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STAFFORDSHIRE COUNTY COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

GEORGE REID, M.D., D.P.H.,

FOR THE YEAR 1895.

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STAFFORDSHIRE COUNTY COUNCIL.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH,

Presented to the Council at the Quarterly Meeting,

November 3rd, 1896.

IN this, my seventh Annual Report, I propose to adhere, so far as collating the reports of District Medical Officers of Health is concerned, to the general plan adopted originally, and deal with the various reports under subject headings, in place of devoting a special summary to each, as is done in some county reports.

Were it not for the fact that the Administrative County contains so many sanitary districts, the latter plan would possibly be the better, but to adopt it, under the circumstances, and, at the same time, give sufficient prominence to the more important features of each report under review, would necessitate needless repetition, many remarks being equally applicable to several districts.

While this is so, I feel it is desirable that Members of the Council, who may wish to see at a glance the leading features of certain districts, ought to have the means of doing so, and, in order to admit of this, I have again introduced a summary, in tabular form, and in alphabetical order, of the vital statistics and prominent characteristics of each report. These tables, one for urban and the other for rural districts, will be found at the end.

In addition to this, I have indexed the Report, so that each question dealt with, whether of general or special significance, may at once be referred to.

The other general tables correspond exactly with those of last year's Report.

I take this opportunity of thanking the Medical Officers of Health, who, almost without exception, have fallen in with my suggestions as to the introduction into their reports of certain details which, from the point of view of the County Council, are of great value. There is still room, however, in some of the reports, for greater detail in the accounts given of the various outbreaks of infectious disease. It is also desirable that corrections should in all cases be made in the statistics of those districts where large public institutions, such as General Hospitals and Union Workhouses, affect the returns to an extent which materially interferes with accurate deductions being drawn from the figures of the districts which contribute to the institutions in question; in many cases these corrections are made, but in a few they are not.

It is satisfactory to be able to record that, in response to the appeals of the County Council, nearly all the annual reports of District Medical Officers of Health are now printed.

In the "Summary of the Year's Work of the Sanitary Committee of the County Council," I have endeavoured to convey some idea of what has been done in public health work, more with the view of indicating the lines on which the Committee are proceeding than with the hope that such a condensed account can convey an adequate idea either of the work itself or the good which has attended it.

Summary of the Year's Work of the Sanitary Committee of the County Council, with General Comments on Public Health Administration.

As regards the summary of the work of the Sanitary Committee, I may point out that it embraces a period of twelve months, ending July, 1896, as the last summary covered the ground up to the end of July of the previous year. So far as that portion of the report which deals with the reports of District Medical Officers of Health is concerned, the period covered embraces 1895 only.

The work of the Sanitary Committee during the year has conclusively demonstrated that the policy adopted the previous year of appointing sub-committees to deal, provisionally, with different branches of the work was a wise one. Considering the rapid growth of the work, and the multiplicity of details which have to be considered, it is quite obvious that if the policy had been continued of considering all matters, in their initial stages, in full Committee, we must, ere now, have reached a deadlock. The change has unquestionably simplified the work, while, at the same time, no responsibility has been parted with, as the final decision regarding the action which shall be taken in any given instance rests with the Committee as a whole.

The routine work under the Rivers Pollution Prevention Act has proceeded on former lines. The systematic work of inspecting existing sewage disposal works, and the collection of samples of sewage effluents and river water at fixed points on streams, has been conducted almost uninterruptedly during the year. In all, 166 analyses have been made, of which 101 were sewage effluents, and the remainder, samples of river water. It has been the custom to call the Committee's attention, at the time, to any irregularities which were noted in the management of sewage works, and the responsible Authorities in such cases were invariably communicated with.

To comment at all fully on the action which has been taken during the year in the matter of rivers pollution would require more space than can well be devoted to one subject in a report of this description. Still, it may be useful to refer,

shortly, to the more important questions in this department of the Committee's work which have received attention.

Two questions involving a large amount of work have engaged the attention of the Committee during the twelve months, one a complete review of the work under the Rivers Pollution Prevention Act in all the districts in North Staffordshire, and the other a detailed investigation into the pollution of the Tame after it has left the County at Perry Barr and before re-entering it at Tamworth—inquiries which involved detailed investigation regarding the circumstances of sewage disposal of a population approaching 1,400,000.

The report with reference to North Staffordshire, which was circulated among members of the County Council, dealt with the whole question of river pollution in the northern districts from the time, early in the existence of the Council, when the work under the Act was first systematically undertaken. It indicated what progress had been made during the period, and enabled the Sanitary Committee to bring special pressure to bear upon those Authorities who, notwithstanding previous remonstrances, had not taken serious steps to remedy faults for which they were responsible.

The work connected with the other important inquiry is still in progress, but sufficient information was acquired to allow of a preliminary report being presented to the Committee, which led to negotiations being entered into with the City of Birmingham—the most important Authority within the area in question—with the result that a conference was held and an understanding was arrived at which is likely to lead to real progress on satisfactory lines. Without the assistance which the Corporation of Birmingham has consented to give, considerable delay would have occurred in acquiring all the needful information, and, in the end, we should not have been in so strong a position as we have every reason to suppose we shall be when all the facts bearing on the question are in our possession.

As regards other work under this heading, besides numerous communications with Authorities, and consultations with their officers, twenty-three special reports have been

presented to the Sanitary Committee during the year dealing with questions relating to rivers pollution; space, however, will not allow of more than an enumeration of the districts to which the reports in question had reference, as follows:—The Urban Districts and County Boroughs were Audley, Cannock, Coseley, Hanley (C.B.), Lichfield, Rugeley, Sedgley, Smethwick, Stone, Tipton, and Wolverhampton (C.B.) The Rural Districts were Eccleshall, Lichfield, and Stoke-on-Trent.

Local Government Board Inquiries with reference to sewage disposal, at which I was present, were held in the following districts during the year, namely—Hanley (C.B.), Heath Town, Leek, and Rowley Regis.

With regard to these Inquiries, I would suggest that further efforts should be made to induce the Local Government Board to give notice of them to the Council. We still only get to hear of them by accident, and it is of the highest importance that the County Council, as the rivers pollution Authority, should be represented on all such occasions.

As regards the general work of the Sanitary Committee, much has been done during the year. Special reports have been presented dealing with important matters affecting Brierley Hill, Lichfield, Newcastle, Quarry Bank, and Wednesfield Urban Districts, and Uttoxeter Rural District.

Following upon the general conference of Authorities, which was called to consider the Isolation Hospitals Act and how it might best be put in operation, conferences have been held in the north and south of the County, at both of which the principle of the union of districts, locally, for hospital purposes was favourably received. As the result of these conferences, the Sanitary Committee are now engaged in necessary preliminary work which it is hoped will result in more than one Joint Hospital Board being formed under the Act.

In addition to the work shortly detailed above, I have been called in or consulted by Medical Officers of Health and other officers of Local Authorities on 57 occasions.

My duties have not been confined to work over which the Sanitary Committee have control. I have been consulted on

several occasions by the Boundaries Committee, the Standing Joint Committee, the County Lunacy Committee, and the Technical Instruction Committee. I have attended three inquiries conducted by the Boundaries Committee, and have reported, from a sanitary point of view, to that Committee on two occasions regarding proposed alterations of district boundaries. I have also attended numerous meetings of the Cheddleton Asylum Building Committee, and presented lengthy reports relating to the plans and specification of the new asylum, which, after much consideration, resulted in many amendments and alterations being introduced. In this connection I may mention that the question of the design which shall be adopted in the construction of isolation hospitals for the asylums at Stafford and Cheddleton, referred to in my last annual report, still remains undecided; a new plan, however, has been prepared, which has been approved by the Lunacy Committee, and it is to be hoped that the buildings will ultimately be built in accordance with it.

The matters which were referred to me by the Standing Joint Committee were the plans and specifications of new police stations at Lichfield and Stoke-on-Trent, and in this connection I again raised the question of the construction of water-closets in the cells, a practice which, unfortunately in my opinion, has hitherto been adopted.

The matter which has come before me in which the Technical Instruction Committee are interested is the question of the furnishing of the museum of sanitary appliances which forms part of the Technical Instruction Buildings at Stafford. This question is still under consideration by a Sub-Committee of the Technical Instruction and Sanitary Committees, and I hope I may be able to refer in my next annual report to the fact that the museum has been fitted up and made available for educational purposes.

In this section of my Report it will be convenient to refer to certain matters of general policy arising either out of the reports of the various District Medical Officers of Health, or recent work of Government departments. One of the most

satisfactory features of this year's district reports is the undoubted advance which has taken place in the department of excrement and refuse disposal. In most of the districts throughout the Administrative County efforts are being made —in some cases on a fairly large scale—to abolish the old privy system in favour of water-carriage. It is to be hoped that the account of this movement which is recorded in this report will stimulate those Authorities, of urban districts more especially, who are not displaying so much energy in this direction, to adopt this excellent policy.

Another satisfactory feature of the reports under review is the evidence they contain of considerable activity in the abolition of private well supplies in districts where public supplies are available. The dangerous character of local supplies is amply evidenced by the fact that no less than 92 per cent. of well waters which were analysed in the various districts in the Administrative County during the year were condemned.

I would specially direct attention to the continued very high infant mortality in many of the districts. This is a question which I have brought prominently forward in previous reports, and it is not an easy matter to suggest even a partial remedy. I have shown that the practice of married women engaging in work which takes them away from home has a very appreciable effect in maintaining this high rate of mortality, but there is another potent contributory cause, namely—ignorance on the part of mothers regarding the feeding of infants. It seems to me that the Council, through the Technical Instruction Committee, might render some assistance in this direction by instituting lectures on domestic hygiene at various centres throughout the County. It is undoubtedly a difficult matter to break down ignorance and prejudice in such cases, but elementary common-sense lectures, such as I suggest, could hardly fail to do some good. In this connection, I would call attention to the remarks of the Medical Officer of Health of Sedgley, which are quoted in this report, page 20.

The practice which prevails, fortunately only in a few cases, of charging patients for treatment in isolation hospitals is one which it is most desirable should be discontinued.

Every inducement should be offered to the public to avail themselves of such accommodation, and as the main object in isolation is the public benefit, those who are compelled by the Authorities to submit to isolation in hospital should not have to pay for it. Of course if any exceptions in the way of privileges are asked for, then a charge might reasonably be made, but so long as patients are satisfied with the accommodation and attendance provided, it should be entirely free.

The opposition on the part of the public in some districts to hospital isolation, reference to which appears in the reports under review, is very unfortunate, and every effort should be made to overcome it. To be in a position to do so, however, the accommodation must in every respect be satisfactory, and in some instances I fear this is not the case.

I must not close this introduction to my Report without referring to the report of the Royal Commission on Vaccination which, after seven years' work, has now been made public. The unanimity of the Commission as to the protective influence of vaccination against small-pox is most gratifying, and although a mitigation of the law is suggested, it is solely in the hope that it will encourage, rather than check, vaccination. No doubt legislation will follow this report, and one result will probably be that the local bodies for carrying out the vaccination law will in future be Sanitary Authorities, and not Boards of Guardians.

Area and Population.

This year I have to record a slight alteration in the area of the Administrative County. Portions of Kidderminster and Shifnal Rural Districts, previously in Staffordshire, have been transferred respectively to Worcestershire and Shropshire; and portions of Seisdon and Tamworth Rural Districts, previously in the Counties of Salop and Derby, have been transferred to this County.

The estimated aggregate population is shown in the following table, which also distinguishes the urban from the rural populations, and gives the comparative figures according to the 1891 Census:—

	Census, 1891.	Estimated to middle of 1895.	Increase.	Decrease.
Urban.....	546,700	579,390	32,690	...
Rural	222,149	226,226	4,077	...
Total.....	768,849	805,616	36,767	...

Births.

The average birth-rate of the whole Administrative County, and of the urban and rural districts respectively, for the seven years 1889-95, is shown in the following table, in which corresponding rates for England and Wales, and for the large towns in England, taken from the Registrar-General's Returns, are included :—

DISTRICTS.	BIRTH-RATE PER 1000 OF POPULATION.						
	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Staffordshire—Combined Urban and Rural....	33·5	32·7	35·7	35·1	35·7	34·3	35·1
Staffordshire—Urban	35·2	34·5	37·3	36·3	36·6	35·4	36·2
Staffordshire—Rural	29·5	28·6	31·6	32·2	33·3	31·6	32·0
England and Wales	31·1	30·2	31·4	30·5	30·8	29·6	30·3
Large Towns in England.....	30·9	30·4	32·5	31·8	31.8	30·6	31·2

The relatively high birth-rate of Staffordshire, as compared with the rest of England, is undoubtedly to be accounted for, as I have explained in former reports, by the large artisan population of the County, and the consequent predominance of young adults.

The Urban Birth-rates are shown in the statistical tables at the end of this Report, and little need be said about them here, beyond pointing out that in seven instances—viz., Audley, Bilston, Brownhills, Cannock, Fenton, Longton, and Short Heath—the rates exceed 40 per 1,000 of the population. It will be noticed that in all these cases the populations are made up of artisans.

In Biddulph, attention is directed to the very high birth-rate (38·1) compared with the year before.

In Rugeley, where the birth-rate was 26·2, the Medical Officer of Health points out that it is 4·2 below the mean of the previous ten years.

The Medical Officer of Health of Cheadle Rural District points out that he is unable to give any statistics with regard to the number of births, owing to the fact that the Registrars do not supply him with the necessary information.

Deaths.

The number of deaths registered in the Administrative County in 1895 amounted to 14,856, as compared with 12,948 in 1894, 14,728 in 1893, 14,746 in 1892, and 15,614 in 1891.

In explaining the great reduction in the deaths during 1894, I referred to the fact that it was largely accounted for by the prevalence of influenza during the previous year, which had the effect of not only raising the standard of comparison but also of greatly reducing the number of the aged and feeble, whose lives might otherwise have been prolonged to swell the death returns of the year in question. Another cause which contributed to the small death-rate in 1894 was the remarkable absence of summer diarrhœa, which is usually so fatal among infants.

In the following table comparative figures for the past seven years are given, together with corresponding figures for the country as a whole, and for town and country districts throughout England.

DEATH-RATE PER 1000 POPULATION.

	Staffordshire.			England.		
	General.	Urban.	Rural.	General.	Large Towns.	Country Districts.*
1889	18·0	18·9	15·4	17·9	19·2	16·5
1890	19·8	20·0	16·3	19·5	21·6	17·5
1891	19·9	20·7	18·1	20·2	22·4	18·5
1892	18·8	19·2	17·9	19·0	20·6	18·1
1893	18·6	19·5	16·3	19·2	21·5	17·4
1894	16·2	16·5	15·4	16·6	18·0	15·6
1895	18·5	19·1	16·9	18·7	20·5	17·0

*Certain proportion of Urban residents included.

The apparent marked increase in the rural death-rate of Staffordshire in 1891, as compared with previous years, is to a large extent accounted for by the fact that the rates for 1889-90 were calculated upon an erroneously high estimate of the population, owing to the long interval since the 1881 Census, a mistake, however, which does not apply to the same extent in the case of the urban districts.

Death-rates in Urban Districts.—These, together with the figures upon which they are based, are shown in the tables at the end of the report. In the following table the figures are given for those districts in which the rates may be said to be very high, together with figures and remarks bearing on the influences that causes, preventable and more or less non-preventable, have had on the results. The districts are placed in order, in accordance with the death-rates, the highest being placed first.

DISTRICT.	Death-rate per 1000 of Population.	Population estimated to middle of 1890.	Number of persons to the Acre.	Deaths in children under 1 year per 1000 births.	Zymotic death-rate per 1000 of population.	Occupation, &c.	Increase over average of entire districts from the undermentioned diseases, affecting appreciably the general rate.				Position as regards mean death-rate of former years.
							Measles.	Whooping Cough.	Diarrhœa.	Diseases of respiratory organs.	
Bilston	26·9	23,500	12·5	224	4·51	Working class.	Considerable.	..	Considerable.	Considerable.	Mean for 10 years, 22·3.
Tunstall ..	26·1	16,362	19·6	288	3·54	,,	Considerable.	..	Slight.	Considerable.	Mean for 6 years, 22·7.
Longton ..	24·6	35,821	17·9	234	2·79	,,	..	..	Slight.	Considerable.	Mean for 6 years, 23·8.
Audley	24·0	13,500	16·8	148	1·33	,,	..	..	..	Considerable.	Mean for 6 years, 16·1.
Darlaston ..	23·5	15,141	18·9	221	3·89	,,	Slight.	..	Considerable.	..	Mean for 10 years, 22·3.
Coseley	22·6	22,000	5·5	216	4·77	,,	Considerable.	Slight.	..	..	Mean for 9 years, 18·8.
Heath Town	20·7	7,526	10·1	222	3·45	,,	..	..	Considerable.	Slight.	Mean for 6 years, 19·6.
Burslem ..	20·6	33,799	13·0	182	2·66	,,	..	..	..	..	Mean for 20 years, 22·6.
Tettenhall..	20·4	5,385	4·4	121	3·54	Mostly residential.	..	..	..	Slight.	Mean for 6 years, 12·9.

Concerning the very high death-rate of Bilston, the Medical Officer of Health writes very fully, and as the district stands worst in this respect of all the Urban Districts in the County, I reproduce his remarks as follows:—

"In considering the death-rate in Bilston, it must not be forgotten that this is essentially an artisan population, without

any residential or suburban element, and should be compared, not with an ordinary town as a whole, but only with those crowded districts in large cities where the masses of the people live. In 1894, too, exceptional conditions of weather reduced the mortality here and throughout the country, as the death-rate, not only in Staffordshire, but in England and Wales, generally decreased about 2½ per thousand of population, and in the large towns even 3 per thousand. This is well shown by the following table, given by Dr. Reid, of comparative figures for the six years 1889-94.

DEATH-RATE PER 1,000 OF POPULATION.

	STAFFORDSHIRE.			ENGLAND.		
	General.	Urban.	Rural.	General.	Large Towns.	Country Districts.
1889	18·0	18·9	15·4	17·9	19·2	16·5
1890	19·8	20·0	16·3	19·5	21·6	17·5
1891	19·9	20·7	18·1	20·2	22·4	18·5
1892	18·8	19·2	17·9	19·0	20·6	18·1
1893	18·6	19·5	16·3	19·2	21·5	17.4
1894	16·2	16·5	15·4	16·6	18·0	15·6

"On a careful examination of the various tables given it will be found that the chief causes for the extraordinary mortality here during the year were:—

"1. The Epidemic of Measles:—This alone, as already pointed out, accounts for 51 deaths, all but five being in very young children. The disease was prevalent in the four quarters of the year and reached its maximum in the second quarter. In addition to these deaths directly attributed to this complaint, it is impossible to say how many more were the indirect result, owing to secondary developments, to impaired health and a consequent pre-disposition to succumb to other diseases.

"2. The almost unprecedented weather of the year:—This affected the deaths in two ways. *(a)* During the early months, particularly, when the cold was intense, by increasing considerably the fatality from respiratory diseases, the deaths from which, as already stated, were 31 in excess of the

previous year. The very prolonged frost, too, caused general stoppage of works, much consequent poverty, a low condition of vitality, and less ability therefore to resist any illness. *(b)* The sub-tropical heat in the autumn greatly increased the number of deaths, particularly in young children, from diarrhœa and diseases of the bowels; 42 deaths from diarrhœa alone were recorded as against 10 in 1894.

"To tabulate these causes, we find—

No. of Deaths from Measles	... ...	... 51
No. ,,	from Chest Diseases above those of 1894 (115—84)	... 31
No. ,,	from Diarrhœa above those in 1894 (42—10)	... 32

or 114 deaths due to causes that can easily be explained, and some of which, at least, are beyond control. This is equal to a rate of 5·5, which if taken from the year's rate (26·9—5·5=21·4) reduces it below the average rate of the last ten years.

"It will naturally be anticipated that the infantile mortality, unfortunately always high here, will be exceptionally great this year, and will, in fact, show the largest proportion of the increase. This is what we find, more than half the deaths being in children under 5 years of age, and the rate in infants under 1 year equal to no less than 224 per thousand of the registered births. The greater excess, however, is between the ages of 1 and 5 years—the age in other words, for the most part, of the fatal cases of measles. The influence of measles and diarrhœa has already been discussed, but there are other causes, constantly present, that have a most serious relationship to our infant mortality. Very early marriages among the poor often result in large families, with puny premature children, handicapped from the beginning with weak constitutions. Mothers, too, cannot leave home without their children, and this leads to constant exposure in all weathers. Improper food has already been mentioned, and this contributes to the death-rate directly and also renders the children more liable to succumb to attacks of bronchitis, congestion of the lungs, &c.—diseases very fatal in early life. Over-crowding, too, of the little ones in small badly-ventilated rooms, where the air is usually close and frequently fœtid, and

where, moreover, the children frequently occupy the same bed with their parents, is an important factor. Actual neglect, with dirty, foul surroundings, and poverty, must also not be forgotten."

The Medical Officer of Health of Tunstall, where the next highest death-rate occurred, says :—" Such an unusually high general death-rate has been brought about by an enormous mortality among young children, no fewer than 286, or nearly two-thirds of the whole mortality, having occurred in children under five years."

The Medical Officer of Health of Longton does not comment specially on the high death-rate of that town, but it will be noticed that it is not very much in excess of the mean for the past six years, which is the highest of all the means of the urban districts. The table (page 11) shows that diarrhœa only slightly accounted for the high death-rate, and that diseases of the respiratory organs influenced it to a considerable extent.

As regards Audley, it will be noticed that the mean death-rate is very much less than this year's rate, and the Medical Officer of Health in referring to this points out that the high rate this year is largely to be attributed to the fact that 77 deaths resulted from the flooding of a colliery.

The Medical Officer of Health of Darlaston points out that the death-rate of that district is higher this year than it has been for several years, and that the increase is mostly to be attributed to the large number of deaths from diarrhœa. Although, it is true, the death-rate is above the mean, still it will be seen from the table that the mean for the past 10 years is 22·3, a figure which cannot be said to be satisfactory.

In discussing the high death-rate in Coseley, the Medical Officer of Health says :—" As in 1894, exceptional causes were concerned in the production of a rate much below the average, so in 1895, the severe epidemic of measles which occurred, has helped to distinguish it as a year of unusually heavy mortality, especially among children."

The question of the Heath Town death-rate is not discussed by the Medical Officer of Health. It will be seen from the

table, however, that diarrhœa deaths have had a considerable influence in contributing to it, although the mean rate is by no means what one would like to see it.

As regards Burslem, although the district appears comparatively low down in the table of high death-rates, as a matter of fact it is 2 per 1000 less this year than the mean for the last 20 years.

The exceptionally high death-rate of Tettenhall is not discussed by the Medical Officer of Health, but the only disease, among the preventable diseases, which can be said to explain it, is diphtheria, which was responsible for 2·7 deaths per 1000 of the population.

On comparing the deaths in Tettenhall this year with those of the previous year, as regards age distribution, I find that the increase has occurred mostly among the very young and the aged. The following figures show this very clearly:—

Deaths at Age Periods in Tettenhall.

	Under 1 year.	1 year and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 65.	65 years and upwards.
1894.....	11	10	3	5	16	14
1895.....	16	15	10	1	28	40

The mean death-rate for the past six years in Tettenhall only amounted to 12·9, and, as it is largely a residential town, one would not expect it to exceed this very much. Too much weight must not be attached to the exceptionally high rate recorded this year, as, in a district with so small a population, chance operates to a large extent, and forbids very definite conclusions being drawn from one year's figures.

So much for the urban districts which appear in the list of high death-rate districts this year.

With reference to the general death-rate of Leek, the Medical Officer of Health writes:—"Looking at the general aspect of the mortality tables for 1895, one cannot but feel

that the exceptional commercial condition of our town in the earlier portion of the year had a good deal to do with the increased death-rate. The very severe atmospheric influences then prevalent prevented out-door labour being followed for many weeks, and the shortened time of workers in the staple trade resulted in a largely diminished income, and consequent inability to provide a sufficiency of materials for physical well-being.

"There were 30 cases of premature birth and debility from birth—a fact showing a great want of vital stamina; and the deaths from disease of the digestive organs were double the average of similar diseases for the last 6 years—many of these cases being children improperly fed, and therefore not nourished.

"The great and lamentable feature of the mortality records for 1895 is the very large percentage of infantile deaths. Out of the 81 deaths under 1 year, 41 had not reached 3 months of life, and 15 others were under 6 months, while we had notice of 33 cases of so-called still-born children, a number much above the average. All this points to a lowered vital power, and although I admit the condition of things I have already noticed may be responsible for much of this, I fear there is a more important factor still."

In continuing his remarks, the Medical Officer of Health attributes the high infant mortality to the practice, which he says is on the increase, of women indulging in alcohol.

In Rugeley, special attention is called to the fact that the death-rate is lower than the mean of the previous 10 years.

In Smethwick, where the death-rate was 14·4, it is said to be the lowest that has been recorded for 14 years, the mean rate for that period being 16·8.

In Stafford, the Medical Officer of Health points out that the cause of the death-rate being above the mean was the excessive mortality during the first quarter of the year, when measles, and subsequently, influenza, became epidemic.

The comparatively high rate of mortality in Wednesbury is accounted for by increased mortality among young children and elderly people.

Death-rates in Rural Districts.—The Medical Officer of Health of Cannock Rural District, where the death-rate was 16·4, holds that it is not a high rate considering the fact that the population largely consists of miners, artisans, and labourers, and that trade has been very depressed.

In Seisdon Rural District, where the rate was 16·6, compared with 13·5 in 1894, the increase is said to have been owing to the high mortality from pulmonary affections among old people.

The high rate in Walsall Rural District (17·1), according to the Medical Officer of Health, is partly accounted for by increased deaths among children, and also by deaths from typhoid fever and diseases of the respiratory organs.

Uncertified Deaths.

In most of the reports, figures are given showing the number of uncertified deaths.

In the Cannock Rural District, an extraordinary increase is recorded in these, as the following figures indicate :—

Percentage of Total Deaths.

1890	...	3·9	1893	...	4·4
1891	...	3·0	1894	...	3·2
1892	...	3·9	1895	...	8·6

The Medical Officer of Health points out that nearly all the cases occurred in the Brewood district, but he does not attempt to explain the possible cause of the increase this year as compared with the five previous years.

Infant Mortality.

The excessive infant mortality in many of the urban districts in the County, which has received such prominent notice in previous reports, is still maintained; in fact, in some instances it is even greater than formerly. Last year, comparatively speaking, this rate was a favourable one, and I pointed out that the probable explanation of this was the greatly diminished mortality from summer diarrhœa. This year the reverse has been the case, the death-rate from this disease being higher than in any year, with one exception (1893), since I have compiled the statistics for the County.

In 1894, there were four districts in the Administrative County in which the infant mortality exceeded 200 per 1000 births registered; in 1895, however, it exceeded that number in no less than seven districts. In the following table the figures are given for the past seven years, together with comparative figures for the urban districts in the County as a whole, and for the large towns in England :—

Deaths in children under one year per 1000 registered births.

	Bilston.	Coseley.	Darlaston.	Fenton.	Heath Town.	Longton.	Tunstall.	Urban Districts in County.	Large Towns in England.
1889	204	187	207	162	204	216	211	161	161
1890	182	149	191	192	200	231	220	176	171
1891	210	180	235	193	252	224	232	175	167
1892	219	161	215	186	221	231	198	174	163
1893	202	177	221	193	158	225	206	179	181
1894	175	133	174	251	143	238	173	163	152
1895	224	216	221	216	222	234	288	181	182
Mean Rate	202	172	209	199	200	228	218	173	168

It must not be supposed, because prominence is given to these towns which have exceptionally high infant death-rates, that, therefore, other towns have favourable records ; this is far from being the case, as a glance at the sixth column of the death-rate table at the end of this Report will show.

As regards Bilston, which, with two exceptions, has appeared in this table each year since 1889, the question of the infant death-rate has already received notice in discussing the high general death-rate in that town. (See page 13).

As regards Coseley, it appears in this table for the first time, although on several occasions, as will be seen from the figures, the rate in this district has by no means been a low one. In discussing this year's figures the Medical Officer of Health writes :—"As in 1894, exceptional causes were concerned in the production of a rate much below the average, so in 1895, the severe epidemic of measles which occurred has helped to distinguish it as a year of unusually heavy mortality, especially amongst children. It will be seen that 296 deaths occurred

under five years of age. Measles was the direct cause in 56 of these, and doubtless an indirect factor in some deaths more immediately due to other diseases."

As regards Darlaston, where the infant mortality seems to be persistently high, no special reference is made to it in the report of the Medical Officer of Health for this year. It will be noticed, however, that the mortality from diarrhœa in that district was very high, and this, no doubt, to some extent, explains the fact that the rate is so much higher than in 1894.

In discussing the high death-rate in Fenton, the Medical Officer of Health attributes it to ignorance on the part of mothers regarding the proper food for infants.

In Heath Town, where the rate amounted to 222, and where the mean rate for the past seven years is no less than 200, no suggestion is offered as to the possible explanation.

In Longton, where the infant mortality is persistently high, the mean rate for the past seven years being 228, the subject does not appear to receive any special notice in this year's report, although frequently in former reports the Medical Officer of Health has discussed the question, and given it as his opinion that want of knowledge on the part of mothers regarding the feeding of infants was the chief cause.

In discussing the high rate of infant mortality in Tunstall, the Medical Officer of Health talks of it as the "black spot" in the year's record, and says:—"An epidemic of measles, accompanied by severe chest complications, among young children, is to some extent responsible for such an exceptional mortality; but, still, much of the mortality has been brought about from causes indicating improper feeding, bad ventilation, and a want of cleanliness in the surroundings of the children."

With reference to the deaths among infants at Biddulph, the Medical Officer of Health writes:—". . . . . no less than 18 lives in all might have been saved in this district, in last year, were the mothers of the poorer classes better instructed in the principles of properly clothing, feeding, and

managing their infants. The spread of such education is to my mind one of the most fertile fields open to the labours of the philanthropist."

In Handsworth, where the infant death-rate may be said to be high for that town, the increase is attributed, by the Medical Officer of Health, chiefly to diarrhœal mortality.

The Medical Officer of Health of Leek, where the infant mortality amounted to 181, refers to the remarks of the Sanitary Inspector of that district, who says:—"There is no doubt but that the objectionable system of the employment of mothers of infants from their homes is, to a large extent, responsible for the loss of infant life."

In Rowley Regis, the high infant mortality is attributed, to some extent, to the prevalence of scarlet fever, whooping cough, and measles.

As regards the infant mortality in Sedgley, the Medical Officer of Health writes as follows, in discussing the deaths from diarrhœa which largely contributed to it :—" ' Occupation of mothers from home contributes to neglect and improper feeding of infants.' (Hygiene and Public Health (Whitelegge) p. 315). Dr. Ballard has recently shown that diarrhœa mortality is high where the *soil* is loose and porous, or polluted by leakage from drains or cesspools. That there is organic pollution of the soil in many of the dwellings of the poor in our district cannot be denied.

"Meanwhile, it is of great practical importance to remember that summer diarrhœa is caused by germs taken with food or drink, and that such germs are best destroyed by heat. Hence food should if possible be *recently* cooked, while milk and water in hot weather should be *recently* boiled before drinking. A lamentable ignorance exists among the very poor as to the proper principles of feeding infants, and hence this disease is most deadly amongst their children. The County Council have recently, *at their sole expense*, sent teachers to this and other districts giving most useful instruction on subjects such as Poultry-Keeping and Gardening. A similar

arrangement could, I am led to believe, be carried out for a course of Health Lectures to the people, and I beg to recommend that steps be taken to have this accomplished. Your district yearly contributes a considerable sum from its local taxation indirectly to the coffers of the County Council, and at present gets nothing in return. I feel confident that this Board of Health will fall in with my suggestion as regards a Free Course of Health Lectures."

The Medical Officer of Health of Smallthorne writes :— "It is noticeable that thirty-four or more than one-third of the total number of deaths were in children under one year of age; this I attribute to a large extent to the ignorance of mothers in the proper feeding of children and to mothers leaving their children during the greater part of the day to follow some occupation; thus depriving them of their natural food. This high infant mortality is bound to continue until parents have more knowledge of the proper care and feeding of infants."

Among other reports of Urban Medical Officers of Health in which ignorance on the part of mothers is held to be the cause of the high infant mortality may be mentioned those of Kidsgrove and Perry Barr.

The Medical Officer of Health of Cheadle Rural District writes :—"This continuous high rate of infant mortality in Caverswall district is certainly a matter for serious reflection, and I can but reiterate my previously-formed opinion that the cause is to be sought for in the fact that the children are daily put out to nurse and have not the advantage of the natural sustenance which it is the duty of the mother to give. Most of these children die off within three months of their birth, either from convulsions, diarrhœa, or marasmus."

The Council will remember that I conducted an inquiry four years ago into the effect of factory labour on the infant mortality. I give in the following table the original figures for the artisan towns, classified in accordance with the relative proportion of married women engaged in factory work, together with corresponding figures for the past seven years :—

Deaths in Children Under One Year in Three Classes of Artisan Towns in Staffordshire.

	CLASS I. Many women engaged in work.	CLASS II. Fewer women engaged in work.	CLASS III. Practically no women engaged in work.
10 years, 1881–90	195	166	152
7 years, 1889–95	203	175	165

These figures speak for themselves. It will be noticed that although there has been a general increase in the infant death-rate, practically very much the same relative proportion has been maintained between the three classes of towns.

Zymotic Death-rate.

The death-rate from zymotic diseases, including under this heading, according to the Registrar-General's classification, the seven principal ones—namely, small-pox, measles, scarlatina, diphtheria, fevers, whooping cough, and diarrhœa—is higher this year than last, although it is not appreciably higher than the mean rate of previous years. In my Report of last year I called attention to the fact that the rate was lower than it had been since it had been my duty to collate the reports.

In the following table the comparative figures are given for the past seven years, together with similar figures for England and Wales, and for the large towns in England.

Zymotic Mortality per 1000 of Population.

	Districts in Administrative County.			England and Wales.	Large towns in England.
	Urban.	Rural.	Urban & Rural combined.		
1889	2·36	1·17	1·99	2·40	2·72
1890	2·06	1·15	1·77	2·05	2·77
1891	2·00	1·36	1·82	1·83	2·41
1892	2·03	1·10	1·77	1·90	2·63
1893	2·41	1·58	2·17	2·47	3·17
1894	1·68	0·97	1·47	1·76	2·43
1895	2·39	1·15	2·04	2·14	2·82

It will be noticed that the increase in the zymotic rate has taken place in both the urban and rural districts. Apparently, the chief cause of the increased rate this year, compared with 1894, is explained mainly by the diarrhœal rate which is very much greater, just as the low rate in 1894 was accounted for by the diminished mortality from this disease; whereas, only 210 deaths from diarrhœa were registered in the urban districts of the Administrative County in 1894, the number this year amounts to 592, and in the rural districts the respective numbers were 60 and 92, the totals being 270 in 1894 as compared with 684 in 1895.

One satisfactory feature of this year's zymotic rate is, that whereas last year 89 deaths occurred from small-pox, the disease only caused two deaths this year.

In some of the reports special attention is called to the increase in the zymotic death-rate.

In Bilston, where this rate amounted to 4·51, it is said to have been chiefly owing to measles and diarrhœa.

Measles and whooping cough are blamed for having raised the rate at Brierley Hill; and at Tunstall, where the rate was 3·5, measles alone appears to have been the chief cause.

In Burslem, where the rate was 2·6, as compared with 1·6 the previous year, the increase is said to have been owing to the prevalence of measles and diarrhœa.

In Quarry Bank, where the rate was most excessive—viz., 6·03—it is a melancholy fact that enteric fever, a disease which is so specially preventable, should have been the chief cause.

In Smethwick, the rate was lower (·97) than it had been for eight years, the cause being the decrease in deaths from measles, whooping cough, enteric fever, and diphtheria.

Special Zymotic Death-rate.

Small-pox.—It is satisfactory to find that this disease, which was so prevalent in 1894, when, as already stated, it caused 89 deaths, was this year comparatively absent, only two deaths having occurred from it.

In Bilston, three cases occurred in one house, the infection having been imported from a village in Derbyshire. The Medical Officer of Health states that had a hospital not been available in all probability a considerable and rapid extension of the disease would have occurred.

In Darlaston, only one case occurred, which was isolated in hospital; the origin was traced to Bilston.

In Handsworth, seven cases were notified as having occurred in five houses, one of which, however, proved to be chicken-pox.

In Lichfield, one case was notified which appeared to have been imported.

In Longton, two cases were reported, one of which was imported and gave rise to the other.

In Rowley Regis, three cases occurred and were immediately isolated. All the cases were in the same street, although no connection between them could be traced; in one of the cases infection appears to have been the result of the patient having nursed another case.

In Sedgley, a child in the Workhouse was attacked with the disease; precautions were adopted in the shape of disinfection and isolation, and the other inmates of the ward were re-vaccinated.

In Smethwick, seven cases occurred which, with one exception, seemed to be connected with an outbreak which started in March 1893. The Medical Officer of Health of this district reviews the outbreak and introduces the accompanying table of particulars regarding the cases which were treated in hospital, and upon which he comments as follows:—"The first question that presents itself from a medical and public health point of view, is the proportion and fate of the unvaccinated as compared with the vaccinated. Twenty-five, or 15½ per cent., were unprotected by any vaccination, and of the 25, the mortality, in spite of all the care and pains that were lavishly bestowed upon them, was equal to 20 per cent. On the other hand, of the 135 who had been more or less successfully vaccinated in infancy, the mortality was only 22 per cent."

SMALL-POX IN SMETHWICK, 1893-4-5.

Age periods of persons attacked.	Number attacked.			Unvaccinated persons attacked.	Said to be vaccinated, but no marks of vaccination discernible.	Deaths of the unvaccinated.	Deaths of those said to have been vaccinated, but with no marks.	Deaths of those who had been vaccinated in infancy.
	M.	F.	Total					
Under 1 year	...	2	2	2	...	2	...	...
1 year & under 5 years	4	3	7	6	...	1	...	...
5 years ,, 15 ,,	18	19	37	8	...	1	...	...
15 ,, ,, 25 ,,	41	15	56	7	...	...	...	1
25 ,, ,, 60 ,,	28	30	58	2	1	1	1	2
60 ,, and upwards..	...	...	...	...	...	...	...	...
Total	91	69	160	25	1	5	1	3

In Lichfield Rural District, three cases were notified; one of these cases, which was imported, occurred in an unvaccinated child, and the other two cases were so mild that there was some doubt as to whether the disease was small-pox.

Measles.—This disease, which appears each year in most districts, has, judging by the death returns, been more prevalent in urban districts, and less prevalent in rural districts, taken as a whole, than in 1894.

In the Administrative County, 305 deaths occurred from measles, as compared with 222 in 1894, equal to a rate per 1000 of the population of 0·37, as against 0.27. Of these deaths, 280 occurred in the urban districts, or 0·48 per 1000, and 25 in the rural districts, producing a rate of 0·11 per 1000. In the following table corresponding figures are given for the past seven years:—

MEASLES.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of Deaths...	347	221	368	187	283	183	280
	Rate per 1000.....	0·64	0·40	0·67	0·33	0·50	0·32	0·48
Rural	Number of Deaths...	66	37	106	20	111	39	25
	Rate per 1000.....	0·26	0·14	0·44	0·08	0·48	0·17	0·11

In Bilston, this disease seems to have been very fatal, having caused no fewer than 51 deaths, or 2·17 per 1000 of the population. The Medical Officer of Health states that the closure of certain schools no doubt helped in diminishing the number of cases.

The Medical Officer of Health of Coseley, where the disease was very prevalent and caused 60 deaths, writes as follows:—"This disease is peculiarly infectious in its early stages, when the child appears to be suffering from nothing more than an ordinary cold, so that it is questionable how far isolation of cases would tend to check its spread, but there is no doubt that a great saving of life would be effected if careful nursing in healthy surroundings could be secured."

In Handsworth, where 17 deaths occurred, 14 of which were in children under five years of age, the Medical Officer of Health writes as follows:—"Measles not being a notifiable disease, many are apt to regard it is a trivial complaint. It cannot, however, be too strongly impressed upon all who have the care of children, that measles should be regarded as a dangerous infectious disease, and that each case would have the same care bestowed upon it as would be given to any other dangerous infectious disease, both in nursing and in preventing further spread of infection."

In Lichfield, where this disease is specially included in the list of those which are notified, 224 cases occurred and caused four deaths. It is stated, however, that in all probability a great many more cases occurred which were not notified owing to their not being attended by a medical man. The Medical Officer of Health writes, with reference to the closure of schools and the notification of measles, as follows:—"It is my belief that the schools play an important part in the dissemination of measles, and that their closure is followed by a marked effect in reducing the prevalence of the disease.

"With the exception of closing the schools, other precautions appear to have had but little effect, and isolation in hospital was entirely out of the question. Your Committee, therefore, after careful consideration of the subject, came to

the conclusion that—at least, so far as this district was concerned—the benefits arising from its notification were not commensurate with the cost involved, and a resolution was carried that measles should be struck off the list of notifiable diseases. This was accordingly done in the middle of December."

The Medical Officer of Health of Stafford refers to the possible influence that influenza may have in cutting short an outbreak of measles. He writes as follows:—"This disease, which was epidemic during the last quarter of the previous year, became aggravated in the first quarter of last year, and caused 10 deaths, all occurring in the first two months. It suddenly subsided on influenza breaking out at the end of February. In the year 1892 a severe epidemic of measles was similarly arrested with the same remarkable suddenness with which influenza appeared, pointing, in my opinion, to a direct antagonism of the two diseases."

In referring to an outbreak of measles at Tipton, the Medical Officer of Health mentions the difficulty which is experienced in that district in prevailing upon the managers to close Sunday schools, in the following terms:—"We had, however, some difficulty with the Sunday schools, and although the managers and ministers had been notified of the epidemic, and asked to discontinue school for a short time, I found on the following Sunday, that out of the six Sunday schools in this district, three only were closed, the other three allowing their scholars to attend and so to disseminate the disease."

In Willenhall, where 20 deaths occurred from this disease, the Medical Officer of Health states that it was the most serious of any of the epidemic diseases, and that the Board and other schools were closed in consequence of it.

Among the other reports in which special mention is made of the prevalence of this disease may be mentioned those of the Medical Officers of Health of Leek, Rugeley, Rowley Regis, and Short Heath Urban Districts, and Leek, Lichfield, and Walsall Rural Districts.

Scarlet Fever.—In the Administrative County, 185 deaths occurred from scarlet fever, as compared with 130 in 1894, equal to a rate per 1000 of the population of 0·23 as against 0·16. Of these deaths, 142 occurred in the urban districts, or 0·24 per 1000, and 43 in the rural districts, producing a rate of 0·19 per 1000. In the following table corresponding figures are given for the past seven years.

SCARLET FEVER.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of Deaths...	108	145	144	105	119	101	142
	Rate per 1000.....	0·20	0·26	0·25	0·18	0·21	0·17	0·24
Rural	Number of Deaths...	30	51	63	29	27	29	43
	Rate per 1000.....	0·12	0·19	0·26	0·12	0·11	0·12	0·19

Among the urban districts where the highest mortality occurred may be mentioned Audley, Kidsgrove, Quarry Bank, Rowley Regis, and Wednesbury.

It appears that in Audley the disease extended into the district from the Wolstanton Rural District, and the Medical Officer of Health points out that at first the cases were few in number and might readily have been isolated had suitable means existed for that purpose. Under the circumstances, the children were isolated, as far as possible, in their own homes, and other members of the family were kept away from school, but in spite of these precautions the disease spread throughout the district.

As regards Kidsgrove, the only precautions referred to as having been taken consisted in the distribution of hand-bills suggesting precautions against the spread of the disease.

In Quarry Bank, where 248 cases occurred, the disease prevailed mostly during the latter half of the year, and, it is said, constituted part of an epidemic then prevailing throughout South Staffordshire.

In Rowley Regis, where an extensive though mild outbreak continued throughout the year, the Authority adopted the precautions of stripping the walls and disinfecting all infected houses free of cost from August to December.

In Wednesbury, where 18 deaths occurred, the diseaes prevailed throughout the year, but it was specially prevalent in the first and last two quarters of the year.

The Medical Officer of Health of Biddulph, in referring to this disease, advises his Authority that isolation for an ample period and thorough disinfection are essential, and asks for their support in his efforts to carry out these precautions.

Under this heading the Medical Officer of Health of Bilston writes:—"Comment in these reports has frequently been made on the extreme carelessness and indifference exhibited with regard to this and similar diseases. One illustration only of this need be given here. In November last, at a large bazaar which was held in the town, crowded with people daily for the greater part of a week, a young girl, peeling freely after a mild attack of scarlet fever, was present, and not only mingled in the crowd, but actually had charge of some children of a neighbour. It is impossible to state what the results, direct and indirect, of such conduct were and might have been, but this much is definitely known, that in addition to three others in the same family who were attacked (and all four had to be removed to hospital), one of the children she had charge of took the disease, and was the means of conveying it to a brother and two sisters. This alone, therefore, accounts immediately for seven other cases, five having to be maintained for weeks in the hospital at the public expense. Of course it was pleaded, as it always is, that the condition was not recognised, and its significance not understood."

In Coseley, where 100 cases occurred, of which 8 proved fatal, the Medical Officer of Health states that the disease has been endemic for several years.

In Leek, 42 cases were notified without a death, a circumstance which the Medical Officer of Health attributes to the fact that 35 of the 42 cases were immediately isolated.

In Stafford, it is satisfactory to know that out of 70 cases which occurred, 65, or 93 per cent., were isolated.

The same also may be said of Tamworth, where 71 cases were notified, of which 69 were isolated in hospital.

In Stone, the disease broke out many times throughout the year, 20 cases were notified, of which 13 were isolated, and the Medical Officer of Health points out that in the case of those patients who were isolated, in no instance did the disease extend to other members of the families, whereas in the other cases four persons were attacked in one family, and two in another.

In Tipton, where the Notification Act is not in force, it is said that it is about 10 years since so many cases occurred.

Among other urban districts where the disease was prevalent, although mostly in a mild form, may be mentioned Brierley Hill, Lichfield, Longton, Newcastle, Smethwick, and Tettenhall.

Among the rural districts in which the disease was most fatal may be mentioned Newcastle and Stoke-on-Trent.

In Newcastle Rural District, the Medical Officer of Health attributes this to the absence of means of isolation.

In Stoke-on-Trent Rural District, the disease prevailed chiefly at Bagnall, where the schools were closed in consequence of it.

Among the other rural districts where the disease mostly prevailed may be mentioned Cannock, Eccleshall, and Gnosall.

The Medical Officer of Health of Eccleshall strongly advocates the closure of schools and isolation.

The Medical Officer of Health of Gnosall also refers to the advantage which results from the closure of schools, and points out the risk which children are exposed to from cases in which throat symptoms exist without a rash.

The Medical Officer of Health of Walsall Rural District, where eight cases occurred in seven houses in seven different months, says:—"It is mainly owing, I believe, to early notification and to the prompt measures taken with regard to isolation that the disease did not spread."

The following is an account of successful proceedings which were taken by the Seisdon Rural Authority under the Public Health Act:—"In the Spring of the year, a case of scarlet fever at Kinver was notified in a little boy, who informed us he was sure he had taken the disease from one of his playmates, who had been ailing with a rash like his some two or three weeks before. We traced this lad to the schools, where he had been attending for more than a week, and on examining him I found extensive peeling on the feet. I removed him at once to his grandmother's, with whom he lived. We had him conveyed the same day to the Cottage Hospital, where he remained 31 days before he was considered safe from infection. He was one of a family, his parents living in the middle of the village close by, and he was frequently at his home.

"The matter being brought before your Council, an order was made to take legal proceedings in this case against the grandmother for not giving notice of the disease, and for exposing the boy whilst suffering from it. The case was heard at Brierley Hill, and the Magistrates convicted the woman, but in view of the fact that she was a widow, and in poor circumstances, ordered her only to pay the costs in both cases, amounting to 15 shillings."

Diphtheria.—In the Administrative County 93 deaths occurred from diphtheria, as compared with 81 in 1894, equal to a rate per 1000 of the population of 0·11, as against 0·10. Of these deaths 65 occurred in the urban districts, or 0·11 per 1000, and 28 in the rural districts, producing a rate of 0·12 per 1000. In the following table corresponding figures are given for the past seven years:—

DIPHTHERIA.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of Deaths...	27	23	37	32	24	47	65
	Rate per 1000.....	0·05	0·04	0·06	0·05	0·04	0·08	0·11
Rural	Number of Deaths...	28	14	25	21	18	34	28
	Rate per 1000.....	0·11	0·05	0·10	0·09	0·08	0·15	0·12

The Medical Officer of Health of Brierley Hill, in referring to a fatal case of membranous croup, an affection which is now generally looked upon as diphtheria, says:—"I had already pointed out the damp and insanitary condition of the house in October, 1893."

Such a sentence as this, addressed to an Authority, should have the effect of opening their eyes to the necessity of acting promptly upon the advice of their officers.

In discussing certain cases which occurred in Coseley, the Medical Officer of Health states that one case occurred in "one of those imperfectly ventilated back-to-back houses which are so numerous in the district."

In Newcastle, where thirteen cases occurred in ten houses, insanitary conditions were met with in most instances.

In Stafford, where four cases occurred, two of which were fatal, the Medical Officer of Health points out that the disease had been almost entirely absent for four years.

In Tamworth, where three cases occurred in two houses, one of which was fatal, in the case of one family, the cause was said to be sewer-gas being blown into the house from a sewer which discharged into the river above the water-level.

In Tettenhall, where the disease was very prevalent and fatal, 60 cases having occurred in 40 houses, resulting in 15 deaths, the Medical Officer of Health enters very fully into the history of the outbreak. It appears that until 1892 very few cases occurred in Tettenhall, but in that year six cases were notified, in the following year one case, and in 1894 five cases. In discussing the origin of the outbreak this year, the Medical Officer of Health says:—"It will be seen by this summary that diphtheria first appeared on February 1, in Nursery Walk, and up to July 22, twenty-three cases occurred, twenty-two of them being in the Parish of Tettenhall.

"Out of the twenty-two cases, eighteen were reported from the Lower Street and Autherley Lane, a locality which is unhealthy from the neighbourhood of the Smestow Brook and

the disposal of the contents of middens in the gardens, in which the soil, already moist, is unable to cope with the amount of sewage heaped in it year after year.

"The remaining thirty-seven cases happened in the parish of Tettenhall Wood, viz., fourteen at Tettenhall Wood, fourteen in the village of Compton and Henwood Lane, three about the Compton Holloway, and six at Finchfield."

As regards the precautions to be adopted to prevent the spread of the disease, the Medical Officer of Health seems inclined to rely upon isolation and quarantine, rather than upon school closure in the case of such outbreaks. This opinion, as regards school closure, is hardly in accordance with the generally accepted opinion, and is not borne out by the recent exhaustive inquiry of Mr. Shirley Murphy, the Medical Officer of Health of the London County Council.

The Medical Officer of Health of Wednesbury points out that only five deaths have occurred from diphtheria in that town during five years, and states that this is satisfactory considering the increase of the disease in large towns in recent years.

Among the other urban districts where cases occurred, which, in most instances, were found to be associated with insanitary conditions, may be mentioned Handsworth, Rowley Regis, and Sedgley.

In the rural districts the disease mostly prevailed in Cannock, Cheadle, Leek, Seisdon, Stone, and Walsall, and, in most instances, defective drainage or foul privies were met with in houses where cases occurred.

An example of defective drainage, which is frequently met with, is mentioned under this heading by the Medical Officer of Health of the Walsall Rural District, consisting of a cellar with a sewer connection and a dry trap. In such cases traps are constantly liable to become dry, and thus bring the house into direct communication with the sewers. If such drain connections only exist as handy provisions for floor washing, they

should certainly be abolished; if, on the other hand, they are provided for the drainage of a flooded cellar, either the cellar should be abolished or other means should be adopted to overcome the difficulty, which, in itself, constitutes an unwholesome condition of things.

Whooping Cough.—In the Administrative County, 224 deaths occurred from whooping cough, as compared with 290 in 1894, equal to a rate per 1000 of the population of 0·27, as against 0·36. Of these deaths, 175 occurred in urban districts, or 0·30 per 1000, and 49 in rural districts, producing a rate of 0·22 per 1000. In the following table corresponding figures are given for the past seven years:—

WHOOPING COUGH.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of deaths....	261	211	222	420	171	252	175
	Rate per 1000.....	0·48	0·38	0·40	0·75	0·30	0·44	0·30
Rural	Number of deaths....	39	68	39	90	33	38	49
	Rate per 1000.....	0.11	0·26	0·16	0·39	0·14	0·16	0·22

As regards urban districts, in Coseley a serious epidemic occurred the year previously, and extended into 1895, causing 16 deaths in the latter year.

In Leek, a mild epidemic occurred which only caused one death.

As regards rural districts, in Eccleshall it was very prevalent during the first half of the year, and proved fatal in four cases.

In Seisdon, the disease was prevalent, particularly in the Wombourn district, and caused 6 deaths.

Enteric Fever.—This disease, which must be looked upon as entirely preventable, caused 148 deaths, as against 95 in 1894, equal to a rate of 0·18 as compared with 0·11. Of these, 129 occurred in urban, and 19 in rural districts, equalling a rate, respectively, of 0·22 and 0·08. In the following table corresponding figures are shown for the past seven years:—

ENTERIC FEVER.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of deaths....	106	74	111	85	117	77	129
	Rate per 1000.....	0·20	0·13	0·21	0·15	0·20	0·13	0·22
Rural	Number of deaths....	26	34	35	24	32	18	19
	Rate per 1000.....	0·10	0·13	0·12	0·10	0·13	0·08	0·08

It will be seen by reference to the tables at the end of this Report that according to the mortality returns the districts that suffered most are the following, enumerated in order, the highest being placed first:—Quarry Bank, Heath Town, and Longton Urban Districts, and Walsall Rural District.

In those reports in which the causation is discussed, polluted water and defective drainage, as a rule, are credited with it. As the accounts of such outbreaks indicate pretty well the sanitary conditions met with in the respective districts, I propose to quote fairly fully from the remarks of the Medical Officers of Health in discussing the probable origin of the disease in their districts.

The Medical Officer of Health of Bilston writes:—"Sporadic cases of typhoid fever are always appearing, but in the last quarter of the year quite a localised outbreak occurred. Nine cases were notified in October (3 being in Wolverhampton Street); 14 in November (5 being in Wolverhampton Street), and 11 in December (7 being in the same street). These 15 cases in one street were in 11 houses, and all were identified with similar local conditions—houses dirty and ill-ventilated (most being back-to-back); yards ill-drained, and some covered with stagnant water; ash-pits partly dilapidated, and some uncovered, &c., &c. It is not hard to understand that, given the first case, the disposal of infected excrement in such an environment would readily cause the disease to spread. The milk and water supplies were carefully noted in all cases, and a surprise visit paid to a neighbouring dairy.

"It was very evident that no satisfactory treatment of these cases could be undertaken in their homes, and it became

absolutely necessary therefore to devise some means whereby the patients could be removed from their surroundings. After anxious consideration, a special meeting of the Sanitary Committee was called on December 5th, and it was advised that the iron building, which had been hitherto reserved for small-pox, and which, fortunately, had been empty for some months, should at once be thoroughly cleansed and disinfected, and the patients taken to it. This was promptly done, and the result has been that, since December 18th, no further case of typhoid has occurred in the street, and only four (in three houses) were notified in any other part of the town in the month of January of this year.

"Some of these houses too fittingly illustrated some special dangers constantly present in cases of infectious outbreak. Many were back to back, and the excrement from the front ones had to be taken through the street—in two cases at least for several yards—before it could be deposited. There is no doubt that back-to-back houses, where through ventilation is absolutely impossible, ought to be prohibited, but, until public opinion on the subject is more ripe, it would be an extreme step to condemn them *en masse*. It has been, for many years too, a practice here to erect dwellings on 'made soils,' and this I believe to be an important item in the causation of typhoid. The ground, often unhealthy from the beginning, readily becomes contaminated with different matters, emanations are given off, varying atmospheric conditions add to the evil, and the result frequently is an environment even dangerous, though often unsuspected. The insanitary conditions referred to in these cases were dealt with as far as they could be."

In Brierley Hill, where seven cases occurred, one of which was fatal, the Medical Officer of Health states that in every case nuisances were met with and corrected.

In Coseley, 18 cases occurred in 16 houses and one was fatal. It is said that three of the cases were imported, and in certain other cases unwholesome closet accommodation was found in the houses attacked.

In Darlaston, where four cases were notified, three of which proved fatal, it is said that the disease was less prevalent than in former years.

In Handsworth, 27 cases occurred in 24 houses, seven cases having occurred in one house. In this house the surroundings were dirty and there was overcrowding.

In Leek, 17 cases were notified and four deaths occurred. The cases were distributed throughout the town, they were apparently unconnected, and no special cause could be discovered.

The Medical Officer of Health of Longton, where 106 cases were notified and 18 deaths occurred, states that enteric fever is very general throughout the Pottery district. With reference to this remark I have prepared the following table, which shows, from statistics now in my possession, the rates in the various Pottery towns for the past seven years. It will be seen that, disregarding Hanley, with which we have nothing to do Longton stands a very long way at the head of the list as regards mortality from this disease, the nearest approach to it being in the neighbouring town of Fenton. Also, the mean enteric death-rate for the urban districts in the County for the same period amounts to 1·7 per 10,000 of the population, whereas in Longton and Fenton this figure is exceeded by no less than 135 and 82 per cent. respectively.

These figures would seem to indicate that there are causes in operation in these two towns which do not exist to the same extent in the other urban districts, and it is a matter which is well worthy of special inquiry.

ENTERIC FEVER DEATH-RATE PER 10,000 OF POPULATION, 1889-95.

	Population 1891 Census	1889.	1890.	1891.	1892.	1893.	1894.	1895.	Mean.
Burslem	31999	2·2	2·5	2·9	1·2	0·9	0·3	1·7	1·6
Fenton	16998	1·9	0·6	4·1	4·4	4·4	3·6	2·5	3·1
Longton	34327	6·2	1·4	3·2	1·9	7·0	3·3	5·0	4·0
Stoke-on-Trent	24027	3·2	2·7	2·0	1·5	3·5	1·9	1·1	2·2
Tunstall	15730	2·0	0·7	0·6	1·2	0·6	3·1	3·0	1·6
Urban Districts in Administrative County	546700	2·0	1·3	2·1	1·5	2·0	1·3	2·2	1·7

In Newcastle, 22 cases occurred in 16 houses, and caused 5 deaths. The Medical Officer of Health points out that 7 of the cases were traced to infection from previous cases in the same house, and emphasizes the importance of precautions being taken to disinfect the excreta.

In Quarry Bank, no less than 121 cases were reported, 26 of which were fatal, equalling the enormous rate of 3·6 per 1000 of the population. This outbreak, it appears, was specially investigated by one of the Medical Officers of the Local Government Board, and the Medical Officer of Health, commenting upon his report, says :—"His report, which has already been presented to you, contained special recommendations as to isolation, disinfection, excrement disposal, water supply, draining, and inspection of nuisances, and I am pleased to say that, acting under his advice, the sanitary state of the district has rapidly improved. Systematic inspection led to 267 notices to empty ashpits and privies. 300 inspections of water supply, with 37 analyses of water—23 by the Medical Officer and 14 by the County Analyst—brought about the closing of probably not less than 50 surface wells, and the general adoption of South Staffordshire water in Vine Street, Church Street, Sheffield Street, Deeley Street, and other places. There are still many surface wells in different parts of the district, which must always be regarded as sources of danger. The water supply of the Saltwells Coppice is impure and often insufficient, and requires your attention in the immediate future."

I would point out that the attention of the Quarry Bank Authority has repeatedly been called to the dangerous nature of the water supply of that district, and this question was the subject of a special communication to the Authority from the Sanitary Committee of the County Council a few years ago, upon a report by me on the sanitary circumstances of the district. Notwithstanding this, however, it has required the stimulus of a serious and fatal outbreak to impress the Authority with the importance of supplying wholesome water to their district. Now that their attention has been so forcibly directed to the importance of the matter, it is to be hoped that

every effort will be made, not only to supply the houses of the district with wholesome water but also to correct many of the nuisances to which their attention has been called in the Report of the Local Government Board Medical Officer.

Concerning 27 cases of this disease which were notified in Rugeley, in only two of which the infection was said to have been imported, the Medical Officer of Health writes as follows regarding 24 of the cases :—" The outbreak appeared to me to be due to one of two causes, or possibly both, viz.—the accumulation and removal (the latter occupying part of several days) of a large quantity of ashes and night-soil from open ashpits connected with privies in the yard, surrounded on two sides by the houses in which, with one exception, the cases occurred, and the drinking water supplied from a well in the yard which, on examination, was found to be well protected, and showed no evidence of leakage into it from without. Nevertheless, when the water was subjected to analysis by Dr. Bostock Hill, it was found to be contaminated with matter of animal origin to a large extent; whichever may have been the cause, its recurrence was obviated by cleansing, altering and closing-in the ashpits, converting the privies into wash-out closets, closing the well, and supplying water from the public main."

In Sedgley, 15 cases occurred, one of which was fatal. Six of the cases were traced to the County Borough of Dudley, and the drinking water in 6 of the other cases was analysed by the County Analyst, and condemned without exception. The Medical Officer of Health says :—" It does not seem fair to this district that the County Borough of Dudley, which is not protected by the Notification Act, should send their pauper typhoid cases for treatment at the workhouse, thus increasing the cost of notification in your district."

In Smethwick, where 28 cases occurred, 2 of which were fatal, the Medical Officer of Health discusses, very fully, the probable causes, and it appears that some of the cases were associated with unwholesome privies or defective drainage.

In Stone, three cases occurred in one court, the cause being attributed to defective drainage, which, it is said, has

since been corrected by connecting with the new sewerage system.

The Medical Officer of Health of Tipton states that the district can never be free from the disease so long as "damp, dilapidated old properties, with sewage-sodden surroundings and unventilated closets with improperly constructed and leaky cesspits," exist. He says, however, that such conditions are now less frequently met with than formerly.

In Wednesfield, where four cases occurred, the Medical Officer of Health states that in one house, where two of the cases occurred, there was no water-supply, except from a well which was probably contaminated "like most of the wells in the locality." It appears that the Authority are endeavouring to get the Wolverhampton water mains extended to the district.

As regards rural districts, 14 cases occurred in Cannock Rural District, 8 of which were attributed to the bad water-supply at Great Wyrley, a matter which is referred to under the heading "Water Supply" in this Report.

In Cheadle Rural District, where 14 cases occurred in various parts of the district throughout the year, four are said to have been imported, and the others were mostly connected with "foul, open drains, uncovered cesspools, and leaky privies."

In Leek Rural District, a case occurred in a farm house at Lowe, which supplied milk to the town of Leek. It appears that the necessary precautions were taken regarding the milk supply.

Six cases were notified in the Newcastle Rural District, four of which occurred in Madeley parish, and it is said that the possible cause of these cases was impure water-supplies from wells adjacent to cesspools.

In connection with this, I may mention that I conducted a special inquiry into an outbreak of enteric fever at Madeley in 1892, and from my report to the Sanitary Committee, which was forwarded to the local Authority, I quote the following:—

"Without asserting either that the water-supply or the drainage arrangement are responsible for the outbreak of fever, there is no doubt whatever that both are sufficiently at fault to account for it. It is, therefore, incumbent on the Authority to take steps to place the property in proper sanitary repair, and to provide a good water-supply for the people. The first requirement can easily be complied with, and I am informed that little difficulty need be experienced in getting a good supply of water at a reasonable cost."

Judging from the report now under review, I am afraid that little has been done to remedy the defects to which the above paragraph refers.

In Seisdon Rural District, 4 cases occurred, all of which are said to have been imported.

In the Walsall Rural District, a serious outbreak occurred at Pelsall and Heath End, resulting in 5 deaths. Privy and drainage defects are credited as being the cause of most of the cases, and in referring to the sewerage scheme for Pelsall and Rushall, the Medical Officer of Health says:—"When it is remembered that the chief factor in predisposing to typhoid fever and diphtheria is damp soil, saturated with animal impurities, as by leakage from drains, cesspits, and privies, and how utterly impossible it is to remedy these without efficient means of drainage, it will be seen that it is a matter of the gravest importance that the localites indicated above should receive the earliest possible attention."

As indicating the importance of isolating cases of enteric fever, I would also quote the following paragraph from this report:—"Several of the cases were almost destitute, and were under the care of the Parish Medical Officer, and as I had no means whatever of isolating them, with your sanction, I engaged a woman to assist the Parish Nurse in looking after them, and seeing to the proper carrying out of disinfection, for which purpose suitable and sufficient disinfectants were supplied by the Sanitary Inspector."

Typhus Fever.—It is satisfactory to be able to record that no mention of this disease appears in any of the reports under review.

Diarrhœa.—In the Administrative County, 684 deaths occurred from diarrhœa, as compared with 270 in 1894, equal to a rate of 0·85 as compared with 0·33. Of these, 592 occurred in urban and 92 in rural districts, equalling a rate respectively of 1·02 and 0·41. In the following table corresponding figures are shown for the past seven years:—

DIARRHŒA.		1889.	1890.	1891.	1892.	1893.	1894.	1895.
Urban	Number of deaths...	431	454	208	301	632	210	592
	Rate per 1000.....	0·82	0·82	0·38	0·54	1·12	0·36	1·02
Rural	Number of deaths...	98	91	65	65	129	60	92
	Rate per 1000.....	0·40	0·35	0·27	0·28	0·56	0·26	0·41

Diarrhœa is a disease which is very variable as regards its prevalence, as the temperature in the summer months is intimately associated with its causation. At the same time, although climatic conditions are intimately associated with the ailment, its prevalence is largely influenced by the presence or absence of insanitary surroundings, and the amount of discretion shown in the feeding of infants, for it is essentially an infantile affection.

The great increase in the mortality this year compared with 1894 is, no doubt, to be attributed to the high temperature which prevailed during the late summer months.

In discussing this ailment, the Medical Officer of Health of Bilston writes:—"No less than 42 deaths were attributed to diarrhœa, which, though a disease largely influenced by the temperature of the summer months, is essentially an infantile ailment, and one dependent, therefore, partly upon insanitary surroundings. It is certain, however, that a great proportion of cases in this district are the direct outcome of improper feeding of infants. Quite young babies are given such things as gruel, boiled bread and milk, biscuits, &c., with the result that the infantile mortality is very greatly and unnecessarily increased. Death takes place often from diarrhœa, sometimes from convulsions, bowel and stomach complaints, or similar diseases. Too much stress cannot be laid on this subject, and

every opportunity should be taken of teaching mothers the proper method of rearing children. Milk is the natural, and should be the only, food of infants—preferably the mother's milk. When from disease, or other cause, this is not available, milk from the cow should be procured. In later months when other things are to be added, it would be best to consult a medical man."

In Darlaston, where 36 deaths occurred, all, with one exception, in children under five years, the Medical Officer of Health attributes the high mortality to less cleanly habits owing to scarcity of water, combined with a high Autumn temperature, and refers to stagnant gutters, leading to impure soil, in the neighbourhood of houses.

The Medical Officer of Health of Wednesbury points out that the affection is amenable to treatment, but that it is so lightly regarded by the poor that it frequently remains untreated and passes on to a fatal termination.

In the Gnosall Rural District, the Medical Officer of Health calls attention to what he characterizes as rather a remarkable outbreak in the Woodseaves neighbourhood, accompanied, in many cases, by sore throats. The outbreak, it is said, seemed to have some connection with an outbreak of sore throats among the children at High Offley school.

Cholera.—No mention is made of this disease in any of the reports under review.

Erysipelas.—Little reference is made to this disease in any of the reports.

In referring to 64 cases which were notified at Smethwick, the Medical Officer of Health states that this number was far in excess of that of any year since the Act came into force. He was unable to trace any of the cases to any infective source either personal or local.

Puerperal Fever.—In the Administrative County, 26 deaths were attributed to puerperal fever, as against 29 in 1894. In a few only of the reports is any special reference made to the circumstances attending the cases.

Concerning two fatal cases which occurred at Sedgley, the Medical Officer of Health points out that they were not attended by the same midwife.

In Smethwick, where 4 cases were notified, all of which recovered, the Medical Officer of Health attributes the disease chiefly to personal and domestic uncleanliness, improper nursing, and want of fresh air.

In discussing 4 cases which occurred in the Cheadle Rural District, the Medical Officer of Health points out that they were not connected with insanitary surroundings, and attributes them to unskilled nursing.

Influenza.—In my last year's Report I was able to state that this disease, although prevalent, had not prevailed to such a serious extent, nor was it so fatal as in former years. It would appear from the reports under review that a still further decline, both in the numbers and the severity of the cases, has taken place, although it attacked most of the districts, chiefly in the early part of the year.

The Medical Officer of Health of Bilston says that the disease, in all probability, contributed, indirectly, to the general mortality more than would appear at the first glance.

In Rowley Regis, 10 deaths were registered from this disease. The Medical Officer of Health states that although it was not so prevalent it was more fatal, that the cases occurred mostly among children and young adults, and that the respiratory organs were attacked in the majority of cases.

In Smethwick, it was prevalent in April and May. No deaths, however, resulted, and no serious after effects were observed as was the case in former epidemics.

In Tipton, the disease prevailed during March, April, and May, and caused 5 deaths. The cases were fewer than in any previous epidemic, but at first the type of the disease was severe. It attacked people of all ages, and a previous attack seemed to afford no protection against it, nor did those who previously suffered have the ailment more lightly than others.

In Eccleshall Rural District, the disease is said to have been very prevalent during March, April, and May, but the type was not so severe as formerly.

Diseases of the Respiratory Organs.—In my last two Annual Reports I called attention to a decline in the death-rate from this class of diseases, following the subsidence of a serious epidemic of influenza, which so greatly increased the deaths from lung diseases, particularly in old people. This year the numbers have increased, although they may still be said to be low; they are 2,802 as compared with 2,511 in 1894.

Zymotic Disease Prevention.

Notification.—I am pleased to say two districts are now added to the list of those where the Compulsory Notification of Infectious Diseases Act was already in force, namely, Wednesfield (Urban) and Mayfield (Rural). The addition of these two places to the list adds 9,147 to the population which is now under the Act, and brings the total up to 716,449. In the following districts, with a total population of 89,167, the Act has not yet been adopted:—

Short Heath,	Urban.	Wednesbury,	Urban.
Smallthorne,	,,	Leek,	Rural.
Tipton,	,,	Uttoxeter,	Rural.

In former reports I have pointed out the advantages of the Act, and it is difficult to understand why certain Authorities still hesitate to adopt it. It is certainly not for want of advice on the part of their own Medical Officers, and one would hardly expect that expense acts as a deterrent.

I give the following figures, which show the average cost per 1,000 of the inhabitants for each of the past six years in districts where the Act has been in force:—1890, 18s. 6d.; 1891, £1 8s. 9d.; 1892, 18s. 4d.; 1893, £1 5s. 10d.; 1894, £1 1s. 7d.; 1895, £1 2s. 8d.

Tables with reference to the working of this Act are introduced at the end of this Report.

In those districts where the Act is in force, it continues to operate with entire absence of friction, and there is a general

consensus of opinion as to its great value, even in districts where hospital accommodation is not yet available.

With regard to the districts where the Act is not in force, the Medical Officers of Health, without exception, urge its adoption.

In Tipton, it appears the adoption of the Act has again been considered, and the Medical Officer of Health expresses his regret that the Authority came to a negative decision.

The Medical Officer of Health of Wednesbury writes:—"Upon October 30th representations were made by School Board teachers respecting the spread of scarlatina among the children, owing to the attendance of children from infected houses. The Town Clerk requested my opinion upon the position. I replied that no practical step was possible until the Notification of Infectious Diseases Act came into force in Wednesbury. I have little doubt that the Council will be agreed as to the accuracy of such an opinion, and I feel convinced that before long a majority of the Health Authority will declare itself in favour of the adoption of the Act. Let it be supposed that an epidemic of scarlet fever arises of such severity as to call for the closure of schools. How, I would ask, can the Health Authority judge of the proportions assumed by the disease unless the cases are notified as they arise? Or again, if the schools have been closed, how can that Authority, without the adoption of the Act, be kept informed of the progress of the disease so as to judge of the proper time for re-opening the schools?"

The Medical Officer of Health of Leek Rural District, in commenting upon the fact that the Act has not been adopted, says:—"At present the means by which the officers of the Sanitary Authority obtain information of the presence of infectious disease in the district are:—

"(1) By the goodwill of the medical men who practice in the district; (2) From the District Registrars (from the latter only as a rule after death has occurred); (3) By the observation of the School Attendance Officer, who is also the Sanitary Inspector."

Isolation and Disinfection.—In most of the reports, both for urban and rural districts, this question is very fully dealt with.

In the table at the end of this Report, headed "Result of the Working of the Compulsory Notification of Infectious Diseases Act," figures are given showing to what extent isolation hospitals are made use of in districts where they exist. It will be noticed that the use made of them varies very considerably, and in most cases it is evident that they can be of little practical value in curtailing epidemics—the chief purpose for which they are intended. In some instances it would appear that patients object to go to them, on the ground that the accommodation provided is not satisfactory. In other cases in which difficulty is experienced the Authorities themselves seem to be responsible, owing to the fact that they take too limited a view of their responsibilities, and impose a hindrance to the isolation of infectious cases by making a charge for the admission to hospital of all persons who are not paupers.

The percentage of infectious cases isolated in urban districts where hospitals are available, and have been available during the whole year, varies very much—from *nil* in the case of Brierley Hill, Brownhills, and Cannock, to 95·9 in Tamworth.

The aim of sanitary authorities should be to isolate all cases where isolation cannot efficiently be carried out at home, and these constitute nearly the whole. A glance at the first column of the table referred to will show the position of each district as regards percentage of cases isolated in hospital to total cases, both in urban and rural districts, where the Notification Act is in force.

As I have indicated in my summary of the year's work, it is desirable, in view of the action of the Council, that I should quote pretty fully from the reports under review in order to indicate the feeling in the various districts regarding this important matter.

The District Council of Audley are said to favour the proposal of the Sanitary Committee for the union of districts for isolation purposes, and the Medical Officer of Health states that had hospital accommodation been available scarlet fever would not have spread as it did throughout the district.

The Medical Officer of Health of Bilston writes:—"The need of proper isolation accommodation for infectious diseases is well known to the Council, and the advantage of combination with one or more neighbouring Authorities—*e.g.*, Coseley or Willenhall—are self-evident. Whether this should be by voluntary arrangement, or through the medium of the County Council, is a matter for consideration, but it is to be hoped that the provision of a proper disinfecting apparatus will be remembered at the same time. No means of any kind now exist for disinfecting bedding, clothing, &c., and I cannot get rid of the suspicion that many cases, the origin of which it is impossible to discover, of infectious disease are due to this great want. A proper ambulance and public mortuary are also required."

In Brierley Hill, the Medical Officer of Health has no doubt that if the isolation hospital could have been used scarlet fever which prevailed would have been stamped out.

In Burslem, it is said that there is still much prejudice amongst the people of the district against removal to the isolation hospital.

The Medical Officer of Health of Cannock writes:—"During the year, at the instance of the County Medical Officer, Dr. Reid, a meeting of medical officers for the various localities in the County has been convened and proposals discussed for the establishment of 'Combined Hospital Districts' in the County, and it appears to me that, if suitable and convenient districts can be so arranged, and the hospitals so placed as not to be too remote from any of the places they may be required to serve, such a system—where a permanent staff of nurses and officers would have, more or less, to be maintained—would be, I presume, to a great extent, interchangeable, and would be most desirable, both on the score of economy and practicability."

The Medical Officer of Health of Coseley, in discussing an outbreak of scarlet fever in that district, says:—"There is little hope of the number of cases being materially reduced until isolation is provided, not only by your Authority, but also by neighbouring districts, and in order to secure the full benefit to be derived from this system, all cases which cannot be properly isolated at home (and these form the majority) should be taken to hospital."

In Fenton, it is stated that a number of cases occurred showing the importance of prompt removal of fever patients from houses where there were other children.

The Medical Officer of Health of Lichfield writes:—"The advantages of isolation in hospital is becoming more apparent and better recognised every year. It is hardly possible to carry it out effectually in small tenements, where thorough disinfection is also difficult, and parents themselves do not readily lend their aid in slight cases.

"The disease (scarlet fever) was confined to first cases, other members of the family having rarely suffered. There were no 'return cases,' *i.e.*, fresh cases in the same household, after the discharge of the patient from hospital, with one exception, in the urban district, and in this instance it was at least possible, if not very probable, that the infection came from another source."

Among the many advantages of hospital isolation he mentions the following:—

"Greater probability of the recovery of the patient, and comforts which are impossible in poorer homes.

"Removal of first cases are seldom followed by further extension of the disease.

"Other members of the family can resume their daily occupation, and other children return to school.

"The patient is not long confined to one room, and can have fresh air and companions during his convalescence."

The Medical Officer of Health of Longton writes:—"I had hoped to be able to record in this report, that a great good work had been accomplished in the erection of the long-thought-of

Contagious Diseases Hospital, the land for which has been purchased some time, and the site approved of by the Local Government Board.

"In modern sanitation a contagious diseases hospital is considered to be one of the first necessities in a population like ours. Some of the more troublesome infectious or contagious diseases would be much circumvented, fewer deaths would occur, and the liberty of families, both as to following their various employments, and in school attendance, would be less interfered with, meaning in the former case less loss of income, and in the latter less loss of time in the work of education."

The Medical Officer of Health of Rugeley writes:—"Until the Urban District Council supplies an isolation hospital nothing reliable can be done in this way, and as the subject is in the air, I venture to advocate the provision of a local hospital to accommodate not less than eight patients, with separate accommodation for two small-pox patients. Neighbouring parishes might, I think, possibly be induced to join with us. Rugeley being a good centre, within easy distance of a number of surrounding villages, and no difficulty would be found in choosing and securing a suitable site. As this is a matter which will have to be settled ere long I do hope that the District Council will give it, and without delay, the earnest consideration which a subject of such importance as this has a claim to."

The Medical Officer of Health of Sedgley writes:—"Every community should be protected from the spread of infectious diseases by compulsory notification and by efficient isolation. For the latter purpose a hospital is necessary. The value of your small-pox hospital was fully proved in the end of 1894 and beginning of 1895, when the first and only cases of small-pox—three in number—were immediately isolated, and thus the spread of this loathsome disease was effectually checked. To prevent suffering and to save valuable lives are, or ought to be, the main objects striven after by a Board of Health. The results attained by this Council in checking small-pox are equally possible in preventing the spread of other infectious

diseases, *e.g.*, scarlet fever. In 1894 there were 148 cases of this disease notified, all of which were treated in their own homes. Had the first few cases been isolated in a hospital the spread of the disease would have been checked, and the cost of notification greatly lessened. Nor need there be much fear of any permanent popular opposition to a well-managed hospital. In other districts parents now *ask* admission to hospital for their children who are suffering from scarlet fever. A like result may confidently be anticipated in your own district after hospital accommodation has been provided.

"In another way also the community would benefit by the use of a hospital. Where scarlet fever now occurs in a household *all* the children have to stay away from school for six weeks. This would not be necessary if isolation in hospital could be carried out, and thus the children not attacked would suffer no loss of education, while the school authorities would gain extra Government grant.

"This question has been greatly advanced by 'The Isolation Hospitals Act, 1893,' by which steps must be taken in the near future to provide hospital accommodation, either alone or in combination with one or more other districts. It seems to me that both efficiency and economy can best be secured by a hospital for your own district combined with some neighbouring localities. Failing that arrangement, efficient isolation for your own district can be carried out with due regard to economy."

In Short Heath, the Council are told by their Medical Officer of Health that they will shortly have to choose between providing accommodation for themselves and having it provided for them by the County Council.

The Medical Officer of Health of Smethwick, in referring to the prevalence of scarlet fever in the district, says:—"These statistical facts have a practical bearing on the consideration which the Isolation Hospitals Act of 1893 is receiving at the hands of the District Council, and the steps to secure compliance with which are being taken by the Staffordshire County Council, for it is in regard of provision for the isolation

of scarlet fever that this district is mainly concerned. The District Council, as were the old Local Board of Health, have long been fully alive to the great advantage that would be gained by the provision of such a hospital, and had they not been hampered by the numerous costly public works in which they have been engaged, would long ago have given practical effect to their opinions. In public, however, as in private affairs, the adage holds good that you must cut the cloth according to your means, and those who have to pay the piper may be well understood to endorse the Fabian policy of their elected representatives in regard of this matter, whose difficult task it is to reconcile sanitary requirements and financial capacities. Still, however, making every allowance for the difficulties confronting the District Council, the fact remains that a statutory obligation now rests on them and that they have no choice left to them, and that the County Council who are empowered by Act of Parliament to compel District Councils to comply with the requirements of the Hospitals Isolation Act, have significantly expressed their intention of exercising their authority, and so the provision of an Isolation Scarlet Fever Hospital becomes a matter of urgency. It may not be out of place for me, therefore, to point out that the figures I have given show that the bulk of the patients whose isolation will have to be provided for will be children of school age, and I may add that it is reasonable to conclude that by the isolation of first cases the measures already in vogue for the prevention of the spread of infection will, by means of such a hospital, be strengthened just where they are weakest, and further, that outbreaks will be capable of being nipped in the bud—confined to the individual first attacked—and so the tedious and expensive hindrances to which the healthy members of families amongst whom scarlet fever has broken out, in respect of attendance at school, or continuance at work, will be done away with, and lastly, that the danger that a number of centres of infection constitutes to the community will be removed."

The Medical Officer of Health of Stafford points out that accommodation is only available in that town for the isolation

of one disease in the permanent hospital, and recommends that provision should be made for isolating enteric fever and diphtheria.

The Medical Officer of Health of Stone, in referring to the work at the joint isolation hospital of the two Authorities (Urban and Rural), calls attention to the necessity of providing an efficient disinfecting apparatus, and points out that the fumigation of clothing by means of sulphur—the practice now followed—is of little value.

In Tamworth, where a hospital for the joint use of the Urban and Rural districts was recently erected, certain requirements are wanted concerning which the Medical Officer of Health writes as follows:—"A Committee was appointed to view and report on two different disinfecting apparatus at Stafford. A more perfect disinfector has, however, since been recently introduced, which will, if adopted, answer every purpose. The work carried on in the hospital shows that a disinfector and the other additional improvements suggested in my last report, and approved of by the Joint Hospital Board, are absolutely needed to insure the proper treatment and thorough disinfection of the various cases. The additional requirements are—improved bathing and hot-water apparatus, increased laundry accommodation, store room, and coal house. The necessity to provide a better means of conveying the patients to and from the hospital is one which is at the present time under consideration."

With reference to isolation accommodation at Tipton, the Medical Officer of Health writes:—"During the year the hospital for infectious diseases has not been made so much use of as I had hoped that it would have been, and this, I think, has arisen from two principal causes. (1) From the difficulty in getting patients to consent to go in, because the hospital is looked upon as a small-pox hospital. (2) From the fear that they would be charged more than they could afford to pay for their maintenance, &c. when in the hospital.

"These are both groundless fears; the wards are always well disinfected after a case of small-pox has been discharged,

and no one has ever been forced to pay more than they could reasonably afford. I mentioned in my last year's report that my own opinion was that as patients are admitted there primarily for the public benefit, to safe-guard the public from infectious disease, therefore, the public ought to pay for their maintenance. Notification and hospital isolation should always be provided together, the one as a natural sequence to the other. As a precautionary measure for preventing the spread of infectious disease, hospital isolation should be applied to the first few cases, and this can only be done by prompt action after early notification. Afterwards, when an epidemic is in full swing, the usefulness of an infectious hospital as a preventative is minimised, and is but a convenience to individual families. If an intelligent use of the hospital is made, a great economy can be effected, because by isolating the first few cases, the spread of the disease can be stayed, and there would not be the need of the large and expensive buildings that we see in some places.

"There is every reason to think that if the first cases of small-pox that we had in January had not been at once isolated we should have had an epidemic which would have cost us as much as it has cost some of the neighbouring towns. The question of notification has often been well discussed at the Council and committee meetings, as has also the free admission of patients into the hospital, and you have decided that notification is unnecessary, and that a small charge ought to be made for the maintenance of patients in the hospital where there would be no hardship in making such a charge, so we must do the best that we can, and still trust to the kindness of the medical practitioners of the district to gratuitously notify to me cases for which a statutory charge can be made."

In my introductory remarks to this Report I have commented adversely upon the custom which is followed in a few cases of making a charge for isolation, and also upon the difficulty which is sometimes experienced in getting patients to go into hospital. An excuse which is occasionally advanced is that the hospital is used for small-pox cases as well as others,

and although such fears, if proper precautions are taken, may be groundless, still, one is hardly surprised that they should exist, and they indicate the necessity of distinct accommodation being provided for small-pox cases.

It appears that the question of providing an efficient disinfecting apparatus for Tipton has been considered, but is now in abeyance in view of the possible action of the County Council in the direction of establishing joint isolation areas.

In this district improved arrangements have been made for the conveyance of patients to the hospital, by an understanding with a cab proprietor who reserves a carriage solely for hospital purposes. It seems that the disinfection of the ambulance in this case is left to the cab proprietor, an arrangement which is hardly satisfactory. The Authority should assume the responsibility of disinfecting the carriage on every occasion after use.

The Medical Officer of Health of Wednesfield calls attention to the fact that accommodation is not available for treating more than one disease at the same time, and he throws out the suggestion that if skilled nursing was provided at the patients' homes, in the case of enteric fever, it would be of much value.

The Medical Officer of Health of Wednesbury writes:—"The question of the isolation of infectious diseases has remained in abeyance, so that at present no indication has been given by the Council of the particular scheme of isolation that they would favour. Still, I feel confident that as I write this we are on the eve of some decided progress in this question, and it remains, I believe, shortly to be seen whether the town contemplates dealing with the matter independently altogether of adjacent health authorities, or whether some plan of joint action shall be preferred. The points are still *sub judice*, but will almost certainly before long be definitely determined."

The Medical Officer of Health of Willenhall, in dealing with this matter, refers to the action of the Sanitary

Committee of the County Council, and says :—"The Council will therefore have to choose between providing the necessary isolation themselves, having it provided for them by the County Council, or joining with other Councils for hospitals for joint use. If the latter course be adopted, I am sure there are sites available not far from the present temporary small-pox hospital, well and conveniently adapted for both small-pox and general contagious hospitals in close proximity to Willenhall, Darlaston, and Bilston, representing a population of over 56,000, whilst other districts would not be far away; or it might be equally possible to find sites on the northern side of the town in close proximity to Willenhall, Wednesfield, Heath Town, and Short Heath, the united population of which places is about 33,000. The matter is one which requires more consideration, but I shall be prepared to help the development of the views of the Council as soon as some definite conclusion has been arrived at as to the course they intend to pursue."

The Medical Officer of Health of Tunstall writes as follows, regarding the difficulty of prevailing upon parents to allow their children to be taken to the isolation hospital :—"The increase in the number of cases of scarlet fever is accounted for by the fact that it is utterly impossible to get satisfactory isolation in the bulk of the houses in the town, and parents have still a strong prejudice against having their sick children removed."

In such cases as these, granting that the Authority can assure themselves that the accommodation and attention provided is satisfactory in every respect, it would be well, by way of example, to enforce the powers they possess to overcome such obstruction on the part of the parents.

As regards rural districts, the Medical Officer of Health of Cannock Rural District writes as follows :—"The question of hospitals for the isolation of infectious cases is one that is demanding earnest attention, and the County Council is taking steps to secure, if possible, the combined action of the Sanitary Authorities, with a view of forming hospital

areas. In some of our larger parishes, a scheme of central hospitals, with a good equipment of nursing and ambulance staffs, would work well, whilst in the more remote and sparsely populated districts, cottage isolation might answer the purpose. As at present worked, the hospital at Cannock is for small-pox only. It is not suitable for a general infectious hospital, but it has served a most useful purpose, and probably saved much to the ratepayers."

The Medical Officer of Health of Gnosall Rural District writes:—"The question of the provision of a suitable isolation hospital for cases of infectious disease which has been pressed upon your notice during the year is an important matter, and one most difficult to grapple with. An emergency hospital to cope with an established epidemic of one disease can be temporarily run up, but such an arrangement does not meet the requirements of the case, which is the provision of suitable isolation for first cases not capable of being otherwise satisfactorily isolated. Such a hospital, however small, should be capable of at any time receiving a case or cases of any two of the ordinary dangerous infectious diseases of either sex. The two diseases of the above class most liable to become epidemic in rural districts are scarlet fever and diphtheria, and these are two diseases which require most strict isolation one from the other, as one disease greatly predisposes to an attack of the other, and this necessarily involves special and careful construction. Every isolation hospital, however small, moreover requires special appliances in the shape of an ambulance, disinfecting apparatus, &c., and the question of expense thus becomes considerable. I am strongly of opinion that as a rule such hospitals could be best provided by the combination of more than one district or of parts of two adjoining districts, as the boundaries of existing sanitary districts are so irregular and interlaced as to render them, as a rule, very unsuitable areas for access to a district isolation hospital."

The Medical Officer of Health of Newcastle Rural District writes:—"In reference to an isolation hospital, which is so

much needed in this district, nothing definite has yet been done, but in accordance with suggestions of the County Council, negotiations are pending between the Newcastle Rural and Urban Sanitary Councils and the Audley Urban Council, to endeavour to frame a joint scheme, which may be beneficial and satisfactory to all."

The Medical Officer of Health of Stone Rural District calls attention to the reluctance on the part of the friends to allow of the removal of cases, and suggests as an explanation the ignorance which prevails as to the care and attention with which patients are treated at the hospital. He also points out that for want of a disinfecting apparatus clothing has to be destroyed.

The Medical Officer of Health of Mayfield Rural District suggests that for such a scattered district it is desirable to provide isolation accommodation in the shape of cottages in different parts of the district.

In concluding this section of my Report I would call attention to the tables at the end of the Report. It will be found on comparing the table which shows the working of the Notification Act with that showing the summary of sanitary inspectors' work that, in a good many instances, sufficient attention is not given to the disinfection of houses.

Vaccination.—In many of the reports attention is directed to the inefficient manner in which vaccination is performed. This I regret to say is not entirely owing to opposition on the part of the public, but is too often the result of dishonesty in the case of certain practitioners. Possibly legislation, which doubtless will follow on the Report of the Vaccination Commission, may effect a much needed reform in this direction, as I have indicated in my opening remarks.

Among the districts where special attention is directed to the inefficient manner in which the operation is conducted may be mentioned Rowley Regis, Tipton, Wednesbury, and Wednesfield.

The Medical Officer of Health of Tipton, in referring to small-pox, says:—"As to our protection, it is unfortunately

the custom here to vaccinate in one place only; this custom is one that is *legally right but morally wrong*, the protection thus afforded being insufficient, and only an evasion of the spirit of the Vaccination Act."

The Medical Officer of Health of Wednesbury, in discussing certain vaccination statistics which he gives, says:—"It will be seen that very little more than a quarter of the children born during the year 1895 have been vaccinated. This state of things will probably continue until the Commission appointed to inquire into the question of vaccination has issued its report. In the meantime the vaccination law is not administered with any strictness, and so in the case of a large proportion of cases the children escape vaccination. Not improbably, nothing short of wide-spread epidemics of small-pox will demonstrate to the public the danger of allowing the people to go unvaccinated."

The Medical Officer of Health of Wednesfield writes:—"As mentioned in my last annual report, public vaccination in this district seems to be gradually dying out, and ere long, if the present rate of decline still goes on, will become a thing of the past. Only 26 children were vaccinated at the public station during the latter half of the year. Parents take their children principally to medical men who make one puncture only, as they have great objection usually to have four punctures made, as is the case with most public vaccinators, and another thing which tends to reduce the number is the probability that the compulsory clauses will be done away with after the report of the Special Commission, which has the matter in hand, is presented to Parliament."

Insanitary Dwellings and Overcrowding.

It would appear from the reports under review that the provisions of the Housing of the Working Classes Act, 1890, and the Public Health Act, 1875, in regard to insanitary dwellings, are receiving increased attention; still, there is room for greater activity on the part of Authorities of rural districts in condemning insanitary properties.

The Medical Officer of Health of Bilston writes :—"There is a very great difficulty in dealing with small wretched property. The tenants, in many cases, are hardly able to pay even low rents, and to declare their homes unfit for habitation simply means turning them into the streets. It will be a question for consideration in the near future whether it may not be advisable to deal on a larger scale with some of the overcrowded areas, or in some way to cause to be erected houses in the more open parts of the town. These houses should provide, at a reasonable rent, such accommodation as would allow of the proper separation of the sexes, and a limited number of inmates in each bedroom. Back-to-back houses ought to be abolished and such system of excrement disposal as the privy system, the use of pails, &c., should be, as soon as possible, discontinued, and the substitution, at least in all new properties, of the water-carriage system encouraged. This latter should be remembered in connection with the question of the sewerage of the town. The introduction of the new water supply—the completion of which is expected in a few months—will considerably add to the ease with which this alteration could be made, and would allow of the thorough systematic flushing of the sewers.

"In the meantime efforts should be directed to reduce to a minimum the size of privy cess-pits ; they should be ventilated and their contents mingled with ashes. Regular and frequent removal should also be insisted upon, and ashpits should be as small as possible and made thoroughly water-tight above and below."

In Coseley, six houses have been closed, and 27 cases of overcrowding have been abated. It appears, however, that one house in this district which was condemned the previous year is still inhabited.

In Lichfield, a block of insanitary houses have been closed after proceedings in Court were instituted. These houses are now unoccupied, and the Medical Officer of Health confirms the opinion of the City Surveyor that they should be demolished under the Housing of the Working Classes Act.

In Longton, 17 houses were closed during the year, and it is said that this work is being proceeded with as fast as is practicable, but that difficulty is experienced in finding other houses for disturbed occupants.

Special mention is made of the police accommodation in this district, which is said to be "very bad." The Medical Officer of Health points out that in cases of sickness the invalids have to remain in the common sleeping-room, much to their disadvantage and causing considerable inconvenience and disturbance to the other men when off duty.

The Medical Officer of Health of Newcastle points out that in several parts of the district the cottage property is in very bad condition, but that no proceedings have been taken during the year.

In Quarry Bank eight cases of overcrowding were abated out of ten which were reported, and three houses were condemned as unfit for habitation.

The Medical Officer of Health of Rugeley writes:—"There are in certain parts of the district a number of old, and some of them thatched, cottages which have been permitted to fall into such a state of dilapidation, especially as regards their roofs, that unless something is promptly done to them to make good the defects, I feel it will be my duty to ask the District Council to condemn them as unfit for human habitation."

In Short Heath, it appears there is much need for increased house accommodation.

In Smethwick, 20 houses were closed under the Housing of the Working Classes Act. In the case of 12 of these the requirements of the Authority were complied with, but as regards the others nothing has been done to place them in habitable repair. It appears that there is little overcrowding in this district, but a few cases were reported and satisfactorily dealt with.

The Tunstall District Council do not appear to be very active in condemning insanitary property in that district judging from the following extract from the Medical Officer of

Health's report :—" I have to reiterate the remarks I made in my last annual report with respect to the paving of the back entries in several streets, and as this matter has been brought forward annually for over ten years, I sincerely hope the Council will at once give instructions for all back passages to be paved in the course of the current year.

" Through the accidental falling of a wall in Booth Street, and which proved fatal to a boy who had been standing near, my attention was called to the dilapidated state of many of the houses and out-houses in the lower part of the town. The matter had the attention of your Sanitary Committee, and orders were given to have all such property put in repair. The owners, however, are very slow in having the work done, and some pressure will have to be brought to bear upon them to have the work fully accomplished."

In Willenhall, 45 houses were reported under the Housing of the Working Classes Act as unfit for habitation, with the result that some have been improved and others are still under consideration.

As regards rural districts, in Leek Rural District 5 cases of insanitary houses have received attention, in 3 of which the tenants left and the houses have not since been occupied ; in the other 2 cases repairs have been carried out.

In Stone Rural District, cases of overcrowding have been dealt with, and some properties have been improved.

Excrement and Refuse Disposal.

I have called attention in my preliminary remarks to the satisfactory advance which has evidently taken place in the system of dealing with the excrement and refuse of districts. This subject has received considerable attention in my previous reports, but as it is one of such supreme importance from a health point of view, I propose to notice, very fully, the paragraphs in the reports under review which deal with it.

The Medical Officer of Health of Audley states that there are fewer complaints of inefficient scavenging than in former years.

The Brownhills District Council are recommended to undertake the cleansing of ashpits, as the contract system which is now in force does not give satisfaction.

In Burslem, 130 objectionable cesspits have been abolished, waste-water closets being substituted in 109 instances, and ordinary water-closets, with clean-water flush, in the remainder. It is stated that the night-soil removal in this district is conducted fairly satisfactorily.

The Medical Officer of Health of Brierley Hill writes in strong terms under this heading as follows :—

"This work is done by contract. The complaints brought to me, during the year, of delay and difficulty in getting the nuisances removed have been more urgent and numerous than I have ever known them to be in previous years.

"The severe weather in the early part of the year doubtless interfered with the regular and systematic emptying of the closets and ashpits. The change of contractors also caused some delay.

"Facts were brought before your committee which showed that on some properties the nuisances had not been removed for six, and in some cases, even twelve months. Proper supervision and enquiry into the manner in which the contractor is carrying on the work should prevent such negligence as these statements reveal.

"The offering of this most important department for tender every year is not to be commended, and I feel convinced the work will not be efficiently carried out whilst this system continues in operation. I would again respectfully urge upon your consideration the advantage of taking the work into your own hands. If it involves a greater cost, the work is better done, and the extra money is well expended for the benefit of the public health.

"On many occasions during the year I have brought before the Sanitary Committee instances of the defective construction of the closets and ashpits.

"The dilapidated, leaky, and wet condition of these closets and ashpits is the most insanitary condition in our town. In these days of enlightened sanitary progress, such a thing as a constantly wet closet and uncovered ashpit should be unheard of. The difficulties and expense of removal of the nuisances are enormously increased where such defects exist. The necessity for using such an abomination as a sock cart in connection with a privy midden should not be tolerated.

"I do not think there can be found a single instance where a properly constructed closet cannot be erected and the contents kept dry.

"The difficulty of clearing the ashpits is very considerably increased by the amount of rubbish thrown into them, such as bricks, bottles, etc. If a definite plan of construction were decided upon, with printed instructions for the builder, and enforced, some of the difficulty would be removed. The ashpit should not be too large, nothing but fine riddled ashes should be thrown into it, and a separate receptacle should be provided for other kinds of rubbish. This separate receptacle could always be emptied in the daytime, the night work being thereby considerably reduced, or rather the actual amount of excremental nuisance removed being increased in a given time. By adopting this plan there would be much less nuisance, no saturation or pollution of the soil and atmosphere, and the cost of removal would decrease. Instead of the numerous 'tips' scattered over the district, and about which there are such frequent complaints, it would be much better to destroy all the accumulated rubbish by fire. 'Fire Destructors' have been established in other parts of the country, and I think it would be well for you to send a deputation to one of these places to enquire into the cost and working of the apparatus. There are also several instances of houses with W.C.'s which have an intercepting cesspit between the W.C. and the sewer, with an overflow pipe into the sewer. The cesspit is made water-tight, ventilated, and trapped. However well this may be done, the plan is to be condemned, and is an element of danger to the occupiers of the houses. It is also a distinct contravention of

your Bye-laws (pages 61 and 62, clauses 86-88). It is true that since I called your attention to this fact five years ago the plan has been dropped, but I think those that are still in existence should be abolished. If under any circumstances a cesspool has to be sanctioned, the conditions laid down in Bye-law 86 should be strictly observed.

"In the above remarks I am dealing with these nuisances as I find them, and endeavouring to put before you the conditions under which I think it is unsafe for them to continue.

"It is necessary, however, that I should point out to you that this privy midden system is universally condemned, and wherever possible the water carriage system is taking its place. In your district the adoption of the water carriage system would involve a sewerage scheme. In the meantime you should deal with the existing circumstances, and, if properly done, there is no reason why such closets cannot be converted into water-closets, when the proper time for introducing that system arrives."

With reference to the last paragraph of the above, I venture to point out that the time for carrying out a sewerage scheme has arrived; in fact, some years ago the County Council impressed this fact upon the Authority, and in view of the pressure which is being put upon the County on all hands to remedy the pollution of streams, the Brierley Hill Authority cannot reasonably delay the matter any longer.

In Coseley, complaints are made regarding delay in the removal of night-soil, and the Medical Officer of Health hopes that the Inspector will have a special staff provided to allow of the district being well cleared before the summer.

In Darlaston, where a few years ago I had occasion to report in strong terms as to the insanitary state of the privies, it is stated that large numbers of these have been re-built. In this district it is said that the removal of refuse is conducted satisfactorily by the contractor, and that the scavenging, except in the low-lying parts of the district, has been done fairly well.

In Fenton, it is said that insanitary privies are rapidly disappearing. Here, however, there is room for improvement in the refuse removal department. In this district many slop-closets have been introduced, and in view of what we already know regarding them, it is of interest to note what the Medical Officer of Health of this district says as to their working. He writes:—"I am in doubt whether the slop-water closet is all that can be desired, the great risk of stoppage which at once becomes a dangerous nuisance, and the horribly foul state of some of them when they have been used but for a short time, are great drawbacks compared with any other merits they may possess; I am strongly of opinion that your Council could, with advantage, push the adoption of water-closets flushed with clean water."

In Handsworth, 143 privy middens have been abolished and water-closets substituted. The District Council, it is satisfactory to find, now undertake the refuse removal in place of entrusting the work to a contractor.

An interesting inquiry was conducted in this district as to the effect of frost on out-door water-closets of the ordinary type. The Council will remember that I have reported specially on this subject, after a similar inquiry in Handsworth and Lichfield, and in view of the pretty general introduction of these appliances throughout the County, I quote the following paragraph from the report under review:—"In 143 cases, privies and middens were converted into water-closets, with dry ashpits, after notices had been served on the owners. With Dr. Welch, I think that privy middens should not be tolerated in the district. During February and March, 196 out-door water-closets were inspected to ascertain the effects produced on them by the frosts of January and February, and the subsequent thaw in March. The results were as follows: In 187 cases the water-pipes were frozen, in 181 cases the cisterns, and in 48 cases the pans; none of the pipes were protected from the frost, in three cases only had precautions been taken to thaw the pipes or draw off the water. In 40 cases the frozen pans were still

in use and full of excreta, attempts having been made to thaw and flush them with hot water by hand. After the thaw, 26 pipes were found to be broken, and a few new cisterns and pans had to be provided.

"In the meantime, slop and waste-water closets had acted well all through the frost."

In Longton, where the District Council are fairly active in abolishing privy cesspits, there are now 1,613 water-closets. It appears from the Inspector's report that the contract system of refuse removal, previously adopted in this district, is now conducted, more efficiently, by the Corporation. In the Medical Officer of Health's report, however, the scavenging is said to be defective, and he calls attention to this matter in the following terms:—"Dust is a compound matter, especially in a town with much traffic, and a few moments' reflection will bring to mind that it has in it particles of very objectionable matter, animal and vegetable, and when, as is often the case, the wind fills the air with these particles, we are compelled to acknowledge them to be a possible cause of disease, and being preventable, imposes a duty upon the Authority. . . . . .

"I am quite aware that the Surveyor does what he can in this matter, and to do more, with the machinery at his command, is impossible; consequently, I must ask the Authority to be more liberal, and allow him more men and horses—the back streets would then have a better share of watering and sweeping. . . . . .

" . . . . . Sweeping the dust or mud to the sides of streets, and leaving them, the former to be blown about by the wind, and the latter to be scattered again by pedestrians and vehicles, or left in warm weather to decompose and give off obnoxious gases, is a highly objectionable process. This being too often the case in our Borough, proves the machinery at the command of the Surveyor is inadequate, and it should therefore be supplemented."

In Newcastle, it is said that the old privy system is gradually being abolished, and that scavenging is more

efficiently done owing to the employment of extra men. During the year, 62 water-closets were substituted for 40 privies, and in the case of new buildings—34 in number—the water-carriage system was introduced.

The Medical Officer of Health of Quarry Bank hopes that the recent improvement in the manner in which the contractor does his work may be maintained.

The Medical Officer of Health of Rowley Regis writes regarding refuse removal:—"This is still done by contract, and although considerable improvement is shown in the conduct of the work, it is far from satisfactory. Great difficulty is experienced in obtaining suitable tips. Complaints are made of the nuisance arising from some of the tips, and of the night-soil being tipped in unauthorized places. Last April an extra assistant-inspector was appointed to look after the privies and closets in the upper division, and since then complaints of delay in having them emptied have been less frequent. Two new tips have been secured, one at Cradley Pool, and one at Dudley Wood. A former tip at Corngreaves Road has been closed."

The Medical Officer of Health of Rugeley writes:—"Before the district can be said to be in the satisfactory state of cleanliness, which the Public Health Act contemplates, and which I should like to be able to report, it is clearly necessary that a number of ashpits, in various parts of the town, should be reduced in size, roofed in, and otherwise made to comply with the provisions of the bye-laws. In their present condition, they are simply traps to catch and cultivate disease, and the very act of emptying them is a source of danger to the health of surrounding inhabitants. Arch Street and Armitage Road, with its outbreak of typhoid fever last summer, is an example of this. On the whole the ashes, &c. have been removed regularly and well throughout the year, but the Inspector of Nuisances still complains of the failure of householders in some parts of the town (especially Blood's Yard and Mossley) to give due notice of their ashpits requiring emptying. Twenty-eight privies have been converted into water-closets during the year."

In Short Heath, although it is said the night-soil contractor has done his work satisfactorily, still, the ashpits and cesspits are in the same unsatisfactory state as previously reported.

The Medical Officer of Health of Smallthorne finds fault with the system of emptying closets, and recommends that more help should be provided for this work, and that it should be conducted during the night.

In Smethwick, where the work is in the hands of a contractor, the removal is said to have been conducted in a satisfactory manner, although one great drawback to the proper scavenging of privies "is the negligence displayed by the public in notifying the inspector that their places require emptying; for this reason there are often complaints made about the difficulty experienced in getting their privies cleaned out, which, if they only would remember to send early notice to the inspector, would be obviated."

The Medical Officer of Health of Stoke-upon-Trent strongly urges his Authority to encourage the introduction of water-closets in all new and altered premises.

In Tamworth, a few privy middens have been abolished, and in time it is intended to do away with them all. All new houses are provided with water-closets.

As regards Tettenhall, the Medical Officer of Health writes:—"In spite of the introduction of a sewerage system, which conveys a large proportion of the sewage of the district to be dealt with at a distance, privy middens continue to flourish. It is to be found in the class of property which requires most attention from the Sanitary Authority. The midden is usually badly built, rarely roofed, and infrequently cleansed. The sopping contents percolate into the neighbouring soil, and when the pit is emptied, the contents are deposited in the little garden, where the soil is already saturated with sewage and often wet.

"A return of all privy middens should be made to the Sanitary Committee, and each case dealt with individually on the report of the Inspector of Nuisances. Where water-closets

or proper earth-closets cannot be substituted, the midden should be re-constructed and periodically cleansed by the Sanitary Authority. This is especially necessary in the valley of the Smestow Brook."

In Tipton, it appears that the suggestion was made that the Authority should give up the work of refuse removal and employ a contractor, but the Medical Officer of Health expresses his satisfaction that this course was not adopted.

The Medical Officer of Health of Tunstall writes:—"I have systematically inspected the backyards in the streets of the town, and I am pleased to report favourably upon the manner in which the contractor has performed his work. Considerable progress has been made in substituting water-closets for the old cesspits, no fewer than sixty having been converted into water-closets during the year. All the new properties, also, in the town have water-closets attached to them."

The Medical Officer of Health of Willenhall, while intimating that there is still much to be done in improving the method of excrement disposal, expresses his satisfaction that 67 trough-closets have been attached to schools and factories, 120 water-closets to houses and factories, and 315 waste-water closets to houses of the poorer class. He recommends that efforts should be made in the immediate future to abolish privy cesspits, or, failing this, to reduce the size of the receptacles to the smallest dimensions, ashes being used in conjunction with excreta. The Authority are also urged to undertake the night-soil removal themselves in place of employing a contractor, who, it is said, often allows a six months' accumulation to take place.

As regards rural districts, the Medical Officer of Health of Cannock Rural District, in discussing the question of diarrhœa, suggests that the Council should arrange for the removal of refuse in Cheslyn Hay and the larger villages, as has been done for some time in Bushbury.

In Cheadle Rural District, the Authority now undertake the scavenging in the town of Cheadle, and a great improve-

ment has resulted in consequence. The Medical Officer of Health suggests that arrangements should be made for the regular scavenging of the Meir and Adderley Green.

In Eccleshall, although it is said there is much improvement in the privy accommodation in many parts, still, with few exceptions, the old form of cesspit is in use, and it is common to find the pits "full to overflowing."

In Leek Rural District, about 65 privy middens have been abolished, and many have been improved. The pail system has also been extended in the Norton district, the pails being regularly emptied by the contractor.

In Mayfield, attention is directed to the large capacity of the privy cesspits in many parts of the district, and to the fact that they are not emptied sufficiently often.

Sewerage and Sewage Disposal.

Apart from the information already in the Council's possession as to the general activity on the part of most Authorities in improving the various sewerage systems, it is evident from the prominence given to the subject in most of the reports that honest efforts are being made to meet the views of the Council. The following summary of the remarks under this heading will serve to show that this is the case :—

In Audley, it is said that considerable attention has been paid to the matter, but the Medical Officer of Health expresses his regret that the District Council did not adopt his suggestion of calling in a sanitary engineer to advise them.

The Medical Officer of Health of Brierley Hill writes :— "Several special meetings have been held during the year, with a view to finding a solution of this question.

"In 1894, Mr. Wilcox, Sanitary Engineer, drew up a report dealing with the sewerage of the whole district. This scheme has been under consideration, and on one occasion during the present year Mr. Wilcox attended a meeting and discussed the question with the Sewerage Committee. The mining operations which are constantly going on in the district

is considered to be a great obstacle to the adoption of a complete sewerage scheme such as Mr. Wilcox advises.

"Enquiries have also been conducted with the object of adopting a system which shall sufficiently purify the effluent water from the present filter beds, and from any other filter beds which it may become necessary to put down, so as to render the effluent sufficiently pure to enter the canal at Moor Lane, and the brook at Delph, which runs into the river Stour. At present the Polarite scheme is under consideration. Mr. Candy, the engineer and manager of the Polarite Company, has attended one of the meetings of the Sewerage Committee and gone into the question with them.

"Though no definite step has yet been taken, this important question has not been ignored. In face of the decided opinion of those amongst you who are competent to judge of the risk of subsidence from mining operations, it is no doubt necessary to proceed with caution, rather than hastily adopt an alternative scheme which may prove inefficient or even more costly than the larger scheme you have already before you."

In Cannock, it is said that the sewerage of Five Ways is still under the consideration of the District Council.

The Medical Officer of Health of Darlaston attributes the prevalence of diarrhœa in the district in some measure to imperfect house drainage, and uses this as an argument in support of the recommendation he has made in previous reports that the houses should be properly connected with the new sewers.

Attention is directed by the Medical Officer of Health of Fenton to nuisances from sewer ventilators. I venture to suggest that the District Council should not lose sight of the possible influence in this direction of the large number of slop-closets which have been introduced in recent years.

As regards Rowley Regis, the construction of sewers is in progress, but they cannot yet be connected with the outfall.

In Rugeley the question of sewage disposal is now under consideration, and an engineer has been engaged to prepare schemes for the consideration of the District Council.

The Medical Officer of Health of Short Heath again recommends his Authority to consider the question of sewage disposal.

The Medical Officer of Health of Smethwick writes:—"Everyone is aware of the harassing nature of the difficulties that for so long a time hampered the Sanitary Authority in their endeavours to complete the sewerage scheme; it will therefore be well to place on record in this report an account of what has been done. The West Smethwick end of the district is now being drained through the West Bromwich sewers, and the sewage being dealt with there under a satisfactory arrangement with the Drainage Board and the West Bromwich Corporation. The Bearwood district is being drained to the outfall works at Saltley by means of the Birmingham sewers. under a fair and equitable arrangement made by the District Council with the Corporation of Birmingham. The remaining part of Smethwick is now being drained through Handsworth and Aston to the outfall works at Saltley. This arrangement has been completed very satisfactorily to Smethwick after years of negotiations and obstinate fighting before the Chairman of the Drainage Board, and by arbitration as well, to fix the value, with the result that Smethwick has acquired an equal interest in the Handsworth and Aston sewers with those Authorities for the purpose of the conveyance of sewage to the outfall, and really a joint ownership with them of their sewers."

In Stone, it is said that the sewerage scheme is approaching completion, and it now remains for the various properties to be properly connected. Regarding this matter, the Medical Officer of Health writes:—"I think a mistake was made in not connecting houses as the work progressed. It would have saved both time and expense."

As regards Tamworth, I have referred in my introductory remarks to the negotiations which have been started, and are

now in progress, with the view of improving the river Tame as it re-enters the County, but the following extract from the report of the Medical Officer of Health of the district may be of interest to some members of the Council :—

"This subject has received attention, and some progress has been made. With a view to lessening the very serious and increasing pollution of the river, both your Authority and the Rural District Council have had this matter repeatedly under their consideration, and it is to be hoped that the following resolution, which was unanimously approved by both Authorities, will lead to some means being taken to remedy the dangerous and unhealthy condition of the river Tame :—'That the Staffordshire County Council be earnestly requested to direct their immediate attention to the extensive pollution of the river Tame by the Birmingham Tame and Rea District Drainage Board, whereby a great and serious nuisance is created, and the due flow of the water prejudicially interfered with on account of the formation of large masses of sewage deposits, which, at certain periods, are exposed to the air, and when decomposed, exhale noxious vapours, tending to endanger public health. This Committee is of opinion that the efforts of the various Local Authorities to prevent the pollution of the river in their own district will be of little avail so long as pollution to such an enormous extent, higher up the river, is tolerated, and the County Council are respectfully urged to put into operation their powers under the Rivers Pollution Prevention Act, 1876, conferred upon them by the Local Government Act, 1888.' The County Council of Warwick have as yet taken no action in the matter, but the County Council of Stafford have directed their County Medical Officer of Health to prepare a comprehensive report on the subject.

"The action against Messrs. Fisher & Co. has been withdrawn on Messrs. Fisher & Co's. undertaking that they will not in future discharge into the Kettlebrook, or into the river Tame, any water polluted with chemicals or manufacturing refuse so as to be a nuisance to the public, or

cause any injury or danger to the public health. Each party to pay their own costs of this action.

"The scheme of sewerage, designed by the Borough Surveyor, has been laid before the Local Government Board, who have suggested some alterations in the plans, one especially with respect to the area of land upon which it is proposed to utilize the sewage. The Surveyor has received your instructions to revise the plans and submit further details and estimates for your consideration and the approval of the Local Government Board. As part of the proposed scheme, an improvement has already been effected in the river Anker by the construction of a 12in. intercepting sewer, 270 yards in length, at the back of Bolebridge Street and George Street. During the very dry summer weather the sewers of the Borough were regularly flushed and disinfected, and the precipitating tank worked satisfactorily."

In connection with this subject I would also quote the following satisfactory paragraphs from the Medical Officer of Health's report:—"A very large flood in January proves that the measures taken by you, in conjunction with the Rural District Council, with regard to the purchase and lowering of the Castle Mill Weir, were well advised, for while the lower parts of Lichfield Street were flooded, Bolebridge Street, which has always been flooded before Lichfield Street, was entirely free from water, and the parts of Amington and Shuttington, which were usually flooded, nearly escaped altogether.

"As you are aware, only part of the scheme has been carried out. A report on the probable cost of purchasing Alders weir has been prepared by an expert, but nothing further has been done.

"It is very much to be desired that this scheme should be carried out in its entirety, as any measure which would tend to lower the water in the sub-soil would render the atmosphere drier, and tend to lessen those diseases, especially rheumatism and chest affections, mainly due to damp."

In Tettenhall, 126 houses have been connected with the new sewers during the year, bringing the number of connections up to 856.

As regards Tipton, I quote the following from the report by the local Surveyor, which is embodied in the report of the Medical Officer of Health :—

"No new sewers have been constructed during the year, and the work of making connections up to the boundaries of the various properties (application for a loan for such work being made in 1894) has been practically at a standstill owing to the Local Government Board refusing to grant us any further loan for sewerage purposes, unless we provide a certain area of land for irrigation of the effluent after it leaves the filter beds. This (we have informed them) is almost an impossibility, and one of their Inspectors has been sent down here to see if any land is available, and has reported upon three sites, each of which are, in my opinion, impracticable for such purpose. I am under the impression that, with an improved filter, we shall be able to turn out an effluent which is well within the limits laid down by the Rivers Pollution Commission, and, with this object, there is now a Sub-Committee appointed, and we shall be able very shortly to recommend a scheme to the Council for an improved or entirely new filtering medium. As regards the completion of the sewering of the parish, I have made a report which has been sent on to the County Council, in which I cannot recommend my Council to embark on any costly scheme of sewerage in face of the difficulties which present themselves from mining operations, which are certainly very serious, considering the proposed scheme of Mines Drainage which is now on the *tapis*, and seems almost certain to be carried out. This question will have to be approached in a very careful and deliberate manner by the Council, as it entails a considerable expenditure, which when completed may soon be destroyed, with the result that we may probably be worse off than we are at present. The question of dealing with the sewage in districts is one that I am inclined to favour under all the circumstances, and the Sub-Committee, hereinbefore

mentioned, are also giving this matter their attention. I really cannot understand the action of the Local Government Board in refusing us a loan for the purposes required, especially as it is so very important that the storm-water should be kept out of the new sewers. I lose no opportunity of impressing this upon the Council, as the longer it is delayed the more costly will the cleansing out be, and the new sewers now being used to take the storm-water will require cleansing from end to end, which will mean expense, but we have our hands practically tied by the action of the Local Government Board."

The position, up to date, as regards this district will be gathered from my summary of the Council's work which appears at the beginning of this Report.

In Tunstall, it is said that the difficulty of acquiring land for sewage disposal purposes has now been overcome, and it is expected that the new works will be completed in the course of the present year (1896).

In Wednesbury, it is stated that the house connections are now practically completed, and that very few connections remain to be made. The Corporation, it appears, have decided to supplement the present sewage disposal plant by Polarite filters.

As regards rural districts, the Medical Officer of Health of Cheadle writes :—" The further sewering of the town of Cheadle should engage the attention of the Authority during the present year. The remaining portion of High Street and Queen Street especially stand in need of it. At the present time these streets are only provided with old brick sewers, which are entirely untrapped, and which, especially in dry and hot weather, are a source of great annoyance and danger.

" Only recently the old brick sewer in Queen Street was completely blocked with foul stinking matter, which had been accumulating for some time."

New sewers have also been constructed at Dividy Lane and Kingsley, in the Cheadle Rural District, but it is said that the latter village is in need of further sewering.

The Medical Officer of Health of Gnosall Rural District writes:—"The condition of the village, as regards its drainage and the nuisances arising from defective drains, have occupied your attention at various times during the year. There is practically no public sewer, but the road drains receive the sewage and convey it direct to the brook at four different outfalls. One length of pipe sewer which was laid is responsible for the worst sanitary defect of the village where the sewage of a number of houses is conveyed to accumulate in an offensive manner in a ditch on the south side of the houses, near the station. This question of the main sewerage should be considered as a whole, and a scheme elaborated for the same. Around and in connection with various houses in the village are sanitary defects in the shape of absent or defective house drains, imperfect and faultily-constructed closets, &c. The defects can only be found out and properly dealt with by a house-to-house survey, such as I have so often recommended."

It is stated that in Leek the house drainage throughout the district has been improved in many instances, and notices have been served to remedy certain small pollutions.

In Seisdon Rural District, it would seem that the question of sewage disposal has received attention. The Wombourne sewage has been diverted from a brook on to a field, and the sewage of Trysull is now being dealt with on osier beds; difficulty, however, is experienced from storm-water.

The Medical Officer of Health of Stone Rural District points out that the sewering of Hanford has not yet been completed, but that this work at Trentham is in progress.

The Medical Officer of Health of Tutbury writes:—"The main drainage of this village is the principal question, and to it I would urgently direct your attention. The present drains are worn out, rotten, defective, and totally inadequate; and, as I pointed out to you some time ago, there is the greatest reason to fear an outbreak of filth-begotten disease, typhoid fever or diphtheria. Twelve or fourteen years ago there was an epidemic here of typhoid fever, which reached alarming proportions, over sixty cases occurring in Bridge Street alone.

I feel convinced that if a case or two of this fever should occur under the present conditions it would be most difficult to prevent wide-spread contagion and disastrous results. However, the Parish Council has now the matter under consideration, and has appointed a sub-committee to examine the different methods of sewage treatment, with a view to the adoption of that system which would best meet the requirements of the place."

The Medical Officer of Health of Uttoxeter Rural District, under the heading Sewerage and River Pollution, states that matters at present are very unsatisfactory in many parts of the district. Referring to the report of the Sanitary Inspector, he says:—"In several of the larger villages there appears to be a great necessity for some kind of sewerage arrangement, instead of the present unseemly way of dealing with it, where each occupier adopts his own peculiar way of disposing of it, and sometimes in a manner both dangerous and objectionable. He states there are only three places in the district where there is any attempt at sewerage arrangement and disposal, and of these the outfall is generally unsatisfactory."

In Walsall, it is said that schemes for Aldridge, and Pelsall and Rushall, have been prepared, and the Medical Officer of Health points out the extreme importance of pushing on with the scheme for the last-named place, owing to an outbreak of enteric fever which occurred, and which, in his opinion, was a recrudescence of an outbreak in 1893.

Water Supply.

The following is a summary of the remarks with reference to water supply in those districts where the subject receives most notice in the reports. The Sanitary Committee of the County Council have frequently had occasion to spur on Authorities in districts where good public supplies are available, but where many old local wells, liable to pollution, were still in use.

In Brierley Hill, out of five samples of well-water analysed three were condemned and the public supply was substituted.

According to the Sanitary Inspector's report, 24 notices to lay on the public supply were complied with, and in many cases houses were connected with the mains without such pressure on the part of the Authority.

In Brownhills, the public supply has been extended, but judging from the report of the Medical Officer of Health, the Authority are hardly active enough in abolishing the existing well supplies.

In Cannock, the public supply has been laid on to 100 houses during the year.

As regards Coseley, the Medical Officer of Health writes :— "It may be taken as a general principle that, in a district like this, well water is (with rare exceptions) unfit for culinary purposes, as has been amply demonstrated in the case of wells at Cinderhill. It is to be regretted that such great delay has occurred in completing the arrangements necessary to furnish a supply of 'tap' water to this hamlet, but I understand that within a very short time the various difficulties, legal and otherwise, will be overcome, and it will then be necessary to insist on every house being supplied. During the year 92 houses have been connected with the public supply.

"For a long time complaint had been made of the absence of a proper supply of water in Tipton Road, Woodsetton, and in my October report I drew attention to the fact that for five months some houses had been without any supply whatever. The Water Company have now undertaken to lay down a main for this locality, which is a matter for congratulation."

The Medical Officer of Health of Perry Barr writes :— "About 20 houses at New Oscott, and a few at Perry Village, are supplied with water from the mains of the Birmingham Corporation. The Colliery Cottages are supplied with water which is pumped from a basin 170 yards down the shaft into a cistern, and afterwards distributed in pipes by gravitation. The water contained no evident sewage or animal contamination, but contained over 50 grains per gallon of common salt. In May and June this supply failed for a time, owing to the

breaking done of the pumping machinery. The water-supply of the remaining houses in the district is derived from wells many of which are not properly protected against surface pollution. Ten samples were examined by the County Analyst, who found that none were first-class waters, and that only one could be passed by him; of another he had doubts, two were dangerous, and the rest were unsafe for drinking. These samples were taken from wells which were suspected to be polluted from the surface. During the dry period of the year many deep wells at Great Barr, including that at the Council House, became dry.

"The question of water supply in rural districts, most parts of which are too remote from large waterworks to make it feasible to pipe the water therefrom, can only be solved by the construction of wells which are sunk deeply enough to tap the ground water. This water, when kept free from surface pollution, is absolutely pure. Freedom from surface pollution is obtained by lining the shaft of the well with bricks set in cement to a depth from the surface, which depends on the nature of the soil; outside this brick lining there should be a 12-inch-thick layer of clay puddle. The brick lining is continued to the height of at least a foot above the surface. The top of the well must be covered in so as to be watertight, and provision must be made for the rapid drainage of waste-water away from the well. As regards the situation of the well, this should be as far away as possible from wet privy middens, dung-pits, and cesspools, especially when these are deep or on a higher level than the well. This sort of well must necessarily be a pump-well, and there should be in the top an opening for ventilation, protected by a hood so that it cannot be reached."

At Quarry Bank, where a public water supply is available, it would seem that many local wells are still retained. In discussing an outbreak of enteric fever which occurred in this district, the Medical Officer of Health writes:—"The district most severely affected was almost exclusively supplied by surface wells, and there can be little doubt, from the first

case in Vine Street in which the well-water was found impure and condemned, these wells were one after another infected, and the drinking-water became the chief means of conveying the disease."

In Rowley Regis, 261 properties were connected with the water mains during the year. It is said that the condition of the wells throughout the district is receiving attention, and that of 15 samples analysed, all, with one exception, were condemned. Regarding one part of this district the Medical Officer of Health writes:—"In spite of all efforts on the part of the Council, the water-supply of Turner's Hill district remains unchanged. An effort has been made to get the mains extended either from Perry's Lake or Whiteheath to the lower part of Portway and Throne, but without success, and this part of the parish is practically without any reliable water. Two springs and a number of surface wells are the only sources from which water can be obtained."

In Rugeley, it is said that three-fourths of the houses in the district are now supplied from the mains, and it is expected that another year will see nearly all the houses connected.

The Medical Officer of Health of Sedgley writes:—"The improvement as regards typhoid fever is associated with a better water-supply. Much has been done during the past year to extend a public water-supply, for your Surveyor (Mr. B. Hughes) informs me that 141 houses and three Board schools have been provided with tap-water during 1895, making a total of 1495 with a public water-supply, out of about 3000 houses in your district. Much, however, remains to be done in this matter, and I beg to repeat what I said last year, viz., I would strongly recommend that your Surveyor should take steps forthwith to have tap-water laid on to those houses which at present *have no supply whatever*, although tap-water is available, and that, if necessary, he have assistance to make a house-to-house visitation, beginning with the streets just supplied by the South Staffordshire Waterworks Company."

In Short Heath, where considerable trouble has been experienced in the higher parts of the district, the action of

the Authority has been instrumental in effecting a temporary improvement by the erection of a pump, which will be available until the new mains are laid from Wolverhampton.

In Smethwick, 304 connections with the water-mains have been made, 192 in the case of new houses, and 112 in substitution for old well supplies.

In Tettenhall, 44 houses have been connected with the public supply, and out of ten samples analysed eight were found to be unfit for use.

The Medical Officer of Health of Tipton writes:—"During the year I have analysed 13 samples of well-water and have found them all to be, more or less, sewage contaminated, and therefore unfit for use as drinking-water, and in each case the landlord has been called upon to have the South Staffordshire Waterworks supply laid on, or to make such provision as would ensure a pure water supply for the property. It is practically impossible for a well to be kept pure in this district, the ground has been so broken up by mining operations, and there are in many places subterranean cracks extending for some distance. Our night-soil lies for months in cesspits, many of which are dilapidated and allow of leakage of the more fluid contents, with consequent fouling of the ground, and of percolation into any well in the vicinity of the middens. I am, therefore, constantly urging that it is cheaper to lay on the S.S.W.W. than to expend money upon mending wells, which, in a short time, will become as much fouled as ever, and I am pleased to report that during the year 138 houses have had the supply laid on, making a total of 5646 houses thus supplied out of the reported number of inhabited houses 5938 (last census). During the year 1894, 113 houses were thus supplied; it will evidently not be very long before every house in the district will be supplied with this exceptionally good and pure water."

The question of water supply in rural districts is generally a more serious one, as, owing to the scattered population, it is not often possible to connect with any public supply. Still, much has been done in this direction in recent years, notwith-

standing the difficulty which Authorities have to contend with in consequence of the unsatisfactory state of the law.

In Cannock Rural District, the Medical Officer of Health writes :—" The question of water for Great Wyrley and Cheslyn Hay is engaging the serious consideration of the Local and District Council. The population is on the increase, and the present facilities for water are totally inadequate to meet the just demands of the people. There is a great element of danger to the public health at the present moment."

In Cheadle Rural District, the supply of Cheadle proper, which is in the hands of a private company, has been improved by the sinking of a second well and the deepening of the old well, and a hope is expressed that the company will now be prevailed upon to provide a constant in place of an intermittent supply.

As regards the village of Kingsley, the Medical Officer of Health writes :—" I still regret that no satisfactory arrangement has been arrived at by which the inhabitants can have the advantages of a pure and wholesome drinking water. In dry weather every available source of supply is eagerly sought after for the daily requirements, and frequently at great inconvenience. It only requires the concerted action of the Local Authorities to arrive at some definite scheme. Several practical schemes have been under consideration and abandoned through some paltry opposition."

In the following places in the Cheadle Rural District—namely, Dividy Lane, Blythe Bridge, Blythe Marsh, Forsbrook, Meir Lane, and Caverswall, an efficient supply has been obtained from the Staffordshire Potteries Waterworks Company, and the Authority are congratulated upon having accomplished this "large undertaking."

The local well supplies in other parts of the Cheadle Rural District have also been improved.

The Medical Officer of Health of Eccleshall Rural District writes :—" The water from the Pottery Co's. Works at Hatton has been laid on at Cranbury, where they now have an

excellent supply. Mains from the above-named works have also been laid to Bowers to supply the Boys' Farm Home, and I believe it is also to be laid on for several cottages in the village where, as I have before reported to you, the supply has been very defective. At Cotes Heath, as I reported to you on July 23rd, the supply is very deficient, as I then told you; this is probably due to the Hatton Waterworks taking all the water from these wells. In one or two cases where the wells have been sunk deeper there has been no permanent improvement. In several cases they are absolutely without water, and have to fetch it from long distances. The only way to supply this part of the village with water is by laying mains from Hatton as has been done to Bowers; the distance would be about the same."

In other parts of this district it would appear from the report that the question of water-supply is receiving considerable attention.

In Kingswinford Rural District, 47 houses have been supplied from the mains.

In the Leek Rural District, it appears that a considerable portion of Norton Sub-Registration District, which formerly suffered from want of water, is now supplied by the Potteries Waterworks Company. Improvements have also been effected in the Longnor Sub-Registration District, where a reservoir has been constructed, from which pipes have been carried to Longnor and Grindon.

In the Leek Frith Sub - Registration District, generally speaking, the supply is good, but at Stanley and Endon, where the available supply (from three sources) has been condemned by the Medical Officer of Health, the Authority have made arrangements with the Potteries Waterworks Company to provide a full supply.

In Lichfield Rural District, difficulty is experienced in inducing property owners at Alrewas to connect with the public supply. Out of 45 samples collected for analysis, all, with one exception, were condemned. In Brereton, nearly

all the houses are now said to be connected with the Rugeley Waterworks.

The Medical Officer of Health of Newcastle Rural District writes:—"With regard to the water-supply of Madeley and Leycett, which has so frequently been referred to by myself and others as unsatisfactory, I am now pleased to say that the difficulty has been solved by your agreement with the Staffordshire Potteries Waterworks Company for a supply, and at the present time the Company are laying mains for the supply of the whole of this district.

"At Betley, complaints having been made of a deficient supply of water, an inspection was made, and it was found the supply was inadequate. We found 27 houses were without any supply at all, and were entirely dependent on neighbouring wells. We believe there is plenty of water to be obtained at Betley, and the matter is at present under consideration."

In Seisdon Rural District, arrangements have been made to supply Wombourn from the Bilston mains.

In Stafford Rural District, the supply at Hopton, to which the attention of the Authority was specially directed by the Sanitary Committee of the County Council, is now said to be more constant and regular. The village of Brocton, in this district, is now supplied with water from the Stafford Corporation mains.

In Stoke-on-Trent Rural District, a new supply from the Potteries Waterworks Company has just been completed for the village of Bagnall; it is pointed out, however, that the Wetley Moor District is in need of a better supply.

In Stone Rural District, many water supplies failed, owing, it is said, to the dry season. Barlaston and Blythe Bridge have now been supplied from the mains of the Staffordshire Potteries Waterworks Company. At Oulton, however, the supply is still defective, and it is suggested that arrangements should be made for an improved supply either from the above Company or from the Stone Urban

supply. It is supposed that the deficiency may be owing, to some extent, to the construction of the Stone Waterworks.

In Wolstanton Rural District, it appears from a report by the Clerk, which is embodied in the Medical Officer of Health's report, that efforts are being made to provide Thursfield with a proper watersupply, and, with this object, it is intended to apply to the Local Government Board for a loan of £300.

Meat Inspection.

It is satisfactory to find from the reports under review that the question of meat supply is receiving more attention than formerly.

In Brierley Hill, there were three seizures of meat, in all of which proceedings were taken and fines were imposed. Also a fine of £25 was inflicted in the case of a seizure of unwholesome ham and bacon.

The Medical Officer of Health of Longton writes:—"There have been four prosecutions for exposing meat for sale which was unfit for human food, and a conviction obtained in each case. In two cases a fine of £20 and costs was imposed, or in default three months' imprisonment; the third £25 and costs, or three months' imprisonment; and the fourth £1 and costs."

The Medical Officer of Health of Smethwick writes:—"I had occasion to examine the carcases of two pigs, neither of which I found was fit for the food of man. In the first instance the owner buried the meat voluntarily on being informed of my opinion; in the second, as swine fever broke out on the premises, the Police and the Board of Agriculture took the matter up.

"Swine fever has been very prevalent again, and many carcases of pigs accordingly have been buried in the manner I described in one of my former reports—'on the premises.' It is frequently only with difficulty that this statutory requirement can be complied with. The outbreak of swine fever referred to above affords a good illustration of, to say the

least of it, the inconveniences experienced in Urban Districts in this respect. Here I find that eleven pigs were destroyed and buried, by the orders of the Inspector of the Board of Agriculture, 'on the premises,'—the place chosen for the interment being an irregularly-shaped back yard, roughly speaking, 6 by 10 yards in area, surrounded closely by dwelling-houses and out-offices. Surely it was never contemplated by the Legislature that compulsory burial 'on the premises' should apply to such a place as this, and certainly I think it will be admitted that, supposing the law on this point to remain immutable, it would be only proper and right that the Urban District Council should be regularly informed of the particulars of these burials; but it would be infinitely better if the Board of Agriculture could make a provisional order empowering Urban District Councils to provide for them by apportioning some plot of ground for the purpose remote from dwelling-houses and the expiscatory restlessness of speculative builders.

"Apart from the causes to which I have referred, there has been no occasion to question the quality of flesh meat—and this is borne out by the fact that I have received no complaints of illness directly attributable to the ingestion of unsound food of any description—a circumstance which certainly redounds to the credit of the increasing number of tradesmen who are engaged in providing for the physical requirements of the people. I am inclined to attribute this happy state of things to the fact that traders are now more than ever realizing the salutary lessons enforced by the keen competition they are experiencing, and also to the fact that the public intelligence demands more careful consideration than heretofore. This growing sanatory appreciation of sanitary requirements must, to those who have the promotion of the public health at heart, be most gratifying."

In Stone Rural District, a carcase was seized during the night at Hilderstone, and, on proceedings being taken, a fine of £20 was imposed.

Slaughter-Houses.

Most of the reports refer to the inspection of slaughter-houses, and as a rule they are said to be found in a fairly satisfactory state.

The Medical Officer of Health of Fenton states that additional accommodation is required, and points out that it is difficult to systematically inspect the meat supply in consequence of the numerous centres where animals are killed.

The Medical Officer of Health of Rugeley states that some slaughter-houses are clean and well kept, but that others are not so. He recommends the adoption of the Public Health Acts Amendment Act, and suggests that it would be a good thing to have a public abattoir outside the town.

In Stone, it is said that no register of slaughter-houses has yet been prepared, although the Authority's attention has previously been called to this necessity.

Bake-Houses.

A few of the reports mention the fact that bake-houses are regularly inspected, but none of the reports contain any observations under this heading which call for special notice.

Dairies, Cowsheds, and Milkshops.

The work under the Dairies, Cowsheds, and Milkshops Order receives attention in a good many of the reports.

In Leek Rural District, it appears that in one instance an outbreak of enteric fever occurred which was associated with a dairy, and in another instance an outbreak of scarlet fever.

Lodging-Houses.

Only in a very few of the reports is any mention made of the inspection of common lodging-houses.

The Medical Officer of Health of Leek Urban District points out that the question of lodging-house accommodation in that town is deserving of the Authority's attention. He

says :—" Those at present in existence are by no means ideal, but as the occupiers attend closely to the Bye-laws regulating such places, and give no reason for complaint, they cannot in my opinion be wisely refused a licence until buildings more in harmony with present-day views are provided ; as without such accommodation tramps would be housed at private dwellings where no supervision could be exercised or information afforded, greatly to the detriment of public health."

In Eccleshall Rural District, the Medical Officer of Health suggests that Bye-laws regulating common lodging-houses should be adopted by the Authority.

Canal Boats.

In a few instances only does the question of canal boat inspection receive notice in the reports under view, and in none are there any remarks which call for special mention.

Factories and Workshops.

The provisions of the Factory and Workshops Act, 1891, seem to be receiving more attention in the various districts than hitherto.

In Brierley Hill, it is said that the Act is becoming better understood, and that certain nuisances have been corrected, some on the initiative of the Medical Officer of Health, and others on his attention being called to them by the Factory Inspector.

In Burslem, 31 workshops have been inspected during the year, and notices have been issued for lime-washing, &c. in several instances.

In Handsworth, 85 workshops were inspected on 145 occasions. In nine cases notices to cleanse and lime-wash were served, and in seven cases nuisances were ordered to be abated.

In Newcastle, 69 workshops have been regularly inspected by the Sanitary Inspector; they were found to be in a satisfactory

state, except that in a few cases the necessary lime-washing had been delayed.

In Short Heath, 20 workshops were inspected during the year without any cause of complaint being met with.

In Rowley Regis, the Council have taken action in four cases, in three of which the cause of complaint was inefficient closet accommodation.

Mortuaries.

The question of providing mortuaries does not appear to receive that attention in the reports which its importance deserves. It is satisfactory to note, however, that in Handsworth a new mortuary has been provided.

The Medical Officer of Health of Stoke-on-Trent points out that a mortuary is much needed for that town.

Bye-Laws.

The Medical Officer of Health of Brierley Hill points out that the Bye-Laws have been contravened in some cases, soil-drain cesspools having been introduced in the course of the drains before joining the sewers.

In Short Heath, new Bye-Laws have received the sanction of the Local Government Board and are now in force.

In Stafford, the Medical Officer of Health points out that the Bye-Laws are out of date, and recommends that new ones, on the lines of the model Bye-Laws of the Local Government Board, should be adopted.

In Tipton and Willenhall, new Bye-Laws are now under consideration.

In Seisdon Rural District, new Bye-Laws are now under consideration, and application has been made to the Local Government Board for special powers to adopt Bye-Laws regulating matters which Rural Authorities, without special powers, cannot deal with.

Adoptive Acts.

In Handsworth, Wednesfield, and Willenhall Urban Districts, and in Eccleshall Rural District, the Medical Officers of Health urge their respective Authorities to adopt either the whole or portions of the Infectious Diseases (Prevention) Act.

The Medical Officer of Health of Cheadle Rural District recommends his Authority to adopt Part III. of the Public Health Acts Amendment Act, 1890.

Printing of Reports.

I am pleased to say that nearly all the Annual Reports of Medical Officers of Health in the County are now printed. The Authorities of Audley and Kidsgrove Urban Districts, and those of Cheadle, Eccleshall, Gnosall, Mayfield, Patshull, and Stone Rural Districts have not yet followed the good example of the others in this respect.

GEORGE REID,

County Medical Officer.

Stafford, September, 1896.

NOTE.—In the following tables the individual zymotic mortality is given in order to indicate readily the class of disease that has mostly contributed to the gross rate. Apart from this, no accurate deductions can be drawn from such figures for one year only.

URBAN.

Table showing Population, Number of Persons per Acre, Birth and Death-rates, as well as the Death-rates at all ages and among Children under 1 year, and the Death-rates from Zymotic Diseases, Phthisis, and Diseases of the Respiratory Organs.

DISTRICT.	Population at all ages.		Number of persons per acre.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	General zymotic mortality per 1000 of population.	Individual zymotic mortality per 1000 of population.											
														Fevers.					
	Census, 1891.	Estimated to middle of 1895.						Smallpox.	Scarlatina.	Diphtheria.	Croup (not spasmodic).	Measles.	Whooping Cough.	Typhus.	Enteric or Typhoid.	Continued.	Diarrhœa and Dysentery.	Phthisis.	Diseases of Respiratory Organs.
AUDLEY	12631	13500	16·8	40·9	24·0	148	1·33	..	0·74	0·07	..	..	0·37	..	..	..	0·14	1·55	4·51
BIDDULPH	5290	5450	1·0	38·1	15·9	144	3·30	..	..	0·55	0·18	0·36	0·91	..	0·18	..	1·28	1·10	2·09
BILSTON	23453	23500	12·5	40·7	26·9	224	4·51	0·04	0·04	..	0·51	2·17	0·12	..	0·34	..	1·78	0·80	4·89
BRIERLEY HILL	11847	11937	11·6	37·2	a18·8	173	2·17	..	..	..	0·08	..	1·08	..	0·08	..	1·00	0·92	3·26
BROWNHILLS	13703	14204	1·6	49·1	14·9	124	0·98	..	..	0·28	0·35	..	..	..	0·35	..	0·35	0·63	2·95
BURSLEM	31999	33799	13·0	38·4	20·6	182	2·66	..	0·14	0·02	0·17	0·29	0·44	..	0·17	..	1·56	1·03	3·78
CANNOCK	20613	21000	2·6	41·0	16·5	144	1·38	..	0·14	..	0·04	0·04	0·33	..	0·14	..	0·71	0·76	4·00
COSELEY	21899	22000	5·5	36·5	22·6	216	4·77	..	0·36	0·04	..	2·72	0·72	..	0·04	..	0·86	0·77	3·86
DARLASTON	14422	15141	18·9	38·7	23·5	221	3·89	..	0·13	..	0·26	0·72	0·46	..	0·19	..	2·37	1·32	3·83
FENTON	16998	20000	12·5	42·1	19·6	216	3·00	..	0·35	0·25	..	0·35	0·35	..	0·25	..	1·45	0·60	3·95
HANDSWORTH	32756	39500	10·8	24·5	12·5	139	1·56	..	0·20	0·12	0·10	0·43	0·22	..	0·20	..	0·38	0·78	1·72
HEATH TOWN	7075	7526	10·1	38·2	b20·7	222	3·45	..	..	0·26	0·13	0·13	0·26	..	0·53	..	2·25	0·66	4·11
KIDSGROVE	3841	..	3·5	36·9	18·4	176	0·78	..	0·52	..	0·26	..	..	..	..	..	0·26	0·78	2·86

a Including 1 death which occurred without the district, a person belonging thereto.

b ,, 13 deaths ,, ,, without ,, ,, among persons belonging thereto.

URBAN.

Deaths registered during the year 1895, classified according to Diseases, Ages, and Localities, together with Births registered during the year.

DISTRICT.	Registered Births.			Registered Deaths.			Deaths from all causes at subjoined ages.						Deaths from subjoined causes.																				
																	Fevers.																
	Males.	Females.	Total.	Males.	Females.	Total.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa or Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries.	All other Diseases.
AUDLEY	293	260	553	208	117	325	82	38	20	47	93	45	..	10	1	..	..	..	..	..	..	..	..	..	5	2	2	..	21	61	13	83	127
BIDDULPH	110	98	208	36	51	87	30	10	3	3	23	18	..	..	3	1	..	1	..	..	2	..	..	2	5	7	..	..	6	16	11	..	33
BILSTON	485	472	957	327	307	634	215	163	22	15	96	123	1	1	..	12	..	8	..	..	..	..	..	51	3	42	..	..	19	115	12	27	343
BRIERLEY HILL	223	222	445	117	107	a224	77	31	6	6	52	52	..	..	..	1	..	1	..	..	1	..	2	..	13	12	1	..	11	39	20	6	117
BROWNHILLS	357	341	698	109	103	212	87	30	6	8	49	32	..	..	4	5	..	5	..	..	..	..	..	..	..	5	..	..	9	42	13	8	121
BURSLEM	658	641	1299	382	317	699	237	107	15	23	222	95	..	5	1	6	..	6	..	..	1	..	..	10	15	53	..	..	35	128	61	15	363
CANNOCK	426	435	861	204	143	347	124	38	8	18	94	65	..	3	..	1	..	3	..	..	..	..	..	1	7	15	2	..	16	84	24	10	181
COSELEY	386	419	805	251	247	498	174	122	28	22	85	67	..	8	1	..	..	1	..	..	..	..	..	60	16	19	2	..	17	85	25	6	258
DARLASTON	287	300	587	176	180	356	130	60	16	14	86	50	..	2	..	4	..	3	..	..	..	..	2	11	7	36	..	..	20	58	16	6	191
FENTON	422	420	842	225	168	393	182	64	13	16	86	32	..	7	5	..	..	5	..	..	3	..	..	7	7	29	1	..	12	79	10	10	218
HANDSWORTH	466	504	970	242	252	494	135	52	14	19	149	125	..	8	5	4	..	8	..	..	1	..	..	17	9	15	..	..	31	68	29	8	291
HEATH TOWN	147	141	288	*	*	b143	64	15	2	5	27	30	..	..	2	1	..	4	..	..	..	..	..	1	2	17	..	..	5	31	11	6	63
KIDSGROVE	82	60	142	41	30	71	25	10	7	3	16	10	..	2	..	1	..	..	..	..	1	..	..	..	..	1	..	..	3	11	5	4	43

a Not including 1 death which occurred without the district, a person belonging thereto.

b ,, ,, 13 deaths ,, ,, without ,, ,, among persons belonging thereto.

* Not sub-divided.

URBAN—continued.

DISTRICT.	Population at all ages.		Number of persons per acre.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	General zymotic mortality per 1000 of population.	Individual zymotic mortality per 1000 of population.										Phthisis.	Diseases of Respiratory Organs.
								Smallpox.	Scarlatina.	Diphtheria.	Croup (not spasmodic).	Measles.	Whooping Cough.	Fevers.			Diarrhœa and Dysentery.		
	Census, 1891.	Estimated to middle of 1895.												Typhus.	Enteric or Typhoid.	Continued.			
LEEK	14128	14746	10·1	30·3	c19·1	181	0·61	..	..	0·06	..	0·20	0·06	..	0·27	..	..	1·55	4·34
LICHFIELD	7864	7864	2·3	28·2	d17·9	139	1·27	..	..	0·12	..	0·50	0·12	..	0·25	..	0·25	1·90	3·56
LONGTON	34327	35821	17·9	40·6	24·6	234	2·79	..	0·27	0·11	0·05	..	0·16	..	0·50	..	1·75	2·00	4·85
NEWCASTLE	18452	19400	29·7	33·6	e 19·2	165	2·06	..	0·30	0·05	0·05	0·10	0·30	..	0·25	..	1·03	1·70	4·58
PERRY BARR	2310	2540	0·6	27·5	f14·9	185	1·18	..	..	0·39	..	0·39	..	..	..	..	0·39	0·78	1·96
QUARRY BANK	6732	7127	7·2	35·9	18·1	152	6·03	..	1·12	..	..	..	0·28	..	3·64	..	0·98	0·56	2·10
ROWLEY REGIS	30791	33300	9·0	37·6	g 19·0	194	2·58	..	0·75	0·03	0·12	0·24	0·75	..	0·09	..	0·72	0·78	3·03
RUGELEY	4181	4500	7·5	26·2	h15·5	59	1·33	..	..	0·22	..	0·22	..	..	0·22	..	0·66	0·88	2·22
SEDGLEY	14961	15000	3·9	37·4	i 19·4	188	3·06	..	0·06	..	0·20	0·06	0·53	..	0·06	..	2·33	0·46	3·40
SHORT HEATH	2514	2748	4·9	47·3	j13·4	61	1·81	..	..	..	0·36	0·72	0·36	..	..	..	0·72	1·09	3·27
SMALLTHORNE	5279	5580	10·5	39·9	17·5	152	2·15	..	..	0·17	..	0·89	0·17	..	..	..	0·89	1·79	2·50
SMETHWICK	36170	41000	21·7	36·6	14·4	141	0·97	..	0·09	0·02	0·02	0·14	0·09	..	0·04	..	0·56	1·39	3·04
STAFFORD	*18732	*19746	19·5	30·3	k16·9	148	1·41	..	0·05	0·10	..	0·50	0·25	..	..	..	0·50	2·17	3·08

c Not including 13 deaths which occurred within the district among persons not belonging thereto.
d ,, ,, 22 ,, ,, ,, in the Union Workhouse among persons not belonging to district.
e ,, ,, 8 ,, ,, ,, within the district among persons not belonging thereto.
f ,, ,, 6 ,, ,, ,, within ,, ,, ,, ,, ,, ,, ,,
g Including 11 ,, ,, ,, without ,, ,, ,, ,, belonging thereto.
h Not including 5 ,, ,, ,, within ,, ,, ,, ,, not belonging thereto.
i ,, ,, 91 ,, ,, ,, within ,, ,, ,, ,, ,, ,, ,,
j Including 5 ,, ,, ,, without ,, ,, ,, ,, belonging thereto.
k ,, 1 death ,, ,, without ,, ,, a person belonging thereto, and
not including 165 deaths ,, ,, within ,, ,, among persons not belonging thereto.

* Excluding Public Institutions.

URBAN—continued.

DISTRICT.	Registered Births.			Registered Deaths.			Deaths from all causes at subjoined ages.						Deaths from subjoined causes.																				
																	Fevers.																
	Males.	Females.	Total.	Males.	Females.	Total.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa or Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries.	All other Diseases.
LEEK	226	221	447	149	133	*c* 282	81	24	10	13	80	74	..	1	..	..	..	4	..	..	1	..	..	3	1	..	2	..	23	60	26	4	157
LICHFIELD	104	118	222	78	85	*d* 163	31	15	3	7	51	56	..	..	1	..	..	2	..	..	..	..	..	4	1	2	..	..	15	28	17	8	85
LONGTON	719	738	1457	435	448	883	341	124	38	48	254	78	..	9	4	2	..	18	..	..	2	..	..	..	6	63	2	..	72	174	57	35	439
NEWCASTLE	327	325	652	206	168	*e* 374	108	48	12	19	117	70	..	6	1	1	..	5	..	..	1	..	1	2	6	20	1	..	33	89	12	6	190
PERRY BARR	43	27	70	19	19	*f* 38	13	7	7	2	6	3	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	2	5	1	1	26
QUARRY BANK	131	125	256	82	47	129	39	17	10	17	36	10	..	8	..	..	..	26	..	..	..	..	1	..	2	7	2	..	4	15	3	3	58
ROWLEY REGIS	665	587	1252	335	298	*g* 633	243	103	22	20	119	126	..	25	1	4	..	3	..	..	2	..	2	8	25	24	1	..	26	101	21	19	371
RUGELEY	73	45	118	28	42	*h* 70	7	5	4	2	21	31	..	..	1	..	..	1	..	..	..	..	..	1	..	3	1	..	4	10	3	2	44
SEDGLEY	285	276	561	155	137	*i* 292	106	41	12	4	66	63	..	1	..	3	..	1	..	..	1	..	..	1	8	35	2	..	7	51	29	7	146
SHORT HEATH	54	76	130	22	15	*j* 37	8	8	2	2	10	7	..	..	..	1	..	..	..	..	..	..	..	2	1	2	..	..	3	9	2	..	17
SMALLTHORNE	119	104	223	54	44	98	34	18	1	6	30	9	..	..	1	..	..	..	..	..	..	..	..	5	1	5	..	..	10	14	6	..	56
SMETHWICK	764	739	1503	316	276	592	213	75	22	27	134	121	..	4	1	1	..	2	..	..	..	..	2	6	4	23	2	..	57	125	35	35	295
STAFFORD	317	283	600	168	166	*k* 334	89	37	8	17	105	78	..	1	2	..	..	..	..	..	..	..	1	10	5	10	..	..	43	61	20	12	169

c Not including 13 deaths which occurred within the district among persons not belonging thereto.
d Including 22 " " " " " " " " " " " "
e Not including 8 " " " " " " " " " " " "
f " " 6 " " " " " " " " " " " "
g Including 11 " " " without " " among persons belonging thereto.
h Not including 5 " " " within " " " " not belonging thereto.
i " " 91 " " " " " " " " " " "
j Including 5 " " " without " " " " belonging thereto.
k Including 1 death " " " " " a person belonging thereto, and
not including 165 deaths " " within " " among persons not belonging thereto.

URBAN—continued.

DISTRICT.	Population at all ages.		Number of persons per acre.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	General zymotic mortality per 1000 of population.	Individual zymotic mortality per 1000 of population.									Phthisis.	Diseases of Respiratory Organs.
													Fevers.					
	Census, 1891.	Estimated to middle of 1895.						Smallpox.	Scarlatina.	Diphtheria.	Croup (not spasmodic).	Measles.	Whooping Cough.	Typhus.	Enteric or Typhoid.	Continued.	Diarrhœa and Dysentery.		
STOKE-ON-TRENT ..	24027	26221	15·2	*l* 31·8	*m* 17·2	179	1·79	..	0·26	0·07	0·03	0·03	0·30	..	0·11	..	1·02	1·79	3·43
STONE	5754	6000	6·0	22·8	*n* 14 6	189	1·33	..	..	0·16	..	0·66	..	..	..	..	0·50	1·33	3·00
TAMWORTH.....	6614	7030	24·6	32·2	*o* 16·7	136	0·56	..	..	0·14	..	0·14	..	..	..	..	0·28	0·99	3·41
TETTENHALL.....	5145	5385	4·4	24·5	20·4	121	3·54	..	0·18	2·78	0·37	..	0·18	..	..	..	0·37	0·73	4·08
TIPTON	29314	29314	10·8	38·4	19·3	173	3·30	0·03	0·23	0·20	0·17	0·64	0·37	..	0·37	..	1·43	1·19	3·37
TUNSTALL	15730	16362	19·6	39·3	26·1	288	3·54	..	0·30	0·18	0·24	1·65	..	..	0·30	..	1·10	1·40	5·92
WEDNESBURY	25347	25300	11·8	34·4	19·7	191	1·89	..	0·71	..	0·03	0·11	0·03	..	0·11	..	0·90	1·02	3·43
WEDNESFIELD	4949	4987	1·9	34·2	17·4	134	1·43	..	0·20	0·20	0·20	0·20	..	..	..	..	0·80	0·80	2·80
WILLENHALL.....	16852	18021	14·4	38·2	*p* 19·7	186	2·94	..	0·16	0·05	..	1·10	0·27	..	..	..	1·33	0·99	3·77
Totals and Averages	546700	579390	6·7	36·2	19·1	181	2·39	0·00	0·24	0·11	0·10	0·48	0·30	..	0·22		1·02	1·16	3·58
33 large towns in England, average population, 320,955 ..	..	10591530	35·3	31·2	20·5	182	2·82	0·01	0·17	0·35	*q*	0·53	0·36	..	0·19		1·18	*q*	*q*

l Not including 37 births which occurred in the Union Workhouse, the parents not belonging to the district.
m Including 2 deaths which occurred without the district among persons belonging thereto, and not including 274 ,, ,, ,, within ,, ,, ,, ,, not belonging thereto.
n Not ,, 10 ,, ,, ,, within ,, ,, ,, ,, ,, ,, ,,
o Including 9 ,, ,, ,, without ,, ,, ,, ,, belonging thereto, and not including 11 ,, ,, ,, within ,, ,, ,, ,, not belonging thereto.
p Including 17 ,, ,, ,, without ,, ,, ,, ,, belonging thereto, and not including 3 ,, ,, ,, within ,, ,, ,, ,, not belonging thereto.
q Not given in the Registrar-General's Returns.

URBAN—continued.

DISTRICT.	Registered Births.			Registered Deaths.			Deaths from all causes at subjoined ages.						Deaths from subjoined causes.																				
																	Fevers.																
	Males.	Females.	Total.	Males.	Females.	Total.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa or Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries.	All other Diseases.
STOKE-on-TRENT	439	433	*l* 872	242	209	*m* 451	150	52	8	14	151	76	..	6	2	1	..	3	..	..	..	..	..	1	8	27	..	..	46	90	38	8	221
STONE	79	58	137	49	39	*n* 88	26	7	..	7	21	27	..	..	1	..	..	..	..	..	..	..	..	4	..	3	..	..	8	18	11	2	41
TAMWORTH	122	105	227	60	58	*o* 118	31	9	6	5	30	37	..	..	1	..	..	..	..	..	1	..	..	2	..	1	1	..	7	24	10	3	68
TETTENHALL	63	69	132	54	56	110	16	15	10	1	28	40	..	1	15	2	..	..	..	..	1	..	..	..	1	2	..	..	4	22	6	..	56
TIPTON	560	567	1127	305	261	566	196	105	21	30	106	108	1	7	6	5	..	11	..	..	..	..	4	19	11	42	1	..	35	99	19	19	287
TUNSTALL	328	316	644	234	194	428	186	96	13	17	63	53	..	5	3	4	..	5	..	..	..	..	2	27	..	18	1	..	23	97	20	5	218
WEDNESBURY ..	455	417	872	259	240	499	167	70	20	17	111	114	..	18	..	1	..	3	..	..	..	..	..	3	1	23	2	..	26	87	24	7	304
WEDNESFIELD ..	104	67	171	*	*	87	23	15	6	3	14	26	..	1	1	1	..	..	..	..	..	..	1	1	..	4	..	..	4	14	6	..	5
WILLENHALL ..	347	343	690	185	171	*p* 356	130	58	9	8	78	73	..	3	1	..	..	..	..	..	..	..	..	20	5	24	5	..	18	68	14	5	19
Totals	10666	10352	21018	†	†	11111	3800	1689	404	485	2709	2024	2	142	65	62	..	129	..	..	18	..	18	280	175	592	31	..	675	2078	630	370	5844

l Including 37 births which occurred within the district, the parents not belonging thereto.
m Not including 274 deaths which occurred within the district among persons not belonging thereto.
n ,, ,, 10 ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, belonging thereto, and
o Including 9 ,, ,, ,, without ,, ,, ,, ,, not belonging thereto.
not including 11 ,, ,, ,, within ,, ,, ,, ,, belonging thereto, and
p Including 17 ,, ,, ,, without ,, ,, ,, ,, not belonging thereto.
not including 3 ,, ,, ,, within ,, ,, ,, ,,

* Not sub-divided.

† Additions not given owing to want of uniformity in returns.

RURAL.

DISTRICT.	Population at all ages.		Mean area per person in acres.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	General zymotic mortality per 1000 of population.	Individual zymotic mortality per 1000 of population.										Phthisis.	Diseases of Respiratory Organs.
								Smallpox.	Scarlatina.	Diphtheria.	Croup (not Spasmodic).	Measles.	Whooping Cough.	Fevers.			Diarrhœa and Dysentery.		
	Census, 1891.	Estimated to middle of 1895.												Typhus.	Enteric or Typhoid.	Continued.			
BLORE HEATH	2227	2227	6·1	32·3	12·1	55	*Nil*	..	..	..	..	..	..	..	..	..	..	2·24	1·79
CANNOCK	15894	16133	3·2	32·1	16·4	135	0·61	..	0·06	0·24	..	..	..	..	0·06	..	0·24	1·11	3·84
CHEADLE	22302	..	2·4	†	18·4	†	0·80	..	..	0·04	0·04	..	0·35	..	..	..	0·40	0·89	2·95
ECCLESHALL	5698	5988	5·3	23·8	12·6	97	1·00	..	..	..	..	..	0·66	..	..	..	0·33	0·16	1·83
GNOSALL	4366	4370	5·6	26·0	*a* 14·1	61	0·45	..	0·22	..	..	..	..	..	..	..	0·22	*Nil*	3·23
KINGSWINFORD	20724	..	0·2	35·2	*b* 20·0	169	1·59	..	0·28	0·04	0·04	0·14	0·43	..	0·14	..	0·53	0·96	3·90
LEEK	13998	..	4·8	33·9	16·0	105	1·00	..	..	0·14	0·14	0·42	0·07	..	..	..	0·35	1·28	2·85
LICHFIELD	*22699	*22699	2·6	34·6	*c* 14·1	107	0·66	..	..	0·13	0·04	0·08	0·26	..	0·04	..	0·13	0·44	2·37
MAYFIELD §	4160																		
NEWCASTLE	6174	6575	2·7	32·6	13·3	93	0·76	..	0·60	..	0·15	..	..	..	0·15	..	..	0·60	3·04
PATSHULL ..... Portion of Seisdon Rural.	234	234	7·7	25·6	*d* 8·5	*Nil*	*Nil*	..	..	..	..	..	..	..	..	..	..	*Nil*	*Nil*

a Including 1 death which occurred without the district, a person belonging thereto.
b Not ,, 44 deaths ,, ,, within ,, ,, among persons not belonging thereto.
c ,, ,, 15 ,, ,, ,, without ,, ,, ,, ,, belonging thereto (corrected rate, 14·8).
d Including 1 death ,, ,, without the district, a person belonging thereto.

† No data, as regards number of births, to allow of calculation.

* Not including Burntwood Asylum.

§ Mr. Hall, the recently-appointed Medical Officer of Health, could not obtain returns for the whole year, therefore those obtained have been omitted from the tables.

RURAL—continued.

DISTRICT.	Registered Births.			Registered Deaths.			Deaths from all causes at subjoined ages.						Deaths from subjoined causes.																					
																	Fevers.																			
	Males.	Females.	Total.	Males.	Females.	Total.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa or Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries.	All other Diseases.
BLORE HEATH	31	41	72	13	14	27	4	1	3	2	5	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	3	1	14
CANNOCK	277	241	518	137	128	265	70	22	10	9	72	82	..	1	4	..	..	1	..	..	2	..	1	..	..	4	2	..	18	62	24	9	137
CHEADLE	**	**	**	210	201	411	104	34	7	14	83	169	..	..	1	1	..	..	..	..	2	..	1	..	8	9	1	..	20	66	41	5	256
ECCLESHALL	72	71	143	38	38	76	14	7	2	5	19	29	..	..	..	..	..	..	..	..	..	..	..	..	4	2	..	..	1	11	8	1	49
GNOSALL	*	*	114	*	*	*a*61	7	9	4	..	15	26	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	14	7	4	34
KINGSWINFORD	364	366	730	233	183	*b*416	124	50	12	12	82	136	..	6	1	1	..	3	..	..	..	..	..	3	9	11	..	..	20	81	39	9	233
LEEK	245	230	475	113	112	225	50	29	11	12	70	53	..	..	2	2	..	..	..	..	..	..	..	6	1	5	..	..	18	40	19	5	127
LICHFIELD	441	345	786	161	159	*c*320	84	27	12	16	85	96	..	..	3	1	..	1	..	..	..	..	..	2	6	3	1	..	10	54	26	22	191
MAYFIELD §																																	
NEWCASTLE	121	94	215	46	42	8	20	7	5	3	23	30	..	4	..	1	..	1	..	..	1	..	..	..	..	..	..	..	4	20	11	3	43
PATSHULL ..... Portion of Seisdon Rural.	*	*	6	*	*	*d*1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

a Not including 1 death which occurred without the district, a person belonging thereto.
b ,, ,, 44 deaths ,, ,, within ,, ,, among persons not belonging thereto.
c ,, ,, 15 ,, ,, ,, without ,, ,, ,, ,, belonging thereto.
d ,, ,, 1 death ,, ,, ,, ,, ,, a person ,, ,,
* Not sub-divided. ** No data.

§ Mr. Hall, the recently-appointed Medical Officer of Health, could not obtain returns for the whole year, therefore those obtained have been omitted from the tables.

RURAL—continued.

DISTRICT.	Population at all ages.		Mean area per person in acres.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	General zymotic mortality per 1000 of population.	Individual zymotic mortality per 1000 of population.										Phthisis.	Diseases of Respiratory Organs.
														Fevers.			Diarrhœa and Dysentery.		
	Census, 1891.	Estimated to middle of 1895.						Smallpox.	Scarlatina.	Diphtheria.	Croup (not Spasmodic).	Measles.	Whooping Cough.	Typhus.	Enteric or Typhoid.	Continued.			
SEISDON	12137	12824	2·7	29·0	16·6	131	1·09	..	0·15	0·23	0·23	..	0·46	..	..	..	0·23	0·70	4·28
STAFFORD	10320	10580	4·9	25·0	*e* 16·1	135	0·85	..	0·47	0·37	..	..	..	..	..	..	..	0·75	2·93
STOKE-ON-TRENT	5122	5700	0·99	31·9	14·9	115	3·85	..	1·75	0·17	..	..	0·52	..	..	..	1·40	1·05	0·87
STONE	8174	8558	2·7	25·3	10·7	78	1·05	..	..	..	..	0·11	0·11	..	0·23	..	0·58	0·58	2·92
TAMWORTH Staffs. portion.	4770	5214	4·4	26·2	*f* 12·6	131	0·38	..	..	..	..	..	..	..	..	..	0·38	1·34	1·53
TUTBURY	9031	9257	2·8	27·9	16·0	154	0·75	..	0·32	..	0·10	..	..	..	0·10	..	0·32	1·51	2·48
UTTOXETER Staffs. portion.	12027	12227	3·9	31·5	19·5	145	0·81	..	0·08	0·08	..	..	..	..	0·08	..	0·57	1·55	4·17
WALSALL	9319	10046	1·2	36·2	*g* 17·1	140	1·79	..	0·09	0·29	..	0·49	..	..	0·49	..	0·39	1·39	4·28
WOLSTANTON	32773	32410	0·3	35·6	20·3	188	1·91	..	0·27	0·15	0·30	0·24	0·34	..	0·12	..	0·77	0·58	3·98
Totals and Averages	222149	226226	2·6	32·0	16·9	137	1·15	..	0·19	0·12	0·09	0·11	0·22	..	0·08	..	0·41	0·88	3·26

e Including 5 deaths which occurred without the district, among persons belonging thereto, and not ,, 7 ,, ,, ,, within ,, ,, ,, ,, not belonging thereto.

f Not ,, 3 ,, ,, ,, within ,, ,, ,, ,, not ,, ,,

g Including 2 ,, ,, ,, without ,, ,, ,, ,, belonging thereto.

RURAL—continued.

DISTRICT.	Registered Births.			Registered Deaths.			Deaths from all causes at subjoined ages.						Deaths from subjoined causes.																				
																	Fevers.																
	Males.	Females.	Total.	Males.	Females.	Total.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa or Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries.	All other Diseases.
SEISDON	179	194	373	99	114	213	49	17	7	6	62	72	..	2	3	3	..	..	..	..	..	..	..	..	6	3	..	..	9	55	16	10	106
STAFFORD	146	119	265	84	87	*e*171	36	15	6	5	37	72	..	5	4	..	..	..	..	..	..	..	..	..	..	..	1	..	8	31	21	9	92
STOKE-ON-TRENT	96	86	182	*	*	85	21	23	5	7	26	3	..	10	1	..	..	..	..	..	..	..	..	..	3	8	..	..	6	5	8	4	40
STONE	116	101	217	50	42	92	17	5	4	5	19	42	..	..	..	..	..	2	..	..	..	..	..	1	1	5	..	..	5	25	18	6	29
TAMWORTH Staffs. portion.	65	72	137	34	35	*f*69	18	5	2	7	23	14	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	7	10	5	2	43
TUTBURY	143	116	259	73	76	149	40	16	3	7	37	46	..	3	..	1	..	1	..	..	..	..	..	..	..	3	..	..	14	23	25	1	78
UTTOXETER Staffs. portion.	205	181	386	125	114	239	56	9	10	7	56	101	..	1	1	..	..	1	..	..	..	..	..	..	..	7	..	..	19	51	34	7	118
WALSALL	195	169	364	98	74	*g*172	51	25	6	12	42	36	..	1	3	..	..	5	..	..	..	..	..	5	..	4	..	..	14	43	13	9	75
WOLSTANTON	615	541	1156	373	286	659	218	*	*	21	*	*	..	9	5	10	..	4	..	..	3	..	3	8	11	25	1	..	19	129	34	15	383
Totals	†	†	6398	†	†	3739	983	†	†	150	†	†		43	28	20	..	19	..	..	8	..	5	25	49	92	6	..	197	724	353	122	2048

e Including 5 deaths which occurred without the district among persons belonging thereto, and not ,, 7 deaths ,, ,, within ,, ,, ,, ,, not belonging thereto.

f ,, 3 deaths ,, ,, ,, ,, ,, among persons not belonging thereto.

g ,, 2 deaths ,, ,, without ,, ,, ,, ,, belonging thereto.

* Not sub-divided. † Figures not given owing to want of uniformity in returns.

Table showing Result of the Working of the Compulsory Notification of Infectious Diseases Act.

NOTE.—Cases of Measles and Whooping Cough are only given when these are included in the diseases compulsorily notified. Smallpox, Scarlet Fever, Diphtheria, and Fevers alone are included in the percentage calculation of hospital cases. In cases in which the Act was not in force during the whole year, the cost has been estimated for the year on the basis of the cost during the period when in force.

Hospitals exist in those districts against which an asterisk is placed.

URBAN.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
AUDLEY.	Houses infected	..	..	116	1	..	..	1	..	1	..	..	6		
13,500.	Cases	Under 5	..	83											
£1 17s. 4d.		5 & upwards		110	1	..	..	1	..	1	..	..	6		
Nil.	Deaths	Under 5	..	6	..	..	..	..	..	..	..	..	..	..	4
		5 & upwards	..	4	1	..	..	..	..	..	..	..	..	..	1
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5 ..													
		5 & upwards													
BIDDULPH.*	Houses infected†	..													
5,450.	Cases	Under 5	..	13	8	1	..	1	..	..	2				
11/5.		5 & upwards													
Nil.	Deaths	Under 5	..	..	2	1	..	..	..	..	..	..	..	2	5
		5 & upwards	..	..	1	..	..	1	..	..	2				
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													

† Not specified.

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
BILSTON.*	Houses infected	..	1	38	2	9	..	24							
23,500.	Cases	Under 5	3	48	2	9	..	30	..	..	..	..	17		
		5 & upwards													
11/7	Deaths	Under 5	1	1	..	11	..	..	..	..	..	..	..	46	3
		5 & upwards	..	..	..	1	..	8	..	..	..	..	..	5	
38·5.	Cases treated in hospital	Under 5	1	8											
		5 & upwards	2	15	..	..	..	6							
	Deaths occurring in hospital.....	Under 5	1	1											
		5 & upwards	..	..	..	..	..	1							
BRIERLEY HILL.*	Houses infected	..	..	82	..	1	..	7	..	..	1	..	3		
11,937.	Cases	Under 5	..	19	..	1									
		5 & upwards	..	63	..	..	..	7	..	..	1	..	11		
£1 1s. 4d.	Deaths	Under 5	..	..	..	1	..	..	..	..	..	..	..	..	12
		5 & upwards	..	..	..	..	..	1	..	..	1	..	2	..	1
Nil.	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
BROWNHILLS.*	Houses infected	..	..	18	5	1	..	20	2	..	..	..	7		
14,204.	Cases	Under 5	..	8	2	2	..	..	1	..	..	..	2		
		5 & upwards	..	19	11	..	..	27	4	..	..	..	7		
14/7	Deaths	Under 5	..	..		4									
		5 & upwards	..	..	4	1	..	5							
Nil.	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
BURSLEM.* 33,799. 12/3 10·5.	Houses infected	..	..	75	5	7	..	37	..	..	1	..	16		
	Cases	Under 5	..	38	1	7	..	4	..	..	..	..	2		
		5 & upwards	..	57	4	..	..	38	..	..	1	..	14		
	Deaths	Under 5	..	5	..	6	..	3	..	..	..	..	..	8	15
		5 & upwards	..	..	1	..	..	3	..	..	1	..	..	2	
	Cases treated in hospital	Under 5	..	1											
		5 & upwards	..	6	..	..	..	8							
	Deaths occurring in hospital	Under 5													
		5 & upwards	..	..	..	..	..	1							
CANNOCK.* 21,000. 11/2 Nil.	Houses infected †....	..													
	Cases	Under 5	..	33	1	1	..	..	..	..	..	..	1		
		5 & upwards	..	38	..	..	..	4	..	..	..	..	16		
	Deaths	Under 5	..	1	1	..	..	..	..	..	..	..	..	1	7
		5 & upwards	..	2	..	..	..	3							
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													
COSELEY. 22,000. 16/4 Nil.	Houses infected	..	..	69	3	2	..	16	1	..	..	..	19		
	Cases	Under 5	} ..	100	3	2	..	18	2	..	..	..	19		
		5 & upwards													
	Deaths	Under 5	..	7	1	..	..	1	..	..	..	..	..	56	15
		5 & upwards	..	1	..	..	..	..	..	..	..	..	..	4	1
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

† Not specified.

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
DARLASTON.*	Houses infected	..	..	16	..	4	..	4	..	..	..	..	16		
	Cases	Under 5	..	18	..	2	..	..	..	..	..	..	3		
		5 & upwards	1	18	..	..	..	4	..	..	..	..	14		
15,141.	Deaths	Under 5	..	2	..	4	..	..	..	..	..	..	..	10	6
		5 & upwards	..	..	..	..	..	3	..	..	..	..	1	1	1
9/10	Cases treated in hospital	Under 5													
		5 & upwards													
Nil.	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
FENTON.*	Houses infected	..	..	140	11	..	..	34	2	..	3	..	28		
	Cases	Under 5	..												
		5 & upwards		174	12	..	..	34	2	..	3	..	28		
20,000.	Deaths	Under 5	..	7	2	..	..	2	..	..	..	..	..	7	7
		5 & upwards	..	..	3	..	..	3	..	..	3				
£1 11s. 7d.	Cases treated in hospital	Under 5	..	6											
		5 & upwards	..	19											
11·2.	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
HANDSWORTH.*	Houses infected	..	5	126	27	3	..	21	..	..	4	..	23		
	Cases	Under 5	2	36	11	3	..	..	..	..	..	..	1		
		5 & upwards	5	143	17	..	..	27	..	..	4	..	22		
39,500.	Deaths	Under 5	..	5	5	4	..	..	..	..	..	..	..	14	8
		5 & upwards	..	3	..	..	..	8	..	..	1	..	..	3	1
17/2	Cases treated in hospital	Under 5	2	11											
		5 & upwards	4	77											
39·0.	Deaths occurring in hospital.....	Under 5													
		5 & upwards	..	2											

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
HEATH TOWN.* 7,526. 11/11 6·4.	Houses infected	..	..	8	4	1	..	12	..	..	..	..	4		
	Cases	Under 5	..	10	4	1	..	17	..	..	..	..	4		
		5 & upwards													
	Deaths	Under 5	..	..	2	1	..	..	..	..	..	..	..	1	2
		5 & upwards	..	..	..	..	..	4							
	Cases treated in hospital	Under 5	..	2											
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
KIDSGROVE. 3,841. 19/6 Nil.	Houses infected ..25	..													
	Cases	Under 5	..	21	..	2	..	..	..	..	1	..	6		
		5 & upwards													
	Deaths	Under 5	..	2	..	1									
		5 & upwards	..	..	..	..	..	..	..	..	1				
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
LEEK.* 14,746. 10/10 77·4.	Houses infected	..	..	38	3	..	..	16	..	..	1	..	1		
	Cases	Under 5	..	22	1	..	..	3							
		5 & upwards	..	20	2	..	..	14	..	..	1	..	1		
	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	3	
		5 & upwards	..	..		..	..	4	..	..	1	..	..	..	1
	Cases treated in hospital	Under 5	..	16	..	..	..	1							
		5 & upwards	..	19	1	..	..	11							
	Deaths occurring in hospital	Under 5	..	..	..	..	..	2							
		5 & upwards													

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
LICHFIELD.* 7,864. £4 12s. 6d. 46·6.	Houses infected	..	..	41	..	..	..	..	..	..	..	..	..	171	
	Cases	Under 5	..	16	1	..	..	..	..	..	..	..	..	110	
		5 & upwards	1	36	..	..	..	6	..	..	..	..	7	114	
	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	3	1
		5 & upwards	..	..	..	..	..	2	..	..	..	..	..	1	
	Cases treated in hospital	Under 5	..	7											
		5 & upwards	..	21	..	..	..	..	..	..	..	..	..	1	
	Deaths occurring in hospital	Under 5													
		5 & upwards													
LONGTON. 35,821. £1 12s. 10d. 0·4.	Houses infected	..	1	211	19	2	..	81	1	..	4	..	17		
	Cases	Under 5	2	314	21	2	..	106	3	..	4	..	19		
		5 & upwards													
	Deaths	Under 5	..	6	4	..	..	5	..	..	..	..	..	..	6
		5 & upwards	..	3	..	2	..	13	..	..	2				
	Cases treated in hospital	Under 5	2												
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													
NEWCASTLE.* 19,400. 19/10 27·5.	Houses infected	..	..	78	10	..	..	16	..	..	2	..	25		
	Cases	Under 5	..	92	13	..	..	22	..	..	2	..	25		
		5 & upwards													
	Deaths	Under 5	..	4	..	1	..	..	..	..	..	..	..	2	6
		5 & upwards	..	2	1	..	..	5	..	..	1	..	1		
	Cases treated in hospital	Under 5	..	31	..	..	..	4							
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
PERRY BARR.* 2,540. 15/9 60·0.	Houses infected†	..													
	Cases	Under 5	..	3	1										
		5 & upwards	..	10	1	..	..	..	..	..	..	..	1		
	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	1	
		5 & upwards													
	Cases treated in hospital	Under 5		3											
		5 & upwards		6											
	Deaths occurring in hospital	Under 5													
		5 & upwards													
QUARRY BANK.* 7,127. £6 10s. 10d. 9·5.	Houses infected	..	..	165	1	..	..	62	..	..	..	..	4		
	Cases	Under 5	..	246	1	..	..	121	..	..	..	..	5		
		5 & upwards													
	Deaths	Under 5	..	5	..	..	..	1	..	..	..	..	1	..	2
		5 & upwards	..	3	..	..	..	25							
	Cases treated in hospital	Under 5	..	..	..	..	..	2							
		5 & upwards	..	..	..	..	..	33							
	Deaths occurring in hospital	Under 5													
		5 & upwards	..	..	..	..	..	2							
ROWLEY REGIS,* 33,300. £2 5s. 11d. 0·5.	Houses infected	..	3	352	5	6	..	17	..	..	2	..	30		
	Cases	Under 5	..	194	2	5	..	2	..	..	..	..	1		
		5 & upwards	3	347	5	1	..	19	..	..	2	..	31		
	Deaths	Under 5	..	22	..	4	..	..	..	..	..	..	1	8	25
		5 & upwards	..	3	1	..	..	3	..	..	2	..	1		
	Cases treated in hospital	Under 5													
		5 & upwards	3												
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

† Not specified.

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
RUGELEY. 4,500. £1 5s. 0d. Nil.	Houses infected	..	..	9	4	..	..	12	..	..	1	..	4		
	Cases	Under 5	..	4											
		5 & upwards	..	6	4	..	..	25	..	..	1	..	5		
	Deaths	Under 5	..	..	..	..	..	..	..	..	..	..	..	1	
		5 & upwards	..	..	1	..	..	1							
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
SEDGLEY.* 15,000. 19/- Nil.	Houses infected † ..	..													
	Cases	Under 5 .... / 5 & upwards	1	47	6	15	..	15	..	..	2	..	28		
	Deaths	Under 5	..	1	..	1	..	..	..	..	..	..	..	1	7
		5 & upwards	..	..	..	2	..	1	..	..	1	..	..	..	1
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
SMETHWICK.* 41,000. £1 0s. 4d. 2·6.	Houses infected	..	6	149	9	1	..	28							
	Cases	Under 5	..	83	2	1	..	3	..	..	..	..	9		
		5 & upwards	7	139	9	..	..	25	..	..	..	..	55		
	Deaths	Under 5	..	3	..	1	..	..	..	..	..	..	1	5	4
		5 & upwards	..	1	1	..	..	2	..	..	..	..	1	1	
	Cases treated in hospital	Under 5													
		5 & upwards	7												
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

† Not specified.

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
STAFFORD.*	Houses infected	..	..	49	3	..	..	7	..	..	3	..	7		
19,746.	Cases	Under 5	..	..	..	..	..	..	..	..	..	..	..		
12/-		5 & upwards	..	70	4	..	..	8	..	..	3	..	10		
81·7.	Deaths	Under 5	..	..	2	..	..	..	..	..	..	..	..	1	9
		5 & upwards	..	1	..	..	..	..	..	..	..	..	..	..	1
	Cases treated in hospital	Under 5	..	..	..	..	..	..							
		5 & upwards	..	65	1	..	..	1							
	Deaths occurring in hospital	Under 5													
		5 & upwards													
STOKE-ON-TRENT.*	Houses infected	..	..	138	21	2	..	31	1	..	2	..	35		
26,221.	Cases	Under 5	1	..	..	..	..	..	..	..	..	..	..		
£1 15s. 0d.		5 & upwards		228	28	2	..	62	1	..	4	..	41		
15·9.	Deaths	Under 5	..	6	1	..	..	..	..	..	..	..	..	1	8
		5 & upwards	..	1	1	1	..	4	..	..	2				
	Cases treated in hospital	Under 5	1	..	..	..	..	..	..	..	..	..	..		
		5 & upwards		48	2										
	Deaths occurring in hospital	Under 5	..	..	..	..	..	..	..	..	..	..	..		
		5 & upwards		2											
STONE.*	Houses infected ..26	..													
6,000.	Cases	Under 5	..	16											
13/4		5 & upwards	..	4	1	..	..	5	..	..	..	..	6		
53·8.	Deaths	Under 5	..	..	..	..	..	..	..	..	..	..	..	6	
		5 & upwards	..	..	1										
	Cases treated in hospital	Under 5	..	9											
		5 & upwards	..	3	..	..	..	2							
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
TAMWORTH.*	Houses infected	..	..	35	2	..	..	..	..	..	1	..	2		
7,030.	Cases	Under 5	..	21	2										
£1 7s. 4d.		5 & upwards	..	50	1	..	..	..	..	..	1	..	2		
95·9.	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	2	
		5 & upwards	..	..	..	..	..	..	..	..	1				
	Cases treated in hospital	Under 5	..	19	1										
		5 & upwards	..	50	1										
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
TETTENHALL.*	Houses infected	..	..	17	40	1	..	2	..	..	1	..	2		
5,385.	Cases	Under 5	..	8	22	2									
£2 1s. 3d.		5 & upwards	..	16	36	..	..	2	..	..	1	..	2		
16·6.	Deaths	Under 5	..	1	7	2	..	..	..	..	..	..	..	..	1
		5 & upwards	..	..	8	..	..	..	..	..	1				
	Cases treated in hospital	Under 5	..	3	1										
		5 & upwards	..	6	3	..	..	1							
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
TUNSTALL.*	Houses infected	..	1	78	8	4	..	27	1	..	2	..	10		
16,362.	Cases	Under 5	..	60	5	4	..	..	..	..	..	..	1		
£1 4s. 9d.		5 & upwards	1	45	3	..	..	31	1	..	2	..	9		
2·7.	Deaths	Under 5	..	3	3	4	..	..	..	..	..	..	2	27	
		5 & upwards	..	2	..	..	..	5							
	Cases treated in hospital	Under 5													
		5 & upwards	1	..	..	..	..	3							
	Deaths occurring in hospital.....	Under 5													
		5 & upwards	..	..	..	..	..	1							

URBAN—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
WILLENHALL.*	Houses infected	..	..	16	5	..	..	2	..	..	..	..	11		
18,021.	Cases	Under 5	..	10	2	..	..	..	..	..	..	..	2		
5/3		5 & upwards	..	10	3	..	..	2	..	..	..	..	9		
Nil.	Deaths	Under 5	..	3	..	..	..	..	..	..	..	..	..	20	5
		5 & upwards	..	..	1										
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													

RURAL.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
BLORE HEATH.‡ 2,227. 2/2 Nil.	Houses infected	..	..	1	..	..	..	..	..	..	..	..	1		
	Cases	Under 5	..	1											
		5 & upwards	..	..	..	..	..	..	..	..	..	..	1		
	Deaths	Under 5													
		5 & upwards													
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
CANNOCK.* 16,133. 18/1 1·0.	Houses infected	..	..	43	11	..	..	11	..	..	2	..	17		
	Cases	Under 5	..	20	2	..	..	..	..	..	..	..	1		
		5 & upwards	..	53	9	..	..	14	..	..	2	..	16		
	Deaths.....	Under 5	..	..	2	..	..	..	..	..	..	..	1		
		5 & upwards	..	1	2	..	..	1	..	..	2				
	Cases treated in hospital	Under 5													
		5 & upwards	..	1											
	Deaths occurring in hospital	Under 5													
		5 & upwards													
CHEADLE. 22,302. 5/10. Nil.	Houses infected † ..	..													
	Cases	Under 5	..	12	3										
		5 & upwards	..	7	6	..	..	14	..	..	4	..	6		
	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	..	7
		5 & upwards	..	..	..	..	..	..	..	..	2	..	1	..	1
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

‡ Tent available. † Not specified.

RURAL—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
ECCLESHALL.*	Houses infected	..	..	12	1										
5,988.	Cases	Under 5	..	9											
2/8		5 & upwards	..	14	1										
20·8.	Deaths	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	4
		5 & upwards													
	Cases treated in hospital	Under 5	..	3											
		5 & upwards	..	2											
	Deaths occurring in hospital	Under 5													
		5 & upwards													
GNOSALL.	Houses infected	..													
4,370.	Cases	Under 5	..	5	5										
£1 8s. 0d.		5 & upwards	..	11	27	..	..	..	..	..	..	..	1		
Nil.	Deaths	Under 5	..	1											
		5 & upwards													
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5 ..													
		5 & upwards													
KINGSWINFORD.*	Houses infected †....	..													
20,724.	Cases	Under 5	..	48	..	1	..	2	..	..	..	..	2		
£1 1s. 11d.		5 & upwards	3	89	1	..	..	22	..	..	..	..	14		
29·7.	Deaths	Under 5	..	5	..	1									
		5 & upwards	..	1	1	..	..	3	..	..	..	..	..	3	9
	Cases treated in hospital	Under 5	..	6	..	..	..	1							
		5 & upwards	3	33	..	..	..	6							
	Deaths occurring in hospital	Under 5	..	1											
		5 & upwards	..	..	..	..	..	1							

RURAL—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
LICHFIELD.*	Houses infected	..	2	26	5	1	..	14	..	..	..	..	7		
22,699.	Cases	Under 5	1	11	1	..	..	4							
8/3		5 & upwards	2	22	7	1	..	19	..	..	..	..	7		
5·9.	Deaths	Under 5	..	..	1	..	..	..	..	..	..	..	..	2	5
		5 & upwards	..	..	2	1	..	1	..	..	..	..	..	..	1
	Cases treated in hospital	Under 5													
		5 & upwards	1	3											
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
NEWCASTLE.	Houses infected	..	..	125	4	3	..	6	1	..	1	..	51		
6,575.	Cases	Under 5	..	48	1	3	..	..	..	..	..	..	2		
£5 5s. 4d.		5 & upwards	..	160	3	..	..	6	1	..	1	..	52		
Nil.	Deaths	Under 5	..	2	..	1									
		5 & upwards	..	2	..	..	..	1	..	..	1				
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													
PATSHULL.	Houses infected	..													
234.	Cases	Under 5													
10·8.		5 & upwards	..	..	..	..	..	1							
Nil.	Deaths	Under 5													
		5 & upwards													
	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital.....	Under 5													
		5 & upwards													

RURAL—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of Cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
SEISDON.*	Houses infected ..55	..													
12,824.	Cases	Under 5	..	19	4	1	..	1							
17/11		5 & upwards	..	42	15	..	..	3	..	..	..	..	7		
27·3.	Deaths	Under 5	..	1	1	2	..	..	..	..	..	..	..	..	5
		5 & upwards	..	1	2	1	..	..	..	..	..	..	..	..	1
	Cases treated in hospital	Under 5	..	8	1										
		5 & upwards	..	10	4										
	Deaths occurring in hospital	Under 5													
		5 & upwards													
STAFFORD.*	Houses infected † ..	..													
10,580.	Cases	Under 5	..	3	4										
9/8		5 & upwards	..	25	7	..	..	1	..	..	..	..	1		
45·0.	Deaths	Under 5	..	4	2										
		5 & upwards	..	1	2										
	Cases treated in hospital	Under 5	..	2											
		5 & upwards	..	12	4	..	..	..	..	..	..	..	1		
	Deaths occurring in hospital	Under 5	..												
		5 & upwards	..	1	2										
STOKE-ON-TRENT.*	Houses infected	..	..	29											
5,700.	Cases	Under 5	..	9											
12/8		5 & upwards	..	20											
31·0.	Deaths	Under 5	..	..	1										
		5 & upwards	..	10											
	Cases treated in hospital	Under 5	..	9											
		5 & upwards													
	Deaths occurring in hospital	Under 5	..	8											
		5 & upwards													

† Not specified.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
STONE.*	Houses infected	..	..	15	7	..	..	2	..	..	..	..	7	60	40
8,558.	Cases	Under 5	..	13	6										
		5 & upwards	..	7	4	..	..	2	..	..	..	..	7		
11/4	Deaths	Under 5													
		5 & upwards	..	..	..	..	..	2	..	..	..	..	..	1	1
Nil.	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5													
		5 & upwards													
TAMWORTH.*	Houses infected	..	..	14	..	..	..	1	..	..	1	..	2		
5,214.	Cases	Under 5	..	10											
		5 & upwards	..	18	..	..	..	1	..	..	1	..	2		
15/4	Deaths.....	Under 5													
		5 & upwards	..	..	..	..	..	1	..	..	1				
96·5.	Cases treated in hospital	Under 5	..	10											
		5 & upwards	..	18											
	Deaths occurring in hospital	Under 5													
		5 & upwards													
TUTBURY.†	Houses infected	..	..	11	1	..	..	2	..	..	1	..	1		
9,257.	Cases	Under 5	..	5	1										
		5 & upwards	..	12	..	..	..	2	..	..	1	..	1		
14/3	Deaths.....	Under 5	..	3	..	1									
		5 & upwards	..	..	..	..	..	1							
Nil.	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital	Under 5 ..													
		5 & upwards													

† Date of introduction, August 1st, 1895.

RURAL—continued.

District, Population, Cost of Notification per 1000 of Population, Percentage of cases treated in Hospital.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.
WALSALL.	Houses infected	..	..	7	7	..	..	15	..	..	..	..	6		
10,046.	Cases	Under 5	..	3	3	..	..	1							
		5 & upwards	..	5	6	..	..	23	..	..	..	..	6		
11/8	Deaths	Under 5	..	1	2	..	..	..	..	..	..	..	..	5	
		5 & upwards	..	..	1	..	.	5							
Nil.	Cases treated in hospital	Under 5													
		5 & upwards													
	Deaths occurring in hospital..... ..	Under 5													
		5 & upwards													
WOLSTANTON.*	Houses infected	..	..	221	20	12	..	37	..	..	3	..	58		
32,410.	Cases	Under 5	..	101	6	7	..	10	..	..	..	..	10		
		5 & upwards	..	160	18	5	..	34	..	..	3	..	48		
£1 11s. 1d.	Deaths	Under 5	..	4	2	6									
		5 & upwards	..	3	7	5	..	4	..	..	..	..	..	..	10
38·6.	Cases treated in hospital	Under 5	..	27											
		5 & upwards	..	78	..	..	..	22							
	Deaths occurring in hospital.....	Under 5													
		5 & upwards	..	..	..	..	..	2							

SUMMARY

OF

SANITARY INSPECTORS'

WORK.

Summary of Sanitary Inspectors' Work.

URBAN.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Audley. 13,000.	Inspections & observations made	2	..	6	..	..	43	119	16	..	..	320	..	..	100		..	..	14	..	..	2	..	..											
	Formal notices by authority	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..											
	Nuisances abated after notice	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	440	..	..	..	..	..	..	1				
Biddulph. 5,450.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Bilston. 23,500.	Inspections & observations made	31	27	8	..	64	103	81	47	70	52	8125	63	17	4	..	5	..	18	6	..	..	13	8734											
	Formal notices by authority	..	..	2	..	..	..	..	..	..	..	5	..	..	2	..	..	..	..	..	..	..	..	9											
	Nuisances abated after notice	..	..	2	..	..	..	..	..	..	..	5	..	..	2	..	..	..	..	..	..	..	..	9	2	..	..	..	..	64	211				
Brierley Hill 11,937.	Inspections & observations made	113	..	6	..	..	20		14	17	107	3094	5	24	4	..	18	15	6	28	..	1	..	3472											
	Formal notices by authority	86	..	6	..	..	Inspected quarterly.				..	..	2	..	..	..	..	..	..	..	..	1	..	95											
	Nuisances abated after notice	113	..	6	..	..					..	..	2	..	..	..	..	..	..	..	..	1	..	122	3	..	..	3	3	63	94				
Brownhills. 14,204.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.					
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Burslem. 33,799.	Inspections & observations made	65	230	18	26	132	140	60	46	88	67	1440	46	1200	230			15	40	6	12	10	24	3895						2	120					
	Formal notices by authority	16	11	4	7	..	5	2	6	2	11	149	23	55	16	4	76	1	8	3	2	..	5	406												
	Nuisances abated after notice	16	11	4	7	..	5	2	6	2	11	149	23	55	16	4	76	1	8	3	2	..	5	406	..	..	..	..	..							
Cannock. 21,000.	Inspections & observations made	2	4	1	..	..	..	..	..	114	8	34	4	9	13	13	18	100	2	..	1	..	3	326												
	Formal notices by authority	2	4	1	..	..	..	..	..	114	8	34	4	9	13	13	18	100	2	..	1	..	3	326												
	Nuisances abated after notice	2	4	1	..	..	..	..	..	114	8	33	4	9	13	13	18	100	2	..	1	..	3	325	..	..	..	6	5							
Coseley. 22,000.	Inspections & observations made	41	59	27	6	..	67	234	64	193	152	171	42	..	7	..	9	92	8	14	..	..	19	1205												
	Formal notices by authority	41	59	27	6	..	..	51	2	..	..	..	..	..	7	..	9	..	8	14	..	..	19	243												
	Nuisances abated after notice	41	59	27	6	..	..	51	2	..	..	..	..	..	7	..	9	..	8	14	..	..	19	243	1	..	..	3	1							
Darlaston. 15,141.	Inspections & observations made	..	..	14	..	..	52	52	26	52	156	2352	9	..	7	..	32	..	..	2	..	..	6	2760												
	Formal notices by authority	..	..	14	..	..	..	..	..	..	..	..	9	..	7	..	32	..	..	2	..	..	6	70												
	Nuisances abated after notice	..	..	14	..	..	..	..	..	..	..	..	9	..	7	..	32	..	..	2	..	..	6	70	..	..	..	..	..	..	5					
Fenton. 20,000.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																	
	Formal notices by authority																																		
	Nuisances abated after notice																																		

URBAN—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisance.	Other nuisances.	Totals.	Food supply & Water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Handsworth 39,500.	Inspections & observations made	237	77	50	36	..	130	65	27	63	..	471	181	269	352	148	532	29	..	206	..	27	166	3066											
	Formal notices by authority	47	17	9	4	..	..	5	6	5	..	80	38	77	69	26	105	9	..	34	..	9	34	574											
	Nuisances abated after notice	46	17	9	4	..	..	5	6	5	..	77	37	77	61	26	103	9	..	27	..	9	34	552	..	..	..	..	..	134	181				
Heath Town. 7,526.	Inspections & observations made	¶	37	..	..	..	37	74	6	86	..	¶	..	6	2	¶	..	..	..	..	..	..	..	¶											
	Formal notices by authority	37	20	..	1	..	..	..	..	..	..	46	7	..	2	..	22	..	5	11	..	..	20	171											
	Nuisances abated after notice	37	20	..	1	..	..	..	..	..	..	46	7	..	2	..	22	..	5	11	..	..	20	171	1	..	..	..	..	5	5				
Kidsgrove. 3,841.	Inspections & observations made	Suggested Form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Leek. 14,746.	Inspections & observations made	18	8	4	1	52	4	76	31	30	35	37	8	12	20	12	46	3	2	3	2	3	35	442											
	Formal notices by authority	13	8	4	1	1	..	1	..	1	2	37	6	12	16	10	21	3	2	3	2	3	21	167											
	Nuisances abated after notice	13	8	4	1	1	..	1	..	1	2	30	6	8	16	10	17	3	2	3	2	3	21	152	..	..	..	..	..	21	19	2				
Lichfield. 7,864.	Inspections & observations made	..	5	..	8	..	17	14	14	13	..	74	36	5	51	13	33	..	18	4	1	..	26	332											
	Formal notices by authority	..	3	..	8	..	1	1	..	..	..	24	25	5	30	10	23	..	7	4	1	..	20	162											
	Nuisances abated after notice	..	5	..	8	..	1	1	..	..	..	24	25	5	30	10	23	..	7	4	1	..	20	164	1	1	..	..	1	1	46	1				

¶ Not known.

URBAN—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & Water.					Precautions against infectious disease.					
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things
Longton. 35,821.	Inspections & observations made	2	77	2	17	..	..	..	..	..	..	27	4	174	9	..	120	16	..	..	..	..	33	481											
	Formal notices by authority																																		
	Nuisances abated after notice																								4	..	..	..	..	39	14					
Newcastle. 19,400.	Inspections & observations made	480	104	14	3	60	75	60	40	90	..	560	30	120	19	14	8	30	55	12	10	..	..	1784											125
	Formal notices by authority	136	86	14	3	1	8	2	3	4	..	115	8	12	9	12	8	12	12	3	..	..	..	448											
	Nuisances abated after notice	136	84	14	3	1	8	2	3	4	..	115	8	12	9	12	8	12	12	3	..	..	..	446	3	15	..	3	..	28	86	..	..	..	1	1
Perry Barr. 2,540.	Inspections & observations made	21	8	..	..	..	3	22	..	..	..	118	1	1	1	..	19	..	2	..	..	..	..	196											
	Formal notices by authority	1	..	..	..	..	..	..	..	..	..	3	1	..	..	..	3	..	..	..	..	..	..	8											
	Nuisances abated after notice	21	8	..	..	..	3	..	..	..	..	115	1	1	1	..	16	..	1	..	..	..	..	167	..	..	..	..	..	..	14					
Quarry Bank 7,127.	Inspections & observations made	26	..	10	3	..	16	14	4	6	..	267	14	..	..	12	..	300	10	10	20	..	..	712											
	Formal notices by authority	26	..	10	3	..	..	..	..	..	..	267	14	..	..	12	..	36	10	10	1	..	..	389											
	Nuisances abated after notice	26	..	8	3	..	..	..	..	..	..	267	12	..	..	11	..	36	8	8	1	..	..	380	..	..	..	37	36	46	80	1				
RowleyRegis 33,300.	Inspections & observations made	281	31	14	17	..	22	219	..	131	92	87	62	..	9	..	47	..	67	33	4	7	16	1139											
	Formal notices by authority	133	16	14	15	..	18	7	..	10	1	49	41	..	6	..	42	..	61	30	..	4	5	452											
	Nuisances abated after notice	130	16	14	5	..	17	6	..	10	1	45	41	..	6	..	42	..	61	29	..	3	5	441	..	..	..	15	14	1098	458	1	..	..	2	2

URBAN—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Rugeley. 4,500.	Inspections & observations made	..	5	..	..	..	14	14	10	36	49	18	3	28	3	..	4	920	2	..	..	1	2	1109											
	Formal notices by authority	..	5	..	..	..	..	..	..	..	1	18	3	28	3	..	4	245	1	..	..	..	1	309											
	Nuisances abated after notice	..	4	..	..	..	..	..	..	..	1	18	3	28	3	..	4	224	1	..	..	..	1	287	..	..	..	400	245	..	17					
Sedgley. 15,000.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Short Heath. 2,748.	Inspections & observations made	541				..	14	14	2	6	..	All	2	..	..	..	..	..	All	..	..	..	6												
	Formal notices by authority																																	
	Nuisances abated after notice	..	..	2	..	..	..	..	..	..	..	1	2	..	..	..	..	..	1	..	..	..	6	12	..	..	..	1	1	..	..	1				
Smallthorne 5,580.	Inspections & observations made	13	43	..	..	..	16	13	7	5	..	1021	..	..	17	..	..	..	40	..	..	..	..	1175											
	Formal notices by authority	13	43	..	..	..	..	..	..	..	..	43	..	..	17	..	..	..	..	..	..	..	..	116											
	Nuisances abated after notice	13	34	..	..	..	..	..	..	..	..	43	..	..	17	..	..	..	..	..	..	..	..	107	..	..	..	..	..	..	2	3				
Smethwick. 41,000.	Inspections & observations made	25	28	15	57	..	*300	*60	*120	*112	168	1995	27	20	716			30	20	2	10	12	123	3840											
	Formal notices by authority	..	5	..	2	..	..	..	..	..	2	147	..	4	358			5	..	..	..	1	41	565											
	Nuisances abated after notice	5	5	5	19	..	..	..	..	..	2	634	9	4	358			5	..	1	..	1	41	1089	..	..	..	6	3	1472	101				

* Verbal notice given on each inspection when necessary, and notices complied with.

URBAN—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.					
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Stafford.† 21,136.	Inspections & observations made	41	438	7	5	28	72	72	85	152	..	1337	..	466	114	..	3	6	112	17	..	4	43	3530											
	Formal notices by authority	3	11	7	..	..	..	..	..	1	..	..	..	5	20	..	3	..	..	8	..	2	3	63											
	Nuisances abated after notice	3	11	7	..	..	..	..	..	1	..	..	..	5	20	..	3	..	..	8	..	2	3	63	..	..	..	6	5	126	52					
Stoke-on-Trent. 26,221.	Inspections & observations made	4	44	9	2	30	90	60	70	150	378	197	6	19	51	..	50	28	..	17	6	20	78	1309											
	Formal notices by authority	4	44	9	2	1	: Verbal.	: Verbal.	: Verbal.	: Verbal.	1	197	6	19	51	..	50	28	..	17	6	20	78	533											
	Nuisances abated after notice	4	44	9	2	1	:	:	:	:	1	197	6	19	51	..	50	28	..	17	6	20	78	533	..	..	..	1	1	1	60					
Stone. 6,000.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																	
	Formal notices by authority																																		
	Nuisances abated after notice																																		
Tamworth. 7,030.	Inspections & observations made	1	13	3	2	5	3	4	11	11	..	25	5	10	16	..	32	..	11	1	1	4	60	218											
	Formal notices by authority	1	13	3	2	..	1	5	4	4	..	12	5	4	16	..	29	..	11	1	1	4	75	191											
	Nuisances abated after notice	1	9	2	..	..	1	4	4	4	..	9	5	4	10	..	23	..	6	1	..	3	51	137	..	..	..	5	4	..	69					
Tettenhall. 5,385.	Inspections & observations made	2	12	4	..	..	22	42	26	20	..	88	25	9	..	..	29	8	..	8	..	..	20	315											
	Formal notices by authority	1	3	..	..	..	..	..	..	..	..	4	..	1	..	..	9	4	..	3	..	..	26	51											
	Nuisances abated after notice	1	12	4	..	..	..	4	8	12	..	88	25	9	..	..	28	8	..	8	..	..	20	227	..	..	..	10	8	..	27	4				

† Including public institutions.

URBAN—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.		Bakehouses.	Slaughter-houses.	Canal boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisance.	Other nuisances.	Totals.	Food supply & Water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.			Cowsheds.							Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Tipton. 29,316.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Tunstall. 16,362.	Inspections & observations made	400	20	1	..	..	250		20	600	76	61	1	60	76			..	20	..	..	..	20	1605											
	Formal notices by authority	70	20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	91											
	Nuisances abated after notice	322	20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..	..	20	383	..	..	..	..	..	1	2	2				
Wednesbury 25,300.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Wednesfield. 4,987.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Willenhall. 18,021.	Inspections & observations made	3840				4	16		58	62	2	1814	8	297	162			56	99	8	..	4	28	6458											
	Formal notices by authority	1	1	3	..	..	..		..	1	..	20	..	..	72			..	..	..	..	..	9	107											
	Nuisances abated after notice	6	5	8	1	1	2		12	7	..	38	4	9	58			28	6	4	..	2	13	204	1	..	..	..	..	13	21	4				

RURAL.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisance.	Other nuisances.	Totals.	Food supply & Water.					Precautions against infectious disease.					
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Blore Heath. 2,227.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																															
	Formal notices by authority																																
	Nuisances abated after notice.....																																
Cannock. 16,133.	Inspections & observations made	4	5	1	3	..	39	39	10	..	30	11	..	..	3	31		11	3	..	..	..	..	190											
	Formal notices by authority	..	5	1	3	..	..	..	..	..	..	11	..	..	3	31		11	..	..	..	..	..	65											
	Nuisances abated after notice.....	4	5	1	3	..	..	..	..	..	..	11	..	..	3	31		11	3	..	..	..	..	72	..	..	..	3	5	..	55				
Cheadle. 22,302.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																															
	Formal notices by authority																																
	Nuisances abated after notice.....																																
Eccleshall. 5,988.	Inspections & observations made	7	7	1	..	2	29		8	7	..	33	13	1	2	5	12	17	3	..	..	..	..	147											
	Formal notices by authority	7	4	1	..	..	..	..	..	1	..	17	13	..	..	2	12	7	1	..	..	..	..	65											
	Nuisances abated after notice.....	7	4	1	..	..	..	..	..	1	..	12	13	..	..	2	9	5	1	..	..	..	..	55	..	..	..	..	..	12	12				
Gnosall. 4,370.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																															
	Formal notices by authority																																
	Nuisances abated after notice.....																																

RURAL—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Kingswinford. 20,724.	Inspections & observations made	691	..	18	..	..	10	50	10	25	25	302	271	11	9	..	117	47	10	..	..	..	..	1596											
	Formal notices by authority	2	..	15	..	..	10	..	..	..	..	200	2	4	..	..	..	20	4	..	..	..	..	257											
	Nuisances abated after notice	691	..	18	..	..	10	50	10	25	25	302	271	11	9	..	117	47	10	..	..	..	..	1596	..	..	..	20	10	..	123				
Leek. 13,998.	Inspections & observations made	5	10	2	5	14	103		..	14	94	87	13	8	32	12	33	52	20	..	48	..	25	577											
	Formal notices by authority	5	10	2	5	..	6		..	2	3	87	13	8	20	7	20	15	14	..	..	..	14	231											
	Nuisances abated after notice	5	10	2	5	..	6		..	2	3	80	13	8	20	7	18	12	12	..	..	..	11	214	..	..	..	..	..	..	15	4				
Lichfield. 23,299.	Inspections & observations made	6	18	9	9	..	124		..	19	139	238	34	7	50	40	80	36	25	15	..	..	23	872											
	Formal notices by authority	1	1	..	2	..	..		..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	6											
	Nuisances abated after notice	5	17	9	9	..	46		..	2	7	230	34	7	50	37	76	36	24	15	..	..	20	624	..	..	..	45	34	30	44				
Mayfield. 4,160.	Inspections & observations made	3	3	..	3	..	..	1	..	..	..	11	8	..	1	..	8	10	1	1	..	..	5	55											
	Formal notices by authority																																	
	Nuisances abated after notice	2	2	..	2	..	..	1	..	..	..	6	5	..	1	..	3	4	1	1	..	..	3	31											
Newcastle. 6,575.	Inspections & observations made	6	3	..	..	..	8	12	2	3	..	56	..	..	26			104	10	..	..	..	..	230											
	Formal notices by authority	6	2	..	..	..	..	..	..	..	..	40	..	..	..			47	..	..	..	..	..	95											
	Nuisances abated after notice	4	2	..	..	..	..	..	..	..	..	40	..	..	..			..	..	..	..	..	..	46	..	..	..	10	10	..	31				

RURAL—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & water.					Precautions against infectious disease.					
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things.
Patshull. 234.	Inspections & observations made	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	335											
	Formal notices by authority	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	113											
	Nuisances abated after notice	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	80	..	..	..	..	..	..	54				
Seisdon. 12,824.	Inspections & observations made	68	15	8	3	..	2	70	13	14	117	125	47	..	13	..	32	13	29	14	..	..	54	637											
	Formal notices by authority	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	189											
	Nuisances abated after notice	68	15	8	3	..	..	15	..	1	..	125	47	..	13	..	32	13	29	14	..	..	54	437	..	..	..	7	2	..	55	1	..	..	1	1
Stafford. 10,580.	Inspections & observations made	Suggested form of Inspector's Return not adopted.																																
	Formal notices by authority																																	
	Nuisances abated after notice																																	
Stoke-on-Trent. 5,700.	Inspections & observations made	614		..	..	..	82	..	..	..	48	..	..	..	..	..	24	..	..	16	..	..	..	784											
	Formal notices by authority	64		..	..	..	..	..	..	..	48	..	..	..	..	..	24	..	..	16	..	..	..	152											
	Nuisances abated after notice	64		..	..	..	..	..	..	..	48	..	..	..	..	..	24	..	..	16	..	..	..	152	..	..	..	7	..	..	10	3				
Stone. 8,558.	Inspections & observations made	5	8	4	..	..	86	9	8	89	31	64	2	..	10	11	24	5	..	..	..	..	..	358											
	Formal notices by authority	5	2	4	..	..	..	..	..	8	15	49	..	..	4	8	8	3	..	..	..	..	..	106											
	Nuisances abated after notice	5	2	4	..	..	..	..	..	7	11	49	..	..	4	7	7	3	..	..	..	..	..	99	1										

RURAL—continued.

District and Population.		Dwelling-houses and Schools.				Lodging-houses.	Dairies and Milkshops.	Cowsheds.	Bakehouses.	Slaughter-houses.	Canal Boats.	Ashpits and Privies.	Deposits of refuse & manure.	Water-closets.	House drainage.			Water supply.	Pigsties.	Animals improperly kept.	Offensive trades.	Smoke nuisances.	Other nuisances.	Totals.	Food supply & Water.					Precautions against infectious disease.						
		Foul conditions.	Structural defects.	Overcrowding.	Unfit for habitation.										Defective Traps.	No disconnection.	Other faults.								Seizures of unwholesome food.	Samples of food taken for analysis.	Samples of food found adulterated.	Samples of water taken for analysis.	Samples of water condemned as unfit for use.	Lots of infected bedding stoved or destroyed.	Houses disinfected after infectious disease.	Schools disinfected after infectious disease.	Prosecutions for not notifying existence of infectious disease.	Convictions for not notifying existence of infectious disease.	Prosecutions for exposure of infected persons or things.	Convictions for exposure of infected persons or things
Tamworth.* 5,214.	Inspections & observations made	..	10	5	2	..	56	8	7	8	..	12	2	3	21	..	15	22	9	..	..	1	32	213											
	Formal notices by authority	..	10	8	1	..	5	3	2	2	..	12	2	2	10	..	15	30	9	..	..	1	45	157											
	Nuisances abated after notice	..	10	5	1	..	5	3	2	2	..	10	2	2	9	..	14	16	8	..	..	..	36	125	..	..	..	6	4	..	15	1				
Tutbury. 9,257.	Inspections & observations made	3	21	..	1	..	..	177	..	4	..	124	88	2	92	44	10	4	73	26	..	..	62	731											
	Formal notices by authority	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2											
	Nuisances abated after notice	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	5	3	..	8					
Uttoxeter.* 12,227.	Inspections & observations made	26	18	5	8	..	30	220	20	21	..	78	12	35	42	27	9	45	26	..	..	..	..	622											
	Formal notices by authority	..	..	5	..	..	..	4	1	1	..	12	2	..	4	..	..	12	7	..	..	..	..	48											
	Nuisances abated after notice	..	..	5	..	..	..	4	1	1	..	10	2	..	4	..	..	..	7	..	..	..	..	34	..	..	..	12	5	..	6					
Walsall. 10,046.	Inspections & observations made	1	..	10	1	..	29	48	..	8	11	320	26	2	28	..	6	67	11	..	..	..	21	529											
	Formal notices by authority	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2											
	Nuisances abated after notice	1	..	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	..	3	3	..	15					
Wolstanton. 32,410.	Inspections & observations made	8	..	3	82	..	539		325	351	44	327	23	9	115	32	286	153	17	17	..	..	149	2480											
	Formal notices by authority	3	..	..	37	..	11		..	..	..	159	10	4	56	14	140	75	7	27	..	..	77	620											
	Nuisances abated after notice	3	..	..	37	..	11		..	..	..	159	10	4	56	14	140	75	7	27	..	..	77	621	..	..	..	4	3	154	151					

* Staffordshire portion.

URBAN.

Table of Vital Statistics for the year 1895; showing also the practice in each District with regard to the printing of Annual Reports, the Adoptive Acts in force, and the prominent features in the Medical Officers' Report.

DISTRICT AND MEDICAL OFFICER.	Area in Acres.	Population estimated to middle of 1895.	Birth-rate per 1000 of population.	Death-rate per 1000 of population.	Deaths in Infants under one year per 1000 registered Births.	Zymotic death-rate per 1000 of population.	Phthisis death-rate per 1000 of population.	Annual Report printed.	Adoptive Acts. Compulsory Notification of Infectious Diseases (Prevention) Act, 1889.	Adoptive Acts. Infectious Diseases (Prevention) Act, 1890.	Adoptive Acts. Public Health Acts Amendment Act, 1890.	PROMINENT FEATURES OF REPORT.
AUDLEY J. Vernon, M.R.	8000	13500	40·9	24·0	143	1·33	1·55	No	Yes	Yes	Yes	High death-rate explained by colliery accident. Considerable attention being paid to sewage disposal. District Council favourable to union with adjoining districts for isolation purposes. Scavenging better done.
BIDDULPH T. W. H. Garstang, M.R.C.S.	5057	9450	39·1	15·9	144	3·30	1·10	Yes	Yes	Yes	Yes	Medical Officer of Health asks for Authority's support in isolation and disinfection in the case of scarlet fever. Additional land for sewage disposal required.
BILSTON T. Ridley Bailey, M.D.	1366	25000	40·7	26·9	224	4·61	0·80	Yes	Yes	Yes	Parts I. II. & V.	Isolation hospital said to have been the means of preventing an outbreak of small-pox. High zymotic rate chiefly owing to measles and diarrhœa. Medical Officer of Health points out the advantages of combination with neighbouring Authorities in providing an efficient isolation hospital. The question of overcrowded areas and unhealthy dwellings will have to be considered in the near future.
BRIERLEY HILL H. D'Arcy Ellis, L.R.C.P., M.R.C.S.	1027	11937	37·2	19·6	173	2·17	0·92	Yes	Yes	Yes	No	Refuse removal by contract is unsatisfactory, and there are many defective privies in the district. Mining operations indicate caution in the matter of sewerage which is still under consideration. Some wells have been closed and the public water-supply substituted.
BROWNHILLS J. C. Maddever, M.D.	3772	14206	49·1	14·9	124	0·98	0·63	Yes	Yes	No	No	Authority congratulated on improvement in sanitary matters, but much yet remains to be done. Refuse removal by contract not satisfactory. Authority urged to abolish polluted local wells and substitute the public water-supply.
BURSLEM J. M. Taylor, L.R.C.P., L.S.A., M.R.C.S., D.P.H.	2505	35790	39·4	20·6	182	2·66	1·05	Yes	Yes	Yes	Pts. I. II. V. & VI.	One Hundred and thirty privies abolished and water-closets substituted. Still much prejudice against removal to isolation hospital.
CANNOCK † J. C. Blackford, M.R.C.S., L.S.A.	8039	22000	41·0	16·5	144	1·32	0·75	Yes	Yes	No	No	Medical Officer of Health approves of union of districts for isolation purposes. Sewerage of Five Ways still under consideration. One hundred houses connected with the public water-supply.
COSELEY W. M. Cleofinson, L.R.C.P., M.R.C.S.	3073	22000	36·5	22·6	216	4·77	0·77	Yes	Yes	Yes	Parts I. & II.	Measles largely responsible for high death-rate. Scarlet fever said to be endemic, and nothing but general isolation will, it is said, diminish the prevalence. It is anticipated that the public water-supply will soon be available for Under Hill. Complaints are made regarding delay in the removal of night-soil.
DARLASTON S. Partridge, M.R.C.S., L.S.A.	800	15141	39·7	23·5	221	3·69	1·32	Yes	Yes	Yes	Yes	High death-rate attributed to large number of deaths from diarrhœa. Scavenging inefficient in low-lying parts of district. Large number of privies and ashpits have been re-built. Medical Officer of Health again urges the necessity of connecting the houses with the new sewers.
FENTON A. V. Griffiths, M.R.C.S., L.S.A.	1599	20053	42·1	19·6	256	3·03	0·60	Yes	Yes	Yes	Parts I. & II.	Insanitary privies are rapidly disappearing. Room for improvement in refuse removal department. Nuisance experienced from sewer ventilators. Increased slaughter-house accommodation required.
HANDSWORTH Jas. Richmond, M.B., D.P.H.	3636	39509	34·5	12·6	139	1·56	0·73	Yes	Yes	No	No	Medical Officer of Health recommends adoption of the Infectious Diseases (Prevention) Act. One hundred and forty-three water-closets substituted for privies, and refuse removal now undertaken by the Authority. A mortuary has been provided.
HEATH TOWN J. Green, M.R.C.S., L.S.A.	733	7526	39·2	20·7	232	3·45	0·66	Yes	Yes	Yes	No	Report contains no sanitary details.
KIDSGROVE J. Steele, L.R.C.P.	1052	3461	36·9	18·4	176	0·73	0·73	No	Yes	Yes	Yes	Report contains few sanitary details.
LEEK J. J. Ritchie, M.R.C.S., L.S.A.	1460	16746	30·3	19·1	181	0·61	1·05	Yes	Yes	Yes	Yes	The employment of mothers away from home, it is said, is responsible, to a large extent, for the high infant mortality. High death-rate partly attributed to poverty consequent upon bad trade.
LICHFIELD J. Clark, M.D.	3416	7964	28·2	17·9	139	1·27	1·90	Yes	Yes	Yes	Yes	Contemplated improvements at the isolation hospital in abeyance pending the action of the County Council. A good many houses closed as unfit for habitation.
LONGTON W. J. Dawes, M.R.C.S., L.M., L.S.A.	2000	35825	40·6	24·6	234	2·79	2·03	Yes	Yes	Yes	Parts II. and V.	Medical Officer of Health points out necessity for isolation hospital, a site for which was purchased some time ago. There are now 1,613 water-closets in the district. Scavenging is now undertaken, and more efficiently done, by the Corporation, although the street scavenging is not so well conducted as is desirable. Enteric fever is usually prevalent in this district.
NEWCASTLE F. Webb, L.R.C.P., M.R.C.S.	652	19405	33·6	19·2	165	2·06	1·70	Yes	Yes	Yes	Parts II. & V.	Old privy cesspits gradually being abolished, and scavenging is more efficiently carried out. Cottage property in a bad state in several parts of the district.
PERRY BARR Jas. Richmond, M.B., D.P.H.	4043	2540	27·5	14·9	125	1·18	0·79	Yes	Yes	No	No	Local well supplies throughout the district are said to be defective.
QUARRY BANK T. M. Tibbetts, M.B., D.P.H.	963	7127	35·9	19·1	152	0·05	0·56	Yes	Yes	No	No	High zymotic rate explained almost entirely by the outbreak of enteric fever during the last half of the year. Refuse removal said now to be better conducted by the contractor. Many local wells have been abolished in favour of the public supply.
ROWLEY REGIS J. G. Beasley, L.R.C.P. Edin., L.F.P.S. Glas.	3670	33300	37·6	19·0	196	2·58	0·73	Yes	Yes	Yes	Parts I. II. & V.	Sewering of the district now in progress. The refuse removal by contract, although better, is far from satisfactory. Two hundred and sixty-one properties been provided with public water-supply during the year.
RUGELEY J. H. Freer, L.R.C.P., M.R.C.S.	600	4800	26·2	15·6	59	1·33	0·83	Yes	Yes	Yes	No	Much need for isolation hospital and disinfecting apparatus. There are a number of defective ashpits throughout the district. Twenty-eight water-closets have been substituted for privies during the year. Three-fourths of the houses now supplied with water from the mains. Engineer engaged to prepare scheme of sewerage and sewage disposal. A number of insanitary houses exist in certain parts of the district.
SEDGLEY J. Biggins, M.D.	2770	15000	37·4	19·4	188	3·06	0·46	Yes	Yes	Yes	Parts I. II. & V.	High infant mortality attributed to mothers working away from home. Medical Officer of Health recommends union with neighbouring Authorities for isolation purposes.
SHORT HEATH J. T. Hartill, L.R.C.P., M.R.C.S.	550	2748	47·3	13·4	61	1·81	1·09	Yes	No	No	No	Previously defective water-supply in higher parts of district now corrected. New Bye-laws sanctioned by the Local Government Board are now in force. Cesspits and ashpits are still in the same unsatisfactory condition. Medical Officer of Health again urges adoption of the Notification Act. Authority again recommended to adopt a sewerage scheme. Increased house accommodation is much wanted.
SMALLTHORNE J. Aspinall, M.R.C.S.	529	5580	39·9	17·5	152	2·15	1·79	Yes	No	No	Part II.	Medical Officer of Health advises adoption of Notification Act, and the provision of an isolation hospital and disinfecting apparatus, possibly, jointly with other Authorities. More systematic emptying of privies is desirable.
SMETHWICK W. F. March Jackson, L.R.C.P., L.M., M.R.C.S.	1882	41000	36·6	18·4	141	0·97	1·39	Yes	Yes	Yes	Yes	Lowest death-rate recorded for 18 years. Medical Officer of Health thinks that efficiency and economy can best be secured by union with neighbouring districts for isolation hospital purposes. Sewering of the district considerably advanced during the year. Three hundred and four connections with water-mains been made during the year. One hundred and fifty water-closets substituted for insanitary privies.
STAFFORD F. M. Blunner, M.B.	1064	13746	30·3	16·9	148	1·41	2·17	Yes	Yes	Yes	Parts I. II. & V.	Ninety-three per cent. of scarlet fever cases isolated in hospital. Medical Officer of Health recommends that accommodation should be provided for isolating enteric fever and diphtheria, also, that Bye-laws should be adopted on the lines of the Local Government Board Model Bye-laws.
STOKE-ON-TRENT Saml. Johnson, M.D.	1720	26221	31·6	17·2	179	1·79	1·79	Yes	Yes	Yes	Yes	Desirable to have a disinfector provided within the Borough. Medical Officer of Health urges introduction of water-carriage system in all new and altered premises. Public mortuary much wanted.
STONE E. Fernie, M.D., D.P.H.	1003	6603	32·6	14·6	189	1·33	1·33	Yes	Yes	Yes	Part II.	A disinfecting apparatus needed in connection with the isolation hospital. Sewerage scheme approaching completion. No register of slaughter-houses has yet been prepared.
TAMWORTH H. J. Fassnett, M.D.	265	7650	32·2	16·7	156	0·66	0·99	Yes	Yes	Yes	Yes	Certain accessories required for isolation hospital, including a disinfecting apparatus and ambulance. Intended in time to abolish all privy middens. Scheme of sewerage and sewage disposal now being considered.
TETTENHALL W. H. T. Winter, L.R.C.P.Ed., M.R.C.S., L.M.	1220	5305	24·5	20·4	121	3·64	0·73	Yes	Yes	Yes	Yes	Diphtheria very prevalent during the year. One hundred and twenty-six houses connected with the new sewers during the year. Medical Officer of Health refers in strong terms to the necessity of improved closet accommodation.
TIPTON A. S. Underhill, M.D., D.P.H.	2607	29354	36·4	19·5	173	3·30	1·19	Yes	No	Yes	Yes	Medical Officer of Health regrets that the Notification Act is not in force. New Bye-laws are being considered. Provision of a disinfecting apparatus is contemplated. Sewerage and sewage disposal schemes are now under consideration.
TUNSTALL W. Partington, M.B.	851	16362	39·5	26·1	288	3·54	1·40	Yes	Yes	Yes	Yes	High death-rate owing to large number of deaths among children. Sixty water-closets substituted for privies during the year. Medical Officer of Health again urges the Council to enforce the paving of back yards. Land now obtained for sewage disposal. Difficulty experienced in obtaining patients' consent to removal to isolation hospital.
WEDNESBURY W. C. Garnsey, M.D.	2130	25300	34·4	19·7	191	1·69	1·02	Yes	No	Yes	Parts I. II. & V.	Nearly all the houses now connected with the new sewers. Decided to supplement present sewage disposal plant by providing polarite filters. Medical Officer of Health urges adoption of Notification Act. Provision of isolation accommodation in abeyance in view of possible union with adjoining districts for isolation purposes.
WEDNESFIELD A. Hands, L.R.C.P., M.R.C.S.	2530	4967	34·2	17·4	134	1·43	0·60	Yes	Yes	No	No	Notification Act has now been adopted. Medical Officer of Health recommends adoption of Infectious Diseases (Prevention) Act and Public Health Acts Amendment Act. Owing to want of accommodation at the hospital, Medical Officer of Health recommends the provision of skilled house-nursing for enteric fever cases.
WILLENHALL J. T. Hartill, L.R.C.P., M.R.C.S.	1240	16363	32·2	19·7	188	2·94	0·99	Yes	Yes	No	Part II.	Medical Officer of Health points out that the district might unite with neighbouring districts for isolation hospital purposes. Many water-closets of various types have been substituted for privies during the year. Reform necessary in privy construction, and Authority should undertake refuse removal. New Bye-laws now under consideration. Improvement recorded in house property. Parts of the Infectious Diseases (Prevention) Act might with advantage be adopted.

* Where no mention of sections appear, the whole Act has been adopted.

† " " " " parts " " " " " "

§ Present Medical Officer of Health, J. N. Phillips, L.R.C.P., M.R.C.S.

Table of Vital Statistics for the year 1895; showing also the practice in each District with regard to the Printing of Annual Reports, the Adoptive Acts in force, and the prominent features in the Medical Officers' Reports.

DISTRICT AND MEDICAL OFFICER.	Area in Acres.	Population estimated to middle of 1895.	Birth-rate per 1000 of Population.	Death-rate per 1000 of Population.	Deaths in Infants under one year per 1000 registered births.	Zymotic death-rate per 1000 of Population.	Phthisis death-rate per 1000 of Population.	Annual Report printed.	Adoptive Acts.			PROMINENT FEATURES OF REPORT.
									Compulsory Notification of Infectious Diseases Act, 1889.	Infectious Diseases (Prevention) Act, 1890. *	Public Health Acts Amendment Act, 1890.†	
BLORE HEATH ..... F. J. Sandford, M.D.	13662	2227	32·3	12·1	55	Nil	2·24	Yes	Yes	Yes	Part 3	Report contains few sanitary details.
CANNOCK ..... W. Hosegood, M.B.	52222	16133	32·1	16·4	135	0·61	1·11	Yes	Yes	No	Part 4	Question of providing isolation accommodation demands urgent attention. In all the larger villages the Authority are recommended to provide for refuse removal. Improved water-supply urgently needed at Great Wyrley and Cheslyn Hay.
CHEADLE ..... H. L. Webb, M.R.C.S., L.S.A.	55140	22302	‡	18·4	‡	0·80	0·89	No	Yes	No	No	Statistics incomplete, as the Registrars do not supply Medical Officer of Health with information as to births. Improvements have been effected in the water-supply of Cheadle, but it is still an intermittent supply. Kingsley village is still badly supplied with water. Improved sewerage necessary for the town of Cheadle, but the Authority have now undertaken the refuse removal in that town with satisfactory results.
ECCLESHALL ..... H. W. Gosse, L.R.C.P., L.M., M.R.C.S.	32278	5988	23·8	12·6	97	1·00	0·16	No	Yes	No	No	In some parts of the district the water-supply has been improved, but at Cotes Heath it is still far from satisfactory. Closet accommodation improved in many parts, but there is still room for much improvement in others.
GNOSALL ..... W. N. Thursfield, M.D., D.P.H.	24513	4370	26·0	14·1	61	0·45	Nil	No	Yes	Yes	Part 3	In the village of Gnosall there are many sanitary defects owing to defective sewers, and the question is receiving attention. Medical Officer of Health recommends union with neighbouring districts for isolation hospital purposes.
KINGSWINFORD ..... E. Turner, M.R.C.S., L.S.A.	6083	20724	35·2	20·0	169	1·59	0·96	Yes	Yes	No	No	Forty-seven houses supplied with "tap" water during the year.
LEEK ..... T. E. Dakeyne, L.R.C.P., L.M., M.R.C.S.	68363	13998	33·9	16·0	105	1·00	1·28	Yes	No	No	Sec. 49	In some parts of the district the water-supplies have been improved. In a good many instances defective closet accommodation has been improved. The adoption of the Notification Act is again urged.
LICHFIELD ..... J. Clark, M.D.	60792	22699	34·6	14·8	107	0·66	0·44	Yes	Yes	No	No	The question of refuse removal at Chase Town and Chase Terrace is under consideration. At Brereton nearly all the houses are now connected with the Rugeley water-supply, but at Alrewas, where the well supplies are bad, it is difficult to induce owners to connect with the public supply.
MAYFIELD ..... A. Hall, M.R.C.S.	24377	4160	§	§	§	§	§	Yes	Yes	No	No	Medical Officer of Health refers to the insanitary privy cesspits throughout the district. As regards isolation, Medical Officer of Health suggests cottages throughout the district.
NEWCASTLE ..... R. H. Dickson, L.R.C.S.I., L.R.C.P.I., L.M.	17922	6575	32·6	13·3	93	0·76	0·60	Yes	Yes	Yes	Yes	Negotiations pending as to union with the neighbouring districts for isolation hospital purposes. The formerly urgent question of the water-supply of Madeley and Leycett has now been settled by arrangement for connecting with the Potteries' public supply.
PATSHULL (Portion of Seisdon Rural) ..... W. N. Thursfield, M.D., D.P.H.	1824	234	25·6	8·5	Nil	Nil	Nil	No	Yes	No	No	Medical Officer of Health recommends a house-to-house inspection, and refers to the proximity of privy cesspits to wells in many instances.
SEISDON ..... W. Spackman, M.D.	35718	12824	29·0	16·6	131	1·09	0·70	Yes	Yes	Yes	No	Higher death-rate, said to be owing to pulmonary affections in old people. New Bye-laws are now under consideration. The question of rivers pollution seems to be receiving attention.
STAFFORD ..... S. Butler, L.F.P.S.G., L.M., L.S.A.	52103	10580	25·0	16·1	135	0·85	0·75	Yes	Yes	Yes	Yes	The water-supply at Hopton has been improved, and the village of Brocton has been supplied from the Stafford mains.
STOKE-ON-TRENT ..... J. Swift Walker, M.D.	5699	5700	31·9	14·9	115	3·85	1·05	Yes	Yes	Secs. 4 to 9, 12 & 14, & 16 to 20	Yes	The village of Bagnall is now supplied with water from the mains. The district of Wetley Moor requires a better water-supply.
STONE ..... E. Fernie, M.D., D.P.H.	23318	8568	25·3	10·7	78	1·05	0·58	No	Yes	No	No	Hanford is still unsewered, but the work at Trentham is progressing. Barlaston and Blythe Bridge are now supplied with water from the mains, but Oulton is still badly off for water. Disinfecting apparatus much needed.
TAMWORTH ..... H. J. Fausett, M.D.	23353	5214	26·2	12·6	131	0·38	1·34	Yes	Yes	Yes	Yes	A disinfecting apparatus and other additions to the isolation hospital much needed.
TUTBURY ..... K. D. B. Dobbs, M.R.C.S.	25916	9257	27·9	16·0	154	0·75	1·51	Yes	Yes	No	No	Medical Officer of Health refers to the recent adoption of the Notification Act as being of great service in the district where there are large parishes. The sewers of Tutbury are "totally inadequate," and the question is now before the Parish Council.
UTTOXETER ..... B. H. Herbert, M.R.C.S., L.M., L.S.A.	47802	12227	31·5	19·5	145	0·81	1·55	Yes	No	No	Secs. 23, (1) (2) & (4), also 25 & 33 for part of dist.	The district in many parts is in an unsatisfactory state as regards sewage disposal. The Authority have not yet adopted the Notification Act.
WALSALL ..... J. Wood, M.B.	12302	10046	36·2	17·1	140	1·79	1·39	Yes	Yes	No	No	Comparative absence of scarlet fever attributed to prompt isolation and other precautions. The sewering of Pelsall and Rushall, which is urgently called for, is likely soon to be effected. Sixty-seven houses have been provided with water from the mains during the year.
WOLSTANTON ..... H. Morris, L.R.C.P., M.R.C.S.	9728	32410	35·6	20·3	188	1·91	0·58	Yes	Yes	Yes	Part 3	It is proposed to borrow £300 in order to provide Thursfield with a proper water-supply.

* Where no mention of sections appear, the whole Act has been adopted.

† " " " " parts " " " " " " "

‡ No data as regards number of births to allow of calculation.

§ Mr. Hall, the recently-appointed Medical Officer of Health, could not obtain returns for the whole year, therefore, those obtained have been omitted from the tables.