

[Report 1897] / Medical Officer of Health, Eccles Borough.

Contributors

Eccles (Greater Manchester, England). Borough Council.

Publication/Creation

1897

Persistent URL

<https://wellcomecollection.org/works/tuu97rau>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



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

BOROUGH OF ECCLES.



Annual Report

OF THE

Medical Officer of Health,

FOR THE YEAR 1897.

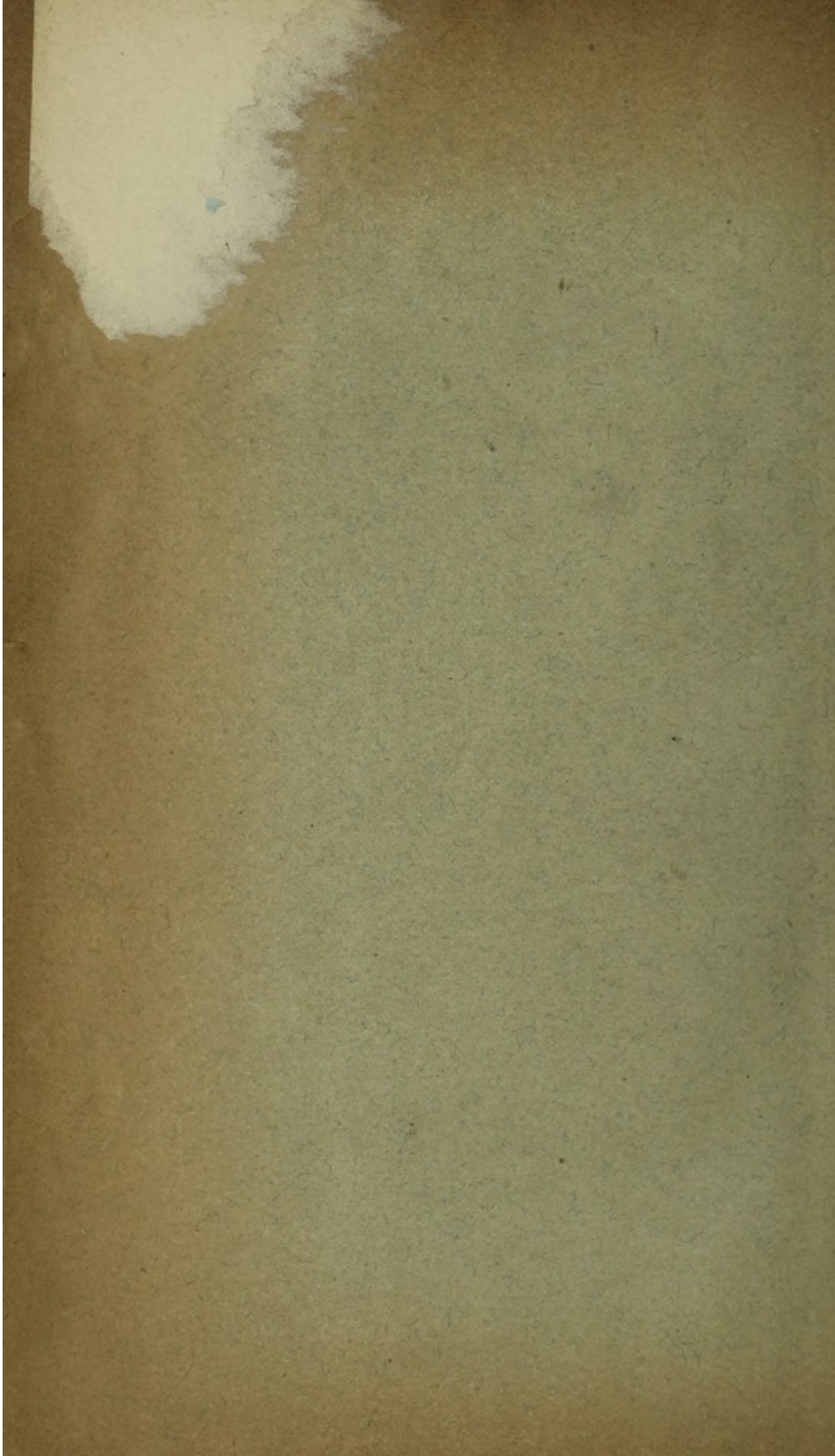
BY

J. H. CROCKER, M.D.,

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

ECCLES :

Printed in the Borough by WM. BOGG, 167, Church-st. & 30, James-st.



BOROUGH OF ECCLES.



Annual Report

OF THE

Medical Officer of Health,

FOR THE YEAR 1897.

BY

J. H. CROCKER, M.D.,

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

ECCLES :

Printed in the Borough by Wm. BOGG, 167, Church-st. & 30, James-st.

STATISTICAL SUMMARY,

—o—

Section I.—STATISTICAL SUMMARY...	...	...	...	...	7
„ II.—VITAL STATISTICS	...	...	...	...	9
„ III.—RECORD OF INFECTIOUS DISEASES AND MEASURES TAKEN TO PREVENT THEIR SPREAD	...	...	...	...	17
„ IV.—ORDINARY SANITARY WORK OF THE HEALTH DEPARTMENT	...	...	...	...	27
„ V.—SPECIAL SANITARY MATTERS	...	...	...	...	35
„ VI.—REPORT OF THE SUPERINTENDENT OF SCAVENGING AND CLEANSING COMMITTEE	...	...	...	...	42



HEALTH COMMITTEE, 1897.

—o—

Chairman

Alderman N. PARR, J.P.

Vice-chairman :

Councillor W. M. HAMILTON, M.D.

—o—

The MAYOR.

Alderman S. MELLOR, J.P., C.C.

Councillor GRINDLE (Portion of the year).

„ NUTTALL do.

„ PEARSON

„ PLEWS do.

„ W. SMITH, M.D.

„ THOMPSON (Portion of the year).

„ THORPE do.

„ WIMPORY. do.

Meetings—Second Wednesday in each month at 2-30 p.m.

—o—

INSANITARY PROPERTY SUB-COMMITTEE of the HEALTH COMMITTEE.

Chairman :

Alderman N. PARR, J.P.

Vice-chairman :

Councillor W. M. HAMILTON, M.D.

Alderman S. MELLOR, J.P., C.C.

Councillor GRINDLE (Portion of the year).

„ W. SMITH, M.D.

„ THORPE (Portion of the year).


HEALTH COMMITTEE, 1897.

Chairman: N. PARK, D.D.
Members: W. M. HAMILTON, M.D.

The Mayor
Commissioner of the Board of Health
Commissioner of the Board of Police
Commissioner of the Board of Fire
Commissioner of the Board of Education
Commissioner of the Board of Public Works
Commissioner of the Board of Prisoners
Commissioner of the Board of Lunatics
Commissioner of the Board of Charities
Commissioner of the Board of Relief

INSANITARY PROPERTIES SUB-COMMITTEE of the
HEALTH COMMITTEE.

Chairman: N. PARK, D.D.
Members: W. M. HAMILTON, M.D.
Commissioner of the Board of Health
Commissioner of the Board of Police
Commissioner of the Board of Fire
Commissioner of the Board of Education
Commissioner of the Board of Public Works
Commissioner of the Board of Prisoners
Commissioner of the Board of Lunatics
Commissioner of the Board of Charities
Commissioner of the Board of Relief



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29189202>



Annual Report of the Medical Officer of Health.

1897.

TO THE HEALTH COMMITTEE OF THE BOROUGH OF ECCLES.

GENTLEMEN,

I beg to lay before you the report of the sanitary condition of the Borough for 1897, in compliance with the orders of the Local Government Board.

During the year many new houses were erected, and 165 houses were granted certificates as fit for habitation.

The death-rate for the year was 16·7, which though higher than last year, is below the average for the past twenty years.

The zymotic death rate was 2·7, diarrhœa and measles to a great extent accounting for this figure.

In many cases the tenants and landlords are realising the advantages that water carriage has over the old privy midden system, and during the past year 100 such structures have been replaced by 112 water and 71 slop water closets.

The completion of the Town's Yard, and provision of your own team labour for scavenging the district, the laying down of the Liverpool-road sewer, commencement of the Irwell Park sewer, and relaying of Ellesmere-street sewer, are sources of congratulation.

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

I am, Gentlemen,

Your obedient Servant,

J. H. CROCKER,

Medical Officer of Health.

SECTION I.

—o—

STAISTICAL SUMMARY.

Statistical Summary, 1897.

—0—

POPULATION Estimated to the middle of the year	...	...	34,550
BIRTHS—Males, 422; Females, 478	...	...	900
ANNUAL RATE of BIRTHS per 1,000 of Population	...	...	26·0
DEATHS—Males, 304; Females, 305	...	...	609
ANNUAL DEATH-RATE per 1,000 of Population, after deducting the Deaths belonging to out districts	...	...	16·7
ZYMOTIC DEATH-RATE	...	...	2·7
EXCESS of REGISTERED BIRTHS over DEATHS	...	...	291
DENSITY—The Mean Density of the Borough is equal to	...	...	17·2
Persons per acre :—In BARTON WARD 14·9 :			
ECCLES WARD, 49·9; IRWELL WARD, 32·2 ;			
MONTON & PARK WARD, 10·0; PATRICROFT			
WARD, 37·6 ; WINTON WARD, 9·9,			
AREA.—The total Area of the Borough of Eccles is	...	...	2,008
			Acres.
RATEABLE VALUE	...	...	£118,573
Value of a Penny Rate	...	...	£475

SECTION II.

—0—

VITAL STATISTICS.

VITAL STATISTICS.

—0—

ESTIMATED POPULATION.—In addition to the natural increase of population as represented by the excess of registered births over deaths, the fact that immigration into the Borough is very considerable must be taken into consideration in order to arrive at a fairly correct estimate of the population. In June last a careful count was made of all the houses in the different Wards of the Borough, and it was found that there were 6,910 inhabited and 114 uninhabited houses. Assuming that the average occupancy is the same as when the Census was taken (1891) we obtain a Population of 34,550, and this has been taken as the Population for the year.

Showing Acreage, Number of Houses, and Population of the various Wards.

Ward.	Acreage.	Inhabited Houses, 1897	Inhabited Houses, 1891	Empty Houses, 1897	Empty Houses, 1891	Population.	
						Estimated 1897	Census 1891.
BARTON	378	1128		19		5640	
ECCLES... ..	106	1058		11		5290	
IRWELL	167	1076		24		5380	
MONTON and PARK	528	1058		37		5290	
PATRICROFT ...	170	1281		13		6405	
WINTON	659	1309		10		6545	
TOTALS FOR THE BOROUGH	2008	6910	5931	114	266	34550	29606

BIRTHS.—The number of Births registered during the year was 900, as against 958 for 1896. Of these 422 were males, and 478 females; this gives a Birth-rate of 26·0 per 1,000 of the Population, as against 28·34 for 1896 and 28·57 for 1895. There were 11 illegitimate births, being 1·2 per cent of the total number of births.

DEATHS.—Of the 609 deaths registered as having occurred within the Borough, 304 were males and 305 females; 75 deaths occurred at the Barton Union Workhouse, and of these 30 were of persons belonging to outside districts. One death of a person belonging to Leigh occurred in the Irwell Ward, and two deaths belonging to this Borough occurred at the Ladywell Sanatorium. After correcting for the above, the Death-rate for the year is 16·7 per 1,000 of the Population, as against 15·79 for 1896. The mean Death-rate for the five years ending 1895 is 17·6.

Births and Deaths for the different Wards and Institutions.

Ward.	Total Deaths.	Death rate per 1,000.	Births.	Birth rate per 1,000.
BARTON	91	16.1	168	29.7
ECCLES	77	14.5	127	24.0
IRWELL	104	19.3	106	19.6
MONTON & PARK ...	66	12.4	81	15.3
PATRICROFT	95	14.8	187	29.1
WINTON	99	15.1	231	35.2
BARTON UNION WORKHOUSE.	75			
ECCLES & P. HOSPITAL	4			
TOTALS for the BOROUGH	611	16.7	960	26.0

In the above table two deaths which occurred at the Ladywell Sanatorium have been placed to their respective Wards.

The Death-rate varies from 12.4 in the Monton and Park Ward to 19.3 in the Irwell Ward.

Measles was prevalent during the months of October and November, and Diarrhoea was most prevalent during August and September.

Deaths which occurred within the district of persons not belonging thereto.

Place of Death.	From Leigh.	From Stretford	From Worsley	From Swinton.	From Flixton.	From Urmston	From Clifton	TOTAL
IRWELL WARD.	1	...	..	...	...	...	...	1
UNION WORKHOUSE ..	...	12	6	7	2.	2	1	30

Monthly Returns of Births and Deaths.

	Diphtheria	Scarlet Fever	Measles.	Enteric or Typhoid Fever	Puerperal Fever.	Whooping Cough	Diarrhoea and Dysentery	Rheumatic Fever	Influenza	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Injuries	Erysipelas.	All other Diseases	DEATHS.			BIRTHS.			
																Males	Females	Total	Males	Females	Total	
January.....						1	2			1	11	6	4	1	19	22	24	46	32	42	74	3
February.....						4	2			6	12	3	1		22	23	27	50	28	29	57	
March.....						2	3			6	9	4	1		20	23	22	45	34	38	72	3
April.....	1			1					2	8	14	8	2		21	29	26	55	45	36	81	2
May.....	2						1		5	6	9	4			29	32	24	56	33	45	78	
June.....					1	1	2	1	1	5	10	4	1		17	20	24	44	31	37	68	
July.....			1			4	2	1	1	4	5	3	2		20	19	24	43	50	45	95	
August.....				1	1		19				5	4	5		24	27	32	59	41	41	82	
September.....			1			1	12			4	9	3	1		19	26	24	50	33	48	81	3
October.....	1	1	5	1			5			5	14	1			27	29	31	60	25	40	65	
November.....		2	8					3		3	10	2	4		32	34	30	64	47	35	82	
December.....	1		2				3	1	2	8	7			1	14	22	17	39	23	42	65	
TOTALS...	5	3	17	3	2	13	51	6	11	56	115	42	21	2	264	306	305	611	422	478	900	11

MORTALITY IN AGE GROUPS:—

Deaths under one year	...	...	...	...	...	168
Do. 1 year and under 5 years	...	...	...	...	...	80
Do. 5 years do. 15 years	...	...	...	...	...	19
Do. 15 years do. 25 years	...	...	...	...	...	22
Do. 25 years do. 65 years	...	...	...	...	...	197
Do. over 65 years	...	...	...	...	...	125
Total	...	...	...	...	...	611

INFANTILE MORTALITY :—

The total number of deaths under one year was 168; this gives a rate of 186 per thousand births, as compared with 144 for 1896, and 168 for 1895.

ZYMOTIC DEATH-RATE :—

The number of deaths due to the "seven principal zymotic diseases," * usually classified under this heading was 94. This gives a zymotic death-rate of 2.7 per 1,000 of the population, as compared with 3.0 for 1896. The mean for the five years ending 1895 was 2.2.

Scarlet Fever.—Three deaths of children were due to this disease, one being below and two above five years of age. One death occurred in the Ladywell Sanatorium.

Measles.—17 deaths were due to this disease, 15 of these being of children below the age of five years.

Enteric or Typhoid Fever.—Three deaths, of which one occurred in the Ladywell Sanatorium.

Diphtheria.—Five deaths were due to this disease, four being of children below five years of age.

Whooping Cough.—There were 13 deaths, all being below five years of age.

Diarrhœa and Dysentery.—There were 51 deaths, 45 being below the age of five years.

INFLUENZA.—Eleven deaths were attributed to this disease, which was most prevalent during the second quarter of the year.

ERYSIPELAS.—There were two deaths, both being of children under 5 years.

BRONCHITIS, PNEUMONIA, AND PLEURISY.—The deaths from these diseases numbered 115. This gives a death-rate of 3.3 per 1,000 as compared with 2.24 during 1896, and 2.96 during 1895. The mean of the five years ending 1895 is 1.4.

PHTHISIS.—Fifty-six deaths were registered as being due to this disease. This gives a rate of 1.6 per 1,000 of the population.

INQUESTS.—There were 25 inquests held during the year,

* Smallpox, measles, scarlet fever, diphtheria, whooping cough, fever (typhus, typhoid, and continued), and diarrhœa.

Total Deaths and Death-rates from all Causes. Children under 5 years of age. Zymotic and Pulmonary Diseases.

For the Years 1876—1897.

Year.	Total Deaths	Rate per 1000	Zymotic Diseases	Rate per 1000	Deaths under 5	Rate per cent.	Phthisis	Rate per 1000	Acute Chest Diseases	Rate per 1000
1876	423	25.4	66	3.9	158	37.5	53	3.1	100	6.0
1877	440	22.7	89	4.6	175	40.0	46	2.3	84	4.3
1878	443	22.2	68	3.4	196	44.2	49	2.4	90	4.5
1879	396	19.2	28	1.3	177	43.8	60	2.9	116	5.6
1880	437	20.5	87	4.0	176	43.7	59	2.7	96	4.5
5 years average	427	22.0	67	3.4	176	41.8	53	2.6	97	4.9
1881	383	17.4	56	2.5	155	40.4	66	3.0	70	3.1
1882	434	19.0	59	2.5	190	49.0	46	2.0	113	4.9
1883	371	15.7	53	2.2	173	47.0	45	1.9	90	3.8
1884	399	16.4	83	3.4	181	45.0	41	1.6	87	3.5
1885	419	16.6	54	2.1	157	37.0	46	1.8	91	3.6
5 years average	401	17.0	61	2.5	171	43.6	48	2.0	90	3.7
1886	419	16.1	47	1.8	186	44.1	40	1.5	93	3.5
1887	475	17.8	90	3.3	219	42.6	41	1.5	127	4.7
1888	437	15.9	54	1.9	183	41.8	49	1.7	100	3.6
1889	465	16.4	79	2.7	213	45.8	49	1.7	93	3.2
1890	603	20.8	50	1.7	218	36.1	50	1.7	142	4.9
5 years average	479	17.4	64	2.2	203	42.0	45	1.6	111	3.9
1891	683	22.3	94	3.1	292	42.7	43	1.4	143	4.7
1892	554	18.1	35	1.1	205	37.0	50	1.6	93	3.0
1893	608	18.6	82	2.5	247	40.6	39	1.2	113	3.5
1894	443	13.0	49	1.4	183	41.3	47	1.4	74	2.3
1895	552	16.2	104	3.1	239	41.4	54	1.6	97	2.9
5 years average	568	17.6	72	2.2	233	40.6	45	1.4	104	3.2
1896	551	15.7	104	3.0	221	40.1	50	1.4	76	2.2
1897	*580	*16.7	94	2.7	248	42.7	56	1.6	115	3.3

* After adding the two Deaths of persons belonging to the Borough which occurred at the Ladywell Sanatorium, and after deducting the 31 deaths which occurred in the Borough of persons belonging to outside districts.

TABLE OF DEATHS during the Year 1897 in the Borough of Eccles Urban Sanitary District, classified according to Diseases, Ages, and Localities.

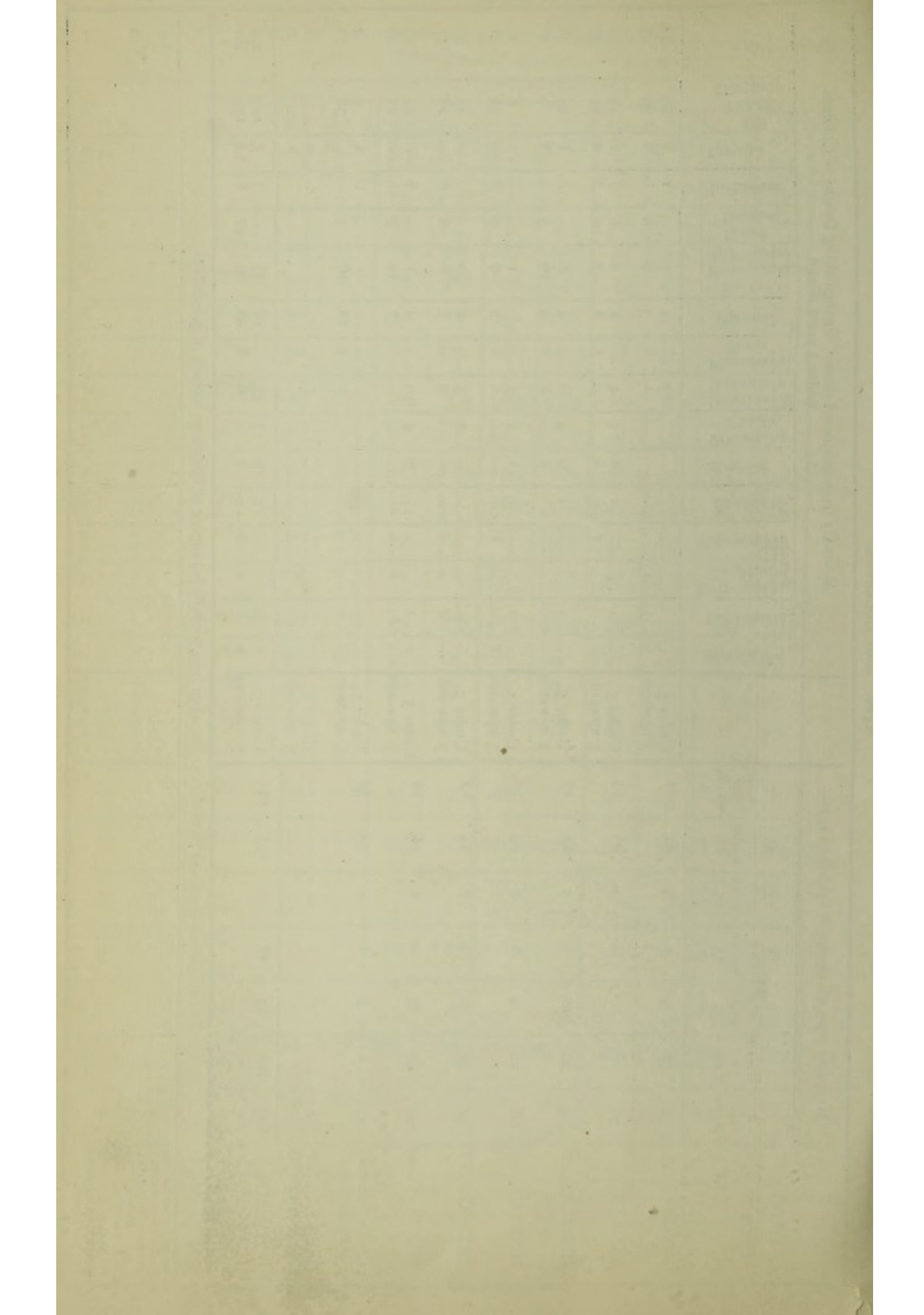
Mortality from all causes at subjoined ages.										Mortality from subjoined causes, distinguishing Deaths of Children under 5 years of age.															
Wards and Institutions. (a.)	At all Ages (b.)	Under 1 Year. (c.)	1 and under 5 (d.)	5 and under 15 (e.)	15 and under 25 (f.)	25 and under 65 (g.)	65 and upwards. (h.)	(i.)	Scarlatina	Diphtheria	Fevers.		Erysipelas.	Measles	Whooping Cough	Diarrhoea & Dysentery	Rheumatic Fever	Phthisis	Bronchitis & Pleurisy	Heart Disease	Influenza	Injuries	All Other Diseases	Total	
											Enteric or Typhoid	Puerperal													
BARTON	91	35	9	1	3	31	12	Under 5 upwards	.....	.....	.....	.....	.....	.....	.....	15	.....	1	1	7	.....	1	1	19	44
ECCLES	76	18	11	4	4	26	13	Under 5 upwards	.....	1	.....	.....	1	2	1	4	.....	1	1	2	.....	1	1	15	29
IRWELL	104	30	28	3	1	25	17	Under 5 upwards	.....	1	.....	.....	1	9	4	8	.....	4	8	8	.....	.....	1	22	58
MONTON	66	12	3	2	2	29	18	Under 5 upwards	.....	1	.....	1	.....	1	.....	2	3	1	3	1	.....	3	1	22	51
PATRICROFT	94	32	11	3	7	24	17	Under 5 upwards	.....	1	.....	.....	.....	.....	2	5	.....	2	2	9	.....	.....	.....	25	43
WINTON	99	40	13	2	2	26	16	Under 5 upwards	.....	1	.....	.....	.....	3	4	10	.....	.....	7	7	.....	1	.....	24	53
BARTON UNION WORKHOUSE.	75	1	3	1	2	36	32	Under 5 upwards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	16	3	.....	.....	38	71
ECCLES & PATRICROFT HOSPITAL	4	...	2	2	...	...	...	Under 5 upwards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	2
TOTALS. ...	609	168	80	18	21	197	125	Under 5 upwards	1	4	.....	.....	2	15	13	45	.....	10	35	.....	3	7	113	248	
									1	1	2	2	.....	2	.....	6	.....	46	80	42	8	14	151	361	

Deaths occurring outside the District among persons belonging thereto.	2	...	1	1	Under 5 upwards	2
Deaths occurring within the district among persons not belonging thereto.	31	1	18	12	Under 5 upwards	1	3	4	1	22	31	

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

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

Deaths occurring outside the District among persons belonging thereto.	2	...	...	1	1	...	...	Under 5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths occurring within the district among persons not belonging thereto.	31	...	...	...	1	18	12	Under 5 upwards	...	...	...	...	...	...	...	...	1	...	3	...	4	...	...	1	22	31



SECTION III.

—o—

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

**Record of Infectious Diseases and Measures taken to Prevent
their Spread.**

—0—

NOTIFICATION OF INFECTIOUS DISEASES.—The total number of cases notified during the year, was 164 as compared with 307 for 1896, and 302 for 1895, 421 for 1894, and 478 for 1893. As will be seen by the Tables the majority of notifications were of scarlet fever. All the notifications were sent in by medical practitioners :

Zymotic Diseases.

Diseases.	1891.		1892.		1893.		1894.		1895.		1896.		1897.	
	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths
SMALL-POX ... ..	..	..	..	..	10	..	3	..	1	..	..	..	..	..
SCARLET FEVER ...	44	4	86	2	315	9	311	6	215	8	186	11	91	3
DIPHTHERIA... ..	29	3	29	7	43	6	36	7	28	..	25	3	23	5
CROUP ... ..	..	..	..	..	..	..	2	4	1	..	..	..	..	..
ENTERIC FEVER ...	31	7	34	3	72	8	34	7	38	4	66	9	20	3
PUERPERAL FEVER	5	..	..	..	9	2	6	2	4	1	5	2	3	2
MEASLES ... ..	..	40	..	8	..	7	..	..	..	26	..	43	..	17
WHOOPING COUGH	..	32	..	3	..	10	..	7	..	13	..	12	..	13
DIARRHŒA and } DYSENTERY ... }	..	8	..	12	..	38	..	20	..	53	..	26	..	51
ERYSIPELAS ... ..	..	..	..	..	29	2	29	3	15	1	25	1	27	2
TOTAL	109	94	149	35	478	82	421	56	302	106	307	107	164	96

Monthly Return of Notifications of Infectious Diseases.

	Membranous Croup	Scarlet Fever	Small-pox.	Diphtheria	Enteric Fever	Puerperal fever	Erysipelas	Totals.
January	4	...	...	1	...	...	8
February...	...	3	...	...	1	...	...	4
March	10	...	1	2	1	3	17
April	4	...	5	3	...	...	12
May	6	...	4	1	...	..	12
June	3	...	2	1	...	1	7
July	4	...	2	2	1	2	11
August	8	...	3	2	1	1	15
September.	...	4	...	1	2	...	1	8
October	12	...	4	1	...	5	22
November	24	...	...	3	...	9	36
December	9	...	1	1	..	2	13
Totals	91	...	23	20	3	27	164

Distribution of Infectious Diseases into Wards

Diseases.	BARTON		ECCLES		IRWELL.		MONTON and PARK		PATRI- CROFT.		WINTON.		Total.	
	Total Notified	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Cases Notified	Deaths
SMALL-POX ... ..	..	..	...	...	...	...	...	...	...	...	...	...	...	...
SCARLET FEVER	13	...	9	...	10	...	13	1	29	1	17	1	91	3
DIPHtheria	2	..	2	1	3	1	9	1	3	...	3	1	23	5
ENTERIC FEVER	3	1	3	...	5	...	1	...	4	...	4	1	20	3
PUERPERAL FEVER ...	..	..	1	1	...	...	1	1	...	...	1	...	3	2
MEASLES .. ... ..	...	...	...	3	...	10	...	1	...	...	...	3	...	17
WHOOPING COUGH ...	...	..	...	1	...	4	...	2	...	2	...	4	...	13
DIARRHŒA and DYSentery. }	...	16	...	4	...	10	...	4	11	7	...	10	...	51
ERYSIPELAS	4	...	4	1	2	...	5	...	10	...	2	...	27	2
TOTAL	22	17	19	12	20	26	29	10	46	11	28	20	164	96

AMOUNT OF HOSPITAL ISOLATION OF INFECTIOUS DISEASES.—

There were 48 cases removed to the Isolation Hospital, 43 cases of scarlet fever 3 of typhoid fever, and 2 of diphtheria. Thus 29·2 per cent of the notified cases were removed, against 33·5 per cent for 1896, and 28 per cent for 1895.

DISINFECTION OF PREMISES.—The method of disinfection of infected premises has been previously described, and it is sufficient to report that in all cases of Scarlet Fever, the walls, floors, and ceilings of infected rooms are sprayed with a solution of chlorinated lime, and the rooms are then fumigated with sulphurous acid gas, obtained by burning sulphur candles. In other cases of infectious diseases, which occurred during the year, fumigation by sulphur was adopted and followed by general cleansing.

All infected bedding etc. is removed to the Ladywell Sanatorium to be dealt with in the steam disinfecter, 78 lots were removed and so treated during the year free of cost to the householders.

PREVENTIVE MEASURES IN SCHOOLS.—In all cases of infectious disease where any of the inmates attend schools, the school authorities are communicated with by special circular and requested not to admit any of them until they receive notice to the effect that the house has been properly disinfected.

Several of the public schools were closed during a portion of November on account of the epidemic of Measles.

SPOT MAP.—Attached to this report will be found a spot map, indicating by red spots the localities of the cases of Scarlet Fever notified during the year, and by black spots those of Typhoid Fever.

PREVALENCE AND DISTRIBUTION OF ZYMOTIC DISEASES.

SMALL POX.—No cases of this disease occurred in the Borough during the year.

SCARLET FEVER.—The number of cases notified during the year was 91. The notifications came from all parts of the Borough.

The cases removed to the Sanatorium during the year as well as in 1896-5 have assisted probably in checking the spread of the disease to some extent, but the wave-like rise and fall common to epidemics of this disease is shown by the notified cases in this Borough for the years, respectively from 1891 to 1897, viz :— 44, 86, 315, 311, 215, 186, 91.

As will be seen by the table of monthly notifications, the greatest numbers followed the hot weather this year, viz : 12 in October, and 24 in November.

DIPHTHERIA.—There were 23 cases of Diphtheria notified and five deaths occurred. Cases occurred in every ward ; there were 9 cases notified in Monton & Park Ward.

During the past year many medical men have taken advantage of the arrangements entered into by the Corporation with the authorities of the Owens College. In 25 cases of sore throat where the report was, "no Diphtheria bacilli found" upon enquiry after the illness, I learnt from the medical men, that they did not consider them cases of Diphtheria. Twelve reports as to the presence of Diphtheria bacilli were received and in all these the diagnoses were confirmed clinically.

TYPHOID FEVER.—Twenty cases of this disease were notified during the year, and 3 deaths occurred. Three cases were removed to the Ladywell Sanatorium. The disease was not localised to any particular area.

THE SERUM TEST.—A copy of the following circular letter was sent to every medical practitioner in the Borough.

PUBLIC HEALTH OFFICE,
TOWN HALL, ECCLES.

APRIL 1897.

DEAR SIR,

Recent investigations by Professor Delépine have quite supported those published by Widal as to the characteristic effect on a cultivation of Typhoid germs upon the addition of a little serum from a patient suffering from Typhoid Fever.

The insidious nature of the onset of this disease, and the difficulty in differentiating it from some cases of Meningitis, Ulcerative Endocarditis, prolonged Influenza, &c., as you are aware, often render a correct diagnoses difficult or impossible for several days by ordinary clinical examination.

As a result of this difficulty cases are not notified sufficiently early to the Public Health Office to enable the Medical Attendant and the Sanitary Authority to take the most effectual measures for preventing communication of the disease to other people, or to give the patient the full advantages of Hospital accomodation when necessary.

Fortunately by means of this recent discovery a drop of blood from the suspected case will by bacteriological examination as a rule, settle the question as to the presence or absence of typhoid fever.

Arrangements have been made by the Sanitary Committee with the Council of the Owens College and Professor Delépine similar to those which have worked so well in the case of Diphtheria.

A number of Pipettes are kept at the Public Health Office in the Town Hall, by means of which a small amount of blood may be obtained from a suspected case for transmission to Professor Delépine. Full particulars and instructions accompany these.

Medical men are requested to be careful to fill in the particulars asked for, as no bacteriological examination will be made in the absence of sufficient information.

If the case is notified as Typhoid Fever the fee of 2s. 6d. will be paid, even if the bacteriological examination gives a negative result.

If no bacteriological examination is requested, this will be regarded as a proof that the case reported admits of no doubt.

Professor Delépine wishes it to be understood that the diagnosis can only be obtained through the Public Health Office, and this will be given to the Medical Attendant only.

If the Pipette reaches Professor Delépine before 1 p.m. (10 p.m. on Saturdays) the result will be known the next day. No diagnoses will be given on Sunday.

The expense of the bacteriological examination will be defrayed by the Corporation, and it is hoped that full advantage will be taken of the opportunities thus afforded at the earliest possible period of the illness.

MEDICAL OFFICER OF HEALTH.

This test has proved very serviceable in many doubtful cases and it is a valuable adjunct to diagnoses in this disease. In 17 cases no reaction was shown and the after course of the illnesses showed the ailments not to be typhoid fever. In 3 cases the reaction was given and these turned out to be typhoid fever.

ELLESMERE STREET.—As a result of the special report on the 16 cases of typhoid fever which occurred in this street (see last year's report) instructions were given to the owners to adopt some form of water carriage, and dry ashpits, or tubs, in the place of privy middens. These orders were carried out in all but that of the property of one owner who, after agreeing to do so, eventually refused.

In consequence of the owner of five houses in Ellesmere street, not having complied with your notice to substitute water closets for the existing privy middens he was summoned before the Borough Magistrates, who after hearing the evidence pro. and con, made an order similar to that of the Local Authority. An appeal was made to the Court of Quarter Sessions, and the trial came off on Jan. 12th, 1898, and lasted the whole of the day. It was stated in evidence that the pits were emptied and disinfecting powder (15 per cent Carbolic powder) put in immediately the cases were notified. Also that special pails were provided with disinfectants and all typhoid excreta, etc., placed in these pails from the time of notification. At a later period a large quantity of chloride of lime was put in the pits and they have been regularly emptied ever since. As the entrance to the privy in each case is in the private yard of each house, and the door of the yard is generally bolted, it follows that probably no one uses the privy but some occupant of the house. Repeated inspections and inquiries were made at each house after a notification of typhoid fever, so that if any one had been ill in the houses, with even a mild attack of this disease, there is every probability that it would have been discovered as the people were alarmed and the medical men of the neighbourhood were aware of the number of cases in the street. On October 22nd, 1897 thirteen months after the last case was notified, the Sanitary Inspector procured some of the filth from between the bricks at the sides and floor of two of the pits, and this was forwarded to Professor Delépine, at the Owens College, Manchester.

The following report was received from Professor Delépine :—

Bacteriological Laboratory,
The Owens College, Manchester,

January 3rd, 1898.

REPORTS 27 AND 28.

DEAR DR. CROCKER,—I have examined the *samples of filth taken from two privy middens into which stools from patients suffering from typhoid fever had been thrown*, and which you had forwarded to me on October 22nd, 1897.

The report has been delayed owing to the difficulty of the investigation, which I carried out with the assistance of Dr. Brindley.

By the usual methods we were unable to separate the bacillus of typhoid fever from the large number of other bacteria present in the material.

I then, by a special method of incubation, caused the bacillus of typhoid fever to multiply rapidly and to separate itself partly from the other bacteria; and finally on November 4th we were able to obtain colonies of the typhoid bacillus sufficiently free from other germs to allow of their being studied with sufficient accuracy to make diagnoses possible.

During the months of November and December these bacilli were submitted to all the tests by which their identity could be established. The results of the second part of the investigations are as follows:—

1. From the material in bottle labelled 115 by you (our No. 27 T.L.B.) a *perfectly typical typhoid bacillus* was obtained in a state of purity.

2. From the material contained in the other bottle which had no label when it reached the Laboratory (our No. 28 T.L.B.) typical colonies were obtained, but the bacillus could not be isolated in a state of purity, morphologically the bacilli were identical with typhoid bacillus, but some of the chemical tests failed owing to our cultures not being pure.

I can therefore say that I am absolutely certain that the bacillus of typhoid fever was present in the first specimen, and I have little doubt that it was also present in the second specimen.

Believe me, dear Dr. Crocker,

Yours very sincerely,

SHERIDAN DELEPINE.

PARTICULARS OF CASES IN CONNECTION WITH THE PITS REFERRED TO FROM
WHICH INFECTED MATERIAL WAS TAKEN.

EGGLES—Ellesmere Street, 1896.

No. of House.	How long in house.	Initials of Parents.	Age.	Sex.	Doctor first called in.	Notified.	Remarks.
115	8 yrs.	E. S.	17	M.	Aug. 28	Sep. 2 ...	Complained of Smell from privy and gully in back passage. Been ill for some time before calling in a doctor.
		A. S.	18	M.		" 9...	
		Mrs. S.	55	F.		" 8...	
		Mr. S.	Ad.	M.		" 24...	
83	3 yrs.	T. H.	5	F.	Mar. 2.	March 3	Note: One case 5 months after the first.
			9	M.	Aug. 8...	Sep. 7	

Upon close enquiry I could not learn that anyone in the two houses had been ill since the last notification, and as there is little likelihood that anyone not belonging to the houses could have used the privies, there is every probability that the infection of the pits took place before the notification. Seeing that the bottom of each pit is two feet below the neighbouring ground, and that the bricks are wanting in some parts, and in others broken and porous, the joints imperfect and every possibility of ready contamination of the soil surrounding these imperfect structures, it follows that the infected fæces placed in one of these pits for many days before the disease was notified, would allow of the liquid portions carrying the bacilli into the

soil surrounding the structure, and between and within the brickwork. As these pits are so large and deep, it would be practically impossible to so apply disinfectants to ensure destruction of all bacteria some distance in the soil outside the imperfect walls. At any rate after due precautions had been taken, typhoid bacilli were discovered in both the samples taken from two different pits 13 months after notification of the last case of typhoid fever.

A possible explanation of this is that the soil being impregnated with organic matter would allow of great multiplication of the typhoid bacilli during the summer months, and the ground water from the autumn rains finding its way along the lines of least resistance would wash some of these organism towards the pits.

DIARRHŒA.—There were 51 deaths from this disease, 45 of these being below 5 years of age. The relations between the soil in hot weather and this disease were referred to fully in my report for 1895. Out of the 51 deaths, 19 occurred in August, and 12 in September.

MEASLES.—An epidemic of this disease occurred again towards the end of the year. A copy of the following letter was forwarded to each head teacher, and it was found the cases were chiefly among the young children, the elder ones being protected by the epidemic of 1895-6. The infant departments of all the schools were closed, as the disease extended throughout the whole Borough.

Town Hall, Eccles,

Sept. 23rd 1897.

Dear Sirs

I am informed that a large number of children are absent through sickness, from the various public schools in the Borough. I shall, therefore, be glad if you will kindly let me have the names and addresses of any of your scholars who are absent through ill-health, and particularly through Measles or Whooping Cough.

Yours faithfully,

THE MEDICAL OFFICER OF HEALTH.

A copy of the following letter was sent to the managers of the schools in the borough.

Town Hall, Eccles,

Nov. 9th, 1897.

Gentlemen,

Measles is again prevalent in this Borough, but chiefly amongst the younger scholars. In the latter part of 1895 and the early part of 1896 a sharp epidemic went through the district with the result that many of the scholars at present in the senior classes are protected by having suffered from the disease at that period. Such protection however has not been afforded those in the Infants Department and Junior Classes.

I am requested by the Sanitary Authority to desire that you will be good enough to close the Infants and Junior departments in your schools from the date of the receipt of this letter until the 28th inst. If you can use any influence in preventing the congregation of young children, such as at Sunday Schools, social gatherings, &c., it will be wise, as it may be the means of saving many lives.

During the above-mentioned epidemic there were 69 deaths, 62 of these being children

below 5 years of age—close upon 90 per cent. If measles can be prevented until a child is over 5 years of age you will see that the chances of living through it are much greater.

I am, gentlemen,

Yours faithfully,

J. H. CROCKER,

Medical Officer of Health.

There were 17 deaths, 15 of these being below the age of 5 years. The following handbill was distributed throughout the Borough.

Town Hall, Eccles,

Nov. 8th, 1897.

MEASLES is again prevalent in the district.

There are more deaths every year from Measles than from Scarlet Fever. This is due to the neglect of parents, in many cases, because of the mistaken idea that the disease is not dangerous.

Take the same care and precautions as you do with Scarlet Fever, and you may save your children, MEASLES is a FEVER.

The disease begins like a cold in the head, this lasts four days before the rash comes out, and the case is "catching" during all this period as well as for some fortnight or more after the disappearance of the rash.

Isolate the patient. Keep off Measles as long as you can. During the last Epidemic in this Borough 69 deaths were directly due to Measles—62 of these were below 5 years of age, *i.e.* 90 per cent. The older the child is when it has the Measles the better chance it has of living through it.

Bronchitis, Pneumonia, and Inflammation of the Kidneys, even in very mild cases, follow on the disease if the patient is not kept in bed.

THE MEDICAL OFFICER OF HEALTH.

Arrangements have now been made by which the School Attendance Officer will notify every case of measles to the Health Department immediately he is aware of it, and precautionary measures will then be taken to try and arrest the extension of the disease.

INFLUENZA.—11 deaths were registered as due to this disease, 5 of these were in May.

WHOOPING COUGH.—13 deaths were due to this disease.

ERYSIPELAS.—There were 27 cases notified, and 2 deaths registered.

PUERPERAL FEVER.—3 cases were notified and 2 deaths occurred.

PHTHISIS.—56 deaths were registered as due to this disease, against 50 in 1896

MEASURES TAKEN TO PREVENT THE SPREAD OF INFECTIOUS DISEASE.—These have been described in previous reports. When a case of Typhoid Fever is reported a special covered pail is immediately taken to the house and instructions given that all evacuations &c., from the patient are to be disinfected and put in the pail—this is removed each day. If there is a privy midden in connection with the house, the contents are immediately treated with chloride of lime and removed,

and a mixture of chloride of lime and water is placed in the pit. A solution of chlorinated lime is also put down the gulleys in the immediate vicinity of the house.

TABLE of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health during the Year 1897, in the Borough of Eccles, classified according to Diseases, Ages, and Localities.

Localities.	Population at all ages		Registered Births	Aged under 5 or over 5	New cases of Sickness in each locality coming to the knowledge of the Medical Officer of Health.							Cases Removed to Hospital		
	Census 1891	Estimated to middle of 1897			Scarlatina	Diphtheria	Fevers		Erysipelas		Scarlatina	Diphtheria	Enteric or Typhoid fr	
							Enteric [Typhoid	Puer'ral						
BARTON.....		5640	168	Under 5... 5 upwards	4 9	1 1	1 2	..... .....	1 3	..... .....	3 4	..... .....	..... .....
ECCLES		5290	127	Under 5.. 5 upwards	3 6	1 1	..... 3	..... 1	1 3	..... .....	2 2	..... .....	..... 1
IRWELL		5380	106	Under 5... 5 upwards	3 7	2 1	..... 5	..... .....	1 1	..... .....	2 5	..... .....	..... 1
MONTON		5290	81	Under 5... 5 upwards	4 9	2 7	..... 1	..... 1	..... 5	..... .....	1 5	..... .....	..... .....
PATRICROFT		6405	187	Under 5... 5 upwards	6 23	2 1	1 3	..... .....	1 9	..... .....	2 14	..... .....	..... 1
WINTON - ...		6545	231	Under 5... 5 upwards	7 10	2 2	..... 4	..... 1	..... 2	..... .....	1 2	..... .....	..... .....
Barton Union Workhouse				5 upwards	...									
TOTALS...	29606	34550	900	Under 5... 5 upwards	27 64	10 13	2 18	..... 3	4 23	..... .....	11 32	..... 2	..... 3

Compulsory Notification Act adopted since 1889.

Isolation Hospital—Ladywell Sanatorium in the County Borough of Salford.

SECTION IV.



ORDINARY SANITARY WORK OF THE HEALTH DEPARTMENT.

Ordinary Sanitary Work of the Health Department.

—o—

STAFF :

CHIEF INSPECTOR	-	C. W. LASKEY, Assoc. San. Inst.
ASSIST. INSPECTOR	-	H. R. THOMAS, Cert. San. Insp.
DISINFECTOR, &c.	-	WM. CROMPTON.

SYSTEMATIC INSPECTION.—During the year there were 3490 re-inspections of nuisances in course of abatement ; 1678 houses were inspected ; 399 visits were paid to infected houses and 157 rooms were disinfected in addition to the ordinary inspections of slaughter houses, milk shops, cowsheds, common lodging houses, &c.

A summary of the work done by the department will be found at the end of this section.

A great deal of work has been done in connection with the abatement of nuisances. Some of this is of very great importance as evidenced by the fact that 46 new systems of drainage were laid down in connection with 178 houses, 100 privy middens were converted into 112 water closets, and 71 slop water closets ; 309 house drains were taken up, cleansed, and re-laid in an efficient manner. A great deal of your inspector's time is taken up by the superintendence of this work, but it is pleasing to report that the inspectors consider that there is a great improvement in the character of the work done.

Proceedings were taken before the magistrates in two cases with the result that orders for the abatement of nuisances were granted, and the owners were fined the costs.

DAIRIES, COW SHEDS, AND MILK SHOPS.—There are 23 cowsheds and 45 dairies and milkshops registered in the Borough. These have been regularly inspected, 95 visits having been paid to the cowsheds, and 141 to the milk shops and dairies.

The following special report on cowsheds was presented to the Health Committee in April, and a copy was ordered to be sent to every cowkeeper in the Borough :—

BOROUGH OF ECCLES.

REPORT ON COW SHEDS,

Ordered by the Health Committee to be printed, and a copy sent to every
Cow-keeper in the Borough.

COW SHEDS.—All these structures have been inspected, and particulars as to their dimensions and condition taken. In the majority of cases their condition is not satisfactory.

NUMBER OF COW KEEPERS IN THE BOROUGH.—There are 21 Keepers of Cows on the Register.

NUMBER OF COWS.—There are 154 Dairy Cows kept in the Borough, varying from 19 in one case, 16 in three cases, down to 2, the smallest number in any one shed.

STRUCTURE OF WALLS OF COW SHEDS.—In many cases the walls are good, but several structures are simply wooden erections. In some of these cases light could be readily seen between the boards, but on enquiry no colds or any illness of any kind had attacked the cows throughout the winter. In contrast with this, in a well constructed house as far as roofs and walls are concerned, where every possible ingress and egress of air was closed up, the proprietor stated that he had lost eleven cows in four years from colds &c. in winter.

STRUCTURE OF FLOORS.—Mostly rough setts, with a channel at the back of the line of cows. Some places bricks are used: these are unsatisfactory, worn irregularly, and absorbent. The condition in nearly every case was dirty, and could be very much improved. The joints should be filled up with cement, and systematic swilling or sweeping would keep the floors clean.

CEILINGS.—Neglected in most cases, abounding in cobwebs and dirt.

SPACE PER HEAD.—Your bye-laws state that 800 cubic feet per cow should be allowed. In nine cases this amount of space, or more was allowed. In all the others the numbers were below,—such as 320, 330, 350 (two cases), 400, 420, 480, 550, 560 and 570 cubic feet of air space per beast.

LIGHTING.—In most cases the sheds are not well lighted. Nothing is better for preventing accumulations of dust or destroying the tubercle germ than light. In one case where several cows are kept there are no windows, the only light coming in from the open door. 1·16th of the floor space should be the area of the windows, and they should be made to open to at least half their extent.

VENTILATION.—There is very great prejudice amongst cow-keepers as to fresh air. In every case we found the ventilators closed where possible, and the smell in the sheds was decidedly "stuffy." Experience on the Denmark farms has exploded the old-fashioned idea that darkness and stuffiness are required for the production of milk in cows.

CLEANLINESS.—The walls wanted lime-washing in most cases, and, as before stated, the floors were very filthy in many cases.

CONDITION OF CATTLE.—There is not enough attention paid to the condition of the cows as regards cleanliness. In some cases we found them lying in manure, and the flanks and udders simply plastered with it. In one case the marks of the dirty hands against the udder from milking was evident. In no case did we find soap, towel, or any sign of means of cleansing the hands of the milkers.

SUMMARY.—The contrast between the existing structures and what was seen by your delegates at the farm at Finchley, when attending the Congress of the Brit. Inst. of Public Health is very great. I am informed that on some of the farms in Lincolnshire the cow-sheds are models, and from all accounts Denmark is well ahead of us in this respect.

Recent investigation has shown that cows are very subject to tuberculosis and when affected can pass the germs on through the milk. Many cases of "consumption of the bowels" in children are in all probability due to this, hence arises the importance of endeavouring to get the great preventatives of consumption brought to bear on the cow-sheds, viz:—light, cleanliness, and plenty of pure air.

In St. Helens over 50 per cent of the cows slaughtered there were found consumptive, (commonly called "The Grapes" in cows). Dr. Niven considers that a least 30 per cent of the cows in Manchester are consumptive.

In another month all the cows will be turned out to grass. Just now, of course, one sees the sheds at their worst, the cows having been in all the winter. It is advisable that a copy of the regulations made by you should be given to each of the keepers during the

summer, together with suggestions as to the lighting, ventilation, &c., so that before another winter comes on the cowsheds can be put in better sanitary conditions.

Medical Officer of Health.

Town Hall, Eccles

April 1897.

BAKEHOUSES.—There are 46 bakehouses, and 76 visits of inspection have been paid to them.

COMMON LODGING HOUSES.—The two registered common lodging houses have been inspected 43 times, and were always found to be in a satisfactory condition

CANAL BOATS.—116 canal boats were inspected as against 131 for 1896. The 116 boats were occupied by 119 males and 33 females, making a total of 152 persons. The average occupancy per boat was 1.31 persons. As every cabin was registered for at least three persons, it is clear that they are not overcrowded. No case of infectious disease was found on any of the boats. There were only three irregularities, in one case the cabin required painting, and in two cases the boats certificate was not produced. These matters were attended to upon receipt of notice from the inspector.

SMOKE ABATEMENT.—121 observations of mill and works chimnies were taken during the year, and in two cases proceedings were taken before the magistrates with the result that orders to abate the nuisances were made and the owners of the works were fined the cost of the proceedings.

INSPECTIONS OF SLAUGHTER HOUSES & BUTCHERS' SHOPS.—77 visits of inspection were paid to the slaughter houses, and they were all found in fairly good condition. No unsound meat was found.

DRAINAGE EXAMINATIONS.—The smoke test was applied to drains 498 times, and in addition 62 drains were opened up for examination, after formal written complaints had been made and authority given for that purpose. In every case upon exposing portions of the drains, they were found to be defective in some particular.

Two works with insufficient sanitary accommodation were provided with additional and efficient water closets.

Magisterial Proceedings.

OFFENCE.	RESULT.	FINE.	REMARKS.
Emitting Dense Smoke from Mill Chimney	Convicted.	Costs.	Order made by Magistrates
Do. do. ..	do.	do.	do. do.
Non-compliance with Notice to abate Nuisance.	do.	do.	do. do.
Do. do. ..	do.	do.	do. do.
Non-compliance with Notice to make Dwellings fit for human habitation.	do.	do.	Closing Order made.
Do. do. ...	do.	do.	do. do.
Do. do. ..	do.	do.	do. do.
Do. do. ..	do.	do.	do. do.
Tenants Non-compliance with order to cease to inhabit dwelling for which Closing Order had been made ..	Adjourned for 7 days	do.	Tenant removed before the time fixed for the Adjourned hearing.

SALE OF FOOD & DRUGS ACT.—The work in connection with this department is done by the County Police.

RETURN shewing the number of Samples taken under the Food & Drugs Act in the Borough and the Result of the Analyses for the Year ended 31st Dec., 1897.

No.	Date 1897	Description of Sample	Result of Analysis.	Remarks.
1	April 26.	1 pint of Vinegar .	Genuine	
2	... 26	$\frac{1}{2}$ lb. of Pepper ...	do.	
3	... 26	$\frac{1}{2}$ lb of Mustard ...	do.	
4	... 26	2lb. of Raspberry Jam	do.	
5	... 26	$\frac{3}{4}$ lb. of Lard ...	do.	
6	... 26	1lb. of Lard ..	do.	
7	... 26	$\frac{3}{4}$ lb. of Butter ...	do.	
8	... 26	1 pint of Vinegar...	Consists of diluted acetic acid, coloured with burnt sugar, and is devoid of genuine Vinegar.	Dismissed.
9	... 26	6ozs. of Coffee ...	Contains the per centage of foreign ingredients as under upwards of 25 per cent of Chicory.	Fined 5/- and 17/6 costs.
10	... 26	1lb. of Sugar ...	Genuine	
11	... 26	1 pint of New Milk	do.	
12	... 26	1 do.	do.	
13	... 26	1 do.	do.	
14	... 26	1 do.	do.	
15	... 26	1 do.	do.	
16	... 26	1 do.	do.	
17	Sept. 13	1lb. of Butter ...	do.	
18	... 13	1lb. of Lard ...	do.	
19	... 13	$\frac{1}{2}$ lb. of Mustard ..	do.	
20	... 13	5 ozs. of Coffee ...	Contains upwards of 40 per cent Chicory.	Fined 5/- and 21/5 costs
21	... 13	1lb. Raspberry jam	Genuine	
22	... 13	3ozs. of Pepper ...	do.	
23	... 13	1lb. of Sugar ...	do.	
24	... 13	2lbs. of Marmalade	do.	
25	... 13	1 pint of Scotch Whiskey ...	do.	
26	... 13	1 pint of Rum ...	do.	
27	... 14	1 pint of New Milk	do.	
28	... 14	1 do.	do.	
29	... 14	1 do.	do.	
30	... 14	1 do.	do.	
31	... 14	1 do.	do.	
32	... 14	1 do.	do.	

Tabulated Particulars of Nuisances dealt with during 1897.

	1897	1896	1895	1894
House Drains —Taken up, Cleansed, and Re-laid ..	309	309	275	159
" New, provided ..	46	63	17	32
" Slopstone waste pipes disconnected from ..	4	7	12	14
" Bath ..	5	4	12	28
" Lavatory ..	3	8	7	9
" Privy Drains ..	...	1	37	126
" Ventilated ...	19	27	9	...
Gully Traps —Defective ..	59	134	121	121
" Want of ..	29	13	30	70
" Filthy ..	89	118	3	17
Soil Pipes —Defective ..	15	22	11	16
" " Ventilation of ..	21	34	20	19
" " Bath and Lavatory Waste Pipes disconnected from ..	5	4	24	6
Slopstone Waste Pipe —Defective ..	154	115	98	105
Water Closets —Defective "pan" ..	31	27	21	10
" Defects in ..	5	12	27	3
" Inefficient flush to ...	3	8	11	3
Slop-water Closets —stopped up ...	8	26	19	2
Defective Ashpits ...	26	25	4	10
" Paving of Yards and Passages ..	151	169	146	165
" " Cellar Floors, &c. ..	39	44	42	12
" Channelling ..	2	...	2	6
" Defective, Eaves Gutters and Spouting ..	63	104	49	51
" Bath and Lavatory Waste Pipes ..	9	23	16	...
" Roofs ...	27	31	8	5
" Middensteads ..	6	7	7	4
" Slopstones ...	2	1	...	2
" Privy Pits ..	158	121	127	170
Rain-water Pipes —Disconnected from drains ...	79	190	201	95
" " from soil Pipes ..	3	5	...	...
Urinals —Defective ..	9	15	2	6
Cesspools Abolished ..	15	2	4	9
Yards, &c cleansed..	23	22	14	15
Dirty Houses Cleansed ..	14	40	11	38
House Premises Damp ..	43	26	4	5
Overcrowded Dwelling-houses ..	6	7	...	1
Accumulations of Manure and Rubbish ..	36	21	17	25
Obstructive Buildings removed..	8	10	...	...
Keeping Fowls, &c. , so as to cause a nuisance ..	16	41	12	8
"Backing-up" of Sewage ..	...	7	2	10
Street Gullies Defective and Stopped up ..	32	13	5	5
Manholes —Foul Smells from ..	4	5	...	...
Want of Water Supply to Houses ..	2	2	3	...
Waste of Water ..	20	8	13	...
Milkehops and Cowsheds require limewashing ..	4	7	5	2
" " Defects in ..	2	2	...	...
Bakehouses require Cleansing and Limewashing ..	1	5	8	5
" " Defects in ..	1	1	2	2
Workshops requiring Cleansing and Limewashing ..	...	7	...	...
" " Defective Ventilation of ..	...	4	...	...
Slaughter-houses requiring Limewashing ...	1	1	...	...
" " Defective floor of ..	1	1	...	...
Miscellaneous ..	6	24	9	25
Totals ...	1614	1923	1469	1416
Privies Converted into Water Closets ..	100	83	51	...

	1897	1896	1895	1894
Number of preliminary notices served ..	62	195	319	347
„ Committees ...	52	72	117	138
„ Cases before the Magistrates ..	9	..	5	2
„ Letters written ...	1000	974	810	..
„ Water Closets provided in lieu of Privies	112	98	39	73
„ Slop Water ..	71	25	67	26
Infected Premises—Walls, &c. Stripped & Limewashed	82	178	175	..
Re-inspection of Nuisances in course of abatement ..	3490	2932	1907	2953
Houses Inspected ..	1678	1699	1094	964
Visits to Slaughter Houses ..	77	53	43	34
„ Milkshops ..	141	81	123	136
„ Cowsheds ...	95	22	22	19
„ Common Lodging Houses ..	43	47	51	42
„ Bakehouses ..	78	84	96	54
„ Workshops ...	72	92	2	2
Owners seen re Nuisances ...	452	487	372	..
Zymotic Cases visited and re-visited ..	399	929	521	970
Rooms Disinfected ..	157	312	302	305
Schools „ ..	..	..	2	10
Schools Inspected ...	24	12	24	8
Canal Boats ...	116	131	101	63
Smoke Observations ...	121	107	67	44
Applications of Smoke Tests to Drains ..	498	420	310	191
Drains Opened up for Examination ...	62	38	..	..
Typhoid Pails removed, cleansed, and disinfected ...	103	850	..	..
Visits to Houses Let in Lodgings... ..	5	28	..	..
Inspection of Water Closets ...	77	..	..	..

SECTION V.

—o—

SPECIAL SANITARY MATTERS.

SPECIAL SANITARY MATTERS.

—O—

WATER SUPPLY.—This is supplied by the Manchester Corporation.

DWELLINGS OF THE WORKING CLASSES.—Proceedings have been taken under the Housing of the Working Classes Acts in respect of the following properties, which amongst others were reported on during 1896.

Nos. 1, 2, 3, 4, 5, 6, 7, Almond's Court, College Croft; Nos. 26, 28, 30, 32, 34, 36, 38, 29, 31, 33, 35, King street, and the houses behind Nos. 29 and 57, King street. Closing orders were obtained on August 9th, in every case except that of Nos. 26, 28, and 30 King street where there was a doubt as to the ownership. The houses No. 25 and the house behind No. 25 Regent street were closed by the owner without waiting for legal proceedings being taken.

Nos. 29, 31, 33, and 35 King street have been made fit for habitation and the house behind has been demolished. No. 2 and 4 Cross street, reported upon in 1896, have also been thoroughly renovated. In all the other cases the houses remain closed.

Some difficulty was experienced in getting the tenant of No. 32, King street to remove, and eventually proceedings before the magistrates had to be taken, these had the desired effect.

A "back to back" house, No. 2 Clegg street was converted into a through dwelling upon the owner being seen with reference to the matter, and two single and two small through houses in Oak Court and Timothy street were voluntarily pulled down by the owners.

ISOLATION HOSPITAL.—The arrangements with the Salford Corporation to treat the cases of infectious disease from this Borough at the Ladywell Sanatorium continues to work very satisfactorily.

EXCREMENT AND REFUSAL DISPOSAL.—All nightsoil is disposed of to farmers and ashpit refuse is tipped at Peel Green.

WATER CLOSETS.—These are being adopted in all new new property and in addition 112 water and 71 slop water closets have been provided for old property, replacing 100 privy pits which have been abolished.

Ordinary wash down water closets are recommended for new property.

PRIVY MIDDENS.—There are now 3162 privies and 512 ashpits in the Borough in addition to 933 ashtubs and 16 pails. The 3674 privy and ashpits have been cleansed over six times during the year and the ashtubs are scavenged weekly. The cleansing is done in the daytime during the winter months and in the night time during the summer. When the material has been thrown on the paved streets the area is well flushed after well sprinkling with a 15 per cent carbolic disinfecting powder.

UNPAVED PASSAGES AND BACK STREETS.—I have still to report that there are very many unpaved back streets and passages in the Borough; and it is very important that these should be properly sewered, paved, and channelled, and then regularly scavenged. In their present condition they too often become little better than "tips" and their condition—especially in wet weather—is very bad indeed.

—o—

BARTON GRANGE FARM.—ECCLES SEWAGE WORKS.

Mr. WILLIS, the Farm Manager, reports:—

The treatment of the Sewage of the Borough has been carried on without intermission during the year.

The discharge of Sewage at the Pumping Station daily is about 1,300,000 gallons dry weather flow.

The Sewage Farm Works have given a better result in working than in the year 1896, 693 million gallons of sewage and stormwater have been pumped and successfully treated, as against 608½ million gallons in 1896. It is hoped that when the storm water overflows are completed (now in course of construction) that the amount of sewage &c. pumped, will be considerably reduced. It is a very difficult matter to cope with such a vast amount of storm water. Further the excess of water run upon the surface of the land washes the nitrogen direct into the drains, thereby destroying the fertilizing agents contained in the sewage.

SLUDGE.—The whole of the sludge is being utilized as manure upon the farm it appears to contain about 30 per cent of sand. The remarks re sludge last year are fully confirmed, the growing crops of cabbage, &c., assimilate practically the whole of the sludge.

PRODUCE.—The chief crops have been Italian rye grass, cabbage, mangolds and turnips, these have done fairly well.

DAIRY CATTLE.—The question of disposing of the Italian rye grass in the summer, and the rough cabbage, etc. in the winter in 1896 was a serious one. The cow-keepers had enough grass for their cattle in the summer, and in the winter did not appreciate the value of cabbage as a milk producer.

The Committee were advised to sanction the purchase of 12 head of dairy cattle, this they agreed to, and the working results have proved that the right course was adopted. It is now arranged to extend the number of cows kept to 24 head. The milk is sold to a local dairy-man, and is refrigerated before delivery. The steam generated to drive the pumping machinery, is utilized for can washing purposes, for boiling the water, and by applying the live steam at 120 lbs pressure to the cans.

Great care is taken to prevent the cattle drinking any of the sewage, they are all stall fed, summer and winter. Water from the Manchester Corporation mains is run into troughs between the animals, they have therewith a constant supply of pure water to drink at-pleasure.

RECEIPTS FOR FARM PRODUCE.—The amount realized for the produce was £745, an increase of £319 over the year 1896.

ANALYSIS OF EFFLUENT.—The analysis of the effluent proves that the farm is working satisfactorily. Appended are the results from samples taken by the Mersey and Irwell Joint Committee inspectors during 1897, their standard for a good effluent being 1.00.

No. on Lists	Description of Sample	Oxidizable Organic matter. Grains per galln.	Method of Treatment.	Remarks.
9	Feb. 9, 1897. 11-30 a.m. slight rain.	0.51.	Subsidence in tanks and land.	Clear, colourless, containing brown flocculent suspended matter, earthy smell
5	April 20, 1897. 11-10 a.m. fine heavy rain previous night.	0.43	do.	Turbid, containing a little brown suspended matter No smell.
5	Dec. 20th, 1897. 11-45 a.m. Fine weather.	0.21	do.	Slight brown colour, containing a little iron oxide in suspension. No smell.

Quantity of Sewage & Storm-Water Pumped and Treated.

Month.	Gallons	Cost.
January ...	58,527,000	The cost of Pumping is about £1 per million Gallons.
February ...	78,660,000	
March ...	77,342,000	
April ...	65,749,000	
May ...	45,266,000	
June ...	41,593,000	
July ...	44,641,000	
August ...	46,972,000	
September ...	48,297,000	
October ...	52,062,000	
November ...	58,882,000	
December ...	75,175,000	
Total ...	693,166,000	

Rainfall on the Farm,

Month.	Fall per Month.	Date of Greatest Fall,	Days on which over or fell.
January ...	1·232	7th. ·300	15
February ...	2·327	2nd. ·470	20
March ...	2·155	28th. ·575	21
April ...	2·258	17th. ·435	16
May ...	1·577	28th. ·305	13
June ...	4·644	29th. 1·960	14
July ...	1·925	26th. ·650	9
August ...	3·167	22nd. ·835	20
September ...	3·564	29th. ·930	15
October ...	2·270	15th. ·600	10
November ...	3·795	30th. ·980	13
December ...	4·528	8th. ·880	20
Total ...	33·442		186

THE TOWN'S YARD.

—C—

In the early part of the year the above yard was completed and handed over to what was subsequently termed the Cleansing and Scavenging Committee. As the yard is now in full working order a brief description of it will not be out of place.

The situation is off Liverpool road, a little distance beyond Patricroft Bridge. At the entrance to the yard is placed a Public Weighing Machine and Office, and all goods entering or leaving the yard are here weighed and recorded. Entering the yard a large piece of vacant land is noticed on the right, on which it is intended at some time to erect a Fire Station and Superintendent's house. A little beyond this on the same side is the Horsekeeper's house, and on the opposite side are the men's Mess Room and Masons' Shed. Along the south side of the yard are placed stables for twenty horses, two loose boxes, harness room, and horse-cloth drying room. On the west side are placed the engine room, provender mixing room, and a shed for carts for the Highways Department, and for the storage of materials belonging to that department. Above these are the provender stores and the machinery for chopping and crushing. On the north side is a large cart shed belonging to the Scavenging and Cleansing Departments, and on the east side are the smithy, wheelwright's shop, cement and other store rooms. At present the smithy and wheelwright's shop are not being used for the purpose for which they were erected, owing to the fact that nearly all the implements are new and are not in need of such an amount of repairing as would warrant the permanent employment of men for the purpose.

Latrines for the men are provided, and adjoining them is the midden stead.

The yard proper is principally used for the deposit of setts, cinders, macadam etc., used by the Highways department.

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

Names of Streets in which new sewers have been laid, and in which existing sewers have been re-laid during the year 1897 :—

Private Streets.—New Sewers.

Hampson street, 12" Moor Street, 9"

Public Streets.—New Sewers.

Barton Lane (Cricket Field to Fountain street) 12"
 Liverpool road (Trafford road to Dean's yard) 3'0" x 2'0" brick.
 Trafford road (Cawdor street to Barton Lane) 12"
 The Irwell Park Intercepting Sewer, 3'0" x 2'0" brick
 (Has been commenced but is not yet finished)

Private Streets.—Existing Sewers Re-laid.

Paradise street, 12" Park Avenue, 9"
 The Park, 12" Vernon Avenue, 9"

Public Streets.—Existing Sewers Re-laid.

Albert street (Mr. Townley Trotters' to Wellington road) 9"
 Back Egerton street, 9" Barlow Lane, 12"
 Ellesmere street 12" Hope street, 9"

This work has been done by Corporation Workmen.

ANNUAL REPORT

OF

C. W. LASKEY, ASSOC., SAN. INST.,
Superintendent of the Scavenging and Cleansing Department,

FOR THE YEAR 1897.

Sanitary Inspector's Office, Town Hall, Eccles.

To the Chairman and Members of the Scavenging and Cleansing Committee.

Gentlemen,

I beg to present to you my report of the work done in the Scavenging and Cleansing Departments during the year ended December 31st, 1897.

In connection with the Cleansing Department I beg to submit the attached tables which show the amount and character of the work done, and the cost of manual and team labour employed

Month.	No. of Privies and Ashpits Scavenged.	No. of houses to which they belong.	No. of Loads removed.	Loads per Ashpit.	No. of Emptyings of Ashtubs.	No. of Loads dry refuse removed.	Average Cost per Load.	No. of Complaints. re Ashpits
January ...	1565	2667	814	'52	2460	62	3 0 $\frac{3}{4}$	4
February.	1332	2049	783	'58	2540	60	3 3	—
March.....	1970	3318	990	'50	2700	71	2 8 $\frac{3}{4}$	2
April	1437	2479	811	'56	3525	82	3 7 $\frac{1}{4}$	2
May	1616	2624	916	'56	3076	72	3 0 $\frac{1}{4}$	1
June	1576	2584	747	49	3100	78	3 8	3
July.....	2060	3321	984	'47	3995	88	3 6 $\frac{3}{4}$	2
August ...	2159	3645	798	'37	3304	78	3 6 $\frac{3}{4}$	
September	2640	4359	755	'28	4345	94	3 9 $\frac{3}{4}$	
October ...	2575	4223	763	'29	3568	96	3 7	
November	2416	4203	695	'28	3696	102	3 5 $\frac{1}{4}$	
December	2121	3437	676	'31	4665	123	3 11	
Total 1897 ...	23407	38909	9732	'41	40974	1006	3 5 $\frac{1}{4}$	14
" 1896 ...	23114	38351	10457*	'45	24425		3 1 $\frac{1}{4}$	10
" 1895 ...	26890	44581	10803*	'40	11366		2 11	8

* Including dry refuse from ashtubs.

Month.	1897			1896			1895		
	Manual Labour			Manual Labour			Manual Labour		
	£	s	d	£	s	d	£	s	d
Jan.	65	15	1	68	11	3	76	3	7
Feb.	63	12	11	73	10	7	57	7	6
Mar.	69	3	3	76	4	4	75	3	9
April	*84	16	6	76	9	1	62	14	5
May	67	4	8	*83	17	7	62	7	3
June	70	3	1	81	6	9	71	18	0
July.	89	8	2	102	2	0	68	1	3
Aug.	69	0	10	87	15	0	59	12	3
Sept.	78	18	1	82	16	0	60	8	6
Octr.	64	13	0	90	0	0	74	9	7
Nov.	61	9	2	76	2	6	58	16	6
Dec.	77	10	0	79	6	3	74	11	4
	861	14	9	978	1	4	801	5	0
	£1839 16 1			£1639 9 6			£1566 0 9		

It will be seen that compared with 1896 there is an increase of £42 16s 5d. in the cost of manual labour and £157 10s. 2d. in the team labour employed in the work of cleansing. This is accounted for by the fact that in April the men received 1s. each per week advance in wages, and that in May the charge for carting was advanced from 7/6 to 9/- per day per horse, cart, and man.

There has been an increase in the amount of work done, especially in the ash-tub department. The number of these receptacles for dry rubbish having increased from 621 to 933.

This weekly collection of house refuse is rightly regarded as superior to the less frequent removal in the case of ashpits, and continues to find favour with householders and property owners. This is evident from the fact that in all new property and in nearly every case of privy and ashpit conversion covered and paved places for the reception of ashtubs are provided.

The total number of privy pits is now 3162—100 having been changed into water-closets, and 1 abolished during the year—and the number of ashpits has been reduced from 537 to 512. The privies and ashpits have been scavenged 6.3 times, this being a slight increase over last year.

I have still to report that there are a great number of unpaved back streets and passages where we cannot use water for swilling after the scavenging of privies.

The total number of loads of refuse, etc., removed was 10738, being 281 more than 1896. These were made up as follows :—

4073	loads of nightsoil	...	...	...	taken to depôt
718	„ „	...	..	...	taken to farmers.
5902	„ rubbish	...	...	...	taken to tip.
45	„ cinders and slag	...	...	...	carted for tip road.

The number of loads of nightsoil sold at the depôt was 1388 and they entirely disposed of the 4073 loads taken there by our carts. At the present time (January 1898) we have no accumulation there. The cleansing staff consists of one foreman, ten labourers, and two tip men—the same number as during last year. The field at the tip was let to the Sewage Disposal Committee in consideration of the destruction in their furnaces of all greengrocers' and fish mongers' garbage and offal. Since July we have done nearly all our own carting with horses and carts from the Town's Yard. The work is much more satisfactorily carried out. 1043 loads of rubbish and 972 loads of nightsoil have been weighed at the Town's Yard, and it is found that the average weight of each load is 19 cwts 2 qrs 11 lbs for rubbish, and 1 ton 5 cwts 2 qrs for nightsoil.

In connection with the scavenging department which came under the control of your Committee in March, I beg to submit the attached tables showing the work done and the cost.

Month.	Loads of snow removed,	Loads of sand used.	Loads of water used.	No. of street gullies scavenged,	No. of manhole dirt boxes scavenged.	No. of lds. refuse removed from streets.	No. of barrow lds. sweepings removed.
January ...	734	13	...	..	..	128	...
February ...	316	...	...	..	...	275	..
March ...	...	...	...	...	...	250	...
April ...	...	...	257	...	...	151	228*
May ...	...	...	1105	..	207†	172	283
June ...	...	...	768	..	47	141	321
July ...	...	...	1192	...	..	166	305
August ...	...	...	319	620*	21	129	280
September .	...	1	44	1220	24	194	284
October ...	...	1	28	1748	63	146	259
November .	...	1	7	1316	8	156	241
December .	...	13	...	1610	..	125	278
Total ..	1050	29	3720	14	370	033	2479

* Numbers first recorded.

† This work first commenced.

Month.	Mannal labour.			Team labour.		
	£	s.	d.	£	s.	d.
January	51	15	6	45	2	6
February ...	65	4	10	35	19	11
March	38	19	9	24	4	10
April	42	5	2	22	15	6
May	36	5	4	38	6	0
June	36	8	8	32	3	9
July	45	5	10	42	6	6
August	35	2	0	27	2	6
September ...	44	3	4	25	1	3
October.....	35	2	0	23	17	0
November ...	36	3	4	27	8	9
December ...	45	5	0	23	3	6
TOTAL ...	510	0	9	367	12	0

The staff in this department consists of a foreman, six labourers, and two orderlies. Places for disposing of the road refuse are scarce, and we are in want of a good tip for the Eccles end of the Borough, the tip at Ladywell being almost full up.

One of the water barrels has been adapted so as to allow of it being used as a snow plough, but fortunately the latter has not been required.

Permission to deposit snow on a large piece of land off Salter's Lane was given by Mr. W. H. Barrett.

Since August we have had no hired team labour except for street watering.

—o—

CONTAGIOUS DISEASES (Animals) ACTS.

I have to report that the Muzzling of Dogs has been required during the whole of the year. No case of rabies has been reported. The Markets and Fairs (Swine Fever) Order has been in force during the year, and all persons bringing Swine into the Borough from Markets, &c. have had to obtain movement Licences for that purpose.

I am, Gentlemen,

Yours obediently,

C. W. LASKEY.



