

[Report 1894] / Medical Officer of Health, Bolton County Borough.

Contributors

Bolton (Greater Manchester, England). County Borough Council.

Publication/Creation

1894

Persistent URL

<https://wellcomecollection.org/works/wcus6m2t>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



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

County

Borough



of Bolton.

REPORT
ON THE
HEALTH OF BOLTON
DURING THE YEAR 1894,

BY

FREDERICK E. ADAMS, M.D., M.CH.

D.P.H., CAMB.; F.C.S.;

MEICAL OFFICER OF HEALTH AND PUBLIC ANALYST FOR THE
BOROUGH.

PHYSICIAN TO THE BOROUGH FEVER HOSPITAL.

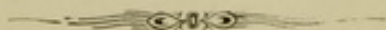
Bolton :

J. W. GLEDSDALE, PRINTER, STATIONER ETC., DEANSGATE.

1895.

THE NEW YORK PUBLIC LIBRARY

SANITARY COMMITTEE.



THE MAYOR:

MR. ALDERMAN B. A. DOBSON, J.P.

CHAIRMAN:

MR. ALDERMAN J. EDWIN SCOWCROFT, M.D., F.R.C.S., J.P.

VICE-CHAIRMAN:

MR. COUNCILLOR EDWARD KEARSLEY.

MR. ALDERMAN TONG.

MR. COUNCILLOR H. FLETCHER.

MR. COUNCILLOR FLITCROFT,
L.R.C.P., &c.

MR. COUNCILLOR HARGRAVES.

MR. COUNCILLOR HEYWOOD, J.P.

MR. COUNCILLOR W. H. HORROCKS

MR. COUNCILLOR MELLING.

MR. COUNCILLOR MURPHY,
L.R.C.P., &c.

MR. COUNCILLOR PANTON, M.D.

MR. COUNCILLOR RUTTER.

MR. COUNCILLOR UTTLEY.



REPORT ON THE HEALTH OF BOLTON,

FOR THE YEAR 1894.

To the Chairman and Members of the Sanitary Committee.

GENTLEMEN,

I beg to submit the following Report upon the health and sanitary condition of the Borough during the year 1894 :—

Population.—Taking the rate of increase of population during the ten years 1881-91 as a basis for calculation, it is estimated that the inhabitants of the Municipal Borough numbered 118,303 on the 30th June, 1894. The vital and mortal statistics contained in this Report are calculated upon that estimate.

Births.—The births during the year numbered 3,719, of which 1,878 were those of males, and 1,841 those of females. The birth rate, therefore, was 31·4 per 1,000 per annum, against a rate of

33·0 per 1,000 per annum during the year 1893. The Ward birth rates will be found in the fourth column of Table I. in Appendix A.

Deaths.—The deaths during the year numbered 2,215, of which 139 were those of municipal paupers who died in the Fishpool Workhouse. Of the total deaths 1,145 were those of males, and 1,070 those of females. This mortality is equivalent to a **death rate of 18·7 per 1,000 per annum**, against a death rate of 23·9 per 1,000 per annum for the year 1893.

The following table shows the number of deaths which occurred in each of the four quarters of the year :—

| | Males. | Females. | Total. | Annual Rate per 1,000. |
|---------------------|--------|----------|--------|---------------------------|
| First Quarter | 310 | 302 | 612 | 20·6 |
| Second „ | 261 | 236 | 497 | 16·8 |
| Third „ | 261 | 244 | 505 | 17·0 |
| Fourth „ | 313 | 288 | 601 | 20·3 |
| Year..... | 1135 | 2070 | 2215 | 18·7 |

The general death rate for each of the Wards of the Borough will be found in the sixth column of Table I. in Appendix A., and a classification of the causes of death, together with the distribution of the mortality from each disease throughout the borough, will be found in Table XI. Subjoined is a statement showing the annual death rates for the Borough of Bolton for a period of 44 years, terminating with the year 1894. It is interesting as showing the influence of modern sanitary progress upon the rate of mortality amongst the community.

DEATH RATES FOR 44 YEARS.

| YEAR | Death rate per 1000 per annum | YEAR | Death rate per 1000 per annum |
|------------------------------|----------------------------------|------------------------------|----------------------------------|
| 1851 | 31'0 | 1871 | 26'1 |
| 1852 | 35'3 | 1872 | 28'0 |
| 1853 | 33'6 | 1873 | 23'3 |
| 1854 | 29'0 | 1874 | 24'3 |
| 1855 | 31'1 | 1875 | 26'0 |
| 1856 | 27'8 | 1876 | 23'6 |
| 1857 | 31'8 | 1877 | 23'5 |
| 1858 | 28'6 | 1878 | 22'0 |
| 1859 | 29'0 | 1879 | 21'0 |
| 1860 | 29'9 | 1880 | 20'5 |
| Average for 10 years 30'7 | | Average for 10 years 23'8 | |
| 1861 | 30'9 | 1881 | 19'1 |
| 1862 | 25'5 | 1882 | 21'3 |
| 1863 | 27'0 | 1883 | 19'9 |
| 1864 | 28'6 | 1884 | 24'0 |
| 1865 | 26'3 | 1885 | 20'7 |
| 1866 | 29'2 | 1886 | 23'1 |
| 1867 | 29'0 | 1887 | 21'2 |
| 1868 | 25'0 | 1888 | 21'6 |
| 1869 | 26'7 | 1889 | 22'0 |
| 1870 | 27'3 | 1890 | 25'3 |
| Average for 10 years 27'5 | | Average for 10 years 21'8 | |
| | | 1891 | 21'8 |
| | | 1892 | 22'7 |
| | | 1893 | 23'9 |
| | | 1894 | 18'7 |
| | | Average for 4 years 21'7 | |

In 33 of the largest towns of England and Wales, containing an aggregate population, at the middle of the year, of nearly ten and a half millions, the general death rate averaged 18'1 per 1,000 per annum,

being '6 less than the rate for Bolton. The rate in each of the 33 towns is given in Table VIII. in Appendix A. The general death rate in the 100 town districts which practically contain the whole of the urban population of England and Wales, amounting to about $20\frac{1}{4}$ millions, averaged 17'1 per 1,000 per annum, whilst in the remaining sub-districts, containing a rural population of about 9,800,000, the rate of mortality was 15'6 per 1,000 per annum.

Infantile Mortality.—During the year the deaths of 863 children under the age of 5 years occurred, of whom 593 were infants under 1 year. During 1893 the mortality amongst children of 5 years and under was 1,259, including 764 infants under 1 year. Infantile mortality is usually measured by calculating the number of deaths under 1 year per 1,000 births registered. Computed in this way the infantile death rate for Bolton was 159 during 1894, which compares favourably with the previous year, when the rate reached 197. The rates of infantile mortality in each of the 33 great towns, as recorded by the Registrar-General, are given in Table VIII. in Appendix A. It will be seen that the average rate was 152 deaths per 1,000 births registered.

Zymotic Diseases.—The principal zymotic diseases, namely, smallpox, measles, scarlet fever, diphtheria, whooping cough, typhus fever, enteric fever, and diarrhœa caused 189 deaths, a mortality which is equivalent to a zymotic death-rate of 1'59 per 1,000 per annum. The rate of mortality from zymotic diseases in each of the Wards of the Borough, together with the per centage ratio of zymotic deaths to deaths from all causes, will be found in Table V. in Appendix A. The rate of zymotic mortality in each of the 33 great towns of England and Wales will be found in Table VIII. The average rate was 2'43 per 1,000 per annum, or 0'84 higher than the rate for Bolton. The coloured map of the Borough, which accompanies this Report, shows the localities where cases of zymotic disease occurred, together with the deaths resulting therefrom.

Smallpox.—Only two cases of smallpox occurred throughout the year. They were discovered at a common lodging-house in Kay Street, the first on July 23rd, and the second on August 11th. In both cases there was only one infantile vaccination mark of insufficient area and unfoveated, and neither patient had ever been re-vaccinated. Both patients recovered.

As anticipated in my Annual Report for 1893, the subject of the dissemination of small-pox by vagrants in common lodging-houses has received close attention throughout the country, and efforts have been made to amend and increase the scope of the laws relating to the supervision of such persons. At a conference of Sanitary Authorities convened by the London County Council on July 19th, 1894, at which the Corporation of Bolton was represented, the following recommendations to the Local Government Board were adopted, and in all probability the increased powers, and the alterations in the existing law sought for, will be sanctioned by Parliament at no distant date :—

Resolutions of Conference on the Dissemination of Small-pox.

1. That common shelters which are not subject to the law relating to common lodging-houses should be made subject to such law.

2. That there should be power to the local authority to require medical examination of all persons entering common lodging-houses and casual wards, and that each inmate of a common lodging-house or casual ward should, on admission, have a bath of fresh water.

3. That the local authority should have power to order the keeper of a common lodging-house in which there has been infectious disease, to refuse fresh admissions for such time as may be required by such authority.

4. That the local authority should be empowered to require the temporary closing of any common lodging-house in which infectious disease has occurred.

5. That the local sanitary authorities should have power to require the detention of any inmate of a common lodging-house or casual ward who may reasonably be suspected of being liable to convey infectious disease.

6. That means should be provided for the detention and isolation of any vagrant found wandering in a public place, if reasonably suspected of being liable to convey infectious disease.

7. That the local authority should have power to require the disinfection of the person and clothes of any person in a common lodging-house or casual ward, whether infected or exposed to infection.

8. That arrangements should be made by which the occurrence of infectious disease in common lodging-houses or casual wards should be made known by the local authority of the district to the local authorities of other districts.

9. That local authorities should be empowered to require the vaccination or re-vaccination of persons in common lodging-houses or casual wards who are exposed to the infection of small-pox.

Should the 9th resolution of the Conference be carried out in a firm manner, small-pox will soon become a rare visitor in the common lodging-house.

Measles.—This disease caused 20 deaths during the year, a mortality which compares very favourably with that for 1893, when 162 deaths occurred. A copy of the handbill of instructions left at all houses where measles is discovered will be found in Appendix B.

Scarlet Fever.—The deaths from scarlet fever numbered 10, as against a mortality of 34 during the previous year. The total number of cases notified was 267, the number notified during 1893 being 747.

In all households where scarlet fever occurs handbills are left containing suggestions for preventing the spread of the disease, and also setting forth the penalties provided by law in cases where infectious disease is wilfully spread or permitted to be spread. Copies of the documents will be found in Appendix B.

Diphtheria.—The deaths attributed to diphtheria numbered 5, against a mortality of 8 during the year 1893. The number of cases notified was 25, as compared with 123 cases reported during the previous year. It will be noticed that the rate of mortality per cent. amongst the cases noticed was much lower last year than during the year 1893 and previous years. This was not due to any change in the type or degree of severity of the disease, but is accounted for by the decease of a late highly-respected medical practitioner, who assumed

all cases of sore throat to be true specific diphtheria, and accordingly reported them as such.

Whooping Cough.—The deaths due to whooping cough numbered 61, and constituted a considerable proportion of the total zymotic mortality of the borough. The deaths in 1893 numbered 78. The disease prevailed persistently throughout the year, but did not at any time become seriously epidemic, nor was it confined to any particular locality.

Typhus Fever.—No case of this disease occurred in the borough during the year.

Typhoid Fever.—The deaths attributed to typhoid fever numbered 25, the total number of cases notified being 117. In 1894 the deaths from this disease numbered 34, whilst the number of cases notified was 170.

In connection with the subject of typhoid fever I have in former years dwelt upon the quality of the water supply, and in particular have had to speak adversely of the character of the Heaton supply. It is gratifying to record that the Watetworks Department has, during the past year, made praiseworthy efforts to improve the Heaton reservoir, and also the catchment area. Hitherto the reservoir has given much trouble owing to the growth in it of algæ, which, when undergoing decomposition, gave off sulphur compounds which imparted to the water a disagreeable taste and smell. It was found necessary to empty the reservoir and thoroughly cleanse it out. The result is indicated in the following passage from a recent report of Mr. Swindlehurst, Waterworks Engineer :—

“HEATON RESERVOIR.—We have completed the clearing out of the reservoir, and I can safely say that its condition now is better than it was when first constructed.”

Some recent analyses which I have made tend to support this statement.

The circular of instructions issued to all typhoid fever infected houses will be found in Appendix B.

Diarrhœa.—The fatal cases of this disease numbered 68, against 197 during the previous year. It was, as usual, very rife during

the late summer and the autumn months, but throughout the whole of the year it was present in varying degree, and was the largest contributor to the zymotic mortality.

A copy of the circular of instructions, which is circulated through the medium of the children attending the Board and other Schools at seasons when diarrhoea is epidemic, will be found in Appendix B.

Unhealthy Dwellings.—During the year the following dwellings were condemned as unfit for human habitation :—

No. 27, Spring Gardens.

No. 1 house, No. 2 Court, Spring Gardens.

No. 2 do. do. do.

No. 3 do. do. do.

No. 29, Spring Gardens.

No. 31, do.

No. 1 house, No. 4 Court, Spring Gardens.

No. 2 do. do. do.

No. 3 do. do. do.

No. 1 do. No. 5 Court, do.

House adjoining No. 1, No. 5 Court, Spring Gardens.

No. 3 house, No. 5 Court, Spring Gardens.

No. 4 do. do. do.

House adjoining No. 4, No. 5 Court, Spring Gardens.

No. 6 house, No. 5 Court, Spring Gardens.

House at rear of 62, Back Spring Gardens.

No. 6, Lawrence Court, High Street.

No. 2, Adam Court, High Street.

No. 4, do. do.

No. 6, do. do.

Notification of Infectious Diseases.—The sub-joined table shows the number of cases of infectious disease notified by

medical practitioners during each quarter of the year, together with the resulting mortality :—

| QUARTERS. | INFECTIOUS CASES. | | | | | | Total Number of Infectious Cases |
|--------------------------|-------------------|---------------|---------------|-----------------|-----------------|------------|----------------------------------|
| | Small-pox | Scarlet Fever | Typhoid Fever | Puerperal Fever | Relapsing Fever | Diphtheria | |
| 1st Quarter | — | 73 | 32 | 3 | — | 16 | 124 |
| 2nd Quarter | — | 80 | 19 | 4 | — | 3 | 106 |
| 3rd Quarter | 2 | 59 | 25 | 3 | 1 | 4 | 94 |
| 4th Quarter | — | 55 | 41 | 6 | — | 2 | 104 |
| Year..... | 2 | 267 | 117 | 16 | 1 | 25 | 428 |
| Total deaths in year ... | — | 10 | 25 | 7 | — | 5 | 47 |

The Borough Fever Hospital.—The following table shows the number of patients admitted to the Hospital during the year, together with their ages and the diseases from which they suffered :—

| AGE—YEARS | ALL CAUSES | | SMALLPOX | | SCARLET FEVER | | MEASLES | |
|--------------------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|
| | Patients Admitted | Deaths | Patients Admitted | Deaths | Patients Admitted | Deaths | Patients Admitted | Deaths |
| Under 3 | 16 | 3 | — | — | 16 | 3 | — | — |
| Between 3 and 4 | 16 | — | — | — | 16 | — | — | — |
| " 4 " 6 | 22 | 1 | — | — | 22 | 1 | — | — |
| " 6 " 10 | 36 | — | — | — | 36 | — | — | — |
| " 10 " 20 | 30 | — | — | — | 30 | — | — | — |
| " 20 " 40 | 15 | — | 1 | — | 12 | — | 2 | — |
| 40 and upwards... | 1 | — | 1 | — | — | — | — | — |
| Total..... | 136 | 4 | 2 | — | 132 | 4 | 2 | — |

The period during which patients were detained in the Hospital averaged $48\frac{1}{2}$ days. The stay of patients suffering from small-pox averaged 51 days, and from scarlet fever $47\frac{1}{3}$ days. Two patients suffering from measles were detained for 18 days and 9 days respectively. During the year four scarlet fever patients died. Of these, one was under treatment 18 days, another 9 days, the third 19 days, and the fourth 10 days. The number of patients under treatment on December 31st was 17. The total expenditure on the Hospital for the year was £1415 19s. 9d. The cost per patient amounted to £10 8s. 2d., and the cost per week per patient to £1 10s. 2d. This rate, which is apparently high, is accounted for by the fact that the prevalence of infectious disease was much below the average; consequently the admissions were less numerous, whilst the various maintenance charges, with the exception of the cost of provisions and some other minor items, were at the usual rate.

The Sanitary Staff and the Inspectors' Work.

—Before proceeding to summarize the ordinary routine work accomplished by the Department during the year, it would be desirable perhaps to enumerate the sanitary staff, and to describe shortly the system upon which their operations are carried out.

The staff consists of the following :—A Chief Sanitary Inspector (Mr. J. R. Thompson). An Inspector of Meat and other foods. An Infectious Disease Inspector. Two District Inspectors, and two Disinfectors.

The Chief Sanitary Inspector exercises a general supervision and control over the entire staff, under the directions of the Medical Officer of Health. The Inspector of Meat and other foods supervises butchers' and other provision shops, slaughter-houses, dairies, cowsheds, milk-shops, tripe-dressing establishments and other places where food is prepared for sale, knackers' yards, piggeries, &c. He inspects the cattle at fairs, and those arriving at the railway sidings, and carries out the provisions of the "Contagious Diseases (Animals) Act." He also executes the provisions of the "Sale of Food and Drugs Act." The Meat Inspector is, for legal purposes, the duly appointed "Inspector of Nuisances" for the borough.

The Infectious Disease Inspector visits all houses where infectious disease is reported to exist immediately upon the receipt of the

statutory notification. On his first visit he ascertains all the particulars indicated in the "Sanitary Survey Sheet," a copy of which will be found in Appendix B. Such particulars are submitted as early as possible to the Medical Officer of Health, and arrangements are made for the removal of the patient to the Borough Fever Hospital, or for other means of isolation, and at the same time intimation of the occurrence of the disease is sent to the principal teacher of the school attended by the children from the infected house, and to the officials of the public libraries. Subsequently, when the premises have been disinfected after the removal of the patient, or on the termination of the illness, another intimation to that effect is sent to the school teacher. The Infectious Disease Inspector is also charged with the duty of attending to casual complaints, that is to say, to complaints received at the sanitary offices which require immediate attention.

Two District Inspectors carry out the ordinary sanitary inspection of the town, in order to report common nuisances, such as defective drainage, obnoxious accumulations, filthy premises, overcrowding, and the like. These inspectors also supervise the workshops, and enforce the provisions of the "Factory and Workshops Act, 1891," respecting such places. They are also required to frequently visit by day and by night all common lodging-houses, and as far as possible all houses let in lodgings. The inspector for Great Bolton examines and reports upon the condition of all canal boats entering the town.

To facilitate the work of the District Inspectors the borough is divided into 42 areas, 20 of which are situated in Great Bolton, and are under the supervision of one inspector, whilst 22 are contained in Little Bolton, and are supervised by the second District Inspector.

The District Inspector is required to thoroughly examine one area each day, and to report all nuisances he discovers therein. For this purpose he is provided with a pocket book for each area, a specimen page of which is given in Appendix B. In addition to reporting new nuisances, he is required to ascertain whether the nuisances reported on the previous visit have been abated. On the day following the District Inspector's visit, "preliminary" or informal notices to abate the new nuisances reported, or formal legal notices to abate, within fourteen days, all nuisances remaining unabated since the previous visit, are served upon the responsible persons.

The Disinfector, and the Assistant Disinfector, carry out their operations mainly at the Corporation Sanitary Yard, School Hill, where there is a Washington Lyon's steam disinfector. Here also a laundry is provided, and facilities are offered which enable any ratepayer to have bedclothing, and other articles used during the course of a case of infectious disease, washed, dried, and disinfected. Such clothing is removed by the Disinfectors from the infected house to the Corporation Yard, and returned, free of charge. It is remarkable, however, that notwithstanding these advantages, the laundry is little used by the public. The Disinfectors carry out the disinfection, by fumigation with sulphur dioxide, of all infected premises, and all patients suffering from infectious disease are removed by them to the Borough Fever Hospital in the ambulance provided for the purpose.

In addition to the staff already enumerated, two men are employed constantly, one in cleansing and keeping in repair the bed of the river Croal, and the other in keeping the public conveniences in proper condition.

The total number of nuisances reported by the Inspectors during the year was 5,269. The number of nuisances reported by other persons was 153. The number of notices issued to abate various nuisances was 2,156. The number of nuisances abated during the year without formal notice was 3,266, whilst the total number of nuisances abated was 4,666, or, including those which were being abated at the end of the year, 5,422. The number of prosecutions before the Justices for non-compliance with the notices of the Department was 8. In 7 cases fines were inflicted, and 1 case was withdrawn on payment of costs by the defendant. Considerable activity was shown in securing the abatement of the smoke nuisance. In all 317 smoke observations were taken, and 41 offenders were summoned before the Justices. In 34 cases the defendants were fined various amounts ranging from 5s. to 20s., three cases were dismissed, a similar number were withdrawn, and in one case a Magistrate's order to abate was obtained. Previous to the last-mentioned case, in all prosecutions for the abatement of smoke nuisances under the "Public Health Act, 1875," it was necessary to procure a Magistrate's order to abate in the first instance, and it was only on the commission of a fresh offence after such an order had been issued that a penalty could be sought for. It was felt that this roundabout mode of procedure militated greatly against the

suppression of the smoke nuisance, necessitating, as it did, two convictions instead of one, and accordingly application was made to the Local Government Board for powers to proceed for a penalty in the first prosecution. Such powers were granted and were embodied in the "Local Government Board Provisional Orders Confirmation (No. 15) Act, 1893," which is now in force in the Borough."

The low prevalence of infectious disease throughout the year enabled a portion of the sanitary staff to prosecute house-to-house visitation more actively than hitherto. In this way 5,893 houses were examined and their condition recorded.

Common lodging-houses were inspected on 1,481 occasions by day, and on 68 occasions by night.

Examinations were made of 529 street houses and 7 court houses, in which 589 cases of infectious disease had occurred.

The number of schools examined was 29, 27 of which were in a satisfactory condition, and 2 required to be disinfected and cleansed.

Sixty-two mill lodges were examined, 55 of which were satisfactory, and 14 required to be cleansed.

Under the "Canal Boats Acts, 1877 and 1884," 37 boats were examined, all of which were satisfactory.

The number of visits to workshops and places used by "out-workers" was 645.

Visits were made to 50 travelling show caravans, containing 124 persons, but no cases of infectious disease were discovered.

The number of rooms disinfected during the year was 915, the number of beds steamed 412, other articles disinfected 2,638.

The cowsheds, dairies, and milkshops in the Borough were regularly inspected, and were generally kept in a satisfactory condition.

A large number of cattle were inspected before slaughter, and a considerable quantity of food of various kinds was destroyed, being unfit for consumption. Details will be found in the summary of Inspectors' work in Appendix A. The prosecutions for the sale of diseased meat

numbered 10, all of which were successful, and resulted in fines amounting in the aggregate to £20 5s., exclusive of costs. The private slaughter-houses of the Borough were, as a rule, kept in fairly good condition, but there is much need for the total abolition of such places, and for the concentration of the slaughtering work of the town at the public abattoirs. This would not only promote cleanliness and order, but would tend to the suppression of the diseased meat traffic by facilitating inspection.

Food Analysis.—The articles of food analysed numbered 53, and included samples of milk, butter, coffee, mustard, lard, pepper, ice creams, and sweets, full particulars of which will be found in Appendix A. Four samples of milk were found to be impoverished by the abstraction of milk fat, and the vendors were in each case prosecuted and convicted. In two cases fines of 5s. and costs were inflicted; in the third and fourth cases fines of 10s. and costs and £2 and costs respectively were imposed.

In conclusion, it gives me considerable pleasure to be in a position to congratulate you upon the result of the earnest endeavours which you are constantly making to improve the health of the community, and the sanitary condition of the town. That your efforts have not been without effect is shown by the statistical records of the past year. The general death rate for the Borough is the lowest on record. The death rate from zymotic diseases is also the lowest hitherto recorded, whilst the rate of infantile mortality, which is a delicate index of the sanitary condition and hygienic status of a locality, is the most favourable yet reached, with the exception of that for the year 1881. These results are highly satisfactory, but it is to be hoped that they will not lead to any mistaken sense of security, or to any relaxation of effort in dealing with the manifold sanitary evils which are constantly arising in a densely populated area, such as the one with which you have to deal.

Thanking you for the help and consideration extended to me throughout the year,

I am Gentlemen,

Your obedient servant,

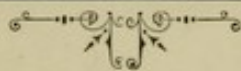
FREDERICK E. ADAMS, M.D.,

MEDICAL OFFICER OF HEALTH.



Report of the Medical Officer of Health,
1894.

APPENDIX A.



CONTENTS OF APPENDIX A.

| | PAGE. |
|--|-------|
| Analysis of Births and Deaths | 21 |
| Certification of Causes of Death | 22 |
| Infantile Mortality | 22 |
| Influence of Age on the Death-rate | 23 |
| Classification and Distribution of Zymotic Diseases | 23 |
| Annual Mortality for the last Ten Years | 24 |
| Zymotic Mortality for the last Ten Years | 25 |
| Comparison of Mortality in Bolton with that in other English Towns... .. | 26 |
| Local Government Board Return (A) as to Mortality | 27 |
| " " " (B) as to Sickness | 28 |
| Causes of Death at Different Periods of Life, &c. | 29 |
| Meteorological Observations | 30 |
| Streets in which Infectious Diseases have occurred | 31 |
| Articles Analysed under the "Sale of Food and Drugs Act" | 39 |
| Summary of Inspectors' Work | 40 |
| Map showing incidence of Zymotic Diseases, and the Mortality therefrom. Also the General Death Rate in each of the Wards. | |

VITAL STATISTICS.

TABLE I.

ESTIMATED POPULATION, BIRTHS, BIRTH-RATE, DEATHS, AND RATE OF MORTALITY PER 1000 DURING THE TWELVE MONTHS ENDING DECEMBER 31, 1894, CLASSIFIED ACCORDING TO WARDS, &c.

| STATISTICAL DIVISIONS. | Population at all Ages Estimated to Middle of 1894. | BIRTHS. | | DEATHS. | | DEATHS FROM | | | | | | | |
|-----------------------------|---|--------------------------------------|----------------|--------------------------------------|----------------|-----------------------------|------------------------------|------------------------------------|-----------------------------------|---------------------------|------------------------------------|---------------------|-------------------------------|
| | | In 12 Months ending Dec. 31st, 1894. | Rate per 1000. | In 12 Months ending Dec. 31st, 1894. | Rate per 1000. | Class 1 Zymotic Diseases | Class 2 Dietetic Diseases | Class 3 Constitutional Diseases | Class 4 Developmental Diseases | Class 5 Local Diseases | Class 6 Diseases of Parturition | Class 7 Violence | Class 8 Ill-defined Causes |
| BOROUGH OF BOLTON. | 118,303 | 3,719 | 31.4 | 2,215 | 18.7 | 217 | 13 | 323 | 224 | 1273 | 11 | 65 | 89 |
| Exchange Ward | 7,319 | 245 | 33.4 | 169 | 23.0 | 26 | — | 22 | 5 | 106 | 3 | 2 | 5 |
| Bradford Ward... | 19,024 | 683 | 35.9 | 354 | 18.6 | 40 | 3 | 54 | 39 | 196 | 2 | 7 | 13 |
| Derby Ward .. | 17,877 | 610 | 34.1 | 367 | 20.5 | 38 | 1 | 44 | 34 | 208 | 3 | 23 | 16 |
| Church Ward ... | 9,129 | 180 | 19.7 | 115 | 12.5 | 11 | — | 13 | 11 | 72 | 1 | 4 | 3 |
| Rumworth Ward | 4,960 | 175 | 35.2 | 90 | 18.1 | 14 | — | 10 | 10 | 46 | — | 4 | 6 |
| East Ward ... | 11,636 | 349 | 29.9 | 240 | 20.6 | 25 | 2 | 35 | 30 | 128 | 1 | 8 | 11 |
| West Ward ... | 26,799 | 803 | 29.9 | 418 | 15.5 | 30 | 4 | 65 | 43 | 249 | 1 | 11 | 15 |
| North Ward ... | 6,799 | 194 | 28.5 | 100 | 14.7 | 10 | — | 16 | 5 | 64 | — | 1 | 4 |
| Halliwell Ward . | 14,700 | 456 | 30.8 | 223 | 15.1 | 20 | 2 | 37 | 22 | 127 | — | 5 | 10 |
| Municipal paupers, Fishpool | — | 24 | — | 129 | — | — | 1 | 27 | 25 | 77 | — | — | 6 |

CERTIFICATION OF THE CAUSES OF DEATH.

| WARDS. | Total Deaths | Certified by | | Not Certi- fied | Proportion per cent. of Deaths. | | |
|--------------------------------------|-----------------|---|---------|-----------------------|---|---------|------------------|
| | | Regis- tered Medical Practi- tioner | Coroner | | Certified by | | Not Certified |
| | | | | | Regis- tered Medical Practi- tioner | Coroner | |
| Exchange | 169 | 151 | 17 | 1 | 89.3 | 10.0 | — |
| Bradford | 354 | 319 | 29 | 6 | 90.1 | 8.1 | 1.6 |
| Derby | 377 | 346 | 29 | 2 | 91.7 | 7.6 | 0.5 |
| Church | 115 | 108 | 7 | — | 93.9 | 6.0 | — |
| Rumworth | 90 | 82 | 8 | — | 91.1 | 8.8 | — |
| East | 240 | 220 | 18 | 2 | 91.6 | 7.5 | 0.8 |
| West | 418 | 391 | 24 | 3 | 93.5 | 5.7 | 0.7 |
| North | 100 | 98 | 2 | — | 98.0 | 2.0 | — |
| Halliwell | 223 | 214 | 9 | — | 95.9 | 4.0 | — |
| Municipal Paupers Fishpool | 139 | 139 | — | — | 100.0 | — | — |
| Borough of Bolton | 2,215 | 2,058 | 143 | 14 | 92.9 | 6.4 | 0.6 |

INFANTILE MORALITY.

| WARDS. | | QUARTERS | | | | Year | Percentage of Deaths under 5 Years to Total Deaths. |
|--------------------------------|-----------------|----------|------|-------|------|-------|---|
| | | Mar. | June | Sept. | Dec. | | |
| East | (Total Deaths | 70 | 48 | 67 | 55 | 240 | 48.3 |
| | (Below 5 Years | 30 | 18 | 38 | 30 | 116 | |
| West | (Total Deaths | 117 | 96 | 100 | 105 | 418 | 40.6 |
| | (Below 5 Years | 36 | 41 | 44 | 49 | 170 | |
| North | (Total Deaths | 27 | 21 | 23 | 29 | 100 | 34.0 |
| | (Below 5 Years | 5 | 7 | 14 | 8 | 34 | |
| Halliwell | (Total Deaths | 51 | 55 | 50 | 67 | 223 | 39.0 |
| | (Below 5 Years | 22 | 14 | 16 | 35 | 87 | |
| Exchange | (Total Deaths | 52 | 38 | 28 | 51 | 169 | 47.3 |
| | (Below 5 Years | 25 | 14 | 11 | 30 | 80 | |
| Bradford | (Total Deaths | 97 | 77 | 83 | 97 | 354 | 43.5 |
| | (Below 5 Years | 38 | 28 | 39 | 49 | 154 | |
| Derby | (Total Deaths | 99 | 74 | 84 | 110 | 367 | 36.5 |
| | (Below 5 Years | 37 | 21 | 32 | 44 | 134 | |
| Church | (Total Deaths | 27 | 30 | 23 | 35 | 115 | 23.4 |
| | (Below 5 Years | 4 | 6 | 7 | 10 | 27 | |
| Rumworth | (Total Deaths | 31 | 21 | 16 | 22 | 90 | 52.2 |
| | (Below 5 Years | 20 | 11 | 7 | 9 | 47 | |
| Municipal Paupers Fishpool } } | (Total Deaths | 41 | 37 | 31 | 30 | 139 | 1.0 |
| | (Below 5 Years | 5 | 3 | 3 | 3 | 14 | |
| BOROUGH | | 612 | 497 | 505 | 601 | 2,215 | 38.9 |
| | | 222 | 163 | 211 | 267 | 863 | |

TABLE IV.
THE INFLUENCE OF AGE UPON THE DEATH-RATE.

| AGES. | QUARTERS | | | | TOTAL DEATHS DURING YEAR | |
|-----------------------------|----------|------|------|------|--------------------------|----------------------------------|
| | Mar. | June | Sep. | Dec. | Deaths | Rate per 1000 of the Population. |
| Deaths under 1 Month | 53 | 32 | 49 | 41 | 175 | 1.47 |
| „ between 1 and 6 Months | 50 | 41 | 69 | 70 | 230 | 1.94 |
| „ „ 6 „ 12 Months | 40 | 38 | 45 | 65 | 188 | 1.58 |
| „ „ 1 year & 5 years | 79 | 52 | 48 | 91 | 270 | 2.28 |
| „ „ 5 years & 25 years | 54 | 42 | 37 | 57 | 190 | 1.60 |
| „ „ 25 „ 45 „ | 99 | 97 | 78 | 87 | 361 | 3.05 |
| „ „ 45 „ 65 „ | 141 | 123 | 117 | 112 | 493 | 4.16 |
| „ „ 65 „ above... | 96 | 72 | 62 | 78 | 308 | 2.60 |
| DEATHS AT ALL AGES | 312 | 497 | 505 | 601 | 2215 | 18.72 |

TABLE V.
SHOWING DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES, WITH THEIR DISTRIBUTION ACCORDING TO WARDS, AND COMPARATIVE PERCENTAGES.

| WARDS | Deaths from all Causes | DISEASE | | | | | | | | | | | Per Centage Proportion of Zymotic Deaths to Deaths from all Causes |
|----------------------------|------------------------|----------|---------|------------|------------|----------------|--------|---------|------------------|-----------|---------|-------|--|
| | | Smallpox | Measles | Scarlatina | Diphtheria | Whooping Cough | FEVER | | | Diarrhoea | Cholera | Total | |
| | | | | | | | Typhus | Typhoid | Simple Continued | | | | |
| East ... | 240 | 0 | 1 | 1 | 1 | 9 | 0 | 2 | 0 | 8 | 0 | 22 | 9.1 |
| West ... | 418 | 0 | 1 | 1 | 0 | 9 | 0 | 5 | 0 | 12 | 0 | 28 | 6.6 |
| North ... | 100 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 6 | 6.0 |
| Halliwell | 223 | 0 | 0 | 1 | 0 | 6 | 0 | 5 | 0 | 5 | 0 | 17 | 7.6 |
| Exchange | 169 | 0 | 7 | 0 | 0 | 9 | 0 | 0 | 0 | 9 | 0 | 25 | 14.7 |
| Bradford | 354 | 0 | 9 | 1 | 0 | 11 | 0 | 3 | 0 | 11 | 0 | 35 | 9.8 |
| Derby ... | 367 | 0 | 2 | 0 | 1 | 9 | 0 | 6 | 0 | 14 | 0 | 32 | 8.7 |
| Church ... | 115 | 0 | 0 | 1 | 3 | 1 | 0 | 3 | 0 | 2 | 0 | 10 | 8.6 |
| Rumworth | 90 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 12 | 13.3 |
| Municipal Paupers Fishpool | 139 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1.4 |
| BOROUGH | 2,215 | 0 | 20 | 10 | 5 | 61 | 0 | 25 | 0 | 68 | 0 | 189 | 8.5 |

TABLE VI.
SHOWING THE ANNUAL MORTALITY FOR THE LAST TEN YEARS COMPARED
WITH 1894.

| YEAR. | Estimated Population. | Total Deaths. | Rate of Mortality per 1,000 Living | Deaths of children under 1 year. | Deaths of children between 1 and 5 years. | Percentage of Deaths under 5 years to Total Deaths. | Deaths at 60 years and upwards. | Deaths from Principal Zymotic diseases. | Percentage of Deaths from Principal Zymotic Causes to Total Deaths. |
|--|--------------------------|------------------|---|---|--|--|---------------------------------------|--|--|
| 1884... .. | 108,968 | 2,615 | 24.0 | 717 | 503 | 46.8 | 468 | 478 | 18.2 |
| 1885... .. | 110,085 | 2,282 | 20.7 | 612 | 307 | 40.2 | 461 | 212 | 9.2 |
| 1886... .. | 111,214 | 2,572 | 23.1 | 697 | 472 | 45.4 | 512 | 493 | 15.9 |
| 1887... .. | 112,354 | 2,393 | 21.2 | 625 | 401 | 42.8 | 476 | 411 | 14.3 |
| 1888... .. | 113,506 | 2,453 | 21.6 | 636 | 368 | 40.9 | 476 | 402 | 12.3 |
| 1889... .. | 114,670 | 2,528 | 22.0 | 630 | 485 | 44.1 | 474 | 520 | 18.0 |
| 1890... .. | 115,846 | 2,986 | 25.8 | 640 | 483 | 37.6 | 642 | 498 | 16.6 |
| 1891... .. | 115,253 | 2,516 | 21.8 | 649 | 352 | 39.5 | 544 | 256 | 10.1 |
| 1892... .. | 116,261 | 2,648 | 22.7 | 711 | 397 | 41.8 | 497 | 342 | 12.9 |
| 1893... .. | 117,278 | 2,813 | 23.9 | 764 | 495 | 44.7 | 577 | 519 | 18.4 |
| Annual Average for 10 years 1884-1893 | | 2,580 | 22.6 | 668 | 426 | 42.3 | 512 | 413 | 14.5 |
| 1894... .. | 118,303 | 2,215 | 18.7 | 593 | 270 | 38.9 | 432 | 189 | 8.5 |

TABLE VII.
DEATHS FROM THE SEVEN PRINCIPAL ZYMOLOGICAL DURING THE TEN YEARS 1884-1893
WITH THE NUMBER OF DEATHS IN 1894.

| DISEASE. | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | Annual Average of 10 Years 1884-1893 | Proportion of Deaths to 1000 Deaths in 10 Years 1884-1893 | 1894 | Proportion of Deaths to 1000 Deaths in 1894 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|---|--|------|---|
| Smallpox | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 0.8 | 0.3 | 0 | 0.0 |
| Measles | 111 | 38 | 137 | 91 | 34 | 160 | 97 | 55 | 43 | 162 | 92.8 | 35.9 | 20 | 9.0 |
| Scarlet Fever | 15 | 9 | 16 | 37 | 52 | 65 | 56 | 21 | 30 | 34 | 33.5 | 12.9 | 10 | 4.5 |
| Diphtheria | 2 | 5 | 7 | 7 | 7 | 29 | 14 | 10 | 13 | 8 | 10.2 | 3.9 | 5 | 2.2 |
| Whooping Cough | 106 | 58 | 75 | 28 | 57 | 64 | 107 | 44 | 7 | 78 | 62.4 | 24.1 | 61 | 27.5 |
| Fever | 33 | 18 | 18 | 35 | 38 | 32 | 26 | 32 | 20 | 34 | 28.6 | 11.0 | 25 | 11.2 |
| Diarrhoea | 211 | 83 | 156 | 146 | 113 | 105 | 110 | 94 | 129 | 197 | 134.4 | 52.0 | 68 | 30.6 |
| TOTAL | 478 | 212 | 409 | 344 | 302 | 455 | 410 | 256 | 342 | 519 | 302.7 | 140.5 | 189 | 85.3 |

TABLE VIII.

COMPILED FROM THE REGISTRAR-GENERAL'S REPORTS
IN ORDER TO SHOW THE COMPARATIVE MORTALITY
OF BOLTON WITH THIRTY-TWO OTHER LARGE
ENGLISH TOWNS.

| BOROUGHs, &c. | Estimated Population, 1894 | Persons to an Acre, 1894 | Annual Rate of Mortality per 1000 living | | Deaths under one year to 1000 Births Registered | Percentage to Total Deaths Registered upon Information of the Coroner's Inquests. |
|--------------------------|----------------------------|--------------------------|--|-------------------------------|---|---|
| | | | From all Causes | From Seven Principal Zymotics | | |
| London | 4,349,166 | 58.2 | 17.7 | 2.66 | 143 | 8.6 |
| West Ham | 238,184 | 50.6 | 16.1 | 3.19 | 138 | 4.5 |
| Croydon | 111,921 | 12.4 | 13.1 | 1.53 | 121 | 6.7 |
| Brighton | 118,715 | 46.9 | 16.4 | 1.20 | 138 | 5.1 |
| Portsmouth | 170,973 | 39.6 | 15.1 | 1.94 | 130 | 6.1 |
| Plymouth | 87,931 | 57.1 | 18.3 | 1.58 | 167 | 6.7 |
| Bristol | 226,578 | 50.8 | 17.2 | 2.04 | 148 | 7.3 |
| Cardiff | 148,890 | 24.6 | 16.2 | 1.93 | 141 | 9.0 |
| Swansea | 95,399 | 18.8 | 17.0 | 1.79 | 161 | 5.7 |
| Wolverhampton | 85,036 | 24.1 | 20.7 | 3.23 | 166 | 6.8 |
| Birmingham | 492,301 | 38.7 | 18.5 | 2.49 | 163 | 2.8 |
| Norwich | 105,645 | 14.0 | 18.7 | 1.50 | 165 | 6.7 |
| Leicester | 189,136 | 22.0 | 14.6 | 1.93 | 162 | 6.8 |
| Nottingham | 223,584 | 20.4 | 17.2 | 2.33 | 174 | 6.0 |
| Derby | 98,796 | 28.6 | 15.0 | 1.62 | 123 | 10.0 |
| Birkenhead | 105,627 | 30.3 | 18.0 | 2.64 | 142 | 7.8 |
| Liverpool | 507,230 | 97.3 | 23.8 | 3.41 | 180 | 7.3 |
| Manchester | 520,211 | 40.3 | 20.4 | 2.38 | 159 | 7.9 |
| Salford | 205,828 | 39.8 | 20.9 | 3.25 | 174 | 6.0 |
| Oldham | 138,755 | 29.3 | 18.6 | 1.84 | 160 | 6.4 |
| Burnley | 96,478 | 24.6 | 18.7 | 2.46 | 169 | 5.0 |
| Blackburn | 125,797 | 18.0 | 17.9 | 1.60 | 169 | 4.7 |
| Preston | 111,425 | 27.2 | 20.7 | 2.61 | 217 | 2.9 |
| Huddersfield | 98,511 | 8.3 | 15.8 | 1.44 | 159 | 3.3 |
| Halifax | 92,861 | 10.9 | 16.4 | 0.87 | 136 | 4.9 |
| Bradford | 223,985 | 20.8 | 17.0 | 1.76 | 145 | 6.8 |
| Leeds | 388,761 | 18.0 | 17.8 | 2.00 | 156 | 8.7 |
| Sheffield | 338,316 | 17.2 | 17.7 | 2.26 | 157 | 5.2 |
| Hull | 212,679 | 25.9 | 17.3 | 1.75 | 141 | 6.0 |
| Sunderland | 136,101 | 47.5 | 20.7 | 3.05 | 168 | 7.7 |
| Gateshead | 93,372 | 29.7 | 17.6 | 2.35 | 151 | 6.9 |
| Newcastle-on-Tyne | 201,947 | 37.6 | 18.2 | 2.16 | 157 | 8.4 |
| BOLTON | 118,303 | 50.2 | 18.8 | 1.82 | 162 | 7.0 |

As the Registrar General's Returns do not begin and terminate on the first and last days of the year respectively, the birth and death rates in the above table are not absolutely correct, but they are sufficiently approximate for comparative purposes.

TABLE IX.—LOCAL GOVERNMENT RETURN. (A)

Table of Deaths during the Year 1894, in the Urban Sanitary District of Bolton, classified according to Diseases, Ages and Localities, and showing also the Population of such Localities, and the Births therein during the Year.

| NAMES OF LOCALITIES adopted for the pur- pose of these Statistics. | Population at all ages. | | Mortality from all causes at subjoined Ages. | | | | | | | | | | Mortality from subjoined causes, Distinguishing Deaths of Children under Five Years of Age. | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------|------------------------------------|---|--------------|---------------|----------------|-----------------|------------------|------------------|---------------|------------------------|----------|---|-------------|--------|--------------------|---------------------|------------------------|-----------------------|----------|---------------------|-------------|---------|---------------------|-------|-----------|---------------------------------------|-------------------|-----------|------------------|-----|-----|----|
| | Census, 1891 | Estimated to middle of 1894. | Registered Births | At all Ages. | Under 1 Year. | 1 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 60. | 60 & upwards. | Small-pox. | Measles. | Scarlet Fever. | Diphtheria. | Croup. | Whooping Cough. | Continued Fever. | | | Cholera. | Rheumatic Fever. | Erysipelas. | Pyæmia. | Puerperal Fever. | Ague. | Phthisis. | Bronchitis, Pneu- monia & Pleurisy | Heart Disease. | Injuries. | Other Causes. | | | |
| | | | | | | | | | | | | | | | | | Typhus. | Enteric or Typhoid. | Other or Doubtful. | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | |
| Exchange Ward.. | 7,740 | 7,319 | 245 | 169 | 52 | 28 | 5 | 9 | 48 | 27 | (Under 5 { 5 upwds | 7 | ... | ... | ... | 8 | ... | ... | ... | 8 | ... | ... | ... | ... | ... | ... | ... | 2 | 18 | 1 | ... | 36 | |
| Bradford Ward ... | 18,716 | 19,024 | 683 | 354 | 112 | 42 | 13 | 18 | 110 | 59 | (Under 5 { 5 upwds | 8 | ... | ... | 1 | 11 | ... | ... | ... | 11 | ... | ... | ... | ... | 1 | ... | ... | 10 | 28 | 12 | 1 | 36 | |
| Derby Ward | 17,271 | 17,877 | 610 | *367 | 91 | 43 | 15 | 23 | 145 | 50 | (Under 5 { 5 upwds | 1 | 1 | ... | ... | ... | 3 | ... | ... | ... | 6 | ... | 6 | 1 | ... | ... | ... | 22 | 51 | 16 | 2 | 97 | |
| Church Ward ... | 8,640 | 9,129 | 180 | 115 | 16 | 11 | 6 | 8 | 50 | 24 | (Under 5 { 5 upwds | 2 | ... | ... | 1 | 1 | ... | ... | ... | ... | 3 | ... | 5 | ... | ... | 4 | ... | 24 | 63 | 22 | 4 | 100 | |
| Rumworth Ward.. | 4,516 | 4,960 | 175 | 90 | 30 | 17 | 5 | 3 | 19 | 16 | (Under 5 { 5 upwds | ... | 4 | ... | ... | 5 | ... | ... | ... | ... | 2 | ... | 1 | ... | ... | ... | ... | 8 | 20 | 14 | 3 | 37 | |
| East Ward | 11,712 | 11,636 | 349 | 240 | 81 | 35 | 8 | 12 | 63 | 41 | (Under 5 { 5 upwds | 1 | 1 | 1 | 1 | 9 | ... | ... | ... | ... | 8 | ... | 2 | ... | ... | 1 | ... | ... | 5 | 11 | 5 | 2 | 17 |
| West Ward | 26,015 | 26,799 | 803 | 418 | 124 | 46 | 12 | 17 | 125 | 94 | (Under 5 { 5 upwds | 1 | 1 | ... | 5 | 9 | ... | ... | ... | ... | 11 | ... | 2 | ... | ... | ... | ... | 14 | 23 | 16 | 4 | 62 | |
| North Ward | 6,580 | 6,799 | 194 | 100 | 21 | 13 | 3 | 11 | 31 | 21 | (Under 5 { 5 upwds | ... | ... | ... | 3 | 1 | ... | ... | ... | ... | 1 | ... | 6 | ... | 1 | ... | ... | 26 | 78 | 29 | 2 | 103 | |
| Halliwell Ward... | 13,812 | 14,760 | 456 | 223 | 58 | 29 | 9 | 12 | 68 | 47 | (Under 5 { 5 upwds | ... | 1 | ... | 4 | 5 | ... | ... | ... | ... | 5 | ... | 1 | ... | 2 | ... | ... | 9 | 19 | 6 | 1 | 27 | |
| Municipal Paupers- Fishpool Workhouse | | | 24 | 139 | 8 | 6 | ... | 1 | 71 | 53 | (Under 5 { 5 upwds | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | 16 | 37 | 13 | ... | 57 | |
| TOTALS..... | 115,002 | 118,303 | 3,719 | 2,215 | 593 | 270 | 76 | 114 | 730 | 432 | (Under 5 { 5 upwds | 19 | 7 | 3 | 17 | 59 | ... | ... | ... | 1 | 62 | ... | ... | 4 | ... | ... | ... | 10 | 161 | 6 | 4 | 510 | |
| | | | | | | | | | | | (Under 5 { 5 upwds | 1 | 3 | 2 | 2 | 2 | 25 | 1 | 6 | ... | 25 | ... | 25 | 1 | ... | 7 | ... | 155 | 362 | 150 | 20 | 590 | |

* Including the deaths of 17 persons not belonging to the Borough which took place in the Infirmary.

TABLE X.—LOCAL GOVERNMENT BOARD RETURN. (B)

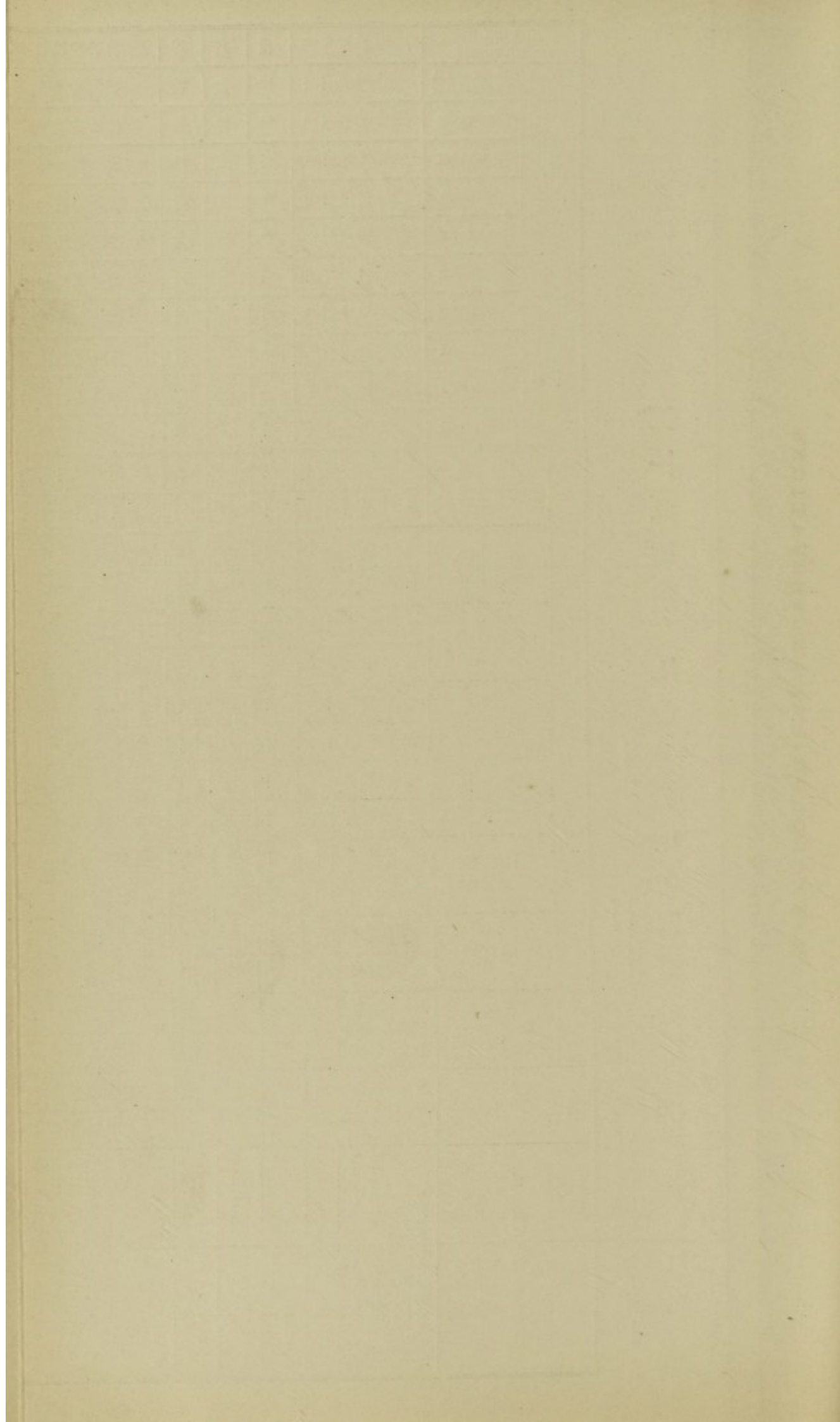
Table of New Cases of Sickness, coming to the knowledge of the Medical Officer of Health during the Year 1894, in the Urban Sanitary District of Bolton, classified according to Localities and Diseases.

| NAMES OF LOCALITIES | New Cases of Sickness in Persons belonging to the District, distinguishing those in Children under Five Years of Age | | | | | | | | | | | | | | | | | | |
|---------------------|--|-----------|---------|------------|------------|-------------------------|----------------|------------------|--------------------|-------------------|-------------------------|---------|-----------------|------------|--------|-----------------|------|--|--|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | Continued Fevers | | | 22 | 23 | 24 | 25 | 26 | 27 | 28 | Other Diseases, such as Chicken Pox, or Pneumonia, which the Medical Officer of Health thinks well to record | |
| 1 | | Small-pox | Measles | Scarlatina | Diphtheria | "Croup (not spasmodic)" | Whooping Cough | Typhus | Enteric or Typhoid | Other or Doubtful | Diarrhoea and Dysentery | Cholera | Rheumatic Fever | Erysipelas | Pyæmia | Puerperal Fever | Ague | | |
| Exchange Ward | { Under 5 { 5 upwds | | | 3 7 | 5 | | | | 1 7 | | | | | | | | 1 | | |
| Bradford Ward | { Under 5 { 5 upwds | | | 31 35 | 1 | 1 | | | 21 2 | | | | | | | | 1 | | |
| Derby Ward | { Under 5 { 5 upwds | | | 19 24 | 1 | 3 | | | 2 10 | | | | | | | | 5 | | |
| Church Ward | { Under 5 { 5 upwds | | | 5 16 | 2 | 2 | | | 7 | | | | | | | | 1 | | |
| Rumworth Ward | { Under 5 { 5 upwds | | | 13 16 | | 3 | | | 4 | | | | | | | | 3 | | |
| East Ward | { Under 5 { 5 upwds | 2 | | 4 12 | 2 | | | | 12 | | | | | | | | | | |
| West Ward | { Under 5 { 5 upwds | | | 11 29 | 3 | | | | 2 23 | | | | | | | | 1 | | |
| North Ward | { Under 5 { 5 upwds | | | 6 10 | 1 | | | | 6 | | | | | | | | 3 | | |
| Halliwell Ward | { Under 5 { 5 upwds | | | 12 14 | 1 | | | | 22 | 1 | | | | | | | 1 | | |
| TOTALS | { Under 5 { 5 upwds | 2 | | 104 163 | 6 19 | | | | 11 106 | 1 | | | | | | | 16 | | |

8

CAUSES OF DEATH

AT DIFFERENT PERIODS OF LIFE, SHOWING ALSO THE DISTRIBUTION OF MORTALITY FROM EACH DISEASE THROUGHOUT THE VARIOUS WAGES OF THE BOATMEN DURING THE YEAR ENDING 31st DECEMBER 1901.



METEOROLOGICAL OBSERVATIONS.

SUMMARY OF MONTHLY AVERAGES FOR THE YEAR 1894.
(From Returns supplied by Mr. MIDGLEY.)

| 1894. | Barometer. Corrected and reduced to 32 deg. Fah. at mean sea level. | READINGS OF THERMOMETERS. | | | | | | | Elastic force of the aqueous vapour | Mean de- gree of humi- dity. Satu- ration = 100 | Mean amount of clouds. | Rain Amount collected | Registered sunshine in hours. | Mean amount of ozone. 0 = none. 10 = max. in |
|-----------|---|---------------------------|--------|-------|-------|---------------|-----------------------------------|--------------------------|--|--|------------------------------|-----------------------------|-------------------------------------|---|
| | | Highest | Lowest | Mean | Range | Dew- point | Maxi- mum in rays of sun | Mini- mum on grass | | | | | | |
| January | 29.799 | 41.7 | 33.1 | 39.57 | 8.7 | 33.0 | 56.7 | 26.5 | 0.196 | 86.1 | 7.7 | 3.037 | 24.30 | 0.01 |
| February | 29.955 | 45.4 | 35.0 | 39.59 | 10.4 | 35.2 | 63.8 | 26.5 | 0.212 | 87.2 | 7.7 | 5.554 | 43.10 | 0.71 |
| March ... | 29.917 | 51.9 | 36.5 | 43.25 | 15.5 | 36.8 | 83.4 | 26.5 | 0.220 | 79.7 | 5.8 | 3.792 | 124.35 | 0.61 |
| April ... | 29.867 | 56.5 | 42.1 | 49.16 | 14.3 | 41.4 | 89.9 | 34.0 | 0.200 | 76.9 | 7.0 | 2.181 | 92.40 | ... |
| May ... | 29.955 | 53.7 | 40.9 | 46.87 | 12.8 | 38.6 | 94.5 | 34.5 | 0.239 | 69.5 | 7.2 | 3.376 | 158.40 | 1.42 |
| June ... | 29.994 | 62.6 | 48.5 | 54.06 | 14.1 | 48.2 | 94.2 | 43.5 | 0.336 | 75.8 | 7.1 | 3.442 | 131.50 | 1.00 |
| July ... | 29.863 | 67.1 | 52.7 | 58.13 | 14.4 | 52.2 | 109.6 | 46.7 | 0.393 | 76.6 | 7.3 | 4.767 | 138.15 | 0.80 |
| August | 29.885 | 61.3 | 51.2 | 54.93 | 10.2 | 51.1 | 98.3 | 47.2 | 0.377 | 79.8 | 9.2 | 5.457 | 67.30 | 1.00 |
| September | 30.191 | 58.7 | 46.3 | 52.02 | 12.4 | 45.1 | 88.8 | 38.6 | 0.304 | 75.4 | 5.6 | 0.483 | 88.55 | 0.13 |
| October | 29.925 | 53.6 | 42.5 | 47.16 | 11.1 | 42.6 | 75.0 | 35.7 | 0.273 | 84.1 | 8.4 | 4.201 | 40.50 | 0.06 |
| November | 29.910 | 50.3 | 41.3 | 45.29 | 9.0 | 41.1 | 66.1 | 39.6 | 0.277 | 88.9 | 9.1 | 3.148 | 23.45 | 0.01 |
| December | 24.964 | 44.6 | 36.8 | 40.64 | 7.8 | 37.5 | 56.1 | 31.8 | 0.228 | 89.2 | 7.8 | 4.753 | 29.40 | 0.50 |
| Mean | 29.935 | 53.9 | 42.2 | 47.39 | 11.7 | 41.9 | 81.4 | 35.9 | 0.277 | 80.8 | 7.5 | 3.683 | 80.22 | 0.52 |

| STREET | DEATHS | | | | | | | | DISEASES | | | | | | | | | |
|-----------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|-------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Brooklyn-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | 2 | ... | ... | ... | 1 | ... |
| Brougham-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Brown-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 1 | 2 |
| Bullock-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Burlington-street | 2 | ... | ... | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Bury New-road | 2 | ... | ... | 2 | ... | ... | ... | ... | ... | 4 | ... | ... | 2 | ... | ... | ... | 2 | ... |
| Bury Old-road | 2 | ... | ... | ... | 1 | ... | ... | 1 | ... | 7 | ... | ... | 3 | ... | ... | ... | 3 | 1 |
| Buxton-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 3 | ... | ... | 2 | ... | ... | ... | 1 | ... |
| Cable-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Caledonia-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Cambridge-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Cannon-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Carey-street and Back | 4 | ... | 2 | ... | 2 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Castle-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 3 | ... |
| Cedar-street | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 4 | ... | ... | 4 | ... | ... | ... | ... | ... |
| Cellini-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| Central-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Channing-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Charles-street | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Charles Rupert-street | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cheapside and Back | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Chester-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | ... | ... | 2 | ... | ... | ... | ... | 2 |
| Chorley Old-road | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Chorley-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Church-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Clarence-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Clarendon-street | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | 5 | ... | ... | 4 | ... | ... | ... | 1 | ... |
| Clarke's-entry | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Clayton-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Clyde-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... |
| Coe-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | ... | ... | ... | ... | ... | ... | 7 | ... |
| Commission-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Coop's-court ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cooper's-square | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Craddock-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | ... | ... | 4 | ... | ... | ... | 1 | ... |
| Cream-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Croasdale-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | 3 | ... | ... | ... | ... | ... |
| Crook-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cross-street and Back | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Crown-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Crumpsall-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |

| STREET | DEATHS | | | | | | | | DISEASES | | | | | | | | | |
|------------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|-------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Dale-street ... | 2 | | | | 2 | | | | | | | | | | | | | |
| Darbishire-street ... | 1 | | | | | | | 1 | | 1 | | | | | | | 1 | |
| Darley-street ... | 1 | | | | | 1 | | | | 1 | | | | | | | 1 | |
| Darwin-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Dawes-street and Back | 3 | | 1 | | | 2 | | | | 1 | | | | | | | 1 | |
| Dean-street ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Deane Church-lane ... | 1 | | | | | | | 1 | | 8 | | | | | | | 8 | |
| Deane-cottage ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Deane-road ... | 1 | | | | 1 | | | | | 2 | | | 1 | | | | 2 | |
| Deansgate ... | | | | | | | | | | 2 | | | | | | | 2 | |
| Delamere-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Delph-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Derby-street and Back | 1 | | 1 | | | | | | | 2 | | | | | | | 2 | |
| Devonshire-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Duckworth-street ... | | | | | | | | | | 2 | | | | | | | 2 | |
| Durham-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Eckersley-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Eden-street ... | 1 | | | | | 1 | | | | | | | | | | | | |
| Edges-court ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Elizabeth-court ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Ellesmere-street ... | | | | | | | | | | 3 | | | 3 | | | | | |
| Elliot-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Emmanuel-street ... | | | | | | | | | | 3 | | | 2 | | | | 1 | |
| Ernest-street ... | | | | | | | | | | 2 | | | 2 | | | | | |
| Eskrick-street ... | | | | | | | | | | 5 | | | 5 | | | | | |
| Everton-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Fairbrother-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Fairfield-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Finney-street ... | | | | | | | | | | 2 | | | 2 | | | | | |
| Flash-street ... | | | | | | | | | | 5 | | | 1 | | | | 4 | |
| Fleet-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Fletcher-street & Back | 2 | | | | | 1 | | 1 | | 1 | | | | | | | 1 | |
| Folds-road ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Foundry-street & Back | | | | | | | | | | 4 | | | 2 | | | | 2 | |
| Fox-street ... | 1 | | | 1 | | | | | | 1 | | | 1 | | | | | |
| Fraser-street... | | | | | | | | | | 1 | | | 1 | | | | | |
| Frank-street... | | | | | | | | | | 2 | | | | | | | 2 | |
| Garden-street ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Gate-street ... | 5 | | | | 2 | 3 | | | | 2 | | | | | | | 2 | |
| George Arthur-street | 1 | | | 1 | | | | | | 7 | | | 1 | | | | 6 | |
| Gibraltar-street ... | | | | | | | | | | 1 | | | | | | | 1 | |

| STREET | DEATHS | | | | | | | | DISEASES | | | | | | | | | |
|---------------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|-------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Glenthorne-street ... | 1 | | | | | 1 | | | | | | | | | | | | |
| Glynn-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Grant-street ... | | | | | | | | | | 3 | | | | | | | 1 | 2 |
| Grasmere-street ... | | | | | | | | | | 2 | | | 1 | | | | 1 | |
| Grecian-street ... | 1 | | 1 | | | | | | | 1 | | | 1 | | | | | |
| Green-street ... | 1 | | | | | 1 | | | | | | | | | | | | |
| Gregson-field ... | 2 | | 2 | | | | | | | | | | | | | | | |
| Hadwin-street & Back ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Haigh-street ... | 1 | | 1 | | | | | | | | | | | | | | | |
| Halliwell-road ... | 2 | | | | | 2 | | | | 1 | | | | | | | 1 | |
| Halton-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Hampden-street ... | | | | | | | | | | 2 | | | 1 | | | | 1 | |
| Hardy-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Hart's-court ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Hartington-road ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Harwood-street ... | 1 | | | | | 1 | | | | | | | | | | | | |
| Haydn-street ... | | | | | | | | | | 1 | | | | | | | | 1 |
| Haydock-street & Back ... | 1 | | | | 1 | | | | | 1 | | | | | | | 1 | |
| Heap-street ... | 2 | | 2 | | | | | | | 1 | | | 1 | | | | | |
| Hector-street ... | | | | | | | | | | 2 | | | | | | | 2 | |
| Heywood-street ... | 2 | | | | | 2 | | | | | | | | | | | | |
| Hibbert-street ... | | | | | | | | | | 1 | | | | | | | | 1 |
| High-street ... | | | | | | | | | | 2 | | | | | | | 2 | |
| Hobart-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Holden-street ... | | | | | | | | | | 4 | | | | | | | 4 | |
| Homer-street ... | 1 | | | 1 | | | | | | 1 | | | 1 | | | | | |
| Hopefield-street ... | 1 | | | | | 1 | | | | | | | | | | | | |
| Hopkins-street ... | 1 | | | 1 | | | | | | 1 | | | 1 | | | | | |
| Howcroft-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| Howel-croft ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Hunt-street ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Independent-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Infirmery ... | 1 | | | 1 | | | | | | 3 | | | 1 | | | | 2 | |
| Irving-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Isabel-street ... | 2 | | | 2 | | | | | | 3 | | | 2 | | | | 1 | |
| Jackson-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| James-street ... | 1 | | | | 1 | | | | | | | | | | | | | |
| Jenny Beck-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| John Alfred-street ... | | | | | | | | | | 1 | | | | | | | 1 | |
| John Brown-street ... | | | | | | | | | | 2 | | | | | | | 2 | |
| John Taylor-street ... | | | | | | | | | | 1 | | | 1 | | | | | |
| Joseph-street ... | | | | | | | | | | 2 | | | | | | | 2 | |

| STREET | DEATHS | | | | | | | | DISEASES | | | | | | | | | |
|----------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|-------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Kay-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 2 | ... | ... | ... | ... | ... | ... | ... |
| Kestor street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| King-street and Back | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Kirk-street and Back | 5 | ... | 1 | 1 | 3 | ... | ... | ... | ... | 4 | ... | ... | 1 | ... | ... | ... | 3 | ... |
| Lark-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Law-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Lawn-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Lee-street ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Leicester-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Lever-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Livingstone-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Locke-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Lum-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Lumsden-street | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Lyndhurst-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Manchester-road | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 3 | ... |
| Market-place... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Markland-street | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mason-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Matthew-street | 2 | ... | ... | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Mawdsley-st. & Back | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mayor-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Mechanic-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Merehall-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| Merrick-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Mill-street ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Milner-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Milo-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Minnie-street | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Moor-lane .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Moor-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Morris-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Mortfield-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Mosley-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Moss-court ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Myrrh-street... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| Middle-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Nebraska-street | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Nelson-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Newport-street | 2 | ... | ... | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Newry-street... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 4 | ... | ... | 4 | ... | ... | ... | ... | ... |
| Ninehouse-lane | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |

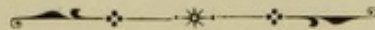
| STREET | DEATHS | | | | | | | | DISEASES | | | | | | | | | |
|-----------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|-------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Norfolk-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Norman-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 2 | 1 |
| Norris-street ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Norwood-grove | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Nuttall-street | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Oak-street ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Oldhall-street | .. | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Oldham-street | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Ormrod-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Osborne-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Oxford-grove... | ... | 2 | ... | 2 | ... | ... | ... | ... | ... | 6 | ... | ... | 2 | ... | ... | ... | 4 | ... |
| Orphanage ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Park-road ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Parkfield ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Parliament-street | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | 4 | ... | ... | ... | ... | ... | ... | 4 | ... |
| Parrott-street | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pedder--street | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 3 | ... | ... | 1 | ... | ... | ... | 2 | ... |
| Peel-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Percival-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Percy-street ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Pilking-ton-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Pitt-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Pocket-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 3 | ... |
| Poplar-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Portugal-street | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Progress-street | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Prince-street... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Profitt-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Punch-street and Back | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Quebec-street | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Radcliffe-road | ... | 2 | ... | 1 | ... | ... | ... | ... | 1 | 7 | ... | ... | 1 | ... | ... | ... | 5 | 1 |
| Ralph-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Ramwell-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Raphael-street | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Rawson-road | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Rebate-street | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Regent-street | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Reservoir-street | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rhyl-street ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Richmond-terrace | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |

| STREET | DEATHS | | | | | | | | | DISEASES | | | | | | | | |
|---------------------------|--------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|----------|-----------|---------|-------|-----------|----------------|-----------------|------------|------------|
| | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria | Total | Small-pox | Measles | Fever | Diarrhoea | Whooping Cough | English Cholera | Scarlatina | Diphtheria |
| Ridgway-gates ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Rigby-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rishton-lane ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 3 | ... | ... | 1 | ... | ... | ... | 2 | ... |
| Rivington-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rix-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Robert Stanley-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Roper's-barn... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| Rosamond-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Roseberry-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Rothwell-street & Back | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Roundcroft-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Roxalina-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rumworth-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Russell-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Ryley-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| St. George's-road ... | 2 | ... | ... | 1 | ... | 1 | ... | ... | ... | 3 | ... | ... | 1 | ... | ... | ... | 2 | ... |
| St. Helens-road ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 5 | ... | ... | ... | ... | ... | ... | 5 | ... |
| Sandham-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Shaw-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Shepherd-Cross-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Sidney-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Snowden-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Soho-street ... | 3 | ... | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Spa-road ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Spring-gardens & Back | 3 | ... | 1 | ... | ... | 2 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Stanley-court ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Stewart-street ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Stott-court ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Stott-hillock ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | ... |
| Stowell-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Strawberry-hill ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Sutcliffe-street ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Sylvester-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Taylor-fold ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tempest-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Thompson-square ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Thynne-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Todd-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Tong-street ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Turk-street ... | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Furton-street ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | 2 | ... |
| Tyndall-street ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |
| Tipping-square ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... |

**ARTICLES ANALYSED UNDER THE "SALE OF FOOD AND
DRUGS ACT, 1875," FOR THE YEAR ENDING DECEMBER
31, 1894.**

| No. of Article | Articles submitted | Result of Analysis. | Observations. |
|----------------------------------|-----------------------|--|----------------------|
| 1 | Butter..... | Genuine..... | |
| 2 | Milk | Genuine..... | |
| 3 | Milk | Genuine..... | |
| 4 | Milk | Impoverished by the abstraction of 50 per cent of its fat | Fined 5/- and costs |
| 5 | Milk | Genuine..... | |
| 6 | Milk | Genuine..... | |
| 7 | Milk | Genuine..... | |
| 8 | Butter..... | Genuine..... | |
| 9 | Butter..... | Genuine..... | |
| 10 | Butter..... | Genuine..... | |
| 11 | Butter..... | Genuine..... | |
| 12 | Butter..... | Genuine..... | |
| 13 | Milk | Genuine..... | |
| 14 | Milk | Genuine..... | |
| 15 | Milk | Genuine..... | |
| 16 | Milk | Genuine..... | |
| 17 | Milk | Genuine..... | |
| 18 | Milk | Genuine..... | |
| 19 | Milk | Genuine..... | |
| 20 | Milk | Genuine..... | |
| 21 | Milk | Genuine..... | |
| 22 | Milk | Genuine..... | |
| 23 | Coffee..... | Genuine..... | |
| 24 | Coffee..... | Genuine..... | |
| 25 | Mustard | Genuine..... | |
| 26 | Mustard | Genuine..... | |
| 27 | Lard | Genuine..... | |
| 28 | Lard | Genuine..... | |
| 29 | Milk | Impoverished by the abstraction of 18 per cent of its fat | Fined 5/- and costs |
| 30 | Milk | Genuine..... | |
| 31 | Milk | Genuine..... | |
| 32 | Milk | Genuine..... | |
| 33 | Milk | Genuine..... | |
| 34 | Butter..... | Genuine..... | |
| 35 | Coffee..... | Genuine..... | |
| 36 | Butter..... | Genuine..... | |
| 37 | Coffee..... | Genuine..... | |
| 38 | Coffee..... | Genuine..... | |
| 39 | Butter..... | Genuine..... | |
| 40 | Butter..... | Contained 19 % of water | |
| 41 | Milk | Impoverished by the abstraction of 27 per cent of milk fat ... | Fined 10/- and costs |
| 42 | Milk | Genuine..... | |
| 43 | Milk | Impoverished by the abstraction of 23 per cent of milk fat ... | Fined £2 and costs |
| 44 | Ice Cream | Genuine..... | |
| 45 | Ice Cream | Genuine..... | |
| 46 | Ice Cream | Genuine..... | |
| 47 | Pepper | Genuine..... | |
| 48 | Pepper | Genuine..... | |
| 49 | Pepper | Genuine..... | |
| 50 | Sweets | Genuine..... | |
| 51 | Sweets | Genuine..... | |
| 52 | Sweets | Genuine..... | |
| 53 | Sweets | Genuine..... | |
| Number of Samples Analysed | | | 53 |
| Number Adulterated..... | | | 5 |

INSPECTOR'S WORK.



NUISANCES.

| | | | | |
|---|-----|-----|-----|------|
| Nuisances reported by Inspectors | ... | ... | ... | 5269 |
| " " Inhabitants | ... | ... | ... | 153 |
| Notices Issued | ... | ... | ... | 2156 |
| Nuisances abated without formal notice | ... | ... | ... | 3266 |
| " undergoing abatement | ... | ... | ... | 756 |
| Total nuisances abated | ... | ... | ... | 4666 |
| Number of Informations for breach of Bye-laws | ... | ... | ... | 8 |
| " Fined | ... | ... | ... | 7 |
| Cases withdrawn on payment of costs | ... | ... | ... | 1 |
| Amount of Fines exclusive of costs, 20s. | | | | |
| Smoke observations taken | ... | ... | ... | 317 |
| " Nuisances reported | ... | ... | ... | 156 |
| " Smoke Notices served | ... | ... | ... | 92 |
| Number of Informations | ... | ... | ... | 41 |
| Magistrates' Order to Abate | ... | ... | ... | 1 |
| Number Fined | ... | ... | ... | 34 |
| " Dismissed | ... | ... | ... | 3 |
| " Cases Withdrawn | ... | ... | ... | 3 |
| Amount of Fines exclusive of costs, £15 os. od. | | | | |

HOUSE TO HOUSE VISITATIONS.

| | | | | |
|---|-----|-----|-----|------|
| Number of houses examined | ... | ... | ... | 5893 |
| " of Sanitary Defects discovered therein and reported to the District Inspectors... | ... | ... | ... | 414 |

LODGING HOUSES.

| | | | | | |
|-----------------|-----|-----|-----|-----|------|
| Day Inspections | ... | ... | ... | ... | 1481 |
| Night ,, | ... | ... | ... | ... | 68 |

INFECTIOUS DISEASES IN HOUSES.

| | | | |
|-----------------------------------|-----------|-----|-----------|
| 529 of the street houses examined | contained | ... | 582 cases |
| 7 court „ „ „ | ... | 7 „ | |

INSPECTION OF SCHOOLS.

| | | | | | |
|--------------------------------|-----|-----|-----|-----|----|
| Schools examined | ... | ... | ... | ... | 29 |
| ,, found clean | ... | ... | ... | ... | 27 |
| ,, ,, dirty | ... | ... | ... | ... | — |
| ,, disinfected and cleaned | ... | ... | ... | ... | 2 |

INSPECTION OF MILL LODGES

| | | | | | |
|----------------------|-----|-----|-----|-----|----|
| Mill Lodges examined | ... | ... | ... | ... | 62 |
| ,, found clean | ... | ... | ... | ... | 55 |
| ,, ,, foul | ... | ... | ... | ... | 7 |
| ,, cleansed | ... | ... | ... | ... | 7 |

CANAL BOATS ACTS, 1877 AND 1884.

| | | | | | |
|---------------------------|-----|-----|-----|-----|----|
| Canal Boats examined | ... | ... | ... | ... | 37 |
| ,, found satisfactory | ... | ... | ... | ... | 37 |

INSPECTION OF WORKSHOPS.

| | | | | | |
|--|-----|-----|-----|-----|-----|
| Number of Visits to Workshops | ... | ... | ... | ... | 597 |
| ,, ,, Outworkers | ... | ... | ... | ... | 48 |
| Limewashed without formal notice | ... | ... | ... | ... | 19 |
| Notices issued for Limewashing | ... | ... | ... | ... | 23 |
| Number of Workshops on register at end of year | ... | ... | ... | ... | 569 |

INSPECTION OF COURT CLOSETS.

| | | | | | |
|---------------------------------------|-----|-----|-----|-----|------|
| Number of Closets examined | ... | ... | ... | ... | 5488 |
| ,, Notices served to Cleanse | ... | ... | ... | ... | 63 |
| ,, Informations for Not Cleansing | .. | ... | ... | ... | 8 |
| ,, Fined | ... | ... | ... | ... | 7 |
| ,, Dismissed | ... | ... | ... | ... | 1 |

ASHPITS.

| | | | | | |
|---|-----|-----|-----|-----|------|
| Applications made by Inhabitants for Emptying Ashpits | ... | ... | ... | ... | 1327 |
| Number reported by Inspectors | ... | ... | ... | ... | 1817 |
| ,, Emptied | ... | ... | ... | ... | 3137 |

SHOW VANS.

50 Show Vans, containing 124 persons, were inspected, but no cases of infectious disease were discovered.

DISINFECTION.

| 1894. | NO. OF ROOMS DISINFECTED | NO. OF BEDS DISINFECTED. | NO. OF OTHER ARTICLES DISINFECTED. |
|------------------|--------------------------------|--------------------------------|--|
| January | 73 | 54 | 223 |
| February | 106 | 41 | 272 |
| March | 81 | 25 | 207 |
| April... .. | 92 | 45 | 312 |
| May | 107 | 36 | 226 |
| June | 67 | 34 | 284 |
| July | 75 | 34 | 223 |
| August | 64 | 34 | 223 |
| September | 39 | 30 | 158 |
| October | 46 | 16 | 85 |
| November | 95 | 37 | 260 |
| December | 70 | 26 | 165 |
| Total | 915 | 412 | 2638 |

The total number of closets erected and supervised by the Sanitary Department amount to 530 and include 502 waste water closets, 2 fresh water closets, and 26 pail closets.

THE DAIRIES, COWSHEDS, AND MILKSHOPS ORDERS.
COWSHEDS.

Total number of Cowsheds on register at end of year... .. 18

DAIRIES AND MILKSHOPS.

Number of Applications for registration as Milksellers. ... 14
Total Number of Milksellers and Dairymen on Register at end
of year 255

BAKEHOUSES.

Total number of Bakehouses on Register at end of year ... 148
Nuisances abated without formal notice 4
Notices served to Limewash 7

CATTLE INSPECTED BEFORE SLAUGHTER.

| BEASTS. | CALVES. | SHEEP AND LAMBS. | PIGS. |
|---------|---------|------------------|-------|
| 11,909 | 1,479 | 52,255 | 6,891 |

NUMBER OF STORE CATTLE INSPECTED AT THE CATTLE
FAIRS AND CATTLE SIDINGS.

| STORE COWS. | BULLS. | PIGS. |
|-------------|--------|-------|
| 1,687 | 96 | 956 |

ANIMALS AND UNWHOLESOME FOOD CONDEMNED AND
DESTROYED AS UNFIT FOR HUMAN CONSUMPTION.

12 Beasts
 13 Sheep and Lambs
 14 Pigs
 4 Calves
 19 cwts. of Meat
 7348 lbs. of Fish
 800 Oysters
 90 quarts of Shrimps
 180 Rabbits
 3866 lbs. of Fruit
 2000 Oranges
 30 pecks of Peas
 206 bunches of Onions
 2 Geese

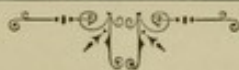
NUMBER OF PERSONS SUMMONED BEFORE JUSTICES FOR
EXPOSING DISEASED AND UNWHOLESOME FOOD
FOR SALE.

| SUMMONED. | CONVICTED. | AMOUNT OF FINES. |
|-----------|------------|-----------------------|
| 10 | 10 | £20 5s. od. and costs |



Report of the Medical Officer of Health,
1894.

APPENDIX B.



COUNTY BOROUGH OF BOLTON.

DIRECTIONS

FOR PREVENTING THE SPREAD OF

MEASLES.

In consequence of the extensive prevalence of **MEASLES** in the Borough, the following directions for preventing the spread of the disease are recommended for perusal :—

MEASLES is a highly dangerous infectious disease, and a mild attack in one child may communicate a fatal one in another.

Overcrowding, insanitary conditions, and cold weather, predispose to the disease.

The complications to be feared are catarrhal pneumonia, and other affections of the chest.

On the appearance of **MEASLES** in a household, the sick members should be at once completely separated from the rest of the family.

Smearing the body daily with sweet oil to which a little carbolic acid has been added will be useful in preventing further infection, and as soon as allowed by the medical attendant, warm baths should be given.

MEASLES is very often carried in the clothing, therefore children should not be sent to School from a house where the disease exists, and visitors, especially children, should on no account be allowed to enter the sick room.

After recovery there should be thorough disinfection of the infected room and of all articles used by the sick. The most efficient disinfectant of a house is thorough ventilation. A little carbolic acid may also be usefully added to ordinary soap and water in all cleansing operations. Soiled linen, &c., should be boiled for some time; and if this cannot be done at once the linen should be wetted with a solution of carbolic acid and water, and afterwards boiled.

In the event of death, the body should be sprinkled with disinfecting powder, and buried with the least possible delay; and should not in the meantime be kept in a room inhabited by living persons.

By application at the Sanitary Office, Town Hall, disinfectants will be supplied, and disinfection of houses within the Borough will be undertaken by the Corporation free of charge.

F. E. ADAMS, M.D.,

Town Hall, Bolton,

Medical Officer of Health.

COUNTY BOROUGH OF BOLTON.

SUGGESTIONS

FOR

Preventing the Spread of Scarlatina.

SCARLATINA, or as it is frequently called, **SCARLET FEVER**, is a highly dangerous infectious disease, which usually begins with chilliness, sore throat, and feverishness, followed by a scarlet rash on the second day.

The spread of the disease is favoured by defective drainage and bad ventilation, but most frequently it is communicated by infection from other cases, hence, in order to escape the fever, the drains, &c., should be well looked after, and houses where the disease exists avoided.

Directly the fever appears in a household the sick members should be completely separated from the rest of the family in a large well-ventilated room, which, if possible, should be at the top of the house. Carpets, curtains, and all unnecessary articles of furniture and clothing should be removed therefrom, and ventilation should be promoted by means of a fire or open window, or both, according to the weather.

Fresh air should be admitted freely through the whole house by the windows and doors.

A sheet should be hung up outside the door of the sick room and kept moistened with a dilute solution of carbolic acid or a solution of chloride of lime. The floor may with advantage be sprinkled with the same disinfectants.

In order that patients' discharges may not communicate the disease, the vessel receiving them should have chloride of lime or carbolic powder placed in it before and after use. The discharges should afterwards be well covered with dry earth or ashes.

Bed and body linen should be frequently changed, and as soon as removed from the sick person, and before being taken from the room, should be first put into a weak solution of carbolic acid and afterwards thoroughly boiled.

Persons attending the sick should not wear woollen garments, as they are likely to retain the infectious poison; dresses of cotton or some washable material should be worn.

Visitors, especially children, on no account should be allowed into the sick room, as they are liable to carry away the infection in their clothing.

The scales or dusty powder which peel off the skin in **SCARLET FEVER** being highly infectious, it is desirable to prevent their escape by smearing the body of the sick person all over every day with olive oil or other grease.

When the patient has recovered, his final disinfection should be completed by careful washing in a warm bath on three or four successive days, till no trace of roughness of the skin remains. After this process, and with clean clothes, he may mix with the rest of the family: but previously to this, however slight may have been his attack, he ought always to be regarded as dangerous to persons susceptible to **SCARLET FEVER**.

When the illness has terminated, the sick room and its contents should be disinfected and cleansed; this, and the disinfection of the patient's wearing apparel, will be done free of charge and without damage, by the Corporation officials on application at the Sanitary Office, Town Hall. It is recommended that bed clothing and other articles which have been in contact with the patient should be washed at the Corporation yard, School Hill, where a laundry, with hot water and soap, are provided for the purpose, free of charge.

In the event of death, the body should be sprinkled with disinfecting powder, and buried with the least possible delay, and should not ever in the meantime be kept in a room inhabited by living persons.

Children should not be allowed to attend School from a house in which there is infectious disease, for, although not ill themselves, they are very likely to carry the infection and so spread the disease. No child should be allowed to re-enter a School without a Certificate from the Medical Attendant, stating that he can do so without any danger of infecting other children.

F. E. ADAMS, M.D.,
Medical Officer of Health.

Town Hall, Bolton.

COUNTY BOROUGH OF BOLTON.

S P R E A D I N G INFECTIOUS DISEASE.

NOTICE IS HEREBY GIVEN,

That the 126th Section of the Public Health Act, 1875,
provides, in effect, as follows:—

Any Person who, while suffering from any dangerous Infectious Disorder, wilfully exposes himself in any Street or other Public Place, or enters any Public Conveyance without previously notifying the owner, conductor, or driver thereof, that he is so suffering ;

OR

Any Person being in charge of Children suffering from any dangerous Infectious Disorder, who exposes them in like manner ;

OR

Any Person who gives, lends, sells, transmits, or exposes, without previous Disinfection, any Bedding, Clothing, Rags, or other things which have been exposed to Infection from any dangerous Infectious Disorder,

SHALL BE LIABLE TO A

PENALTY OF FIVE POUNDS.

SCARLET FEVER, or **SCARLATINA**, is a highly dangerous Infections Disorder, especially when the Patient has apparently recovered, AND IS ABLE TO MOVE ABOUT. Any Person, therefore, who infringes the above provisions in a case of that Disease will be liable to the Penalty named.

F. E. ADAMS, M.D.,
Medical Officer of Health.

COUNTY BOROUGH OF BOLTON.

RULES

FOR PREVENTING THE SPREAD OF

ENTERIC OR TYPHOID FEVER.

The disease is usually communicated from one individual to another by means of the bowel discharges of the patient. Hence these should be regarded as highly dangerous, and should be disposed of in the following manner:—

The discharge should be received into a vessel reserved for the use of the patient alone. Disinfecting fluid should at once be poured into the vessel, and as soon afterwards as possible the discharge should be emptied into a special pail provided for the purpose by the Corporation, and not into the closet, or midden. The pail should be kept in the back yard, from whence it will be removed and cleansed, as frequently as necessary, by the Corporation Scavengers.

If from any cause the pail is not available when required, the bowel discharges should be received into old cloths or rags, and burned without delay. All soiled bed clothing or linen should be changed as soon as possible, and placed in water containing a disinfectant until it can be washed.

NURSING THE PATIENT.

This duty should be left, as far as possible, in the hands of one competent person. The nurse runs little risk of contracting the disease if the following precautions are carefully observed:—

She should frequently wash her hands, and use the nail brush, and should be specially careful in doing so after handling the patient, or dealing with the bowel discharges. A little disinfecting fluid should be added to the water before using it, and the towel used by the nurse for wiping her hands should be used for no other purpose.

The sick room should be well ventilated, and a fire kept burning in the grate.

On no account should a person engaged in nursing a patient suffering from Typhoid Fever be employed in dairy work, or in the sale or distribution of milk, or other articles of food.

No food, except that intended for the immediate use of the patient, should be brought into the sick room. Food left unconsumed by the patient should not be used by any other person. Cups and dishes used by the patient should not be used by other persons. No other person should be allowed to sleep in the same room as the patient, and on no account should the patient be allowed to occupy the living room or kitchen.

SOILED LINEN, ETC.

When bed clothing or linen used by the patient requires to be washed, it should be placed in a tub, or other vessel, and covered, before leaving the sick room, with a mixture of disinfecting fluid and water (1 part of fluid to 20 parts of water). It should be allowed to soak for 24 hours at least, and should then be washed separately from all other articles. The water used in washing linen, &c., should have more disinfecting fluid added to it before it is allowed to run into the sewers.

CORPORATION LAUNDRY.

Soiled linen, or other articles, may be washed at the Corporation Laundry, School Hill Yard, where soap and hot water are provided free of charge.

IN CASE OF DEATH.

A layer of carbolic acid powder, or of chloride of lime, should be placed in the coffin. The house should be freely ventilated.

The funeral should take place as early as possible.

DISINFECTANTS.

Carbolic Powder, disinfecting fluid, and carbolic soap may be procured, free of charge, at the Sanitary Office, Town Hall.

F. E. ADAMS, M.D.,
Medical Officer of Health.

COUNTY BOROUGH OF BOLTON.

DIARRHŒA.

In consequence of the prevalence of autumnal **DIARRHŒA**, the **SANITARY COMMITTEE** think the present time suitable for issuing the following advice and recommendations:—

Young children and aged persons should be warmly clad, especially when changes of weather are frequent. A broad belt of flannel to be worn round the waist is recommended. Exposure to chills and wettings should be avoided.

Fruit, especially stone fruit, should be eaten very sparingly, and unripe or over-ripe fruit should be carefully avoided. Vegetables should also be used in moderation.

Milk should be boiled and kept in a cool, well-ventilated place, where it will not be exposed to foul air. Other articles of food should also be kept in pure air.

Young children should not be given large quantities of food at a time. Their food should be given to them in small quantities and frequently.

Cold water should not be drunk in large quantities.

During the present season, when the ground becomes heated to a certain degree, the soil gives off a poisonous exhalation which causes diarrhœa. It is of importance, therefore, that dwellings should be freely ventilated, and this applies particularly to houses which have no well ventilated basements, but are built directly upon the soil.

Midden and Pail Closets should be carefully attended to. They should be frequently cleansed and disinfected. When a closet escapes the attention of the Corporation Scavenging Staff notice should be sent to the **SANITARY OFFICE, TOWN HALL**. Disinfectants can be obtained at the same place **FREE OF CHARGE**, between the hours of 9 a.m. and 6 p.m.

When an individual is suffering from Diarrhœa, the common closet of the house should not be used, as the disease is frequently communicated from one person to another in this way. On application at the Sanitary Office, a special covered pail to receive the bowel discharges, will be delivered free of charge, and will be removed and cleansed daily. A supply of disinfecting fluid will be sent with the pail, a little of which should be poured upon the contents of the pail every time it is used.

When the first symptoms of Diarrhœa are observed medical advice should be obtained without delay. Diarrhœa is usually easily cured if treated at the outset, but when the disease is well established it becomes obstinate and dangerous to life, especially in children and aged persons.

By ORDER,

F. E. ADAMS, M.D.,

Town Hall, Bolton.

Medical Officer of Health.