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Contributors

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BOROUGH OF OLDHAM.

REPORT

ON THE

HEALTH OF OLDHAM,

FOR THE YEAR, 1894,

BY

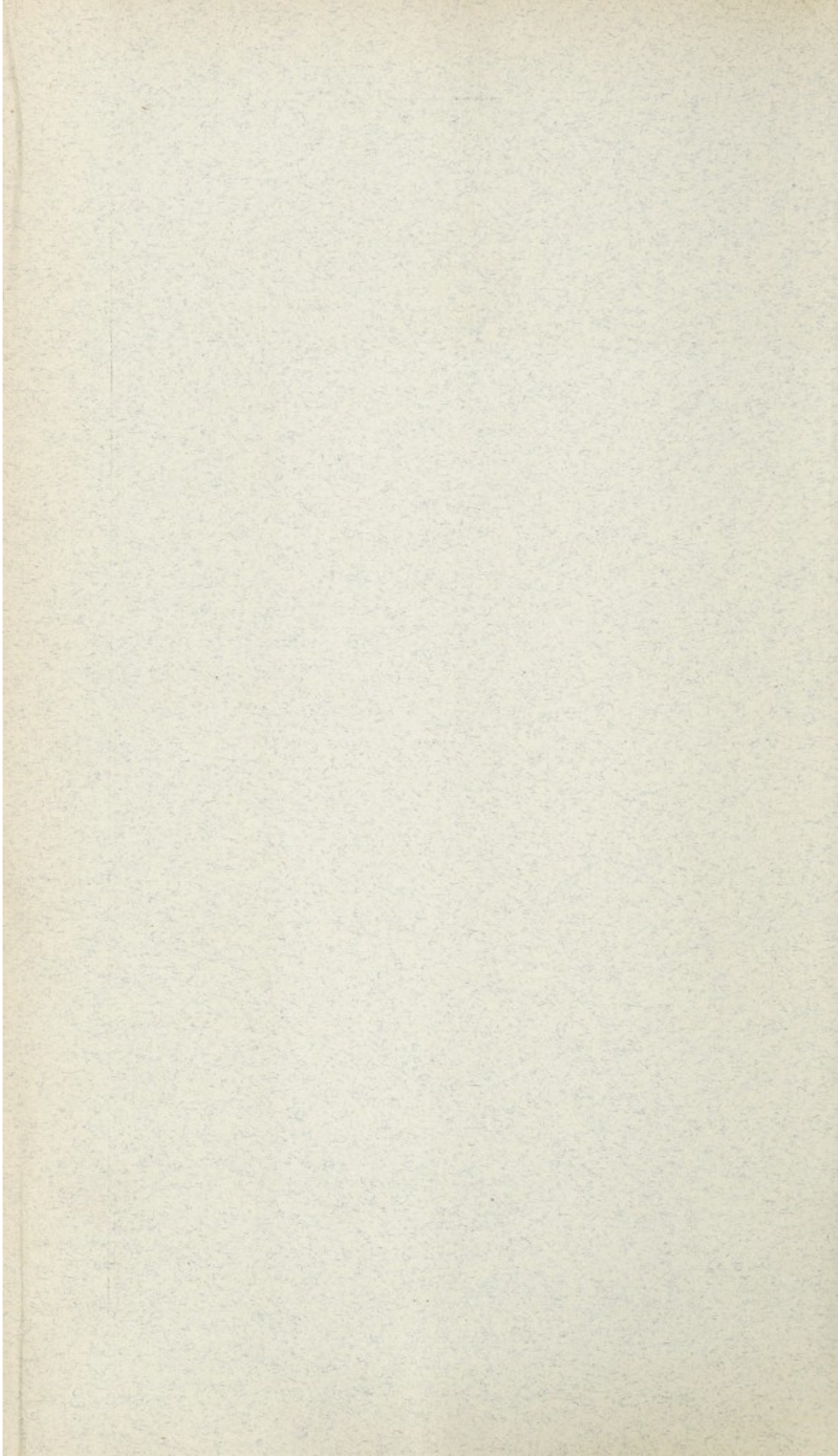
CHARLES H. TATTERSALL, M.R.C.S.,
L.R.C.P., Lond., L.S.Sc.,

*Medical Officer of Health for the Borough, and Medical Superintendent
to the Westhulme Fever Hospital.*

MANCHESTER :

HALL AND SON, PRINTING CONTRACTORS, 6, ST. MARY'S PARSONAGE.

1895.





*Town Hall,
Oldham.*

WITH THE
MEDICAL OFFICER OF HEALTH'S
COMPLIMENTS.



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1895.

MEMBERS OF THE SANITARY COMMITTEE.

1894.

MR. ALDERMAN JACKSON, CHAIRMAN.

„ „ HANSON, VICE-CHAIRMAN.

THE MAYOR.

MR. ALDERMAN BRIERLEY

„ COUNCILLOR ANDREW.

„ „ CHADWICK.

„ „ EMMOTT.


MR. COUNCILLOR HAWKINS.

„ „ HORROBIN.

„ „ SIMISTER.

„ „ WADDINGTON.

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BOROUGH OF OLDHAM.

TO THE

CHAIRMAN AND MEMBERS

OF THE

SANITARY COMMITTEE.

GENTLEMEN,

I have the honour to lay before you my first Annual Report on the Health of the Borough.

The death-rate for the year was 18·5 per thousand living, which is slightly in excess of that for the 33 large towns which was 18·1 per thousand.

This is the lowest death-rate ever recorded for the Borough.

With the exception of the Smallpox Epidemic, which ran into the middle of the year, there has been exceptionally little Infectious Disease.

During the year enquiries have been made, and a report issued on the Water Carriage System of removing excreta from the dwellings, and I sincerely trust that the Corporation will see its way to commence an

alteration, which promises to be of marked advantage to the Public Health, before very long.

I have also made enquiries into the Mortality Statistics in Back to Back houses in Oldham, the results of which are appended to this Report.

These once more demonstrate the unhealthiness of this class of dwelling, and while the Corporation are to be congratulated on having stopped the building of these dwellings in 1881, it is certainly worth consideration whether those already in existence should be allowed to remain unaltered.

I wish to take this opportunity of thanking you for the kind consideration which you have shown me while new to the town, and also to express my appreciation of the excellent manner in which the members of the staff both in the office and at the Hospitals have carried out their various duties. Especially would I thank the Inspectors for the energy and care displayed in making the enquiries respecting the Back to Back houses, a work which entailed some months of hard work in addition to their ordinary routine of duty.

I am, Gentlemen,

Your obedient Servant,

CHAS. H. TATTERSALL,

Medical Officer of Health.

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PART I.

VITAL STATISTICS.

POPULATION—The Registrar General's estimate of the population of the Borough in the middle of 1894, which is the basis upon which the various rates are calculated was 138,755. This estimate is made upon the assumption that the Borough continues to grow at the same rate, as in the decade 1881—1891 which is shown by the Census. This estimate is probably correct, and I have endeavoured to correctly apportion the estimated increase to the various Wards according to the relative amount of Building operations going on. St. Mary's getting the greatest share, and Coldhurst having last year's estimate reduced.

The estimated population in each Ward is as follows :

| | | | | |
|-------------|-----|-----|-----|--------|
| St. Mary's | ... | ... | ... | 11,020 |
| St. Peter's | ... | ... | ... | 12,537 |
| Werneth | ... | ... | ... | 12,626 |
| Westwood | ... | ... | ... | 12,240 |
| St. Paul's | ... | ... | ... | 10,835 |
| Coldhurst | .. | ... | ... | 11,130 |
| Hartford | ... | ... | ... | 13,130 |
| Hollinwood | ... | .. | ... | 8,221 |
| Clarksfield | ... | .. | ... | 12,931 |
| Mumps. | ... | ... | ... | 9,486 |
| St. James's | ... | ... | ... | 10,944 |
| Waterhead | ... | ... | ... | 13,655 |

The density of the population varies greatly in the different Wards, and is shown in detail in Table No. 1, ranging from 97 persons per acre in St. Mary's Ward to 10 persons per acre in St. James' Ward.

The natural increase of the population during the year, that is the excess of Births over Deaths, is 1,211, compared with 1,035 for last year, and a total of 3,868 since the Census.

Births—During the year 1894, 3,768 births have been registered in the Borough which is a decrease, 127 on the previous year, and 113 on the year 1892.

Of the total births 1894 were males, and 1874 females, equal to *Birth rate of 27.1* per thousand of the estimated population, against 28.5 the rate for the previous year and 30.1 mean rate for the preceding five years.

The rate for the great Towns of England and Wales for 1894 was 30.7 per thousand, which shows Oldham to have a Birth Rate 3.6 per thousand less than that for the whole country.

A glance at Table No. 6, which gives a summary of the Vital Statistics of the Borough from 1877 to the present time, shows how marked and continuous has been the decline in the Birth Rate. Thus in 1877 the Birth Rate was 40.2, and for the five years 1877 to 1881 it was 37.4, the rates in the two succeeding quinquennial periods being 36.2 and 32.1 respectively. This is the most marked feature of the statistics of the Borough, for although there has been a continuous fall in the Death Rate it is nothing like so marked as this fall in the Birth Rate. The effect of this low Birth Rate is, for the time, to somewhat lower the Death Rate, as it diminishes the proportion of young children in the population, a class which suffers from a high rate of mortality; in the course of years, if it be continued it will, however, cause some increase in the Death Rate, as there will be a steadily increasing proportion of old people, a class which also suffers from a high mortality rate.

If the Birth Rate had been maintained at 37·4 the average rate for the years 1877 to 1881 the deaths during the year would, in all probability, have been increased by 226, thus raising the Death Rate from 18·5 to 20·1 per thousand.

Deaths—The total deaths registered from all causes in the Borough during 1894 numbered 2557, made up of 1314 males and 1243 females. There were also 17 deaths (12 males and 5 females) registered in other districts but belonging to Oldham. Taking these numbers into consideration the total deaths during the year numbered 2,574, made up of 1,326 males, and 1,248 females, which gives a Death Rate of 18·5 per thousand of the population.

This is the actually lowest Death Rate recorded, as is shown on Table No. 6, the previously lowest death rate being 20·9 in 1893.

The weather of the year has certainly had a great effect in producing this low death rate, as it was not at any time very hot or very cold, very wet or very dry; in fact the year was remarkable for a relatively warm winter and cold summer. There has also been a marked absence of infectious disease. Influenza has to a great extent spared us, there have been no epidemics of Scarlet Fever, Measles, Whooping cough, or Diarrhœa, and Smallpox, which was so severe last year, died out gradually during the first six months of the year.

District Mortality Rates.—

The district mortality rates may be seen from Tables No. 4, etc., appended to this report. From all causes the death rates vary from 15·6 per thousand in Clarkfield Ward to 23·6 in Coldhurst Ward. For the past five years the lowest and highest death rates have been—

| | | | | | | |
|------|-----|------------|------|-------|------------|------|
| 1889 | ... | Werneth | 16·1 | ..... | St. Paul's | 24·2 |
| 1890 | ... | Werneth | 16·4 | ..... | Coldhurst | 28·2 |
| 1891 | ... | Clarkfield | 22·3 | ..... | Mumps | 31·7 |
| 1892 | ... | St. Paul's | 16·6 | ..... | St. Mary's | 30·9 |
| 1893 | ... | Westwood | 18·2 | ..... | St. Mary's | 26·4 |

In 1894 the highest death rate is recorded in Coldhurst Ward, 23·6 per 1,000, and the lowest in Clarkfield Ward, 15·6.

The highest Zymotic Rate was in Coldhurst Ward, where it reached 3·5 per 1,000 of the population, which is due to the excess of Diphtheria and Diarrhoea in this Ward. There has, however, been no localised epidemic of any kind to call for special enquiry or report.

Coldhurst Ward suffered the most severely from Phthisis, 32 deaths being registered from this cause, giving a rate of 2·9 per 1,000, while St. Mary's suffered most from Bronchitis, Pneumonia and Pleurisy, 57 deaths being registered. It is worth while noting that these two Wards show the greatest density of population ; St. Mary's having 97·5 persons per acre and Coldhurst 85·5 persons per acre.

St. Peter's Ward has suffered most severely from Infantile deaths, there having been 197 per 1,000 births, while St. James' has the very satisfactory rate of 96 per 1,000 births. The difference in this respect may be accidental for the year, and it will be interesting to note if the relation of Wards to each other in this respect are maintained. A probable cause for the low Infant mortality in St. James Ward is the amount of land unbuilt upon ; there being also plenty of open spaces even in that portion which is strictly part of the town. The density of the population in this Ward is only 10·8 persons per acre.

Deaths at various Ages.—The deaths and death rates per 1,000 living in each age period are shown in Table No. 2, from which it will be seen that mortality falls most heavily on the groups under 5 years (63 per 1,000 living), and over 65 (88 per 1,000 living) years, and most lightly on the groups 5 to 15 years (4·1 per 1,000 living) and 15 to 25 years of age (6·2 per 1,000 living). This is of course what may be generally expected, but at the same time it is impossible to avoid feeling what an immense waste of human life is constantly going on in the excessive mortality among young children.

Deaths of Different Sexes.—In the above-named Table No. 2, the deaths at various age groups are divided into sexes, which show that the total mortality of Males is 20 per 1,000 against 17·2 for Females, and that this excess is due to excess among Infants (72 per 1,000 males, 56 per 1,000 females), and in adult life (18·3 per 1,000 males and 12·4 per 1,000 females). Over 65 years male deaths show a decrease, the figures being 79 per 1,000 for males and 96 per 1,000 for females. Thus showing that though a male infant has a much less chance of reaching 65 years of age than a female child, still if that age be once reached, the male has the better prospect before him.

Infant Mortality.—The deaths of children under 1 year numbered 610, being at the rate of 162 deaths per 1,000 births. This is 24 per 1,000 less than last year, and 16 below the 5 years average for the years 1887-1891. In fact, there have only been 4 years since 1877 giving a lower rate, the lowest being 151 per 1,000 in 1888.

The Infant mortality is generally considered one of the most important indications of the sanitary condition of a town, and it is anything but satisfactory to note that the diminution has been so slight. In the quinquennial period, 1877-1881, the average deaths under 1 year per 1,000 births was 165, so that our progress may be represented by 3 deaths per 1,000 births, while taking the average of the past five years which is 179, it would appear that there has been actual retrogression in this direction.

With a view of elucidating the cause of this excessive mortality among Infants I have classified the deaths in the following table under ages and causes of death.

TABLE I.

DEATHS UNDER 1 YEAR FROM VARIOUS CAUSES.

| Ages. | Premature Birth. | Congenital Malformation. | Marasmus, Inanition, and Debility. | Diarrhoea. | Other Zymotics. | Convulsions. | Dentition. | Tubercular Diseases. | Pneumonia and Bronchitis. | Other Causes. | Totals. |
|--------------|------------------|--------------------------|------------------------------------|------------|-----------------|--------------|------------|----------------------|---------------------------|---------------|---------|
| Under 1 mon. | 54 | 13 | 29 | 1 | ... | 42 | ... | ... | 10 | 28 | 177 |
| 1-2 months | 5 | 1 | 17 | 1 | 1 | 14 | ... | 1 | 14 | 13 | 67 |
| 2-3 " | 1 | 2 | 8 | 1 | 3 | 10 | ... | 5 | 13 | 12 | 55 |
| 3-4 " | ... | ... | 5 | 1 | 5 | 2 | ... | 3 | 17 | 8 | 41 |
| 4-5 " | ... | ... | 4 | 1 | 3 | 7 | ... | 1 | 12 | 6 | 34 |
| 5-6 " | ... | 1 | 4 | 4 | 5 | 6 | ... | 1 | 15 | 6 | 42 |
| 6-7 " | ... | ... | 2 | ... | ... | 8 | ... | 4 | 12 | 7 | 33 |
| 7-8 " | ... | ... | ... | 1 | 9 | 4 | ... | 1 | 14 | 4 | 33 |
| 8-9 " | ... | ... | 2 | 5 | 1 | 7 | ... | 5 | 10 | 3 | 33 |
| 9-10 " | ... | ... | 1 | 1 | 6 | 3 | ... | 2 | 11 | 4 | 28 |
| 10-11 " | ... | ... | 1 | 3 | 9 | 3 | ... | 7 | 9 | 4 | 36 |
| 11-12 " | ... | ... | 3 | 3 | 6 | 3 | ... | 3 | 9 | 4 | 31 |
| Totals - - | 60 | 17 | 76 | 22 | 48 | 109 | ... | 33 | 146 | 99 | 610 |

Certain of these causes such as "premature birth" and "congenital malformations" are to a large extent unpreventable, and these form 12 per cent. of the whole. Marasmus, Convulsions, and Diarrhoea which are all more or less caused by improper feeding (see below), form 33 per cent. of the total, and the greatest portion of the remainder (23 per cent. of the whole), are due to Bronchitis and Pneumonia,

which may also be considered to be largely preventable. The frequency of acute lung diseases is probably due to the very common practice of taking the infants out to be nursed in the very early morning, in those cases where the mother goes out to work for the day, and the child still in its night clothes, is exposed to the raw air of the early morning.

With a view of ascertaining the effect of the out-door occupation of the mother, I have had the information tabulated below obtained for each death during the past six months. I hoped in the first instance to be able to compare the deaths of children whose mothers nurse them at home with those of children whose mothers go out to work. To do this, however, it is necessary to ascertain the number of married women at the child-bearing periods of life who go out to work, as well as the total number of married women in the town at those ages. The latter information is to be obtained from the Census returns, but the former seems impossible to get without taking a special Census of the town. Oldham being bounded on all sides by districts exactly similar in population and industry, a great number of people who work in the Oldham factories live outside the Borough, and on the contrary, a great number of Oldham people work in the factories in Chadderton, Failsworth, Royton and Lees. As it is impossible to complete with any accuracy the relative numbers thus employed any information obtained from the Oldham mills would be comparatively valueless.

The table shows that 19 % of the deaths inquired into were the children of cotton workers; 6 % were the children of women with other occupation; and 77 % were the children of women who nursed their children at home.

There is also shown that 56 % were fed from the breast, and 44 % by the bottle or artificial foods.

These figures are instructive, but the more complete information which I hope to be able to give you next year will be more valuable.

TABLE No. II.

Deaths Under One Year of Age.

| Nature of Diseases. | How Fed. | | | Cotton Workers. | Charwoman or Domestic Servant | Other Occupations | No. where child was nursed at home by mother. |
|--------------------------------------|----------|--------|-----------------|-----------------|-------------------------------|-------------------|---|
| | Breast | Bottle | Artificial food | | | | |
| Zymotic Diseases ... | 3 | 4 | ... | 4 | 1 | 2 | 15 |
| Diarrhœa ... | 4 | 5 | 2 | 5 | 1 | ... | 11 |
| Convulsions ... | 29 | 14 | 1 | 8 | 3 | 2 | 51 |
| Congenital Malformation ... | 1 | ... | 1 | ... | ... | ... | 2 |
| Inanition, Dibility, or Marasmus ... | 12 | 16 | ... | 8 | 5 | ... | 32 |
| Premature Birth ... | 12 | 4 | 1 | 8 | ... | ... | 28 |
| Tubercular Diseases | 8 | 4 | ... | 1 | 1 | ... | 20 |
| Bronchitis and Pneumonia ... | 41 | 29 | 1 | 18 | 2 | 4 | 66 |
| All other Diseases ... | 16 | 17 | ... | 9 | 1 | 1 | 35 |

Classification of Causes of Death—In Table No. 11 appended there will be found a detailed classification of the deaths into their various causes, and ages. These summarised show that there were were from—

| | | | | | | | | | | |
|-------------------|----------|-------|---------|----|----|-----|-------|----|-----|-------|
| Zymotic | Diseases | 675 | deaths, | or | 26 | per | cent. | of | the | total |
| Constitutional | „ | 117 | „ | „ | 5 | „ | „ | „ | „ | „ |
| Developmental | „ | 158 | „ | „ | 6 | „ | „ | „ | „ | „ |
| Local | „ | 1,352 | „ | „ | 52 | „ | „ | „ | „ | „ |
| Other | „ | 205 | „ | „ | 8 | „ | „ | „ | „ | „ |
| And from Violence | | 67 | „ | „ | 3 | „ | „ | „ | „ | „ |

Zymotic Diseases—From the seven principal Zymotic diseases (cholera, smallpox, scarlet fever, diphtheria, typhoid fever, measles, whooping cough, and diarrhœa) there were 267 deaths, giving a Zymotic death rate of 1·8 per thousand of the population. This is the lowest rate recorded since 1877, with the exception of 1883 when the Zymotic death rate was 1·5 per thousand.

The Zymotic death rate for the previous year was 2·5 per thousand, in 1892 it was 2·6, and the corrected average for the five years 1887 to 1891 was 2·9 per thousand of the population. In Table 6 the details will be found of the deaths from these diseases for the past 18 years.

Smallpox—The deaths from this disease were 22, whereas in the previous year they were 65, and in 1892 15 in number. There were 165 cases in all, which gives a death rate of 13·3 % of those attacked. Of these 165 cases 117 occurred in vaccinated persons, with eight deaths, giving a death rate of 6·8 %; and 48 occurred in unvaccinated persons, with 14 deaths, giving a death rate of 29·1 %.

Measles—Fifty six deaths were registered from this cause, against 29 in the previous year and 139 in 1892. The disease was mainly prevalent in the northern portion of the town, 28 out of the 56 deaths occurring in Coldhurst, Hartford, and Westwood Wards.

Scarlet Fever—This disease has not been very prevalent during the year. There were 264 cases reported with 21 deaths, or a death rate equal to 7.9 % of the persons attacked. In the previous year there were 16 deaths, and in 1892 42 deaths.

Whooping Cough—There were 58 deaths registered from this disease, against 56 in 1893, and 68 in 1892. Fifty four out of the 58 deaths occurred in children under five years of age.

Diphtheria—There were 39 deaths from this cause out of 67 cases reported, giving the excessively high case mortality of 56.7 %. As, however, there can be little doubt that many of the mild cases of this disease are never reported, the actual case mortality is probably much less. In 1893 there were 16 deaths, and in 1892 there were 18 deaths from this cause.

Typhoid Fever—There were 15 deaths registered from this cause out of 69 cases reported, which gives a case mortality of 21.7 %. In 1893 there were 26 deaths, and in 1892 there were 16 deaths from this cause.

Diarrhœa—The deaths from this cause were unusually low, there being 46 registered during the year, against 140 in 1893, and 56 in 1892. The probable reason for this satisfactory condition is the absence of any very hot weather, the 4 ft. earth thermometer never rising above 56 degrees Fahrenheit

Influenza—There were 29 deaths from this cause against 44 in 1893, and 41 in 1892, 157 in 1891, and 28 in 1890. The deaths were fairly evenly distributed throughout the various age-groups, old people however, suffering the most severely.

Phthisis—There were 269 deaths from this cause, being 10·4 % of the total deaths, and equal to a death rate of 1·9 per thousand of the population. The death rate is the same as in the previous year, and the same as the corrected average for the years 1887 to 1891. There are consequently no signs as yet of the improvement which may ultimately be expected in the mortality from this disease, by the diffusion of the knowledge of its infectious character throughout the population, and it is most important that there should be no relaxation of the efforts that have been made in the past to bring this home to the people at large.

There were 536 deaths from Acute Lung Diseases, against 624 for 1893, and 683 for 1892, which shows a satisfactory diminution; this is probably due to the favourable weather maintained throughout the year, and the absence of any great amount of Influenza, which has been such a large factor in increasing the deaths from Acute Lung Diseases.

From Bronchitis alone there were 276 deaths, giving a death rate of 2 per thousand of the population, which is the lowest recorded for the Borough, while from Pneumonia there were 255 deaths, giving a death rate of 1·8 per thousand of the population, against 2·3 for 1893, and 2·7 the corrected average for the years 1887 to 1891.

In Table No. 5, which is reproduced from the Registrar General's report for 1894, will be found a comparison of the death rates in Oldham with those in the rest of the 33 large towns.

The death rate from all causes in the 33 large towns was 18·1 per thousand against 18·5 in Oldham.

Of the 8 Lancashire towns Oldham stood second, viz. : Blackburn 17·9, Oldham 18·5, Burnley 18·7, Bolton 18·8, Manchester 20·4, Preston 20·8, Salford 21·0, and Liverpool 23·8.

From Zymotic Diseases the death rate in the 33 large towns was 2·44, against 1·84 in Oldham.

The Zymotic death rates in the other Lancashire towns were :—
Liverpool 3·41, Salford 3·25, Preston 2·61, Burnley 2·46, Manchester 2·38, Oldham 1·84, Bolton 1·82, Blackburn 1·60.

Among children under 1 year of age the death rate in the 33 large towns averaged 152 per 1,000 births against 161 per 1,000 births in Oldham.

The rates in the other Lancashire towns per 1,000 births were :—
Preston 217, Liverpool 179, Salford 174, Burnley 170, Blackburn 169, Bolton 162, Oldham 161, Manchester 160.

Inquests—There have been 166 inquests held during the year, particulars of which will be found in table No. 9 for which I am indebted to the courtesy of the Coroner. From this table it will be seen that there were 2 verdicts of murder ; 3 of manslaughter ; 50 of accidental death ; and 88 of death from natural causes.

In 1893 the total number of inquests was 175, and in 1892 it was 168.

METEOROLOGICAL REPORT.

The weather during the year was remarkable for the warm winter (primroses being in flower in December), and the comparatively cold summer. The rainfall has been decidedly less than in the two previous years, the figures being 52 inches of rain in 1892, 46·8 inches in 1893, and 38 inches in 1894; but there was no prolonged period of drought. The rainfall was lowest in the months of May and September, and highest in the months of February and June. A short summary of the most important facts of each month are as follows :—

January.—The mean pressure of the barometer for the month was 29·96 inches, and the mean temperature 36 degrees Fahrenheit. The minimum temperature recorded on the grass was 22 degrees, and the maximum in the sun was 48 degrees. The temperature recorded by the thermometer 4 feet below the surface, ranged from 40 to 42 degrees. Rain fell on 19 days, the total rainfall for the month amounting to 2·40 inches. Snow fell on several occasions.

February.—The mean barometric pressure was 30·04 inches, and the mean temperature 38·2 degrees. The minimum temperature recorded on the grass was 20 degrees, and the maximum in the sun 57 degrees. The temperature recorded by the thermometer 4 feet below the surface was 41 degrees.

Rain fell on 20 days, the total rainfall for the month amounting to 4·61 inches. Snow fell on 2 days.

March.—The mean barometric pressure for the month was 30·01 inches, and the mean temperature 42·7 degrees. The minimum temperature on the grass was 27 degrees, and the maximum in the sun 93 degrees. The temperature recorded by the thermometer 4 feet below the surface, ranged from 40 to 42 degrees.

Rain fell on 18 days, the total rainfall being 4·27 inches.

April.—The mean barometric pressure was 29.96 inches, and the mean temperature 42.5 degrees. The minimum temperature on the grass was 35 degrees, and the maximum temperature in the sun was 89 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 43 to 46 degrees.

Rain fell on 14 days, the total rainfall amounting to 2.05 inches.

There were several south or south-easterly gales.

May.—The mean barometric pressure was 30.13 inches, and the mean temperature 46.8 degrees. The minimum temperature recorded on the grass was 29 degrees, and the maximum in the sun 90 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 47 to 48 degrees.

Rain fell on 14 days, the total rainfall amounting to 1.99 inches.

Westerly winds prevailed generally, but there were two north-easterly gales.

June.—The mean barometric pressure was 29.75 inches, and the mean temperature 53.1 degrees. The minimum temperature recorded on the grass was 36 degrees, and the maximum in the sun 96 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 48 to 51 degrees.

Rain fell on 22 days, the total rainfall amounting to 4.44 inches. South-westerly winds prevailed.

July.—The mean barometric pressure was 29.98 inches, and the mean temperature 59 degrees. The minimum temperature recorded on the grass was 46 degrees, and the maximum in the sun 82 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 54 to 55 degrees.

Rain fell on 18 days, the total rainfall amounting to 2.91 inches. South-westerly winds prevailed with heavy winds from the north-east on two days.

August.—The mean barometric pressure was 29.95 inches, and the mean temperature was 56 degrees. The minimum temperature recorded on the grass was 45 degrees, and the maximum in the sun 75 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 55 to 56 degrees.

Rain fell on 20 days, the total rainfall amounting to 3.69 inches. West and south-west winds prevailed.

September.—The mean barometric pressure was 30.27 inches, and the mean temperature 52 degrees. The minimum temperature recorded on the grass was 40 degrees, and the maximum in the sun 70 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 55 to 53 degrees.

Rain fell on 9 days, and the total rainfall amounted to 1.09 inches.

Winds variable, mainly northerly and north easterly.

October.—The mean barometric pressure was 30.09 inches, and the mean temperature 47 degrees. The minimum temperature recorded on the grass was 35 degrees, and the maximum in the sun 64 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 52 to 49 degrees.

Rain fell on 11 days, and the total rainfall amounted to 3.93 inches.

November.—The mean barometric pressure was 29·86 inches, and the mean temperature 46 degrees. The minimum temperature recorded on the grass was 34 degrees, and the maximum in the sun 57 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 49 to 47 degrees.

Rain fell on 22 days, and the total rainfall amounted to 3·1 inches.

South and south-westerly winds prevailed.

December.—The mean barometric pressure was 30·15 inches, and the mean temperature 40 degrees. The minimum temperature on the grass was 28 degrees, and the maximum in the sun 49 degrees.

The temperature recorded by the thermometer 4 feet below the surface, ranged from 46 to 44 degrees.

Rain fell on 21 days, and the total rainfall amounted to 3·6 inches.

Some fog and light variable winds until December 22nd, when there was a very heavy westerly gale, which did a great amount of damage.

VITAL STATISTICS, 1894.

SUMMARY.

| | | |
|--|-------------|---------|
| Population estimated by the Registrar General to the middle the year 1894 | ... .. | 138,755 |
| Births registered in the 52 weeks ending December 29th, 1894 | ... .. | 3,768 |
| | Males ... | 1,906 |
| | Females ... | 1,862 |
| Deaths registered in the 52 weeks ending December 29th, 1894 | ... .. | 2,574 |
| | Males ... | 1,314 |
| | Females ... | 1,243 |
| Deaths registered outside the Municipal Borough of persons belonging thereto, | Males ... | 12 |
| | Females ... | 5 |
| Deaths from the Seven principal Zymotic Diseases | ... .. | 257 |
| Deaths under 1 per thousand births | ... .. | 162 |
| Annual Rate of Births per thousand living population | ... .. | 27.1 |

Annual Rate of Mortality from all causes per thousand
living population 18·5

Annual Rate of Mortality per thousand living population
from the Seven principal Zymotic Diseases 1·8

Of the 2,574 deaths registered [during the year 1894, 1,001, or
38·9 % were those of children under 5 years of age.

PRINCIPAL CAUSES OF DEATH.

| | | | | | | | | |
|---------------|-----|-----|-----|-----------------------|-----|-----|-----|----|
| Bronchitis | ... | ... | 276 | Debility | ... | ... | ... | 87 |
| Phthisis | ... | ... | 269 | Old Age | ... | ... | ... | 79 |
| Pneumonia | ... | ... | 255 | Cancer | .. | ... | ... | 73 |
| Heart Disease | ... | ... | 170 | Inflammation of Brain | ... | ... | ... | 70 |
| Apoplexy | ... | ... | 127 | Whooping Cough | ... | ... | ... | 58 |
| Convulsions | ... | ... | 124 | Measles | ... | ... | ... | 56 |

TABLE No. 1. Showing Population, Births, and Birth-Rates.

| Ward. | Population. | Area in Acres | Density (Persons to an Acre). | BIRTHS. | | | Birth Rate per 1,000 Population. | DEATHS | | | Death Rate per 1,000 Population. |
|-------------|-------------|---------------|-------------------------------|---------|---------|--------|----------------------------------|--------|---------|--------|----------------------------------|
| | | | | Males | Females | Total. | | Males | Females | Total. | |
| St. Mary's | 11,020 | 113 | 97.5 | 173 | 161 | 334 | 30.3 | 103 | 108 | 211 | 19.1 |
| St. Peter's | 12,537 | 271 | 46.3 | 131 | 143 | 274 | 21.8 | 109 | 112 | 221 | 17.6 |
| Werneth | 12,626 | 262 | 48.1 | 163 | 143 | 306 | 24.2 | 110 | 100 | 210 | 16.6 |
| Westwood | 12,240 | 280 | 43.7 | 200 | 188 | 388 | 31.7 | 121 | 103 | 224 | 18.3 |
| St. Paul's | 10,835 | 457 | 23.7 | 158 | 141 | 299 | 27.6 | 98 | 74 | 172 | 15.9 |
| Coldhurst | 11,130 | 130 | 85.5 | 150 | 141 | 291 | 26.1 | 131 | 132 | 263 | 23.6 |
| Hartford | 13,130 | 207 | 63.4 | 195 | 200 | 395 | 30.1 | 141 | 128 | 269 | 20.5 |
| Hollinwood | 8,221 | 420 | 19.6 | 145 | 135 | 280 | 34.0 | 73 | 62 | 135 | 16.4 |
| Clarksfield | 14,931 | 623 | 20.7 | 154 | 165 | 319 | 24.7 | 102 | 100 | 202 | 15.6 |
| Mumps | 9,486 | 125 | 75.9 | 103 | 113 | 216 | 22.8 | 100 | 92 | 192 | 20.2 |
| St. James' | 10,944 | 1,015 | 10.8 | 145 | 157 | 302 | 27.6 | 97 | 96 | 193 | 17.6 |
| Waterhead | 13,655 | 826 | 16.5 | 189 | 175 | 364 | 26.6 | 129 | 136 | 265 | 19.4 |
| Total | 138,755 | 4,729 | 29.3 | 1,906 | 1,862 | 3,768 | 27.1 | 1,314 | 1,243 | 2,557 | 18.5* |

*Including 17 deaths occurring in the Small-Pox Hospitals outside the town.

TABLE No. 2

Estimated Population, also Deaths at all Ages, and at 5 Groups of Ages

| Groups of Ages | PERSONS. | | | |
|-----------------------|--------------|-----------------|--------------|--|
| | Census, 1891 | Estimated, 1894 | Deaths, 1894 | Death rates per 1,000 living Population 1894 |
| All Ages ... | 131,463 | 138,755 | 2,574 | 18·5 |
| Under 5 Years ... | 15,466 | 15,686 | 1,001 | 63·8 |
| 5 to 15 ,, ... | 29,281 | 30,976 | 128 | 4·1 |
| 15 to 25 ,, ... | 26,406 | 27,995 | 175 | 6·2 |
| 25 to 65 ,, ... | 56,598 | 60,082 | 913 | 15·2 |
| 65 Years & upwards... | 3,712 | 4,016 | 357 | 88·8 |
| | MALES. | | | |
| All Ages ... | 62,862 | 66,250 | 1,326 | 20·0 |
| Under 5 Years ... | 7,507 | 7,546 | 543 | 72·0 |
| 5 to 15 ,, ... | 14,349 | 15,189 | 51 | 3·3 |
| 15 to 25 ,, ... | 12,551 | 13,341 | 78 | 5·8 |
| 25 to 65 ,, ... | 26,890 | 28,493 | 521 | 18·3 |
| 65 Years & upwards... | 1,565 | 1,681 | 133 | 79·1 |
| | FEMALES. | | | |
| All Ages ... | 68,601 | 72,505 | 1,248 | 17·2 |
| Under 5 Years ... | 7,959 | 8,140 | 458 | 56·3 |
| 5 to 15 ,, ... | 14,932 | 15,787 | 77 | 4·9 |
| 15 to 25 ,, ... | 13,855 | 14,654 | 97 | 6·6 |
| 25 to 65 ,, ... | 29,708 | 31,589 | 392 | 12·4 |
| 65 Years & upwards... | 2,147 | 2,335 | 224 | 95·9 |

TABLE No. 3.

Death Rates per 1,000 population in the various Wards,
from various Diseases,

1894.

| Ward. | All Causes | Seven Principal Zymotic Diseases. | Phthisis. | Bronchitis. | Pneumonia | Deaths under 1 year to 1000 births. |
|-------------|------------|-----------------------------------|-----------|-------------|-----------|-------------------------------------|
| St. Mary's | 19.1 | 1.8 | 1.4 | 3.0 | 2.1 | 171 |
| St. Peter's | 17.6 | 1.3 | 1.1 | 1.7 | 2.1 | 197 |
| Werneth | 16.6 | 1.3 | 1.5 | 1.9 | 1.6 | 150 |
| Westwood | 18.3 | 2.4 | 2.0 | 2.1 | 2.0 | 160 |
| St. Paul's | 15.9 | 0.8 | 1.7 | 1.7 | 2.0 | 164 |
| Coldhurst | 23.6 | 3.5 | 2.9 | 2.9 | 1.7 | 175 |
| Hartford | 20.5 | 1.8 | 2.6 | 2.4 | 1.3 | 187 |
| Hollinwood | 16.4 | 1.1 | 2.1 | 1.8 | 2.4 | 121 |
| Clarksfield | 15.6 | 1.6 | 1.2 | 1.4 | 1.4 | 157 |
| Mumps | 20.2 | 0.8 | 2.6 | 2.5 | 2.1 | 171 |
| St. James's | 17.6 | 1.5 | 2.5 | 1.2 | 2.0 | 96 |
| Waterhead | 19.4 | 2.2 | 2.0 | 1.5 | 1.7 | 170 |

Table of Deaths during the year 1894, in the Urban Sanitary District

| NAMES OF LOCALITIES. | Mortality from all Causes at subjoined Ages. | | | | | | | Mortality | | |
|---|--|---------------|----------------|-----------------|------------------|------------------|-----------------|-----------------------|-------------|------------|
| | At all Ages. | Under 1 year. | 1 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 65. | 65 and upwards. | Smallpox. | Scarlatina. | |
| St. Mary's | 211 | 57 | 27 | 6 | 7 | 89 | 25 | Under 5 5 upwards. | 2 1 | ... ... |
| St. Peter's | 221 | 54 | 31 | 16 | 11 | 62 | 47 | Under 5 5 upwards. | ... ... | ... 1 |
| Werneth | 210 | 46 | 29 | 13 | 11 | 72 | 39 | Under 5 5 upwards. | ... ... | ... .. |
| Westwood | 224 | 62 | 49 | 10 | 14 | 64 | 25 | Under 5 5 upwards. | ... ... | 2 1 |
| St. Paul's | 172 | 49 | 32 | 5 | 13 | 56 | 17 | Under 5 5 upwards. | ... ... | 3 ... |
| Coldhurst | 263 | 51 | 49 | 16 | 16 | 97 | 34 | Under 5 5 upwards. | ... 1 | 3 1 |
| Hartford | 269 | 74 | 31 | 7 | 16 | 110 | 31 | Under 5 5 upwards. | ... 1 | 1 ... |
| Hollinwood | 135 | 34 | 13 | 6 | 8 | 58 | 16 | Under 5 5 upwards. | ... ... | 1 ... |
| Clarksfield | 202 | 50 | 37 | 6 | 22 | 60 | 27 | Under 5 5 upwards. | ... ... | 1 2 |
| Mumps | 192 | 37 | 18 | 9 | 16 | 87 | 25 | Under 5 5 upwards. | ... ... | ... 1 |
| St. James's | 193 | 29 | 26 | 17 | 21 | 66 | 34 | Under 5 5 upwards. | ... ... | 1 2 |
| Waterhead | 265 | 62 | 46 | 16 | 18 | 86 | 37 | Under 5 5 upwards. | ... ... | ... 1 |
| Total Deaths (deaths in Institutions within the borough are distributed over the Wards. | 2,557 | 605 | 388 | 127 | 173 | 907 | 357 | Under 5 5 upwards. | 2 3 | 12 9 |
| Westhulme Hospital... | 7 | ... | 1 | 2 | 3 | 1 | ... | Under 5 5 upwards. | 1 2 | ... 1 |
| Union Workhouse | 271 | 9 | 3 | ... | 17 | 160 | 82 | Under 5 5 upwards. | ... ... | ... ... |
| Infirmery | 52 | 1 | 6 | 4 | 6 | 31 | 4 | Under 5 5 upwards. | ... ... | ... ... |
| The subjoined numbers have also to be taken into | | | | | | | | | | |
| Deaths occurring outside the district among persons belonging thereto. | 17 | 5 | 3 | 1 | 2 | 6 | ... | Under 5 5 upwards. | 8 9 | ... ... |
| The subjoined numbers have been taken into | | | | | | | | | | |
| Deaths occurring within the district among persons not belonging thereto | 87 | 2 | 2 | 2 | 8 | 43 | 30 | Under 5 5 upwards. | ... ... | ... ... |
| Area and Population of the District | | | | | | | | | | |
| Area in Acres: 4,729. Population Census (1891), 131,463. | | | | | | | | | | |

o. 4.

of Oldham, classified according to Diseases, Ages, and Localities.

from subjoined causes, distinguishing deaths of Children under five years of age.

| Diphtheria. | Membranous Group. | Fevers. | | | Erysipelas. | Measles. | Whooping Cough. | Diarrhoea and Dysentery. | Rheumatic Fever. | Phthisis. | Bronchitis, Pneumonia, and Pleurisy. | Heart Disease. | Injuries. | All other Diseases | Total. |
|-------------|-------------------|---------------------|------------|------------|-------------|----------|-----------------|--------------------------|------------------|-----------|--------------------------------------|----------------|-----------|--------------------|--------|
| | | Enteric or Typhoid. | Continued. | Puerperal. | | | | | | | | | | | |
| 3 | 3 | ... | ... | ... | ... | 1 | 3 | 3 | ... | 3 | 19 | ... | 1 | 46 | 84 |
| 1 | ... | 1 | ... | ... | 1 | ... | 2 | 3 | 1 | 12 | 38 | 14 | 4 | 49 | 127 |
| 1 | 4 | ... | ... | ... | ... | 4 | 3 | 2 | 1 | ... | 23 | ... | 1 | 46 | 85 |
| 2 | ... | ... | ... | ... | ... | ... | 2 | 2 | 3 | 14 | 25 | 3 | 6 | 78 | 136 |
| 3 | 3 | ... | ... | ... | ... | 4 | 5 | 1 | ... | ... | 19 | ... | ... | 40 | 75 |
| ... | 1 | ... | ... | 1 | ... | 1 | ... | 3 | 2 | 19 | 26 | 16 | ... | 66 | 135 |
| 5 | 3 | ... | ... | ... | ... | 9 | 6 | 1 | 1 | 1 | 31 | ... | 1 | 51 | 111 |
| 1 | 1 | 2 | ... | ... | ... | ... | ... | 2 | 2 | 23 | 20 | 14 | 2 | 45 | 113 |
| ... | 1 | ... | ... | ... | 1 | 2 | 1 | 2 | ... | 1 | 24 | ... | 2 | 44 | 81 |
| ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 18 | 17 | 11 | 2 | 42 | 91 |
| 4 | 4 | ... | ... | ... | ... | 6 | 6 | 8 | ... | ... | 23 | 1 | ... | 45 | 100 |
| 4 | 1 | 3 | ... | 1 | 1 | 2 | ... | 1 | 2 | 32 | 29 | 9 | 4 | 72 | 163 |
| ... | 1 | ... | ... | ... | ... | 11 | 3 | 4 | ... | ... | 24 | ... | 3 | 58 | 105 |
| 2 | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | 34 | 24 | 16 | 12 | 72 | 164 |
| ... | 1 | ... | ... | ... | ... | 2 | 1 | 4 | ... | 2 | 12 | ... | ... | 24 | 47 |
| ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | 15 | 23 | 9 | 6 | 33 | 88 |
| 1 | 5 | ... | ... | ... | ... | 4 | 8 | 2 | 1 | 1 | 19 | 1 | 3 | 41 | 87 |
| ... | 1 | 3 | ... | 4 | 1 | ... | ... | ... | 5 | 15 | 17 | 17 | 4 | 46 | 115 |
| 1 | ... | ... | ... | ... | ... | 2 | 1 | ... | ... | 2 | 12 | ... | ... | 37 | 55 |
| ... | ... | 2 | ... | ... | ... | ... | ... | 1 | 2 | 23 | 33 | 15 | 6 | 54 | 137 |
| 1 | 3 | ... | ... | ... | ... | 4 | 5 | ... | ... | ... | 13 | 1 | 1 | 26 | 55 |
| 2 | 1 | 1 | ... | 1 | ... | ... | ... | 1 | 2 | 27 | 22 | 20 | 3 | 56 | 138 |
| 5 | 3 | ... | ... | ... | 1 | 4 | 12 | 2 | ... | 1 | 22 | 1 | 3 | 54 | 108 |
| 3 | 2 | 2 | ... | 7 | ... | ... | ... | 1 | 1 | 26 | 21 | 22 | 3 | 68 | 157 |
| 4 | 31 | ... | ... | ... | 2 | 53 | 54 | 29 | 3 | 11 | 241 | 4 | 15 | 512 | 993 |
| 5 | 7 | 15 | ... | 14 | 4 | 3 | 4 | 17 | 21 | 258 | 295 | 166 | 52 | 681 | 1564 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| ... | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 10 | 12 |
| ... | ... | ... | ... | ... | ... | ... | ... | 7 | 2 | 51 | 48 | 25 | 2 | 124 | 259 |
| ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 4 | 2 | 7 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 3 | 15 | 23 | 45 |

count in judging of the above records of mortality.

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 |

count in judging of the above records of mortality.

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 4 |
| ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 10 | 16 | 6 | 5 | 44 | 83 | |

Division to which this Return relates.

th Rates : General, 18.5 per 1,000 population. Infant, 162 per 1,000 births.

TABLE No 5.

33 TOWNS, BIRTH and DEATH-RATES, and ANALYSIS of MORTALITY, in the 52 Weeks of 1894.

In this Table 0·00 indicates that the deaths were too few to give a rate of 0·005 : when *no death* occurred — is inserted.

| CITIES AND BOROUGHES. | ANNUAL RATES PER 1,000 PERSONS LIVING. | | | | | | | | | | | Percentage to Total Deaths. | | | | | | | | |
|--|--|-----------------|-----------------|-----------------|-----------------------------|------------|----------|----------------|-------------|-----------------|--------|--|-----------|----------------|--------------------------------|------------------------------|------------------------------------|-------------------------|---------------------------|-----|
| | Total Deaths. | | | | Deaths from | | | | | | | Annual Rate of Mortality per 1000 living | | Inquest Cases. | Deaths in Public Institutions. | Uncertified Causes of Death. | | | | |
| | 52 or 53 Weeks ending | | | | Principal Zymotic Diseases. | Small Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping-cough. | Fever. | Diarhoea. | Violence. | | | | Deaths under 1 year to 1000 Births | Aged 1 year to 60 Years | Aged 60 Years and upwards | |
| Births in 52 Weeks ending 29th Dec. 1894 | 2nd. Jan. 1892. | 31st Dec. 1892. | 30th Dec. 1893. | 29th Dec. 1894. | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| Cols. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 33 Towns | 30·7 | 22·2 | 20·7 | 21·6 | 18·1 | 2·44 | 0·04 | 0·63 | 0·21 | 0·38 | 0·48 | 0·19 | 0·51 | 0·68 | 152 | 10·5 | 64·6 | 7·3 | 20·6 | 1·7 |
| London | 30·1 | 21·4 | 20·6 | 21·3 | 17·8 | 2·66 | 0·02 | 0·76 | 0·22 | 0·61 | 0·48 | 0·15 | 0·42 | 0·73 | 143 | 10·4 | 61·9 | 8·6 | 28·7 | 0·8 |
| West Ham | 34·0 | 17·8 | 18·6 | 18·9 | 16·2 | 3·19 | 0·21 | 0·96 | 0·15 | 0·80 | 0·43 | 0·19 | 0·45 | 0·51 | 138 | 9·4 | 61·9 | 4·5 | 10·8 | 4·2 |
| Croydon | 25·0 | 14·5 | 15·8 | 16·3 | 13·2 | 1·54 | — | 0·36 | 0·07 | 0·29 | 0·56 | 0·06 | 0·20 | 0·28 | 121 | 6·7 | 57·5 | 6·9 | 14·1 | — |
| Brighton | 25·8 | 18·2 | 19·2 | 18·4 | 16·4 | 1·21 | — | 0·30 | 0·03 | 0·22 | 0·12 | 0·09 | 0·45 | 0·46 | 138 | 8·7 | 59·2 | 5·1 | 18·6 | 1·4 |
| Portsmouth | 27·6 | 19·0 | 18·5 | 18·2 | 15·2 | 1·95 | 0·02 | 0·81 | 0·09 | 0·19 | 0·24 | 0·16 | 0·44 | 0·48 | 131 | 8·2 | 56·1 | 6·2 | 14·9 | 0·8 |
| Plymouth | 28·8 | 22·5 | 18·8 | 21·2 | 18·3 | 1·59 | 0·06 | 0·03 | 0·09 | 0·06 | 0·89 | 0·13 | 0·33 | 0·51 | 169 | 9·1 | 58·9 | 6·5 | 9·1 | 1·2 |
| Bristol | 28·2 | 20·9 | 19·5 | 18·9 | 17·3 | 2·04 | 0·07 | 0·50 | 0·07 | 0·21 | 0·78 | 0·10 | 0·31 | 0·55 | 150 | 9·1 | 66·5 | 7·1 | 19·9 | 1·3 |
| Cardiff | 34·4 | 22·1 | 18·8 | 19·7 | 16·2 | 1·94 | 0·01 | 0·07 | 0·05 | 0·46 | 0·83 | 0·05 | 0·47 | 0·81 | 141 | 9·4 | 59·1 | 9·0 | 10·9 | 1·2 |
| Swansea | 32·3 | 22·0 | 20·4 | 19·6 | 17·0 | 1·77 | — | 0·27 | 0·24 | 0·11 | 0·81 | 0·13 | 0·21 | 0·39 | 163 | 9·1 | 65·3 | 5·6 | 5·6 | 1·1 |
| Wolverhampton | 34·1 | 24·2 | 21·5 | 23·3 | 20·7 | 3·23 | 0·06 | 0·85 | 0·63 | 0·41 | 0·33 | 0·20 | 0·75 | 0·61 | 166 | 11·5 | 69·1 | 6·8 | 17·3 | 0·7 |
| Birmingham ... | 31·7 | 22·2 | 20·4 | 22·0 | 18·6 | 2·50 | 0·35 | 0·67 | 0·15 | 0·15 | 0·44 | 0·22 | 0·52 | 0·70 | 163 | 10·6 | 66·0 | 2·9 | 19·2 | 5·1 |
| Norwich | 29·8 | 19·3 | 20·0 | 19·3 | 18·7 | 1·51 | — | 0·21 | 0·14 | 0·17 | 0·86 | 0·22 | 0·41 | 0·38 | 164 | 8·8 | 67·1 | 6·8 | 12·0 | 1·7 |

| | | | | | | | | | | | | | | | | | | | | |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|------------|-------------|------------|
| Nottingham ... | 28.6 | 19.9 | 18.7 | 18.5 | 17.2 | 2.33 | 0.01 | 0.60 | 0.23 | 0.08 | 0.53 | 0.28 | 0.60 | 0.56 | 174 | 9.1 | 59.8 | 6.0 | 14.2 | 1.3 |
| Derby | 29.3 | 19.1 | 18.3 | 18.2 | 15.0 | 1.62 | — | 0.65 | 0.15 | 0.05 | 0.16 | 0.26 | 0.35 | 0.70 | 123 | 8.1 | 70.4 | 10.1 | 13.0 | 0.7 |
| Birkenhead..... | 30.6 | 20.9 | 19.6 | 20.5 | 18.1 | 2.64 | 0.01 | 0.87 | 0.11 | 0.39 | 0.64 | 0.16 | 0.46 | 0.48 | 143 | 10.6 | 72.0 | 7.6 | 11.9 | 0.5 |
| Liverpool..... | 35.4 | 27.0 | 24.7 | 27.3 | 23.8 | 3.41 | 0.04 | 0.59 | 0.45 | 0.19 | 0.55 | 0.59 | 1.00 | 1.26 | 179 | 15.1 | 68.7 | 7.4 | 22.0 | 3.5 |
| Bolton | 31.5 | 21.9 | 22.8 | 24.1 | 18.8 | 1.82 | — | 0.18 | 0.08 | 0.08 | 0.50 | 0.22 | 0.76 | 0.58 | 162 | 10.9 | 72.7 | 7.0 | 9.3 | 0.9 |
| Manchester..... | 32.0 | 26.5 | 23.8 | 24.9 | 20.4 | 2.38 | 0.04 | 0.43 | 0.22 | 0.28 | 0.55 | 0.19 | 0.67 | 0.84 | 160 | 12.4 | 77.3 | 8.0 | 22.3 | 1.3 |
| Salford..... | 34.3 | 26.0 | 24.6 | 24.1 | 21.0 | 3.25 | 0.01 | 0.71 | 0.55 | 0.31 | 0.68 | 0.31 | 0.68 | 0.74 | 174 | 12.5 | 74.0 | 6.0 | 16.6 | 2.8 |
| OLDHAM | 27.2 | 25.7 | 22.0 | 21.0 | 18.5 | 1.84 | 0.17 | 0.40 | 0.15 | 0.28 | 0.41 | 0.11 | 0.32 | 0.50 | 161 | 11.5 | 70.6 | 6.4 | 10.3 | 0.8 |
| Burnley | 32.2 | 21.6 | 20.4 | 21.9 | 18.7 | 2.46 | — | 0.37 | 0.53 | 0.30 | 0.18 | 0.28 | 0.80 | 0.60 | 170 | 10.9 | 69.2 | 5.0 | 7.4 | 1.8 |
| Blackburn | 28.8 | 25.8 | 21.7 | 23.3 | 17.9 | 1.60 | — | 0.10 | 0.07 | 0.14 | 0.33 | 0.26 | 0.70 | 0.57 | 169 | 10.0 | 74.8 | 4.8 | 9.0 | 3.6 |
| Preston | 32.1 | 27.3 | 24.1 | 26.4 | 20.8 | 2.61 | 0.01 | 0.33 | 0.11 | 0.07 | 0.41 | 0.26 | 1.42 | 0.50 | 217 | 10.3 | 76.3 | 2.9 | 7.7 | 4.8 |
| Huddersfield ... | 29.2 | 23.0 | 18.1 | 17.2 | 15.8 | 1.45 | — | 0.13 | 0.23 | 0.22 | 0.55 | 0.12 | 0.20 | 0.40 | 160 | 9.3 | 65.7 | 3.3 | 8.2 | 3.4 |
| Halifax | 23.1 | 22.8 | 19.5 | 17.4 | 16.5 | 0.87 | 0.04 | 0.36 | 0.03 | 0.13 | 0.21 | 0.06 | 0.04 | 0.45 | 135 | 9.3 | 73.0 | 4.9 | 11.1 | 4.9 |
| Bradford ... | 26.7 | 22.2 | 18.0 | 21.0 | 17.0 | 1.76 | 0.12 | 0.51 | 0.32 | 0.08 | 0.30 | 0.13 | 0.30 | 0.54 | 145 | 9.9 | 71.3 | 6.7 | 13.1 | 0.9 |
| Leeds | 32.2 | 22.9 | 19.8 | 22.3 | 17.9 | 2.00 | 0.01 | 0.75 | 0.13 | 0.19 | 0.34 | 0.13 | 0.45 | 0.62 | 155 | 10.0 | 68.2 | 8.7 | 11.0 | 1.0 |
| Sheffield | 33.4 | 23.9 | 20.8 | 22.3 | 17.8 | 2.27 | — | 0.49 | 0.12 | 0.20 | 0.71 | 0.19 | 0.56 | 0.53 | 157 | 9.9 | 65.5 | 5.2 | 13.0 | 3.6 |
| Hull | 32.4 | 21.0 | 19.6 | 21.8 | 17.4 | 1.76 | 0.01 | 0.43 | 0.18 | 0.14 | 0.38 | 0.19 | 0.43 | 0.74 | 142 | 9.7 | 65.9 | 6.0 | 14.3 | 4.2 |
| Sunderland..... | 35.1 | 25.0 | 20.9 | 22.5 | 20.8 | 3.06 | — | 0.85 | 0.18 | 0.07 | 0.52 | 0.60 | 0.84 | 0.66 | 167 | 12.2 | 66.0 | 7.7 | 11.1 | 1.0 |
| Gateshead | 34.2 | 23.1 | 18.9 | 19.3 | 17.7 | 2.35 | 0.01 | 1.00 | 0.06 | 0.23 | 0.33 | 0.25 | 0.47 | 0.47 | 152 | 9.9 | 65.9 | 6.8 | 5.9 | 0.9 |
| Newcastle | 31.0 | 23.8 | 19.7 | 21.0 | 18.3 | 2.16 | — | 0.48 | 0.14 | 0.16 | 0.76 | 0.13 | 0.49 | 0.71 | 157 | 10.7 | 68.9 | 8.4 | 15.2 | 1.0 |

TABLE No. 6.

Showing the Birth-rates, also Rates of Mortality from all causes, from the Seven principal Zymotic Diseases, and from Phthisis, Bronchitis, and Pneumonia, during the years 1877-1894.

| Years. | Population. | RATES PER 1,000 POPULATION FROM | | | | | | Deaths under 1 year to 1000 births |
|-----------------------|-------------|---------------------------------|-------------------|------------------------------|------------|-------------|------------|------------------------------------|
| | | Births | Deaths all causes | 7 princ'p'l Zymotic Diseases | Phthisis | Bronchitis. | Pneumonia. | |
| 1877 | 99,557 | 40.2 | 24.9 | 3.0 | 2.2 | 3.3 | 1.6 | 162 |
| 1878 | 102,573 | 39.8 | 26.9 | 5.7 | 2.3 | 3.5 | 1.5 | 175 |
| 1879 | 105,679 | 36.2 | 22.7 | 2.8 | 2.1 | 3.4 | 1.8 | 157 |
| 1880 | 108,880 | 35.4 | 24.6 | 4.3 | 2.3 | 3.3 | 1.7 | 181 |
| 1881 | 112,176 | 35.3 | 22.7 | 2.3 | 2.3 | 3.4 | 2.0 | 152 |
| Average 5 y'rs | | 37.4 | 24.3 | 3.6 | 2.2 | 3.4 | 1.7 | 165 |
| 1882 | 114,017 | 35.3 | 24.9 | 2.8 | 2.3 | 3.4 | 2.1 | 182 |
| 1883 | 115,888 | 36.0 | 22.5 | 1.5 | 2.3 | 2.9 | 1.8 | 159 |
| 1884 | 117,791 | 37.4 | 25.9 | 3.7 | 2.6 | 2.8 | 2.3 | 182 |
| 1885 | 119,724 | 37.5 | 23.2 | 2.1 | 2.4 | 2.7 | 2.2 | 167 |
| 1886 | 121,690 | 34.7 | 24.2 | 3.0 | 2.3 | 3.1 | 1.9 | 175 |
| Average 5 y'rs | | 36.2 | 24.1 | 2.6 | 2.4 | 3.0 | 2.0 | 173 |
| 1887 | 123,687 | 33.8 | 25.8 | 4.5 | 2.0 | 3.2 | 2.1 | 187 |
| 1888 | 125,717 | 33.3 | 22.3 | 2.2 | 1.9 | 2.6 | 2.6 | 151 |
| 1889 | 127,781 | 31.5 | 22.7 | 3.3 | 1.9 | 2.8 | 2.6 | 178 |
| 1890 | 129,878 | 31.0 | 24.4 | 2.5 | 2.0 | 3.4 | 3.1 | 180 |
| 1891 | 132,010 | 30.8 | 25.6 | 2.3 | 1.9 | 3.7 | 3.3 | 193 |
| Average 5 y'rs | | 32.1 | 24.2 | 2.9 | 1.9 | 3.1 | 2.7 | 178 |
| 1892 | 134,221 | 28.9 | 21.9 | 2.6 | 2.1 | 2.7 | 2.3 | 177 |
| 1893 | 136,469 | 28.5 | 20.96 | 2.5 | 1.9 | 2.2 | 2.3 | 186 |
| 1894 | 138,755 | 27.1 | 18.5 | 1.8 | 1.9 | 2.0 | 1.8 | 162 |

TABLE No. 7.

Showing the number of deaths from the Seven Principal Zymotic Diseases in the Borough of Oldham, during the years 1877-1894.

| Year. | Population. | Smallpox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever Typhus & Typhoid. | Diarrhoea. | Total Deaths. |
|-------|-------------|-----------|----------|-------------------|-------------|--------------------|----------------------------|------------|------------------|
| 1877 | 99,557 | 19 | 11 | 58 | 11 | 111 | 28 | 58 | 296 |
| 1878 | 102,573 | 1 | 114 | 240 | 26 | 77 | 36 | 93 | 587 |
| 1879 | 105,679 | ... | 9 | 136 | 19 | 60 | 25 | 46 | 295 |
| 1880 | 108,880 | .. | 96 | 131 | 9 | 70 | 28 | 142 | 476 |
| 1881 | 112,176 | 9 | 7 | 87 | 10 | 36 | 39 | 69 | 257 |
| 1882 | 114,017 | 4 | 69 | 58 | 10 | 77 | 26 | 74 | 318 |
| 1883 | 115,888 | 2 | 6 | 21 | 9 | 38 | 26 | 76 | 178 |
| 1884 | 117,791 | ... | 193 | 33 | 7 | 36 | 22 | 149 | 440 |
| 1885 | 119,724 | ... | 54 | 20 | 14 | 104 | 18 | 46 | 256 |
| 1886 | 121,690 | ... | 89 | 32 | 29 | 57 | 30 | 134 | 371 |
| 1887 | 123,687 | ... | 176 | 103 | 62 | 100 | 25 | 89 | 555 |
| 1888 | 125,717 | 13 | 53 | 66 | 36 | 40 | 24 | 43 | 275 |
| 1889 | 127,781 | ... | 126 | 54 | 16 | 127 | 20 | 78 | 421 |
| 1890 | 129,878 | ... | 95 | 25 | 6 | 82 | 15 | 96 | 319 |
| 1891 | 132,010 | ... | 97 | 25 | 18 | 71 | 27 | 68 | 306 |
| 1892 | 134,221 | 15 | 139 | 42 | 18 | 68 | 16 | 56 | 354 |
| 1893 | 136,469 | 65 | 29 | 16 | 16 | 56 | 26 | 140 | 348 |
| 1894 | 138,755 | 22 | 56 | 21 | 39 | 58 | 15 | 46 | 257 |

TABLE No. 8.
Weekly Means of Meteorological Observations for the year 1894.

| DATE. | Barometer reduced to Sea Level at 37.0. | Thermometer. | | HYGROMETER. | | TEMPERATURES. | | | | | | | Distance travelled by the Wind in 24 hours. | Pressure of Wind in lbs. per square foot. | Rainfall 12th. above ground. | Number of days on which rain fell. | Clouds covered = 10. clear = 0. | |
|------------|---|-------------------|-------------------|----------------------------|----------------------------|----------------------------|-------------------|----------------------|---------------------|---------------------------------|-----|------|---|---|------------------------------|------------------------------------|---------------------------------|--|
| | | Maximum in Shade. | Minimum in Shade. | Maximum in Sun Black Bulb. | Minimum in Sun Black Bulb. | Maximum in Sun Black Bulb. | Minimum on Grass. | Temperature | | Temperature 4ft. below Surface. | | | | | | | | |
| | | | | | | | | 12th. below Surface. | 4ft. below Surface. | | | | | | | | | |
| 1894 | | | | | | | | | | | | | | | | | | |
| January 6 | 30.39 | 30 | 29 | 31 | 25 | 38 | 51 | 22 | 35 | 42 | 130 | .14 | ... | 2 | 9 | | | |
| 13 | 29.89 | 39 | 38 | 41 | 31 | 44 | 52 | 24 | 33 | 40 | 184 | .28 | .42 | 4 | 8 | | | |
| 20 | 29.77 | 42 | 42 | 46 | 39 | 48 | 54 | 34 | 38 | 40 | 131 | .14 | 1.19 | 7 | 10 | | | |
| 27 | 29.81 | 38 | 37 | 43 | 33 | 45 | 52 | 27 | 36 | 41 | 129 | .14 | .79 | 6 | 7 | | | |
| February 3 | 29.82 | 37 | 36 | 44 | 33 | 47 | 53 | 27 | 35 | 41 | 198 | .33 | 1.24 | 6 | 8 | | | |
| 10 | 30.06 | 44 | 42 | 48 | 38 | 50 | 57 | 33 | 38 | 41 | 136 | .16 | 1.01 | 5 | 9 | | | |
| 17 | 29.98 | 38 | 38 | 44 | 34 | 47 | 56 | 29 | 37 | 41 | 183 | .28 | 1.76 | 7 | 10 | | | |
| 24 | 30.32 | 33 | 32 | 39 | 26 | 43 | 52 | 20 | 33 | 41 | 86 | .06 | .60 | 2 | 7 | | | |
| 3 | 29.88 | 41 | 40 | 46 | 35 | 49 | 64 | 29 | 35 | 40 | 208 | .36 | 1.50 | 6 | 8 | | | |
| 10 | 29.78 | 40 | 40 | 45 | 34 | 49 | 61 | 29 | 36 | 40 | * | ... | 1.65 | 6 | 9 | | | |
| 17 | 29.68 | 38 | 37 | 45 | 34 | 52 | 72 | 27 | 37 | 40 | * | ... | .84 | 4 | 8 | | | |
| 24 | 30.46 | 45 | 43 | 52 | 36 | 56 | 70 | 28 | 37 | 41 | 68 | .04 | .03 | 1 | 5 | | | |
| 31 | 30.21 | 54 | 46 | 62 | 38 | 69 | 93 | * | 40 | 42 | 129 | .14 | .25 | 1 | 3 | | | |
| April 7 | 30.11 | 52 | 47 | 58 | 41 | 66 | 84 | 37 | 43 | 43 | 175 | .26 | .51 | 3 | 4 | | | |
| 14 | 30.00 | 53 | 48 | 58 | 43 | 65 | 83 | 39 | 45 | 44 | * | ... | .35 | 2 | 7 | | | |
| 21 | 29.91 | 50 | 49 | 55 | 40 | 62 | 83 | 38 | 46 | 45 | * | ... | .61 | 4 | 6 | | | |
| 28 | 29.85 | 50 | 48 | 55 | 40 | 63 | 89 | 35 | 46 | 46 | 166 | .23 | .58 | 5 | 7 | | | |
| 5 | 30.11 | 49 | 43 | 52 | 41 | 60 | 80 | 37 | 46 | 47 | 182 | .29 | .51 | 4 | 8 | | | |
| 12 | 29.93 | 49 | 45 | 53 | 42 | 62 | 84 | 40 | 46 | 47 | 165 | .23 | 1.12 | 7 | 9 | | | |
| 19 | 30.20 | 53 | 46 | 56 | 43 | 63 | 87 | 40 | 48 | 47 | 341 | 1.00 | .36 | 3 | 6 | | | |
| 26 | 30.30 | 49 | 41 | 53 | 35 | 64 | 90 | 29 | 47 | 48 | 152 | .19 | ... | ... | 8 | | | |

| | | | | | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-----|-----|-------|-----|----|
| 9 | 30-01 | 54 | 53 | 50 | 57 | 47 | 63 | 81 | 45 | 49 | 49 | 143 | .17 | 1.97 | 5 | 9 |
| 16 | 30-05 | 55 | 54 | 51 | 58 | 47 | 64 | 83 | 44 | 49 | 49 | 127 | .13 | .93 | 4 | 8 |
| 23 | 30-11 | 57 | 57 | 52 | 61 | 45 | 68 | 85 | 43 | 53 | 50 | 86 | .06 | .32 | 4 | 9 |
| 30 | 30-38 | 64 | 64 | 57 | 69 | 53 | 63 | 96 | 51 | 56 | 51 | 164 | .23 | .15 | 3 | 4 |
| 7 | 30-27 | 67 | 65 | 58 | 74 | 55 | 82 | 107 | 52 | 59 | 54 | 161 | .22 | .12 | 2 | 5 |
| 14 | 29-71 | 59 | 58 | 54 | 65 | 49 | 74 | 99 | 46 | 58 | 55 | 124 | .13 | .33 | 5 | 8 |
| 21 | 29-89 | 56 | 56 | 54 | 61 | 51 | 70 | 87 | 47 | 56 | 55 | 161 | .22 | 1.91 | 7 | 9 |
| 28 | 30-06 | 63 | 61 | 56 | 67 | 53 | 76 | 101 | 50 | 57 | 55 | 168 | .24 | .55 | 4 | 6 |
| 4 | 29-93 | 61 | 61 | 57 | 67 | 54 | 75 | 90 | 57 | 59 | 56 | 164 | .23 | 1.47 | 4 | 9 |
| 11 | 29-89 | 58 | 57 | 54 | 63 | 51 | 71 | 91 | 48 | 56 | 56 | 151 | .19 | .81 | 6 | 8 |
| 18 | 30-01 | 55 | 55 | 53 | 59 | 51 | 69 | 84 | 49 | 56 | 55 | 205 | .36 | .69 | 6 | 10 |
| 25 | 30-00 | 56 | 54 | 51 | 59 | 48 | 67 | 83 | 45 | 54 | 55 | 165 | .23 | .72 | 4 | 8 |
| 1 | 30-28 | 58 | 57 | 54 | 61 | 52 | 70 | 86 | 50 | 55 | 55 | 135 | .15 | .55 | 2 | 10 |
| 8 | 30-21 | 54 | 53 | 48 | 57 | 45 | 69 | 84 | 41 | 53 | 55 | 137 | .16 | .08 | 3 | 7 |
| 15 | 30-46 | 54 | 54 | 50 | 60 | 46 | 69 | 87 | 40 | 52 | 54 | 109 | .09 | ... | ... | 8 |
| 22 | 30-28 | 54 | 53 | 50 | 57 | 49 | 64 | 73 | 46 | 52 | 53 | 158 | .22 | .34 | 2 | 8 |
| 29 | 30-15 | 54 | 52 | 48 | 57 | 44 | 67 | 83 | 41 | 51 | 53 | 171 | .25 | .12 | 2 | 6 |
| 6 | 30-42 | 52 | 51 | 48 | 55 | 42 | 64 | 78 | 36 | 47 | 52 | 63 | .03 | ... | ... | 5 |
| 13 | 30-30 | 54 | 53 | 52 | 57 | 49 | 61 | 70 | 46 | 50 | 51 | 41 | .01 | .41 | 4 | 10 |
| 20 | 30-06 | 44 | 43 | 40 | 49 | 39 | 54 | 66 | 35 | 46 | 51 | 114 | .11 | .02 | 2 | 7 |
| 27 | 29-60 | 46 | 46 | 44 | 52 | 38 | 57 | 73 | 37 | 44 | 49 | 261 | .58 | 3.50 | 5 | 9 |
| 3 | 29-77 | 50 | 50 | 48 | 53 | 45 | 57 | 65 | 41 | 45 | 49 | 184 | .29 | 1.01 | 7 | 9 |
| 10 | 29-83 | 48 | 48 | 46 | 52 | 43 | 55 | 67 | 40 | 46 | 49 | 148 | .18 | .69 | 6 | 9 |
| 17 | 29-51 | 43 | 43 | 41 | 48 | 38 | 50 | 61 | 34 | 42 | 48 | 110 | .10 | 1.25 | 6 | 8 |
| 24 | 30-36 | 45 | 45 | 44 | 49 | 41 | 52 | 57 | 36 | 42 | 47 | 95 | .07 | .15 | 3 | 9 |
| 1 | 30-51 | 40 | 40 | 39 | 45 | 36 | 47 | 50 | 33 | 40 | 46 | 82 | .06 | .05 | 3 | 9 |
| 8 | 30-14 | 36 | 37 | 36 | 41 | 32 | 45 | 48 | 28 | 37 | 45 | 125 | .13 | .29 | 1 | 10 |
| 15 | 30-08 | 45 | 44 | 43 | 47 | 41 | 49 | 51 | 39 | 40 | 44 | 146 | .18 | .65 | 5 | 8 |
| 22 | 29-81 | 41 | 41 | 39 | 45 | 35 | 48 | 53 | 32 | 39 | 44 | 267 | .60 | 2.10 | 6 | 9 |
| 29 | 30-24 | 41 | 41 | 41 | 46 | 34 | 48 | 50 | 33 | 39 | 44 | * | ... | .51 | 6 | 8 |
| Mean | 30-02 | 48.83 | 48.35 | 45.42 | 53.29 | 41.42 | 59.11 | 73.94 | 38.1 | 45.54 | 47.58 | 150 | .19 | 38.08 | 208 | 8 |

* Instruments being repaired.

TABLE No. 9.

Return of Inquests held in Oldham, touching the cause of death of any person, for the year ended 31st December, 1894.

| INQUESTS. | Males. | Females. |
|---|-------------|--------------|
| Infants (Legitimate), under 1 year | 22 | 13 |
| Do 1 year and under 7 years..... | 9 | 14 |
| Infants (Illegitimate or Unknown), under 1 year | ... | 2 |
| Do. 1 year and under 7 years | ... | ... |
| Children, above 7 years and under 16 | 1 | 3 |
| Youths, 16 years and under 25..... | 8 | 2 |
| Adults, 25 years and under 60 | 43 | 19 |
| Aged, 60 years and above | 16 | 14 |
| Total..... | 99 | 67 |
| VERDICTS. | Males. | Females. |
| Murder | ... | 2 |
| Manslaughter | 2 | 1 |
| Suicide, while Insane..... | 11 | 4 |
| Accidental Death | 32 | 18 |
| Suffocated whilst in Bed with their parents | 3 | ... |
| Found Drowned | 1 | ... |
| Found Dead..... | ... | ... |
| Excessive Drinking..... | 1 | ... |
| From Want, Cold, Exposure, &c | 1 | ... |
| Disease aggravated by neglect by others..... | 1 | 1 |
| Natural Causes | 47 | 41 |
| Total Costs | £292 | 13 11 |

TABLE 10.

Prices of Coal, Bread, Flour, Butchers' Meat, and Potatoes, and the number of Paupers relieved in Oldham, 1885—94.

| | Coal per Ton. | Bread per doz. lbs. | Flour per load. | Meat per lb. | Potatoes per load. | Weekly No. of Indoor Poor. |
|------|------------------|------------------------|--------------------|-----------------|-----------------------|-------------------------------|
| | s. d. | d. | s. d. | d. | s. d. | |
| 1885 | 7 9 | 11 $\frac{1}{4}$ | ... | 5 | 6 5 | 890 |
| 1886 | 8 0 | 11 $\frac{1}{4}$ | ... | 5 $\frac{1}{4}$ | 7 4 | 931 |
| 1887 | 7 6 | ... | 24 6 | 4 $\frac{1}{2}$ | 8 10 | 910 |
| 1888 | 7 6 | ... | 25 3 | 5 | 6 4 | 936 |
| 1889 | 8 4 | ... | 26 10 | 5 | 7 6 | 946 |
| 1890 | 10 10 | ... | 26 10 | 4 $\frac{7}{8}$ | 6 11 | 921 |
| 1891 | 10 7 | ... | 29 2 | 4 $\frac{7}{8}$ | 10 2 | 901 |
| 1892 | 9 7 | ... | 26 3 | 4 $\frac{5}{8}$ | 7 4 | 937 |
| 1893 | 11 7 | ... | 21 6 | 4 $\frac{1}{2}$ | 6 6 | 1,011 |
| 1894 | 9 4 | .. | 18 4 | 4 $\frac{1}{4}$ | 6 6 | 1,075 |

TABLE 11—Continued.

| CAUSE OF DEATH. | AGES. | | | | | | | | | | | Total | |
|---|--------|--------|-------------------|---------|----------|----------|----------|----------|----------|----------|----------|-------|----------|
| | 0 to 1 | 1 to 5 | Total under 5 yrs | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 60 | 60 to 65 | 65 to 75 | | 75 to 85 | 85 and upwards |
| <i>Zoogenous Diseases.</i> | | | | | | | | | | | | | |
| Cowpox and effects of Vaccination | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other Diseases, Hydrophobia, Glanders, Splenic Fever | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| <i>Venereal Diseases</i> | | | | | | | | | | | | | |
| Syphilis | 15 | ... | 15 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | 17 |
| Gonorrhœa, Stricture of Urethra | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| <i>Septic Diseases.</i> | | | | | | | | | | | | | |
| Erysipelas | 2 | ... | 2 | ... | 1 | ... | ... | ... | 1 | ... | 1 | 1 | 6 |
| Pyæmia, Septicæmia | ... | ... | ... | 1 | 1 | 2 | ... | 1 | 1 | ... | ... | ... | 6 |
| Puerperal Fever | ... | ... | ... | ... | 5 | 6 | 3 | ... | ... | ... | ... | ... | 14 |
| CLASS II. PARASITIC DISEASES. | | | | | | | | | | | | | |
| Thrush, and Other Vegetable Parasitic Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Worms. Hydatids, and other Animal Parasitic Diseases | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| CLASS III. DIETETIC DISEASES | | | | | | | | | | | | | |
| Want of Breast Milk, Starvation | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Scurvy | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Chronic Alcoholism | ... | ... | ... | ... | ... | 1 | 2 | 3 | ... | ... | 1 | ... | 7 |
| Delirium Tremens | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| CLASS IV. CONSTITUTIONAL DISEASES. | | | | | | | | | | | | | |
| Rheumatic Fever, Rheumatism of the Heart | 1 | 2 | 3 | 4 | 5 | 4 | 5 | 2 | 1 | ... | ... | ... | 24 |
| Rheumatism | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | 3 |
| Gout | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 |
| Rickets | 1 | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Cancer, Malignant Disease | ... | 1 | 1 | ... | 2 | 6 | 12 | 15 | 12 | 7 | 15 | 2 | 73 |
| Purpura, Hæmorrhagic Diathesis | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Anæmia, Chlorosis, Leucocythæmia | 2 | ... | 2 | ... | 1 | 1 | 1 | 1 | ... | ... | ... | ... | 6 |
| Glycosuria, Diabetes Mellitus | ... | ... | ... | ... | ... | ... | ... | 3 | 2 | 1 | ... | ... | 6 |
| Other Constitutional Diseases | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| CLASS V. DEVELOPMENTAL DISEASES. | | | | | | | | | | | | | |
| Premature Birth | 63 | ... | 63 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 63 |
| Atelectasis | 7 | ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Congenital Malformations | 9 | ... | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 |
| Old Age | ... | ... | ... | ... | ... | ... | ... | 2 | 2 | 5 | 33 | 32 | 79 |
| CLASS VI. LOCAL DISEASES. | | | | | | | | | | | | | |
| <i>Diseases of Nervous System.</i> | | | | | | | | | | | | | |
| Inflammation of Brain or Membranes | 19 | 13 | 32 | 18 | 6 | 4 | 4 | 2 | 1 | 1 | 2 | ... | 70 |
| Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis | 1 | ... | 1 | 1 | 3 | 4 | 9 | 16 | 19 | 17 | 46 | 11 | 127 |

TABLE 11—Continued.

| CAUSE OF DEATH. | AGES. | | | | | | | | | | | Total | | |
|--|--------|--------|-------------------|---------|----------|----------|----------|----------|----------|----------|----------|-------|----------|----------------|
| | 0 to 1 | 1 to 5 | Total under 5 yrs | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 60 | 60 to 65 | 65 to 75 | | 75 to 85 | 85 and upwards |
| CLASS VIII. DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES. | | | | | | | | | | | | | | |
| Dropsy | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | 2 | 1 | ... | 5 |
| Debility, Atrophy, Inanition ... | 80 | 7 | 87 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 87 |
| Mortification | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 3 | 2 | ... | 6 |
| Tumour | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | 2 |
| Abscess | 1 | ... | 1 | ... | ... | ... | ... | 1 | 1 | ... | 1 | ... | ... | 4 |
| Hæmorrhage | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Sudden Death (cause not ascertained)..... | 1 | 1 | 2 | ... | ... | ... | ... | 1 | ... | 1 | 1 | ... | ... | 5 |
| Causes not Specified or Ill-defined... | 30 | 9 | 39 | 2 | 4 | 2 | 8 | 12 | 8 | 3 | 7 | 2 | ... | 87 |

PART II.

INFECTIOUS DISEASES.

The total number of cases of Infectious Disease notified during the year was 574, as against 962 in 1893, 861 in 1892, 383 in 1891, and 403 in 1890.

These were made up of 165 cases of Smallpox, 264 cases of Scarlet Fever, 67 cases of Diphtheria, 69 cases of Typhoid Fever, and 9 cases of Puerperal Fever.

This shows an increase on the previous year of 42 cases of Diphtheria and a decrease of 251 cases of Smallpox, 178 cases of Scarlet Fever, and 1 case of Typhoid Fever.

Smallpox.—The epidemic which commenced in January 1892 came to an end in July, 1894. The weekly incidence of cases and deaths is shown in the accompanying chart, from which it will be seen that from the beginning of the year the epidemic was steadily declining, with the exception of a sudden increase in the second week in February, which fortunately proved to be only temporary. All the reported cases except 3 were removed to Hospital, and of these 3 cases 1 was too ill to allow of removal, and died in a few hours; and in the other 2 cases every precaution was taken to prevent the Disease spreading, with satisfactory results.

I had no personal knowledge of the cases prior to the 3rd week in March, but at a meeting of the Committee, held on March 1st, Dr. Niven reported a case of Smallpox which had not been notified at the time of its outbreak, and traced no less than 13 cases to it, 10 of which were traced without a doubt, and the remaining 3 were, in his opinion, in all probability so traceable. The mother of the child whose case was unreported attended before the Committee, and was severely reprimanded by the chairman for not reporting the case. The woman stated that both she and her neighbours thought the case was one of measles.

I had a similar experience and traced 8 cases to 1 which had been overlooked. In this instance the overlooked case occurred in a well vaccinated young man who was under treatment for Epilepsy, taking large doses of Bromide of Potassium. He had suffered from Acne from this cause for some time, and mistook the Smallpox eruption for a return of it, especially as he had not felt ill, and in fact was only kept in the house one day.

Of the later cases several were traced to sources outside the town, but fortunately they did not give rise to any further outbreak.

In the following table I have analysed the cases according as they were vaccinated or unvaccinated, and into various age groups.

TABLE IV.

SMALLPOX—1894.

| Ages. | BOROUGH. | | | VACCINATED. | | | UNVACCINATED. | | |
|---------------|----------|---------|--------------|-------------|---------|--------------|---------------|---------|--------------|
| | Cases. | Deaths. | | Cases. | Deaths. | | Cases. | Deaths. | |
| | | Total. | Per Centage. | | Total. | Per Centage. | | Total. | Per Centage. |
| Under 5 years | 24 | 10 | 41·6 | 3 | 1 | 33·3 | 21 | 9 | 42·8 |
| 5 to 10 | 16 | 2 | 12·5 | 6 | 1 | 16·6 | 10 | 1 | 10·0 |
| 10 to 15 | 18 | 1 | 5·5 | 11 | ... | ... | 7 | 1 | 14·2 |
| 15 to 25 | 45 | 2 | 4·4 | 41 | 1 | 2·4 | 4 | 1 | 25·0 |
| 25 to 35 | 33 | 3 | 9·0 | 28 | 2 | 7·1 | 5 | 1 | 20·0 |
| 35 to 45 | 19 | 3 | 15·8 | 19 | 3 | 15·8 | ... | ... | ... |
| 45 to 55 | 9 | 1 | 11·1 | 8 | ... | ... | 1 | 1 | 100·0 |
| Over 55 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... |
| Total ... | 165 | 22 | 13·3 | 117 | 8 | 6·8 | 48 | 14 | 29·1 |

All vaccinated cases, whether well vaccinated or not, are classed together. There were no cases among the Staff of the Hospital or the Health Department, and no cases among successfully re-vaccinated persons.

From the above table it will be noticed that among the vaccinated the great bulk of the cases were in persons from 15 to 45 years of age, and among the unvaccinated under 10 years of age.

Also the mortality which was 13·3 per cent. on the whole cases fell most heavily upon the unvaccinated, in which class there were 14 deaths out of 48 cases, or 29·1 per cent., as against 8 deaths out of 117 cases, or 6·8 per cent.

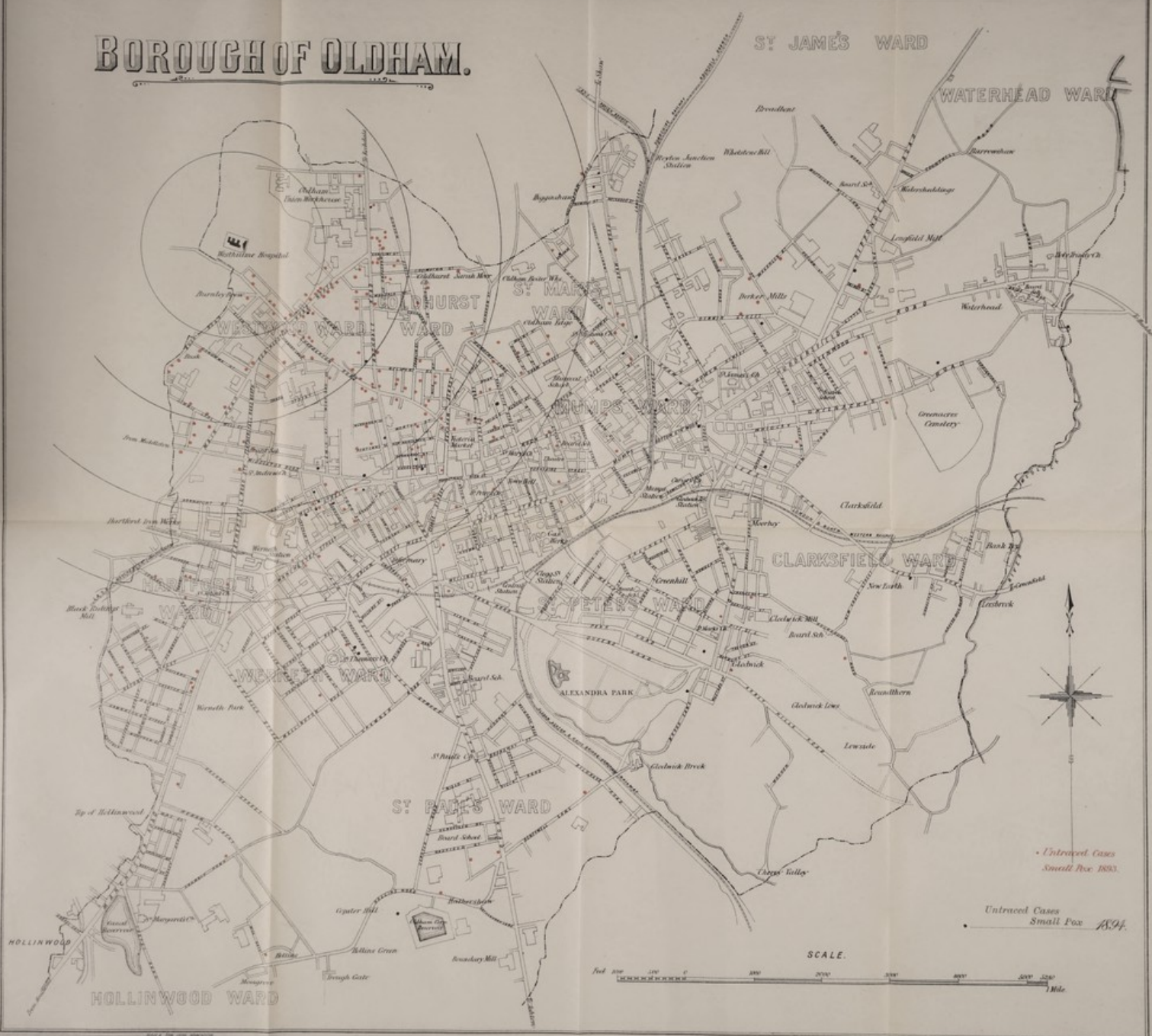
These facts only confirm what has been universally observed elsewhere, and point once more to the need of infant vaccination, and re-vaccination of young adults, although standing alone the figures would be too small in number to justify generalisation.

The most remarkable fact to my mind is the comparatively few cases among unvaccinated children, when the fact is taken into consideration that for the past 5 or 6 years there has been practically no infant vaccination performed, but I attribute this to the promptitude with which isolation was carried out, and also to the general readiness I have found to have children actually exposed to the infection vaccinated at once.

Influence of the Westhulme Hospital.—At the end of 1893 the Committee made arrangements for removing all acute cases to the newly opened Cinder Hill Hospital, belonging to the Chadderton Local Board, and situated a couple of miles out of the town, and also opened a new Hospital of their own at the other end of the town by taking over the Moscow Farm Hospital from the Quickmere Local Board.

Consequently from the 1st of January, 1894, all acute cases were removed quite away, so that infection from the Hospital should be an impossibility. As soon as the cases became convalescent, and able to be moved, they were brought back to the Westhulme Hospital, which still contained Smallpox patients, until the end of June; but only convalescent ones.

BOROUGH OF OLDHAM.



BOROUGH

1891

HOLLINGWOOD

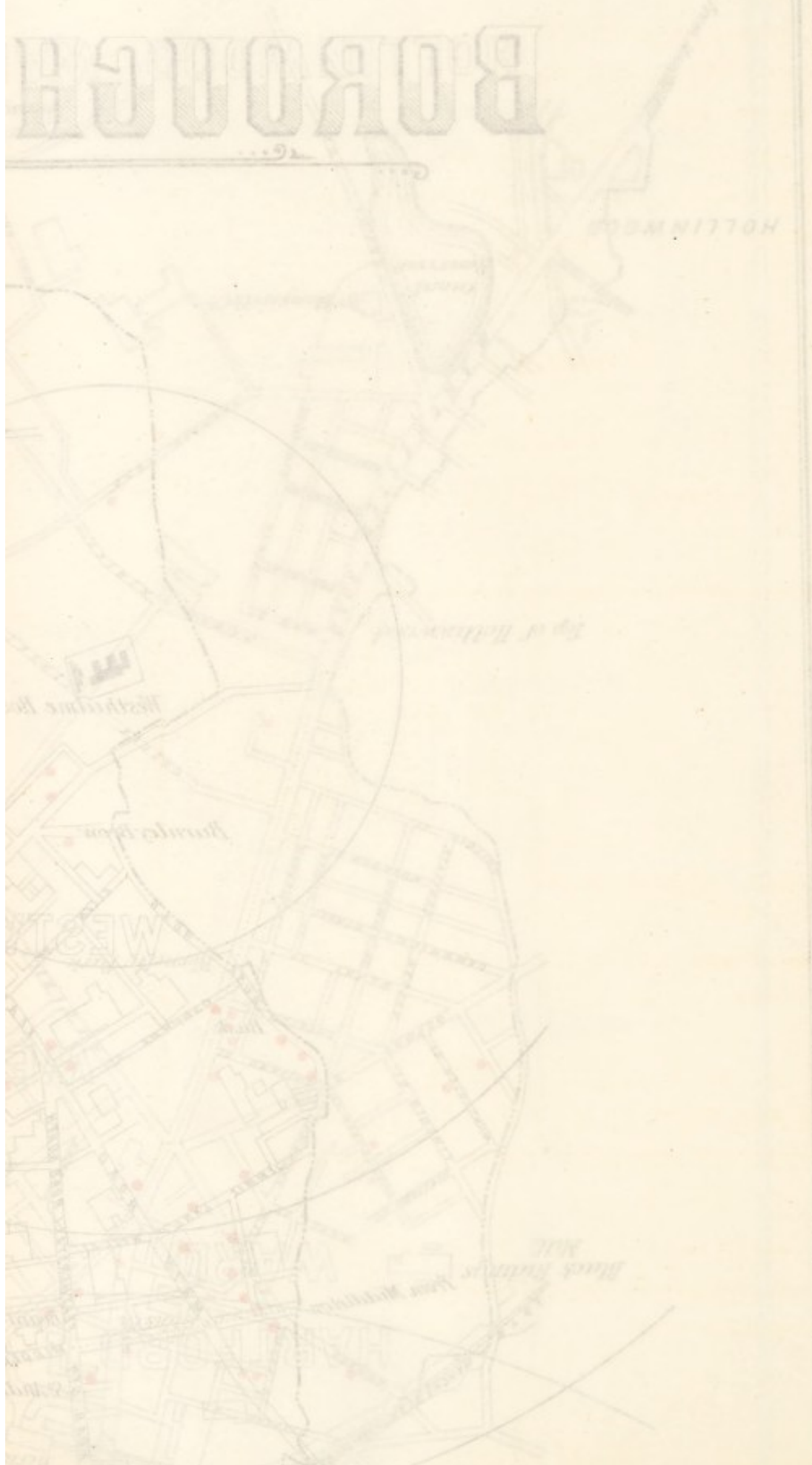
Top of Hollingwood

Historical Map

Hollingwood

WEST

Black Hollingwood
New Hollingwood



In the accompanying spot map I have shown the position of each untraced case in the year 1893, when the Smallpox cases were treated entirely at the Westhulme Hospital; and in the year 1894, when the acute cases were all removed out of the town, although convalescent cases continued to be treated at the Westhulme Hospital. In the following table the results are tabulated.

TABLE V.

UNTRACED CASES OF SMALLPOX,
In relation to Westhulme Hospital.

| | Total Number of Houses in 1888. | 1893 | | 1894 | |
|--|---------------------------------|-----------------------------------|---------------------------------|-----------------------------------|---------------------------------|
| | | Number of untraced Cases in 1893. | Per Centage of Houses affected. | Number of untraced Cases in 1894. | Per Centage of Houses affected. |
| Within $\frac{1}{4}$ mile radius of Westhulme Hospital | 170 | 10 | 5.8 | 0 | 0.00 |
| Zone $\frac{1}{4}$ to $\frac{1}{2}$ mile..... | 1,660 | 62 | 3.7 | 3 | 0.18 |
| „ $\frac{1}{2}$ „ $\frac{3}{4}$ „ | 2,450 | 40 | 1.6 | 4 | 0.16 |
| „ $\frac{3}{4}$ „ 1 „ | 5,000 | 46 | 0.9 | 10 | 0.20 |
| Outside 1 mile radius..... | 20,250 | 49 | 0.2 | 19 | 0.09 |

From this table it is at once seen that whereas in 1893 the percentage of houses attacked decreases with their distance from the Hospital, no such relation holds in 1894.

This action of the Committee has been proved to be a most wise one and has greatly assisted in stamping out the Epidemic, and I trust that when the next cases of Smallpox arise, which ~~will~~^{time}, owing to our increasingly unvaccinated condition cannot be far distant, arrangements may have been made which will do away with the necessity of treating any Smallpox cases within the town.

Scarlet Fever—There were 264 cases of Scarlet Fever notified during the year, and among these 21 deaths occurred, giving a death-rate of 7.9 per cent.

This is a marked decrease on the two previous years, when the number of cases notified was, respectively, 667 and 442.

The cases were spread fairly equally throughout the year, the greatest number being notified in February, March, and April. At no time did anything approaching a severe epidemic threaten, and taken as a whole the attacks were of a mild character.

With regard to age, it is seen from the accompanying table that the great bulk of the cases occurred among children under 10 years of age, and the greatest proportion among those, from 5 to 10 years old.

Of the various districts, Clarksfield Ward suffered most, with 50 notified cases, and Hartford Ward the least with 8 notified cases.

Owing to Westhulme Hospital having Small-pox cases in, it was not thought advisable to remove any cases of other diseases to that institution until it had been thoroughly disinfected, cleansed, and redecorated, so that until the middle of October no Scarlet Fever patients were admitted. From that date 20 out of the 39 cases reported (or 50 per cent.) were removed to the Hospital, and a diminution of the number of cases seems to have followed.

TABLE VI.
SCARLET FEVER.

| | Cases. | Deaths. | |
|----------------|--------|---------|-------------|
| | | Total | Percentage. |
| Under 5 Years. | 84 | 11 | 13·1 |
| to 10 | 122 | 7 | 5·7 |
| 10 „ 15 | 34 | 2 | 5·9 |
| 15 „ 25 | 15 | 1 | 6·7 |
| 25 „ 35 | 7 | ... | ... |
| 35 „ 45 | 2 | ... | ... |
| 45 „ 55 | ... | ... | ... |
| Over 55 | ... | ... | ... |
| Total ... | 264 | 21 | 7·9 |

Diphtheria.—There were 67 cases reported during the year, of which 38 died, giving the extremely high death rate of 53 per cent. of those attacked.

In 1893 there were 25 cases with 16 deaths, and in 1892, 27 cases with 18 deaths so that the percentage of deaths to attacks is rather less than in these periods, although there is an increase in the number of cases.

TABLE VII.—DIPHTHERIA.

| Ages. | Cases. | Deaths. | |
|---------------|--------|---------|-------------|
| | | Total. | Percentage. |
| Under 5 years | 26 | 19 | 73·1 |
| 5 to 10 | 31 | 17 | 54·8 |
| 10 „ 15 | 4 | 1 | 25·0 |
| 15 „ 25 | 2 | 1 | 50·0 |
| 25 „ 35 | 3 | ... | ... |
| 35 „ 45 | ... | ... | ... |
| 45 „ 55 | 1 | ... | ... |
| Over 55 | ... | ... | ... |
| Total | 67 | 38 | 56·7 |

In the following table particulars are given of the cases in the various schools. From this it will be seen that the only case in which there would appear to be any school influence at work is that of the North Moor Board School, from which there were 9 cases reported during the year. In the autumn I wrote the School Board drawing their attention to the excessive amount of Diphtheria occurring in the School, and also bringing to their notice the arrangement of the closets around the Infant School, from which section almost all the cases were drawn.

The School is a new building admirably adapted for its purpose, and except for the arrangement of the closets practically free from

sanitary defects. Unfortunately, there are 3 stacks of pail closets in close proximity to the Infant School, and the children have to pass near two of them in entering or leaving the School. I found when I inspected the premises that the pails had only been emptied once a fortnight.

I met a Sub-Committee of the Board, and went over the premises with them, and at the time they agreed to the suggestion that these pail closets should be replaced by trough closets, flushed automatically at least twice a day. I regret, however, that they have since decided not to go on with the alterations, and the condition remains as before.

No cases of Diphtheria were admitted to the Isolation Hospitals, although should the disease threaten to become epidemic, arrangements could be readily made to take cases into the Westhulme Hospital.

TABLE VIII.

SCHOOL DISTRIBUTION OF CASES OF DIPHTHERIA.

| | |
|---|-----------|
| Oldham Church, St. Margaret's, Hollins Wesleyan, St. Domingo Street, St. Ann's, St. James', St Johns, Rock Street, Waterhead Church, Greenacres British, Salem, Higginshaw, St. Stephen's and Coppice Schools had one case each. Total | 14 cases. |
| Christchurch (Chadderton), Stoneleigh Street and Smith Street Schools had 2 cases each | 6 „ |
| Hathershaw Board | 3 „ |
| The various Private Schools had 3 cases among them ... | 3 „ |
| North Moor Board School had | 9 „ |
| There was no School attendance in | 32 , |

Typhoid or Enteric Fever—There were 69 cases reported during the year, and of these 17 died, or 25 per cent of the number attacked.

In 1893 there were 70 cases with 26 deaths, and in 1892, 83 cases with 16 deaths.

Fifteen cases were removed to Westhulme Hospital, and of these three died.

The cases of this disease which we get in the Hospital are of a very severe type, and although the number of deaths is not excessive in most instances convalescence has been very protracted.

TABLE IX.
TYPHOID OR ENTERIC FEVER.

| AGES. | CASES. | DEATHS. | |
|----------------|--------|---------|-------------|
| | | TOTAL. | PERCENTAGE. |
| Under 5 years. | 7 | 1 | 14·3 |
| 5 to 10 | 9 | 3 | 33·3 |
| 10 ,, 15 | 10 | 2 | 20·0 |
| 15 ,, 25 | 14 | 4 | 28·6 |
| 25 ,, 35 | 13 | 1 | 7·7 |
| 35 ,, 45 | 7 | 1 | 14·3 |
| 45 ,, 55 | 4 | 2 | 50·0 |
| Over 55 | 5 | 3 | 60·0 |
| Total ... | 69 | 17 | 24·6 |

Puerperal Fever—With nine cases notified during the year is in the same position as in the two previous years.

It was not found necessary to interfere with the practice of any midwife or nurse, the various cases appearing to arise quite independently from one another.

Measures taken to prevent the spread of Infectious Diseases.—Hospital Isolation has been made most valuable use of in the epidemic of Smallpox, as above described. Later in the year, cases of Typhoid Fever and Scarlet Fever were removed, where consent could be obtained, and about 50 per cent of the cases of these diseases were removed from that time.

Disinfection of houses by fumigation with sulphur and stripping of the walls where practicable, is carried out after cases of the various Notifiable diseases, after deaths from Phthisis, and, where requested, after cases of Influenza.

The clothes were disinfected by dry stoving until October, when the stoves were removed to make room for the new Steam Disinfector, which the committee decided, in June, should be put in.

The machine selected is Messrs. Goddard and Massey's Steam Disinfector, and there are erected in connection with it baths and dressing rooms, so arranged that infected clothing and persons from infected houses are brought to one entrance, the former stoved and the latter bathed, and sent away from the opposite side.

I feel confident that this arrangement will be a most useful adjunct to our means of dealing with Infectious Disease, and when it is completed there will only remain one thing wanting to complete the provision for disinfection and isolation, viz :—A furnished cottage, to which a family could be removed for a night when necessary, while their own house is thoroughly disinfected.

All Typhoid excreta are received into special pails, and collected and burnt. Disinfecting powder and soaps are freely distributed to the houses where Infectious Diseases occur. The drains, in all cases of Typhoid Fever and Diphtheria, are tested with the Smoke Machine.

Westhulme and Moscow Hospitals—As stated above at the beginning of the year the Moscow Farm was opened as a temporary Small-pox Hospital. It is situated about half a mile outside the Borough boundary, and a full mile from any amount of property.

Staff—For working the two Hospitals, Miss Whitehead, the matron, has had the assistance of 4 nurses, 2 porters, and 6 Servants.

To Westhulme Hospital 30 cases of Small-pox were directly admitted. Of these 29 were discharged and 1 died. Small-pox convalescents were transferred from the Moscow and Cinder Hill Hospitals.

Twenty cases of Scarlet Fever were admitted, and 2 of these died, giving a death rate of 10 per cent.

Fifteen cases of Typhoid Fever were admitted, and 3 of these died, giving a death rate of 20 per cent.

Westhulme Hospital has been redecorated inside, and 2 new Manchester Stoves placed in the upper Wards of the Scarlet Fever Pavilion which have been found to act quite satisfactorily.

Moscow Farm has been repaired and the accomodation increased, so that it is now ready for the accomodation of 20 patients, but the provision for the nurses is most inadequate and unsatisfactory

TABLE No. 12.

Showing the number of Cases of Sickness and the Deaths reported during the several months of the year 1894 in Oldham.

| Months. | Smallpox | | Scarlet Fever | | Diphtheria | | Typhoid Fever | | Puerperal Fever | |
|----------------|----------|--------|---------------|--------|------------|--------|---------------|--------|-----------------|--------|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| January..... | 39 | 7 | 21 | 1 | 5 | 2 | 5 | 2 | ... | ... |
| February | 49 | 3 | 30 | 3 | 4 | 1 | 2 | ... | ... | ... |
| March | 36 | 4 | 34 | 2 | 3 | 2 | 7 | 1 | ... | ... |
| April | 25 | 1 | 27 | 3 | 2 | 1 | 16 | 4 | ... | ... |
| May | 4 | 1 | 20 | 3 | 8 | 3 | 2 | 1 | ... | ... |
| June | 4 | 1 | 21 | ... | 8 | 6 | 1 | ... | 1 | 1 |
| July | 8 | 1 | 23 | 1 | 4 | 2 | 3 | 2 | 2 | ... |
| August | ... | ... | 17 | 2 | 3 | 3 | 1 | ... | 1 | 1 |
| September..... | ... | ... | 24 | 2 | 10 | 7 | 9 | 1 | 1 | ... |
| October | ... | ... | 15 | 2 | 2 | 1 | 6 | ... | 2 | ... |
| November | ... | ... | 17 | 1 | 7 | 5 | 8 | 2 | ... | ... |
| December | ... | ... | 15 | 1 | 11 | 5 | 9 | 4 | 2 | 1 |
| Totals | 165 | 18 | 264 | 21 | 67 | 38 | 69 | 17 | 9 | 3 |

Table of Population, Births, and of New Cases of Infectious Sickness,
year 1894, in the County Borough of
Ages and

| NAMES OF LOCALITIES. | Population at all Ages. | | Registered Births. | Aged under 5 or over 5. | New Cases of Sickness knowledge of the | | |
|----------------------|-------------------------|------------------------------|--------------------|-------------------------|--|-------------|-------------|
| | Census 1891. | Estimated to middle of 1894. | | | Smallpox. | Scarlatina. | Diphtheria. |
| St. Mary's ... | 9,031 | 11,020 | 334 | Under 5 5 upwards. | 6 14 | 1 10 | 1 4 |
| St. Peter's ... | 11,798 | 12,537 | 274 | Under 5 5 upwards. | ... 2 | 4 11 | 1 6 |
| Werneth | 11,747 | 12,626 | 306 | Under 5 5 upwards. | 1 8 | 4 8 | 3 3 |
| Westwood (H) | 11,637 | 12,240 | 388 | Under 5 5 upwards. | 2 19 | 6 16 | 6 3 |
| St. Paul's | 10,191 | 10,835 | 299 | Under 5 5 upwards. | ... 2 | 8 16 | 1 4 |
| Coldhurst | 13,688 | 11,130 | 291 | Under 5 5 upwards. | 2 18 | 12 17 | 5 8 |
| Hartford | 12,679 | 13,130 | 395 | Under 5 5 upwards. | 3 41 | 2 6 | 1 4 |
| Hollinwood ... | 7,652 | 8,221 | 280 | Under 5 5 upwards. | ... ... | 6 10 | ... 1 |
| Clarksfield ... | 11,615 | 12,931 | 319 | Under 5 5 upwards. | 1 9 | 15 35 | 3 1 |
| Mumps | 7,733 | 9,486 | 216 | Under 5 5 upwards. | 1 6 | 4 11 | ... 2 |
| St. James's ... | 10,735 | 10,944 | 302 | Under 5 5 upwards. | ... 11 | 6 18 | 1 2 |
| Waterhead ... | 12,957 | 13,655 | 364 | Under 5 5 upwards. | 8 11 | 16 22 | 4 3 |
| Totals | 131,463 | 138,755 | 3,768 | Under 5 5 upwards. | 24 141 | 34 180 | 26 41 |
| | | | | GrandTotal | 165 | 264 | 67 |

No. 13.

coming to the knowledge of the Medical Officer of Health, during the Oldham; classified according to Diseases, Localities.

| in each Locality, coming to the Medical Officer of Health. | | | | Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospital. | | | | | | |
|--|---------------------|------------|-------------|--|-------------|-------------|---------|---------------------|------------|-------------|
| Fevers. | | | Erysipelas. | Smallpox. | Scarlatina. | Diphtheria. | Fevers. | | | Erysipelas. |
| Typhus. | Enteric or Typhoid. | Puerperal. | | | | | Typhus. | Enteric or Typhoid. | Puerperal. | |
| ... | 1 | ... | ... | 5 | ... | ... | ... | 1 | ... | ... |
| ... | 3 | 1 | ... | 14 | 2 | ... | ... | 2 | ... | ... |
| ... | 1 | ... | ... | ... | 3 | ... | ... | ... | ... | ... |
| ... | 6 | 1 | ... | 2 | 2 | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... |
| ... | 5 | 1 | ... | 7 | ... | ... | ... | 1 | ... | ... |
| ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... |
| ... | 3 | ... | ... | 19 | 1 | ... | ... | ... | ... | ... |
| ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | 6 | ... | ... | 2 | 1 | ... | ... | 3 | ... | ... |
| ... | 1 | ... | ... | 2 | ... | ... | ... | ... | ... | ... |
| ... | 7 | ... | ... | 18 | 2 | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... |
| ... | 5 | 1 | ... | 40 | ... | ... | ... | 1 | ... | ... |
| ... | 2 | ... | ... | ... | 2 | ... | ... | ... | ... | ... |
| ... | 3 | ... | ... | ... | 2 | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... |
| ... | 8 | 2 | ... | 8 | ... | ... | ... | 2 | ... | ... |
| ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... |
| ... | 6 | ... | ... | 6 | 2 | ... | ... | 1 | ... | ... |
| ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | 6 | 1 | ... | 11 | 2 | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | 8 | 1 | ... | ... | ... | ... | ... |
| ... | 4 | 2 | ... | 11 | ... | ... | ... | ... | ... | ... |
| ... | 7 | ... | ... | 23 | 6 | ... | ... | 1 | ... | ... |
| ... | 62 | 9 | ... | 138 | 14 | ... | ... | 10 | ... | ... |
| ... | 69 | 9 | ... | 161 | 20 | ... | ... | 11 | ... | ... |

TABLE

SUMMARY OF CASES ADMITTED INTO WESTHULME

| | 1880. | | | 1881. | | | 1882. | | | 1883. | | | 1884. | | | 1885. | | | 1886. | | |
|---------------------------------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|
| | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. |
| Smallpox | 5 | 5 | ... | 39 | 30 | 9 | 18 | 16 | 2 | 6 | 6 | ... | 2 | 2 | ... | 5 | 5 | ... | 5 | 5 | ... |
| Measles..... | 2 | 2 | ... | ... | ... | ... | 2 | 2 | ... | 1 | 1 | ... | 5 | 5 | ... | ... | ... | ... | ... | ... | ... |
| Scarlet Fever ... | 73 | 61 | 12 | 60 | 45 | 15 | 30 | 28 | 2 | 91 | 88 | 3 | 111 | 101 | 10 | 90 | 82 | 8 | 205 | 195 | 10 |
| Diphtheria | ... | ... | ... | 2 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | 12 | 8 | 4 |
| Typhoid Fever ... | 28 | 23 | 5 | 56 | 48 | 8 | 29 | 25 | 4 | 32 | 25 | 7 | 36 | 32 | 4 | 31 | 24 | 7 | 52 | 44 | 8 |
| Simple Continued Fever | 2 | 2 | ... | 4 | 3 | 1 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | 1 | 1 | ... |
| Puerperal Fever.. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 4 | 1 | 4 | 2 | 2 | 1 | 1 | ... | 2 | 1 | 1 |
| Ill-defined..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 6 | 0 | 4 | 1 | 3 | ... | ... | ... |
| | 110 | 93 | 17 | 162 | 127 | 35 | 81 | 73 | 8 | 135 | 124 | 11 | 165 | 149 | 16 | 132 | 114 | 18 | 277 | 254 | 23 |

* 4 of these were treated

No. 15.

HOSPITAL DURING THE YEARS 1880 TO 1894.

| 1887. | | | 1888. | | | 1889. | | | 1890. | | | 1891. | | | 1892. | | | 1893. | | | 1894. | | | |
|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|-------------|-------|---|
| Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | Admitted. | Discharged. | Died. | |
| 3 | 3 | ... | 123 | 107 | 16 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 136 | 120 | 16 | 638 | 575 | 63 | 28 | 27 | 1 | |
| 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 3 | 3 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | |
| 571 | 544 | 27 | 203 | 195 | 8 | 222 | 209 | 13 | 134 | 127 | 7 | 81 | 77 | 4 | 246 | 231 | 15 | ... | ... | ... | 20 | 18 | 2 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | |
| 2 | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | |
| 40 | 34 | 6 | 23 | 16 | 7 | 12 | 7 | 5 | 28 | 23 | 5 | 46 | 36 | 10 | 12 | 10 | 2 | ... | ... | ... | 15 | 12 | 3 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 1 | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| ... | ... | ... | 4 | 4 | ... | 1 | 1 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 619 | 583 | 36 | 354 | 323 | 31 | 236 | 218 | 18 | 166 | 154 | 12 | 128 | 114 | 14 | 397 | 364 | 33 | * | 638 | 575 | 63 | 63 | 57 | 6 |

at Moscow Hospital.

TABLE No. 14.

Showing the number of new Cases of Sickness coming to the knowledge of the Medical Officer of Health, during the years 1881 to 1894.

| Year. | Small-pox | Scarlet Fever | Diphtheria. | Typhus Fever | Typhoid Fever | Puer-peral Fever | Total Cases |
|-------|-----------|---------------|-------------|--------------|---------------|------------------|-------------|
| 1881 | 15 | 434 | 20 | ... | 131 | 3 | 603 |
| 1882 | 13 | 465 | 27 | ... | 117 | 3 | 625 |
| 1883 | 6 | 301 | 15 | ... | 96 | 3 | 421 |
| 1884 | 2 | 289 | 20 | 1 | 100 | ... | 412 |
| 1885 | 4 | 229 | 28 | ... | 58 | 2 | 321 |
| 1886 | 5 | 391 | 44 | 12 | 100 | 7 | 559 |
| 1887 | 3 | 1,775 | 127 | 2 | 119 | 5 | 2,031 |
| 1888 | 104 | 985 | 86 | ... | 106 | 3 | 1,284 |
| 1889 | 1 | 680 | 39 | ... | 56 | 5 | 781 |
| 1890 | ... | 320 | 11 | 2 | 63 | 7 | 403 |
| 1891 | ... | 238 | 29 | ... | 112 | 4 | 383 |
| 1892 | 75 | 667 | 27 | ... | 83 | 9 | 861 |
| 1893 | 416 | 442 | 25 | ... | 70 | 9 | 962 |
| 1894 | 165 | 264 | 67 | ... | 69 | 9 | 574 |

TABLE No. 16.

Smallpox Hospitals, 1894.

| | Cases Admitted | Discharged | Died |
|-------------------------|----------------|------------|------|
| Moscow Hospital | 81 | 72 | 9 |
| Cinder Hill Hospital... | 52 | 44 | 8 |

PART III.

ORDINARY SANITARY WORK
OF THE
HEALTH DEPARTMENT,
1894.

Staff.—The Staff of the Health Department consists at the present time of the Chief Sanitary Inspector, five Assistant-Inspectors, a Smoke Inspector, and a Disinfector.

With this limited number of Inspectors it is impossible to carry out satisfactorily the provisions of the numerous Acts of Parliament which impose duties of such a varying character upon the department. If proper attention be given to these special matters the general inspection of the district, which in itself is more than the Inspectors can deal with satisfactorily, has to suffer.

Systematic Inspection.—During the year the Dairies, Slaughter-houses, Bakehouses, Tripe Boiling Places, and Mill Lodges have been regularly inspected with satisfactory results. The districts generally have received systematic attention from the Inspectors, although in some of the worst neighbourhoods it is found to be quite impossible to either induce or compel the people to be ordinarily clean in their habits. Unfortunately the practice which formerly held of building back to back houses with large stacks of privies is, to a certain extent, the cause of these filthy habits, or at least tends to make them much worse, owing to the great inconvenience and exposure in removing slops &c. from the front houses. The stacks of privies

are almost always found in a filthy condition, and although notices are served and the place made clean it is found in the course of a week to be as bad as ever.

House to house inspections have been continuously carried on throughout the year, with the result that nuisances, which would probably have never attracted attention until some special harm had been traced to them, have been discovered and put right.

The smoke test has been applied to the drains of 196 houses, and in 119 instances drainage defects, generally of an important character, discovered.

The particulars of the work done by the Department in various directions will be found in Table, No. 22 appended.

Insanitary Property.—During the year the Insanitary Dwellings Sub-Committee have visited 35 dwellings reported by the Medical Officer, in addition to visiting a number of Insanitary courts, yards, &c. Of these 27 have been closed as unfit for human habitation, and in the remainder alterations have been carried out which have improved their condition.

The dwellings actually closed are the following :—

- 35 and 37 New Street
- 1, 3, 5 and 7, Court 2, New Street.
- 2, 4, 6 and 8, Foundry Street.
- 1, 3 and 5, Mansfield Street.
- 3 and 7, Boardman Street.
- Cellar in Court 5, West Street.
- Cellar in Court 5, Middleton Road.
- 2, 4, 6, 8 and 10, Court 4, Scott Street.
- 19, 21 and 23, Higginshaw Road.
- Cellar under 22, Grosvenor Street.
- Cellar under 10, Smethurst Street.

Dairies and Milkshops.—At the end of 1894 there were 132 dairies and milkshops on the register, this number being 20 less than the previous year.

This diminution in number is due to a revision of the register having been carried out, with the result that a number of persons registered, were found to have gone out of the trade.

In connection with this revision of the register, the following advertisement was inserted in the local papers.

COUNTY BOROUGH OF OLDHAM.

THE CONTAGIOUS DISEASES (ANIMALS) ACTS,
1878 AND 1886.

DAIRIES, COWSHEDS, & MILK SHOPS ORDER, 1885.

NOTICE OF THE NECESSITY OF REGISTRATION.

Section VI. of the above order enacts that—

“It shall not be lawful for any person to carry on in the District of the Local Authority the trade of Cowkeeper, Dairyman, or Purveyor of Milk, unless he is registered as such therein in accordance with this article.”

Any person offending against this order is liable to a penalty of £5.

Forms of application for registration, and any information required, may be obtained at the Sanitary Office, 2, Mill Street, Oldham.

By Order,

A. NICHOLSON, Town Clerk.

Town Clerk's Office, 10th Dec., 1894.

It is satisfactory to find that it was only found necessary to serve notices for lime washing, &c., in 3 cases and that only 3 cases of infectious diseases occurred in connection with milkshops, each of which was promptly removed to the Hospital.

TABLE X.

DAIRIES AND MILK SHOPS.

| District. | No. on Register, 1893. | No. discontinued, 1894. | No. Registered, 1894. | No. on Register, 1894. | Notices served. | Cases of Sickness. | | | | No. removed to Hospital. | Treated at Home. |
|-----------|---------------------------|----------------------------|--------------------------|---------------------------|-----------------|--------------------|------------------|------------------|------------|-----------------------------|---------------------|
| | | | | | | Smallpox | Scarlet Fever | Typhoid Fever | Diphtheria | | |
| No. 1 | 41 | 7 | 6 | 40 | 2 | ... | 2 | ... | ... | ... | 2 |
| „ 2 | 56 | 33 | 10 | 33 | ... | ... | ... | ... | ... | ... | ... |
| „ 3 | 17 | 6 | 9 | 20 | ... | ... | ... | ... | ... | ... | ... |
| „ 4 | 38 | 9 | 10 | 39 | 1 | ... | ... | 1 | ... | ... | 1 |
| | 152 | 55 | 35 | 132 | 3 | | 2 | 1 | ... | ... | 3 |

Common Lodging Houses.—These are under the control of the Watch Committee, and the Chief Constable in his report gives the following particulars:—

Number of Common Lodging Houses, 34 ; being an increase of one over last year.

Total accomodation per night 1,131 beds.

Number of persons who slept in them during the year 283,883.

Bakehouses.—There are 54 Bakehouses in the town. With the exception of about four they are on a very small scale, and they are generally in a very clean and satisfactory condition. The large machine bakeries are well managed, clean, and in suitable buildings.

Four hundred and sixty-seven visits have been paid to Bakehouses during the year, and 11 notices served for lime-washing, &c., which have been promptly attended to.

Slaughter Houses.—I inspected the whole of the Slaughter Houses in the Borough, and found them, with very few exceptions, kept in good condition and clean. A few are very old places situated in crowded districts, but so long as they are kept in good condition and there is no Public Abbatoir I am afraid nothing can be done with them.

There were 66 licenses issued, which is the same as last year.

From the Tables appended it will be seen that there have been 2,943 visits paid by the Inspectors to Slaughter Houses during the year, and in 36 cases it was found necessary to serve notice to cleanse, &c., which were at once complied with.

There have been 2 seizures of unsound meat, one of which resulted in a prosecution.

In this case the meat was found in the back premises of a Butcher's shop (not a Slaughter-house), and a penalty of £20 and costs was inflicted, which I trust, will act as a deterrent to others. There is, indeed, no excuse possible for dealing in this class of meat, and as meat is so cheap at the present time, that there can be but little inducement in the way of extra profit.

The other case, in which the meat had been over-kept, the owner appeared before you, and on account of his previous good character, was let off with a reprimand.

Two Butchers have also been prosecuted for Slaughtering on unlicensed premises, and were fined 10s. and costs each.

In November I had to report that I had been informed there was a considerable amount of slaughtering done on the out-lying farms of the district, and by your instructions the following circular was issued to every Farmer within the Borough, with, I have reason to believe, good results, for the time at least :—

COUNTY BOROUGH OF OLDHAM.

—:O:—

SLAUGHTERING ON UNLICENSED PREMISES.

—:O:—

It has come to the knowledge of the Sanitary Committee that it is a common practice for Farmers to Slaughter Cattle on their Farms. They desire it to be known that such SLAUGHTERING ON UNLICENSED PREMISES IS AN OFFENCE AGAINST THE BOROUGH IMPROVEMENT ACT (PUNISHABLE BY A FINE OF £5), and can only be permitted when the consent of the authorised officials is previously obtained.

CHAS. H. TATTERSALL,

Medical Officer of Health.

Town Hall, Oldham,

December, 12th 1894.

Applications for permission to Slaughter to be made at the Sanitary Office, 2 Mill Street, from 9 a.m. to 6 p.m. Saturdays, 9 a.m. to 1 p.m.

There are 66 Slaughter-houses in the Borough, and these have received careful supervision throughout the year, 2943 visits having been paid, and 36 notices issued for the abatement of nuisances, etc.

In November I reported to you an intimation I had received from the Equitable Co-operative Society, that they proposed to build a new Slaughter-house, as they were desirous of ascertaining whether at some early date they might not be compelled to remove to a Public Abbatoir. I went on to say :

“ It is scarcely necessary for me to point out the extreme difficulty of controlling the meat supply of the town with 66 licensed Slaughter-houses scattered throughout the district, in fact, it is impossible for us to prevent the occasional slaughter of diseased animals, should the Butchers attempt it.

“ Under these circumstances, I am, personally, of opinion, that the further multiplication of Slaughter-houses is inadvisable, especially as the Corporation secured borrowing powers to the extent of £10,000 for this purpose in 1880.”

I regret that you were unable to see your way at the present time to take steps to carry out the obvious intention of the Council in 1880, on account of the anticipated inconvenience to the Butchers in having to come, some of them 2 to 3 miles to the Abbatoir.

Offensive Trades.—The only offensive trade carried on in the town is that of Tripe Boiling. In 1893 there were 18 Tripe Boiling Places. During the year five of these have been given up, and at the close of the year 13 remain on the Register. There has been one application for a new license, which was refused on account of the premises and site being unsuitable.

These Tripe Boiling Places have been visited 358 times during the year. They are generally carried on satisfactorily, and very few complaints are received about them. It was found necessary to serve 11 notices for cleansing and the abatement of various nuisances, which were at once complied with.

Smoke Nuisances.—In the Table, No. XI., particulars of the work done in the direction of securing the abatement of this nuisance will be found.

The dense black smoke which is poured out in such volumes from our mill chimneys is one of the most marked deficiencies of the town from a sanitary point of view. A pure atmosphere will be unanimously conceded to be one of the first necessities of life, and this emission of black smoke is, without doubt, detrimental to the life of the inhabitants to say nothing of its other effects, such as giving the town its grimy appearance and hiding the sun almost permanently by a black cloud.

There have been 923 observations taken during the year—each lasting for one hour, and 413 of these or 44·7 per cent. show an emission of dense black smoke extending over five minutes. Sixty-four or 6·9 per cent. exceeded the limit of nine minutes black smoke per hour allowed by the Committee before proceeding to take steps to procure abatement. Of these 64 cases, seven had notices served upon them for abatement, it being their first offence; and 45 were prosecuted as detailed in Table xii, and in 12 there was no action taken, there being some reasonable excuse such as a breakdown of a boiler or machinery.

There has not been, to my knowledge any great extension of the application of mechanical means for the consumption of smoke (or rather for its prevention) during the year.

For the purpose of showing what can be done in the direction of prevention of black smoke simply by increased care, I have prepared Table XI. showing the number of cases and percentage of the total observations over 5, 6, 7, 8, 9, and 12 minutes respectively, from 1890 in which year the new powers for prosecution were obtained, to the present time.

TABLE XI.

Smoke Observations taken during the years 1890 to 1894, both inclusive, showing the total number taken where Black Smoke emitted has exceeded 5 minutes in the hour.

| Years | Over 5 Minutes | | Over 6 Minutes | | Over 7 Minutes | |
|-------|----------------|-------------|----------------|-------------|----------------|-------------|
| | Total | Per centage | Total | Per centage | Total | Per centage |
| 1890 | 579 | or 49·53 | 518 | or 44·31 | 454 | or 38·83 |
| 1891 | 611 | „ 62·72 | 532 | „ 45·90 | 457 | „ 39·43 |
| 1892 | 522 | „ 41·76 | 386 | „ 30·88 | 267 | „ 21·36 |
| 1893 | 360 | „ 45·92 | 260 | „ 33·16 | 178 | „ 22·70 |
| 1894 | 413 | „ 44·74 | 294 | „ 31·85 | 196 | „ 21·23 |

| Years | Over 8 Minutes | | Over 9 Minutes | | Over 12 Minutes | |
|-------|----------------|-------------|----------------|-------------|-----------------|-------------|
| | Total | Per centage | Total | Per centage | Total | Per centage |
| 1890 | 384 | or 32·84 | 318 | or 27·20 | 139 | or 11·89 |
| 1891 | 392 | „ 33·82 | 347 | „ 29·94 | 189 | „ 16·31 |
| 1892 | 178 | „ 14·24 | 119 | „ 9·52 | 63 | „ 5·04 |
| 1893 | 122 | „ 15·56 | 88 | „ 11·22 | 42 | „ 5·36 |
| 1894 | 125 | „ 13·54 | 64 | „ 6·93 | 33 | „ 3·57 |

Smoke Observations taken during the Year 1894.

| Total Observations taken. | No. Black Smoke | Under 1 Minute | Under 2 minutes | Under 3 minutes | Under 4 minutes | Under 5 minutes | Under 6 minutes | Under 7 minutes | Under 8 minutes | 8 and 9 minutes inclusive | over 9 minutes |
|---------------------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------------|----------------|
| 923 | 4 | 19 | 63 | 118 | 147 | 135 | 122 | 105 | 70 | 76 | 64 |

In 1890 and 1891 a limit of 12 minutes Black Smoke was allowed, with the result that 11·8 and 16·3 per cent. respectively of the observations showed this limit to be exceeded.

In 1892 the limit of Black Smoke was reduced to 9 minutes, with the immediate result for that year of reducing the percentage of cases over 12 minutes from 16·3 in the preceding year to 5, and of cases over 9 minutes from 30 per cent. of the total observations to 9·5 per cent. It is worthy of remark that this great, almost startling, reduction was not brought about by any extended application of mechanical means of prevention, but mainly by increased care on the part of the stokers; and if it be remembered that the whole of this Black Smoke is absolute waste, it will be seen that in reducing the limit of Black Smoke allowed, the Committee actually conferred a considerable benefit on the manufacturers, in addition to markedly improving the atmosphere of the town.

Unfortunately from this time, 1892, the progress has been very slight, the percentage of excesses having only fallen from 9·5 per cent. in 1892 to practically 7 per cent. in 1894, and judging by past experience, no marked progress will be made until the limit is still further reduced.

As a very slight advance in this direction, I should like to suggest that the time of the observations might be reduced to half-an-hour, so as to enable the Inspector to cover the ground oftener and, that the limit be fixed at 4 minutes for each half hour's observation, or a total reduction from the present limit of 1 minute in the hour, which even in the present year, would not bring the excesses up to the standard of 1891, when the limit was 12 minutes.

One thing shown by Table XI. is that the endeavour seems to be to keep just inside the limit fixed by the Committee, for the percentage of cases over 5 minutes of Black Smoke in the hour has only been reduced from 49·5 in 1890 to 44·7 in 1894.

TABLE XII.
SMOKE PROSECUTIONS DURING 1894.

| No. of Firms Fined. | Amount of Fine. | No. of times previously prosecuted. |
|---------------------|-----------------|-------------------------------------|
| 1 | £5 and costs. | 7 |
| 1 | £3 .. | 7 |
| 2 | £3 .. | 6 |
| 1 | £3 .. | 4 |
| 1 | £2 .. | 7 |
| 1 | £2 .. | 6 |
| 1 | £2 .. | 5 |
| 2 | £2 .. | 4 |
| 1 | £2 .. | 2 |
| 1 | £1 .. | 6 |
| 5 | £1 .. | 4 |
| 3 | £1 .. | 3 |
| 5 | £1 .. | 2 |
| 1 | 10/- .. | 6 |
| 1 | 10/- .. | 5 |
| 2 | 10/- .. | 4 |
| 1 | 10/- .. | 3 |
| 4 | 10/- .. | 2 |
| 3 | 10/- .. | 1 |
| 1 | 5/- .. | 3 |
| 7 | 5/- .. | 1 |

Sale of Food and Drugs.—In Table, No. XIII., will be found a detailed statement of the work which has been done with a view to prevent the adulteration of Food and Drugs from 1876 to the present time.

From this Table it will be seen that the number of samples taken has, with a few fluctuations, steadily risen from 74 in 1876 to 139 in 1894, and that at the same time the percentage of adulteration has decreased from 27 in 1876 to 2·1 in 1894, which is a most satisfactory result, and should encourage you to devote even greater attention to this department, as even 139 samples in the year is only one for each 1000 of the population, and cannot possibly be the means of detecting more than a small proportion of the adulteration which is carried on.

The 139 samples purchased were made up of—

| | | |
|----|------------|------------------|
| 83 | samples of | Milk, |
| 18 | „ | Butter, |
| 6 | „ | Bread and Flour, |
| 26 | „ | other Groceries, |
| 3 | „ | Spirits, |
| 3 | „ | Sundries, |

of which three samples of milk were reported by the Borough Analyst to be adulterated, and in each instance a prosecution was instituted.

The first case was a sample of milk which came into the town by rail from Derbyshire, 25 per cent. of the fat being abstracted and six per cent. of water added. This case was dismissed by the magistrates on the ground that the can had stood unlocked all night at the railway station and might have been tampered with.

The other two cases resulted in convictions, penalties of £10 and costs and £1 and costs being respectively inflicted.

There were also five other prosecutions for Milk Adulteration as shown in Table 17 resulting from the analysis of samples taken in 1893, and in these cases also convictions were secured and penalties of 20s. and 5s. (four cases) were inflicted,

TABLE XIII.

SAMPLES OBTAINED UNDER THE "SALE OF FOOD AND DRUGS ACT."

| Year. | Total. | | Milk. | | Butter. | | Bread and Flour. | | Other Groceries. | | Wines and Spirits. | | Sundries. | |
|-------|-----------------|-------------------------|-----------------|-------------------------|-----------------|-------------------------|------------------|-------------------------|------------------|-------------------------|--------------------|-------------------------|-----------------|-------------------------|
| | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. | No. of Samples. | Percentage Adulterated. |
| 1876 | 74 | 27.0 | 38 | 42.1 | 7 | ... | 6 | ... | 23 | 17.4 | ... | ... | ... | ... |
| 1877 | 81 | 23.4 | 34 | 26.5 | ... | ... | 21 | ... | ... | ... | 20 | 50.0 | 6 | ... |
| 1878 | 74 | 25.7 | 55 | 21.8 | ... | ... | ... | ... | 12 | 8.3 | 6 | 100.0 | 1 | ... |
| 1879 | 77 | 14.3 | 54 | 20.4 | ... | ... | 12 | ... | 6 | ... | 3 | ... | 2 | ... |
| 1880 | 87 | 21.8 | 43 | 27.9 | 8 | 12.5 | 8 | ... | 22 | 18.2 | 6 | 33.3 | ... | ... |
| 1881 | 100 | 10.0 | 67 | 10.4 | 13 | ... | ... | ... | 10 | 10.0 | 7 | 28.6 | 3 | ... |
| 1882 | 100 | 19.0 | 44 | 22.7 | 15 | 33.3 | 4 | ... | 17 | ... | 13 | 30.8 | 7 | ... |
| 1883 | 101 | 12.9 | 43 | 16.3 | 8 | 37.5 | 2 | ... | 20 | ... | 18 | 16.6 | 10 | ... |
| 1884 | 85 | 8.2 | 47 | 2.1 | 11 | 18.2 | ... | ... | 8 | 37.5 | 8 | 12.5 | 11 | ... |
| 1885 | 63 | 15.9 | 43 | 18.6 | 17 | 11.7 | ... | ... | 3 | ... | ... | ... | ... | ... |
| 1886 | 62 | 9.7 | 40 | 5.0 | 9 | 1.1 | ... | ... | 13 | 23.1 | ... | ... | ... | ... |
| 1887 | 75 | 8.0 | 57 | 8.8 | 4 | ... | 4 | ... | 6 | 16.6 | 4 | ... | ... | ... |
| 1888 | 90 | 8.9 | 70 | 8.6 | 4 | 25.0 | ... | ... | 4 | 25.0 | 8 | ... | 4 | ... |
| 1889 | 98 | 6.1 | 80 | 6.2 | 5 | 20.0 | ... | ... | 4 | ... | 6 | ... | 3 | ... |
| 1890 | 98 | 6.1 | 75 | 6.6 | 7 | ... | ... | ... | 6 | 16.6 | 4 | ... | 6 | ... |
| 1891 | 119 | 5.9 | 75 | 4.0 | 13 | 23.1 | ... | ... | 27 | ... | 4 | .0 | ... | ... |
| 1892 | 90 | 1.1 | 68 | 1.5 | 3 | ... | ... | ... | 7 | ... | 4 | ... | 8 | ... |
| 1893 | 106 | 10.4 | 84 | 8.3 | 7 | 42.8 | ... | ... | 6 | ... | 3 | 33.3 | 6 | ... |
| 1894 | 139 | 2.1 | 83 | 3.6 | 18 | ... | 6 | ... | 26 | ... | 3 | ... | 3 | ... |

Factory and Workshops Act.—In Table No. XIV. there will be found details of the work done under this Act to the end of 1894, which shows that out of 253 workshops registered, 184 were found defective in one way or other, the greatest number being for defective drainage and general want of cleanliness. Out of 184 notices served, 151 have been complied with, leaving 33 defects still requiring attention.

Inspections under the Act have been regularly carried out during the year with satisfactory results so far as they go. The workshops, however, require more attention than it is possible to give them with the limited staff of Inspectors attached to the Department.

TABLE XIV.

Showing the number of Workshops registered, visits made, and defects removed.

| | | | | | | |
|---|-----|-----|-----|-----|-----|-----|
| No. of Workshops registered | ... | ... | ... | ... | ... | 253 |
| No. of Workshops reported to Factory Inspectors | ... | ... | ... | ... | ... | 43 |
| No. of Visits paid | ... | ... | ... | ... | ... | 327 |

| Defects found. | Notices Served. | Notices complied with. |
|--|-----------------|------------------------|
| Defective drainage | 51 | 44 |
| Defective ventilation... .. | 6 | 4 |
| Damp | 17 | 13 |
| Broken floors or walls | 18 | 16 |
| Insufficient or no privy or closet accomodation | 12 | 11 |
| Defective privies or closets | 27 | 17 |
| Defective or no Urinals | 5 | 3 |
| Dirty Workshops | 48 | 43 |

Shops Hours Act, 1892.—In the Table given below particulars of the work done under this Act during the year is detailed.

It will be noticed that of a total of 96 shops which were found to be subject to the Act, only 10 exhibited the notice required giving an extract of the Act, and stating the hours of employment.

Unfortunately this Act of Parliament is practically a dead letter, as there is no penalty prescribed for the non-exhibition of the notice referred to above, and to obtain a conviction under the other clauses it would have to be proved that some particular young person had been employed more than 74 hours in a week, which, so long as the hours of employment for each day are not specified, is a very difficult matter to accomplish.

The Table gives the various trades affected so far as our enquiries have gone, and it will be noticed that there are 121 young persons (that is persons under 18 years of age) employed.

TABLE XV.

INSPECTIONS UNDER THE SHOP HOURS ACT, DURING 1894.

| Business. | No. of Shops visited where young persons are employed. | No. of young persons employed. | No. where proper notice is exhibited. | No. where no regulations exist. |
|------------------------------|--|--------------------------------|---------------------------------------|---------------------------------|
| Grocers, &c. ... | 21 | 29 | 3 | 18 |
| Boot and Shoe Dealers | 11 | 12 | ... | 11 |
| Tailors & Out-fitters | 9 | 12 | ... | 9 |
| Drapers, &c. ... | 14 | 20 | ... | 14 |
| Chemists and Drysalters ... | 5 | 5 | 1 | 4 |
| Hosiers, &c. ... | 3 | 4 | ... | 3 |
| Ironmongers... | 4 | 5 | ... | 4 |
| Restaurants & Confectioners | 4 | 4 | ... | 4 |
| Hatters | 4 | 4 | 4 | ... |
| Fish Dealers... | 5 | 8 | ... | 5 |
| Stationery, &c. | 6 | 7 | 1 | 5 |
| Furniture Dealers... | 4 | 4 | 1 | 3 |
| Pawnbrokers | 6 | 7 | ... | 6 |
| Totals ... | 96 | 121 | 10 | 86 |

REPORT OF THE INSPECTOR OF NUISANCES RESPECTING
THE CONTAGIOUS DISEASES ANIMALS ACT, &c.

TO THE MEDICAL OFFICER OF HEALTH.

SIR—I beg to offer some remarks on one or two matters of interest, which have certainly had no parallel for the past 12 years.

I refer first in order, to reporting to the Sanitary Committee early in the year the case of Measles in a fine pig, weighing 10 score 16 lbs., which had been honourably reported on discovery amongst a number of Irish pigs—the carcass being duly condemned and destroyed. I am not aware that any previous case has come to the knowledge of the Sanitary Officers.

The second incident refers to the discovery of Anthrax—a disease hitherto unknown, or unrecognized in the province of Veterinary experience in Oldham, and certainly the first outbreak dealt with by any Sanitary Committee in Oldham.

This was reported by the Veterinary Surgeon at the time, (Mr. Spencer Bailey), on March the 9th, 1894. Two cows were found dead on visiting the premises in Glodwick, and immediate steps were taken, by instructions from the Chairman of the Sanitary Committee, to stamp out the disease, by the immediate slaughtering of two other cows having been in close contact on the same premises, and 10 pigs, which, although not in immediate contact, it was deemed advisable to clear the premises of; all the four beasts being burnt at the Destructor the same day. The pigs were found free from disease and were sold.

Unfortunately in regard to assessment and valuation of the stock to be destroyed and disposed of, some misunderstanding arose leading the owner to dispute the valuation fixed by the Corporation according to the terms of the Contagious Diseases Animals Act, and necessitating the matter being referred to arbitration.

The total amount awarded by the Arbitrator for valuation, costs, and fees, on behalf of the farmer, amounted to £79 3s. 6d., against which £23 18s. was received by the Corporation as salvage.

I have personally to tender my grateful thanks to the then Chairman of the Sanitary Committee—Mr. Alderman Jackson, and to Mr. Councillor Emmott, and other members of the Committee for their valuable help and counsel at such a critical time, when I was far from being physically strong, and I trust it will be a long time ere the Staff or the Committee will be called on to adjudicate on such an expensive, and yet necessary proceeding in the interest of the public health.

As near as I can estimate, the weight of unsound food destroyed during the year amounts to about 5,817 lbs. of beef, 216 lbs. of pork, and 2,540 lbs. of fish.

Four special inspections have been made of cows killed on farm premises. In one case only was it necessary to have the carcass destroyed.

Three post-mortems of suspected rabies in dogs have been made, where the Veterinary Surgeon failed to find any symptoms of the disease. No information has ever come to hand of any harm resulting to a number of persons who were stated to have been bitten by such a dog in September last at Hollins.

There are other matters of interest on which I might have dwelt, but I fear I have already travelled further than might be expected of me; I will, therefore, conclude by assuring you that it is at all times the desire of your staff of Inspectors to render every assistance to you and to the Committee in furtherance of brighter and healthier conditions. Our work is, however, transitory and futile, constantly recurring where so much carelessness and ignorance abounds. If self interests centred more in pride of home our work would be less.

I remain,

Your obedient servant,

THOMAS RUSHWORTH,

CHIEF SANITARY INSPECTOR.

TABLE No. 17.

MAGISTERIAL PROCEEDINGS, 1894.

| No. of Cases. | Particulars of Complaint. | How Disposed of. | Penalties | | |
|---------------|--|--|-----------|----|----|
| | | | £ | s. | d. |
| 48 | Smoke Nuisance | One fined £5 and costs; four £3 and costs each; six 40s. and costs each; fourteen 20s. and costs each; twelve 10s. and costs each; eight 5s. and costs each; two paid costs; and one withdrawn | 51 | 0 | 0 |
| 10* | Milk Adulteration | Two fined £5 and costs each; one 20s. and costs; two 10s. and costs each; four 5s. and costs each; and one dismissed | 13 | 0 | 0 |
| 1 | Unsound Meat | Fined £20 and costs ... | 20 | 0 | 0 |
| 2 | Slaughtering on Un-licensed Premises ... | Fined 10s. and costs each | 1 | 0 | 0 |
| 61 | | Total £ | 85 | 0 | 0 |

* Five of these were for offences committed in the year 1893.

TABLE 18.

Showing the number of Smoke Observations taken and Inspections of Mill Lodges and Slaughter Houses made, during the years 1893-94.

| FORTNIGHT ENDING. | | SMOKE OBSERVATIONS. | | MILL LODGE INSPECTIONS. | | SLAUGHTER-HOUSE INSPECTIONS. | |
|-------------------|--------------|---------------------|-------|-------------------------|-------|------------------------------|-------|
| 1893. | 1894. | 1893. | 1894. | 1893. | 1894. | 1893. | 1894. |
| Jan. 4 | Jan. 3... | 33 | 20 | 184 | 148 | 127 | 93 |
| " 18 | " 17... | 36 | 40 | 106 | 59 | 136 | 119 |
| Feb. 1 | " 31... | 29 | 42 | 123 | 225 | 107 | 123 |
| " 15 | Feb. 14... | 15 | 41 | 84 | 39 | 125 | 113 |
| Mar. 1 | " 28... | 22 | 29 | 197 | 209 | 126 | 98 |
| " 15 | Mar. 14... | ... | 39 | 67 | 17 | 145 | 80 |
| " 29 | " 28... | 34 | 25 | 177 | 94 | 119 | 61 |
| Apr. 12 | Apr. 11... | 42 | ... | 73 | 127 | 119 | 88 |
| " 26 | " 25... | 45 | 33 | 147 | 128 | 133 | 129 |
| May 10 | May 9... | 46 | 20 | 120 | 94 | 117 | 61 |
| June 7 | " 23... | 93 | 37 | 248 | 127 | 306 | 88 |
| " 21 | ...June 2... | 48 | 24 | 146 | 129 | 139 | 94 |
| July 4 | " 16... | 46 | 50 | 149 | 58 | 93 | 159 |
| " 19 | " 30... | 50 | 50 | 77 | 199 | 107 | 102 |
| Aug. 2 | July 14... | 53 | 44 | 171 | 100 | 108 | 143 |
| " 16 | " 28... | 60 | 48 | 57 | 174 | 119 | 108 |
| Sep. 13 | Aug. 11... | 54 | 41 | 323 | 121 | 216 | 124 |
| " 27 | Sep. 8... | 35 | 41 | 167 | 278 | 75 | 211 |
| Oct. 11 | " 22... | ... | 47 | 122 | 191 | 107 | 143 |
| " 25 | Oct. 6... | ... | 48 | 157 | 130 | 126 | 68 |
| Nov. 8 | " 20... | ... | 40 | 91 | 113 | 89 | 123 |
| " 22 | Nov. 3... | ... | 34 | 126 | 207 | 147 | 153 |
| Dec. 6 | " 17... | 16 | 36 | 175 | 104 | 119 | 127 |
| " 20 | Dec. 1... | 27 | 26 | 103 | 197 | 121 | 131 |
| | " 15... | ... | 47 | ... | 70 | ... | 110 |
| | " 29... | ... | 21 | ... | 229 | ... | 94 |
| Totals..... | | 784 | 923 | 3,390 | 3,567 | 3,126 | 2,943 |

NIGHTSOIL AND ASHES DEPARTMENTS.

1894.

| | |
|---|--------|
| Number of Sanitary Pans in the Borough..... | 23,413 |
| Do. Iron Tanks, Cesspools, &c., in the Borough ... | 77 |
| Do. Water Closets in the Borough..... | 1,103 |
| Do. Waste Water Closets in the Borough..... | 107 |
| Do. Ashpits in the Borough..... | 10,304 |
| Do. Ashpans and other places in the Borough ... | 623 |
| Do. Houses represented in the Borough..... | 30,680 |
| Do. Mills, Workshops, &c., represented in the Borough | 534 |
| Do. Churches, Schools, &c., Do. Do. | 205 |

NIGHTSOIL DEPARTMENT.

| | |
|--|-----------|
| Number of Sanitary Pans emptied during the night..... | 1,212,250 |
| Do. Iron Tanks, Cesspools, &c., Do. | 216 |
| Do. Slaughter Houses from which Butchers' Offal has been removed during the night | 6,271 |
| Do. Fish Shops, &c., from which Fish Offal has been removed during the day... .. | 8,463 |
| Do. Loads of Excreta collected..... | 13,720 |
| Do. Do. Butchers' Offal collected..... | 592 |
| Do. Do. Fish Offal collected | 364 |
| Do. Do. Shoddy Dirt collected..... | 5,646 |
| Do. Tons of Manure sent out from Higginshaw... | 15,541 |
| Do. Do. Do. Do. Bower Clough | 7,191 |
| Total Number of Tons of Manure sent out..... | 22,732 |

ASHES DEPARTMENT.

| | |
|---|--------|
| Number of Ashpits emptied during the day | 59,680 |
| Do. Ashpans and other places collected during the day | 42,554 |
| Do. Loads of Ashes taken to Destructor..... | 9,145 |
| Do. Do. Do. Corporation Tips | 13,959 |
| Do. Do. Do. elsewhere | 13,435 |
| Do. Do. Clinkers removed from Destructor... | 2,819 |
| Total Number of Loads removed..... | 39,358 |

DESTRUCTOR.

| | Tons Cwt. |
|--|-----------|
| Quantity of Ashes, Fish Offal, and Garbage consumed at the Destructor | 11,306 0 |
| Average per Furnace, per day of 24 hours | 7 1½ |
| Quantity of Mortar sold..... | 871 0 |

Nuisances Reported and Work Executed.

1894.

| | |
|---|--------|
| Total Number of Reports of Nuisances and Sanitary Requirements from January 1st to December 31st, 1894. ... | 3,505 |
| The number which have been abated, or complied with, or re-noticed... .. | 2,994 |
| The number of cases dealt with by the Sanitary Committee | 553 |
| Number of Complaints Received and Visited | 406 |
| House-to-House Inspections | 4,495 |
| Re-inspection of Nuisances under Notice | 12,212 |
| Privies Inspected | 2,415 |
| Insufficient Privy Accommodation | 29 |
| Dirty Privies Cleaned and Whitewashed | 993 |
| Dangerous Places reported | 105 |
| Defective or no Ashpits, and Ashplaces built | 99 |
| Number of Sanitary Pans found requiring emptying | 369 |
| Number of Ashpits do. do. | 248 |
| Number of Defective Water Pipes and Taps | 73 |
| Number of Coal Gas Nuisances and Escapes reported... .. | 9 |
| Number of Street Grids blocked &c. | 72 |
| Defective Urinals: Repaired, 19; Urinals Built, 8 | 28 |
| Defective Drains, blocked, &c. | 637 |
| Defective Downspouts and Eaves Gutters | 477 |
| Damp Houses (Defective Roofs, &c.) | 285 |
| Slopstone Pipes (emitting Sewer Gas) disconnected | 275 |
| Defective Slopstone Pipes (broken, blocked, &c.) | 407 |

| | |
|---|-------|
| Manure Heaps | 42 |
| Ventilating Grids fixed to Traps | 160 |
| Workshops repaired | 5 |
| Workshops cleaned | 12 |
| Workshops visited | 163 |
| Accumulation of Offensive Matter | 446 |
| Pigsty Nuisances | 8 |
| Poultry in Houses | 57 |
| Dirty Houses and Premises | 368 |
| Houses Stripped and Cleaned after Infectious Disease | 98 |
| Offensive Mill Lodges | 23 |
| Stable, Slaughter-house, and Tripe-boiling Nuisances | 36 |
| Low or Defective Chimneys | 30 |
| Offensive Trades | 6 |
| Defective Cellars | 112 |
| No Water Supply to Houses and Water Closets | 7 |
| Carcases of Animals in Water | 52 |
| Stagnant Water | 43 |
| Dust and Fly from Mills | 6 |
| Number of Notices, Committee Summonses, and Committee Orders Served | 3,834 |
| Houses Visited where bread is baked for sale | 467 |
| Shippons Cleansed and Limewashed | 8 |
| Daries Visited | 529 |
| Privies Reconstructed and Repaired | 267 |
| New Privies and Water Closets provided | 104 |
| Water Closets Repaired, Reconstructed, and Ventilated | 21 |
| Bath and Lavatory Pipes disconnected | 38 |
| Yards and Passages Repaired and Flagged | 355 |
| Yard and Cellar Drains Relaid and Reconstructed | 76 |
| Traps fixed in Cellars, Yards and Houses | 1,221 |
| Improved Ventilation to Houses | 88 |

| | |
|---|-------|
| Drains tested with the Smoke Machine | 196 |
| No. of Houses where Defects were Found | 119 |
| Ventilating Shafts to Cellar and House Drains | 5 |
| Drains of Houses connected with Main Sewers | 196 |
| Houses closed, unfit for Habitation | 27 |
| Manure Pits built | 9 |
| Erections in Yards Reported | 12 |
| Farm Premises visited | 70 |
| Cesspools abolished | 1 |
| Overcrowding abated | 4 |
| Animals and unsound food destroyed at Destructor and Knacker's Yards, 1 calf, 1 pig, 1 duck, 6 carcasses of beef, 13 boxes of fish, lbs. | 8,573 |
| Dead Bodies removed to Mortuary | 23 |
| Contagious Diseases (Animals) Act (2 Cows), Rabies in Dogs | 5 |
| Letters written to Property Owners or Agents | 128 |
| Circular Letters sent out | 36 |
| Visits to deaths under 1 year of age | 276 |
| Miscellaneous Visits | 292 |

DISINFECTION.

1894.

| | |
|---|-------|
| Houses Disinfected during the year | 548 |
| Rooms Disinfected during the year | 1,644 |

CLOTHING, &c., 1893-94.

| Articles. | Disinfected. | | Destroyed. | | Totals. | |
|-----------------|--------------|-------|------------|-------|---------|-------|
| | 1893 | 1894. | 1893. | 1894. | 1893. | 1894. |
| Blankets | 1,946 | 883 | — | 1 | 1,946 | 884 |
| Sheets | 1,822 | 796 | — | 7 | 1,822 | 803 |
| Pillows | 1,959 | 1,023 | 10 | 46 | 1,969 | 1,069 |
| Bolsters | 1,055 | 576 | 11 | 12 | 1,066 | 588 |
| Quilts | 1,319 | 754 | 1 | — | 1,320 | 754 |
| Mattresses | 275 | 284 | 34 | 63 | 309 | 347 |
| Beds | 1,185 | 550 | 25 | 91 | 1,210 | 641 |
| Carpets | 215 | 110 | 1 | 3 | 216 | 113 |
| Rugs | 459 | 312 | 5 | — | 464 | 312 |
| Curtains | 135 | 93 | — | — | 135 | 93 |
| Clothes | 7,712 | 2,761 | 6 | 6 | 7,718 | 2,967 |
| Sundry Articles | 1,732 | 842 | 5 | 30 | 1,737 | 872 |
| | — | — | — | — | — | — |
| | 19,814 | 9,184 | 98 | 259 | 19,912 | 9,443 |

INFECTIOUS CASES.

1893-94.

(Cases and Visits.)

| | 1893. | 1894. |
|---------------------------------------|-------|-------|
| Number of Cases | 960 | 574 |
| Number of Visits | 1,996 | 1,296 |
| Number of Visits to Cases of Phthisis | ... | 120 |

PART IV.

SPECIAL SANITARY WORKOF THE YEAR.

Water Carriage of Sewage.—In October I submitted to you a special report on the advisability of converting the present system of removal of excrement by pails into a system of water carriage.

The arguments brought forward in that report were shortly as follows :—

1. That water carriage is the only system of excrement removal by which the immediate removal of offensive matter from the neighbourhood of the dwelling is possible, and is thus directly advantageous in improving the health of the community.
2. That the prompt removal of excremental matter is a large factor in producing cleanliness, decency, and self-respect, on the part of the inhabitants.
3. That when once the necessary Sewers and connections are made, it is much more economical than any other system. In point of fact, if the £13,479 spent last year in the collection of nightsoil were capitalised, it would pay one-half the cost of the conversion of the whole town to the Water Carriage System, taking the Surveyor's estimate of the cost of such conversion,

4. That no Town which had ever adopted Water Carriage had ever abandoned it, and that at the present time 30 out of the 38 towns from which replies had been received, had adopted this principle, and either had converted their systems or were in process of conversion.

5. That Oldham, with its steep gradients providing excellent fall for the drains, is eminently suitable for the Water Carriage System of excrement removal.

6. That the Corporation having spent very large sums of money in laying down a complete system of main drainage will not receive the pecuniary benefit which ought to result without the adoption of this system.

The report then went on to deal with the respective advantages and disadvantages of the ordinary type of Water Closets, Trough Closets, and Waste Water Closets, terminating with the following recommendations—for ensuring the best results from the adoption of the Water Carriage System of Sewage.

1. Conversion of Stacks of privies into Troughs, with automatic flush tanks under the control of the Corporation.
2. Conversion of existing privies, situated in yards attached to single dwellings, into waste water closets of some approved type.
3. Provision in new property of ordinary water closets or waste water closets, the former having the preference.

A Special Committee having now been formed to consider this most important question, I earnestly trust that they will come to an early decision, as in the meantime pail closets are still being largely erected in new property, and this will increase the expense of conversion whenever it may take place. To my mind the most important matter in the first instance is to definitely adopt the principle, and prevent

the erection of any more pail closets ; which would be a great stride towards the ultimate complete conversion of the system at present in vogue.

With a view of ascertaining the best form of waste water closet, a deputation of the Committee visited Manchester for the purpose of examining Day's Patent Waste Water Closet. Subsequently, I accompanied the Chairman on a visit to Widnes for the same purpose, and it was considered to be worth while to put a sample closet into the Cottage No. 2, Mill 8, and another behind the office, where they have been working quite satisfactorily for the past six months, and may be examined by anyone interested in the matter.

Destructors.—Early in the year you decided to add 4 more cells on Horsfalls System to the 6 already existing at Rhodes Bank. These have now been erected at a cost of £716, and are in efficient working order, and have proved capable of dealing with 8 tons of Refuse per cell per day of 24 hours ; the old cells burning 7 tons. Unfortunately at the present time the draught is greatly crippled by the old boiler, which is practically done, and the engineer has reported to you on the best means of remedying this difficulty, and at the same time as to the best means of utilising the heat from the Destructor in the production of steam. Respecting the latter a Special Sub-Committee has had several meetings with a Sub-Committee of the Electric Lighting Committee, with a view of arranging some means for utilising the waste heat in the production of the Electric Light, but, so far, no definite conclusion has been arrived at.

APPENDIX.

MORTALITY STATISTICS

IN

THE BACK TO BACK HOUSES IN OLDHAM

FOR THE

TEN YEARS 1883 TO 1892.

On first coming to Oldham the most striking feature in the sanitary condition of the borough seemed to me to be the large number of back to back and single houses. By single houses are meant those which, although not built back to back with other houses or buildings, have only one entrance, and are without through ventilation. In this enquiry these two forms of dwellings have been classed together.

There were, I found, 4,893 of these dwellings, although none have been built since 1881; and believing them to be the cause of part, at least, of the excessive death rate of the town, which although not comparing unfavourably with other Lancashire towns, is still much heavier than it ought to be, I looked up all the figures I could find bearing on the mortality in this class of dwellings.

The only ones I could find were those of Dr. Tatham's for Salford, and of Dr. Jones for Shipley, which although most suggestive and

indeed conclusive with regard to the areas dealt with, were, I felt, insufficient to justify me in advising the Committee to take any action with regard to back to back houses simply on the ground of their mode of construction, more especially as in Oldham a considerable proportion of these dwellings are well built, occupied by respectable working people, and not over-crowded on the land, conditions the reverse of what appears to have existed in the affected areas in Salford.

I therefore proceeded to take a census of the back to back houses, and to obtain the mortality statistics for each block of such dwellings in the borough for the ten years 1883 to 1892, with the results that are shown in the tables appended to this report.

I have taken the population of these houses to be the same during the whole ten years referred to as at the present time, and I have no reason to believe that this is in any way unsatisfactory. The population in them is a constantly varying one, but there seems no probability that it is either less or more at the present time than it was 10 years ago.

As might have been expected the total death rate in the back to back houses proved to be higher than that in the Borough generally, and averaged 31·3 per thousand living per annum, which is an excess of 7·5 per thousand over the average death rate for the Borough for the same period; and, if the deaths and population in the back to back houses be taken from the Borough totals, the excess of the death rate in the back to back houses over that in the remainder of the Borough is increased to 8·7 per thousand.

In so far as the dwelling itself is the cause of disease, it will be found that its effects will tell most heavily on those who occupy the house constantly, viz., the women and young children; and with regard to the children this is borne out in the most striking manner in this enquiry.

During the ten years 2,668 deaths occurred among children under five years of age in the back to back houses, giving a death rate of 112·8 per annum per thousand living at that age.

In the same period the death rate in the borough, among children under 5 years old, was 80·8, showing an excess in the back-to-back houses of 32 per thousand living, or, if the deaths and population in these dwellings be taken from the borough totals, the death rate under 5 years of age drops to 75 per thousand living, per annum, and the excess in the back-to-back houses over the remainder of the town is shown to be no less than 37·8 per thousand living.

This startling difference is certainly the most striking feature in the whole enquiry, and accounts for the major portion of the excess of deaths in the back-to-back houses. Considering the important part infantile mortality takes in our general death rate, and the fact, as shown earlier in this report, that it is in respect of this matter that least progress has been made, this huge excess of mortality among the children in back-to-back dwellings is most important, and indicates one of the first steps in reducing our Massacre of the Innocents, viz :—
To do away with this class of dwelling.

With regard to sex the question is complicated by this great excess in infantile deaths. These always show a great excess of males, and this is doubtless the reason why the difference between the deaths of males in the back-to-back houses and the rest of the town is greater than that shown with respect of females.

The actual figures are, among males, a death rate of 33·4 per thousand, per annum, in the back-to-back houses, against 25·9 in the whole Borough, and among the females a death rate of 28·3 in the back-to-back houses, against 21·9 in the rest of the town.

In each case the females have a lower death rate than the males, and in the back-to-back houses the excess is 6·4 among females, and 7·5 among males, which, but for the considerations referred to above, would not tell against this class of dwelling.

In table D. will be found a comparison of the death rates from several causes in each of the wards over the same period of time, and from this it is seen that with the one exception of Hollinwood Ward, to which I shall shortly refer, the deaths in the back-to-back houses show an excess in each instance over those in the rest of the Ward, and this excess is most marked in Zymotic and Pulmonary Diseases.

With regard to Hollinwood Ward the conditions are peculiar. The houses in this district have been erected at two periods of time a considerable distance apart. The older houses are arranged in little clusters in the fields, here and there, and these largely consist of single dwellings which, although not provided with adequate ventilation, are still exposed to all winds, and the ventilation is much better than in the single dwellings in the other parts of the town, there being often a partially opening casement window at the back. The newer portion of the ward has been massed around the principal street, and although the houses are of the ordinary through type, still they include at least one large batch of badly built property, and the population to the acre in this portion will nearly equal in density that of the more thickly populated wards.

There is, in fact, in this ward only one block, consisting of nine houses, of the ordinary back to back type.

The figures again are small in number, and consequently more liable to be affected by accidental circumstances.

With respect to the causes of death, the rates from various diseases in the borough are compared with those in the back to back houses in Table E.

From this it will be noticed that from Zymotic Diseases there is an excess in the back to back houses of 1·5 per thousand per annum, which is most marked in the case of Diarrhœa, this disease accounting for two-thirds of the excess. The deaths from Smallpox have been left out of consideration entirely, as it was found impossible to locate the cases satisfactorily, but over the 10 years they do not form any considerable item.

From Phthisis there is an excess of ·6 per thousand, which is a marked difference, being nearly 30 per cent.

From Bronchitis and Pneumonia again there is a marked excess ; 1·64 per thousand in the former and 1·44 in the latter.

An objection which is always raised against figures respecting this class of property is that the houses are occupied by the lowest class of the population, amongst whom a much higher death rate may be expected both on account of their want of the advantages of those in a better position, and also on account of their habits and general want of cleanliness.

To a certain extent this is correct, the back to back houses, which usually only contain two rooms, being rented at from 1s. 9d. to 3s. per week (whereas the rents of through houses run higher), and they are occupied by a poorer class of tenants. But this is not by any means universally the case in Oldham.

On the contrary the back to back houses are only occupied by one family, and that, usually, a small one, whereas in many instances through houses are sub-let, two or three families occupying the same house.

Again, some of the actually worst districts in the town as regards the class of their occupants, are composed, not of back to back, but, of through houses.

There are in Oldham 220 cellar dwellings. It will, I think, be generally admitted that the occupiers of these dwellings live under more generally unhealthy conditions than the occupants of the back to back houses. These cellars have received a great amount of attention from the committee, and are now almost all provided with through ventilation, although they remain in other respects undesirable dwellings. For the purpose of comparison I have got out the figures for these dwellings for the same time as those above referred to for the back to back houses, and I find that although they show a death rate greatly in excess of that for the whole town, viz:—29·0, against 23·8, yet it does not reach the death rate in the back to back property which is 31·3 as stated above.

In view of the facts above set forth, I have every confidence now in asking the committee to carefully consider to what extent it may be desirable to press on the owners of this class of property the importance of converting them into through dwellings, which may be done in several ways as has been shown in Manchester.

TABLE A.

POPULATION AT VARIOUS AGES IN THE BACK TO BACK AND SINGLE
HOUSES OF THE DIFFERENT WARDS.

| WARD | No. of Houses | Population. | | | | | | | | | | | |
|-------------|---------------|-------------|---------|---------|--------|---------|----------|----------|----------|----------|----------|----------|----------|
| | | Males | Females | Under 1 | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 |
| St. Mary's | 472 | 775 | 872 | 63 | 175 | 360 | 275 | 317 | 224 | 115 | 86 | 26 | 6... |
| St. Peter's | 489 | 791 | 876 | 48 | 180 | 365 | 299 | 299 | 211 | 146 | 75 | 37 | 7... |
| Werneth... | 270 | 416 | 477 | 30 | 83 | 182 | 135 | 196 | 112 | 52 | 73 | 28 | 2... |
| Westwood | 300 | 454 | 541 | 36 | 116 | 225 | 172 | 193 | 130 | 63 | 37 | 20 | 3... |
| St. Paul's | 239 | 434 | 482 | 36 | 117 | 209 | 150 | 179 | 113 | 61 | 33 | 14 | 4... |
| Coldhurst | 423 | 677 | 835 | 53 | 193 | 326 | 273 | 271 | 207 | 89 | 67 | 28 | 4 1 |
| Hartford... | 452 | 725 | 823 | 59 | 198 | 349 | 241 | 303 | 203 | 103 | 59 | 28 | 5... |
| Hollinwood | 82 | 171 | 178 | 18 | 37 | 85 | 55 | 73 | 33 | 20 | 17 | 7 | 4 |
| Clarksfield | 375 | 545 | 602 | 23 | 121 | 245 | 203 | 187 | 165 | 115 | 44 | 35 | 8 1 |
| Mumps ... | 603 | 947 | 1106 | 49 | 202 | 440 | 340 | 373 | 329 | 181 | 87 | 47 | 3 2 |
| St. James's | 353 | 604 | 623 | 30 | 130 | 283 | 193 | 223 | 162 | 99 | 72 | 25 | 9 1 |
| Waterhead | 835 | 1319 | 1514 | 84 | 284 | 601 | 523 | 523 | 332 | 227 | 167 | 73 | 18 1 |
| Total..... | 4893 | 7858 | 8929 | 529 | 1836 | 3670 | 2859 | 3137 | 2221 | 1271 | 817 | 368 | 73 6 |

TABLE B.
AVERAGE ANNUAL DEATHS, AND DEATH RATES, PER 1000 POPULATION
LIVING AT VARIOUS AGES DURING THE YEARS, 1883-1892.

| AGE PERIODS. | BOROUGH. | | | BACK TO BACK HOUSES. | | | REST OF BOROUGH | | |
|----------------------|------------|--------|-------------|----------------------|--------|-------------|-----------------|--------|-------------|
| | Population | Deaths | Death Rates | Population | Deaths | Death Rates | Population | Deaths | Death Rates |
| All ages | 124,924 | 2,974 | 23·8 | 16,787 | 525·4 | 31·3 | 108,137 | 2448·6 | 22·6 |
| Under } 5 years } | 15,317 | 1,238 | 80·8 | 2,365 | 266·8 | 112·8 | 12,952 | 971·2 | 75·0 |
| 5 to 15 | 27,755 | 163 | 5·9 | 3,670 | 24·4 | 6·6 | 24,085 | 138·6 | 5·8 |
| 15 to 25 | 24,971 | 156 | 6·2 | 2,859 | 20·6 | 7·2 | 22,112 | 135·4 | 6·1 |
| 25 to 35 | 20,396 | 197 | 9·6 | 3,137 | 33·3 | 10·6 | 17,259 | 163·7 | 9·5 |
| 35 to 45 | 15,547 | 238 | 15·3 | 2,221 | 41·0 | 18·5 | 13,326 | 197·0 | 14·8 |
| 45 to 55 | 10,995 | 272 | 24·7 | 1,271 | 42·3 | 33·3 | 9,724 | 229·7 | 23·6 |
| 55 to 65 | 6,510 | 312 | 47·9 | 817 | 46·6 | 57·0 | 5,693 | 265·4 | 46·6 |
| 65 to 75 | 2,779 | 272 | 97·9 | 368 | 37·5 | 101·9 | 2,411 | 234·5 | 97·3 |
| 75 to 85 | 613 | 110 | 179·4 | 73 | 11·2 | 153·4 | 540 | 98·8 | 183·0 |
| Over 85 } years } | 41 | 16 | 390·2 | 6 | 1·7 | 283·3 | 35 | 14·3 | 408·6 |

TABLE C.
POPULATION AND AVERAGE DEATH RATES PER THOUSAND LIVING
PER ANNUM.

| | MALES. | FEMALES. | PERSONS. |
|--------------------------------|--------|----------|----------|
| Borough Population | 59,735 | 65,189 | 124,924 |
| Back to Back Houses Population | 7,858 | 8,929 | 16 787 |
| Borough Death Rate..... | 25·9 | 21·9 | 23·8 |
| Back to Back Death Rate | 33·4 | 28·3 | 31·3 |

TABLE D.

AVERAGE DEATH RATES IN VARIOUS WARDS PER 1,000 POPULATION PER ANNUM, OVER THE YEARS 1883—1892, SHOWING THE DIFFERENCE BETWEEN THE BACK TO BACK HOUSES AND THE REST OF THE WARD.

| | All Causes | | Seven Principal Zymotic | | Phthisis | | Bronchitis | | Pneumonia | | Diarrhœa | |
|--------------|--------------|--------------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Back to Back | Rest of Ward | Back to Back | Rest of Ward | Back to Back | Rest of Ward | Back to Back | Rest of Ward | Back to Back | Rest of Ward | Back to Back | Rest of Ward |
| St. Mary's | 33·39 | 24·11 | 4·25 | 2·67 | 3·04 | 1·82 | 4·86 | 3·51 | 3·04 | 2·91 | 1·82 | 0·73 |
| St. Peter's | 37·79 | 21·39 | 4·20 | 1·57 | 3·60 | 1·99 | 4·79 | 2·10 | 5·40 | 2·41 | 1·80 | 0·10 |
| Werneth ... | 32·47 | 20·34 | 5·59 | 1·65 | 2·24 | 1·46 | 3·36 | 2·43 | 3·36 | 2·43 | 1·68 | 0·22 |
| Westwood | 28·14 | 24·44 | 3·02 | 2·38 | 2·01 | 1·89 | 4·02 | 3·08 | 4·02 | 3·28 | 1·01 | 0·49 |
| St. Paul's | 26·20 | 21·43 | 2·18 | 2·73 | 2·18 | 1·48 | 4·37 | 3·08 | 3·27 | 2·28 | 0·65 | 0·48 |
| Coldhurst | 29·76 | 28·81 | 4·63 | 3·20 | 3·31 | 2·86 | 5·29 | 4·46 | 3·31 | 3·54 | 1·32 | 0·69 |
| Hartford ... | 33·58 | 24·19 | 5·16 | 2·28 | 3·23 | 2·09 | 4·52 | 3·24 | 3·87 | 2·95 | 1·29 | 0·29 |
| Hollinwood | 17·19 | 22·23 | 0·86 | 1·77 | 1·72 | 1·79 | 2·89 | 2·59 | 2·87 | 3·03 | 0·29 | 0·44 |
| Clarksfield | 27·03 | 20·53 | 3·05 | 2·83 | 2·61 | 1·62 | 4·36 | 2·12 | 2·61 | 2·02 | 1·13 | 0·23 |
| Mumps ... | 33·61 | 23·22 | 2·92 | 2·39 | 3·41 | 2·68 | 4·38 | 3·13 | 3·90 | 2·09 | 1·17 | 0·71 |
| St. James's | 34·23 | 22·40 | 4·89 | 2·56 | 2·44 | 1·89 | 4·07 | 2·90 | 3·26 | 3·23 | 1·63 | 0·33 |
| Waterhead | 28·22 | 22·77 | 4·23 | 3·27 | 2·12 | 1·90 | 4·23 | 3·05 | 3·53 | 2·42 | 1·06 | 0·53 |

TABLE E.

AVERAGE DEATH RATES PER 1,000 POPULATION, PER ANNUM, FOR
THE YEARS 1883-1892, AT ALL AGES.

| | In Borough | In Back to Back Population. | In remainder of Borough excluding Deaths and Population in back to back houses. |
|--------------------------------------|------------|-----------------------------------|---|
| All causes..... | 23·8 | 31·3 | 22·6 |
| 7 Zymotic Diseases | 2·78 | 4·07 | 2·53 |
| Measles | 0·81 | 1·36 | 0·73 |
| Whooping Cough | 0·57 | 0·75 | 0·55 |
| Scarlet Fever | 0·33 | 0·33 | 0·33 |
| Diphtheria | 0·17 | 0·17 | 0·17 |
| Typhoid Fever..... | 0·17 | 0·12 | 0·18 |
| Diarrhoea | 0·66 | 1·33 | 0·55 |
| Phthisis | 2·13 | 2·66 | 2·05 |
| Other Tubercular Diseases | 0·7 | 0·96 | 0·66 |
| Bronchitis | 2·99 | 4·41 | 2·77 |
| Pneumonia | 2·35 | 3·67 | 2·23 |
| Other Diseases of Respiratory Organs | 0·37 | 0·137 | 0·41 |
| Heart Disease..... | 1·54 | 1·37 | 1·42 |

DEATHS IN THE TEN YEARS 1883-1892.

| Year | Measles | Whooping Cough | Scarlet Fever | Typhoid Fever | Typhus Fever | Diphtheria | Diarrhoea | Total Zymotic Diseases | Phthisis | Other Tubercular Diseases | Bronchitis | Pneumonia | Other Diseases of Respiratory Organs | Heart Disease |
|-------|---------|----------------|---------------|---------------|--------------|------------|-----------|------------------------|----------|---------------------------|------------|-----------|--------------------------------------|---------------|
| 1883 | 6 | 38 | 21 | 26 | | 9 | 76 | 178 | 268 | 70 | 341 | 211 | 32 | 150 |
| 1884 | 193 | 36 | 33 | 22 | | 7 | 149 | 440 | 304 | 106 | 331 | 266 | 44 | 153 |
| 1885 | 54 | 104 | 20 | 18 | | 14 | 46 | 256 | 293 | 87 | 321 | 265 | 45 | 175 |
| 1886 | 89 | 57 | 32 | 24 | 4 | 29 | 134 | 371 | 283 | 80 | 373 | 230 | 44 | 177 |
| 1887 | 176 | 100 | 103 | 24 | 1 | 62 | 89 | 555 | 243 | 103 | 393 | 259 | 52 | 184 |
| 1888 | 53 | 40 | 66 | 24 | | 36 | 43 | 275 | 239 | 75 | 330 | 329 | 51 | 181 |
| 1889 | 126 | 127 | 54 | 20 | | 16 | 78 | 421 | 245 | 81 | 359 | 326 | 31 | 199 |
| 1890 | 95 | 82 | 25 | 15 | | 6 | 96 | 320 | 264 | 89 | 453 | 402 | 59 | 192 |
| 1891 | 97 | 71 | 25 | 27 | | 18 | 68 | 306 | 252 | 97 | 485 | 437 | 53 | 196 |
| 1892 | 139 | 68 | 42 | 16 | | 18 | 56 | 354 | 279 | 88 | 368 | 309 | 52 | 165 |
| Total | 1018 | 723 | 421 | 216 | 5 | 215 | 825 | 3476 | 2670 | 876 | 3744 | 3034 | 463 | 1772 |

TOTAL DEATHS IN BACK TO BACK HOUSES IN OLDHAM
DURING YEARS 1883-92.

| Cause of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|--|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Measles | 59 | 158 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | 228 |
| Scarlet Fever | 2 | 37 | 17 | ... | ... | ... | ... | ... | ... | ... | ... | 56 |
| Whooping Cough... | 51 | 71 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | 126 |
| Diphtheria | 3 | 13 | 8 | ... | 3 | 1 | ... | ... | ... | ... | ... | 28 |
| Typhus Fever | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Typhoid Fever | ... | 3 | 5 | 3 | 3 | 4 | 1 | 2 | ... | ... | ... | 21 |
| Tabes Mesenterica.. | 21 | 35 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | 63 |
| Hydrocephalus and Tubercular Men- ingitis..... | 20 | 21 | 12 | 1 | 1 | ... | ... | 1 | ... | ... | ... | 56 |
| Phthisis | 15 | 23 | 23 | 79 | 118 | 115 | 51 | 16 | 8 | ... | ... | 448 |
| Tuberculosis | 11 | 8 | 13 | 6 | 1 | 1 | 2 | ... | ... | ... | ... | 42 |
| Diarrhœa | 140 | 51 | 6 | 1 | 2 | 1 | 3 | 9 | 9 | 1 | ... | 223 |
| Syphilis | 24 | 4 | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 30 |
| Puerperal Fever ... | ... | ... | ... | 3 | 4 | 2 | ... | ... | ... | ... | ... | 9 |
| Rheumatic Fever... | ... | ... | 4 | 6 | 5 | 3 | 1 | ... | 1 | ... | ... | 20 |
| Rheumatism..... | ... | ... | 1 | 1 | 2 | ... | 3 | 3 | 3 | ... | ... | 13 |
| Cancer | ... | ... | ... | ... | 2 | 17 | 16 | 23 | 8 | 2 | ... | 68 |
| Premature Birth ... | 151 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 152 |
| Old Age..... | ... | ... | ... | ... | ... | ... | 1 | 15 | 66 | 58 | 13 | 153 |
| Convulsions | 294 | 78 | 10 | ... | 1 | ... | ... | ... | ... | ... | ... | 383 |
| Heart Disease | 1 | 3 | 12 | 12 | 19 | 37 | 46 | 48 | 42 | 11 | ... | 231 |
| Croup..... | 7 | 38 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | 51 |
| Bronchitis..... | 167 | 124 | 6 | 7 | 17 | 59 | 91 | 133 | 120 | 15 | 2 | 741 |
| Pneumonia | 129 | 157 | 33 | 27 | 57 | 73 | 65 | 43 | 27 | 5 | ... | 616 |
| Other Respiratory Diseases..... | 2 | 3 | ... | ... | 1 | 4 | 2 | 8 | 2 | ... | 1 | 23 |
| Debility and Maras- mus | 218 | 67 | 3 | 1 | ... | 1 | 1 | 1 | 1 | ... | ... | 293 |
| All other causes ... | 264 | 194 | 62 | 58 | 96 | 92 | 140 | 164 | 87 | 20 | 1 | 1178 |
| Totals..... | 1579 | 1089 | 244 | 206 | 333 | 410 | 423 | 466 | 375 | 112 | 17 | 5254 |

ST. MARY'S WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|--|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 4 | 15 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 21 |
| Scarlet Fever | ... | 7 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Whooping Cough... | 5 | 7 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Diphtheria | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus Fever | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Typhoid Fever | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 2 |
| Tabes Mesenterica.. | 2 | 8 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 12 |
| Hydrocephalus and Tubercular Men- ingitis..... | 3 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Phthisis..... | 4 | 3 | 3 | 11 | 13 | 8 | 4 | 1 | 1 | ... | ... | 48 |
| Tuberculosis | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diarrhœa | 17 | 5 | 1 | ... | ... | ... | 1 | 2 | 1 | ... | ... | 27 |
| Syphilis | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Rheumatic Fever... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Cancer | ... | ... | ... | ... | ... | ... | 3 | 2 | 2 | ... | ... | 7 |
| Premature Birth ... | 18 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 19 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 3 | 7 | 3 | 3 | 16 |
| Convulsions | 32 | 7 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 41 |
| Heart Disease | ... | ... | 1 | 1 | 2 | 4 | 9 | 6 | 3 | 1 | ... | 27 |
| Croup..... | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Bronchitis | 17 | 15 | ... | 1 | 4 | 8 | 9 | 18 | 7 | ... | ... | 79 |
| Pneumonia | 5 | 17 | 3 | 1 | 4 | 10 | 5 | 7 | 1 | ... | ... | 53 |
| Other Respiratory Diseases | ... | 1 | ... | ... | ... | ... | ... | 3 | ... | ... | ... | 4 |
| Debility and Maras- mus | 28 | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 38 |
| All other causes ... | 24 | 25 | 10 | 9 | 9 | 7 | 12 | 15 | 9 | 1 | ... | 121 |
| Totals..... | 163 | 125 | 29 | 24 | 34 | 39 | 43 | 58 | 31 | 5 | 3 | 554 |

ST. PAULS WARD.
DEATHS IN BACK TO BACK HOUSES
DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|-----------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 4 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 11 |
| Scarlet Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Whooping Cough... | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Diphtheria | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tabes Mesenterica. | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Hydrocephalus and Tubercular Men- ingitis | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Phthisis..... | ... | 1 | ... | 2 | 4 | 5 | 2 | ... | 2 | .. | ... | 16 |
| Tuberculosis | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Diarrhœa | 4 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 6 |
| Syphilis | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cancer | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Premature Birth ... | 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 6 | 1 | 12 |
| Convulsions | 9 | 5 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 15 |
| Heart Disease | ... | ... | 2 | ... | 3 | 2 | ... | 1 | 2 | ... | ... | 10 |
| Croup..... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Bronchitis | 7 | 12 | ... | ... | ... | 1 | 1 | 7 | 5 | 1 | 2 | 36 |
| Pneumonia | 2 | 14 | 2 | 3 | 3 | ... | 4 | 2 | 2 | 1 | ... | 33 |
| Other Respiratory Diseases | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Debility and Maras- mus | 9 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 12 |
| All other causes ... | 8 | 13 | 1 | 2 | 4 | 7 | 8 | 9 | 3 | ... | ... | 55 |
| Totals..... | 63 | 64 | 7 | 7 | 15 | 15 | 16 | 19 | 19 | 8 | 3 | 236 |

COLDHURST WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Measles | 3 | 29 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 32 |
| Scarlet Fever | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Whooping Cough... | 3 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 11 |
| Diphtheria | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Tabes Mesenterica.. | 4 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Hydrocephalus and Tubercular Men- ingitis | 2 | 2 | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | 7 |
| Phthisis..... | 2 | 1 | 2 | 7 | 16 | 12 | 3 | 3 | 3 | ... | ... | 49 |
| Tuberculosis | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 3 |
| Diarrhœa | 12 | 9 | 2 | ... | ... | ... | 1 | ... | ... | ... | ... | 24 |
| Syphilis | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatism | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Cancer | ... | ... | ... | ... | ... | 1 | ... | 3 | ... | ... | ... | 4 |
| Premature Birth... | 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 2 | 6 | 5 | 1 | 14 |
| Convulsions | 27 | 10 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 39 |
| Heart Disease | ... | ... | 1 | 1 | 1 | ... | 1 | 1 | 2 | ... | ... | 7 |
| Croup..... | ... | 2 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Bronchitis | 24 | 15 | ... | 1 | 1 | 3 | 10 | 9 | 13 | 1 | ... | 77 |
| Pneumonia | 12 | 11 | 4 | 2 | 5 | 7 | 2 | 4 | ... | ... | ... | 47 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | 2 |
| Debility and Maras- mus | 21 | 4 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 26 |
| All other causes ... | 16 | 13 | 5 | 6 | 3 | 4 | 6 | 10 | 6 | 3 | ... | 72 |
| Totals | 148 | 107 | 23 | 20 | 28 | 28 | 23 | 33 | 30 | 9 | 2 | 451 |

HARTFORD WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 2 | 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 16 |
| Scarlet Fever | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Whooping Cough... | 10 | 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 27 |
| Diphtheria | ... | 1 | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | 3 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | 3 |
| Tabes Mesenterica . | 5 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 |
| Hydrocephalus and Tubercular Men- ingitis | 7 | 3 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Phthisis | 2 | ... | 3 | 8 | 12 | 16 | 4 | 1 | .. | .. | ... | 46 |
| Tuberculosis | ... | 1 | 3 | ... | ... | ... | 2 | ... | ... | ... | ... | 6 |
| Diarrhœa | 18 | 4 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 24 |
| Syphilis | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 2 |
| Cancer | ... | ... | ... | ... | 1 | 2 | 2 | 2 | ... | ... | ... | 7 |
| Premature Birth ... | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 1 | 7 | 2 | 1 | 11 |
| Convulsions | 21 | 7 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 29 |
| Heart Disease | ... | ... | ... | 1 | 2 | 2 | 7 | 5 | 6 | 1 | ... | 24 |
| Croup..... | ... | 8 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 9 |
| Bronchitis | 18 | 19 | 1 | 1 | ... | 3 | 9 | 10 | 10 | 1 | ... | 72 |
| Pneumonia | 11 | 16 | 4 | 5 | 6 | 8 | 4 | 1 | 2 | ... | ... | 57 |
| Other Respiratory Diseases..... | ... | ... | ... | ... | ... | ... | .. | ... | 1 | ... | ... | 1 |
| Debility and Maras- mus | 29 | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 36 |
| All other causes ... | 31 | 23 | 6 | 2 | 11 | 7 | 14 | 10 | 5 | 1 | 1 | 111 |
| Totals..... | 165 | 127 | 23 | 18 | 35 | 40 | 42 | 31 | 33 | 5 | 2 | 521 |

ST. PETER'S WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|--|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 8 | 17 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 26 |
| Scarlet Fever | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Whooping Cough... | 6 | 6 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Diphtheria..... | ... | 2 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 4 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | 1 | ... | 1 | ... | 1 | ... | ... | ... | ... | 3 |
| Tabes Mesenterica . | ... | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Hydrocephalus and Tubercular Men- ingitis..... | 1 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Phthisis..... | ... | 4 | 3 | 7 | 17 | 14 | 9 | 1 | 1 | ... | ... | 56 |
| Tuberculosis | 1 | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 5 |
| Diarrhœa | 16 | 5 | 1 | 1 | 1 | ... | ... | 2 | 1 | ... | ... | 27 |
| Syphilis | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Puerperal Fever ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Rheumatic Fever... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 2 |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cancer | ... | ... | ... | ... | ... | 1 | 1 | 1 | 1 | ... | ... | 4 |
| Premature Birth ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Old Age..... | ... | ... | ... | ... | ... | ... | 1 | 3 | 9 | 3 | 1 | 17 |
| Convulsions | 37 | 6 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 45 |
| Heart Disease | ... | ... | 3 | 3 | 3 | 4 | 7 | 4 | 5 | 3 | ... | 32 |
| Croup..... | ... | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Bronchitis | 18 | 10 | 1 | 2 | 2 | 4 | 13 | 20 | 9 | ... | ... | 79 |
| Pneumonia | 13 | 23 | 4 | 6 | 7 | 16 | 12 | 6 | ... | 1 | ... | 88 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | 2 | 1 | 2 | ... | ... | ... | 5 |
| Debility and Maras- mus | 25 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 36 |
| All other causes ... | 38 | 32 | 8 | 7 | 13 | 10 | 21 | 23 | 11 | ... | ... | 163 |
| Totals..... | 175 | 129 | 31 | 28 | 46 | 51 | 66 | 62 | 37 | 7 | ... | 1633 |

WERNETH WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 6 | 13 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 21 |
| Scarlet Fever | ... | 3 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Whooping Cough... | 2 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Diphtheria | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tabes Mesenterica. | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Hydrocephalus and Tubercular Men- ingitis | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Phthisis..... | ... | 1 | 1 | 4 | 6 | 6 | 1 | ... | ... | ... | ... | 19 |
| Tuberculosis | ... | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 3 |
| Diarrhœa | 9 | 4 | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 15 |
| Syphilis | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| Puerperal Fever ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 2 |
| Rheumatic Fever... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Cancer | ... | ... | ... | ... | ... | 1 | 2 | 1 | 1 | ... | ... | 5 |
| Premature Birth ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 1 | 4 | 4 | ... | 9 |
| Convulsions | 12 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 14 |
| Heart Disease | .. | 1 | ... | 1 | ... | 5 | 2 | 3 | 3 | 2 | ... | 17 |
| Croup..... | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Bronchitis | 6 | 5 | ... | ... | ... | 5 | 4 | 7 | 7 | ... | ... | 34 |
| Pneumonia | 12 | 5 | 3 | 1 | 2 | 4 | 2 | 5 | ... | ... | ... | 34 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Debility and Maras- mus | 13 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 18 |
| All other causes ... | 11 | 9 | 4 | 3 | 5 | 3 | 7 | 8 | 7 | 2 | ... | 59 |
| Totals..... | 84 | 61 | 16 | 13 | 13 | 24 | 18 | 27 | 23 | 8 | ... | 287 |

WESTWOOD WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|------------|------------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 7 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 11 |
| Scarlet Fever | ... | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Whooping Cough... | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Diphtheria | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever..... | ... | ... | 1 | ... | ... | ... | ... | 2 | ... | ... | ... | 3 |
| Tabes Mesenterica.. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hydrocephalus and Tubercular Men- ingitis | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Phthisis..... | 1 | 2 | ... | 4 | 5 | 4 | 1 | 1 | ... | ... | ... | 18 |
| Tuberculosis | 2 | 1 | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 5 |
| Diarrhœa | 8 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Syphilis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Fever ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 |
| Rheumatic Fever... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cancer | ... | ... | ... | ... | 1 | 1 | ... | 1 | 1 | ... | ... | 4 |
| Premature Birth ... | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | ... | 4 |
| Convulsions | 13 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 17 |
| Heart Disease | ... | ... | 1 | 1 | 1 | 4 | 4 | 1 | 2 | ... | ... | 14 |
| Croup..... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Bronchitis | 5 | 6 | 1 | ... | 1 | 1 | 2 | 12 | 9 | ... | ... | 37 |
| Pneumonia | 10 | 8 | 2 | 1 | 4 | 6 | 6 | 2 | 4 | ... | ... | 43 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Debility and Maras- mus | 17 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 22 |
| All other causes ... | 19 | 9 | 3 | 2 | 2 | 4 | 10 | 11 | 4 | 3 | ... | 67 |
| Totals..... | 98 | 47 | 11 | 9 | 16 | 21 | 23 | 30 | 21 | 6 | ... | 282 |

HOLLINWOOD WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Scarlet Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Whooping Cough... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Diphtheria | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tabes Mesenterica.. | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Hydrocephalus and Tubercular Men- ingitis | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 2 |
| Phthisis | ... | ... | 2 | 3 | ... | ... | 1 | ... | ... | ... | ... | 6 |
| Tuberculosis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diarrhœa | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| Syphilis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatism | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Cancer | ... | ... | ... | ... | ... | 1 | 1 | 1 | ... | ... | ... | 3 |
| Premature Birth ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 |
| Convulsions | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Heart Disease | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Croup..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Bronchitis | 4 | ... | ... | 1 | ... | 2 | ... | ... | 3 | ... | ... | 10 |
| Pneumonia | 1 | 6 | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | 10 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Debility and Maras- mus | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| All other causes ... | 3 | 7 | 2 | 1 | 1 | ... | ... | 3 | 1 | 1 | ... | 19 |
| Totals..... | 14 | 17 | 4 | 6 | 4 | 4 | 2 | 4 | 6 | 2 | ... | 63 |

CLARKSFIELD WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 3 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Scarlet Fever | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Whooping Cough ... | 2 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| Diphtheria | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 2 |
| Tabes Mesenterica.. | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Hydrocephalus and Tubercular Men- ingitis | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Phthisis | 2 | ... | ... | 7 | 8 | 9 | 2 | ... | 1 | ... | ... | 29 |
| Tuberculosis | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diarrhœa | 8 | 3 | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 13 |
| Syphilis | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cancer | ... | ... | ... | ... | ... | 2 | 1 | 3 | ... | ... | ... | 6 |
| Premature Birth ... | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 5 | 3 | 13 |
| Convulsions | 23 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 27 |
| Heart Disease | ... | ... | ... | ... | ... | 1 | ... | 4 | 4 | 1 | ... | 10 |
| Croup..... | 1 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Bronchitis | 13 | 9 | ... | ... | 1 | 4 | 8 | 11 | 4 | 1 | ... | 51 |
| Pneumonia | 7 | 5 | 1 | ... | 3 | 2 | 1 | 1 | 7 | ... | ... | 27 |
| Other Respiratory Diseases | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Debility and Maras- mus | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| All other causes ... | 16 | 10 | ... | 4 | 2 | 9 | 13 | 15 | 8 | 3 | ... | 80 |
| Totals..... | 97 | 49 | 8 | 11 | 14 | 28 | 25 | 34 | 31 | 10 | 3 | 310 |

MUMPS WARD.

DEATHS IN BACK TO BACK HOUSES IN OLDHAM

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 6 | 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 21 |
| Scarlet Fever | ... | 5 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | 9 |
| Whooping Cough .. | 4 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| Diphtheria | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tabes Mesenterica.. | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Hydrocephalus and Tubercular Men- ingitis | 2 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Phthisis | 1 | 3 | 4 | 12 | 11 | 21 | 12 | 5 | ... | ... | ... | 69 |
| Tuberculosis | 1 | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 5 |
| Diarrhœa | 17 | 5 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 24 |
| Syphilis | 2 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Puerperal Fever ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | 2 |
| Rheumatic Fever ... | ... | ... | 1 | ... | ... | 1 | ... | ... | 1 | ... | ... | 3 |
| Rheumatism | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | 2 |
| Cancer | ... | ... | ... | ... | ... | 4 | 1 | 7 | 1 | 1 | ... | 14 |
| Premature Birth ... | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 24 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 1 | 8 | 9 | ... | 18 |
| Convulsions | 46 | 11 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 59 |
| Heart Disease | ... | ... | 1 | 1 | 5 | 5 | 7 | 4 | 1 | ... | ... | 24 |
| Croup..... | ... | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Bronchitis | 23 | 10 | 2 | ... | 3 | 12 | 15 | 14 | 12 | 3 | ... | 94 |
| Pneumonia | 20 | 16 | 2 | 2 | 7 | 14 | 12 | 6 | 5 | 1 | ... | 85 |
| Other Respiratory Diseases | ... | 1 | ... | ... | ... | 1 | 1 | ... | 1 | ... | ... | 4 |
| Debility and Maras- mus | 27 | 7 | 3 | ... | ... | ... | 1 | 1 | ... | ... | ... | 39 |
| All other causes ... | 46 | 19 | 6 | 11 | 18 | 19 | 14 | 18 | 13 | 4 | ... | 168 |
| Totals..... | 220 | 107 | 31 | 28 | 45 | 77 | 64 | 57 | 44 | 18 | ... | 691 |

ST. JAMES' WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 year. | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|------------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 5 | 16 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 23 |
| Scarlet Fever | ... | 4 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Whooping Cough... | 5 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Diphtheria | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Tabes Mesenterica.. | ... | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Hydrocephalus and Tubercular Men- ingitis | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Phthisis | 1 | 2 | 1 | 6 | 6 | 7 | 4 | 2 | .. | ... | ... | 29 |
| Tuberculosis | 1 | 1 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 4 |
| Diarrhœa | 12 | 6 | ... | ... | ... | ... | ... | 1 | 2 | 1 | ... | 22 |
| Syphilis | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever ... | ... | ... | 2 | 1 | 2 | 1 | ... | ... | ... | ... | ... | 6 |
| Rheumatism | ... | ... | 1 | ... | ... | ... | 1 | 1 | ... | ... | ... | 3 |
| Cancer | ... | ... | ... | ... | ... | 2 | 2 | ... | ... | ... | ... | 4 |
| Premature Birth ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 2 | 6 | 4 | 1 | 13 |
| Convulsions | 23 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 35 |
| Heart Disease | ... | ... | 1 | 1 | ... | 6 | 5 | 5 | 4 | 1 | ... | 23 |
| Croup..... | 1 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Bronchitis | 8 | 8 | ... | ... | 2 | 1 | 11 | 12 | 10 | 2 | .. | 54 |
| Pneumonia | 10 | 9 | 2 | 3 | 7 | 1 | 5 | 4 | 2 | ... | ... | 43 |
| Other Respiratory Diseases | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | 2 |
| Debility and Maras- mus | 12 | 10 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | 24 |
| All other causes ... | 19 | 13 | 6 | 4 | 10 | 10 | 15 | 16 | 4 | 1 | ... | 98 |
| Totals..... | 107 | 98 | 18 | 15 | 28 | 30 | 43 | 45 | 29 | 9 | 1 | 423 |

WATERHEAD WARD.

DEATHS IN BACK TO BACK HOUSES

DURING YEARS 1883-1892.

| Causes of Death. | Under 1 Year | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 to 75 | 75 to 85 | 85 & over | Total. |
|---|-----------------|--------|---------|----------|----------|----------|----------|----------|----------|----------|-----------|--------|
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 11 | 24 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 38 |
| Scarlet Fever | ... | 10 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Whooping Cough... | 9 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 20 |
| Diphtheria | ... | 3 | 5 | ... | 1 | ... | ... | ... | ... | ... | ... | 9 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid Fever | ... | 2 | 1 | 2 | 1 | 1 | ... | ... | ... | ... | ... | 7 |
| Tabes Mesenterica.. | 3 | 6 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 11 |
| Hydrocephalus and Tubercular Men- in itis | 2 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Phthisis | 2 | 6 | 4 | 8 | 20 | 13 | 8 | 2 | ... | ... | ... | 63 |
| Tuberculosis | 1 | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 4 |
| Diarrhoea | 19 | 7 | 1 | ... | ... | ... | 1 | 1 | 1 | ... | ... | 30 |
| Syphilis | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Puerperal Fever ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Rheumatic Fever... | ... | ... | ... | 3 | 1 | 1 | 1 | ... | ... | ... | ... | 6 |
| Rheumatism | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | 2 |
| Cancer | ... | ... | ... | ... | ... | 2 | 2 | 2 | 2 | 1 | ... | 9 |
| Premature Birth ... | 35 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 35 |
| Old Age..... | ... | ... | ... | ... | ... | ... | ... | 2 | 8 | 13 | 2 | 25 |
| Convulsions | 47 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 58 |
| Heart Disease | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 14 | 10 | 2 | ... | 42 |
| Croup..... | 2 | 4 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| Bronchitis | 24 | 15 | 1 | 1 | 3 | 15 | 9 | 13 | 31 | 6 | ... | 118 |
| Pneumonia | 26 | 27 | 6 | 2 | 8 | 5 | 12 | 5 | 3 | 2 | ... | 96 |
| Other Respiratory Diseases | ... | 1 | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | 3 |
| Debility and Maras- mus | 29 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 34 |
| All other causes ... | 33 | 21 | 11 | 7 | 18 | 12 | 20 | 26 | 16 | 1 | ... | 165 |
| Totals..... | 245 | 158 | 43 | 27 | 55 | 53 | 58 | 66 | 71 | 25 | 2 | 803 |

