#### [Report 1895] / Medical Officer of Health, Eccles Borough.

#### **Contributors**

Eccles (Greater Manchester, England). Borough Council.

#### **Publication/Creation**

1895

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Borough



of Eccles.

# ANNUAL REPORT

OF THE

# Medical Officer of Health,

FOR THE YEAR 1895.

BY

### J. H. CROCKER, M.D.,

Bachelor of Surgery, Diploma in Sanitary Science, Victoria University; Licentiate of the Royal College of Physicians, London; Member of the Royal College of Surgeons, England; &c.

#### ECCLES:

THE TELEGRAPH PRINTING COMPANY, CHURCH STREET.

#### SANITARY AND CLEANSING COMMITTEE.

TO NOVEMBER, 1895.

Chairman: Alderman PARR.

- Vice-Chairman: Councillor W. SMITH, M.D.

The MAYOR.

Councillor HAMILTON, M.D. Councillor OLDFIELD.

" HINDLEY.

,, HOLLAND.

,, PRESTWICH.

" WHITEHEAD.

FROM NOVEMBER, 1895,

Chairman: Alderman PARR.

Vice-Chairman: Councillor HAMILTON, M.D.

The MAYOR.

Alderman MELLOR.

Councillor PEARSON.

,, W. SMITH, M.D.

Councillor THORPE.

" WHITEHEAD.

" WIMPORY.

Insanitary Property Sub-Committee.

Chairman:

Alderman PARR.

Vice-Chairman: Councillor HAMILTON.

Alderman MELLOR.

Councillor WHITEHEAD.

# Annual Report of the Medical Officer of Health.

#### TO THE SANITARY COMMITTEE OF THE BOROUGH OF ECCLES.

GENTLEMEN,

I beg to lay before you the report of the sanitary condition of your district for 1895, prepared in compliance with the orders of the Local Government Board.

There has been a slight improvement in some of the trades of the district, and fewer houses were empty during the year. 118 new houses were granted certificates as fit for habitation. The operation of the new building bye-laws is causing a decidedly better class of house to be erected.

The death rate for the year was 16.2, which is below the average for the past fifteen years. The average death rate for the five years ending 1885 was 17 per thousand of the population, for the five years ending 1890 it was 174, and for the five years ending 1895 it was 17.6. During the past quinquennium the district has been visited with two epidemics of measles, and scarlet fever has persisted for some years, but against this is the extrewely low death rate of 1894, which was general throughout England and Wales. Unfortunately the zymotic death keeps up, and I wish to call attention to pages 15+29 as a possible explanation of this reason That the district is healthy from a climatic point of view is evident from the death rate of Monton and Park Ward, which was only 8.9 for the year 1895. In 1894 it was 8.2, in 1893 11.5, and in 1892 it was 9.5. Even allowing for the servant population this is very low. From a sanitary point of view this is by far the most fortunate Ward in the Borough; as a rule the houses are of a good class, there is plenty of air space, good sanitary convenienceschiefly water-closets-and good food and clothing for the inhabitants. If such a healthy condition can be maintained year after year in one part of the Borough, it is evident the nearer we can approach similar conditions in the other wards, the better they must become.

The completion of the Sewage Farm, and the excellent results from the six months' working are points for congratulation.

My thanks are due to Mr. Superintendent Bent for the information supplied regarding the Sale of Food and Drugs Act.

I am, Gentlemen,

Your obedient servant,

J. H. CROCKER, M.O.H.

Section I .- STATISTICAL SUMMARY.

- " II.—VITAL STATISTICS.
- ,, III.—RECORD OF INFECTIOUS DISEASES AND MEASURES TAKEN TO PREVENT THEIR SPREAD.
- ., IV .- ORDINARY SANITARY WORK OF THE HEALTH DEPARTMENT.
- ,, V.—SPECIAL SANITARY MATTERS.

### SECTION I.

### STATISTICAL SUMMARY, 1895.

| POPULATION Estimated to the Middle of the Year        | 32,720 |
|---|--------|
| BIRTHS—Males, 502; Females, 433                       | 935    |
| ANNUAL RATE OF BIRTHS per 1,000 of Population         | 28.57  |
| DEATHS—Males, 280; Females, 272                       | 552    |
| ANNUAL DEATH RATE per 1,000 of Population (corrected) | 16.2   |
| ZYMOTIC DEATH RATE                                    | 3.17   |
| EXCESS OF REGISTERED BIRTHS OVER DEATHS               | 383    |
| ESTIMATED ANNUAL INCREASE OF POPULATION               | 740    |
| DENSITY-The Mean Density of the Borough is equal to   | 16.2   |
| Persons per acre. In Barton Ward, 13:4; Eccles        |        |
| Ward, 49:5; Irwell Ward, 30; Monton & Park            |        |
| WARD, 9.6; PATRICROFT WARD, 36.4; WINTON              |        |
| WARD, 9.2.  | Acres. |
| AREA-The Total Area of the Borough of Eccles is       | 2,008  |

#### SECTION II.

#### VITAL STATISTICS.

ESTIMATED POPULATION.—In Table I, will be seen the number of inhabited houses in each Ward, and reckoning the average number of inhabitants of each house at the same rate as that of the last census, the total population of this Borough at the middle of the year was about 32,720. This number is below what would be given by the average rate of increase between the census periods 1881 and 1891.

SHOWING ACREAGE, NUMBER OF HOUSES, AND POPULATION IN VARIOUS WARDS.

| Ward.  | Acreage.                               | Inhabited<br>houses<br>1895.                 | Inhabited<br>houses<br>1891, | Empty<br>houses<br>1895,         | Empty<br>houses<br>1891. | POPULA<br>Estimated<br>1895.                 | TION.<br>Census<br>1891. |
|--|--|--|------------------------------|----------------------------------|--------------------------|--|--------------------------|
| BARTON ECCLES IRWELL MONTON AND PARK PATRICROFT WINTON | 378<br>106<br>167<br>528<br>170<br>659 | 1015<br>1051<br>1002<br>1023<br>1240<br>1213 |                              | 82<br>50<br>25<br>30<br>48<br>74 |                          | 5075<br>5255<br>5010<br>5115<br>6200<br>6065 |                          |
|  | 2008                                   | 6544   | 5931                         | 309                              | 266                      | 32720  | 29606                    |

BIRTHS—The number of births registered during the year was 935 against 878 for 1894. Of these 502 were males and 433 females; this shows a birth-rate of 28.57 per thousand of the population against 27.1 for 1894.

There were 40 births registered as illegitimate, being 4.3 per cent. of the total births. This, unfortunately, is an increase on previous years, and is an unsatisfactory feature.

The following Table shows the births and deaths in the various wards :-

### BIRTHS AND DEATHS FOR THE DIFFERENT WARDS AND INSTITUTIONS.

| Wards.            | Total Deaths.                                | Death rate<br>per 1,000.                    | Total<br>Births.                       | Birth rate<br>per 1,000.                   |
|-------------------|--|---|--|--|
| BARTON            | 87<br>63<br>75<br>46<br>90<br>119<br>64<br>8 | 17·1<br>11·9<br>14·9<br>8·9<br>14·5<br>19·6 | 183<br>121<br>137<br>102<br>181<br>203 | 36°<br>23°<br>27°3<br>19°9<br>29°1<br>33°4 |
| Total for Borough | 552  | *16-2                                       | 927                                    | 28:57                                      |

\* Corrected after adding 6 deaths occurring outside the Borough and deducting 26 deaths at the Workhouse belonging to out-townships.

DEATHS.—The deaths from all causes were 552, of these 280 were males and 272 were females. Sixty-four deaths occurred in the Workhouse; 26 of these belonged to outside districts, and 38 to the Borough. Eight deaths occurred in the Eccles and Patricroft Hospital. Six deaths of patients belonging to this district occurred in the Ladywell Sanatorium.

After correcting for the above the DEATH RATE for the year is 16.2 per thousand of the population.

The death rate varies from 8.9 in the Monton and Park Ward to 19.6 in the Winton Ward.

The Winton Ward suffered severely from measles and diarrhoea, 16 deaths of the former and 14 of the latter disease being registered as belonging to this ward.

In Barton Ward there were 5 deaths from measles and 14 from diarrhoea.

In Patricroft Ward, 2 deaths from measles, 8 from diarrhoa, and 18 from acute lung diseases.

In IRWELL WARD, 1 death from measles, 8 from diarrhoea, and 15 from lung diseases.

The healthiest Ward in the Borough is the Monton and Park Ward, where the death rate was 8.9. Last year (1894) it was 8.2, in 1893 it was 11.5, and in 1892 it was 9.5. As this ward contains most of the better class houses one would naturally expect a low death rate here; another point is, there are many servants in this district who, if taken ill, generally go to their homes out of the Borough, consequently, though reckoned in the population, their deaths are credited to some other district. This number of unmarried population will also partly account for the low birth rate in this ward.

The death rate for the Borough in 1894 was 13.07; for 1893 was 18.6; for 1892 was 18.1; and in 1891 it was 22.3.

The epidemic of measles at the end of 1891 raised the death rate at that period, and the two epidemics of this disease coming within the five years' average given on page 10 will partly explain why there is apparently no improvement on the previous five years' average.

## DEATHS, WHICH OCCURRED WITHIN THE DISTRICT, OF PERSONS NOT BELONGING THERETO.

| Place of Death. | From From Stretford Worsley |   | From<br>Swinton | From<br>Rusholme | From<br>Walkden | From<br>Man-<br>chester | Total. |
|-----------------|-----------------------------|---|-----------------|------------------|-----------------|-------------------------|--------|
| Union Workhouse | 12                          | 9 | 2               | 1                | 1               | 1                       | 26     |

|          |                                  | -       |          |       |       | 1000 | -    |      | 2013   | Car       | 483     | 4        | 4000     | all which |
|----------|----------------------------------|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|-----------|
|          | Illegiti-<br>mate.               | 3       | 89       | 99    | 9     | 4    | 60   | 4    | 1      | 21        | 10      | 1        | 1        | 40        |
| ths.     | Total.                           | 16      | L        | 62    | 38    | 11   | 88   | 16   | 85     | 88        | 78      | 70       | 11       | 985       |
| Births.  | Females.                         | 40      | 83       | 38    | 46    | 39   | 30   | 41   | 37     | 44        | 25      | 35       | 37       | 433       |
|          | Males.                           | 51      | 48       | 56    | 39    | 88   | 38   | 20   | 45     | 39        | 53      | 35       | 40       | 205       |
| -        | Total.                           | 15      | 46       | 9     | 49    | 77   | 35   | 25   | 55     | 38        | 55      | 41       | 56       | 552       |
| Deaths.  | Eemales.                         | 20      | 36       | 25    | 30    | 19   | 16   | 12   | 30     | 20        | 83      | 21       | 22       | 272       |
| Ď        | Males.                           | 31      | 50       | 355   | 19    | 25   | 16   | 13   | 255    | 18        | 27      | 20       | 31       | 083       |
| .86      | All other Disease                | 26      | 16       | 23    | 58    | 21   | 18   | 15   | 83     | 19        | 24      | 21       | 17       | 350       |
| *        | Erysipelas                       | :       | :        | -     | :     | :    | :    | :    | 1      | 1         | 1       | -        | :        | -         |
|          | Injuries.                        | -       | -        | -     | 1     | 1    | 00   |      | 63     | :         | 1       | :        | -        | =         |
| .asse.   | Heart Disc                       | 4       | 00       | 01    | 00    | 60   | 31   | -    | 0.1    | -         | :       | :        | 4        | 1 33      |
| bas, and | Bronchii<br>Pneumonii<br>Siruell | œ       | 16       | 17    | 1     | œ′   | 1    | 1    | -      | 4         | 12      | 6        | 1        | 16.       |
|          | Phthisis.                        | ∞       | 4        | 00    | -1    | 4    | 1    | 70   | 00     | 7         | 00      | 0.1      | 0.1      | 92        |
|          | Influenza.                       | :       | -        | 1-    | 01    | -    | :    | :    | :      | :         | :       | :        | 1        | =         |
| 0        | Rheumatic                        | 1       | :        | -     | :     | :    | 1    | :    | 00     | :         | 1       | ***      | :        | -         |
|          | Diarrhea   Dysente               | :       | 61       | -     | :     | 01   | -    | 00   | 19     | 10        | 00      | 01       | 10       | 78        |
| Cough    | Whooping                         | 01      | 89       | 4     | 0.1   | -    | :    | :    | :      | :         | :       | -        | :        | 13        |
| Isi :    | Puerper                          | 1       | :        | :     | :     | -    | :    | :    | 1      | :         | 1       |          |          | 01        |
| ever.    | Enteric                          | -       | :        |       | 1     | -    | :    | :    | 1      | :         | -       | :        | 1        | 4         |
|          | Measles.                         | 1       | :        | 1     | :     | -    | :    | :    | :      | 1         | :       | 10       | 20       | 56        |
| ver.     | Scarlet Fe                       | :       |          | 1     | ;     | :    | :    | :    | 1      | 1         | :       | 1        | 1        | 01        |
|          |                                  | January | February | March | April | May  | June | July | August | September | October | November | December | Totals    |

MONTHLY RETURNS OF BIRTHS AND DEATHS.

#### MORTALITY IN AGE GROUPS :-

| Deatl | hs under o | ne year   |        |       | -  |   | - |   | - |   | 157 |
|-------|------------|-----------|--------|-------|----|---|---|---|---|---|-----|
| do.   | 1 year a   | nd under  | 5 yea  | ırs - |    |   |   | - |   | - | 82  |
| do.   | 5 years a  | and under | 15 y   | ears  | -  |   | - |   | - |   | 26  |
| do.   | 15 years a | and under | e 25 y | ears  |    | - |   | - |   | - | 27  |
| do.   | 25 years a | and under | r 65 y | ears  | -  |   |   |   | - |   | 161 |
| do.   | over 65    | -         | -      | -     |    | - |   | - |   | - | 99  |
|       |            |           |        | Tota  | al |   | - |   | - |   | 552 |

#### INFANTILE MORTALITY .-

The total number of deaths under one year was 157; this is at the rate of 168 per thousand births. Last year it was 142, and in 1893 it was 192.

#### ZYMOTIC DEATH RATE.-

The number of deaths due to the seven "Principal Zymotic diseases" usually classified under this heading was 104. This gives a zymotic death rate of 3:17 per thousand of the population. That for 1894 was 1:47; for 1893 was 2:5; and for 1892 it was 1:1.

There were no deaths from Small Pox or Diphtheria.

Scarlet Fever.—Eight deaths were due to this disease; five under 5 years of age, and three over that age. Six deaths occurred in the Sanatorium.

Measles.—Twenty-six deaths were due to this disease, 23 being below the age of 5 years.

Enteric or Typhoid Fever .- Four deaths.

Whooping Cough.-Thirteen deaths.

Diarrhea and Dysentery .- Fifty-three deaths, 44 being below 5 years of age.

INFLUENZA.—An epidemic of this disease occurred in the early part of the year, and eleven deaths were attributed to it.

BRONCHITIS, PNEUMONIA, AND PLEURISY.—The deaths from these diseases number 97 or 2.96 per thousand of the population. In 1894 the rate was 2.3, and in 1893 it was 3.5.

Phthisis.—The total number of deaths attributed to this disease was 54, showing a death rate of 1.65 per thousand of the population. In 1894 it was 1.47; in 1893 it was 1.2; and in the quinquennial period 1886 to 1891 the average was 1.6 per thousand of the population.

INQUESTS.—There were 36 inquests held in the Borough on deaths from accident, suicide, &c. In one case death was due to hydrophobia.

TOTAL DEATHS AND DEATH-RATES FROM ALL CAUSES, CHILDREN UNDER 5 YEARS OF AGE, ZYMOTIC AND PULMONARY DISEASES.

For the Years 1873—1895.

Corrected to 1891 according to ascertained Population.

| Year.              | Total<br>Deaths | Rate<br>per 1000 | Zymotic<br>Diseases | Rate<br>per 1000 | Deaths<br>under 5 | Rate<br>per cent. | Phthisis | Rate per<br>1000 | Acute<br>Chest<br>Diseases | Rate<br>per 1000 |
|--------------------|-----------------|------------------|---------------------|------------------|-------------------|-------------------|----------|------------------|----------------------------|------------------|
| 1873               | 423             | 25.4             | 66                  | 3.9              | 158               | 37.5              | 53       | 3.1              | 100                        | 6.0              |
| 1877               | 440             | 22.7             | 89                  | 4.6              | 175               | 40.0              | 46       | 2.3              | 81                         | 4.3              |
| 1878               | 443             | 22.2             | 68                  | 3.4              | 196               | 44.2              | 49       | 2.4              | 90                         | 4.5              |
| 1879               | 396             | 19.2             | 28                  | 1.3              | 177               | 43 8              | 60       | 2.9              | 116                        | 5.6              |
| 1880               | 437             | 20.2             | 87                  | 4.0              | 176               | 43.7              | 59       | 2.7              | 96                         | 4.5              |
| 5 years<br>average | 427             | 22.0             | 67                  | 3.4              | 176               | 41.8              | 53       | 2.6              | 97                         | 4.9              |
| 1881               | 383             | 17:4             | 56                  | 2.5              | 155               | 40.4              | 66       | 3.0              | 70                         | 3.1              |
| 1882               | 434             | 19.0             | 59                  | 2.2              | 190               | 49.0              | 46       | 2.0              | 113                        | 4.9              |
| 1883               | 371             | 15.7             | 53                  | 2.2              | 173               | 47.0              | 45       | 1.9              | 90                         | 3.8              |
| 1884               | 399             | 16.4             | 83                  | 3.4              | 181               | 45.0              | 41       | 1.6              | 87                         | 3.5              |
| 1885               | 419             | 16.6             | 54                  | 2.1              | 157               | 37:0              | 46       | 1.8              | 91                         | 3.6              |
| 5 years<br>average | 401             | 17.0             | 61                  | 2.5              | 171               | 43.6              | 48       | 2.0              | 90                         | 3.7              |
| 1886               | 419             | 16.1             | 47                  | 1.8              | 186               | 44.1              | 40       | 1.2              | 93                         | 3.2              |
| 1887               | 475             | 17.8             | 90                  | 3.3              | 219               | 42.6              | 41       | 1.2              | 127                        | 4.7              |
| 1888               | 437             | 15.9             | 54                  | 1.9              | 183               | 41.8              | 49       | 1.7              | 100                        | 3.6              |
| 1889               | 465             | 16.4             | 79                  | 2.7              | 213               | 45.8              | 49       | 1.7              | 93                         | 3.2              |
| 1890               | €03             | 20.8             | 59                  | 1.7              | 218               | 36.1              | 50       | 1.7              | 142                        | 4.9              |
| 5 years<br>average | 479             | 17.4             | 64                  | 2.2              | 203               | 42.0              | 45       | 1.6              | 111                        | 3.9              |
| 1891               | 683             | 22:3             | 94                  | 3.1              | 292               | 42.7              | 43       | 1.4              | 143                        | 4:7              |
| 1892               | 554             | 18.1             | 35                  | 1.1              | 205               | 37:0              | 50       | 1.6              | 93                         | 3.0              |
| 1893               | 608             | 18.6             | 82                  | 2.5              | 247               | 40.6              | 39       | 1.2              | 113                        | 3.5              |
| 1894               | 443             | 13.0             | 49                  | 1.4              | 183               | 41.3              | 47       | 1.4              | 74                         | 2.3              |
| 1895               | 552             | 16.2             | 104                 | 3.1              | 239               | 41.4              | 54       | 1.6              | 97                         | 2.9              |
| 5 years<br>average | 568             | 17.6             | 72                  | 2.2              | 233               | 40.6              | 45       | 1.4              | 104                        | 3.2              |

TABLE OF DEATHS during the Year 1895, in the Borough of Eccles Urban Sanitary District, classified according to Diseases. Ages, and Localities.

|  | Total  | 4881448144488 <sub>0</sub> 2-7  | 313                     |
|--|--|---|-------------------------|
|  | All Other Diseases                                 | 5877268588278 : s   | 102                     |
| ps of  | səiminī  |   | 20 00                   |
| Deat   | Ezuonhal   | 18 14 14 18 18 18 18 18 18 18 18 18 18 18 18 18   | :=                      |
| shing.   | Heart<br>Disease                                   | וו מו מו מו מו מו שו ומו  | . 56:                   |
| inguis<br>s of A   | Bronchitis,<br>Pneumonia,<br>& Pleurisy            | 1 5 THOTE 3 1 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8   | 827                     |
| dist   | sisidtiff  | הימורה בי ומות בות בות בות בות בות בות בות בות בות ב  | #9                      |
| auses,<br>Five   | Henmatic<br>Fever                                  | 111111111111111111111111111111111111111   | 01 00                   |
| Mortality from Subjoined Causes, distinguishing Deaths of<br>Children under Five Years of Age. | Diarrhea &<br>Dysentery                            | ≅-4-г-ы-г-д≈ : : :-   | 44 2 14 37<br>9 3 40 60 |
| Subjoi   | M hooping<br>Cough.                                | ווווווו המווומווו פ   | 21-                     |
| from S   | Mensles  | ים ו-פביוות באוווו  | 83 co                   |
| dity   | Erysipelas   | THE PERSON NAMED IN COLUMN 1  | 11                      |
| Morte  | Puerperal  | 1117111111111111  |                         |
| -  | Enteric or Typhoid Typhoid Typhoid Typhoid Typhoid | 1114 1111444 1111   | 00                      |
|  | Searlatina   | 111111111111111   |                         |
|  |  | Under 5<br>5 upwds.<br>Under 5<br>5 upwds.<br>Under 5<br>5 upwds.<br>Under 5<br>5 upwds.<br>Under 5<br>5 upwds.<br>Under 5<br>5 upwds.<br>Under 5 | Under 5<br>5 upwds.     |
|  | 65<br>and<br>up-<br>wards.                         | 1 2 2 6 1 2 2 2   | 66                      |
| ses, at  | and<br>under<br>SS                                 | 8 8 8 8 8 8 8   | 191                     |
| Mortality from all Causes, a<br>Subjo ined Ages.   | 15<br>and<br>under<br>25                           | + 10 + 80 1- 81 1- 1-   | 27                      |
| lity from all Caus<br>Subjo ined Ages.   | 5<br>and<br>under<br>15                            | 4 8 8 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 56                      |
| lity fr<br>Subjo   |  | 110 111 111 111 111 111 111 111 111 111   | 83                      |
| forta  | Under<br>1<br>Year.                                | 8 1 8 6 2 4 1 :   | 157                     |
| A  | At all Ages  | 87<br>63<br>46<br>90<br>90<br>119<br>8  | 552                     |
|  | Wards and Institutions.                            | BARTON WARD ECCLES ", IRWELL ", MONTON & PARK WARD PATRICROFT ", WINTON ", BARTON UNION WORKHOUSE, ECCLES & PATRICROFT                            | TOTALS                  |

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Under 5 4 5 upwds. 2 Under 5 ... 5 upwds. ... 14 11 Deaths occurring outside the district among persons belonging thereto .... Deaths occurring within the district among persons not belonging thereto ...

17

### Section III.

# RECORD OF INFECTIOUS DISEASES, AND MEASURES TAKEN TO PREVENT THEIR SPREAD.

NOTIFICATION OF INFECTIOUS DISEASES.—The total number of cases notified during the year was 302, against 421 for 1894, and 478 for 1893. As will be seen by the Tables, the majority of notifications were of scarlet fever, which has persisted throughout the whole year. All the notifications were by medical men.

#### ZYMOTIC DISEASES.

|                         | 18    | 91_    | 18    | 92     | 18    | 93     | 18    | 94     | 18    | 95     |
|-------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| Diseases.               | Cases | Deaths |
| Small Pox               |       |        | ***   |        | 10    |        | 3     |        | 1     |        |
| Scarlet Fever           | 44    | 4      | 86    | 2      | 315   | 9      | 311   | 6      | 215   | 8      |
| Diphtheria              | 29    | 3      | 29    | 7      | 43    | 6      | 36    | 7      | 28    |        |
| Croup                   |       |        |       |        |       |        | 2     | 4      | 1     |        |
| Enteric Fever           | 31    | 7      | 34    | 3      | 72    | 8      | 31    | 7      | 38    | 4      |
| Puerperal Fever         | 5     |        |       | ***    | 9     | 2      | 6     | 2      | 4     | 1      |
| Measles                 |       | 40     |       | 8      |       | 7      |       |        |       | 26     |
| Whooping Cough          |       | 32     |       | 3      |       | 10     |       | 7      |       | 13     |
| Diarrhoea and Dysentery |       | 8      |       | 12     |       | 38     |       | 20     |       | 53     |
| Erysipelas              |       |        |       |        | 29    | 2      | 29    | 3      | 15    | 1      |
|                         |       |        |       | -      | -     |        | -     | -      |       | -      |
| Total                   | 109   | 94     | 149   | 35     | 478   | 82     | 421   | 56     | 302   | 106    |

## $\begin{array}{c} \textit{MONTHLY RETURN OF NOTIFICATIONS OF INFECTIOUS} \\ \textit{DISEASES.} \end{array}$

|            | Membranous<br>Croup | Scarlet Fever | Small Pox | Diphtheria | Enteric Fever | PuerperalFev'r | Erysipelas | Totals. |
|------------|---------------------|---------------|-----------|------------|---------------|----------------|------------|---------|
| January    |                     | 11            |           | 1          | 3             | 1              | 3          | 19      |
| February   |                     | 9             |           | 2          | 1             |                | 1          | 13      |
| March      |                     | 7             |           | 3          |               | ***            |            | 10      |
| April      |                     | 3             | ***       | 3          | 1             | 1              | 2          | 10      |
| May        |                     | 13            | 1         | 4          | 4             | 1              |            | 23      |
| June       |                     | 9             |           |            | 2             |                | 1          | 12      |
| July       |                     | 14            |           | 3          | 2             |                | 2          | 21      |
| August     |                     | 28            |           | 1          | 7             |                |            | 36      |
| September. |                     | 32            |           | 2          | 4             |                | 1          | 39      |
| October    |                     | 44            |           | 3          | 11            | ***            | 1          | 59      |
| November   | 1                   | 20            |           | 1          | 2             |                | 3          | 27      |
| December   |                     | 25            |           | 5          | 1             | 1              | 1          | 33      |
|            |                     |               |           |            |               |                |            |         |
| Totals     | 1                   | 215           | 1         | 28         | 38            | 4              | 15         | 302     |

### DISTRIBUTION OF INFECTIOUS DISEASES INTO WARDS.

|                        | Bar               | rton         | Eco               | cles  | Irv               | vell            | Mor I               | nton<br>Park    |                   | tri-<br>oft.    | Win   | iton            |
|------------------------|-------------------|--------------|-------------------|-------|-------------------|-----------------|---------------------|-----------------|-------------------|-----------------|-------|-----------------|
| Diseases.              | Total<br>Notified | Total Deaths | Total<br>Notified | Total | Total<br>Notified | Total<br>Deaths | Total<br>  Notified | Total<br>Deaths | Total<br>Notified | Total<br>Deaths | Total | Total<br>Deaths |
| Small-Pox              | ***               |              |                   |       |                   |                 |                     |                 | 1                 |                 |       |                 |
| Scarlet Fever          | 35                |              | 20                |       | 33                |                 | 20                  |                 | 60                | 1               | 47    | 1               |
| Diphtheria             | 4                 |              | 3                 |       | 4                 | 200             | 3                   |                 | 8                 |                 | 6     |                 |
| Enteric Fever          | 3                 |              | 7                 | 1     | 3                 |                 | 2                   |                 | 8                 | 1               | 15    | 2               |
| Puerperal Fever        | 1                 |              | 2                 | 1     | 1                 |                 | ***                 |                 |                   |                 |       |                 |
| MembranousCroup        | 1                 |              |                   |       |                   |                 |                     |                 |                   |                 |       |                 |
| Whooping Cough         |                   | 6            |                   | 3     |                   |                 |                     |                 |                   | 4               |       |                 |
| Diarrhœa and Dysentery |                   | 14           |                   | 5     |                   | 8               |                     | 3               |                   | 9               |       | 14              |
| Erysipelas             | 2                 |              | 1                 |       | 2                 |                 | 1                   |                 | 8                 | ***             | 1     |                 |
|                        | -                 | _            | _                 | _     | -                 | _               | -                   |                 | _                 |                 | -     | _               |
| Total                  | 46                | 20           | 33                | 10    | 43                | 8               | 26                  | 3               | 85                | 15              | 69    | 17              |

AMOUNT OF HOSPITAL ISOLATION OF INFECTIOUS DISEASES.— There were 85 cases removed to the Isolation Hospitals, one case of small-pox to Clayton Vale, and 84 cases to the Ladywell Sanatorium. Thus 28 per cent. of the notified cases were removed. In 1894 the removals were 17 per cent.

DISINFECTION OF PREMISES.—More stringent measures have been taken during the year, and in every case of scarlet fever the walls, etc., have been sprayed with a solution of chloride of lime, the paper stripped, and floors and all woodwork ordered to be washed with soap and water, and in some cases the rooms have been fumigated with sulphur.

DISINFECTION OF BEDDING, &c.—In all cases the bedding, &c., from infectious cases has been taken to the steam disinfector at Ladywell.

PREVENTIVE MEASURES IN SCHOOLS.—As in the past, whenever an infectious case occurs in a house where any of the children attend school, the schoolmaster is notified of the illness, and requested not to admit anyone from the house until receiving a notice from the Sanitary Authority that it is free from infection. Besides this, special circulars on scarlet fever and measles have been forwarded to the masters and mistresses of every school in the Borough, public and private. Owing to the epidemic of measles several schools were closed previous to the Christmas holidays.

SPOT MAP.—In the front of this report is a map of the Borough, showing the distribution of typhoid fever cases and deaths from diarrhoad during the year 1895. This should be studied in connection with the articles on diarrhoad, typhoid fever, and privy middens, in other parts of this report.

#### PREVALENCE AND DISTRIBUTION OF ZYMOTIC DISEASES.

SMALL Pox.—One case of this disease was reported at the Workhouse in May, and was removed to Clayton Vale Hospital, as Mode Wheel Hospital was undergoing repairs.

The patient was a tramp, and had probably acquired the disease at Nottingham. He had slept in a lodging house in Shuttle-street three nights before going into the Workhouse, and had been ill there. The bed from this house was disinfected at Ladywell, and the room thoroughly disinfected. All precautions as to disinfection, re-vaccination etc, were taken by the Medical Officer of the Workhouse, and no secondary cases occurred. The Medical Officer of Health for Nottingham was communicated with,

SCARLET FEVER.—This disease has been in evidence throughout the whole year; generally of a mild type. Out of 215 cases notified there have been eight deaths, showing a case mortality of 87 per thousand. Seventy-five cases were removed to the Isolation Hospital, or over 34 per cent of the cases notified, against 20 per cent for 1894, and 13 per cent for 1893.

No charge has been made for the cases of this district removed to Ladywell since April last, and the extra removals must have been of some advantage in arresting the spread of the disease. In addition to the greater number removed, more stringent measures as to disinfection, etc., have been carried out, and the suggestions given in my last year's report have been adopted by the Committee.

DIPHTHERIA.—There have been 28 cases of this disease notified during the year. No deaths occurred. In two or three cases the serum treatment was adopted. Three cases were removed to the Sanatorium. Arrangements are being made with the Bacteriological department of Owens College to have a bacteriological examination of all doubtful cases.

CROUP.—One case of this disease was notified.

ENTERIC OR TYPHOID FEVER.—Thirty-eight cases were notified and 4 deaths occurred, showing a case mortality of 105 per thousand. Six cases were removed to the Isolation Hospital. The disease was most marked in the Winton, Patricroft, and Eccles Wards. Foul privy middens were found in connection with most of the cases, and probably the contaminated soil was the origin of many of these. Most of the privy middens in this district are from two to three feet below the level of the surrounding ground, and lined only with seconds bricks, not rendered watertight; consequently the liquid contents soak into the surrounding soil, and if any specific germs are present a hot summer will probably develop a large number. When rain comes, these germs are washed by the subsoil water back into the pits, and when these are emptied on to the back passages or streets, some of the contents remain, dry up, and are wafted about as dust, getting on to the food, milk, etc., or perhaps the lips or mouths of passers-by, and thus the disease is caught and no tangible origin can be given by the sufferer. It is worthy of note that this disease has occurred year after year in certain areas, and the above explanation seems the only feasible one. Upon looking at page 13 it will be seen that the greatest number of cases occurred during and after the hot weather, namely, in August, September, and October. In endeavouring to mitigate this evil the Sanitary Committee agreed to get special pails with air-tight covers so that the excreta, etc., from affected patients may be placed therein, and the pails removed frequently to the tip, and the contents there placed in a pit with chloride of lime. As the tip is far from any habitation or water supply, and the bottom of the pit is clay, there is little likelihood of spreading from this source. The Medical Officer of Health for St. Helens kindly forwarded a specimen of the special pail adopted by them, and it was decided to adopt similar ones in this district. Although good may be expected from this, yet in most cases many days elapse before the diagnosis is certain, therefore as long as these privy pits are used there is the risk of contamination. The following handbill is left wherever a pail is used :-

"BOROUGH OF ECCLES.—Instructions as to the use of Typhoid-fever Pail.

1. This pail is for the purpose of receiving all matters infected with typhoid fever.

2. You must therefore put into it all Fœcal matter, Urine, Washing Water, and Refuse Food which has been in contact with the patient, and add some chloride of lime on each occasion.—3. None of the above infected matters are, under any circumstance, to be thrown down any drain, or into any ashpit, privy, Pail closet, or water-closet.—4. Keep the pail tightly closed in your back-yard, and do not allow any children to play near it.—5. It will be removed as frequently as necessary.—6. It is particularly requested that the above instructions be rigidly adhered to, in order that the danger of Typhoid Fever spreading by means of infected sewers, privies, and pail closets should be as little as possible.—By order of the Sanitary Committee,

THE MEDICAL OFFICER OF HEALTH."

DIARRHEA.—There were 53 deaths due to diarrhea, 44 of these being below the age of five years. The chief causes of this ailment amongst the young are (1) Early weaning and injudicious feeding, and (2) Insanitary surroundings.

Dr. Ballard, who had for several years been investigating this disease, in a report to the Local Government Board in 1887, stated that a virulent chemical poison results from the growth of certain micro-organisms in the superficial layers of organic polluted soils, and that at times such organisms may become air-borne, and fasten on to food inside as well as outside the body, and there develop the poison which is the cause of epidemic diarrhea. For the development of these organisms, in addition to a polluted soil, a certain height of temperature is necessary. He has shown that the mortality does not bear a direct relation to the temperature of the air, but commences soon after the temperature of the earth at a depth of 4 feet registers 56 deg. F., and that in its further rise and subsequent decline it closely corresponds with the movements of the 4ft. earth thermometer, the latter fall being slower than that of the air.

Upon looking at the monthly returns of deaths from this disease, in 1895, we find the greatest number occurred in accordance with the above explanation, and in previous years the same relations existed.

The Monton and Park Ward suffered the least, there being only 2 deaths from this disease below the age of five years. The better sanitary surroundings of this ward are probably the cause of this.

From the foregoing evidence it will be seen that as long as we have the soil polluted with organic matter from the leaking midden privies, whenever a hot summer occurs we may expect a high death rate from epidemic diarrhoea, and in the autumn an increase of typhoid fever cases. I would suggest that handbills should be distributed advising the boiling of cow's milk intended for food, especially during hot weather, boiling being the best means of destroying any organisms that may be present.

DEATHS FROM DIARRHŒA AND NOTIFICATIONS OF TYPHOID FEVER AND THEIR RELATION TO THE TEMPERATURE OF THE 4ft. EARTH THERMOMETER.

| Month.    | Mean Temperature<br>of 4ft, Earth<br>Thermometer.  | from | of Typhoid |
|-----------|--|------|------------|
| January   | 42·6° F.   | 0    | 3          |
| February  | 39.2   | 2    | 1          |
| March     | 37.9   | 1    | 0          |
| April     | 41.8   | 0    | 1          |
| May       | 48:3   | 2    | 4          |
| June      | 53.8   | 1    | 2          |
| July      | 57.4   | 3    | 2          |
| August    | 58.7   | 19   | 7          |
| September |  | 10   | 4          |
| October   | First fortnight 57:3<br>Second ,, 53:4   | 8    | 11         |
| November  | The state of the s | 2    | 2          |
| December  | 45.4   | 5    | 1          |
|           |  |      |            |
|           |  | 53   | 38         |

Choleraic Diarrhæa due to toxic effects of food.—In August it was brought to my notice that 13 persons were ill with choleraic symptoms. Upon investigation it was found that the patients were suffering from vomiting, diarrhæa, and collapse. In every case the patient hal previously partaken of a portion of the shank of a pig which had been purchased at the same shop. Nine persons in one house, one in another, and two in another, in different parts of the district, were affected. Other occupants of the houses who had not partaken of the food were not ill. Nothing was left of the shanks for examination, but from evidence it seems to have had no bad taste, and the remainder of the pig was apparently quite right. The probable cause was some toxin, possibly of a microbal origin, due to the excessive heat of the weather. There was no evidence of sewer gas contamination. All the patients eventually recovered.

MEASLES.—In November an epidemic of this disease commenced, and continued during the remainder of the year. The first evidence was in the Winton Ward, and the first cases were probably imported from the surrounding districts. The scholars of St. Mark's School were first affected, the disease then spreading to

Monton, Barton, Patricroft, and lastly, Eccles. From the time and course taken the chief cause of spreading was by contact of susceptible children with affected ones.

As this disease is not now notifiable in this district, I had some difficulty in ascertaining the extent of the epidemic.

A copy of the following letter was sent to the master of each school in the district:-

Public Health Department, Town Hall, Eccles,

November 20th, 1895.

Dear Sir.

I am informed there are many children in this Borough suffering from measles, and I take the liberty of sending you a short description of some of the symptoms of this affection, so that you may endeavour to prevent the spread of the disease through your school.

Unfortunately, the general impression is that this disease is not serious, but the annual death rate is greater from this ailment than from scarlet fever. At this time of the year, Bronchitis, Pneumonia, and Inflammation of Kidneys—the most common sequelæ—are very likely to occur, therefore, if you have the opportunity, please inform the parents of the necessity of keeping the children indoors and warm during convalescence.

#### MEASLES.

Mostly conveyed by contact with the patient, or by air infected by him, or clothes, &c. Especially contagious in the prodromal stage preceding the rash, and during the eruption.

Incubation: Ten days. That is, after being exposed to the disease, the child may appear well for ten days, and then follows the

Onset of Disease: Feverishness and catarrhal symptoms, watery eyes and running at the nose, sneezing, etc., sometimes vomiting.

RASH: Appears about fourth day from onset of feverishness. First on the face at roots of the hair, pink in colour, roundish or irregular in shape, often coalescing.

It will be seen from the above how readily the disease may spread in schools, especially as in the onset for four days, during which time the infection is spread, only a "feverish cold" may be suspected.

At present, it will be wise to keep every child from school who has any of the symptoms above described, such as sneezing, catarrh, etc., and also any child from an infected house, though not itself ill.

Believe me,

Faithfully yours,

MEDICAL OFFICER OF HEALTH.

In addition to the closing of St. Mark's School it was found necessary to close Barton Wesleyan Schools for a fortnight from November 23rd; Monton Day School (Infant Department), St. Michael's, Winton, for a similar period from the 9th of December; and Peel Green British Schools from the 11th December.

Three thousand handbills, describing the chief symptoms of the disease, and giving advice as to isolation, etc., were distributed in the affected districts. The carelessness of the people in treating the disease as of no moment, and allowing the children to catch it so as to get it over all at once, is deplorable. If more precautions were taken, and the younger children prevented from catching the disease—and this could be done, as very young children do not attend school—the mortality from this disease would be greatly diminished, as the older a child is, the greater chance it has of recovery. Of the 26 deaths from this disease, 23 were below the age of five years.

INFLUENZA.—In the early part of the year this disease again became epidemic in the Borough, and 11 deaths were registered as directly due to this. On studying Table IV. (page 8) it will be seen the deaths registered under acute lung diseases was much above the average during the same period; evidently many of these were primarily due to Influenza.

One hundred large posters, as below, were placed in various parts of the Borough:—

#### BOROUGH OF ECCLES.-EPIDEMIC INFLUENZA.

1.—The above complaint is prevalent in this distict, and in some cases it is of a serious type.

The Disease is generally marked by its sudden onset, feverishness, severe head ache, and sometimes pain in the back and limbs. The incubation period is one of the shortest of all infectious diseases. The infection is largely given off by the lungs, and hence the disease is highly catching from person to person.

- 2.—Persons suffering from Influenza should be separated from the rest of the household when possible.
- 4.—Persons who are attacked should at once seek rest, warmth, and medical advice, and they should bear in mind that the risk of relapse with dangerous complications constitutes a chief danger of the disease.
- 5.—Those attacked should not join assemblages of people for sometime, as they are likely to convey the disease to others.

By Order of the Sanitary Committee,

THE MEDICAL OFFICER OF HEALTH.

Town Hall, March 16th, 1895,

Whooping Cough.—Thirteen deaths were due to this disease.

ERYSIPELAS.—Fifteen cases were notified, and one death occurred.

PUERPERAL FEVER.-Four cases were notified, and one death occurred.

Phthisis.—Fifty deaths were registered as due to this disease, showing a rate of 1.5 per thousand of the population. Last year there were 47 deaths, and in 1893, thirty-nine.

Measures taken to Prevent the Spread of Infectious Diseases.—The routine measures adopted to prevent the spread of infectious diseases are described in the Annual Report for 1893, page 16. During the past year more stringent measures as to disinfection have been taken, and more cases of scarlet fever have been removed to the Isolation Hospital.

TABLE of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health during the year 1895, in the Borough of Eccles Urban District, classified according to Diseases, Ages, and Localities.

| Do Do                              | Cases he-<br>Homes in<br>litities for<br>Isolation   | Enteric or<br>Typhoid  | ::          | :07              | 1 : :            | -                   | :0               | :-               | 1:                  | 9:9                 |
|------------------------------------|--|--|-------------|------------------|------------------|---------------------|------------------|------------------|---------------------|---------------------|
| O don                              | such Cases Ke-<br>their Homes in<br>Localities for<br>in Isolation                                     | Diphtheria.  | ::          | :-               | 1:               | : :                 | :-               | - :-             | 11                  | 100                 |
| - 10                               |  | Scarlatina.  | 65 51       | 470              | 41-              | :10                 | 19               | 000              | ::                  | 엄점                  |
| of Lesenses, Alges, and Locarines. | mov<br>the<br>Trea<br>Hos  | Smallpox.  | ::          | :                |                  | : :                 | :                | : : :            | :-                  | 1:1                 |
| 7 11                               | New Cases of Sickness in each<br>Locality coming to the knowledge<br>of the Medical Officer of Health. | Erysipelas   | :01         | :-               | :07              | :-                  | -12              | :-               | ::                  | 141                 |
| 193 6                              | s in e<br>nowl<br>of He  | Puerperal.   | :-          | :01              | :-               | : :                 | : :              | ::               | 11                  | :4                  |
| 186                                | knes<br>thek<br>icer o   | Enterie or<br>Typhoid  | :00         | :-               | :01              | :01                 | :6               | 141              | ::                  | 37                  |
| 2,5                                | f Sic  | Membranous   | ::          | : :              | : :              | : :                 | : :              | - :              | 11/                 | <b>-</b> :          |
| 2000                               | ses o<br>somin<br>edica  | Diphtheria   | 00          | :00              | -00              | -01                 | :00              | 314              | 11.                 | 10 83               |
| 1                                  | w Ca<br>ality<br>he M  | Scarlatina.  | 27.2        | 13               | 23               | 15                  | 83 88            | 31               | 11                  | E #                 |
| -                                  | Ne Loca  | Smallpox.  | ::          | : :              |                  | : :                 |                  |                  |                     | :-                  |
| Sugar Long                         |  | Age<br>under 5<br>or<br>over 5.  |             | Under 5 5 upwds. | Under 5 5 upwds. | Under 5<br>5 upwds. | Under 5 5 upwds. | Under 5 5 upwds. | Under 5<br>5 upwds. | Under 5<br>5 upwds. |
| _                                  |  | Registered<br>Births.  | 183         | 121              | 137              | 102                 | 181              | 203              | :                   | 927                 |
| annafaccanan ta                    | opulation at<br>all Ages.  | Estimated<br>to<br>middle of<br>1895.  | 5075        | 5255             | 2010             | 5115                | 0200             | 6065             | :                   | 32720               |
| tan inch                           | Popula<br>all  | Census<br>1891.  | :           | :                | :                | :                   | :                | :                | :                   | 29606               |
| Trans Orana                        |  | of these Statistics; Public Institutions being shown as separate localities. | BARTON WARD | ECCLES ,,        | IRWELL "         | MONTON&PARKWARD     | PATRICROFT ,,    | WINTON "         | UNION WORKHOUSE     | TOTALS              |

The "Notification of Infectious Disease" has been compulsory in the district since 1889. The isolation hospitals used by the sick of the district are the Lady Well Sanatorium and Mode Wheel Hospital, Salford.

#### ORDINARY SANITARY WORK OF THE HEALTH DEPARTMENT.

STAFF.—Chief Inspector C. W. LASKEY, Assoc. San. Inst. Inspector G. NORMAN, Cert. San. Inspr. Disinfector, &c., W. CROMPTON.

Systematic Inspection.—Throughout the whole year this has been actively carried out. There were 1,905 re-inspections of nuisances in course of abatement, over 1,000 houses inspected, 521 visits to zymotic cases, 302 rooms disinfected, besides systematic inspections of slaughter-houses, milkshops, cowsheds, common lodging-houses, bakehouses, etc. A summary is given at the end of this section.

ABATEMENT OF NUISANCES UNDER THE PUBLIC HEALTH ACTS.—Details of work under this heading are given at the end of this section. Although many of these are more or less permanently abated, yet much of the work is of a temporary character only. A study of the table will show the different kinds of work done.

Dairies, Cowsheds, and Milkshops.—There are 23 Cowsheds and 53 Dairies in the Borough, all of which have been regularly inspected.

Bakehouses.—There are 34 Bakehouses and Confectioners' shops in the Borough, and 96 inspections have been made.

Noxious Trades.—Many complaints were made concerning the stench from the Hille Rubber Works, and a largely-signed petition by residents in the vicinity of the works was received by the Committee. I inspected the works in November and found the cause was due to the drying of a particular parcel of rubber which the Manager assured me would be soon used up, and no further nuisance would occur. Shortly after this the nuisance was abated, and did not recur.

Common Lodging Houses.—There have been two applications for registration of houses as common lodging-houses. In one case the position and condition of the house were unsuitable for the purpose, and registration was refused; in the other case the suggested alterations were such that the applicant decided to let the matter stand over.

Systematic inspections of the two registered common lodging-houses in the Borough have been made. On one occasion mixing of sexes, and in one case overcrowding, was found, and prosecutions were instituted, with the result of a fine of £1 and £1 13s. 6d. in one case, and the costs 8s. 6d. in the other. Fresh measurement of the rooms in the Patricroft house has resulted in fewer members per room being allowed.

Two occupiers of lodging-houses were summoned for receiving common lodgers without being registered. In one instance eight common lodgers were found, and, there having been several previous convictions, a fine of £2 and costs for each offence was enforced, total £16 and £17s. costs. The other was fined 10s.

CANAL BOATS.—During the year 101 inspections were made, against 63 for 1894 and 80 for 1893. The 101 boats examined contained 108 men, 19 women, and 6 children, making a total of 133 persons. The average occupancy per boat was 1.32 persons. The number of children of school age found upon the boats was 6. No case of infectious disease was found.

DEFECTS, &c. FOUND ON CANAL BOATS.

| Cabins in want of Painting. | Boats working without Certificate. |
|-----------------------------|------------------------------------|
| 1                           | 5                                  |

These defects, &c., were remedied on receipt of notice from the Inspector.

SALE OF FOOD AND DRUGS ACT.

The enforcement of this Act has been carried out by the County Police.

| Number of Samples. | Number sent to<br>Public Analyst. | Description of Sample. | Result of Analysis.            |
|--------------------|-----------------------------------|------------------------|--------------------------------|
| 20                 | 29                                | New Milk               | Genuine                        |
| 5                  | 5                                 | Butter                 | do.                            |
| 1                  | 1                                 | Coffee                 | do.                            |
| 2                  | 9                                 | Pepper<br>Lard         | do.<br>do.                     |
| 3                  | 2 3                               | Scotch Whisky          | do.                            |
| 3                  | 3                                 | Irish WŁisky           | do.                            |
|                    |                                   | ,                      | Mixture with water             |
| . 1                | 1                                 | do.                    | 31 under proof. To             |
| 2                  | 2                                 | Ram.                   | pay 26s. 7d. costs.<br>Genuine |
| ī                  | ī                                 | Gin.                   | do.                            |
| 48                 | 48                                |                        |                                |

SMOKE NUISANCE.—The number of observations made in connection with factory and other trades' chimneys was 67. The periods of emission of dense smoke varied from 0 to 13 minutes per hour. Five notices to abate nuisances were served, but no prosecutions have been undertaken. One large firm who had mechanical stokers applied to their boilers have done away with them.

LIST OF CASES TAKEN BEFORE THE MAGISTRATES DURING THE YEAR 1895.— One case for non-compliance with notice to abate a nuisance was brought before the magistrates. Fine of 10s. and 15s. costs, and order granted. Other cases are mentioned under the heading of Common Lodging-houses.

UNWHOLESOME MEAT.—Inspections have been made, but no seizures have been necessary.

PRIVATE SLAUGHTER HOUSES.—Regular inspections have been made, to the number of 43 visits. The position and structure of some of these buildings are far from satisfactory. As a rule they have been found in a cleanly condition.

Drainage Examinations.—310 examinations of drains by the smoke test were made.

# TABULATED PARTICULARS OF NUISANCES DEALT WITH DURING 1895.

|   |                 |            | ,    | 1005        | 1904        | 1000 |
|---|-----------------|------------|------|-------------|-------------|------|
| House Drains-Taken up,                          | Cloonead and    | Ro.laid    |      | 1895<br>275 | 1894<br>159 | 1893 |
| Now near  |                 | ne-laid    | ***  | 17          | 32          |      |
| ,, Slopstone                                    | waste-pipes     | disconne   | cted |             |             | 1110 |
| from  |                 |            |      | 13          | 14          | 4    |
| ,, Bath   | ,,              | ,,         |      | 13          | 28          | 4    |
| ,, Lavatory                                     | . "             | "          |      | 7           | 9           | 4    |
| ,, Privy Dra                                    | ins "           | "          | ***  | 37          | 126         |      |
| Gully Traps—Defective                           |                 | ,,         | ***  | 121         | 121         | 105  |
| Want of   | ***             | ***        | ***  | 30          | 70          | 15   |
| ,, Cleansed                                     |                 |            | ***  | 3           | 17          |      |
| Soil Pipes-Defective                            |                 |            | ***  | 11          | 16          | 9    |
|   | tilation of     |            | 411  | 20          | 19          | ***  |
| ,, ,, bath                                      | waste-pipes     | disconne   | cted |             |             |      |
|   | from            |            |      | 15          | 4           | ***  |
| Sland's Wasta Bines                             | tory pipes disc | onnected f | rom  | 9           | 103         | 70   |
| Slopstone Waste-Pipes-I                         |                 | ***        | ***  | 1           | 103         | 79   |
| Water Closets - Defective                       | ant of          |            | ***  | 21          | 10.         | ***  |
| Defects in                                      | pan             |            | **   | 27          | 3           | 8    |
| Inefficient                                     | flush to        |            |      | 11          | 3           | ***  |
| Slop Water-Closets-Stopp                        | ped up, &c.     |            |      | 19          | 2           | 1    |
| Defective-Ashpits                               |                 |            |      | 4           | 10          | ***  |
| ,, Yards, passage                               | es, &c          |            |      | 116         | 165         | 106  |
| ,, Cellar Floors, 8                             | сс              | ***        |      | 42          | 12          | 14   |
| ,, Channels                                     |                 |            |      | 2           | 6           | ***  |
| ,, Eaves gutters                                |                 |            | ***  | 18<br>31    | 9<br>42     | 37   |
| ,, Down-spouting                                | ovy wasta-nine  |            |      | 16          | 12          | 91   |
| Bath and lavat                                  | ory waste-pipe  |            | ***  | 8           | 5           |      |
| Middenstoads                                    |                 |            |      | 7           | 4           |      |
| ,, Slopstones                                   |                 |            |      |             | 2           | ***  |
| Privy-pits-Defective                            |                 |            |      | 127         | 170         | 176  |
| ,, Converted into                               | some form of    | f w.c.     |      | 51          | 1           |      |
| " Repaired, &c.                                 |                 |            |      | 63          | 51          | 28   |
| Abolished                                       |                 |            |      | 6           | ,           |      |
| Rain-water Pipes, termina                       |                 |            | ws,  | 201         | 95          | 50   |
| TT-11- TO-611                                   | ed from drains  |            | ***  | 201         | 5           |      |
| Want of   |                 | ***        |      |             | 1           |      |
| C   |                 |            | ***  | 4           | 9           | 7    |
| Yards, Cellars, &c., Cleans                     | sed             |            |      | 14          | 15          |      |
| House Premises Damp                             |                 |            |      | 4           | 5           | ***  |
| Dirty Houses<br>Overcrowding                    |                 |            |      | 11          | 38          |      |
| Overcrowding                                    | and Dubblish    | ***        |      | 177         | 1 05        | 9    |
| Accumulations of Manure                         | and Rubbish     | ***        |      | 17          | 25<br>8     | 2    |
| Keeping Pigs, Fowls, &c. "Backing up" of Sewage | ***             |            | ***  | 2           | 10          | -    |
| Defeating Ctuest Culling                        |                 |            | ***  | 5           | 5           | ***  |
| Want'of Water Supply to                         | Houses          | ***        |      | 3           | ***         |      |
| Waste of Water                                  |                 | ***        |      | 13          |             | ***  |
| Milkshops requiring clean                       | sing and lime-  | washing    |      | 5           | 2           |      |
| Bakehouses ", ",                                | ,, ,,           |            |      | 8           | 5           | ***  |
| Miscellaneous floors requiri                    |                 | ***        |      | 2 9         | 2<br>25     | 6    |
| Miscellaneous                                   |                 | ***        | ***  | 9           | 20          |      |
|   |                 |            | J    | 1559        | 1467        | 753  |
| Number of Preliminary No                        | tices Served    |            |      | 319         | 347         |      |
| . Committee's                                   |                 |            |      | 117         | 138         |      |
| ,, Cases before th                              | e Magistrates   | 3          |      | 5           | 2           |      |
| ., Letters Writte                               | n               | ***        |      | 810         |             |      |
| Water-Closets provided in                       | lieu of Privies | š          | ***  | 39          | 73          |      |
| Slop Water-Closets ,,                           | 0- 22           |            |      | 67          | 26          | ***  |
| Infected Premises-walls,                        | &c., stripped   | and lim    | e-   | 177         |             |      |
| washed  |                 |            | ***  | 175         |             | ***  |

#### SUMMARY OF WORK DONE BY THE INSPECTORS DURING 1895.

|                               |          |          |          | -    | 1895 | 1894 |
|-------------------------------|----------|----------|----------|------|------|------|
| Re inspections of Nuisances i | n cour   | se of Al | batement |      | 1907 | 2953 |
| Houses Inspected              |          |          |          |      | 1094 | 964  |
| Visits to Slaughter-houses    |          | ***      |          |      | 43   | 34   |
| " Milkshops                   |          |          |          |      | 123  | 136  |
| " Cowsheds                    |          | ***      | ***      |      | 22   | 19   |
| " Common Lodging-H            | ouses    |          | ***      | 2.50 | 51   | 42   |
| " Bakehouses                  | 4.00     | ***      |          | ***  | 96   | 54   |
| ., Workshops                  |          | ***      | ***      | ***  | 2    | 2    |
| Owners seen re Nuisances      |          |          |          |      | 372  | ***  |
| Zymotic Cases Visited and R   | e-visite | ed       | ***      |      | 521  | 970  |
| Rooms Disinfected             |          | ***      |          |      | 302  | 305  |
| School Premises Disinfected   | ***      |          |          | ***  | 2    | 10   |
| ,, Inspected                  | ***      |          | ***      |      | 24   | 8    |
| Canal Boats Inspected         | ***      | ***      | ***      |      | 101  | 63   |
| Smoke Observations            |          |          | ***      |      | 67   | 44   |
| Applications of "Smoke Tes    | t" to I  | rains    |          |      | 310  | 191  |

#### SECTION V.

#### SPECIAL SANITARY MATTERS.

WATER SUPPLY.—As nearly every house has the Manchester water laid on, we are at a great advantage in this respect. In the case of three cottages in Green-lane, where there was no water supply, notices were served and Manchester water has been laid on.

Dwellings of the Working Classes.—Beyond ordinary inspections and the remedying of some of the usual nuisances, nothing has been done. An Insanitary Property Sub-committee has been formed, and more work may be expected during the coming year.

Isolation Hospital for Infectious Diseases.—I stated in my last Annual Report that an agreement was being entered into with the Salford Corporation as to the removal of cases from this Borough to the Sanatorium at Ladywell and Mode Wheel Smallpox Hospital.—I am glad to state the matter has at last been settled, and an agreement between the two Corporations signed. The effect of this is that the Borough of Salford guarantees the use of 20 beds, if we require them, at the Ladywell Sanatorium or Mode Wheel Hospital, as the case may be.

An annual subsidy must be paid by Eccles Corporation, and there is a fixed weekly charge per case. This agreement is binding for ten years, and after that subject to two years' notice on either side.

PRIVATE SCHOOLS.—In accordance with instructions from the Sanitary Committee, an inspection of all the private schools in the Borough was undertaken by Mr. Laskey, and a detailed report was presented by him in August. The following are the chief points of importance in his report:—

Of the twenty schools inspected, a large number could scarcely be considered satisfactory in many details. Fourteen schools were conducted in what were either specially built premises or rooms which had been adapted for teaching purposes, and the remaining six in ordinary rooms of dwelling-houses—viz., bedrooms or sitting-rooms.

Cubic Capacity. -This varied very much. In measuring the rooms it was found that few exceeded 12 feet in height, but, taken in conjunction with the length and width, the rooms appeared fairly lofty.

The average amount of cubic space per scholar varies from 95 cubic feet to 560 cubic feet. Six schools have less than 150 cubic feet per head, and eight over 200.

Ventilation.—In the majority of cases this depends on the opening of doors and windows, and upon the chimney flues. It is hardly necessary to point out that oftener than not the doors and windows would be shut, owing to draughts, and even the chimney flues are considered objectionable, for in two cases where each child had only 125 and 155 cubic feet of space respectively, it was found the flues had been carefully stopped up. In eight cases some attempt had been made to ventilate the rooms. In one or two cases boards had been placed under the lower sash of the windows (Hinckes-Bird principle), and in two cases Tobins' tubes were in use.

Lighting.—Fairly good, but no particular system seems to have been adopted in the seating of the scholars, the desks being so arranged as to give a maximum of seating accommodation regardless of other conditions.

Structure of Walls.—In six cases the walls were either wainscotted, painted, or distempered. In all others paper was general.

Sanitary Conveniences.—Particular attention was paid to this matter. It is a cause for regret that owing to the inadaptability in most cases no particular attention has been paid to the provision of efficient sanitary conveniences. Generally speaking, the occupiers are quite content to carry on their schools without any improvement or increase in the matter of conveniences already fixed. Privy pits of the usual primitive type were found in connection with 13 of the schools, and of these only 5 had sole use, the others being used by adjoining occupiers. It is therefore palpable that these insanitary conveniences are a continual source of danger to those who have to use them, owing to the large number of persons who avail themselves of them. Pan closets were found in three cases, but no complaints were made about them. In five cases there was good water-closet accommodation. In three cases lavatories were provided, and in four cases there were urinals.

Playgrounds or Playrooms.—These were provided in twelve of the schools.

Boarders - In seven of the schools boarders were taken. The bedrooms were sufficiently large, and there was no evidence of overcrowding.

Remarks.—It seems unfortunate that Local Authorities have not the same powers over private schools as they have over many other places, particularly the right to grant or withhold permission to use premises which may or may not be suitable for scholastic purposes. It would, I think, be an advantage if regulations could be made as to the number of children permissible under the various circumstances, and it should be imperative that before premises are to be used for school purposes they should be made suitable as regards their size,

ventilation, warming, and lighting arrangements, and as to the provision of adequate sanitary conveniences.

EXCREMENT AND REFUSE DISPOSAL.—The "Tip," which was used for ashes only, in the Patricroft Ward, has been closed, hence everything has now to be carted to the Tip at Peel Green, near the Sewage Farm.

Water Closets.—In addition to water closets being adapted to all new houses, there have been 39 ordinary water closets and 67 slop water closets adapted to old property, replacing 51 privy pits. In each case an ash tub has been supplied by the Corporation, and these are emptied every week.

Privy Middens.—There are 3,347 privy pits belonging to 5,966 houses in this borough, chiefly in connection with the houses of the working classes. In a few cases these pits are very large, and have several privies emptying into the one pit, but in the majority of cases they are double, that is, one pit for two houses. The average size of one of these is 5ft. by 3ft. 6in. i.e., without considering the space under the privy seat, and in nearly every case they are from 2 to the 3 feet below the level of the surface of the surrounding ground. As these structures are simply one brick thick, and generally the bottoms are made of broken bricks, there is an ebb and flow of the liquid filth into the surrounding soil, with the result stated previously in the account of enteric fever and diarrhoea.

In cases where these structures have been drained fine ashes find their way into the drains and sewers and choke them up, and even if they remain open the escape of sewer gas from them so near the dwelling-houses must be a source of danger. Dr. Bruce Low, from the Local Government Board, who inspected this district in 1894, in his report to you stated that "in no case should drainage of privy middens into public sewers be any longer permitted."

I have seen in this district a 9-inch sewer completely choked up with fine ashes, and a recent inspection of the main sewer in Church-street at various man-holes revealed a sediment of some inches depth of this material.

In connection with this subject I quote the following from the report on this district in 1875, by Dr. Stevens, a Special Commissioner from the Board of Health:—

"That no further privies with middens of the present construction should be permitted, and that existing privies should be converted to some more healthy plan for excrement and refuse reception."

At page 3 Dr. Stevens states his views more fully :-

"The plan for excrement disposal and ash and refuse storage, is the old one very commonly found in the North of England, by which the privy communicates with an open ashpit or midden; this arrangement never secures its aim, that of modifying the nuisance inseparable from exposed excrement by covering it, as deposited, by ashes. The construction is such that if the privy middens be emptied as frequently as they should be, the contents of the excrement pit and ashpit would never commingle.

"In the early stages of their use, and when the deposits in either compartment are slight, the rainfall saturates the ash refuse more or less, and washing into

the privy, renders more fluid the deposit there, which flows out over the whole extent of the exposed midden; here it lies soaking into the soil and brickwork, often into the walls of the houses, and sending its stinking effluvia into the dwellings to which it is always too near."

The late Dr. Carrington, the Medical Officer of Health for this district at that time, in his annual report for 1876, referring to the same subject, states:—

"Whether the value of the ash is due to its absorbent qualities, or, like charcoal, it possesses true disinfectant and deodorant properties, we need not inquire. It is sufficient to know that when saturated by rain water and house slops the ashes lose their salutary qualities, fermentation commences in the animal and vegetable matters which are thrown on every midden, and the whole mass becomes offensive to sight and smell, and prejudicial to health.

"The exposed excreta supply a fit nidus, in which flies of different species deposit their eggs, so that it is quickly reduced to a mass of writhing corruption, and in turn fills our courts and houses with insect pests. Thus converting, what if rightly treated, would increase the food of man, into insect legions which prey upon him!

"No reasonable person can doubt the evil of so many open middens existing in the midst of a growing population.

"It is difficult to afford any reliable idea of its extent, but, on a rough estimate, it has been calculated, that if the middens of the district were massed together, they would form a tank as large as the open area from Eccles Cross to Bradburn's Buildings, and with a depth of five feet.

"To imagine such a lake in our midst, filled with the contents of the cesspools seething and fermenting and giving off its mephitic gases, is not a pleasant exercise for the imagination.

"I would respectfully urge upon the Board the evils associated with the present system of draining ashpits. By these drains the sewage, in a state of fermentation, is carried by a thousand channels beneath every court and back yard, and, too frequently, beneath the houses themselves; the gases engendered naturally collecting in largest quantity in the highest portions of the sewer system, where they are stagnant for a time, or seek outlets at the point of least resistance. 'Not infrequently (in the words of Mr. Leigh, the experienced officer of the Manchester Board—Report of Officer of Health for Manchester, 1874) these points are within, or in the immediate vicinity of the houses themselves, and a constant insidious escape takes place of poisonous effluvia, which gradually undermines the health of the occupants, or by some sudden ebullition under low atmospheric pressure, prostrate them at once with fever, diarrhœa, or other serious disease.'"

While investigating this question, Mr. Leigh caused a large number of sewers to be opened, with these results:—"The greatest accumulations I found in the drains at the back of the houses, in courts, passages, and in narrow streets. Some of the drains were found quite full of solid matter, others had a few inches above the deposit—the deposit consisting of small coal, ashes, broken pot, and

feecal matter cemented into a strong tenacious mortar, which no amount of flushing could dislodge, and which gave off very offensive gases."

THE FOREGOING WAS WRITTEN TWENTY YEARS AGO, and, in addition to the then existing conditions, some hundreds of similar structures have since been erected. A few years ago the Authorities insisted that all such structures in every case should be removed at least four feet from the dwelling-house, but, unfortunately, the size and mode of construction were not altered, and since the Sewage Farm Scheme has been adopted and carried out, water closets have been insisted on in most of the new houses, but the above-mentioned blot still exists and must be faced.

Dr. Carrington, in the report above mentioned, states—"Fortunately, the winds and currents of the atmosphere, those great natural scavengers, meet with less obstruction in our midst than in the crowded courts of Salford and Manchester. Hence evil vapours are not allowed to stagnate, but are constantly displaced by purer air."

Since that period the district has greatly increased in population, and the number of houses being erected every year will more and more add to the above-mentioned danger. During the past twenty years Manchester and Salford have tried every variety of conservancy system, but it has been found wanting, and at present they are adopting water carriage.

London, wisely, has universally adopted the water carriage system for many years, and nearly all big towns are now adopting similar measures.

Dr. Niven, the Medical Officer of Health for Manchester, in his report for 1894, states:—"No doubt a good pail system is a vast improvement on the old midden privy, but it cannot be said that the pail system in Manchester answers well. The actual conditions, indeed, are such as to render the ground a nursery for the infections of such diseases as summer diarrhæa and typhoid fever. The houses are built direct into the ground, cellars being exceptional, without the interposition of any damp-proof course. The consequence is that any pollution of the soil, such as has been described, will necessarily cause polluted water to be sucked into the brickwork of the walls. In fact, whether as regards pollution of the atmosphere, or as regards the generation of disease in the ground, the presence of these defective pail arrangements in confined yards must be regarded as a serious injury to health."

Mr. Rook, the Superintendent of the Sanitary Department, in the same report writes as follows:—

"I am unable to conclude this report without calling attention to the very serious danger to health arising from the present pail-closet system. In hundreds of the narrow back passages in the city, the air at any time, and especially on a close warm day, is most sickening; and as most of the closets are within a few feet only of the back doors, or underneath the windows, the air must of necessity be drawn into the houses. The sooner a change is made and the water-carriage system adopted the better it will be, in my opinion, for the health of the citizens."

At Birmingham, Leicester, Southport, Accrington, Burnley, &c., marked improvement in the health of the inhabitants has been found since the adoption of the water-carriage system.

Notwithstanding the bad drinking water supply of London, and the excellent supply of Manchester and Salford, anyone who will compare the death-rates of these towns can come to only one conclusion as to the advantage of the water-carriage system from a health point of view.

Where such structures as privy middens have to be, the Local Government Board suggests the following, as a glance at the bye-laws, adopted by you in 1894, will show.

The structures shall be of such materials as to prevent any absorption by any part of such receptacle of any filth deposited therein, or any escape by leakage or otherwise, of any parts of the contents of such receptacle.

The bottom or floor shall be in every part at least three inches above the level of the surface of the ground adjoining such receptacle. The capacity of the privy part shall not exceed 8 cubic feet, and the ash part 6 cubic feet. The structures must not be drained. The contents shall be removed at least once a week.

It is evident that the only practical remedy for these nuisances in this district is the adoption of water carriage, as the following reasons will show:—

- 1.—To change the existing structures into privy middens, as directed in your bye-laws, will cost nearly as much as putting in water closets.
- 2.—Even if this change were made it would necessitate scavenging once a week. The cost formerly for scavenging was over £2,200 a year, and the district was only gone over two or three times a year, but under the careful supervision of Mr. Laskey, who has increased the scavenging of the whole district to once in two months, the cost last year was reduced to £1,750. If the borough had to be scavenged once a week, the cost would be enormous, and a serious and constant burden on the rates.
- 3.—The well laid out Sewage Farm at Peel Green is quite capable of dealing with all the sewage of the borough.
- 4.—The better class and many of the other houses have already water closets. A dual system would be very expensive.
- 5.—The water rates now paid will allow of a water closet per house without extra charge.
- 6.—If each house had an ash tub for dry ashes, &c., these could be emptied weekly at less cost than the present removal once in two months.

In the report for 1883 Dr. Carrington writes concerning Dr. Stevens' recommendations, they were seriously discussed by the Board, and it was decided for the present no change should be made.

In the same reports he states—"I have sometimes thought that covering the ashpits so as to leave the front only open, would abate the chief nuisance, which is due to the presence of tainted storm water. But a better plan would be the introduction of extern water closets applied to cottages as at Birkenhead."

That the present Council are aware of the seriousness of existing conditions and are endeavouring to remedy them is evident from the following:—

In nearly all houses passed by the Building Committee during the last two or three years, some form of water closet has been provided. Another important step was taken by the Council on October 7th last, when they adopted the following resolution of the Sanitary Committee, passed at the monthly meeting held on September 11th, "That the Sanitary and Nuisance Inspector be instructed in future, when issuing preliminary notices for the abatement of nuisances arising from defective privy middens, to include a notice requiring the adoption of the water-carriage system as being in this Committee's opinion the only satisfactory means of abating such nuisance, and preventing a recurrence thereof."

During the past year I am glad to state that 51 of these structures have been replaced by 106 water or slop water closets, and ash tubs were provided, the latter by the Corporation, but if the rate of alteration does not exceed that of the past two years, it will take 60 years to remedy these existing nuisances.

It is satisfactory to note that the owner of a row of 12 houses has, during the past year, voluntarily adopted slop water closets and ash tubs to replace the privy middens, and it is to be hoped that more landlords will follow in his footsteps.

REPORT ON WATER CLOSETS FOR COTTAGE PROPERTY.—A special report on this matter was presented to you in June. The following are the chief matters of importance mentioned:—

The Frost.—The cold period commenced on December 30th, 1894, and terminated on March 16th, 1895, practically a continuous frost for over 70 days, the mean temperature in January being 34.4, which was 4.5deg. below the average for that month, and in February 31.6 or 8.3deg. below the average.

Slop Closets.—There were over 280 of these in use in the district during the frost, and not one of them became frozen.

Where they had been fixed for some time there were few stoppages from foreign bodies thrown down, but when first fixed careless people sometimes threw down such things as salmon tins, wood, bricks, rags, cloths, &c.

In some cases the sides of the passage between the seat and the bottom of the closet were foul.

Ordinary Water Closets.—An investigation of 223 of these structures in cottage property was made, and it was found that in all cases where the structure was away from the house, the water in the cisterns and pipes had been frozen where they were not cased in, but where the structure was built against the house, and the cistern and pipes cased in, or in the few cases were the cistern was inside the scullery or kitchen, there was no freezing.

Conclusions.—From the point of cleanliness the ordinary water closet is preferable, and from the foregoing evidence, if the closet is built against the house and the cistern placed inside the kitchen or scullery and well cased,

there is little fear of freezing. The closet should be of the short hopper or wash down type, with a flushing rim, and a good water seal. The cistern should hold at least three gallons, and be of syphon action, one pull of the lever ensuring complete emptying. The supply pipe should be of 1½ inch calibre at least.

In dealing with those cases where the closet is situated away from the house, or where the class of tenant is, unfortunately, ignorant, careless, negligent, or destructive, the slop closet is decidedly preferable. The B arrangement of Duckett's or Day's slop closets are the ones chiefly used in this district, the advantages of the latter form are that the tipper is beneath the seat and can be seen and easily got at if anything goes wrong, and the sides are arched back, which prevents fouling to a great extent.

SCAVENGING OF ASHPITS AND ROADS.—This has been actively carried out during the year, and the better conditions as to paving of the streets and scavenging generally are noticeable.

The 3,347 privy middens have been emptied 6.9 times during the year, and, in addition to the above, there are 541 dry ash pits, 17 pails, and 345 ash tubs, the latter being emptied weekly. The scavenging is done during the day time in winter, and at night during the summer months.

Method of Scavenging Privy Pits.—The men work in pairs, one man being employed in "pitching out" and the other in wheeling the rubbish away. The pitcher-out enters the pit and throws the contents out into a barrow; this is wheeled out from the back premises to the street and there upset, and a heap formed. In many cases the man has to stand on a ladder while in the pit, or otherwise stand up to his knees in liquid filth. Such contents have to be ladled out and poured into a barrow, wheeled to the street, and then scooped into a wa'ertight cart. In the other cases the carter fills his cart from the heap in the street, and removes it to the tip at Peel Green.

Soiling of the passages and the streets cannot be avoided, and, although the soiled places are swept as clean as possible, some amount of filth is bound to be left behind on the unpaved portions of the passages, and in the joints between the sett paving of the streets. This eventually dries, and is blown in all directions.

The danger from this has been recognised by your Committee, and I am pleased to record that flushing of the surface of paved streets is now carried out, but in the unpaved streets and passages the old order of things remains—they are swept, and then sprinkled with disinfecting powder which may "cover one stink with another," but certainly does not destroy any specific germs, if they should be present.

That the *emptying* of these pits is a nuisance and injurious to health is certain. In April I received complaints from the owners and some of the operatives of Messrs. Houldsworth and Gibb's mill, concerning the nuisance created periodically by the tipping of nightsoil, &c., into the street near the mill gates. Several assured me that on leaving the mill for breakfast, in passing the heap the stench was so abominable that they were attacked with vomiting, could

not eat any breakfast, and in some cases could not return to work for some time.

Upon inspection, it was found that the only outlet from the property bounded by Peel-street, Monton-lane, and Rutland-street, was by a narrow passage just opposite the above-named mill, and everything had to be wheeled down this passage and tipped in the street previous to removal. Means were taken to minimise the nuisance by putting on all hands to get that district scavenged in the one day, but the more frequent scavenging pursued during the year meant a more frequent repetition of the nuisance.

I am glad to report that the owners in connection with this property have now adopted slop-water closets, ash tubs are provided, and these are emptied once a week by being tipped directly into the cart.

Other complaints as to the nuisance created by the more frequent emptying of these pits have been received; in one case a memorial was signed by most of the inhabitants of one short street complaining of the frequency of recurrence of this nuisance.

SEWERAGE.—The completion of the general survey of the district by the Borough Surveyor places on record matter of considerable value. Not only is the survey of the surface of the district complete, but the position, depths, manholes, and other important details of the sewers are also recorded. An important alteration at the junction of the two main trunks of sewers near the Sewage Farm will, it is hoped, remove the obstruction which has occurred in the past in the time of storms. The provision of the storm overflow at Peel Green has been successful in alleviating the flooding in that neighbourhood.

The Committee have had under serious consideration the provision of a new Intercepting Sewer through the Irwell Ward, so as to take the sewage from the Lane Ends Sewer, which is now discharging into the Ship Canal, down to Barton, there to join the deep sewer. Another matter which will probably be entered upon during the coming year, is re-laying, at a greater depth the sewer along Liverpool-road, from Trafford-road, as far as Dean's-yard. The provision of other storm overflows, and better ventilation of the sewers will also require attention in the near future.

An important matter from a health point of view is the condition of the drains in the passages and back yards, which remove waste matter from the backs of the houses, and in most cases drain privy middens. In nearly every case examined, where the drains have been laid for some time, not only have many of them been found choked with fine ashes, &c., but the joints in every case were defective, and hence liquid impurities have percolated into the soil to some distance from the pipes. It is evident that such a condition should be remedied, whether water closets are adopted or not.

GRANGE FARM.—THE ECCLES SEWAGE FARM WORKS.—The treatment of the sewage of the borough at this farm was regun at the end of July. The following brief description of the farm has been furnished by the Engineer, Mr. H. Leonard Hinnell, M. Inst. C.E.:—

These works are situated on land between Peel Green-road on the north-east side and Salt Eye Brook on the south-west, are about one mile from the centre of the town, and the area of the land obtained for them is 711 statute acres-To these works the sewage of the whole of your borough flows with the exception of a small quantity passing down Salter's-lane and which it is proposed to convey into a sewer having its connection with the outfall sewers which have their confluence in Peel Green-road, at the point opposite where the main outfall sewer enters the Sewage Farm land. This main outfall sewer is 4 feet in diameter and daily, discharges, from a population of 32,000, an average volume of sewage of 1,000,000 gallons, 20 to 25 per cent. of which is estimated to be manufacturers' bleachers' and dyers' refuse waters. The last length of this sewer was laid through the land, and until the opening of these works discharged its sewage into Salt Eye Brook. The sewage now flowing down this outfall sewer is intercepted at a point behind the pumping station by means of a junction made with the same sewer and the sewage conveyed in culvert to the catch pit. The outfall sewer below this point is now utilised as a storm overflow. an overflow sill having been constructed in it so as to divert the sewage into the work. Any excess of storm or rain water beyond eight times the ordinary flow of sewage is considered by the River Authorities sufficiently diluted to be discharged direct into the streams and water courses, and the sill is arranged to allow storm water to pass over accordingly.

The sewage received into the catch pit passes through a screen, which effectually arrests any floating matter which may damage the machinery, into the pump well, from which it is raised by means of pumping machinery and discharged in pipes through a bell mouth opening in a circular basin. At this point when the sewage is considerably agitated the precipitating medium will be added, though at present it is proposed that the tanks shall be worked without chemicals and precipitate mechanically as the arrangement of them will ensure this result to a very large extent.

The pumped sewage flowing from the discharged basin passes into conduits either right or left as desired and from these flows evenly through openings in their sides into the detritus tanks. In them, road detritus, sand, and other heavy matter will be retained. The sewage retarded in its flow in these tanks passes through trapped outlets into the conduit connected with the settling tanks and from it passes through penstocks into the settling tanks through distributing troughs which, as their name implies, cause a distribution and admission of the sewage into the settling tanks almost imperceptibly. In the settling tanks, sills, and weirs, are provided so as to assist precipitation as the sewage flows through them, as in them the light flocculent matter will generally be found to have been deposited from the sewage as it has been flowing quietly through.

At the extreme end of these tanks an overflow sill is constructed over which the tank effluent or supernatant waters, freed from its matters in suspension, falls in a thin film, thus allowing aëration, into a discharge conduit to which is connected a series of underground carriers which convey it to any of the dis-

tributing chambers on the farm as desired. The removal of the valves and sluices in these chambers causes the tank effluent to flow down any grip in the land which may be cut, from whence it irrigates in the furrows any crops grown on the plots. The plots have a sub-soil of sand and loam, and are underdrained with seconds earthenware pipes laid from 3ft. 6in. to 5ft. in depth at fixe distances apart according to the quality of the sub-soil, and the tank effluent passing through the land is purified, being freed from its impure matter in solution and is collected into branch drains connected with the main effluent drains from which it is discharged in a clear and purified condition into Salt Eye Brook. It is upon these plots of land covered with vegetation that the process of sewage purification is completed, the tank effluent being freed from the polluting matters in solution contained in it by flowing on to and through the land, the matters in suspension having been previously eliminated in the The polluting bodies in solution are the organic matters which it is impossible to remove by merely chemical treatment, and it is only by the agencies which are now recognised as biological in character which operate when sewage is applied to porous aërated soil that this can be effected. The process is now understood to operate in the following manner:-The organic matter is decomposed by the action of micro-organisms, and is dissolved and carried in solution into the soil where it is converted by bacteria in their life processes into nitrates and nitrites, and in which state it is fit to be assimilated by vegetation.

The sludge deposited in the detritus and settling tanks, after the supernatant water has been drawn off by means of floating outlets and discharged on to the lower plots, flows into pipes which convey it to be discharged by gravitation on to the sludge filter beds which are formed of porous materials. On these beds the sludge rapidly parts with its moisture and becomes in a portable condition ready for removing and spreading upon the farm land which should be considerably benefited by its application, or if any demand was made for it from the neighbouring farmers the Corporation might dispose of it to advantage.

The following is a copy of the Analyst's report presented to the Committee in December, 1895:—

#### CORPORATION OF ECCLES SEWAGE FARM.

REMARKS.

Sewage appears much the same as usual, except that it contains a large quantity of soapy and greasy matter; the total solids are rather high.

Effluent good, the percentage of purification effected in albuminoid ammonia, being 75·1, showing that the ground is doing its work satisfactory. In time, no doubt, the albuminoid ammonia can be still further reduced to 0·1 per 100,000, still, if this class of effluent can always be turned out, the work of the farm will be well done.

C. A. Mc.KERROW, Dec. 9th, 1895.

## To the CHAIRMAN of the SEWAGE DISPOSAL COMMITTEE (Borough of Eccles)

REPORT on SEWAGE and EFFLUENT received on November 26th, 1895.

| Expressed as Parts per 100,000.   |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|
|   | SEWAGE.<br>A mean of 24 samples<br>taken consecutive hours,<br>Nov. 25th and 26th, 1895. | EFFLUENT.<br>A mean of 24 samples<br>taken consecutive hours,<br>Nov. 25th and 26th, 1895.           | Percentages<br>Purification.   |  |  |  |  |  |  |  |
| Total Solids at 212° F.  Mineral Solids  Loss on Ignition  Suspended Matter  "Mineral "Organic, &c  Solids in Solution  Mineral in Solution  Organic, &c., in Solution  Free Ammonia  Albuminoid Ammonia  Alkalinity (as Na. Ho.) | 59·50<br>129·80<br>109·80<br>13·80<br>96·00<br>79·50<br>45·70<br>33·80<br>2·260<br>0·604 | 59·30<br>37·90<br>21·40<br>3·80<br>3·00<br>0·80<br>55·50<br>34·90<br>20·60<br>0·586<br>0·150<br>6·00 | 68·6<br>36·3<br>83·6<br>96·5<br>78·2<br>99·1<br>30·1<br>23·6<br>39·0<br>29·8<br>75·1<br>64·9 |  |  |  |  |  |  |  |
| Colour, Original 24 Hours' Standing Odour Rate of Filtration  | black<br>turbid, large sediment<br>sewage & soapy matter<br>fair                         | clear<br>clear, slight brown sediment<br>none<br>quick   |  |  |  |  |  |  |  |  |

NOTE.—The Sewage was first pumped on to the land on June 25th, 1895. A sample of the Effluent taken on September 11th, gave a percentage of purification of 55'3. The present analysis, giving a percentage of purification of 75-1, shows that the land, after five months' working, is giving a good result.

GEORGE W. WILLIS, Manager.

Ship Canal.—The emanations from this waterway were decidedly objectionable during the hot weather, but no distinct illness could be attributed to it.

GILDA BROOK.—This stream has been found clear on the various occasions it was inspected.

Folly Brook.—In 1884, the late Dr Carrington wrote: "The smell of Folly Brook, after its pollution by the Swinton Sewage Farm, was extremely offensive." The same remarks apply to the year 1895. The excuse given is that the offence is due to the sewage from the few houses in the Swinton portion of Folly-lane; as arrangements are now completed to take this sewage into our sewers we shall see what improvement takes place, but on many occasions when I inspected this brook the contamination was far more than could be accounted for by the above explanation.

Cholera Survey.—In last year's report a copy of Dr. Bruce Low's recommendations was inserted. In endeavouring to comply with the suggestions therein, some work has been entered upon under each of the headings.

1. Excrement and Refuse Disposal.—Increased scavenging and adoption of water closets in some cases have been carried out.

- 2. Sewerage and Drainage.-Vide report on Sewerage.
- 3. Condition of Dwellings .- Many yards have been paved during the past year.

OPEN SPACES.—Through the wisdom of the Local Authority the congested portions of the district are fortunate in having such excellent gymnasia and open spaces for cricket and other games on the Recreation Grounds, and full advantage has been taken by the public of the provision.

### PUBLIC BATHS.

| The following information rela                                  | ative to          | the Pu  | blic Bath              | s will | be of in                         | terest:    |
|---|-------------------|---------|------------------------|--------|----------------------------------|------------|
| No. of SWIMMIN<br>SIZE OF ,                                     |                   | s<br>,, | (1) 70ft<br>(2) 30ft   |        |                                  |            |
| No. of Slipper  | BATHS             |         |                        |        | 8                                |            |
| No. o   | F BATH            | ERS IN  | 1895-                  |        |                                  |            |
| Swimming Bath—Ma<br>,,, Fe<br>Attendance of (2<br>Slipper Baths | males<br>03) Cont | ract Ti | cket Ho                | lders  | 16,095<br>913<br>10,493<br>1,373 |            |
|   |                   |         | 1895 Tota<br>1894 Tota |        |                                  |            |
|   |                   | Inc     | rease 189              | )5     | 3,879                            |            |
| The Baths were opened on Mar                                    | ch 23rd,          | 1895, a | nd closed              | donth  | e 13th O                         | ct., 1895. |
| PR  | ICES OF           | ADMIS   | sion:-                 |        |                                  |            |
| Gentlemen's Swimming Batl                                       | ı—                |         |                        |        |                                  |            |
| Sundays (6 to 9 a.m.)   |                   | ***     | .444                   |        | 2d.                              |            |
| Mondays   | ***               |         |                        |        | 4d.                              |            |
| Other Days  |                   |         |                        | ***    | 3d.                              |            |
| Ladies' Swimming Bath-  |                   |         |                        |        |                                  |            |
| Mondays (all day),  | Tuesday           | s, Wed  | lnesdays               | and    |                                  |            |
| Thursdays (6 to 8   | a.m.)             |         |                        |        | 3d.                              |            |
| Fridays (all day)   |                   |         |                        | ***    | 1d.                              |            |
| Boys' Swimming Bath-  |                   |         |                        |        |                                  |            |
| Boys Swimming Dath—   |                   |         |                        |        |                                  |            |
| Tuesdays and Saturd   | ays (all          | day)    | ***                    |        | 1d.                              |            |

#### SEASON TICKETS.

First-class Contract ... 10s. Second-class Contract ... 7s. 6d.

Boys under 15 (not available on Mondays) ... 5s.

#### SLIPPER BATHS.

Ladies: Mondays (all day), Tuesdays, Wednesdays, and Thursdays, (6 to 8 a.m.), and Fridays (all day) 4d.

Gentlemen: Mondays, Wednesdays, Thursdays, and Saturdays (all day), Tuesdays (after 8 a.m.), and Sundays (6 to 9 a. m.), 4d. Season Tickets, 10s.

Special terms are made for Clubs and Schools.

#### BORING OPERATIONS.

In February, 1895, Mr. Jno. Thom completed his trial boring at the Baths land, with the result that he was able to report that he had tested the boring with a hand pump for two days, which proved there was a good supply of water, and he was of opinion that if the well was widened to 15in. in diameter to a depth of 300 feet, it would yield at least 4,000 gallons per hour.

The Bath Committee subsequently considered the advisability of proceeding with a scheme, but in the meantime the Electric Lighting Committee had taken into consideration a scheme for Electric Lighting, and their Engineer had recommended the vacant land adjoining the Baths as a very suitable site for the Electric Lighting Station, and on the Baths Committee being informed of this, they considered that the Electric Lighting Committee should consider whether it would not be advisable for them to formulate a scheme for the boring for water with the Electric Lighting scheme, and supply the water to the Baths. This being considered by the Electric Lighting Committee to be a very feasible scheme, they decided to undertake the matter, and, therefore, the Baths Committee scheme was deferred until it is settled whether the Electric Lighting scheme goes on.

### ANNUAL REPORT

OF

C. W. LASKEY, Assoc. SAN. INST.,

Superintendent of the Cleansing Department,

FOR THE YEAR 1895.

Sanitary Inspector's Office, Town Hall, Eccles.

To the Chairman and Members of the Sanitary Committee. Gentlemen,—

I beg to present to you my report of the work done by the Cleansing and Scavenging Departments. The improvement made in 1894 has, I am glad to say, been more than maintained as a reference to the reports will show. It is also satisfactory to note that, while the amount of work done has been increased, the expenditure has been very much reduced. Particularly is this the case in the Cleansing Department, as the following tables will show:—

Cleansing Department.—Table showing the amounts of expenditure month by month during 1894 and 1895.

| Month   |  |  | 1895.  |                                 |                                       |   |  |   | 1894.  |                              |   |  |                              |
|---|--|--|--|---------------------------------|---------------------------------------|---|--|---|--|------------------------------|---|--|------------------------------|
| Month.  |  | Manual Labour.   |  |                                 | Team Labour.                          |   |  | Manua   | abour.   | Team Labour.                 |   |  |                              |
| February March April May June July August September October November December |  | £ 63<br>70<br>76<br>68<br>78<br>57<br>59<br>74<br>58<br>74<br>59<br>59 | s. 6<br>1 8<br>18<br>9 3<br>12<br>9 16<br>11<br>17<br>10 | d. 8 4 4 1 1 4 4 3 7 6 4 10 5 0 | £ 46 63 71 63 61 63 63 73 60 66 70 60 | s. 2<br>12<br>14<br>18<br>10<br>7<br>0<br>17<br>6<br>15<br>4<br>7 | d. 2<br>6 9<br>0 0<br>6 0<br>6 6<br>0 4<br>6 | £ 54<br>79<br>122<br>143<br>111<br>77<br>74<br>95<br>77<br>77<br>82<br>71 | s. 9<br>3 0<br>4 7<br>1 13<br>3 11<br>0 6<br>4 | d. 6 3 5 5 0 11 1 5 7 2 10 2 | £ 54<br>87<br>64<br>140<br>90<br>69<br>71<br>61<br>95<br>70<br>75<br>65 | s. 9<br>14<br>13<br>8<br>13<br>18<br>18<br>4<br>8<br>7<br>18 | d. 3 11 9 8 9 10 1 4 9 1 5 0 |
| Totals  |  | 001  |  | £1,566                          |                                       | 10  | _  | 1000  |  | £2,013                       |   | - 0  | 10                           |

TABLE SHOWING THE AMOUNT OF WORK DONE MONTH BY MONTH DURING 1895.

| Month.  | No. of<br>Privy Pits<br>and<br>Ashpits<br>Emptied.   | Belonging<br>to,<br>Houses.  | Ashtubs emptied.   | No. of<br>Loads<br>Removed.  | No. of<br>Com-<br>plaints,                  | Cost per<br>Load,  | Loads<br>per<br>Ashpit,  |
|---|--|--|--|--|---|--|--|
| January February March April May June July August September October November December | 1603<br>2067<br>2207<br>2401<br>2430<br>1962<br>2437<br>2242<br>2230<br>2688<br>2327<br>2296 | 2451<br>3691<br>3455<br>4122<br>4010<br>3215<br>4082<br>3524<br>3893<br>4374<br>3935<br>3829 | 704<br>612<br>626<br>676<br>772<br>808<br>900<br>924<br>1205<br>1164<br>1595<br>1280 | 726<br>1061<br>1124<br>972<br>944<br>760<br>882<br>922<br>814<br>911<br>832<br>855 | nil 5 nil nil nil nil nil nil nil 1 nil nil | s. d.<br>3 0<br>2 6½<br>2 7½<br>2 8½<br>2 11½<br>3 2<br>2 9¼<br>3 2½<br>2 11<br>3 1<br>3 1½<br>2 10½ | *45<br>*51<br>*50<br>*40<br>*38<br>*38<br>*36<br>*41<br>*36<br>*33<br>*35<br>*37 |
| Totals  | <br>26,890   | 44,581   | 11,366   | 10,803   | 8   | 2 11*  | *40*   |

The total number of privy pits in the borough is 3,347, and they are used by the inmates of 5,966 houses. In addition to the above, there are 17 pails, 541 ashpits, and 345 ash tubs. The privy pits and ashpits have each been scavenged 6.9 times, and the total number emptied shows an increase of 10,025 or 59.5 per cent. over last year's figures. The total number of complaints was 8, as compared with a total of 432 during 1894. The average contents per privy pit at the time of scavenging only amounted to.4 loads, as compared with .9 loads in the previous year.

The number of ashtubs has increased from 143 to 345. These are emptied weekly, and this frequent scavenging is very satisfactory, as not only is the accumulation of a lot of refuse prevented, but it is found that the usual articles thrown into ashpits are not present in the tubs. However, while they are too small to receive mattresses, oilcloth, and other bulky articles, they are quite large enough for a week's refuse from a house of ordinary size. In all new property these receptacles are being provided, and in the majority of those cases where privies have been converted to water closets, ashtubs have been supplied.

An improvement in the method of scavenging privies has been made, the soiled surfaces of paved streets being flushed with water. Unfortunately there are a number of unpaved streets and passages where such flushing cannot be done, and under these circumstances the usual method of sprinkling with disinfecting powder is still in operation.

In May the directors of the Protector Lamp and Lighting Company gave notice of their intention to stop any further tipping on their land in Monton. In consequence of this I had to make a reduction in the staff or we should have been considerably overspent by reason of the extra carting which would have been required to take all the refuse, &c., to Peel Green. During the latter seven months of the year the staff consisted of a foreman, 10 labourers, and the two tipmen; total 13, as compared with 15 in 1894 and 17 in the latter part of 1893.

The total number of loads of refuse, &c., dealt with is made up as follows :-

```
4,256 loads of nightsoil taken to Depôt.
3,516 ,, ,, refuse ,, ', ''Oil Tip.''
1,698 ., ,, ', ', ', ', ''Oil Tip.''
1,210 ,, ,, nightsoil ,, ,, Farmers.
123 ,, ,, Slag, cinders, &c., carted for the repair of Tip roads.
10,803
```

The cost of removal per load was 2s. 11d., as compared with 3s. 0½d. for 1894; 1,466 loads of nightsoil were sold at the Depôt during the year, or 890 less than in the previous year. During the summer months there was considerable difficulty in getting rid of the nightsoil, consequently we had an extremely large accumulation. As the winter approached this accumulation disappeared, and the demand is, at the close of the year, more than equal to the supply. Year by year more difficulty in disposing of excrement will, I think be experienced, especially in view of the fact that there are good facilities for the Urmston and Davyhulme farmers at the Manchester Sewage Works, and I am informed that a wharf is about to be constructed at Irlam for the supply of nightsoil there.

The vacant land at the Depôt not having been let, the grass was mown, with the result that a good crop of hay was obtained. This is stacked at the Cemetery preparatory to sale.

The wing walls of the Tip Bridge having shown signs of giving way, a retaining pier was constructed, under the supervision of the Borough Surveyor.

Scavenging Department.—In November it was decided by the Council that in future this department should be under the control of the Borough Surveyor. The appended table shows the amount of work done from Jan. 1st to Nov. 30th.

TABULATED STATEMENT OF WORK DONE BY THE SCAVENGING DEPARTMENT from JANUARY 1st to NOVEMBER 30th, 1895.

| Month.    |     |     | Loads of snow<br>removed from<br>streets. | Loads of sand<br>used on strents<br>and footpaths. | Loads of water<br>used on streets. | Loads<br>of sweepings<br>taken off streets |
|-----------|-----|-----|---|--|------------------------------------|--|
| January   |     |     | 620                                       | 228<br>74  |                                    | 255  |
| February  |     |     | 119                                       | 74   |                                    | 113  |
| March     |     |     |   |  |                                    | 203  |
| A 11      |     |     |   | ***  | 153                                | 147  |
|           | *** | *** |   | ***  | 629                                | 109  |
| May       | *** | *** |   |  |                                    | 193  |
| June      |     | *** |   |  | 490                                | 145  |
| July      |     |     |   |  | 189                                | 185  |
| August    |     |     |   | 6  | 115                                | 151  |
| September |     |     |   | 6 8  | 210                                | 182  |
| October   |     | *** | ***                                       | 16   |                                    | 206  |
|           | *** | *** |   | 100  | ***                                |  |
| November  |     |     | ***                                       | 24   |                                    | 202  |
|           |     |     | 739                                       | 356  | 1786                               | 1982                                       |

It will be remembered that in the early part of 1895 the weather was very severe, there being several falls of snow and continued frost. At no time was traffic stopped in Eccles, and the snow clearing and sanding of streets was, I think, done in a very satisfactory manner. In this work the scavenging staff was assisted very much by the cleansing staff, and the expense incurred was not so much as it otherwise would have been.

The sand from the Tip proved very satisfactory for the roads and footpaths. During the year arrangements were made with the Manchester Corporation by which we were permitted to draw water from any of the hydrants in the borough. This enabled us to put more water on the streets at less cost for cartage.

#### CONTAGIOUS DISEASES (ANIMALS) ACTS.

This borough still remains on the list of Swine Fever Infected Areas, consequently the movement of swine has been regulated by means of the usual ticenses. I am glad to be able to report that there was no outbreak of the disease in the borough during the year.

In April a case of Farcy or Glanders was notified to me. The horse was examined by your Veterinary Surgeon, and afterwards killed, the carcase being destroyed in the manner suggested by the Board of Agriculture. The other horses at this stable were kept under observation, and the stable was thoroughly disinfected, re-paved, and the mangers and fittings burned. There was no recurrence of the disease. The owner was awarded £4 compensation by your Authority.

There were three cases of Rabies during the year, one each in April, June, and July. Two persons bitten by the dogs in June and July were sent to Paris for treatment at the Pasteur Institute. There was one death from Hydrophobia, a little girl who was bitten by a stray dog.

The Muzzling Order has been in operation in the borough since the 10th of April, 1895.

I am, Gentlemen,
Your Obedient Servant,
C. W. LASKEY.



