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THE ELEVENTH  
**Annual Report**  
ON THE HEALTH  
OF THE  
COUNTY BOROUGH OF WIGAN,  
FOR THE  
YEAR ENDING DECEMBER 31st, 1906,

BY

WILLIAM BERRY,

F.R.C.S.I., D.P.H., F.P. & S., Glasgow.

Fellow of the Incorporated Society of Medical Officers of Health.

Past President of the North-Western Branch.

Fellow of the Royal Sanitary Institute.

Fellow of the Royal Institute of Public Health.

Fellow of the Royal Academy of Medicine, Ireland.

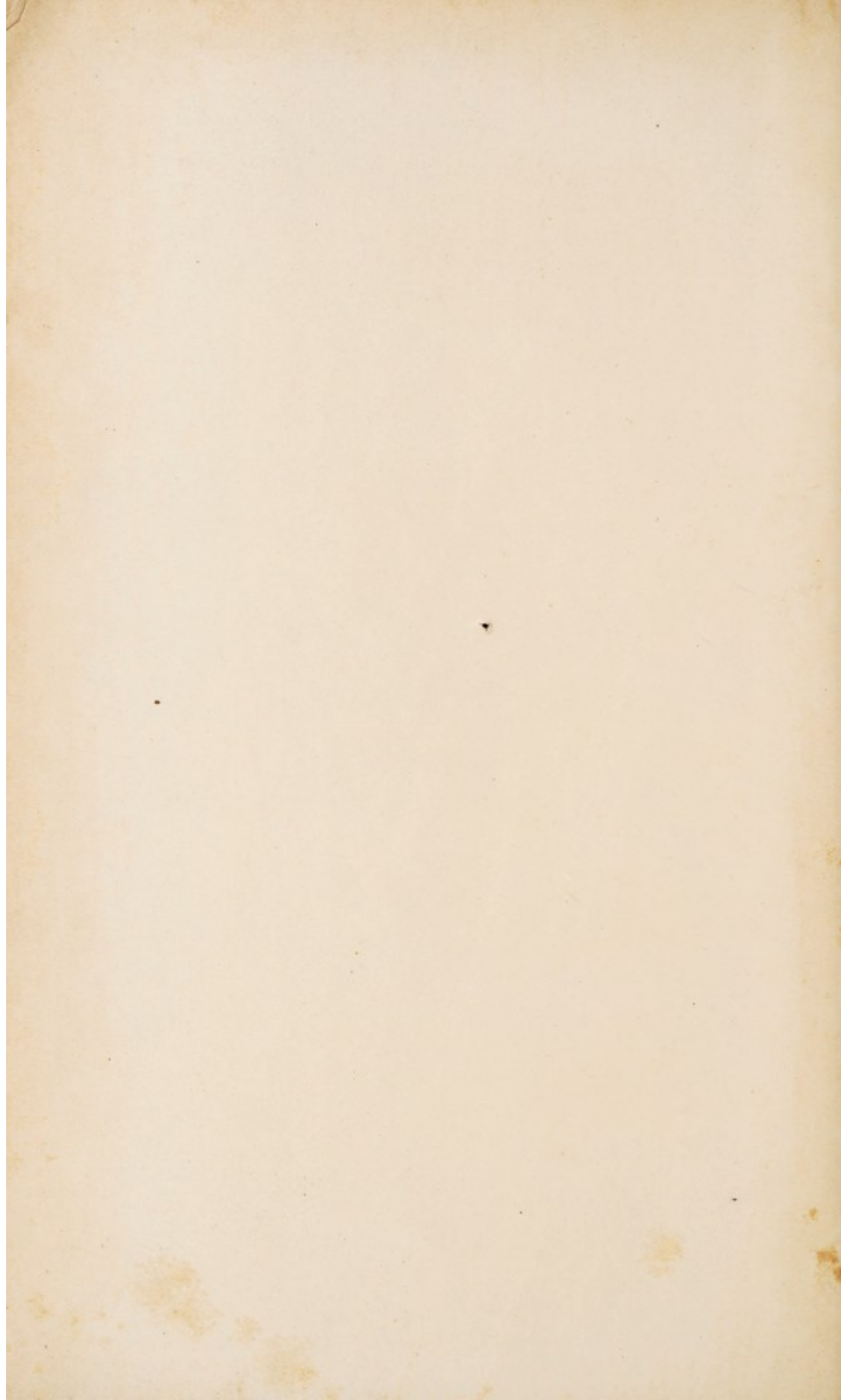
Medical Officer of Health, and

Medical Superintendent of the Borough Sanatorium for Infectious Diseases



WIGAN :

THOS. WALL AND SONS LTD., PRINTERS, "OBSERVER" OFFICE.











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## HEALTH COMMITTEE.

From November, 1906, to November, 1907.

CHAIRMAN :

ALDERMAN J. PHILLIPS, J.P.

VICE-CHAIRMAN :—COUNCILLOR J. BRADSHAW.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN A. BYWATER, J.P.

COUNCILLOR H. BARTON.

„ M. BENSON, M.D.

„ J. P. HEYES.

„ A. E. MATHER.

„ P. PARTINGTON.

„ J. SAYER.

„ T. SMITH.

„ W. STOKER.

„ J. WILSON.

„ G. WOLSTENHOLME, M.B., J.P.

ommittee meets on the 3rd Thursday in each month, at 2.30 p.m.



## SANITARY WORKS COMMITTEE.

From November, 1906, to November, 1907.

CHAIRMAN :

COUNCILLOR J. PAXTON.

VICE-CHAIRMAN :—COUNCILLOR J. P. HEYES.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN L. BOOTH, J.P.

„ R. BRITTON.

„ J. PHILLIPS, J.P.

COUNCILLOR J. BOTT.

„ W. CHARNOCK.

„ T. CRITCHLEY.

„ E. DICKINSON.

„ J. LOWE.

„ W. LOWE, J.P.

„ J. PARKINSON, J.P.

„ W. WILSON.

The Committee meets on the Fourth Monday in each month, at 3 45  
p.m.

## SANATORIUM SUB-COMMITTEE.

From November, 1906, to November, 1907.

CHAIRMAN :

COUNCILLOR G. WOLSTENHOLME, M.B., J.P.

THE MAYOR.

THE EX-MAYOR.

COUNCILLOR H. BARTON.

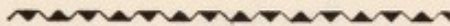
„ M. BENSON, M.D.

„ A. E. MATHER.

„ P. PARTINGTON.

„ W. STOKER.

The Committee meets the Wednesday before the Third Thursday in  
each month, at 11 a.m., at the Hospital.



## INSANITARY HOUSES COMMITTEE.

From November, 1906, to November, 1907.

CHAIRMAN :

COUNCILLOR J. SAYER.

VICE-CHAIRMAN :—COUNCILLOR T. CRITCHLEY.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN R. BRITTON.

„ H. SWIFT.

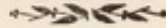
COUNCILLOR W. BLACK.

„ J. BOTT.

„ G. WOLSTENHOLME, M.B., J.P.

The Committee meets when required.

## MEDICAL OFFICER OF HEALTH'S DEPARTMENT.



Medical Officer of Health and Medical Superintendent of  
Sanatorium :

WILLIAM BERRY, F.R.C.S.I., D.P.H., F.P.S., Glasgow.

Fellow of the Incorporated Society of Medical Officers of Health.

Past President of North-Western Branch.

Fellow of the Royal Sanitary Institute.

Fellow Royal Inst. Public Health, and

Fellow of the Royal Academy of Medicine, Ireland

Chief Sanitary Inspector :

JOHN SUMNER, Certif. San. Inst., and Assoc. Royal San. Inst.

Cert. City of London Guilds (Plumbing).

Assistant Sanitary Inspectors :

CHARLES H. FRANCE, Certif. San. Inst., and Assoc. Royal  
San. Inst.

FRED MARTLEW, Certif. San. Inst.

M. CLUNAN, Certif. San. Inst.

Smoke, Shop Hours Act, and Factory and Workshop Act :

FRED G. BISHOP.

Sub-Inspector :

ERNEST KNOWLES.

Clerk :

JOHN ASHTON.

Enquiry Office :

ERN. RICHARDSON.

Disinfectors :

JAS. RISLEY.

GEO. CROSTON.

HENRY PARKINSON.

Master of Sanatorium :

MICHAEL MOORE.



By order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health, shall "prepare an Annual Report, to be "made to the end of December in each year, comprising a "summary of the action taken during the year for preventing "the spread of disease, and an account of the sanitary state "of his district generally at the end of the year. The "report shall also contain an account of the enquiries "which he has made as to conditions injurious to health "existing in his district, and of the proceedings in which "he has taken part or advised under the Public Health Act, "1875, so far as such proceedings relate to those conditions ; "and also an account of the supervision exercised by him "or on his advice, for sanitary purposes over places and "houses that the Sanitary Authorities have power to "regulate, with the nature and results of any proceedings "which may have been so required and taken in respect of "the same during the year. It shall also record the action "taken by him or on his advice, during the year, in regard "to offensive trades, and to factories and workshops. The "report shall also contain tabular statements (on forms to "be supplied by the Local Government Board, or to the "like effect) of the sickness and mortality within the "district, classified according to diseases, ages, and localities."

## CORPORATION OF WIGAN,

## HEALTH DEPARTMENT,

JANUARY 21ST, 1907.

*To the Chairman and Members of the Health  
Committee.*

GENTLEMEN,

It is my privilege as well as pleasure to present you with my Eleventh Annual Report on the health of your County Borough for the year 1906.

The death-rate is calculated on an estimated population of 89,342, this being taken for July 1st, 1906.

The death-rate for the year is 17·61 per 1,000 of the population, against 18·07 for 1905, showing a diminution of ·46.

The infantile deaths number 160 per 1,000 births, whilst that for England and Wales is 133. Last year we had 163 infantile deaths, and for England and Wales 152.

The total number of deaths from Zymotic diseases is 234, a rate of 2·61, against 3·23 in 1905. The Diarrhœa rate, however, is 1·55 against 1·57 in the previous year.

We have also an increase in the number of deaths in persons over 60 years of age, namely :—317, against 287 in 1905.

Measles has been prevalent during the year, and epidemic during the months of May, June, July, August, September, October, November, and December, although we were never free from cases in January, February, March, and April. We have had 1,422 cases, with 45 deaths, against 1,108 cases, and 60 deaths.



The following Schools or departments of schools were closed in consequence :—

St. Catharine's (Infants' Department).....	From April 25th, 1906...	25 days.
"    (Boys' and Girls' Depts.)...	May 7th .....	21 "
St. John's (Infants' School) .....	June 18th.....	28 "
"    (All Departments) .....	June 26th.....	20 "
St. Thomas's (Infants' Department) .....	July 11th.....	17 "
"    Clayton Street (Boys and Girls' Departments) .....	July 14th.....	14 "
St. Catharine's Whelley (All Departments)	July 11th.....	17 "
Wesleyan School, Standishgate (Infants' Department) .....	July 20th.....	8 "
St. James's, Worsley Mesnes (Infants) .....	Sep. 6th.....	25 "
"    "    (All Departments)...	Sep. 11th.....	21 "
St. James's, Poolstock (Infants' Department)	Oct. 16th .....	19 "
National and Blue Coat (Infants' Dept.) ..	Oct. 16th.....	33 "
"    (Boys' and Girls' Depts.)	Nov. 2nd.. .....	17 "
Poolstock (Boys' and Girls' Departments)...	Nov. 2nd .....	17 "
"    (Infants' Department).....	Nov. 5th.....	14 "
St. John's, Pemberton (All Departments) ...	Oct. 23rd.. .....	34 "
Kitt Green (All Departments) .....	Oct. 26th.....	35 "
St. Mark's, Pemberton (All Departments)...	Nov. 16th .....	33 "
Pemberton Colliery School (Infants' Dept.)	Nov. 30th .....	21 "
New Jerusalem School (Infants' Dept.).....	Dec. 5th .....	18 "

On December the 13th I wrote the Director of Education asking that the Education Committee should commence the Christmas holidays a week earlier than the time fixed ; this was done, and I think with a beneficial result.

Small-pox, I am pleased to say, has been absent. I have had three cases of Consumption in the Small-pox Doecker for open air treatment, with beneficial results in two cases. I would recommend the Small-pox Doecker for treatment in such cases, when there is a prospect of improvement.

Scarlet Fever has furnished us during the past year with a fewer number of cases, 256, against 325, and we have had only five deaths, against 11 in 1905. The death-rate therefore from Scarlet Fever is .055, against .12 in 1905. Enteric Fever has been very prevalent, especially in the months of September and October. We have had four or five cases from one house, so that personal contamination may have been the cause of spreading the infection. A detailed account of these cases will be found in the body of my report. Most of the cases occurred in the Pemberton district, which I may say, abounds with privy middens, and until these are abolished and also an impervious yard formed, Enteric will remain endemic.



During the year Dr. S. Monckton Copeman, F.R.S., F.R.C.P., London, held an inquiry into the prevalence of Enteric Fever in the town, and into the causation of Infantile Diarrhœa. Every facility was afforded him, and all the information requisite was placed at his disposal. Your Chief Sanitary Inspector or myself took him to all the places he required to inspect, and the Water Committee afforded us the opportunity of inspecting the watershed and gathering grounds.

His report has, since this was written, been received, and I hope the same will receive your serious consideration.

I must here express regret at the curtailment of supplies in reference to the Sanatorium for Infectious Diseases; it has been with the greatest difficulty that we have been enabled to keep within the estimate; a less number of cases of Scarlet Fever has enabled us to do so.

To my colleagues in the Medical profession in Wigan and adjoining districts I tender my thanks for their co-operation. I also tender my thanks to the staff in the Health Department (especially Mr. Sumner) for their attention to everything which tends to prevent disease.

In conclusion, I must thank the Chairman, Vice-Chairman, and Members of this Committee for their kind co-operation in carrying out the delicate duties appertaining to the work of the Health Department.

I am, Gentlemen,

Your obedient Servant,

WM. BERRY,

MEDICAL OFFICER OF HEALTH.

# REPORT.

## STATISTICAL SUMMARY FOR 1906.

Published under the authority of the Registrar-General, 25th Nov. 1906.

Manuscripts are not accepted for the Quarterly Returns.

Annual rates per 1,000 of population.

For England and Wales, 1906, 1905, 1904, 1903, 1902, 1901, 1900, 1899, 1898, 1897, 1896, 1895, 1894, 1893, 1892, 1891, 1890, 1889, 1888, 1887, 1886, 1885, 1884, 1883, 1882, 1881, 1880, 1879, 1878, 1877, 1876, 1875, 1874, 1873, 1872, 1871, 1870, 1869, 1868, 1867, 1866, 1865, 1864, 1863, 1862, 1861, 1860, 1859, 1858, 1857, 1856, 1855, 1854, 1853, 1852, 1851, 1850, 1849, 1848, 1847, 1846, 1845, 1844, 1843, 1842, 1841, 1840, 1839, 1838, 1837, 1836, 1835, 1834, 1833, 1832, 1831, 1830, 1829, 1828, 1827, 1826, 1825, 1824, 1823, 1822, 1821, 1820, 1819, 1818, 1817, 1816, 1815, 1814, 1813, 1812, 1811, 1810, 1809, 1808, 1807, 1806, 1805, 1804, 1803, 1802, 1801, 1800, 1799, 1798, 1797, 1796, 1795, 1794, 1793, 1792, 1791, 1790, 1789, 1788, 1787, 1786, 1785, 1784, 1783, 1782, 1781, 1780, 1779, 1778, 1777, 1776, 1775, 1774, 1773, 1772, 1771, 1770, 1769, 1768, 1767, 1766, 1765, 1764, 1763, 1762, 1761, 1760, 1759, 1758, 1757, 1756, 1755, 1754, 1753, 1752, 1751, 1750, 1749, 1748, 1747, 1746, 1745, 1744, 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## PART I.

## VITAL STATISTICS.





# REPORT.

## STATISTICAL SUMMARY FOR 1906.

Population estimated July 1st, 1906 ..... 89,342

*Marriages* are not ascertained for the County Borough.

„ Annual rate per 1,000 of population ditto.

<i>Births</i>	{ Males ..... 1464 }	Total..... 2,920
	{ Females..... 1456 }	

Annual rate of births per 1,000 of population ..... 32·68

Ditto for England and Wales ..... 27·00

Illegitimate births 144, or 1·61 per 1,000 of population, a percentage of ... 4·9

<i>Deaths</i>	{ Males..... 853 }	Total..... 1,575
	{ Females..... 722 }	

Annual rate of mortality..... 17·61

Ditto in England and Wales..... 15·4

Death rate in 76 great towns ..... 16·0

Ditto 142 smaller..... 14·4

Ditto Rural England and Wales 15·00

Excess of registered births over deaths ..... 1,345

Total deaths from zymotic diseases ..... 234

Annual rate of mortality from zymotic diseases... 2·61

Ditto in England and Wales ..... 1·73

Total deaths from diarrhoea ..... 139

Annual rate of mortality from diarrhoea ..... 1·55

Infantile rate (deaths per 1,000 births), 1906..... 160

Ditto for England and Wales ..... 133

Deaths of infants under one day old, number..... 65

*Acreage.*—With an acreage of 5,082, and a population estimated at 89,342, we have 17·58 persons per acre.

*Population.*—The population estimated at the middle of the year (June 30th, 1906) is 89,342, and this may be taken as fairly correct, in accordance with the number of inhabited houses on July 1st.

*Births.*—The number of births registered during 1906 is 2,920 (males, 1,464; females, 1,456), the rate per 1,000 of the population being 32·68. The birth rate, compared with 1905, is ·36 lower. The illegitimate births number 144, or 4·9 per cent.

*The Mortality Rate.*—The deaths for 1906 number 1,575 (853 males, 722 females), being an excess of 131 males over females. The rate per 1,000 of the population, per annum, is 17·61; in 1905, 18·07; thus on a population of 89,342 we have a decrease in deaths of 21 over 1905. There is, therefore, a decrease in the death rate of ·46 per 1,000.

The death rate for each quarter is as follows:—

1906.	All Causes.	Zymotics.
1st Quarter	16·04	·26
2nd „	15·16	·80
3rd „	19·93	6·22
4th „	19·57	3·16

The zymotic rate, 2·61, shows a decrease for 1906. The previous year it was 3·23, showing a decrease of ·62, this is due to a decrease in the number of deaths from Measles, Scarlet Fever, and Whooping Cough.

## THE VITAL STATISTICS FOR ENGLAND AND WALES DURING 1906.

### ENGLAND AND WALES.

	1906.	1905.
Birth rate per 1,000 living	27·00	27·2
Death rate „	15·4	15·2
Seven epidemic diseases per 1,000 living..	1·73	1·88
Infant mortality per 1,000 births	133	128



TABLE I.

## WEEKLY RETURN OF BIRTHS AND DEATHS FOR 1906.

1906. WEEK ENDING.	Deaths from all Causes.	Annual Rate per 1,000.	Deaths from Zymotics.	Zymotic Rate.	Births.	Annual Rate per 1,000
January 6 .....	30	17.66	—	—	64	37.69
" 13 .....	28	16.48	—	—	60	35.31
" 20 .....	29	17.06	1	.58	43	25.30
" 27 .....	27	15.88	—	—	66	38.82
February 3 .....	22	12.94	—	—	49	28.82
" 10 .....	22	12.93	—	—	58	34.09
" 17 .....	26	15.27	1	.58	56	32.90
" 24 .....	25	14.68	1	.58	61	35.84
March 3 .....	25	14.67	—	—	45	26.42
" 10 .....	20	11.73	2	1.17	73	42.84
" 17 .....	37	21.71	—	—	59	34.62
" 24 .....	32	18.76	1	.58	64	37.53
" 31 .....	32	18.76	—	—	51	29.91
April 7 .....	27	15.82	—	—	60	35.16
" 14 .....	22	12.89	1	.58	50	29.30
" 21 .....	35	20.50	1	.58	64	37.49
" 28 .....	24	14.05	2	1.17	63	36.88
May 5 .....	25	14.63	2	1.17	57	33.37
" 12 .....	32	18.72	1	.58	54	31.59
" 19 .....	29	16.96	2	1.16	52	30.42
" 26 .....	21	12.28	1	.58	49	28.65
June 2 .....	27	15.78	1	.58	64	37.42
" 9 .....	28	16.36	1	.58	59	34.48
" 16 .....	23	13.43	2	1.16	55	32.12
" 23 .....	19	11.09	—	—	61	35.63
" 30 .....	25	14.59	4	2.33	55	32.10
July 7 .....	31	18.08	5	2.91	61	35.58
" 14 .....	17	9.91	4	2.33	61	35.58
" 21 .....	26	15.16	4	2.33	48	27.98
" 28 .....	30	17.49	2	1.16	60	34.98
August 4 .....	35	20.39	8	4.66	57	33.21
" 11 .....	24	13.98	10	5.82	52	30.30
" 18 .....	46	26.79	17	9.90	65	37.85
" 25 .....	49	28.53	17	9.89	77	44.84
September 1 .....	30	17.46	11	6.40	54	31.43
" 8 .....	41	23.86	17	9.89	55	32.01
" 15 .....	38	22.11	19	11.05	56	32.59
" 22 .....	50	29.08	19	11.05	58	33.74
" 29 .....	28	16.28	6	3.48	41	23.85
October 6 .....	42	24.43	11	6.39	51	29.66
" 13 .....	35	20.36	7	4.07	56	32.57
" 20 .....	27	15.69	3	1.74	50	29.06
" 27 .....	35	20.34	6	3.48	60	34.88
November 3 .....	30	17.43	4	2.32	57	33.12
" 10 .....	30	17.43	6	3.48	60	34.86
" 17 .....	31	18.00	5	2.90	49	28.45
" 24 .....	43	24.97	4	2.32	46	26.71
December 1 .....	33	19.16	4	2.32	53	30.77
" 8 .....	38	22.05	3	1.74	64	37.14
" 15 .....	21	12.18	2	1.16	44	25.53
" 22 .....	43	24.95	10	5.80	65	37.72
" 29 .....	30	17.48	6	3.48	28	16.25



TABLE II.

MONTHLY TABLE OF DEATHS FROM ALL CAUSES  
AND ZYMOTIC DISEASES WITH RATES  
PER 1,000 PER ANNUM.

MONTH.	No. of Deaths from all Causes.	Annual Rate per 1,000 living.	No. of Deaths from Zymotic Diseases.	Annual Rate per 1,000 living.	Deaths of	
					Infants under 1 yr.	Persons over 60 yrs.
January .....	114	16.77	1	.14	33	21
February .....	95	13.95	2	.29	30	21
March .....	146	17.12	3	.35	41	40
April .....	108	15.81	4	.58	20	22
May .....	107	15.64	6	.87	22	29
June .....	122	14.25	8	.93	29	28
July .....	104	15.16	15	2.18	35	16
August .....	154	22.42	52	7.56	76	20
September .....	187	21.75	72	8.37	84	18
October .....	139	20.20	27	3.92	35	30
November .....	134	19.45	19	2.75	22	36
December .....	165	19.16	25	2.90	41	36
Totals .....	1575	17.61	234	2.61	468	317

TABLE III.

TABLE SHOWING COMPARATIVE STATISTICS BETWEEN WIGAN  
AND OTHER TOWNS DURING 1906.

TOWN.	Popula- tion.	Birth Rate.	Death Rate.	Zymotic Rate.	Infantile Death rate per 1,000 Births.	Respira- tory Death Rate.	Phthisis Death rate
Accrington .....	45,000	21.68	13.37	1.42	132	2.00	.91
Bath .....	50,000	18.6	13.5	1.06	114	2.36	1.1
Blackpool .....	57,115	17.91	12.29	1.12	130	1.63	.68
Bootle .....	68,000	31.9	17.3	2.7	143	3.6	1.2
Bradford .....	288,544	20.58	16.00	1.97	152	2.43	1.30
Burton-on-Trent ...	52,922	24.2	12.96	1.05	117	1.6	1.4
Bury .....	58,744	22.74	17.02	1.97	177	2.72	1.26
Cardiff .....	183,823	27.2	13.8	1.34	134	2.37	1.20
Carlisle .....	48,425	25.3	16.7	.7	132	2.4	1.3
Coventry .....	83,900	27.9	14.8	2.50	144	1.76	1.04
Crewe .....	47,142	26.7	11.8	1.16	118	1.6	.8
Derby .....	123,981	25.1	14.0	1.6	116	2.0	.92
East Ham .....	129,886	28.1	11.5	2.0	127	1.86	.93
Folkestone .....	35,500	19.0	10.5	1.2	128	1.3	.90
Halifax .....	108,000	19.1	15.5	1.31	118	2.6	1.1
Hanley .....	66,360	34.0	19.6	3.5	159	2.6	1.1
Huddersfield .....	94,862	24.34	17.33	2.39	135	2.90	1.26
Kingston-on-Hull ..	262,462	29.6	17.0	2.8	161	2.5	1.09
Lancaster .....	45,570	23.28	12.48	3.81	138	.54	.96
Leigh .....	44,800	30.17	14.9	2.9	173	2.8	.93
Oldham .....	140,969	26.9	18.8	2.8	146	3.3	1.3
Plymouth .....	118,014	23.90	16.46	1.95	153	2.73	1.33
Reading .....	79,559	23.67	12.76	1.88	115	1.71	.92
Rochdale .....	87,190	23.46	17.55	1.84	139	2.69	1.27
South Shields .....	111,402	31.70	17.89	2.68	150	2.77	1.49
St. Helens .....	91,153	33.9	17.21	2.01	157	2.97	1.21
Stockport .....	99,646	26.95	21.22	3.27	186	3.83	1.35
Sunderland .....	154,251	34.2	18.5	1.98	140	3.71	1.52
Swansea .....	100,690	31.9	17.8	1.86	156	2.7	1.48
West Bromwich ...	65,170	31.6	15.6	2.0	159	—	—
<b>WIGAN</b> .....	89,342	32.68	17.61	2.61	160	3.86	1.20
Wolverhampton ...	00,867	27.47	14.78	2.25	140	2.83	.80
York .....	183,467	26.5	13.6	1.73	124	1.71	1.06



TABLE IV.

DEATH RATE FOR WIGAN DURING THE LAST TEN YEARS.

1897	20.99	} Average for 10 years, 20.51.
1898	18.88	
1899	21.91	
1900	21.95	
1901	22.30	
1902	20.25	
1903	21.69	
1904	21.49	
1905	18.07	
1906	17.61	

*Infantile Mortality.*—The number of deaths of children under one year is 468, or 160 per 1,000 births, and of children over one year and under 5 years 236, or 2.64 per 1,000 of the population.

In regard to this infantile mortality there were 65 deaths in children who did not live more than 24 hours, and if we deduct these there would only be 403 deaths, or 138 per 1,000 births; in a large birth rate we necessarily have a larger proportion of premature births.

*Senile Mortality.*—The number of deaths of persons of 60 years of age and over is 317, or 3.54 per 1,000 of population.

NO. OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1906.

Ward.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
1	23	24	25	24	96
2	18	23	18	25	84
3	31	26	29	34	120
4	42	33	34	33	142
5	15	23	37	28	103
6	26	18	22	31	97
7	19	19	28	23	89
8	51	65	67	73	156
9	26	24	22	25	97
10	13	13	26	20	72
11	17	16	29	30	92
12	34	25	47	52	158
13	15	13	19	13	60
14	25	15	42	27	109
Total...	55	337	445	438	1575



## WIGAN CENSUS, 1901.

WARD.	Separate Families.	HOUSES.				Tenements with less than five rooms.	PERSONS.		Total
		In-habited.	Uninhabited.				Males.	Females.	
			In Occu- pation.	Not in Occu- pation.	B'ding.				
No. 1, or St. George Ward ...	959	919	87	17	...	753	2406	2524	4930
No. 2, or Lindsay Ward .....	924	913	22	12	6	592	2310	2472	4782
No. 3, or St. Catharine Ward	1234	1193	20	5	...	863	3169	3435	6604
No. 4, or St. Patrick Ward...	1586	1567	46	10	3	954	4714	4470	9184
No. 5, or St. Thomas Ward...	939	890	42	4	...	703	2394	2451	4845
No. 6, or Poolstock Ward ...	977	950	18	3	4	523	2424	2613	5037
No. 7, or Victoria Ward .....	999	949	33	4	4	688	2440	2586	5026
No. 8, or St. Andrew Ward...	1684	1662	29	14	29	501	4658	4622	9280
No. 9, or Swinley Ward .....	1386	1368	46	41	14	453	3224	4043	7267
No. 10, or All Saints Ward...	709	709	327	28	25	360	1811	1925	3736
Canal Boats .....	...	...	...	...	...	...	60	19	79
Wards not stated .....	...	...	...	...	...	...	...	...	...
Totals.....	11388	11120	670	138	85	6390	29610	31160	60770

Percentage of increase in population, England and Wales  
since Census of 1891..... 12.15.

The preceding period, 1881-91..... 11.65.

Increase in Wigan ..... 10.46.

## COUNTY BOROUGH OF WIGAN.

(Parliamentary Area.)

STATEMENT OF HOUSES BUILDING, EMPTY, AND INHABITED,  
Estimated Population. ON 27TH JULY, 1906.

WARD.	HOUSES.			Estimated Population at 5·465 per Inhabited House.
	Building.	Empty.	Inhabited.	
1 St. George.....	—	22	924	
2 Lindsay .....	9	23	1004	
3 St. Catharine .....	7	22	1288	
4 St. Patrick .....	23	4	1664	
5 St. Thomas .....	—	30	831	
6 Poolstock .....	10	19	1023	
7 Victoria .....	—	42	947	
8 St. Andrew .....	36	84	2208	
9 Swinley .....	9	59	1474	
10 All Saints .....	—	28	740	
Total Parliamentary Borough.....	94	375	12103	66,142
11 West Pemberton...	7	16	817	
12 North Pemberton...	14	23	1364	
13 Central Pemberton.	8	12	1064	
14 South Pemberton...	9	18	1093	
Total Pemberton.....	38	69	4338	23,582
Total Municipal Borough.....	132	444	16441	5·14 89,724

The average per house inhabited 1906 was 5·44 (estimated).

The figures are taken from the Survey Books of the Wigan Conservative Registration Association, on completion of the Survey on 27th July, 1906, and by permission of Mr. R. Halliwell, J.P., Agent.



## LOCAL GOVERNMENT BOARD RETURNS.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1906 AND PREVIOUS YEARS. NAME OF DISTRICT—WIGAN (County Borough.)

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.						Deaths of Non-residents Registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.				
		Number.	Rate.	Under 1 Year of Age.		At all Ages.						Total Deaths in Public Institutions in the District.	Deaths of Non-residents Registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Number.	Rate.*
				Number.	Rate per 1000 Births Registered	Number.	Rate.*									
								5	6							
1	2	3	4	5	6	7	8	9	10	11	12	13				
1896	58340	2144	37.10	400	186	1376	23.84	158	106		1387	22.90				
1897	58915	2247	38.58	398	175	1270	21.80	246	91		1379	22.30				
1898	59590	2159	35.70	369	170	1182	19.54	225	116		1251	20.25				
1899	60165	2148	35.36	422	195	1368	22.63	253	123		1359	21.69				
1900	60740	2177	36.00	404	190	1520	25.06	290	158		1381	21.49				
1901	60923	2245	36.40	457	203	1537	24.87	280	142		1596	18.07				
1902	61827	2311	37.42	366	158	1393	22.58	269	152							
1903	62689	2221	35.47	388	174	1511	24.09	313	147							
1904	64249	2223	34.59	418	188	1528	23.78	301	121							
1905	88306	2918	33.04	476	163	1717	19.44	277								
Averages for years 1896—1905	63574	2279	35.96	409	180	1440	22.76	261								
1906	89342	2920	32.68	468	160	1713	19.17	294	138		1575	17.61				

\* Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water) 5,082. At Census of 1901 the total population at all ages was 82,428; number of inhabited houses, 15,095; average number of persons per house 5.4. Institutions within the District receiving sick and infirm persons from outside the District: Workhouse, Infirmary, and Sanatoriums. Is the Union Workhouse within the District? Yes.



TABLE II.—VITAL STATISTICS OF SEPARATE LOCALITIES IN 1906  
AND PREVIOUS YEARS.

Name of District—Wigan County Borough.

YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1896 .....	58340	2144	1376	400
1897 .....	58915	2247	1270	398
1898 .....	59590	2159	1182	369
1899 .....	60165	2148	1368	422
1900 .....	60740	2177	1520	404
1901 .....	60923	2245	1537	457
1902 .....	61827	2311	1393	366
1903 .....	62689	2221	1359	388
1904 .....	64249	2223	1381	418
1905 .....	88306	2918	1596	476
Averages of Years 1896 to 1905 ... }	63574	2279	1398	409
1906 .....	89342	2920	1575	468

TABLE III.  
CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1906.  
Name of District, Wigan County Borough.

Notifiable Disease.	Cases Notified in Whole District.						Cases Removed to Hospital from Each Locality.	
	At all Ages.	At Ages—Years.					H W Wigan, Haigh.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	
Diphtheria.....	49	—	19	17	7	6	—	
Erysipelas.....	86	2	1	10	16	54	3	
Scarlet fever.....	256	2	94	140	20	—	—	4
Enteric fever.....	138	1	12	39	32	54	—	8
Puerperal fever.....	9	—	—	—	4	5	—	
Measles.....	1422	114	820	478	7	3	—	
Phthisis.....								3
Totals.....	1960	119	946	684	86	122	3	205 12

Isolation Hospital—Wigan and Pemberton Sanatorium.

Mark (H) the locality in which the hospital is situated.

Mark (W) the locality in which the workhouse is situated.

TABLE IV.—CAUSES OF, AND AGES AT, DEATH DURING YEAR 1906.

Name of District—Wigan (County Borough).

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.							Total Deaths in Public Institutions in District.
	All Ages	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	
Small-pox .....	—	—	—	—	—	—	—	—
Measles .....	45	8	34	3	—	—	—	—
Scarlet fever.....	5	—	3	2	—	—	—	—
Whooping-cough .....	3	2	1	—	—	—	—	—
Diphtheria and mem- branous croup .....	6	—	2	4	—	—	—	—
Croup.....	2	—	2	—	—	—	—	—
Fever—Enteric .....	27	—	2	3	6	16	—	—
Diarrhœa .....	139	92	41	1	—	4	1	—
Puerperal fever .....	4	—	—	—	3	1	—	—
Erysipelas .....	3	—	—	—	—	3	—	—
Phthisis (Pulmonary Tuberculosis) .....	108	7	9	13	21	56	2	—
Other tubercul'r diseases	40	18	12	7	2	1	—	—
Cancer, malign'nt dis'ase	46	—	—	1	1	35	9	—
Bronchitis .....	142	20	7	1	2	68	44	—
Pneumonia .....	203	46	49	14	14	69	11	—
Premature birth .....	67	67	—	—	—	—	—	—
Heart diseases .....	91	—	—	—	1	70	20	—
Accidents .....	44	2	11	5	6	17	3	—
Suicides .....	—	—	—	—	—	—	—	—
Rheumatism .....	8	—	—	—	1	6	1	—
Convulsions.....	25	18	7	—	—	—	—	—
Wasting .....	45	39	6	—	—	—	—	—
All other causes .....	522	149	50	17	17	156	133	—
All causes .....	1575	468	236	71	74	502	224	294

## STATEMENT OF DEATHS OCCURRING IN WIGAN, BUT NOT BELONGING TO WIGAN.

Deaths from Accidents .....	17
„ Bronchitis .....	11
„ Cancer .....	7
„ Enteric Fever .....	5
„ Heart Affections .....	12
„ Other Diseases .....	63
„ Phthisis .....	9
„ Pneumonia .....	3
„ Rheumatism .....	2
„ Other Tubercular Diseases .....	4
„ Wasting Diseases .....	3
„ Convulsions .....	1
„ Diarrhœa .....	1



TABLE V.

BOROUGH OF WIGAN (COUNTY BOROUGH).

## INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
<i>All Causes ;</i>																	
Certified .....	91	15	21	12	139	33	40	38	36	35	32	24	17	25	13	24	456
Uncertified .....	10				10		1		1								12
<i>Common Infectious Diseases :</i>																	
Measles .....												3	1	1	1	2	8
Whooping Cough .....										1						1	2
<i>Diarrhoeal Diseases :</i>																	
Diarrhoea, all forms .....		1	1		2	11	14	5	17	10	9	5	6	3	2	7	91
Enteritis, Muco-enteritis, Gastro-enteritis...						2	1	2			2	1					8
Gastritis, Gastro-intestinal Catarrh...		1	1		2	1	2	2	1	2			2		1	1	14
<i>Wasting Diseases :</i>																	
Premature Birth .....	47	6	4	4	61	5	1										67
Congenital Defects .....	4	1	1		6			1								1	8
Injury at Birth .....	1				1												1
Want of Breast Milk, Starvation...		1	2	1	4		2	1	1			1					9
Atrophy, Debility, Marasmus...	17	3	3	1	24	2	7	7	3	6	7	3	2	3	1	2	67
<i>Tuberculous Diseases :</i>																	
Tuberculous Meningitis..							1	1	1	2		1		1		1	8
Tuberculous Peritonitis:																	
Tabes Mesenterica...							1		1		3	1	1	1		1	9
Other Tuberculous Dise's			1		1	1		2	1	3		1		1	2		12
<i>Other Causes :</i>																	
Syphilis .....			1		1												1
Meningitis (not Tuber'l's)	1				1	1		1		1				1	4	1	10
Convulsions .....	6				6	1	1	1	3		3	1		1		1	18
Bronchitis .....				1	1	2	2		2	3	2	3		3	1	1	20
Laryngitis .....								1	1								2
Pneumonia .....		1	2		3	2	4	6	4	3	4	3	5	8		4	46
Suffocation, overlying ...	2				2												2
Other Causes .....	23	1	5	5	34	5	5	8	2	4	2	1		2	1	1	65
	101	15	21	12	149	33	41	38	37	35	32	24	17	25	13	24	468

District of Wigan.

Population (estimated to middle of 1906), 89,342.

Births in the year—Legitimate, 2,776.

Illegitimate, 144.

Deaths from all Causes at all Ages, 1,575.















Street.	Ward.	Small-pox.	Scarlet.	Enteric.	Typhus.	Diphtheria.	Whoop. Cough.	Measles.	Diarrhoea.	Pulmonary.	Rheumatism.	Cancer.	Others.	Total
Scholes	2								1				1	2
Sole Street	3											1	1	1
Seed Street	3								1				1	2
Scholes	3												3	3
Stanley Street	3								1	1			2	4
Schofield Lane	3								1				6	7
Swift's Square	3												4	4
Schofield Lane	4								1	1			1	4
St. Patrick Street	4												2	2
Scholes	4								1				1	3
Stuart Street	4												1	1
Spring Street	4								1	1			2	4
Spring Grove	4								1	1			2	2
Silver Street	4								1	1	2		5	9
Sovereign Road	4												3	3
Shared Street	4												1	1
Seven Stars Rd.	6									1			1	1
Swan Meadow Rd	6								1				1	1
Sandon Street	6								1				1	1
Sharp Street	7								1				1	1
Snappe Street	7								2				3	5
Swann Street	7								1				4	5
Stratford Street	8								1				4	5
Springfield Road	8								1				1	1
Stopforth Street	8												1	1
Second Avenue	8										1		1	1
Bwinley Road	9								2				1	3
Bwinley Street	9												2	2
Bwinley Lane	9								1	1			1	3
Standishgate	9								2				2	2
St. Paul's Yard	9												1	1
Shaw Street	9												1	1
Scarisbrick St	9								1				1	1
Smithy Yard	9												1	1
Sutton Mill														
Common	9												1	1
Saracens Head														
Yard	9								1				1	1
Stirling Street	9												2	2
Somerville Rd.	9												1	1
Shelmerdine St.	10												2	2
Spring Gardens	10												1	1
Scots Field	11								1				2	3
Short Street	11												1	1
Silver Street	11								1	1			3	3
Sarginson Street	12								2	1			7	11
Scott Lane	12		1	1					1	3			14	20
Soho Street	12		1						2	1	2		5	11
Stanley Street	12								1				1	1
Swift's Square	12								1				1	1
Swift Street	12								1				1	1
Schofield House	13												1	1
Smethurst Lane	13												1	1
Smethurst Street	13								1				1	1
School Terrace	14								1				1	1
Turner Street	2												4	4
Thompson Street	2								1				1	2
Peck Street	4												2	2
Nipping Street	6												1	1
Taylor Street	7								1				1	3
Chickness														
Avenue	8									1			2	3
Throstle Nest														
Avenue	8									1			1	2
Crentham Street	12												1	1
Gunstall Lane	3												2	2
Tan Pits, War-														
ington Road.	14												1	1
Turner's Yard	14												4	5
Upper Morris St.	1									2			2	4
Union Work'se	8								1	30	1	3	59	94
Upper St.														
Stephen Street	8												2	2
Upper Diccons'n														
Street	9											1	2	3
Vaughan Street	2												1	1
Vine Street	2								1				1	2
Vauxhall Road.	4								1	1			1	4
Vine Grove	5			1					2				3	3
Victoria Street	5								1	3			3	7
Vere Street	7								1				1	2
Victoria Avenue	8									2			2	2
Victoria Street	12		1						1	2			1	5
Withnall Street	1												1	1
Wolfendale's Yd	1												1	1
Woods' Square	1									1			1	1
Windmill Street	1									1			1	1
Worsley's Yard.	1												1	1
Water Hayes Ter	2												1	1
Westminster St.	2												2	2
Windsor Street	2									1	1		2	4
Weston Street	2												1	1
Whelley	2											2	4	6
Wright Street	2		1										1	3
Wallace Lane	2												1	1
Whelley	3									2			10	12
William Street	3												1	1
Well Street	3												2	2
Worsley's Yard.	4												1	1
Warrington Lne	4		1										8	9
Wallgate	5								1				1	2
Woods Street	5												1	1
Wood Street	5								3				2	5
William Street	5												1	1
Wallgate	6								1				5	6
Wignall Street	6												1	1
Walmer Street	6												4	8
Wilcock Street	7								2				3	5
Wallgate	7								1			1	3	5
Woodhouse Lne.	8								3			2	14	19
Whiteside Aven.	8								1	1			2	4
Wrightington St	9												2	2
Wigan Lane	9									2		1	7	10
Whittaker's Yd.	9								1				1	1
Worsley Terrace	9												3	3
Walthew's Yard	10								1				1	1
Wallgate	10												1	1
Walthew H'se L.	11									1			2	3
Wardley Street	11								1				1	2
Woodfrd Street	11												3	3
Worsley Street	11												1	1
Warrington Rd.	12		1						3	6		1	10	21
Westminster St	12												1	1
Wesley Street	13								1				2	3
Wa' rington Rd.	14								3	3	1		16	26
Willow Street	14												1	1
Yates Yard	2												1	1
Yates Street	7								1	1			1	3
York Street	7								1	2		1	3	7
York Street E.	7								1	1			2	2
Zulu Street	4		1										1	2

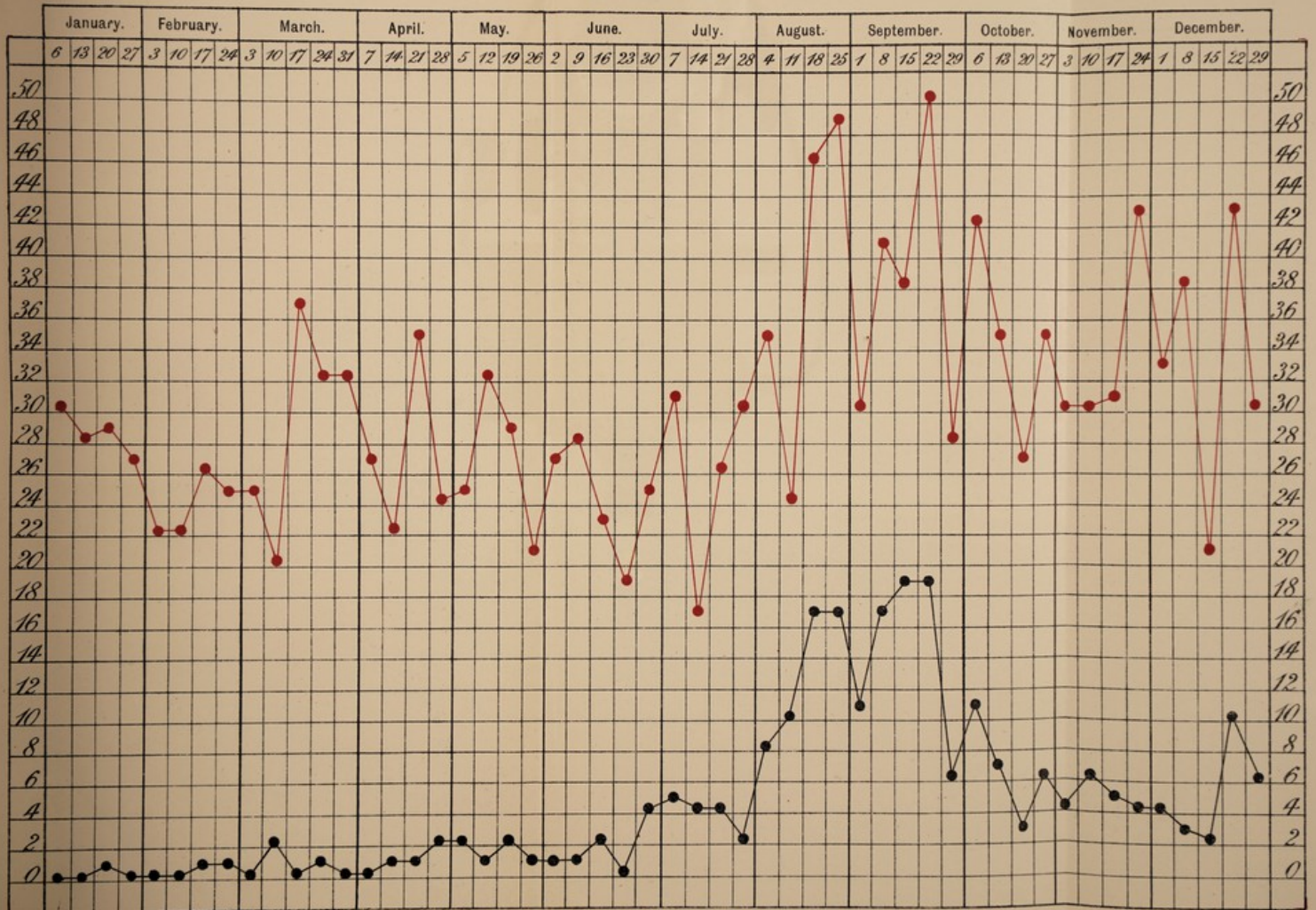
Name		Age		Sex		Religion		Marital Status		Occupation		Education		Income		Assets		Liabilities		Total	
John Doe		35		Male		Protestant		Married		Teacher		High School		\$12,000		\$5,000		\$7,000		\$12,000	
Jane Doe		32		Female		Protestant		Married		Homemaker		High School		\$8,000		\$3,000		\$5,000		\$8,000	
Robert Smith		45		Male		Catholic		Married		Engineer		College		\$15,000		\$10,000		\$5,000		\$15,000	
Mary Smith		42		Female		Catholic		Married		Nurse		College		\$10,000		\$8,000		\$2,000		\$10,000	
William Brown		55		Male		Protestant		Married		Farmer		High School		\$9,000		\$4,000		\$5,000		\$9,000	
Elizabeth Brown		52		Female		Protestant		Married		Homemaker		High School		\$7,000		\$3,000		\$4,000		\$7,000	
James Green		60		Male		Catholic		Married		Retired		High School		\$6,000		\$2,000		\$4,000		\$6,000	
Margaret Green		58		Female		Catholic		Married		Homemaker		High School		\$5,000		\$2,000		\$3,000		\$5,000	
Thomas White		70		Male		Protestant		Married		Retired		High School		\$4,000		\$1,000		\$3,000		\$4,000	
Ann White		68		Female		Protestant		Married		Homemaker		High School		\$3,000		\$1,000		\$2,000		\$3,000	
Charles Black		80		Male		Catholic		Married		Retired		High School		\$2,000		\$500		\$1,500		\$2,000	
Sophia Black		78		Female		Catholic		Married		Homemaker		High School		\$1,500		\$500		\$1,000		\$1,500	

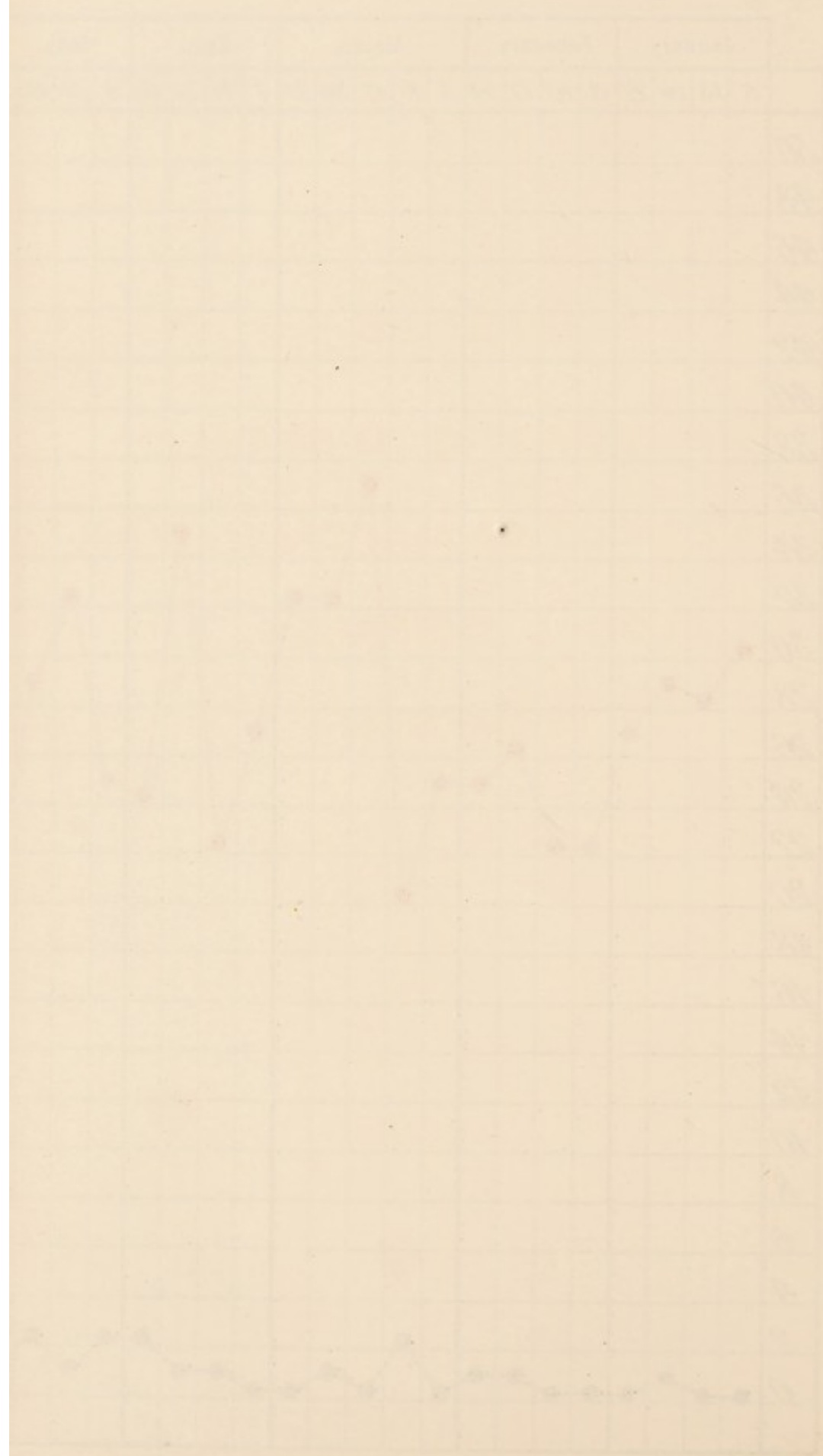


# DEATH RETURNS CHART I.

1906.

All Causes (Red)  
Zymotics (Black)





# CAUSES OF DEATH.

## THE ZYMOTIC DISEASES.

The mortality from the principal Zymotic Diseases, namely, Small Pox, Scarlatina, Measles, Whooping Cough, Typhus, Typhoid Fever, Erysipelas, Diphtheria, and Cholera, gives an average of 1.001 of the population, against 0.22 in 1860.

## PART II.

### THE ZYMOTIC DISEASES.

### CONSTITUTIONAL DISEASES.

### LOCAL DISEASES.

### INQUESTS.

Year		Deaths		Rate per 1000	
1860	1861	1860	1861	1860	1861
Small Pox	10	10	10	0.001	0.001
Scarlatina	10	10	10	0.001	0.001
Measles	10	10	10	0.001	0.001
Whooping Cough	10	10	10	0.001	0.001
Typhus	10	10	10	0.001	0.001
Typhoid Fever	10	10	10	0.001	0.001
Erysipelas	10	10	10	0.001	0.001
Diphtheria	10	10	10	0.001	0.001
Cholera	10	10	10	0.001	0.001
Total	10	10	10	0.001	0.001



## CAUSES OF DEATH.

### THE ZYMOTIC DISEASES.

The Mortality from the principal Zymotic diseases, namely, Small Pox, Scarlet Fever, Measles, Whooping Cough, Typhus, Enteric Fever, Puerperal Fever, Diphtheria, and Diarrhœa, gives us a rate of 2·61 per 1,000 of the population, against 3·23 in 1905.

The deaths numbered 234.

The zymotic rate 2·61 is made up as follows :—

DEATHS PER 1,000.

	1906.	1905.
Small Pox.....	...	...
Scarlet Fever .....	·055	·12
Measles .....	·50	·67
Whooping Cough .....	·033	·16
Typhus .....	...	...
Enteric .....	·030	·40
Diphtheria.....	·089	·11
Diarrhœa .....	1·55	1·57
Puerperal .....	·044	·10
Erysipelas.....	·033	·067

The zymotic rate during each of the four quarters was :—

	1906.	1905.
1st Quarter .....	·26	2·65
2nd „ .....	·80	2·50
3rd „ .....	6·22	6·37
4th „ .....	3·16	1·49

### TABLE OF ZYMOTIC DISEASES.

	Notified.	Died.	Case Mortality per cent.
Small Pox .....	...	...	...
Scarlet Fever .....	256	5	1·95
Enteric Fever .....	138	27	19·56
Diphtheria.....	49	8	16·32
Measles .....	1422	45	3·16
Whooping Cough.....	...	3	...
Diarrhœa .....	...	139	...
Puerperal Fever .....	9	4	44·44
Erysipelas.....	86	3	3·48

## DEATH RATES, 1906.

Disease.	No. of Deaths.	Rate.
Small Pox .....	...	...
Measles .....	45	·50
Scarlet Fever .....	5	·055
Diphtheria and Croup .....	8	·089
Whooping Cough .....	3	·033
Enteric Fever .....	27	·30
Erysipelas .....	3	·033
Septicæmia .....	...	...
Puerperal Fever .....	4	·044
Diarrhœa .....	139	1·55
Phthisis .....	108	1·20
Other Tubercular Diseases .....	40	·44
Bronchial Diseases .....	142	1·58
Pulmonary Diseases .....	203	2·27
Wasting Diseases of Infants .....	45	·50
Convulsive " " .....	25	·27
Cancer .....	46	·51
Rheumatism .....	8	·089
Diseases of Heart .....	91	1·018
Other Diseases .....	633	7·08
Total .....	1575	17·61

Number of notifications compared with other years :—

Disease.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Small Pox .....	91	33	0	0	0	0	0	4	66	2	3	0
Typhus .....	33	20	1	0	0	0	0	0	0	0	0	0
Scarlet .....	161	151	191	420	245	484	264	557	362	191	325	256
Enteric .....	64	101	64	93	173	104	71	76	51	56	133	138
Continued .....	29	2	0	0	0	0	0	0	0	0	0	0
Diphtheria .....	13	10	23	12	13	20	49	58	38	9	49	49
Puerperal .....	5	7	7	4	4	4	8	10	5	8	16	9
Cholera .....	0	0	1	0	0	0	0	0	0	0	0	0
Erysipelas .....	0	0	0	0	0	39	65	65	51	47	92	86
Mem. Croup .....	0	0	0	0	0	0	0	2	0	0	0	0
Total .....	396	324	287	529	435	651	457	772	573	313	618	538

Analysis of Notifications :—

1906.	Jan.	Feb.	Mar.	Apl.	May	Jun	July	Aug	Sep.	Oct.	Nov	Dec.	Total
Small Pox .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet .....	21	19	22	31	20	16	29	21	17	24	23	13	256
Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric .....	9	4	6	13	9	9	4	8	17	42	8	9	138
Continued .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria .....	9	4	1	4	3	2	5	5	2	8	3	3	49
Puerperal .....	1	...	...	...	1	...	1	...	1	2	3	...	9
Erysipelas .....	7	6	9	8	8	8	4	7	4	9	12	4	86
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Total .....	47	33	38	56	41	35	43	41	41	85	49	29	538



Total Number of Successful Vaccinations, all ages, 1905 .....	1868
" " " 1906 .....	1801
Deaths of Infants under 12 months in 1902.....	368
" " 1903.....	399
" " 1904.....	405
" " 1905.....	385
" " 1906.....	328



## LIST OF TOWNS IN WHICH SMALL-POX OCCURRED DURING 1906.

DATE.	TOWN.	NO. OF CASES.	DATE.	TOWN.	NO. OF CASES.	DATE.	TOWN.	NO. OF CASES.
Jan. 6	Plymouth	9	Mar. 17	Croydon	1	April 28	Ashton-u-Lyne	6
"	Devonport	2	"	Plymouth	14	"	Oldham	5
"	Oldham	20	"	Devonport	2	May 5	Plymouth	10
Jan. 13	Plymouth	4	"	Cheltenham	1	"	Devonport	2
"	Devonport	1	"	Ashton u-Lyne.	4	"	Bristol	1
"	Ashton-u-Lyne	4	"	Chadderton	1	"	Ashton-u-Lyne.	6
"	Rochdale	21	"	Oldham	33	"	Oldham	5
Jan. 20	Plymouth	3	"	St'kton on-Tees	1	"	Preston	1
"	Bristol	1	Mar. 24	Plymouth	7	"	South Shields	1
"	Nuneaton & C.C.	2	"	Devonport	1	"	Newcastle-upon	
"	Liverpool	2	"	Bristol	1	"	Tyne	1
"	Ashton u-Lyne.	1	"	Ashton-u-Lyne.	8	"	Tynemouth	1
"	Oldham	22	"	Chadderton	1	"	Newport (Mon.)	1
Jan. 27	Plymouth	4	"	Oldham	23	"	Cardiff	2
"	Oldham	15	Mar. 31	Croydon	1	May 12	Plymouth	6
Feb. 3	Plymouth	2	"	Plymouth	10	"	Bristol	2
"	Bristol	5	"	Bristol	2	"	Ashton-u-Lyne.	3
"	Bury	1	"	Mansfield	1	"	Chadderton	3
"	Chadderton	2	"	Warrington	1	"	Oldham	3
"	Oldham	29	"	Ashton-u-Lyne.	3	"	Rochdale	1
Feb. 10	Plymouth	5	"	Chadderton	2	"	Newcastle-upon	
"	Devonport	2	"	Oldham	8	"	Tyne	2
"	Bristol	1	April 7	Plymouth	4	May 19	Plymouth	7
"	Chadderton	1	"	Bristol	2	"	Devonport	1
"	Oldham	24	"	Ashton-u-Lyne.	5	"	Bristol	2
Feb. 17	Plymouth	2	"	Oldham	14	"	Ashton-u-Lyne.	11
"	Devonport	3	April 14	Croydon	1	"	Middleton	1
"	Bristol	4	"	Plymouth	6	"	Oldham	9
"	Ashton u-Lyne.	1	"	Devonport	1	"	Newcastle-upon	
"	Chadderton	5	"	Bristol	2	"	Lyne	2
"	Oldham	38	"	Ashton-u-Lyne	1	May 26	Plymouth	4
Feb. 24	Plymouth	10	"	Chadderton	1	"	Devonport	2
"	Bristol	1	"	Oldham	7	"	Birkenhead	1
"	Chadderton	4	"	Blackpool	1	"	Ashton-u-Lyne.	3
"	Oldham	57	April 21	Plymouth	8	"	Oldham	4
"	Blackpool	1	"	Devonport	1	"	Preston	1
"	Leeds	1	"	Bristol	2	"	Kingston-upon-	
Mar. 3	Chadderton	4	"	Ashton-u-Lyne.	9	"	Hull	1
"	Oldham	36	"	Oldham	7	June 2	Plymouth	3
Mar. 10	Croydon	1	"	Wakefield	1	"	Ashton-u-Lyne.	3
"	Plymouth	10	"	Newcastle upon		"	Oldham	6
"	Devonport	1	"	Tyne	3	"	Blackpool	1
"	Bristol	2	April 28	Portsmouth	1	"	Kingston-upon-	
"	Liverpool	2	"	Plymouth	8	"	Hull	2
"	Oldham	32	"	Bath	1	June 9	Plymouth	7
"	Leeds	1	"	Bristol	4	"	Devonport	2



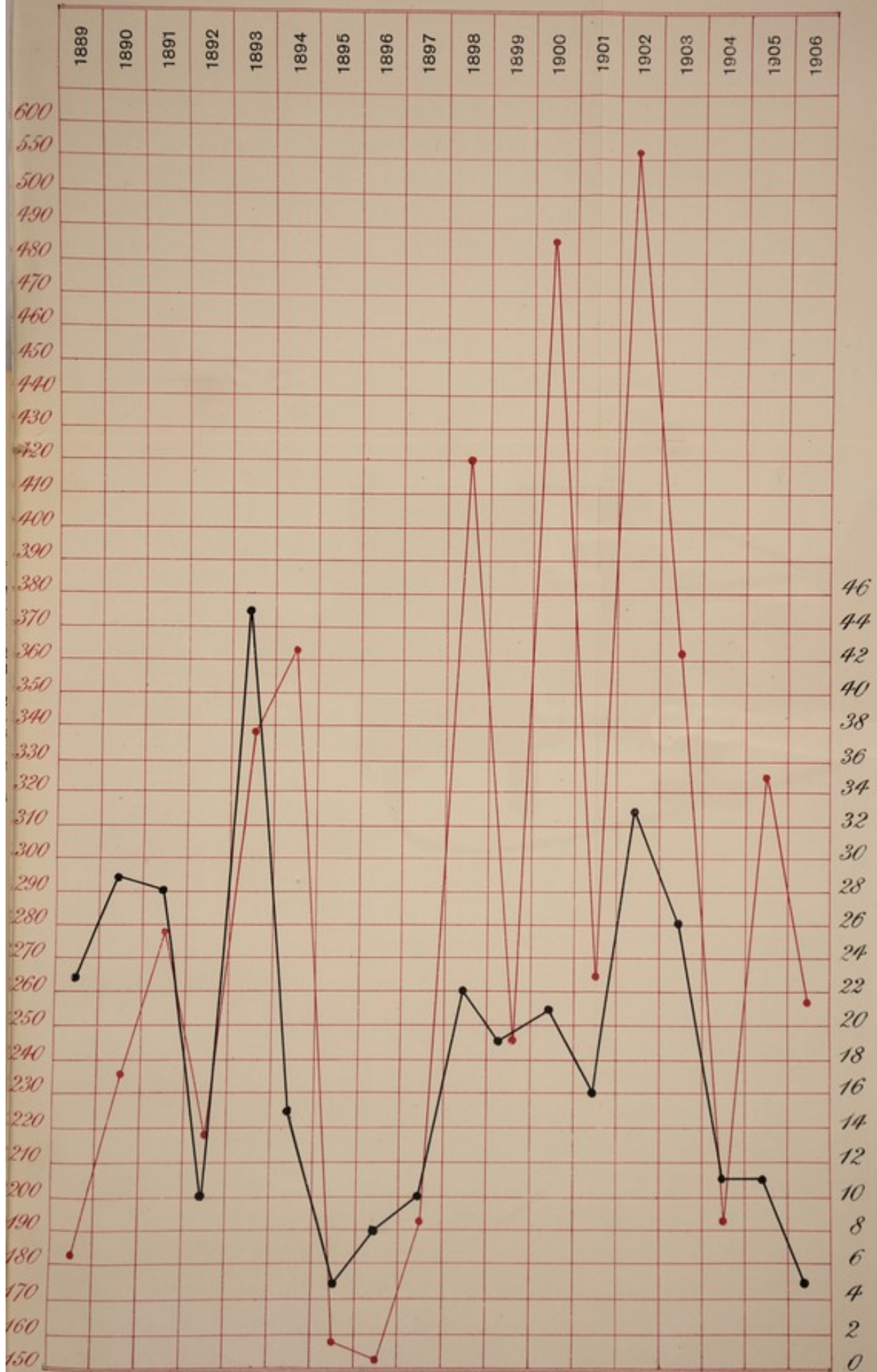
## LIST OF TOWNS.—Continued.

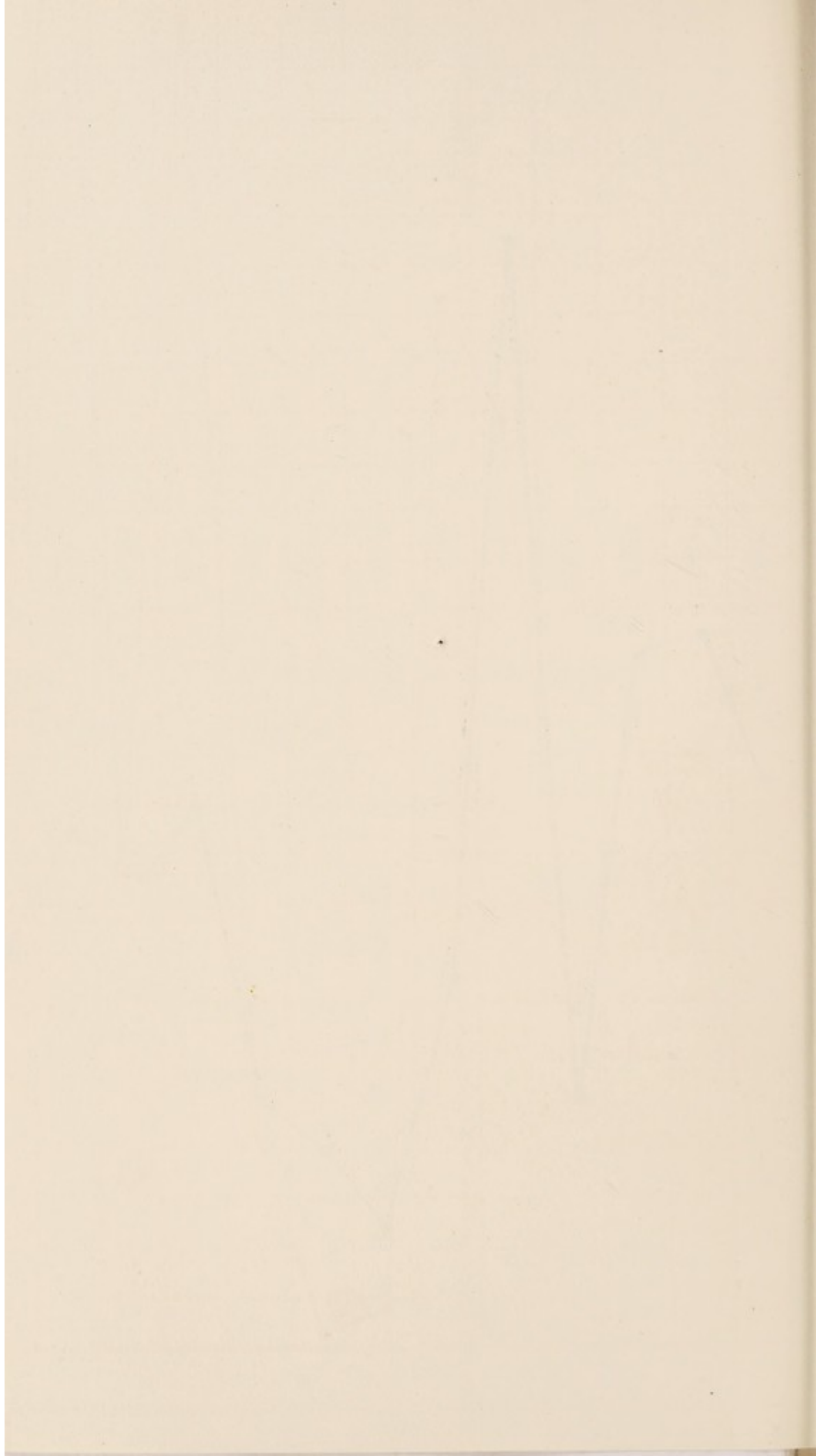
DATE.	TOWN.	NO. OF CASES.	DATE.	TOWN.	NO. OF CASES.	DATE.	TOWN.	NO. OF CASES.
June 9	Liverpool.....	1	July 28	Plymouth.....	1	Sept. 29	Oldham .....	1
"	Ashton-u-Lyne.	7	"	Liverpool ....	4	Oct. 6	Oldham .....	1
"	Oldham .....	8	"	Ashton-u Lyne.	1	Oct. 13	Plymouth ....	2
"	Preston .....	1	"	Stalybridge....	1	"	Devonport ....	3
Jun 16	Plymouth ....	2	"	Middleton.....	2	"	Merthyr Tydvil	1
"	Stalybridge ...	1	"	Oldham .....	3	Oct. 20	Ipswich .....	2
"	Oldham .....	3	"	Rochdale .....	2	"	Devonport ....	2
June 23	Plymouth ....	2	Aug. 4	Ashton-u-Lyne.	2	"	Ashton-u-Lyne.	3
"	Birkenhead.....	1	"	Chadderton ...	1	"	Blackpool ....	4
"	Ashton-u-Lyne.	5	"	Oldham .....	6	Oct. 27	Devonport ....	2
"	Middleton .....	1	"	Sheffield ....	1	Nov. 3	Devonport ....	1
"	Oldham .....	9	Aug. 11	Ashton-u Lyne.	2	"	Manchester ....	3
"	Kingston-upon-		"	Chadderton....	1	"	Ashton-u-Lyne.	1
"	Hull .....	1	"	Oldham .....	1	Nov. 10	Devonport ....	1
June 30	Plymouth ....	3	Aug. 18	Devonport ....	1	"	Ashton-u-Lyne	1
"	Devonport ....	1	"	Ashton-u-Lyne.	2	"	Middleton ....	1
"	Heywood.....	1	"	Oldham .....	4	"	Kingston-upon-	
"	Ashton-u-Lyne.	1	"	Wakefield .....	1	"	Hull .....	1
"	Middleton ....	1	Aug. 25	Devonport ....	1	Nov. 17	Ashton-u-Lyne	1
"	Oldham.....	2	"	Liverpool.....	2	"	Kingston-upon-	
"	Kingston-upon-		"	Ashton-u-Lyne.	2	"	Hull.....	4
"	Hull .....	1	"	Chadderton....	1	Nov. 24	Manchester ...	1
July 7	Bristol.....	1	Sept. 1	'Tu'bridgeWells	1	"	Ashton-u-Lyne.	5
"	Ashton-u-Lyne.	3	"	Plymouth ....	1	"	Kingston-upon-	
"	Rochdale .....	1	"	Devonport ....	9	"	Hull .....	3
"	Kingston-upon-		"	Ashton-u-Lyne.	1	Dec. 1	Devonport ....	2
"	Hull .....	1	"	Chadderton....	1	"	Aston Manor..	1
July 14	Plymouth.....	2	"	Oldham .....	2	"	Ashton-u-Lyne	1
"	Devonport ....	1	"	Bradford .....	1	"	Kingston upon-	
"	Leicester.....	1	Sept. 8	Devonport ....	3	"	Hull .....	5
"	Ashton-u-Lyne.	1	"	Oldham .....	4	"	Gateshead ....	1
"	Middleton ....	1	Sept. 15	Devonport ....	1	Dec. 15	Ashton-u-Lyne	2
"	Oldham .....	1	"	Liverpool ....	1	"	Kingston upon-	
July 21	Plymouth ....	1	"	Ashton-u-Lyne.	2	"	Hull .....	7
"	Ashton-u-Lyne.	1	"	Bradford .....	1	Dec. 22	Manchester....	1
"	Stalybridge....	1	Sept. 2	Devonport ....	3	"	Ashton-u-Lyne.	2
"	Middleton ....	3	"	Oldham.....	1	"	Blackpool ....	1
"	Blackpool.....	1	Sept. 29	Devonport ....	1	Dec. 29	Ashton-u-Lyne.	4
"	Newport(Mon.)	1	"	Ashton-u-Lyne.	2			



# SCARLET FEVER.

CHART:—Cases notified in red. ● Deaths in black. ●







## SCARLET FEVER.

Number of Notifications .....	256
Number of Deaths .....	5
Death-rate per 1,000 of population ...	·055

The number of notifications of this disease is for 1906, 256, against 325 in 1905; and 5 deaths, against 11 in 1905.

	Notifications.	Removed to Sanatorium.	Deaths.
January .....	21	15	...
February .....	19	12	1
March .....	22	14	...
April.....	31	11	1
May .....	20	12	...
June .....	16	7	...
July .....	29	12	...
August .....	21	4	...
September .....	17	9	...
October .....	24	8	1
November .....	23	15	1
December .....	13	7	1
Total.....	256	126	5

The percentage of removals to Sanatorium has been 47·65, against 63·69 in 1905, and 68·06 in 1904.

The number of return cases during the year was 6, and the causation was difficult to define. In some cases it appeared that the discharged patient got a coryza, and thus infected the other child. We have had 5 deaths amongst those notified, 2 occurred in hospital, and these were severe cases when sent in; this equals 2 in 47·65 per cent. of cases removed, and the remaining three cases were in the remaining 52·35 per cent. left at home, so we may take it that the fatality amongst those cases left to be nursed in better houses, with parental care and nursing, gives us a death-rate, per cent, of 2·22, against 1·63 in hospital.



BOROUGH OF WIGAN.

Notification of Disease adopted March, 1889. Hospital opened 1891.

SCARLET FEVER.

Year.	Estim. Population.	Cases Notified.	Under Five Years.	Deaths.	Cases in Hospital.	Attacks per 1,000.	Deaths per 1,000.	Removals Per cent. per Annum.
1889	53916	182	76	23	15	3.37	.42	8.24
1890	54440	235	163	29	83	4.31	.42	35.31
1891	55084	278	198	28	151	6.86	.50	39.68
1892	56040	218	117	10	79	3.89	.17	36.69
1893	57483	336	211	45	183	5.84	.78	54.49
1894	58529	361	215	15	200	6.16	.25	55.40
1895	59469	157	84	5	92	2.64	.08	58.59
1896	60235	151	83	8	43	2.50	.13	28.47
1897	61202	191	84	10	95	3.12	.16	49.74
1898	61657	420	220	22	189	6.80	.35	45.00
1899	62630	245	129	19	142	3.91	.30	57.95
1900	63440	485	159	21	211	7.63	.33	42.59
1901	60923	264	92	16	155	4.00	.26	58.70
1902	61827	557	190	33	246	9.00	.53	44.16
1903	62689	362	119	26	205	5.77	.41	56.63
1904	64249	191	88	11	130	2.97	.17	68.06
1905	88306	325	131	11	207	3.68	.12	63.09
1906	89312	256	96	5	126	2.87	.055	47.65





## MEASLES.

The total number of cases notified for 1906 was 1,422 against 1,108 cases in 1905. Of these 866 were notified by medical men, and 556, the remainder, discovered by the inspectors when inquiring into the notified cases.

The deaths numbered 45, or a rate of .50 per 1,000 of the population, or a percentage mortality of 3.16 against 5.41 in my last report, and 2.76 per cent. in 1904. This shows that in epidemic cycles the percentage of deaths varies according to the period of the year.

The following is a list of voluntary notifications and other cases discovered in consequence : --

### VOLUNTARY NOTIFICATIONS OF MEASLES IN 1906.

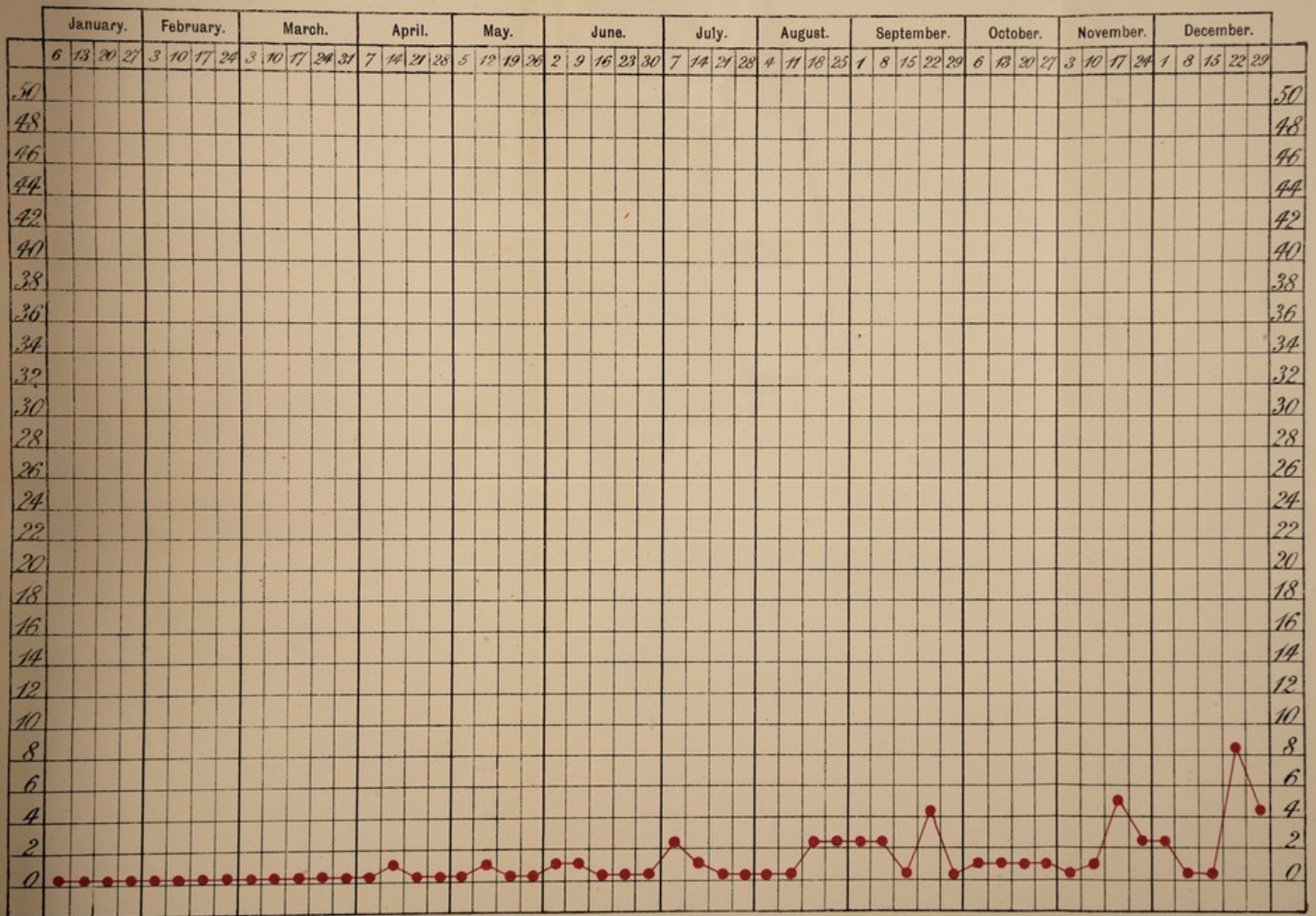
	Notifications.	Deaths.
January .....	5	—
February .....	13	—
March .....	5	—
April .....	32	1
May .....	70	2
June .....	84	1
July .....	168	3
August .....	108	6
September .....	118	7
October .....	193	3
November .....	273	10
December .....	353	12
Total .....	1422	45



DEATH RETURNS CHART 2.

1906.

Measles (Red)







—•— 1906. —•—

[illegible]





## AGE INCIDENCE.

1906.	Under 1 year.	1-5 years	5-15 years.	15-25 years.	25-65 years.	Total.
January .....	1	2	2	—	—	5
February .....	1	6	5	1	—	13
March .....	1	3	—	1	—	5
April .....	2	18	12	—	—	32
May .....	5	34	28	3	—	70
June .....	6	51	26	—	1	84
July .....	10	92	66	—	—	168
August .....	9	77	20	1	1	108
September .....	7	72	38	1	—	118
October .....	30	109	54	—	—	193
November .....	15	157	100	—	1	273
December .....	27	199	127	—	—	353
Total .....	114	820	478	7	3	1422

We still have voluntary notification of Measles. On May 19th, 1904, the Sanitary Committee agreed to voluntary notification of the first case of Measles in a house for a further period of three years. This, I am persuaded, is beneficial, and enables us to know in what district fresh cases arise.

A number of schools were closed in consequence of an epidemic. A list of the schools are mentioned in my introduction to this report.

## WHOOPIING COUGH.

The number of deaths from Whooping Cough is 3, against 15 in 1905, and 34 in 1904. The number is shown in the following table :—

	Deaths in 1906.	Deaths in 1905.
January .....	0	2
February .....	0	4
March .....	0	0
April .....	0	2
May .....	0	2
June .....	0	1
July .....	0	2
August .....	1	0
September .....	0	1
October .....	0	0
November .....	0	0
December .....	2	1
Total .....	3	15

The deaths were less in 1906 by 12, nevertheless it is a very dangerous disease owing to the lung affections which supervene.

### TYPHUS FEVER.

I am pleased to say we have had no notifications of this disease during the year.

### ENTERIC FEVER.

Number of Notifications	...	...	138
Number of Deaths	...	...	27
Mortality per 1,000 of population	...	...	30
Removed to Sanatorium	...	...	82

We have for 1906, 138 notifications, against 133 in 1905, and 56 in 1904. A few of the cases removed to the Sanatorium turned out to be cases of other febrile diseases.

The number of deaths were 27, or 19·56 per cent. of the cases notified, against a rate of 27·06 per cent. in 1905, and 28·57 per cent. in 1904.



## Removed to Sanatorium.

January .....	3
February .....	2
March .....	2
April .....	8
May .....	4
June .....	5
July .....	2
August .....	5
September.....	12
October .....	29
November.....	5
December .....	5
	—
Total .....	82
	—

In the Thompson Yates Laboratory, Liverpool, we have had 5 specimens of blood examined, with the following results :—

Positive reaction.....	—
Negative .....	5

We have had a large number of Enteric Fever cases, larger in proportion than in the previous year, yet we cannot say it has been epidemic, as it appeared in different parts of the town. The mortality rate is also great, and this has been due to the severity of the disease, and to some extent the want of early removal to Hospital. We have 27 deaths in 138 cases, a rate of 19·56 per cent.

I here give the weekly number of notifications from January 6th to December 29th.

## WEEKLY NOTIFICATIONS FOR 1906.

Jan. 6th ... ..	3	July 7th ... ..	2
„ 13th ... ..	2	„ 14th ... ..	1
„ 20th ... ..	1	„ 21st ... ..	1
„ 27th ... ..	2	Aug. 11th ... ..	2
Feb. 3rd .. ..	2	„ 25th ... ..	2
„ 10th ... ..	2	Sept. 1st ... ..	5
„ 24th ... ..	1	„ 8th ... ..	2
Mar. 3rd ... ..	1	„ 22nd ... ..	5
„ 10th ... ..	1	„ 29th ... ..	9
„ 17th ... ..	2	Oct. 6th ... ..	16
„ 31st ... ..	2	„ 13th ... ..	7
April 7th ... ..	3	„ 20th ... ..	8
„ 14th ... ..	1	„ 27th ... ..	9
„ 21st ... ..	1	Nov. 3rd ... ..	4
„ 28th ... ..	3	„ 17th ... ..	1
May 5th .. ..	7	„ 24th ... ..	3
„ 12th ... ..	4	Dec. 1st ... ..	2
„ 19th ... ..	3	„ 8th ... ..	4
June 9th ... ..	1	„ 15th ... ..	2
„ 16th ... ..	1	„ 22nd .. ..	1
„ 23rd ... ..	3	„ 29th ... ..	2
„ 30th ... ..	4		

## ENTERIC FEVER.

1906.	Notification.		Deaths.	
	(1906.)	(1905.)	(1906.)	(1905.)
January .....	9	4	1	2
February .....	4	12	—	1
March .....	6	6	2	2
April .....	13	2	—	—
May .....	9	9	2	2
June .....	9	4	2	1
July .....	4	5	6	1
August .....	8	16	1	4
September .....	17	31	2	9
October .....	42	12	3	5
November .....	8	21	4	7
December .....	9	11	4	2
Total .....	138	133	27	36



## INCIDENCE OF ENTERIC FEVER FOR ELEVEN YEARS.

Year.	Notified Cases.	Deaths from Enteric.	Enteric Fever rate per 1,000,
1896	101	14	·23
1897	63	10	·16
1898	92	17	·27
1899	174	25	·40
1900	104	19	·29
1901	71	12	·19
1902	76	14	·22
1903	15	11	·17
1904	56	16	·24
1905	133	36	·40
1906	138	27	·30

The age incidence shows the greatest number of cases have occurred in persons over 30 years, and the next larger in cases from 10-14.

## AGE INCIDENCE.

## YEARS.

1—4	5—9	10—14	15—19	20—24	25—29	over 30
13	17	21	15	18	9	45

Total cases 138.

Pemberton district in proportion to population has given us a greater number of cases; this, I think, is accounted for by the large number of privy middens, defective drainage, and unpaved or badly paved yards.

Houses in which cases have occurred with:—

Privy Middens	Pails.	Waste Water Closets.	Water Closets.
41	75	6	16

Number of privy middens in Wigan	...	12
"	"	in Pemberton 1746

## STREET LIST OF DEATHS FROM ENTERIC FEVER.

Wigan.		Pemberton.	
Albion Yard, Millgate ...	1	Albert Street ... ..	3
Ascroft Street ... ..	1	Bentinck Street... ..	1
Bailey's Court ... ..	1	Bridgewater Street ..	1
Chapel Street ... ..	3	Earl Street ... ..	1
Cross Street ... ..	1	Ormskirk Road... ..	2
Hallgate ... ..	1	Scot Lane ... ..	1
Hardybutts ... ..	1	Soho Street ... ..	1
Holme Terrace ... ..	1	Warrington Road ... ..	1
Ingram Street ... ..	1		
Park Road... ..	1		
Platt Lane... ..	1		
Vine Grove ... ..	1		
Warrington Lane ... ..	1		
Zulu Street... ..	1		
	16		11
Estimated Population for year ending 1906, 66,854		Estimated Population for year ending 1906, 23,497	

## ENTERIC FEVER.

Cases in houses with insanitary conditions and surroundings ... ..	14
„ houses with other defects ... ..	49
„ houses where no defects were found ... ..	74
„ that occurred at the Infirmary and Work-house ... ..	1
Total ... ..	138



LIST OF STREETS IN WIGAN WHERE CASES OF ENTERIC FEVER  
HAVE OCCURRED.

	1906	1905		1906	1905
Acton's Walk .....	2		Kirkless Street .....	2	
Albion Yard, Millgate.	1		Lime Street .....	1	5
Ascroft Street.....	1		Lower Morris street ..	1	
Ashton's Yard, Duke			Mariebonne Place ....	1	
Street .....	1		Park Road .....	1	
Ashton Street.....	1		Platt Lane .....	4	
Bailey's Court .....	2		Poolstock .....	1	2
Beech Hill Lane.....	1		Prescott Street .....	1	1
Birkett Bank .....	1		Princess Street .....	7	1
Bottling Wood .....	1		Queen Street .....	2	
Canal Street .....	1		Rylands Street .....	1	
Caroline Street .....	3		Scholes .....	1	1
Counce Street .....	3		School Street .....	1	
Chadwick Street .....	1		St. James' Terrace ....	1	1
Chancery Street .....	1		Thompson Street.....	1	
Chapel Lane .....	2		Vaughan Street .....	1	
Chapel Street .....	7		Vine Grove .....	2	
Coronation Street ....	1		Wallgate .....	1	1
Cross Street.....	1		Walmer Street .....	1	
Douglas Road .....	1		Warrington Lane ....	3	
Frog Lane .....	1	1	Well Street .....	1	
Gidlow Lane .....	1		Wilton Street .....	1	
Hallgate .....	5	1	Windermere Street ..	1	
Hardybutts .....	1	1	Woods' Grove .....	2	
Hill Street .....	1		Workhouse .....	1	1
Holland Street .....	1		Worthington's Yard,		
Holme Terrace .....	1		Queen Street .....	1	
Hope Street.....	1	1	York Street .....	1	1
Ingram Street .....	1		Zulu Street .....	1	
Kenyon Road .....	2				

LIST OF STREETS IN PEMBERTON WHERE CASES OF ENTERIC FEVER  
HAVE OCCURRED

	1906.	1905.
Albert Street, Newtown .....	12	—
Alfred Street .....	1	2
Arthur Street .....	1	—
Bank Street .....	1	—
Bentinck Street .....	1	2
Bridgewater Street .....	1	—
Clapgate Lane .....	2	—
Duke Street .....	2	2
Earl Street .....	1	—
Gore Street.....	1	—
Major Street .....	1	—
Mitchell Street .....	1	—
Noble Street .....	1	—
Northumberland Street.....	2	1
Ormskirk Road .....	4	3
Poolstock Lane .....	1	—
Richmond Hill .....	1	—
Scot Lane .....	3	2
Soho Street .....	1	—
Spencer's Fold .....	2	—
Swift Street .....	1	—
Wardley Street .....	1	—
Warrington Road .....	6	—



## ENTERIC FEVER CASES DURING 1906.

Case 1.—T. R., aged 46 years, 11, Chancery Street, Notified January 5th, 1906. Case commenced December 29th, 1905. Removed to Sanatorium on January 10th, 1906. Two living and 3 sleeping rooms occupied by 5 adults and 3 children. Patient works as collier at Hindley Green Colliery (Scowcroft's). 3 children attend St. Patrick's School. Surroundings: Yard partly flagged, drains trapped, pail closet. Milk from Grimshaw.

Case 2.—L. H., aged 17 years, 67, School Street. Notified January 6th, 1906. Case commenced December 27th, 1905. Removed to Sanatorium on January 4th, 1906. Two living and 2 sleeping rooms, occupied by 2 adults and 4 children. Patient works as ring spinner at Eckersley's Mill, Greenough Street. Three children attend St. John's School. Surroundings: Yard flagged, drains trapped, pail closet. Milk not used.

Case 3.—L. B., aged 5 years, 18, Coronation Street. Notified January 6th, 1906. Case commenced December 22nd, 1905. Isolated at home. Two living and 3 sleeping rooms. Occupied by 4 adults and 5 children. Two children attend St. Thomas's, Caroline Street, and 1 St. James's. Patient does not attend school. Surroundings: Yard flagged, drains trapped, water closet. Milk from Barton's.

Case 4.—J. A., aged 59 years, 12, Ingram Street. Notified January 8th, 1906. Case commenced December 31st, 1905. Too ill to be removed. Two living and 3 sleeping rooms, occupied by 5 adults. Patient works at Douglas Bank Colliery. Surroundings: Yard part flagged, pail closet, drains trapped, unpaved passage at rear. Milk from Ashton's. Case died at home, January 13th.

Case 5.—T. M., aged 53 years, 49, Birkett Bank. Notified January 10th, 1906. Case commenced December 27th, 1905. Isolated at home. Two living and 3 sleeping rooms, occupied by 5 adults and 3 children. Patient a retired postman. Has not worked for 8 months.



Two children attend St. Catharine's School. Surroundings: Open yard, flagged, drains trapped, pail closet. Milk from Haddock's.

Case 6.—E. R., 46 years, 56 York Street. Notified January 18th, 1906. Case commenced January 13th. Isolated at home (2nd case.) First case notified December 15th, 1905.

Case 7.—M. R., aged 34 years, 35, Vaughan Street. Notified January 26th, 1906. Case commenced January 19th. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults and 5 children. Patient engaged in domestic duties. Three children attend St. Mary's. Surroundings: Yard flagged, drains trapped, pail closets. Milk purchased from Thomas.

Case 8.—J. G., aged 4 years, 58, Mitchell Street, Pemberton. Notified January 22nd. Case commenced January 12th. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults and 2 children. Patient probably contracted disease at Bolton, where he had been staying for one month, and returned the day before he sickened. No children attend school. Yard flagged, drains trapped, privy midden. Milk from Richardson's.

Case 9.—T. D., aged 27 years, 25, Caunce Street. Notified January 30th. Case commenced January 23rd. Removed to Sanatorium January 30th. Two living and two sleeping rooms, occupied by 3 adults. Patient works at the Crawford No. 1 Pit. Surroundings: Yard paved, drains trapped, pail closet. Milk from Foster's.

Case 10.—E. F., aged 5 years, 39, Caunce Street. Notified February 1st. Case commenced January 11th. Isolated at home. Two living and 2 sleeping rooms. Occupied by 2 adults and two children. Patient did not attend school. Niece to case at No. 9. Surroundings: Yard paved, pail closet, drains trapped. Milk from Foster's.

Case 11.—M.C., aged 32 years, Workhouse, of 7, Prescott Street, Lower Ince. Notified February 7th. Case commenced January 24th. Removed to Sanatorium



February 7th. Patient was only received in the Work-house on February 6th from 7, Prescott Street, Lower Ince, which is out of the Wigan Borough.

Case 12.—A. D., aged 30 years, 25, Caunce Street. Notified February 9th. Case commenced February 2nd. Removed to Sanatorium on February 9th (2nd case). First case: Removed to Sanatorium January 30th.

Case 13.—M. J., aged 4 years, 5 and 6, Hope Street. Notified February 24th. Case commenced February 11th. Isolated at home. Three living and 4 sleeping rooms, occupied by 5 adults and 2 children. Patient did not attend school. Surroundings: Yard paved, drains trapped, water closet. Milk from Dobson's.

Case 14.—T. S., aged 43 years, 29, Warrington Road, Pemberton. Notified March 2nd. Case commenced February 23rd. Removed to Sanatorium March 2nd. Two living and 3 sleeping rooms, occupied by 4 adults and 7 children. Patient is a miner at Douglas Bank Colliery. Two children attend school (St. Mark's), and 3 Marsh Green School. Surroundings: Yard unpaved, drains trapped, privy midden. Milk from Bannister's. Case died in Sanatorium March 4th.

Case 15.—J. T., aged 22 years, 1, Ascroft Street. Notified March 7th. Case commenced February 24th. Too ill to be removed. Two living and 2 sleeping rooms, occupied by 3 adults. Patient has been out of employment for 4 months. Surroundings: Yard flagged and bricked, drains trapped. Pail closet. Milk condensed. Case died at home March 7th.

Case 16.—I. W., aged 47 years, 82, Rylands Street. Notified March 12th. Case commenced March 2nd. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults. Patient is an engine-driver on the L. and Y. Railway. Surroundings: Yard flagged, drains trapped, water closet. Milk from Hodge's.

Case 17.—A. S., aged 11 years, 47, Bridgewater Street, Pemberton. Notified March 13th. Case commenced March 2nd. Removed to Sanatorium March 13th. Two living and 2 sleeping rooms, occupied by 5



adults and 4 children. Patient attends St. Mark's School. Surroundings: Yard bricked, drains trapped, privy midden. Milk from Hurst's.

Case 18.—W. F., aged 49, 403, Warrington Road, Pemberton. Notified March 26th. Case commenced March 12th. Isolated at home. Two living and 3 sleeping rooms, occupied by 6 adults and 3 children. Two children attend St. Paul's School. Patient is a coal dealer, and is usually engaged in carting; he had been away fishing at Garstang, when he contracted a severe cold, and commenced with disease a few days later. Surroundings: Yard paved, drains trapped, water closet. Milk from Finney's.

Case 19.—R. D., aged 4 years, 155, off Wardley Street, Pemberton. Notified March 26th. Case commenced March 15th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 4 children. Patient attends St. John's School, along with two other children. Surroundings: Yard and street unpaved, drains trapped, privy midden. Milk from Land's.

Case 20.—L. C., aged 15 years, 27, Kenyon Road. Notified April 2nd. Case commenced March 26th. Isolated at home. Three living and 3 sleeping rooms, occupied by 3 adults and 5 children. Patient attends Grammar School, 3 other children attend St. John's School. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from Grimshaw's. Defective surface of closet floor under pail.

Case 21.—L. H., 14 years, 1, Noble Street, Pemberton. Notified April 4th. Case commenced March 26th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 3 children. Patient works at Taylor's Mill, in reeling room. Two children attend Marsh Green School. Surroundings: Open yard, unpaved, drains trapped, privy midden. Milk from Southworth's.

Case 22.—J. T., aged 25 years, 53, Walmer Street. Notified April 5th. Case commenced March 23rd. Removed to Sanatorium April 5th. Two living and 2 sleeping rooms, occupied by 2 adults and 1 child.



Patient works at Garswood Hall Colliery. No school. Surroundings: Yard flagged, drains trapped, pail closet. Milk from Hodge's.

Case 23.—M. A. D., 16 years, 4, Ashton's Yard, Duke Street. Notified April 12th. Case commenced April 7th. Removed to Sanatorium April 12th. Two living and 2 sleeping rooms, occupied by 4 adults and 4 children. Patient works in the Mule Room at Rylands' Mill. One child attends St. Michael's School. Surroundings: Open yard, flagged, drains trapped, pail closet (defective). Milk from Barnes's.

Case 24.—J. L., aged 23, Scot Lane, Newtown. Notified April 21st. Case commenced April 11th. Isolated at home. Two living and 2 sleeping rooms, occupied by 5 adults and 2 children. Patient works as a clay cutter at a brick croft. One child attends St. Cuthbert's. Surroundings: Yard flagged, drains trapped, pail closet. Milk purchased from Waring's.

Case 25.—T. J., aged 3 years, 23, Hill Street. Notified on April 25th. Case commenced April 15th. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults and 2 children. Patient's sister suffered from this disease. Case was notified on February 24th, was then residing at 6, Hope-street. No connection could be traced to the two cases. Surroundings: Yard flagged, drains trapped, water closet. Milk from Schofield's.

Case 26.—J. F., aged 23 years, 16, Warrington Road, Pemberton. April 26th notified. Case commenced on April 14th. Removed to the Sanatorium on the 26th of April. Two living and two sleeping rooms, occupied by 2 adults and 1 child. Patient is the buyer at a marine stores, and may have contracted the disease there. Surroundings: Yard part flagged, drains trapped, water closet. Milk from Waring's and Bannister's.

Case 27.—M. P., aged 37 years, 84, Hallgate. Notified on the 27th of April. Case commenced on April 17th, removed to the Sanatorium on April 27th. Two living and 2 sleeping rooms, occupied by 2 adults and 6 children. Patient follows her domestic duties.



Two children attend the National School. Surroundings : Very old house, yard part flagged, drains trapped, waste water closet. Milk from Bond's.

Case 28.—L. D., aged 15 years, 15, Princess Street. Notified on April 30th. Case commenced on April 3rd, removed to the Sanatorium on April 30th. One living and 2 sleeping rooms, occupied by 6 adults. Patient works in the reeling room at No. 2 Western Mill (Eckersley's). Surroundings : Yard open and unpaved, pail closet, drains defective, insanitary property, no back door, cellars which are not used, defective roof. Milk from O'Donahue's.

Case 29.—M. B., aged 22 years, 18, Wells Street. Notified April 30th. Case commenced April 20th. Isolated at home. Two living and 3 sleeping rooms, occupied by 7 adults and 1 child. Patient assists in domestic duties at home. One child attends St. Catharine's School. Surroundings : Yard flagged, drains trapped, pail closet, keeping of poultry in yard. Milk from Winnard's.

Case 30.—V. M. C., aged 8 years, 13, Acton's Walk. Notified April 30th. Case commenced April 22nd, removed to Sanatorium April 30th. Two living and 3 sleeping rooms, occupied by 5 adults and 3 children. Patient attends St. Thomas's School, Caroline Street. Surroundings : Yard flagged, drains trapped, pail closet, defective slopstone pipe, defective surface of wall around slopstone pipe, and defective surface of yard round gully. Milk from Vernon's.

Case 31.—L. C., aged 40 years, 27, Kenyon Road. Notified April 30th. Case commenced April 24th. Isolated at home. Second case, first case notified April 2nd. Patient engaged as a draughtsman at ironworks.

Case 32.—J. F., aged 29 years, 7, Warrington Road, Pemberton. Notified April 30th. Case commenced on April 22nd, removed to Sanatorium April 30th. One living and 2 sleeping rooms, occupied by 2 adults and 3 children. Patient is a collier at Lamb and Moore's.



One child attends St. Mark's School. Surroundings: Yard open, paved, drains trapped, water closets, no back door. Milk from Hurst's.

Case 33.—A. T., aged 25 years, 2, Zulu Street. Notified May 2nd. Case commenced April 20th. Isolated at home, case died. Two living and 2 sleeping rooms, occupied by 3 adults and 2 children. Patient is engaged in domestic duties at home. Two children attend St Patrick's School. Surroundings: Yard paved, drains trapped, pail closet, defective closet seat, and want of pailhole doors. Milk from farm at Haigh, name unknown.

Case 34.—M. A. B., aged 4 years, 91, Chapel Lane. Notified May 5th. Case commenced on April 27th. Removed to the Sanatorium on May 7th. One living and 2 sleeping rooms, occupied by 2 adults and 2 children. Patient is a playmate of the case removed from 13, Acton's Walk, on April 30th, 1906. Surroundings: Yard paved, drains trapped, pail closets. Milk from Letman's and Holland's.

Case 35.—L. D., aged 20 years, 15, Princess Street. Notified on May 7th. Case had been ill for some weeks. Removed to the Sanatorium on May 7th (2nd case). First case was removed to the Sanatorium on April 30th.

Case 36.—W. M., aged 45 years, 10, Windermere Street. Notified on May 7th. Case commenced on April 29th. Removed to the Sanatorium on May 7th. Two living and 2 sleeping rooms, occupied by 5 adults and 1 child. Patient works at the Lindsay Pit, Whelley. One child attends Whelley School. Patient suffered from disease, and was removed to the Sanatorium on July 11th, 1902. Surroundings: Yard flagged, drains trapped, pail closet. Milk from Forster's.

Case 37.—A. T., aged 5 years, 54, Caroline Street. Notified on May 7th. Case commenced on April 26th. Isolated home. Two living and 2 sleeping rooms, occupied by 3 adults and 4 children. Three children attend St. Thomas's School, Caroline Street. Patient does not attend school. Surroundings: Yard flagged, drains



trapped, pail closet, pail closet of No. 56 Caroline street adjoins the pantry at No. 54. Defective slop-stone and defective surface ash-house floor. Milk from O'Donahue's.

Case 38.—R. A., aged 22 years, 84, Caroline Street. Notified on May 9th. Case commenced on May 4th. Removed to the Sanatorium on May 9th. Two living and three sleeping rooms, occupied by 6 adults. Patient no doubt contracted the disease outside this district, as he is a joiner, and has been working at Coppull for some weeks; only returned home after he sickened. Surroundings: Yard flagged, drains trapped, pail closet. Milk from Letman's.

Case 39.—E. C., aged 1 year 8 months, 148, Chapel Lane. Notified May 18th. Case commenced May 7th. Isolated at home. Two living and 2 sleeping rooms, occupied by 6 adults and 2 children, 1 child attends St. Thomas's, Caroline Street. Surroundings: Pail closet, drains trapped, yard part flagged. Milk from Hurst's.

Case 40.—E. A. H., 13 years, 309, Wallgate. Notified May 19th. Case commenced April 24th. Isolated at home. Two living and 3 sleeping rooms, occupied by 6 adults and 3 children. Patient and 1 other child attends St. Mark's School. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from Waring's.

Case 41.—A. M., 5 years, 49, Prescott Street. Notified May 19th. Case commenced May 12th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 1 child. Patient attends St. Thomas's School, Clayton Street. Surroundings: Yard flagged, drains trapped, pail closet. Milk from Barton's.

Case 42.—J. W., 18 years, 6, Cross Street. Notified June 9th. Case commenced June 1st. Removed to Sanatorium June 11th. Two living and 2 sleeping rooms, occupied by 5 adults. Patient is a cab driver, also goes out hawking, had an accident a few days before commencing with the disease. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from O'Donahue's.

Case 43.—J. T. D., aged 24 years, 64, Platt Lane. Notified June 15th. Case commenced June 5th, unwell



for some time. Removed to Sanatorium June 14th. Two living and 2 sleeping rooms, occupied by 7 adults and 1 child. Patient works as a collier at Douglas Bank Colliery. Surroundings: Yard unpaved, drains trapped, pail closet. Milk from Callow Park Dairy Company.

Case 44.—R. S., aged 19 years, 70, Platt Lane. Notified June 19th. Case commenced June 7th. Removed to Sanatorium June 19th. Two living and 2 sleeping rooms, occupied by 3 adults and 5 children. Patient works at Rose Bridge Colliery in a very damp part of the mine, and often came home wet through. Children attend St. Catherine's School. Surroundings: Open yard, unpaved, drains trapped, pail closet. Milk from Tickle's.

Case 45.—J. T. C., aged 2 years 10 months, 93, Platt Lane. Notified June 21st. Case commenced June 8th. Isolated at home. Two living and two sleeping rooms, occupied by 2 adults and 5 children. One child attends St. Catherine's School. Surroundings: Open field at rear, no paving, pail closet, drains trapped, open field drain on land opposite house, same is in a very filthy condition. Milk from Fairhurst's and Green's.

Case 46.—M. A. T., aged 32 years, 104, Platt Lane. Notified June 23rd. Case commenced June 18th. Removed to Sanatorium June 26th. Two living and two sleeping rooms, occupied by 2 adults. Patient is engaged in domestic duties. Surroundings: Yard flagged, drains trapped, pail closet. Open field drain mentioned in the above case adjoins these premises. Milk from various persons.

Case 47.—M.K., aged 20 years, 42, Canal Street. Notified June 25th. Case commenced June 4th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 5 children. Patient works at Rylands' Mill, in Throstle Room. Two children attend Springfield School. Surroundings: Yard flagged, drains trapped, water closet. Milk from Ashton's.

Case 48.—J.F., aged 37 years, 31, Scot Lane, Pemberton. Notified June 26th. Case commenced June 12th. Removed to Sanatorium, June 26th. Two living and



2 sleeping rooms, occupied by 4 adults and 4 children. Patient is a collier at Douglas Bank Colliery. Two children attend Marsh Green School. Surroundings: Yard part flagged, drains trapped, privy midden. Milk from Hurst's.

Case 49.—M. A. W., aged 12 years, 11, Chapel Street. Notified June 28th. Case commenced June 14th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 6 children. Patient attends St. Joseph's School along with two other children. Surroundings: Yard unpaved, defective drains, pail closet. Complain of smell from Marine Store at rear. Milk from Letman's.

Case 50.—A. W., aged 14 years, 11, Chapel Street. Notified June 28th. Case commenced June 19th (2nd case.) Patient works in spinning room at Taylor's Mill.

Case 51.—T. D., aged 48 years, 4, Earl Street, Pemberton. Notified July 3rd. Case commenced June 18th. Removed to Sanatorium on July 4th. Two living and 2 sleeping rooms, occupied by 4 adults; patient is a collier at Douglas Bank Colliery. Surroundings: Unpaved yard, drains trapped, privy midden. Milk from Southworth's.

Case 52.—A. F., aged 32 years, Bowling Green Hotel, Pemberton. Notified July 4th. Case commenced June 20th. Isolated at home. Large house, occupied by 3 adults. Patient was usually engaged in the Hotel (behind bar). Yard flagged, drains trapped, water closet. Patient had been visiting friends at Thorne, near Doncaster, and was unwell when she returned. Milk from Hogg's and Richardson's.

Case 53.—H. H., aged 18 years, 21, Thompson Street. Notified July 12th. Case commenced July 9th. Removed to Sanatorium July 12th. Three living and 3 sleeping rooms, occupied by 4 adults and 4 children. Patient is an apprenticed wagon builder at Wigan Coal and Iron Company. One child attends Whelley School, and 1 child attends Wesleyan School. Surroundings: Yard flagged, drains trapped, water closet. Milk from Sutton and Rigby.



Case 54.—A. W., aged 32 years, 11, Chapel Street. Notified July 18th. Case commenced July 8th. Removed to Sanatorium July 18th. Patient had nursed two previous cases (3rd case).

Case 55.—A. J. B., 9 years, 15, Arthur Street, Pemberton. Notified August 9th. Case commenced August 1st. Too ill to be removed. Two living and 2 sleeping rooms, occupied by 2 adults and 6 children. Patient attended St. Paul's School. Surroundings: Yard paved, drains trapped, privy midden. Milk from Finney's.

Case 56.—J. W., aged 11 months, 7, Vine Grove. Notified August 10th. Case commenced August 1st. Isolated at home. Two living and two sleeping rooms, occupied by 2 adults and 6 children. Patient is a child of Alice Wilkinson, who was removed to the Sanatorium on July 18th, suffering from the same disease. Child was breast fed, previous to mother being removed to Sanatorium. Patient belongs to 11, Chapel Street. Milk from Letman's. Surroundings: Yard flagged, drains trapped, pail closet.

Case 58.—J. T. L., aged 47 years, 25, Chadwick Street. Notified August 22nd. Case commenced August 13th. Removed to Sanatorium August 22nd. Two living and 2 bedrooms. Occupied by patient, wife, and 6 children, 3 of latter attend St. James's School. Patient employed at L. and N.-W. Railway principally on night turns. Surroundings: Yard well paved, water closet in yard, drainage well trapped. Milk from various sources.

Case 59.—E. L., aged 25 years, 41, Lime Street. Notified August 22nd. Patient occupying part of house with wife's mother, been serving in the Militia, reported himself sick about August 2nd, treated by Military doctor, after return treated by Dr. Hamilton, and finally by Dr. McElligott. Surroundings: Yard common and narrow, dirty, and badly paved, pail closet, drains trapped. Two living and 4 bedrooms, occupied by 7 adults and 1 child. Milk from various sources.

Case 59a.—W. W., aged 12 years, 58, Princess Street. Notified August 28th. Case commenced August 17th.



Removed to Sanatorium August 28th. Two living and 3 sleeping rooms, occupied by 2 adults and 3 children. Patient attends St. Thomas's, Caroline Street, along with 2 other children. Three cases of Enteric Fever occurred recently at 11, Chapel Street, which is immediately at the rear of this house. Surroundings: Yard concreted, drains trapped, waste water closet. Milk from Donahue's.

Case 60.—N. W., aged 9 years, 58, Princess Street. Notified August 28th. Case commenced August 22nd. Removed to Sanatorium August 28th. First case commenced August 17th, (Second case.)

Case 61.—J. W., aged 13 years, 58, Princess Street. Notified August 28th. Case commenced August 22nd. Removed to Sanatorium August 28th. (Third case.)

Case 62.—T. B., aged 22 years, 678, Ormskirk Road, Pemberton. Notified August 30th. Case commenced August 17th. Isolated at home. Two living and 3 sleeping rooms, occupied by 6 adults. Patient is employed as a wheelwright at Starkey's, Billinge Road, Pemberton. Surroundings: Yard part flagged, drains trapped, privy midden. Milk from Alker's.

Case 63.—E. D., aged 14 years, 22, Gore Street, Pemberton. Notified August 31st. Case commenced August 10th. Isolated at home. Two living and 2 sleeping rooms, occupied by 4 adults and 1 child. Patient has recently left school, but up to the present has not commenced working. Surroundings: Yard part flagged, drains trapped, privy midden. Milk from Land's.

Case 64.—E. H., aged 4 years, 7, Vine Grove. Notified September 4th. Case commenced August 21st. Removed to Sanatorium September 4th. (Second case.)

Case 65.—J. B., aged 28 years, 8, Wood's Grove, Chapel Street. Notified September 5th. Case commenced August 2nd. Removed to Sanatorium September 5th. Two living and 3 sleeping rooms, occupied by 3 adults and 3 children. Two children attend St. Thomas's School, Caroline Street. Patient is a miner at Bicker-



shaw Collieries, Abram. Several cases of Enteric Fever have occurred in this district recently. Surroundings: Concrete yard, drains trapped, pail closet. No milk.

Case 66.—N. K., aged 4 years, 74, Queen Street. Notified September 17th. Case commenced September 8th. Removed to Sanatorium September 17th. Two living and two sleeping rooms, occupied by 3 adults and 3 children. Two children attend St. Joseph's School. These people removed from 8, Hodson Street, 14 days since. Surroundings: Yard open and unpaved, pail closet, drains trapped. No milk used.

Case 67.—R. O., aged 24 years, 1a, Albert Street, Pemberton. Notified September 17th. Case commenced September 9th. Removed to Sanatorium September 17th. One living and 1 sleeping room, occupied by 2 adults and 1 child. Patient is engaged in domestic duties. Surroundings: Yard part paved, drains trapped, privy midden. Milk from Williams's.

Case 68.—J. F., aged 14 years, 7, Chapel Street. Notified September 18th. Case commenced September 9th. Removed to Sanatorium on September 18th. Two living and 2 sleeping rooms, occupied by 2 adults and 6 children. Three children attend St. Thomas's, Caroline Street. Patient is engaged in domestic duties at home. Several cases of Enteric Fever have occurred in this district; 4 cases at No. 11, Chapel Street. Surroundings: Yard unpaved, drains trapped, pail closet. Milk from Letman's.

Case 69.—R. B., aged 4 years, 17, Albert Street, Pemberton. Notified September 22nd. Case commenced September 16th. Isolated at home. Two living and 2 sleeping rooms, occupied by 4 adults and 5 children, 3 children attend St. Mark's; case recently occurred in this street. Surroundings: Yard part flagged, drains trapped, privy. Milk from Williams's.

Case 70.—H. J., aged 4 years, 17, Warrington Road, Pemberton. Notified September 22nd. Case commenced September 15th. Isolated at home. Two living and 2 sleeping rooms, occupied by 3 adults and 4 children.



Two children attend St. Mark's. Surroundings: Yard paved, drains trapped, privy midden. Milk from Bannister's.

Case 71.—M. E. C., aged 10 years, "King of Prussia," Hallgate. Notified September 25th. Case commenced September 18th. Removed to Sanatorium September 25th. Two living and 4 sleeping rooms, occupied by 5 adults and 2 children; 1 child attends St. John's School. Surroundings: Yard flagged, drains trapped, pail closet, urinal in yard, no flushing apparatus attached. Milk from Hodge's.

Case 72.—R. R., aged 47 years, 5, Kirkless Street. Notified September 25th. Case commenced September 11th. Removed to Sanatorium September 25th. Two living and 3 sleeping rooms, occupied by 6 adults and 3 children. Two children attend Rose Bridge School. Surroundings: Yard paved, drains trapped, pail closet (very close to kitchen door). Milk from Barton's.

Case 73.—E. D., aged 14 years, 3, Wood's Grove. Notified September 25th. Case commenced September 17th. Removed to Sanatorium September 25th. Two living and 3 sleeping rooms, occupied by 4 adults and 3 children. Patient works in cardroom at Tipping Street Mill. Surroundings: Concrete yard, pail closet, drains trapped, defective and choked drains. Condensed milk used.

Case 74.—M. P., aged 20 years, 17, St. James's Terrace. Notified September 28th. Case commenced August 31st. Isolated at home. Three living and 3 sleeping rooms, occupied by 3 adults and 3 children. One child attends St. James's, Worsley Mesnes. Surroundings: Yard flagged, ashplace, pail closet. Milk from Britnall's.

Case 75.—E. C., aged 50 years, "King of Prussia," Hallgate. Notified September 28th. Case commenced September 7th. Removed to Sanatorium September 28th. (Second case.)

Case 76.—A. M., aged 12 years, 19, Lower Morris Street. Notified September 28th. Case commenced



September 22nd. Removed to Sanatorium September 28th. Two living and 2 sleeping rooms, occupied by 4 adults and 3 children. Patient attends Wesleyan School. Surroundings: Private yard, flagged, drains good and trapped, want of pailhole to door. Milk from Nestles'.

Case 77.—L. W., aged 10 years, 11, Chapel Street. Notified September 29th. Case commenced September 21st. Isolated at home. Two adults and 2 children. One child attends St. Joseph's School. Previous cases have occurred in this house, and a number of cases in the district (5th case).

Case 78.—T. O., aged 18 years, 4, Worthington's Yard. Notified September 29th. Case commenced September 14th, removed to Sanatorium 28th September. One living and 1 sleeping room, occupied by 2 adults and 2 children. One child attends St. Joseph's School. Patient works at Eckersley's. Surroundings: No back door, front yard flagged, pail closet and ashplace, drains good and trapped, rooms ventilated by windows. Milk from O'Donahue and Letman's.

Case 79.—J. O., aged 27 years, 1a, Albert Street. Notified September 29th. Case commenced September 19th, removed to Sanatorium September 29th (2nd case).

Case 80.—M. M., aged 30 years, 50a, Princess Street. Notified October 1st. Case commenced September 16th, removed to Sanatorium October 1st. Four adults and 2 children occupy 2 living and 2 sleeping rooms. Patient is a labourer in coal mine. Surroundings: Yard flagged, drains trapped, water closet. Milk from O'Donahue's.

Case 81.—W. B., aged 12 years, 17, Albert Street. Notified October 1st. Case commenced September 23rd, removed to Sanatorium October 1st. Patient attends St. Mark's School (2nd case).

Case 82.—J. J. B., aged 16 years, 17, Albert Street. Notified October 2nd. Case commenced September 23rd, removed to Sanatorium October 1st. Patient works at Worsley Mesnes Colliery (3rd case).

Case 83.—J. A., 163, Hardybutts, Notified October 1st. Case commenced September 17th, too ill to be



removed. Two living and 3 sleeping rooms, occupied by 2 adults and 5 children. Patient is a fish and fruit hawker. Three children attend St. George's School. Surroundings : Yard flagged and bricked, drains trapped, pail closet. Milk from Bailey's.

Case 84.—A. P., aged 13 years, 17, Chapel Street. Notified October 2nd. Case commenced September 22nd, too ill to be removed. Two living and 4 sleeping rooms, occupied by 3 adults and 6 children. Patient attends St. Thomas's School, Clayton Street, 2 other children attend St. Thomas's School, Caroline Street. Surroundings : Yard open and part flagged, drains trapped, pail closets, insufficient closet accommodation, filthy yard. Milk from O'Donahue and Letman's.

Case 85.—J. Mc. H. aged 16 years, 9, Chapel Street. Notified October 2nd. Case commenced September 24th. Removed to Sanatorium October 2nd. Two living and 2 sleeping rooms, occupied by 5 adults and 5 children. Patient is a clogger at a shop in Poolstock. Four children attend St. Joseph's School. Cases of Enteric Fever have occurred at No. 7 and 11, Chapel Street. Surroundings : Yard flagged, drains trapped, water closet. Milk from Letman's.

Case 86.—P. D., aged 20 years, 4, Acton's Walk, Chapel Lane. Notified October 2nd. Case commenced September 14th, removed to Sanatorium October 2nd. Two living and 2 sleeping rooms, occupied by 5 adults. Patient is a labourer in coal mine. Surroundings : Yard flagged and bricked, drains choked, pail closet. Milk from O'Donahue's.

Case 87.—J. S., aged 41 years, 12, Ashton Street. Notified October 3rd. Case commenced September 26th, removed to Sanatorium October 3rd. One living and 2 sleeping rooms, occupied by 3 adults and 3 children. Patient is a labourer on ironworks at Wigan Coal and Iron Co. One child attends St. Patrick's School. Surroundings : Yard paved, drains trapped, pail closet. Milk, condensed.

Case 88.—E. A., aged 8 years, 63, Ormskirk-road, Pemberton. Notified October 3rd. Case commenced



September 24th. Isolated at home. Two living and 3 sleeping rooms, occupied by 4 adults and 3 children. Patient attends St. Mark's School along with 1 other child. Surroundings : Yard open-unpaved, drains trapped, privy midden. Milk from Bannister's.

Case 89.—M. T., aged 20 years, 47, Scot Lane, Pemberton. Notified October 4th. Case commenced September 27th. Isolated at home. Two living and 3 sleeping rooms, occupied by 6 adults. Patient is a domestic servant at Hagerty's, Scot Lane, and sometimes assists in the shop. Surroundings : Yard flagged, drains trapped, privy midden. Milk from Jones'.

Case 90.—P.B., aged 21 years, 32, Albert Street, Pemberton. Notified October 4th. Case commenced September 27th. Isolated at home. Two living and 2 sleeping rooms, occupied by 5 adults and 2 children. Patient is a miner at Plank Lane Colliery. One child attends St. Mark's School. A number of cases of Enteric have occurred in this district. Surroundings : Yard paved, drains trapped, privy midden. Milk from Williams'.

Case 91.—B.M., aged 41 years, 6, Clapgate Lane, Pemberton. Notified October 4th. Case commenced September 25th. Removed to Sanatorium October 4th. Two living and 2 sleeping rooms, occupied by 2 adults and 5 children. Patient is a collier at Smethurst's Colliery. Three children attend St. Paul's School. Surroundings : Yard flagged, paved, drains trapped, privy midden. Milk from Phythian's.

Case 92.—J. T., aged 19 years, 3, Swift Street, Pemberton. Notified October 4th. Case commenced October 1st. Removed to Sanatorium October 4th. Two living and 2 sleeping rooms, occupied by 5 adults and 1 child. Patient is a labourer at Blundell's Colliery. Surroundings : Yard flagged, drains trapped, privy midden. Milk from various persons.

Case 93.—J.P., aged 5 years, 1 Major Street, Pemberton. Notified October 4th. Case commenced September 23rd. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 4 children. Patient attends St.



John's School. Surroundings: Yard part paved, drains trapped, privy midden. Milk from Hands'.

Case 94.—T. B., aged 9 years, 17, Albert Street, Pemberton. Notified October 5th. Case commenced September 30th. Removed to Sanatorium October 5th (4th case.) Patient attends St. Mark's School.

Case 95.—F. L., aged 33 years, 80, Beech Hill Lane. Notified October 6th. Case commenced September 30th. Removed to Sanatorium October 6th. Two living and 3 sleeping rooms, occupied by 2 adults and 2 children. Patient engaged in domestic duties at home. One child attends St. Andrew's School. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from Gill's.

Case 96.—W. P., aged 7 years, 38, Frog Lane. Case commenced September 29th. Notified October 8th. Removed to Sanatorium October 9th. Two living and 3 sleeping rooms, occupied by 3 adults and 4 children. Patient attends St. John's School along with 3 other children. Patient's father is an oyster dealer. Surroundings: Yard flagged, drains trapped, pail closet. Milk from T. H. Warth and Co.

Case 97.—L. C., aged 22 years, "King of Prussia," Hallgate. Notified October 6th. Commenced October 1st. Removed to Sanatorium October 8th (3rd case.) Patient is engaged at a draper's stall in the Market Hall.

Case 98.—C. M., aged 40, 53, Princess Street. Notified October 8th. Case commenced September 27th. Removed to Sanatorium October 8th. Two living and 2 sleeping rooms, occupied by 5 adults and 5 children. Patient is engaged in domestic duties at home. Several cases have occurred in this district. Three children attend St. Joseph's School. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from O'Donahue.

Case 99.—H. G., aged 38 years, 10, Warrington Lane. Notified October 9th. Case commenced September 28th. Isolated at home. Two living and 2 sleeping rooms, occupied by 3 adults and 1 child. Patient is a fireman at Pearson and Knowles Colliery. One child attends Grammar School. Surroundings: Yard part flagged, drains trapped, water closet. Milk from Barton's.



Case 100.—F. C., aged 19 years, "King of Prussia," Hallgate. Notified October 13th. Case commenced October 10th. Removed to Sanatorium October 13th (4th case.) Patient works at the Bleach Works, Standish.

Case 101.—J. S., aged 32 years, 24, Bottling Wood. Notified October 13th. Case commenced October 1st. Removed to Sanatorium October 13th. Two living and 2 sleeping rooms, occupied by 3 adults and 4 children. Patient is a collier at Douglas Bank Colliery. Four children attend St. Michael's School. Surroundings: Small unpaved yard, overlooking river Douglas, drains trapped, pail closet. Milk from Leather's.

Case 102.—E. Y., aged 23 years, 30, Caroline Street. Notified October 13th. Case commenced October 3rd. Removed to Sanatorium October 13th. Two living and 3 sleeping rooms, occupied by 5 adults. Patient works at Printing Works at the "Observer" Office. Patient's mother had been ill some time, and patient had nursed her. Surroundings: Yard flagged, drains trapped, pail closet. Milk from O'Donahue's.

Case 103.—B. F., aged 11 years, 76, Queen Street. Notified October 15th. Case commenced October 2nd. Removed to Sanatorium October 15th. Two living and four sleeping rooms, occupied by 3 adults and 6 children. Patient attends St. Joseph's School. A case of enteric fever was notified at No. 74, Queen Street, on September 17th. Surroundings: Yard unpaved, drains trapped, pail closets, defective roof. Milk from O'Donahue's.

Case 104.—M. L., aged 29 years, 36, Northumberland Street, Pemberton. Notified October 15th. Case commenced October 3rd. Removed to Sanatorium October 16th. One living and 1 sleeping room, occupied by 2 adults and 5 children. Patient is engaged in domestic duties at home; had nursed two of her children who had been ill for some weeks. Three children attend St. Paul's School. Surroundings: Yard unpaved, drains trapped, privy midden. Milk from Ball's.



Case 105.—M. C., aged 17 years, Back 40, Northumberland Street, Pemberton. Notified October 15th. Case commenced October 4th. Removed to Sanatorium October 16th. One living and 2 sleeping rooms, occupied by 4 adults and 2 children. Patient is a weaver at Brown and Nephew's Mill, Worsley Mesnes. Surroundings: Yard unpaved, drains trapped, privy. Milk from Ball's.

Case 106.—A. R., aged 10 years, 5, Kirkless Street. Notified October 16th. Commenced October 3rd. Removed to Sanatorium October 16th (2nd case). Patient attends Rose Bridge School.

Case 107.—G. G., aged 36 years, 19, Clapgate Lane, Pemberton. Notified October 16th. Case commenced October 5th. Isolated at home. Four living and 4 sleeping rooms, occupied by 6 adults. Patient is a surface hand at Bryn Hall Colliery. Surroundings: Yard unpaved, defective drains, privy midden. Milk from Smith's.

Case 108.—C. C., aged 30 years, 11, Soho Street, Pemberton. Notified October 17th. Case commenced October 8th. Removed to Sanatorium October 17th. Two living and 2 sleeping rooms, occupied by 3 adults and 4 children. Patient is engaged in domestic duties; had been nursing a child which had been badly burned. Surroundings: Yard flagged, drains trapped, privy midden. Milk from Waring's.

Case 109.—L. J., aged 23 years, 23, Bailey's Court. Notified October 19th. Case commenced October 5th. Removed to Sanatorium October 19th. Two living and two sleeping rooms, occupied by 2 adults and 1 child. Patient is engaged in domestic duties. Surroundings: Insanitary, yard part paved, drains trapped, pail closets. Milk from Whittle's.

Case 110.—E. P., aged 8 years, 12, Duke Street, Pemberton. Notified October 20th. Case commenced October 8th. Isolated at home. Two living and 2 sleeping rooms, occupied by 4 adults and 3 children. Patient attends St. Paul's School along with 1 other child. Surroundings: Yard open, unpaved, drains trapped, privy midden. Milk from Phythian's.



Case 111.—J. W., 39 years, Scholes. Notified October 22nd. Case commenced October 12th. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults and 2 children. Patient has a grocer's shop in Hallgate. Case of enteric fever from Bailey's Court visited this shop. One child attends St. George's School. Surroundings: Yard flagged, drains trapped, pail closet.

Case 112.—G. R., aged 7 years, 12, Bailey's Court. Notified October 22nd. Case commenced October 15th. Removed to Sanatorium October 22nd. Two living and 2 sleeping rooms, occupied by 3 adults and 3 children. Patient attends National School, and had been in contact with his sister, who was removed from 23, Bailey's Court, suffering from the same disease. Surroundings: Insanitary, yard part paved, drains trapped, pail closet. Milk from Whittle's.

Case 113.—T. B., aged 36 years, 2; Albion Yard, Millgate. Notified October 23rd. Case commenced October 12th. Case dead when visited. Two living and 3 sleeping rooms, occupied by 3 adults and 4 children. Patient is a cooper, and works in Albion Yard. Two children attend Presbyterian School. Surroundings: Yard paved, drains trapped, water closet. Milk from Kearsley's.

Case 114.—A. A., aged 25 years, 407, Poolstock Lane, Pemberton. Notified October 23rd. Case commenced October 13th. Removed to Sanatorium October 24th. Two living and 3 sleeping rooms, occupied by 6 adults and 2 children. Patient is a weaver at Brown and Nephews', Worsley Mesnes Mill. Surroundings: Yard flagged, drains trapped, privy midden. Milk from Barton's.

Case 115.—E. W., aged 16 years, 143, Gidlow Lane, Notified October 24th. Case commenced October 20th. Isolated at home. Two living and three sleeping rooms, occupied by 5 adults and 1 child. Patient works at Battye's, Market Street, as a tailoress. One child attends St. John's School. Surroundings: Yard flagged, drains trapped, pail closet. Milk from O'Donahue's.



Case 116.—R. B., aged 42 years, 17, Albert Street, Pemberton. Notified October 26th. Case commenced October 20th. Removed to Sanatorium October 25th. (Fifth case). Patient works at Burland's, Pemberton.

Case 117.—E. W., aged 11 years, 5, Spencer's Fold, Pemberton. Notified October 26th. Case commenced October 16th. Isolated at home. Two adults and 3 children, occupy 2 living and 2 sleeping rooms. Patient attends St. John's School.

Case 118.—J. W., 5 years, 5, Spencer's Fold, Pemberton. Notified October 26th. Case commenced October 23rd. Isolated at home. Patient attends Wesleyan School. Surroundings: Yard unpaved, drains trapped, privy midden. Milk from Kilshaw's.

Case 119.—J. W. H., aged 30 years, 4, Richmond Hill, Pemberton. Notified October 27th. Case commenced October 13th. Isolated at home. Two living and 2 sleeping rooms, occupied by 2 adults and 2 children. Patient is a cotton warper at May Mill. Two children attend Wesleyan School. Surroundings: Yard flagged, drains trapped, privy midden, street unpaved. Milk from Johnson's.

Case 120.—E. P., aged 36 years, 11, Douglas Road. Notified October 29th. Case commenced October 22nd. Isolated at home. Three living and 3 sleeping rooms, occupied by 2 adults and 3 children. Patient is a manager of a grocer's shop in Market Place. Three children attend Wesleyan School. Surroundings: Yard flagged, drains trapped, water closet. Milk from Hodge's.

Case 121.—H. H., 40 years, 4, Mariebonne Place. Notified October 30th. Case commenced October 24th. Removed to Sanatorium October 30th. Two living and 2 sleeping rooms, occupied by 2 adults and 2 children. Patient is a clerk at The Employers' Liability Company (Peace and Ellis, King Street). One child attends Mariebonne School and 1 Wesleyan School. Surroundings: Yard flagged, drains defective, pail closet. Milk from Sutton's.



Case 122.—H. K., aged 9 years, 19, Warrington Road, Pemberton. Notified November 1st. Case commenced October 20th. Removed to Sanatorium November 1st. Two living and 2 sleeping rooms, occupied by 4 adults and 3 children. Patient attends St. Mark's School along with another child, and one child attends Marsh Green School. Surroundings: Yard paved, drains trapped, privy midden directly opposite back door. Milk used, condensed.

Case 123.—S. M., aged 15 years, 6, Wilton Street. Notified November 3rd. Case commenced October 21st. Too ill for removal. Two living and 3 sleeping rooms, occupied by 4 adults and 4 children. Patient works at a grocer's shop in Market Place. Two children attend Presbyterian School. Surroundings: Yard flagged, drains trapped, pail closet. Milk from Haddock's.

Case 124.—R. B., aged 36 years, 87, Ormskirk Road, Pemberton, Notified November 12th. Case commenced November 4th. Removed to Sanatorium November 12th. Two living and 3 sleeping rooms, occupied by 2 adults. Patient is a painter, and works on his own account. Surroundings: Yard paved, drains trapped, pail closet. Milk from Waring's.

Case 125.—T. L., aged 13 years, 42, Poolstock. Notified November 19th. Case commenced November 12th. Isolated at home. Two living and 3 sleeping rooms, occupied by 2 adults and 3 children. Patient has just commenced working at a bakery in Lower Ince, where he states he had to work in a cellar, and complains of stench from bad eggs which were stored there. One child attends Presbyterian School. Surroundings: Yard part flagged, drains trapped, pail closet. Milk from Jones'.

Case 126.—G. W., aged 13 years, 15, Alfred Street, Pemberton. Notified November 19th. Case commenced November 5. Isolated at home. Two living and 2 sleeping rooms, occupied by 4 adults and 3 children. Patient attends St. Paul's School. Surroundings: Yard unpaved, drains trapped, privy midden. Milk from Phythian's.



Case 127.—M. L., aged 34 years, 43, Bentinck Street, Pemberton. Notified November 23rd. Case commenced November 16th, removed to Sanatorium November 24th. Two living and 2 sleeping rooms, occupied by 3 adults and 6 children. Patient is engaged in domestic duties. Three children attend St. Paul's School. Surroundings: Yard unpaved, drains trapped, privy midden. Milk from Phythian's.

Case 128.—A. M., aged 12 years, 56, Albert Street, Pemberton. Notified November 27th. Case commenced November 21st, removed to Sanatorium November 27th. One living and 2 sleeping rooms, occupied by 2 adults and 4 children. Patient attends St. Mark's School along with two other children. Surroundings: Yard unpaved, drains trapped, privy midden, back to back house. Milk from Bannister's.

Case 129.—T. M., aged 35 years, 23 Albert Street, Pemberton. Notified November 29th. Case commenced November 23rd, removed to Sanatorium November 29th. Two living and 2 sleeping rooms, occupied by 2 adults and 3 children. Patient is engaged as a weigh clerk at Norley Colliery. One child attends St. Mark's School. Surroundings: Yard part flagged, drains trapped, privy midden. Milk from various persons.

Case 130.—D. R., aged 44 years, 21, Holme Terrace. Notified December 3rd. Case commenced November 27th, removed to Sanatorium December 3rd. Two living and 3 sleeping rooms, occupied by 3 adults and 3 children. Patient is a labourer at coal mine, Gidlow Pit. Surroundings: Yard concrete, drains trapped, pail closet. Milk from Sutton's.

Case 131.—D. M., aged 32 years, 6, Holland Street. Notified December 4th. Case commenced November 24th, removed to Sanatorium December 4th. Two living and 2 sleeping rooms, occupied by 5 adults and 1 child. Patient is a labourer on iron works at Wigan Coal and Iron Co. One child attends St. Patrick's School. Surroundings: Unpaved yard, drains trapped, pail closet (defective), defective ash-house. Milk from Haddock's.



Case 132.—J. F., 57 years, 36, Park Road. Notified December 5th. Case commenced November 16th. Isolated at home. Three living and 3 sleeping rooms, occupied by 5 adults. Patient is engaged in domestic duties. Surroundings: Yard flagged, drains trapped, pail closet. Complain of smell from gas which comes from an old surface mine. Milk from Gill's.

Case 133.—E. K., aged 53 years, 24, Duke Street, Pemberton. Notified December 5th. Case commenced November 25th. Isolated at home. Two living and 2 sleeping rooms, occupied by 3 adults and 1 child. Patient is engaged in domestic duties. One child attends St. Paul's School. Surroundings: Yard paved, drains trapped, privy midden. Milk from Phythian's.

Case 134.—H. M., aged  $4\frac{1}{2}$  years, 23, Albert Street, Pemberton. Notified December 11th. Case commenced December 7th. Removed to Sanatorium December 11th (2nd case).

Case 135.—M. M., aged 30 years, 23, Albert Street, Pemberton. Notified December 15th. Case commenced December 7th. Removed to Sanatorium December 15th (3rd case).

Case 136.—W. L., aged 9 years, 2, Bank Street, Pemberton. Notified December 21st. Case commenced December 10th. Isolated at home. Three living and 4 sleeping rooms, occupied by 2 adults and 4 children. Patient attends St. Mark's School along with 2 other children. Surroundings: Yard part flagged, drains trapped, water closet. Milk from Turner's.

Case 137.—E. M., aged 6 years, 48, Warrington Lane. Notified December 28th. Case commenced December 21st. Removed to Sanatorium December 28th. Two living and 3 sleeping rooms, occupied by 3 adults and 3 children. Patient attends St. Mark's School, and usually resides at 23, Albert Street, Pemberton, where three other cases have occurred. Surroundings: Yard flagged, drains trapped, waste-water closet. Milk from Thomas's.

Case 138.—E. A. S., aged 25 years, 48, Warrington Lane. Notified December 28th. Case commenced

December 23rd. Removed to Sanatorium December 28th. Patient nursed Mellings before removal to Sanatorium.

### ENTERIC FEVER CASES, 1906.

Case 10 was probably the source of Cases 9 & 12

„ 13	„	„	25.
„ 14	„	„	26 & 32.
„ 28	„	„	35.
„ 43	„	„	44, 45 & 46.
„ 49	„	„	50, 54, 56, 59a, 60, 61, 64, 65, 66, 68, 73, 77, 78, 80, 84, 85, 86, 98, 103.
„ 67	„	„	69, 79, 81, 82, 88, 89, 90, 92, 94, 116, 122, 124, 128, 129, 134, 135, 137, 138.
„ 72	„	„	106.
„ 75	„	„	71, 96, 97, 100, 109, 111, 112.
„ 91	„	„	104, 105, 107, 110, 114, 126, 127, 133.
„ 93	„	„	117, 118, 119.
„ 120	„	„	123.

The following is a list of houses where two or more cases of Enteric Fever have occurred.

I have had to come to the conclusion that these have been cases of personal infection, in the Hallgate case my opinion is that they were first infected from an ambulatory case from Chapel Street.

The cases in Hallgate, and 58, Princess Street, were probably infected by cases from 11, Chapel Street, and the cases from Bailey's Court were infected from 28, Hallgate.

The cases in Albert Street, Pemberton, probably arose from the same cause, and possibly personal infection spread the disease.



Warrington Lane cases were distinctly from 23, Albert Street, Pemberton.

We could not trace any of the cases either to the water supply being at fault or to the milk supply.

### CASES.

	CASES.
56, York Street .....	2
25, Caunce Street .....	2
27, Kenyon Road .....	2
5, Hope Street } .....	2
23, Hill Street }	
15, Princess Street .....	2
58, Princess Street .....	3
11, Chapel Street .....	5
7, Vine Grove .....	2
1a, Albert Street .....	2
17, Albert Street .....	5
23, Albert Street .....	3
48, Warrington Lane .....	2
5, Spencer's Fold .....	2
28, Millgate .....	4
23, Bailey's Court } .....	2
12, Bailey's Court }	

## DIARRHŒA.

Number of Deaths .....	139	In 1905 .....	139
Mortality of Population..	1.55	„ .....	1.57

We have the same number of deaths from Zymotic Diarrhœa. We had a rate of 1.57 in 1905, but we have this year only a rate of 1.55.

## AGE INCIDENCE, 1906.

Month.	Deaths.	0-1 Year.	1.5 Years.	Over 5 Years
January .....	—	—	—	—
February .....	—	—	—	—
March .....	—	—	—	—
April .....	—	—	—	—
May .....	1	1	—	—
June .....	4	3	1	—
July .....	8	7	1	—
August .....	51	40	9	2
September .....	55	33	20	2
October .....	15	7	7	1
November .....	3	1	2	—
December .....	2	—	1	1
Total .....	139	92	41	6



## PARTICULARS RE DIARRHŒA DEATHS.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhœa	W.C. Accom	Yard	Remarks
F.	8 months	13, Wesley St. (P.)	Breast	—	None	Privy	Part flagged	
F.	4 months	9, Victoria St...	Breast	—	None	W.C.	Flagged	
F.	6 months	12, Herbert St.	Bottle	Cow's	None	Pail	Unpaved	Weak from birth. Mother of child died of Phthisis when child was 14 days old.
M.	1 Yr. 7 mon.	25, Hopwood St. (P.)	Breast and bottle	Cow's	3	Privy	Flagged	
M.	1 month	11, Bridgewater St. (P.)	Bottle (tube)	Cow's	4	Privy	Flagged	No back door
F.	4 months	139, Ormskirk Road (P)	Bottle (tube)	Cow's	None	Privy	Flagged	
M.	1 month	9, Victoria St. (P.)	Bottle (boat and tube)	Cow's and condensed	6*	Privy	Flagged	*Probably deaths from diarrhœa; parents stated wasting diseases
M.	6 months	90, Albert St. (P.)	Bottle (tube)	Cow's	3	Privy	Unpaved	Twin birth
F.	8 months	57a, Scot Lane (P.)	Bottle (tube)	Cow's	1*	Privy	Part flagged	*Could not be ascertained
F.	6 months	90, Albert St. (P.)	Bottle (tube)	Cow's	4	Privy	Unpaved	Twin birth; other child died a few days previous
M.	2 months	116, Ormskirk Rd. (P.)	Bottle (tube)	Cow's	3	Privy	Unpaved	Weak from birth
M.	1 year	11, Lea Street...	Particulars	could not	be observed	tain-Pail	ed.	
F.	1 yr. 6 mon.	Riley's Yd., Northumberland St.	Ordinary	—	None		Bricked and tiled	No through ventilation
F.	5 months	10, Northumberland St	Bottle (tube)	Cow's	1	Privy	Unpaved	
F.	9 months	4, Johnson's Yd. (P.)	Bottle	Condensed	None	Privy	Part flagged	
M.	2 months	33, Bridgewater St. (P.)	Bottle (tube)	Cow's	None	Privy	Bricked	
F.	2 months	14, Gore St. (P.)	Bottle and breast	Cow's	None	Privy	Part paved	Mother died when child was 1 month old
F.	1 Yr. 5 mon.	12, G'bralter St. (P.)	Spoon	Cow's	None	Privy	Paved	House badly ventilated
M.	2 months	727, Ormskirk Rd. (P.)	Bottle	Cow's	None	Privy	Paved	

PARTICULARS RE DIARRHŒA DEATHS—Continued.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhœa	W.C. Accom.	Yard	Remarks
F.	4 months ..	159, Little Lane (P.)..	Breast and bottle ..	Cow's ..	None	Privy	Unpaved ..	No back door
M.	11 months ..	4, Stanley St. (P.) ..	Bottle (tube). ..	Cow's ..	1	Privy	Bricked ..	Back to back house
F.	2 months ..	22, Marsh St. (P.) ..	Bottle (tube). ..	Condensed ..	None	Privy	Flagged ..	Twin birth
M.	2 months ..	22, Marsh St. (P.) ..	Bottle (tube). ..	Condensed ..	1	Privy	Flagged ..	Twin birth
M.	7 months ..	5, Gaskell's Yd. (P.)..	bottle (tube) ..	Cow's ..	None	Privy	Flagged and paved ..	
M.	6 months ..	38, Bridgewater St. (P.)	Bottle (tube). ..	Cow's ..	None	Privy	Paved ..	
F.	11 months ..	14, Carlton St. (P.) ..	Bottle ..	Cow's ..	None	Privy	Paved ..	Weak from birth
M.	1 year ..	6, Swift's Sq. (P.) ..	Bottle (tube). ..	Cow's ..	None	Privy	Flagged ..	Child nursed out; mother works in mill
M.	8 months ..	5, Mill Yd., Scholes ..	Breast ..	—	None	Pail	Unpaved ..	Weak from birth
F.	5 months ..	16, Yates St. ..	Bottle ..	Cow's and condensed ..	None	Pail	Flagged ..	
M.	4 months ..	80, Lime St. ..	Bottle ..	Condensed ..	None	Pail	Flagged ..	8 previous deaths at this house from wasting diseases
M.	2 months ..	25, Bridge St. ..	Bottle ..	Sterilized ..	?	Pail	Unpaved ..	
F.	8 months ..	17, Anderton St. ..	Bottle (tube). ..	Cow's ..	None	Pail	Flagged ..	
M.	1 month ..	83, Corporation St. ..	Bottle ..	Cow's ..	None	Pail	Part flagged ..	
M.	4 months ..	10, New Row, (P.) ..	Breast ..	—	None	Privy	Paved ..	
M.	4 months ..	5, Old Fold (P.) ..	Bottle ..	Cow's ..	6	Privy	Unpaved ..	Weak from birth
M.	2 months ..	71, Ormskirk Rd. (P.)..	Bottle (tube). ..	No milk used Patent food ..	None	Privy	Part flagged ..	
M.	6 months ..	5, Bk. Sydney St. (P.)..	Bottle (tube). ..	Condensed ..	None	Privy	Paved ..	Weak from birth
M.	11 months ..	12, Chapel St. (P.) ..	Bottle (tube). ..	Cow's ..	None	Privy	Part flagged ..	
M.	1 Yr. 5 mon.	40, Bentinck St. (P.) ..	Spoon ..	Cow's ..	None	Privy	Paved ..	
F.	1 Yr. 4 mon.	35, Duke St. (P.) ..	Breast ..	—	None	Privy	Part paved ..	Complains of smell from sewer near hole



## PARTICULARS RE DIARRHOEA DEATHS—Continued.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhoea	W.C. Accom	Yard	Remarks
F.	4 months	25, Queen St. (P.)	.. Bottle (tube)	Cow's	.. None	Privy	Part flagged	Weak from birth; mother works in factory
M.	4 months	346, Warrington Rd. (P.)	Bottle	Cow's	.. None	Privy	Part paved	Weak from birth
F.	1 Yr. 4 mon.	2, Brown's Yd., Queen St.	Bottle	—	.. None	Pail	Badly paved	No through ventilation
M.	7 months	17, Horsfield St.	Bottle	—	.. None	Pail	Paved	
M.	1 Yr. 3 mon.	21, Taylor St.	Bottle	Cow's	.. None	Pail	Part paved	
M.	3 months	13, Brown St.	Bottle	—	.. None	Pail	Paved	
F.	6 months	7, Vine Grove	Bottle (tube)	Cow's	.. None	Pail	Flagged	Weak from birth
F.	75 years	5, Schofield Lane	Ordinary	—	.. None	Pail	Flagged	
F.	50 years	40, York St.	Ordinary	—	.. None	Pail	Paved	
M.	3 months	18, Brackley St. (P.)	Spoon	Cow's	1	Privy	Unpaved	Weak from birth
F.	11 months	19, Silver St. (P.)	Bottle	Condensed	.. None	Privy	Part paved	
F.	1 month	145, Little Lane (P.)	Breast and bottle	—	.. None	Privy	Part paved	
F.	4 months	125, Ormskirk Rd. (P.)	Bottle	Cow's	.. None	Privy	Paved	
M.	2 months	5, Soho St. (P.)	Breast	Cow's	.. None	Privy	Flagged	
M.	1 month	42, Bentinck St. (P.)	Bottle	Cow's	1	Privy	Paved	Mother works in mill
F.	10 months	30, Princess St. (P.)	Breast	—	.. None	Privy	Part paved	
F.	1 Yr. 1 mon.	31, Holt St.	Breast	—	.. None	Privy	Paved	
M.	3 months	13, Boyswell Lane	Bottle	Cow's	.. None	W.C.	Unpaved	Weak from birth
M.	8 months	43, Silver St.	Bottle (tube)	Condensed	.. None	Pail	Unpaved	Mother works in mill
M.	5 months	33, Prescott St.	Bottle	Condensed	.. None	Pail	Part flagged	Defective closets
M.	5 months	125, Little Lane (P.)	Bottle (tube)	Cow's	.. None	Privy	Paved	
M.	1 month	13, Chatsworth St. (P.)	Bottle (tube)	Cow's and condensed	.. None	Privy	Paved	Weak from birth
M.	1 Yr. 3 mon.	4 Seed St.	Breast	—	1	Pail	Unpaved	
M.	2 months	4, Greenough's Gardens	Bottle	Cow's	1	Pail	Flagged	Street unpaved
M.	2 years	28, Spring St.	Ordinary	—	2	Pail	Unpaved	

• PARTICULARS RE DIARRHŒA DEATHS—Continued.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhœa	W.C. Accom.	Yard	Remarks
M.	1 month ..	7, Bailey's Court ..	Breast ..	—	None	Pail	Paved ..	Weak from birth
F.	8 months ..	3, Northumberland St.	Bottle ..	Cow's and condensed	1	Pail	Unpaved ..	Twin; weak from birth
F.	16 days ..	75, Ingram St. ..	Breast ..	—	None	Pail	Flagged ..	Mother works in mill
F.	1 Yr. 7 mon. ..	11, Prescott St. ..	Ordinary ..	—	None	Pail	Part flagged	
M.	1 Yr. 3 mon. ..	5, Driving Lane ..	Breast ..	—	None	Pail	Paved ..	
M.	1 Yr. 8 mon; ..	7, Foy St. ..	Bottle (tube). ..	Condensed	None	Pail	Flagged ..	
F.	6 months ..	21, Swann St. ..	Bottle ..	Cow's ..	None	Pail	Unpaved ..	Weak from birth; mother works in mill
M.	50 years ..	52, Northumberland St. (P.)	Ordinary ..	—	—	Privy	Part flagged	Child nursed out
M.	2 years ..	1 Ct., 1, Thompson St. (P.)	Breast ..	—	2	W.C.	Flagged ..	Weak from birth; child nursed out
F.	1 Yr. 1 mon. ..	776, Ormskirk Rd. (P.)	Bottle (tube). ..	Cow's ..	5	Privy	Part paved	
F.	5 months ..	Warrington Rd. (P.)	Bottle ..	Condensed	None	Privy	Flagged ..	
M.	4 months ..	20a, Lime St. ..	Breast ..	—	None	Pail	Flagged ..	Back to back house
M.	1 Yr. 1 mon. ..	133, Wallgate ..	Breast ..	—	None	Pail	Flagged ..	Weak from birth; mother died when child was 9 days old
M.	5 months ..	4, Vine Grove ..	Bottle ..	Cow's ..	None	Pail	Tiled ..	
M.	2 months ..	3, Heaton's Yd., Schofield Lane ..	Bottle (tube). ..	Condensed	None	Pail	Unpaved ..	
F.	1 Yr. 5 mon. ..	Walthe's Yd., Millgate	Particulars ..	could not be	obtain-	ed.	Flagged ..	Weak from birth
F.	3 years ..	12, Crown St. ..	Ordinary ..	—	None	W.C.	Flagged ..	Weak from birth; twin
F.	4 months ..	89, Caroline St. ..	Bottle (tube). ..	Cow's ..	None	Pail	Flagged ..	
M.	4 months ..	3, Gerrard St. ..	Bottle ..	Cow's ..	None	Pail	Flagged ..	
F.	1 month ..	179, Hardybutts ..	Bottle ..	Condensed	None	Pail	Flagged ..	
F.	4 months ..	6, Clephan's Yd. ..	Breast ..	—	None	Pail	Paved ..	Weak from birth
F.	2 months ..	1, Whiteside Avenue ..	Bottle ..	Cow's ..	None	W.C.	Flagged ..	



PARTICULARS RE DIARRHOEA DEATHS—Continued.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhoea	Acom W.C.	Yard	Remarks
F.	7 months ..	19, Bridge St.	Breast	—	None	Pail	Bricked ..	
M.	1 Yr. 2 mon.	28, Folly ..	Breast	—	None	Pail	Flagged ..	No back door
M.	1 Yr. 4 mon.	74, Platt Lane	Bottle	Condensed	None	Pail	Unpaved ..	
M.	9 months ..	141, Enfield St. (P.)	Bottle	Cow's ..	None	Privy	Flagged ..	Weak from birth
F.	3 months ..	18, Warrington Rd. (P.)	Breast	—	2	Privy	Part paved ..	
M.	6 months ..	62, Ellesmere Rd. (P.)	Bottle	Condensed	None	Privy	Unpaved ..	
F.	1 Yr. 9 mon.	27, Albert St. (P.)	Breast	—	None	Privy	Part paved	
F.	8 days ..	72, Warrington Rd. (P.)	Breast	—	None	Privy	Part Paved	Weak from birth
M.	2 years ..	5, Atherton St.	Breast	—	None	Pail	Paved and flagged ..	
M.	1 Yr. 6 mon.	8, Benson's Yd., Gidlow Lane	Ordinary	—	None	Pail	Part flagged	
M.	2 months ..	7, Mount St.	Bottle (tube).	Cow's ..	None	Pail	Flagged and bricked ..	Back to back house
M.	1 month ..	173, Park Rd...	Bottle	Cow's ..	None	W.C.	Flagged ..	
M.	4 months ..	20, Sharp St.	Bottle	Cow's ..	None	Pail	Flagged ..	
M.	1 Yr. 5 mon.	30, Adelaide St.	Particulars	could not be	obtain-	ed.	Flagged ..	
M.	1 Yr. 4 mon.	74, Platt Lane	Bottle	Condensed	1	Pail	Unpaved ..	
M.	4 months ..	112, Beech Hill Lane	Breast and bottle	Cow's ..	2	Pail	Flagged and tiled ..	
M.	10 months ..	22, Frith St.	Bottle	Cow's ..	None	Pail	Flagged ..	
M.	9 months ..	127, Darlington St., E.	Breast	—	None	Pail	Flagged ..	
M.	7 months ..	145, Ormskirk Rd. (P.)	Bottle	Cow's ..	None	Privy	Flagged ..	
M.	11 months ..	387, Warrington Rd. (P.)	Bottle	Cow's ..	None	Privy	Flagged ..	
M.	11 months ..	14, Church St. (P.)	Bottle (tube).	Condensed	None	Privy	Paved ..	Choked drains
M.	1 Yr. 1 mon.	3, Bridgewater St. (P.)	Breast	—	None	Privy	Unpaved ..	Weak from birth
F.	5 months ..	141, Billinge Rd. (P.)	Bottle (tube).	Cow's ..	1	Privy	Flagged ..	
M.	3 years ..	22, Bk. Water St.	Ordinary	—	None	Pail	Unpaved ..	
					None	Pail	Paved ..	

PARTICULARS RE DIARRHŒA DEATHS—Continued.

Sex	Age	Address	How Fed	Milk	Previous Deaths from Diarrhœa	W.C. Accom.	Yard	Remarks
M.	3 months ..	3, Gee St. ..	Breast ..	—	None	Pail	Flagged ..	
F.	1 Yr. 6 mon.	5, Prescott St.	Ordinary ..	—	None	Pail	Part flagged	
M.	5 months ..	28, Holland St.	Bottle ..	Condensed	None	Pail	Unpaved ..	Weak from birth
F.	6 months ..	22, Beresford St.	Bottle (tube) ..	Cow's	None	W.C.	Flagged ..	
F.	4 months ..	22, Gt. George St.	Bottle ..	Cow's	None	Pail	Flagged ..	
M.	4 months ..	4, Hambleton St.	Bottle ..	Cow's	None	Pail	Flagged ..	
F.	27 years ..	30, School Lane	Ordinary ..	—	—	Pail	Flagged ..	
M.	1 Yr. 2 mon.	6, Marsden's Ct.	Ordinary ..	Cow's	None	Pail	Part paved	
M.	2 years ..	Union Workhouse	—	—	—	—	—	
F.	5 months ..	14, York St. East	Bottle ..	Cow's	None	Pail	Flagged ..	
M.	7 months ..	35, Vine St. ..	Bottle ..	Cow's	None	W.C.	Flagged ..	
M.	1 Yr. 9 mon.	9, Swift St. (P.)	Ordinary ..	—	None	Privy	Paved ..	
M.	1 month ..	4, Douglas St. (P.)	Bottle (tube) ..	Cow's	None	Privy	Paved and flagged ..	Weak from birth
F.	1 month ..	48, Vauxhall Rd.	Breast ..	—	None	W.C.	Flagged ..	
M.	2 months ..	56, Stanley St.	Breast ..	—	None	Waste	Flagged ..	
						W.C.]	Flagged ..	
F.	11 months ..	27, Princess St. (P.)	Breast ..	—	None	Privy	Paved ..	
F.	1 Yr. 4 mon.	88, Warrington Rd. (P.)	Spoon ..	Cow's	None	Privy	Paved; ..	
F.	5 months ..	76, School St.	Particulars ..	could not be	obtain-	ed.	..	
F.	2 years ..	24, Bailey's Court	Ordinary ..	—	None	Pail	Paved ..	Insanitary surroundings
M.	6½ years ..	36, McCormick St.	Ordinary ..	—	—	Pail	Flagged ..	
M.	1 Yr. 1 mon.	8, Moorfield St.	Particulars ..	could not be	obtain-	ed.	..	
F.	1 Yr. 9 mon.	3, Prescott St.	Ordinary ..	Cow's	None	Pail	Flagged ..	Twin birth
F.	2 years ..	11, Sarginson St. (P.)	Ordinary ..	—	None	Privy	Paved ..	
M.	3 years ..	15, Greenough's Row	Ordinary ..	—	None	Pail	Paved ..	
M.	1 Yr. 1 mon.	2, Turner's Yd. (P.)	Bottle (tube) ..	Condensed	1	Privy	Unpaved ..	Weak from birth; no through ventilation
M.	4 months ..	5, Wright St. ..	Breast and bottle (tube) ..	Cow's	None	Waste	Paved ..	Weak from birth
			Ordinary ..	—	1	W.C.	..	through ventilation
M.	2 years ..	44, Barton St. (P.)	Breast ..	—	2	Privy	Part flagged	Weak from birth
M.	10 months ..	3, Brackley St. (P.)	Breast ..	—	..	Privy	Unpaved ..	



## SUMMARY.

Breast Fed	...	...	...	...	...	32
Bottle Fed, Cow's Milk	...	...	...	...	...	47
„ Condensed Milk	...	...	...	...	...	19
„ Sterilized Milk...	...	...	...	...	...	1
„ Cow's and Condensed Milk	...	...	...	...	...	4
„ Patent Food (no milk used)	...	...	...	...	...	1
Breast and Bottle Fed, Cow's Milk	...	...	...	...	...	6
Spoon Fed, Cow's Milk	...	...	...	...	...	4
Ordinary Food	...	...	...	...	...	19
Particulars could not be obtained	...	...	...	...	...	6
Total ...						<u>139</u>

STREETS IN WIGAN IN WHICH DEATHS FROM  
DIARRHŒA HAVE OCCURRED.

	1906	1905		1906	1905
Adelaide Street.....	1		Ingram Street .....	1	
Anderton Street .....	1		Lea Street.....	1	1
Atherton Street .....	1	1	Lime Street .....	2	1
Bailey's Court .....	2		Marsden's Court, Hall-		
Beech Hill Lane .....	1	2	gate .....	1	
Benson's Yard, Gidlow			McCormick Street.....	1	
Lane .....	1	1	Mill Yard .....	1	
Beresford Street .....	1		Moorfield Street .....	1	
Bk. Water Street .....	1		Mount Street .....	1	
Boyswell Lane .....	1		Northumberland Street	1	
Bridge Street .....	2		Park Road .....	1	
Brown Street.....	1		Platt Lane.....	2	1
Brown's Yard, Queen			Prescott Street .....	4	4
Street .....	1		Riley's Yard, North-		
Caroline Street .....	1		umberland Street .....	1	
Clephan's Yard, School			Scholefield Lane .....	1	1
Lane .....	1		School Lane .....	1	1
Corporation Street .....	1		School Street.....	1	
Crown Street .....	1		Seed Street .....	1	
Darlington Street East..	1	1	Silver Street.....	1	
Driving Lane .....	1		Sharp Street .....	1	
Folly .....	1		Spring Street .....	1	1
Foy Street.....	1		Stanley Street .....	1	
Frith Street .....	1	1	Swann Street .....	1	2
Gee Street .....	1	2	Taylor Street .....	1	3
Gerrard Street .....	1		Vauxhall Road .....	1	
Greenough's Gardens ..	1	1	Victoria Street .....	1	1
Greenough's Row.....	1		Vine Grove .....	2	
Great George Street.....	1	1	Vine Street .....	1	
Hambleton Street.....	1		Wallgate .....	1	2
Hardybutts .....	1	1	Walthew's Yard, Millgate	1	
Heaton's Yard, Schole-			Whiteside Avenue .....	1	
field Lane .....	1		Workhouse .....	1	
Herbert Street .....	1		Wright Street .....	1	
Holland Street .....	1		Yates Street .....	1	1
Holt Street .....	1		York Street .....	1	
Horsfield Street .....	1		York Street East .....	1	



STREETS IN PEMBERTON IN WHICH DEATHS FROM  
DIARRHŒA HAVE OCCURRED.

	1906.	1905.
Albert Street .. ..	3	—
Barton Street .. ..	1	—
Bentinck Street .. ..	2	4
Billinge Road .. ....	1	1
Back Sydney Street .. ..	1	—
Brackley Street .. ..	2	1
Bridgewater Street .. ..	4	1
Carlton Street .. ..	1	1
Chapel Street .. ..	1	—
Chatsworth Street .. ..	1	—
Church Street .. ..	1	—
Douglas Street .. ..	1	1
Duke Street .. ..	1	1
Ellesmere Road .. ..	1	2
Enfield Street .. ..	1	—
Gaskell's Yard, New Street ..	1	—
Gibraltar Street .. ..	1	—
Gore Street .. ..	1	—
Hopwood Street .. ..	1	1
Johnson's Yard .. ..	1	—
Little Lane .. ..	3	—
Marsh Street .. ..	2	1
New Row .. ..	1	—
Northumberland Street .. ..	2	1
Old Fold .. ..	1	—
Ormskirk Road .. ..	7	3
Princess Street .. ..	2	—
Queen Street .. ..	1	2
Sarginson Street .. ..	1	—
Scot Lane .. ..	1	1
Silver Street .. ..	1	—
Soho Street .. ..	1	—
Stanley Street .. ..	1	1
Swift's Square .. ..	1	—
Swift Street .. ..	1	—
Thompson Street .. ..	1	—
Turner's Yard, Warrington Road	1	—
Victoria Street .. ..	1	—
Warrington Road .. ..	6	5
Wesley Street .. ..	1	—

It will be seen that August and September give us the greatest number of deaths, and, as in previous years, these are in children under the age of one year.

## DIPHTHERIA.

Number of Notifications .....	49
Number of deaths, including Croup.....	8
Mortality per 1,000 of population .....	·089

We have had no increase in the number of cases notified, namely, 49, against 49 in 1905, and the mortality against these cases is decreased ·089 per 1,000 of population, against ·11. The following table shows the number of cases notified and the number of deaths :—

	Notified.	Deaths.
January .....	9	—
February ... ..	4	1
March .....	1	—
April.....	4	2
May .....	3	1
June .....	2	—
July .....	5	1
August .....	5	2
September .....	2	—
October.....	8	1
November.....	3	—
December .....	3	—
	49	8

The following is the result of the examinations bacteriologically made at the Thompson Yates Laboratory :—

Number of cases, 12.

Streptococci present, 3 ; Bacillus absent, 6.

Staphylococci present 1; „ present 2,



## DIPHTHERIA CASES, 1906.

<i>Address.</i>	<i>Sanitary Surroundings.</i>
1, Folly .....	Yard flagged, drains trapped, pail closet. No through ventilation
44, Silver Street .....	„ paved, drains trapped, pail closet.
12, Chapel Street, Pemberton ..	„ „ and flagged, drains trapped, privy midden.
569, Ormskirk Road, Pemb...	„ partly paved, drains trapped, privy midden.
1, Vaughan Street .....	„ flagged, drains trapped, pail closet.
3, Penson's Yard, Standishgate ..	„ part flagged, drains trapped, pail closet. No through ventilation.
19, Coop Street.....	„ flagged, drains trapped, pail closet, street unpaved.
11, Pemberton Cottages .....	„ paved, drains trapped, privy midden.
212, Enfield Street, Pemb...	„ part flagged, drains trapped, privy midden.
15, Acton's Court.....	„ flagged „ pail closet.
15, Pagefield Street.....	„ part flagged „ water closet.
62, Brook Lane, Pemberton...	„ paved „ privy midden.
4, Kendrick Street .....	„ unpaved „ water closet.
Wheat Sheaf Inn, Pemb.....	„ flagged „ privy midden.
21, Coop Street.....	„ „ „ pail closet.
„ „	no back door. Street unpaved.
17, Sharp Street .....	„ flagged, drains trapped, pail closet.
274, Warrington Road, Pemb	„ partly flagged, drains trapped, privy midden.
„ „ „	„ „ „
7, Caunce Street .....	„ paved „ pail closet.
171, Enfield Street, Pemb...	„ partly flagged „ privy midden.
3, Wallace Lane .....	„ paved „ water closet.
30, Bentinck Street, Pemb...	„ „ „ privy midden.
134, Poolstock Lane, Pemb.	„ partly flagged „ „
317, Warrington Road, Pemb.	„ surface defective, drains trapped, privy midden.
17, Bold Street.....	„ flagged, drains trapped, water closet.
26, Bridgewater Street, Pemb.	„ „ „ privy midden.
56, Albert Street, Pemberton ..	„ unpaved „ „ No through ventilation.
16, Chapel Lane.....	„ concreted, drains trapped water closet, defective soilpipe.
13, Clifton Street.....	„ flagged, drains trapped, water closet, foul cistern.
„ „ .....	„ flagged, drains trapped, water closet, foul cistern.

DIPHTHERIA CASES—*Continued.*

<i>Address.</i>	<i>Sanitary Surroundings.</i>
6, Richmond Street.....	Yard, flagged drains trapped, pail closet, adjoin scullery.
23, Hardy Street .....	„ flagged, drains trapped, water closet.
317, Warrington Road, Pemb.	„ surface defective, drains trapped, privy midden
80, Corporation Street.....	„ bricked, defective drains, pail closet.
188, Gidlow Lane.....	„ flagged, drains trapped, water closet.
2, Kildare Street, Pemberton	„ partly bricked, drains defective, water closet.
14, Sovereign Road.....	„ flagged, drains trapped, pail closet.
73, Hodges Street.....	„ „ „ „
49, Scot Lane, Pemberton...	„ „ „ „ privy midden.
19, „ „ „	„ unpaved „ „ defective house roof.
5, Smithy Yard, Wigan Lane	„ paved, drains trapped, pail closet.
7, Moss Street .....	„ partly flagged, drains trapped, pail closet.
Hindley Hall Farm, Pemb....	„ flagged, defective drains, foul water closet.
69, Billinge Road, Pemb .....	„ paved, drains trapped, privy midden.
417, Warrington Road, Pemb.	„ flagged „ water closet.
4, Wilcock Street.....	„ partly flagged, drains trapped, pail closet.
2, Sydney Street, Pemberton	„ flagged, drains trapped, foul water closet.
230, Wallgate .....	„ „ „ „ pail closet.
12, Withnall Street.. .....	„ „ „ „

## ERYSIPELAS.

Number notified ...	...	...	...	86
Number of Deaths	...	...	...	3.
Mortality per 1,000 of population	...	...	...	·033.

We have a decrease in the number of deaths from Erysipelas, 3 against 6, showing a decrease in the mortality rate.



## LIST OF HOUSES IN WHICH CASES OF ERYSIPELAS HAVE OCCURRED DURING 1906.

<i>Address.</i>	<i>Cause.</i>	<i>Condition of Yard and Other Remarks.</i>
29, Lime Street ..	Running sore ..	Yard unpaved, pail closet
5, Bold Street (P.) ..	Probably from cold ..	Yard flagged, privy
17, Silver Street ..	Probably from cold ..	Yard unpaved, pail closet
11, Swann Street ..	Accident to foot ..	Yard unpaved, pail closet
15, Kendrick Street ..	Probably from cold ..	Yard flagged, water closet
36, Bridge Street ..	Accident ..	Yard paved, pail closet
211, Gidlow Lane ..	Probably from cold ..	Yard flagged, pail closet
253, Billinge Road (P.) ..	Probably from cold ..	Yard paved, privy
217, Ormskirk Road (P.) ..	Probably from cold ..	Yard part flagged, privy
86, Warrington Road (P.) ..	Parents stated probably from vaccination ..	Yard paved, privy
53, Lower Morris Street ..	Accident ..	Yard part flagged, pail closet
210, Scholes ..	Probably from cold ..	Yard bricked, pail closet
253, Billinge Road (P.) ..	Probably from cold ..	Yard paved, privy
24, Holme Terrace ..	From scratch ..	Yard flagged, water closet
58, Moss Terrace (P.) ..	Probably from cold ..	Yard paved, privy
20, Gore Street (P.) ..	Probably from cold ..	Yard part flagged, privy
66, Bottling Wood ..	Probably from cold ..	Insanitary property
2, Bk. Little Church Street (P.) ..	Probably from cold ..	Yard flagged, privy
15, Howard Street ..	Probably from cold ..	Yard part flagged pail closet,
7, Clarington Grove ..	Probably from cold ..	Yard flagged, water closet
6, Gee's Court.. ..	Probably from scratch ..	Yard flagged, pail closet, street unpaved
29, Darlington Street ..	Probably from cold ..	Yard flagged, pail closet
20, Thompson Street ..	Probably from cold ..	Yard paved, water closet
46, John Street ..	Probably from sore and cold ..	Yard flagged, pail closet
100, Lime Street ..	From abscess ..	Yard flagged, pail closet

## ERYSIPELAS CASES—Continued.

Address.	Cause.	Condition of Yard and Other Remarks.
379, Ormskirk Road (P.)	Probably from cold	Yard flagged, privy
20, St. Patrick Street	Probably from cold	Yard part paved, pail closet
12, Frederick Street	Running sore and cold	Yard part flagged, pail closet
18, Princess Street	Accident	Yard flagged, pail closet
15, Chatworth Street (P.)	Probably from cold	Yard paved, privy
1, Miry Lane	Probably from cold	Yard flagged, pail closet
2, Cambridge Street	Probably from cold	Yard flagged, pail closet
4, Buckley Street	Probably from cold	Yard part flagged, pail closet
13, Warrington Road (P.)	Probably from cold	Yard paved, privy
Brewers' Arms, King Street	Probably from cold	Yard paved, water closet
51, Hallgate	Probably from cold	Yard flagged, pail closet
105, Enfield Street	Probably from cold	Yard part flagged, privy
275, Warrington Road	Probably from cold	Yard flagged, privy
13, Whelley	Probably from cold	Yard flagged, pail
50, Queen Street (P.)	Accident	Yard paved, privy
186, Billinge Road (P.)	Accident	Yard flagged, privy
2, New Row (P.)	Probably from cold	Yard flagged, privy, street unpaved
104, Standishgate	Probably from cold	Yard flagged, water closet and pail closet
229, Whelley	Accident	Yard unpaved, pail closet
15, Russell Street	Probably from cold	Yard flagged, pail closet
180, Woodhouse Lane	Accident	Yard bricked, pail closet
62, Darlington Street	Probably from midge bite	Yard flagged, pail closet
21, Silver Street (P.)	Probably from cold	Yard flagged, pail closet
7, Holme Street	Probably from cold	No yard, privy
107, Platt Lane	Accident	Yard flagged, pail closet, damp house
9, Vine Grove	Probably from cold	Yard flagged, pail closet
R.A.E. Infirmary	Five cases.	Yard flagged, pail closet



Address.	Cause.	Condition of Yard and Other Remarks.
48, Boyswell Lane ..	Probably from cold	Yard flagged, pail closet
47, Whelley ..	Accident	Yard flagged, pail closet
324, Whelley ..	Probably from cold	Yard unpaved, pail closet
36, Barton Street (P.) ..	Accident	Yard paved, privy
7, Seed Street ..	Accident	Yard unpaved, pail closet
12, Oxford Street ..	Probably from cold	Yard unpaved, pail closet
1a, Noble Street (P.) ..	Probably from cold	Yard part paved, privy
29, Lime Street ..	Cold and running sore	Yard unpaved, pail closet
81, Gidlow Lane ..	Probably from cold	Yard flagged, waste water closet (out of order)
157, Warrington Road (P.) ..	Probably from cold	Yard part flagged, privy
9, Eckersley Street ..	Probably from cold	Yard flagged, privy
82, Dicconson Street W. ..	Probably from cold	Yard paved, pail closet
10, Ashland Avenue ..	Probably from cold	Yard flagged, pail closet
16, Morris Row ..	Probably from cold	Yard unpaved, pail closet, no through ventilation, slop- stone pipe connected to drain
11, Alker Street (P.) ..	Probably from cold	Yard flagged, privy
9, Eckersley Street ..	Probably from cold	Yard paved, water closet
32, Darlington Street E. ..	Probably from cold	Yard flagged, pail closet
31, Baron Street ..	Probably from cold	Yard flagged, pail closet
3, Heardman Avenue ..	Probably from cold	Yard flagged, water closet
37, Poolstock Lane (P.) ..	Probably from cold	Yard part flagged, privy
84, Hardybutts ..	Accident	Yard part paved, pail closet, defective drains
86, Enfield Street (P.) ..	Probably from cold	Yard paved, privy
91, Chapel Lane ..	Probably from cold	Yard paved, pail closet
163, Warrington Road (P.) ..	Probably from cold	Yard unpaved, privy
9, Billinge Road (P.) ..	Probably from cold	Yard flagged, privy
13, Lower St. Stephen Street ..	Probably from cold	Yard flagged
22, Duke Street (P.) ..	Accident	Yard flagged, privy
3, Leader Street ..	Probably from cold	Yard flagged, privy
6, Cudworth Street ..	Probably from cold and rheumatism	Yard paved, waste water closet
13, Wood Street ..	Probably from cold	Yard part flagged, pail closet, street unpaved

## PUERPERAL FEVER.

Number of cases notified .....	9
Number of deaths .....	4
Mortality per 1,000 of population .....	·044

We have a decrease in the number of cases notified, and a decrease in the death-rate. None of the cases appear to have been communicated, and everything was done to prevent communication with others.

## SANATORIUM.

The arrangements made in the nursing department have been satisfactory, and the accommodation ample.

The Decker Hospital is sufficient for the Small Pox cases, and the improvements made, on its removal from the old site, have been of great advantage. No cases were admitted to Pemberton Hospital on account of want of funds.

The number of infectious cases notified compulsorily is as follows :—

	Notifications.	Removed to Sanatorium.	Died in Sanatorium.
Small Pox.....	—	—	—
Typhus .....	—	—	—
Scarlet Fever .....	156	126	2
Enteric .....	138	82	20
Diphtheria .....	49	—	—
Puerperal Fever ..	9	—	—
Cholera .....	—	—	—
Membranous Croup ..	—	—	—
Erysipelas... ..	86	—	—
Other .....	—	9	1
Total .....	538	217	23

In the Sanatorium on December 31st, 1906, there were 17 patients, namely, Scarlet Fever 12, Enteric Fever 4, others 1.



	Small-pox.	Scarlet.	Enteric.	Others.	Total.
In-patients Jan. 1, '06	—	23	8	3	34
Admitted in 1906 ..	—	126	82	9	217
Discharged „ ...	—	135	66	10	211
Died „ ...	—	2	20	1	23
In-patients Jan. 1, '07	—	12	4	1	17

The number of deaths in the Sanatorium was 23 ; 2 died from Scarlet Fever and 20 from Enteric, and 1 from other diseases.

During the year there were 211 patients discharged, and 23 died, making a total of 234.

The number of days they were in was 9,192, or 39·2 days for each patient, against 38·9 days average for 1905.

The cost of maintenance was as follows :—

1906.	Food.	Stimulants.
	£ s. d.	£ s. d.
January .....	63 10 9	15 15 7
February .....	34 14 5	4 6 5
March .....	38 17 0	5 9 2
April .....	39 7 7	4 14 4
May .....	22 1 6	8 13 11
June .....	36 11 3	5 5 4
July .....	21 15 2	8 5 1
August .....	13 14 6	4 16 8
September .....	24 14 6	7 6 6
October .....	23 19 3	15 8 2
November .....	61 12 3	18 10 3
December .....	35 10 2	12 6 0
Total .....	416 8 4	110 17 5

	£ s. d.	£ s. d.
Cost per patient, 1906 ...	1 15 7	0 9 5½
„ 1905 ...	1 9 0¾	0 7 8½
„ 1904 ..	1 7 1	0 8 1
„ 1903 ...	1 12 0	0 4 7
„ 1902 ..	1 13 0	0 4 9
„ 1901 ...	1 9 10¼	0 4 10¼
„ 1900 ...	1 12 6¾	0 4 3½
„ 1899 ...	1 12 4½	0 5 1¼
„ 1898 ...	1 8 6¼	9 3 11½

The total cost of the Sanatorium is as follows :—

	£	s.	d.	Average Cost per Patient.		
				£	s.	d.
Master, Matron, and Nurses.....	1909	1	5	4	6	2 $\frac{3}{4}$
Porter, Repairs, &c.....	903	9	7	3	17	2 $\frac{1}{2}$
Patients' Keep.....	416	8	4	1	15	7
Stimulants.....	110	17	5	0	9	5 $\frac{1}{2}$
Medical Superintendent.....	150	0	0	0	12	9 $\frac{3}{4}$
Clerk.....	10	0	0	0	0	10 $\frac{1}{4}$
Ditto 1906.....	2599	16	9	11	2	2 $\frac{1}{2}$
" 1905.....	2836	14	4	8	18	4 $\frac{1}{2}$
" 1904.....	2299	12	7	12	1	11 $\frac{1}{2}$
" 1903.....	2352	10	11	7	7	5 $\frac{1}{2}$
" 1902.....	2101	5	11	6	19	0 $\frac{3}{4}$
" 1901.....	1992	9	6	9	6	5 $\frac{1}{4}$
" 1900.....	2638	14	11	7	5	6
" 1899.....	1914	12	4	7	4	6 $\frac{1}{2}$
" 1898.....	1851	3	11	7	16	2 $\frac{1}{2}$
" 1897.....	1384	4	7	10	12	3 $\frac{1}{2}$
" 1896.....	1653	10	11	11	6	6 $\frac{1}{2}$

The Administrative Department cost :—

1906.	Wages.	Board.	Total.
	£ s. d.	£ s. d.	£ s. d.
January .....	39 6 8	43 15 8	83 2 4
February .....	39 10 0	44 15 8	84 5 8
March .....	41 11 5	46 19 0	88 10 5
April.....	41 0 0	45 19 0	86 19 0
May .....	41 0 0	44 6 6	85 6 6
June .....	39 11 8	41 1 6	80 13 2
July .....	42 8 4	41 1 6	83 9 10
August.....	41 3 4	37 5 8	78 9 0
September .....	41 6 8	45 19 0	87 5 8
October .....	39 13 4	44 8 6	84 1 10
November .....	39 13 4	43 15 8	83 9 0
December.....	39 13 4	43 15 8	83 9 0
Total.....£	485 18 1	523 3 4	1009 1 5

### SANATORIUM STAFF.

Master	2 Ward Maids.
House Keeper.	1 Housemaid-Waitress.
5 Nurses.	1 Kitchenmaid.
5 Probationers.	1 Scullery Maid.
1 Laundress.	1 Porter and Gardener.
2 Assistant Laundresses.	1 Assistant Gardener.

### PEMBERTON SANATORIUM.

1 Nurse.	1 Caretaker.
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TABLE OF ADMISSIONS AND DISCHARGES FOR 1906.

1906.	Admitted.					Discharged.					Died.							
	Small-pox.	Scarlet Fever.	Enteric.	Typhus.	Others.	Total.	Small-pox.	Scarlet Fever.	Enteric.	Typhus.	Others.	Total.	Small-Pox.	Scarlet Fever.	Enteric.	Typhus.	Others.	Total.
January .....	0	15	3	0	1	19	0	12	5	0	3	20	0	0	0	0	1	1
February .....	0	12	2	0	2	16	0	18	4	0	0	22	0	1	0	0	0	1
March.....	0	14	2	0	0	16	0	14	3	0	1	18	0	0	2	0	0	2
April .....	0	11	8	0	0	19	0	12	0	0	1	13	0	0	1	0	0	1
May.....	0	12	4	0	2	18	0	12	7	0	1	20	0	0	3	0	0	3
June .....	0	7	5	0	0	12	0	13	2	0	1	16	0	0	2	0	0	2
July .....	0	12	2	0	2	16	0	8	2	0	1	11	0	0	3	0	0	3
August .....	0	4	5	0	1	10	0	12	0	0	0	12	0	0	0	0	0	0
September....	0	9	12	0	0	21	0	5	1	0	0	6	0	0	0	0	0	0
October .....	0	8	29	0	0	37	0	9	29	0	1	39	0	0	3	0	0	3
November ...	0	15	5	0	0	20	0	8	8	0	0	16	0	1	3	0	0	4
December ...	0	7	5	0	1	13	0	12	5	0	1	18	0	0	3	0	0	3
Total .....	0	126	82	0	9	217	0	135	66	0	10	211	0	2	20	0	1	23

## CONSTITUTIONAL DISEASES.

### TUBERCULAR DISEASES.

Under the heading of Tubercular Diseases we include deaths from Consumptive Diseases, such as Phthisis Pulmonalis, Tabes Mesenterica, Tubercular Meningitis, Wasting Diseases of Infants (Marasmus), and other Tubercular affections.

The number of deaths from Phthisis is 108, against 92 in 1905, and 70 in 1904. The number of deaths from other Tubercular affections is 40, against 37 in 1905, and 26 in 1904.

From Wasting Diseases of Infants we have 45 deaths, against 44 in 1905.

The rates are as follows :—

Phthisis Pulmonalis.....	1·20	per 1,000 of population.
Other Tubercular Diseases	·44	”
Wasting Diseases of Infants	·50	”

If taken together as Tubercular affections we have 193 deaths, or a rate of 2·16 per 1,000 of population.

### PHTHISIS AND TUBERCULAR DISEASES, BUT NOT INCLUDING MARASMUS.

The deaths occurred in the following wards :—

St. George's Ward .....	14
Lindsay Ward .....	11
St. Catharine's Ward .....	14
St. Patrick's Ward .....	12
St. Thomas's Ward .....	9
Poolstock Ward .....	11
Victoria Ward .....	14
St. Andrew's Ward .....	13
Swinley Ward .....	4
All Saints' Ward .....	3
West Pemberton Ward .....	10
North       ”       ” .....	10
Central     ”       ” .....	4
South       ”       ” .....	7
In Union Workhouse but belonging to Wigan .....	12



# PHTHISIS DEATHS, 1906.

No. of Cases, 108.

Deaths previously of the same disease (brothers or sisters) ...	18
Deaths previously of the same disease (parents or relations) ...	12
No. of cases where separate bedroom occupied ...	20
"                    "            bed but others in the same room ...	47
"                    "            others occupying the same bed ..	34
"                    "            others occupying the same room ...	57
"                    "            which cannot be traced ... ..	11
Total number of sleeping rooms of houses affected ... ..	186
"                    "            living rooms of houses affected ... ..	181
"                    "            persons occupying the same ... ..	401
No. of cases where lodgers kept (overcrowding) ... ..	8
No. of back to back houses ... ..	3
No. where sanitary defects found ..	6
No. of cases where house found dirty ... ..	3
"                    "            patient occupied a cradle .. ..	8
"                    "            patient died in Institutions ... ..	8

# PHTHISIS DEATHS.

Occupations of Deceased Persons.

Weaver	...	...	...	...	...	7
Spinner...	...	...	...	...	...	1
Labourer	...	...	...	...	...	3
Carter	...	...	...	...	...	1
Miner	...	...	...	...	...	17
Fireman in Mine	...	...	...	...	...	1
Scholar	...	...	...	...	...	11
Domestic	...	...	...	...	...	17
Young Children	...	...	...	...	...	13
Greengrocer	...	...	...	...	...	2
Furniture Dealer	...	...	...	...	...	1
Stone Mason	...	...	...	...	...	1
Publican	...	...	...	...	...	1
Slater	...	...	...	...	...	1
Joiner	...	...	...	...	...	2
Butcher...	...	...	...	...	...	1
Hairdresser	...	...	...	...	...	1
Tailoress	...	...	...	...	...	1
Blacksmith	...	...	...	...	...	1
Grocer	...	...	...	...	...	1
Painter	...	...	...	...	...	1
Tramway Conductor	...	...	...	...	...	1
Could not be traced	...	...	...	...	...	9

## DEATHS AND RATES FROM PHTHISIS FOR PAST YEARS

Year.	No. of Deaths.		Rate per 1,000.
1896	....	66	.... 1·09
1897	....	69	.... 1·14
1898	....	59	.... ·93
1899	....	59	.... ·94
1900	....	69	.... 1·09
1901	.....	73	.... 1·18
1902	....	55	.... ·89
1903	....	74	.... 1·1
1904	....	70	.... 1·08
1905	....	92	.... 1·04
1906	....	108	.... 1·20

## RHEUMATISM.

Rheumatism caused 8 deaths against 12 deaths in 1905, and 12 in 1904, and we have 91 deaths from heart affections, against 83 in 1905, and 63 in 1904.

## LOCAL DISEASES.

Respiratory Diseases, such as Pneumonia and Bronchitis, caused 345 deaths, against 334 in 1905. Pneumonia caused 203, against 187; and Bronchitis caused 142, against 147.

## INQUESTS AND UNCERTIFIED DEATHS.

The number of Inquests for 1906 is 123, against 119 for 1905, and 115 in 1904, and the following verdicts have been recorded :—

1. Natural causes	...	...	...	...	38
2. Accidents, burnt	...	...	...	...	11
" tram car	...	...	...	...	2
" run over	...	...	...	...	3
" scalded	...	...	...	...	5
" colliery	...	...	...	...	14
" fall downstairs	...	...	...	...	3
" drowned	...	...	...	...	3
" falls	...	...	...	...	4
" railway	...	...	...	...	1
" suffocation	...	...	...	...	1
" overlaid	...	...	...	...	1
" mill	...	...	...	...	3
" others	...	...	...	...	7



3. Suicides, hanging ...	...	...	...	2
"    cut throat ...	...	...	...	1
4. Others ...	...	...	...	23
5. Murders, drowning ...	...	...	...	1
				<hr/>
				123

There were 14 deaths uncertified in 1906, against 10 in 1905, and 7 in 1904. They were as follows:—

Premature birth ...	...	...	...	8
Debility ...	...	..	..	1
Convulsions ...	...	...	..	2
Marasmus ...	...	...	...	1
Heart Failure ...	...	...	...	2
				<hr/>
				14

NOT RECORDED IN THE DEPARTMENT OF HEALTH  
AND HUMAN SERVICES  
1965

There were 14 deaths recorded in the years 1965 and 1966. They were as follows:

- 1. Thomas John
- 2. John
- 3. Thomas
- 4. Thomas
- 5. Thomas

DEATHS

It is noted that the above deaths were recorded in the years 1965 and 1966. They were as follows:

DEATHS

It is noted that the above deaths were recorded in the years 1965 and 1966. They were as follows:

DEATHS

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DEATHS

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DEATHS

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### **PART III.**

## **General Sanitary Work.**

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**FACTORY AND WORKSHOP ACT, 1901**

**SHOP HOURS ACTS, 1892 TO 1899**

**SHOP HOURS ACT, 1904, CLOSING ORDER**

**MEAT INSPECTION AND SLAUGHTER HOUSES**

**DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885 & 1886**

**WATER SUPPLY AND RAINFALL**

**BLACK SMOKE NUISANCE**

**PROPERTY UNFIT FOR HUMAN HABITATION**

**UNPAVED YARDS AND PASSAGES**

**BOROUGH SURVEYOR'S DEPARTMENT**

**SCAVENGING**

**MIDWIVES ACT, 1902**

**EDUCATION ACT, 1902**

**APPENDIX.**

## FACTORY AND WORKSHOP ACT, 1901.

These have been regularly and systematically visited by Inspector Bishop, whose report on the same I subjoin, also his report on the Shop Hours Acts of 1892-1899, and Closing Order, 1904.

### 1.—INSPECTION.

Premises.	No of Inspections.	Written Notices.
Factories (including Factory Laundries)...	270	8
Workshops (including Workshop Laundries) ... ..	939	43
Workplaces ... ..	—	—
Total ... ..	1209	51

### 2.—DEFECTS FOUND.

#### NUISANCES UNDER PUBLIC HEALTH ACTS.

	No. of Defects Found.	R'medi'd.
Want of Cleanliness... ..	23	21
Want of Ventilation ... ..	11	11
Overcrowding ... ..	1	1
Want of Drainage of floors ..	3	3
Other Nuisances ... ..	17	17
Sanitary accommodation, { insufficient ... ..	4	4
{ unsuitable or defective ... ..	5	5
{ not separate for sexes ... ..	7	6
<i>Offences under the Factory &amp; Workshop Act.</i>		
Illegal occupation of underground bakehouse ...	—	—
Breach of special sanitary requirements for bake-houses ... ..	74	71
Other offences ... ..	15	15
Total... ..	160	154



## 3.—HOME WORK.

Nature of Work.	OUTWORKERS LISTS, SECTION 107.					
	Lists Received from Employers.				Numbers of Addr'sses of Out-workers received from oth'r Councils.	Numbers of Addr'sses of Out-workers forward'd to other Councils.
	Twice in the year.		Once in the year.			
	Lists.	Out-workers.	Lists.	Out-workers.		
Wearing Apparel :						
(1) Making, &c. ....	50	124	6	11	3	10
(2) Cleaning, &c. ....	—	—	—	—	—	—
Number of Inspections of Outworkers' Premises, 101.						

## 4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131 at the end of the year.	Number.
Workshops .. .. .	412
Bakehouses .. .. .	150
Workshops (Domestic) .. .. .	78
Total number of Workshops on Register ..	640

## 5.—OTHER MATTERS.

Class (1).	Number (2).
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133) ... .. .	26
Notified by H.M. Inspector ... .. .	16
Reports (of action taken) sent to H.M. Inspector ...	15 complied with 1 in hand
Underground Bakehouses (s. 101) :—	
In use at the end of the year ... .. .	9

LIST OF WORKSHOPS UNDER THE FACTORY AND  
WORKSHOP ACT, 1901.

<i>Address.</i>	<i>Trade</i>	<i>Address.</i>	<i>Trade</i>
1.—9, Standishgate	Tailor	57.—Commercial Buildings	Tailor
2.—134, Standishgate	"	58.—16, Garden Street	"
3.—107, Standishgate	"	59.—Crawford House, Standishgate	"
4.—37, New Market Street	"	60.—7, Standishgate	Dressmaker.
5.—42, Wigan Lane	"	61.—1, Church Street	"
6.—71, Mesnes Street	"	62.—12, Wigan Lane	"
7.—71, Spring Street	"	63.—30, Wigan Lane	"
8.—55, Library Street	"	64.—138, Wigan Lane	"
9.—19, King Street	"	65.—142, Park Road	"
10.—38, King Street	"	66.—7, Library Street	"
11.—11, Dicconson Street	"	67.—36, Dicconson Street	"
12.—36, Dicconson Street	"	68.—2, Pitt Street	"
13.—12, Dicconson Street	"	69.—Dawber's Court	"
14.—Alliance Hall, Crompton Street	"	70.—11, Standishgate	"
15.—21, Hallgate	"	71.—4, Hope Street	"
16.—10, Market Street	"	72.—6, Wigan Lane	"
17.—130, Gidlow Lane	"	73.—29, Mesnes Street	"
18.—8, Great George Street	"	74.—86, Park Road	"
19.—Pennyhurst Mill	"	75.—11, Library Street	"
20.—Pennyhurst Mill	"	76.—3, Dicconson Terrace	"
21.—1, Wallgate	"	77.—23, Market Place	"
22.—Barrack's Yard	"	78.—36, Swan Meadow Road	"
23.—81, Scholes	"	79.—85, Corporation Street	"
24.—121, Scholes	"	80.—50, Pool Street	"
25.—832, Ormskirk Road (P.)	"	81.—70, Pool Street	"
26.—788, Ormskirk Road (P.)	"	82.—164, Hardybutts	"
27.—Spencer's Fold (P.)	"	83.—35, Hardybutts	"
28.—Brick Kiln Lane	"	84.—265, Gidlow Lane	"
29.—114, Standishgate	"	85.—21, Hodges Street	"
30.—55, Standishgate	"	86.—111, Schofield Lane	"
31.—1, Church Street	"	87.—1, Westmoreland Street	"
32.—7, New Market Street	"	88.—73, Greenough Street	"
33.—57, Mesnes Street	"	89.—37, Greenough Street	"
34.—27, Mesnes Street	"	90.—41, Richmond Street	"
35.—22, Bold Street	"	91.—185, Dorning Street	"
36.—10, Library Street	"	92.—16, Lord Street	"
37.—30, King Street	"	93.—13, Charles Street	"
38.—9, Dicconson Street	"	94.—13, Duke Street	"
39.—27, Dicconson Street	"	95.—50, Springfield Road	"
40.—74, Dicconson Street	"	96.—12, Whelley	"
41.—10, Worsley Terrace	"	97.—118, Darlington Street East	"
42.—10, Crompton Street	"	98.—204, Darlington Street East	"
43.—29, Market Place	"	99.—170, Darlington Street East	"
44.—54a, Market Street	"	100.—24, Darlington Street	"
45.—54, Millgate	"	101.—19, Vauxhall Road	"
46.—89, Greenough Street	"	102.—232, Wallgate	"
47.—20, Rodney Street	"	103.—47, Scholes	"
48.—278, Wallgate	"	104.—71, Scholes	"
49.—113, Wallgate	"	105.—118, Woodhouse Lane	"
50.—111, Wallgate	"	106.—26, Poolstock Lane (P.)	"
51.—Meeks' Buildings	"	107.—84, Enfield Street (P.)	"
52.—Meeks' Buildings	"	108.—294, Ormskirk Road (P.)	"
53.—2, Scholes	"	109.—710, Ormskirk Road (P.)	"
54.—18, Makinson Arcade	"	110.—695, Ormskirk Road (P.)	"
55.—737, Ormskirk Road (P.)	"	111.—289, Warrington Road (P.)	"
56.—793, Ormskirk Road (P.)	"	112.—24, Baron Street	"



WORKSHOPS UNDER THE FACTORY AND WORKSHOP ACT.—*Continued.*

<i>Address.</i>	<i>Trade</i>	<i>Address.</i>	<i>Trade</i>
113.—120, Chapel Lane	Dressmaker	169.—587, Ormskirk Road (P.)	Milliner
114.—51, Corporation Street	"	170.—745, Ormskirk Road (P.)	"
115.—108, Pool Street	"	171.—7, Standishgate	"
116.—116, Hardybutts	"	172.—44, Standishgate	"
117.—4, Hardybutts	"	173.—38, Wigan Lane	"
118.—211, Gidlow Lane	"	174.—21, Mesnes Street	"
119.—10, Delph Street	"	175.—41, Mesnes Street	"
120.—15, Hodges Street	"	176.—7, Library Street	"
121.—5, Schofield Lane	"	177.—21, Market Place	"
122.—4, Worsley Terrace	"	178.—4, Market Place	"
123.—62, Greenough Street	"	179.—25, Hodges Street	"
124.—2, Turner Street	"	180.—Market Hall	"
125.—5, Dorning Street	"	181.—21, Frog Lane	"
126.—6, Great George Street	"	182.—7, Darlington Street	"
127.—9, Charles Street	"	183.—Moot Hall	"
128.—19, Charles Street	"	184.—70, Wallgate	"
129.—12, Scarisbrick Street	"	185.—164, Wallgate	"
130.—37, Wellington Street	"	186.—163, Scholes	"
131.—11, Whelley	"	187.—74, Scholes	"
132.—163, Darlington Street East	"	188.—176, Scholes	"
133.—142, Darlington Street East	"	189.—8, Makinson Arcade	"
134.—121, Darlington Street East	"	190.—739, Ormskirk Road (P.)	"
135.—36, Darlington Street	"	191.—127, Ormskirk Road (P.)	"
136.—2, Holme Street	"	192.—405, Warrington Road (P.)	"
137.—10, Ratcliffe Street	"	193.—Crawford House Standishgate	"
138.—45, Scholes	"	194.—7, Millgate	Underclothing
139.—20, Makinson Arcade	"	195.—14, Greenough Street	"
140.—30, Woodhouse Lane	"	196.—50, Greenough Street	"
141.—55, Billinge Road (P.)	"	197.—72, Darlington Street	"
142.—91, Ormskirk Road (P.)	"	198.—124, Wallgate	"
143.—835, Ormskirk Road (P.)	"	199.—Barrack's Yard	"
144.—646, Ormskirk Road (P.)	"	200.—70, Scholes	"
145.—11, Duke Street (P.)	"	201.—108, Scholes	"
146.—13, Duke Street (P.)	"	202.—21, Makinson Arcade	"
147.—9, Greenough Street	"	203.—15, Fleet Street (P.)	"
148.—6, Standishgate	Caps	204.—31, Brackley Street (P.)	"
149.—50, Standishgate	Milliner	205.—31, Millgate	"
150.—35, Standishgate	"	206.—16, Greenough Street	"
151.—1, Church Street	"	207.—20, Greenough Street	"
152.—46, Wigan Lane	"	208.—11, Orchard Street	"
153.—35, Mesnes Street	"	209.—Pennyhurst Mill	"
154.—33, Parson's Walk	"	210.—91, Wallgate	"
155.—6, Library Street	"	211.—Rowbottom Square	"
156.—48, Market Place	"	212.—90, Scholes	"
157.—132, Chapel Lane	"	213.—178, Woodhouse Lane	"
158.—16, Schofield Lane	"	214.—9, Wood's Grove	"
159.—121, Darlington Street East	"	215.—Corner Millgate	"
160.—51, Darlington Street	"	216.—76, Ormskirk Road (P.)	"
161.—4, Darlington Street	"	217.—1, White Street	"
162.—44, Wallgate	"	218.—3, White Street	"
163.—158, Wallgate	"	219.—68, Standishgate	Boot repairs
164.—290, Wallgate	"	220.—33, Standishgate	"
165.—56, Scholes	"	221.—45, Wigan Lane	"
166.—164, Scholes	"	222.—73, Wigan Lane	"
167.—154, Scholes	"	223.—101, Wigan Lane	"
168.—4, Fleet Street (P.)	"	224.—57, Park Road	"

WORKSHOPS UNDER THE FACTORY AND WORKSHOP ACT—*Continued.*

<i>Address.</i>	<i>Trade.</i>	<i>Address.</i>	<i>Trade</i>
225.—2, King Street	Boot repairs	281.—Lord Street (corner)	Clogger
226.—34, Market Place	"	282.—60, Whelley	"
227.—52, Millgate	"	283.—31, Whelley	"
228.—37, Chapel Lane	"	284.—2, Cambridge Street	"
229.—86, Pool Street	"	285.—138, Frog Lane	"
230.—128, Gidlow Lane	"	286.—31, Birkett Bank	"
231.—39, Greenough Street	"	287.—74, Lime Street	"
232.—4, Orchard Street	"	288.—174, Wallgate	"
233.—34, Wellington Street	"	289.—83, Scholes	"
234.—39, Darlington Street	"	290.—149, Scholes	"
235.—174, Wallgate	"	291.—245, Scholes	"
236.—175, Scholes	"	292.—33, Scholes	"
237.—50, Scholes	"	293.—47, Woodhouse Lane	"
238.—127, Woodhouse Lane	"	294.—Martland Mill Bridge	"
239.—1, Chapel Street	"	295.—105, Poolstock Lane (P.)	"
240.—819, Ormskirk Road (P.)	"	296.—175, Enfield Street (P.)	"
241.—814, Ormskirk Road (P.)	"	297.—92, Ormskirk Road (P.)	"
242.—131, Ormskirk Road (P.)	"	298.—21, Ormskirk Road (P.)	"
243.—397, Ormskirk Road (P.)	"	299.—425, Warrington Road (P.)	"
244.—76, Hallgate	"	300.—11, Greenough Street	"
245.—1, Church Street	"	301.—33, Platt Lane	"
246.—79, Wigan Lane	"	302.—9, Wiend	"
247.—103, Wigan Lane	"	303.—69, Whelley	"
248.—17, Mesnes Street	"	304.—46, Lower Morris Street	"
249.—Park Road	"	305.—11, Frog Lane	"
250.—19, Market Place	"	306.—72, Frog Lane	"
251.—62, Market Place	"	307.—53, Queen Street	"
252.—22, Millgate	"	308.—146, Wallgate	"
253.—72, Corporation Street	"	309.—154a, Wallgate	"
254.—66, Pool Street	"	310.—103, Scholes	"
255.—114, Schofield Lane	"	311.—233, Scholes	"
256.—8, Greenough Street	"	312.—160, Scholes	"
257.—1, Wilton Street	"	313.—118, Scholes	"
258.—61, Darlington Street East	"	314.—208, Woodhouse Lane	"
259.—136, Wallgate	"	315.—224, Woodhouse Lane	"
260.—12, Wallgate	"	316.—281, Billinge Road (P.)	"
261.—10, Scholes	"	317.—37, Brackley Street (P.)	"
262.—104, Scholes	"	318.—831, Ormskirk Road (P.)	"
263.—22, Church Street	"	319.—411, Ormskirk Road (P.)	"
264.—1, Bridgewater Street	"	320.—102, Wigan Lane	Saddler
265.—809, Ormskirk Road (P.)	"	321.—5, Dorning Street	"
266.—69, Ormskirk Road (P.)	"	322.—36, Chapel Lane	"
267.—152, Ormskirk Road (P.)	"	323.—90, Darlington Street	"
268.—240, Warrington Road (P.)	"	324.—17, Millgate	"
269.—9, Market Place	Clogger	325.—46, Market Place	Jeweller
270.—74, Millgate	"	326.—30, Wallgate	"
271.—42, Corporation Street	"	327.—76, Scholes	"
272.—72, Byrom Street	"	328.—64, Millgate	"
273.—110, Hardybutts	"	329.—27, Makinson Arcade	"
274.—Bailey's Court	"	330.—38, Standishgate	"
275.—134, Chapel Lane	"	331.—95, Greenough Street	"
276.—110, Chapel Lane	"	332.—18, Wallgate	"
277.—41, Hardybutts	"	333.—11, Scholes	"
278.—74, School Street	"	334.—22, Standishgate	Plumber
279.—87, Schofield Lane	"	335.—166, Ormskirk Road (P.)	"
280.—53, Miry Lane	"	336.—2, Barnsley Street	"



WORKSHOPS UNDER THE FACTORY AND WORKSHOP ACT—*Continued.*

<i>Address.</i>	<i>Trade</i>	<i>Address.</i>	<i>Trade</i>
337.—62, Standishgate	Upholsterer	377.—Library Street	Picture Framers
338.—King Street West	"	378.—29, Millgate	"
339.—94, Schofield Lane	"	379.—121, Ormskirk Road (P.)	"
340.—Crawford House, Standishgate	"	380.—30, King Street	"
341.—Crompton Street	"	381.—34, Darlington Street	"
342.—Soho Street (P.)	"	382.—823, Ormskirk Road (P.)	"
343.—Roebuck Yard	Blacksmith	383.—Crofter's Arms Yard	Cooper
344.—Brick Kiln Lane	"	384.—66, Millgate	Tin Plate Worker
345.—Platt Lane	"	385.—Lord Street	"
346.—Coffee House	"	386.—182, Scholes	"
347.—Stanley Street	"	387.—Clayton Street	"
348.—89, Chapel Lane	"	388.—Pottery Road	"
349.—266, Wallgate	"	389.—771, Ormskirk Road (P.)	"
350.—White Street (P.)	"	390.—Crompton Street	Wood Carver
351.—Platt Lane	Wheelwright	391.—Marsh Lane	"
352.—Pottery Road	"	392.—44, Schofield Lane	Hard Confectioner
353.—Hartley Street	"	393.—Great Acre	"
354.—Miry Lane	"	394.—Neville Street	Bedding
355.—Darlington Street	"	395.—17, Platt Lane	Chair Maker
356.—218, Wallgate	"	396.—Princess Street	Marine Stores
357.—Chapel Street	"	397.—Douglas Street	"
358.—Elm Farm, Little Lane (P.)	"	398.—61, Darlington Street East	Ice Cream
359.—166, Wallgate	Ginger-Beer	399.—72, Standishgate	"
360.—King Street West	Bottling Stores	400.—62, Greenough Street	"
361.—Mariebonne	Laundry	401.—116, Scholes	Sausage Maker
362.—Dobb's Fold	"	402.—109, Warrington Lane	French Polisher
363.—18, Wigan Lane	"		
364.—Holme Terrace	"	403.—14, Scholes	Tripe Dresser
365.—Spencer's Fold (P.)	Nail Maker	404.—Millgate Bridge	"
366.—166, Wallgate	Soap Boiler	405.—Watmough's Yard	"
367.—Gower Street (P.)	"	406.—17, Hope Street	Scales
368.—Jackson's Square	Tallow Chandler	407.—Market Street	"
369.—94a, Greenough Street	Cycles	408.—Arcade Street	Platers
370.—28, King Street	"	409.—Bradshaw Street	Clay Pipe Maker
371.—72, Market Street	"	410.—Wiend	Brush Manufacturer
372.—25, Ormskirk Road (P.)	"	411.—23, Makinson Arcade	Umbrella Repair
373.—126, Chapel Lane	"		
374.—66, Greenough Street	Stockings	412.—Woodcock Street	Paper Box Maker
375.—33, Mesnes Street	"		
376.—292, Wallgate	"		

## BAKEHOUSES.

The Bakehouses have been regularly visited, and when any nuisance has been discovered, notice has been served on the occupiers. The regulations as to lime-washing, cleanliness, &c., have been enforced. The underground bakehouses have been kept in a sanitary condition. The following is a list of the underground bakehouses in the Borough :—

H. Kennedy	...	...	Woodcock Street.
Mrs. Tyrer	...	...	22, Earl Street.
Miss Clayton.	...	...	36, Wigan Lane.
Miss Hughes	...	...	34, Wigan Lane.
G. Duckworth and Son	...	...	108, Wallgate.
W. H. Large	...	...	12, Wallgate.
Miss Poole	...	...	32, Market Street.
J. Barres	...	...	58
Miss Poole	...	...	10, Standishgate.

### THE FOLLOWING IS A LIST OF BAKEHOUSES NOT UNDERGROUND :—

<i>Address.</i>	<i>Trade.</i>	<i>Address.</i>	<i>Trade.</i>
1.—217, Scholes	Baker	32.—16, Portland Street	Baker
2.—116, Scholes	"	33.—Boundary Street	"
3.—89, Scholes	"	34.—103, Schofield Lane	"
4.—78, Scholes	"	35.—88, Schofield Lane	"
5.—3, Vauxhall Road	"	36.—Wood Street	"
6.—Leigh Street	"	37.—22, Bolton Street	"
7.—Appleton Street	"	38.—62, Platt Lane	"
8.—142, Hardybutts	"	39.—9, Orchard Street	"
9.—118, Schofield Lane	"	40.—39, Kirkless Street	"
10.—61, Schofield Lane	"	41.—5, Pitt Street	"
11.—144, Chapel Lane	"	42.—163, Wigan Lane	"
12.—1, Bolton Street	"	43.—119, Wallgate	"
13.—25, Leader Street	"	44.—Walthew's Yard	"
14.—Andrew Street	"	45.—136, Frog Lane	"
15.—32, Belvoir Street	"	46.—160, Frog Lane	"
16.—49, Wigan Lane	"	47.—60, Frog Lane	"
17.—89, Wigan Lane	"	48.—45, Queen Street	"
18.—46, Greenough Street	"	49.—61, Standishgate	"
19.—248, Wallgate	"	50.—767, Ormskirk Road (P.)	"
20.—34, Woodhouse Lane	"	51.—78, Ormskirk Road (P.)	"
21.—68, Frog Lane	"	52.—183, Ormskirk Road (P.)	"
22.—108, Frog Lane	"	53.—215, Ormskirk Road (P.)	"
23.—2, Warrington Lane	"	54.—37, Ormskirk Road (P.)	"
24.—18, Catherine Street	"	55.—763, Ormskirk Road (P.)	"
25.—1, Withnall Street	"	56.—83, Ormskirk Road (P.)	"
26.—191, Scholes	"	57.—73, Warrington Road (P.)	"
27.—22, Scholes	"	58.—47, Billinge Road (P.)	"
28.—239, Scholes	"	59.—39, Fleet Street (P.)	"
29.—261, Scholes	"	60.—26, Chapel Street (P.)	"
30.—42, Whelley	"	61.—72, Pool Street	"
31.—Thompson Street	"	62.—66, Corporation Street	"



BAKEHOUSES NOT UNDERGROUND—*Continued.*

<i>Address.</i>	<i>Trade.</i>	<i>Address.</i>	<i>Trade.</i>
63.—506, Park Lane (P.)	Baker	107.—18, Harrogate Street	Confectioner
64.—55, Birkett Bank	"	108.—87, Park Road	"
65.—43a, City Road (P.)	"	109.—59, Wigan Lane	"
66.—New Market Street	"	110.—60, Market Place	"
67.—182, Ormskirk Road (P.)	"	111.—216, Wallgate	"
68.—752, Ormskirk Road (P.)	"	112.—2, Pottery Street	"
69.—400, Ormskirk Road (P.)	"	113.—142, Gidlow Lane	"
70.—724, Ormskirk Road (P.)	"	114.—23, Mesnes Street	"
71.—662, Ormskirk Road (P.)	"	115.—120, Millgate	"
72.—6, Warrington Road (P.)	"	116.—217, Woodhouse Lane	"
73.—91, Tunstall Lane (P.)	"	117.—Beech Hill Lane	"
74.—19, Fleet Street (P.)	"	118.—39, Queen Street	"
75.—9, Enfield Street (P.)	"	119.—75, Caroline Street	"
76.—14, Chapel Street (P.)	"	120.—34, Market Street	"
77.—84, Pool Street	"	121.—58, Market Street	"
78.—32, Wellington Street	"	122.—45, Standishgate	"
79.—48, Northumberland St. (P.)	"	123.—120, Standishgate	"
80.—41, Princess Street (P.)	"	124.—131, Ormskirk Road (P.)	"
81.—349, Scot Lane (P.)	"	125.—318, Ormskirk Road (P.)	"
82.—Kenyon Road	"	126.—811, Ormskirk Road (P.)	"
83.—47a, Scholes	Confectioner	127.—97, Ormskirk Road (P.)	"
84.—247, Scholes	"	128.—40, Victoria Street (P.)	"
85.—84, Scholes	"	129.—58, Victoria Street (P.)	"
86.—237, Scholes	"	130.—26, Darlington Street	"
87.—10a, Hardybutts	"	131.—53, Darlington Street	"
88.—104, Park Road	"	132.—35, Wellington Street	"
89.—86, Wigan Lane	"	133.—310, Warrington Road (P.)	"
90.—33, Market Place	"	134.—700, Warrington Road (P.)	"
91.—176, Wallgate	"	135.—111, Poolstock Lane (P.)	"
92.—54, Wallgate	"	136.—116, Standishgate	"
93.—175, Gidlow Lane	"	137.—805, Ormskirk Road (P.)	"
94.—19, Mesnes Street	"	138.—119, Ormskirk Road (P.)	"
95.—47, Mesnes Street	"	139.—669, Ormskirk Road (P.)	"
96.—65, Hodges Street	"	140.—80, Ellesmere Road (P.)	"
97.—162, Woodhouse Lane	"	141.—25, Fleet Street (P.)	"
98.—69, Beech Hill Avenue	"	142.—42, Darlington Street	"
99.—37, Queen Street	"	143.—162, Darlington Street East	"
100.—10, Caroline Street	"	144.—419, Warrington Road (P.)	"
101.—66, Market Street	"	145.—447, Warrington Road (P.)	"
102.—129, Standishgate	"	146.—19, Poolstock Lane (P.)	"
103.—96, Scholes	"	147.—2, Kendal Street	Muffin & Crampets
104.—232, Scholes	"	148.—28, Marsh Lane	"
105.—52, Scholes	"	149.—20, Vine Street	"
106.—9, Chancery Street	"	150.—142, Platt Lane	"

## SHOP HOURS ACTS, 1892-1899.

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During the year 1906 but little time has again been given to this Act during the day. Observations at night have been frequently taken, and visits made where I had reason to believe the Act was not being carried out.

One Hundred and Forty-nine Shops have been visited.

At Twenty-seven no young persons were employed, and Twenty-five were domestic. At Twelve Shops young persons were employed contrary to the Act, the Abstract not being exhibited, and these were at once obtained.

Four Proprietors have been cautioned for employing young persons in shops after having worked under the Factory and Workshop Act during the day.

Three Proprietors have been cautioned for employing young persons for a greater number of hours than the Act allows. One, after a week's observation, for employing a young person 77 hours during the week, or three hours longer than the Act allows.

Seats for Shop Assistants Act, 1899, at one shop when visited no seat was provided. After attention had been called to the same the Act was complied with.

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## SHOP HOURS ACT, 1904.—CLOSING ORDER.

### HAIRDRESSERS' AND BARBERS' SHOPS.

The above Closing Order came into force in August, 1906. There are Sixty-eight Hairdressers on the list, and these being spread all over the Borough, a good number of hours are required to enforce this Order.

The Closing Hours for Hairdressers' Shops to which this Order applies are as follows, viz. :—

Monday,	not later than	8-30	p.m.
Tuesday	„	8-30	p.m.
Wednesday	„	1-0	p.m.
Thursday	„	8-30	p.m.
Friday	„	9-0	p.m.
Saturday	„	11-0	p.m.



So that night duty is required five nights during the week to enforce this Order.

Four Hundred and Ninety-three Visits have been made at night, and One Hundred and Seventy-eight in the day.

Twenty-four letters have been sent to Proprietors warning them for offences committed under this Act, and they appear to have had good effect.

Several complaints have been received, and special observations have been made at the several shops.

Signed,

F. G. BISHOP,  
Inspector.

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## MEAT INSPECTION AND SLAUGHTER- HOUSES.

The Slaughter-houses have been visited by the Inspectors. I have myself paid many visits when the Inspector found food which was doubtful, more especially when tuberculosed meat was found. The condemnation of meat from tuberculosis is no doubt a delicate duty, but it would not be just in my opinion to condemn meat on this account unless one is satisfied that the beast has general tuberculosis. I have generally followed the lines laid down by the Royal Commission on Tuberculosis in 1898.

I shall, however, be glad to see the report of the more recent Royal Commission.

I don't like to be continually flogging a dead horse, but I must here again repeat what I said in my last Annual Report (page 109), and it was to this effect: "I can repeat here that the inspection of meat can never be efficiently done till we have a Municipal Abattoir, where the beasts can be seen both before and after being killed."

I may state here openly that we are aware of inferior meat, and even "slink" meat being brought into the town, and although we have a detective system, the culprits are worse than thieves to catch. It is also a misfortune that the farmer who takes 30s. to 40s. for his beast that is generally killed dying cannot also be put into the dock. If I could make a law of my own, I would make them and their families consume the meat, which is only fit to be put into a crematorium or destructor.

In May last we prosecuted a butcher for having in his possession meat unfit for human food. Mr. Sumner seized it because it was unfit, and in reality "slink meat." We knew where this meat had come from. We knew more, that inferior meat does get into the town, yet we only get a paltry fine of £5 and costs.

There is no improvement in the existing private slaughter-houses, in fact none can be made.

As Dr. Monckton Copeman's, F.R.S., report is at hand, I must quote from it on this matter. On page 10 of his report he says: "Bye-laws for the regulation of slaughter-houses allowed by the Local Government Board on the 20th October, 1891, are supposed to be in force, but so far as I have been able to ascertain the facts, there is not in the borough a single slaughter-house which complies with the conditions set forth in the preface to the Model Bye-laws." Then he goes on further to say: "I agree moreover with the statement by the Medical Officer of Health (Dr. Berry) made to the Town Council, when specially reporting to them on the subject, that it would be difficult, if not impossible, for the majority, at any rate, of the existing buildings to be so improved that they would do so. Many of them indeed are quite unsuitable for slaughtering purposes. Some of the slaughter-houses were low, dark and dirty, with floor and yard in a filthy condition, and the latter usually uneven and unpaved. Large accumulations of manure were not unfrequently met with, and in one or two cases remains of offal were found within the slaughter-house or on the manure heaps outside. The only satisfactory remedy for such a generally undesirable



state of affairs would appear to be the establishment of a Municipal Abattoir, a course which the Medical Officer of Health has frequently suggested to the Town Council."

A case of Anthrax was reported to us, and Mr. Sumner, Chief Sanitary Inspector, investigated the case, and found that the Veterinary Inspector was aware of the case and had seen to the burial of the carcase. We had however to supervise the milk supply. I am pleased to say no other cases occurred, and no harm arose.

### **DAIRIES, COWSHEDS, AND MILKSHOPS ORDER, 1885 AND 1886.**

Proceedings have been commenced in two cases to compel compliance with these Orders. In the case of two cowsheds the Magistrates adjourned the case, so that the defendants might complete the work required.

The milkshops are not what I would like to see in the town. In my opinion a milkshop should be one for the sale of milk only, should be scrupulously clean and cut off from the dwelling-house; as it is at present milk is sold in all sorts of shops and by all sorts of people.

The milk sold in a shop where paraffin oil is also sold cannot be supposed to be under the best condition for human food, especially for children; but we have many shops where all sorts of things are sold as well as milk, in fact, many of these little shops seem to be "universal providers," and I am afraid not to the advantage of the milk which is such an important article of diet.

A case of Anthrax was discovered and the beast was promptly dealt with, as your Veterinary Inspector was aware of the case and gave instructions for the destruction of the carcase. We have not heard of any other case.

I subjoin Mr. Woods, Veterinary Inspector's report:—

Wigan,

January, 30th, 1907.

GENTLEMEN,

In making my yearly statement on the inspections under the Dairies, Cowsheds, and Milkshops Order, it will of course be understood that Pemberton is now included in these inspections.

Structural alterations are slowly proceeding in most of those cowsheds which do not conform to the regulations.

Summonses were taken out against two cowkeepers with whom persuasion and argument had previously had no effect. These were adjourned on the promise of the necessary alterations, and in both cases I am glad to say, were ultimately withdrawn, owing to the progress of the alterations in the interval.

I have recently inspected the whole of the Milking stock, and believe that at the present moment there is not a case of udder Tuberculosis in the County Borough.

I have previously drawn attention to the fact that most of the milk consumed in the town comes from outside the Borough boundary where we had previously no jurisdiction. Now however, under certain circumstances, power is given to visit and inspect the source of supply of any milk coming from without. No such inspections have as yet been made, but the power is there, should the Council so desire.

I wish to acknowledge the assistance I have received from the Town Clerk and the Medical Officer of Health, who has spent considerable time with me in various inspections in which I have asked his help.

Yours obediently,

(Signed) WM. WOODS.



## WATER SUPPLY.

The water supply has been continuous and of good quality, there has been no necessity to have a curtailment or intermittent supply, which is always dangerous. I regret to record the death of Mr. Orsman, F.C.S., the Borough Analyst, which occurred on June 21st, 1906, after my last Annual Report was made. Mr. Ernest Melling, F.C.S., was appointed in his stead on August 23rd, 1906.

The following are the reports on the analysis of the water :---

January.--Hardness before boiling, 10·5 degrees ; after, 3 degrees. The permanent hardness is 2 degrees higher than that of last month. The Albumenoids are however lower.--Wigan.

Hardness before boiling, 14 degrees ; after, 7·5 degrees. The total hardness is 2 degrees higher this month. The Albumenoids are also higher, being 0·086 parts, against 0·060 parts per million on December 20th last.--Pemberton.

September.--Total Solids, at 212 degrees F. 15·3 ; Mineral Solids, at 360 degrees F. 14·2 ; Chlorine, 1·3 ; Nitrates as Nitrogen, 131. These results show the water to be free from other than normal traces of readily changeable organic matter, and afford no evidence of contamination by drainage or similar impurity. So far as chemical analysis can indicate the water is of suitable quality for drinking and general domestic use.--Wigan.

October.--Total Solids, at 212 degrees F. 15·9 ; total Solids, at 360 degrees F. 14·8 ; Chlorine, 1·2 ; Nitrates as Nitrogen, ·088. Except the figure for Albuminoid Ammonia, which is rather high, these results are satisfactory. There is neither evidence of sewage infiltration nor previous contamination, and as far as chemical analysis can indicate the water is of suitable quality for drinking purposes.--Wigan.

November.--Hardness before boiling, 9·5 degrees ; after boiling, 5·5 degrees. So far as chemical analysis

can decide this water is perfectly satisfactory, and of a higher degree of purity than last month's sample.—Wigan.

December.—Hardness before boiling, 8·4 degrees; after boiling, 6·0 degrees. These results show the water to be satisfactory, and about equal in purity to last month's sample.—Wigan.

### RAINFALL, 1906.

Month.	Rainfall in Inches, and Tenths.	No. of days on which rain fell, being ·01 of an inch or more.
January .....	5·45	23
February .....	3·57	20
March .....	2·31	15
April .....	1·41	12
May .....	3·40	21
June .....	2·85	15
July .....	1·36	12
August .....	3·12	20
September .....	1·71	10
October .....	5·91	28
November .....	2·55	16
December .....	3·60	23
	37·24	215

The mean annual fall for the previous ten years is 33·63 inches.

The mean annual fall for the past 49 years is 37·29 inches.

### BLACK SMOKE NUISANCE.

Much has been done in reference to the Black Smoke Nuisance, many observations have been taken by your Inspectors, with a view to prosecutions.

Letters have been written and threats made, and some improvement has been made, and your Committee has



authorised me to take action, this shall be done in the coming year, for I feel certain the offenders are not doing all they can to abate the nuisance.

We are liberal in our time limit.

I submit here a list of the time allowed in other towns.

Wigan allows eight minutes in one hour, which is a very liberal allowance.

### BLACK SMOKE EMISSION IN OTHER TOWNS.

	Town.					Limit.
Leeds	...	...	...	...	...	3 min. in an hour.
Bolton	...	...	...	...	...	4 "
Liverpool	...	...	...	...	...	4 "
Halifax	...	...	...	...	...	5 "
Warrington	...	...	...	...	...	6 "
Huddersfield	...	...	...	...	...	6 "
Wigan	...	...	...	...	...	8 "
Oldham	...	...	...	...	...	8 "
Preston	...	...	...	...	...	10 "
Burnley	...	...	...	...	...	12 "

Manchester allows only  $2\frac{1}{2}$  minutes in the hour, but takes proceedings for less if a nuisance is caused.

Sheffield, for 1 Boiler	...	...	2 minutes in an hour.
„ 2 Boilers	...	...	3 „
„ 3 „	...	...	4 „
„ 4 or more	...	...	6 „
Blackburn „ 1 Boiler	...	...	4 „
„ 2 Boilers	...	...	5 „
„ 3 „	...	...	6 „
„ 4 or more	...	...	7 „

Bradford and Nottingham.—No limit is fixed, but proceedings are taken whenever a nuisance is caused.

(Extract from *Public Health*, of October, 1906, pp. 42-43.)

### PROPERTY UNFIT FOR HUMAN HABITATION.

The following houses were scheduled under the Housing of the Working Classes Act, 1890, and will be dealt with by the Committee in due course ;—

- 3, 4, 6, 7, 8, 9, 10, Benson's Yard, Gidlow Lane.
- 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Moore's Buildings, Frog Lane.
- 1, 3, Dobbs' Fold, Wallgate.
- 2, 3, 4, 5, Preston's Yard, Albert Street, Pemberton.
- 1, 3, 4, 5, 6, Clayton's Yard, Ormskirk Road, Pemberton.
- 48, 50, 52, 54, 56, 58, Albert Street, Pemberton.
- 2, 3, 4, 5, 6, 7, 8, 9, 10, Dickinson's Yard, Ormskirk Road, Pemberton.
- 1, 2, Magraw's Yard, Ormskirk Road, Pemberton.
- 3, 4, 5, 6, 7, Engine Fold, Ormskirk Road, Pemberton.
- 5, 7, 9, Chapel Street, Pemberton.
- 1, 2, 3, 4, 5, 6, 7, 8, 9, Potter's Square, Princess Street, Wigan.

## UNPAVED YARDS AND PASSAGES.

In my last Report (page 116), I stated, "We are proceeding slowly with the conversion of pail closets into water closets, and are getting some of the unpaved yards either flagged or paved. There is, however, much to be done. Until these insanitary conditions are remedied, we shall still get Enteric Fever, Scarlet Fever, and Infantile Diarrhœa."

I may repeat this from to-day, and quote from Dr. Monckton Copeman's report the following:—Page 3, "Thus the late Sir George Buchanan stated in 1870, as has already been mentioned, that one of the chief defects of Wigan was the "extensive want of paving and channelling in small streets and private courts."

The insanitary conditions of the environment of so considerable a proportion of the population of the town cannot but re-act on their personal habits, and it seems hardly possible to expect much improvement in this respect until such time as they are given the opportunity of experiencing the value of cleanly surroundings, in conducing to the general healthiness of living, as well as the prevention of infectious disease. With this object in view the first essentials in the case of Wigan are the cleansing and paving of all courts, alleys, and back yards, and the provision of a more satisfactory method of excrement and refuse disposal.

The following is a list of unpaved Yards and Passages that have been dealt with during 1906 :—



160, 162, Woodhouse Lane  
 170-176, Woodhouse Lane  
 5-15, Chapel Street  
 77-83, Queen Street

11-35, Swan Street  
 16-60, Miry Lane  
 Potter's Square, Princess Street

The following have also been dealt with for defective surface of Yards, &c.

37-43, Platt Lane  
 2-16, Golborne Street  
 2-10, Wilcock Street  
 258-268, Warrington Road,  
 Pemberton  
 129, 143, Great George Street  
 10-16, Lower Morris Street  
 11, Harper Street  
 1, 2, Hill's yard, Bridge Street  
 317, Warrington Road Pem-  
 berton  
 16, Hardybutts

Brown's Yard, Queen Street  
 Farrimond's Row  
 18, Chapel Street  
 1, Vine Grove  
 4, Mitchell Street Pemberton  
 3, Manor Street, Pemberton  
 3 and others, Mitchell Street,  
 Pemberton  
 68, 70, Corporation Street  
 16-60, Miry Lane  
 114, 116, 118, Scholes

## BOROUGH SURVEYOR'S DEPARTMENT.

The Borough Surveyor has kindly supplied me with the following particulars :—

	T.	C.	Q.
House refuse collected in Borough from January 1st to December 31st, 1906 ... ..	17,745	3	0
Pail excreta removed ... ..	6,650	9	0
Nightsoil removed ... ..	330	14	0
Number of pail closets in borough	8,049		
Number of pails collected in 1906	463,168		
Cost(including washing and distribution) ... ..	£2,228	7	7
Cost of collecting ashes during 1906 ... ..	£2,087	5	0
Number of privy middens in borough	1,763		
"                    " emptied, 1906	13,578		
" new houses erected in 1906...	386		
" slop closets put in, in 1906 ...	Nil.		
" water closets in borough ...	4,725		

## SCAVENGING.

This department is now under the control of the Sanitary Works Committee, and the disposal of sewage is in charge of the Sewage Farm Committee, the Medical Officer of Health being requested to attend when required.

## MIDWIVES ACT, 1902.

We have now 53 women on the midwives register for the Borough. This year they have been visited at their own homes by Dr. J. Foreman Berry, M.B. & Ch. B., St. And: L.R.C.P., & S. Ed., &c., he has presented a report to me in each case, and where necessary, letters have been written to those who have not conformed to the regulations of the Midwives Board. I have also had printed "Directions to Midwives," which should guide them in their duties. I may say that there is an improvement in the class of women attending midwifery cases, and this improvement will increase as the old ones with old-fashioned notions die out.

In my last report I said: "In time it will bring about a condition of things where all midwives will have gone through a proper course of training, and thus the risks to which child-bearing women of our population are subject will be minimised." There are seven registered certified midwives practising in the Borough, 15.9%. Nineteen 43.1% can neither read nor write, yet many of these are sensible, practical women.

During the year there were nine cases of Puerperal Fever notified and four deaths against 16 cases, and nine deaths in 1905. There were six cases in which a midwife had been in attendance, in each case she was suspended from carrying out her midwifery duties for a period of fourteen days.

### DIRECTIONS TO MIDWIVES.

1. The Midwife must be scrupulously clean in every way.
2. She must wear a dress of washable material, and over it a clean, washable apron.
3. A Midwife who is attending a case in which there are foul-smelling discharges, must not go direct to another case without first changing her dress and thoroughly cleansing and disinfecting her hands and forearms and such appliances as she may have had occasion to use, and is obliged to take with her.



When called to a confinement a Midwife must take with her :—

- (1) An appliance for giving VAGINAL injections, an appliance for giving enemata, a catheter, a pair of scissors, a clinical thermometer, and a nail brush.
  - (2) An efficient antiseptic for disinfecting the hands, etc.
  - (3) An antiseptic for douching in special cases.
  - (4) An antiseptic lubricant for smearing the fingers, catheters, douche nozzles, and enema nozzles, before they touch the patient.
5. On each occasion of touching the genital organs or their neighbourhood, the Midwife must previously disinfect her hands and forearms.
6. All instruments and other appliances brought into contact with the patient's generative organs must be properly disinfected.
7. Whenever a Midwife has been in attendance upon a patient suffering from puerperal fever, or from any other illness supposed to be infectious, she must disinfect herself and all her instruments and other appliances, to the satisfaction of the Local Sanitary Authority, and must have her clothing thoroughly disinfected before going to another labour. Unless otherwise directed by the Local Supervising Authority all washable clothing should be boiled, and other clothing should be sent to be stoved, and then exposed freely to the open air for several days.

#### DUTIES TO PATIENT.

1. If a Midwife has charge of a lying-in case she must not leave the patient after the commencement of the *Second Stage*, and she must stay with the woman *until after the expulsion of the afterbirth*, and as long after as may be necessary. In cases where a doctor has been sent for on account of the labour being abnormal, or of there being threatened danger, she must await his arrival, and faithfully carry out his instructions.

2. Before making the first internal examination, and always before passing a catheter, the Midwife must wash the patient's external parts with soap and water, and then swab them with an antiseptic solution. For this purpose, and for washing the external parts immediately after labour and during the lying-in, on no account must ordinary sponges or flannels be used, but material which can be boiled before use and thrown away afterwards ; such as linen, cotton wool, cotton waste, tow, etc.

3. No more internal examinations should be made than are absolutely necessary.

4. On the birth of a child which is in danger of death, the Midwife shall inform one of the parents of the child's condition.

5. The Midwife must remove soiled linen, blood, fæces, urine, and the placenta from the neighbourhood of the patient, and from the lying-in room, as soon as possible after the labour, and in every case before she leaves the patient's house.

6. The Midwife shall be responsible for the cleanliness, and should give full directions for securing the comfort and proper dieting of the mother and child during the lying-in period, which shall be held, for the purpose of these regulations and in a normal case, to mean the time occupied by the labour, and a period of ten days thereafter.

7. A " case of normal labour " in these regulations shall mean a labour in which there are none of the conditions specified below.

#### DUTIES TO CHILD.

1. In the case of a child being born apparently dead, the Midwife should carry out the methods of resuscitation which have been taught her.

2. As soon as the child's head is born, and, if possible, before the eyes are opened, its eyelids should be carefully cleansed with a suitable antiseptic lotion.



## GENERAL.

1. No Midwife shall undertake the DUTY OF LAYING OUT THE DEAD, or follow any occupation that is in its nature liable to be a source of infection.

2. A Midwife must enter in a book, with other notes of the case, all occasions on which she is under the necessity of administering any drug, whether scheduled as a poison or not, the dose, and the time and cause of its administration.

3. In all cases of abortion, of illness of the patient or child, or of any abnormality occurring during pregnancy, labour, or lying-in, a Midwife must decline to attend alone, and must advise a registered practitioner be sent for, as, for example, under the following circumstances :

(a) In a case of a pregnant woman :—

- (1) When she suspects a deformed pelvis.
- (2) When there is loss of blood.
- (3) When the pregnancy presents any other unusual feature, or when it is complicated by fever or any other serious condition.

(b) In the case of a woman in labour :—

- (1) In all presentations other than the uncomplicated vertex or breech ; in all cases of breech presentations in primiparae, in all cases of flooding and convulsions, and also whenever there appears to be insufficient room for the child to pass, or when a tumour is felt in any part of the mother's passages.
- (2) If when the cervix has become dilated is unable to make out the presentation.
- (3) If there is loss of blood in excess of what is natural, at whatever time of the labour it may occur.

- (4) If an hour after the birth of the child the placenta has not been expelled, and cannot be expressed, even if no bleeding has occurred.
- (5) In cases of rupture of the perinæum, or other serious injury of the soft parts.
- (c) In the case of lying-in women, and in the case newly-born children :—

Whenever, after delivery, the progress of the woman or child is not satisfactory, but in all events upon the occurrence of the subjoined conditions, viz. :—

(I.) THE MOTHER :—

- (1) Abdominal swelling and signs of insufficient contraction of the uterus.
- (2) Foul-smelling discharges.
- (3) Secondary post-partum hæmorrhage.
- (4) Rigor.
- (5) Rise of temperature above  $100^{\circ} 4'$  F., with quickening of the pulse for more than 24 hours.
- (6) Unusual swelling of the breasts with local tenderness or pain.

(II.) THE CHILD :—

- (1) Injuries received during birth.
- (2) Obvious malformations or deformities, not inconsistent with continued existence.
- (3) Concealed malformations—incapacity to suck or take nourishment.
- (4) Inflammation to even the slightest degree of the eyes, eyelids, and ears.
- (5) Syphilitic appearance of the skin in certain parts.



- (6) Illness or feebleness arising from prematurity.
- (7) Malignant jaundice.
- (8) Inflammation about the navel.
- (d) In all cases of the death of a woman during pregnancy, labour, or lying-in. When a registered Medical Practitioner is sent for, the Midwife must state in writing the condition of the patient and the reason of the necessity for medical advice.

#### NOTIFICATION.

(1) DEATHS.—In all cases in which the death of the mother or of the child occurs before the attendance of a registered Medical Practitioner, the Midwife shall, as soon as possible after the death, notify the same to the Local Supervising Authority.

(2) STILLBIRTHS.—In all cases where a registered Medical Practitioner is not in attendance, the Midwife shall, as soon as possible after the occurrence of a stillbirth, notify the same to the Local Supervising Authority.

A child is deemed to be stillborn when it has not breathed or shown any sign of life after being completely born.

(3) PUERPERAL FEVER AND OTHER INFECTIOUS DISEASES.—These cases are included in the notice required when medical help is sent for.

## COUNTY BOROUGH OF WIGAN.

Midwives on Register, year ending 31st December, 1906.

<i>Name.</i>	<i>Registered No.</i>
Atherton, Ann ... ..	4,607
Appleton, Mary A. ... ..	890
Ashton, Ellen ... ..	3,740
Archer, Annie M. ... ..	4,143
Alcock, Florence A. ... ..	17,693
Blatherwick, Jane... ..	3,878
Baxter, Mary E. ... ..	661
Banks, Jane ... ..	891
Bentham, Elizabeth ... ..	6,722
Bentham, Ellen .. ... ..	19,486
Booth, Maria ... ..	3,263
Cox, Jane .. ... ..	933
Cowley, Elizabeth... ..	3,780
Cunliffe, Mary ... ..	19,673
Coates, Charlotte... ..	20,134
Daniels, Ellen ... ..	9,585
Finch, Eliza ... ..	3,760
Finch, Alice ... ..	4,360
Finch, Jane ... ..	7,694
Grundy, Maria ... ..	3,643
Groncott, Harriet... ..	5,241
Green, Sarah ... ..	13,239
Holland, Ellen ... ..	2,531
Halliwel, Ann H. ... ..	4,121
Humphries, Margaret ... ..	4,479
Holland, Elizabeth ... ..	3,781
Hoy, Louisa ... ..	19,889
Kynaston, Jane E. ... ..	9,942
Lyon, Sarah ... ..	596
Langshaw, Ann ... ..	3,621
Layland, Alice ... ..	5,276
McAllister, Isabel... ..	23,614
McQuillan, Sarah ... ..	2,676
McCann, Margaret ... ..	2,532
Morris, Sarah ... ..	5,231
Massey, Elizabeth.. ... ..	4,144
Moss, Elizabeth ... ..	15,722
Patrick, Ann ... ..	6,335
Perkins, Margaret A. ... ..	4,145
Pilkington, Hannah ... ..	11,088
Priest, Catherine .. ... ..	17,057
Perry, Nancy ... ..	17,052
Rigby, Mary A. .. ... ..	2,765
Taylor, Ann ... ..	3,331
Thorpe, Milicent .. ... ..	4,146



<i>Name.</i>	<i>Registered No.</i>
Wilson, Dorothy ... ..	558
Wallwork, Mary ... ..	659
Worthington, Elizabeth ..	4,367
Welsh, Alice ... ..	4,346

*Residing outside, but practising in Wigan :*

Davies, Mary A. : .. ..	2,780
Coxhead, Jane ... ..	4,351
Hill, Alice ... ..	3,766
Bateson, Elizabeth ... ..	10,502

## EDUCATION ACT, 1902.

The Education Committee so far have done nothing in respect to the Medical Inspection of Schools, or of the school children.

The Director of Education consults me on all matters appertaining to the Teachers, and the Committee carry out loyally any suggestion made by myself in respect to Infectious Diseases.

We may state that the Inspectors visit the schools when requested and examine for sanitary defects ; the Medical Officer of Health also, and the class-rooms are visited by him if required.

The water supply in the elementary schools is good, and prompt measures are taken to exclude children from the school when any information is received regarding infectious disease, especially the notifiable diseases and Measles. Advice is also given in cases of skin diseases.

THE NATIONAL EDUCATION ACT, 1902  
Section 11. - The Education Committee of the Local Education Authority shall be constituted as follows: -  
(a) The Local Education Authority shall nominate not more than two members of the Committee.  
(b) The Local Education Authority shall nominate not more than two members of the Committee.  
(c) The Local Education Authority shall nominate not more than two members of the Committee.

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(c) The Local Education Authority shall nominate not more than two members of the Committee.

We hereby state that the Local Education Authority shall be constituted as follows: -  
(a) The Local Education Authority shall nominate not more than two members of the Committee.  
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(c) The Local Education Authority shall nominate not more than two members of the Committee.

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APPENDIX.

County Borough of Wigan.



REPORT

OF

NATIONAL CONFERENCE

ON

Infantile Mortality.

Health Office, Wigan,

July 19th, 1906.

To the Chairman and Members of the Health Committee.

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**National Conference on Infantile Mortality,**

Held June 13th and 14th, 1906.

---

Gentlemen,

In consequence of the importance of the above subject and especially as we have had recently Dr. Monckton Copeman, F.R.S., Inspector of the Local Government Board, inquiring into this subject and also Enteric Fever, I attended this Conference which was attended by representatives of 105 Municipal Boroughs, 13 County Authorities, 15 other bodies, and 73 Official Members. There were between 400 and 500 members present. The President of the Conference was the Right Hon. John Burns, M.P., President of the Local Government Board.

I submit to you for your consideration a report which is also signed by your Chairman, who was present at the Meeting.

I am, Gentlemen,

Your obedient Servant,

WILLIAM BERRY,

Medical Officer of Health.



# REPORT ON NATIONAL CONFERENCE

ON

## INFANTILE MORTALITY,

Held June 13th and 14th, 1906.

---

The President (Right Hon. John Burns, M.P.) said that both personally and officially he welcomed that useful, necessary and too long delayed conference. On behalf of the Government he offered sympathy for the object and promised all the practical, kindly and sensible help his department could give. He stated that the seriousness of the subject of Infantile Mortality increased every day. Its preventability was a reproach to the nation, and was a striking commentary on the fact that as wealth increased the infants decayed. In round numbers 100,000 infants died annually from neglect, carelessness, thoughtlessness, and ignorance. There were as many deaths in the first year of life as there were in the succeeding eighteen, and in some districts thirty to forty per cent. died under five years of age, and he did not believe this was due to a dispensation of nature or an ordinance of man.

During the last fifty years the general birth-rate had dropped from 34 to 28 per 1,000, although at the same time he was glad to say that the general death-rate had dropped from 22 to 16 per 1,000. If reforms had been able to reduce the death-rate for the child, the youth, the adult, and even for the aged, was it not possible to hope that similar reforms should bring down the infantile death-rate, and bring about a similar result in the next ten years?

He felt we had witnessed the top curve in the rise of infantile mortality, and he hoped this conference might be the beginning of an epoch which would witness a large decline in this mortality.

He went on to state that still he was not despondent, for he believed there were signs that the curve of infantile mortality had reached the highest point, and he hoped that similar conferences held annually would in another five years knock down the infantile mortality from 33 per cent. to 25 per cent. ; then he asked why was there this high Infantile Mortality ? Wealth, prosperity, and comfort had increased, yet the weakest, the smallest, and the dearest, bore unduly the burden of death.

Whatever the chief cause might be the innocent child was not to blame, so that the fault must be with the mothers and husbands. Society and industry must be at fault. He believed that two out of every four infantile deaths were preventable.

It was, he said, perhaps true that a disproportionate love of pleasure and inordinate physical exercise did not tend to produce a high birth-rate, but he would not grumble if the children were healthier. A man's physique began with his grandmother. Napoleon after he had been beaten by soldiers who had not known a "comforter," nor "canned beef," had exclaimed "Oh ! those English mothers." It was to the mothers of the race that we must look for the improvement of the race. Drinking among women was a tragedy which confronted society.

Married women working in the factories and laundries were a fruitful cause of the early decease of children, and in some districts doubled the general death-rate. When mothers were working for nine, ten, or twelve hours in a factory. it not only contributed to produce a high mortality amongst their infants, but the effect on the children who survived was seen in the gaup of the anæmic, saucy, vulgar, ignorant, cigarette smoking hooligans. The absence of the mother had a bad effect on the preparation of food and on table discipline, there was no influence shown to youth so great as that of the mother at the head of the table, and the father coming home from his work ; the children learn more than at school or polytechnic, or even at Eton or Harrow ; a poor home with a mother always there was far better



than one in which the mother was in the factory all day. When the mother went to work there was a scramble to prepare a meal, and the children were left to the care of proxies and substitutes no less ignorant than the mother herself.

He held strongly that no married woman should be allowed to go to work for three months before, and for six months after confinement.

There was too much married women labour and too much child labour. Married women's labour manufactured loafers who might be seen buttressing a beershop or French polishing the outside of a public-house; married women's labour was an individual injury, a social mistake, and a commercial blunder. In his judgment the points to which the conference ought to give special attention were:—1st. To obtain good ante-natal conditions in regard especially to food, and also to women's labour; the health of the mother was the cardinal condition for the health of the baby. 2nd. To remove the ignorance which led sometimes to under-feeding or sometimes to the deadly and stupid kindness which caused excessive feeding or improper feeding, he believed there was little or no deliberate cruelty, but the result of ignorance was needless cruelty and preventable death. 3rd. To impress upon mothers the importance of breast feeding.

He appealed to the Conference to concentrate its energies on the mother, to glorify, dignify, and purify motherhood, for what the mother is the children will be. It should seek also to obtain cleaner milk, cleaner homes and fresher air, paved back yards and impervious streets. Officially he was willing to introduce a Bill to legalize expenditure on municipal milk depôts, but personally he was opposed to creches on the ground that they would encourage women's labour.

He alluded also to fashion, as in some directions tending to curtail the responsibility of mothers towards their children and the community. He said in conclusion that he had the conviction that the foundation of a commercial supremacy was the healthy workman, and that health was a maternal legacy.

During the two days which the conference lasted the following papers were read and discussed :—

1. The Teaching in Schools of Elementary Hygiene in reference to the rearing of Infants, by James Niven, M.A.M.B., Camb., Medical Officer of Health, Manchester, and Miss Alice Ravenhill.

2. The appointment of Qualified Women with special reference to the Hygiene and Feeding of Infants, by J. Spottiswoode Cameron, M.D., B.Sc., Ed., Medical Officer of Health, Leeds, and by John Robertson, M.D., B.Sc., Ed., Medical Officer of Health, Birmingham.

Both advocated female sanitary inspectors with sanitary inspectors certificates to be employed as health visitors and adjuncts to public health work.

A resolution was passed affirming this principle, the health visitor to be specially trained in the hygiene of infancy, and a resolution was adopted, namely :—“ That the Education Department be urged to add to their present scheme, for systematically training girls in the senior classes in the practice and principles of personal hygiene, the elements of dietary with special instruction in respect to the rearing of infants.”

3. The public supply of specially prepared milk for the feeding of infants, by G. F. McCleary, M.D., D.P.H., Medical Officer of Health, Hampstead.

4. The Teaching of the Hygiene of the expectant and suckling mother, by J. F. J. Sykes, M.D., D.Sc., Medical Officer of Health, St. Pancras.

5. The relation of Premature Birth to Infantile Mortality, by J. R. Kaye, M.B., C.M., Glasgow, Medical Officer of Health, West Riding of Yorkshire.

In this paper it was pointed out that in large manufacturing towns where there are a number of premature births the Infantile Mortality is increased, and he advocated the registration of all still-born children.

6. Earlier Registration of notification of births, by Alderman Benjamin Broadbent, Mayor of Huddersfield.



7. Infant Life Insurance, by Councillor W. Fleming Anderson, Glasgow. The present system of Infant Insurance was condemned.

8. Infantile Mortality and the employment of married women in factory labour before and after confinement, by G. Reid, M.D., D.P.H., Medical Officer of Health, Staffordshire.

In this paper it was strongly advocated that no pregnant woman should be allowed to work in a factory for three months before and for six months after confinement.

9. The regulation of the placing of infants out to nurse by Dr. Moore, Medical Officer of Health, Huddersfield, and the amendment of the Infant Life Protection Act, by Dr. Greenwood, Medical Officer of Health, Blackburn.

10. The Chemistry of Infants Food Stuffs by James Knight, Esq., D.Sc., Glas.,—Dr. Bostock Hill, Birmingham.

11. The increase of the powers of local authorities in regard to milk supplies, by Dr. Chalmers, Medical Officer of Health, Glasgow.

12. The Operation of the Midwives Act in England, with a view to its extension to Scotland and Ireland in relation to Infantile Mortality, by Dr. M. Merry Smith, Manchester, and Dr. Chalmers, Glasgow.

The resolutions passed at the meeting were : -

1. That the Education Department be urged to add instruction in Elementary Hygiene with reference to the dietary and rearing of infants to their present scheme for systematically training girls in the senior classes in the practice and principles of personal hygiene and the elements of dietary.

2. That, in the opinion of this Conference, immediate legislation is required enabling Sanitary Authorities to establish or support depôts for the supply of pure, or modified, or sterilized milk, and to defray any cost out of the monies available for public health purposes.

3. That, in view of the information submitted, the Conference is of opinion that all *still births* should be notified within 48 hours to the Medical Officer of Health of the district in which they occur, and that no burial should take place without a medical certificate.

4. That notification of all births be given within 48 hours to the Medical Officer of Health of the district in which they occur.

5. That, in the opinion of this Conference, the question of the insurance of infant lives under 12 months is one demanding serious consideration, and, with a view to receiving reliable information, the Government should be asked to appoint a departmental committee of enquiry on the whole question.

6. (a) That the period of one month's abstention from factory work away from home now imposed on mothers be extended to at least three months, and that, on their return to work, evidence must be produced satisfactory to the Local Authority that proper provision has been made for the care of the child.

(b) That no employer of labour shall permit a woman advanced in pregnancy to engage in factory labour unless her ability therefor has been certified to the satisfaction of the Local Authority.

7. (a) That, having regard to the ascertained fact that in centres of industries where women are largely employed away from their homes an excessive number of deaths of infants takes place, and that this is contributed to by the improper conditions existing at the houses in which infants are placed out to nurse, it is necessary that the persons by whom, and the places into which infants are received, should be under supervision by the Local Sanitary Authority.

(b) That the Infant Life Protection Act be amended to remedy abuses which are not at present provided against.



8. That all preparations offered or sold as food for infants should be certified by a Government Analyst as non-injurious, and that each packet should contain its analysis.

9. That the Dairies, Milkshops and Cowsheds Order is defective, and that any amendment should extend the definition of disease as applied to animals, and should make the provisions of regulations by Local Authorities compulsory. That the scope of the regulations should be extended to cover dirty milk and should enable Local Authorities to prohibit the sale of any milk which fails to comply with the conditions of purity agreed upon.

10. That, in the opinion of this Conference, the Midwives Act, 1902, should be extended to Scotland and Ireland.

At the close of the Conference it was resolved and unanimously agreed—

That the Conference resolve itself into a Committee to give effect to the foregoing resolutions, and with power to remit to an Executive Committee to carry out the same.

J. PHILLIPS, Chairman.

WM. BERRY, Medical Officer of Health.

It is also to be noted that the Commission has not yet received any information from the Government of the Republic of China regarding the situation in the region of the Yangtze River.

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At the close of the Commission's visit to the region of the Yangtze River, it is to be noted that the Commission has not yet received any information from the Government of the Republic of China regarding the situation in the region of the Yangtze River.

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County Borough of Wigan.

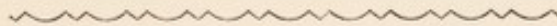


# ANNUAL REPORT

OF THE

*Chief Sanitary Inspector.*

1906.



WIGAN :

THOS. WALL AND SONS LTD., PRINTERS, "OBSERVER" OFFICE.

1907.

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# Annual Report of the Chief Sanitary Inspector.

HEALTH DEPARTMENT,

WIGAN,

JANUARY 21st, 1907.

*To the Chairman and Members of the Health Committee.*

SIR AND GENTLEMEN,

I have the honour to submit to you my sixteenth Annual Report of the work done by the staff of this department, the work has been greatly increased since the inclusion of Pemberton, inasmuch as the acreage is twice as great as before.

I have to thank the staff for their zeal and good work during the past year.

The following is a summary of the work done and a description of the nuisances dealt with:—

Houses and Premises Inspected and Visited ( <i>re</i> Nuisances and Complaints) ... ..	7,430
Nuisances Discovered ... ..	1,230
"    Abated ... ..	1,163
Notices Issued (Preliminary) ... ..	501
"    "    (Formal) ... ..	860
Letters Written <i>re</i> Nuisances ... ..	113
<i>Re</i> Inspections Made (about) ... ..	3,690
Other Visits Made ... ..	544
Nuisances Remaining on Books, December 31st, 1906 ... ..	398

## DESCRIPTION OF NUISANCES DEALT WITH,

Defective Drainage ... ..	61
Choked Drainage ... ..	133
Defective Gullies ... ..	23
Foul Gullies ... ..	4
Gullies requiring grids ... ..	17
Defective Slopstones. ... ..	3
Want of Slopstones and Pipes ... ..	52
Defective and Choked Sink Waste Pipes ... ..	28
Sink Waste Pipes connected to drains... ..	5

Bath and Lavatory Waste Pipes connected to Drains	2
"    "    defective ... ..	1
Soil Pipes or connections defective ... ..	6
"    insufficiently ventilated ... ..	1
Defective ventilating shafts ... ..	4
"    or Choked Water Closets ... ..	13
"    Pail Closet Roofs and Walls ... ..	55
"    "    Doors or want of ... ..	22
"    "    Seats ... ..	15
"    "    Floors ... ..	20
"    and Choked Waste Water Closets... ..	16
"    Ash House Roofs and Walls ... ..	18
"    "    Doors or want of ... ..	19
"    "    Floors ... ..	9
Want of Ash Tub Covers ... ..	19
Foul and Defective Privies and Ashpits ... ..	2
Water Closets without proper water supply ... ..	1
Defective Water Closet Cisterns ... ..	4
Insufficient Closet Accommodation to Houses or Work-	
shops ... ..	14
Defective Spouting ... ..	57
Want of Spouting to Premises ... ..	3
Downspouts connected to Drain ... ..	2
Defective Roofs... ..	27
"    Yard Surface round Gulley ... ..	21
"    Flagging or Paving ... ..	86
Unpaved Yards and Passages ... ..	23
Houses without Proper Drainage ... ..	10
"    overcrowded, keeping of Lodgers ... ..	29
"    and Premises Filthy ... ..	5
"    requiring Limewashing (Walls and Ceilings)..	20
"    with Filthy Closets ... ..	21
"    with Filthy Yards and Entries ... ..	8
"    with Damp or Defective Walls ... ..	13
"    without Proper or Through Ventilation (back	
to back houses) ... ..	29
"    with Foul Closets (pan and others) ... ..	37
Workshops insufficiently Ventilated .. ..	2
"    requiring Limewashing .. ..	2
Bakehouses " " .. ..	4
Defective Middensteads .. ..	4
Want of " " .. ..	2
Accumulation of Manure ... ..	12
"    Water ... ..	4
"    Rubbish ... ..	11
Keeping of Animals ... ..	81
Smoke Nuisances ... ..	16
Miscellaneous [ ... ..	134



## COMMON LODGING HOUSES AND HOUSES LET IN LODGINGS.

These have been regularly visited by day and surprise visits paid by night, and the houses have been generally found to be kept in a clean state. With two exceptions the houses have been adapted for the purpose, and are not fitted for the purpose of modern lodging houses, but as long as they comply with the bye-laws we must put up with them. The keepers, I think, do their best to keep the houses respectable, and for that are deserving of praise. In some instances letters have had to be sent out to the keepers for some infringement of the Bye-laws, but it has not been necessary to take any legal action, nor has the keeper had to be warned a second time.

### COMMON LODGING HOUSES.

No. of Common Lodging-Houses in the Borough .. ..	18
„ Lodgers Allowed Nightly .. ..	776
„ Visits by Day .. ..	2,530
„ „ Night .. ..	265
„ Lodgers Reported as being Received (per Returns)	202,882
„ Letters Sent Out .. ..	18
„ Houses "Let-in-Lodgings" on Register .. ..	46
„ Visits to Houses "Let-in-Lodgings" .. ..	228

### COMMON LODGING-HOUSES.

No. on Register		Registered for
1	2 and 4, John Street .. ..	12
2	"Brown Cow," Queen Street .. ..	24
3	18 and 20, Hardybutts .. ..	13
4	46, Queen Street .. ..	23
5	1, 3, and 5, Union Street .. ..	48
6	16, Hardybutts .. ..	8
7	87, 89, and 91, Millgate .. ..	60
8	1, Hardybutts .. ..	100
12	7, Wiend .. ..	28
13	1, Swift's Yard, Millgate .. ..	36
14	7, Hardybutts .. ..	12
15	32, Hardybutts .. ..	29
24	28, Wiend .. ..	41
34	27, Hallgate .. ..	85
35	19, Warrington Lane .. ..	33
36	1, 3, 5, 7, and 9, Scholes .. ..	82
37	7 and 9, Union Street .. ..	52
38	36 and 38, Hardybutts .. ..	88

## SLAUGHTER-HOUSES.

The Medical Officer of Health has consistently advocated for some years the building of a Municipal Slaughter-House, and until this is done the work devolving on your Inspectors in frequently visiting the outlying slaughter-houses will entail a great deal of time. There is no Slaughter-House in the Borough worthy of the name, and many of them are in a bad state structurally. They are generally fairly well kept, although the keepers attention has frequently to be called to the removal of offal, &c., after killing.

During the year many visits have also been made (at the request of the butchers) and inspections made of what they considered doubtful carcasses. This difficulty would be entirely removed if a Public Abattoir was erected, and then probably the stigma which many people seem to think is attached to the town would vanish. The near outstanding districts are, we know, responsible for some meat coming in which very often is open to grave suspicion, and until there is proper supervision also exercised outside the Borough there will be a certain class of butchers who will, if they have the chance, deal in this class of food, which is very often very hard to detect when the meat is cut up. In the interests of the honest and fair-dealing butcher this trade should be very severely dealt with by the Magisterial Bench when a case is brought before them, and the offender should be sent to gaol without the option of a fine.

A great quantity of food has been inspected during the year, and condemned and destroyed at Miry Lane Dépôt often at the request of the consignees as will be seen by the appended statement.

### SLAUGHTER-HOUSES AND MARKETS, &c.

No. of Slaughter-Houses in Borough .. .. .	27
„ Offensive Trade Premises in Borough.. ..	7
„ Visits to Slaughter-Houses and Offensive Trade Premises .. .. .	1025
„ Visits to Markets .. .. .	516
„ Letters Sent Out .. .. .	112



## SLAUGHTER-HOUSES.

Behind 8, Darlington Street	..	..	F. Knorzer.
Behind 60, Darlington Street	..	..	J. H. Green.
Upper Morris Street	..	..	W. Walsh.
Rigby's Buildings, Scholes	..	..	M. Ward.
Behind 124, Scholes	..	..	J. Watts.
Wiend	..	..	H. Sawbridge.
Water Street	..	..	J. H. and W. Cordeaux.
Behind 75, Wigan Lane..	..	..	J. Jackson.
Bottom Croft	..	..	W. R. Dunbar.
Shaw's Yard, Hallgate	..	..	J. Smirk.
Clayton Street	..	..	C. Sawbridge.
Hilton's Yard, Scholes	..	..	J. Hilton.
Mill Yard, Scholes	..	..	E. Hamill.
Behind 53, Birkett Bank	..	..	B. Turner.
Altham's Yard, Standishgate	..	..	R. V. Swarbrick.
Silver Street	..	..	E. McEvoy.
Behind 133, Standishgate	..	..	J. Hill.
122, Scholes	..	..	J. Lowe.
Shaw's Yard, Hallgate	..	..	H. Hurst.
132a, Ormskirk Road	..	..	J. Lythgoe.
Walthew House Farm, Marsh Green	..	..	
274, Billinge Road	..	..	W. Fairhurst.
808, Ormskirk Road	..	..	J. Rigby.
Brickcroft, Lamberhead Green..	..	..	W. H. Pennington.
841, Ormskirk Road	..	..	E. Hitchen.
Smithy Brook, Goose Green	..	..	C. Ashton.
270, Warrington Road, Goose Green	..	..	R. Britton.

## OFFENSIVE TRADE PREMISES.

Millgate	...	...	...	Bolton Hide Co.
Church Street...	...	...	...	J. Smith.
Crompton Street	...	...	...	J. Eckmann.
Robin Hood Yard, Haligate...	...	...	...	F. Pietsch.
Watmough's Yard, Scholes	...	...	...	P. Gallagher.
14, Scholes	...	...	...	J. Coyle.
Jackson's Yard, Scholes	..	...	...	W. Jackson.

Number of Beasts that have been inspected by request during 1906 :—

No. of Beasts passed	...	...	...	174
„ condemned	...	...	...	7
				<hr/>
				181

## FOOD CONDEMNED, 1906.

January ...	2 Beasts, 6 Turkeys, 24 Rabbits.
February ...	2 boxes of Fish, 1 Sheep.
March .....	1 Beast, 40 Rabbits.
April .....	4 bags of Cockles, 1 box of fish.
May .....	911 Eggs, 12 boxes of Fish, 136 lbs. of beef.
June .....	18 boxes and 2 barrels of Fish, 8 bags of Offal, 15 Rabbits.
July .....	53½ boxes of Fish, 1 box of Livers, 92 baskets of Black Currants, 8 baskets of plums.
August .....	1 Beast, 49½ boxes of Fish, 41½ lbs. of Salmon, 2 boxes of Beef Kidneys.
September ...	107 Rabbits, 90 boxes of Fish, 56 lbs. of Halibut, 10 bags of Shrimps, 12 crates of Bananas, 1 box of Beef Kidneys, 20 Legs of Mutton.
October .....	2 boxes of Fish, 251 Rabbits, 1 box of Sausages.
November ...	2 Beasts, 1 box of Fish, 1½ cwt. of Fish, 314 Rabbits.
December ...	1 box of Fish.

## SUMMARY, 1906.

6 Beasts.	230 boxes of Fish.
1 Sheep.	2 barrels of Fish.
136 lbs. of Beef.	265½ lbs. of Fish.
1 box of Livers.	10 bags of Shrimps.
3 Boxes of Beef Kidneys.	4 bags of Cockles.
20 Legs of Mutton.	781 Rabbits.
1 box of Sausages.	911 Eggs.
6 Turkeys.	92 baskets of Black Currants.
8 bags of Offal.	8 baskets of Plums.
12 crates of Bananas.	

The following statement shows the quantities of unwholesome food destroyed at the Miry Lane Depôt during the year :--

					Tons.	Cwts.	Qrs.
Fish	...	...	...	...	23	3	0
Beef	...	...	...	...	6	7	2
Pork	...	...	...	...	0	0	2
					29	11	0

In addition to the above the following was destroyed :

					Tons.	Cwts.	Qrs.
Shell and Fish Refuse	...	..			16	7	0
Other Refuse	...	...	...		317	19	.
					334	6	1



## CANAL BOATS ACTS, 1877 TO 1884.

These Acts have been carefully seen to during the past year and H.M. Inspector (Mr. Llewellyn) on his annual visit spoke highly of the work done by this department.

## CANAL BOATS ACTS, 1877 TO 1884.

No. of Boats Registered at Wigan .. ..	129
„ Applications for Registration during 1906 ..	Nil.
„ „ „ Granted ..	Nil.
„ Inspections .. ..	134
„ Notices Issued .. ..	2
„ „ Complied with .. ..	2
„ Contraventions of Regulations.. ..	2
„ Boats Re-registered .. ..	Nil.
„ Certificates Renewed .. ..	1
„ Letters Sent Out.. ..	10

## SMOKE NUISANCES.

The attention paid to the above has (I think) had a beneficial effect, there having been a great diminution in the nuisances observed during the year, in many instances I have had to verbally warn the firemen on the occasion of my visits. and also to speak to some of the owners who have in my presence warned their employees.

No. of Smoke Observations taken	...	...	...	193
„ Notices issued	...	...	...	16
„ Letters sent Out	...	...	...	4

## INFECTION DISEASES.

The work entailed by the above has been very heavy on the staff of the department, and extra help has had to be obtained for some few weeks to cope with the disinfection of premises after convalescence.

INFECTIOUS DISEASES (PREVENTION ACT).

No. of Houses Disinfected	...	...	1,200
" Rooms	"	...	1,767
" Beds	"	...	1,388
" Mattresses	"	...	972
" Sheets and Quilts Disinfected	...	...	3,746
" Other Articles Disinfected	...	...	13,874

No. of Premises Cleansed and Limewashed after Infectious Disease	...	...	...	...	...	604
„ Visits to Houses re Cleansing and Limewashing after Infectious Disease	...	...	...	...	...	905
„ Visits to Houses re Infectious Disease	...	...	...	...	...	3,757
„ Letters sent out re Limewashing, &c.	...	...	...	...	...	84
„ „ re Infectious Disease	...	...	...	...	...	25

## SALE OF FOOD & DRUGS ACTS, 1877 TO 1899.

### MARGARINE ACTS, 1877 TO 1899.

Appended is the list of articles purchased during the year under the Sale of Food and Drugs Acts and Margarine Acts.

When the articles purchased “not formally” were found adulterated they were afterwards re-tried formally and found correct.

No. of Samples obtained for Analysis	..	...	254
„ Genuine	...	...	236
„ Adulterated	..	...	18

	Samples.	Genuine.	Adul- terated.	Not formal Samples.		
Milk	..	...	164	159	5	—
White Pepper	...	...	4	4	—	4
Tea	...	...	3	3	—	3
Mustard	...	...	2	2	—	—
Margarine	...	..	9	9	—	3
Cayenne Pepper...	...	...	1	1	—	1
Tinned Meats	...	...	9	4	5	9
„ Fish	...	...	3	—	3	3
„ Peas	...	...	1	—	1	1
Sausages	...	...	2	1	1	2
Picked Shrimps	...	...	1	1	—	1
Potted „	..	...	2	—	2	2
Butter	...	...	17	17	—	3
Milk of Sulphur...	...	...	6	6	—	—
Flowers of Sulphur	...	...	2	2	—	—
Rum	...	..	12	11	1	12
Brandy	...	...	1	1	—	1
Scotch Whiskey...	...	...	3	3	—	3
Lard	...	..	6	6	—	—
Sweet Spirit of Nitre	..	..	6	6	—	—
			254	236	11	48



## Tinned Foods :—

				Samples.	Genuine.	Adul-Not terated.	Formal Samples.
Corned Beef	..	..	...	2	2	—	2
Jellied Boar's Head	...	..	...	1	—	1	1
Lamb's Tongue	...	...	...	1	—	—	1
Mutton	...	...	...	1	1	—	1
Roast Beef	...	...	...	2	1	1	2
Boiled Rabbit	...	...	...	2	—	2	2
Fresh Herrings	...	...	...	1	—	1	1
Lobsters...	...	...	...	1	—	1	1
Salmon Steak	...	...	...	1	—	1	1
Peas	...	..	...	1	—	1	1
Prosecutions	...	...	...	...	...	4	
Convictions	...	...	...	...	...	2	
Cases Dismissed	...	...	...	...	...	2	
No Action taken	..	...	...	...	...	14	
Person Warned...	...	...	...	...	...	1	
Letters sent out	...	...	...	...	...	40	

## FACTORY AND WORKSHOP ACTS.

The above Acts have been found to be generally well observed by the different persons interested, and no legal action has had to be taken.

With respect to the Closing Order of the Hairdressers, which came into operation during the year, there have been some of the shopkeepers who have had to be cautioned, but now that the Order has got well into working order we have had fewer complaints to make, the shops being closed punctually.

## SHOP HOURS ACTS.

No. of Visits to Shops (day)	..	..	..	..	353
„ „ (night)	..	..	..	..	1
„ Day Observations	..	..	..	..	1
„ Visits to Hairdressers and Barbers <i>re</i> Closing Order	..	..	..	..	487
„ Letters <i>re</i> Infringements of Closing Order	..	..	..	..	19

## FACTORY AND WORKSHOP ACTS.

No. of Visits to Workshops (day)	..	..	..	..	935
„ „ Factories.	..	..	..	..	310
„ Letters Sent Out	..	..	..	..	47

## DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

No. of Visits	..	..	..	..	..	244
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## PROSECUTIONS, 1906.

May 14th.—For exposing for sale 13 pieces of beef, weighing 136lbs., which was unsound and unfit for the food of man.—  
Fined £5 and costs.

June 18th.—For selling to the prejudice of the purchaser one pint of milk not of the nature, &c., demanded.—Case dismissed.

„ 18th.—For selling to the prejudice of the purchaser one pint of milk not of the nature, &c., demanded.—Case dismissed.

„ 18th.—For selling to the prejudice of the purchaser one pint of milk, not of the nature, &c., demanded.—Pay costs.

„ 18th.—For selling to the prejudice of the purchaser one pint of milk, not of the nature, &c., demanded.—Pay costs.

„ 25th.—For having fish, to wit, one box of codfish, with plaice, five silver hake, and one codfish, belonging to the person, which was unsound and unfit for the food of man.—Case dismissed.

In conclusion, Gentlemen, I thank you for your ready compliance with any suggestion I have had to make, and I again thank the members of the staff for their ready compliance with any instructions I have had to give them in the execution of their many duties.

I remain,

Gentlemen,

Your obedient servant,

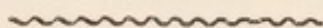
JOHN SUMNER

(Assoc. Royal San. Inst.),

Chief Sanitary Inspector.



County Borough of Wigan.



# REPORT

OF THE

***Congress of Public Health held in Cork,***

BY THE

***Royal Institute of Public Health,***

***June 27th to July 3rd, 1906.***

CONGRESS OF PUBLIC HEALTH HELD IN CORK BY  
THE ROYAL INSTITUTE OF PUBLIC HEALTH.

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JUNE 27TH TO JULY 3RD, 1906.

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PRESIDENT OF THE CONGRESS :

BERTRAM C. A. WINDLE, M.A., M.D., D.Sc., F.R.S.,

Principal of Queen's College, Cork.

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PRESIDENT OF THE ROYAL INSTITUTE :

Professor WM. R. SMITH, M.D., D.Sc., Ed., F.R.S.Ed., J.P.



Health Office,

Wigan, July 11th, 1906.

To the Chairman and Members of the Health Committee.

Gentlemen,

As your delegate, I attended, with Mr. Sumner, your Chief Sanitary Inspector (who was also appointed by you to represent the Health Committee), the Congress of the Royal Institute of Public Health, held in Cork, from June 27th to July 3rd, 1906, inclusive.

I have pleasure in submitting my report of the proceedings for your perusal.

I beg also to thank you for the opportunity of being present, thus enabling me to hear the views of the Various Medical Officers of Health, Sanitary Engineers, &c., who attend and read papers, or take part in the discussions.

I am, Gentlemen,

Your obedient Servant,

WM. BERRY,

Medical Officer of Health.

# REPORT.

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The Congress was conducted in the following sections, which were held in the Queen's College, Cork.

1. Preventive Medicine.
2. Child Study and School Hygiene.
3. Engineering and Architecture.
4. Bacteriology and Chemistry.
5. Veterinary Hygiene.

The opening address was delivered by the President of the Congress (Principal Windle). The City High Sheriff (R. H. Beamish, Esq.) presided in the absence of the Lord Mayor, and after a few appropriate remarks, he called on Professor Smith, President of the Royal Institute of Public Health, to invest Principal Windle, the President of the Congress, with the chain of office.

Professor Smith said his first duty was to thank the Corporation of the City of Cork for the very cordial invitation which they had been good enough to give to the Royal Institute of Public Health, to meet this year in their city. In the course of his speech he pointed out that the objects of the Congress were well known to them. It brought together men who were engaged in Public Health administration in various parts of the kingdom, and enabled them to compare notes, not only for their own advantage, but they trusted for the benefit of the districts in which they were more particularly concerned. From their experience in the past that object had been fully realised.

He next alluded to the stimulus which such a meeting gave rise to in the place and neighbourhood in which the meeting was held. He called attention to the mortality from consumption in Ireland, as it was 2·9 per thousand in Ireland, whilst in England 1·7. In Cork the death-rate was 38 per thousand, whilst in 1905 it was 44, and after a general survey of the public health of Cork he invested Principal Windle with the insignia of his office.



## INAUGURAL ADDRESS.

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Dr. Windle then proceeded to deliver his inaugural address, which was listened to with wrapt attention. He stated how with pleasure he welcomed the delegates to the city and to the college, and thanked them for the honour of being made President.

He stated that the Congress had come to a country where public health matters are perhaps badly in need of public interest and attention as any country in the world.

You will be able to observe the beauties of the country, its fertility, and also its climate.

In respect to health he said Ireland is far from what it should be, Tuberculosis decimating the population. Year by year the death-rate from this disease is declining in England and Scotland, and as steadily increasing in this country. In 1864 the English death-rate from Consumption was 3·3 per 1,000, the Irish 2·4. In 1881 they were both 2·6; in 1904 the English rate was 1·7, whilst ours is 2·9. The rate in Scotland was 3·6 in 1864, that is to say, her rate was 1·2 per thousand higher than ours at that date. Thirty years later her death-rate from Tuberculosis has so far fallen and ours so far risen that we are ·6 worse than she is; she has sunk to 2·1, whilst ours is 2·9. This is a terrible state of affairs and requires attention.

The number of the insane has also increased; of every 10,000 persons in Ireland 52·6 are registered as lunatics or idiots. It is unfortunately only too true that lunacy is on the increase in England and Wales also, but the actual figure there is 34·71 per 10,000, that is to say, nearly eleven-and-a-half less than our figure over here. Many attempts have been made to explain this increase. Some would have it that drink is the cause, but it is not the root of the matter. We, no doubt, drink more than we need or is good for us, but we drink less per head than our neighbours. Over tea drinking and particularly

over-drawn tea, has a good deal to do with the low state of health in this country as well as in England. Bad housing of our people is also mentioned, and here, there is no doubt much room for improvement. But I do not think this either by itself or in conjunction with the drink question is sufficient to account for this state of affairs which we find to exist in this country.

We have, however, here a factor which is not operative in England to anything like the same extent, and that is the emigration curse, which drains away the life blood of our race in the shape of the youngest, its most promising, its most valuable members.

He then proceeded to show how the population of Ireland had decreased since 1841, and mentioned the terrible scourge of famine and fever. During this awful time Ireland lost two millions of her population, and came down from 8,000,000 to 6,000,000.

Following the famine and the fever came emigrations which have ever since exercised a devastating influence and still continues to prey on the vitals of the country. In 60 years, 4,000,000 have emigrated from this country, and of this number 69 per cent. have gone to the United States.

Are the Authorities doing everything that is possible in carrying out the Public Health Acts and Housing Acts for the benefit of the people? Why should not we have our own society for the betterment of the Public Health, meeting annually in some Irish town and visiting the smaller, as well as the larger centres of population?

Surely we have our own needs, our own grave problems, our own difficulties, over which we might with great profit take counsel together.



## SECTION 1.

***Preventive Medicine.****President :*

Denis Dempsey O'Donovan, L.R.C.P., Ed., Superintendent Medical Officer of Health, Cork.

The President gave an inaugural address, which contained the improvements in sanitation during the last 20 years, mentioning particularly the diminution in the number of cases of Typhus Fever. He also mentioned many of the steps that are being taken at the present time to reduce the heavy death-rate of Cork.

The following are selections from the list of papers read :—

1. DIRECTIONS OF POSSIBLE IMPROVEMENT IN THE GENERAL SUPERVISION OF THE MILK SUPPLY.

By Professor E. W. Hope, M.D., D.Sc., Ed., Medical Officer of Health, Liverpool.

He mentioned in this paper that milk was a most important article of food, as well as one that was easily contaminated. Although Local Authorities in many districts had power to make regulations for the control of cowsheds, yet in rural districts very few steps had been taken to put those regulations into force. Some cities and towns however had availed themselves of these powers by every means at their disposal, and the milk of cows kept in Manchester and Liverpool was better than that from some of those districts. This was owing to the active measures taken in those cities, which applied not only to the producer but also to the seller. Milk coming from the country which they found to be contaminated could be rejected, and the cow-keeper prohibited from sending any more of it to Liverpool, but inasmuch as he would divert his diseased milk to some less protected place it was obvious that a general supervision of the whole supply of the country was absolutely essential. Dr. Hope then dwelt with the admirable arrangements made in Copenhagen, moved a resolution

to the effect that powers should be conferred upon the county and city councils to appoint inspectors to supervise the production and transport of milk, and that a great advantage would accrue if the Local Government Board and the Board of Agriculture called on their staff of veterinary and other inspectors to co-operate with the officers of the authorities named.

An interesting discussion followed, in which Dr. McWalter, Dublin; Dr. Marsden, Birkenhead; Mr. Short, Bootle; Dr. Sergeant, Co. Lancaster; Dr. Dearden, Manchester; Dr. Barras, Govan; Dr. Bagnell, Salford; Dr. Coutts, Blackpool; Dr. Williams and Sir Henry Littlejohn, Edinburgh, took part. Dr. Hope replied.

## 2. PORT SANITARY ADMINISTRATION.

By J. Wright Mason, M.B., D.P.H., Medical Officer of Health for Hull, and Herbert Williams, M.D., D.P.H., Medical Officer of Health for the Port of London.

In the course of this paper it was advocated that there should be a close inspection of the food supply, and water supply on board vessels, and that the powers at present vested in the Board of Trade for the Inspection of the food should be transferred to the Port Sanitary Authorities.

This led to an interesting discussion, Dr. Dearden, Medical Officer of Health for the Port Sanitary Authority, making some useful and practical observations.

## 3. THE NECESSITY FOR THE PLACING OF PREMISES WHERE FOOD IS PREPARED AND COOKED UNDER SIMILAR REGULATIONS TO THOSE AFFECTING BAKEHOUSES.

By W. N. Barlow, M.R.C.S., Eng., &c., D.P.H., Medical Officer of Health for Bootle.

## 4. SOPHISTICATION OF FOODS.

By F. J. H. Coutts, M.D., D.P.H., Medical Officer of Health for Blackpool.

Both these papers gave rise to a lengthy discussion,



many speakers believing that we had at present sufficient powers to carry out the objects, but in the end the following resolution was unanimously adopted:—

“That in the opinion of this Congress it is very necessary that all places where food is prepared for human consumption should be compulsorily registerable, and placed under regulations on the same lines as those applied to bakehouses.”

## 5. THE TEACHING OF HYGIENE.

By Alfred Greenwood, M.D., Vict., D.P.H., Medical Officer of Health, Blackburn.

The author pointed out that the attainment of learning some elementary truths as to the formation and duties of the various parts of their own bodies and simple laws of health, and sanitation generally, was most important to children; and it reacted in a favourable manner upon the mental development of the child, and that involved interest of every educationalist. After giving instances of schools in which hygiene was effectually taught, and after dealing at length with the methods which to his mind should be adopted with a view to imparting to school children a knowledge of this important subject, Dr. Greenwood said the teachers of children should be put through a course of hygiene themselves.

Dr. Berry, M.O.H., Wigan, opened the discussion, giving his experience as to the teaching of hygiene to pupil teachers, and stated that hygiene would do well to take the place of one of the many subjects which pupil teachers had to take, for instance instead of botany, which was often learned to be forgotten. With regard to children in the schools it should be for those of a sufficient age and in the higher standards, and the pupil teachers were those to teach it.

The President (Dr. Donovan), Dr. S. G. Moore (Huddersfield), Dr. Barlow (Bootle), the Mayor of Birkenhead (Mr. Councillor Lewis), Dr. Dearden (Manchester), Dr. Sergeant (Lancashire), Dr. Snell (Coventry), and Alderman Walker (Maidenhead) took part in the discussion.

Dr. Greenwood replied.

## 6. DISCUSSION.

Opened by S. G. Moore, M.D., Viet., D.P.H., Medical Officer of Health, Huddersfield: "On the need for Comprehensive and Systematic Efforts to reduce Infant Mortality."

He pointed out that 120,000 infants over and above what might be recorded, were lost to England every year, which meant that 120,000 infants would be saved if proper precautions were taken.

What he considered necessary was to enlist the attention and appeal to the imagination of the half-dozen men who govern the country. He accordingly moved a resolution in favour of means being taken by the Central Government for comprehensive and systematic efforts against infant mortality.

The Mayor of Birkenhead, Dr. Sergeant (Lancashire), Alderman Purcell (Liverpool), Dr. Dearden (Manchester), Mr. Askew (Hull), Dr. Coutts (Blackpool), Dr. O'Meara (Skibbereen), Professor Hope (Liverpool), and others continued the discussion.

Dr. Moore replied.

A resolution was adopted in favour of means being taken by the Central Government for Comprehensive and Systematic efforts against infant mortality, and that the time was opportune for the appointment of a Minister of Public Health.

Dr. Sambon, Director of the Department of Parasitology in the Royal Institute of Public Health, delivered an address on "The Role played by Animals in the Causation of Disease." The address was illustrated by beautifully coloured diagrams and microscopical specimens.



## SECTION 2.

***Child Study and School Hygiene.****President :*

The Rev. F. A. Finlay, S.J.M.A., Fellow of the Royal University, Ireland, and Commissioner of National Education, Ireland.

The President, in the course of his presidential address, dealt with the general theme of hygiene and the school—that is to say both as to practical effects as applied to school life and methods, and also the value of hygiene teaching as a factor in general education. It is, he said, now generally recognised in these days that the aim of educational systems should be not merely to impart knowledge to the young, but primarily, to train them in the ways of right living. Bodily health was the first necessity of right living, and was, therefore, a subject which was essential in a curriculum of education, as education is now understood. He then alluded to the condition of affairs in Ireland, and to the want of a sufficient general education, so as to enable those taught to appreciate the higher education which was offered them.

## I. SOME DEFECTS IN OUR PRIMARY SCHOOLS.

By Father O'Brien, C.C., Douglas.

He stated that, in his opinion, children were sent to school at too early an age. Keeping infants in a school room for three or four hours, terrorised into silence, was little less than cruelty. It might be urged that sometimes mothers did send their children to school in order to be free to work to support them; but his experience was that the earnings of the mother did not add one iota of additional efficacy to the maintenance of the household. More money came in, but more was expended in extravagance.

Providence has destined the mother not to work, but for the ruling of her home in godliness and cleanliness, and for the rearing of her children.

After speaking of the little time allowed for children's meals, he spoke of a mid-day meal being provided at school, said it would always have the taint of pauperism, it would be too expensive, and would be shirking a parental responsibility.

He said also the want of a Medical Inspector was a most serious defect, as he would have the school in a proper sanitary condition, and stamp out these epidemics which were generally spread through schools. He would see to the wants of the children individually and see they did not suffer from defective vision, toothaches or earaches. This was the most universal custom on the Continent, and satisfactory results always followed

The following papers were also discussed:—

2. THE TEETH OF SCHOOL CHILDREN.

By Herbert O'Keefe, L.D.S.

3. SCHOOL WORK IN RELATION TO BODILY HEALTH.

By George Fletcher, M.A., F.R.G.S., Assistant Secretary to the Department of Agricultural and Technical Instruction in Ireland.

4. THE CAUSES AND EFFECTS OF OVER-PRESSURE IN SCHOOLS.

By J. D. Lyman, M.A., Inspector of Schools in Ireland.

SECTION 3.

***Engineering and Architecture.***

*President:* Joseph Holloway, Esq, M.R.I.A.I., President of Architectural Association of Ireland.

The following are the titles of some of the papers read and discussed:—

1. THE ROYAL COMMISSION ON SEWAGE DISPOSAL.  
REPORTS ON LAND TREATMENT.

By Herbert T. Scoble, F.A.S.I.



2. MICROBES AND MUD.—THE BACTERIOLOGICAL ASPECT  
OF THE SLUDGE PROBLEM.

By John P. Lord, Bacteriologist to the Malden and  
Coombe Urban District Council.

3. THE PROVISION FOR STORM WATER IN SEWAGE WORKS.

By George B. Latham, A.M.Inst., C.E.

SECTION 4.

***Bacteriology and Chemistry.***

*President:*

Arthur Ed. Moore, Esq., M.B., Lecturer on Bacteriology,  
Queen's College, Cork.

Papers read and discussed were many. I have  
selected the title of the following few :—

1. DAIRY HYGIENE.

By Sir Charles A. Cameron, C.B., M.D., &c., Medical  
Officer of Health, Dublin.

2. NOTE ON A CASE OF TUBERCULOSIS MILK.

By Thomas Farrington, M.A.

3. WATER ANALYSIS.

By Major R. Jackson, M.B., R.A.M.C.

SECTION 5.

***Veterinary Hygiene.***

*President:* E. Wallis Hoare, Esq., F.R.C.V.S.

After the presidential address the following were a few  
of the interesting papers read and discussed :—

1. DISEASES OF THE UDDER AND THE MILK SUPPLY.

By Professor A. E. Mettam, B.Sc., M.R.C.V.S.

2. DAIRY INSPECTION IN IRELAND.

By P. J. Howard, M.R.C.V.S.

## 3. ANTHRAX.

By William Cargill Patrick, F.R.C.V.S., Mullingar.

At the close of the meeting in the veterinary section the following resolutions were unanimously passed, indicating the feeling of the Congress :—

1. " That local sanitary authorities be urged to abolish all private slaughter-houses, and to establish public abattoirs, where animals intended for the food of man may be examined prior to and after slaughter by a qualified veterinary officer."

2. " That in the opinion of this Congress, cows kept for the public supply of milk both in town and country should be regularly inspected by a qualified veterinary surgeon appointed for the duty, and that all owners should be compelled to notify the existence of any disease of the udder to the Medical Officer of Health, as well as any cases of illness among the workers in the dairy and members of the family coming in contact with the milk ; and further, that powers should be obtained to enforce the destruction of all cows suffering from Tuberculosis of the udder."

WM. BERRY,

Medical Officer of Health.

Health Office,

Wigan,

July, 1906.

To the Chairman and Members of the Health Committee.  
Gentlemen,

As one of your delegates I attended, with the Medical Officer of Health (Dr. Berry), the Congress of the Royal Institute of Public Health, held in the Queen's College, Cork, and I have great pleasure in handing you my report on the proceedings, which lasted from the 27th June to the 3rd of July.



The President of the Congress, Professor Windle, M.D., &c., the Principal of the College, supported the High Sheriff, who welcomed the delegates, after which Professor Smith thanked the Corporation of the City of Cork for their invitation, and also spoke about the fearful death-rate from Consumption in Ireland, and the means taken to combat its dire effects in England. His address was an admirable one, and elicited great applause:

Professor Windle, who is one of the greatest authorities on Anatomy, then delivered his Presidential address, dwelling on the fact that if any country ought to be filled with strong men and women, healthy, happy, and prosperous, it is Ireland, but that they were very far indeed from being what they should be; he quoted figures showing the ravages made by Phthisis in the past, and how it is even now on the increase, and spoke of the finest specimens of their manhood and womanhood emigrating, leaving behind a large proportion of the least profitable of the population, viz.:—the oldest and least healthy. Any person who watches the trains loaded with emigrants from all parts of Ireland to Queenstown, will see how the land is being drained of her young and healthy peasantry. The President finished his remarks by saying Congresses of this sort were heartily welcomed, because they gave opportunities of stirring up public opinion on points which are of vital interest to the public welfare.

A very cordial vote of thanks was passed to the Professor for his very able address, on the motion of Alderman Dale (Cork), supported by the Mayor of Folkestone, Mayor of Birkenhead, Sir Henry Littlejohn, &c.

I attended the different sections on the Thursday and following days, and listened very intently to the remarks of the President of the Preventive Medicine section (Dr. Donovan, Medical Officer of Health, Cork), who delivered a stirring address mainly dealing with the water supply of Cork, and the efforts that have been



put forth to stamp out Typhus Fever, which had been prevalent in Cork, consequent in the great deal of overcrowding which had existed for years.

Mr. J. Kelly, M.R.C.V.S., Dublin, read a paper on "The effects of the presence of large numbers of animals in a city upon the public health." He strongly condemned the wretched conditions under which (too frequently) cattle and horses were housed in our towns and cities, and the intolerable nuisance caused thereby, and said that much improvement in this condition of things could not be expected, until legislation was provided, to prevent the owners of property seizing the fruits of a tenant's toil, and increasing the rent as a result of the tenant's improvements. He then dealt with the methods to be adopted for the prevention of the various diseases, which are transmitted from animals to man, and urged the necessity for increased vigilance on the part of local authorities, and far more wide-spread interest on the part of the general public in such questions.

Mr. P. J. Howard, M.R.C.V.S., delivered a capital address on "Dairy Inspection in Ireland," showing how essential it was for proper inspection of dairies if we were to have a pure milk supply, to see the cows were healthy, properly watered and fed, and that proper light and ventilation was provided. He said inspection in Ireland was conspicuous by its almost entire absence. In conjunction with this paper one by Professor Matten was read on "Diseases of the Udder," and interesting discussions in which I had the honour of taking part followed.

Mr. Keith, County Sanitary Inspector of Clackmannanshire, read a paper in the Preventive Medicine Section, on the workings of the Food and Drugs Act, in the course of which he described the manner in which the adulteration of butter was carried out:—Firstly, certain substances were added in excess which were natural to butter in small quantities; secondly, substances were introduced for the purposes of gain which were not found in butter. Leading experts were at one in suggesting that some sort of action should be taken



in prohibiting the manipulation and watering of butter to the extent allowed at present. Milk blended butter which had been put upon the market and greatly advertised to the detriment of firkin butter, was sold as enriched butter, but the principal enrichment was water.

After entering into technical details, Mr. Keith stated that the time had arrived when the Congress should petition for new amendments, or better still, a new Food and Drugs Act.

Many of the papers and discussions in the Veterinary Sections were extremely interesting, notably one on "Anthrax," by Mr. Cargill Patrick; and "Meat Inspection in Dublin," with suggestions as to improvement, by Mr. Warson, M.R.C.V.S., Veterinary Inspector to the Dublin Corporation. At the close of the meeting the following resolutions were unanimously passed:—

(1) "That Local Sanitary Authorities be urged to abolish all private slaughter-houses, and to establish public abattoirs, where animals intended for the food of man may be examined prior and after slaughter by a qualified veterinary surgeon.

(2) That in the opinion of this Congress cows kept for the public supply of milk, both in town and country, should be regularly inspected by a qualified veterinary surgeon appointed for the duty, and that all owners should be compelled to notify the existence of any disease of the udder, as well as to the Medical Officer of Health, any cases of illness among the workers in the dairy and members of the family coming into contact with the milk, and further, that powers should be obtained to enforce the destruction of all cows suffering from Tuberculosis of the udder.

These resolutions I had pleasure in supporting, knowing the feeling which exists in the subject in the minds of many of our own townsmen.

In the Engineering Section I listened for some time to a paper on "Refuse Disposal in 1906," by Councillor Goldrich, of Watford, which proved very instructive

and interesting. In it he dealt at length with the rapid strides and improvements that had taken place within the last thirty years, with the final and sanitary disposal of towns' refuse.

On Dr. Greenwood's (Blackburn) paper, "A Few Notes on the Teaching of Hygiene," our Medical Officer (Dr. Berry) took part in the discussion, and warmly advocated the teaching of Hygiene in our elementary schools.

In conclusion, Gentlemen, I thank you most sincerely for appointing me as one of your delegates, and I trust that the information which I have derived by attending the different sections will be a benefit to the town, in some little way. Many things I learned, I am pleased to say, and you may rest assured I will do my utmost to use what I have learned to the best of my ability.

I remain,

Your obedient Servant,

J. SUMNER,

Chief Sanitary Inspector.









