

**[Report 1914] / Medical Officer of Health, Darwen Borough.**

**Contributors**

Darwen (England). Borough Council.

**Publication/Creation**

1914

**Persistent URL**

<https://wellcomecollection.org/works/bgtmc6p2>

**License and attribution**

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

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

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



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



BOROUGH OF DARWEN.

---

**REPORT**

OF

F. G. HAWORTH,

M.B.C.M., L.R.C.S., D.P.H.,

MEDICAL OFFICER OF HEALTH,

Medical Officer of the Education Committee,

POLICE SURGEON,

FOR THE

**Year Ending December 31st, 1914.**

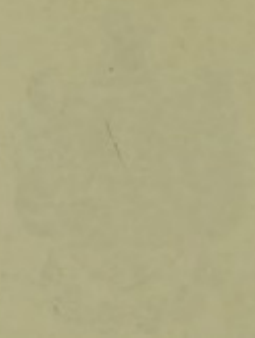
---

PRESTON :

MATHER BROS., Printers, Bookbinders, &c., 31, Lune Street.

M C M X V.





BOROUGH OF DARWEN

REPORT

F. C. HAWORTH

MEDICAL OFFICER OF HEALTH

Medical Officer of Health for the Borough of Darwen

POLICE SURGEON

Year Ending December 31st 1911

ROBERT



VALE HOUSE, DARWEN,

FEBRUARY, 1915.

**TO THE CHAIRMAN AND MEMBERS OF THE  
HEALTH COMMITTEE.**

GENTLEMEN,

I have the honour to present to you my Twentieth Annual Report, being  
for the Year ending, December 31st, 1914.

I am, Gentlemen,

Your obedient Servant,

**F. G. HAWORTH,**

Medical Officer of Health,  
Darwen Urban Sanitary Authority.



# Members of the Health Committee.

1914—1915.

ALDERMAN J. COCKER, J.P., MAYOR.

## Chairman :

COUNCILLOR GEORGE PICKUP HOLDEN, J.P.

## Vice-Chairman :

COUNCILLOR J. T. BALLANTYNE, M.B., J.P.

ALDERMAN A. CARUS, J.P., C.C.	ALDERMAN RALPH SHORROCK, J.P.
„ A. T. ECCLES, J.P.	„ JAS. TOMLINSON, J.P.
COUNCILLOR WM. AINSWORTH.	„ JOHN TOMLINSON, J.P.
„ CROSSLEY ST. JOHN BROAD-	COUNCILLOR H. C. JEPSON.
„ BENT.	„ W. P. KAY.
„ G. BUTTERWORTH.	„ J. PARKINGTON.
„ T. P. DAVIES, J.P.	„ G. PICKUP.
„ T. DUXBURY.	„ JOHN PICKUP, J.P.
„ E. GIBSON.	„ JOHN B. THORNLEY.
„ F. HINDLE, J.P., C.C.	„ RD. WILCOCK.
„ J. HODKINSON.	„ W. WORTH, J.P.
TOWN CLERK.....	WILLIAM P. HALLIWELL, B.A.
ASSISTANT TOWN CLERK.....	JOHN DERBYSHIRE.
NUISANCE INSPECTORS.....	(South Division)—W. E. MARSDEN.
	(North Division)—C. R. WALSH.
SUPERINTENDENT OF SCAVENGING.....	JOSEPH NICCOLL
SLAUGHTER HOUSE AND MEAT INSPECTOR.....	WILLIAM BICKERSTAFFE.
MEDICAL OFFICER OF INFECTIOUS DISEASES HOSPITAL.....	F. G. HAWORTH
SCHOOL NURSE AND LADY HEALTH VISITOR.....	MISS C. A. ORPIN.



# REPORT.

---

## Natural and Social Condition of the Districts.

---

The town of Darwen is situated in a valley, Latitude  $53^{\circ} 41' 25''$  N. and Longitude  $2^{\circ} 28' 32''$  W., and runs almost due north and south, being about five miles in extent, on the highway between Blackburn on the North and Bolton on the South. The centre of the town stands 500 feet above the sea level, the higher parts of the town reaching over 800 feet above sea level, its situation favouring the free circulation of air and free exposure to sunlight.

The soil on which the town is built consists of boulder clay overlaying the sandstone or shale of the coal measures. In the middle of the valley along the riverside, gravel and sand form the subsoil, the land rises up on each side of the moorland, that on the West side forming the gathering ground.

There is only one outlying district of any importance, viz. : Hoddlesden, situate at a distance of two miles to the east, with a population of about 800.

The River Darwen runs northward through the valley.

The inhabitants are chiefly of the artisan and labouring classes. Area of town 5,959 acres. Rateable value, end of year to the Borough Rate, £170,857 10s. ; Assessable Value to the District Rate, £157,251 10s. 6d.

The town is divided into six Wards :—Central, West Central, North East, North West, South East, South West.

The population, based on the natural increment, is estimated for the middle of 1914 at 41,038.

### MEDICAL RELIEF.

The Darwen District Nursing Association was instituted in 1890, under the auspices of the late Lady Huntington. It is carried on by voluntary contributions collected in the Mills, Churches, Chapels, and from private sources, by a Management Committee, consisting of thirty ladies and gentlemen, there is a General Committee of eighty-five ladies and gentlemen.



Amount Collected.				Amount Expended.			
Year.	£	s.	d.	Year.	£	s.	d.
1905.....	621	0	0	1905.....	549	0	0
1911.....	1286	0	0	1911.....	1051	0	0
1912.....	665	0	0	1912.....	722	0	0
1913.....	990	16	4	1913.....	930	18	11
1914.....	1070	2	5	1914.....	891	15	1

There are about six Nurses, including those doing Maternity Work. The work is done under the close supervision of the local medical men and is of a very high character.

The following are the terms of payment, at a minimum charge of :—

10/- per week, for one visit per day.

15/- per week, for two visits per day.

The Maternity Nurse attends for 7/6 to 15/- per case, according to the income of the patient. When the person is too poor to pay, of course no charge is made.

### **POOR LAW ADMINISTRATION.**

Comes under the Blackburn Union, which consists of sixty members, of which eight are sent from, and represent Darwen.

The accounts of the Guardians do not show the whole amounts expended in respect of each Township.

### **THE BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY**

is an Institution standing at the Southern end of the neighbouring County Borough of Blackburn.

Darwen has not a particular number of beds at its disposal, every case sent from here is admitted without question.

Collections are made twice a year in the Mills, Workshops, Churches, and Chapels, and other sources contribute.

The Secretary, Mr. Nathan A. Smith, supplied the following information of patients from Darwen, treated in the Institution :—

	1910	1911	1912	1913	1914
In-Patients ....	210	225	221	242	242
Out-Patients ...	484	402	449	460	498

The Out-Patients do not include accidents or dental extractions.

Based upon the ordinary Expenditure for the Year, the Cost of Treatment of these Patients was £1,018.



# Population.

was calculated on the natural increment of what took place during the inter-censal period from 1901 to 1911.

WARDS.	Census, 1911	Estimated for middle of 1913	Estimated for middle of 1914
CENTRAL .....	6,698	6,649	6,629
WEST CENTRAL .....	3,947	3,967	3,975
NORTH EAST .....	9,181	9,212	9,223
NORTH WEST .....	7,055	7,521	7,728
SOUTH EAST .....	6,882	6,970	7,008
SOUTH WEST.....	6,569	6,505	6,475
<b>BOROUGH .....</b>	<b>40,332</b>	<b>40,824</b>	<b>41,038</b>

The Census returns for 1911 give the following figures regarding families or separate occupiers :—

WARDS.	1911
CENTRAL .....	1668
WEST-CENTRAL .....	912
NORTH-EAST .....	2165
NORTH-WEST .....	1758
SOUTH-EAST .....	1607
SOUTH-WEST .....	1564
<b>TOTAL .....</b>	<b>9674</b>

With the exception of the Model Lodging House, almost all the others are separately occupied ; that is, each family occupies its own house, although at one time it was stated that the larger houses in Punstock Road were used by two families to reduce the rental.

There are four places of entertainment in the town :—Olympia, which is purely a picture palace ; The Public Hall, Theatre, and Albert Hall, in which a sort of music hall entertainment in conjunction with pictures is given in each one. These will on an average employ 10 persons in addition to the regular staff. These transients are accommodated in houses used as lodging houses as follows : 7 houses in Bank Street, 2 houses in Green Street East and South Street, 1 in Duckworth Street, 1 in Peabody Street, and in the old Grey Horse Inn, which at one time was a licensed house.

I presume the apparently large number of houses which take in lodgers is required for the artists and their dependents. During the winter a theatrical or panto-



mime company occasionally visits the town, when the resources of the lodgings will be more heavily tried.

From the Census returns of 1911 it is estimated that the Population per house was 4.16, as compared with 4.48 persons per house in 1901. During the progress of the war, I am informed, about 3,200 men have left the town to join the colours, that is, the Army and Navy. This further depletion reduces the house population to 3.93. As the men who have enlisted are able-bodied wage earners, the result on the industries of the town are likely to be far reaching. Apart from the fatalities and the maimed ones, there will be the problem of getting men who have become accustomed to an active outdoor life to settle down to the monotony of the old order of things.

## Births.

There were 381 male and 380 female children born and registered during the year. To these must be added 3 male and 1 female babies born in other places of Darwen parents and transferred to us, raising the total number of births to 765. This gives a Birth Rate for the Borough for the year of 18.64 per 1,000, an increase of 0.56 per 1000 over the previous year.

June had the highest Birth Rate of 24.56 per 1000, and February the lowest rate of 14.91 per 1000.

The average Birth Rate for the last 33 years is 25.81 per 1000 of the population. The highest Annual Rate was in 1883, when it was 34.39 per 1000, and the lowest was in 1912, when it was 16.99 per 1000 of the population.

The large number of able-bodied men at the age for becoming fathers, which have been drawn into the ranks, and there is still a further number depleting our male population, also able-bodied men, who have gone to the large munition works. Probably further contingents will be required, so that the chances of any increase in the population by natural increment are exceedingly small. This renders the work of forming an estimate of the population an exceedingly difficult one, speculation, always an uncertain method, must be relied upon.

It is interesting to study the birth-rates in the various wards in the town. Taking the rate of the Borough as the average only one Ward is below this, viz., North-West Ward, which was 16.43 per 1,000 as against 18.64 per 1,000 of the Borough. All the rest were above this average, Central, West Central North-East, South-East, and South-West Wards, the highest being in Central Ward. As its name implies this occupies the centre of the town, and is fairly equal on both sides of the main highway from



Blackburn to Bolton; this is the closest population, or more persons to the acre than any other, and more clearly represents the working class, which may account for it, although the trend of the birth-rate does not encourage one to hope much from this fact.

**TABLE showing the Estimated Populations, Number of Births, and the Birth-Rates for the Darwen Sanitary District since 1882 inclusive.**

Year.	Estimated Population at the Middle of Each Year.	Total Births	Birth-Rate
1801	3,587	...	...
1811	4,411	...	...
1821	6,711	...	...
1831	6,972	...	...
1841	9,348	...	...
1851	11,702	...	...
1861	16,492	...	...
1871	21,277	...	...
1881	27,589	...	...
1882	30,295	987	32.57
1883	30,733	1057	34.39
1884	31,360	978	31.18
1885	31,720	1015	31.99
1886	32,185	965	29.98
1887	32,491	1000	30.77
1888	33,500	994	29.67
1889	34,500	972	28.17
1890	36,500	1075	29.45
1891	34,192	1115	32.60
1892	35,000	1057	30.20
1893	35,500	955	26.90
1894	36,000	1039	28.86
1895	36,000	1128	31.33
1896	36,652	1032	28.15
1897	37,500	1114	29.70
1898	37,500	1131	30.16
1899	37,900	1062	28.02
1900	38,600	980	25.38
1901	38,212	858	22.45
1902	38,712	891	23.01
1903	39,114	941	24.05
1904	39,516	820	20.75
1905	39,918	818	20.49
1906	41,164	811	19.70
1907	41,864	876	20.92
1908	42,266	895	21.17
1909	42,668	816	19.12
1910	43,000	776	18.05
1911	40,398	756	18.71
1912	40,611	690	16.99
1913	40,824	738	18.08
1914	41,038	765	18.64

Average for the last 33 years, 25.81.



# BIRTH-RATES IN THE VARIOUS WARDS.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Borough.
1898	31.3	28.3	33.9	24.2	29.9	32.2	30.5
1899	26.7	24.7	31.4	24.7	29.5	29.7	28.4
1900	23.37	28.29	25.00	28.35	24.58	27.13	25.79
1901	22.45	22.25	19.94	24.78	20.26	23.53	21.54
1902	24.8	19.1	24.2	21.4	20.9	24.6	23.0
1903	26.2	21.4	26.3	19.9	23.8	23.3	24.0
1904	19.3	18.8	22.4	25.4	19.8	18.4	20.7
1905	17.8	23.1	23.5	20.4	18.0	19.8	20.4
1906	19.23	19.25	21.11	19.82	17.47	20.53	19.70
1907	16.18	23.63	22.14	23.63	20.58	20.92	20.92
1908	17.72	20.65	22.89	23.41	23.34	18.97	41.17
1909	17.82	21.85	18.74	21.25	19.60	17.44	19.12
1910	14.76	20.35	20.57	22.61	17.77	13.63	18.05
1911	16.29	20.76	20.02	16.60	18.86	20.26	18.71
1912	16.49	17.94	18.69	16.00	14.86	17.90	16.99
1913	17.15	17.14	20.95	15.16	18.22	18.75	18.08
1914	19.91	19.62	18.65	16.43	19.26	18.68	18.64
Averages for 17 Years.	20.39	21.59	22.90	21.41	20.92	21.57	21.50

## ILLEGITIMATE BIRTHS.

28 Children were born out of wedlock during the year, this gives a rate of 3.66 % of total births of erroneously called "Love Babies." Four of these were inward transfer births. Since 1901 the average annual number is 24, 1910 showed the lowest for that period, viz. : 16.

The rate per cent. of Births averages 2.95, the highest was 4.02% in 1904.



The Infantile Mortality of Illegitimates averages for the past ten years 231 per 1000 births ; the same rate for last year was 249. The rate for the whole of the Births was 119. If we could eliminate the large death rate of these unfortunate babies our Infantile Mortality Rate would be materially reduced ; one must take the bad with the good.

Table showing number of Illegitimate Births, etc., during the past 14 years.

Year.	Number of Births.	Rate % of Total Births.	No. of Deaths under 1 Year.	Death-rate per 1,000 Births.
1901	21	2.45	—	...
1902	22	2.47	...	...
1903	23	2.44	...	...
1904	33	4.02	...	...
1905	25	3.06	8	320
1906	28	3.45	6	214
1907	29	3.31	5	172
1908	18	2.01	6	333
1909	29	3.55	4	138
1910	16	2.06	5	313
1911	25	3.31	8	348
1912	18	2.61	3	167
1913	21	2.85	5	238
1914	28	3.66	2	71
Average .....	24	2.95	5	231

#### ILLEGITIMATE BIRTHS.

	Number.	Percentage of Births.
JANUARY .....	2	3.70
FEBRUARY .....	3	5.88
MARCH .....	2	3.23
APRIL .....	2	3.51
MAY .....	3	4.11
JUNE .....	4	4.76
JULY .....	0	0.00
AUGUST .....	2	3.33
SEPTEMBER .....	2	2.67
OCTOBER .....	2	3.39
NOVEMBER .....	1	1.53
DECEMBER.....	5	8.77
	28	3.66



# BIRTHS IN WARDS, 1914.

	Central.		West-Central.		North-East.		North-West.		South-East.		South-West.		Total.		Rate per 1,000 estimated Population
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January .....	4	4	2	1	8	7	3	4	3	7	7	4	27	27	15.79
February .....	4	1	5	4	6	6	7	1	4	4	5	4	31	20	14.91
March .....	1	6	3	2	3	14	3	7	6	5	6	6	22	40	18.13
April .....	7	7	4	4	2	6	3	5	10	3	2	4	28	29	16.67
May .....	4	5	4	2	3	11	10	8	4	8	5	6	33	40	21.35
June .....	7	3	3	5	9	10	8	8	6	8	8	9	41	43	24.56
July .....	6	8	2	3	7	8	8	5	4	4	3	6	30	34	18.71
August .....	5	5	4	3	8	5	6	5	6	6	4	3	33	27	17.54
September .....	8	8	4	1	8	8	7	6	9	7	6	3	42	33	21.93
October .....	3	6	3	4	6	7	5	4	6	5	5	2	31	28	17.25
November .....	6	6	1	3	10	3	3	6	5	4	6	7	31	34	19.00
December .....	9	6	5	6	4	5	3	2	8	3	6	4	35	26	16.63
	67	65	40	38	77	95	66	61	71	64	63	58	384	381	18.64
TOTAL.....	132		78		172		127		135		121		765		
Population ....	6,629		3,975		9,223		7,728		7,008		6,475		41,038		
Birth-rate .....	19.91		19.62		18.65		16.43		19.26		18.68		18.64		

The following Table shows the number of Births and the percentage of these attended by Medical Men during the last seventeen years :—

Years.	No. of Births.	Attended by Medical Men.	
		Number.	Percentage.
1898	1131	815	72.06
1899	1062	653	61.48
1900	980	540	55.10
1901	858	420	48.95
1902	891	401	45.00
1903	941	461	48.99
1904	820	421	51.34
1905	818	411	50.24
1906	811	376	46.36
1907	876	394	44.97
1908	895	427	47.71
1909	816	389	47.67
1910	776	352	45.35
1911	756	350	46.30
1912	690	288	41.74
1913	738	363	49.19
1914	765	337	44.05

# RETURN OF VACCINATION FOR DARWEN, 1914.

MONTHS.	Successful Vaccination.	Died Unvaccinated.	Insusceptible.	Ex-empted.	Post-poned.	Removed out of Town and Traced.	Removed and Cannot Trace	Unaccounted for	Successfully vaccinated each quarter.
January	23	5	0	25	0	1	0	0	67
February	18	4	0	29	0	0	0	0	
March ...	26	4	0	32	0	0	0	0	
April .....	20	4	0	32	1	0	0	0	90
May .....	32	2	0	37	2	0	0	0	
June .....	38	9	0	33	0	0	0	4	
July .....	23	3	0	35	2	0	0	1	76
August	26	7	0	25	1	0	0	1	
September	27	8	0	38	1	0	0	1	
October...	16	7	0	29	0	0	1	6	38
November	17	5	0	33	0	0	0	10	
December	5	1	0	28	0	0	0	23	
	271	59	0	376	7	1	1	46	271

## VACCINATION.

Year.	Births.	Successfully Vaccinated.	Rate per cent. Vaccinated.
1899	1062	851	80.1
1900	980	705	71.9
1901	858	651	75.9
1902	891	765	85.9
1903	941	750	79.7
1904	820	662	80.7
1905	818	618	75.6
1906	811	593	73.1
1907	876	597	68.2
1908	895	447	49.9
1909	816	294	36.0
1910	776	275	35.4
1911	754	280	37.1
1912	690	204	29.57
1913	738	232	31.44
1914	765	271	35.42



# Marriages.

The number of Marriages solemnized in Darwen during the year ending December 31st, 1914 was as follows :—

Church of England .....	147
Nonconformist Places of Worship .....	150
Total .....	297

This means that 594 people were united in the bonds of wedlock, and is at the rate of 14.47 per 1000 of the population, as compared with 17.54 per 1,000 in the previous year.

Year.	Births.		Deaths.		Marriages	
	Number.	Rate.	Number.	Rate.	Number.	Rate.
1882	987	32.57	650	21.45	490	16.0
1883	1057	34.39	518	16.85	478	15.5
1884	978	31.18	595	18.97	444	14.1
1885	1015	31.99	489	15.41	480	15.1
1886	965	29.98	641	19.91	540	16.7
1887	1000	30.77	716	22.03	558	16.6
1888	994	29.67	600	17.90	616	18.2
1889	972	28.17	544	15.76	570	16.5
1890	1075	29.45	673	18.43	586	16.0
1891	1115	32.60	660	19.30	648	18.7
1892	1057	30.20	641	18.31	670	19.1
1893	955	26.90	677	19.07	592	16.7
1894	1039	28.86	542	15.05	640	17.7
1895	1128	31.33	640	17.77	676	18.7
1896	1032	28.15	627	17.10	696	18.9
1897	1114	29.70	651	17.36	688	18.3
1898	1131	30.16	632	16.85	700	18.6
1899	1062	28.02	647	17.07	666	17.5
1900	980	25.38	789	20.44	532	13.7
1901	858	22.45	620	16.22	576	15.0
1902	891	23.01	569	14.69	606	15.6
1903	941	24.05	501	12.80	612	15.6
1904	820	20.75	606	15.33	606	15.3
1905	818	20.49	562	14.07	578	14.4
1906	811	19.70	540	13.11	744	18.0
1907	876	20.92	527	12.58	702	16.7
1908	895	21.17	550	13.01	636	15.1
1909	816	19.12	616	14.44	684	16.0
1910	776	18.05	573	13.33	610	14.2
1911	754	18.66	641	15.87	598	14.8
1912	690	16.99	563	13.86	710	17.5
1913	738	18.08	579	14.18	716	17.5
1914	765	18.64	595	14.49	594	14.4
Average 32 Years....	942	25.80	605	16.45	601	16.4



## Deaths in Regard to Occupation.

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Bricklayer.</b>														
Inquest .....								1	...	...	...		1	
<b>Blacksmith.</b>														
Gastro Enteritis .....								1	...	...	...		1	...
<b>Builder and Contractor.</b>														
Senile Decay .....										1	...		1	...
<b>Brick Burner.</b>														
Duodenal Ulcer .....								1	...	...	...		1	...
<b>Block Cutter.</b>														
Inquest .....										1	...		1	...
<b>Brick Kiln Setter.</b>														
Pneumonia .....					1	...				...	...		1	...
<b>Blacksmith's Strikers.</b>														
Uraemia .....								1	...	...	...		1	...
Aneurysm .....						1	...			...	...		1	...
						1	...	1	...	...	...		2	...
<b>Brass Founder.</b>														
Heart Disease.....								1	...	...	...		1	...
<b>Butcher.</b>														
Bronchitis .....										1	...		1	...
<b>Baker.</b>														
Inquest .....			1	...						...	...		1	...



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Carter.</b>														
Arterio Sclerosis.....										1	...		1	...
Bright's Disease .....								1	...	...	...		1	...
Senile Decay.....									1	...	...		1	...
Apoplexy .....								1	...	...	...		1	...
Phthisis.....								1	...	...	...		1	...
								3	...	2	...		5	...
<b>Cab Driver.</b>														
Phthisis.....						1	...	...	...	...	...		1	...
<b>Clogger.</b>														
Bright's Disease .....						1	...	...	...	...	...		1	...
Bronchitis.....									1	...	...		1	...
						1	...		1	...	...		2	...
<b>Caretaker.</b>														
Inquest .....						1	...	...	...	...	...		1	...
Bronchitis.....									1	...	...		1	...
Arterio Sclerosis.....									1	...	...		1	...
						1	...		2	...	...		3	...
<b>Colliery Surface Banksman.</b>														
Bronchitis.....									1	...	...		1	...
<b>Colliery Surface Hauler.</b>														
Nephritis .....								1	...	...	...		1	...
<b>Coal Miners.</b>														
Typhoid Fever .....			1	...					...	...	...		1	...
Inquest .....			1	...					...	...	...		1	...
Bronchitis.....								1	...	1	...		2	...
Pneumonia .....					1	...			...	...	...		1	...
Apoplexy .....									1	...	...		1	...
Cancer of Liver .....						1	...		...	...	...		1	...
Arterio Sclerosis.....								1	...	...	...		1	...
Cancer of Throat .....								1	...	...	...		1	...
Intestinal Obstruction .....									1	...	...		1	...
Cerebral Abscess .....					1	...			...	...	...		1	...
			2	...	2	...	1	...	3	...	3	...	11	...



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Charwomen.</b>														
Cancer of Stomach.....											1		1	
Senile Decay.....											1		1	
Inquest.....									1				1	
Cancer of Uterus.....							1						1	
Bronchitis.....									1				1	
Diabetes.....											1		1	
							1		2		3		6	
<b>Chimney Sweep.</b>														
Cancer of Liver.....								1					1	
<b>Chip Potato Dealer.</b>														
Cancer of Liver.....								1					1	
<b>Confectioners.</b>														
Pneumonia.....						1							1	
Tubercular Mesenteric Glands.....				1									1	
				1		1							2	
<b>Cotton Weavers.</b>														
Bronchitis.....						1		1	3	5	3	6	7	
Endarteritis Obliterans.....				1								1		
Heart Disease.....					1	1	4	3	2	2	3	6	10	
Diabetes.....					1							1		
Phthisis.....				1	4	2	2					5	4	
Apoplexy.....								1	3	2	3	3	6	
Haematemesis.....									1				1	
Influenza.....					1			1	1			1	2	
Rheumatic Fever.....					1			1	1			2	1	
Myasthenia Gravis.....							1						1	
Senile Decay.....										2	2	2	2	
Pneumonia.....						2			1				3	
Cancer of Liver.....									1				1	
Pleurisy.....											1		1	
Typhoid Fever.....				1								1		
			3	4	6	4	2	6	6	13	11	12	28	39



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Cotton Weavers (continued)</b> .....			3	4	6	4	2	6	6	13	11	12	28	39
Asthma .....									1	1	...	...	1	1
Cirrhosis of Liver .....									1	...	...	...	...	1
Pregnancy Haemorrhage (accidental) .....								1	...	...	...	...	...	1
Eclampsia (confinement) .....						1	...	...	...	...	...	...	...	1
Nephritis (Bright's Disease) .....					1	1	...	...	3	...	...	...	1	4
Suicide (inhalation of coal gas) .....						1	...	...	...	...	...	...	1	...
Amyotrophic Lateral Sclerosis .....									1	...	...	...	...	1
Cancer of Breast .....							1	...	1	...	...	...	...	2
Inquest .....						1	...	...	...	...	...	...	1	...
Appendicitis .....			1	...	...	...	...	...	...	...	...	...	1	...
Cancer of Stomach .....							1	...	...	...	...	...	...	1
Suicide (drowned) .....								1	...	...	...	...	1	...
Arterio Sclerosis .....									2	...	...	...	...	2
Cerebral Embolism .....									...	...	1	...	...	1
Cancer of Ovary .....									1	...	...	...	...	1
Anæmia .....						1	...	...	...	...	...	...	...	1
Cancer of Face .....									...	1	...	...	1	...
Perforated Duodenal Ulcer .....							1	...	...	...	...	...	1	...
Cerebral Tumour .....						1	...	...	...	...	...	...	...	1
	...	...	4	4	7	8	5	9	8	23	12	13	36	57
<b>Cotton Warpers.</b>														
Tubercular Peritonitis .....						1	...	...	...	...	...	...	...	1
Bronchitis .....									...	...	1	...	...	1
Senile Decay .....									...	...	1	...	...	1
Heart Disease .....									...	...	1	...	...	1
	...	...	...	...	...	1	...	...	...	...	3	...	...	4
<b>Cotton Card-room Hands.</b>														
Cirrhosis of Liver .....									...	...	1	...	...	1
Heart Disease .....									1	...	...	...	...	1
Apoplexy .....									...	...	1	...	...	1
Bronchitis .....									1	...	...	...	...	1
Gangrene of Lung .....							1	...	...	...	...	...	...	1
Strangulated Femoral Hernia ...									1	...	...	...	...	1
	...	...	...	...	...	...	1	...	3	...	2	...	...	6



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Cotton Winders.</b>														
Uncertified .....											1	...	1	
Typhoid Fever .....							1	...			...	...	1	
Apoplexy .....								1	...		...	...	1	
Heart Disease.....							1	1	...		...	...	2	
Phthisis .....			1	...							...	...	1	
Cancer of Uterus .....								1	...		...	...	1	
Bronchitis.....								1	...	2	...	...	3	
Cancer of Stomach.....								1	...		...	...	1	
Inquest .....		1	...					1	...		...	...	2	
Senile Decay.....										1	...	...	1	
Tubercular Mesenteric Glands .....							1	...			...	...	1	
Epistaxis .....										1	...	...	1	
Cancer of Bowels .....								1	...		...	...	1	
Appendicitis .....					1	...					...	...	1	
	...	1	...	1	...	1	...	3	...	7	...	5	...	18
<b>Cotton Bobbin Winder.</b>														
Hypertrophy of Prostate .....										1	...	1	...	
<b>Cotton Overlookers.</b>														
Cancer of Pancreas .....								1	...		...	1	...	
Phthisis .....						1	...				...	1	...	
Pneumonia .....								1	...		...	1	...	
Heart Disease.....								1	...		...	1	...	
Bronchitis.....									1	...	1	...	1	
						1	...	3	...	1	...	5	...	
<b>Cotton Spinners.</b>														
Bronchitis.....								1	...		...	1	...	
Bright's Disease .....						2	...				...	2	...	
Inquest .....										1	...	1	...	
						2	...	1	...	1	...	4	...	
<b>Cotton Mill Labourers.</b>														
Pneumonia .....								1	...		...	1	...	
Phthisis.....				1	...						...	1	...	
				1	...			1	...		...	2	...	



**Deaths in Regard to Occupation.—(Continued).**

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Cotton Cloth Lookers.</b>														
Cerebral Thrombosis .....										1	...		1	...
Inquest .....									1	...	...		1	...
Heart Disease.....									1	...	...		1	...
Cystitis .....									1	...	...		1	...
									3	...	1	...	4	...
<b>Cotton Spinning Master.</b>														
Suicide (hanged) .....									1	...	...		1	...
<b>Cotton Sizers.</b>														
Arterio Sclerosis.....									1	...	1	...	2	...
Pneumonia .....									1	...	...		1	...
Bronchitis.....									1	...	...		1	...
									3	...	1	...	4	...
<b>Cotton Mill Manager.</b>														
Bright's Disease .....										1	...		1	...
<b>Cotton Warehouseman.</b>														
Pulmonary Tuberculosis.....					1	...				...	...		1	...
<b>Cotton Twisters.</b>														
Phthisis.....									1	...	...		1	...
Nephritis .....									1	...	...		1	...
Apoplexy .....						1	...		...	...	...		1	...
Otitis Media .....					1	...			...	...	...		1	...
					1	...	1	...	2	...	...		4	...
<b>Cotton Reacher-in.</b>														
Phthisis.....	1	...								...	...		1	...
<b>Cotton Mill Engine Tenters.</b>														
Apoplexy .....										1	...		1	...
Pneumonia .....									1	...	...		1	...
									1	...	1	...	2	...



Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Cotton Winding Master.</b>														
Pleurisy .....									1	...	...	...	1	...
<b>Cotton Mill Fireman.</b>														
Phthisis .....					1	...					...	...	1	...
<b>Cotton Drawer.</b>														
Tubercular Hip Disease .....					1	...					...	...	1	...
<b>Cotton Manufacturer.</b>														
Enteric Fever .....									1	...	...	...	1	...
<b>Domestic Servant.</b>														
Cancer of Stomach .....									1	...	...	...	...	1
<b>Draper.</b>														
Hyperntphy of Prostate .....											1	...	1	...
<b>Drapers Assistant.</b>														
Heart Disease .....				1	...						...	...	1	...
<b>Dress Maker.</b>														
Cancer of Breast .....											...	1	...	1
<b>Furniture Broker.</b>														
Senile Decay .....											1	...	1	...
<b>Fish Dealer.</b>														
Apoplexy .....											1	...	1	...
<b>Farmers.</b>														
Pneumonia .....									1	...	...	...	1	...
Senile Decay .....											1	...	1	...
Heart Disease .....											...	1	...	1
									1	...	1	1	2	1



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Green Grocer.</b>														
Bronchitis.....											1		1	
<b>Grocer.</b>														
Nephritis .....								1					1	
Arterio Sclerosis.....											1		1	
								1			1		1	
<b>Gardener.</b>														
Bronchitis.....										1			1	
<b>Hairdresser.</b>														
Heart Disease.....								1					1	
<b>Insurance Agent.</b>														
Heart Disease.....					1								1	
<b>Iron Moulder.</b>														
Cancer of Tongue .....										1			1	
<b>Inn Keeper.</b>														
Nephritis .....									1					1
<b>Iron Works Labourer.</b>														
Pulmonary Tuberculosis.....									1				1	
<b>Joiners.</b>														
Cancer of Lung.....									1				1	
Suicide (drowned) .....			1										1	
Phthisis.....									1				1	
Cancer of Stomach.....									1				1	
Addisons Disease .....						1							1	
Heart Disease.....									1				1	
			1			1		4					6	



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to	15 to	25 to	35 to	45 to	65 and	Total.	
	15 M F	25 M F	35 M F	45 M F	65 M F	upwards M F	M	F
<b>Knocker-up.</b>								
Cerebral Thrombosis .....					1	...	1	...
<b>Land Owner.</b>								
Gastritis .....						1	1	...
<b>General Labourers.</b>								
Pneumonia .....				2		...	2	...
Chronic Rheumatism .....		1				1	2	...
Myelitis .....				1		...	1	...
Nephritis (Bright's Disease) .....					3	1	4	...
Bronchitis .....				2	1	1	4	...
Pththisis .....		2		1		...	3	...
Senile Decay .....						1	1	...
Uncertified .....					1	...	1	...
Cirrhosis of Liver .....					1	...	1	...
Arterio Sclerosis .....					1	...	1	...
Typhoid Fever .....				1		...	1	...
Suicide (poisoning) .....					1	...	1	...
Cancer of Bladder .....						1	1	...
Cancer of Stomach .....					1	...	1	...
Gastro Enteritis .....				1		...	1	...
Heart Disease .....					2	...	2	...
Apoplexy .....						1	1	...
Pneumonia .....				1		...	1	...
Congestion of Lung .....						1	1	...
Cancer of Throat .....					1	...	1	...
Atheroma .....						1	1	...
	...	3	...	9	12	8	32	...
<b>Licensed Victuallers.</b>								
Cholecystitis (phlegmonous) .....					1	...	1	...
Cirrhosis of Liver .....					1	...	1	...
Uncertified .....					1	...	1	...
Senile Decay .....						1	...	1
Cancer of Prostate Gland .....						1	1	...
Rheumatic Fever .....					1	...	1	...
	...				4	1	5	1



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Motor Waggon Driver.</b>														
Pneumonia .....									1	...	...	...	1	...
<b>Motor Waggon Stoker.</b>														
(Injuries Accidental .....					1	...					...	...	1	...
<b>Mechanic.</b>														
Senile Decay .....									1	...	...	...	1	...
<b>Newsagents.</b>														
Senile Decay .....											1	...	1	...
Nephritis .....											1	...	1	...
Pyloric Obstruction .....									1	...	...	...	1	...
									1	...	2	...	3	...
<b>Paper Packer.</b>														
Bronchitis .....											1	...	1	...
<b>Paper Stainers.</b>														
Senile Decay .....											1	...	1	...
Apoplexy .....											1	...	1	...
Cancer of Eye .....									1	...	...	...	1	...
									1	...	3	...	4	...
<b>Paper Sorters.</b>														
Senile Decay .....											1	...	1	...
Erysipelas .....					1	...					...	...	1	...
					1	...					1	...	2	...
<b>Paper Mill Hand.</b>														
Arterio Sclerosis .....									1	...	...	...	...	1
<b>Paper Maker.</b>														
Pneumonia .....											1	...	1	...



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Paper Mill Manager.</b>														
Heart Disease.....											1	...	1	...
<b>Paper Reeler.</b>														
Phthisis.....			1	...							...	...	1	...
<b>Paper Mill Sorter.</b>														
Cancer of Cervical Glands .....								1	...	...	...	...	1	...
<b>Picture Framer.</b>														
Apoplexy .....											1	...	1	...
<b>Plumber.</b>														
Cerebral Tumour .....							1	...			...	...	1	...
<b>Property Repairer.</b>														
Pneumonia .....								1	...	...	...	...	1	...
<b>Paint Works Labourer.</b>														
Appendicitis.....			1	...							...	...	1	...
<b>Painters.</b>														
Pneumonia .....							1	...			...	...	1	...
Heart Disease.....											1	...	1	...
Pulmonary Tuberculosis.....								1	...	...	...	...	1	...
							1	...	1	...	1	...	3	...
<b>Painter's Labourer.</b>														
Pneumonia .....								1	...	...	...	...	1	...
<b>Photographer.</b>														
Cancer of Stomach.....								1	...	...	...	...	1	...
<b>Police Constable.</b>														
Heart Disease.....								1	...	...	...	...	1	...
<b>Plasterer.</b>														
Pneumonia .....								1	...	...	...	...	1	...



## Deaths in Regard to Occupation.—(Continued).

TRADES AND DISEASES.	5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>1 Quarryman.</b> Suicide (hanged) .....									1	...	...	...	1	...
<b>Railway Teamsman.</b> Influenza .....			1	...							...	...	1	...
<b>Reed Maker.</b> Bronchitis .....									1	...	...	...	1	...
<b>Railway Labourer.</b> Suicide (hanged) .....							1	...			...	...	1	...
<b>Roller Coverer.</b> Senile Decay .....											1	...	1	...
<b>Stone Mason.</b> Phthisis .....					1	...					...	...	1	...
<b>Stocking Knitter.</b> Ulceration of Intestines .....					1	...					...	...	1	...
<b>Sanitary Pipe Moulder.</b> Apoplexy .....									1	...	...	...	1	...
<b>School Mistress.</b> Septic Endocarditis .....				1	...						...	...	...	1
<b>Street Sweeper.</b> Heart Disease .....					1	...					...	...	1	...
Senile Decay .....											1	...	1	...
					1	...					1	...	2	...
<b>Tea Dealer.</b> Broncho Pnuemonia .....					1	...					...	...	1	...
<b>Terra Cotta Works Manager.</b> Cancer of Pancreas .....							1	...			...	...	1	...
<b>Wheelwrights.</b> Carbuncle .....									1	...	...	...	1	...
Injuries (accidental) .....							1	...			...	...	1	...
							1	...	1	...	...	...	2	...
<b>Yeast Dealer.</b> Cirrhosis of Liver .....									1	...	...	...	1	...



## OCCUPATION.

There were 269,108 spindles and 37,307 looms in the borough ; this is the staple trade of the town. Besides this, paper making is very largely carried on, to this may be added paper staining and paper printing. The paper making and its subsidiary branches find work for a large number of persons. There is also the Building Trade, Engineering and Machine Making, Coal and Shale Mining, and the manufacture of Sanitary pipes, &c. so that Darwen holds an enviable position in the fact of having a variety of trades carried on in its midst : when one is going through a period of depression the others may be flourishing

## HOUSE ACCOMMODATION.

The number of houses at the end of the year was 10,429, this number includes 79 for which plans have been passed.

In my last Annual Report I drew attention to the need for houses with more bedroom accommodation so that the sexes could be separated, this need still exists, in my opinion, but some men in the building trade with whom I have spoken on the subject are of opinion they will not be provided : the initial cost could not be recovered by their sale, nor would a suitable rent be paid for them, it would not pay to build them. This is a pity, if we could have a bedroom for each individual member of the family it would make for better health and greater privacy in the home life. This latter feature does not appeal to the present generation, with which it is customary for males and females to wash practically in the scullery exposed to each other, such a habit does not tend to a natural delicacy of feeling, and the result is that subjects which should be sacred are common topics between the sexes. I also mentioned in the same report that from my own observations and from hearing very frequently when on my rounds that houses were very difficult to get, if one became empty it could be let many times over in a very short time, it seemed impossible for so many to hear of it being empty. I had no doubt in my own mind that if not an actual scarcity of houses there was no margin over the number actually needed by the population. This discrepancy, however, has now disappeared through a large number of men, married and single having left the town for one or other of the services, and also to work in munition factories, it will be many years before there is brought round a stable equilibrium of the people to raise the house population to its former level. It is more than probable that the weaving industry will become more and more a female source of revenue. I cannot ever imagine the men who have left the mill to join the Army ever coming back to their looms, the very monotony of such an existence is opposed to the new life they have been leading and any return to it is contrary to human nature. Apart from those who, unfortunately, may be killed in action, many who escape to have the chance of returning home will turn their faces in other directions and seek variety, fame and fortune in the far distant outposts of the world nor



will this be altogether a disadvantage ; we have been for long rooted to the spots associated with our birth and childhood All this will be changed by the war. our men being lononger satisfied with the old fashioned mode of living. so it is not likely the need for more house accommodation will be set up when the war is over ; the men will not return permanently.

### HOUSING AND TOWN PLANNING ACT.

No. of Houses Inspected	No. of houses considered unfit for human habitation	No. of Re-presentations made to Local Authority with a view to making closing orders	No. of closing orders made	No. of houses remedied without the making of closing orders	No. of houses remedied or being remedied after closing orders being served	Houses demolished		Demolition orders made
						Without demolition order	After demolition order	
35	8	8	0	0	0	8	0	0

Eight houses were closed during the year by the owners on representation being made by the authorities that this course was most advisable Some have been transformed into shops, such as 108, 112 and 114 Duckworth Street, being first gutted and carried through to Nos. 1, 2, and 3 Plough Yard.

3 and 4 Smalley's Court were pulled down after closure to make room for the Olympia Picture Palace.

The following houses had been put on the Black List ; during the year improvements as follows instituted :

Nos. 73. 74 and 75 Bury Street are back to back with  
 1, 2 and 3 Back Bury Street,  
 1, 2, 3 and 4 John Street,  
 1, 2 3 and 4 Ellison Court,  
 5, 6, and 7 Back Wood Street  
 93, 94 and 95 Wood Street,  
 1 Hutchinson Court,

513, 515, 517, 519 Blackburn Road have also had the pails removed and converted to the Water Carriage System in fact both Inspectors have been exceedingly busy during the year with introducing the Water Carriage System of sewerage, where pails obtained. also in many cases Waste Water Closets have been removed to make room for the fresh Water Closets.



## THE MODEL LODGING HOUSE.

Having become more popular under new management, it was considered the time to increase the accommodation. 14 new cubicles were put in, bringing the bed accommodation up to 144. including females the average number occupied was 111.3

It was not necessary to serve any notices for overcrowding during the year.

Notices were served in the following instances for dirty houses, viz. :—

February	18th	11, Riley Street
June	23rd	48, Sudellside Street.
"		21, Corporation Street.
"		77, Crown Street
July	28th	9, Spring Street.
August	25th	28, Ashton Street
"		15, Garnett Street.
"		2, Bury Court.
"		507, Blackburn Road.
November	24th	38, Snape Street
"		9, Dove Street.

The town is well supplied with open spaces in spite of the fact that there is in no part of it any overcrowding of dwelling houses and practically no slum property. There are three large, well arranged, and beautifully laid out parks.

**SUNNYHURST WOOD**, situated at the north end of the town, consists of 80 acres of well wooded land. This in its original state was really a natural park, open to the public by means of a footpath running through a valley bounded on both sides by well wooded slopes. Its acquisition was determined upon by Alderman Tomlinson, who secured, by subscriptions and donations, sufficient to buy the land for the town. It has been laid out, tended, planted, and set out without sacrificing any of its natural beauties, and yet brought well within the meaning of a park. Such are its attractions that it has become a source of great pleasure to crowds of people, who come from Blackburn to spend a few hours in its glades. It is the reason for excursion trains from many towns within a radius of thirty miles.

**BOLD VENTURE PARK** occupies a part of West Central Ward, being reached by way of Belgrave Road and Borough Road, reaching right up to the edge of the moors, covers 25½ acres of beautifully laid out gardens. A lake or pond for water fowl lies just within its gates, kept well supplied with water by means of a stream of pure water falling from the moors and uplands over cascades of nature's structure. This park ends in a cul-de-sac of rock, from which in former years much of the stone with which the town is built has been gathered. In front of this face of rock has been



erected a fountain to the memory of the late James Huntington, subscribed by the workpeople at the paper works controlled by the said James Huntington. On a height to the north of this fountain stands the Gillibrand Meteorological Observatory, a station of the second class, the whole cost of the Observatory and Instruments being defrayed by a late Mayor.

**WHITEHALL PARK**, at the southern end of the town and abutting on the Cemetery, consists of  $16\frac{1}{4}$  acres. This, one of nature's beauty spots, has year by year been improved by artificial means until it is now the focus of a large number of detached villas occupied by the wealthier citizens of the borough. The land slopes upwards to the moors. Just within its gates has been constructed a **MUNICIPAL BOWLING GREEN**, which appears to appeal to the public taste, as it is very popular and much used. This seems to me a step in the right direction, because it gets those who use it into the fresh air, supplies the exercise so necessary for the development of the body, without the contra attractions of the public house so often associated with this form of amusement. The first **MUNICIPAL BOWLING GREEN** to be established was in Everton Street, on the site of a public play ground. This play ground, representative of others in Olive Lane and Hanover Street, was a railed-in plot of land, the ground being of well trodden ashes, was principally used by young men, or immature men, for purposes of a rough kind of football in winter, nay very often throughout the year, although cricket was sometimes played in summer. The games played never appeared to be, even in practice, of such a nature as to develop scientific football, nor to bring forward promising young players to the attention of the football authorities, it was simply "horse play," and its retention as a play ground was not advisable.

The success of the Everton Street Bowling Green was such as to encourage the formation of the one at Whitehall and also on the Olive Lane site. The appearance in all cases is such as to form a great attraction to the public, and apart from the games played thereon they are invaluable as breathing spaces now retained permanently for the public good.

There is still a much needed reformation in Hanover Street. Perhaps in the near future this will be accomplished, and will form the completion of the set of bowling greens giving one to each district. The only loss in the transformation is where a play ground happens to be in close proximity to an elementary school when it has given an extra playground to the school much used for football as in the case of Olive Lane. It is however a doubtful benefit because each school has its own distinctive playground.

Generally speaking the main streets run north and south, making the town a very long one in comparison with its size and area. This is an advantage, as the sun shines alternately on the front and back, as the case may be, thus influencing



to a certain extent local currents of air by causing them to move first in one direction and then in the other according to the position of the sun. The front streets are 12 yards wide and the back streets are 4 yards wide. This latter is unfortunate. I have had occasion in a previous report to describe a venture on the part of a builder to give much more air space at the rear of the cottages by making the back yards in the form of gardens, much more than 12 yards wide to do away with intervening walls, and substituted privet edges. The pleasure the occupants derive from these gardens is unbounded. They are more beautiful to look upon and do away with the depressing, monotonous old fashioned back yards we are so accustomed to look upon, that the lives of the people are bettered, lengthened, and rendered more cheerful. The innovation certainly deserves the thanks of the community.

The minimum amount of yard space is 150 square feet.

There are 1704 houses with baths. 57 baths were put in during the year.

The streets are all paved with setts. The side walks of the front streets are flagged and are 7ft. 6in. wide.

The whole of the sanitary work, such as cleansing and watering of the streets, collection and removal of night soil, ashes, etc., is done in a very satisfactory manner by the Council.

The levelling, sewerage, and paving of the streets is well done and in capital condition, in fact I do not meet with better streets in any town I visit. They certainly reflect great credit on the engineering department. Owing to many streets being laid out in the earlier history of Darwen there are still some humps to be met with. Some streets present the appearance of a modified switchback railway, not elegant to look at. However, such an arrangement may lend itself to greater variety of movement.

### **WATER SUPPLY.**

This is upland water, gathered from the moors on the western side of the town. Owing to the heavy rainfall in this district the amount is sufficient with efficient storage room. Its contact with decaying vegetation, and the absence of mineral salts makes it very soft in character, and has resulted in causing gypsum to be added to counteract the acidity and prevent its action on the lead pipes.

The mention in my last Annual Report of the action of Bolton Corporation in securing further extension of the gathering ground, also that Darwen secured the rights to 300,000 gallons per day from that source, the water from this was turned on, on April 27th, 1914. I again mention my objection to the plan of covered reservoirs, another of these has been completed since my last report. The water may not be long enough in the reservoir to lose its sparkling character, still we do



not know how long that takes and such a thing should not be risked. Personally, I do not think covered reservoirs should be permitted, or some method adopting of aerating the water by passing it over a series of steps.

The water supply from Sunnyhurst Hey and Earnsdale Reservoirs is on the constant system ; the amount used during the year was 294,930,000 gallons ; 42,930,000 being for trade purposes, the remainder for domestic use at the rate of 16 gallons per head per day.

The total Rainfall for the year on the Watershed was 50.74 inches, and in Bold Venture Park, 54.54 inches. We had rain on 247 days.

The heaviest rainfall was in December, with 7.38 inches, and the lowest in April, with 2.15 inches.

### **MILK SUPPLY.**

Is fairly satisfactory. The supervision of this article of food is in the hands of the Police, with other foods.

It is not difficult to ascertain the character of a farm if one looks at the conveyance in which the farmer retails his milk. If the vehicle and the milk appliances are dirty, not in order, and lacking in polish, if the animal in the shafts is, or appears to be, untended and showing an absence of grooming ; if the harness and clothing of the milk vendor are untidy one may assume that things at home are not in a satisfactory condition. I do not think the fault lies in the quality of the milk being below its required value so much as in an absence of perfect cleanliness. One may look through a cotton mill and come to the conclusion it is clean ; when an isolation hospital when compared with the cotton mill would be classed as decidedly unsatisfactory in regard to scientific cleanliness, so it is with farms and dairies, they should be looked upon from the standpoint of a hospital, and not from that of a cotton mill. We want our milk to show an absence of the collection of particles of dirt at the bottom of the milk vessel after standing a few hours. To arrive at this, acting under the instructions of the Health Committee, I have issued the following instructions.

THE COWS should be healthy, and to that end should be kept as much as possible in the open air. Farmers are advised to buy only cows about the health of which they have no doubt, and to keep cows which may happen to fall ill, isolated from other cows ; they must be kept clean and for this purpose plenty of good bedding must be provided and renewed as often as necessary.

UDDERS AND TEATS—As the source of contamination is either dirty or diseased udders, these must be cleaned with a damp cloth before milking. If the udder is soiled so that it cannot be cleaned in this way, it should be washed with warm water and soap and then carefully dried with a clean dry cloth. Many farmers object to do this, under the impression that it will curtail the supply



of milk. This appears to me a mistake, as the cows lie on the ground in the open air in all states of the weather, the udder coming into close contact with the cold wet ground, which is more likely to influence the flow of milk than is the method of cleansing above suggested.

The farmers should be instructed to examine the cow's udders and teats after every milking for any unusual lump or swelling, as these are the more readily recognised after milking than before.

If anything suspicious is found or there is obvious disease of udder or teats, the milk must not be sold for human consumption until the advice of a Veterinary Surgeon has been obtained and his decision given that it is safe to so use it.

**THE MILKER**—The sources of contamination is in the clothes, the hands, or through the illness of the milker. To prevent danger he or she must wash his or her hands before milking using a stiff brush to cleanse underneath the nails.

Soap, towels and clean water must be provided in a convenient place for this purpose. The absence of suitable provision for this will be taken as evidence that these instructions are not being carried out. Clean linen overalls or smocks should be worn when, and only when, milking. Persons who are ill or have sickness at home should in no way have anything to do with the cows until the sanction of a medical man has been obtained that it is safe to do so.

**THE COW SHED** should be so lighted that every part is easily visible in the day time, when the doors are closed; should be so ventilated that the air in it will not feel close, or have a disagreeable smell when the cows are housed and the doors are shut. Cows, like ourselves, will not suffer from free ventilation if it is steadily maintained throughout the year.

It should be kept free from dust, especially during milking.

The manure must be removed from the cowshed as often as required, this being not less than twice a day. the liquid manure channels must be cleansed frequently with water.

The milk must not be left standing in the Cow Shed, but immediately removed as occasion requires to a suitably clean place, strained and cooled.

**UTENSILS**.—All milk vessels should be so constructed that all parts can be thoroughly and easily cleaned, the lids should be close fitting and dust proof. All cloths used for cleaning milk vessels must be frequently wrung out of clean water and boiled at least once a day. These utensils should be kept for milk alone, and not used for any other purpose. An efficient seive must be



provided for straining milk and must be maintained in a thoroughly clean condition ; muslin or other similar material must be used with the seive, then washed and scalded after each operation.

In summer time special precautions must be taken to prevent house flies from getting to the milk.

ALL VEHICLES used for distributing the milk must be kept as clean as possible and provided with special receptacles for the measures, &c., with a lid attached to keep out dust, &c.

The condition of milk carts, utensils, gears, horses, &c. will be taken as an indication of the state of all the other parts appertaining to the milk industry.

Yours truly,

F. G. HAWORTH,  
Medical Officer of Health.

The Bye-laws in regard to the cubic area for each beast state this must be 600 c.f. ; the Model Bye-laws require 800 c.f.

Until the cows are groomed as carefully as are horses in the best stables, we shall not see our cow-sheds in that sanitary state of cleanliness necessary for the production and supply of a pure milk. The two must go together.

### **FOOD INSPECTION.**

By the Meat Inspector and the Inspectors of Nuisances is very ably carried out, and in particular all food sold on the Market ground and from carts in the streets, I would like here to draw the attention of itinerant vendors of fish, vegetables and fruit to the necessity of preserving their wares from dust, &c. To effect this the cart or lurry should be covered over as a protection from the weather, and boarded in front to keep off dust, &c. from that direction ; otherwise dirt and hairs are blown from the horse on to the contents of the lurry. This is a matter which has hitherto escaped the attention of those concerned.

### **BAKEHOUSES.**

Are frequently inspected by the Officers. During the last decade or two a great change has come over the habits of the people, formerly each housewife baked her own bread, &c., and washed the family or household clothes. These duties have been gradually dropped and now the main supply of bread comes from public bakehouses, and the family washing is done in laundries run as private concerns. Theoretically, both these should be for the public good and be done cheaper when everything is taken into consideration. The bread has a better chance of being baked in more



sanitary surroundings, ensuring greater purity, and the washing must be a relief to an overworked woman ; but all this implies a careful watch on bakehouses and laundries.

On one occasion an Inspector received information, and afterwards verified its accuracy, that in the manufacture of meat pies, in which a wood block is used to mould the pastry, saliva was being smeared on the block to prevent it adhering to the pastry. He reported the matter at a meeting of the Health Committee, and the Town Clerk was instructed to issue notices to the makers of meat pies.

Last year " Regulations for Bakehouses " were issued to all the bakers in the town, printed on stiff paper to hang up in a prominent position ; a copy of these was included in my last report.

### **SLAUGHTER HOUSES.**

We have the Municipal Abattoir, one private, and one owned by a local wholesale purveyor of meat. These are under the supervision of the Meat Inspector, who is responsible for the condition in which they are kept.

### **SEWERAGE AND DRAINAGE.**

I consider the sewers are of the first order in regard to structure and maintenance. In some of the old parts of the town the drains may not be up to date in form of construction, as occasionally an old-fashioned stone drain is met with during alterations. When this occurs it is re-constructed as soon as possible.

### **CLOSET ACCOMMODATION.**

The following constitutes the accomodation in this respect at the end of the year in question.

Pails .....	2827
Water Closets .....	5355
Waste Water Closets .....	2503
Total .....	<hr/> 10685 <hr/>

Water Closets fixed in new buildings.....	84
Houses with two closets.....	5
Houses with one closet.....	74
Water closets dismantled.....	2
Pails converted to Water Closets .....	1856
Waste Water converted to Water Closets.....	10
Baths installed during the year .....	57



It is evident from the above figures that the tendency of the age is in the direction of a rapid removal of excreta from the vicinity of the houses to a central depot, where it can be treated and rendered innocuous. At present the most rapid and economical system in vogue is the water carriage system, and this is what is taking place.

It is perhaps unfortunate that at the initiation of a new system, the one selected was the waste water closet : These are frequently becoming blocked up by all sorts of odds and ends, empty sardine or salmon tins—children probably throwing them down mostly out of mischief—this proves a more or less costly departure to the tenants or owners, as well as a nuisance and danger to the neighbours ; but a greater danger, because a constant one, lies in the large fœcal covered surface of drain pipe exposed to the action of the atmosphere, extending from the closet pan down to the drain many feet below. The action of the waste water does not extend beyond the drain pipe, whereas in an ordinary water closet, the water flushes out every part of the system, from the pan onwards to the sewer, and, in fact, to the sewage works.

### **DISPOSAL OF REFUSE.**

House refuse is collected by the Corporation servants, conveyed in carts which are covered over with sheets, to the Destructor, and there burnt in a Meldrum Destructor. I have frequently mentioned in my reports the many objections to the ordinary ash tubs, as being insanitary ; the tub must be taken out through the doorway leading into the back street, then the contents emptied on to the ground and afterwards filled into the carts with spades. Whilst the tub is out the floor of the space in which it usually stands should be swept clean, this is not always done and the children have too easy access to the contents of the tub, and may in this way be exposed to infection.

Last year I recommended the adoption of the Quines Dust Bins, and stated the advantages of this particular system, which need not be here repeated.

### **THE WORK OF THE INSPECTORS.**

Continues to be effectively done in spite of the increasing quantity. The conversion of Pails to Water Closets continues at a good rate, but owing to the war this has been allowed to quieten down and the amount of work entailed by this change is a great tax on both Inspectors. There is also the usual house inspection, attention to nuisances and enquiring into complaints. When a case of Infectious Disease is notified the Inspector for that particular district calls at the house gets the necessary information, accompanies the patient to the Isolation Hospital, sees to the disinfection, fumigation, &c. Each Inspector has also a large amount of clerical work to do, which would be too great a demand on his time were he not to choose days unfavourable for outdoor work for this duty.



The extra work entailed by the large number of conversions from pails to Water Closets has compelled some of the work in other directions to be delayed. The Committee gave instructions to the Inspectors not to press these conversions, where the owners asked for delay owing to the War, so this work will not be as speedy as intended nor as desired.

#### SUMMARY OF INSPECTIONS—SOUTHERN DISTRICT.

A. Number and Nature of Inspection Made.	No.	B. Number of Notices Served			C. Result of Service of Notice.		
		Legal.	Preliminary.	Nuisances Abated.	Remain ing in hand.	Prosecutions.	
						Instituted.	Pending
Dwelling Houses including houses under Town Plan ning Act .....	1795	.....	.....	.....	.....	.....	.....
Factories and Workshops .....	244	5	12	12	2	.....	.....
Dairies and Cowsheds.....	104	9	13	20	4	.....	.....
Bakehouses .....	117	5	2	7	.....	.....	.....
Infectious Diseases .....	157	.....	.....	.....	.....	.....	.....
Smoke Observations .....	83	3	.....	3	.....	4	.....
NUISANCES.							
Defective Drains .....	54	17	39	49	5	.....	.....
„ Slop Gullies ....	39	9	41	37	2	.....	.....
„ Soilpipes, W.C.s etc. ....	15	2	17	13	2	.....	.....
„ Troughs and Downspouts .	77	6	81	70	7	1	.....
Insanitary Yards.....	14	2	16	12	2	.....	.....
Dirty Houses, etc.....	56	13	42	54	2	.....	.....
Dirty Closets.....	12	3	14	11	1	.....	.....
Accumulation of Refuse...	34	2	37	31	3	.....	.....
Nuisance from Animals...	3	1	4	3	.....	.....	.....
Insanitary Ashpits .....	12	12	.....	12	.....	.....	.....
Ashtubs without Covers...	27	2	29	23	4	.....	.....
Broken Sloppipes .....	33	4	37	30	3	.....	.....
Choked Waste Water Cls.	17	2	16	17	.....	.....	.....
Insufficient Ventilation ...	2	1	2	1	1	.....	.....
Insufficient Closet Accom.	3	3	.....	2	1	.....	.....
Overcrowding .....	6	6	2	6	.....	.....	.....
Dirty Bedding, etc.....	3	3	3	3	.....	.....	.....
Miscellaneous .....	9	3	9	7	2	.....	.....
Convert Pail Closets .....	994	976	.....	814	162	.....	.....
Emitting Steam .....	2	2	.....	2	2	2	.....

WILLIAM E. MARSDEN, Inspector.

Cellar Dwellings and Back to back houses are being done away with as occasion arises.

#### OFFENSIVE TRADES.

Of which we are remarkably free in Darwen, consist of Gut Scraping on a small scale, and the Town's Triperies are both as sanitary as possible.



## RIVER POLLUTION.

From time to time I have mentioned the need of covering in the river to prevent the escape of noxious gases and steam. The sooner this can be done and the better. Occasionally I hear complaints of a nuisance arising therefrom.

### BYE LAWS IN REGARD TO PREMISES AND OCCUPATION.

**Lodging-houses.**—The Municipal Model Lodging House is the only common lodging house in the town, and is frequently visited and inspected by Inspector Walsh.

The average daily number of lodgers for the year was 111.3, including women, as compared with 125.8 for the previous year.

### SUMMARY OF INSPECTIONS—NORTHERN DISTRICT.

A. Number and Nature of Inspection Made.	No.	B. Number of Notices Served			C. Result of Service of Notice.		
		Legal.	Prelim- inary.	Nuis- ances Abated.	Remain- ing in hand.	Prosecutions.	
						Instituted.	Pending
Dwelling Houses including houses under Town Plan- ning Act .....	2075	.....	.....	.....	.....	.....	.....
Factories and Workshops .....	126	23	10	20	3	.....	.....
Dairies and Cowsheds.....	70	12	6	12	.....	.....	.....
Bakehouses .....	80	6	3	6	.....	.....	.....
Infectious Diseases .....	197	.....	.....	.....	.....	.....	.....
Rooms Disinfected .....	110	.....	.....	.....	.....	.....	.....
Smoke Observations .....	84	5	.....	5	.....	1	.....
<b>NUISANCES.</b>							
Defective Drains .....	20	10	15	16	4	.....	.....
„ Slop Gullies ....	8	2	8	6	2	.....	.....
„ Soilpipes, W.C.s etc. ....	14	10	6	14	.....	.....	.....
„ Troughs and Downspouts .	51	29	51	48	3	.....	.....
Insanitary Yards.....	9	5	9	9	.....	.....	.....
Dirty Houses, etc.....	31	25	31	31	.....	.....	.....
Dirty Closets.....	7	2	7	2	5	.....	.....
Accumulation of Refuse...	9	4	8	9	.....	.....	.....
Nuisance from Animals...	1	.....	1	1	.....	.....	.....
Insanitary Ashpits .....	1	.....	1	1	.....	.....	.....
Ashtubs without Covers...	4	2	2	4	.....	.....	.....
Broken Sloppipes .....	11	5	11	5	6	.....	.....
Choked Waste Water Cls.	13	6	13	13	.....	.....	.....
Broken Closet rec. Doors .	3	0	3	3	.....	.....	.....
Insufficient Ventilation ...	4	4	4	4	.....	.....	.....
Insufficient Closet Accom.	.....	.....	.....	.....	.....	.....	.....
Overcrowding .....	1	1	1	1	.....	.....	.....
Insanitary Pail Closets ...	1178	1178	.....	1042	136	.....	.....
Dirty Bedding, etc.....	4	3	4	4	.....	.....	.....
Emitting Steam .....	2	.....	2	.....	2	.....	.....

C. R. WALSH, M.R.S. Inst., Inspector of Nuisances.

In one case legal proceedings were instituted to enforce the abatement of Nuisance caused by the emission of Black Smoke, an order to abate was made by the Magistrates.



# Notification of Infectious Diseases.

The following were reported to me during the year :—

Small Pox.....	0
Diphtheria .....	20
Erysipelas.....	27
Scarlet Fever .....	206
Typhoid Fever.....	20
Ophthalmia Neonatorum .....	4
Puerperal Fever .....	1
Tuberculosis .....	88
Total .....	356

## CASES REPORTED IN—

Year.	Diphtheria and Croup	Erysipelas	Scarlet Fever	Typhoid Fever	Continued Fever	Puerperal Fever	Smallpox	Chicken-pox	Tuberculosis	Ophthalmia Neonatorum	Total.
1887 (from Aug.)	...	...	145	14	...	...	1	...	...	...	160
1888	...	...	225	39	...	...	19	...	...	...	283
1889	...	...	158	20	...	...	2	...	...	...	180
1890	3	...	78	26	...	...	...	...	...	...	107
1891	1	...	39	50	...	...	...	...	...	...	90
1892	...	...	257	53	...	...	1	...	...	...	311
1893	5	5	242	29	...	...	6	...	...	...	287
1894	7	5	126	40	1	2	5	...	...	...	186
1895	11	27	46	36	2	8	...	...	...	...	130
1896	12	70	139	33	3	9	...	...	...	...	266
1897	5	56	101	41	1	12	...	...	...	...	216
1898	8	35	93	43	3	10	...	...	...	...	192
1899	12	31	400	55	...	7	...	...	...	...	505
1900	190	27	276	33	1	4	...	...	...	...	531
1901	207	34	231	21	3	1	...	...	...	...	497
1902	144	15	137	34	1	3	3	...	...	...	337
1903	21	17	30	15	...	2	27	32	...	...	144
1904	34	35	689	20	...	5	2	...	...	...	785
1905	29	49	456	28	...	5	...	...	...	...	567
1906	18	17	50	17	...	4	...	...	...	...	106
1907	22	14	26	21	...	...	1	...	...	...	84
1908	14	14	22	23	...	4	—	...	...	...	77
1909	11	7	149	15	...	3	...	...	11	...	196
1910	18	32	123	12	...	4	...	...	5	...	194
1911	32	16	39	9	...	2	...	...	3	...	101
1912	19	31	9	3	...	2	...	...	53	...	117
1913	26	15	28	2	...	1	...	...	91	...	163
1914	20	27	206	10	...	1	...	...	88	4	356

**DIPHTHERIA AND CROUP.**—Of these diseases 20 cases were notified, as compared with 26 the year before ; in 14 of these swabs were taken and sent to Manchester University for examination.



In 4	the reaction was	positive
In 9	„ „	negative
In 1	„ „	doubtful

The value of this aid to diagnosis is undoubted. Where the report is positive it clears away all doubt ; where negative, of course, the result is not necessarily without doubt, and my advice is always to submit another swab for examination.

There was only one house with two cases of this complaint, one was notified on July 18th and the other one on July 27th ; probably the one infected the other.

In another case—No. 125—the patient had been away to Blackpool and stayed in lodgings in which there were two cases of Whooping Cough. Of course, there is no connection between these two complaints, except the possible chance of one of the patients being suffering at the time from a mild and undiscovered form of Diphtheria.

Another case—No. 163—was related to one of the other patients, which may account for the infection.

This disease is treated in the homes of the patients, but isolated as well as circumstances will allow, as we have no hospital to which to remove them.

### SCARLET FEVER.

No. of houses with one case .....	154
„ „ two cases .....	17
„ „ three cases .....	6

No. 10 case had been in contact with another patient.

No. 55 was in Bolton the week previous to commencing, and had probably been in touch with infection.

No. 76, I, as School Medical Officer, came across this person whilst desquamating in school, and sent the child home.

No. 126. had been on a holiday to Morecambe.

No. 128 had been on a holiday to Aberystwith.

No. 137 had been on a holiday to Withnell.

Within the usual period of incubation, and the same remark as to infection applies in these cases.

No. 144 was discovered by me to be desquamating whilst in school, and immediately sent home.



**No. 146.** This person had been to Chorley on his bicycle a few days before becoming ill.

**No. 150.** Her brother had Scarlet Fever at Bishop Auckland in July, returned home in September 14, and was notified on September 24th. She had also been to Leeds about that time.

**No. 166.** I found this one also in school desquamating, and sent him home.

**No. 159.** A sister had been in Bull Hill suffering from Scarlet Fever, the patient slept with her on the night of her return home.

**No. 170** was found desquamating in school and sent home.

**No. 177** had been to Bolton a few days before.

**No. 201.** The teacher saw that she was peeling and sent her home ; in the course of a few days another member of the family commenced.

**No. 205.** Treated by the parents for a common cold until desquamation proved it had been Scarlet Fever.

**No. 215** patient's mother had been to Hull for the week-end. A second case occurred here.

**No. 227.** Found by doctor to be desquamating. Two more cases occurred in the house.

**No. 245.** This case was desquamating when the doctor was called in.

It is needless for me to assert that the notes on the preceeding cases of Scarlet Fever prove the origin of the many cases cited ; this it is almost impossible to prove ; but they serve as clues in many instances and as far as possible these clues are followed up. My main reason for introducing them is to show how this disease is spread. Take, for instance, where the patient has visited another town within the incubation period and contracted the disease, how many more children have become infected from the same source it is impossible to say, probably a great many. There are also the children who were desquamating when the doctor was called in and those found in school in that condition. These must have infected many more before the complaint was diagnosed, or the patient isolated. It also indicates how difficult it is to prevent this disease spreading, in fact, the dangerous cases always are the mild, undetected ones, and one wonders that we do as well as we are doing under the circumstances. My "modus operandi" is to get the cases up to Bull Hill as soon as possible after notification ; so far, I feel sure it has checked the disease in a marked manner.

There is also the influence of the school in spreading infection. Personally, I do not attach the slightest value to the period of desquamation, the skin is dead,



and in the opinion of many Medical Officers of Health it is innocuous, in fact, Dr. Killick Millard, Medical Officer of Health for Leicester, sends all Scarlet Fever cases home from hospital as soon as the febrile symptoms have subsided, which means long before the skin has peeled. In my experience, the skin begins to peel about the end of the second week and continues until the end of six or eight weeks, the time varying according to the nature of the skin. The last part to desquamate as a rule being the sole of the foot, and particularly the heel, on account of the thickness of the skin. This method shortens very materially the stay in hospital and enables one to pass through the isolation hospital a great many more patients than obtains under the present regime. I do not see why we cannot do the same as Leicester : so far it is under my careful consideration.

To return to the effect of the schools in spreading infection. Take the cases mentioned in the list describing the movements of the children previous to the disease showing itself, where the parents treated the case as a common cold until peeling decided the diagnosis. These children must have been in school whilst acutely infectious ; is it any wonder the disease spreads ?

It seems to me important that the Medical Attendant should see the child and sign the card previous to him being allowed back in school.

The distribution was as follows :

	Central.	West-Central.	North-East	North-West.	South-East.	South-West
Population .....	6629	3975	9223	7728	7008	6475
Number .....	22	27	51	46	33	27

Table showing susceptible period :—

Under 1 yr.	1 to 5	5 to 15.	15 to 25.	25 to 65.	Total.
1	40	146	17	2	206

In my Monthly Report for February, 1914, I made the following remarks, " The last outbreak of this complaint is shown by the following figures :—

1909.....	149 cases
1910.....	123 „
1911.....	39 „
1912.....	9 „
1913.....	28 „
1914.....	19 „ during the month of January
„ .....	189 „ to the end of the year.
<hr/>	
	554

showing the last epidemic to have occurred four or five years ago, commencing in



1909 and extending on into 1910. This disease most frequently attacks children from three to six years of age, or during their early school life, so the longer we can stave off an epidemic and the better chance there is of missing one of them, this is : disturb the continuity of these visitations and the more difficult it appears for them to establish themselves. The cyclical nature of epidemics of Scarlet Fever depends on the birth and growth of children during the period of quiescence until they reach the susceptible age and sufficient numbers to form an epidemic. The older the children grow and the less susceptible they become, so we have the most to fear from those who have arrived at the above-mentioned particular age. It is also of seasonal occurrence. The seasonal curve begins to rise above the mean level about the third week in August, continues its upwards course until the middle of October, remains stationary until the same time in November, or about one month, and then rapidly declines as the numbers lessen.

This epidemic periodically enables us to be forewarned, and consequently to be forearmed against an attack, just as does the rise of the four-foot earth thermometer to the standard of 56° F. against the approach of summer Diarrhœa.

The usual course of procedure is carried out in all notifiable diseases. Notices being sent to the Education Office, Free Library, and to the Head Master or Mistress as the case may be.

**TYPHOID FEVER.** There were 10 cases notified during the year, as compared with 2 cases in the previous twelve months.

**No. 3** had a Mince Pie in the mill at which he works. His blood was positive.

**No. 75** had a few Oysters some days before being taken ill. Blood positive.

**No. 77** had some water cress previous to being ill. Blood positive.

**No. 102** had some Black Pudding before being ill.

**No. 188** had raw Mussels. Blood positive.

**No. 197** had Mussels. Blood positive.

**No. 210** had Mussels. Blood positive.

**No. 251.** Her mother suffering from Enteric Fever was an inmate of Moss Side Isolation Hospital, near Blackpool, so she must have been a visitor to that popular sea-side resort when she commenced with the disease, even if she did not contract it there. The daughter was well when she was brought home from there, but commenced a few days afterwards. This points to both patients being infected whilst in Blackpool.

This list is interesting as indicating the number of persons who commenced to be ill after taking some particular kind of food, certainly there does not appear to be anything in a Mince Pie of a dangerous character, but one does not know the particular circumstances under which it was made, this is more important than what entered into its composition. There cannot, however, be the same reserve in regard



to the other foods mentioned, such as oysters, mussels and water cress. We know the beds where these shell fish are cultivated on the Lancashire coast are not above suspicion, and it is quite possible that water cress may be contaminated from night soil being spread on adjacent land, just as celery may, and often does, become dangerous through being manured with night soil. In all cases where the person partook of mussels the reaction of the blood test was positive.

The custom of eating mussels in a raw state is much more common than one not of the habits of the artizan class would suspect; this undoubtedly increases the danger, and if one were to recommend them being cooked to lessen the danger, the cooking would consist in putting the mussel in its shell on the top bar of the kitchen fire until the shell opened, and then eating it. The said operation only opens the shell and stops far short of cooking, and the temperature certainly does not rise high enough to destroy any bacteria which may be present.

**OPHTHALMIA NEONATORUM.** By a memorandum issued by the Local Government Board, in February of the year of this report, the above disease became a compulsory notifiable disease, on April 1st.

Instructions of procedure were sent out to all the Medical men practising in the town, accompanied by books of notification forms, also to midwives.

The purpose of this Act is to draw attention to these cases and to force upon the people proper medical attendance. The danger of this early inflammation of a specific character of one or both eyes is very great, endangering the eyesight of the child, in fact, it is the direct cause of the larger number of cases of blindness to-day.

**PUERPERAL FEVER.** One case was notified, being the same number in the previous year.

Since the County Council was established, this disease comes under the supervision of the officials of that Authority. More care is taken in the disinfection of the Nurses' clothing, &c., which probably accounts for the decreasing number of such cases.

**ERYSIPELAS.** There were 27 cases, as compared with 15 in the previous year.

**SMALL POX.** None.

**MEASLES.** Not being a notifiable disease we can form only an approximate and even a vague idea of the number of cases. I have now for some time been trying to evolve a scheme for dealing with cases of this kind. The office work of the School Attendance Officers has increased to such an extent that the duties associated with their position must inevitably fall into abeyance.



I have asked the Head Masters and Mistresses to notify to me every day when Measles is prevalent the names ages and addresses of all the children absent from school on account of Measles. In company with the School Nurse the school most affected is visited, the children examined, and all suspected ones are sent home for a few days to give the disease time to develop, or otherwise.

This method appears to be a fairly effective one, the threatened epidemic is more quickly checked. The whole of the school is never closed, and instead, as under the older custom of closing a school when the children were playing about the streets and in each others homes spreading the infection, now the children remain in school under the close supervision of teachers, School Attendance Officers, the School Nurse and myself.

**TUBERCULOSIS.** Under the regulations, 88 cases were notified as compared with 94 in the previous year. The following Table gives detailed particulars of them.

**Table Showing the Age Periods and Localisation of Tuberculosis Cases notified during 1914.**

DISEASES.	Un- der 1 yr	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards		Total.						
	M F	M F	M F	M F	M F	M F	M F	M	F	M	F					
Lungs .....			5	8	4	8	7	5	3	8	2	2	1	31	22	
Lungs and Skin.....							1							1	...	
Lung—Left .....						1								1	...	
Lung—Right .....				2						1				2	1	
Lungs and Brain .....			1											1	...	
Lungs and Right Humerus.....					1				1					1	...	
Lungs and Peritoneum.....														1	...	
Lungs and Adrenalin Glands .....							1							1	...	
Pleura .....							1							1	...	
Hip Joint .....					1									1	...	
Right Hip Joint Stump, Amputation .....				1										1	...	
Lower Epiphysis of Femur .....			1											1	...	
Left Knee .....									1					1	...	
Left Eighth Rib .....									1					1	...	
Ankle .....		1												1	...	
Spine .....			1											1	...	
Spine and Left Shoulder Joint .....													1	1	...	
Peritoneum .....		1			2									1	2	
Intestines .....							1							1	...	
Mesenteric Glands.....			1		1									1	2	
Meninges .....		1												1	...	
Larynx.....										1				1	...	
Cervical Glands .....			1	1	1	1		2						2	5	
Skin—Left Hand .....				1										1	...	
.....	1	3	5	6	13	10	9	8	9	5	11	4	2	2	50	38
.....		4	11	23	17	14	15					4			88	

Consumption of the Lungs is still the prevailing part affected out of a total of 88, 53 were of the Lungs.



Forty-two deaths took place from tuberculosis of one kind or another, being 2 less than in the year before.

Pulmonary Tuberculosis headed the list with 29. Glands 5, Hip joint 2, Meninges 4, Peritoneum 1, Generalised 1.

Twenty seven cases of Pulmonary Tuberculosis were sent to various sanatoria. Twenty of these were discharged before the end of the year, with the following results

In	1	case—No report.
„	1	„ Improvement.
„	1	„ Considerable improvement
„	1	„ No improvement
„	1	„ Little or no active disease
„	3	„ Fit for full work.
„	1	„ Not fit for work.
„	13	„ Fit for light work
„	1	„ Died.

The Consumptive patients from Darwen were sent to the following institutions :

Meathop Sanatorium, Grange.  
 Woodburn Sanatorium  
 Strinesdale Sanatorium  
 Felix House Sanatorium  
 Heath Charnock Sanatorium  
 Aitken Sanatorium  
 Bull Hill Sanatorium, Darwen

During the year 90 patients were sent by the County Committee to Bull Hill Sanatorium.

I intended giving you a special report on the cases of Pulmonary Phthisis treated at Bull Hill, but owing to my sudden break down last November and continued illness afterwards, I have not been able to collect and collate the particulars necessary for such a report.

**Table showing the Age Period and Localisation of Tuberculous cases which died during 1914.**

DISEASES.	Under 1 yr		1 to 2		5 to 15		15 to 25		25 to 35		35 to 45		45 to 65		65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Lungs .....					1	...	4	5	6	1	5	...	5	2	...	...	21	8
Tuberculosis Generalised.....					1	...	...	...	...	...	...	...	...	...	...	...	1	...
Hip Joint .....					1	...	...	...	1	...	...	...	...	...	...	...	2	...
Mesenteric Glands.....	1	...	...	1	1	...	1	...	...	...	1	...	...	...	...	...	2	3
Meningitis.....	2	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	3
Peritonitis .....					...	...	1	...	...	...	...	...	...	...	...	...	...	1
	1	2	...	2	5	...	4	7	7	1	5	1	5	2	...	...	27	15
	3	2	...	5	11	...	8	6	7	...	...	...	...	...	...	...	42	...



	Cases Notified	Deaths Registered	Death-rate of those attacked
Scarlet Fever .....	206	1	0.48
Diphtheria and Membraneous Croup...	20	3	15.0
Typhoid Fever.....	10	5	50.0
Puerperal Fever .....	1	0	0.0
Erysipelas.....	27	0	0.0
Small Pox.....	0	0	0.0
Tuberculosis .....	88	41	46.6
Ophthalmia Neonatorium .....	4	0	0.00
Total .....	356	50	





**NOTIFICATION OF INFECTIOUS DISEASES IN EACH WARD, AND FOR  
EACH MONTH OF THE YEAR 1914.**

MONTHS.	CENTRAL					WEST CENTRAL					NORTH-EAST					NORTH-WEST					SOUTH-EAST					SOUTH-WEST					BOROUGH					Total
	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Op. Neonatorum.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Op. Neonatorum.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Op. Neonatorum.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Op. Neonatorum.			
JANUARY .....	2	1	2	1	...	1	2	...	1	...	3	3	2	...	1	...	1	1	...	1	1	...	1	1	...	1	1	6	1	4	5	1	9	...	26	
FEBRUARY .....	...	...	1	...	...	...	3	...	1	...	2	1	1	...	...	...	1	1	...	1	1	...	...	...	...	13	...	...	...	3	1	...	5	...	22	
MARCH .....	5	...	...	...	...	...	5	...	1	...	2	1	...	...	...	...	1	2	...	1	2	...	...	...	225	...	...	...	...	3	2	...	7	...	37	
APRIL .....	2	1	...	...	...	...	11	1	...	...	5	4	...	...	...	...	1	1	...	...	1	2	...	...	...	21	2	2	...	...	...	11	...	36		
MAY .....	...	...	...	...	...	...	1	1	...	1	...	...	4	...	...	...	...	...	...	...	2	1	...	...	...	3	9	...	1	...	...	9	...	19		
JUNE .....	...	...	...	...	...	...	1	...	1	...	2	1	...	...	...	...	1	1	...	...	1	...	...	...	...	3	5	1	2	2	...	11	...	21		
JULY .....	1	...	1	...	...	...	2	...	...	1	1	5	...	...	...	...	2	...	...	...	2	1	...	...	...	211	...	...	3	4	...	8	1	27		
AUGUST .....	...	1	...	...	...	...	2	...	1	...	4	1	...	...	...	...	1	...	...	...	2	4	...	...	...	11	...	...	2	2	...	7	...	22		
SEPTEMBER .....	1	...	...	...	...	...	3	...	...	1	...	...	1	...	...	...	1	...	...	...	1	...	...	...	...	3	6	...	...	...	1	9	1	17		
OCTOBER .....	2	...	...	...	...	...	1	7	1	...	...	1	...	...	...	...	2	1	...	...	3	...	...	...	...	119	1	2	1	...	4	1	28			
NOVEMBER.....	4	1	...	...	...	...	7	...	...	...	...	1	3	1	...	...	...	...	...	4	...	2	...	...	...	133	3	3	1	...	5	...	45			
DECEMBER .....	5	...	...	...	...	...	1	8	...	...	...	14	1	...	...	...	1	1	...	10	...	1	...	...	...	47	2	2	1	...	3	1	56			
TOTALS...	22	1	4	3	1	12	51	2	4	3	1	22	46	2	5	1	22	33	3	7	11	...	10	27	2	5	1	11	206	10	27	20	188	4	356	



Table showing the number of Pathological Specimens which have been sent for examination to Professor Delépine, Public Health Laboratory, Victoria University, Manchester.

YEAR.	Diphtheria.				Typhoid Fever.			Tuberculosis. Sputum.		
	Posi- tive.	Nega- tive.	Doubt- ful.	Total.	Posi- tive.	Nega- tive.	Total.	Posi- tive.	Nega- tive.	Total.
1910	1	6	...	7	4	3	7	3	8	11
1911	6	8	...	14	4	7	11	2	9	11
1912	7	4	...	11	...	...	...	7	11	18
1913	8	8	...	16	1	7	8	28	33	61
1914	4	9	1	14	6	2	8	65	57	122

#### ZYMOTIC DEATH RATE.

1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897				
0.7	3.3	3.0	1.9	2.0	1.2	1.7	1.9	2.2	1.1	2.1	2.2	1.6				
1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
2.08	2.34	2.90	2.14	1.03	0.76	2.07	1.00	1.14	0.69	0.76	1.10	0.51	1.51	0.86	0.27	0.44



## Deaths.

The total number of deaths during the year was 595 ; males 279 ; females 316 ; being an increase of 16 on the previous year.

The Death-Rate for the year is 14.49, or an increase of 0.31 on the previous year.

The number of deaths of residents in Institutions outside the district was 57 which has been added to the 538 deaths registered within the district, making a total of 595.

These deaths are reported to me quarterly by the Registrar General, through the County Medical Officer of Health.

The number of deaths in the Union Workhouse, Blackburn, was .....	23
„ „ „ „ Royal Infirmary, Blackburn .....	21
„ „ „ „ other Institutions and places .....	13

Four deaths of non-residents occurred in the town during the year.

**INQUESTS.**—There were 30 Inquests held during the year, compared with 45 during 1913. The following were the verdicts :—

	1910	1911	1912	1913	1914
Accidental Death .....	18	9	18	17	14
Natural Causes .....	19	7	6	24	8
Suicide .....	5	11	4	4	8
	<hr/> 42 <hr/>	<hr/> 27 <hr/>	<hr/> 28 <hr/>	<hr/> 45 <hr/>	<hr/> 30 <hr/>



Death-rates per 1,000 of the Population in the various Wards of the Borough.

WARDS. Population.	Central. 6629	West- Central. 3975	North- East 9223	North- West 7728	South- East 7008	South- West 6475	Death- Rate per month.
1914							
January .....	12.67	9.06	27.32	23.29	17.12	16.68	19.01
February .....	12.67	12.08	14.31	13.98	15.41	16.68	14.33
March .....	21.72	3.02	10.41	21.74	11.99	20.39	15.50
April .....	7.24	12.08	9.11	4.66	8.56	11.12	8.48
May .....	7.24	9.06	14.31	18.63	13.70	22.24	14.62
June .....	19.91	12.08	14.31	9.32	25.68	12.97	16.08
July .....	7.24	6.04	9.11	3.11	15.41	14.83	9.33
August .....	14.48	9.06	10.41	9.32	10.27	7.41	10.23
September ....	9.05	9.06	14.31	15.53	8.56	16.68	12.57
October .....	14.48	9.06	15.61	7.76	20.55	9.27	13.16
November.....	14.48	12.07	11.05	6.21	15.41	14.82	12.28
December ....	9.05	6.04	23.42	9.32	5.14	12.97	11.98
Transfers ...	14.48	15.09	19.52	15.53	12.27	20.39	16.67
Rate for year..	13.73	10.31	16.15	13.19	15.12	16.37	14.49

Death-Rates in the Various Wards for the past 23 Years.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Borough.
1892	16.6	20.7	18.0	14.0	20.6	19.9	18.3
1893	18.2	15.4	16.0	21.0	19.9	22.2	19.0
1894	14.66	15.22	15.54	13.04	16.96	14.63	15.0
1895	17.0	17.39	20.6	12.33	17.65	19.82	17.7
1896	12.8	17.8	16.4	17.5	19.8	19.2	17.1
1897	17.52	15.22	18.16	16.14	18.37	18.64	17.3
1898	16.09	18.58	17.82	14.99	15.51	18.0	16.8
1899	18.45	15.80	15.38	12.50	20.85	18.05	17.0
1900	20.78	17.28	21.40	21.09	20.03	20.50	20.4
1901	17.92	17.36	14.21	17.05	18.46	13.83	20.8
1902	13.13	15.78	14.13	13.60	14.11	17.34	14.6
1903	14.13	13.95	11.67	12.97	11.85	13.17	12.8
1904	14.12	15.21	14.52	20.50	14.54	14.54	15.2
1905	13.30	14.15	13.24	16.67	15.41	12.84	14.0
1906	11.40	12.83	14.66	11.68	12.52	14.64	13.11
1907	12.79	12.55	12.27	15.69	10.86	12.07	12.58
1908	11.77	13.28	13.46	15.31	11.32	13.39	13.01
1909	12.58	18.16	11.22	17.74	15.26	15.47	14.44
1910	15.02	16.18	11.67	14.37	11.51	13.24	13.33
1911	17.93	18.23	16.32	13.23	12.47	18.13	15.87
1912	14.09	15.92	12.83	12.99	13.99	14.69	13.86
1913	12.33	15.12	14.22	14.76	14.79	14.14	14.18
1914	13.73	10.31	16.15	13.19	15.12	16.37	14.49
Average	15.15	15.82	15.48	15.54	16.00	16.33	15.83



Population as per Census enumerated	Estimated Population to middle of year	Births	Deaths from all causes.	Deaths under 1 year.	Deaths 1 to 5	Deaths 5 to 15	Deaths 15 to 25	Deaths 25 to 60	Deaths 60 years and upwards.
1881 29,747	1886								
	32,185	965	641	187	154	28	29	135	108
	1887								
	32,491	1000	716	188	139	60	35	174	120
	1888								
	33,500	994	600	154	113	32	33	145	118
	1889								
	34,500	972	544	149	90	16	31	161	107
	1890								
	36,500	1075	673	184	68	28	30	196	167
1891 34,192	1891								
	34,192	1115	660	168	115	32	26	193	126
	1892								
	35,000	1057	641	177	85	35	64	175	105
	1893								
	35,500	955	677	184	101	40	44	167	141
	1894								
	36,000	1039	542	130	67	17	46	174	108
	1895								
	36,000	1128	640	179	92	16	43	186	124
1901 38,212	1896								
	36,652	1032	627	187	102	17	26	163	132
	1897								
	37,500	1114	651	182	87	19	33	195	135
	1898								
	37,500	1131	632	199	79	22	27	174	131
	1899								
	37,900	1062	647	200	90	23	26	189	119
	1900								
	38,600	980	789	188	144	45	33	196	183
1901 38,212	1901								
	38,212	858	620	145	100	33	20	166	156
	1902								
	38,712	891	569	135	58	32	27	174	143
	1903								
	39,114	941	501	117	51	17	18	151	147
	1904								
	39,516	820	606	123	110	35	29	160	149
	1905								
	39,918	818	562	118	61	31	30	25 to 65 216	65 and upwards. 106
1911 40,332	1906								
	41,164	811	540	111	65	19	18	202	125
	1907								
	41,864	876	527	104	49	21	26	217	110
	1908								
	42,266	895	550	107	33	20	19	240	131
	1909								
	42,668	816	616	104	63	28	31	250	140
	1910								
	43,000	776	573	95	36	25	35	229	153
1911 40,332	1911								
	40,389	756	641	116	74	20	24	246	161
	1912								
	40,611	691	563	88	40	25	24	247	139
	1913								
	40,824	738	579	94	38	23	20	251	153
	1914								
	41,038	765	595	91	31	23	24	250	176



### Bronchitis.

Deaths at the different age periods during the last twenty-two years.

YEAR.	Under 1 year.	1 to 5.	5 to 15.	15 to 25	25 to 60	60 and upwards.	Total.
1893.....	41	24	3	...	12	29	109
1894.....	27	20	...	...	7	17	71
1895.....	24	13	...	...	21	26	84
1896.....	36	28	...	...	10	20	94
1897.....	25	13	...	...	22	26	86
1898.....	22	12	...	...	10	21	65
1899.....	29	12	...	...	16	16	73
1900.....	18	7	...	...	20	36	81
1901.....	16	10	...	...	11	30	67
1902.....	19	8	1	...	7	22	57
1903.....	17	8	...	...	4	20	49
1904.....	8	10	...	...	11	19	48
					25 to 65	65 and upwards.	
1905.....	15	5	...	...	12	19	51
1906.....	16	5	...	...	11	23	55
1907.....	16	9	...	1	10	12	48
1908.....	8	7	...	...	9	18	42
1909.....	22	8	...	...	25	26	81
1910.....	7	3	...	...	16	23	49
1911.....	6	7	1	...	12	18	44
1912.....	11	6	...	...	13	20	50
1913.....	17	3	2	1	11	17	51
1914.....	14	3	...	...	20	37	74
Total ...	414	221	7	2	290	495	1429

### Pneumonia.

Deaths at the different age periods during the last twenty-two years.

YEAR.	Under 1 year.	1 to 5.	5 to 15.	15 to 25	25 to 60	60 and upwards.	Total.
1893.....	8	8	1	1	24	8	50
1894.....	5	4	1	...	19	4	33
1895.....	9	4	1	1	15	4	34
1896.....	9	9	2	...	17	3	40
1897.....	14	12	2	2	31	10	71
1898.....	11	13	3	...	18	8	53
1899.....	12	14	2	...	21	8	57
1900.....	20	28	3	1	25	11	88
1901.....	19	14	1	...	15	11	60
1902.....	16	12	2	2	28	4	64
1903.....	8	8	1	...	18	6	41
1904.....	13	19	1	...	15	5	53
					25 to 65	65 and upwards.	
1905.....	12	12	6	...	13	4	47



### Pneumonia.—Continued.

YEAR.	Under 1 year.	1 to 5.	5 to 15.	15 to 25	25 to 65	65 and upwards.	Total.
1906.....	11	19	5	5	20	6	66
1907.....	18	16	3	2	17	6	62
1908.....	4	4	...	2	12	1	23
1909.....	12	10	6	2	14	3	47
1910.....	10	12	2	2	19	6	51
1911.....	8	10	1	4	17	8	48
1912.....	9	11	2	2	14	6	46
1913.....	3	9	2	1	16	5	36
1914.....	7	3	4	...	24	5	43
Total ...	238	251	51	29	412	132	1113

### Phthisis.

Deaths at the different age periods during the last twenty-two years.

YEAR.	Under 1 year.	1 to 5.	5 to 15.	15 to 25	25 to 60	60 and upwards.	Total.	Rate.
1893.....	...	...	...	...	35	4	39	1.10
1894.....	...	1	1	1	42	...	45	1.25
1895.....	...	...	...	...	34	4	38	1.06
1896.....	1	1	...	...	25	2	29	0.79
1897.....	...	...	...	...	26	1	27	0.72
1898.....	...	...	...	...	26	2	28	0.75
1899.....	...	...	1	2	26	2	31	0.82
1900.....	1	...	1	1	25	2	30	0.78
1901.....	...	...	1	2	23	3	29	0.76
1902.....	...	2	...	...	27	2	31	0.80
1903.....	...	...	1	1	18	2	22	0.56
1904.....	1	3	3	...	28	3	38	0.96
						65 and upwards.		
1905.....	...	1	...	8	24	3	36	0.90
1906.....	...	...	1	2	16	...	19	0.46
1907.....	...	1	1	5	28	...	35	0.84
1908.....	...	...	3	3	19	...	25	0.59
1909.....	...	...	2	7	26	...	35	0.82
1910.....	...	...	...	6	16	2	24	0.56
1911.....	...	1	...	7	26	...	34	0.84
1912.....	...	...	3	3	23	...	29	0.71
1913.....	...	...	1	5	23	...	32	0.78
1914.....	...	...	1	9	19	...	29	0.70
Total	3	10	20	62	558	32	685	



## DEATHS OF PERSONS 65 YEARS AND UPWARDS.

Senile Decay .....	33
Bronchitis and Pneumonia .....	43
Heart Disease .....	14
Apoplexy .....	20
Injuries .....	2
Phthisis.....	0
All other causes .....	64
	176

## DEATHS FROM CONSUMPTION.

Tuberular Meningitis .....	3
Tubercular Peritonitis .....	1
Phthisis Pulmonalis .....	29
Tubercular Mesenteric Glands .....	5
Tubercular Hip Joint .....	2
Tuberculosis Generalised .....	1
	41

## DISINFECTION.

During the year infected bedding was removed from 179 houses for disinfection, and 213 rooms were fumigated.

## LIST OF BEDDING DISINFECTED DURING 1914.

Beds.	Mattresses.	Bolsters.	Pillows.	Quilts.	Blankets.	Sheets.	Suits of Clothes.	Carpets.	Rugs.	Curtains.	Cushions.	Shawls.	Sundries.
200	43	163	216	183	290	72	4	5	6	0	19	25	212

## INFANTILE MORTALITY.

The number of Infants who died during the year was 91, making an Infantile Mortality Rate of 119.



With the exception of 1911, this rate has gradually but slowly become lower, until 1914, when it reached 119 per 1,000 births ; 1911 was a particularly bad year for babies. It is impossible to give reasons why this rate should remain at its high figure. Comparisons have been made in Government Reports between Burnley, where the rate is high and Nelson where it is exceptionally low, and so far without arriving at a solution. In my opinion, it is mostly a social matter. Burnley is an old town with many old quarters, unfavourable in the home life. In their surroundings and habits old associations die hard and bad habits are difficult to eradicate. Accumulated dirt, want of free ventilation and armies of flies in hot weather, all tend to the rapid souring of milk and its ill effects on the baby, no doubt combined with careless habits, keep the rate up in the one place whilst in the other, the rapid growth of a new industrial town with new houses, wide, well paved streets, and possibly higher wages all induce a better class artizan to settle within its borders, possibly depleting the neighbouring town of its best workpeople. The more favourable surroundings help to bring the population up to a higher plane, industrious, cleanly and thrifty, improving, no doubt, the morale of the people with its beneficial effects on the Infantile Death Rate, this comparison must not be taken as a reflection on the people of, or on the older town itself. To bring it up to the level of the newer town would mean its razing to the ground and rebuilding it, an impossible task.

With the visits of the Health Visitor and the influence of the Mothers' Club we are making steady, if slow, progress.

**During the First week** there were 25 deaths, as follows—Convulsions 1, Enteritis 1, Injury at Birth 1, Atelectasis 1, Premature Birth 13, Marasmus 4, Other Causes 4. Premature Birth heads the list with a comparatively high figure ; how far occupation, or going to work too near confinement affects this we do not know. Constitutional disability, habit or preventive measures may influence it largely.

**One to Two weeks**, there were 6 deaths : Convulsions 1, Bronchitis 1, Congenital Malformations 3, Marasmus 1 ; here the causes were unavoidable.

**Two to Three weeks**, 3 deaths : Congenital Malformation 1, Marasmus 2.

**Three to Four weeks** : 1, overlaid.

**Four weeks and under three months**, 21 deaths : Tubercular Meningitis 1, Convulsions 1, Bronchitis 3, Pneumonia 1, Enteritis 4, Syphilis 1, Congenital Malformation 1, Premature Birth 3, Marasmus 6.

**Three to Six months**. 11 Deaths : Whooping Cough 1, Bronchitis 3, Pneumonia 2, Enteritis 3, Gastritis 1, Other causes 1.

**Six months to nine months**. 13 deaths : Whooping Cough 1, Tubercular Meningitis 1, Convulsions 2, Bronchitis 3, Pneumonia 2, Enteritis 1, Marasmus 1, Other Causes 2.



**Nine months to twelve months.** 11 Deaths : Abdominal Tuberculosis 1, Convulsions 1, Bronchitis 4, Pneumonia 2, Enteritis 1, Other causes 2.

Total number of deaths 91, of which 2 were illegitimate, out of 28 illegitimate births during the year.

There is no doubt, judging from the causes of death in some of these cases, that wrong and injudicious feeding had much to do in keeping up the rate amongst the infants

If we can extend the scope of the work of the Mothers' Club, we shall do a great deal to lessen the number of these deaths' I do not think we get quite the class of mothers at the meetings we should do ; they who attend are usually well dressed with well cared for babies. This has a tendency to keep away the poorer classes, as they do not like to risk an invidious if unspoken comparison. The work is too much for one person with other duties to perform. I hope, however, next year to be able to report a better state of things, or at least the inauguration of such.

I have received the following Report from Miss Orpin, Health Visitor :—

HEALTH OFFICE,  
May, 1915.

SIR,

During the year 1914 I have paid 428 first visits after the notification of births, and 537 second visits. Of these 382 were not attended by a medical man at or before the time of the first visit.

I made a note of how 409 of the Babies were being fed.

304 at the breast.  
105 by means of a bottle.  
65 bottle without tube.  
11 bottle with glass tube.  
29 bottle with long rubber tube.

As to food :—

95 with a milk and water mixture.  
7 with tinned prepared foods.  
1 undiluted milk.  
1 Nestle's milk.  
1 Nestle's milk and barley water.

As a general rule the milk is steryilised, and lime water is often used.



The Mothers Club which meets fortnightly on Saturday afternoons, from September till the end of May, continues to work very well. During the year the average attendance was 44. Lessons have been given on Home and Personal Hygiene ; on the care of Mothers and Infants ; on Feeding Infants and young children. Also practical lessons in cooking, cutting out and making little garments.

Mothers with infants, and expectant mothers are invited to become members, and may remain members if they wish till the youngest child is 5 years old.

I am, Sir,

Yours obediently,

C. A. ORPIN, Queen's Nurse, etc.  
(Health Visitor).





# GOVERNMENT TABLE IV.

NAME OF DISTRICT—DARWEN.

## INFANT MORTALITY DURING THE YEAR 1914.

Nett Deaths from stated Causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Total deaths under 1 year
<b>ALL CAUSES—</b>										
Certified .....	22	6	3	1	32	21	10	11	11	85
Uncertified .....	3	...	...	...	3	...	1	2	...	6
Small-pox .....	...	...	...	...	...	...	...	...	...	...
Chicken-pox .....	...	...	...	...	...	...	...	...	...	...
Measles .....	...	...	...	...	...	...	...	...	...	...
Scarlet Fever .....	...	...	...	...	...	...	...	...	...	...
Whooping Cough.....	...	...	...	...	...	...	1	1	...	2
Diphtheria and Croup .....	...	...	...	...	...	...	...	...	...	...
Erysipelas.....	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis .....	...	...	...	...	...	1	...	1	...	2
Abdominal Tuberculosis .....	...	...	...	...	...	...	...	...	1	1
Other Tuberculous Diseases .....	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous) .....	...	...	...	...	...	...	...	...	...	...
Convulsions .....	1	1	...	...	2	1	...	2	1	6
Laryngitis.....	...	...	...	...	...	...	...	...	...	...
Bronchitis.....	...	1	...	...	1	3	3	3	4	14
Pneumonia (all forms) .....	...	...	...	...	...	1	2	2	2	7
Diarrhoea .....	...	...	...	...	...	...	...	...	...	...
Enteritis .....	1	...	...	...	1	4	3	1	1	10
Gastritis .....	...	...	...	...	...	...	1	...	...	1
Syphilis .....	...	...	...	...	...	1	...	...	...	1
Rickets .....	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying .....	...	...	...	1	1	...	...	...	...	1
Injury at Birth .....	1	...	...	...	1	...	...	...	...	1
Atelectasis .....	1	...	...	...	1	...	...	...	...	1
Congenital Malformations .....	...	3	1	...	4	1	...	...	...	5
Premature Birth .....	13	...	...	...	13	3	...	...	...	16
Atrophy, Debility and Marasmus.....	4	1	2	...	7	6	...	1	...	14
Other Causes .....	4	...	...	...	4	...	1	2	2	9
<b>TOTALS .....</b>	<b>25</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>35</b>	<b>21</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>91</b>

Nett Births in the Year.

Legitimate ..... 737

Illegitimate ..... 28

Nett Deaths in the Year of—

Legitimate Infants ..... 89

Illegitimate Infants ..... 2



# DEATHS UNDER ONE YEAR OF AGE.

Year.	Premature Birth.	Convulsions.	Bronchitis & Pneumonia.	Diarrhoeal Diseases.	Whooping Cough.	Measles.	Inanition.	Congenital Defects.	Other Causes.	Total.	Rate per 1,000 Births.
1886	...	...	...	...	...	...	...	...	...	187	193
1887	19	42	31	16	8	2	13	...	57	188	188
1888	...	...	...	...	...	...	...	...	...	154	155
1889	27	28	24	14	11	2	17	...	26	149	153
1890	...	...	...	...	...	...	...	...	...	184	171
1891	20	39	33	8	...	10	12	...	46	168	151
1892	15	36	37	5	11	...	13	...	60	177	167
1893	24	22	49	16	2	9	12	...	50	184	193
1894	21	17	30	6	10	...	8	...	38	130	125
1895	16	17	33	41	3	13	27	6	36	179	158
1896	25	14	44	35	15	3	18	6	30	187	181
1897	27	11	39	35	4	13	22	8	36	182	163
1898	33	6	33	58	...	11	12	9	48	199	175
1899	22	18	41	43	7	1	9	12	48	200	188
1900	36	16	38	27	4	9	18	5	44	188	191
1901	20	8	35	24	6	3	15	7	30	145	169
1902	23	6	35	16	6	1	7	7	35	135	151
1903	21	2	25	16	7	2	17	4	5	117	124
1904	15	2	21	29	13	8	13	5	25	123	150
1905	31	5	27	11	...	1	17	3	24	118	144
1906	18	5	27	19	...	4	9	3	30	111	136
1907	18	9	34	11	4	...	7	4	17	104	118
1908	27	3	12	26	1	...	10	4	24	107	120
1909	21	1	34	10	8	7	6	5	12	104	127
1910	19	11	17	12	3	...	5	3	25	95	122
1911	22	2	14	23	...	9	18	1	27	116	153
1912	13	4	20	6	10	3	9	4	19	88	127
1913	17	1	20	12	1	2	18	6	17	94	127
1914	16	6	21	10	2	...	14	5	17	91	119

TABLE showing Infantile Mortality in the Various Wards.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Boro.'
1898	195	193	219	125	122	164	175
1899	215	147	189	154	212	161	188
1900	225	183	238	170	158	163	191
1901	182	169	160	208	157	162	169
1902	138	135	146	121	174	174	151
1903	156	157	117	160	94	91	124
1904	152	96	126	172	194	152	150
1905	171	144	153	107	138	139	144
1906	117	179	160	62	158	140	136
1907	153	156	158	82	35	122	118
1908	102	131	133	105	103	140	120



**Table showing Infantile Mortality in the Various Wards.—Continued.**

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Boro.¹
1909	144	180	108	116	114	128	127
1910	155	169	93	101	109	152	122
1911	165	159	174	102	123	188	153
1912	82	155	110	145	165	128	127
1913	105	162	135	123	157	90	127
Average for 16 yrs	153	157	151	128	138	143	145
1914	98	128	122	94	170	99	119

	Males.	Females.	Total.
Disease of the Respiratory System .....	13	8 .....	21
Disease of the Digestive System.....	6 .....	7 .....	13
Malformations .....	1 .....	4 .....	5
Disease of the Nervous System.....	5 .....	2 .....	7
Disease of Early Infancy .....	12 .....	20 .....	32
General Diseases .....	2 .....	4 .....	6
Affections produced by External Causes.....	1 .....	0 .....	1
Uncertified .....	3 .....	3 .....	6
Inquests .....	0 .....	0 .....	0
	<u>43</u>	<u>48</u> .....	<u>91</u>

### NOTIFICATION OF BIRTHS ACT, 1907.

Table showing the number of Births Notified during 1914.

	Male.	Female.	Total.	Stillborn.
JANUARY .....	32	26	58	3
FEBRUARY .....	19	30	49	2
MARCH .....	32	34	66	6
APRIL .....	43	45	88	6
MAY .....	39	48	87	3
JUNE .....	36	32	68	4
JULY .....	29	31	60	4
AUGUST .....	36	30	66	2
SEPTEMBER .....	33	32	65	2
OCTOBER .....	32	31	63	4
NOVEMBER .....	30	24	54	2
DECEMBER .....	29	41	70	3
	<u>390</u>	<u>404</u>	<u>794</u>	<u>41</u>







# ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1914, FOR THE BOROUGH OF DARWEN.

On the Administration of the Factory and Workshop Act, 1901, in connection with :—

## FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

### I.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Inspections	NUMBER OF Written Notices.	Prosecu- tions.
Factories (including Factory Laundries) .....	106	5	...
Workshops (including Workshop Laundries) .....	344	41	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report) .....	23	...	...
Total .....	473	46	...

### II.—DEFECTS FOUND.

Particulars.	No. OF Found.	DEFECTS. Remedied	Prosecu- tions
NUISANCES UNDER PUBLIC HEALTH ACTS :—			
Want of Cleanliness .....	15	15	...
Want of Ventilation .....	1	1	...
Overcrowding .....	...	...	...
Want of Drainage to Floors .....	...	...	...
Other Nuisances .....	6	6	...
SANITARY ACCOMMODATION :—			
Insufficient .....	2	2	...
Unsuitable or Defective .....	15	15	...
Not Separate for Sexes .....	...	...	...
Total .....	39	39	...



### III.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107								OUTWORK IN UN- WHOLESOME PREM- ISES, SECTION 108			OUTWORK IN IN- FECTED PREMISES SECTIONS 109, 110			
	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists	Prose- cutions		Instances	Notices served	Prosecutions	Instances	Orders made (S, 110)	Prosecutions (Sections 109, 110)
	Sending twice in the year			Sending once in the year				Failing to keep or permit inspection of lists	Failing to send lists						
	Lists	Out- work'rs		Lists	Out- work'rs										
		Contractors	Workmen		Contractors	Workmen									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Wearing Apparel— (1) making, &c.....	3	...	6	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....

### IV.—REGISTERED WORKSHOPS.

Workshops .....	261
Bakehouses .....	67
Laundries .....	4
Other Workshops .....	23
Total .....	355

### V.—OTHER MATTERS.

Matters Notified to H.M. Inspector of Factories—

Number.

Action taken in matters referred by H.M. Inspector as remedi- able under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) : Notified by H.M. Inspector.....	14
Reports (of action taken) sent to H.M. Inspector .....	9
Other.....	2
Underground Bakehouses (s. 101) in use at the end of the year...	5



**GOVERNMENT TABLE I.**  
**Vital Statistics of whole District during 1914 and previous Years.**  
**NAME OF DISTRICT—DARWEN.**

Year.	Population 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 Residents not registered in the District.	Under 1 Year of Age.	
			Number.	Rate.					Number.	Rate per 1,000 Net Births.
1	2	3	4	5	6	7	8	9	10	11
1909	42,668	816	816	19.12	564	13.22	...	52	104	127
1910	43,000	776	776	18.05	519	12.07	...	54	95	122
1911	40,398	754	756	19.71	592	14.65	3	52	116	153
1912	40,611	687	691	17.02	500	12.31	10	73	88	127
1913	40,824	735	738	18.08	518	12.69	6	67	94	127
1914	41,038	761	Males 765 Females 384	18.64	542	13.21	4	57	91	119
										Males 595 Females 279
										316

Area of District in Acres (land and inland water) ..... 5,959  
Total Population at all ages ..... 40,332  
Number of Inhabited houses ..... 9,674  
Average number of persons per house ..... 4.16  
At Census of 1911.

Institutions outside the District receiving sick and infirm persons from the District :  
Union Workhouse, Blackburn.  
Blackburn and East Lancashire Royal Infirmary, Blackburn.

Other Institutions, the deaths in which have been distributed amongst the several localities in the District :—

Asylum, Lancaster.  
Workhouse, Fulwood, Preston.  
Royal Infirmary, Blackburn.  
Union Workhouse, " "  
Infirmary, Bolton.  
Baines Convalescent Hospital, Stockport.

Is the Union Workhouse within the District? No.



**GOVERNMENT TABLE II.**

**Cases of Infectious Diseases notified during the Year 1914.**

**NAME OF DISTRICT—DARWEN.**

Notifiable Diseases.	Number of Cases Notified.							Total Cases Notified in each Locality. (e.g. Parish or Ward) of the District.					Total Cases Removed to Hospital.	Deaths in Hospital of Patients Removed from this District.	
	At all Ages	At Ages—Years.						1 Central Ward.	2 West Central Ward.	3 North- East Ward.	4 North- West Ward.	5 South- East Ward.			6 South- West Ward.
		Un- der 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65								
Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup) .....	20	9	11	...	...	...	...	3	1	3	1	11	1	...	...
Erysipelas .....	27	...	...	...	...	10	15	4	2	4	5	7	5	...	...
Scarlet Fever .....	206	1	40	146	17	1	...	22	27	51	46	33	27	89	...
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever .....	10	...	1	3	5	...	...	1	...	2	2	3	2	...	...
Relapsing Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever .....	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...
Cerebro-Spinal Menin- gitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio-myelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neon- atorum .....	4	4	...	...	...	...	...	...	...	1	2	...	1	...	...
Pulmonary Tubercu- losis .....	64	...	6	15	27	13	3	9	4	16	17	6	12	...	...
Other forms of Tuber- culosis .....	24	...	4	5	8	4	2	4	2	5	6	3	4	...	...
Totals .....	356	5	53	169	43	48	30	44	36	82	79	63	52	89	...

ISOLATION HOSPITAL.—Bull Hill Hospital, Darwen. SANATORIA, &c.—Bull Hill Sanatorium, Darwen. (In temporary use for County Patients).



# GOVERNMENT TABLE III.

Causes of, and Ages at Death during the Year 1914.

NAME OF DISTRICT—DARWEN.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District (a)										Total deaths whether of 'Re- sidents' or 'Non-residents' in Institutions in the district (b)
	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		
	2	3	4	5	6	7	8	9	10	11	
1	2	3	4	5	6	7	8	9	10	11	
ALL CAUSES—											
Certified (c) .....	582	85	14	16	23	24	84	163	173	5	
Uncertified .....	13	6	1	...	...	...	...	5	3	...	
Enteric Fever .....	5	...	...	...	...	2	2	1	...	...	
Small Pox.....	...	...	...	...	...	...	...	...	...	...	
Measles .....	2	...	...	2	...	...	...	...	...	...	
Scarlet Fever .....	1	...	...	1	...	...	...	...	...	...	
Whooping Cough.....	6	2	2	2	...	...	...	...	...	...	
Diphtheria and Croup .....	4	...	...	3	1	...	...	...	...	...	
Influenza .....	6	...	...	...	...	1	3	1	1	...	
Erysipelas.....	1	...	...	...	...	...	1	...	...	...	
Phthisis (Pulmonary Tuberculosis) .....	29	...	...	...	1	9	12	7	...	5	
Tuberculous Meningitis .....	4	2	1	...	1	...	...	...	...	...	
Other Tuberculous Diseases .....	9	1	1	...	3	2	2	...	...	...	
Cancer, malignant disease .....	45	...	...	...	...	...	4	24	17	...	
Rheumatic Fever .....	5	...	...	1	1	...	1	2	...	...	
Meningitis.....	1	...	...	1	...	...	...	...	...	...	
Organic Heart Disease .....	52	...	1	...	1	2	11	23	14	...	
Bronchitis.....	74	14	2	1	...	...	3	17	37	...	
Pneumonia (all forms) .....	43	7	1	2	4	...	9	15	5	...	
Other Diseases of Respiratory Organs.....	8	...	1	...	1	...	1	3	2	...	
Diarrhoea and Enteritis .....	18	10	2	1	1	...	1	1	2	...	
Appendicitis and Typhlitis.....	3	...	...	...	...	2	1	...	...	...	
Cirrhosis of Liver .....	5	...	...	...	...	...	...	4	1	...	
Alcoholism .....	...	...	...	...	...	...	...	...	...	...	
Nephritis and Bright's Disease .....	26	...	1	...	...	...	6	13	6	...	
Puerperal Fever .....	...	...	...	...	...	...	...	...	...	...	
Other accidents and diseases of Preg- nancy and Parturition .....	6	...	...	...	...	...	6	...	...	...	
Congenital Debility and Malformation, including Premature Birth .....	35	35	...	...	...	...	...	...	...	...	
Violent Deaths, excluding Suicide .....	14	1	...	1	1	2	3	2	4	...	
Suicide .....	8	...	...	...	...	1	2	5	...	...	
Other Defined Diseases .....	164	13	2	1	7	3	14	42	82	...	
Diseases ill-defined or unknown .....	21	6	1	...	1	...	2	6	5	...	
TOTALS .....	595	91	15	16	23	24	84	166	176	5	
Sub-entries included in above figures :											
Cerebro-spinal Meningitis .....	...	...	...	...	...	...	...	...	...	...	
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	



Deaths of Children at School Ages for the last seventeen years.

	3 to 4		4 to 5		5 to 6		6 to 7		7 to 8		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1898	2	5	6	4	7	4	1	2	1	2	1	1	...	2	1	1	1	1	1	1	20	15
1899	3	2	7	5	3	5	1	1	1	1	4	2	...	...	1	...	1	1	...	...	17	23
1900	9	14	12	2	3	9	2	6	1	6	2	2	...	3	...	...	1	1	4	1	36	44
1901	10	7	7	6	2	4	4	2	3	2	1	2	1	1	1	3	1	1	1	...	30	33
1902	6	5	3	4	2	1	3	4	...	4	1	1	5	...	1	1	1	1	2	...	24	17
1903	1	1	1	4	1	1	1	2	1	...	1	2	...	2	3	3	...	...	...	...	8	13
1904	13	8	7	2	3	1	1	3	1	3	1	3	2	4	...	...	2	...	1	1	32	28
1905	7	2	2	2	1	4	1	1	...	1	...	3	2	...	1	...	2	1	...	...	22	16
1906	1	3	4	5	...	...	1	6	1	2	...	...	1	...	...	...	2	2	...	2	13	15
1907	5	2	1	1	1	...	...	1	...	1	...	...	3	1	1	...	3	3	3	...	14	11
1908	4	2	...	1	...	3	1	...	...	3	1	1	3	...	...	...	...	1	2	...	12	9
1909	4	5	...	3	3	...	1	1	...	1	1	1	...	1	2	...	2	2	1	1	15	18
1910	1	4	2	1	1	1	3	6	1	3	...	...	2	2	...	...	2	2	2	...	11	20
1911	3	6	2	6	1	4	1	1	...	...	1	2	1	...	1	1	1	1	...	1	11	22
1912	3	3	1	1	3	2	3	2	3	...	2	2	...	...	3	3	...	...	...	3	16	16
1913	4	5	...	5	...	5	...	3	...	3	...	3	...	...	2	2	1	...	...	1	9	22
1914	1	1	2	1	5	2	...	...	2	...	1	1	2	2	1	1	1	...	...	...	14	9



**Estimated Population, Number of Deaths, and Death-rates from all Causes,  
from Zymotic Diseases, of Children under 1 Year, and Persons  
of 60 years and upwards, during the last 24 years.**

YEAR.	Estimated Population at Middle of Year.	Total Deaths from all causes	Death Rate per 1,000 of Population.	Total Deaths from Seven Principal Zymotic Diseases	Death Rate from Zymotic Diseases per 1,000 of Population.	Total Deaths under 1 Year of Age.	Percentage of Deaths under 1 Year to Total Deaths.	Total Deaths of Persons 60 Years and Upwards.	Percentage of Deaths of Aged Persons to Total Deaths.
1891	34,192	660	19.30	60	1.75	168	25.4	126	19.0
1892	35,000	641	18.31	67	1.91	177	27.6	105	16.3
1893	35,500	677	19.07	79	2.22	184	27.1	141	20.8
1894	36,000	542	15.05	40	1.11	130	23.9	107	19.7
1895	36,000	640	17.77	77	2.13	179	27.9	124	19.3
1896	36,652	627	17.10	81	2.20	187	29.8	132	21.0
1897	37,500	651	17.36	63	1.68	182	27.9	135	20.7
1898	37,500	632	16.85	78	2.08	199	31.4	131	20.7
1899	37,900	647	17.07	89	2.34	200	30.9	119	18.3
1900	38,600	789	20.44	112	2.90	188	23.8	183	23.1
1901	38,212	620	16.22	82	2.14	145	23.3	156	25.1
1902	38,712	569	14.69	40	1.03	134	23.7	143	25.1
1903	39,114	501	12.80	30	0.76	117	23.3	147	29.3
1904	39,516	606	15.33	107	2.70	123	20.2	149	24.5
1905	39,918	562	14.07	40	1.00	118	20.9	106	18.8
1906	41,164	540	13.11	47	1.14	111	20.5	125	23.1
1907	41,864	527	12.58	29	0.69	104	19.7	110	20.8
1908	42,266	550	13.01	32	0.76	107	19.5	131	23.8
1909	42,668	616	14.44	47	1.10	104	16.8	140	22.7
1910	43,000	573	13.33	22	0.51	95	16.6	153	26.7
1911	40,398	641	15.87	61	1.51	116	18.1	161	25.1
1912	40,611	563	13.86	35	0.86	88	15.6	139	24.7
1913	40,824	579	14.18	11	0.27	94	16.2	153	26.4
1914	41,038	595	14.49	18	0.44	91	15.2	176	29.5



Deaths during the Twenty-Three Years, 1892 to 1914 inclusive, of Children under 5 years.

UNDER 5 YEARS OF AGE.																							
	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Smallpox .....	...	...	...	41	14	28	25	8	42	7	3	12	27	3	17	1	...	22	...	27	...	...	...
Measles .....	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever .....	13	7	2	2	5	2	1	15	7	8	5	...	10	14	3	...	1	1	3	3	...	4	...
Diphtheria .....	...	4	2	...	2	1	1	4	18	19	12	4	6	1	...	2	2	...	1	4	3	1	3
Whooping Cough .....	26	2	17	3	26	9	...	15	8	11	...	8	28	...	1	11	4	14	4	2	16	1	6
Croup .....	17	13	1	10	2	1	3	2	10	5	1	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fevers :—																							
Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid .....	2	...	...	...	...	...	...	...	...	1	...	1	2	...	...	...	...	...	...	...	...	...	...
Others .....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Dysentery	5	20	6	18	17	11	42	25	11	14	4	1	9	3	21	4	15	2	2	17	7	2	13
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Erysipelas .....	1	1	...	2	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Pyæmia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ague .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis .....	...	1	...	...	1	...	...	...	3	...	2	...	4	1	...	1	...	...	...	1	...	...	...
Bronchitis, Pneumonia, and Pleurisy .....	63	84	49	51	82	64	58	67	73	59	52	41	50	44	51	59	23	52	32	31	37	32	27
Heart Disease .....	...	...	...	1	...	...	1	4	1	3	1	1	1	2	1	...	...	2	...	2	...	1	1
Injuries .....	3	1	...	5	2	3	4	4	6	4	...	3	...	5	1	1	1	2	1	1	...	4	1
All other Diseases .....	133	126	118	138	153	150	143	145	163	114	104	97	96	106	81	74	94	72	88	102	56	85	67



Deaths during the Twenty-Three Years, 1892 to 1914 inclusive, of Persons of 5 years and upwards.

	YEARS AND UPWARDS.																						
	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Smallpox .....	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
Measles .....	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever .....	5	3	2	...	...	2	...	7	4	6	4	...	12	7	...	...	1	1	1	...	...	...	...
Diphtheria .....	...	1	...	...	...	1	...	1	14	10	7	...	1	2	1	3	...	1	4	2	1	2	1
Whooping Cough .....	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...
Croup .....	4	10	2	1	2	1	3	1	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fevers :—																							
Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid .....	8	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Others .....	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Dysentery	3	7	...	...	...	...	...	2	2	3	1	...	...	...	...	1	1	1	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever .....	1	...	...	3	2	5	7	2	2	1	...	3	...	5	3	3	3	1	3	2	10	9	4
Erysipelas .....	1	...	1	...	1	2	...	1	2	...	...	...	...	1	1	...	...	...	3	1	1	1	1
Pyæmia .....	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal .....	...	1	3	5	5	3	5	1	1	...	1	1	...	3	2	...	1	3	2	1	3	1	...
Ague .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis .....	40	44	44	38	28	27	28	31	27	29	29	22	34	35	19	34	25	35	24	33	29	32	29
Bronchitis, Pneumonia,																							
and Pleurisy .....	93	82	52	72	53	93	60	65	89	72	70	53	53	56	75	51	44	76	74	64	35	60	119
Heart Disease .....	35	57	47	43	37	35	47	55	53	55	54	57	53	56	63	53	52	56	48	60	59	52	51
Injuries .....	15	13	5	20	15	9	4	6	4	7	1	4	...	6	4	6	7	14	13	12	16	12	11
All other Diseases .....	170	168	180	163	184	197	189	172	250	157	198	192	208	200	192	216	268	256	263	270	274	277	247



# STATISTICS FROM LANCASHIRE TOWNS.

TOWN.	Estimated Population, 1914.	Birth Rate (per 1,000).	Death Rate (Corrected).	Zymotic Death Rate.	Respiratory Death Rate.	Phthisis. Death Rate.	Death Rate from other Tubercular Diseases.	Infantile Death Rate per 1,000 Births.	Cancer Death Rate.
Accrington .....	45,775	19.31	13.98	1.09	2.40	0.87	0.48	117	1.07
Ashton-under-Lyne.....	45,179	23.7	18.4	3.3	3.8	1.2	0.4	183	0.7
Bacup .....	22,500	18.71	17.95	1.22	3.54	1.20	0.35	126	1.00
Barrow-in-Furness .....	68,523	28.6	14.3	0.94	2.67	0.91	0.56	104	0.72
Blackpool.....	66,314	14.47	13.76	0.4	2.00	1.04	0.3	110	1.41
Bolton.....	185,247	22.1	15.8	1.66	3.00	0.90	0.29	118	0.93
Bootle .....	73,230	31.7	17.9	2.31	3.81	1.17	0.37	123	0.94
Burnley.....	110,040	23.5	16.4	1.9	3.8	1.02	0.20	158	0.82
Chadderton .....	29,512	24.1	15.2	1.8	2.7	1.05	0.33	101	0.9
Chorley.....	31,500	24.03	16.64	2.38	2.50	0.73	0.19	149	0.89
Colne .....	27,404	17.69	12.69	1.20	2.07	0.83	...	117	...
Eccles.....	43,300	21.6	13.09	0.99	2.26	1.8	0.23	105	0.83
Lancaster. ....	38,593	20.49	13.19	0.46	1.81	1.39	0.32	86	0.93
Liverpool .....	767,992	30.0	19.5	2.7	4.3	1.4	0.5	139	0.9
Manchester .....	739,136	25.30	16.76	1.20	3.44	1.70	0.49	128	1.00
Middleton .....	28,750	19.8	14.6	1.6	2.25	1.18	0.31	126	1.18
Oswaldtwistle.....	16,210	22.27	15.73	1.41	2.89	0.92	0.12	144	1.41
Radcliffe .....	26,050	19.46	14.90	0.65	3.14	0.76	0.26	124	1.03
Salford .....	234,975	26.9	17.1	1.9	3.8	1.6	0.5	126	1.1
Stretford.....	45,100	18.0	11.9	0.48	1.97	1.00	0.17	83	1.48
Waterloo-with-Seaforth ...	29,079	22.21	14.20	1.27	1.85	1.09	0.41	85	1.13
Wigan .....	92,868	29.18	17.09	2.38	4.13	0.95	0.31	139	0.64
DARWEN .....	41,038	18.64	14.49	0.44	3.11	0.76	0.31	119	1.09



# INFECTIOUS DISEASES NOTIFIED.

TOWNS.	Small Pox.		Scarlet Fever.		Diphtheria.		FEVERS.			
							Typhoid.		Puerperal.	
	Num-ber.	Rate per 1000	Num-ber.	Rate per 1000	Num-ber.	Rate per 1000	Num-ber.	Rate per 1000	Num-ber.	Rate per 1000
1. Hyde .....	...	...	447	13.37	18	0.54	5	0.15	1	0.03
2. Stockport .....	...	...	455	4.18	71	0.65	24	0.22	3	0.03
3. Macclesfield .....	...	...	126	3.62	37	1.06	10	0.28	4	0.11
4. Crewe .....	...	...	134	2.98	100	2.22	5	0.11	2	0.04
5. Chester .....	...	...	82	2.10	60	1.54	12	0.31	5	0.13
6. Birkenhead.....	...	...	381	2.91	126	0.90	22	0.16	6	0.04
7. Wallasey .....	...	...	253	3.22	84	1.07	23	0.29	1	0.01
8. Bootle .....	...	...	191	2.72	61	0.88	7	0.10	4	0.06
9. Liverpool .....	1	0.00	3689	4.94	1273	1.71	128	0.17	53	0.07
10. Waterloo-with-Seaforth	...	...	164	6.21	39	1.47	6	0.23	1	0.03
11. St. Helens .....	...	...	341	3.53	124	1.28	22	0.23	16	0.16
12. Widnes .....	...	...	133	4.22	40	1.27	...	...	5	0.16
13. Southport .....	...	...	161	3.12	59	1.14	12	0.23	4	0.07
14. Hindley .....	...	...	79	3.28	14	0.58	19	0.79	4	0.17
15. Ince-in-Makerfield .....	...	...	62	2.81	24	1.08	10	0.45	2	0.09
16. Wigan .....	...	...	222	2.49	42	0.47	70	0.80	6	0.07
17. Warrington .....	...	...	1121	15.52	126	1.74	31	0.43	9	0.12
18. Leigh .....	...	...	429	9.73	68	1.54	9	0.24	9	0.24
19. Bolton .....	...	...	269	1.48	187	0.10	53	0.29	8	0.04
20. Farnworth .....	...	...	106	3.71	4	0.14	12	0.43	4	0.14
21. Bury .....	...	...	256	4.36	59	1.01	8	0.14	4	0.07
22. Heywood .....	...	...	230	8.61	6	0.23	5	0.19	6	0.23
23. Radcliffe .....	...	...	72	2.75	13	0.49	7	0.26	4	0.15
24. Eccles .....	...	...	248	5.91	63	1.50	8	0.19	3	0.07
25. Stretford .....	...	...	329	7.74	33	0.77	7	0.16	...	...
26. Swinton and Pendlebury	...	...	192	6.24	32	1.04	19	0.61	...	...
27. Manchester .....	...	...	5212	7.29	853	1.19	167	0.23	116	0.16
28. Salford .....	1	0.00	2337	10.06	354	1.53	63	0.27	19	0.08
29. Ashton-under-Lyne .....	...	...	347	7.08	23	0.51	13	0.28	1	0.02
30. Stalybridge.....	...	...	123	4.64	5	0.18	2	0.08	1	0.04
31. Chadderton .....	...	...	199	7.03	25	0.88	9	0.32	...	...
32. Middleton .....	...	...	219	7.82	22	0.78	42	1.50	...	...
33. Oldham .....	4	0.02	1284	8.91	162	1.09	23	0.15	9	0.06
34. Rochdale .....	5	0.05	509	5.56	148	1.62	17	0.18	6	0.05
35. Accrington .....	...	...	91	2.02	36	0.79	11	0.24	3	0.07
36. Bacup .....	2	0.09	190	8.51	17	0.77	6	0.27	2	0.09
37. Haslingden .....	...	...	67	3.53	19	1.01	9	0.48	...	...
38. Rawtenstall .....	...	...	172	5.63	36	1.18	3	0.09	...	...
39. Burnley .....	...	...	309	2.91	125	1.17	23	0.21	8	0.08
40. Colne .....	1	0.04	46	1.80	15	0.58	32	1.25	...	...
41. Nelson .....	...	...	45	1.14	22	0.55	4	0.10	...	...
42. Blackburn .....	...	...	694	5.22	65	0.49	30	0.23	10	0.08
43. Chorley .....	...	...	82	2.69	7	0.23	11	0.36	2	0.07
44. Preston .....	...	...	1156	9.87	221	1.90	45	0.38	6	0.05
45. Blackpool .....	...	...	151	2.51	33	0.56	34	0.58	2	0.03
46. Fleetwood .....	...	...	55	3.47	25	1.58	1	0.06	1	0.06
47. Lancaster .....	...	...	236	5.70	56	1.35	26	0.63	2	0.05
48. Barrow-in-Furness .....	1	0.02	181	2.84	97	1.52	10	0.16	2	0.03
49. Darwen .....	...	...	206	5.02	20	0.48	10	0.24	1	0.02



Table showing the Diseases and Age Periods at which Persons have Died.

DISEASES.	Un- der 1 yr	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards		Total.	
	M F	M F	M F	M F	M F	M F	M F	M F	M	F	M	F
<b>GENERAL DISEASES.</b>												
Abscess of Brain .....						1					1	
Addisons Disease .....							1				1	
Anæmia .....						1						1
Anæmia (Pernicious) .....								1				1
Cancer of Bladder .....								1			1	
„ „ Bowel .....								2		2		4
„ „ Brain .....								1				1
„ „ Breast .....								3		2		5
„ „ Cervical Glands .....								1			1	
„ „ Eye .....								1			1	
„ „ Face .....								1			1	
„ „ Gall Bladder .....										1		1
„ „ Glands.....										1		1
„ „ Liver .....							1	2	1	3	3	4
„ „ Lung .....								1			1	
„ „ Ovary .....								1				1
„ „ Pancreas.....						1	1	1		1	2	2
„ „ Pelvic Cavity .....								1				1
„ „ Prostate Gland .....									1		1	
„ „ Stomach .....							1	3	3	2	3	6
„ „ Throat.....								1		1	2	
„ „ Tongue .....									1		1	
„ „ Uterus .....							1	1				2
Croup .....				1							1	
Diabetes .....						1		1		2	1	3
Diphtheria .....			2	1							2	1
Enteric Fever .....					2		1	1	1		4	1
Erysipelas .....						1						1
Influenza .....					1	1		2	1		1	2
Measles .....			1	1							1	1
Phthisis.....				1	4	5	6	1	5	2	21	8
Purpura Hæmorrhagica .....	1										1	
Pyæmic Abscess.....								1				1
Rheumatic Fever .....				1	1		1		2		3	2
Rheumatic Gout .....									1			
Rheumatism (Chronic) .....					1				1		1	1
Scarlet Fever .....			1								1	
Syphilis Congenital .....	1											1
Tuberculosis Generalised .....				1							1	
Tubercular Hip Joint .....				1		1					2	
„ Mesenteric Glands .	1		1		1			1			2	3
„ Meningitis.....	2		1		1						1	3
„ Peritonitis .....					1							1
Whooping Cough.....	2	1	1	1	1						2	4
	2	5	1	3	5	4	6	1	8	7	11	3
									9	7	18	20
									6	15	66	65



**Diseases and Age Periods at which Persons have Died.—Continued.**

DISEASES.	Un- der 1 yr	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F
<b>DISEASES OF THE NERVOUS SYSTEM.</b>												
Amyatrophic lateral Sclerosis .....								1	...	...	...	1
Apoplexy .....							1	3	12	9	11	23
Cerebral Embolism .....										1	...	1
Cerebral Thrombosis .....								1	...	1	2	1
Cerebral Tumour .....						1	1	...	1	...	1	2
Convulsions .....	5	1	...	...	...	...	...	...	...	...	5	1
Hæmiplegia .....										1	...	1
Mastoid Abscess .....					1	...	...	...	...	...	...	1
„ Disease .....				1	...	...	...	...	...	...	1	...
Melancholia .....								1	...	...	...	1
Meningitis .....			1	...	...	...	...	...	...	...	1	...
Myasthenia Gravis .....							1	...	...	...	...	1
Myelitis .....							1	...	...	...	1	...
Otitis Media .....						1	...	...	...	...	1	...
Paralysis Agitans .....									1	...	...	1
	5	1	...	1	1	1	3	4	15	10	15	34
<b>DISEASES OF CIRCULATORY SYSTEM.</b>												
Aortic Aneurism .....								1	...	...	1	...
Arterial Sclerosis .....								3	4	3	7	11
Atheroma .....									1	...	1	...
Endarteritis Obliterans .....					1	...	...	...	...	...	1	...
Endocarditis .....				1	...	...	...	...	...	...	...	1
Endocarditis Septic .....					1	...	...	...	...	...	...	1
Epistaxis .....										1	...	1
Heart Disease .....		1	...	1	1	1	3	5	11	12	4	20
Heart Disease (not Organic) .....				1	...	...	...	...	...	...	1	...
Thyroid (enlarged) .....							1	...	...	...	...	1
	...	1	...	2	2	2	3	4	5	15	16	30
										8	18	48
<b>DISEASES OF RESPIRATORY SYSTEM.</b>												
Asthma .....								1	1	...	1	1
Bronchitis .....	10	4	2	1	...	1	2	6	11	14	23	32
Broncho Pneumonia .....	3	4	1	1	...	1	...	...	...	...	6	5
Congestion of Lungs .....			1	...	...	...	...	...	1	...	1	1
Gangrene of Lung .....							1	...	...	...	...	1
Laryngitis .....				1	...	...	...	...	...	...	1	...
Pleurisy .....								1	...	1	1	1
Pneumonia .....				3	1	2	3	3	10	5	4	19
Pulmonary Embolism .....								1	...	...	...	1
Tumour of Thyroid Body .....									1	...	...	1
	13	8	1	3	1	2	4	1	3	4	5	18
									18	18	16	29
											61	66



**Diseases and Age Periods at which Persons have Died.—Continued.**

DISEASES.	Un- der 1 yr	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards		Total.	
	M	F	M	F	M	F	M	F	M	F	M	F
<b>DISEASES OF DIGESTIVE SYSTEM.</b>												
Appendicitis .....					2	1					2	1
Biliary Calculi .....										1		1
Catarrhal Jaundice .....			1									1
Cholecystitis Plegmonous .....								1			1	
Cirrhosis of Liver .....								3	1		3	2
Diarrhœa .....										1		1
Duodenal Ulcer .....							1	1			2	
Enteritis .....		1			1						1	1
Gastritis .....	1			1				1	1		3	1
Gastro Enteritis .....	3	4	1				1	1		1	6	5
Gastro Intestinal Cararrh .....										1		1
Haematemesis .....								1				1
Hepatitis .....	1									1	1	1
Infective Enteritis .....	1	2		1							2	2
Intestinal Obstruction .....									1		1	
Pyloric Obstruction .....								1		1	1	1
Strangulated Femoral Hernia...								3				3
Ulceration of Intestines .....						1					1	
	6	6	2	1	2	1	2	7	6	2	7	22
<b>NON VENEREAL DISEASES OF THE GENITO URINARY SYSTEM &amp; ANNEXA.</b>												
Bright's Disease .....		1				1	3	2	6	5	3	13
Cystitis .....								1			1	
Hypertrophy of Prostate .....										2	2	
Acute Nephritis .....				1				1			2	
Uraemia .....								2			2	
		1		1		1	3	2	10	5	5	20
<b>THE PUEPERAL STATE.</b>												
Accidental Hæmorrhage of Preg- nancy .....								1				1
Confinement .....								1				1
Hyperemesis Gravidarum.....							1					1
Pregnancy .....							1					1
Puerperal Convulsions .....							1					1
Puerperal Hæmorrhage .....								1				1
							3	3				6
<b>DISEASES OF THE SKIN AND CELLULAR TISSUE.</b>												
Carbuncle .....								1			1	
Mediastinal Abscess .....					1							1
					1			1			1	1



**Diseases and Age Periods at which Persons have Died.—Continued.**

DISEASES.	Un- der 1 yr	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards	Total.	
	M F	M F	M F	M F	M F	M F	M F	M F	M F	M	F
<b>MALFORMATIONS.</b>											
Congenital Heart Disease .....	1	1								1	1
Congenital Intestinal Obstruc- tion .....		1									1
Congenital Stenosis of Pylorus .....		1									1
Cleft Palate .....		1									1
	1	4								1	4
<b>DISEASES OF EARLY INFANCY.</b>											
Atelectasis .....		1									1
Inanition .....	4	10								4	10
Injury at Birth .....		1									1
Premature Birth .....	8	8								8	8
	12	20								12	20
<b>OLD AGE.</b>											
Senile Decay .....									12 21	12	21
<b>AFFECTIONS PRODUCED BY EXTERNAL CAUSES.</b>											
Drowned (accidental) .....				1						1	
Drowned (no evidence) .....							1			1	
Injuries (no evidence) .....								1			1
Injuries (accidental) .....			1		2	1	1	1	3	5	4
Inquest (overlain) .....	1									1	
Suffocated (accidental) .....								1		1	
Suicide (drowned) .....				1				1		2	
„ (hanged) .....								3		3	
„ (inhaling gas) .....							1			1	
„ (poisoned) .....						1		1		1	1
	1		1	1	3	1	1	3	5 2	1	3
										16	6
<b>ILL DEFINED CAUSES.</b>											
Dentition .....		1									1
Marasmus .....		1								1	
		1	1							1	1
<b>INQUESTS.</b>				1			1	1	2	1	1
										4	4
<b>UNCERTIFIED.</b>	3	3	1					2	1	3	6
											7



# METEOROLOGY.

---

The Meteorological Observatory is at Bold Venture Park, in Lat.  $53^{\circ} 41' 25''$  N., and Lon.  $2^{\circ} 28' 32''$  W., and is at an altitude of 728 feet above mean sea level.

Observations are taken twice daily, at 9 a.m. and 9 p.m.

This station is connected with the Meteorological Office, and is called a Normal Climatological Station. Readings are sent daily, and a report giving all details is sent each month to the Meteorological Office, London.

The total rainfall for the year is 54.54 inches being recorded on 247 days. The average for the last eight years being 55.49 inches. The greatest monthly fall was in December, 7.38 inches ; and the lowest in April, 2.15 inches. The greatest daily fall was 1.39 inches, on September 16th.

The total sunshine registered on 278 days during the year was 1199.7 hours being above the average for the last eight years, which is 1136.3 hours. April registered the highest monthly total, 187.8 hours ; and January the lowest, 13.7 hours. The highest daily reading was 13.7 hours, on June 14th. The number of days on which sunshine was recorded was the highest for the last three years.

The mean maximum temperature in shade was  $53.7^{\circ}$ , being a little above the average for the last eight years which was  $52.5^{\circ}$ . The highest monthly mean was in August,  $66.8^{\circ}$  ; and the highest reading for the year was  $82.0^{\circ}$ , on July 21st.

The mean minimum temperature in shade was  $41.9^{\circ}$ , being above the average for the last eight years which was  $40.6^{\circ}$ . The lowest monthly mean was in January,  $33.4^{\circ}$ , and the lowest reading for the year,  $24.8^{\circ}$ , on January 24th. The lowest monthly mean and the lowest daily reading were higher than the readings of the last eight years.

The mean maximum temperature in the sun was  $80.3^{\circ}$ . The average for the last seven years was  $78.1^{\circ}$ . The highest monthly mean was  $98.4^{\circ}$ , in July ; and the highest reading  $111.9^{\circ}$  on June 30, July 2, and 21st. The highest reading during the last eight years was  $117.5$  in 1911.

The mean minimum temperature on grass was  $39.3^{\circ}$ , being above the average for the last eight years which was  $38.2^{\circ}$ . The lowest monthly mean was  $30.8^{\circ}$ , in December, and the lowest reading for the year was  $22.6^{\circ}$  on November 18th.

The maximum wind velocity was on February 15th, when a south-westerly wind blowing at the rate of 55 miles per hour.

Twelve observations of calm, were recorded, 10 observations of thunderstorm, 4 observations of fog, 12 observations of snow, and 26 observations of hail, 49 observations of ground frost, 5 observations of thunder.



# JANUARY.

<b>Barometer,</b>	Mean Corrected Reading .....	30.147	inches.
„	Highest Corrected Reading on the 12th .....	30.693	„
„	Lowest Corrected Reading on the 5th .....	29.463	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	37.6	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	36.8	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	40.8	„
„	Highest Temperature recorded on 31st ...	50.8	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	33.4	„
„	Lowest Temperature recorded on 24th ...	24.8	„
<b>Water Thermometer,</b>	Mean Temperature .....	40.7	„
„	Highest Temperature recorded on 31st .....	48.0	„
„	Lowest Temperature recorded on 13th .....	35.9	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	31.6	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	37.1	„
„	„ „ „ 4ft.....	41.7	„
„	„ „ „ 10ft.....	46.4	„
<b>Humidity,</b>	Mean .....	92	%
„	Highest on 8, 9 and 30th. ....	100	%
„	Lowest on 22nd.....	77	%
<b>Rainfall,</b>	Total Fall .....	3.98	inches.
„	Daily Average .....	0.13	„
„	Greatest Fall on 8th. ....	1.28	„
„	Recorded on .....	19	days.
<b>Sunshine,</b>	Total Duration .....	13.7	hours.
„	Daily Average .....	0.4	„
„	Highest on 6th .....	3.3	„
„	Recorded on .....	11	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	15	
„	Maximum Velocity in miles per hour on 26th. dir. W. ....	43	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	7	9	6	14	5	15	3

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 9.1

**Days of Clear Sky—0.**

**Days of Overcast Sky—26.**

**Days of Calm—2.**

**Observations of Wind Forces 4 to 7—26.**

**Hail on 2 Days.**

**Snow on 1 Day.**

**Ground Frost on 12 Days.**

**Thunderstorms on 1 Day.**

**Thunder on 1 Day.**



# FEBRUARY.

<b>Barometer,</b>	Mean Corrected Reading .....	29.632	inches.
„	Highest Corrected Reading on the 27th .....	30.167	„
„	Lowest Corrected Reading on the 22nd .....	28.449	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	41.8	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	40.6	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	46.5	„
„	Highest Temperature recorded on 1st ...	52.5	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	37.1	„
„	„ Lowest Temperature recorded on 25th ...	30.7	„
<b>Water Thermometer,</b>	Mean Temperature .....	43.9	„
„	„ Highest Temperature recorded on 1st .....	49.8	„
„	„ Lowest Temperature recorded on 25th .....	38.8	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	35.2	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	45.1	„
„	„ „ „ 4ft. ....	42.5	„
„	„ „ „ 10ft. ....	45.0	„
<b>Humidity,</b>	Mean .....	91	%
„	Highest on 1, 9, 10, 13, 23, and 24th.....	99	%
„	Lowest on 15th .....	68	%
<b>Rainfall,</b>	Total Fall .....	3.98	inches.
„	Daily Average .....	0.14	„
„	Greatest Fall on 17th .....	0.68	„
„	Recorded on .....	23	days.
<b>Sunshine,</b>	Total Duration .....	39.6	hours.
„	Daily Average .....	1.4	„
„	Highest on 25th .....	5.0	„
„	Recorded on .....	21	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	19	
„	Maximum Velocity in miles per hour on 15th dir. S.W.....	55	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
0	0	0	2	38	9	6	0

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 9.0

**Days of Clear Sky—0.**

**Days of Overcast Sky—22.**

**Days of Calm—1.**

**Observations of Wind Forces 4 to 7—41.**

**Hail on 3 Days.**

**Snow on 1 Day.**

**Ground Frost on 3 Days.**

**Fog on 2 Days.**



# MARCH.

<b>Barometer,</b>	Mean Corrected Reading .....	29.600	inches.
"	Highest Corrected Reading on the 31st .....	30.129	"
"	Lowest Corrected Reading on the 20th .....	29.005	"
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	40.4	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	39.5	"
<b>Maximum Thermometer,</b>	Mean Temperature.....	45.3	"
"	Highest Temperature recorded on 30th ...	56.8	"
<b>Minimum Thermometer,</b>	Mean Temperature .....	35.5	"
"	Lowest Temperature recorded on 10th ...	28.5	"
<b>Water Thermometer,</b>	Mean Temperature .....	42.2	"
"	Highest Temperature recorded on 31st .....	47.5	"
"	Lowest Temperature recorded on 10th .....	36.0	"
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	34.0	"
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	41.4	"
"	" " " " 4ft.....	42.4	"
"	" " " " 10ft. ....	44.4	"
<b>Humidity,</b>	Mean .....	92	%
"	Highest on 4th and 30th. ....	100	%
"	Lowest on 28th .....	71	%
<b>Rainfall,</b>	Total Fall .....	6.50	inches.
"	Daily Average .....	0.21	"
"	Greatest Fall on 5th. ....	0.66	"
"	Recorded on .....	29	days.
<b>Sunshine,</b>	Total Duration .....	63.7	hours.
"	Daily Average .....	2.1	"
"	Highest on 11th .....	7.1	"
"	Recorded on .....	23	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	17	
"	Maximum Velocity in miles per hour on 15th. dir. W. ....	44	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	4	0	2	16	5	28	6

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 8.8

**Days of Clear Sky—0.**

**Days of Overcast Sky—22.**

**Days of Calm—0.**

**Observations of Wind Forces 4 to 7—32.**

**Hail on 5 Days.**

**Snow on 6 Days.**

**Ground Frost on 7 Days.**

**Lightening on 1 Day.**

**Thunder on 1 Day.**



# APRIL.

<b>Barometer,</b>	Mean Corrected Reading .....	30.070	inches.
"	Highest Corrected Reading on the 26th .....	30.584	"
"	Lowest Corrected Reading on the 7th .....	29.272	"
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	47.7	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	44.1	"
<b>Maximum Thermometer,</b>	Mean Temperature.....	56.1	"
"	Highest Temperature recorded on 21st ...	71.4	"
<b>Minimum Thermometer,</b>	Mean Temperature .....	39.7	"
"	Lowest Temperature recorded on 15th ...	32.0	"
<b>Water Thermometer,</b>	Mean Temperature .....	46.4	"
"	Highest Temperature recorded on 28th .....	51.6	"
"	Lowest Temperature recorded on 7th .....	39.0	"
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	36.8	"
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	47.2	"
"	" " " " 4ft.....	44.8	"
"	" " " " 10ft. ....	44.6	"
<b>Humidity,</b>	Mean .....	77	%
"	Highest on 24th. ....	99	%
"	Lowest on 22nd.....	41	%
<b>Rainfall,</b>	Total Fall .....	2.15	inches.
"	Daily Average .....	0.07	"
"	Greatest Fall on 4th .....	0.56	"
"	Recorded on .....	12	days.
<b>Sunshine,</b>	Total Duration .....	187.8	hours.
"	Daily Average .....	6.3	"
"	Highest on 15, 18, and 19th.....	11.9	"
"	Recorded on .....	29	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	13	
"	Maximum Velocity in miles per hour on 6th. dir. W. ....	38	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	1	2	7	11	11	20	6

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 6.4

**Days of Clear Sky—0.**

**Days of Overcast Sky—8.**

**Days of Calm—1.**

**Observations of Wind Forces 4 to 7—20.**

**Hail on 2 Days.**

**Snow on 1 Day.**

**Ground Frost on 2 Days.**



# MAY.

<b>Barometer,</b>	Mean Corrected Reading .....	30.104	inches.
„	Highest Corrected Reading on the 19th .....	30.462	„
„	Lowest Corrected Reading on the 7th .....	29.361	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	48.3	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	45.9	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	55.9	„
„	Highest Temperature recorded on 17th ...	69.0	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	42.2	„
„	Lowest Temperature recorded on 2nd ...	31.8	„
<b>Water Thermometer,</b>	Mean Temperature .....	47.6	„
„	Highest Temperature recorded on 20th .....	56.3	„
„	Lowest Temperature recorded on 9th .....	37.0	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	40.7	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	52.8	„
„	„ „ „ 4ft.....	48.8	„
„	„ „ „ 10ft. ....	46.2	„
<b>Humidity,</b>	Mean .....	84	%
„	Highest on 7th and 13th .....	100	%
„	Lowest on 17th .....	56	%
<b>Rainfall,</b>	Total Fall .....	2.65	inches.
„	Daily Average .....	0.09	„
„	Greatest Fall on 3rd .....	0.59	„
„	Recorded on .....	19	days.
<b>Sunshine,</b>	Total Duration .....	121.5	hours.
„	Daily Average .....	3.9	„
„	Highest on 2nd .....	11.4	„
„	Recorded on .....	26	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	13	
„	Maximum Velocity in miles per hour on 8th dir. W.S.W. ....	29	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	4	2	4	7	6	26	12

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 8.2

**Days of Clear Sky—0.**

**Days of Overcast Sky—17.**

**Days of Calm—0.**

**Observations of Wind Forces 4 to 7—19.**

**Hail on 2 Days.**



# JUNE.

<b>Barometer,</b>	Mean Corrected Reading .....	30.085	inches.				
„	Highest Corrected Reading on the 26th .....	30.466	„				
„	Lowest Corrected Reading on the 7th .....	29.694	„				
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	56.0	degrees.				
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	52.6	„				
<b>Maximum Thermometer,</b>	Mean Temperature.....	63.5	„				
„	Highest Temperature recorded on 30th ...	76.9	„				
<b>Minimum Thermometer,</b>	Mean Temperature .....	48.0	„				
„	Lowest Temperature recorded on 8th ...	36.8	„				
<b>Water Thermometer,</b>	Mean Temperature .....	53.4	„				
„	Highest Temperature recorded on 17th & 20th	60.0	„				
„	Lowest Temperature recorded on 7th .....	43.0	„				
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	45.9	„				
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	58.9	„				
„	„ „ „ 4ft.....	52.5	„				
„	„ „ „ 10ft .....	48.5	„				
<b>Humidity,</b>	Mean .....	80	%				
„	Highest on 1, 5 and 29th. ....	100	%				
„	Lowest on 15th .....	48	%				
<b>Rainfall,</b>	Total Fall .....	2.53	inches.				
„	Daily Average .....	0.08	„				
„	Greatest Fall on 22nd .....	0.59	„				
„	Recorded on .....	20	days.				
<b>Sunshine,</b>	Total Duration .....	185.7	hours.				
„	Daily Average .....	6.2	„				
„	Highest on 14th .....	13.7	„				
„	Recorded on .....	26	days.				
<b>Wind,</b>	Mean Velocity in miles per hour .....	12					
„	Maximum Velocity in miles per hour on 9th dir. N. ....	31					
Summary of observations of direction :—							
N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
5	9	2	1	2	4	21	15
<b>Cloud,</b> Mean Amount (overcast sky indicated by 10).....				6.8			
<b>Days of Clear Sky—0.</b>							
<b>Days of Overcast Sky—9.</b>							
<b>Days of Calm—0.</b>							
<b>Observations of Wind Forces 4 to 7—11.</b>							
<b>Hail on 2 Days.</b>							
<b>Thunderstorm on 2 Days.</b>							



# JULY.

<b>Barometer,</b>	Mean Corrected Reading .....	29.870	inches.
"	Highest Corrected Reading on the 10th .....	30.234	"
"	Lowest Corrected Reading on the 25th .....	29.556	"
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	58.9	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	55.9	"
<b>Maximum Thermometer,</b>	Mean Temperature.....	65.5	"
"	Highest Temperature recorded on 21st ...	82.0	"
<b>Minimum Thermometer,</b>	Mean Temperature .....	51.9	"
"	Lowest Temperature recorded on 25 & 27	46.3	"
<b>Water Thermometer,</b>	Mean Temperature .....	54.9	"
"	Highest Temperature recorded on 21st .....	60.3	"
"	Lowest Temperature recorded on 25th .....	46.0	"
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	48.7	"
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	62.3	"
"	" " " " 4ft.....	56.3	"
"	" " " " 10ft .....	51.2	"
<b>Humidity,</b>	Mean .....	82	%
"	Highest on 17, 19 and 26th. ....	100	%
"	Lowest on 4th .....	55	%
<b>Rainfall,</b>	Total Fall .....	5.46	inches.
"	Daily Average .....	0.18	"
"	Greatest Fall on 16th. ....	1.30	"
"	Recorded on .....	23	days.
<b>Sunshine,</b>	Total Duration .....	131.0	hours.
"	Daily Average .....	4.2	"
"	Highest on 4th .....	12.6	"
"	Recorded on .....	29	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	13	
"	Maximum Velocity in miles per hour on 25th, dir. W N.W. ...	30	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	2	1	13	7	8	20	8

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 8.2

**Days of Clear Sky—0.**

**Days of Overcast Sky—17.**

**Days of Calm—2.**

**Fog on 1 Day.**

**Observations of Wind Forces 4 to 7—16.**

**Thunderstorm on 4 Days.**



# AUGUST.

<b>Barometer,</b>	Mean Corrected Reading .....	30.019	inches.
"	Highest Corrected Reading on the 11th and 31st .....	30.389	"
"	Lowest Corrected Reading on the 2nd .....	29.495	"
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	58.6	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	55.8	"
<b>Maximum Thermometer,</b>	Mean Temperature.....	66.8	"
"	Highest Temperature recorded on 14th ...	78.8	"
<b>Minimum Thermometer,</b>	Mean Temperature .....	51.6	"
"	Lowest Temperature recorded on 8th ...	46.0	"
<b>Water Thermometer,</b>	Mean Temperature .....	55.2	"
"	Highest Temperature recorded on 9th .....	58.0	"
"	Lowest Temperature recorded on 8th .....	51.8	"
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	48.8	"
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	61.3	"
"	" " " " 4ft.....	52.7	"
"	" " " " 10ft .....	53.0	"
<b>Humidity,</b>	Mean .....	84	%
"	Highest on 1, 8 and 26th. ....	100	%
"	Lowest on 13th .....	56	%
<b>Rainfall,</b>	Total Fall .....	3.90	inches.
"	Daily Average .....	0.13	"
"	Greatest Fall on 1st .....	0.73	"
"	Recorded on .....	16	days.
<b>Sunshine,</b>	Total Duration .....	171.7	hours.
"	Daily Average .....	5.5	"
"	Highest on 12th .....	12.9	"
"	Recorded on .....	27	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	11	
"	Maximum Velocity in miles per hour on 9th. dir. S. ....	35	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
0	1	1	8	23	7	19	2

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 7.0

**Days of Clear Sky—0.**

**Days of Overcast Sky—10.**

**Days of Calm—1.**

**Observations of Wind Forces 4 to 7—7.**



# SEPTEMBER.

<b>Barometer,</b>	Mean Corrected Reading .....	30.070	inches.
„	Highest Corrected Reading on the 29th .....	30.447	„
„	Lowest Corrected Reading on the 17th .....	29.413	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	53.7	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	51.4	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	61.7	„
„	Highest Temperature recorded on 3rd.....	77.0	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	46.7	„
„	Lowest Temperature recorded on 29th ...	36.4	„
<b>Water Thermometer,</b>	Mean Temperature .....	51.6	„
„	Highest Temperature recorded on 8th & 10th .....	55.9	„
„	Lowest Temperature recorded on 29th .....	43.6	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	43.2	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	56.6	„
„	„ „ „ 4ft.....	56.6	„
„	„ „ „ 10ft. ....	54.0	„
<b>Humidity,</b>	Mean .....	86	%
„	Highest on 11, 12, 14, and 17th .....	100	%
„	Lowest on 7th .....	52	%
<b>Rainfall,</b>	Total Fall .....	5.47	inches.
„	Daily Average .....	0.18	„
„	Greatest Fall on 16th .....	1.39	„
„	Recorded on .....	14	days.
<b>Sunshine,</b>	Total Duration .....	176.6	hours.
„	Daily Average .....	5.9	„
„	Highest on 6th .....	10.6	„
„	Recorded on .....	29	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	15	
„	Maximum Velocity in miles per hour on 18th and 28th .....	39	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	2	3	9	9	12	15	8

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 6.3

**Days of Clear Sky—9.**

**Days of Overcast Sky—9.**

**Days of Calm—2.**

**Hail on 2 Days.**

**Observations of Wind Forces 4 to 7—24.**

**Thunderstorms on 2 Days.**



# OCTOBER.

<b>Barometer,</b>	Mean Corrected Reading .....	30.049	inches.
„	Highest Corrected Reading on the 4th .....	30.466	„
„	Lowest Corrected Reading on the 31st .....	29.419	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature.....	48.9	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature.....	47.8	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	54.0	„
„	Highest Temperature recorded on 2nd ...	62.4	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	44.7	„
„	Lowest Temperature recorded on 29th ...	37.2	„
<b>Water Thermometer,</b>	Mean Temperature .....	48.0	„
„	Highest Temperature recorded on 2nd .....	53.0	„
„	Lowest Temperature recorded on 28th .....	40.0	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	41.4	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	51.2	„
„	„ „ „ 4ft.....	52.7	„
„	„ „ „ 10ft. ....	53.1	„
<b>Humidity,</b>	Mean .....	91	%
„	Highest on 2, 3 and 19th .....	100	%
„	Lowest on 7th .....	72	%
<b>Rainfall,</b>	Total Fall .....	3.31	inches.
„	Daily Average .....	0.11	„
„	Greatest Fall on 25th .....	1.10	„
„	Recorded on .....	21	days.
<b>Sunshine,</b>	Total Duration .....	50.7	hours.
„	Daily Average .....	1.6	„
„	Highest on 9th .....	4.6	„
„	Recorded on .....	25	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	13	
„	Maximum Velocity in miles per hour on 31st .....	35	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
3	10	3	10	6	6	19	3

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 8.8

**Days of Clear Sky—0.**

**Days of Overcast Sky—25.**

**Days of Calm—2.**

**Fog on 1 Day.**

**Observations of Wind Forces 4 to 7—16.**

**Thunderstorm on 1 Day.**



# NOVEMBER.

<b>Barometer,</b>	Mean Corrected Reading .....	29.897	inches.
"	Highest Corrected Reading on the 18th .....	30.466	"
"	Lowest Corrected Reading on the 15th .....	29.142	"
<b>Dry Bulb Thermometer,</b>	Mean Temperature.....	42.5	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature.....	41.2	"
<b>Maximum Thermometer,</b>	Mean Temperature.....	46.6	"
"	Highest Temperature recorded on 8 & 30..	53.9	"
<b>Minimum Thermometer,</b>	Mean Temperature .....	37.9	"
"	Lowest Temperature recorded on 21st ...	29.0	"
<b>Water Thermometer,</b>	Mean Temperature .....	44.0	"
"	Highest Temperature recorded on 9th .....	50.3	"
"	Lowest Temperature recorded on 17th .....	35.8	"
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	34.4	"
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	43.9	"
"	" " " " 4ft.....	47.9	"
"	" " " " 10ft.....	51.4	"
<b>Humidity,</b>	Mean .....	86	%
"	Highest on 3, 24 and 29th.....	99	%
"	Lowest on 14th .....	68	%
<b>Rainfall,</b>	Total Fall .....	7.23	inches.
"	Daily Average .....	0.24	"
"	Greatest Fall on 11th .....	0.79	"
"	Recorded on .....	24	days.
<b>Sunshine,</b>	Total Duration .....	39	hours.
"	Daily Average .....	1.3	"
"	Highest on 14th .....	6.4	"
"	Recorded on .....	17	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	16	
"	Maximum Velocity in miles per hour on 11th. dir. N.N.W. ...	40	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
5	4	1	11	12	15	6	5

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 7.8

**Days of Clear Sky—0.**

**Days of Overcast Sky—17.**

**Days of Calm—1.**

**Observations of Wind Forces 4 to 7—24.**

**Thunder on 2 Days.**

**Snow on 1 Day.**

**Hail on 4 Days.**

**Ground Frost on 11 Days.**



# DECEMBER.

<b>Barometer,</b>	Mean Corrected Reading .....	29.530	inches.
„	Highest Corrected Reading on the 24th .....	30.280	„
„	Lowest Corrected Reading on the 14th .....	28.806	„
<b>Dry Bulb Thermometer,</b>	Mean Temperature .....	38.1	degrees.
<b>Wet Bulb Thermometer,</b>	Mean Temperature .....	37.1	„
<b>Maximum Thermometer,</b>	Mean Temperature.....	41.8	„
„	Highest Temperature recorded on 2nd ...	49.7	„
<b>Minimum Thermometer,</b>	Mean Temperature .....	34.5	„
„	Lowest Temperature recorded on 30th ...	28.4	„
<b>Water Thermometer,</b>	Mean Temperature .....	40.5	„
„	Highest Temperature recorded on 4th .....	44.8	„
„	Lowest Temperature recorded on 25th .....	36.0	„
<b>Grass Minimum Thermometer,</b>	Mean Temperature .....	30.8	„
<b>Earth Thermometer,</b>	Mean Temperature, 1ft. ....	39.6	„
„	„ „ „ 4ft.....	43.7	„
„	„ „ „ 10ft. ....	48.2	„
<b>Humidity,</b>	Mean .....	90	%
„	Highest on 14th .....	99	%
„	Lowest on 3rd.....	71	%
<b>Rainfall,</b>	Total Fall .....	7.38	inches.
„	Daily Average .....	0.24	„
„	Greatest Fall on 24th .....	1.18	„
„	Recorded on .....	27	days.
<b>Sunshine,</b>	Total Duration .....	18.7	hours.
„	Daily Average .....	0.6	„
„	Highest on 16th.....	3.2	„
„	Recorded on .....	15	days.
<b>Wind,</b>	Mean Velocity in miles per hour .....	18	
„	Maximum Velocity in miles per hour on 5th. dir. W. ....	28	

Summary of observations of direction :—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	2	3	6	31	5	8	6

**Cloud,** Mean Amount (overcast sky indicated by 10)..... 8.3

**Days of Clear Sky—0.**

**Days of Overcast Sky—16.**

**Days of Calm—0.**

**Observations of Wind Forces 4 to 7—34.**

**Thunder on 1 Day.**

**Snow on 2 Days.**

**Hail on 4 Days.**

**Ground Frost on 14 Days.**



# MEAN METEOROLOGICAL READINGS FOR 1913 AND 1914.

MONTH.	Barometer. Corrected.		Thermometers.														Hu- midity		Sunshine (hours).		Rain (inches).		Wind Velocity		Wind Direction, 1914.										C'm
			Maxi- mum.	Mini- mum.	Mean.	Earth.								Water.																					
						1 Foot.		4 Feet.		10 Feet.																									
1913 ins.	1914 ins.	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.								
January ...	29.746	30.147	40.6	40.8	33.2	33.4	36.9	37.6	38.0	37.1	42.0	41.7	45.6	46.4	40.3	40.7	94	92	8.9	13.7	6.57	3.98	15	15	1	7	9	6	14	5	15	3	2		
February...	30.155	29.632	44.3	46.5	34.8	37.1	39.6	41.8	38.9	45.1	40.8	42.5	43.9	45.0	41.3	43.9	89	91	54.1	39.6	2.30	3.98	17	19	0	0	0	2	38	9	6	0	1		
March .....	29.789	29.600	45.3	45.3	34.3	35.5	39.8	40.4	40.4	41.4	41.0	42.4	43.2	44.4	42.2	42.2	86	92	90.9	63.7	7.23	6.50	18	17	1	4	0	2	16	5	28	6	0		
April .....	29.848	30.070	49.7	56.1	37.0	39.7	43.4	47.7	44.7	47.2	42.9	44.8	43.5	44.6	44.5	46.4	83	77	90.3	187.8	6.94	2.15	19	13	1	1	2	7	11	11	20	6	1		
May .....	29.904	30.104	51.2	55.9	42.7	42.2	50.0	48.3	51.6	52.8	47.0	48.8	44.9	46.2	48.9	47.6	83	84	127.0	121.5	4.59	2.65	14	13	1	4	2	4	7	6	26	12	0		
June .....	30.060	30.085	61.7	63.5	48.0	48.0	54.9	56.0	58.1	58.9	52.3	52.5	44.2	48.5	51.6	53.4	84	80	135.4	185.7	3.70	2.53	15	12	5	9	2	1	2	4	21	15	0		
July .....	30.089	29.870	64.0	65.5	49.6	51.9	56.8	58.9	60.7	62.5	54.9	56.3	50.2	51.2	53.1	54.9	84	82	145.5	131.0	1.55	5.46	11	13	1	2	1	13	7	8	20	8	2		
August ...	30.081	30.019	65.5	66.8	49.9	51.6	57.7	58.6	60.5	61.3	56.4	57.2	52.0	53.0	53.9	55.2	83	84	151.9	171.7	2.80	3.90	11	11	0	1	1	8	23	7	19	2	1		
September	29.997	30.070	61.9	61.7	49.4	46.7	55.7	53.7	56.9	56.6	55.4	56.6	52.8	54.0	52.0	51.6	85	86	112.3	176.6	2.59	5.47	12	15	1	2	3	9	9	12	15	8	2		
October ...	29.853	30.049	54.4	54.0	45.1	44.7	49.8	48.9	51.2	51.2	52.9	52.7	52.6	53.1	49.9	48.0	90	91	70.4	50.7	2.29	3.31	14	13	3	10	3	10	6	6	19	3	2		
November	29.826	29.837	49.0	46.6	40.7	37.9	44.9	42.5	45.5	43.9	48.6	47.9	50.8	51.4	46.6	44.0	92	86	34.8	39.0	6.80	7.23	16	16	5	4	1	11	15	6	5	12	1		
December	30.007	29.530	43.1	41.8	35.9	34.5	39.5	38.1	41.2	39.6	45.5	43.7	48.8	48.2	43.2	40.5	92	90	18.3	18.7	4.19	7.38	17	18	1	2	3	6	31	5	8	6	0		
Totals .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1040.4	1199.7	51.55	54.54	...	...	20	46	27	79	179	84	202	81	12		
Mean ...	29.952	29.923	53.1	53.7	41.7	41.9	47.4	47.7	49.0	49.8	48.3	48.9	47.7	48.8	47.3	47.4	87	86	86.7	99.9	4.30	4.54	15	14	...	...	...	...	...	...	...	...	...		







COUNTY OF LANCASTER.

SUMMARY OF

Medical Officer's Report for 1914.

URBAN DISTRICT OF DARWEN.

Medical Officer of Health—FRED GEORGE HAWORTH,  
M.B.C.M., L.R.C.S., D.P.H. Salary as M.O.H., £250.

Inspectors of Nuisances—William E. Marsden and C. R. Walsh.  
Salary as Inspectors, £160 and £150.

What is the Character of the Hospital Accommodation ?—For Small-Pox, Farm House, 2 beds ; for other Infectious Diseases, for Scarlet Fever and Typhoid Fever, 1 block, 20 beds, good ; 1 block, 8 beds, very good.

Is it Joint or otherwise—Our own.

Deaths in Hospital of patients removed from your District ?—1 Consumption.

How is Disinfection carried out ?—Houses : Sulphur and Formalin. No. of Houses disinfected ?—213. Apparatus used for Clothing, Bedding, &c. (steam or otherwise) ?—Washington, Lyons superheated Steam Disinfector. Where is apparatus situated ?—Bull Hill Hospital (used for all purposes)

Are any Diseases not specifically mentioned in the Infectious Diseases Notification Act notifiable (for instance, Measles, Whooping Cough, Diarrhoea, Chicken Pox, &c.) ? If so, what are they ?—No.

Diseases specially prevalent ?—Measles. Period ?—November. No. of Times School Closure adopted ?—Once, Blackburn Road Infant School. For what Disease ?—Measles.

No. of Special Reports made under Art. XIX (15 and 16) Sanitary Officers' Order, 1910 ?—None.

Bacteriological Examinations. Specimens examined : Blood, 8 ; Swabs, 14 ; Sputum, 122.



Arrangement (if any) made under the Diphtheria Anti-toxin Order, 1910 ?—None.  
Anti-toxin supplied at cost price.

“ The Housing of the Working Classes Acts, 1890 to 1909 ” :—Has your Authority determined the procedure to be adopted for the inspection of your District as required by Article 1 of the Regulations ?—Yes.

Has your Authority prepared, as required by Article 1 (3), a list of dwelling houses, the early inspection of which is desirable ?—Yes.

Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Article 2. If so, what officer ?  
Inspectors of Nuisances.

Have the necessary books, forms, &c., for keeping the required records been obtained ?  
—Yes.

Action taken in 1914 :—

No. of Dwelling-houses inspected under Sec. 17 of the Act of 1909 ?—35.

„ Dwelling-houses considered unfit for human habitation ?—8.

„ Representations to Authority with a view to making Closing Orders  
—8.

„ Closing Orders made ?—0.

„ Dwelling-houses in which defects were remedied without making  
Closing Orders ?—0.

„ Dwelling-houses put into a fit state of habitation after making  
Closing Orders ?—0.

„ Dwelling-houses demolished ?—8.

General character of defects found to exist ?—6 were back to back houses and insanitary ; 2 houses were too low and dark.

Is there a deficiency of housing accommodation ? If so, where, and to what extent—  
No.

Number of New Houses built during 1914—By and at the cost of the District Council ?  
None. By private enterprise ?—79.

Source of Water Supply ?—Upland Surface.

What is its condition ?—Good.

Possibilities of contamination ?—Not in the vicinity of dwelling-houses.

Any insufficiency, and where ?—No.

Is Scavenging and Removal of House Refuse carried out satisfactorily for whole  
of district ?—Yes.



How performed (state whether by Sanitary Authority, Contract, or Occupiers of Houses) ?—Sanitary Authority.

How is the Refuse disposed of ?—Burnt in destructor.

Has a destructor been provided ?—Yes (Meldrum's).

Sewage Disposal Works. Method of Treatment ?—Bacteriological.

What is the character of the Drainage System ? Any developments during year ?  
—Combined System.

Areas, or Townships, without proper drainage system ?—None.

Action taken—Drain Testing, Flushing, &c.—Water, Smoke, Periodic Flushing.

Action taken with regard to the Pollution of Streams ?—No legal action taken.

Canal Boats : Number inspected ?—None.

What is the condition of the Bakehouses ?—Fairly good.

What is the condition of Slaughter Houses ?—Good. Has a Public Abattoir been provided ?—Yes.

What is the condition of Lodging Houses ?—One lodging house only. Are they Registered ?—Municipal.

What is the Sanitary condition of the Schools ?—Good.

Dairies, Cowsheds and Milkshops—Are they periodically inspected ?—Yes. What is their condition ?—Fairly good.

Have Regulations been made under the Order of the L.G.B. ?—Yes. Are they enforced ?—Yes.

Amount of air space in cubic feet required for each cow ?—600 c.f.

No. of Cowkeepers ?—No. on Register ?—114. No. of Inspections during year ?—174

No. of Dairymen or Purveyors of Milk (other than Cowkeepers) ? No. on Register ?  
—5.

Any arrangements for veterinary inspection of dairy cows ?—Veterinary Surgeon called in if occasion requires.

Total amount of Food seized as unfit for Human Consumption ?—4 Beasts, 1 Calf, 10 Sheep, 2 Swine, 2 Deer and 2 Tons, 15 Cwts. of Offal.

No. of Carcases and parts of Carcases condemned for Tuberculosis ?—2 Beasts and 1 Pig.

No. of Legal Proceedings, and result ?— None.



Department of Inspector of Nuisances ?—No. of Notices served ?—2355. Nuisances remedied ?—2410.

Number of Legal Proceedings taken and result ? 8 : two cases “ Order to Abate ; three cases “ Dismissed ” ; one case, costs only ; one case, 5s. and costs, and 1 case 10/- and costs.

CLOSET ACCOMMODATION OF THE DISTRICT :—

No. of Privy Middens ?—None

Number of Pail Closets ?—2827.

Number of Fresh Water Closets ?—5355.

Number of Waste Water Closets ?—2503.

Number of Pail Closets converted during 1914 ?—To W.C.'s ?—1856

Does the Council contribute towards the cost of conversion of either privies or pail closets, or both ? If so, how much ?—We have no privies. One half cost is paid where pail closets are converted to W.C.'s.

What kind of closet accommodation is being provided for new property ?—Fresh Water Closets.

SMOKE :—

Number of Observations ?—167.

Number of Legal Proceedings taken and result ?—5 : 1 10/- and costs ; 1 5/- and costs ; 1 costs only ; 1 Order to Abate ; 1 Dismissed.

What is the time limit allowed for the emission of black smoke per hour ?—One, Two or Three Boilers, 5 Minutes per hour, Four or more Boilers, 7 minutes per hour.

HAS THE AUTHORITY ADOPTED—

“ The Infectious Disease (Prevention) Act, 1890 ” ?—Yes, except Sect. 5 to 11 inclusive and Section 15.

“ The Public Health Acts Amendment Act, 1907 ” ?—Certain Sections.

“ The Public Health Acts Amendment Act, 1890 ” ?—Yes, except that relating to music and dancing.

“ The Notification of Births Act, 1907 ” ?—Yes.

Has a Health Visitor been appointed ?—Yes, part time. School Visitor.

Has any, and if so, what action been taken respecting Child Welfare Work ?—Mothers' Club ; Babies weighed, advice given.

Notable Sanitary Improvements during 1914—Conversion of Pails to Fresh Water Closets.

Chief Sanitary requirements of District :—Disinfector centrally situated.



# Medical Inspection of Schools and School Children.

To the Chairman and Members of the Education Committee.

GENTLEMEN,

I beg to present for your consideration my Report on the Work of Medical Examination of School Children, for the year ending December 31st, 1914.

And remain,

Yours faithfully,

F. G. HAWORTH.

## SCHOOL BUILDINGS.

The whole of the Schools were visited by Miss Orpin, School Nurse, and myself, for the examination of the children. I have also examined the sanitary arrangements,

After each vacation the Inspectors of Nuisances visit the schools in their respective districts examine the sanitary arrangements and see if the schools have been cleansed according to our usual instructions, they then report to me.

Generally speaking, they were found in a satisfactory condition, with two exceptions the school buildings are used for several purposes : as Elementary Schools during the week, for Sunday School purposes on the Sunday, and at other times for Tea Parties, Entertainments and Meetings. This makes the question of cleansing a very complicated and difficult one, leaving very little time between the closing of one and commencement of the other, however, the caretakers have done their best with these conditions, so that, generally speaking, the buildings have been fairly satisfactory.

At St. James' School a substance of an oily nature is being used, with a view to causing the dust to settle and adhere to the substance on the floors ; this has certain disadvantages as well as advantages in that the lighter particles which float in the air when settled remain on the floor, and as time goes on accumulate there, the result being an increasing amount of deleterious material in the wrong place. The substance also causes the floor to become oily and a very dark colour, whereas, in my opinion, it would be better if the floors were washed and rendered lighter and dryer looking.

The road passing the front of this School has been paved during the year, consequently it is much cleaner and less dirt will no doubt now be carried into the school buildings on the childrens clogs. This street being practically a private road



is much used for play by the children, a playground made and owned by the Corporation is very near and available for the children attending this school.

Under the conditions of the School buildings being used for several purposes it becomes of greater importance that the play grounds and the approaches to the schools should be paved or flagged, and not covered with ashes.

In one or two schools the playgrounds are not on the level, and the gradient or slope of the ground renders it unfit for either paving or flagging owing to the number of accidents from the children slipping down when at play. This might be modified by dividing the playground into two parts, each on its own level and divided from each other by railings ; whether this is practical or not on account of the varied uses the buildings are put to is more than I can say. It is a suggestion.

Nearly all the schools have the rooms divided by moveable partitions, so that the classes are separated and rendered more useful. Where the rooms were large and capable of accommodating several classes this has brought about a great improvement.

The schools where the pails obtained are as quickly as possible and consistent with equity being transformed into the Water Carriage System, by the introduction of closets or latrines with automatic flushing. As the whole of the town is at the same time being converted, the resultant drainage will be a great sanitary improvement as well as lessening the cost of collection.

The general cleansing of the school buildings has been fairly satisfactory during the year, taking into consideration the difficulties above mentioned, where a certain amount of laxity is displayed it is in the direction of the lighter duties of the cleaners, such as dusting, &c.

Evidently a sufficient amount of time is not allowed between sweeping and dusting to permit dust to become settled, so that after the dusting has been done more dust settles down on the school furniture. This naturally forms an object lesson for the children, as well as being insanitary. No doubt the want of time is responsible for the dereliction of duty.

### **VENTILATION.**

The whole of the schools have been altered by sub-dividing the rooms into class rooms by means of moveable partitions, with the exception of Earcroft, St. Edward's, and St. Joseph's. Other school buildings are now being used for Infants only, and wing to the reduction in the numbers on the registers such alterations are not required.

These moveable partitions, from an educational point of view are a great improvement, the classes are kept quite separate, the teachers are able to concentrate the



attention of the scholars on their lessons ; but from a sanitary point of view they are not such a success.

I have in a previous report spoken of the great advantage of cross or through ventilation, where this cannot be obtained the windows have been altered by making the lowest and highest sashes to open inwards on hinges. These openings are provided with side shields, the effect of this alteration is to cause the air currents to be short-circuited ; the air coming in at one opening and out at the other, consequently there is very little disturbance of the air in the room and it soon becomes rather stuffy.

The result of introducing these partitions has been to completely stop cross ventilation, this effect has probably not been taken into account by the makers. So long as they are put in as temporary expedients no great harm can be done.

This matter requires attention.

### **HEATING.**

This chiefly by means of hot water pipes which were put in when the schools were built, and, of course, prior to the introduction of the partitions, consequently there are no means of cutting off the supply from one or more rooms without affecting the whole school. This method is, therefore, a costly one, as well as being irregular in its action. This method undoubtedly dries the air by volatilising the moisture in the atmosphere, this will probably become condensed on cold surfaces such as walls and windows.

### **CLEANLINESS.**

This continues to improve. I think more attention is being paid to dusting than formerly ; it a very important item in the work of a school care-taker not always recognised.

Before the holidays, circular letters are sent out from the office of the Education Secretary (Mr. Bretherick) giving instructions to the various school managers for the work of cleansing to be carried out during the coming vacation, where necessary, and the conditions met with on my visits to the schools determine this. Special instructions are issued from my office in regard to particular work, such as washing down of walls, floors and desks. It is the custom with most managers to employ special hands for this work, owing to the many and varied uses to which the school buildings are put during holiday periods, little time is left for this special work.

As, however, these uses are mostly in the shape of entertainments or re-unions of the members of the congregation, they usually take place during the evenings, leaving the whole of the day time for cleansing operations, with this drawback, that



a large number of people meet in the school rooms shortly after the place has been cleaned up, with the result that during certain times of the year the results are not evident.

Nearly all the schools in the Borough under the Education Committee's jurisdiction have their closets on the Water Carriage System ; these, with the urinals are kept well under supervision, and are always in a satisfactory clean condition.

The children are much better in this respect than formerly. Their bodies are always clean, never showing signs of vermin, and their clothing exceptionally clean looking ; the periodic visits of Miss Orpin seem to act as a stimulus to cleansing operations, certainly there is not that indifference to their looks which formerly obtained, and a smarter appearance is becoming more and more a habit, the exception to this improvement is the hands, which are often found to be grubby, due to the playgrounds in some places being covered with ashes, and contact with this is certainly not favourable to clean hands.

### **INFECTIOUS AND CONTAGIOUS DISEASES.**

The town was singularly free from Infectious diseases with the exception of SCARLET FEVER.—This complaint has been quiescent for a number of years ; the part of the year of its development is during the Autumn and it disappears early in November, thus its incidence is seasonal and its recurrence is periodic, coming amongst us and developing about every third or fourth year ; this, no doubt, is due to the fact that children from two to six years of age are the most susceptible. After a serious epidemic the children are rendered immune by an attack of the fever and the soil is exhausted, the disease fails to materialise until another crop of children are born and have reached the susceptible age. When this happens the disease spreads mainly in the schools due to the close aggregation therein and an epidemic is the result.

We have over 200 cases notified during the year, these were dealt with at Bull Hill Infectious Hospital as far as the accommodation permitted, with the result that the complaint did not spread as far as it otherwise would have done.

On the 7th January I visited Earcroft School and I found the closets clean and in good working order. This School was fumigated on the 15th of April and another visit paid to it on the 20th of April.

On the 2nd September Miss Orpin and I went to Blackburn Road Council School, Infant Department, and examined the children there ; one was seen to be peeling, viz : James Coleman, 13 Dove Lane, who evidently had been suffering from Scarlet Fever.

On November 9th Inspector Marsden informed me that a case of Scarlet Fever was reported from St. Paul's School, Hoddlesden, this child's home was in Waterside.



On 4th November, Circulars concerning Measles were sent to Blackburn Road Council School, and on the 13th November similar circulars were sent to St. Cuthbert's School. Owing to the prevalence of Measles among the children attending Blackburn Road School, this place was closed for eleven school days.

During October I discovered a boy in Duckworth Street Council School who was desquamating after Scarlet Fever, and on two separate occasions the teachers have sent children home who were desquamating. This shows the danger to the community of the mild, undetected cases being in school. The Inspectors leave printed instructions at the homes of the patients.



Table showing the Schools attended by Children Notified to be suffering from Scarlet Fever during 1914 :—

	3		4		5		6		7		8		9		10		11		12		13		14		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
St. Cuthbert's ....	1	1			1	1	3	1	1	1	1	1			1	1	1	1							9	7
St. John's .....						2		1			1	1													1	4
Earcroft .....	1		1		1						1				1		1					1			6	1
Hollins Grove ....		1		1		1	2	1	2		2					1		1							4	8
Trinity .....				2				2		2			1	4	1	1	1	2							3	13
Culvert.....						1		2				1				1		1		1			1		1	7
St. Paul's .....				1			1		1	1			1		1			1	1						5	3
St. George's.....	1			2	1		3			1		2	1												6	5
Sudell Road .....													1												1	...
Duckworth St.....	1			2				1	1	1	1		5	1		1		2		2					8	10
Blackburn Rd.....					1		1		1		2					1	1				1				7	1
Lower Chapel.....				1												1									...	2
Bolton Road .....		1	2			1	1	2		2	1							2							4	8
Spring Bank .....									1		2	1					1								1	4
Belgrave .....											1	2	2	1	2					3		1			3	9
St. Joseph's .....	1						1	2	1					1			1	1				1			3	6
Highfield.....	1				1																				2	...
St. James' .....						1	1	1			2		1												5	2
Central Council ...				1					2																2	1
	6	3	3	10	5	7	13	13	9	10	9	10	13	8	5	9	5	12	1	6	1	3	1	...	71	91

Table showing the Schools attended by Children notified to be suffering from Diphtheria during 1914 :—

	3		4		5		6		7		8		9		10		11		12		13		14		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sudell Road.....											1												1		2	...
St. Paul's.....											1								1		1				3	...
Belgrave .....												1													1	...
Trinity .....		1																							...	1
St. Edward's.....										1															1	...
Highfield.....	1																								1	...
	1	1									3		1						1		1		1		8	1

On looking over the table of deaths of children at school-age, it is interesting to note that no child died from Phthisis, one died from Tuberculosis of Mesenteric Glands, one from Generalized Tuberculosis, and one from Tubercular Meningitis. This fact again accentuates my previous contention that Phthisis is not a common disease of childhood.



The deaths from Phthisis since 1893 to 1914 inclusive, number 686. These are distributed as follows:—

Under 1 year.	1 to 5.	5 to 15.	15 to 25.	25 to 60 and 65	60 and 65 and upwards.
3	10	21	62	558	32

Since 1905 the age period has been altered from 25 to 60 to 25 to 65, up to 1904 inclusive, the last age period was 60 years and upwards, in which there were 27 deaths, after that year it was returned at 65 and upwards, and there were only 5 deaths, a very suggestive fact. In 22 years only 21 deaths from Consumption have taken place among children at 5 to 15 years old, or less than one per annum whereas the large number of 558 deaths occurred among persons aged 25 years up to 60 and 65. If this complaint were common at the school-age, certainly a larger number of deaths would take place at an earlier age, taking the average duration of Consumption as  $7\frac{1}{2}$  years (Osler), more persons would die before reaching 20 years than obtains at present.

Table showing the cause of death of Children at School-age:—

Cause of Death.	3		4		5		6		7		8		9		10		11		12		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Measles . . . . .		1																			...	1
Heart Disease . . . . .						1							1		1	1					2	2
Croup . . . . .					1																1	...
Tubercular Meningitis . . . . .									1												1	...
Mastoid Abscess . . . . .											1										...	1
Pneumonia . . . . .					3	1															3	1
Injuries (accidental) . . . . .			1																		1	...
Rheumatic Fever . . . . .				1														1			...	2
Enteritis . . . . .	1												1								1	1
Scarlet Fever . . . . .			1																		1	...
Drowned (accidental) . . . . .													1								1	...
Generalised Tuberculosis . . . . .															1						1	...
Mediastinal Abscess . . . . .														1							...	1
Tubercular Mesenteric Glands . . . . .									1												1	...
Laryngitis . . . . .					1																1	...
	1	1	2	1	5	2	...	...	2	...	1	2	2	1	1	1	1	...	...	...	14	9
	2		3		7		...	...	2		1		4		2		2		...	...	23	



## PHYSICAL CONDITION.

These Tables showing the Heights and Weights of Boys and Girls respectively, also comparing them with the average heights and weights of the general population of Great Britain for the same ages, are worth more than a passing notice. In Darwen the staple trade is cotton weaving with side lights as it were of other trades, such as spinning, paper making and printing, some iron work, although we appear to have lost our name for loom making : I think Blackburn has absorbed our share of this industry, and some coal mining. These industries, inasmuch as they employ both sexes at an age when they are in school a part of the time must have some influence in the growth and development of the young. We shall see as the years roll on how this influence is exerted, whether in improving the stock, or depreciating it.

BOYS above the average in HEIGHT are found at the ages 3, 4, and 8.

Those below the average in height are at ages 5, 6, 7, 9, 10, 11, 12 and 13.

In WEIGHTS, those above the average are aged 3 and 13 ; all the other ages are below the average.

GIRLS compare more favourably than the boys age 3, 4, 8, 9 and 11 are above the average height, whilst ages 5, 6, 7, 10, 12 and 13 are below the average height. In WEIGHTS the ages above the average are only 3 and 11, all the other ages are below the average.

It will be noticed that there is a transference of some ages from one average to another, for instance, in boys aged 7 years in my last Report was above the average, this year it is below the average. In weights, in my last Report, the boys aged 4 years were above the average, last year they were below the average, and those aged 13 take their place above the average.

In girls, in height, the transfer is in ages 4 and 11 to above the average, and ages 5, 6, and 7 to below the average. In weights age 6 years is below the average and 11 years has taken its place above.

The peculiar feature in this respect is in both Boys and Girls comparing the weights in my last Annual Report with those for last year, the years 4 and 6 respectively, which were above the average weight, were last year brought by some mysterious influence to below the average weight, and the ages 13 and 11 respectively were previously under the average were last year transferred to above the average weight.

It presumes the children start off in life under favourable conditions, seeing the first age mentioned, viz : 3 years. The boys and girls are over the average in height and weight, but they soon go off and lose the position previously obtained, until at 8 years, both boys and girls are again above the average in height, and in weights in boys we have to wait for him reaching 13 years and girls 11 years before an ascendancy is again observed.



### MALES—HEIGHT.

Age last Birthday .....	3	4	5	6	7	8	9	10	11	12	13
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
Darwen .....	37.75	39.41	40.76	42.06	44.59	47.24	47.10	51.50	52.55	54.77	56.64
General Population Great Britain .....	36.82	38.46	41.03	44.00	45.97	47.05	49.70	51.84	53.50	54.99	56.91
Above Average .....	0.93	0.95	...	...	...	0.19	...	...	...	...	...
Below Average .....	...	...	0.27	1.94	1.38	...	2.60	0.34	0.95	0.22	0.27

### MALES—WEIGHT.

Age last Birthday .....	3	4	5	6	7	8	9	10	11	12	13
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Darwen .....	35.8	36.3	39.5	42.8	46.1	51.5	54.0	61.5	63.6	74.1	83.6
General Population Great Britain .....	34.0	37.3	39.9	44.4	49.7	54.9	60.4	67.5	72.0	76.7	82.6
Above Average .....	1.8	...	...	...	...	...	...	...	...	...	1.0
Below Average .....	...	1.0	0.4	1.6	3.6	3.4	5.6	6.0	8.4	2.6	...

### FEMALES—HEIGHT.

Age last Birthday .....	3	4	5	6	7	8	9	10	11	12	13
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
Darwen .....	39.00	39.02	40.52	42.03	44.24	46.66	49.46	47.87	54.00	55.58	56.82
General Population Great Britain .....	36.23	38.26	40.55	42.88	44.45	46.60	48.73	51.05	53.10	55.66	57.77
Above Average .....	2.77	0.76	...	...	...	0.60	0.63	...	0.90	...	...
Below Average .....	...	...	0.03	0.85	0.21	...	...	3.18	...	0.08	0.95

### FEMALES—WEIGHT.

Age last Birthday .....	3	4	5	6	7	8	9	10	11	12	13
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Darwen .....	34.5	35.6	38.5	41.4	44.4	49.0	54.9	56.6	73.6	73.8	79.6
General Population Great Britain .....	31.6	36.1	39.2	41.7	47.5	52.1	55.5	62.0	68.1	76.4	87.2
Above Average .....	2.9	...	...	...	...	...	...	...	5.5	...	...
Below Average .....	...	0.5	0.7	0.3	3.1	3.1	0.6	5.4	...	2.6	7.6



The Anthro-pometric system, which shows the difference in percentage, is again given in table form.

	MALES.				FEMALES.			
	HEIGHTS.		WEIGHTS.		HEIGHTS.		WEIGHTS.	
	Great Britain.	Darwen	Great Britain.	Darwen	Great Britain.	Darwen	Great Britain.	Darwen
3	100	102.4	100	105.2	100	107.1	100	108.1
4	100	102.4	100	97.2	100	101.9	100	98.6
5	100	99.4	100	99.2	100	100.0	100	98.2
6	100	95.7	100	96.5	100	98.1	100	99.3
7	100	97.0	100	92.8	100	99.6	100	93.5
8	100	100.4	100	93.1	100	100.1	100	94.1
9	100	94.8	100	91.9	100	101.2	100	99.0
10	100	99.4	100	91.0	100	94.0	100	91.4
11	100	98.3	100	88.3	100	101.6	100	107.7
12	100	99.6	100	96.7	100	99.9	100	96.6
13	100	99.6	100	101.2	100	98.4	100	91.7
Total	1100	1089.0	1100	1053.0	1100	1101.9	1100	1068.2
Avr'ge	100	99.0	100	95.7	100	100.1	100	97.1

Comparing the heights and weights of the boys and girls, the girls are taller than the boys at ages 3, 5, 6, 7, 9, 11, and 12; and weigh more at all ages except 5, 12, and 13.

These figures do not compare equally with those generally published, in these, which are from 100,000 examinations, the girls are taller than the boys at ages 12, 13 and 14, and weigh more at ages 12, 13, 14, and 15.



Table showing Average Height of Boys and Girls.

	3 to 4 yrs	4 to 5 yrs	5 to 6 yrs	6 to 7 yrs	7 to 8 yrs	8 to 9 yrs	9 to 10 yrs	10 to 11 yrs	11 to 12 yrs	12 to 13 yrs	13 to 14 yrs
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
Males .....	37.75	39.41	40.76	42.06	44.59	47.24	47.10	51.50	52.55	54.77	56.64
Females ...	39.00	39.02	40.52	42.03	44.24	46.66	49.46	47.87	54.00	55.58	56.82

Table showing average Weight of Boys and Girls.

	3 to 4 yrs	4 to 5 yrs	5 to 6 yrs	6 to 7 yrs	7 to 8 yrs	8 to 9 yrs	9 to 10 yrs	10 to 11 yrs	11 to 12 yrs	12 to 13 yrs	13 to 14 yrs
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Males .....	35.83	36.36	39.51	42.84	46.12	51.55	54.00	61.50	63.60	74.13	83.67
Females ...	34.50	35.66	38.55	41.38	44.36	49.04	54.93	56.63	73.62	73.78	79.62



	No. Reported.		Cured.		Improved.		Operation not necessary.		Operation to be done.		No Action.		Left the town.		Treated at Clinic.		Further Visits by S. N.		Re-inspec-tions by S. M. O.	
	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914
Enlarged Ton-sils .....	58	10	34	3	...	...	9	4	5	3	8	2	...	...	...	...	13	...	13	...
Adenoids.....	...	14	...	6	...	...	...	2	...	5	...	1	...	...	...	...	...	...	...	...
Re-Inspected & reported on Enlarged Tonsils ....	...	10	...	1	...	...	...	3	...	3	...	3	...	...	...	...	...	...	...	...
„ Adenoids .....	...	12	...	2	...	...	...	5	...	4	...	1	...	...	...	...	...	...	...	...
Squint & De-f't've Sight	9	56	5	...	...	...	...	...	4	...	...	...	...	...	...	52	...	...	4	...
Def't've Teeth	14	19	14	1	...	...	...	...	...	...	...	1	...	...	...	17	...	...	...	...
Ear Disease .	2	5	...	...	2	5	...	...	...	...	...	...	...	...	...	3	...	...	...	...
Skin Disease	...	6	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blepharitis	...	6	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eczema, Heads }	14	10	11	...	3	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...
Heart Disease	8	4	...	...	No	Exer-cises	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Un-classified.	3	4	...	...	1	2	...	...	...	...	2	...	...	...	...	...	2	...	2	2
Dirty Heads.	207	176	22	...	52	15	...	...	...	...	...	...	...	...	...	...	185	161	...	...
	315	326	86	13	58	28	9	14	9	15	10	6	2	...	...	82	200	161	19	2

#### NUMBER OF SCHOLARS INSPECTED AT EACH SCHOOL DURING 1914.

	NUMBER INSPECTED.																									
	3		4		5		6		7		8		9		10		11		12		13		14		Totals.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Belgrave .....	..	..	..	..	5	7	..	..	..	..	10	12	..	..	2	..	..	..	12	26	2	1	1	..	32	46
B'burn Road...	..	..	..	..	12	21	13	11	..	..	20	25	..	..	..	..	..	..	17	14	6	..	..	..	68	71
Blacksnape ...	..	..	..	..	3	3	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	6	6
Bolton Road ..	..	..	..	..	5	6	..	4	1	..	5	6	..	1	1	2	..	..	3	6	3	..	..	..	18	25
Central Coun...	..	..	..	..	3	1	1	2	2	..	2	4	..	..	..	..	..	..	..	..	..	..	..	..	8	7
Duckworth St.	..	..	..	..	11	12	8	6	..	1	4	4	..	1	..	1	1	1	9	17	3	2	..	..	36	45
Earcroft .....	..	..	..	..	3	2	2	2	1	1	5	6	..	..	..	..	1	4	2	..	1	..	..	..	15	15
Highfield.....	..	..	..	1	7	14	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	18
Sudell Road ..	..	..	..	..	..	..	..	..	..	..	16	24	1	5	1	..	4	1	14	13	..	..	..	..	36	43
Hollins Grove .	1	..	6	6	9	8	4	..	1	2	23	14	..	..	..	..	..	..	5	11	1	2	..	..	50	43
Holy Trinity ..	..	..	..	..	14	12	1	1	3	..	7	22	..	..	..	..	..	..	31	24	2	4	1	..	59	63
Lower Chapel..	..	..	1	2	5	10	7	1	2	1	16	32	1	1	..	..	..	..	11	10	3	..	..	..	46	57
St. Cuthberts'	..	..	..	..	15	22	6	11	..	2	19	18	1	1	..	..	..	..	13	20	..	2	..	..	54	76
St. George's...	..	..	..	..	20	17	3	..	2	..	20	22	..	2	..	..	1	1	16	15	1	1	..	..	63	58
St. Edward's ..	1	..	..	..	5	3	4	3	1	2	4	4	1	..	..	..	..	9	2	1	..	..	..	..	26	14
St. James' ....	..	..	1	1	18	17	7	16	1	1	26	29	1	1	..	..	..	..	22	18	1	..	..	..	77	83
St. John's .....	..	..	..	..	10	13	..	5	2	2	17	19	..	..	..	..	..	..	15	5	3	3	..	..	47	47
Culvert.....	1	1	5	8	13	16	2	7	3	4	17	12	1	1	..	..	..	..	10	11	2	2	..	..	54	62
St. Joseph's....	..	..	..	2	34	37	21	32	2	3	34	10	..	..	1	..	..	..	23	12	1	6	..	..	116	102
St. Paul's.....	..	..	2	..	4	2	..	..	..	..	4	5	..	1	1	1	..	..	6	5	1	..	..	..	18	14
Sandhills .....	..	..	..	..	..	..	..	..	1	1	2	1	..	..	..	..	..	..	1	..	..	..	..	..	4	2
Spring Bank ..	..	..	..	..	6	7	7	4	3	4	6	18	..	1	..	..	..	..	7	10	3	3	..	..	32	47
	3	1	15	20	202	230	86	106	25	26	260	290	6	15	6	4	6	4	228	221	33	27	2	..	872	944
	4		35		432		192		51		550		21		10		10		449		60		2		1816	



The Table shows the actual work done and the results.

The number of cases of Enlarged Tonsils and Adenoids is 24, as compared with 58 in the previous year ; so many were dealt with in 1913 that the number is naturally lower in the following year. These will eventually be brought down to one level showing the average number of children affected with these complaints, and these will be the only ones to be dealt with each year.

Miss Orpin has re-inspected 12 of these, this means she has followed them up, and in special cases has used her influence in the direction of an operation.

During the year Dr. Scott Heyliger, of Blackburn, was appointed Ophthalmic Surgeon, and Mr. Bromley, of Darwen, as Dentist.

A building in Bolton Road was taken. It is very central and easy of access from every part of the town. It consists of a front portion, intended by the architect for a shop, but which has been transformed into an office for the School Nurse, a large room behind this is used as a waiting room, it is well lighted from the roof and warmed by two gas stoves. Upstairs, over the office, is the Ophthalmic Surgeon's room, containing a dark room for the examination by means of the Ophthalmoscope, this room is also used by the Dental Surgeon. All the appliances and instruments have been bought and installed.

Mr. Bromley has been busy this year attending to the teeth of the recruits, and has, consequently, had to forego his work with the School children. This will be remedied as soon as he can be liberated from attendance on the recruits.

**TABLE I.**

Number of Children Inspected 1st January, 1914 to 31st December, 1914 :—

**A.—“Code” Groups.**

Age.	ENTRANTS.						LEAVERS.					Grand Total
	3	4	5	6	Other Ages	Total	12	13	14	Other Ages	Total	
Boys .....	3	15	202	86	...	306	228	33	2	...	263	569
Girls .....	1	20	230	106	...	357	221	27	...	...	248	605
Totals .....	4	35	432	192	...	663	449	60	2	...	511	1174

**B.—Groups Other than “Code.”**

	Intermediate Group. 8	SPECIAL CASES.			
		7	9	10	11
Boys .....	260	25	6	6	6
Girls .....	290	26	15	4	4
Totals .....	550	51	21	10	10



TABLE II.—Return showing the Physical Condition of Children Inspected.

CONDITION.	ENTRANTS			LEAVERS.			INTERMEDIATE GROUP.			TOTAL.			SPECIAL CASES.		
	Boys	Girls	Total	Per cent.	Boys	Girls	Total	Per cent.	Boys	Girls	Total	Per cent.	Boys	Girls	Total
Total Inspected .....	306	357	663	..	263	248	511	..	260	290	550	..	43	49	92
Clothing and Footgear.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Satisfactory.	305	355	660	99.6	263	248	511	100	258	290	548	99.7	43	49	92
Unsatisfactory	1	2	3	0.4	..	..	..	..	2	..	2	0.3	..	..	..
Footgear.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Satisfactory	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unsatisfactory	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cleanliness of Head.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clean	303	301	604	91.1	262	185	447	87.5	258	221	479	87.1	43	41	84
Nits only	3	54	57	8.6	1	63	64	12.5	2	69	71	12.9	..	8	8
Pediculi	..	2	2	0.3	..	..	..	..	..	..	..	0.1	..	..	..
Cleanliness of Body.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clean	306	357	663	100	262	248	510	99.8	260	290	550	100	43	49	92
Dirty	..	..	..	..	1	..	1	0.2	..	..	..	0.1	..	..	..
Pediculi Present	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nutrition.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Excellent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Normal	306	357	663	100	263	247	510	99.8	260	290	550	100	43	49	92
Below Normal	..	..	..	..	..	1	1	0.2	..	..	..	0.1	..	..	..
Bad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nose and Throat.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
No Defect	304	347	651	98.2	259	236	495	96.9	254	288	542	98.5	42	44	86
Mouth Breathers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tonsils enlarged slightly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tonsils much enlarged	2	10	12	1.8	1	2	3	0.6	5	2	7	1.3	..	2	2
Adenoids, slight	..	..	..	..	3	10	13	2.5	1	..	1	0.2	1	3	4
Adenoids, marked	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
External Eye Disease.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
No Disease	304	356	660	99.6	260	245	505	93.8	259	289	548	99.6	42	49	91
Blepharitis	..	1	3	0.4	1	1	2	0.4	1	..	1	0.2	1	..	1
Conjunctivitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Corneal Opacities	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Disease	..	..	..	..	1	1	2	0.4	..	1	1	0.2	..	..	..



Ear Disease.	No Disease	..	306	357	663	100	262	248	510	99.8	258	289	547	99.5	826	894	1720	99.8	42	49	91	98.9
	Obstruction, R.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Obstruction, L.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Otorrhoea, R.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Otorrhoea, L.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Other Disease	..	..	..	..	..	1	..	1	0.2	2	1	3	0.5	3	1	4	0.2	1	..	1	1.1
Teeth.	Sound	..	75	130	205	30.6	63	50	113	22.2	44	60	104	18.9	182	240	242	21.5	5	6	11	11.9
	Less than four decayed	..	147	142	289	43.6	162	154	316	61.8	130	142	272	49.5	439	438	877	50.9	28	28	56	60.9
	Four or more decayed	..	84	85	169	25.8	38	44	82	16.0	86	88	174	31.6	203	217	425	24.6	10	15	25	27.2
	Sepsis'	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Heart and Circulation.	No Disease	..	303	357	663	100	260	242	502	98.2	260	289	549	99.8	826	888	1714	99.3	43	49	92	100
	Organic Disease	..	..	..	..	..	3	4	7	1.4	..	1	1	0.2	3	5	8	0.5	..	..	..	..
	Functional Disease	..	..	..	..	..	..	1	1	0.2	..	..	..	..	..	1	1	0.1	..	..	..	..
	Anæmia	..	..	..	..	..	..	1	1	0.2	..	..	..	..	..	1	1	0.1	..	..	..	..
	Other Defect	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lungs.	No Disease	..	306	353	659	99.4	263	248	511	100	259	290	549	99.8	828	891	1719	99.7	42	49	91	98.9
	Chronic Bronchitis and Bronchial Catarrh	..	..	4	4	0.6	..	..	..	..	1	..	1	0.2	4	1	5	0.3	1	..	1	1.1
	Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tuberculosis suspected	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nervous System.	No Disease	..	305	357	662	99.9	262	248	510	99.8	260	290	550	100	827	895	1722	99.9	43	49	92	100
	Epilepsy (major or minor)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chorea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Disease	..	1	..	1	0.1	1	..	1	0.2	..	..	..	..	2	..	2	0.1	..	..	..	..
Skin.	No Disease	..	305	356	661	99.7	261	248	509	99.6	259	290	549	99.8	825	894	1719	99.7	42	49	91	98.9
	Ringworm, body	..	..	..	..	..	1	..	1	0.2	..	..	..	..	1	..	1	0.1	1	..	1	1.1
	Ringworm, head	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Impetigo	..	1	1	2	0.3	1	..	1	0.2	1	..	1	0.2	3	1	4	0.2	..	..	..	..
	Scabies	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rickets.	No Disease	..	306	356	662	99.9	263	248	511	100	260	290	550	100	829	894	1723	99.7	42	49	91	98.9
	Slight and marked	..	..	1	1	0.1	..	..	..	..	..	..	..	..	..	1	1	0.1	1	..	1	1.1
Deformities.	No Deformity	..	305	357	662	99.9	262	248	510	99.8	260	290	550	100	827	895	1722	99.9	42	49	91	98.9
	Deformity present	..	1	..	1	0.1	1	..	1	0.2	..	..	..	..	2	..	2	0.1	1	..	1	1.1
Tuberculosis Non-Pulmonary	No Disease	..	305	356	661	99.8	263	248	511	100	259	290	549	99.8	827	894	1721	99.8	43	49	92	100
	Glandular	..	1	..	1	0.1	..	..	..	..	1	..	1	0.2	2	..	2	0.1	..	..	..	..
	Bones and Joints	..	..	1	1	0.1	..	..	..	..	..	..	..	..	..	1	1	0.1	..	..	..	..
	Other Forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..



TABLE II.—Continued.

CONDITION.	ENTRANTS				LEAVERS				INTERMEDIATE GROUP.				TOTAL				SPECIAL CASES.			
	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent
Speech.	304	357	661	99.8	263	248	511	100	259	290	549	99.8	826	895	1721	99.7	43	49	92	100
	1	1	2	0.1	1	1	2	0.2	1	1	2	0.2	2	2	4	0.2	1	1	2	0.2
	1	1	2	0.1	1	1	2	0.2	1	1	2	0.2	1	1	2	0.1	1	1	2	0.1
Mental Condition.	306	357	663	100	261	248	509	99.6	259	290	549	99.8	826	895	1721	99.7	43	49	92	100
	1	1	2	0.1	1	1	2	0.2	1	1	2	0.2	2	2	4	0.2	1	1	2	0.2
	1	1	2	0.1	1	1	2	0.2	1	1	2	0.2	1	1	2	0.1	1	1	2	0.1
Vision.	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100	6/6	6/6	6/6	100
Squint	2	5	7	1.0	1	1	2	0.2	1	1	2	0.2	4	5	9	0.5	2	2	4	2.2
	2	5	7	1.0	1	1	2	0.2	1	1	2	0.2	4	5	9	0.5	2	2	4	2.2
	2	5	7	1.0	1	1	2	0.2	1	1	2	0.2	4	5	9	0.5	2	2	4	2.2
Hearing (Whisper)	147	146	293	100	143	136	279	92.2	121	160	281	97.6	269	312	581	100	19	18	37	100
	143	138	281	95.9	143	138	281	95.9	121	160	281	97.6	264	296	560	96.4	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
Number Examined	147	146	293	100	143	136	279	92.2	121	160	281	97.6	269	312	581	100	19	18	37	100
	143	138	281	95.9	143	138	281	95.9	121	160	281	97.6	264	296	560	96.4	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
20 feet each ear (normal hearing)	143	138	281	95.9	143	138	281	95.9	121	160	281	97.6	264	296	560	96.4	19	17	36	97.3
	143	138	281	95.9	143	138	281	95.9	121	160	281	97.6	264	296	560	96.4	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
15 feet, R.	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
10 feet, R.	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
5 feet, R.	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3
	143	139	282	96.2	143	139	282	96.2	122	160	282	97.9	265	299	564	97.1	19	17	36	97.3



TABLE III.

Numerical Return of all Exceptional Children in the Area.

			Boys	Girls	Total
BLIND (including partially blind)		Attending Public Elementary Schools.....	...	...	...
		Attending Certified Schools for the Blind.....	...	1	1
		Not at School .....	...	...	...
DEAF AND DUMB (including partially deaf).		Attending Public Elementary Schools.....	1	1	2
		Attending Certified Schools for the Deaf ....	2	2	4
		Not at School .....	...	...	...
MENTALLY DEFICIENT	FEEBLE MINDED.	Attending Public Elementary Schools.....	...	3	3
		Attending Certified Schools for Mentally Defective Children .....	...	...	...
		Not at School .....	2	...	2
	IMBECILES.	At School .....	...	...	...
		Not at School .....	...	...	...
	IDIOTS .....	.....	...	...	...
EPILEPTICS.		Attending Public Elementary Schools.....	3	1	4
		Attending Certified Schools for Epileptics ...	...	...	...
		Not at School .....	...	1	1
PHYSICALLY DEFECTIVE	PULMONARY TUBERCULOSIS	Attending Public Elementary Schools.....	...	3	3
		Attending Certified Schools for Physically Defective Children .....	...	...	...
		Not at School .....	...	1	1
	OTHER FORMS OF TUBERCULOSIS	Attending Public Elementary Schools.....	1	1	2
		Attending Certified Schools for Physically Defective Children .....	...	...	...
		Not at School .....	1	...	1
	CRIPPLES OTHER THAN TUBERCULAR	Attending Public Elementary Schools.....	3	2	5
		Attending Certified Schools for Physically Defective Children .....	...	...	...
		Not at School .....	...	...	...
DULL OR BACKWARD.		Retarded 2 Years.....	5	3	8
		Retarded 3 Years.....	2	2	4
		Not Retarded .....	3	...	3



## MENTALLY DEFECTIVE CHILDREN.

A. B., aged 10 years, is in Standard II., but does not know the alphabet, she is a twin. The only incident in her life her mother could remember was when the child was 6 years of age she fell down stairs and after this she had strabismus, she did not have convulsions. Her memory is very poor, she can sew, knit and do housework, in fact, she is a great help to her mother ; she is very fond of play, is rather short for her age, has a voracious appetite, in fact, she eats too much ; at two years of age she only weighed 11lbs. and did not walk until she was five years old, her dentition was completed at 2 years of age.

B., her twin sister is similarly backward and attends school, is in Standard II. ; She also is splendid in house work.

F. B. is  $10\frac{1}{2}$  years old : commenced school at 7 years of age, walked at 5 years was premature at birth—her mother had a very hard confinement— 8 months' child, has rickets, poor memory but looks intelligent, has pigeon breast, bronchial catarrh, teeth are notched ; there is no evidence of Adenoids, is mentally slow, dresses and washes herself, and is very useful in the house and goes errands, but does not understand the value of money ; her speech is imperfect, is in Standard III.

A. A. Age 8 years. Has clear enunciation, wears spectacles, does not know the alphabet. When 3 years old he had an accident, receiving a cut on his right temple and after this he squinted ; first tooth appeared at 12 months old, was 4 years old when he walked, is in the Infant School, goes errands well, dresses himself, cleans his clogs and helps with the housework, is fairly intelligent, but plays with younger children than himself.

P. W. is 8 years old, is in Standard I., she can read small words and can copy, has very poor memory. She had two epileptic seizures when a week old and was prematurely born—8 months' child—her first tooth was cut when 7 or 8 months old, and walked when more than 2 years old ; her mother had great trouble with her feeding. She is very useful in the house and in the cow sheds. Her teacher first noticed that she was mentally backward. She appears deaf at times.

L. Y., aged 9 years. Is in Standard I, cannot read, his family history and surroundings are very poor, the family is very poor, and he lacks attention.

E. I. T. Age 14 years. Short for her age, is in Standard II., she washes and dresses herself, can knit, sew and do housework. 1st tooth erupted at 8 months old, walked alone at 4 years old, commenced school at 6 years. Her teacher first noticed she was backward, she plays with children her own age ; she can go errands, but does not understand the value of money.



J. W. Aged 8 years, is in Standard I., is an epileptic—had an epileptic seizure in school a short time before, he drags the right foot and writes with the left hand ; apparently is an epilepto-apoplectic. Very imperfect knowledge of his letters, but has a fairly intelligent face.

N. A. Aged 12 years, is in Standard IV., knows her letters, is fairly intelligent looking ; is a half-time weaver.

H. H. Aged 9 years, imperfect speech, his sight is apparently defective, his disposition is very destructive, does not attend any school as he cannot learn, his temper is bad and he has no control of sphincter ani, low forehead ; appears to be always laughing.

H. W. can say her letters, but not distinguish them, has very heavy dull features, is an epileptic, had her first seizure at 3 years of age, her first tooth erupted at 3 to 4 months old, and the whole lot when 14 months old. She has had Whooping Cough and Measles. She has epileptic fits during the night frequently and her appetite is abnormally large. She walks fairly well, keeps her right hand doubled up or clenched, and it is invariably cold ; she does not use it. Is of a destructive disposition and has a violent temper.

A. A. W. Aged 8 years. Standard I. Is epileptic and has fits : her first seizure when 12 months old and her second when 7 years old. Her first tooth erupted when she was 12 months old, she walked when she was 3 years old. The lower teeth are notched and her breath is very foul.

W. F. Aged 12 years. Does not attend school. When asked why he does not he remarked "The teachers say I am too silly to learn." He is very often seen about the streets, and I have seen him at the Destructor Works filling ashes into a cart ; is evidently fond of horses. The teachers do not like him at school as the other children tease him and jeer at him, his temper is very bad so he quickly retaliates and sometimes has seriously injured a child, not necessarily the one most to blame.

J. W. Aged 11 years, is in standard III—Girl.

A. W. Aged 8 years, is in Standard I., brother to above, both have good teeth, but notched, heavy dully features. This is a very large family and I remember being in attendance at one of the mother's confinements many years ago, when the child was a huge one, weighing 12 lbs. I fancy the earlier children were fairly intelligent, passing through school with a minimum result educationally, but were able to learn and follow weaving satisfactorily.

S. H. Female. Aged 8 years. Has an old-fashioned face, does not attend frequently but irregularly as she has been ill. She does not know her letters.



W. H. Aged 10 years, is in Standard I. and cannot read ; she shows distinct lack of reasoning powers. The father is a spinner and her mother is the housekeeper. They have seven children, all the others are working.

A. P. is in Standard I., and knows some of the letters, he can copy, knows the comparative value of money, seems fairly intelligent, and holds his head on one side.

W. T. M. Aged  $10\frac{7}{12}$  years. In Standard II., he does not know his letters, cannot learn to read, but has learned to tell the time. He appears to be about the average size ; he was about 11 months old when his mother noticed that he could not sit up, when walking he runs into people, he had a fit of epilepsy when 3 days old, another fit when 5 years old and the last about two years ago. He will only play with children much younger and less than himself, is fairly intelligent looking ; when once he begins to laugh he cannot stop.

W. H. Aged 7 years. Is in Standard I, he is quite intelligent looking, with good features.

W. F.—Boy. Aged 6 years, he is in Standard I. Clogs are very poor.

W. F.—Boy, deaf, brother to above ; he can write and draw very well from copy. His clogs have no soles whatever, surroundings are very poor.

J. T. Aged 7 years. He squints, is very small, comes off a family of small people. Standard I. At his birth instruments were used and his head was injured, in one eye the sight is defective ; he walked before he was a year old, commenced school when 5 years old, he has a troublesome cough, like a dog barking, croupy sound. He suffers from attacks of Laryngismus Stridulus, he has an abnormally large appetite, is a very good reciter.

B. C. Aged 12 years, is in Standard III., squints with left eye, has done so from birth ; his speech is defective, he is intelligent and knows his way about ; he imitates well.

S. B. Aged 12 years. He is in Standard III. First tooth erupted when 12 months old and walked before he was 2 years old, when he had a stroke, walked again when 4 years old. At times he is very stubborn ; he is of good physique, and is ambidexterous.

M. W. Aged  $11\frac{1}{2}$  years. Her features are of a low type, her right leg is shorter—this was noticed when twelve months old—has had no illness. She cannot talk, but knows what you are talking about. She cannot express herself, is very emotional, her head is very square, has never had a fit, is very fond of pictures, no mental attitude.



J. M. Boy. Aged  $12\frac{1}{2}$ , in Standard I., has poor memory. He had Scarlet Fever when  $1\frac{5}{12}$  years old, had Epileptic fit last Monday night and one on New Year's night. The child's birth was a normal one, he does not know his letters, they cannot teach him at school, has full control over his sphincters, cannot wash him self. Walked when 2 years old and talked at 5 years, dentition commenced when 12 months old ; has Strabismus.

There were 15 males and 12 females mentally deficient in attendance in our Elementary Schools in Darwen, making a total of 27.

The outstanding feature of these deficient is the want of memory, so that their education as we understand it, is impossible when attempted on the ordinary lines. They do not, even in one case, know their letters, the result is, a child has either to be kept back in a lower standard than his age justifies and he is the butt and laughing-stock of the rest of the class, who are much younger than himself, or he is put in a standard suitable for children of his age, when his teacher has to neglect him to attend to the others and he is simply a block, allowed to do as he likes, because any time spent on him means the neglect of the others, without any compensating advantage to the education of the deficient one. They all lack initiative, which probably accounts for these children choosing their playmates from those much younger than themselves.

It is not fair to themselves nor to the other children of the class in which they are, nor to the teachers who have charge of them—in fact, it is evident to anyone who has seen much of these unfortunate children, that the teacher, to be successful with them must have special training for the work and must be peculiarly fitted by disposition and temperament to be a success. It is not only because these mentally weak ones are a special charge on the Education Authorities, but their entire future rests on the amount of useful education which may be imparted to them.

At present they are not being trained and the future is an unknown quantity. Education, by which we understand the equipment of the mind with useful facts and forces to be in later years utilized for the benefit of mankind, and of such a character as to claim a living wage, is out of the question ; at least it is not a mental but a manual education which is possible for the present and practical for the future. This cannot be undertaken in the ordinary elementary schools, nor—may I suggest without prejudice—by our elementary teachers. Each temperament require to be specially and separately studied to find out his or her proclivities in what direction his leanings are, so that his energies may be directed in the proper groove. Suppose these children are left without the proper direction of his energies, what will be the result ? They are fast growing up, and time is short ; these natures grow and develop fast, they mature physically earlier than the ordinary youth and maiden ; as “ like draws to like the world over ” proverb, so in after years they will naturally be drawn



towards each other, ending in ties stronger than they will be able to sever, and so there will be nothing to prevent them joining forces as these animal natures mature early so this side of their economy is for ever uppermost. It will not stretch one's imagination far to foresee large families with atavistic tendencies they breed back, like a colony of the finest bred pigeons if put on an island and left to themselves will breed back to the common type from which they originally sprang ; so the children of our defectives will be a lower type than the parents which gave them birth, and so if they go on they must in time by retrograde movement provide us with a criminal type dangerous to the community. One boy who has a reputation as a copyist was pointed out to me and gave me an example of his work. He could not transpose from printed matter to written characters when the letters were capitals, but any writing put before him he could copy like copper plate. Here is a case no doubt of a boy who, if taught on proper lines, would be able to earn a living and be made into a useful member of society. There are many such, as is evidenced by one of the girls who was passed as a half-timer and is doing very well at her occupation.

It seems to me that such occupations as basket making, toys, &c. are the most likely and feasible for the mentally deficient to be trained in, but they must first be drilled, have their bodies trained in physical exercises, and their minds in disciplinary training before they can be considered fit for the reception of further instruction.

A few years ago the Education Committee engaged the services of Mr. Yearsley to train a number of children who stammered, with a view to their recovery.

I took great interest in his methods and the results. I was struck by the effect which such evolutions as deep breathing exercises had upon them : the development of the chest and then the result of well considered recitations was very remarkable, and I think we would be reasonable if we expected similar good results. The number is large enough for a beginning, and I think a useful school might be formed, or, failing this, to send them away to a residential school where they could be kept at the expense of the rates.

If something is not done to get them out of the groove in which they simply exist, we shall find we are burdened with an increasing number of useless and certainly not ornamental units, their own lives made miserable and empty for want of something to do, and if ever a proverb were true it is the one which says, "Satan finds some mischief still for idle hands to do." It is a serious subject and a painful one, yet no good will be done by shelving it or ignoring it, the matter must be taken in hand by one authority or another.

I have in my mind's eye one of the members of this unfortunate class, who to-day, whilst still in his teens is leading a useless, and yet an apparently active life, for he always seems on the go.



## EXAMINATION OF SCHOOL CHILDREN.

The number of entrants examined was 663. The number of leavers was 511. The Schools are visited twice a year and the new children admitted and those who will leave before the time of the next visit are examined. Very few parents indeed take advantage of the invitation to be present during these examinations, owing to the fact that many of the mothers go to the mill and it is not convenient for them to be absent from work.

The improvement is being maintained in the cleanliness of the children.

The cases in which girls have Nits in the hair is too large. The School Nurse is careful in giving instructions, printed and verbal, on the methods of getting rid of this pest ; she also follows up these children by visiting them in their homes, where she can influence the mother in habits of cleanliness. She is not often successful in catching the mothers at home, where the said mothers go out to work, and there is an opinion common to these mothers that Nits are, if not a necessity, they are an evil which is natural to all children and must be looked upon as a part of their education. The reason why girls suffer out of all proportion to the boys is the length of hair and the way it is dressed. If plaited I do not think it would be so bad, but if cut short we should soon see its disappearance.

The **Bodies** of the children are very clean, take them all round. There is no excuse for a want of cleanliness ; if a bath is not in the house the children can be washed all over before the kitchen fire preparatory to going to bed, and if done every night the bedding would be kept cleaner than it is, in many houses. The view that to have frequent baths is to court the danger of taking cold, is due to ignorance which time and education can alone dispel. The real reason to-day is the attraction of the Picture Palace, which does not leave time for these domestic duties.

The part still not receiving the attention which it deserves is the clothing, in very many instances this, when torn remains unmended, and when attended to the parts are drawn together by unsuitable material, such as white thread in black material.

In many of the poorer homes the footwear is defective. I have seen children wearing shoes or clogs where there was an entire absence of sole.

The cases of skin diseases, &c. are being attended to in the School Clinic as occasion requires ; there is, in my opinion, a decided improvement.

### EXTERNAL EYE DISEASES.

**Blepharitis**, of which the number seen was 7, being 2 more than the previous year.

All received attention at the Clinic.



## **TEETH.**

The percentage of ENTRANTS with fewer than 4 decayed teeth is 43.6, % is compared with 30.6% of sound ones, whilst those with four or more decayed is 25.8%.

In the intermediate group the number of sound teeth was 18.% of the total at this age. Those with fewer than 4 decayed was 49.5%, whilst those with 4 or more decayed was 31.6%, pointing very clearly to the infectious character of this decay and the value of dentistry work in school children.

In LEAVERS, those with fewer than 4 decayed teeth was 61.8% ; with 4 or more decayed ones was 16.0%, and with sound teeth it was only 22.2%.

Carious teeth rapidly spread the mischief when once started, owing to their close proximity, to the accumulation of partly digested food undergoing decomposition and the fact that the use of the tooth brush is so little appreciated by the children and also by the parents. The teeth should be well brushed after each meal to remove the remains of food, the teeth should be brushed upwards to get the food from between the teeth.

From enquiries made in the schools, the use of the tooth brush is evidently increasing, but I think the fault lies in the method of its use. There is also a want of attention to the general appearance, the clothing is apt to show signs of neglect, both in regard to cleanliness and to repairs. If a smarter appearance could be developed it would have good results.

## **HEART AND CIRCULATION.**

Actual Heart Disease is rare in school children ; the usual instructions are issued to the Head Teachers and to the Parents.

## **LUNGS.**

The only diseases of these organs are Bronchitis and Bronchial Catarrh, there are no more signs that these are tubercular than previously, as mentioned in my last Annual Report.

## **SKIN DISEASES.**

Are becoming fewer, as they are now treated at the School Clinic by Nurse Orpin under my supervision ; they get more regular and better attention, so that the course of treatment is shorter.

## **DEFECTIVE SPEECH AND HEARING.**

There is practically no stammering in school children. The number of children who failed in the test at the maximum distance was 6.8%



## **GENERAL CLEANLINESS.**

The changes in this respect continue, though in one respect mentioned above, there is still room for further improvement.

I take this opportunity in presenting my Report to acknowledge the very great kindness, consideration, and help, which I have at all times received from the Members of the Education Committee, and from all the Officials of the Corporation.

And beg to remain, Gentlemen,

Your very obedient servant,

**F. G. HAWORTH.**







In completing this my Twentieth Report, I beg to thank the late Clerk, Mr. J. C. Cook, and the new Clerk, Mr. Littlecott, and the Inspectors for much valuable help.

Also the Members of the Health Committee for their kind forbearance during a critical illness, when I was unable to approach work. For these favours I give you my thanks,

And beg to remain,

Your Obedient servant,

F. G. HAWORTH.







**R E P O R T S**  
**OF THE**  
**INSPECTORS OF NUISANCES,**  
**FOR THE**  
*Year ending December 31st, 1914.*





**PUBLIC HEALTH OFFICE,  
DARWEN,**

February, 1915.

**TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.**

GENTLEMEN,

I have the pleasure to submit the Twenty-fourth Annual Report of work carried out by me in the Health Department of the Corporation for the year ending December 31st, 1914.

As regards Sanitary Work, much has been done with regard to the abolition of Pail Closets, which in a few months should be a thing of the past, with the exception of some in the country districts.

Insanitary Ashpits are also disappearing and being replaced by the more sanitary ashtub and bin. From a sanitary point of view I am looking forward to the reduction of the insanitary Waste Water Closet.

I wish to thank the Members of the Committee for the support given to me in all my recommendations to the Health Committee.

I am, Gentlemen,

Your Obedient Servant,

WM. E. MARSDEN.

Cert. Royal San. Inst., Etc.

**REPORT.**

The Districts for which the Report refers to are Central Ward, South-East Ward, and South-West Ward.

The following Table gives the area and number of houses, and population of the Wards.

	Area in Acres.	No. of Houses.	Estimated Population.
CENTRAL .....	110	1671	6629
SOUTH-EAST .....	1900	1700	7008
SOUTH-WEST .....	1908	1626	6475

During 1914, 58 new houses were certified by the Borough Surveyor, as follows :

South-East Ward .....	43
South-West Ward .....	15

**INFECTIOUS DISEASES.**

The number of notifiable diseases received during 1914 was 157 as compared with 80 in 1913, being an increase of 77.



The following Table gives the list of cases in Central, South-East and South-West Wards in 1913-1914.

WARD	Scarlet Fever		Typhoid Fever		Diphtheria		Erysipelas		Puerperal Fever		Consumption	
	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914
Central .....	2	23	0	1	4	3	3	4	0	1	7	12
South East .....	7	32	1	3	10	8	0	7	0	0	24	9
South-West .....	2	27	0	2	7	2	0	5	0	0	11	16
	11	82	1	6	21	13	3	16	0	1	42	37

It will be seen that there was a large increase in Scarlet Fever cases, and these were equally distributed in the 3 Wards.

Immediately on receipt of a notification, the houses are visited and verbal or printed instructions are given to prevent the spread of the disease, and in cases where there is insufficient isolation of the patient, the Hospital is recommended, and during the year 36 cases were removed to Bull Hill Hospital, all being Scarlet Fever.

**SCARLET FEVER.**—Several cases of Scarlet Fever made their appearance early in the year, in March and April, when several cases were removed to Hospital with a view to preventing the spread of the disease, in June, July and August, the disease appeared to be dying out, but in October and November it appeared again, and in spite of all precautions taken a large number were notified till the end of the year.

**TYPHOID FEVER.**—6 cases of this disease were notified and 4 died. Inquiries were made in every case, and it was ascertained that in 4 cases shell fish (Mussels) had been partaken of.

After the removal or recovery of each infectious case all articles of bedding capable of being disinfected are conveyed to the Hospital where they are subjected to Steam Disinfection, and the rooms at the houses are fumigated usually by means of sulphur or Formaldehyde.

125 Houses were disinfected, and the following is a list of Bedding, &c. removed to Hospital during 1913-14.

	Beds	Mattresses	Bolsters	Pillows	Quilts	Blankets	Sheets	Suits of Clothes	Carpets	Rugs	Cushions	Shawls	Sundries
Central .....	25	4	24	31	23	55	12	0	3	1	3	2	37
South-East .....	37	6	29	34	32	38	8	0	0	0	2	9	19
South-West .....	26	9	20	29	18	32	6	1	0	0	0	1	21
	88	19	73	94	75	125	26	1	3	1	5	12	77
Year 1913 .....	45	18	30	49	22	21	9	0	6	8	2	6	15



## **CONSUMPTION.**

Visits were made to 37 cases of Tuberculosis notified to the Department. Verbal instructions were given and printed instructions were left in most cases, as to precautions to be taken by the patient to prevent spread of the disease.

At the request of the Tuberculosis Officer of the County Council, I have superintended the erection of several Shelters in various parts of the Borough, which have been lent to persons who have already received Sanatoria treatment.

## **NUISANCES, Etc.**

During 1914 I received 82 verbal and written complaints; these complaints arose mostly from offensive smells in connection with drains, Waste Water Closets, &c. In all cases I visited the premises and made inquiries with respect to the nuisances and in nearly all cases caused the defects to be remedied.

## **CONVERSION OF PAIL CLOSETS.**

The principal work in the department during the year was the conversion of Pail Closets to the Water Carriage System, but owing to a strike in the building trade and the War during the latter part of the year a large number of the notices served and those outstanding from the previous year were not carried out.

Notices served during 1914 numbered 976, and 814 closets were converted, or in hand at December 31st.

The conversion of Closets were mostly carried out in the South-East and South-West Wards, but a few have been commenced in the Central Ward, and practically the whole of Hoddlesden village has been converted.

The principal conversions which have been carried out, and which necessitated bi-weekly collections are : St. Paul's School, New Mill, Tythebarn Cottages.

## **OPEN ASHPITS.**

Twelve notices were served to abolish large open insanitary ashpits, and in every case the notices were complied with. With only few exceptions the whole of the large ashpits have been abolished and ash tubs substituted. the remaining cases being covered or situated in the country districts. 33 ashtubs have been provided in lieu of ashpits abolished.

## **HOUSING AND TOWN-PLANNING ACT.**

The whole of the houses scheduled under the above Act were inspected at least 8 times during the year and were found to be in a fair sanitary condition. Most of



them have been limewashed and cleansed, and the whole of the closets are now on the Water Carriage System. Two cases of overcrowding were discovered, but after a preliminary notice the nuisances were abated.

### **OVERCROWDING.**

During my periodical inspections of the poorer class property I came across several cases of overcrowding, two of them being very serious cases. I served legal notices and the nuisances were at once abated. In one case it was a large family who removed to a larger house and in the other cases they were lodgers who caused the overcrowding. In all these cases the houses were in a more or less dirty condition and I invariably find dirtiness in all cases of overcrowding. The streets where overcrowding and dirty bedding, &c. cases occurred were : Stoney Flats, Riley Street, Sudell Side Street, Corporation Street and Crown Street

### **MANURE PITS.**

I have inspected these pits periodically and found them generally free from large accumulations owing, I understand, to the scarcity of manure ; hence the frequent removal.

Careful inspection was made during the hot weather, and circulars were issued, asking the owners to co-operate with the Department in putting down the nuisance from flies, which is caused chiefly by the non-removal of manure. The occupiers of stables were always willing to comply with the request, and most of the manure pits were sprayed with Kerosene Oil after request.

### **NUISANCE FROM STEAM.**

Complaints were received from occupiers of houses in Starkie Street and Balle Street that nuisances were being caused through the emission of steam.

At Starkie Street Mill the nuisance arose from Water Coolers erected over the Mill lodge and steam being carried therefrom to the houses across the street.

At Darwen Paper Mill steam was emitted from the roof of the machine house through electric fans and carried across Balle Street.

Legal Notices were served to abate the nuisances, but nothing was done. Police Court proceedings were then instituted, but the Magistrates dismissed both cases.



The following Table gives a list of Inspections, Notices Served and result.

### SUMMARY OF WORK.

A. Number and Nature of Inspection Made.	No.	B. Number of Notices Served			C, Result of Service of Notice.		
		Legal.	Prelim- inary.	Nuis- ances Abated.	Remain- ing in hand.	Prosecutions.	
						Instituted.	Pending
Dwelling Houses including houses under Town Plan ning Act .....	1795	.....	.....	.....	.....	.....	.....
Factories and Workshops .....	244	5	12	12	2	.....	.....
Dairies and Cowsheds.....	104	9	13	20	4	.....	.....
Bakehouses .....	117	5	2	7	.....	.....	.....
Infectious Diseases .....	157	.....	.....	.....	.....	.....	.....
Smoke Observations .....	83	3	.....	3	.....	4	.....
NUISANCES.							
Defective Drains .....	54	17	39	49	5	.....	.....
„ Slop Gullies ....	39	9	41	37	2	.....	.....
„ Soilpipes, W.C.s etc. ....	15	2	17	13	2	.....	.....
„ Troughs and Downspouts .	77	6	81	70	7	1	.....
Insanitary Yards.....	14	2	16	12	2	.....	.....
Dirty Houses, etc.....	56	13	42	54	2	.....	.....
Dirty Closets.....	12	3	14	11	1	.....	.....
Accumulation of Refuse...	34	2	37	31	3	.....	.....
Nuisance from Animals....	3	1	4	3	.....	.....	.....
Insanitary Ashpits .....	12	12	.....	12	.....	.....	.....
Ashtubs without Covers...	27	2	29	23	4	.....	.....
Broken Sloppipes .....	33	4	37	30	3	.....	.....
Choked Waste Water Cls.	17	2	16	17	.....	.....	.....
Insufficient Ventilation ...	2	1	2	1	1	.....	.....
Insufficient Closet Accom.	3	3	.....	2	1	.....	.....
Overcrowding .....	6	6	2	6	.....	.....	.....
Dirty Bedding, etc.....	3	3	3	3	.....	.....	.....
Miscellaneous .....	9	3	9	7	2	.....	.....
Convert Pail Closets .....	994	976	.....	814	162	.....	.....
Emitting Steam .....	2	2	.....	2	2	2	.....

### FACTORY AND WORKSHOP ACT.

During the year systematic inspection of Factories and Workshops was carried out. 244 visits were made to Workshops, and 117 were made to Bakehouses. Several visits were also made to houses where out work is carried on. The whole of the premises were found to be generally kept in a sanitary condition.

Eight complaints were received from HM. Inspector of Factories : seven cases being for want of limewashing, and 1 case sanitary convenience out of order.

Nine Occupation forms were received from the Inspector, notifying new workshops or change of occupiers.

At several of the places visited I found nuisances which required attention, and after verbal or preliminary notice the matters were attended to.



The following gives the list of particulars in the form required by the L.G.B.

**FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOME-  
WORKERS PREMISES.**

**I.—INSPECTION.**

PREMISES.	NUMBER OF	
	Inspections	Notices. Written
Factories (including Factory Laundries) .....	20	1
Workshops (including Workshop Laundries) .....	244	16
Workplaces, Homeworkers Premises .....	3	0
Total .....	267	17

**NUISANCES UNDER PUBLIC HEALTH**

**II.—DEFECTS FOUND.**

	NUMBER OF DEFECTS.	
	Found.	Remedied
Want of Cleanliness .....	5	5
Want of Ventilation .....	0	0
Overcrowding .....	0	0
Want of Drainage of Floors .....	0	0
Other Nuisances .....	3	3
Sanitary Accommodation Insufficient, unsuitable, or Defec- tive (not separate for sexes) .....	2	1
	10	9

**III.—OTHER MATTERS.**

CLASS.	Number.
Matters Notified to H.M. Inspector of Factories .....	2

**FAILURE TO AFFIX ABSTRACT OF THE FACTORY AND  
WORKSHOP ACT (S. 133).**

Action taken in matters remediable under the Public Health Acts but not under the Factory Act (S. 5)—Reports of Action taken sent to H.M. Inspectors .....	8
Action taken in matters remediable under the Public Health Acts but not under the Factory Act (S. 5)—Notified to H.M. Inspector...	2
Underground Bakehouses (S. 101) .....	1



#### IV.—REGISTERED WORKSHOPS.

Workshops on Register (S. 131) .....	144
Workshop Laundries .....	4
Workshop Bakehouses .....	8
Other Workshops .....	9

Total Number of Workshops on Register .....	185
---	-----

At the end of the year there were the following Workshops on the Register, classified as follows :—

##### Clothing, &c.

Milliners.....	11
Tailors .....	7
Boots, &c. ....	10
Dress .....	13
Underclothing.....	7
Knitting .....	4
Clogs .....	9
	61

##### Food and Drink.

Confectionery .....	22
Bakers .....	9
Chip Shops .....	9
Pork .....	1
Restaurants.....	2
Mineral Water .....	1
	44

##### Conveyances, &c.

Wheelwrights .....	2
Blacksmiths .....	3
Saddlery .....	2
Coach Painter .....	1
Shoeing Forges .....	2
	10

##### Furniture, &c.

Upholsterers .....	3
Picture Framers.....	1
Wood Turner .....	1
Cabinet Maker .....	1
	6

##### Jewellery.

Jewellers .....	3
Watch Repairers .....	2
	5

##### Building, &c.

Joiners .....	6
Plumbers .....	3
Painters .....	6
	15

##### Engineering.

Engineers .....	3
	3

##### Laundry.

Laundries .....	4
-----------------	---

##### Other Trades.

Printer .....	1
Brass Worker .....	1
Monumental Works .....	2
Tin Plate Worker .....	1
Soap Maker .....	1
Clog Iron Maker .....	1
Cycle Repairing .....	1
Basket Making .....	1
Paper Bag .....	1
Florist .....	1
Reed Making .....	1
Flock Cleaning .....	1
Polish Making.....	1
Waste Sorting.....	2
	16



## DAIRIES, MILKSHOPS AND COWSHEDS ORDER.

During the year 114 visits were made to the Farms under the above Order, and they were found to be in a fairly clean condition. It was found necessary to serve notices for the following nuisances which were found to exist :—

Defective Roof of Shippon .....	1
Defective Drains .....	1
Insufficient Water Supply .....	2
Badly Constructed Gullies .....	9
Defective Flagging in Shippons .....	4
Defective Manure Pit .....	2
Insufficient Ventilation .....	3
To Limewash and cleanse .....	4

The number of Farms and Milkshops on the Register is

Farms .....	79
Milkshops .....	6

## BLACK SMOKE.

During the year 1914 I took 83 Smoke Observations, and the average emission of Black Smoke was 3 minutes per hour.

It has been necessary to serve legal notices in 3 cases, and institute proceedings in 4 other cases.

A Notice was served on the occupier of the Sunlight Laundry to raise chimney, after complaints had been received from owners of property adjoining. The nuisance appears to have been abated, as no further complaints have been made.

Complaints having been made with respect to the emission of Black Smoke from locomotive engines working between Spring Vale and Darwen Station, I have drawn the attention to the Railway Co. and Paper Mill Co., and the nuisances have been practically abated.

A full list of Mill Chimney Observations, together with other information, follows.



MILL.	Date of Observation.	Black.		Mod.		Not Smoking.		Notice Served.	Boilers.	Apparatus.	Remarks.
		Min.	Sec.	Min.	Sec.	Min.	Sec.				
Albert Spinning...	Jan'y	20...	4 15	20	45	35	0	April	2	Hand Fired.	
	March	26...	7 0	10	15	12	45				
Bowling Green ...	April	21...	2 30	16	45	40	45		3	Proctor's Stokers.	
Weaving	Dec.	15...	2 15	16	30	41	15				
Britannia	May	19...	3 30	21	15	35	15		2	1 Hand Fired	
Weaving	Sept.	22...	3 15	18	30	38	15			1 Bennis's Stoker	
Culvert Weaving	March	22...	3 0	16	0	41	0		1	Hand Fired	
	April	19...	1 30	16	45	41	45				
	May	19...	1 30	17	15	41	15				
Darwen Mills .....	July	13...	4 30	19	30	36	0		3	Hand Fired	
(Spinning)	Oct.	13...	3 15	21	0	35	45				
	Dec.	15...	3 0	18	30	38	30				
Ellenshaw .....	March	22...	4 30	21	15	34	15		1	Hand Fired	
(Weaving)	April	21...	3 0	19	45	37	15			Patent Bars	
	Sept.	21...	4 45	21	15	34	0				
Greenfield (New)	January	16...	3 45	19	45	36	30		1	Proctor's Stoker	
(Weaving)	Sept.	22...	2 0	16	45	41	15				
Greenfield (Old)...	January	16...	2 30	17	45	39	45		1	Proctor's Stoker	
(Weaving)	June	19...	3 0	19	30	37	30				
	Sept.	22...	2 30	17	30	40	0				
Hampden .....	January	16...	3 15	25	30	31	15		1	Proctor's Stoker	
(Weaving)	July	13...	3 45	20	45	35	30				
Highfield Weaving	March	24	4 0	20	30	35	30		1	Hand Fired	
	April	21	3 0	22	30	34	30				
Hanover Street ...	January	16...	2 30	18	45	38	45		2	1 Hand Fired	2 Firms use this chimney.
Weaving & Smith	May	18...	2 45	20	15	37	0			1 Bennis's Stoker	
Holme Weaving...	Feby.	17...	1 45	19	0	39	15		1	Proctor's Stoker	
	April	21...	2 30	20	15	27	15				
	October	13...	2 15	18	30	39	15				
Hope Weaving ...	Feby.	17	3 0	21	15	35	45		2	Hand Fired	
	April	21...	2 45	18	30	38	45				
	October	30...	10 30	32	15	17	15				
India Mill .....	Feby.	17...	2 15	16	30	41	15		4	Hand Fired	
(Spinning)	June	24...	4 0	20	30	33	30				
	August	25...	3 0	17	45	39	15				
	October	9...	11 0	27	30	21	30				
Perseverance ...	July	6	3 15	18	30	38	15		1	Hand Fired	
(Weaving)											
Marsh House .....	May	19	2 0	19	15	38	45		1	Hand Fired	
No 1 Mill .....	July	6	4 45	20	15	35	0		2	Whittaker's Stoker	
Spinning											
New Mill .....	April	21...	4 0	19	45	36	15		2	1 Hand Fired	
	August	25...	3 0	21	15	35	45			1 Bennis's Stoker	
	Dec	14...	3 15	27	0	29	45				



MILL	Date of Observation	Black.		Mod.		Not Smoking.		Notice Served.	Boilers	Apparatus.	Remarks.
		Min	Sec	Min.	Sec	Min.	Sec.				
New Bridge .....	March	24...	3 15	19	30	37	15		1	Whittaker's Stoker	
	June	23...	2 15	17	15	30	45				
	Sept.	21...	3 30	18	30	38	0				
Premier .....	Feby.	17...	4 30	21	45	33	45		1	Leach's Stoker	
	July	7...	3 30	17	45	38	45				
	Sept.	29...	4 30	20	15	35	15				
	October	13...	6 0	8	0	16	0	November			30 minutes observa- tion.
	Dec.	14...	4 30	21	15	34	15				
Primrose .....	Jany.	14...	2 0	16	45	41	15		1	Proctor's Stoker	
	May	18...	2 15	17	45	40	0				
	Dec.	15...	1 30	14	45	43	45				
Progress .....	June	20...	2 0	16	45	41	15		1	Whittaker's Stoker	
Rose .....	May	18...	1 0	19	30	37	30		1	Proctor's Stoker	
	Oct.	30...	6 15	30	30	23	15	November			
Springfield .....	January	16...	2 45	16	30	40	45		1	Hand Fired	
(Spring Vale)	April	21...	1 45	17	15	41	0				
	Sept.	21...	2 30	16	45	40	45				
Spring Vale Paper (Tall Chimney)	Oct.	29...	14 30	13	0	2	30			New Boilers are being put in at this mill	
Sudell Side .....	May	19...	2 45	18	30	38	45		1	Hand Fired	
(Weaving)	Dec.	14...	2 45	16	30	49	45				
South End .....	Jany.	20...	4 0	18	15	37	45		1	Proctor's Stoker	
	March	24...	4 15	20	15	35	30				
	June	23...	3 45	18	30	37	45				
Starkie Street ....	April	21...	3 45	20	15	36	0		1	Hand Fired	
	October	13...	3 0	22	45	34	15				
South Street.....	Feby.	17...	3 45	18	30	37	45		2	Hand Fired	
	July	7...	3 45	19	15	37	0				
	Aug.	25...	3 15	19	30	37	15				
	Aug.	14...	3 0	21	45	35	15				
Tackfield.....	Jany	16...	4 30	20	30	35	0		1	Hand Fired	
	June	24...	4 0	22	15	33	45				
Two Gates .....	Febry.	17...	2 0	19	15	38	45		1	Proctor's Stoker	
	July	7...	2 30	19	30	38	0				
Vale Brook .....	Jany.	16...	3 15	18	45	38	0		1	Proctor's Stoker	
	March	24...	2 30	18	15	39	15				
	June	23...	2 15	20	15	37	30				
	August	25...	2 15	16	45	41	0				
Whitehall .....	April	21...	2 15	18	30	39	15		1	Bennis's Stoker	
Waterfield .....	June	23...	4 15	22	15	33	30		1	Grimshaw's Stoker	
	August	25...	3 30	20	30	36	0				
	October	29...	6 45	17	0	36	15	November			



## **HACKNEY CARRIAGE DEPT.**

As Hackney Carriage Inspector for the Borough, I have issued the following Licenses during 1914.

Tramway Carriage Licenses .....	8
Hackney Carriage (Hansoms) .....	2
Motor Car (to ply for Hire) .....	1
Tramcar Drivers Licenses .....	64
Tramcar Conductors Licenses .....	55
Hackney Carriage Drivers .....	2
Tramcar Drivers' Badges issued .....	19
Tramcar Conductors' Badges issued .....	25

## **INSPECTION OF FOOD.**

The whole of the premises where food is prepared for consumption are frequently visited, and every precaution taken to see that only food in a good and wholesome condition is exposed for sale.

The fish and fruit stalls on the Market Ground are continually under observation, as well as the Fish Hawkers and Butchers Vans.

Periodical visits are made to the Railway Station to inspect meat imported from various places.

It has not been necessary to condemn any unsound food during the year.

## **ELEMENTARY SCHOOLS.**

The whole of the Schools were periodically inspected and reports on the sanitary condition were submitted to the Health Committee as occasion required.

## **CARAVANS.**

The Caravans which settle on the Market ground are always kept under close supervision and are always found to be kept in a clean condition.

There is no proper sanitary accommodation for these people at the Easter and Darwen Fairs, and I have complaints that much refuse, etc., is thrown into the mill lodge adjoining the Market ground.



Supplementary reports on all matters requiring attention are submitted monthly to the Health Committee, as well as recommendations for the service of legal notices for nuisances under the Public Health Act, 1875.

# **LIST OF POLICE COURT PROCEEDINGS DURING 1914.**

Date.	Name.	Offence.	Result.
1914 Feb. 13	No. 1 Spinning Co.	Black Smoke	5/- & Costs.
Dec. 3	Thomas Harwood	Premises without proper downspout and easing trough.	Order to Abate
,,	Starkie Street Mill	Emission of Steam	Dismissed
,,	Darwen Paper Mill	,,	,,
,,	Hope Mill	Black Smoke	10/- & Costs
,,	India Mill	,,	Dismissed
,,	Spring Vale Paper Co.	,,	5/- & Costs.



February, 1915.

Northern District.**TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.**

GENTLEMEN,

I beg to submit a Report to you of the work carried out in the District during the year ending December 31st, 1914, as required by order of the Local Government Board, Sub-clause (16). The District is comprised of North-East, North-West, and West-Central Wards.

During the year 23 new houses have been certified by the Surveyor's Department, 11 of these being situated in North-East Ward, and 12 in North-West Ward.

Six houses were closed in North-West Ward, and 2 West Central Ward.

The Table gives the total number of houses to January 1915,

West-Central Ward.....	947
North-East Ward .....	2307
North-West Ward .....	1935
Total .....	5189

The Population in the Northern District of the Borough, according to the 1911 Census returns, was 20,183, being distributed as follows :—

	Persons.	Families or Separate occupiers, 1911	Estimated Population Jan., 1915
West-Central Ward.....	3947	912	3975
North-East Ward .....	9181	2165	9223
North-West Ward .....	7055	1758	7728
Total .....	20183	4835	20926

The average number of persons per house according to the returns at Census, 1911, was about 4.17 persons.



## INFECTIOUS DISEASES NOTIFIED.

Ward	Scarlet Fever		Typhoid Fever		Diph- theria		Erys- pelas		Puerperal Fever		Con- sumption		Opthalmia Neo- natorum		Total	
	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914	1913	1914
West-Central	0	27	0	0	1	1	1	2	0	0	14	6	0	0	16	36
North-East	8	51	1	2	3	3	3	4	0	0	23	22	0	1	38	83
North-West	9	46	0	2	1	1	7	5	0	0	12	22	0	2	29	78
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	17	124	1	4	5	5	11	11	0	0	49	50	0	3	83	197
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Immediately upon receipt of notification of Infectious Diseases I visited the houses and ascertained if the patients were properly isolated. I also made a thorough examination of the premises, any defects discovered in the drainage or sanitary arrangements I caused to be remedied as quickly as possible.

### SCARLET FEVER.

During the year under review, 124 cases were reported, as against 17 in the previous year, and 5 in 1912. Owing to lack of bedroom accommodation and other reasons, 53 of the patients, or 43 per cent. of the cases reported were removed as quickly as possible to the Fever Hospital at Bull Hill. 28 were taken from North-East Ward, 12 from North-West Ward and 13 West-Central Ward. This procedure has the effect of reducing the number of centres of inspection, and certainly helped to prevent the spreading of the disease.

Several of the patients suffering from Scarlet Fever were discovered in school by the Medical Officer, others had been in contact with other patients during the incubation period, whilst a few patients seemed to have been infected in other towns.

In many homes the first patient to sicken was treated by the parents as simply suffering from a cold, with the result that other children were infected before a doctor was called in and the nature of the illness ascertained, as a result

there were 8 houses with 2 cases

„ „ 6 „ „ 3 „

„ „ 90 „ „ 1 case only

Immediately upon notification all that could possibly be done in the way of improved isolation, etc. was effected, and the houses were kept under supervision until they were declared free from infection.

### TYPHOID FEVER.

There were 4 cases reported. In two instances there was no doubt as to the source of infection, the patients having eaten mussels within a short time of being



taken ill, whilst the third person had eaten water cress. The fourth patient came to Darwen from Blackpool and it was ascertained that her mother had been taken to the Kirkham Sanatorium suffering from the disease. A trained Nurse was given charge of the latter case.

A Sanitary Pail with a tight fitting lid is sent to each house immediately upon Notification. The Nurse is instructed to place all discharges in the pail, which is removed each night and a clean one left in its place ; the contents of each pail are cremated on the destructor fires.

### **DIPHTHERIA.**

Five cases were reported during the year.

### **ERYSIPELAS.**

Eleven cases were reported during the year.

### **OPHTHALMIA NEONATORUM.**

Three cases were reported during the year.

At the termination of each case of infectious disease, the rooms were thoroughly cleansed and disinfected, and the bedding, &c. conveyed to Bull Hill Hospital and disinfected in the super-heated Steam Disinfector.

### **PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.**

There were fifty cases reported in my district.

Acting under instructions received from the Medical Officer of Health, I have visited each house in which a case of Consumption has occurred. Information in detail was obtained respecting each patient, and all possible precautions were taken to prevent the spreading of the disease, and in many instances printed instructions were also given. Where a patient was sent to a Sanatorium, removed, or died, the house and bedding was disinfected.

During the year 98 loads of Bedding, &c. were disinfected, as compared with 54 loads in 1913 and 38 loads in 1912. The following list gives the number and kind of articles treated :—

	Beds	Mattresses	Bolsters	Pillows	Quilts	Blankets	Sheets	Suits of Clothes	Carpets	Rugs	Curtains	Cushions	Shawls	Sundries	TOTAL
1909	87	38	67	106	72	95	37	3	8	4	10	11	13	315	866
1910	130	40	99	137	164	198	67	3	13	13	4	9	17	334	1228
1911	63	25	45	65	42	60	20	2	4	3	2	6	7	208	552
1912	31	21	22	39	25	22	9	3	1	11	2	7	9	57	259
1913	58	19	43	64	42	55	24	2	7	7	0	9	1	80	411
1914	110	25	91	108	124	166	46	3	2	5	0	12	14	129	835



In accordance with your instructions and the general order of the Local Government Board I have endeavoured, by systematic inspection, to keep myself informed in respect of any Nuisance existing in the District, as the following summary will show :—

### **SUMMARY OF NUISANCES DEALT WITH IN THE DISTRICT.**

New Drains Constructed.....	18
Defective Drains Repaired and Relaid.....	20
Waste Pipes Trapped and Disconnected from Drains.....	2
Defective Soil Pipes Repaired.....	2
Defective Water Closets Repaired.....	12
Defective Roofage, Downspouts and Easing Troughs Repaired.....	51
Insanitary Yards Flagged and Repaved.....	9
Dirty Houses and Premises Limewashed.....	31
Houses Insufficiently Ventilated and Overcrowded.....	4
Filthy Closets Limewashed and Cleansed.....	5
Insufficient or Insanitary Closet Accommodation.....	1178
Accumulations of Refuse Removed.....	9
Nuisances arising from the Keeping of Animals.....	1
Choked Waste Water Closets Cleansed and Repaired.....	13
Insanitary Ashpits Abolished and Tubs or Bins provided.....	1
Insanitary Manure Pits.....	33
Ashtubs provided with Covers .....	4
Street Pavement in Defective Condition.....	6
Broken Slop Pails Repaired.....	11
Dangerous Buildings Repaired or Rebuilt.....	8
Broken Ashtubs Repaired.....	4
Loads of Bedding Disinfected .....	98
Rooms Disinfected .....	110
Defective Floors in Houses.....	2
Broken Closet Receptacle Doors Replaced.....	4
Defective Water Pipes .....	8
Factory Chimneys Emitting Black Smoke beyond the Time Limit.....	5
Choked Sewer .....	6
Nuisances of a Miscellaneous Character.....	2

### **SUMMARY OF WORK DONE IN THE DISTRICT.**

Total Number of Nuisances Discovered in District.....	1372
Letters Written Respecting Nuisances and Pail Closets.....	1288
Preliminary Notices Served Respecting Nuisances.....	199
Legal Notices Served Respecting Nuisances.....	1275



Number of Re-Inspections.....	2782
Number of Nuisances Abated (including outstanding Nuisances Discovered in 1912 .....	1275
Number of Houses and Premises Inspected.....	2075
Number of Inspections of Refuse Tips.....	77
Number of Inspections of Schools and Public Buildings.....	150
Complaints Received and Investigated.....	95
Number of Drains, Water Closets, &c., tested.....	40
Number of Smoke Observations taken.....	84
Number of Inspections of Factories and Workshops .....	126
"    "    "    "    Lodging Houses .....	47
"    "    "    "    Bakehouses .....	80

### COMPLAINTS.

During the year under review 95 Complaints (written and verbal) were received from residents in the district ; these were enquired into as speedily as possible and remedied.

The great number of conversions of Pail Closets to the Water Carriage System led to the discovery of the cause of many of the complaints respecting bad smells, &c. The defects being found in the drains, and in some cases the sewers were found to be faulty. Waste Water Closets were often found to be choked, causing the drains to be full to overflowing with sewage. Under such conditions the sewage often finds its way into foundation walls and sometimes under the houses. Many water service pipes and gas pipes were found to be leaky. Some of the complaints received did not come within the scope of Sanitary Law, and did not, therefore, admit of my interference.

All the defects were remedied as speedily as possible.

### DIRTY AND OVERCROWDED HOUSES.

I again kept a sharp look-out for nuisances of this kind, and discovered 31 houses in a dirty condition, requiring whitewashing and cleansing. Legal notices were served under Sect. 46 P.H.A., 1875, and the work was ultimately done to my satisfaction.

A few houses were found in an exceedingly filthy condition, the bedding was also dirty and did not appear to have been washed for some considerable time. I cautioned the occupiers and ultimately reported each case to the Committee and legal notices were served with the proviso that legal proceedings were to be instituted in the event of non compliance with the requirements of the notices in the time stated



therein. I am glad to report that the service of the Notices had the desired effect, the houses and bedding being cleansed almost immediately.

It is necessary to pay visits very frequently to houses of this kind to prevent a recurrence.

The Medical Officer has accompanied me when requested to inspect dirty and overcrowded houses.

## **HOUSING AND TOWN PLANNING ACT, 1909,**

### **HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.**

In accordance with the above Regulations I have inspected the houses in my district to ascertain whether any dwelling-houses were in such a state as to be dangerous or injurious to health, thus rendering them unfit for habitation.

The properties registered previously as being very near the border line, have been inspected at least monthly, in accordance with the wishes of the Committee, and any nuisance discovered have been immediately attended to by the owners or occupiers.

### **HOUSES VOLUNTARILY CLOSED.**

The houses Nos. 3 and 4 Smalley's Court have been taken down voluntarily by the owner during the year, and the site forms part of the ground now covered by a new picture palace. These were old but spacious houses, the rooms were rather dark on account of the position of the houses and the close proximity of much higher buildings. It was impossible for direct sunlight to enter the houses. The approaches were narrow passages leading from Bolton Road in front, and Foundry Street in the rear.

1, 2, 3 Plough Yard ; 108, 112, 114 Duckworth Street (back to back houses). These houses have been closed voluntarily by the owner during the year, and after much altering converted into lock-up shop property.

This property was very old.

Nos. 1 and 2 Plough Yard were very dark on account of the obstruction to light, &c. by the high mill wall which stands some 13ft. 6in. away from the houses. The cellars were very dark and insanitary.

The drains have been repaired and the Pail Closets converted to the Water Carriage System at the following houses, which are on the Black List.—

73, 74, 75 Bury Street and 1, 2 and 3 Back Bury Street.



1, 2, 3, 4 John Street ; 1, 2, 3, 4, Ellison Court ; 6, 5, 7, Back Wood Street ; 93, 94, 95 Wood Street, 1 Hutchinson Court ; 513, 515, 517, 519 Blackburn Road.

### DAIRIES, COWSHEDS AND MILKSHOPS.

There are now 36 farms with 67 shippens in the Northern District. The whole of the farm buildings at Anchor Inn, Blackburn Road were taken down during December and a new Public House is being erected on the site. Holly Bank is no longer used as a farm, and no dairy cows are kept at Greenlands or Lower Trees Farms. There are about 500 cows stalled in the whole of the shippens in addition to young stock and oxen. Many visits were paid during the year, and the Dairies, Cowsheds and Milkshops Regulations strictly enforced. Improvements were carried out, viz. :

Lighting and Ventilation of Shippens Improved.....	3
Shippen Pavement Re-laid and Repaired.....	2
Drains Re-Constructed.....	2
Farm Yard Pavement Re-laid .....	1
Defective Drains Repaired .....	2
Dirty Shippens and Dairies Limewashed .....	8
Repairs to Roofage of Shippens .....	2
Easing Troughs and Downspouts Repaired and Fixed.....	3

I have continued to watch carefully the water supplies at the various farms.

The cowsheds are, without exception, attached to or in close proximity with farm premises. The cattle are turned out to grass early in the Spring, and are only brought up for milking morning and evening, until late in the Autumn when they are housed until the following spring. A few of the farmers still use fluffy shoddy waste for bedding purposes, this is sprinkled on the floor of the stall near the heel-stone and manure channel, it is very dusty and adheres to the animal when she lies down. Much of this dust must find its way into the milk ; the practice should be stopped in the interests of public health.

The shippens are often visited whilst the cows are being milked in order to ascertain if the necessary cleanly precautions are being taken, there is a marked improvement in this respect, but we have not yet reached the standard of cleanliness one would like to see ; however, most of the farmers appreciate the quiet instructive talks given when visiting, and seem very willing to put into practice the suggestions made.

When making my inspections I have delivered at each farm copies of the Regulations under the Dairies, Cowsheds and Milkshops Orders.



## BLACK SMOKE NUISANCE.

The nuisance arising from the emission of Black Smoke from Factory Chimneys has again received my attention. Eighty-four observations were taken, each of one hour's duration. This is a considerable reduction when compared with the number reported in 1913, accounted for by the closing of the mills for varying periods during the latter half of the year owing to the depression in trade, caused by the war. Whilst the mills were closed several owners had new apparatus fixed and repairs carried out, viz. :—

### BELGRAVE MILLS.

Two old boilers were taken out and one large new one fixed. New Economisers were also installed.

### CARR'S MILL.

Two new boilers with Bennis's Stoking Apparatus were fixed in lieu of the two old ones.

### WOODSIDE MILL.

Two new boilers were fixed in the place of two old ones. The Mechanical Stokers were not refixed.

OLIVE MILL.—The Boilers were repaired.

COTTON HALL SPINNING MILL.—New Economisers were fixed.

COTTON HALL WEAVING MILL.—Boiler repaired.

HEY FOLD.—New Fire Bars were fixed.

HINDLE STREET MILL.—Proctor's Stoker fixed.

whilst minor repairs to the boilers, &c. were carried out at several other mills.

The following is the time limit :—

One, Two, or Three Boilers, 5 Minutes per hour.

Four, or more Boilers, 7 Minutes per hour.

From the following particulars you will observe that Black Smoke was emitted in excess of the time limit from the Chimneys of 5 factories, as against 8 last year, and 6 in the previous year. Statutory Notices were served, calling for the abatement of the nuisance.

The Analysis of the Observations shows an average Emission of Black Smoke of 2.08 minutes per hour ; average for 1912, 1.91 minutes per hour. The average for 1911 was 2.22, 1910 was 2.12, 1909, 2.43 minutes, for 1908, 2.18, and for 1907, 2.15

Proceedings were taken in February against the owners of Eccleshill Pipe Works for allowing the chimney to emit black smoke in excess of the time limit in December, 1913. The magistrates made an Order to Abate the nuisance.



# Particulars of Observations taken during the Year.

MILL	Black Smoke	Moderate Smoke	Slight Smoke	None	Date Reported to Committee.	Legal Notices Served	No. of Boilers	Stokers	Remarks
Anaglypta ...	1½	5½	2	51	Feb.	—	2		...Hand Fired
Anchor ...	3½	4½	10	42½	April	—	1	Bennis's	
„ ...	1½	3½	4½	50½	July	—	1		
Barley Bank .	½	11½	36	12	Feb.	—	1	Proctor's	...Very low Chim- ney
„ ...	4½	47½	4	4	April	—			
„ ...	½	2½	9	48	May	—			
„ ...	6½	39½	7	7	Aug.	Sept			
„ ...	2	18	24	16	Dec.	—			
Bank Top ...	3½	9½	7½	40	Jan.	—	1	Proctor's	
„ ...	1½	21½	16	21	July	—			
„ ...	1½	20½	19	19	Nov.	—			
Belgrave ...	7	15	21½	16½	Sept.	—		Bennis's	...Stokers fixed to 1 boiler only
„ ...	2	17½	23½	17	Nov.	—			
Belgrave South ...	½	13½	28	18	Jan.	—	3	Proctor's	...Sprinkler Stokers only.
„ ...	3½	15½	14	27	June	—			
„ ...	7½	18½	21	13	July	Aug.			
Bottom Croft ...	1½	13½	14	31	Feb.	—	2		...Hand Fired.
„ ...	4½	28½	15½	11½	March	—			
„ ...	3	20½	23½	13	June	—			
„ ...	3	15½	17	24½	Augu.	—			
„ ...	2½	17½	15½	24	Oct.	—			
Brook Side ...	½	12½	21	26	Jan.	—	1	Bennis's	...Movable Bars
„ ...	1½	8½	25	25	March	—			
„ ...	0	4	40	16	Aug.	—			
„ ...	0	11	29½	19½	Nov.	—			
Carrs ...	6½	24½	19½	10	June	July	2	Bennis's	...Moveable Bars.
„ ...	0	14	32	14	Aug.	—			
Cobden ...	3½	24½	27½	5	Feb.	—	1	Proctor's	...Moveable Bars.
„ ...	0	2	20	38	April	—			
Cotton Hall ...	½	26½	30	3	Jan.	—	2	Bennis's	„
(Spinning)...	4½	39½	12	4	March	—			
„ ...	3	39½	15½	2	Aug.	—			
Cotton Hall ...	1	3	45	11	April	—	1	Proctor's	
(Weaving)									
Dove ...	5	14½	15½	25	Jan.	—	1		...Hand Fired.
„ ...	½	6½	9	44	Oct.	—			
George St. ...	3½	20½	29	7	Jan.	—	2	Proctor's	
„ ...	2½	21½	22½	13	March	—			
„ ...	1	16½	24½	18	Aug.	—			
„ ...	2½	18½	18½	21	Nov.	—			
Electricity Works ...	0	4	29	27	Jan.	—	2	Proctor's	
„ ...	½	11½	30	18	Nov.	—	3		
Hill Side ...	1½	7½	13½	37½	Jan.	—	1	Whittaker's	...Sprinkler only
„ ...	1½	13	22½	23	March	—			
„ ...	3½	5½	10½	41	July	—			
Hindle St. ...	1½	39½	14	0	Feb.	—	1	Whittaker's	...Sprinkler only.
„ ...	2½	15½	34	8	April	—			
„ ...	2½	41½	8	8	May	—			
„ ...	1½	38½	18	2	Dec.	—			



# Particulars of Observations taken during the Year.—Continued.

MILL	Black Smoke	M'der'te Smoke	Slight Smoke	None	Date Reported to Committee	Legal Notices Served	No. of Boilers	Stokers	Remarks
Hollins (Tall... Chimney)	2½...	9¾...	12	36	April	—	5	Eriths	...Grateless Stokers
Hey Fold ...	1¾...	10¼...	28	20	March	—	2		...Hand Fired
" ...	2	4½	15½	38	April	—			
" ...	1½	5½	15	38	June	—			
" ...	2¼	11¼	30	16½	Oct.	—			
" ...	2	14½	22½	21	Dec.	—			
Hollins Grove	2	6	37	15	April	—	2	Bennis's	
" ...	¼	8¾	24½	26½	Feb.	—			
" ...	3¼	11¾	31	14	June	—			
Lorne St. ...	2	10	18½	29½	March	—	1		...Hand Fired
" ...	1	11½	7½	40	Aug.	—			
" ...	1	9	11	39	Oct.	—			
" ...	4	10	15	31	Dec.	—			
Low'r Wood...	2	6	20	32	May	—	1	Proctor's	
Moss Fold ...	7	22	22	9	April	May	2	Proctor's	...Sprinkler only.
" ...	5	41	8	6	July	—	3		
Orchard ...	4	7½	17½	31	Feb.	—	3	Proctor's	
" ...	3¾	15¾	9½	31	Apl.	—			
" ...	1	7	33	19	May	—			
" ...	1	9	24½	25½	Dec.	—			
Provident ...	¼	12¾	31	16	Jan.	—	1	Bennis's	...Movable Bars, Self-feeding Sokes
" ...	1	13	23	23	March	—			
" ...	½	15½	28	16	Aug.	—			
Peel ...	1	12	25	22	Feb.	—	1	Leach's	...Sprinkler only.
" ...	0	4	25	31	April	—			
Prospect ...	4	7	17	32	Aug.	—	1		...Hand Fired.
" ...	1	7	7	45	Oct.	—			
Queen St. ...	1¾	16¼	14	28	May	—	1	Leach's	...Sprinkler's only
Springfield ...	½	4	8½	47	June	—	1	Proctor's	
Sunnyhurst ...	2¼	14¾	31	12	July	—	1	Hodgkinsons.	
Vale Street ...	¼	38¾	19	2	March	—	1	Bennis's	
" ...	1	16	31	12	May	—	1		
" ...	¼	7¼	22½	30	Nov.	—			
Woodiold ...	½	4½	33	22	June	—	1	Proctor's	
" ...	0	3	43	14	Oct.	—			
" ...	½	6½	14	39	Dec.	—			

## SCHOOLS.

During the year I paid many visits to the 13 schools situated in my district, particularly during each of the vacations, viz. : Easter, Midsummer, and Christmas, to ascertain if the cleansing was being done in accordance with your requirements, as issued prior to each vacation to the various school correspondents, by Mr. Bretherick, Secretary of Education.



The Schools, with one exception, were thoroughly cleansed, the walls swept down, all wood work and desks washed, and the floors scrubbed with hot water and soap.

There has been a general improvement in the Schools, but portions of the playgrounds at Lower Chapels, Earcroft, St. Cuthbert's, and Blackburn Road Schools still require asphaltting or flagging ; this would cause the schoolrooms to be very much cleaner than they are at the present time and prove helpful to the Caretakers.

The street in front of St. James' School has now been paved, the approaches are now in a sanitary condition.

During the year the following work was done, viz. :—

Walls, ceilings, etc., distempered and woodwork painted where necessary, at Central Council, St. James', Earcroft, St. George's, St. Cuthbert's and St. Edward's.

St. Edwards.—Ventilation improved by the fixing of new hopper ventilators in lower part of windows.

The closets at all Schools (with one exception) have been limewashed regularly.

The school windows are not cleaned often enough, and often look very dirty and dusty, when in that condition a great amount of light must be impeded.

### **TRIPERIES.**

These workshops are situated in West-Central Ward, in the centre of the town. Scrupulous cleanliness and very great care is necessary to avoid effluvia nuisances, which occur only when the attendants are careless. The waste material is removed daily, and cremated in the destructor. I visit these workshops regularly.

### **FACTORIES, WORKSHOPS, AND BAKEHOUSES.**

Systematic inspection of these places of employment has been carried out and the usual register kept. 126 visits have been paid to them. As previously stated in the Medical Officer's Report, this constant supervision has resulted in a general improvement.

The Bakehouses have received attention, 80 visits having been paid to them.

All reasonable precautions are taken in order that wholesome articles of food may be produced. There are three certified Underground Bakehouses in the Northern District.



The Limewashing, &c. was carried out in accordance with the provisions of the Factory and Workshop Act.

The following is a list of Workshops on the Register :—

Dressmakers & Milliners....	28	Marine Stores.....	3
Stocking Knitters .....	1	Plumbers .....	8
Cycle Repairers .....	3	Loom Slay Makers .....	1
Tin Plate Workers .....	4	Cooper.....	1
Saddlers .....	3	Joiners .....	4
Tailors.....	6	Tripe Dressers .....	3
Furniture Polish Manufac-		Blacksmiths .....	3
turers .....	1	Picture Framers .....	2
Upholsterers & Cabinet Ma-		Weighing Machine Repairer	1
kers .....	4	Waste Sorting .....	3
Wheelwrights .....	4	Herb Beer Manufacturers	
Boot, Shoe & Clog Makers .	30	and Bottlers .....	2
Confectioners & Bakers ....	40	Watch Makers & Jewellers	5
Electrical Engineer .....	1	Brush Maker .....	1
Gutscraper .....	1	Others .....	11

## FACTORIES AND WORKSHOPS.

### I.—INSPECTION.

Premises.	Inspection	Number of Written Notices.
Factories.....	86	4
Workshops .....	100	25
Workplaces .....	20	0
Total .....	206	29

## NUISANCES UNDER PUBLIC HEALTH ACTS,

### II.—DEFECTS FOUND.

	Number of Defects. Found.	Remedied.
Want of Cleanliness .....	10	10
Want of Ventilation .....	1	1
Overcrowding .....	0	0
Want of Drainage of Floors .....	0	0
Other Nuisances .....	3	3
Sanitary Accommodation, unsuitable or defective (not separate for sexes) .....	15	15
Total .....	29	29



### III.—OTHER MATTERS.

Matters Notified to H.M. Inspector of Factories .....	1
Action taken in matters referred by H.M. Inspector, as remediable under Public Health Acts (Notified by H.M. Inspector) .....	6
Not under Factory and Workshop Acts (Reports of Action sent to H.M. Inspector) .....	0
Others .....	0
Certified Underground Bakehouses in use at end of year.....	3

### IV.—REGISTERED WORKSHOPS.

Workshops on Register.	Number
Workshops .....	117
Bakehouses .....	43
Other Workshops .....	14
Total .....	174

### FOOD INSPECTION.

I have kept a sharp look out during the year over the various articles of food offered for sale for human consumption in the district, and have inspected the hawkers carts. I have had no cause for complaint.

### MUNICIPAL MODEL LODGING HOUSE.

The House is still very popular. The increase in the number of lodgers was maintained until August last when the average number of occupants dropped owing to many of the reservists and other men lodgers joining the Army. The hammocks which were put up temporarily last year have now been dispensed with and fourteen additional cubicles erected, there being ample air space. I have kept the house under supervision and have always found it in a satisfactory condition. The cubicles, walls, beds, etc. have been disinfected when necessary. I have also paid many visits about midnight and checked the books on each occasion, finding everything in order.

The following Table shows the average number of occupants for each month during the last ten years. —

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Jan. ...	62.8	75.1	80.5	77.2	76.0	70.2	75.2	72.1	111.3	121.0
Feb. ...	65.2	77.2	81.2	87.9	74.9	76.2	84.1	77.1	125.2	126.6
March .	70.1	73.8	93.2	87.2	73.2	70.2	80.4	95.3	127.2	125.6
April ...	80.2	81.1	95.1	88.2	79.5	79.2	86.5	102.6	127.4	129.4
May ...	79.2	84.2	86.1	90.2	83.2	79.2	78.0	96.0	126.2	127.2
June ...	75.1	96.2	82.2	93.2	79.2	78.1	71.5	86.1	131.8	122.3



July ...	64.4	80.3	84.3	85.9	84.1	78.7	69.2	77.1	130.1	124.1
August	70.2	60.2	86.1	80.5	81.9	72.1	70.2	91.5	132.9	108.1
Sept. ...	69.1	72.1	97.2	74.7	87.0	70.2	79.2	104.2	123.1	91.1
Oct. ...	69.1	81.1	90.2	76.9	74.2	72.6	82.1	113.5	128.1	94.2
Nov. ...	87.1	81.4	92.2	72.1	74.1	79.6	79.1	109.1	124.2	87.2
Dec. ...	74.0	75.3	78.3	69.1	80.1	78.2	75.2	108.9	122.4	79.2
Average	72.2	78.1	87.2	81.9	78.9	75.3	77.5	94.4	125.8	111.3

There is no other common Lodging House in the district, a distinct advantage from a health point of view, as the lodgers are brought together under one roof, and, therefore, more directly under our supervision.

### **SANITARY IMPROVEMENTS.**

The work of converting the obsolete insanitary pail closets to the Fresh Water Carriage System has been prosecuted with vigour during the year and at the time of writing there are only about 220 of these pails remaining in the Northern District. Many very defective drains were discovered and repaired, and it was also found necessary to relay several portions of the sewers owing to defects of various kinds ; however, we have the satisfaction of knowing that the drainage was never in better condition than at the present time, although much remains to be done.

The conversion of the closets to the Water Carriage System has certainly effected a great saving in the cost of collection of excreta by the nightsoil men.

### **INSANITARY CARAVANS.**

During February I received several complaints respecting a nuisance caused by a family of Gypsies (hawkers) living in two caravans on land situated between Earcroft School and the Co-operative Store. There were no sanitary conveniences and no water supply, and the whole of the refuse was thrown on the ground. I was obliged to report the matter to the Committee as I had been unable to persuade them to remove, however, after the service of a legal notice they left, and the refuse which had been deposited was removed.

### **MANURE PITS.**

According to your instructions I made an inspection during June to the Horse Manure Midden Steads in use in the Northern District, and submitted a detailed report at the meeting of the Health Committee. I again sent copies of the bye-laws relating to Midden Steads, to the various horse keepers in the district, and asked them to let me know each time the middens were emptied, so that the workmen could spray the walls, etc. with Kerosine, and destroy the larvæ of flies.



There was ready response to the letters issued, the middens being emptied weekly ; fewer complaints were received from occupiers of houses near the stables.

At each monthly meeting of the Health Committee, in addition to the printed Report I have submitted a detailed typewritten Report of the work carried out in my district.

During the year I have had to report various owners of property to the Committee for non-observance of legal notices which have been served upon them. Warning letters were sent in each by the Town Clerk.

I am pleased to say the letters were effectual in securing the abatement of the nuisances, and in no case was it necessary to institute legal proceedings.

Agreement Forms have been signed by Owners of Property in the Northern District for the Corporation workmen to convert Pail Closets to Water Carriage System, to carry out repairs, &c. to Back Yards, Drains, Waste Water Closets, &c. This work has been done under my supervision.

I am, Gentlemen,  
Yours obediently,

**C. R. WALSH, M.R., San. Inst., &c.,**  
Inspector of Nuisances.



SUPERINTENDENT'S OFFICE,

CLEANSING DEPARTMENT.

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

GENTLEMEN,

I beg to submit to you my Annual Report for the year January 1st to December 31st, 1914.

The following is a Summary of Work done from January 1st to December 31st, 1914.

	Tons.	Cwts.	Qrs.
House Refuse to Destructor .....	12340	15	2
Market Garbage to Destructor .....	291	13	0
Slaughter Garbage to Destructor .....	46	1	0
	12678	9	2
Clinkers Removed from Destructor .....		3,813	Loads.
Excreta to Sewage Works .....		4,756	,,
Sweepings to Various Tips .....		2,893	,,
Sweepings Deposited by Handcards at Destructor .....		2,493	,,
Gully Wreck to Various Tips .....		1,342	,,
Water Deposited on Streets .....		2,970	,,
Length of Streets Swept by Machine.....		2,767	Miles.
Length of Streets Swept by Hand .....		481	,,
Street Gullies Emptied.....		29,953	
Back Yard Gullies Emptied .....		17,372	
Excreta Pails Emptied.....		237,800	
Ashes Tubs Emptied .....		346,290	
Ashpits Emptied .....		1,151	
Ashtubs Added during the year .....		117	
Pails Brought in from Closet Conversions .....		1,777	

Yours obediently,

**JOSEPH NICCOL,**

Cleansing Superintendent.



## REPORT OF THE SLAUGHTER HOUSES, 1914.

To the Chairman and Members of the Slaughter House Committee.

GENTLEMEN,

Herewith I present to you for your consideration my Report for the year ending December, 1914, showing the number of Cattle, &c. Slaughtered.

### PUBLIC ABATTOIRS.

1914	.....	Beasts .	1609	Against 1913	.....	Beasts .	1488
"	.....	Sheep ...	8691	" "	.....	Sheep ...	8567
"	.....	Calves ...	207	" "	.....	Calves ...	123
"	.....	Swine ...	514	" "	.....	Swine ...	404
			<hr/> 11021				<hr/> 10582

Showing an increase of 439 for the year.

### PRIVATE PREMISES.

1914	.....	Beasts .	710	Against 1913	.....	Beasts .	709
"	.....	Sheep ...	4507	" "	.....	Sheep ...	4735
"	.....	Calves ...	189	" "	.....	Calves ...	159
			<hr/> 5406				<hr/> 5603

Showing a decrease for the year of 197.

### TRIPERIES.

The amount of prepared food in this department was less than in former years, owing to the scarcity during the summer. The quality, however, was good.

### BUTCHERS' VANS.

There are only 4 vans hawking meat at the present time, and these are kept in good condition, being constantly watched.

### TUBERCULOSIS.

During the year there has been examined for this disease 15 Beasts, viz. : 1 Bull, 8 Bullocks, and 6 Cows, most of which had been brought into the town to be slaughtered ; 15 Swine were also found to be Tuberculous. 9 came from Mellor and the remainder from Darwen farms. Two Beasts and one Pig were condemned and destroyed.

### MEAT UNFIT FOR FOOD.

There has been condemned during the year 4 Beasts, 1 Calf, 10 Sheep, 2 Swine, 2 Deer, and 2 tons, 15 cwt of Offal.

Licenses were issued to farmers and others for the Slaughtering of 2 Beasts and 48 Swine, all were inspected and found fit for food, with the exception of 1 Beast, which was destroyed.

I am,

Yours obediently,

**WILLIAM BICKERSTAFFE,**

Meat and Shops Inspector.



# INDEX.

	Page.
AREA OF BOROUGH.....	5
BATHS, NUMBER OF.....	31
BAKEHOUSES.....	34, 35
BEDDING DISINFECTED.....	55, 125, 138
BIRTHS.....	8 to 12
BIRTHS IN DIFFERENT WARDS.....	11
BLACK SMOKE.....	131 to 133, 143 to 145
BRONCHITIS, DEATHS FROM.....	53
CLOSET ACCOMMODATION.....	35
COMPLAINTS.....	140
DEATHS.....	51 to 55, 59 to 61, 74 to 77
DEATHS REGISTERED FROM INFECTIOUS DISEASES.....	47
DEATHS AT SCHOOL AGES.....	68
DEATHS IN VARIOUS WARDS.....	51
DEATHS, LANCASHIRE TOWNS.....	72
DEATHS OF INFANTS.....	60
DEATHS OF AGED PERSONS.....	55
DEATHS IN REGARD TO OCCUPATION.....	15 to 26
DIPHTHERIA.....	39
DISINFECTION.....	55, 125, 138
DRAINAGE.....	35
ERYSIPELAS.....	44
FARMS AND DAIRIES.....	131, 142
FACTORIES AND WORKSHOPS.....	128 to 130, 146 to 148
FEEDING OF INFANTS.....	56
FOOD INSPECTION.....	34, 148
HEALTH COMMITTEE, MEMBERS OF.....	4
HOUSE ACCOMMODATION.....	27, 28
HOUSES DIRTY AND OVERCROWDED.....	140
HOUSING AND TOWN PLANNING ACT.....	28, 141
ILLGITIMATE BIRTHS.....	10, 11, 59
INFANTILE MORTALITY.....	55, 56, 57, 58
INFECTIOUS DISEASES REMOVED.....	66
INQUESTS.....	50
LEGAL PROCEEDINGS.....	38
LODGING HOUSES.....	29, 148, 149
MANURE HEAPS AND FLIES.....	149
MARRIAGES.....	14
MEASLES.....	44, 45
MEDICAL RELIEF.....	5, 6
METEOROLOGY.....	78 to 92



	Page.
MILK SUPPLY.....	32, 33, 34
NATURAL AND SOCIAL CONDITIONS.....	5
NOTIFICATION OF INFECTIOUS DISEASES .....	39 to 47, 124, 126
"        "        "        "        IN WARDS.....	48, 124
"        "        TYPHOID FEVER.....	43
"        "        SCARLET FEVER.....	40, 43
"        "        INFECTIOUS DISEASES IN LANCASHIRE TOWNS.....	73
NOTIFICATIONS OF BIRTHS ACT.....	61, 62
NUISANCES.....	126
OCCUPATION .....	27
OFFENSIVE TRADES.....	37
OVERCROWDING .....	140
PARKS.....	29, 30, 31
PATHOLOGICAL SPECIMENS EXAMINED.....	49
PHTHISIS.....	45, 46
POOR LAW ADMINISTRATION.....	6
POPULATION.....	7, 8, 136
PNEUMONIA DEATHS.....	53, 54
PUERPERAL FEVER.....	44
RAINFALL AT WATERSHED.....	32
RATEABLE VALUE.....	5
REFUSE DISPOSAL.....	36
REPORTS, INSPECTORS OF NUISANCES.....	124 to 150
REPORT OF CLEANSING SUPERINTENDENT.....	151
REPORT OF MEAT INSPECTOR.....	152
RESERVOIRS.....	32
RIVER POLLUTION.....	38
SANITARY INSPECTION OF DISTRICT.....	36, 37, 38
SCHOOLS MEDICAL INSPECTION.....	97 to 121
SEWERAGE AND DRAINAGE.....	35
SLAUGHTER HOUSES.....	35, 152
SMALLPOX .....	44
SUB-SOIL, NATURE OF.....	5
SUMMARY OF MEDICAL OFFICER OF HEALTH'S REPORT.....	93 to 96
TRIPERIES .....	146
TABLES (GOVERNMENT).....	59, 65, 66, 67
VACCINATION .....	13
WATER SUPPLY.....	31, 32
ZYMOTIC DEATH-RATE.....	49