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THE
ANNUAL REPORT

ON THE
Work of the Health Department,
OF THE
COUNTY BOROUGH OF WIGAN,

For the Year ending December 31st, 1912,

INCLUDING

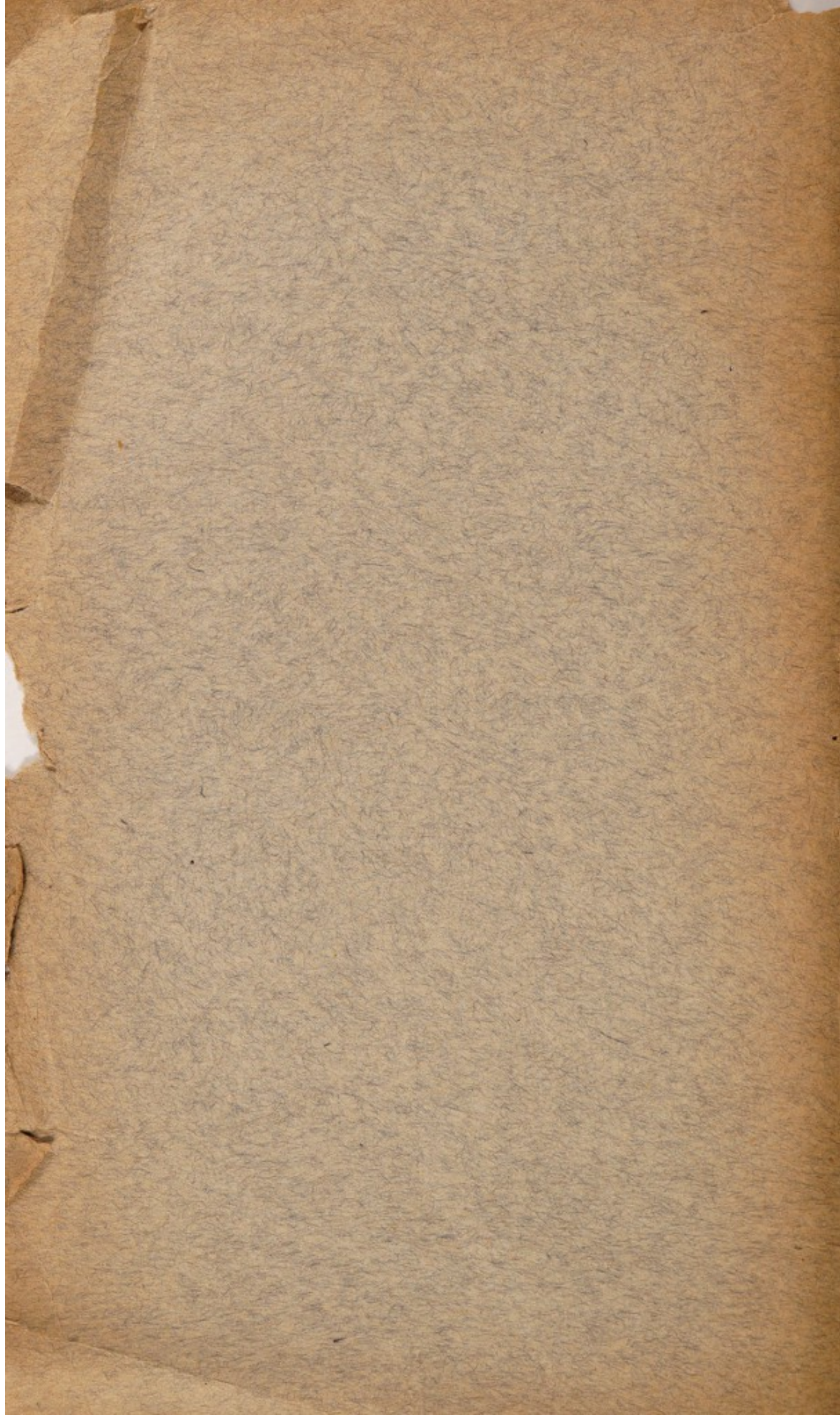
The Report of the Medical Inspection
of Children in the Elementary Schools,

AND

THE REPORT OF THE CHIEF SANITARY
INSPECTOR.


WIGAN :

STROWGER & SON, PRINTERS, CLARENCE PRESS, WALLGATE.
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HEALTH COMMITTEE.

From November, 1912, to November, 1913.

CHAIRMAN :

ALDERMAN J. PHILLIPS, J.P.

VICE-CHAIRMAN :

COUNCILLOR H. BARTON.

THE MAYOR.

THE EX-MAYOR.

COUNCILLOR W. H. ANGUS.

„ J. F. A. BENNETT.

„ M. BENSON, M.D., J.P.

„ J. BRADSHAW.

„ J. COUNSELL.

„ J. P. HEYES.

„ W. HIGHTON.

„ W. HOLLAND.

„ A. E. MATHER.

„ J. O'DONAHUE, J.P.

„ E. YATES.

Committee meets on the 3rd Thursday in each month, at 3-30 p.m.

SANITARY WORKS COMMITTEE.

From November, 1912, to November, 1913.

CHAIRMAN :

ALDERMAN J. PAXTON.

VICE-CHAIRMAN :

COUNCILLOR J. P. HEYES.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN L. BOOTH, J.P.

„ J. PHILLIPS, J.P.

COUNCILLOR J. BLACKLEDGE.

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„ J. I. CARTWRIGHT.

„ J. FAIRHURST.

„ J. R. HOLLAND.

„ J. R. KING.

„ T. MASON.

„ J. WALKDEN.

„ W. WATMOUGH.

Committee meets on the 4th Monday in each month, at 3-45 p.m.

SANATORIA SUB-COMMITTEE.

From November, 1912, to November, 1913.

CHAIRMAN :

COUNCILLOR H. BARTON.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN J. PHILLIPS, J.P.

COUNCILLOR W. H. ANGUS.

„ J. BRADSHAW.

„ M. BENSON, M.D., J.P.

„ J. O'DONAHUE, J.P.

„ J. P. HEYES.

„ W. HIGHTON.

„ A. E. MATHER.

Committee meets the Wednesday before the 3rd Thursday in each
month, at 11 a.m., at the Hospital.

INSANITARY HOUSES COMMITTEE.

From November, 1912, to November, 1913.

CHAIRMAN :

ALDERMAN A. BYWATER, J.P.

VICE-CHAIRMAN :

COUNCILLOR WM. HIGHTON.

THE MAYOR.

THE EX-MAYOR.

ALDERMAN R. BRITTON.

COUNCILLOR W. BANKHEAD.

„ A. E. BAUCHER.

„ J. F. A. BENNETT.

„ J. BOTT.

„ G. ELLISON.

„ F. J. PAGETT.

„ R. RATCLIFFE.

„ W. SHAW.

„ A. A. WATTS.

„ E. YATES.

Committee meets when required.

**MEDICAL OFFICER OF HEALTH'S
DEPARTMENT, 1912.**

Medical Officer of Health,
Medical Superintendent of Sanatoria,
Superintendent School Medical Officer :
FRED E. WYNNE, B.A., M.B., Ch.B., D.P.H., &c.

Assistant School Medical Officer :
CECIL BERRY, L.R.C.P. AND S.ED., &c., D.P.H.

Chief Sanitary Inspector, &c. :
CHARLES H. FRANCE, Certif. Royal San. Inst., Assoc. Royal
San. Inst., Member San. Insp. Association.

Assistant Sanitary Inspectors :
FRED MARTLEW, Certif. Royal San. Inst., Certif. Meat Insp.
FRED G. BISHOP.
JOHN ASHTON, Certif. Royal San. Inst.

Assistants :
ERNEST RICHARDSON.
JAMES RISLEY.

Lady Health Visitor :
Mrs. HALL, Certif. Royal San. Inst., Certif. C.M.B.

Clerk :
ARTHUR BYERS.

Disinfectors :
GEORGE CROSTON.
HENRY PARKINSON.
JOHN ARROWSMITH.

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 on 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.”

PUBLIC HEALTH OFFICE,

WIGAN, March 28th, 1913.

*To the Chairman and Members of the Health Committee of the County
Borough of Wigan.*

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit my Annual Report on the Health and Sanitary Conditions of your County Borough during the year 1912.

The Vital Statistics published herewith show a state of affairs which on the whole compare favourably with those of other similar centres of population, but in several respects the Borough is handicapped from a sanitary point of view, and its financial position is such that many obvious reforms have perforce to be postponed. Your officials are accordingly compelled to realise that economy in administration is at present indirectly a measure of sanitary reform, looking forward to a future when our savings may justly be expended to obtain those advantages which will result in a further saving of human life, and an economic gain which will be no less real because indirect.

The administration of the Health Department during the year under review has been seriously dislocated by changes in the staff. After a brief period of eminent usefulness, my predecessor, Dr. Hutchinson, resigned his position on his appointment to the Local Government Board. Within a few months of my taking up my present duties, the lamented death of your late Chief Sanitary Inspector occurred, and the department thus lost the services of one of the best and most experienced sanitary officials in the country, and one on whose assistance and advice I was to a great extent dependent. This was immediately followed by the resignation of your late Health Visitor, Miss Alldritt, on her appointment to a similar post under the Metropolitan Borough of Poplar. This portion of our work was further interfered with by the illness of your late Health Visitor, Mrs. Hall, who rendered admirable service as long as she was able to work, and whose resignation was a matter of regret to all with whom she came in contact.

With a reduced and altered staff we have had to cope with the extra work involved in a more stringent administration of the Housing and Town Planning Act, 1909, with the administration of the Shops Act, the new Tuberculosis Regulations, and various Orders and Regulations of Government Departments, as well as the very heavy work involved in the administration of Sanatorium Benefit under the National Insurance Act.

I wish to take this opportunity of thanking the Chairman and Members of the Health Committee, and of the Sanatorium Sub-Committee; the Chairman and Members of the Insanitary Houses Committee, of the Education Committee; and the Mayor and Members of the Corporation, for their unfailing support and encouragement in my work.

I must also express my gratitude to your Town Clerk for his able advice, his energetic co-operation in the affairs of my department, and his much-tried patience and kindness. Your late Medical Officer, Dr. Hutchinson, has greatly assisted me with his advice and assistance during the year. I have also to thank my colleague, Dr. Cecil Berry; the Director of Education, your late Borough Engineer, Mr. Bolton, your Veterinary Officer, Mr. Woods, and the Borough Analyst, Mr. Melling, for their loyal and cordial co-operation and help in the various departments of our work.

Your Chief Sanitary Inspector, Mr. France, and his staff have done most admirable work during a very trying period; and to them is mainly due the fact that the work of the department has been carried on in complete harmony, and I believe, with a high standard of efficiency.

I am,

Mr. Chairman and Gentlemen,

Your obedient Servant,

FRED E. WYNNE,

Medical Officer of Health.

PART I.

INTRODUCTION

AND

VITAL STATISTICS.

General Considerations.

The County Borough of Wigan, including Pemberton, covers an area of 5,082 acres, and had a population at the 1911 census of 89,171. The estimated population on the 1st of July, 1912, was 90,504, on which figure the statistics in this report have been based. This population is essentially an industrial one, and is concentrated in densely populated areas in Wigan and Pemberton. A considerable portion of the area of the Borough is rural and agricultural, but the proportion of the population living under these conditions is inconsiderable. The presence of this agricultural community is none the less of great importance from the public health point of view, inasmuch as it supplies a large proportion of the milk consumed in the town; and the existence of farming operations in close proximity to densely populated areas is always fraught with a certain degree of danger.

The Borough area forms a considerable part of the Valley of the Douglas. This stream enters the Borough close to its most northern point, and practically traverses the old Borough from north to south, when it turns to the west and then bends northwards forming a loop. During its course through the Borough the stream falls considerably, the bench marks showing that its bed at entry is at a level of 150 feet above sea level, and near its exit 75 feet. It acts as a feeder to the Leeds and Liverpool canal—another waterway traversing the Borough, roughly, from east to west. The Douglas is already polluted on entering the Borough, and further sources of pollution within our area still persist. The periodical cleansing of its bed is a constant source of expenditure to the Sanitary Works Committee; and complaints of nuisance have in the past been dealt with by the application of large quantities of chloride of lime—an expenditure which it would be difficult to justify by results. Practically throughout its course the Borough rises steeply from the banks of the stream; the maximum elevation being 214 feet at Whelley, and 254 feet at the northern extremity of the Borough. The lowest level is in St. Andrew's Ward, near the Leeds and Liverpool canal, where the land is liable to floods.

Geologically, the whole of the Borough rests on the Lower Coal-measures or Gannister Beds, which are here very superficial, and in fact outcrop in several parts of the district. The sub-soil is

mainly clay, which in places has a depth of nearly 20 feet ; but there is an important layer of sand covering a large part of the centre of the town, and extending northwards in the direction of Standish. In other parts of the Borough sand is found in "pockets." Much of the western portion of the Borough, beyond the Park, lies on a fairly extensive gravel bed.

Great alterations in the levels have taken place as a result of subsidence due to the colliery workings, and this is detrimental to the public welfare by causing accumulations of water in parts of the Borough and interfering seriously with the level of the sewers.

Water Supply.

The Borough is supplied with water from the Arley, Worthington, Adlington, and Whitley reservoirs, and a service reservoir having a total capacity of 255 million gallons. There is also a well at Wrightington which provides an occasional supply of water of very fine quality derived from the sandstone overlying the coal measures.

The Pemberton water supply is stored in three service reservoirs at Orrell, and an underground reservoir near Bispham Hall, Billinge. These reservoirs are largely replenished by pumping from Nicholson's well, which supplies a large quantity of very pure water. An adjuvant supply was derived by pumping from the Bispham Hall Colliery, but this was recently found by the Borough Analyst and myself to be unsatisfactory, and has been diverted to compensation purposes.

In addition to these supplies, the Corporation takes annually about 182 million gallons of Thirlmere water from the Manchester Corporation.

The daily consumption of water amounts on an average to about 1,610,000 gallons. The gathering ground from which the greater part of this water is derived is mainly agricultural land, but careful precautions are taken to prevent organic pollution as far as possible, and the system of filtration is adequate. Samples of water taken from various parts of the Borough are analysed every month, and the results on the whole are uniformly satisfactory. Particulars will be found in the Borough Analyst's report appended.

Milk Supply.

A considerable proportion of the milk supply is derived from cows kept on farms within the Borough.

A larger amount is imported, chiefly from Lancashire, Cheshire, and North Wales ; though a certain amount comes from as far as the neighbourhood of Carlisle.

There are 44 registered cowsheds in the Borough, which are under constant inspection. Under the supervision of your Veterinary Officer, Mr. Woods, these have been, with very few exceptions, reconstructed and brought into conformity with the Cowsheds, Dairies and Milkshops Orders. Mr. Woods has effected a remarkable improvement by the exercise of constant pressure on the owners ; and the conditions under which milk is produced now compares very favourably with those prevailing in other districts.

Samples of the milk are regularly taken and analysed under the Food and Drugs Acts, and particulars of the results will be found in the report of your Chief Sanitary Inspector.

Sewage Disposal—Removal of Nightsoil, &c.

The whole of the Borough, with the exception of the purely rural areas, is sewered and drained.

The sewage is conducted by a main outfall sewer, which runs in the valley of the River Douglas, to the Sewage Works and Farm at Hoscar Moss. It is then treated by the addition of sulphate of iron and lime and conducted to long precipitation tanks, the effluent from which is distributed for land filtration on the farm. The nature of the soil, however, has proved unsuitable for this purpose, and the final effluent has been continuously unsatisfactory.

The whole of this question has been carefully considered by the Committees concerned, and is the subject of an exhaustive report by Mr. Midgley Taylor, published in the minutes of the Sanitary Works Committee for the 17th September, 1912, to which the readers of this report are referred. It is expected that the re-modelling of the Works suggested by Mr. Midgley Taylor will be commenced at

an early date. It should be noted that Mr. Midgley Taylor's estimate of the filtration area required is based on the normal increase of population, but allowance should be made for an early increase in the normal flow which will have to be dealt with as soon as the water-carriage system becomes more widely adopted.

At present there are 1,669 privy middens in the Borough, all of which, with the exception of 8, are in Pemberton. The conversion of these to the water-carriage system is one of the most urgently required sanitary reforms of the district. Particulars of the number of conversions carried out in recent years will be found below. The slow rate at which this work has been done in the past is mainly owing to financial considerations and the inadequacy of the Sewage Works for dealing with an increased flow.

There are 7,894 pail closets in the Borough, and 6,900 water closets. While the capital cost of converting this large number would be very heavy, it would result in an actual saving to the rates, as during the year under review the cost of collecting, washing and distributing pails was £2,226 14s. 6d., and the cost of collecting midden and ashpit refuse £1,308 7s. 11d. ; while the indirect gain through the prevention of disease would be incalculable.

The contents of the pails and privy middens are at present discharged into tanks at the Miry Lane Depot, where they are mixed with sifted ashes to form a compost which is loaded into barges and conveyed by canal to farms. The material commands a good price as manure, but its storage and removal gives rise to a serious nuisance. There is a small destructor at the depot, but this can only deal with an insignificant fraction of the material handled. All dejecta from infected houses are dealt with in the destructor ; but the whole system is antiquated and unsatisfactory.

The housing conditions of many parts of the Borough are very unsatisfactory, being an unfortunate legacy from the past. As will be seen from Part III. of this report, the Insanitary Houses Committee has been very active during the year and a large number of insanitary dwellings has been dealt with under the Housing and Town Planning Act of 1909. Many of these have been back-to-back houses which have been converted into single tenements and other-

wise rendered habitable. But a difficulty arises in many cases owing to the displacement of tenants who find a difficulty in obtaining other houses at a rent they can afford. The question of providing suitable accommodation for such people is one that will have to engage the serious attention of the Council at an early date.

Particulars relating to the inspection of meat and slaughter-houses, and other details of sanitary administration, will be found in Part III. of this report.



REPORT.

STATISTICAL SUMMARY FOR 1912.

	1912.	1911.
Population estimated July 1st, 1912	90,504	89,631
<i>Marriages</i> are not ascertained for the County Borough.		
„ Annual rate per 1,000 of population ditto.		
<i>Births</i> Males 1290 Total	2,588	2,425
Females 1298		
Annual rate of births per 1,000 of population	28·59	27·05
Ditto for England and Wales	23·8	24·4
Illegitimate births 112, or 1·23 per 1,000 of population a percentage of	4·32	5·1
<i>Deaths</i> Males 755 Total	1,441	1,638
Females 686		
Recorded death-rate	15·92	18·27
Corrected death-rate	17·74	...
Ditto in England and Wales	13·3	14·6
Death-rate in 95 great towns	13·8	...
Excess of registered births over deaths.....	1,147	787
Total deaths from Zymotic Diseases	124	351
Annual rate of mortality from Zymotic Diseases	1·36	3·91
Ditto in England and Wales	·83	1·87
Total deaths from Diarrhœa	39	203
Annual rate of mortality from Diarrhœa.....	·42	2·26
Infantile rate (deaths per 1,000 births), 1912...	125	193
Ditto for England and Wales	95	130
Ditto for 95 great towns	101	...
Deaths of infants under one day old, number	55	41
„ „ „ 1 year (legitimate	305	...
„ „ „ 1 year (illegitimate)...	19	...

Acreage.—With an acreage of 5,082, and a population estimated at 90,504, we have 17·80 persons per acre.

Population.—The population estimated at the middle of the year (June 30th, 1912) is 90,504, 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 1912 is 2,588 (males 1,290, females 1,298), the rate per 1,000 of the population being 28·59. The birth-rate, compared with 1911 is 1·54 higher. The illegitimate births number 112, or 4·3%.

The Mortality Rate.—The deaths for 1912 number 1,441 (males 755, females 686), being an excess of 69 males over females. The recorded rate per 1,000 of the population per annum is 15·92; in 1911, 18·27; thus on a population of 90,504 we have a decrease in deaths of 198 as compared with 1911. There is therefore a decrease in the death-rate of 2·36 per 1,000.

The death-rate for each quarter is as follows:—

1912.	All Causes.	Zymotics.
1st Quarter	17·78	·57
2nd Quarter	16·20	1·32
3rd Quarter	14·86	1·59
4th Quarter	14·99	1·84

The Zymotic-rate, 1·36, shows a decrease of 2·57 for 1912; in the previous year it was 3·91.

The Vital Statistics for England and Wales during 1912.

ENGLAND & WALES.

	1912.	1911.
Birth-rate per 1,000 living	23·8	24·4
Death-rate per 1,000 living	13·3	14·6
Seven Epidemic Diseases per 1,000 living.....	·83	1·87
Infant Mortality per 1,000 Births.....	95	130

TABLE I.

WEEKLY RETURN OF BIRTHS AND DEATHS FOR 1912.

1912 WEEK ENDING.	Deaths from all Causes.	Annual Rate per 1000.	Deaths from Zymotics	Zymotic Rate	Births.	Annual Rate per 1000.
January 6.....	29	16·85	3	1·74	54	31·37
„ 13.....	18	10·45	...	...	50	29·03
„ 20.....	31	18·00	...	...	39	22·64
„ 27.....	28	16·25	2	1·16	63	36·56
February 3.....	29	16·89	1	·58	48	27·87
„ 10.....	42	24·37	1	·58	50	29·01
„ 17.....	31	17·97	...	...	71	41·15
„ 24.....	32	18·55	1	·57	65	37·68
March 2.....	28	16·02	...	...	52	30·14
„ 9.....	22	12·74	...	...	60	34·82
„ 16.....	23	13·31	...	...	64	37·05
„ 23.....	25	14·47	2	1·15	51	29·53
„ 30.....	23	13·31	3	1·74	60	34·72
April 6.....	23	13·31	1	·57	44	25·46
„ 13.....	22	12·72	1	·57	76	43·95
„ 20.....	23	13·29	4	2·31	43	24·85
„ 27.....	31	17·91	2	1·15	38	21·96
May 4.....	35	20·23	2	1·15	55	31·79
„ 11.....	28	16·17	1	·57	57	32·92
„ 18.....	27	15·65	2	1·15	42	24·26
„ 25.....	29	16·75	4	2·31	55	31·78
June 1.....	20	11·54	3	1·73	45	25·98
„ 8.....	23	13·27	3	1·73	63	36·35
„ 15.....	24	13·84	2	1·15	42	24·23
„ 22.....	18	10·38	2	1·15	51	29·41
„ 29.....	24	13·84	3	1·73	46	26·52
July 6.....	23	13·26	...	...	34	19·60
„ 13.....	23	13·25	3	1·72	51	29·39
„ 20.....	27	15·56	1	·57	44	25·35
„ 27.....	22	12·67	6	3·45	57	32·83
August 3.....	17	9·79	2	1·15	28	16·12
„ 10.....	21	12·08	4	2·30	43	24·75
„ 17.....	30	17·27	2	1·15	53	30·51
„ 24.....	29	16·68	5	2·87	56	32·23
„ 31.....	19	10·92	4	2·31	41	23·59
Sept'ber 7.....	26	14·95	5	2·87	31	17·84
„ 14.....	25	14·37	1	·57	59	33·92
„ 21.....	21	12·07	1	·57	38	21·85
„ 28.....	25	14·37	2	1·15	47	27·02
October 5.....	19	10·91	2	1·14	34	19·54
„ 12.....	21	12·07	...	...	63	36·20
„ 19.....	24	13·78	5	2·87	45	25·84
„ 26.....	18	10·33	...	...	56	32·16
Nov'ber 2.....	22	12·62	3	1·72	45	25·83
„ 9.....	23	13·20	2	1·14	45	25·83
„ 16.....	19	10·90	3	1·72	45	25·81
„ 23.....	22	12·62	3	1·72	49	28·11
„ 30.....	18	10·32	1	·57	37	21·21
Dec'ber 7.....	28	16·03	6	3·43	47	26·91
„ 14.....	30	17·18	5	2·86	49	28·06
„ 21.....	32	18·32	7	4·00	46	26·34
„ 28.....	29	16·60	5	2·86	37	21·19
Transferable, 1912.....	140	...	1	...	24 more	

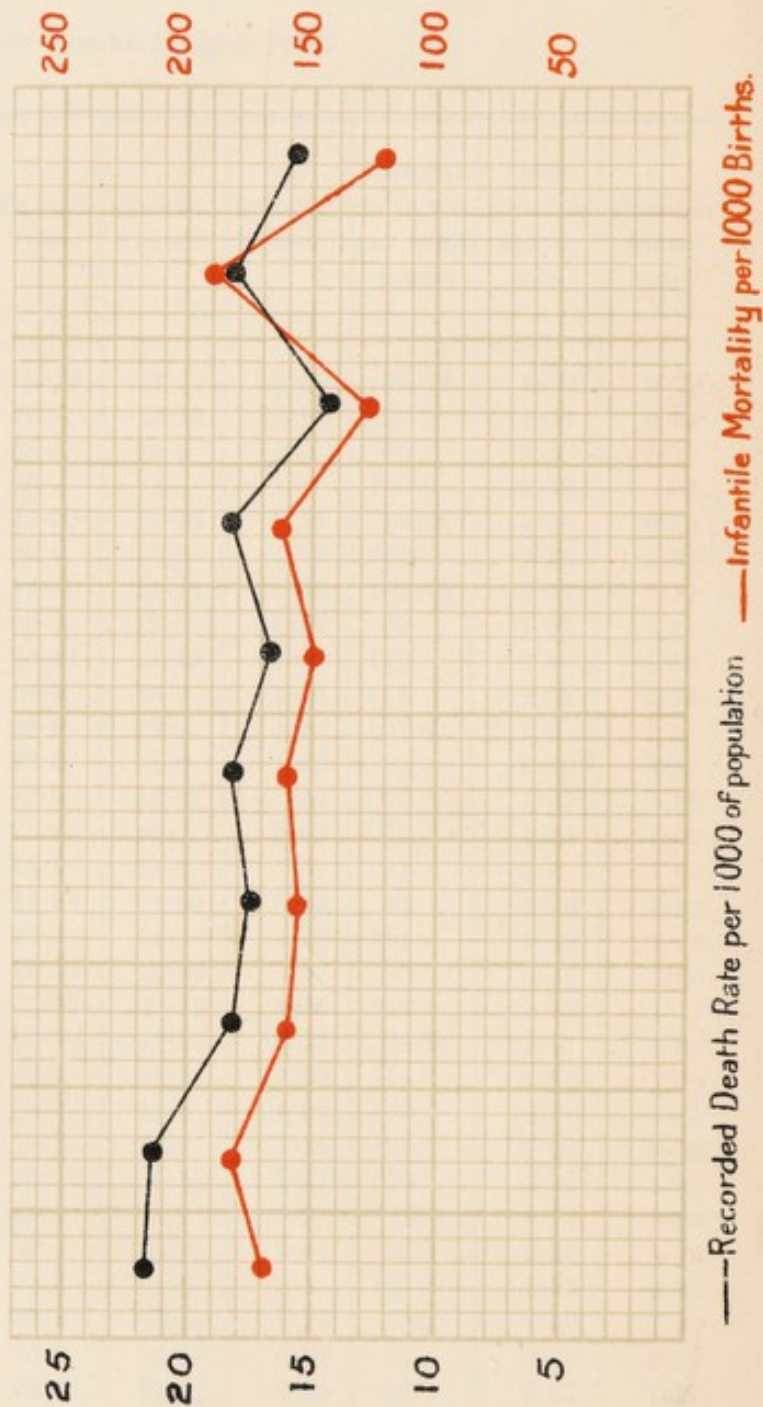
TABLE III.

TABLE SHOWING COMPARATIVE STATISTICS BETWEEN WIGAN AND
OTHER TOWNS DURING 1912.

TOWN.	Population	Birth- rate.	Death- rate.	Zymotic rate.	Infantile de'th-r'te per 1,000 births.	Res- piratory death- rate.	Phthisis death- rate.
Accrington	45,175	18.75	11.77	0.35	76.74	0.72	0.79
Bath	69,598	16.7	12.13	0.65	76	2.11	0.89
Birkenhead.....	133,521	28.4	14.5	1.4	96	3.1	1.1
Blackburn	133,539	20.4	14.4	1.0	119.2	3.10	.81
Blackpool	62,125	15.50	12.14	0.31	88.26	1.74	0.79
Bootle	71,150	29.9	16.6	1.79	108	3.37	1.61
Bradford	289,618	19.29	14.17	0.82	100.43	2.32	1.17
Burton-on-Tr't	48,000	22.1	12.6	0.41	69	1.93	1.37
Bury	59,106	20.81	14.18	0.86	112	2.47	1.30
Cardiff	184,633	24.9	13.9	1.96	110	2.34	1.32
Carlisle	52,237	21.9	14.9	1.5	104.4	2.3	1.2
Crewe	45,342	22.5	12.6	1.49	82	2.02	0.83
Derby	124,544	23.4	12.21	.46	79	1.97	.86
East Ham	138,450	25.6	10.7	0.93	72	1.91	1.09
Halifax	101,500	18.0	14.7	.6	81	2.4	1.0
Huddersfield ...	109,512	18.84	13.80	0.83	97	2.23	0.82
Hull	282,988	27.7	14.4	1.08	101	0.14	1.05
Lancaster	38,513	22.14	12.90	.67	95	2.46	1.06
Leigh	44,600	27.73	15.13	1.36	134	4.10	1.11
Maidstone	35,734	18.72	12.31	0.47	76.2	1.6	1.0
Rochdale	92,530	20.3	15.0	1.05	111	2.76	1.10
South Shields...	109,678	30.6	15.9	1.37	106	2.98	1.53
St. Helens	98,159	31.9	15.5	1.76	124	3.37	0.92
Stockport	110,781	22.75	16.31	1.44	109	3.43	1.31
Tottenham	142,015	26.6	11.2	0.7	79.5	0.14	0.99
Warrington	73,158	28.3	15.7	2.07	92	2.39	1.12
West Bromwich	68,750	28.9	14.6	1.1	122.5	3.95	0.85
WIGAN	90,504	28.59	15.92	1.36	125	4.09	1.07
Wolverhampton	95,472	25.9	13.5	0.88	87	2.79	0.79
York	82,863	22.9	13.8	0.85	97	2.27	1.11

*DIAGRAM SHEWING ORDINARY & INFANTILE MORTALITY DURING
THE TEN YEARS 1910 to 1912.*

1903 1904 1905 1906 1907 1908 1909 1910 1911 1912



DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1903.....	21·69	Average for 10 years, 18·08.
1904.....	21·49	
1905.....	18·07	
1906.....	17·61	
1907.....	18·03	
1908.....	16·97	
1909.....	18·28	
1910.....	14·55	
1911.....	18·27	
1912.....	15·92	

Infantile Mortality.—The number of deaths of children under one year is 324, or 125 per 1,000 births, and of children over one year and under five years 166, or 1·83 per 1,000 of the population.

In regard to this Infant Mortality there were 55 deaths in children who did not live more than 24 hours, and if we deduct these there would only be 269 deaths, or 103 per 1,000 births; with a large birth-rate we necessarily have a larger proportion of premature births.

The following Diagram illustrates the fluctuations in the Ordinary and Infantile Death-rates during the past 10 years.

Senile Mortality.—The number of deaths of persons of 60 years of age and over is 363, or 4·01 per 1,000 of population.

No. OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1912.

Ward.	Census Pop'l'tion	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.	Rate.
1	4,905	10	9	12	21	52	10·60
2	5,295	29	31	24	17	101	19·07
3	7,586	25	23	20	42	110	14·50
4	9,795	52	55	40	29	176	17·96
5	4,382	19	19	17	23	78	17·80
6	5,413	21	13	15	11	60	11·08
7	4,836	30	33	29	14	106	21·91
8	12,378	49	32	35	27	143	11·55
9	7,384	25	18	18	21	82	11·10
10	3,536	9	16	16	9	50	14·14
11	4,188	13	12	15	16	56	13·37
12	7,379	25	23	33	30	111	15·04
13	5,962	25	16	14	21	76	12·74
14	6,113	29	27	20	24	100	16·35
Transfer- able Deaths ...	...	38	38	28	36	140	...
Total ...		399	365	336	340	1,441	15·92

STATEMENT OF DEATHS OF NON-RESIDENTS OCCURRING IN WIGAN.

Deaths from :—

ns from :—

Accidents.....	19	Years.		
Cancer	3	Under	1.....	1
Heart Affections	4	1 and under	5.....	10
Other Diseases	34	5	15.....	12
Pneumonia	6	15	25.....	10
Other Tubercular Diseases	1	25	35.....	5
Enteric.....	2	35	45.....	11
Suicide	1	45	55.....	12
Phthisis	1	55	60.....	2
Diphtheria.....	1	60	65.....	4
Violent Death.....	1	Over	65.....	7
Nephritis	1			
	<hr/>			<hr/>
	74			74

CENSUS, 1911.

<i>Wards.</i>	<i>Population.</i>
St. George's	4,905
Lindsay	5,295
St. Catharine's	7,586
St. Patrick's	9,795
St. Thomas	4,382
Poolstock.....	5,413
Victoria	4,836
St. Andrew's	12,378
Swinley	7,384
All Saints'	3,536
West Pemberton	4,188
North Pemberton	7,379
Central Pemberton	5,962
South Pemberton.....	6,113
Total	<u>89,152</u>

LOCAL GOVERNMENT BOARD RETURNS.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1912 AND PREVIOUS YEARS.
Name of District—Wigan County Borough.

Year	Pop'tion estimated to middle of each year	Births			Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belonging to the District.			
		Un- corrected number	Nett		Number	Rate	of Non- residents registered in the District	of Resi- dents not registered in the District	Under 1 year of age		At all ages	
			Number	Rate					Number	Rate per 1,000 nett births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1907...	90,765	2,728	2,728	30.05	1,751	19.29	114	...	446	163	1,637	18.03
1908...	92,114	2,934	2,934	31.85	1,710	18.56	146	...	453	154	1,564	16.97
1909...	93,263	2,861	2,861	30.67	1,836	19.68	131	...	486	169	1,705	18.28
1910...	94,654	2,770	2,770	29.26	1,486	15.69	108	...	369	133	1,378	14.55
1911...	89,631	2,433	2,425	27.05	1,593	17.77	90	135	470	193	1,638	18.27
1912...	90,504	2,564	2,588	28.59	1,375	15.26	74	139	324	125	1,441	15.92

Area of District in Acres (land and inland water), 5,082.

At Census, 1911: Total population at all ages, 89,152; Number of inhabited houses, 16,979; Average number of persons per house, 5.25.

TABLE III.—CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1912. NAME OF DISTRICT—Wigan County Borough.

Cause of Death.	Net Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "residents" or "non-residents" in institutions in the district
	All ages.	Under 1 year	1 and under 2 years	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All Causes—Certified	1,440	324	88	79	72	79	205	318	275	160
Uncertified.....	...	...	...	...	...	...	...	...	...	...
Enteric Fever	12	...	...	1	2	...	7	1	1	...
Measles	30	4	11	12	3	...	...	...	...	...
Scarlet Fever	1	...	...	...	1	...	...	...	...	...
Whooping Cough	29	9	13	6	1	...	...	...	...	...
Diphtheria and Croup	10	1	2	4	2	...	1	...	...	...
Influenza	9	...	1	...	...	2	1	3	2	...
Erysipelas.....	1	...	...	...	...	...	1	...	...	...
Phthisis (Pulmonary Tuberculosis)	98	1	...	1	5	26	48	16	1	...
Tuberculous Meningitis	23	8	4	4	4	2	1	...	...	...
Other Tuberculous Diseases	38	11	5	3	3	4	7	4	1	...
Cancer, malignant disease	66	...	...	...	1	...	10	41	14	...
Rheumatic Fever	7	...	...	...	1	2	1	2	1	...
Meningitis.....	12	5	4	2	...	1	...	...	...	...
Organic Heart Disease	91	1	...	...	4	4	15	46	21	...
Bronchitis.....	171	25	2	3	1	3	9	58	70	...
Pneumonia (all forms)	194	28	23	24	16	12	36	42	13	...
Other Diseases of Resp. Organs.....	8	...	1	1	2	...	3	...	1	...
Diarrhoea and Enteritis	39	34	5	...	...	...	...	...	...	...
Appendicitis and Typhlitis	6	...	...	...	2	...	3	...	1	...
Cirrhosis of Liver	14	...	...	...	...	...	...	...	2	...
Alcoholism	4	...	...	...	...	...	...	...	1	...
Nephritis and Bright's Disease	28	...	2	...	...	...	2	1	7	...
Puerperal Fever	3	...	...	...	3	1	5	10	...	...
Other Accidents and Diseases of Pregnancy and Parturition	9	...	...	...	...	1	2	...	...	...
Congenital Debility & Malformation including Premature Birth	147	...	...	...	...	3	6	...	...	...
Violent Deaths, excluding Suicide	65	3	2	5	10	10	...	...	...	...
Suicide	8	...	...	...	...	1	5	2	...	...
Other Defined Diseases	305	42	12	13	10	7	27	64	130	...
Diseases Ill-defined or unknown.....	13	5	1	...	1	...	1	1	4	...
TOTALS	1,441	324	88	79	72	79	205	318	276	160

TABLE IV.—INFANT MORTALITY, 1912. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES
UNDER 1 YEAR OF AGE. Name of District—Wigan County Borough.

Cause of Death.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks & under 3 months	3 months & under 6 months	6 months & under 9 months	9 months & under 12 mths.	Total Deaths under 1 year
All Causes—Certified	95	8	8	10	121	37	68	48	50	324
Uncertified .....	...	...	...	...	...	...	...	...	...	...
Measles .....	...	...	...	...	...	...	...	3	1	4
Scarlet Fever .....	...	...	...	...	...	...	...	...	...	...
Whooping Cough .....	...	...	...	...	...	3	4	1	1	9
Diphtheria and Croup .....	...	...	...	...	...	...	...	...	1	1
Tuberculous Meningitis .....	...	...	...	...	...	...	...	4	4	8
Abdominal Tuberculosis .....	...	...	...	...	...	2	1	3	1	7
Other Tuberculous Diseases .....	...	...	...	...	...	...	2	...	3	5
Meningitis (not Tuberculous) .....	...	...	...	...	...	...	2	...	3	5
Convulsions .....	...	1	...	...	1	1	5	...	...	7
Laryngitis .....	...	...	...	...	...	...	...	1	...	1
Bronchitis .....	...	...	2	...	2	7	4	4	8	25
Pneumonia (all forms) .....	...	...	...	...	...	2	5	8	13	28
Diarrhoea .....	...	...	...	...	...	3	15	9	4	31
Enteritis .....	...	...	...	...	...	...	1	1	1	3
Gastritis .....	...	...	...	...	...	...	...	1	...	1
Syphilis .....	...	...	...	...	...	1	1	...	...	2
Congenital Malformations	4	1	1	...	6	...	2	...	...	8
Premature Birth	54	2	2	3	61	3	...	2	...	66
Atrophy, Debility and Marasmus	25	3	3	5	36	9	18	7	3	73
Other Causes	12	1	...	2	15	6	8	4	7	40
TOTALS	95	8	8	10	121	37	68	48	50	324

Nett Births in the year—Legitimate, 2,476; Illegitimate, 112.

Nett Deaths in the year of—Legitimate Infants, 305; Illegitimate Infants, 19.

PART II.

THE ZYMOTIC DISEASES.

CONSTITUTIONAL DISEASES.

LOCAL DISEASES.

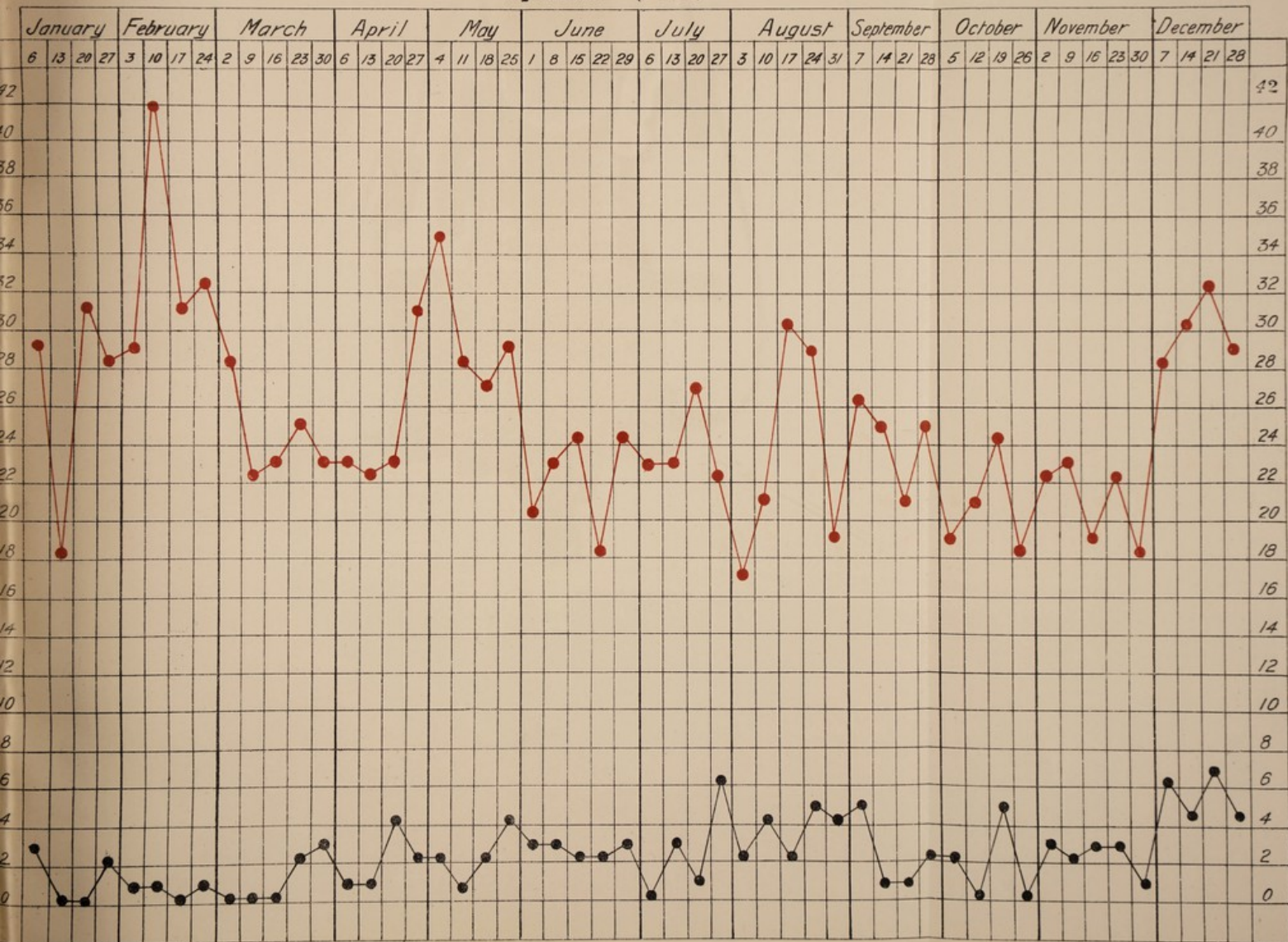
INQUESTS.

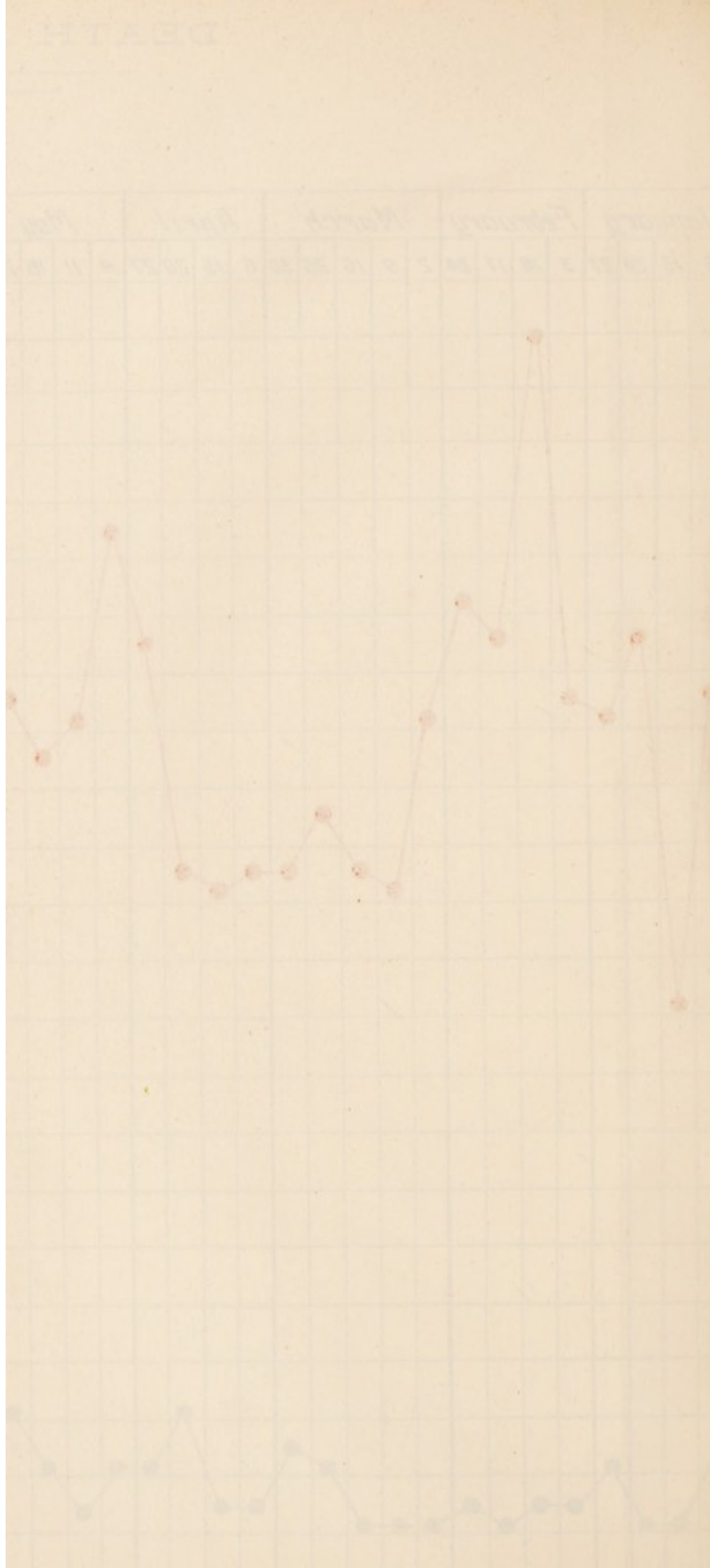
DEATH RETURNS CHART

1912.

All Causes (Red)

Zymotics. (Black)





CAUSES OF DEATH.

ZYMOTIC DISEASES.

The Mortality from the principal Zymotic Diseases, namely, Small Pox, Scarlet Fever, Measles, Whooping Cough, Typhus, Enteric Fever, Puerperal Fever, Diphtheria, and Diarrhoea, gives us a rate of 1·36 per 1,000 of the population, against 3·88 in 1911.

The deaths numbered 124 as against 348 in 1911.

The Zymotic rate, 1·36, is made up as follows :—

DEATHS PER 1,000.

	1912	1911
Small Pox .....	...	...
Scarlet Fever.....	·01	·044
Measles	·33	·66
Whooping Cough	·32	·39
Typhus .....	...	...
Enteric	·13	·32
Diphtheria	·09	·16
Diarrhoea	·42	2·24
Puerperal	·03½	·022
Erysipelas	·01	·022

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

	1912	1911
1st Quarter	·57	2·94
2nd „	1·32	1·96
3rd „	1·59	7·87
4th „	1·84	1·50

TABLE OF ZYMOTIC DISEASES.

	Notified.	Died.	Case Mortality %.
Small Pox .....	...	...	...
Scarlet Fever.....	142	1	·70
Enteric Fever	73	12	16·43
Diphtheria	38	9	23·68
Measles .....	...	30	...
Whooping Cough .....	...	29	...
Diarrhoea .....	...	39	...
Puerperal Fever	4	3	75·00
Erysipelas	47	1	2·12

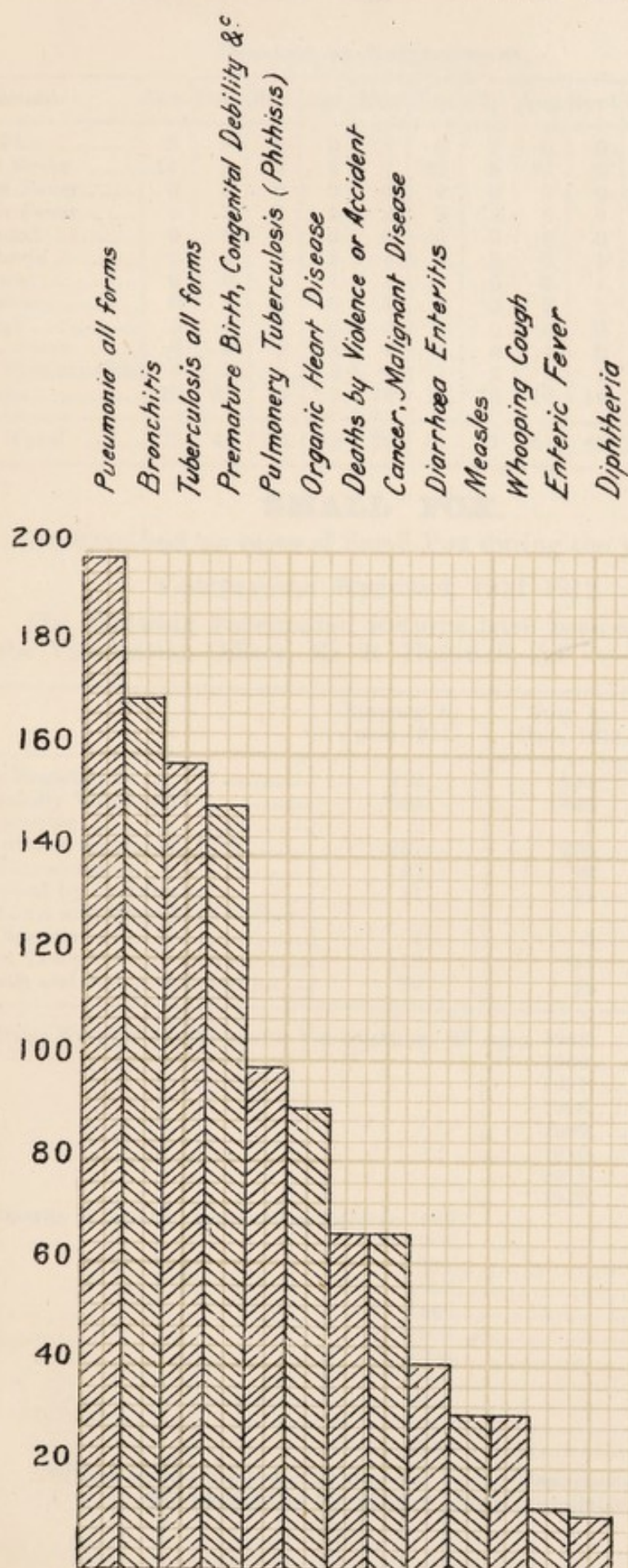
DEATH-RATES, 1912.

Disease.	No. of Deaths	Rate.
Enteric Fever	12	·13
Small Pox .....	...	...
Measles	30	·33
Scarlet Fever.....	1	·01
Whooping Cough	29	·31
Diphtheria and Croup	10	·11
Influenza	9	·09
Erysipelas	1	·01
Phthisis (Pulmonary Tuberculosis)	98	1·07
Tuberculosis Meningitis	23	·25
Other Tubercular Diseases	38	·41
Cancer, Malignant Disease	66	·72
Rheumatic Fever	7	·07
Meningitis	12	·13
Organic Heart Disease.....	91	1·00
Bronchitis	171	1·88
Pneumonia (all forms)	194	2·13
Other Diseases of Respiratory Organs	8	·08
Diarrhoea and Enteritis (under 2 years)	39	·42
Appendicitis and Typhlitis	6	·06
Cirrhosis of Liver	14	·15
Alcoholism	4	·04
Nephritis and Bright's Disease	28	·30
Puerperal Fever	3	·03
Other Accidents and Diseases of Pregnancy and Parturition	9	·09
Congenital Debility and Malformation (including Premature Birth)	147	1·61
Violent Deaths (excluding Suicides).....	65	·71
Suicide	8	·08
Other Defined Diseases	305	3·35
Diseases ill-defined or unknown	13	·14
Total.....	1441	15·92

Number of Notifications compared with other years :—

Disease.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Small Pox.....	0	0	4	66	2	3	0	0	0	0	0	7	0
Typhus	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet.....	484	264	557	362	191	325	256	175	220	730	395	176	142
Enteric	104	71	76	51	56	133	138	107	103	93	128	151	73
Continued	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	20	49	60	38	9	49	49	66	36	34	38	66	38
Puerperal	4	8	10	5	8	16	9	8	12	8	4	7	4
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0
Erysipelas.....	39	65	65	51	47	92	86	77	71	75	70	84	47
Ophth. Neon.	0	0	0	0	0	0	0	0	0	0	0	0	26
Acute Polomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	6
Pul. Tuberculosis...	0	0	0	0	0	0	0	0	0	0	0	0	217
Total	651	457	772	573	313	618	538	433	442	940	635	491	553

Diagram Shewing Graphically the Comparative responsibility of the more important causes of Death.



ANALYSIS OF NOTIFICATIONS.

Disease.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tot.
Small Pox.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet Fever	14	8	10	9	7	22	9	14	8	21	13	7	142
Typhus Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Enteric Fever	4	3	2	9	2	3	5	8	9	8	7	13	73
Continued	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	2	3	6	3	4	3	3	5	1	4	0	4	38
Puerperal	0	0	0	1	1	0	0	0	1	0	1	0	4
Erysipelas.....	6	1	4	10	5	3	2	3	2	6	2	3	47
CholeraI	0	0	0	0	0	0	0	0	0	0	0	0	0
Ophth. Neon.	0	0	2	3	1	6	0	4	2	5	2	1	26
Acute Poliomyelitis	0	0	0	0	0	1	2	1	1	1	0	0	6
Phthisis.....	49	31	14	7	16	17	10	16	16	17	12	12	217
Total	75	46	38	42	36	55	31	51	40	62	37	40	553

SMALL POX.

We have had no cases of Small Pox during the year.

VACCINATION RETURNS, 1911-1912.

The following Vaccination Returns have been supplied to me by the Vaccination Officer, Mr. R. Halliwell, J.P. :—

	January to June, 1911.	July to Dec., 1911.	The whole of 1911.*
Births Registered	912	843	1755
Successfully Vaccinated	540	442	1004
Insusceptible	2	5	7
Exemptions, Section 2, 1899	237	255	495
Died Unvaccinated	83	92	174
Postponed by Certificates	11	14	8
Left Town and Reported to other Districts	4	3	7
Cannot Trace	16	11	31
Refusals and Not Accounted for ...	20	22	32

Total Number of Successful Vaccinations, all ages, 1905.....	1868
„ „ „ 1906.....	1801
„ „ „ 1907.....	1754
„ „ „ 1908.....	1738
„ „ „ 1909.....	1371
„ „ „ 1910.....	1266
„ „ „ 1911.....	1118
„ „ „ 1912.....	1153
Deaths of Infants under 12 months in 1902.....	368
„ „ „ 1903.....	399
„ „ „ 1904.....	405
„ „ „ 1905.....	385
„ „ „ 1906.....	328
„ „ „ 1907.....	325
„ „ „ 1908.....	332
„ „ „ 1909.....	350
„ „ „ 1910.....	265
„ „ „ 1911.....	325
„ „ „ 1912.....	240

*These figures are given as supplied by the Vaccination Officer.
Full particulars for 1912 are not yet available.

SCARLET FEVER.

Number of Notifications	142
Number of Deaths	1
Death-rate per 1,000 of Population	·011

The number of Notifications of this Disease is, for 1912, 142, against 176 in 1911. One death occurred, giving a rate of ·011 as against 4 deaths with a rate of ·044 in 1911.

	Notifications.	Removed to Sanatorium.	Deaths.
January	14	9	—
February	8	7	—
March	10	10	—
April	9	6	—
May	7	6	—
June	22	18	—
July	9	8	1
August	14	12	—
September	8	3	—
October	21	19	—
November	13	11	—
December.....	7	6	—
Total.....	142	115	1

The percentage of removals to Sanatorium has been 80·98 against 69·88 in 1911, and 50·88 in 1910.

The number of return cases during the year was 3.

We had 1 death among those notified; this occurred in hospital; giving a fatality rate of ·87% of hospital-treated cases, as against 2·43% in 1911.

SCARLET FEVER.**RETURN CASES, 1912.**

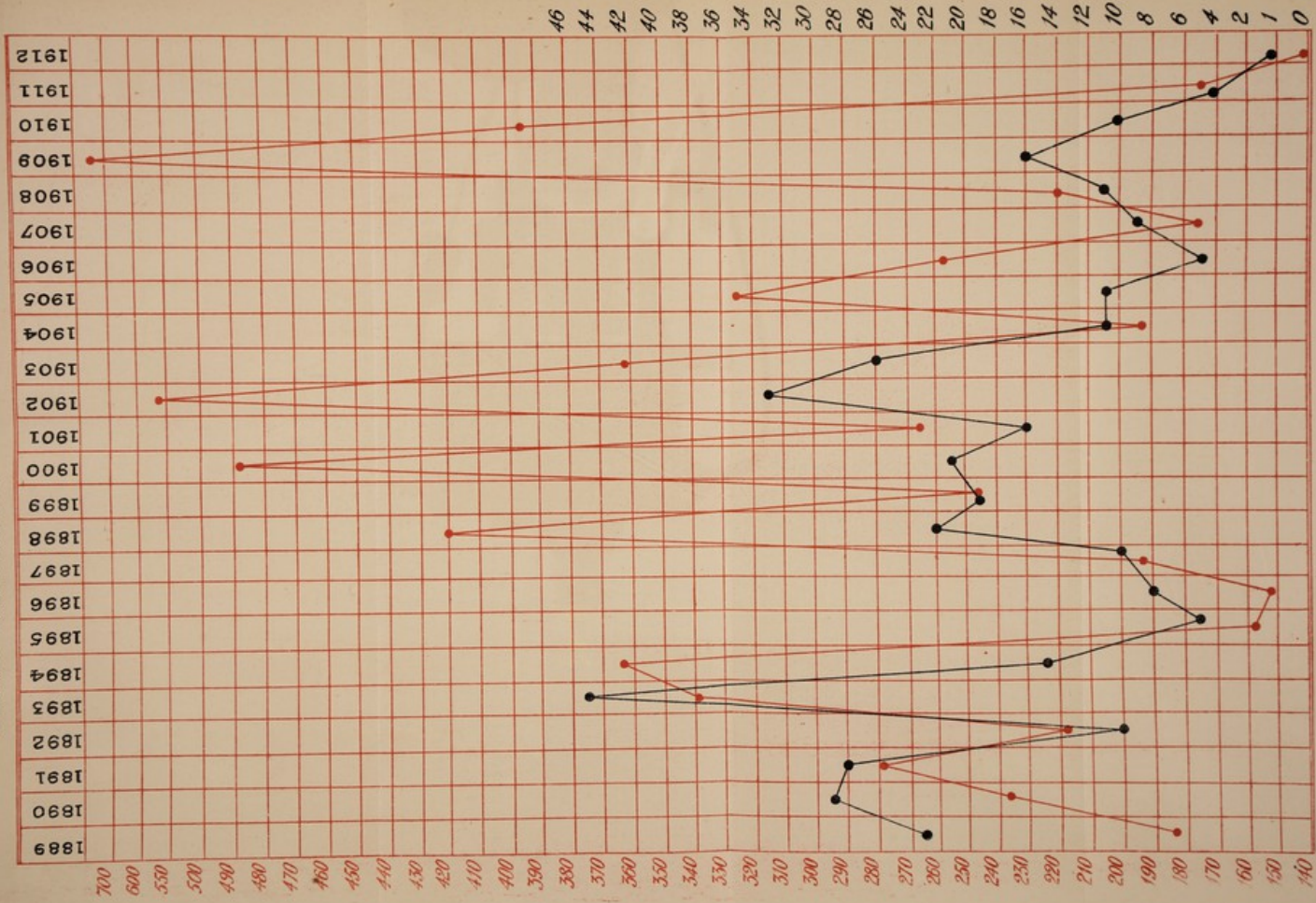
1.—(6, W—— Grove)—First case notified and removed to Sanatorium, on December 5th, 1911; returned home on January 12th, 1912. Second case commenced on January 7th; was notified and removed to Sanatorium on January 19th, 1912. Third case commenced on January 20th; was notified and removed to Sanatorium on January 23rd, 1912.

2.—(73, N—— Street)—First case notified and removed to Sanatorium on May 7th, 1912; returned home on June 14th, 1912. Second case commenced on June 21st, 1912; was notified and removed to Sanatorium on June 24th, 1912.

3.—(99, G—— Street)—First and second case notified and removed to Sanatorium on June 10th, 1912. Second case returned home on July 26th, 1912. Third case commenced on July 29th, 1912; was notified and removed to Sanatorium on August 1st, 1912.

SCARLET FEVER

CHART:- Cases notified in red • Deaths in Black •



BOROUGH OF WIGAN.

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

SCARLET FEVER.

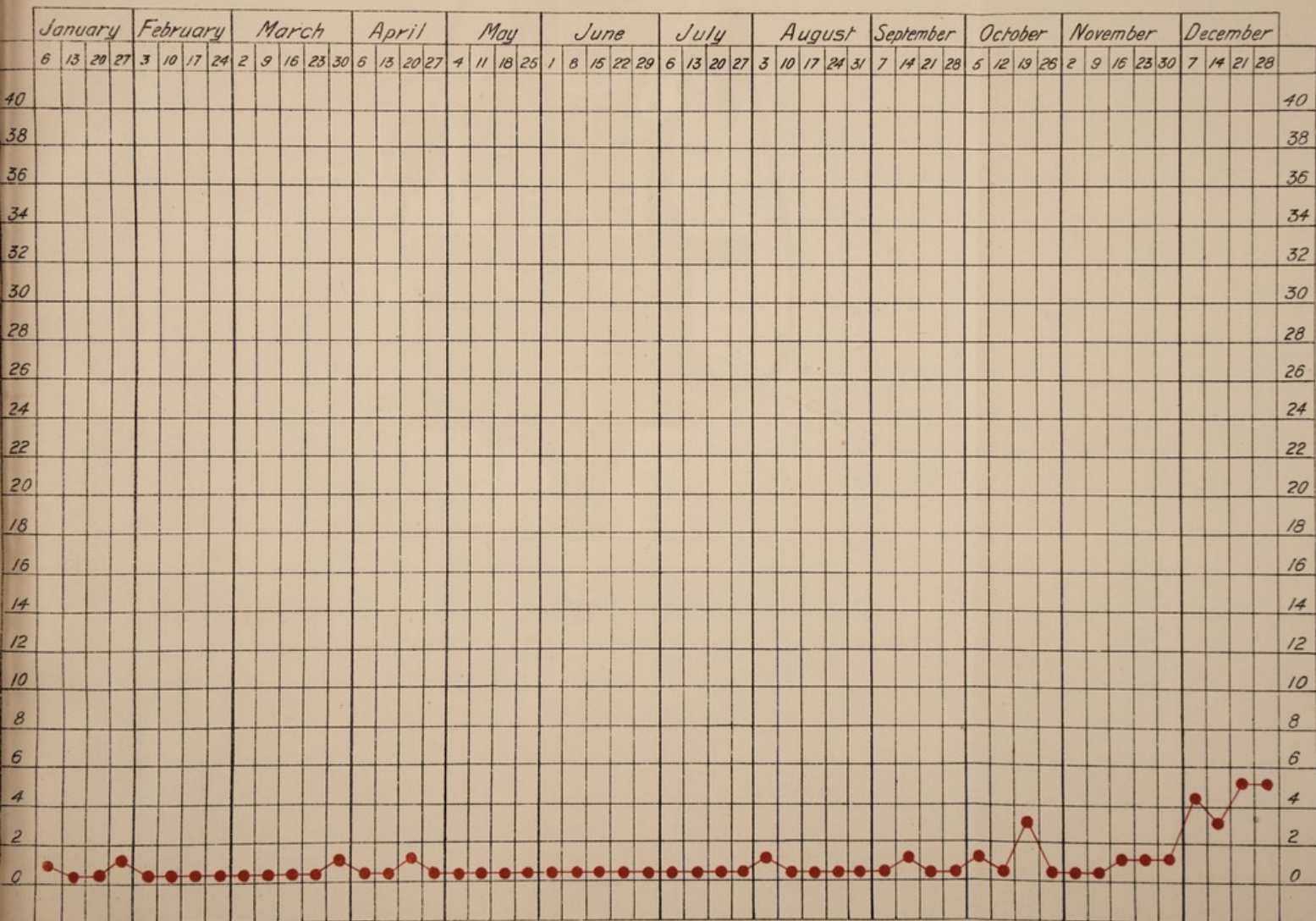
Year.	Estim. Popula- tion.	Cases notifi'd.	Under five Years.	Deaths.	Cases in hospital	Attacks per 1,000.	Deaths per 1,000.	Rem'v'ls per cent. per annum.
1889	53916	182	76	23	15	3·37	·42	8·24
1890	54440	235	163	29	83	4·31	·42	35·31
1891	55084	278	198	28	150	6·86	·50	39·68
1892	56040	218	117	10	79	3·89	·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	61697	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	63·69
1906	89342	256	96	5	126	2·87	·055	49·21
1907	90765	175	70	9	93	1·92	·099	53·14
1908	92114	220	69	11	138	2·38	·11	62·72
1909	93263	730	207	16	331	7·82	·17	45·34
1910	94654	395	110	10	201	4·17	·10	50·88
1911	89631	176	53	4	123	1·96	·044	69·88
1912	90504	142	39	1	115	1·56	·011	80·98

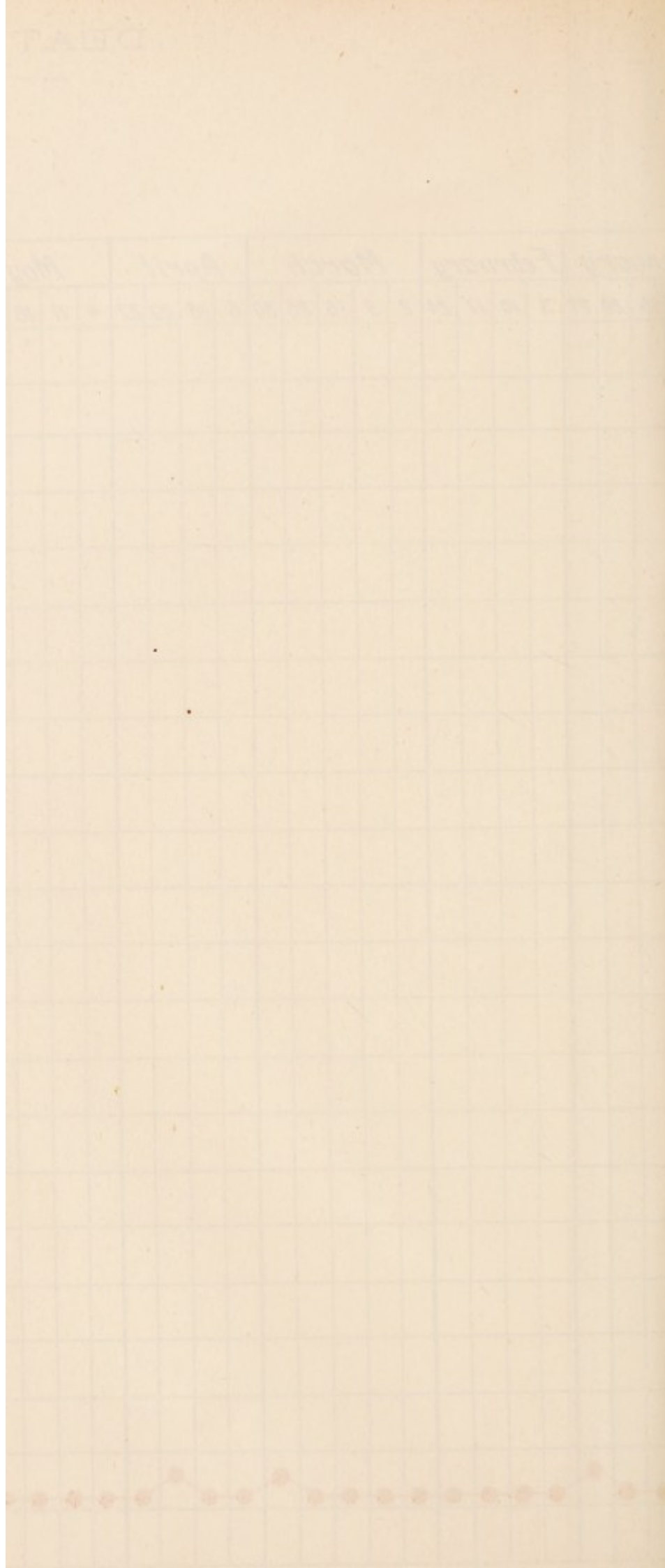
AGE INCIDENCE OF SCARLET FEVER.

	MONTHS												YEARS												Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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1912.

Measles (Red)

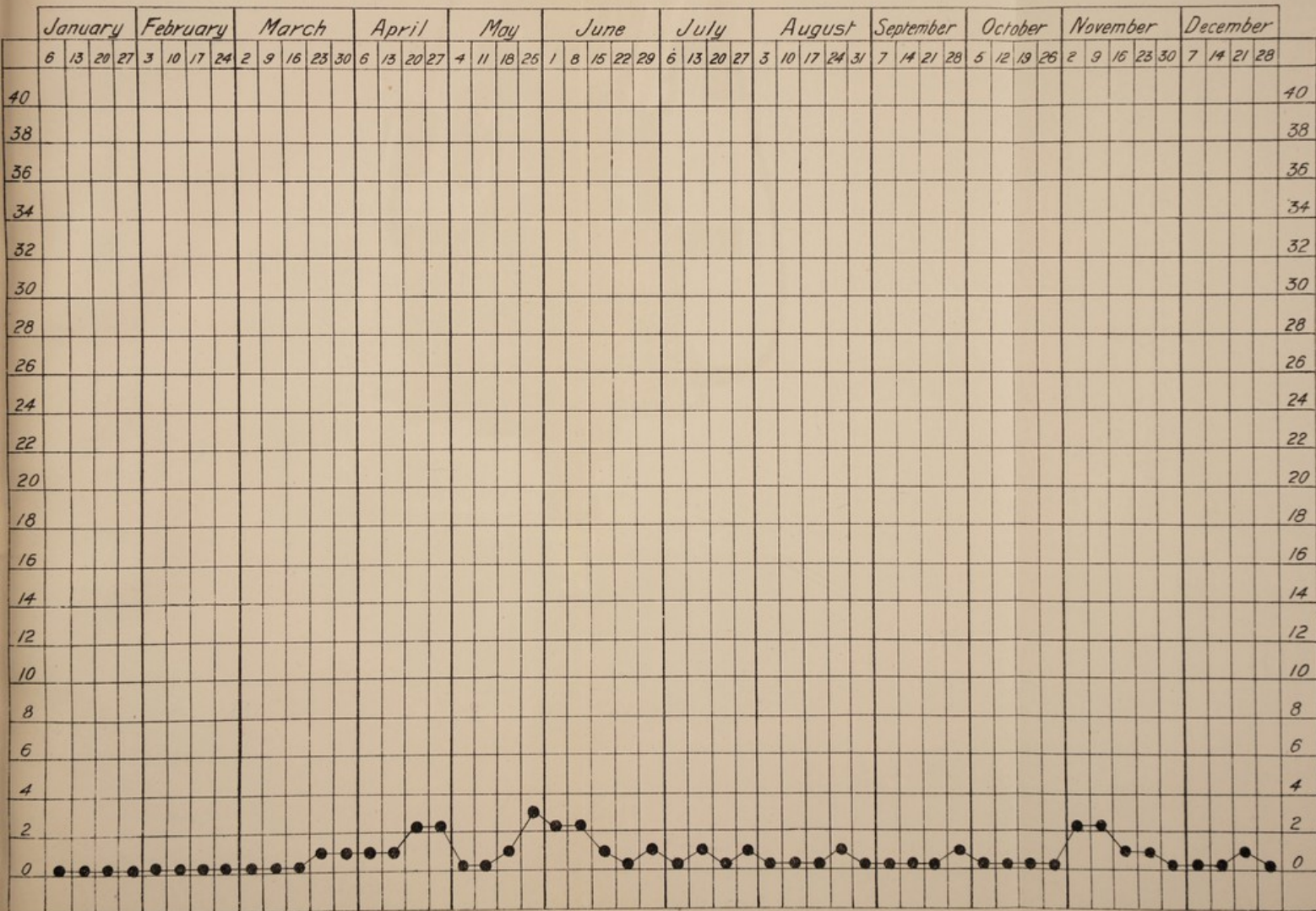




DEATH RETURNS CHART

1912.

Whooping Cough (Black)



MEASLES.

The deaths numbered 30, or a rate of .33 per 1,000 of the population.

1912.	Deaths in 1912.	Deaths in 1911.
January	2	...
February .....	...	11
March	1	29
April	1	8
May .....	...	7
June .....	...	2
July .....	...	1
August	1	2
September	1	...
October	4	...
November	3	...
December.....	17	...
Total.....	30	60

WHOOPING COUGH.

The number of deaths from Whooping Cough is 29, against 35 in 1911, and 13 in 1910. The number is shown in the following table :—

1912.	Deaths in 1912.	Deaths in 1911.
January .....	...	1
February .....	...	2
March	2	9
April	6	7
May	4	4
June	6	3
July	2	2
August	1	3
September	1	4
October .....	...	...
November	6	...
December.....	1	...
Total.....	29	35

The deaths were less in 1912 by 6. It is a very dangerous disease owing to the lung affections which supervene, and is highly infectious, but it is difficult to persuade mothers of its seriousness.

TYPHUS FEVER.

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

ENTERIC FEVER.

Number of Notifications	73
Number of Deaths	12
Mortality per 1,000 of Population.....	13
Removed to Sanatorium.....	53

We have for 1912, 73 notifications, against 151 in 1911, and 128 in 1910. A few of the cases removed to the Sanatorium turned out to be cases of other febrile diseases.

The number of deaths was 12, or 16·43 per cent. of the cases notified, against a rate of 19·20 per cent. in 1911, and 20·31 per cent. in 1910.

	Removed to Sanatorium.
January	0
February	3
March.....	1
April.....	6
May	2
June	1
July	5
August	5
September	8
October	7
November	4
December	11
	—
	53
	—

We had 23 specimens of blood examined at the Thompson Yates Laboratory, Liverpool, with the following result :—Positive reaction, 8 ; Negative reaction, 15.

The mortality rate is lower. We have 12 deaths in 73 cases, a rate of 16·43 per cent.

I here give the weekly number of Notifications for the year :—

WEEKLY NOTIFICATIONS FOR 1912.

January 6th	2	August 10th	2
" 13th	1	" 17th	2
" 27th	1	" 24th	2
February 10th	2	" 31st	1
" 24th	1	September 7th	2
March 9th	1	" 14th	1
" 16th	1	" 21st	4
April 6th	1	" 28th	2
" 13th	2	October 12th	1
" 20th	3	" 19th	3
" 27th	2	" 26th	2
May 4th	1	November 2nd	2
" 11th	1	" 9th	1
" 25th	1	" 16th	3
June 15th	2	" 23rd	3
" 22nd	1	December 7th	4
July 13th	2	" 14th	3
" 20th	1	" 21st	3
" 27th	2	" 28th	3
August 3rd	1		

ENTERIC FEVER.

1912.	Notification.		Deaths.	
	1912	1911	1912	1911
January	4	23	...	5
February	3	8	...	4
March	2	11	...	1
April	9	5	...	2
May	2	2	...	...
June	3	4	1	1
July	5	6	2	1
August	8	12	1	3
September	9	51	2	4
October	8	19	2	4
November	7	8	...	2
December	13	2	4	2
Total	73	151	12	29

INCIDENCE OF ENTERIC FEVER FOR SEVENTEEN 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	51	11	·17
1904	56	16	·24
1905	133	36	·40
1906	138	27	·30
1907	107	22	·24
1908	103	26	·28
1909	93	18	·19
1910	128	26	·27
1911	151	29	·32
1912	73	12	·13

AGE INCIDENCE.

YEARS.

1—4	5—9	10—14	15—19	20—24	25—29	30 and over
8	11	12	6	9	3	24

Total Cases, 73.

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

Houses in which cases have occurred with :—

Privy Midden.	Pails.	Waste Water Clostes.	Water Closets.
14	45	5	7

2 Cases occurred in Public Institutions.

Number of privy middens in Wigan	8
" " " Pemberton	1662
" " ashpits " 	75
" " cesspools " 	8
" " " in Wigan.....	2
" " ashpits " 	44
" wagons " 	16

STREET LIST OF DEATHS FROM ENTERIC FEVER.

<i>Wigan.</i>	<i>Pemberton.</i>
Dean Street..... 1	Leader Street 1
Foster's Buildings 1	Chapel Street 1
Frog Lane 1	Warrington Road 1
Hen Street 1	
Kendrick Street 1	
Layland Street 2	
Queen Street 1	
Rodney Street 1	
—	—
9	3
—	—

ENTERIC FEVER.

Cases in Houses with Insanitary Conditions and Surroundings	10
Cases in Houses with other Defects	12
Cases in Houses where No Defects were found	49
Cases in Public Institutions.....	2
	—
	73
	—

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

	1912	1911		1912	1911
Bridgeman Terrace	1		Lime Street	1	
Caunce Street	1		Margaret Street	1	
Cecil Street.....	1		Meadow Street.....	1	
Chancery Street.....	1		Oxford Street.....	1	
Darlington Street East	1		Poolstock	1	
Dean Street	1		Queen Street	1	1
Douglas Street	1		Ratcliffe Street	1	
Fletcher Street	1		Rodney Street	1	
Foster's Buildings	1		Seven Stars Road	1	
Frog Lane	3	4	Silver Street	1	
Gidlow Lane	7	3	Stopforth Street	2	1
Great George Street	1		Wall Street.....	1	
Hallgate	1		Walmer Street	1	1
Hardybutts	1		Well Street	1	
Hen Street	2		Whelley	2	1
Kay Street	5		Woodhouse Lane.....	2	1
Kendrick Street.....	1		Infirmary	2	

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

	1912	1911		1912	1911
Bridgewater Street	1		Liptrot Street	1	
Chapel Street	2		Northumberland Street .	1	2
Douglas Street	1		Scot Lane	1	2
Duke Street	1	2	Warrington Road	4	6
Fleet Street	1		Woolden Street	1	
Leader Street	1				

It has not been found possible to trace any group of cases to any single cause, such as milk, etc. The disease seems to crop up sporadically and to be conveyed by infection. In one instance of which the particulars are appended, four members of the same family were infected by a child in whom the disease had not been diagnosed, but who proved to be a carrier; the B Typhosus being present in the stools and urine during convalescence. This child was kept in the Sanatorium until free from infection.

The decline in the prevalence and fatality of this disease during the year under review is satisfactory, but must to some extent be attributed to the weather conditions, which were unfavourable to its spread; as long as we retain the present large number of privy middens in Pemberton, with the consequent risk of pollution of the sub-soil, we cannot rely on any permanent reduction in the endemicity of this disease.

It has not been found possible definitely to trace any cases to the consumption of shell-fish, but there is no doubt that this form of food, especially mussels, cannot be consumed without risk. The reports which reached me as to the conditions under which mussels were grown and gathered in certain estuaries have made it necessary to prohibit their importation into Wigan. Even so, mussels should never be eaten uncooked.

ENTERIC FEVER—Particulars of Cases in W. Family.

	Sickened.	Notified.	Address.	Admitted to Hospital.	Widal Test.	Discharged.	Died.
1st Case	Sept. 4/12....	Sept. 12/12....	2, Foster's B'ldings	Sept. 12/12....	...	...	Oct. 11/12
2nd Case ...	Sept. 11/12....	Sept. 19/12....	11, Stopforth St.	Sept. 19/12....	...	Nov. 15/12....	...
3rd Case ...	Sept. 13/12....	Sept. 20/12....	20, Stopforth St.	Sept. 20/12....	...	Nov. 15/12....	...
4th Case*	Aug. 21/12....	Sept. 26/12....	80, Woodhouse Lane.	Oct. 29/12....	Positive, Sept. 24	Dec. 13/12....	...
5th Case ...	Oct. 12/12....	Oct. 26/12....	80, Woodhouse Lane.	Oct. 26/12....	Negative, Oct. 16	Dec. 13/12....	...

* This case was the fourth notified, but the first to sicken.

HEALTH OFFICE, WIGAN,

December 24th, 1912.

DIARRHŒA.

Number of Deaths	39	In 1911.....	203
Mortality per 1,000 of Population	·42	„	2·26

We have a fatality rate of ·42 in 1912 against a rate of 2·26 in 1911.

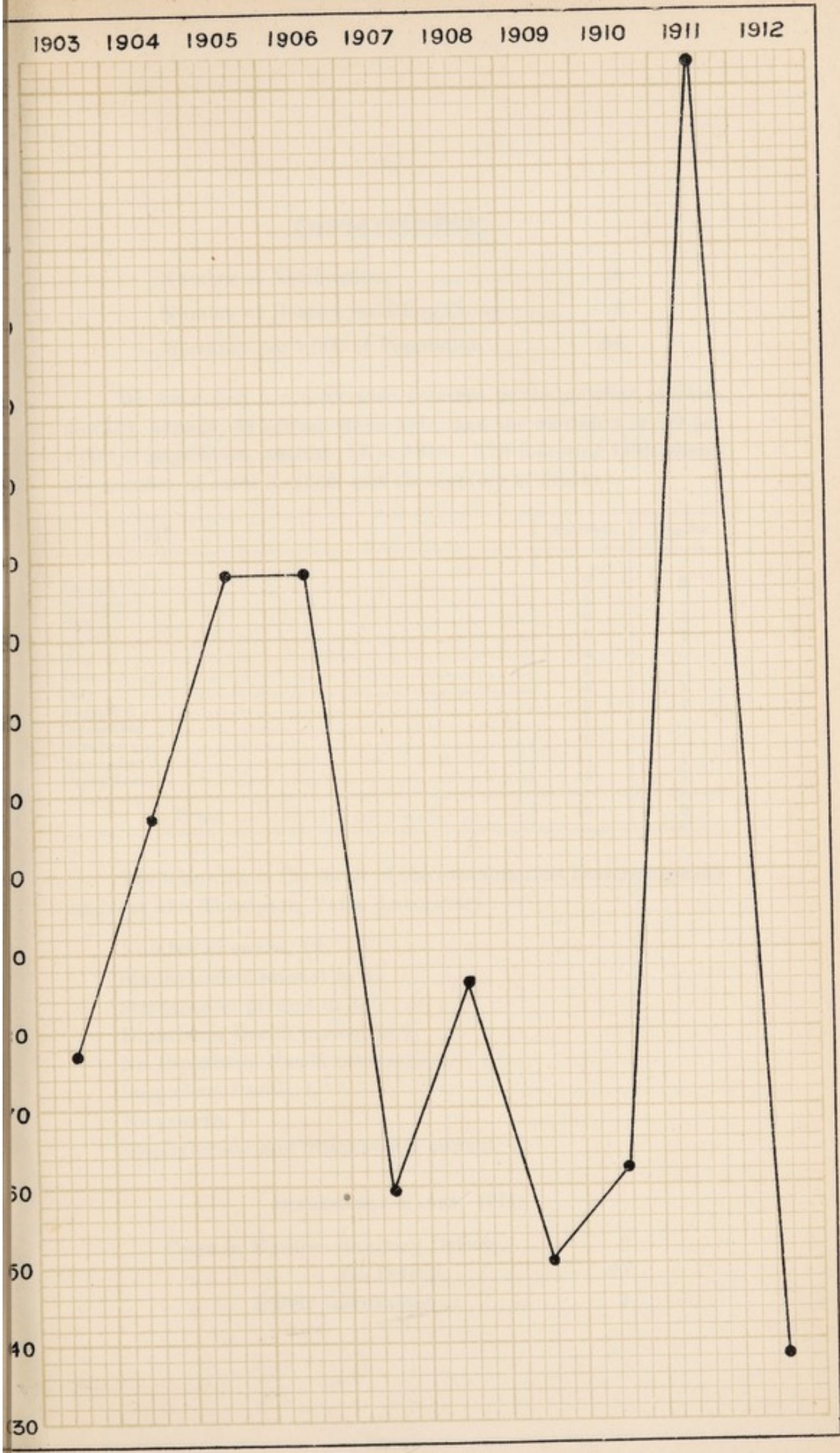
AGE INCIDENCE, 1912.

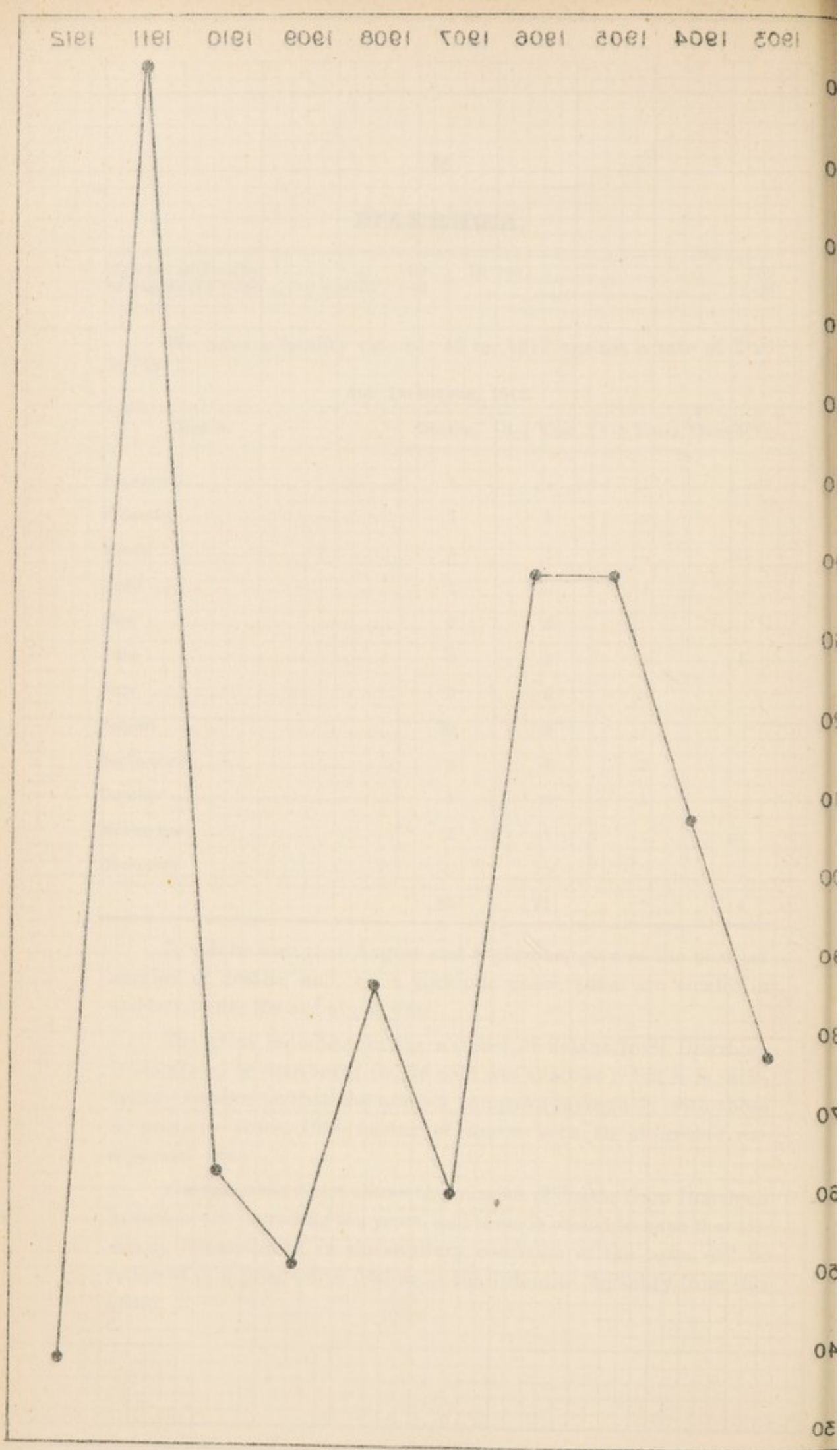
Month.	Deaths.	0-1 Year.	1-5 Years.	Over 5 Yrs.
January	1	...	1	...
February	1	1	...	...
March	1	1	...	...
April	1	...	1	...
May	5	5	...	...
June	5	3	1	1
July	5	5	...	...
August	10	9	1	...
September	8	6	2	...
October	1	9	1	...
November.....	1	1	...	...
December .....	...	...	...	...
	39	31	7	1

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

The great reduction in the number of deaths from Diarrhœa is mainly to be attributed to the cold wet summer; but it is satisfactory to observe that the number compares favourably with those in previous years, 1911 having of course been an altogether exceptional year.

The following chart shows the number of deaths from Diarrhœa in each of the preceding ten years, and there is reason to hope that the steady improvement in the sanitary condition of the town will be reflected in a progressive decline in the Infantile Mortality from this cause.





DIPHTHERIA.

Number of Notifications	38
Number of Deaths, including Croup	9
Mortality per 1,000 of Population.....	·09

We have had a considerable decrease in the number of cases notified, namely, 38 against 66 in 1911, and the mortality is ·09 per 1,000 of population, against ·16 in 1911. The following table shows the number of cases notified, and the number of deaths :—

1912.	Notified.	Deaths.
January	2	3
February	3	...
March	6	1
April	3	1
May	4	...
June	3	...
July	3	1
August	5	1
September	1	...
October	4	...
November .....	...	1
December.....	4	1
TOTAL	38	9

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

Number of swabs, 12.
 Staphylococci present in 2.
 Streptococci present in 3.
 Diphtheria Bacilli present in 2.
 No Diphtheria Bacilli present in 2.
 Suspicious Bacilli, 1.
 No growth, 1.
 Staphylococci and Streptococci present, 1.

DIPHTHERIA CASES, 1911.

Cases in Houses—Sanitary Defects.....	6
„ „ No Defects	29
„ Public Institutions	3

ERYSIPELAS.

Number of Cases Notified.....	47
Number of Deaths	1
Mortality per 1,000 of Population.....	·011

We have a smaller number of Notifications, and we have 1 death.

Cases in Houses with Insanitary Surroundings	5
„ Defects	4
„ No Defects	37
„ Public Institutions	1

PUERPERAL FEVER.

Number of Cases Notified.....	4
Number of Deaths	3
Mortality per 1,000 of Population.....	·033

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

SANATORIUM.

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

During the year there were 11 cases admitted at the Pemberton Hospital—Diphtheria, 4; Phthisis, 6; Measles, 1. And 6 cases discharged—Diphtheria, 4; Phthisis, 1; Measles, 1. Leaving 5 cases of Phthisis in on January 1st, 1913.

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

	Notifications.	Removed to Sanatorium.	Died in Sanatorium.
Small Pox .....	...	...	...
Typhus .....	...	...	...
Scarlet Fever.....	142	129 14*	1
Enteric	73	68 15*	12 2*
Diphtheria	38	...	...
Puerperal Fever	4	...	...
Cholera .....	...	...	...
Membranous Croup .....	...	...	...
Erysipelas	47	...	...
Ophthalmia Neonatorum	26	...	...
Acute Poliomyelitis	6	2	...
Pulmonary Tuberculosis	217	...	...
Others .....	...	...	...
TOTAL	553	199	13

In the Wigan Sanatorium on December 31st, 1912, there were 26 patients, namely, Scarlet Fever 12, Enteric Fever 14.

*Cases from Outside Districts inclusive.

Wigan Sanatorium.	Small Pox.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1912...	...	13	5	...	18
Admitted in 1912	129	68	2	199
Discharged „	129	47	2	178
Died „	1	12	...	13
In-patients, Jan. 1, 1913...	...	12	14	...	26

The number of deaths in the Wigan Sanatorium was 13 ; 1 died from Scarlet Fever and 12 from Enteric, as against 3 deaths from Scarlet and 17 from Enteric Fever in 1911.

Two deaths from Diphtheria occurred during the year in the Pemberton Sanatorium.

During the year there were 178 patients discharged, and 13 died (Wigan), and 4 patients discharged and 2 died (Pemberton); making a total of 197.

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.

Matron.	1 Nurse.	1 Caretaker.
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WIGAN SANATORIUM.—Table of Admissions and Discharges for 1912.

1912.	Admitted.					Discharged.					Died.							
	Small-pox.	Scarlet fever.	Enteric.	Ty-phus.	Oth'rs.	Total.	Small-pox.	Scarlet fever.	Enteric.	Ty-phus.	Oth'rs.	Total.	Small-pox.	Scarlet fever.	Enteric.	Ty-phus.	Oth'rs.	Total.
January	0	9	...	0	0	9	0	7	3	0	0	10	0	0	0	0	0	0
February ...	0	7	5	0	0	12	0	7	1	0	0	8	0	0	0	0	0	0
March	0	10	2	0	0	12	0	11	1	0	0	12	0	0	0	0	0	0
April	0	10	6	0	0	16	0	4	6	0	0	10	0	0	0	0	0	0
May	0	7	2	0	0	9	0	20	5	0	0	25	0	0	0	0	0	0
June	0	18	4	0	0	22	0	5	1	0	0	6	0	0	1	0	0	1
July	0	10	6	0	0	16	0	14	3	0	0	17	0	1	4	0	0	5
August	0	14	5	0	0	19	0	11	4	0	0	15	0	0	1	0	0	1
September .	0	4	10	0	2	16	0	11	4	0	2	17	0	0	1	0	0	1
October	0	21	11	0	0	32	0	11	4	0	0	15	0	0	2	0	0	2
November .	0	11	4	0	0	15	0	12	11	0	0	23	0	0	0	0	0	0
December...	0	8	13	0	0	21	0	16	4	0	0	20	0	0	3	0	0	3
TOTAL ...	0	129	68	0	2	199	0	129	47	0	2	178	0	1	12	0	0	13

14 Cases of Scarlet Fever, 15 Enteric, were removed from outside Districts to the Sanatorium, and are included in the Table.

CONSTITUTIONAL DISEASES.

TUBERCULOUS DISEASES.

The number of deaths from Phthisis is 98, against 68 in 1911, and 66 in 1910. The number of deaths from other Tubercular affections is 61, against 67 in 1911, and 34 in 1910.

The rates are as follows :—

Phthisis Pulmonalis	1·07	per 1,000 of population.
Other Tubercular Diseases	·66	„

If taken together as Tuberculous affections we have 159 deaths, or a rate of 1·73 per 1,000 of population.

PULMONARY PHTHISIS AND TUBERCULOUS DISEASES.

The deaths occurred in the following Wards :—

St. George Ward	8
Lindsay Ward	6
St. Catharine Ward	18
St. Patrick Ward	38
St. Thomas Ward	10
Poolstock Ward	5
Victoria Ward	16
St. Andrew Ward.....	16
Swinley Ward	3
All Saints Ward	8
West Pemberton Ward	14
North Pemberton Ward	7
Central Pemberton Ward	5
South Pemberton Ward	5

159

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	53 .....	.89
1903	74	1.1
1904	70	1.08
1905	92	1.04
1906	108	1.20
1907	84 .....	.92
1908	75 .....	.81
1909	68 .....	.72
1910	66 .....	.69
1911	68 .....	.75
1912	98	1.07

There is a considerable increase in the number of deaths and the death-rate from Phthisis, but there is no reason to regard this as more than temporary. It is not unlikely that the cold wet summer proved unusually fatal to the consumptive population, while there is no doubt that the increased attention given to the disease and the introduction of notification have led to its certification as a cause of death with greater precision.

During the year all cases notified have been visited and instructed ; antiseptic paper handkerchiefs and copies of the appended leaflet have been distributed. The latter was also published as a poster.

CORPORATION OF WIGAN.

PUBLIC HEALTH OFFICE,

King Street West.

Instructions to Persons Suffering from Consumption and those in contact with them.

- 1.—Consumption, Phthisis, and Pulmonary Tuberculosis are different names for the same disease.
- 2.—*Consumption is an infectious disease*, as much so as Small Pox or Scarlet Fever.
- 3.—*Consumption is not inherited*, but the children of consumptive parents are generally delicate, and more likely than others to catch the disease if exposed to infection.
- 4.—The infection of consumption is contained in *the material coughed or spit up* by persons suffering from the disease.
- 5.—The germs of the disease contained in this material may float about in the air when coughed out, or the dried material may mingle with the dust, which is afterwards stirred up and mingles with the air. In either case the germs of the disease are breathed in by healthy persons, who thus contract the disease. Similarly, food may become contaminated with the germs, and when eaten is capable of setting up the disease either in the lungs or some other part of the body.
- 6.—The milk or meat of an animal suffering from the disease is capable of infecting persons who consume it, if the germs are not destroyed by boiling or cooking.
- 7.—Every person suffering from Consumption is, therefore, *a source of grave danger* to those with whom he or she associates, unless the following precautions are taken, namely :—

- (a) *Never to spit* except into a *special spittoon or bottle* so constructed that it can be easily *disinfected and cleaned out*, or preferably into specially prepared paper or other material (rags, &c.) which *must be immediately burnt*.
 - (b) *Never to cough* except in a similar piece of material which must be immediately burnt.
 - (c) *Never to sleep in the bed* with any child or other person not similarly affected.
 - (d) *Never to kiss children or other persons*.
 - (e) *Never to drink out of the same vessel as another person*.
- 8.—Consumption in its earliest stage is *curable by suitable treatment*.
- 9.—The working life of a consumptive person *even in the more advanced stages* can be prolonged, and his or her *sufferings greatly lessened* by suitable treatment.
- 10.—The treatment of Consumption consists in *providing fresh air and good food*. Coughing is Nature's way of getting rid of the germs of the disease. *To stop the cough is to keep the germs at work in the lungs*, therefore, *quack medicines* which soothe the cough for a time *hasten the death of the patient*.
- 11.—Consumptive persons must accustom themselves to live as much as possible in the fresh air and *to keep their windows wide open day and night*. Persons living thus in fresh air *must keep warm*. It is easier to keep warm in fresh air than in foul air. '*Catching cold*' generally means *breathing foul air*. It is impossible to 'catch a cold' in pure fresh air. *Chill may be avoided* by good food and suitable clothing.
- 12.—The food of consumptive patients should be *as generous as possible*. The appetite improves when the windows are kept open. The food should contain plenty of fat, the best forms of which are milk, cream, butter, bacon, dripping, suet, lard, and margarine.

13.—The clothes should be warm but light. Flannel or woollen underwear is the best, and this should be loose. *The chest and throat should not be muffled up. Chest protectors, cotton wool, or many layers of any substance swathed round the chest hamper the movements of the lungs, and are very harmful.*

14.—*Flies are carriers of the infection of Consumption as well as of Typhoid Fever and other infectious diseases. They breed wherever there is decaying animal or vegetable matter. All persons should assist the Sanitary Authorities in preventing such accumulations of filth. Flies suck up the material expectorated by consumptive persons and deposit it on food, milk, &c.*

All food should be protected from flies, and food on which flies have crawled should be regarded as filthy and poisonous.

Flies should as far as possible be destroyed, but the principal thing is to do away with their breeding places, and to protect food from contact with them.

15.—The infection of Consumption is killed by fresh air and sunlight. It flourishes in dark, ill-ventilated houses, in close courts and alleys, with unpaved yards. The Sanitary Authority is compelling owners to improve the condition of their property, but much of the unwholesome conditions is due to careless and dirty tenants.

16.—The earliest symptoms of Consumption are weakness and lassitude with a dry cough. All persons thought to be suffering from Anæmia with a slight dry cough should be medically examined. It is in this stage that the disease is sometimes curable.

FRED E. WYNNE,

Date, June, 1912.

Medical Officer of Health."

On the National Insurance Act coming into force steps were at once taken by the Health Committee, in conjunction with the Local Insurance Committee, to organise a local scheme for the administration of Sanatorium Benefit. The scheme includes the organisation of domiciliary attendance, the provision of a Tuberculosis dispensary jointly with the County Authority, the alteration and extension of the Pemberton Hospital so as to render it suitable for the reception and treatment of Consumptive patients, and the leasing of beds at the Bowdon Sanatorium for the treatment of suitable cases.

The Medical Officer of Health was appointed Administrative Tuberculosis Officer, and it is intended to appoint in addition a full-time Tuberculosis Officer jointly with the County Council, and to appoint the Assistant School Medical Officer as Assistant Tuberculosis Officer.

The scheme was not complete by the end of the year, but the Pemberton Hospital was opened for the reception of patients in November. During November and December five cases were admitted, of whom two were advanced and three early cases. Of the two former, one died a few days after discharge; the other was discharged unimproved. The other three were all discharged with the disease apparently arrested and have returned to work. These encouraging results have been fully maintained during the current year.



RHEUMATISM.

Rheumatism caused 7 deaths, against 13 deaths in 1911, and 10 in 1910.

DISEASES OF RESPIRATORY ORGANS.

Respiratory Diseases, such as Pneumonia (all forms), Bronchitis and other diseases, caused 373 deaths, against 366 in 1911. Pneumonia caused 194 against 213; and Bronchitis and other diseases caused 179 against 153.

INQUESTS AND UNCERTIFIED DEATHS.

The number of Inquests for 1912 is 136, against 146 for 1911, and 126 in 1910, and the following verdicts have been recorded :—

1. Natural Causes	50
2. Accidents—burnt	10
„ scalded	8
„ colliery	14
„ vehicle or car	7
„ drowned.....	3
„ falls	17
„ railway.....	4
„ kicked by horse	1
„ mill	1
„ others	3
3. Suicides—railway	1
„ cut throat.....	1
„ poison	3
„ hanging.....	2
„ gas	1
4. Others	8
5. Murder—kicking	1
„ shooting	1
	<hr/>
	136
	<hr/>

We had no uncertified deaths in 1912, against 2 in 1911, and 1 in 1910.

RHEUMATISM

DISEASES OF RESPIRATORY ORGANS

INQUESTS AND UNCERTIFIED DEATHS

PART III.

General Sanitary Work.

FACTORY AND WORKSHOP ACT, 1901

SHOP HOURS ACTS, 1892 TO 1905

SHOPS ACT, 1912

SHOP HOURS ACT, 1904, CLOSING ORDER

MEAT INSPECTION AND SLAUGHTER HOUSES

DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885 AND 1886

RAINFALL

BLACK SMOKE NUISANCE

PROPERTY UNFIT FOR HUMAN HABITATION

UNPAVED YARDS AND PASSAGES

BOROUGH SURVEYOR'S DEPARTMENT

LADY HEALTH VISITOR'S REPORT

MIDWIVES ACT, 1902

NOTIFICATION OF BIRTHS ACT, 1907

EDUCATION ACT, 1902, 1904

PUBLIC ANALYST REPORT

FACTORY AND WORKSHOP ACT, 1901.

The workshops have been regularly and systematically visited by your Inspectors ; and also the factories, on receipt of report from H.M. Inspectors. The bakehouses have been regularly visited and any nuisances arising have been promptly dealt with. The regulations as to limewashing, cleanliness, &c., have been enforced. The underground bakehouses have been kept in a sanitary condition.

I.—INSPECTION.

Premises.	No. of Inspections.	No. of written Notices.
Factories (including Factory Laundries)	45	9
Workshops (including Workshop Laundries)	646	6
Workplaces .....	...	...
TOTAL	691	15

2.—DEFECTS FOUND.

Particulars.	No. of defects found.	No. of defects remedied.
<i>Nuisances under Public Health Acts :—</i>		
Want of Cleanliness	10	10
Want of Ventilation .....	...	...
Overcrowding .....	...	...
Want of Drainage of Floors.....	2	2
Other Nuisances	9	9
Sanitary { insufficient	7	7
Accommo- { unsuitable or defective	89	73
dation { not separate for sexes	1	1
<i>Offences under the Factory and Workshop Act :—</i>		
Illegal occupation of underground bakehouse .....	...	...
Breach of special sanitary requirements for bakehouses	54	52
Other offences	14	13
TOTAL	186	167

3.—HOME WORK.

Nature of Work.	OUTWORKERS' LISTS, SECTION 107.						Notices served on occupiers as to keeping or sending lists. (8)
	Lists received from Employers.						
	Sending twice in the year.			Sending once in the year.			
	Lists. (2)	Outworkers.		Lists. (5)	Outworkers.		
		Con-tractors (3)	Work-men (4)		Con-tractors (6)	Work-men (7)	
WEARING AIPAREL							
(1) Making, &c....	26	8	176	7	2	9	36
(2) Cleaning, &c..	...	...	...	...	...	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Workshops	414
Bakehouses	145
Domestic Workshops (not Outworkers)	27
Total Number of Workshops on Register	586

5.—OTHER MATTERS.

Class.	Number.
<i>Matters Notified to H.M. Inspector of Factories :—</i>	
Failure to affix Abstract of the Factory and Workshop Act (s. 133) ...	15
Notified by H.M. Inspector	11
Report (of action taken) sent to H.M. Inspector	8
Other.....	3
<i>Underground Bakehouses (s. 101) :—</i>	
Certificates granted during the year .....	...
In use at the end of the year	8

TRADES FOR WHICH REGISTERED WORKSHOPS ARE USED.

Dressmaking	73	Coopers	2
Boot Repairing	48	Joiners	5
Clogging.....	41	Cycle Repairer.....	7
Tailoring	46	Tripe Dresser	2
Millinery	42	Tallow Melter	1
Clothiers	29	Chandler	1
Saddlers	7	Marine Store Dealers	6
Jewellers	9	Coffin Makers.....	2
Plumbers	18	Soap Boilers.....	1
Painters	13	Preserve Works	2
Shoeing Smiths	8	Ginger Beer Works.....	4
General Smiths.....	2	Clay Pipe Maker	1
Wheelwrights	7	Hard Confectionery	3
Cabinet Makers	6	Brush Makers	1
Ice Cream Makers	3	French Polishers	1
Scale Repairers	2	Box Makers	1
Laundries	4	Umbrella Repairers	3
Knitting	3	Mantle Making	2
Picture Framer	6	Sausage Maker	1
Wood Carvers.....	1		
		Total	414

NUMBER OF WORKSHOPS ON REGISTER.

1912	1911	Increase.
414	405	9

NUMBER OF DOMESTIC WORKSHOPS ON REGISTER.

1912	1911	Decrease.
27	60	33

FACTORY AND WORKSHOP ACT, 1901.

Notices received from H.M. Inspector.....	11
Section 5—Sanitary defects	10
Complied with	6
In hand	4
Section 14—Means of escape in case of fire.....	1
In hand	1

NUMBER OF BAKEHOUSES ON REGISTER:

1912	1911	Increase.
<hr/> 145	<hr/> 135	10

Nine are certified underground bakehouses, and are as follows :

22, Earl Street.	36, Wigan Lane.
32, Market Street.	108, Wallgate.
58, Market Street.	12, Wallgate.
10, Standishgate.	Woodcock Street (not being
34, Wigan Lane.	used as bakehouse).

OUTWORKERS' LISTS (SECTION 107).

No. of Visits to Outworkers' Premises	77
„ Nuisances arising	0

SHOP HOURS ACT, 1892-1905.

SHOP ACT, 1912.

The number of visits paid under this Act is given in the Chief Sanitary Inspector's report. The infringements were complied with upon warning from the Inspectors.

INFRINGEMENTS.

Want of Abstract	169
„ Notice	1,200
„ Form	548
	<hr/>
	1,917

No. of Observations (day)	3,855
„ „ (night)	31

SHOP HOURS ACT, 1904 (CLOSING ORDER).

(HAIRDRESSERS AND BARBERS.)

The number of visits paid are given in your Inspector's report, and are not as many as in the previous year, on account of the Inspectors' time being given to compiling the Register of Shops under the new Act of 1912.

No. of Infringements	3
„ Observations (day)	469
„ „ (night)	197
„ Letters sent	1

SLAUGHTER-HOUSES & MEAT INSPECTION

There are 26 slaughter-houses in the Borough, all of which are registered under the Towns' Improvement Clauses Act. With very few exceptions these slaughter-houses are unsatisfactory and in default under the Bye-laws. They are generally in close proximity to dwellings, but unfortunately cannot be closed on this account. Many of them are ill-paved, improperly drained, and insufficiently lit. The Bye-law as to the provision of suitable receptacles for offal is not often observed. The middens in connection with the slaughter-house constitute a serious nuisance, and as breeding-places for flies constitute a real danger to health.

The attention of the local branch of the Butchers' Association has been called to this state of affairs, and it is due to that body to state that they have met the Committee in a very fair spirit, and already work is in hand in many cases which will bring these places into conformity with the Bye-laws.

I hope that the whole of the work will be completed in a comparatively short time, and that different arrangements may be made for the removal of offal and manure so as to lessen the danger from the existence of middens in crowded areas.

The fact that the business of slaughtering is distributed among so many slaughter-houses in different parts of the Borough renders the work of meat inspection difficult. Cases of Tubercular or other disease are reported to this office by the butchers and are then examined by an Inspector, and in doubtful cases referred to the Medical Officer. In addition to this, the slaughter-houses are constantly visited by the Inspectors. During the year no cases of diseased or otherwise unwholesome meat which had not been reported have been discovered.

Particulars of meat and other food stuffs surrendered and destroyed will be found in your Chief Sanitary Inspector's report.

I append a special report on three cases of food poisoning which were notified in October.

Three cases of food poisoning were reported on October 21st, of which the following are particulars :—

The occupants of the house in which the cases occurred were father, mother, and 2 children ; aunt and grandmother.

Chops, sausages, and savoury ducks, purchased in Wigan Market the previous evening, were cooked for breakfast on Sunday morning about 8-30.

The father had some of the chops and sausage. The children had chiefly the sausage. The mother had a little of the chops.

The aunt never ate any of the sausage (she complained of the smell after cutting one, but immediately put it away), but had some of the chops and plenty of savoury duck.

The father became sick about 6 p.m. ; one child about 8 p.m., and the other child about 10 p.m. The mother and her sister (aunt) were quite well.

The doctor was called in on Monday morning. One child died at 2-30 on Monday afternoon.

Portion of sausage was obtained on 21/10/12.

A sample of vomit from one child on 21/10/12.

A sample of motion from same child 22/10/12.

Two samples of blood from the father on 21/10/12.

The house was very clean, drainage in good order, and it has a privy midden. There are four rooms downstairs—parlour, kitchen, scullery and pantry. The pantry is separate, very clean, and has window opening to external air.

The following was delivered at the Liverpool University Laboratories :—

Portion of cooked sausage, taken 21st October.

Specimen of blood from father, taken 21st October.

Specimen of vomit from one child, taken 21st October.

Specimen of faeces from same child, taken 22nd October.

The stomach of fatal case, sent on October 23rd (by post), received October 23rd.

The premises on which the sausages were manufactured were inspected.

The sausage-making room is behind store-room. The places evidently have been a house converted to shop purposes, communicating with the house next door.

The sausage-room was very clean; also the appliances.

The walls are whitewashed; three doors open into this room and light is supplied by a window which does not open. The ingredients of the sausages were chiefly beef, some pork, bread, biscuit powder, and seasoning.

On the particular days in question (Friday and Saturday) the sausages would be made from portions of the following :—

Half of hog pig, slaughtered locally.

Shoulder of frozen beef, purchased locally.

"	"	"
Buttock	"	"

Purchased Wednesday, October 16th; and also two pieces of chawl (about 5lbs.) taken from pig heads purchased at Manchester.

The meat when brought in is either hung in the store-room or the sausage-making room, and dealt with as soon as possible.

The appliances in the making-room are :—

The cutter.

The filler.

A boiler heated by gas.

A gas stove.

A gas engine.

The sausages are chiefly made from the beef; a little pork is also put in the mixing. The mixture from the chopper is put upon an enamelled dish, and from there put into the filler.

On Thursday, October 24th, shops were visited in Wigan district to ascertain any illness reported from the consumption of sausages of the same consignment. No illness was reported.

COPY OF BACTERIOLOGIST'S REPORT ON MATERIAL SUBMITTED.

THOMPSON YATES LABORATORIES,
UNIVERSITY OF LIVERPOOL,

October 31st, 1912.

General report on samples submitted by the Medical Officer of Health, Corporation of Wigan, October 22nd, 1912.

Samples consisted of :—

1. Portion of cooked sausage.
2. Specimen of blood from case I.
3. Specimen of vomit from case II.
4. Specimen of faeces from case II.
5. Stomach of fatal case (October 24th).

These specimens, excluding the sample of blood, were submitted to bacteriological examination, and 45 pure cultures were isolated and examined by a general process of exclusion. No Gaertner bacilli were finally distinguished in any of the specimens, although many of the organisms obtained were initially of a very suspicious nature. This latter remark applies more particularly to the portion of cooked sausage, which in addition to containing large numbers of *B. Coli*, containing also organisms of an intermediate type between typical *B. Coli* and the general group of Paratyphoid bacilli.

In view of the localised character of the outbreak and the absence of *Bacillus Enteritidis* Gaertner, or other typical members of the Paratyphoid group, not only from the sausage, but also from the Pathological material submitted, I am of opinion that the grossly contaminated condition of the sausage is quite consistent with it being at least a contributory factor to the illness.

If later observation of the cultures shows anything further of interest I will communicate with you.

(Signed) J. M. BEATTIE.

An inquest was held on the body of the deceased child, when a verdict of death from food poisoning was found.

The conditions under which the sausages were manufactured were satisfactory ; but the case appears to illustrate the danger of the use of frozen meat in the manufacture of food stuffs which are not immediately consumed. There was no evidence in this case of contamination by rats or mice.

DAIRIES, COWSHEDS & MILKSHOPS ORDER 1885 and 1886.

The milk supply continues to be satisfactory on the whole. The improved condition of the cowsheds has already been referred to in Part I. of this report. There remain now only three or four which require structural alterations. Unfortunately full advantage is not always taken of these improvements by the tenants, and in many cases the condition of the cows leaves much to be desired; while the precautions taken by milkers and others handling the milk are insufficient.

The following is the report of Mr. Woods, your Veterinary Inspector :—

GENTLEMEN,

During the year 172 official visits have been paid to the cowsheds of the Borough, and four cases of Udder Tuberculosis have been discovered and satisfactorily dealt with.

There are 44 registered cowsheds in the Borough. The number of cows is slightly less owing to exceptional circumstances, principally arising from the serious outbreaks of Foot and Mouth Disease throughout the country and the consequent interference with the free movement of cattle.

A new Order of the Board of Agriculture will come into force on May 1st, to which I think it necessary to draw attention. The Order in question is a considerable advance on anything previous. It is called the Tuberculosis Order of 1913.

At the present time the only milch cows dealt with by law are those affected with Tuberculosis of the Udder or giving Tuberculous milk, which amounts practically to the same thing, and even in this case all that the law enforces is isolation of the animal and the prohibition of the sale of such milk. There is no compulsion to slaughter the animal and there is no power to prevent the owner selling such an animal to another cowkeeper.

The present Order, however, instructs any person having in his possession any cow which is or appears to be suffering from Tuberculosis of the Udder, indurated udder, or other chronic disease of the udder, or any bovine animal which is or appears to be suffering from Tuberculosis with emaciation, to give information without avoidable delay to the Local Authority, through the medium of the police ; and also directs them not to use or mix such milk with other milk. Any private Veterinary Surgeon meeting with such a case in his practice is also required to notify the Local Authority, and is entitled to a fee of half-a-crown for so doing.

The Local Authority having received such information or having reasonable ground for suspecting the existence of one of these three forms of Tuberculosis on any premises is directed to make through their Veterinary Inspector such an examination as is necessary to verify the report and may with the consent of the owner, but not otherwise, apply the Tubercular test to any suspected animal. Where the Local Authority are satisfied by the report of their Inspector that one of these forms of Tuberculosis exists, they are directed to have the animal slaughtered after agreeing with the owner as to the value of the animal at the time. A post-mortem examination has to be made and a scale of compensation must be paid to the owner out of the local rates ; but one-half of such compensation is recoverable by the Local Authority from the Government. The scale is as follows :—The cow has first to be valued in two cases. First, on the supposition that it is Tuberculous ; and, secondly, on the supposition that it is healthy.

If the post-mortem examination fails to prove it Tuberculous the owner receives full value plus a sum of twenty shillings ; if the post-mortem examination shows Tuberculosis, then the compensation depends on the amount of Tuberculosis present, and that amount is taken to be what would be sufficient to condemn the whole carcase for use as food, in which case the compensation is to be one-fourth with a minimum of thirty shillings ; if a portion of the carcase is passed as food, the compensation is to be three-fourths up to a maximum valuation of thirty pounds.

There is a power on the part of the owner to object to a valuation if unsatisfactory ; in which case an independent valuer must be appointed ; one-half the cost of such valuation to be borne by the owner.

There are also clauses dealing with the milk from a suspected animal, which must be boiled before use ; and clauses dealing with cleansing and disinfection of an infected cowshed at the expense of the owner.

There is also a recommendation to owners to allow their cattle to be tested with Tuberculin on the distinct understanding that re-acting animals, unless affected with Udder Tuberculosis or Emaciated, shall not be dealt with by law ; but the Board is prepared to give advice to any owner as to the best method of isolating or segregating re-acting animals in any cowshed with the view of attempting to free any herd from Tuberculosis.

It is a far-reaching Order, and as far as compensation is concerned the Government only shares the compensation for 5 years, believing that after that time the cost to Local Authorities will not be great.

I may say that so far as the Borough is concerned I don't think the expense or inconvenience will be very great ; the principal expense will fall on the rural districts.

Yours obediently,

WM. WOODS.

RAINFALL, 1912.

AT WORTHINGTON.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	3.68	18
February	1.81	19
March	5.85	27
April	0.57	4
May	2.19	15
June	4.05	24
July	4.36	19
August	7.09	28
September	2.38	13
October	4.70	14
November	2.85	19
December.....	3.27	26
TOTAL	42.80	226

The mean average rainfall for the past 55 years, 37.35 inches.

RAINFALL, 1912.

AT BISPHAM.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	3.87	19
February	1.59	18
March	5.90	27
April	0.51	4
May	2.46	14
June	3.61	24
July	5.05	19
August	7.57	26
September	1.90	13
October	4.54	15
November	3.19	19
December.....	3.36	25
TOTAL	43.55	223

Average consumption per head per day, Wigan and Pemberton,
(estimated population, 91,150) was 16.90 gallons.

BLACK SMOKE NUISANCE.

This continues to be very bad. Owners of factories have been warned in a number of cases, but further proceedings were not taken as it was understood that experiments were being made with a view to remedying the nuisance. None of these, however, appear to have been successful, and it will be necessary to take more drastic action in the immediate future. The nuisance was increased for a time during and after the coal strike owing to the burning of inferior classes of fuel.

HOUSING.

The housing conditions in many parts of the Borough are deplorable, but a serious effort has been made during the year to inaugurate a real improvement in this respect. With a view to this the Insanitary Houses Committee has met monthly to receive reports on insanitary property and make the necessary Orders. The policy of the Committee has been to obtain the re-construction of dwellings and to demolish as few as possible. But as many of the houses dealt with have been back-to-back houses which have been converted into single tenements a certain displacement of tenants has been inevitable. There is always a risk of such displaced persons causing overcrowding or creating conditions worse than those they have left, and the demand for houses at a very low rental may become a serious problem in the future.

The work done during the year under the Housing and Town Planning Act, 1909, is shown in the following table :—

No. of houses reported on to Committee.	Closing Orders made.	No Orders made.	Houses made Habitable.	Closing Orders Determined.
281	245	30	42	42

Demolition Orders made.	Houses Demolished under Order.	Houses Demolished by Owners without Order.	Back-to-back Houses Converted.
12	4	10	44

As this work was practically inaugurated during the year a large proportion of the property on which Closing Orders were operative was still in hand at the end of the year, and during the first few months of 1913, 89 Closing Orders referred to in the above table were determined, while notifications or work is in progress in connection with all the others referred to.

The work done has included the paving and draining of yards, repairing of closets and ashpits, substitution of water closets for pails and privy middens, cleaning and re-decorating interiors, provision of adequate light and ventilation, provision of slopstones, drainage and water supply, repairs to roofs, spouting, and brickwork, and conversion of back-to-back into through houses.

Of the Demolition Orders made and quoted in the above table, six concerned houses on which Closing Orders were made in the previous year, but these were re-constructed and made habitable by the owner with the consent of the Committee.

The houses reported on and dealt with were situated as follows :

Shaw's Yard, Hallgate.
 Moore's Buildings, Frog Lane.
 Orrell's Yard, Pemberton.
 Atherton's Yard, Hallgate.
 Bolton's Yard, Hallgate.
 Crooke's Yard, Hallgate.
 Robin Hood Yard, Hallgate.
 Dawber's Court, Standishgate.
 Penson's Yard, Standishgate.
 Dobb's Fold, Wallgate.
 Frog Lane.
 McEwen's Yard, Millgate.
 Preston's Yard, Pemberton.
 Albert Street, Pemberton.
 Dickinson's Yard, Pemberton.
 Clayton's Yard, Pemberton.
 Magraw's Yard, Pemberton.
 Flemming's Yard, Pemberton.
 Bridgewater Street, Pemberton.

Harrison Street, Pemberton.
 Engine Fold, Pemberton.
 Brackley Street, Pemberton.
 Thompson Street, Pemberton.
 Holt Street, Pemberton.
 Marsh Street, Pemberton.
 Scholes.
 Hilton's Yard, Lower Morris Street.
 Douglas Street.
 Hodge's Yard, Douglas Street.
 Hilton's Yard, Douglas Street.
 Pitt Street.
 Bigham's Yard, Pitt Street.
 Scholefield Lane.
 Swift's Square, Scholefield Lane.
 Greenough's Yard, Orchard Street.
 Crofters' Arms Yard.
 Princess Street.
 Sydney Street, Pemberton.
 Folly.
 Grayson's Yard, Wigan Lane.
 Turner's Yard, Pemberton.
 Ashton Street.
 Ormskirk Road, Pemberton.
 Mooney's Yard, Pemberton.
 Watmough's Yard, Scholes.
 Rigby's Yard, Scholes.
 Hardybutts.

The number of new houses erected during the year is 59; in all cases the plans were passed by the Streets Committee, acting on the advice of the Borough Surveyor.

As against this increase of 59 houses must be set the fact that 14 houses have been demolished and 44 back-to-back houses converted into single dwellings—a further loss of 22 houses. The net increase in the number of houses is thus only 23, which allowing 5 inmates per house would provide accommodation for only 115 persons, whereas the estimated increase in population is 873.

It is thus evident that private enterprise in building is not keeping pace with the requirements of the population.

UNPAVED YARDS & PASSAGES, &c.

The following have been dealt with for defective surface of yards and passages :—

- 60, Linney Street.
- 133, Platt Lane.
- 5, Clarence Street.
- 79 and 81, Darlington Street East.
- 4, Greenough's Row.
- 17, Wellington Street.
- 31-37, Richmond Street.
- 1-5, Union Street.
- 105-109, Great George Street.
- 37, Bolton Street.
- 28, Holme Terrace.
- 48, Boyswell Lane.
- 48, Scholes.
- 14-22, Leigh Street.
- 13, Bridgewater Street.
- Smithy Yard.
- Rear of 6-14, Hen Street.
- 1-7, Gee's Court, Harrogate Street.
- 108-130, Ormskirk Road, Pemberton.
- 6, Brookhouse Street.
- 55, Ingram Street.
- Passage adjoining 12, Caunce Street.

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, 1912	21,797	17	0
Pail excreta removed in 1912	6,823	14	0
Midden and Ashpit refuse removed in 1912	11,555	4	0
Number of Pail Closets in Borough	7,894		
Number of Pails collected in 1912	423,596		
Cost (including washing and distribution)	£2,226	14	6
Cost of Collecting Ashes during 1912	£2,794	3	10
Cost of Collecting Midden and Ashpit Refuse during 1912...	£1,308	7	11
Number of privy middens in Borough	1,669		
„ „ emptied, 1912	19,562		
„ new houses erected in 1912	59		
„ Water Closets in Borough to December 31st, 1912	6,900		

MIDDENS, ASHPITS AND CESSPOOLS.

Year.	ABOLISHED.			RE-CONSTRUCTED.		
	Middens.	Ashpits.	Cesspools.	Middens.	Ashpits.	Cesspools.
1904	1	...	...	3	...	...
1905	7	...	...	5	...	...
1906	6	...	...	2	...	...
1907	7	...	...	3	...	...
1908	6	...	1	3	...	...
1909	5	1	...	15	3	...
1910	1	...	...	2	...	...
1911	11	...	...	32	3	...
1912	7	...	...	16	2	1
TOTAL	51	1	1	81	8	1

Middens132 demolished or re-constructed.

Ashpits 9 „

Cesspools 2 ,

MIDDENS OR PAIL CLOSETS CONVERTED INTO WATER
CLOSETS IN EACH OF ABOVE YEARS.

1904	8
1905	28
1906	23
1907	26
1908	21
1909	60
1910	5
1911	86
1912	44
<hr/>	
TOTAL	301

*Information regarding "Middens, Ashpits and Cesspools" kindly
supplied by Mr. E. Knowles, Night Soil Superintendent.*

**REPORT of the Lady Health Visitor (Miss Norman)
to the Medical Officer of Health on Work done
during the Year 1912.**

GENERAL STATEMENT.

During the year 1912, 1,479 visits were made as compared with 2,546 visits made during the previous year.

DETAILS OF VISITS.

1,337 visits have been made in connection with the Notification of Births Act ; re-visits being made when necessary.

Sixty-nine visits have been made to the Midwives practising in the Borough as compared with 172 during the previous year.

Thirty per cent. of the Midwives have shown want of knowledge of the rules of the Central Midwives Board.

Seven per cent. have been reported to the Medical Officer of Health ; in one case the Midwife being reported to the Central Midwives Board.

Sixty-eight deaths of Infants under one year of age occurring from all causes have been investigated ; and other miscellaneous visits concerning such matters as Phthisis, Ophthalmia Neonatorum and Puerperal Fever have been made.

SUMMARY.

Births visited	1,337
Midwives visited and inspected.....	69
Deaths of infants under one year investigated.....	68
Visits to special cases	4
Puerperal Fever investigations	1
Total	<u>1,479</u>

MIDWIVES ACT, 1902.

During the year 53 women were registered as practising within the Borough. They have been visited at their own houses by Mrs. Hall, the Health Visitor.

During the year there were 4 cases of Puerperal Fever notified and 3 deaths, against 7 cases and 2 deaths in 1911. In all cases a Midwife had been in attendance; in each case she was suspended from carrying out her midwifery duties.

Caution has been given for negligence in carrying out the rules of the Midwives' Board.

Notifications sent in, as required by the rules of the Central Midwives Board :—

	1912	1911	1910	1909	1908	1907	1906	1905
Records of Sending for Medical Help	297	199	80	60	42	16	13	9
Notification of Death of Mother or Child	12	8	...	2	4	2	4	...
Notifications of Still-births	29	32	25	34	26	18	15	5

COUNTY BOROUGH OF WIGAN.

Midwives on Register, year ending 31st December, 1912 :—

<i>Name.</i>	<i>Registered No.</i>
Ashton, Ellen	3,740
Archer, Annie M.	4,143
Baxter, Mary E.	661
Bentham, Elizabeth	6,722
Bentham, Ellen	19,486
Bolton, Elizabeth	26,027
Booth, Maria	3,263
Cox, Jane	933
Cowley, Elizabeth	3,780
Cunliffe, Mary	19,073
Daniels, Ellen	9,585
Dutton, Harriet	10,507
Ellis, J.	32,972
Finch, Eliza	3,760
Finch, Alice	4,360
Fraser, Susannah	26,727

<i>Name.</i>	<i>Registered No.</i>
Grundy, Maria	3,643
Hanna, M. C.	32,247
Hall, Ann J.	10,630
Howarth, Mary E.....	28,695
Holland, Annie A.	28,685
Hogg, M.	36,116
Layland, Alice	5,276
Mann, M. A.	33,103
McAllister, Isabel.....	23,614
McCann, Margaret	2,532
Patrick, Ann.....	6,335
Pilkington, Hannah.....	11,088
Priest, Catherine	17,057
Perry, Nancy	17,052
Quarmby, Helena M.	30,811
Scott, Jane I.	26 920
Taylor, Ann	3,331
Thomas, M. J.	33,242
Topping, S. E.	30,896
Wilson, Dorothy	558
Worthington, Elizabeth	4,367
Walsh, Alice	4,346
Winstanley, Ann	3,574
Giles <i>nee</i> Wilkinson, Mary J. G.	28,969

Residing outside but practising in Wigan :—

Berry, S.	11,980
Coxhead, J.....	4,351
Davies, Mary A.	2,780
Ellison, Mrs.	3,196
Green, Elizabeth	1,911
Hall, Mrs.	2,813
Horne, J.....	5,473
Knowles, Fanny.....	2,328
Moss, Elizabeth	15,722
Moss, Margaret.....	4,398
Ramsdale, A.	3,219
Rudd, Ann	2,773
Trow, Mary Ann	21,067

NOTIFICATION OF BIRTHS ACT, 1907.

This Act has been adopted and has now been in operation since the 6th of June, 1910. Subjoined are the Infantile Death-rates for 1912 and 1911:—

INFANTILE DEATH-RATES, 1912.

Month.	Deaths, all Causes.	Births.	Rate per 1,000 Births.	Diarrhoea Deaths.	Rate per 1,000 Births.
January	16	206	77	...	...
February	24	234	102	1	4
March	34	287	118	1	3
April	23	201	114	...	...
May	26	209	124	5	23
June	34	247	137	3	12
July	31	186	166	5	26
August	38	221	171	9	40
September	26	175	148	6	34
October	21	198	106	...	...
November.....	20	221	90	1	4
December	30	179	167	...	...
Transferable	1	24	...	...	...
	324	2,588	125	31	11

Rate per 1,000 Births for 12 months, 125.
Average for the last 10 years (1903-1912), 162.

INFANTILE DEATH-RATES, 1911.

Month.	Deaths, all Causes.	Births.	Rate per 1,000 Births.	Diarrhoea Deaths.	Rate per 1,000 Births.
January	17	219	77	...	...
February	29	200	145	1	5
March	33	185	178	...	...
April	34	236	144	1	4
May	14	197	71	...	...
June	25	186	134	5	26
July	34	228	149	19	83
August	85	173	491	97	560
September	76	190	400	58	305
October	39	208	139	18	86
November.....	32	176	181	2	11
December	48	235	204	2	8
Transferable....	4	8 less			
	470	2,425	193	203	83

Rate per 1,000 Births for 12 months, 193.
Average for the last 10 years (1902-1911), 165.

EDUCATION ACT, 1902 & 1904.

The report on the work done under these Acts is given in the School Medical Officer's report.

NOTIFICATION OF BIRTHS ACT 1902

This Act has been adopted and has been in force since the 1st of January 1903. Subsequent to the 1st of January 1903 for 1902 and 1901.

REMARKS ON THE ACT

Year	1902	1901	1900	1899	1898
Births	1,100	1,050	1,000	950	900
Deaths	1,050	1,000	950	900	850
Population	1,000	950	900	850	800
...

There are 1,000 births in 1902, 1,050 in 1901, 1,100 in 1902.

REMARKS ON THE ACT

Year	1902	1901	1900	1899	1898
Births	1,100	1,050	1,000	950	900
Deaths	1,050	1,000	950	900	850
Population	1,000	950	900	850	800
...

There are 1,000 births in 1902, 1,050 in 1901, 1,100 in 1902.

EDUCATION ACT, 1902 & 1904

The report on the work under these Acts is given in the School Manual, which is report.

Annual Report of the Public Analyst, 1912.

THE CLIFF, HIGHER BROUGHTON,

MANCHESTER, May, 1913.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to report herewith a short resume of the work of the Analytical Department of the Corporation for the year 1912.

The report is divided, as in previous years, into the work carried out under the Sale of Food and Drugs Acts and Fertilizers and Feeding Stuffs Acts, Monthly Water Examinations, and Gas Tests.

There is nothing calling for special remark other than that the percentage of adulteration in respect of the first-mentioned Acts is about three times higher than in the previous year.

The water has been uniformly good throughout and the Corporation is to be congratulated upon the possession of a supply of such consistent and wholesome quality.

I am, Gentlemen,

Your obedient Servant,

S, ERNEST MELLING,

WORK CARRIED OUT UNDER THE SALE OF FOOD AND DRUGS ACTS.

During the year 197 samples were examined, viz. :—

136 milks, 12 whiskies, 8 butters, 7 coffees, 6 rice, 5 sweet spirits of nitre, 4 each of pepper and self-raising flour, 2 each of camphorated oil, catsor oil, and olive oil ; 1 each of eucalyptus oil, calomel ointment, compound powder of cinnamon ; and 6 miscellaneous samples.

Fifteen samples were found to be adulterated or not up to standard ; 10 of these being milks, 4 sweet spirits of nitre, and 1 camphorated oil.

The milk adulteration has been in respect of either the addition of water, or deficiency in fat by abstraction direct, or the addition of of separated milk to milk of good quality. Particulars are to be seen in the quarterly reports which have been duly presented.

Four samples also were found to contain heavy traces of preservative in the form of boron compounds.

Apart from these samples, however, the average quality of the milk was quite good, and further confirms one in the belief that the Board of Agriculture limits in regard to fat and non-fatty solids operate rather in favour of, than against, the milk producer.

In a few cases here and there vegetable colouring matter was observed. There is no question as to the danger of the addition of such agents, but it is obvious that the practice is open to misconstruction.

No case of butter adulteration was reported. All samples were free from foreign, animal or vegetable oil or fat ; and boron compounds were present in no case amounting to the limit of 0.5 per cent.

The amount of water present also was well under the statutory 16 per cent. in each case. The whiskies were of the requisite alcoholic strength as defined by Act of Parliament ; and with the exception of one sample of camphorated oil, which was somewhat deficient in camphor, all samples of oil were found to be wholesome and up to the requirements of the British Pharmacopœia. 80 per cent. of the sweet spirits of nitre were more or less deficient in ethyl nitrite, its medicinally-active constituent.

One can scarcely regard this type of adulteration to be due to anything but carelessness or ignorance. The properties of ethyl nitrite are well known (volatility, etc.) and it devolves upon the chemist, and particularly the small shopkeeper, to adopt every means possible to minimise this tendency to deterioration.

The coffees were free from foreign vegetable tissue and, like the peppers, were chemically and microscopically of normal quality.

All samples of rice were specially examined for steatite or talc, which is used as a "facing," but the quantity present in no case exceeded 0.5 per cent.

The drugs had been prepared in close accordance with the directions of the British Pharmacopœia ; and the remaining miscellaneous samples call for no special comment.

WORK CARRIED OUT UNDER THE FERTILIZERS AND FEEDING STUFFS ACTS.

Fifteen samples were examined during the year, which included cotton-seed cake (decorticated and undecorticated), bean meal, Indian meal, crushed oats, bran, etc., and 8 were found either not up to the declaration on the invoice, or, in absence of such invoice, were judged to be deficient in one or other of its important constituents. These samples, it is to be noted, were taken without the formalities of the Act.

WATER SUPPLY.

Nine samples of Water were taken in the Wigan area, and the remaining three from Pemberton. The appearance varied from a perfectly clear and colourless liquid to one having a yellowish tinge; and the presence of traces of suspended matter was noted on only four occasions.

The hardness of the water has been very carefully determined. The hardness before boiling was at a maximum in September when sampled from service tap at 6, Ormskirk Road, Pemberton, it showed 13°, and after boiling 8°. The lowest record was in May, when a sample taken from the service tap at 116, Frog Lane, showed only 2·5° before boiling, and 2·25° after boiling. The total solid matter in solution for this month was only 6·4 grains per gallon. The highest record of albuminoid ammonia was a sample in November, 0·12 part per million, and the lowest 0·05 part per million in June. This figure, as I have often pointed out, is subject to fluctuation, and is in all analyses carried out so far, an index of vegetable organic contamination.

The previous history of the water is a satisfactory one, as seen in the low proportion of nitrogen as nitrates, and its stability is emphasised by its complete freedom from nitrites.

In passing, and although not coming in the year under review, I should mention that in co-operation with Dr. Wynne, the unsatisfactory character of one of the feeders of the Pemberton supply, has recently been amply demonstrated, and in the face of some element of danger, the supply has been diverted. In this case chemical data available pointed to a high degree of organic purity, but upon a more extended examination, involving bacterioscopic methods, it was perfectly clear that the history of the water was unsatisfactory, and we had no hesitation in advising its discontinuance.

GAS TESTS.

In the earlier and later months of the year regular examinations were made of the Corporation gas supply, and the illuminating power was found to vary within narrow limits. The highest result being 18·25, the lowest 18·11; and the average 18·19 sperm candles.

S. ERNEST MELLING.

County Borough of Wigan.



ANNUAL REPORT

OF THE

Chief Sanitary Inspector.

1912.

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ANNUAL REPORT OF THE CHIEF SANITARY INSPECTOR,
1912.

HEALTH DEPARTMENT,

KING STREET WEST, April, 1913.

To the Chairman and Members of the Health Committee.

SIR AND GENTLEMEN,

I have much pleasure in submitting for your perusal my First Annual Report of the work carried out by the Staff of the Department during the year 1912.

During the year the work of the staff was re-organised so that the duties of the department could be carried out to some degree of satisfaction. The work of the department increases yearly and with the present staff I cannot hope to give the minute attention to every branch of the work. I sincerely hope that before long your Committee will deem it advisable to increase the Inspectorial Staff.

In carrying out our duties one cannot fail to notice the apathy shown by the householder generally in endeavouring to carry out the ideals of cleanliness, and further, the wanton destruction of property by persons aptly described as "hooligans." I fully realise the hardship that is put upon property owners by this Department, when notices are served upon them to remedy the conditions resulting from this hooliganism.

A detailed account of work done is given under the different headings. Beyond the work done under the Housing and Town Planning Act, house to house inspection has been carried out in a smaller degree.

In conclusion, Gentlemen, I have to tender you my sincere thanks for the help and consideration extended to the department. To the Medical Officer of Health I tender my thanks for his ever-ready help. To the Inspectors and the rest of the staff I have nothing but praise, and sincerely hope that their efforts in carrying out the arduous duties will be fully appreciated by you.

I am, Gentlemen,

Your obedient Servant,

CHARLES H. FRANCE,

Chief Sanitary Inspector.

THE FOLLOWING IS A SUMMARY OF THE VISITS PAID
DURING THE YEAR.

No. of Houses and premises inspected <i>re</i> Nuisances and complaints	2,415
„ Re-visits <i>re</i> Nuisances	903
„ Miscellaneous Visits	896
„ Visits to premises <i>re</i> Testing Drainage	39
„ „ „ Housing and Town Planning Act	352
„ Re-visits to premises <i>re</i> Housing and Town Planning Act	495
„ Visits to Infectious Disease Cases	1,193
„ „ <i>re</i> Limewashing, &c., after Infectious Disease...	182
„ „ to Slaughter-houses	1,087
„ „ to Offensive Trade Premises	136
„ „ to Markets	303
„ „ to Butchers' and other Food Shops	113
„ „ to Cowsheds, Dairies and Milkshops	6
„ „ to Houses Let-in-Lodgings (day)	709
„ „ „ (night)	2
„ „ to Common Lodging Houses (day)	2,332
„ „ to Shops (day)	4,278
„ „ „ (night);	41
„ „ „ <i>re</i> Closing Order (day)	46
„ „ „ „ (night)	187
„ „ to Factories	46
„ „ to Workshops	645
„ Smoke Observations taken	13
„ Canal Boats inspected	102
„ Samples procured under the Food and Drugs Acts...	201
„ „ „ Fertilizers and Feeding Stuffs Act.....	15

NUISANCES.

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

Houses and premises inspected and visited <i>re</i> Nuisances and Complaints	2,415
--	-------

Nuisances discovered	1,182
„ abated	842
Notices issued (preliminary)	543
„ (formal).....	238
Letters issued	110
Re-visits to Nuisances	903
Other visits made	896
Visits to premises (testing of drainage)	39
Nuisances remaining on books, December 31st, 1912.....	282

DESCRIPTION OF NUISANCES DEALT WITH.

Defective drainage.....	28
Choked drainage	125
Defective and foul gullies	15
Gullies requiring grids	24
Want of slopstones and pipes	2
Sink waste pipes connected to drains	4
Slopstones defective	1
Soil pipes or connections defective	6
Defective or choked water closets	22
Defective or choked sink waste pipes	36
Defective ventilating shafts	1
Defective water supply to closets.....	5
Defective condition of closets (roof, walls, door, seat or floor)	84
Want of doors to closets	15
Want of doors to Ashhouse	18
Defective condition of ashhouses (roof, walls, door or floor)...	20
Defective or choked waste water closets.....	22
Want of ashtub covers	36
Want of ashtubs	33
Foul and defective privies and ashpits	34
Want of pails to closets	1
Defective W.C. cisterns	13
Insufficient closet accommodation to houses or workshops.....	22
Insufficient ventilation to closets, factories and workshops.....	1
Workshops insufficiently ventilated	1
Defective spouts (eave or down).....	116

Want of spouting to premises.....	46
Defective roofs	52
Defective yard surface round gully.....	16
Defective flagging or paving	55
Unpaved yards and passages	4
Houses overcrowded or keeping of lodgers	16
Houses and premises filthy	12
Houses requiring limewashing	2
Houses without proper and sufficient drainage.....	1
Houses without proper or through ventilation.....	1
Houses with filthy closets	40
Houses with filthy yards and entries.....	15
Houses with damp or defective walls	63
Bakehouses requiring limewashing	1
Slaughter-houses requiring limewashing	1
Foul closets.....	37
Want of middensteads	7
Defective middensteads	6
Accumulations of manure	10
Accumulations of water	3
Accumulations of rubbish	9
Keeping of animals	65
Smoke nuisances	1
Miscellaneous	34

COMMON LODGING HOUSES.

The different houses on the register have been given the attention necessary. The Bye-laws are strictly enforced—verbal warnings for slight infringements have been given, and these have had the desired effect.

The number of registered houses compared with the previous year has been increased by one. Slight changes have occurred in the keepers licensed. Mr. J. Risley has carried out the work of inspection in a very satisfactory manner.

COMMON LODGING HOUSES.

No. of Common Lodging Houses in the Borough	21
„ Lodgers allowed nightly	956
„ Visits by day	2,332
„ Lodgers reported as being received (per returns).....	188,134
„ Letters sent out	4

COMMON LODGING HOUSES.

<i>No. on Register.</i>	<i>House.</i>
1	.....2 and 4, John Street.
2	.....“ Brown Cow,” Queen Street.
3	.....23, 25, Hardybutts.
4	.....46, Queen Street.
5	.....1, 3, 5, Union Street.
6	.....16, Hardybutts.
7	.....87, 89, 91, Millgate.
8	.....1, Hardybutts.
9	.....14, Scholes.
10	.....“ The Mint,” Scholes.
11	.....17, Warrington Lane.
12	.....7, Wiend.
13	.....1, Swift’s Yard, Millgate.
14	.....7, Hardybutts.
15	.....32, Hardybutts.
17	.....3, Hardybutts.
24	.....28, Wiend.
34	.....27, Hallgate.
36	.....1, 3, 5, 7, 9, Scholes.
37	.....7, 9, Union Street.
38	.....36, 38, Hardybutts.

HOUSES LET-IN-LODGINGS.

The work of inspection of these houses has been carefully carried out by Mr. E. Richardson.

The number of houses on register has increased by one as compared with last year.

No. of Houses on register	18
„ Visits (day)	709
„ Visits (night)	2

SLAUGHTER-HOUSES.

The slaughter-houses have been regularly visited and every attention given to the compliance of the Bye-laws. As I mentioned in the previous year the majority in many ways do not strictly conform to the Bye-laws. A report has been prepared upon each slaughter-house and representatives have met your Committee and given assurance that the recommendations of Medical Officer of Health regarding the improvements necessary to comply with the Bye-laws, will be carried out satisfactorily. When such is done, the slaughter-houses will compare favourably with those in other towns.

It is quite essential to the public, as it is to the tenant, that no stigma should be cast upon the conditions governing the storage of food and slaughtering of animals.

The butchers have as usual notified us when they have a beast awaiting our inspection. I have directed attention during the year to the conditions of the shops where food is supplied.

The beasts that have been inspected by *request* during the year number 238.

In each case where the beast has been passed, portions of the offal have been surrendered and destroyed. In those condemned, the offal was accounted for in each case.

The fish markets have been regularly visited.

OFFENSIVE TRADE PREMISES.

Bye-laws have been before your Committee and confirmed by the Council for the better regulation of these places, and I hope to report favourably on their condition in my next report. A greater number of visits have been paid than in former years.

SLAUGHTER-HOUSES & MARKETS, &c.

No. of Slaughter-houses in Borough	26
„ Offensive Trade Premises in Borough.....	7
„ Knackers Yards in Borough (licensed)	2

No. of Visits to Slaughter-houses	1,087
„ „ Offensive Trade Premises	136
„ „ Markets.....	303
„ „ Butchers' and other Food Shops.....	113
„ Letters sent out	5
„ Certificates issued (condemned food)	66
„ Beasts passed	226 $\frac{1}{4}$
„ „ condemned	11 $\frac{3}{4}$

FOOD CONDEMNED, 1912.

January.	54 Boxes of Fish, 3 Bags of Fish.
February.	1 Turkey, 1 Beast (Tuberculosis), 6 $\frac{1}{4}$ cwts. of Beef (Tuberculosis). 10 Boxes and 2 Baskets of Tomatoes.
March.	123 Jars of Marmalade, 2 Kits of Fish, 16 Rabbits.
April.	14 Rabbits, 2 Forequarters of a Beast (Tuberculosis) 1 Beast (Tuberculosis), 1 Bag of Fish.
May.	11 Boxes of Fish.
June.	30 Boxes of Fish.
July.	51 Boxes of Fish, 125 Trays of Strawberries, 36 Baskets of Raspberries, 23 Baskets of Gooseberries.
August.	2 Beasts (Tuberculosis), 1 Calf (Emaciated), 3 Tubs and 10 Pots of Plums, 9 Bags of Apples, 1 Box of Fish.
September.	1 Beast (Tuberculosis), 2 Forequarters of a Beast (Tuberculosis), 20lbs. Pomegranates, 2 Boxes and 4 $\frac{1}{2}$ Bags of Fish.
October.	2 Beasts (Tuberculosis), 1 Hindquarter of a Beast (Tuberculosis), 13 Rabbits, 7 Boxes of Melons, 12 Boxes of Tomatoes, 2 Boxes and 7 Bags of Fish.
November.	1 Beast and 2 Forequarters of a Beast (Tuberculosis), 5 Crates of Bananas, 7 Boxes of Melons, 12 Boxes and 21 Baskets of Tomatoes, 7 Bags of Fish.
December.	Portion of Beast (Tuberculosis), 1 Pig (sweated), 16 Pig Plucks (sweated), 10 Hares, 66 Baskets of Tomatoes.

SUMMARY.

8 Beasts.	34 Boxes of Tomatoes.
6 Forequarters of Beasts.	89 Baskets of Tomatoes.
1 Hindquarter of a Beast.	5 Crates of Bananas.
Left Flank portion of a Beast.	14 Boxes of Melons.
6 $\frac{1}{4}$ cwts. of Beef.	20lbs. of Pomegranates.
1 Pig.	9 Bags of Apples.
1 Calf.	3 Tubs of Plums.
16 Pigs' Plucks.	10 Pots of Plums.
106 Boxes of Fish.	23 Baskets of Gooseberries.
2 Kits of Fish.	36 Baskets of Raspberries.
22 $\frac{1}{2}$ Bags of Shellfish.	125 Trays of Strawberries.
1 Turkey.	123 Jars of Marmalade.
10 Hares.	43 Rabbits.

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

	T.	C.	Q.
Fish	7	1	3
Beef	7	8	2
Pork	0	3	3
	<hr/>	<hr/>	<hr/>
	14	14	0

In addition to the above, the following was destroyed :—

	T.	C.	Q.
Shellfish refuse	18	10	3
Other refuse	254	0	2
	<hr/>	<hr/>	<hr/>
	272	11	1

CANAL BOATS ACTS, 1877 & 1884.

The canal has been visited regularly during the year and the boats thereon have been thoroughly examined. The number of inspections have been slightly more this year.

The number of occupants and the sexes on the boats inspected, were as follows :—Men, 221 ; Women, 16 ; Children, 14.

A census was taken at the end of the year of the boats that have been registered at Wigan—as to how many were still in use or otherwise. The result of the enquiries is given below.

On January 16th of this year, H.M. Inspector of Canal Boats (Mr. Llewellyn) visited me and made a thorough inspection of the books, and expressed himself fully satisfied upon the work that had been carried out.

During the year disinfection had been carried out on a boat, consequent upon information from out-district respecting the removal of a case of Scarlet Fever from the boat.

No. of Boats that have been registered at Wigan.....	286
„ „ still in use or available	70
„ „ not in use	185
„ „ that cannot be traced	15
„ „ re-registered with other authorities	10
„ „ „ at Wigan	6
„ Applications for registration and re-registration during the year	10
„ Applications granted	10
„ Boats re-registered	2
„ Inspections	102
„ Notices issued	6
„ „ complied with	6
„ Contraventions of regulations.....	6
„ Letters sent out	68
„ Certificates renewed	4

Copy of Annual Report to the Local Government Board as to the execution of the Canal Boats Acts during 1912 :—

1. INSPECTION OF BOATS.

The inspection is undertaken by the Chief Sanitary Inspector (Mr. Charles H. France, Health Office, Wigan). Remuneration reckoned in salary.

2. NUMBER OF BOATS INSPECTED.

100. Condition of boats and occupants, good.

3. INFRINGEMENTS OF THE ACTS AND REGULATIONS.

(c) Certificates	4
(d) Marking	1
Leaky cabin	2
Defective cabin	1

4. LEGAL PROCEEDINGS.

None taken.

5. STEPS TAKEN TO SECURE COMPLIANCE WITH ACTS AND REGULATIONS.

Notices and letters issued in each case.

6. CASES OF INFECTIOUS DISEASE.

None.

7. DETENTION OF BOATS FOR CLEANSING AND DISINFECTION.

1. (This was a case of notification from out-district of removal of Infectious Disease (Scarlet Fever) from boat.) Disinfection carried out satisfactorily by this Authority.

8. TOTAL NUMBER OF BOATS ON REGISTER.

Total registered	286
(a) In use or available	70
(b) Cannot be traced	15
Not in use	185
Re-registered	16

9. NUMBER OF BOATS REGISTERED IN 1912.

8. No structural alterations.

(Signed) CHARLES H. FRANCE,

Chief Sanitary Inspector.

SMOKE NUISANCES.

During the past year the following observations have been made of the mill chimneys in the Borough.

In 3 cases letters were sent calling attention to the time limit of 8 minutes being exceeded. No further complaint has been necessary. With the exercise of a little care upon the part of the stokers, much of the nuisance arising from the emission of black smoke would be avoided.

No. of Smoke Observations	13
„ Letters sent out	3

INFECTIOUS DISEASES.

During the year this work has been carefully carried out, though there has been a reduction in the number of ordinary notifiable diseases. The notification of Pulmonary Tuberculosis has increased the work of the staff. Every case of infectious disease necessitates visiting and re-visiting upon the part of the Inspector for the purpose of seeing that the Medical Officer of Health's instructions are being carried out. Then follows disinfection, and finally the compliance of notices *re* limewashing, &c.

The number of premises and articles disinfected are very slightly different to the previous year. During the 'Xmas vacation the schools in the Borough were sprayed and disinfected owing to the prevalence of Measles.

Appended is a summary of the work done.

INFECTIOUS DISEASES (PREVENTION) ACT.

No. of Houses disinfected	364
„ Rooms disinfected	599
„ Beds disinfected	332
„ Mattresses disinfected	223
„ Sheets and Quilts disinfected	1,232
„ Other Articles disinfected ...	3,258
No. of Premises Cleansed and Limewashed after Infectious	
Disease.....	135
„ Visits to Houses <i>re</i> Limewashing and Cleansing, &c.	182
„ „ <i>re</i> Infectious Disease	1,193
„ Letters sent out <i>re</i> Infectious Disease	1
„ „ <i>re</i> Limewashing	10

SALE OF FOOD & DRUGS ACTS, 1875-1907.
MARGARINE ACTS, 1887-1907.

The work carried out under these Acts has been much the same as in the previous year. The number of samples obtained has been slightly under that of the previous year, but the number found adulterated is double. During the month of June—owing to preservatives being found in samples of milk submitted—the Medical Officer of Health issued a circular to each milk dealer in the Borough calling their attention to the fact, and warning them, that in future cases where the presence of preservative is found, action would be taken against them.

Of the 201 samples obtained, with 4 exceptions, all were submitted to the Public Analyst. These 4 were informal samples of spirits and were tested by me with the hydrometer and found genuine. During the year the Local Government Board issued Regulations, namely: "The Public Health (Milk and Cream) Regulations, 1912," which came into operation on October 1st, 1912. It makes it an offence for the addition of preservatives to milk, and with certain restrictions to cream, and regulates the sale of preserved cream.

Regulations were also issued by the Board of Agriculture and Fisheries respecting "skimmed and separated milk." These regulations came into operation on September 1st, 1912.

Appended is the list of samples taken with results of analysis.

No. of Samples obtained for analysis	201
" " genuine	190
" " adulterated.....	11
" " "not formal"	34
" Letters sent out	8

	Samples.	Genuine.	Adulterated.	Not Formal.
Milk	136	130	6	3
Butter	8	8	—	—
Coffee	7	7	—	—
Coffee & Chicory ...	1	1	—	—
White Pepper	4	4	—	—
Rice	6	6	—	6
Self-raising Flour .	4	4	—	4
Brandy	1	1	—	—
Whiskey	15	15	—	3
Shrimps	1	1	—	1
Olive Oil	2	2	—	2
Castor Oil	2	2	—	2
Camphorated Oil .	2	1	1	2
Glycerine	2	2	—	2
Eucalyptus Oil.....	1	1	—	1
Sweet Spirits of Nitre	5	1	4	3
Calomel Ointment.	1	1	—	1
Compound Powder of Cinnamon...	1	1	—	1
Nerve and Tonic Powder	1	1	—	1
Head Powder.....	1	1	—	1
Total	201	190	11	34

Name of Article.	Identification number given to the sample in the Quarterly Report.	Result of Analysis.	If any legal proceedings were instituted under the Sale of Food and Drugs Acts, state result showing fines and costs separately.	If any legal proceedings were taken under Acts other than the Sale of Food and Drugs Acts, state the result, showing fines and costs separately.	If no legal proceedings were instituted, state briefly the course adopted in regard to each sample.	Information, if any, as to previous convictions.	Remarks on any point of special interest.
Camphorated Oil....	61	Camphor, 19.45 Olive Oil, 80.55 Deficient in camphor to the extent of 9.3%	No.	No.	None.	...	Informal sample.
New Milk	77	Deficient in fat to the extent of 13.3% Milk fat 2.6% N. fatty solids 9.0% Water 88.4% 100.0%	No.	No.	Warned. Explanation given. Further sample taken informally.	...	Formal. Stated to be from heavy milk.
New Milk	97	Deficient in fat to the extent of 6.6% Milk fat 2.8% N. fatty solids 9.2% Water 88.0%	No.	No.	Warned.	...	Formal.
New Milk	108	Deficient in fat to the extent of 3.3% Milk fat 2.9% N. fatty solids 8.6% Water 88.5%	No.	No.	...	...	Informal sample; following sample No. 77. From heavy milk.

Name of Article.	Identification number given to the sample in the Quarterly Report.	Result of Analysis.	If any legal proceedings were instituted under the Sale of Food and Drugs Acts, state result showing fines and costs separately.	If any legal proceedings were taken under Acts other than the Sale of Food and Drugs Acts, state the result, showing fines and costs separately.	If no legal proceedings were instituted, state briefly the course adopted in regard to each sample.	Information, if any, as to previous convictions.	Remarks on any point of special interest.
New Milk	158	Contains 2.1% of extraneous water. Milk 97.9% Ext. water 2.1% 100.0%	No.	No.	Warned by letter.	...	...
New Milk	163	Contains 4.7% of extraneous water. Milk 95.3% Ext. water 4.7% 100.0%	Yes. Dismissed.	No.	...	...	Costs to Corporation 8/6; bench refused to convict in view of the fact that the solids taken together were up to the minimum allowed by the Board of Agriculture. Corporation withdrew case consequent upon magistrates' decision upon case 163.
New Milk	167	Contains 3.5% of extraneous water. Milk 96.5% Ext. water 3.5% 100.0%	Yes. Withdrawn.	No.	...	...	Informal sample.
Sweet Spirits of Nitre.	185	Deficient in Ethyl Nitrite to the extent of 4.1% Alcohol and legitimate water 98.98% Eth. Nitrite 1.02% 100.0%	No.	No.	Formal sample taken afterwards. No. 189.	...	

Name of Article.	Identification number given to the sample in the Quarterly Report.	Result of Analysis.	If any legal proceedings were instituted under the Sale of Food and Drugs Acts, state result showing fines and costs separately.	If any legal proceedings were taken under Acts other than the Sale of Food and Drugs Acts, state the result, showing fines and costs separately.	If no legal proceedings were instituted, state briefly the course adopted in regard to each sample.	Information, if any, as to previous convictions.	Remarks on any point of special interest.
Sweet Spirits of Nitre.	187	Deficient in Ethyl Nitrite to the extent of 4.1% Alcohol and legitimate water 98.98% Eth. Nitrite 1.02% <u>100.0%</u>	No.	No.	Formal sample taken afterwards. No. 190.	...	Informal sample.
Sweet Spirits of Nitre.	189	Contains only 4.7% of the minimum proportion of Ethyl Nitrite. Eth. Nitrite 1.0% Alcohol and legit. water 99.0% <u>100.0%</u>	No.	No.	Warned by letter.	...	...
Sweet Spirits of Nitre.	190	Contains only $\frac{1}{2}$ of the minimum proportion of Ethyl Nitrite. Eth. Nitrite 0.9% Alcohol and legit. water 99.1% <u>100.0%</u>	No.	No.	Warned by letter.	...	...

Offences other than adulteration :—

Obstructing Inspector.....	Nil.
Attempting to bribe Inspector	„
Refusing to serve Inspector.....	„
No name on milk can	„
Condensed, separated or skimmed milks unlabelled...	„
Breaches of the Margarine Act, 1887.....	„
„ Butter and Margarine Act, 1907...	„

MARGARINE & MARGARINE CHEESE.

Under the above 14 persons are registered as “ Wholesale Dealers ” for 17 premises.

FERTILIZERS & FEEDING STUFFS ACT, 1906.

During the year 15 informal samples have been taken ; 7 samples were reported satisfactory and 8 as unsatisfactory—in these cases satisfactory explanations were given.

Uncorticated cotton cake	1
Decorticated cotton cake	1
Bean meal	2
Indian meal	2
Pea meal	1
Crushed oats	2
Thirids	1
Broad bran	2
Maize	1
Beans	1
Linseed	1

FACTORY & WORKSHOP ACT.

Much attention has been given to the different factories and workshops in the Borough, and many infringements of the Acts have been promptly dealt with. The full particulars of work under this heading are dealt with in Part III. of the Medical Officer's report.

No. of Workshops on register	413
„ Bakehouses on register	145
„ Domestic Workshops	27
„ Visits to Outworkers' Premises	77
„ „ Factories.....	45
„ „ Workshops	646
„ Letters sent out	48
„ Defects dealt with	186

SHOPS ACTS.

Owing to the coming into operation on May 1st of the Shops Act (1912), Inspector Bishop was engaged for some time in visiting the shops in the Borough for the purpose of compiling the register.

To carry out the Act fully would entail a great amount of work upon the department, but I trust with the limited staff at my disposal to carry out the provisions to some degree of satisfaction. I very much question whether the carrying out of all the provisions of the Acts should be rightly put upon the department. With respect to the coming into operation this year (1913) of the Barbers' and Hairdressers' New Closing Order, more attention will be given to its provisions during the year.

No. of Shops on register	2,334
„ Visits to Shops (day)	4,278
„ „ (night)	41
„ „ <i>re</i> Closing Order Barbers and Hair-	
dressers (day)	46
„ „ <i>re</i> Closing Order Barbers and Hair-	
dressers (night)	187
„ Letters sent out <i>re</i> infringements.....	13

SHOP ACT, 1912.

Report of Defects, 1912.	DISTRICTS.			
	Insp. B.	Insp. M.	Insp. A.	Total.
Cautioned for not exhibiting Closing Notice	111	18	8	137
„ „ having form (assistants' half-holiday)	16	...	...	16
„ having no abstract	6	...	...	6
„ assistants not having half-holiday	11	6	...	17
„ intervals for meals	2	...	...	2
„ selling on closing days.....	11	...	...	11
„ employing young persons after working under Factory and Workshops Act	11	...	...	11
„ offence—Barbers' and Hair-dressers' Closing Order...	...	...	1	1

DAIRIES, COWSHEDS AND MILKSHOPS ORDER.

No. of Cowsheds on register	44
„ Dairies on register	6
„ Milkshops on register	123
„ Visits paid	6
„ Letters issued	132

The number of premises registered I think may be taken as fairly correct, but owing to the constant change of registered places that occurs each year, I am now revising the register and bringing the same up-to-date.

The number of visits are very small this year owing to the attention of the Inspectors to other duties.

I hope in the coming year to give far more attention to the regulations governing the sale and storage of milk, especially to those "general" shops dealing in the sale of milk. Samples of milk have been taken from such shops during the year, and in three cases the samples were declared adulterated. Action taken in these cases is given under the heading of Sale of Food and Drugs.

DISEASES OF ANIMALS ACTS.

The provision of the Acts so far as relate to this department have been given the attention required. The appearance of Foot and Mouth Disease in this part of the country curtailed very greatly the movements of cattle by the dealers. A deputation of the butchers appeared before the Diseases of Animals Act Executive Committee and satisfactory arrangements were made whereby the carrying out of the Orders of the Board of Agriculture would be adhered to with the least friction with the trade. Your department was kept constantly informed during the prohibited periods of the source of supply to the trade;

AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDER,
1912.

This Order of the Board of Agriculture and Fisheries came into operation on April 1st, 1912, and I was appointed Inspector to your Authority to carry out the provisions of the Order. The provisions are summarised under the following heads :—

Prohibition of Sale of Diseased Gooseberries.

Regulation of Importation of Gooseberries.

Information as to Imported Gooseberries.

Powers of Inspectors to Enforce Cleansing of Packages on Entry.

Offences.

A circular was issued to all persons dealing in fruit, and also to the Superintendents of the Goods Stations in the Borough, directing their attention to the provisions and enclosing a Publication of the Board dealing with the Order. I visited the Markets constantly whilst the season was on, but had no occasion to proceed under the Order. The benefit of the Order cannot be as fully realised in the towns similar to the Borough, as is the case of the rural districts, especially the plantations—the source of supply.



County Borough of Wigan.

Education Department.

Annual Report

OF THE

SCHOOL MEDICAL OFFICERS

FOR THE YEAR ENDED

31st DECEMBER, 1912.

Approved by the Education Committee.

School Medical Officer's Report.

*To the Chairman and Members of the Education Committee
of the County Borough of Wigan.*

LADIES AND GENTLEMEN,

We beg to submit our Annual Report on the Inspection of Schools and School Children for the year ended 31st December, 1912.

There are 27 Schools and 60 Departments in the Borough. These serve a population estimated to be 91,224.

The number of children on the registers is 15,292, and the average daily attendance 13,820, giving a percentage attendance of 90·3.

The total number of children examined during the year was 5,469.

These were :—

- (1) Entrants ;
- (2) Leavers ;
- (3) Children of 7 years of age ;
- (4) Children of 10 years of age.

Of the children examined 2,767 were boys, and 2,702 were girls.

The arrangements for the examination of School Children were as follows :—

The Head Teacher was notified of our visit, asking him or her to put at our disposal a room for the examination, and a place for parents to wait.

Notices were sent out to parents of the day and time of examination of their child, asking them, if convenient, to attend.

If any defect was found, a notice with instructions for cleansing in the cases of nits or dirty heads was sent ; in the case of verminous bodies a notice saying that the child must be cleansed within 24 hours was sent. In all other cases a notice advising the parent to take the child to a doctor as soon as possible was sent.

The cases of dirty heads or nits and dirty or verminous bodies were followed up by the school Nurse, either by visiting the School or the home.

In the case of dirty heads or nits a further notice is sent if no change is noticed ; this second notice states that the child has been isolated in school, and that if it be not cleansed now the child will be excluded and the parent prosecuted for not sending it in a fit state to school.

At the same time a notice is sent to the Head Teacher asking him or her to isolate the child in school, and we are sorry to say in some cases this has not been done.

In respect to the dirty or verminous bodies, a notice is sent demanding the child to be cleansed in 24 hours. If cleansing has not taken place, steps are taken for the forcible cleansing of the children ; this is done by the Nurse removing the child from school by means of a conveyance, and taking it to the Pemberton Sanatorium to be cleansed, after which the child is taken back to school. If the child is allowed to get into such a condition again, the parent is prosecuted.

The cases who were advised to see the doctor are followed up by the Nurse visiting the home, and by a re-examination at school when the school is next visited.

All cases of infectious or contagious disease discovered in the course of examination or reported by the Head Teacher, with, when necessary, any contacts, are excluded from school.

The intimate correlation of the office of School Medical Officer and Medical Officer of Health is undoubtedly of great value, especially in connection with the control of Scarlet Fever, Measles, and Diphtheria.

The amount of disturbance of the routine of ordinary education involved by the Medical Inspection is practically none.

The following is a summary of the principal defects noted, which are fully tabulated below, in connection with each school :—

CLOTHING AND FOOT-GEAR.—This is described as fair, poor, or bad in 840 cases, or 15·3 per cent. of the children examined.

NUTRITION.—This was found to be fair or poor in 453 cases. The percentage of children suffering from Malnutrition is 8·2.

These figures confirm the statistics of the height and weight given below, and go to prove that most of the malnutrition is the result of insufficient or faulty feeding in infancy, those children who survive tending to improve in this respect as they grow older.

HEIGHT.—The following table gives the average height in inches of the children examined, with the figures for children at similar age periods (*a*) in England and Wales, all classes, and (*b*) children of artisans in towns :—

	Age 5.		Age 12.
Boys, Wigan	40 $\frac{2}{5}$	...	53 $\frac{1}{2}$
Boys, England and Wales .	41	...	54 $\frac{3}{4}$
Boys, Artisans in Towns....	41	...	53 $\frac{1}{2}$
Girls, Wigan	40 $\frac{1}{8}$	...	53 $\frac{1}{4}$
Girls, England and Wales...	40	...	55 $\frac{1}{2}$
Girls, Artisans in Towns ...	39	...	51

TABLE SHOWING THE AVERAGE HEIGHT IN INCHES OF
CHILDREN EXAMINED AS COMPARED WITH THE STANDARD OF THE
ANTHROPOMETRIC COMMITTEE.

Ages.	5	6	7	8	9	10	11	12	13
Boys, Wigan	41·4	42·32	45·39	46·03	48·43	49·78	50·95	53·53	57·24
Anthropometric	41·03	44·00	45·97	47·05	49·70	51·84	53·50	54·99	56·91
Girls, Wigan.....	40·21	42·02	44·67	45·41	47·92	49·63	50·43	53·14	54·97
Anthropometric	40·55	42·88	44·45	46·60	48·73	51·05	53·10	55·66	57·77

WEIGHT.—The following table gives the average weight in pounds of the children examined with the figures for children at similar age periods (*a*) in England and Wales, all classes, and (*b*) children of artisans in towns :—

	Age 5.		Age 12.
Boys, Wigan	40 $\frac{3}{4}$	...	70 $\frac{1}{2}$
Boys, England and Wales...	39	...	76 $\frac{1}{2}$
Boys, Artisans in Towns....	40	...	73 $\frac{1}{2}$
Girls, Wigan	38 $\frac{3}{4}$	...	72 $\frac{1}{2}$
Girls, England and Wales...	38	...	76 $\frac{1}{2}$
Girls, Artisans in Towns ...	39	...	74 $\frac{3}{4}$

TABLE SHOWING THE AVERAGE WEIGHT IN POUNDS OF
CHILDREN EXAMINED AS COMPARED WITH THE STANDARD OF THE
ANTHROPOMETRIC COMMITTEE.

Ages	5	6	7	8	9	10	11	12	13
Boys, Wigan	40·74	42·52	47·29	50·77	57·25	61·13	63·69	70·48	76·0
Anthropometric	39·9	44·4	49·7	54·9	60·4	67·5	72·0	76·7	82·6
Girls, Wigan.....	38·95	42·06	46·61	49·19	54·7	60·39	63·34	68·84	74·48
Anthropometric	39·2	41·7	47·5	52·1	55·5	62·0	68·1	76·4	87·2

NITS ON HEAD.—This condition was present in 363 cases, or 6.6 per cent. It is more common in girls than in boys, and is a serious condition on account of the secondary conditions—Impetigo, enlarged glands, &c., to which it gives rise. It is a most difficult matter to deal with, as parents often resent the imputation that such a thing exists, and refuse to take the necessary steps to cure it. One of the most satisfactory features of the work of the School Nurse is the large number of cases in which she has persuaded parents to have this condition properly treated. This condition will never be eradicated as long as so many of the children come from dirty homes, but it is in the schools that such children infect others who are perfectly clean and well cared for. It cannot be too strongly insisted on that the condition is not necessarily an evidence of dirt or neglect.

BODILY UNCLEANLINESS.—The body was found to be dirty in 97 cases, or 1.7 per cent. of the children examined. Only cases were notified as dirty in which there was distinct evidence of neglect.

DEFECTIVE TEETH.—The teeth were found to be defective or bad in 3,963 cases. The following table shows the number at different ages :—

<i>Ages</i>	5	6	7	8	9	10	11	12	13	14
	651	360	972	159	135	1,065	178	170	62	5

Only the bad cases of defective teeth were notified to the parents and advised to see the doctor. It is very difficult to persuade parents to have the teeth cared for, as those who are anxious to do the best for their children come back and say the advice they have received is "to leave the teeth in, and they will drop out as the child grows older."

The point in question really is injury to the child's digestive apparatus due to sepsis in the mouth from carious teeth.

The great factor in the production of this condition is want of attention to cleanliness and the hygiene of the mouth. Hardly any, even of the older children in the elementary schools, have tooth brushes, or use them, and such a thing as a tooth brush among infants is unheard of.

NASAL CATARRH, ENLARGED TONSILS, AND ADENOIDS.—These three conditions can best be discussed together. Enlarged tonsils or adenoids were diagnosed in 103 cases. Nasal Catarrh was present in the majority of these cases. All three conditions, but especially enlarged tonsils, were regularly associated with carious teeth, and in these cases there was often a vaulted palate or other deformity of the jaw.

This association suggests a vicious circle, bad teeth with a septic condition of the mouth tending to promote enlargements of the tonsils and adenoids, while the interference with respiration thus produced causes deformity of the very plastic bones of the children, which again prevents the proper development of the teeth.

ENLARGED GLANDS.—The glands were enlarged in 8 cases. Nearly all of these cases were secondary to "nits" in the head, with impetigo, or to defective teeth.

Diseases of the eye, 185 cases, including 97 squints, were met with.

Strabismus (or squint)	97
Blepharitis (inflamed eyelids)	41
Nebulæ (opacities, obstruction of the passage of light)	8
Conjunctivitis—Simple	22
Phlyctenular	6
Keratitis	0
Nystagmus	3
Corneal Ulcer	4
Enucleation.....	1
Cataract.....	2
Trachoma	1

This list is not (excluding the 97 cases of squint) a formidable one, and presents no unusual features. It is of the utmost importance that squinting children should be taken in hand as soon as possible.

In the majority of cases there is co-existent hypermetropia, and the correction of refraction is the first thing to be affected. This means spectacles early in school life, as the squint usually develops then. In a young child the tender age of the patient is an obstacle to wearing glasses, as also is the ignorance of many parents, and the unwillingness to admit the presence of a squint until it has been present for such a time that the eyes have become more or less amblyopic (functionless). It cannot be too strongly urged upon parents that these children should have skilled attention without delay, as a squinting eye is apt to become a blind eye.

DEFECTIVE VISION.—Vision was defective in 319 cases, or 5.8 per cent.

EAR DISEASE.—10 children were found to be suffering from Otorrhœa, or inflammation of the ear with discharge of pus. Both in these, and in cases of nasal discharge, careful enquiries were made to ascertain if the discharge was post-scarlatinal, and, therefore, a possible source of infection.

DEFECTIVE HEARING.—In 12 cases hearing was defective. Many of the cases were due merely to accumulations of wax in the ear, and others were associated with enlarged tonsils and adenoids, or with otitis or perforations of the tympanic membrane.

DEFECTIVE SPEECH.—Most of the cases were merely failures to articulate certain consonants. Only five children were stammerers. This condition was due mainly to nervousness, and the condition will improve with a little care and the establishment of more confidence in the child.

MENTAL CONDITION.—The mental condition was below normal in 24 cases. The majority of these cases were merely dull or backward, and were often due to and associated with defects of hearing or vision.

RICKETS.—This was present in 8 cases. Most of these were children who had grown out of the disease, but its effects were seen in various deformities, especially pigeon chest, beaded ribs, curvature of spine, bowed legs, knock knees, and malformations of the skull.

Rickets is a constitutional disease, due primarily to bad feeding. By bad feeding is understood not insufficiency of food, but the giving of food of an improper character, not possessing those constituent elements which go to the building up of a firm healthy body on a hard, bony frame, but rather a flabby fat one on a soft spongy bone. This disease first manifests itself in the bones of the chest and limbs; hence in some cases deformities were found, whilst in others deformities of the legs or arms were obvious.

TUBERCULOSIS.—11 cases were found to be suffering from Pulmonary Tuberculosis with well-marked symptoms. A number of doubtful early cases are being kept under observation.

SKIN DISEASES.—The commonest disease of the skin affecting the children was Impetigo. Seborrhœa was present in a considerable number of cases, but none of the cases were severe. Alopecia Areata, Psoriasis, etc., were also noted.

HEART DISEASE.—Several cases of valvular trouble following up Endocarditis in children who had suffered from Acute Rheumatism were found.

LUNG DISEASES.—These are seldom found in school children, as cases of acute Bronchitis and Pneumonia are naturally kept at home. Several cases of slight Bronchitis were noted.

Number of children excluded from attendance at school, 36.
(See table.)

The following tables give the particulars of the defects noted in each school:—

WESLEYAN SCHOOL.

[illegible]

WESLEYAN SCHOOL—Continued.

[illegible]

NATIONAL AND BLUE COAT SCHOOL.

[illegible]

KITT GREEN SCHOOL.

[illegible]

ST. MARK'S NEWTOWN SCHOOL—Continued.

[illegible]

PEMBERTON COLLIERY SCHOOL.

[illegible]

PEMBERTON COLLIERY SCHOOL—Continued.

[illegible]

SACRED HEART SCHOOL.

[illegible]

ST. ANDREW'S SCHOOL.

[illegible]

ST. CATHARINE'S SCHOOL.

[illegible]

[illegible]

[illegible]

ST. CUTHBERT'S SCHOOL—Continued.

[illegible]

ST. GEORGE'S SCHOOL.

[illegible]

ST. GEORGE'S SCHOOL—Continued.

[illegible]

ST. GEORGE'S MARYLEBONE SCHOOL.

[illegible]

ST. GEORGE'S MARYLEBONE SCHOOL—Continued.

[illegible]

[illegible]

ST. JOHN'S R.C. SCHOOL.

[illegible]

ST. JOHN'S R.C. SCHOOL—Continued.

[illegible]

ST. JOSEPH'S SCHOOL.

[illegible]

[illegible]

ST. MICHAEL'S SCHOOL—Continued.

[illegible]

ST. PATRICK'S SCHOOL.

Age	5	6	7	8	9	10	11	12	13
Number Examined—									
Girls	46	31	79	7	2	38	9	5	
Boys.....	53	30	77	11	9	58	11	7	1
Weight—									
Girls	38·84	42·6	44·9	44·7	57	55·6	63·5	71	
Boys.....	40·15	43·3	45·9	51	60·5	59·6	63·6	68	69
Height—									
Girls	39·84	41·4	43·8	44	50	49·5	50·5	51·2	
Boys.....	40·28	43·3	43·3	46	53	49	50·3	51·5	53
Clothing and Foot Gear									
Fair	4	6	23	1	1	16	4	2	
Poor	14	4	21	2	1	11	3	1	1
Bad	7		14	2	1	5	2		
Nutrition—									
Fair	12	2	6	1		5			
Poor	1		2						
Head—									
Dirty	12	12	12	2	2	8	3		
Affected with Nits...	3	2	7	3		3	3	1	
Body—									
Dirty	5	1	1	1	1				
Vermineous.....	3	3	3			2			
Teeth—									
Defective	52	37	105	10	10	71	15	6	
Alveolar Abscess									
Nasal Catarrh									
Pharyngitis									
Follicular Tonsillitis ...									
Enlarged Tonsils	3	1	5			9			
Adenoids		2				1	1	1	
Mouth-breathing									
Cleft Palate.....					1				
Enlarged Glands		2							
External Eye Disease—									
Conjunctivitis		3	2						
Blepharitis	1		1			1	1		
Nebula			1						
Corneal Ulcer									
Keratitis									
Iritis.....									
Cataract									
Enucleation									
Nystagmus									
Squint	4	1	8			3			
Defective Vision.....			16	3	3	18	5	1	
Blindness—									
One Eye									
Both Eyes									
Phlyct			1						

ST. PATRICK'S SCHOOL—*Continued.*

Age	5	6	7	8	9	10	11	12	13	14
Ear Diseases—										
Otitis or										
Otorrhœa										
Obstruction by Wax										
Defective Hearing										
Deafness										
Defective Speech			1							
Dumbness										
Mental Condition—										
Dull					2	1	1			
Backward						1				
Anæmia										
Heart Disease			1							
Bronchitis and other										
Lung Diseases	1		1							
Phthisis										
Epilepsy										
Fits										
Chorea										
Paralysis										
Tuberculosis										
Incontinence of Urine.										
Congenital Syphilis										
Rickets		1								
Spinal Curvature										
Torticollis										
Pigeon Chest.....										
Flat Chest										
Bow-legs	1		1							
Knock-knee										
Club-foot				1						
Vaulted Palate										
Other Deformities										
Hernia										
Infectious Diseases—										
Measles										
Scarlet Fever										
Diphtheria										
Whooping-cough										
Chicken-pox										
Ringworm										
Impetigo										
Eczema										
Other Skin Diseases....										
Oral Fissures or ...										
Rhagades										
Goitre										
Scabies			1							

ST. PAUL'S SCHOOL—Continued.

[illegible]

WARRINGTON LANE COUNCIL SCHOOL.

[illegible]

WARRINGTON LANE COUNCIL SCHOOL—Continued.

Age	5	6	7	8	9	10	11	12	13	14
Diseases—										
Otitis or										
Otorrhœa										
Obstruction by Wax										
Defective Hearing										
Deafness										
Defective Speech	1									
Stammering										
General Condition—										
Dull						2				
Backward										
Scarcity										
Heart Disease										
Bronchitis and other										
Lung Diseases										
Emphysema										
Epilepsy										
Stomach										
Diarrhœa										
Calculus										
Tuberculosis										
Incontinence of Urine.										
Congenital Syphilis										
Warts										
Anal Curvature										
Strabismus										
Goitre										
Flat Chest										
W-legs										
Lock-knee										
Club-foot										
Altered Palate										
Other Deformities								1		
Strabismus										
Infectious Diseases—										
Measles										
Scarlet Fever										
Diphtheria										
Whooping-cough										
Chicken-pox										
Ringworm										
Scabies										
Eczema		1								
Other Skin Diseases...										
Anal Fissures or ...										
Rhagades										
Scabies										

*Scabies.

ST. CATHARINE'S WHELLEY BRANCH SCHOOL—*Continued.*

Age	5	6	7	8	9	10	11	12	13	14
Ear Diseases—										
Otitis or										
Otorrhœa			1							
Obstruction by Wax										
Defective Hearing				1						
Deafness										
Defective Speech										
Dumbness										
Mental Condition—										
Dull										
Backward										
Idiocy										
Heart Disease						1				
Bronchitis and other										
Lung Diseases	1									
Phthisis										
Epilepsy										
Scrofula										
Chorea										
Paralysis										
Tuberculosis										
Incontinence of Urine.										
Congenital Syphilis										
Rickets										
Spinal Curvature										
Torticollis										
Pigeon Chest.....										
Flat Chest										
Bow-legs										
Buck-knee										
Club-foot										
Faulted Palate										
Other Deformities			1							
Hernia										
Infectious Diseases—										
Measles										
Scarlet Fever										
Diphtheria										
Whooping-cough										
Chicken-pox										
Ringworm										
Scabies										
Eczema										
Other Skin Diseases....										
Anal Fissures or ...										
Rhagades										
Scabies										
Scabies			1							

SCOT LANE COUNCIL SCHOOL—Continued.

[illegible]

Children at the following Schools have been Medically Inspected during the year :—

<i>School.</i>	<i>Department.</i>	<i>No. of Visits.</i>
Presbyterian	Infants	1
„	Mixed	2
Wesleyan	Infants	2
„	Mixed	7
National and Blue Coat	Infants	4
„	Boys	9
„	Girls	5
Marsh Green	Mixed	4
St. Mark's	Infants	7
„	Girls	3
„	Boys	2
Pemberton Colliery	Infants	4
„	Girls	4
„	Boys	3
Poolstock C.E.	Infants	3
„	Mixed	2
Sacred Heart R.C.	Mixed	2
St. Andrew's	Infants	5
„	Mixed	5
St. Catharine's	Infants	5
„	Girls	4
„	Boys	4
St. Cuthbert's	Infants	2
„	Mixed	1
St. George's.....	Infants	6
„	Mixed	8
St. George's, Marylebone	Mixed	1
St. James's, Worsley Mesnes ...	Infants	2
„	Mixed	1
St. John's C.E.	Infants	5
„	Mixed	4
St. John's R.C.	Infants	2
„	Girls	2
„	Boys	2

TABLE SHOWING THE AVERAGE HEIGHT IN INCHES & CENTIMETRES
OF CHILDREN EXAMINED :—

Ages.	5	6	7	8	9	10	11	12	13	14
<i>Females—</i>										
Inches	40.21	42.02	44.67	45.41	47.92	49.63	50.43	53.14	54.97	85.5
Centimetres	102.1	106.7	113.5	115.3	121.7	126.0	128.1	135.0	139.6	148.6
<i>Males—</i>										
Inches	41.4	42.32	45.39	46.03	48.43	49.78	50.95	53.52	57.24	57.3
Centimetres	105.15	107.4	115.3	116.85	123.0	126.25	129.4	135.9	145.4	145.6

TABLE SHOWING THE AVERAGE WEIGHT IN POUNDS & KILOGRAMMES
OF CHILDREN EXAMINED :—

Ages.	5	6	7	8	9	10	11	12	13	14
<i>Females—</i>										
Pounds	38.95	42.06	46.61	49.19	54.70	60.39	63.34	68.84	74.48	97.0
Kilogrammes	17.65	19.08	21.14	22.32	24.81	27.4	28.73	31.23	33.78	44.0
<i>Males—</i>										
Pounds	40.74	42.52	47.29	50.77	57.25	61.13	63.69	70.48	76.0	81.6
Kilogrammes	18.48	19.28	21.45	23.03	25.96	27.73	28.89	31.96	34.47	37.02

The number of Parents who were advised to obtain treatment was 634, the classification of defects being as follows :—

Teeth	153
Nose and Throat	9
Tonsils and Adenoids	103
Submax and Cervical Glands	1

Eyes :—

External	64
Vision.....	319
Ear Disease	10
Hearing	12
Lungs	4
Skin Disease	13
Other Diseases	3

TABLE—RESULT OF TREATMENT.

	Old Cases.	TREATED.			Un-treated.	New Cases.
		Cured.	Im-proved.	Un-changed		
Teeth	57	...	...	12	45	153
Nose and Throat	1	...	1	...	...	9
Tonsils, &c.	62	12	1	8	41	103
Glands	2	...	...	...	2	1
Eyes—External	67	15	25	17	20	67
Vision	260	...	27	66	106	319
Ear Disease	21	...	16	...	5	10
Hearing	41	...	10	4	27	12
Lungs	3	3	...	...	...	4
Other Diseases	2	2	...	...	...	3
Skin Disease	4	4	...	...	...	13

Number excluded during the year, 36 :—

Verminous Heads.....	21
Skin Disease	12
Eye Disease	3

WORK OF THE SCHOOL NURSE.

The School Nurse reports as follows :—

SCHOOL MEDICAL INSPECTION FROM JANUARY 1ST, 1912, TO
DECEMBER 31ST, 1912.

Number of children examined	5469
Number notified as suffering from any defect	634

<i>Number Visited.</i>		<i>Times Visited.</i>		<i>Number of Visits.</i>
634	...	1	...	634
187	...	2	...	374
84	...	3	...	252
17	...	4	...	68

Total number of visits paid ... 1,328

TREATMENT OF CASES.

Number having treatment for Bad Teeth	36
" " Enlarged Tonsils and Adenoids...	51
" " Eyes (External).....	54
" " " (Vision)	95
" " Skin Disease	13
" " Defective Hearing	7
" " Otorrhœa	10
" " Other Disease or Defect	6
.....	—
Total number obtained treatment	272
.....	—

Number of cases treated by Doctor.....	107
" " Dentist	9
" " Optician	11
" " Infirmary	114
" minor cases treated at home	31
Number of notices sent for dirty heads	363
Number cleansed within a week	198
Number requiring second notice	165
Number excluded from school	21

NUMBER OF VISITS IN CASES OF IMPETIGO.

<i>Number Visited.</i>		<i>Times Visited.</i>		<i>Number of Visits.</i>
17	...	1	...	17
11	...	2	...	22
4	...	3	...	12
				—
Total number of visits paid				51
				—

Number of 24 hours notices sent.....	97
Number taken and cleansed.....	2
Number of special visits paid to schools.....	193
Number of children examined	1097

(Signed) C. BOTTOMLEY,
School Nurse.

We desire to take this opportunity of thanking your Teaching Staff for their co-operation in the work of Medical Inspection, and the Office Staff for assistance in the preparation of the statistical part of this Report. We wish also to express our appreciation of the invaluable work done by the School Nurse.

We beg to remain,

Ladies and Gentlemen,

Yours truly,

F. E. WYNNE, M.B., Ch.B., D.P.H.,

SUPERINTENDENT SCHOOL MEDICAL OFFICER.

CECIL BERRY, L.R.C.P. & S.Ed., &c., D.P.H.,

ASSISTANT SCHOOL MEDICAL OFFICER.

13th February, 1913.

APPENDIX—COPIES OF FORMS USED IN CONNECTION WITH
SCHOOL MEDICAL INSPECTION.

County Borough of Wigan.—Education Department.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

MEDICAL INSPECTION.

EDUCATION OFFICES,

King Street, WIGAN,

.....19.....

180

Dear Sir (or Madam),

I beg to inform you that Dr. CECIL BERRY will attend at your School on.....
next, at.....o'clock, for the purpose of Medically Inspecting the Children.

I shall be glad if you will set apart a Class-room for the accomodation of the Children and their Parents, and afford the Medical Officer and the School Nurse all reasonable facilities for carrying out their duties.

Yours faithfully,

GEO. H. MOCKLER,

Director of Education.

County Borough of Wigan.—Education Department.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

MEDICAL INSPECTION.

EDUCATION OFFICES,
King Street, WIGAN,

181

.....19.....

Dear Sir (or Madam).

I beg to give you notice that Dr. CECIL BERRY, a Medical Officer appointed by the Education Authority under the Regulations of the Board of Education, will attend at the.....
School, on.....next, at.....o'clock, for the purpose of Medically Inspecting
the Children.

It is very desirable that, whenever possible, the Parents of Children should be present during the Inspection, and I am to request you to be good enough to attend at the School at the time stated.

Yours faithfully,

GEO. H. MOCKLER,

Director of Education.

WIGAN EDUCATION COMMITTEE.

SCHEDULE OF MEDICAL INSPECTION.

NAME.....DATE OF BIRTH.....
ADDRESSSCHOOL
PERSONAL HISTORY—(Previous Illnesses, &c.).....
FAMILY MEDICAL HISTORY.....

P.T.O.

PRESENT CONDITION.	DATE.	DIRECTIONS TO PARENT OR TEACHER.

County Borough of Wigan.—Education Department.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

MEDICAL INSPECTION.

EDUCATION OFFICES,

King Street, WIGAN,

186

.....19.....

Dear Sir (or Madam),

I beg to inform you that I have medically examined your Child.....
who is attending the.....School, and find that he (she) is suffering
from.....I should advise you to take the Child
to your own Doctor for treatment without delay.

Yours faithfully,

.....
Assistant School Medical Officer.

 MEDICAL INSPECTION.

 PRIVATE NOTICE.

.....School.

To the Parents or Guardians of.....

Your attention is drawn to the condition of this child's head, which has been noticed in School. The School Nurse has examined it, and says that by attention to the directions given on the other side, it can be rendered permanently clean within a week.

If cleansing is not effected by that time the child will have to be kept separated from the others in School until the condition is remedied.

GEO. H. MOCKLER,

Director of Education.

Date.....

Where there is difficulty in keeping a child's head clean, Paraffin Oil and a small tooth comb should be used daily.

All hair with nits must be cut off.

The head should be washed with Paraffin Oil, and combed with a small tooth comb twenty minutes after using the Paraffin.

CAUTION—DO NOT USE PARAFFIN NEAR FIRE OR A NAKED LIGHT.

MEDICAL INSPECTION.

SECOND WARNING.

.....School.

To the Parents or Guardians of.....

A Private Notice regarding the state of this child's head having been sent to you, and this condition, which could be remedied in a week, still being allowed to persist, the child has now been separated in School as unfit to be in the ordinary class. You are required to take steps to cleanse its head within the next week, failing which the child will be excluded from School, and you will be liable to prosecution and fine for not sending it in a fit state to School.

The means for cleansing these heads is given on the other side of this card.

GEO. H. MOCKLER,
Director of Education.

Date.....

INSTRUCTIONS FOR CLEANSING HEADS.

It is possible to effect a cure in about a week. All hairs with nits and all hair within a quarter of an inch of a sore must be cut off.

The head must be washed and scrubbed daily with Paraffin Oil, to which an equal quantity of Olive Oil may be added. If there are scabs, these, when softened, should be removed.

Repeat this treatment daily for a week, then weekly until all signs of lice are gone.

The use of a small tooth comb daily is necessary.

Where there is difficulty in keeping a child's head clean, the hair should be worn cut short.

CAUTION—Do NOT USE PARAFFIN NEAR FIRE OR A NAKED LIGHT.

County Borough of Wigan.—Education Department.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

EDUCATION OFFICES,

King Street, WIGAN.

.....19.....

189

Sir (or Madam),

I beg to inform you that, in consequence of your non-compliance with the Notice respecting the condition of.....Head, and the Instructions for Cleansing the same, forwarded to you on....., 19....., directions have now been given to the Head Teacher to exclude the said Child from School.

GEO. H. MOCKLER,

Director of Education.

County Borough of Wigan.—Education Department.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

EDUCATION OFFICES,

King Street, WIGAN,

190

.....19.....

Dear Sir (or Madam),

I beg to inform you that.....
of....., should be separated from the other Children in the School from
the date of the receipt hereof, and until further notice.

GEO. H. MOCKLER,

Director of Education.

