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### COUNTY BOROUGH OF BURY.

## ANNUAL REPORT

OF THE

# Medical Officer of Health,

FOR THE YEAR 1905.

BY

### ALBERT E. BRINDLEY,

M.D. (LOND.), B Sc., D.P.H. VICT.), ETC.,

MEDICAL OFFICER OF HEALTH FOR THE BOROUGH AND

MEDICAL SUPERINTENDENT OF THE FLORENCE NIGHTINGALE

HOSPITAL FOR INFECTIOUS DISEASES.

BURY:

PRINTED AT THE "TIMES" OFFICE, CROSS STREET. 1906.



### HEALTH COMMITTEE, 1905-1906.

#### CHAIRMAN - ALDERMAN PARKS.

DEPUTY-CHAIRMAN - ALDERMAN COLLINGE.

#### THE MAYOR.

ALDERMAN	ASHWORTH,	Councillor	HARGREAVES,
,,	DAWSON,	,,	HARRISON,
Councillo	R BRADLEY,	,,,	R. KAY,
,,	BRIDGE,	,,	MARSDEN,
,,	J. COX,	,,	SHARP,
,,	DUCKWORTH,	,,	SLATER,
,,	GREENHALGH,	,,	T. B. SMITH,
,,	HALL,	,,	SPENCER,
,,	HARDMAN,	,,	JOS. TAYLOR.

Meetings—The Wednesday in each month immediately preceding the 14th day before the Council, at 10-0 a.m.

#### OFFICIALS OF THE HEALTH DEPARTMENT.

- Inspector of Nuisances, Superintendent of the Cleansing Department, District Inspector of Moorside and East Wards, Inspector under Shop Hours' Acts, Inspector under Explosives Act, &c.:—John Haworth, Assoc. R.S.I., Certified Sanitary Engineer.
- District Inspector for Bury South and Elton, Inspector of Common Lodging-Houses, Canal Boats, &c.:—Samuel Kay, Cert. R.S.I.
- Inspector of Meat, and of Dairies, Cowsheds, and Milkshops; Inspector of Offensive Trades, &c.:—W. P. Openshaw, Cert. R.S.I., Certified Inspector of Meat and other Food.
- Inspector of Workshops (where Females are employed), Inspector under Shop Hours' Acts, Inspector of Midwives, &c.:—NURSE L. E. WALTON, Assoc. R.S.I.
- Chief Clerk in Health & Cleansing Departments: -T. H. TURNER.

  Junior Clerk: -WILLIAM H. SANDIFORD.
- Disinfectors, Drain Testers, &c.:—John Kenyon and John Kirkman.
- Foremen in Cleansing Department:—WILLIAM BEAZLEY AND DANIEL COOPER.
- Assistant Medical Officer of Health and Resident Medical Officer at the Florence Nightingale Hospital:—HAROLD KERR, M.B., Ch.B. (Ed.), D.P.H. (Camb).
- Medical Officer of Health:—A. E. Brindley, M.D. (Lond)., B.Sc., D.P.H. (Vict.)
- Inspector under Food and Drugs Acts, Abattoirs Superintendent:
  H. C. Cass (Markets Inspector).
  - Borough Analyst: THOMAS J. HUTCHINSON, F.I.C.

#### Health Department,

Parsons Lane,
BURY, May, 1906.

## To the Chairman and Members of the Health Committee of the County Borough of Bury.

Gentlemen,

I beg to submit my Annual Report upon the Health of the Borough for the year 1905. Included are new Tables required by the Local Government Board referring to Infant Mortality.

For special information contained herein I am indebted to Messrs. A. W. Bradley (Borough Surveyor), H. C. Cass (Abattoirs Superintendent), R. B. Rigby (Water Manager), J. Isherwood (Clerk to the Guardians), and to many Medical Officers of Health.

The photographs were taken by Mr. Turner, Chief Clerk in the Health Department.

For the loan of Plans of the Hardman Square property I have to thank Mr. Gill (Architect), of this town.

Dr. Kerr (Assistant Medical Officer of Health) and Mr. Turner have given me invaluable assistance in the preparation of this report.

The Department is greatly indebted to Mr. Noblett and the members of the Police Force for their ready help on many occasions throughout the year.

I take this opportunity also of thanking you for your kindness, courtesy and help.

I am, Gentlemen,

Your obedient Servant,

ALBERT E. BRINDLEY.

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## County Borough of Bury.

### STATISTICAL SUMMARY, 1905.

Density.—The mean density of the Borough from the census of 1901 is equal to 9.95 persons per acre:—In Church Ward, 28.53; East Ward, 15.0: Moorside Ward, 9.42; Redvales Ward, 8.69; Elton Ward, 6.86.

Area.—The Municipal Borough of Bury comprises parts of what were formerly the Townships of Tottington-lower-End, Shuttleworth, Bircle-cum-Bamford, Heap, Pilsworth, Pilkington, Radcliffe and Elton, as well as the township of Walmersley, and has a total area of 5907 acres.

Elevation.—The mean elevation of the Borough is about 300 feet above sea level, and varies between 223 feet at Blackford Bridge and 765 feet at Higher Sedger Hey.

#### LEGAL SUMMARY.

Particulars of the Sanitary Laws in force in the Borough (other than Public General Acts):—

LOCAL ACTS.

Bury Improvement Acts, 1846, 1872 and 1885. Bury Corporation Acts, 1899 and 1901.

ACTS CONFIRMING PROVISIONAL ORDERS.

Local Government Board's Provisional Orders Confirmation (No. 13) Act, 1900. (An Act inter alia to confirm a certain Provisional Order relating to the provision of Markets, Slaughter-houses, Refrigerators and Ice-making Plant by the Corporation of Bury.)

Local Government Board's Provisional Orders Confirmation (No. 17) Act, 1903. (An Act to confirm certain Provisional Orders relating to Bury and the Bury and District Joint Hospital Board.)

ACTS ADOPTED.

Public Health Acts Amendment Act, 1890. (March 5th, 1891.)

Infectious Diseases (Prevention) Act, 1890. (August 2nd, 1900.)

**Estimated Population.**—The Registrar-General estimated that the population of the Borough would be 58,594 at the middle of the year 1905, this being an increase of 144 over the estimated population of the preceding year.

The following table shows the estimated population and the number of males and females in each ward of the Borough:—

Ward.	Males.	Fem	ales.	Totals.
Moorside	6636	79	41	14577
East	5519	63	72	11891
Church	3505	37	82	7287
Redvales	4837	58	68	10705
Elton	6676	74	58	14134
Totals	27173	314	21	58594

#### Rainfall, 1905.—Bury. (Yard, Parsons Lane).

JAN...Total Rainfall 2'18in.

Greatest fall in 24 hours 0'40in., date January 5th.

No. of days on which 0'01in. or more fell = 17.

FEB... Total Rainfall 2'43in.

Greatest fall in 24 hours 0'44in., date February 27th.

No. of days on which 0 1in. or more fell = 16.

MAR..Total Rainfall 3.44in.

Greatest fall in 24 hours 0.56in., date March 27th.

No. of days on which 0.1in. or more fell = 16.

APRL. Total Rainfall 3.20in.

Greatest fall in 24 hours 0.60in., date April 28th.

No. of days on which 0.1in. or more fell = 18.

May. Total Rainfall 0.52in.

Greatest fall in 24 hours 0.29in., date May 1st.

No. of days on which 0.1in. or more fell = 4.

JUNE. Total Rainfall 3.53in.

Greatest fall in 24 hours 1.35in., date June 17th

No. of days on which o in. or more fell = 10.

July Total Rainfall 2.26in.

Greatest fall in 24 hours 0.68in., date July 26th.

No. of days on which 0.1in. or more fell = 12.

Aug. Total Rainfall 4'89in.

Greatest fall in 24 hours 1'32in., date August 25th.

No. of days on which o'1in. or more fell = 19.

SEP...Total Rainfall 2.70in.

Greatest fall in 24 hours 0.90in., date September 9th.

No. of days on which 0.1in. or more fell = 16.

Ocr...Total Rainfall 3.53in.

Greatest fall in 24 hours o.89in., date October 14th.

No. of days on which o.1in., or more fell = 13.

Nov...Total Rainfall 4.49.

Greatest fall in 24 hours 0.63in., date November 10th.

No. of days on which 0.1in. or more fell = 21.

DEC...Total Rainfall o'69in.

Greatest fall in 24 hours o'12in., date December 8th.

No. of days on which o'1in. or more fell = 11.

RAINFALL AT GREENWICH OBSERVATORY, 1905.

#### BIRTHS.

During the year 1,271 births have been registered within the Borough, of which 649 were boys and 622 were girls. This gives a birth rate of 21.69 per 1,000, as compared with 1,383 births and a rate of 23.66 per 1,000 for the year 1904. The number of births in the Borough thus shows a decrease of 112 during the year 1905 from the preceding year, so continuing the general decrease of the past ten years; the birth rate of Bury is 5.51 per 1,000 below that for England and Wales, and 6.51 per 1,000 lower than the average for the 76 great towns. Though the birth rate is on the down grade in most of the other similar Lancashire towns, Bury compares badly with such as Wigan, with a rate of 33.04; Warrington, 32.9; and Preston, 28.16 per 1,000 respectively.

#### WARD DISTRIBUTION.

	NO. OF BIRTHS. RATE PER 1000.
Moorside	308 21.13
East	302 25.39
Church	
Redvales	214 19.99
Elton	

69 of the above births were illegitimate, as compared with 54 in the previous year, being apportioned to the wards as follows:—

Moorside	12
East	26 (7 of which occurred in
	the Union Workhouse).
Church	
Redvales	
Elton	13
Total	69
	_

#### DEATHS IN BURY.

During the year 1,065 deaths have been recorded in the Borough, being 39 fewer than in the preceding year. Of these deaths 188 occurred in the Union Workhouse, 40 in the Infirmary, 13 in the Florence Nightingale Hospital, and one in the Robinson Kay Home.

Of the deaths occurring in Public Institutions 115 were of persons not usually resident in the Borough, 42 being from Heywood, 35 from Radcliffe, 14 from Ramsbottom, eight from Tottington, seven from Whitefield, five from Bury Rural, and one each from Manchester, Wigan, Rochdale, and St. Helens respectively.

By excluding the deaths of these 115 non-residents, the total deaths are reduced to 950, to which must be added the deaths of 14 Bury residents in other districts, eight of which occurred in the Prestwich Asylum, four in the Manchester Hospitals, one in the Isolation Hospital at Ainsworth, and one at Blackpool. Thus the corrected number of deaths of Bury residents is brought to 964, which is fewer by 39 than in the previous year, and 2.28 lower than the mean for the preceding ten years.

The death rate is equal to 16.46 per 1,000 of the population, as compared with 17.16 per 1,000 in the previous year, and is 2.28 per 1,000 below the mean of the preceding ten years.

The following table shows the natural increase of the population, i.e., the excess of births over deaths during the past 15 years (1891-1905):—

Year.	Births.	Deaths.	Natural Increase
1891	1682	1474	208
1892	1617	1202	415
1893	1488	1287	201
1894	1507	1077	430
1895	1710	1414	296
1896	1454	1162	292
1897	1520	1099	421
1898	1483	1057	426
1899	1439	1061	378
1900	1390	1108	282
1901	1272	975	297
1902	1214	955	259
1903	1329	1030	299
1904	1383	1003	380
1905	1271	964	307
Total	21759	16868	4891

#### MARRIAGES.

The total number of marriages celebrated in the Bury Union during the year 1905 was 1,265, being an increase of 32 as compared with the preceding year. The quarterly return of the marriages solemnized in the Bury District in the year 1905 is summarised as follows:—

Quarter. Church	of England	Auth	Before orised P	ersons.	Before Registra	rs.	Totals.
March Quarter, 1905	114		20	4.4.4	94		228
June Quarter, 1905	213		38		121		372
September Quarter, 1905					132		374
December Quarter, 1905	164		23		104		291
		-	-				
Totals	704		110		451		1265
		-	-		-		-

District Mortality Rates.—The following table shows clearly the difference as regards the mortality rates in the various Wards:—

POPULATION, ACREAGE, AND DEATH RATES IN THE VARIOUS WARDS.

	1					Mo	rtality	per 100	0 Livin	g.
WARD.	Estim'ted Popula- tion to middle of 1905.	Acreage.	Persons per Acre.	Total Deaths	*Death Rate per 1000.	Zymotic Diseases.	Phthisis.	Other Tubercular Diseases.	Other Respiratory Diseases.	Cancer.
Moorside	14577	1534	9.42	246	16.87	1.23	0.81	0.48	2.95	0.75
East	11891	786	15.0	210	17.76	1.85	1.59	0.25	2.86	1.51
Church	7287	253	28.53	162	22.23	1.78	3.02	0.55	5.62	1.10
Redvales	10705	1221	8.69	149	13.92	1.03	1.12	0.28	2.05	0.75
Elton	14134	2042	6.86	197	18.94	0.49	0.13	0.49	2.83	0 68
Totals	58594	5886	9.95	964	16.46	1.21	1.24	0.68	3.16	0.92

<sup>\*</sup>Deaths occurring in Institutions have been relegated to the Wards to which they belonged; deaths within the Borough of persons usually resident outside are here excluded, and correction is made for persons dying without the Borough, but usually resident within. It will be observed from the above table that the highest death rate is recorded in Church Ward, which is the most densely populated district.

### Causes of, and Ages at, Death, during Year 1905.

	_		-								
Causes of Death.		Death hole	Dist		at su			bel lo (at	calit	ies ges).	Total Deaths in Public Institutions in the District.
Causes of Death.		-		10	30	- 10	- :			tion	OH-
	All ages.	F 1.	1 and under 5.	5 and under 15.	15 and under 25	25 and under 65	65 and pwards.	100000000000000000000000000000000000000	-Dis		Total ublic I in the
	65	Under year.	1 and	aler	der der	ler.	65 a	무	th	on	5 E
	A	b.	_ a	on o	100	25 ande	9 ap	North	South	Elton	P
				-		_	_	14	012	-	
Smallpox	1					1		1	1		- 6
Measles	6	3	2	1				4	1	i	
Scarlet Fever	3		2	1				Î	2		3
Whooping Cough	1	1						1		1	
Diphtheria and Membra-					1000						
nous Croup	5		4	1				3	2		2
Croup											
Typhus	::		.:					.:			
Fever Enteric	11		1		3	7		5	2	4	7
Other continued.	10						.:	.:	.:		150
Epidemic Influenza Cholera	10				2	4	4	5	5		5
Plague											
Diarrhœa	44	33	5			3	3	26	16	2	4
Enteritis	2	1		1			1		1	ī	*
Puerperal Fever	ī				1			1			i
Erysipelas	3		1			2		2		1	
Other Septic Diseases	2			1		2		1	1		1
Phthisis (Pulmonary											
Tuberculosis)	73	3	1	4	10	54	1	31	34	8	18
Other Tuberculous Diseases		7	5	3	3	6		10	7	7	2 8
Cancer, Malignant Disease	54	1::	1:	1	2	47	4	29	16	9	8
Bronchitis	90	11	5		.:	50	24	36	33	21	25
Pneumonia	75	13	13	5	5	28	11	33	25	17	7
Pleurisy Other Diseases of Respira-	100						2	1	1		1
	13	1	3	2		5	2	7	4	2	14.
Alcoholism		1	0	-		-				2	
Cirrhosis of Liver	19				1	16	2	8	7	4	5
Venereal Diseases	1.				1				1		1
Premature Birth	26	26						14	9	3	
Diseases and Accidents of		1	1 1	0.82	COLUMN TO SERVICE	360	200			0.50	
Parturition	5				1	4	0.400	2	1	2	1
Heart Diseases	121	6		3	4	73	35	50	39	32	18
Accidents	25	3		4	2	14	2	9	12	4	12
Suicides	10					8	2	4	2	4	
Diseases of Brain and				-0		10		0.5		_	
Membranes	41	3	3	2	6	18	9	25	9	7	19
Apoplexy	35	2				18	15	22	10	3	8
Digestive Organs, Diseases	28	8	2	2	3	8	5	8	14	6	- 1
Old Age	72					3	69	30	21	21	61
Spinal Cord, Diseases of	4	i	11			3		1	2	1	3
Rheumatic Fever	3		1	1	i	1		2		1	
All other causes	154	62	10	6	4	55	17	85	33	36	26
		-		-	_	-	-	-	-	_	
All causes	964	184	57	36	49	430	208	456	311	197	242

Vital Statistics of Whole District during 1905 and Previous Years.

		Births	hs.	Total	Total Deaths Registered in the District.	gistered rict.	in the	Total	Deaths of	Deaths of	Nett De	Nett Deaths at all Ages belonging to
	Population estimated			Under	Under 1 Year of Age.	At all	At all Ages.	in Public	registered	Residents registered in Public	the	nstrict.
	to middle of each Year.	Number.	Rate	Number	Rate per 1000 Births Regist'r'd	Number	Rate	Institu- tions in the District.	in Public Institutions in the District.	Institutions beyond the District.	Number	Rate.
	57558	1710	29.88	888	197	1501	26.19	196	94	1	1414	24.56
	57689	1454	25.22	257	176	1245	21.59	164	88	1	1162	20.15
	57721	1520	26.33	270	177	1183	20.49	166	84	1	1099	19.08
	57804	1483	25.65	275	185	1128	19.51	150	71	1	1057	18.58
	57885	1489	24.85	238	161	1168	20.09	194	109	7	1061	18.59
:	57966	1890	28.97	288	167	1199	89.03	210	107	16	1108	19.11
:	58049	1272	21.91	213	166	1060	18.26	204	94	6	975	16.79
:	58182	1214	20.86	156	128	1011	17.87	198	80	24	955	16.41
:	58318	1829	22.79	281	174	11115	19.12	224	105	20	1030	17.66
:	58450	1383	23.66	226	163	1104	18.88	148	119	18	1008	17.16
Averages for years 1895-1904.	57956	1419	24.52	248	170	1711	20.21	185	94	6	1086	18-74
:	58594	1271	21.69	185	146	1065	18.18	242	115	14	964	16.46

Area of District in acres (exclusive of area) 5836.

15

Vital Statistics of separate Localities in 1905 and previous years.

	(m)	BURY (whole dista	JRY district).				32	SUB-1	SUB-REGISTRATION	RATI		DIST	DISTRICTS.			
					A	NORTH	H.	-	32	SOUTH	H.			ELTON	N.	
YEAR.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under I year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under I year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under I year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under Lyear.
1895	57558	1710	1414	888	26280	765	629	145	17711	527	480	120	18617	418	325	
9881	57639	-	1162	257	26229	652		114	17729		844	85	_	816	285	58
7881	57721	1520	1099	270	26228	689		184	17747		888	80			287	
1898	57804	1488	1057	275	26227	969	519	118	17766	454	824	88			214	
6681	57885	1489	1061	288	26226	650	588	116	17784		299	72			224	
0061	57966	1890	1108	288	26225	655	594	107	17802		305	99	18989	10.5	209	
1061	58049	12		218	26224	580	470	66	17821		285	99	14004	100	212	
1902	58182	12	955	156	26290	560	425	70	17859		300	46			280	
1908	5881818	1829		281	26348	617	449	101	17901		820	74	14064		261	
5004	58450	1888	1003	526	26405	688	484	111	17946		880	99			239	
Averages of Years 1895 to 1904	5795614	1419	191086	248	26263	655	520	= =	17806	481	827	75	18887	888	239	57
1905	5859412	1271	964	184	98488	610	456	00	17000	000	011	101	14194	020	107	98

#### CLASSIFICATION OF THE CAUSES OF DEATH.

Of the 964 deaths from all causes :-

Zymotic Diseases caused 89 deaths or 9.23 per cent.

Constitutional	,,	173		17.95	
			,,		,,
Developmental	,,	143	,,	14.83	,,
Local	,,	518	,,	53.73	,,
Other	,,	41	,,	4.26	,,

#### Mortality at Different Ages .- Of the 964 deaths :--

184 occurred in children under one year of age..... 19.09 per cent.
57 occurred between the ages of 1 and 5 years..... 5.91 ,,

36 ,, 5 and 15 years..... 3.74 ,, 49 ,, 15 and 25 years..... 5.08 ,, 430 ,, 25 and 65 years..... 44.60 ,,

208 occurred in persons over 65 years of age ..... 21.58 ,,

100.00

**Zymotic Diseases.**—The percentage of deaths from the infectious diseases (9.23) during the year compares very favourably with the years 1904, 1903, 1902, and 1901, when the percentages of deaths were 14.05, 12.04, 9.95, and 10.87 respectively. This comparatively low mortality is chiefly attributed to the small number of deaths (six) recorded from Measles and Whooping Cough (one); whilst 45 deaths were recorded from Diarrhæa and one from Smallpox.

Diseases of the Respiratory Organs (excluding Phthisis).—
180 deaths have been attributed to various diseases of the respiratory organs, which is a decrease of two in the number of deaths as compared with that of the preceding year. Of these deaths, 90 (or 50.00 per cent. of the total deaths from respiratory diseases) were attributed to *Bronchitis*, of which 11 occurred in children under one year of age. The following table shows the age periods at which deaths from Bronchitis were recorded:—

Under	1 and	5 and	15 and	25 and	65
1.	under 5.	under 15.	under 25.	under 65.	upwards.
11	 5	 	 -	 50	 24

Pneumonia caused 75 deaths, as compared with 56 in the previous year. The following table shows the ward distribution and the age periods at which these deaths were recorded:—

Wards.	Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and Upwards	Totals
Moorside	5	2		2	. 8	3	20
East	3	8	1	2	8	1	18
Church	2	6	1		6	8	18
Redvales	1	1			4	1	7
Elton	2	1	8	1	7	8	17
Totals	18	13	5	5	28	11	75

#### LONGEVITY.

Deaths of Persons over 60 Years of Age.—The deaths of persons over 60 years of age were equal to 29.87 per cent. of the total deaths, which compares favourably with the preceding year, when the percentage of deaths of persons over 60 years of age was 28.61.

The number of deaths attributed to **Old Age** was 72, which is not so high as in former years, as will be seen from a reference to the following table:—

YEAR.	1897	1898	1899	1900	1901	1902	1903	1904	1905
No. of Deaths	98	78	81	112	109	74	79	78	72
Per cent of Total Deaths	8.28	6.91	6.96	9.34	10.21	7.64	7 67	7.27	7 48

#### INQUESTS DURING THE YEAR 1905.

During the year the cause of death of 74 Bury residents were investigated by the District Coroner, Mr. S. F. Butcher. In 61 instances it was found advisable to hold an inquest, and in 13 cases an inquiry was dispensed with. Of this number 48 related to the bodies of males and 26 to females. The following is a classification of the sex and age periods:—

			emales.
Under one year of age	2		4
Over one and under five years of age	0		0
Over 5 and under 15 years of age			
Over 15 and under 25 years of age	3		I
Over 25 and under 65 years of age	25		12
Over 65 years	8		3
	_	8	
Totals	40		2 I

In the 61 cases in which inquests were held the findings of the Coroner's Juries were as follows:—

Natural Causes	 	 27
Accidents	 	 23
Suicide	 	 10
Open	 	 I

Of the 44 deaths returned as "Natural Causes," three were due mainly to the excessive use of alcohol.

Of the ten deaths from suicide (seven males and three females), four committed suicide by taking poison, four by hanging, and two by drowning.

In one instance an "open" verdict was returned, the body of an unknown person found drowned in a lodge at Woolfold.

#### UNCERTIFIED DEATHS.

The number of uncertified deaths, i.e., deaths which have not been certified by a Medical Man, or cases in which the Coroner deems the holding of an inquest unnecessary, was 13, eight being males and five females.

The following are the age periods:-

Under one year of age	5
Over one and under five years of age	I
Over five and under 25 years of age	0
Over 25 and under 65 years of age	4
Over 65 years of age	3

### Annual Rate of Mortality compared with other Towns.

The following table compares the Birth Rate and certain Death Rates of Bury with other manufacturing towns and with the returns for England and Wales.

TOWN.	Estimated Population.	Birth Rate per 1000,	Death B	tate per 00.	Zymotic Death Rate.	Phthisis Death Rate.	Proportion of Deaths of Infants under twelve months to
			Crude.	Correct'd.			1000 Births.
Accrington	44600	20.78	12.93	13.43	0.65	0.67	137
Crewe	46578	28.2	12.9	18.5	1.67	0.5	131
Oldham	140225	24.8	18.9	18.1	2.2	1.47	150
Preston	115721	28.16	16.47	18:01	2.86	1.08	150
Wigan	88306	33.04	19.44	18.07	8.28	1.04	163
Bolton	178111	25.1	15 4	17.4	1.88	1.17	166
Bury	58594	21.69	18.18	16.46	1.21	1.24	146
Rochdale	86390	21.8		16.7	1.80	1.30	133
Radcliffe	25500	23 8	15 0	16.4	1.2	0.59	155
Ramsbottom.	16200	20.25		15.0	0.86	1.6	106
Stockport	98320	27.13	18.67	18 22	2.20	1.82	167
Warrington .	69153	32.9	16.9	18.2	2.7	1.87	147
St. Helen's	89843	86.2	17:0	17.1	1.88	1.31	184
Blackburn	132742	24.0	16.4	18.5	2.0	1.0	146
Leeds	456787	27.1		15.6	1.62	1.23	152
Burnley	100000	26.67	17.99	16.80	2.16	1.67	172
Darwen	89918	20.4	18.7	14.0	1.07	0.90	144
London	4684794			15.1	1.70		129
Heywood	26371	21.72	17.14	15.58	1.7	1.59	117
England & Wales	84152977	27.2		15.2	1.52		128

<sup>\*</sup> For Non-Residents.

#### INFANTILE MORTALITY.

Number of births during the year 1905 12	71
Number of deaths in children under 1 year of age	84
Infantile Mortality 146 per 1,000 birt	hs.

The Infantile Mortality for the year 1905 shows a reduction on that of the two previous years, but is not so low as the rate for 1902. Though lower than the mean for the preceding ten years (170), it is still too high when we consider that the rate for the 76 great towns is only 140 per 1,000 births.

On reference to the appended table it will be noticed that no fewer than 47 of the deaths occurred during the first week after birth, and 68 during the first month.

As compared with the preceding year we find a marked decrease in the number (22) of deaths from the zymotic diseases (59 in 1904); also a diminution in the deaths from respiratory and tuberculous diseases respectively.

The comparison of the deaths respectively for the past ten years in the Borough, and also those for England and Wales, will be seen in the subjoined table:—

A TO I CATOLOGUE A TILL OF LEGGE A COL LISTER A .	In	fantile	Mortalit	v o	f Bury :	
---	----	---------	----------	-----	----------	--

1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
176	177	173	161	167	166	128	174	163	146

Infantile Mortality for the whole of England and	
Wales (1905)	128
For the 76 great towns	
For the 141 smaller towns	
For the rest of England and Wales	
For London	129

Causes of Deaths.—**Zymotic Diseases** have caused 27 deaths, of which three were due to Measles, one to Whooping Cough, and 33 to Diarrhœa, as compared with 59 deaths during the previous year. The most unsatisfactory feature is the large number of

deaths again recorded of children under one year of age from Diarrhœa (33), as compared with 32 deaths during the year 1904, 38 deaths during the year 1903, and seven during 1902.

Respiratory Diseases.—These are responsible for 25 deaths, as compared with 40 deaths in the preceding year, eleven of which were due to Bronchitis, 13 to Pneumonia, and one to other respiratory diseases.

The chief remaining causes were:

Premature Birth	26	deaths.
Malformation & Congenital Defects	15	,,
Marasmus, Tabes Mesenterica, &c	28	,,
Tuberculous Diseases	9	,,
Convulsions and Nervous Diseases	15	,,
Dentition	4	,,

An analysis of the deaths at the various age periods is given on page 23.

Inquests.—During the year the Coroner (Mr. S. F. Butcher) has enquired into the cause of death in six instances (two males and four females), the age of the children being four hours, two days, five weeks, six weeks, seven weeks, and twelve weeks respectively. In three instances the cause of death was returned as "Natural Causes," and in the other three cases as "Accident," due to suffocation by being over-laid in bed.

Uncertified Deaths.—In five instances (three males and two females) the Coroner deemed the holding of an inquest unnecessary, the cause of death in each case being returned as due to "Natural Causes."

**Illegitimacy.**—It is satisfactory to again record that of the 184 deaths, only 14, or 7.6 per cent., were of illegitimate children.

During the year the Inspector (Nurse Walton) has been able to obtain particulars in all of the 184 deaths registered as regards the feeding of the infants, and also as to the occupations of the mothers, which are as follows:—

Feeding.—No fewer than 120, or 65'22 per cent., were bottle fed, while only 48, or 26.09 per cent., were fed naturally.

In the remaining cases (16) the character of the feeding was not obtained, this number including those prematurely born and also those which died shortly after birth.

Occupation of Mother.—In the majority of cases the mother was occupied at home (113). In 71 instances the mother was at work (chiefly in the mill).

Insurance — Eighty-two of the children (44.57 per cent.) were insured.

Influence of Feeding on Infant Mortality,—During the year the Female Inspector has obtained information as to the method of feeding in 1,256 instances, or 99.35 per cent. of the 1,271 births registered during 1905. In 888 cases, or 70.70 per cent., the children were breast fed, and in 368 instances, or 29.30 per cent., the children were bottle fed at the time of her visits.

Of the 1,256 cases investigated, 140 died before the end of the year; 16 of this number were either premature births or lived only a few hours, and of the remaining 124, 81 deaths occurred in bottle fed children, and 43 in children fed naturally.

	Number of instancin which informat was obtained.	ion of	Number of Deaths.	Mortality Percentage.	
1271	1256	(888 Breast	43 81	4.8	
		DISTRICT MORTALITY.			
	Bury North	Moorside Ward East Ward		146 178	
	Bury South	Church Ward Redvales Ward			
		Elton Ward		132	

It will be noticed that the highest Infantile Mortality occurs in Church Ward, a district in which there is probably most poverty, vice, and drunkenness. The majority of the registered common lodging-houses, as well as of the furnished rooms, are situated in this portion of the Borough. A portion of this ward ("The Mosses") comprises dwellings which are badly arranged, and built upon "made" ground. In Redvales Ward there is probably least poverty, the ward containing the largest proportion of better-class dwellings.

Months under One Year of Age. INFANTILE MORTALITY DURING THE YEAR 1905 (Whole District). Deaths from stated Causes in Weeks and

1										-
Total Deaths under one year.	179	1 33	29	7	26 13 29	00	8 4	1231	17	184
an'M 21-11	œ :	- :	::	:	: : -	1	: :	::::	<b>*</b> : ⊓	00
sa'M 11-01	œ :		eo :	-	:::	:	: -	::: : =	:::	00
9-10 M'ths.	4 :	□ :	c1 :	:	:::	:	::	::::	::-	4
adtaoM 8-8	1	::	⊣ :	:	:::	:	: -	- :- :	∞ :-	1
7-8 Months	∞ <del></del>	::	· 5	:	::-	:	::	: :	: :-	6
edinoM 7-9	œ :	::	· :	:	:::	:	: -	:	<b>-</b> : :	00
5-6 Months	9 1	::	::	:	: : 00	-	: :	: : 01 00	- : :	10
sdtaoM &-b	Ξ:	::	01 01	:	: : 01	:	нн	: :: : ೧٦	:: =	=
8-4 Months	13	::	03 F	:	: :01	1	٦:	:- :01		13
2-3 Months	17	::	c2 :	1	:∞	:	::	::-::	cı : cı	17
1-2 Months	21 :	::	9	1		:	⊣ :	:::-	01011	21
Tot'l under I Month.	66	::	eo :	4	25 11 8	:	::	::91	: c1 ∞	89
3-4 Weeks.	4:	::	::	:	- :-	:	::	::	:::	4
2-3 Wеекв.	: ::	::	- :	60	0	:	::	::::	:: : ::	=
I-2 Weeks.	9:	::	c3 :	:	::-	:	::	:: : : :	:	9
Under 1	45	::	::	-	23 10 4	:	::	::4:	:4	47
CAUSE OF DEATH.	ALL CAUSES.—Certified	Common Infectious Diseases.  Measles Whooping Cough	Diarrhoa, all forms Enteritis Got Tuberculous)	Wastrug Dreates	Premature Birth Congenital Defects Atrophy, Debility, Marasmus.	:	Tuberculous Peritonitis: Tabes Mesenterica Other Tuberculous Diseases	Rickets Meningitis (not Tuberculous) Convulsions Bronchitis	Preumonia Suffocation, overlaying Other Causes	TOTALS

Deaths from stated Causes in Weeks and Months under One Year of Age. INFANTILE MORTALITY DURING 1905 (Sub-Districts).

	Total Deaths under I year.	36	r :	250	1040	-	C3 1-1	:-0-0-4	18
		03 .				-			100
	II-IS Months.	63 :	- : :		:			11111	111
	10-11 Months.	7 :	-	111		- :			10
	9-10 Months.	::	-				::		110
	8-9 Months.	ю :	:	1 . 1	:::	:	:-		1
	7-8 Months.	100	:	- : :	-		::	:: :	100
	6-7 Months.	03 :	- :	- :	: :		11	: : -	03
z	5-6 M. nths.	03 :			::-		:	:	103
0	4-5 Months.	- :		:	: :	- :		: :::::	-
F	3-4 Months.	10 :	::	:- :	: : :		- :	1 1 1 1 1	160
ELTON.	S.5 Months.	03 :	::		:01			11 11	(0)
ш	1-S Months.	5 :	11	:":	:		-	:::	0
	Total under I Month.	27 :		::=	2041		::	: :00 : : :	120
	Committee of the Commit	H :			-	-	1.1		-
	3-4 Weeks.	-	- :	- : : :	111	- :	11	1 1 1 1 1 1 1	1
	S-5 Weeks.	- :		- : : :		:		: H : : : :	-
	I.S Weeks.		::	-	Ø4H				-
_	Under I Week.	01 :	:			:	::		10
	Total Deaths under I year.	84	1.1	310	0.610	-	:03		49
	11-12 Months.	03 :	1:	1.1	111	:	-	. : := :=	63
	10-11 Months.	63 :	::	- :	::		-	: ::!	03
	9-10 Months.	- :	:	- : :	. :	:	:	11 11 11	-
Ť	8.9 Months.	03 : 1		- :	:	- :	:	- : : : : : : : : : : : : : : : : : : :	63
Ē	7-8 Months.	::	1.5	111	:	:	1	1 1 1 1 1	
SOUTH	6-7 Months.	7:1	::	:::	::	-	1	: - :	-
0	5-6 Months.	03:1	:	:::	::	- 1	::	117 111	6.0
S	4-5 Months.	10 : 1	:	:":	: :	:	:-	::	10
5000	5-4 Months.	9:1		H : :	: :-	:	::	H :03 :H 1	9
2	2-5 Months.	9:1	1:	- ::	10			: :: -: - : - :	9
=	1-S Months.	4 :	:	w :-	:::		:	111	4
BURY	1 Month.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	::	04 ;09	000	:	:	::: - 02	8
	3-4 Weeks.	7:1	::	111	111		:	:- :	-
	S-3 Weeks.	9:1	. :	H :03	: -		:	: : :00	9
	L.S Weeks.	-	::	-	: : :		1.1		-
	Under 1 Week.	=-		111	681		: '	111 1	12
	Total Peaths under 1 year.	95	21	17	14 7 16	1		:-00-000	8
	II-IS Months.	4:1	- :	:::	111	:	::	:::::::::::::::::::::::::::::::::::::::	4
	10-11 Months.	10:1	:	03 :	1 1			:: '- ::	5
-:	9-10 stonths.	10 · 1	H :	- : :	111	:		::::	143
Ŧ	8-9 Months.		:	1:11	1 1	:	: '	: - ::-1	6.3
Ë	7-8 Months.	01	:	4 :	111	- 1	. :	: :::	8
2	6-7 Months.	10		ca :	:::			:: == .	5
ž	5-6 atonths.	504	::	::	; 03	:	- 1	: -01 ::	9
~	4-5 Months.	7:1	:	ca :	: 0		<b>-</b> :	: : :04 : : : :	7
>	3-4 Months.	4:1		- ::	:: : =	-	::	: :: - :: 1	4
~	S-5 Months.	0:1			: 10		1 :	: :- :- :-	on .
BURY NORTH.	I-S atontha.	1: 12	::	ю::	ппм		::	::::	23
	Total under I Month.	184	::	н :н	55 5	:	::	: 4 : 610	%
		00 :	1:	111	::=		::	: + ::	co
	2.5 Weeks. 5.4 Weeks.	ω : I	::	::-		:	11	::: :-!	9
	I-2 Weeks.	4:1	:	:	; =	:	1.1	: ::	4
	Under I Week.	124	1:	:::	5240		1:	: M HM	55
-						- :		::.::::	
	CAUSE OF DEATH.	-Certified	COMMON INFECTIOUS DISEASES. Measles Whooping Cough	ARRHGAL DISEASES.  Diarrhea, all forms  Enteritis (not Tuberculous)  Gastritis, Gastrointestinal Catarrh	Premature Birth Congenital Defects Atrophy, Debility, Marasmus	TUBERCULOUS DISEASES.  Tuberculous Meningitis  Tuberculous Peritonitis.	Tabes Mesenterica Other Fuberculous Diseases	Rickets Meningitis (not Tuberculous, Convulsions Bronchitis Pneumonia Suffection, overlaying Other Causes	
	Circ.	rti	00 id	up din	ty,	Sini	ica	ay a	
	0	35	H : in	E Tro	AS illi	Me	ter	E	
	60		Co	all all	SE DE	Sis	ent	ov.	
	CIS	SS	N. Se	A.C.	ASTING DISEASES.  Premature Birth .  Congenital Defects Atrophy, Debility,	Pol	Tabes Mesenterica Other Tuberculous	s s s s s s s s s s s s s s s s s s s	
	CA	TO.	Measles Whoopin	tribes.	att att	reu	N	sio sio itio tio	
		5	MO	RET	TIL BE	BR	ber	r Current	
		ALL CAUSES.	COM	DIARRHGAL DISEASES. Diarrhoea, all forms Enteritis (not Tubero Gastritis, Gastrointes	WAST Pre Cor Atr	TUB	tr O	Rickets Meningtis (not Tuberc Convulsions Bronchitis Preumonia Suffocation, overlaying Other Causes	1

### NOTIFICATION OF INFECTIOUS DISEASES.

## Table showing the number of cases of Infectious Diseases notified from 1884 to 1905.

DISEASE.	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
Smallpox Scarlet Fever Diphtheria	3 115 7	1 171 6	114 2	14 183 8	5 92 7	42 20	98	255	272	12 359 34	28 449 42	160 32	1 365 27	262	148	236	5 432 14	179	37 156 177	59 156 98	25 261 68	33 197 52
Membranous Croup † Enteric Fever Continued Fever Typhus Fever	84 10 3	30 7 1	19 2 1	17	2i i	18	36	88 1	41	76 9	76 30 10	70 8	41 8	4 59 13	56 15	5 45 12	4 40 11	2 47 9	5 33 5	9 37 2	5 22 1	33 33 3
Cholera Puerperal Fever Measles§	108	i	26		499	22	2 27	5 360	3	4	13	4	2	5	6	8	15	7	11	2	ii	4
Whooping Cough§ Erysipelas‡ Chickenpox *	17	::		15	19	179	63	45	,								34	15	20	20	10	46
TOTALS	347	217	168	315	644	283	248	788	354	494	648	274	444	366	250	346	555	335	444		403	450

§Not notifiable after 1891. † Made notifiable on June 26th, 1897. † Made notifiable on January 1st, 1900.

\* Made notifiable for six months from April 3rd, 1905.

\* Made notifiable for six months from April 3rd, 1905.

\* Made notifiable for six months from April 3rd, 1905.

\* Made notifiable for six months from April 3rd, 1905.

\* Made notifiable for six months from April 3rd, 1905.

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\* Made notifiable for six months from April 3rd, 1905.

\* Made notifiable for six months for six months from April 3rd, 1905.

\* Made notifiable for six months fo

### Cases of Infectious Disease notified during the Year 1905.

Notifiable Disease.			notifie A		hole D			not	otal Ca ified in locality stration Distric	each y. n Sub-	No. of Cases Removed to Hospital from each locality.			
	At all Ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and up- wards.	North.	South.	Elton	North.	South.	Elton.	
Smallpox Cholera Diphtheria Membranous Croup	33 52	::	1 15	8 26	9	15	-: ::	11 33	21	1	11 12	21	1 2	
Erysipelas Scarlet Fever	3 46 197	i 1	55	6 125	7 12	31 4	i	1 22 65	2 7 92	17 40	1 28	72	27	
Enteric Fever Relapsing Fever Continued Fever Puerperal Fever	33 3 4		1	5	8	19		13	11 2 2	9	5	3	6	
Plague	371	2	75	172	43	78	1	146	148	77	58	104	38	

## Number of Cases of Infectious Diseases Reported in each Month of the Year.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox
January	14	3	1	2			8	1
February	15	6		3		2	4	-1
March	28	4		2			2	20
April	10	8		1	1		2	4
May	20	10		2		1		7
June	12	4		1		1	7	
July	10	1			1		1	
August	9	1		2			3	
September	26	3		5	1		9	
October	25	4	1	9			4	
November	21	5		4			7	
December	7	3	1	2			4	
Totals	197	52	8	88	8	4	46	38

## Number of Cases of Infectious Diseases Notified in each Quarter of the Year 1905.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.		Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox
QUARTER.			P					
1st	57	13	1	7		2	9	22
2nd	42	22	0	4	2	2	9	11
3rd	45	5	0	7	1		13	
4th	53	12	2	15			15	
Totals	197	52	3	33	3	4	46	88

#### WARD DISTRIBUTION OF INFECTIOUS DISEASES, 1905.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox
Moorside	37	28	1	9		1	12	4
East	28	5		4			10	7
Church	36	4	2	4	1	1	3	11
Redvales	56	7		7	1	1	4	10
Elton	. 40	8		9	1	1	17	1
Totals	197	52	3	33	3	4	46	33

## Cases Removed to the Florence Nightingale Hospital from the various Wards.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	* Smallpox.
Moorside	17	10	1	3			1	4
East	11	2		2				7
Church	27	2	1	2				2
Redvales	45	5		1				19
Elton	27	2		6	1	1		1
Totals	127	21	2	14	1	1	1	38

<sup>\*</sup>Removed to the Isolation Hospital, Ainsworth, with the exception of one case, which was removed to the Heywood Isolation Hospital.

#### SCARLET FEVER.

#### RATE OF MORTALITY DURING THE PAST TEN YEARS.

			000 1000									1905.		
Year	1896	1897	1898	1899	1900	1901	1902	1903	1904	England & Wales	London	76 Great Towns	141 Smaller Towns	Bury
Death Rate per 1000 Living		0.26	0.14	0.08	0.09	0.05	0.09	0.13	0.17	0.11	0.12	0.13	0.11	0.05

Being a decrease from the preceding year of 64

Three deaths have been recorded, representing a rate of 0.05 per 1,000, a decrease of 0.08 below the average for the last ten years.

#### QUARTERLY INCIDENCE.

1905.	ıst	Quart	er. 2nd	Quarter	r. 3rd	Quarte	r. 4th	Quarte	er.	Total.
Notifications		57		42		45		53		197
Deaths										

The ward distribution is shown on the previous page. Unlike the preceding year, the maximum number of cases occurred in Redvales Ward, and the minimum in East Ward, while in 1904 Elton Ward shewed the maximum number of cases and Church Ward the minimum.

#### TABLE SHOWING AGE DISTRIBUTION.

	All Ag	es.	Under 1 year.		1 to 5.	5	to 15.	15	to 25.	25 t	0 65.	upwa upwa	irds
Cases	 197		I		55		125		12		4		0
Deaths													

School Closure.—No schools were closed during 1905 on account of Scarlet Fever.

In 17 instances there were two cases of fever in one house.

In five instances there were three cases in one house.

The remaining 148 cases were all in separate houses.

ADMISSIONS TO HOSPITAL.—Of the total notifications (197) there were admitted to the Florence Nightingale Hospital 127, i.e., 64.47 per cent., as compared with 64.75 per cent. in the previous year. Of the 127 hospital cases two died, representing a case mortality of 1.57 per cent. Of the 70 cases treated at home one died, the case mortality thus being 1.43 per cent. The corresponding case mortalities in 1904 were 3.55 for hospital, and 4.35 for home cases.

The type of the disease which has been most prevalent this year (1905) is a comparatively mild one, and after the first few months there were few of the severe throat complications which were a special feature of the disease in the preceding year.

RETURN CASES.—As in 1904, only three cases call for remark under this head:—

- (i.) F. W., discharged on 13th December; N. F. notified from the same house on 19th December.
- (ii.) W. A., discharged on 7th March; H. A. notified from same house on 24th March.
- (iii.) E. B., discharged on 4th January; A. B. notified from same house on 19th January.

The same difficulties have attended attempts at discovering return cases among patients treated at home as were encountered last year. It is usually impossible to obtain any information at all as to infecting cases, a very large proportion of which are most probably of so mild a type as altogether to escape notice, and yet are able to cause a well-marked form of the disease in others. Several cases indeed, during the past year, were sent into hospital as late as four weeks after onset, having only been discovered when a doctor was called in to another case in the same family. It is such cases as these which constitute a far greater danger to the community in general than the severe ones, which call for prompt attention and recognition.

Only one case of those treated at home was definitely proved to be of the nature of a return:—

F. A., notified on 2nd May; E. A. (brother) notified on 15th May; S. A. A. (mother) notified on 28th May. In each instance "isolation" ceased a week or so after the onset of the disease. In our last Annual Report we tabulated particulars bearing out the fact that of the cases treated at home the large proportion are from households containing only one or two children, hence rendering occurrence of return cases much less likely than in families in which the number of children is greater.

The following table for 1905 bears out the same fact:—

CASES TREATED, 1905.

From Families with			Home.				Hospital.	
From Families with	N	umber.		Per cent.	N	umber		Per cent.
One child		34		61.8		21		38.2
Two children		24		44.4		30		55.6
Three children		8		24.2		25		75.8
Four children		3		10.0		27		90.0
Five children		3		21.4		11		78.6
Six children		0		0.0		5		100.0
Seven children		I		33.3		2		66.7
Eight children		0		0.0		2		100.0

One child was sent into Hospital from the Infirmary, in which case infection was probably introduced by a visitor to the wards.

#### ENTERIC FEVER.

RATE OF MORTALITY FROM ENTERIC FEVER FOR THE LAST TEN YEARS.

					1						19	05.		
Year.	1896	1897	1898	1899	1900	1901	1902	1903	1904	England and Wales.	London.	76 Great Towns.	141 Smaller Towns.	Bury
Death Rate per 1000 living.	0.18	0-24	0-24	0-24	0-09	0.12	0.07	0.07	0.12	0-09	0.05	0-08	0-13	0.188

Notifications of 33 cases of Enteric Fever were received at the Health Office during the year, as compared with 22 cases in 1904, 37 in 1903, 33 in 1902, and 47 in 1901. Of these, 14, or 42.42 per cent., were removed to the Florence Nightingale Hospital. There were 11 deaths in all, of which six had been treated at home, and five in hospital. One of the latter was not suffering from Typhoid Fever, but from Puerperal Fever, with phlegmonous erysipelas.

The Monthly In	CIDE	NCE W	as a	s fol	lows	s :				
Jan. F	eb. Mar	r. April.	May.	June.	July. A	Aug. S	Sep.	Oct. 1	Nov. I	Dec. Total
Notifications 2	3 2	1	2	I	0	2	5	9	4	2 33
Deaths 3	0 1	0	0	I	0	0	0	4	2	0 11
	AG	E DIS	STRIB	UTIC	on.					
Ages-Under 1.	ı t	0 5.	5 to 15	. 1	5 to 25	. 25	to 6	5. Ov	er 65.	Total.
Notifications o		I	5		10		17		0	33
Deaths o		ı	I		2		7		0	11
	WA	RD D	ISTR	IBUT	ION.					
	Moon	rside.	East.	Cł	urch.	R	edval	es. E	lton.	Total.
Notifications		8	5		5		5		10	33
Deaths		2	3		I		1		3	10

SEX INCIDENCE.—Of the notified cases 18 were males and 15 were females, and of the fatal cases eight were males and three were females.

Sanitary Condition of Infected Houses.—The general sanitary conditions are summarised in the tables on pages 32 and 33.

From these it will be seen that of the 32 houses infected

18 were provided with privy middens,

2 with pail closets,

7 with waste water closets, and

5 with water closets.

Bacteriological Tests.—Specimens of blood from seventeen cases of suspected Typhoid Fever were sent to the Public Health Laboratories, Manchester, with the following results:—

5 gave a positive result to Widal's test,

12 gave a negative result.

WATER SUPPLY.—In all cases the water supply was directly from the public service, and in no case was there any evidence of pollution.

MILK SUPPLY.—No instance of infection by this channel was discovered.

SHELL FISH.—In four cases there was reason to suspect cockles, mussels, or oysters, as the vehicle of infection, but no direct proof was obtainable.

BACK-TO-BACK HOUSES.—One case occurred in a back-to-back house, and another in a house which permitted of no through ventilation.

PREVENTIVE MEASURES .- These, for some years now, have consisted generally in (i.) Isolation (a) at home, or (b) in hospital. (ii.) Disinfection or destruction of stools. In the case of patients treated at home, special pails are supplied by the Health Department for the reception of the excreta of patients. The pails are removed frequently, and their contents burnt at the destructor. (iii.) Thorough disinfection of house, bedding, &c. (iv.) Disinfection of sanitary conveniences attached to the infected houses. (v.) Examination of drains, and defects, if any, remedied. (vi.) Conversion of midden ashpits, where these exist in connection with infected houses, to the water carriage system. The last remedy is, in my opinion, a most important one in the prevention of the future spread of the disease.

## Comparative Prevalence of Enteric Fever in Bury During the Years 1898-1904.

The rates of attack by Enteric Fever in 90 large towns of England and Wales during the years 1898 to 1904, inclusive, have been recently tabulated by Dr. Buchanan, of the Local Government Board. Appended is a much-abridged table extracted from the one published by Dr. Buchanan, and from this it will be noted that the annual attack rate for Bury for the seven years is the same as that for Southport:—

and an enter for courting	JOIL.		
Liverpool	1.19	Birkenhead	1.76
Manchester	0.81	Derby	1.00
Birmingham	1.12	Burnley	0.82
Leeds	1.01	St. Helens	1.47
Sheffield	1.73	Stockport	0.81
Nottingham	1.75	Warrington	0.78
Bolton	1.30	Rochdale	0.45
Oldham	0.48	Wigan	1.48
Blackburn	1.24	Bootle	1.30
Preston	1.48	Southport	0.70
Wolverhampton	1.29	Bury	0.70
Rotherham	1.28		

CASES OF ENTERIC FEVER.

2	A see	ర్ధ	Nature of Closet		Condition of		REMARKS
No.	Age.	nouse or vicinity.	Accommo- dation.	Yard.	Drains.	Closet or Ashpit.	TATE OF THE PARTY
1	43	Two cases three doors off in same	W. C. Latrines	Good order. common to three	Good on surface	Ashpit cleared bi-weekly	Patient washed clothing of the cases in same street (end of 1904).
0.3	26	(1001) 100110	W C. and	Good order	Good on surface	Sole use; good;	Employed at the Union Workhouse.
ęę	20	: :	W.W.C.	Good order,	Good on surface	Dry ashpit;	Barman in an Inn; two sewer manholes in front street 15 vards away.
4	36	:	P. & A.	Good order, partly flagged	Good; pavement defective round		
70	26	Three cases 150 yards from house	P. & A.	Good order, unpaved,	Good on surface	Cleared monting Cleared every eight weeks	Cellar has foul odour; dog and cat kept.
9	34	:	P. & A.	No proper yard	In bad condition	Uncovered and	P. & A. uncovered; sinkstone connected
7	19	:	Modified D. f. A	Good order	Good on surface	Cleared monthly	Tub of horse manure in yard; ate
œ	20	:	P. & A.	Good order,	Good on surface	Cleared every	Confinement five days previous.
6	30	:	W.W.C.	Good order,	Good on surface	Ashpit; cleared	Frequently ate mussels; house new,
10	31	:	Modified	Good order,	Good on surface	Dry ashpit;	Cellar unusual, dirty, and has strong
11	30	:	W.C.	Good order	Good on the whole: one waste	-	Patient a Nurse in a Public Institution.
12 )	19	Infected by 12	W.W.C.	Good order, flagged	pipe untrapped Good; new	0	Sisters; elder ailing for some time before; slept together.
14	45	:	P. & A.	Good order,	Good on surface	Cleared every	Four privies and one ashpit nine yards
15	6	Mother "out of sorts" for some time	W.C.	Good order, paved	Good	Cleared weekly	Mother and Brother not well for some time; large open wet privy-midden recently removed.
1	63	80	4	5	9	7	00

	00	Foul block of four privies common to 22 houses; foul brook ten yards from	P. and A. foul, and in bad condition.	Dirty yard; contains dog, pigeons, and ducks; privy ashpit deep and foul.	Foul open privy midden; slopstone pipe too short, and wall dilapidated near it.	Wet privy midden; unpaved back and front streets, and yard sloping to house rooms dark	Sewer manhole close to front of house.	Pail leaks and liquid flows on to yard; back door opens into a covered entry, preventing ventilation; ate mussels	Pri	Deep midden for three privies; back to	No ashpit; ashes thrown into corner of	yard. Has frequently had mussels and oysters	before this illness	Large privy midden.	Drains choked.	Infection probably obtained while at Attercliffe.	No through ventilation to house; P. and	House very damp; mother does washing from house of No. 21	House exceptionally clean and in good order.	
	7	Cleared every two months	Cleared monthly	Cleared every three months	Cleared at irreg- ular intervals	Cleared every three months	Cleared every six weeks	Cleared twice a week	Cleared monthly	Cleared every 8	Ashes cleared	Cleared	Cleared weekly	Cleared every	Cleared weekly	Cleared every six weeks	Cleared monthly	Cleared weekly	Cleared monthly	as (Fatal).
	9	Good on surface	Good on surface	Good on surface; pavement defec- tive near drain	Condition doubt- ful; pavement near gully defec- tive	Good on surface	Good on surface	Good on surface	Good on surface	Good on surface	Good on surface	Good	Good on surface	Good on surface	Yard gully chok'd	Good on surface	Good	Good on surface	W.W.C., tippler under waste pipe from sink	* Case of Puerperal Fever with Erysipelas (Fatal)
1	9	Small, good order, Good on surface paved	Good order,	dirty	Good order, flagged		_	Good order, paved				W.W.C. &A. Good order, paved		pavement Good order	Good order,	id,	Good order		W.W.C. &A. Good order, paved u	* Case of Puerpera
	4	P. & A.	P. & A. Modified	P. & A.	P. & A.	P. & A.	P. & A.	Pail Closet and A.	Modified P. & A.	P. & A.	W.C., no	W.W.C. &A.	W.C. & A.	P. & A.	W.W.C. & A.	P. & A.	P. & A.	Pail & A.	W.W.C. &A.	
	200	:	:	1	1	:	::	:	:	:	:	:	::	- !	::	:	No. 19	19 and 31 five doors away	:	
0	2	36	12	20	4	16	53	4	99	24	18	22	40	41	16	27	œ	00	14	
-	-	16	17	18	19	-50	21	55	53	24	25	56	27	28	53	30	31	35	00	

Case of Puerperal Fever with Erysipelas (Fatal).

#### CONTINUED FEVER.

Three cases of "Continued" Fever were notified during the year. One of these was afterwards found to be a case of Typhoid Fever. It was admitted to the Florence Nightingale Hospital. There were no deaths from this disease.

Particulars of sanitary conditions in the infected houses :-

- Case 1.—Age four years; no other cases in the vicinity; house has pail closet and ashpit, cleared weekly; yard and drains in good condition, so far as could be seen. House old, very dirty, in very bad repair, and some parts are below street level.
- Case 2.—Age four years; no other cases in the vicinity; has two w.c.'s in yard, and dry ashpit, which is cleared weekly; yard unpaved; drains appear to be in good condition. House in good repair, but kept exceedingly warm and close. Fowls kept in front garden.
- Case 3.—Age eleven years; no other cases in the vicinity; house has only a privy and ashpit, emptied about quarterly. House, yard, and drains in good condition; house overcrowded. Two deaths from Phthisis within the previous twelve months in the same house.

#### PUERPERAL FEVER.

During the year four cases of Puerperal Fever have been notified, with one death, as compared with eleven cases and three deaths in 1904. One case was removed to the Florence Nightingale Hospital, where recovery took place.

#### DIPHTHERIA AND MEMBRANOUS CROUP.

#### RATE OF MORTALITY FROM DIPHTHERIA AND MEMBRANOUS CROUP FOR THE LAST TEN YEARS.

				-	1900	1901						1905.		
Year	1896	1897	1898	1899			1902	1903	1904	England and Wales.	London	76 Great Towns.	141 Smaller Towns.	Bury
Death Rate per 1000 Living.		0.11	0.06	0.18	0 12	0.21	0.58	0.43	0.12	0.16	0.12	0.16	0.15	0.085

Fifty-two cases of diphtheria and three cases of membranous croup have been notified during the year, a total of 55 cases, as compared with 73 in 1904, 107 in 1903, and 182 in 1902.

Five deaths have been recorded, representing a mortality of 0.085 per 1,000, a distinct improvement on preceding years.

Of the 52 cases of diphtheria, 23 were removed to the Florence Nightingale Hospital; and of the three cases of membranous croup, one was removed to hospital. This represents a percentage of 43.6 of all cases notified, as compared with 39.7 per cent. in 1904. On admission to hospital, the case of membranous croup proved to be one of diphtheria.

Of the 24 cases admitted to hospital, one, or 4.17 per cent., died; of those treated at home, four, or 12.9 per cent., proved fatal.

				Qt	JAR	ΓER	LY	INC	CIDE	ENCE						
				ıst.			and.			3rd.			4th.		Tot	al.
Cases				14			22			5			14		5	5
Deaths .				_			2			1			2			5
				W	ARI	D	IST	RIB	UTI	ON.						
				M	oorsi	de.	Eas	st.	Ch	urch.	Red	lvale	s.	Elton.	T	otal.
Cases					29		5			6		7		8		55
Deaths																
Removed to	o I	los	pit	al	0		C	)		0		0		0		0
				*	Die	ed i	in I	los	spit	al.						

### NOTIFICATION AND DEATHS AT DIFFERENT AGES.

Age.	Un	der 1	year.	ı t	0 5 ye	ars. 5	to 15.	15 to 25.	Over 25.	Total.
Notifications			14		22		5	14	—	55
Deaths					4		1*	—	—	5
			*1	Diec	l in	hosp	ital.			

ANTITOXIN.—Forty bottles of Antitoxin were supplied to the medical men of the district at a nominal rate, for the use of patients inside the Borough suffering from diphtheria, as compared with 25 bottles supplied in 1904.

It is very gratifying to find that greater advantage has been taken of this supply during the past year than in previous years.

In the Florence Nightingale Hospital the use of the Antitoxin is almost a matter of routine, and it is used early and freely.

### CASE MORTALITY IN

BACTERIOLOGICAL EXAMINATIONS.—Twenty-one swabs from doubtful cases were sent for bacteriological examination to the Public Health Laboratories, Manchester, with the following results:—

6 gave positive results for diphtheria bacilli,

15 gave negative results.

### SMALLPOX.

An outbreak of Smallpox in the Borough occurred during the first half of the year. The first case was notified on January 31st, and the last on May 17th. Prior to this, no case had occurred since October, 1904. In all, there were 33 cases, an increase of eight on the previous year. With the exception of one case, which developed the rash a day or so after admission to the Infirmary from Heywood, and which was removed to Heywood Isolation Hospital, all the cases were sent to Ainsworth Hospital.

MORTALITY.—There was one death, representing a case mortality of three per cent., and a mortality of 0.017 per 1,000 of the population.

1 1													
	A	GE A	ND S	EX	INC	CID	ENC	Ε.					
	ı to 5.	5 t	0 10	to 15.	15 to 25.	)	25 to 35-		35 to 45-	45 to	60 a upwa	nd rds.	All Ages
Males	Ι.	1	I		2		. I		3	3	о		12
Females	ο.	. 3	3		4		. 3		3	5	о		21
Totals	1 .	4	4		. 6		. 4		6	8	0		33
Monthl													
WARD.		Jan	1.	Fe	b.		Mar.		April.		May.	T	otals
Moorside		C		C	) .		3		I		0		4
East													
Church													
Redvales													11.11
Elton													1
		-		_	-		_		-		_		_
Entire Borough		1		. 1			20		4		7		33

With the exception of the case from the Infirmary, all the cases notified occurred in private houses; the common lodging-houses and tramp wards fortunately keeping free from the infection.

	V	ACCINATIO	N.	
Unvaccinated.		Vaccinated in nfancy only.		have been cinated.
10		23		0

The fatal case, a man aged 47, was only vaccinated in infancy, and only showed two small marks.

### AGE PERIODS OF NOTIFIED CASES.

	 Inder years.	er 15 ider 2	25 ar upwar	Total
Vaccinated in infancy only	 0	 5	 18	 23
Unvaccinated	 9	 I	 0	 10

This table bears out the well-proven facts that vaccination is a certain protection against Smallpox, but that, in order to remain efficient, it requires to be repeated. It is very significant that no case occurred among vaccinated persons within 15 years of vaccination.

Type of Disease.—Four cases, including the fatal case, were of a severe confluent type; eleven were confluent; the remaining 18 were of a mild type, some being so mild as to be extremely difficult of recognition.

An instance of a case of Smallpox without an eruption seemed to be the following:—

H. S. was taken ill with "Pleurisy and Lumbago" about three or four days before five cases were notified in the same household (wife, son, and three daughters of the above). The symptoms of Pleurisy and Lumbago disappeared, but no characteristic eruption developed, although on several occasions he was placed in a warm bath in my presence, and carefully examined. Inasmuch as the above symptoms commenced about the same time as the premonitory symptoms of some of the other inmates of the household, it may be reasonable to judge that this was a case of Variola sine eruptione. It is interesting to note also that the son-in-law of the above subsequently developed an exceedingly mild attack of Smallpox, with only three or four spots, and of these only one was really typical; the gradation between the two varieties of the disease can be, therefore, readily imagined.

ORIGIN AND COURSE OF THE OUTBREAK.—The disease was apparently introduced through the visit of a case of supposed Chicken-pox to the household of the case which was first notified. This was a cousin (of the two first patients), who came over from Preston to recuperate from the supposed Chicken-pox. The disease was further propagated, apparently, by another case of

supposed Chicken-pox (which was doubtless modified Smallpox) for a fortnight subsequent to the notification of the first two cases, a schoolmate and deskmate of one of them was absent from school suffering from a disease which the parents considered to be Chicken-pox; no doctor being called in. The result was an outbreak of Smallpox in the household of this boy, the disease proving fatal in the case of his father. The majority of the remaining cases were definitely traced to contact with one or other of the foregoing. The chart opposite page 40 illustrates the origin and spread of the disease through these two cases of supposed Chicken-pox. It was, therefore, decided, on the recommendation of the Health Committee, and with the sanction of the Local Government Board, to make Chicken-pox compulsorily notifiable for a period of six months.

A very marked feature of the outbreak was the prominent part played by unvaccinated children in the acquisition and spread of the disease, they being the first persons to be attacked in the first three households. It was significant of the courage of his convictions displayed by the conscientious objector, prominent as usual among the sufferers, that he readily embraced the chances of safety offered by the vaccination of the unaffected members of his family. I learn that the last coherent words of the unfortunate man who died (a pronounced anti-vaccinator) were a bitter recantation of his former opinions, and an appeal to his friends to protect themselves by vaccination before it was too late.

As suggestions for future legislation regarding vaccination, I would recommend (1) That an inquest be held on all cases dying from Smallpox. The difficulty of viewing the body can be got over by having an inspection room from which the body could be viewed by jurors without incurring any risk of infection (such rooms as exist in most modern fever hospitals). As Smallpox is such a preventable disease, the publicity arising from the above would bring home to the uneducated public the real dangers of anti-vaccination tenets. Probably one inquest only would be necessary to convert a juryman of anti-vaccination tendencies. (2) That the cost of exemption certificates should be sufficient to serve as a contribution towards the upkeep of Smallpox Hospitals, in the nature of

an insurance against the disease. It is obviously unfair that reasonable people, who protect themselves by vaccination, should have to pay for the so-called objections of the anti-vaccinator.

SMALLPOX HOSPITAL.—The erection of a permanent Hospital at Ainsworth was commenced in the latter half of the year 1905, and considerable progress was made before the winter. It will be ready for the reception of patients some time in the coming year.

Notification of Chicken-pox.—Compulsory notification of Chicken-pox commenced on April 3rd, and continued until October 3rd, a period of six months. During this time 79 cases were notified. It is satisfactory to report that no further spread of Smallpox occurred due to the agency of unrecognised cases of Chicken-pox subsequent to the introduction of compulsory notification of the latter disease.

School Closure.—One Public Elementary School was closed for a fortnight, as one of the Smallpox patients had attended the school one week previous to the onset of the disease. The master of a private school also voluntarily closed his school for a week in order that thorough disinfection of the rooms, &c., might be effected, there being probably contact of some of the scholars with the inmates of an affected household.

### SMALLPOX AND VACCINATION.

Return showing the number of Births, Deaths (under one year), Vaccinations, Conscientious Objections, and number Unvaccinated for the year ending August 31st, 1905:—

### BOROUGH OF BURY.

	Bury North	Bury South		Elton	Totals.
Births	621	 382		305	 1308
Vaccinated	418	 255	***	218	 891
Insusceptible of Vaccination					
Conscientious object'n certificates	59	 35		45	 139
Dead, Unvaccinated	76	 48		25	 149
Postponed by medical certificate.	20	 2		6	 28
Removals to districts known	II	 4		0	 15
Removals to districts unknown	14	 17		9	 40
Unaccounted for	22	 19		1	 42

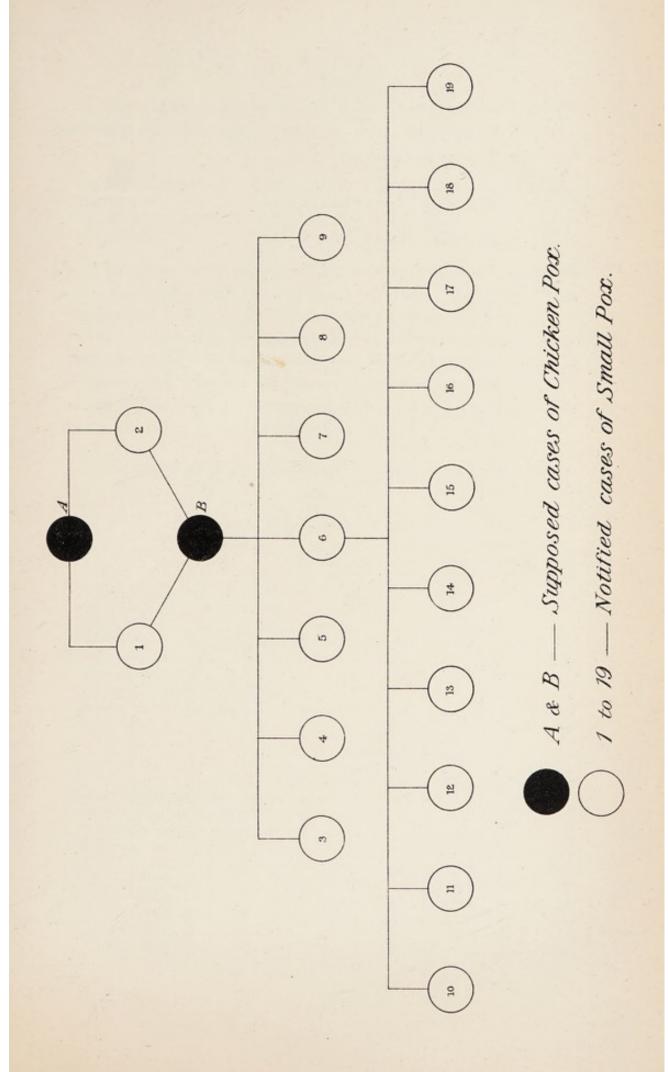




Table showing percentage of Vaccination, and also comparison with the years, 1904, 1903, 1902, 1901, and 1900:—

		Yea	ar ending A	ugust 31st,		
	1905	1904	1903	1902	1901	1900
Number of births	1,308	1,368	1,287	1,272	1,302	1,450
Vaccinated	68.12	64.40	57.34	66.74	49.23	49.65
Con. object'n. cert's	10.63	10.09	10.10	10.61	18.27	15.20
Unaccounted for	3.21	7.67	12.72	7.47	15.82	19.79

The above table, as regards the number vaccinated, compares most favourably with the five preceding years, and if we deduct the number (149) of deaths (unvaccinated) from the total (1,308) births, we find that the percentage of children vaccinated is equal to 76.87, which is eminently satisfactory. The percentage of conscientious objection certificates granted during the year is a shade higher than in the preceding year, but is 2.22 per cent. below the mean of the preceding five years.

### SMALLPOX OUTBREAKS IN BURY, 1902 TO 1905.

### STATISTICAL SUMMARY OF VACCINATION

STATISTICAL S	UMMARY	OF V	ACCINAT	TION.		
	A	GE PERIO	DS OF NO	TIFIED CAS	ES.	
	Under			40 to 6 60 up	owards all	
Vaccinated in Infancy only. Re-vaccinated less than ten years before, but before	1	5	51	44	5	106
infection by Smallpox Re-vaccinated after infec-	0					
Not Vaccinated until after	0	0	5	2	3	10
infection by Smallpox	I	3	0	0	0	4
Unvaccinated	11	11	8	3	o	33
		Age Pe	RIODS OF	FATAL CAS	SES.	
•	Under	10 to 20	20 to	40 to 6	o and	
Vaccinated in Infancy only. Not Vaccinated until after						
infection by Smallpox	I	0	0	0	0	1
Unvaccinated	2	0	0	3	0	5
Year.	N	umber of	Cases.	Total	Deaths.	
1902		3	7		3	
1903		5	9			
1904						
1905						

# SUMMARY OF SMALLPOX CASES NOTIFIED DURING THE YEAR 1905.

Remarks.	Severe confluent	Vaccinated after contact; discrete	Confluent	Confluent	Severe confluent	Mild attack	Confluent		Severe confluent	Confluent	Mild attack	Confluent	Confluent	Confluent	Confluent	Discrete	10
Termination of Case.	Recovered,	Recovered,	Recovered, April 19, 1905	Recovered,	Recovered,	Recovered,	Fatal,	0001 100 1000	Recovered, April 25, 1905	Recovered,	Recovered,	Recovered,	Recovered,	Recovered,	Recovered,	Recovered, April 25,1905	6
Particulars of Vaccination.	Unvaccinated	Unvaccinated	Vaccinated in infancy	Vaccinated in	Unvaccinated	Vaccinated in	Vaccinated in	Commercial	Unvaccinated	Vaccinated in infancy	Vaccinated in	Vaccinated in	Unvaccinated	Vaccinated in	Unvaccinated	Vaccinated in infancy	8
Source of Infection.	Case of (?) Chicken-	Do.	Case of (?) Chickenpox in house of cases 7.8.9	Do.	Do.	Do.	Case of (?) Chickenpox	tact with cases Nos. 1 and 2.	Do.	Do.	Contact with cases		Do.	Do.	Do.	Do.	7
Address.	10, York Terrace	10, York Terrace	28, Ingham Street	28, Ingham Street	28, Ingham Street	28, Ingham Street	62, South Cross St.		62, South Cross St.	62, South Cross St.	17, Ingham Street	17, Ingham Street	32, Andrew Street	36, Alfred Street	26, Ingham Street	26, Ingham Street	9
Age.	13	19	46	38	00	15	47		10	49	45	44	4	27	œ	38	20
Sex.	M.	M.	M.	F.	표	표	M.		E.	표.	표	W.	M.	표.	M.	표	4
Initials.	W.R.	J.R.	Ј.Н.	D.H.	M.H.	J.H.	А.Н.		A.H.	Е.Н.	A.R.	W.H.R.	T.H.	A.W.	A.R.	H.R.	89
Date of Notification.	Jan. 31, 1905	Feb. 8, 1905	Mar. 6, 1905	Mar. 6, 1905	Mar. 6, 1905	Mar. 5, 1905	Mar. 9, 1905		Mar. 9, 1905	Mar. 11, 1905	Mar. 11, 1905	Mar. 14, 1905	Mar. 16, 1905	Mar. 16, 1905	Mar. 17, 1905	Mar. 17, 1905	61
No. of Case.	1	63	00	4	20	9	7		œ	6	10	11	12	133	14	15	1

10	Confluent	Vaccinated after contact; discrete	Vaccinated after contact; discrete	Vaccinated after contact; discrete	Discrete	Confluent	Discrete	Confluent	Confluent			Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Vaccinated after contact; discrete	Vaccinated after contact; discrete	
6	Recovered,	Recovered,	Recovered.	Recovered, May 10, 1905	Recovered,	Recovered,	Recovered.	Recovered,	Recovered,	Removed to	Hospital	Recovered, May 23, 1905	Recovered, May 23, 1905	Recovered,	Recovered,	Recovered,	Recovered,	Recovered,	Recovered, June 7, 1905	
œ	Vaccinated in	Unvaccinated	Unvaccinated	Unvaccinated	Vaccinated in	Vaccinated in	Vaccinated in	Vaccinated in	Vaccinated in	Vaccinated in infancy		Vaccinated in infancy	Vaccinated in infancy	Vaccinated in	Unvaccinated					
ţ+	1 cases	Nos. o to o	Do.	Do.	6-	6	6	1 Cases	Contact with case	Heywood		6	? Contact with case No. 13	Do.	Do.	Do.	Do.	Contact with cases	Do.	
9	32, Andrew Street	17, Ingham Street	17, Ingham Street	17, Ingham Street	16, North Street	16, North Street	16, North Street	70, Spring Street	6, Clerke Street	Bury Infirmary, from 4, Manchester Rd.,	Heywood.	22, Hall Street	46, Barrett Street	46, Barrett Street	46, Barrett Street	46, Barrett Street	46, Barrett Street	12, Albert Street	12, Albert Street	
10	43	13	9	10	57	69	23	42	50	55		44	53	26	24	22	99	34	6	
4	M.	F.	표	표	W.	F.	F.	M.	F.	표		[1	E.	표.	표	M.	E.	M.	F.	
00	Л.Н.	F.R.	E.R.	A.R.	J.R.	W.R.	C.B.	T.B.E.	M.B.	M.D.		E.R.	S.S.	B.S.	E.S.	J.S.	E.S.	н.В.	E.B.	
61	Mar. 17, 1905	Mar. 24, 1905	Mar. 24, 1905	Mar. 25, 1905	Mar. 29, 1905	Mar. 29, 1905	Mar. 29, 1905	April 3, 1905	April 6, 1905	April 14,1905		April 29,1905	May 2, 1905	May 2, 1905	May 2, 1905	May 2, 1905	May 2, 1905	May 17, 1905	May 17, 1905	
1	16	17	18	19	20	21	25	233	24	25		56	27	58	53	30	31	35	99	

9 3

### ERYSIPELAS.

During the past year 46 cases of Erysipelas have been notified, and there have been three deaths, which corresponds to a death rate of 0.05 per 1,000, and a case mortality of 6.52 per cent. One case was removed to the Florence Nightingale Hospital. In 1904 only ten cases were notified, and there were no deaths.

The region of the body implicated in each case was as follows:-

In 42 cases the face was affected.

In 2 cases the scalp

In I case the leg ,

In I case the foot ,,

Most of these cases were secondary to neglected injuries, such as cuts, scratches, bruises, or other abrasions; and in most instances the patients were resident in dirty or unhealthy houses, two being of the back-to-back type.

Thirty-three females were attacked and 13 males.

Table showing the ward distribution in each quarter of the year:—

Quarter of Year		Мо	orside	East.	(	hurch	. R	edval	les.	Elte	on.	Total.
1st			2	 4		0		1		2		9
2nd			4	 3		0		I		1		9
3rd			3	 1		0		I		7		12
4th			2	 3		3		I	* ***	7		16
Whole Yea	ır		11	 ΙI		3		4		17		46

Table showing age and sex distribution:-

Sex.	Ţ	Jnder	ı yea	r.	1 to 5.	5 to 15	. 15	to 25.	25	to 65.	65	upwa	rds. T	otal
Males			0		0	 1		0		12		0		13
Females														

### SCHOOLS AND INFECTIOUS DISEASES, 1905.

During the year, 787 notifications were received at the Health Office from the Headmasters and Mistresses of the various Schools within the Borough, of the existence of Infectious or Contagious Diseases amongst scholars attending their schools. Of this number 703 were certified as suffering from one or other of the undermentioned ailments:—

Measles	306	Pediculosis	8
Chickenpox	165	Impetigo	4
Mumps	57	German Measles	4
Whooping Cough	52	Diphtheria	3
Eczema	19	Varicella	2
Sore Throat	19	Bronchitis	I
Ophthalmia	16	Croup	I
Influenza	12	Adenitis	1
Scarlet Fever	12	Tuberculosis	I
Catarrh	10	Herpes Zoster	1
Ringworm	9		

The number of notifications received from the various schools during the years 1902, 1903, and 1904, were 1,430, 1,364, and 1,106 respectively.

The following are the schools from which notifications were received in the order of number of notifications:—

Woolfold Wesleyan School.
Brunswick School.
Chesham British School.
All Saints' School.
Pits-o'th'-Moor School.
St. Mark's School.
Bank Street School.
St. Chad's School.
St. Stephen's School.
St. Marie's School.
Guardian Angels' School.

St. Thomas's School.
Parish Church School.
Wood Street School.
Parkhills School.
Christian Church School.
St. John's School.
St. Peter's School.
Walmersley School.
St. Joseph's School.
St. Paul's (Bell) School.
St. Paul's (Huntley) School.

Owing to a rather extensive outbreak of Measles at the close of the year the following handbill was distributed at the schools, and in the neighbourhood in which the disease was prevalent:—

### MEASLES AND ITS PREVENTION.

Measles is a dangerous disease, one of the most dangerous with which a child under five years of age can be attacked. During the year 1898, the number of deaths from Measles in Bury exceeded not only that from either Typhoid Fever or Influenza, but also that of the total number from Scarlet Fever, Diphtheria, Croup, and Continued Fever combined.

During the year 1900, Measles caused more than four times the number of deaths which resulted from Scarlet Fever, and more than the total number of deaths from Scarlet Fever in the three years (1898-1899-1900).

The disease is especially apt to be fatal to teething children. It tends to kill by producing inflammation of the lungs, and may prepare the way for consumption. Permanent damage to the eyes and ears may result from an attack of Measles.

Measles is therefore not such a trifling disease as is generally assumed. The older a child the less likely it is to catch Measles, and if it does, the less likely is it to die. If every child could be protected from Measles until it had passed its fifth year, the mortality from Measles would be very greatly diminished.

It is therefore a great mistake to say "The sooner the better" for a child to have Measles. The early signs of Measles are the following:—The face is flushed, the eyes are watery, glistening and sensitive to light, there is usually cough, sneezing, and running from the nose (signs similar to those of a bad cold in the head). During this period (before the rash comes out) the child is highly infectious, and should not be sent to school, and any child observed with these symptoms in school should be sent home at once.

PRECAUTIONS.—Mothers with children in arms should not go into houses where Measles exists.

Every child ill of Measles should be put to bed and kept warm; a doctor should be called in, except in the mildest cases.

A case of Measles continues infectious for at least three weeks after the appearance of the rash.

The importance of isolating the patient from other children for this period should be remembered.

Children from the house in which there is a case of Measles should on no account attend school (either Sunday or Day School). Parents or Guardians who send children to school from an infected house, as well as teachers who receive them knowingly, are liable to a penalty.

Disinfectants can be obtained on application to the Health Department, Parsons Lane. Disinfection of rooms, clothing, &c., will be undertaken by this department free of charge.

> A. E. Brindley, M.D., Medical Officer of Health.

### SCHOOL CLOSURE.

During the year it was found advisable to apply Closure to the Infants' Department of three schools, with a view of checking the further spread of Measles. In each case the closure, which was applied just prior to the commencement of either the Summer or Christmas Holidays, had the desired effect in controlling or checking the outbreaks, as in no case had a further extension of the period of closure to be resorted to.

In one instance the whole of one school was closed for a week, owing to one of the scholars developing Smallpox. It is, however, gratifying to record that no further cases of the disease were notified from this source.

The following is a summary of the schools closed :-

HEYWOOD STREET NEW CONNEXION SCHOOL.—The whole of this school was closed from March 9th to the 25th, owing to one of the scholars having developed Smallpox. The patient (an unvaccinated girl) having attended the school up to the 3rd of March.

BANK STREET BRITISH SCHOOL.—Closure was applied to the Infants' Department of this school from July 21st to July 28th (the commencement of the Summer Holidays), on account of the prevalence of Measles, the attendance having fallen to 39, out of a total number on the books of 73, with an average daily attendance of 60.

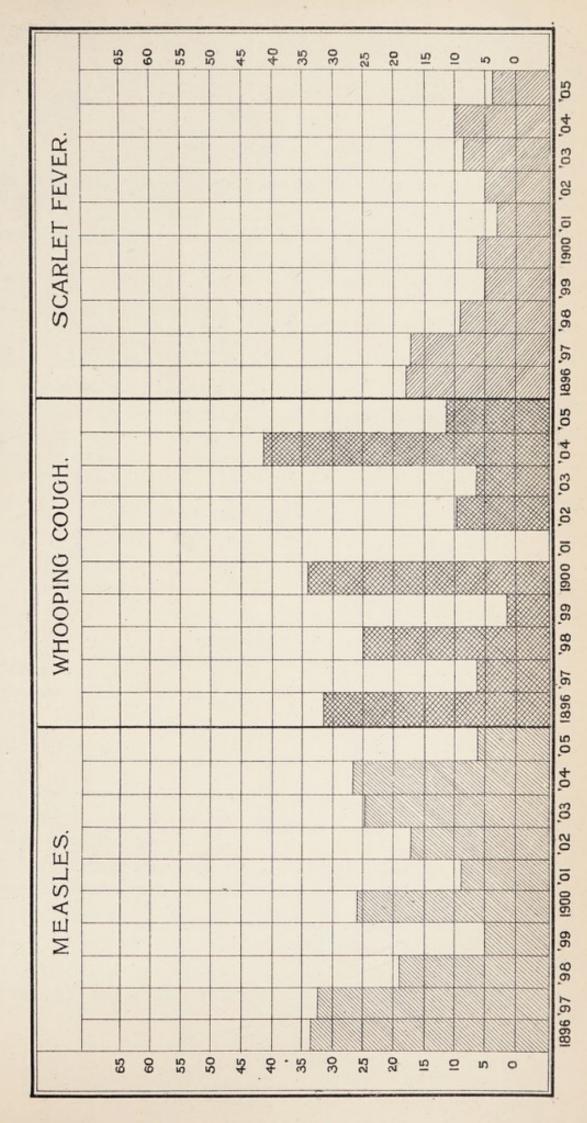
BRUNSWICK SCHOOL.—The Infants' Department of this school was closed from December 15th until December 22nd (the commencement of the Christmas Holidays), owing to the prevalence of Measles amongst the scholars, as out of a total of 126 on the books, with an average daily attendance of 101, only 58 scholars were present on the day the school was closed. Twenty-four of the absentees were verified as suffering from Measles, the character of the disease being of a severe type.

St. Mark's School.—The Infants' Department of this school was closed from December 18th, until the commencement of the Christmas Holidays (December 22nd). On enquiry at the school 24 scholars were found to be absent suffering from Measles alone, while many others were absent suffering from Catarrh.

### DISINFECTION.

In each instance after the closure of a school the walls, desks, floors, &c., have been sprayed with a solution of either formalin or "Chloros," the rooms afterwards being fumigated with sulphur. Special attention has been paid to the disinfection of the books, &c., used by the scholars.

# DEATHS IN BURY DURING TEN YEARS, 1896-1905.





### MEASLES.

### RATE OF MORTALITY FROM MEASLES FOR THE LAST THIRTEEN YEARS.

															1905.		
Year.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	England & Wales	76 Great Towns	141 Smaller Towns	London	Bury
Death rate per 1000.		0-05	0.52	0.55	0.53	0-29	0 -08	0.42	0.13	0.29	0.43	0.46	0.32	0.39	0.31	0.49	0.10
Total Deaths	84	3	31	33	32	18	5	26	8	17	25	27					6

Six deaths were recorded from Measles during the year, as compared with 27 deaths in the previous year, the rate of mortality being equal to 0.10 per 1,000, which is 0.27 per 1,000 below the mean of the preceding 10 years, and 0.22 per 1,000 below the rate for England and Wales.

### WARD DISTRIBUTION.

Moorside	2
East	2
Church	0
Redvales	т
Elton	т.

### AGE AND SEX.

Malas		Unde	rry	ear.	1 to 2.	2 to 5.	Over	5 yea	irs.	Totals.	
Males	 ***		1		. 0	 0		0		. I	
Females	 		2		. I	 1		I		. 5	

### MONTHLY INCIDENCE.

February.	April.		December.
I	 I	*********	4

CLOSURE OF SCHOOLS.—Owing to the prevalence of Measles among the scholars the infants' departments of the following schools were closed:—

- (I.) BANK STREET BRITISH SCHOOL.—July 21st to July 28th. (Commencement of the Summer Holidays.)
- (2.) Brunswick School.—December 15th to December 22nd. (Commencement of the Christmas Holidays.)
- (3.) St. Mark's School.—December 18th to December 22nd. (Commencement of the Christmas Holidays.)

PRECAUTIONARY MEASURES.—The following precautionary measures are adopted in dealing with the outbreaks of Measles:—

- (i.) Notification of the disease by School Teachers on printed forms supplied by the Health Department. 306 cases of Measles were thus notified during the year.
- (ii.) Each case was visited, where possible, by the Female Inspector, who left handbills, and gave advice as to the precautions to be used.
- (iii.) Closure of Schools, chiefly the Infants' Departments, affected by the disease. A request is made also to the Sunday School Authorities to have this portion of the School closed during the period of closure of the Day School.
- (iv.) Disinfection of houses affected, by means of formalin spray, &c., where consent could be obtained.
- (v.) Thorough disinfection of affected Schools, with special attention to books, desks, &c.

Although the number of deaths from Measles was comparatively small in Bury during the year under review, the heavy mortality which is annually recorded from this disease is to be regretted. During the year 1905 the total number of deaths from Measles (10,841) in England and Wales was over three times as many as were recorded from Scarlet Fever (3,048).

The accompanying table well illustrates the heavy mortality experienced during the past ten years from the non-notifiable diseases—Measles and Whooping Cough, as compared with the mortality from the notifiable diseases—Scarlet Fever, Diphtheria, Smallpox, and "Fever":—

Number of Deaths from Certain Epidemic Diseases in England and Wales during the Ten Years 1896—1905.

DISEASE,	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	Av'rage ten years.
Measles	17169	12456	12922	9850	12386	8847	12673	8995	12081	10841	11822
Whooping Cough	12736	10887	9723	9660	10984	9661	9469	9165	11527	8417	10323
Smallpox	534	25	254	174	84	359	2461	754	504	113	526
Scarlet Fever	5431	4492	3505	3655	3761	4242	4810	4085	3701	3048	4073
Diphtheria	8805	7461	7500	9114	9143	8720	7703	5987	5664	5359	7545
"Fever"	5147	4873	5733	6298	5603	5086	4214	3402	3189	3778	4732

### WHOOPING COUGH.

During the year only one death was recorded from Whooping. Cough, which is equal to a rate of 0.02 per 1,000, as compared with a rate of 0.25 per 1,000 for England and Wales, and 0.29 per 1,000 for the 76 great towns. There were 42 deaths from this cause in 1904.

DEATHS FROM WHOOPING COUGH DURING THE LAST ELEVEN YEARS.
1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902 1903. 1904. 1905.

19 32 7 25 2 34 0 10 7 42 1

The fatal case occurred in a boy aged 10 months, resident in East Ward.

One of the pleasing features of the year has been the comparative freedom of the town from Whooping Cough. Although the rate for England and Wales is slightly lower than in the previous year, we find that the disease has been prevalent in several of the Lancashire towns, with a fairly high mortality, namely:—Salford, with 46 deaths; St. Helens, 26 deaths; and Stockport, 31 deaths.

The chart opposite page 50 shews graphically the number of deaths from Whooping Cough during each of the past ten years.

### INFLUENZA.

During the year ten deaths have been attributed to Influenza, representing a death rate of 0.17 per 1,000, as compared with eleven deaths, and a rate of 0.19 per 1,000 in the previous year.

DEATHS DURING THE PAST NINE YEARS FROM INFLUENZA.

1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 10 ... 17 ... 24 ... 34 ... 12 ... 6 ... 5 ... 11 ... 10

WARD DISTRIBUTION.

Moorside 2, East 3, Church 3, Redvales 2, Elton o.

MONTHLY INCIDENCE.

Jan. Feb. Mar. Apr. May. June. July. Aug. Sept. Oct. Nov. Dec. 2 2 0 I 0 I 0 0 I 0 3 0

AGE DISTRIBUTION.

AGES.—15 to 25 years 25 to 65 years. 65 and over Totals.

2 ...... 4 ...... 10

### DIARRHŒA.

### RATE OF MORTALITY FOR THE PAST ELEVEN YEARS.

													1905.		
Year.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	England & Wales.	London	76 Great Towns	141 Smaller Towns.	Bury
Death rate per 1000		0.85	1:56	1 46	1.20	0.85	1.06	0.24	0.84	0-77	0:59	0.77	0.83	0.57	0-75

Forty-four deaths have been recorded from Diarrhoea during the year 1905, as compared with 45 deaths in the previous year. The rate of mortality is equal to 0.75 per 1,000, as compared with 0.77 per 1,000 in the previous year. The rate of mortality shews a slight improvement over the preceding year, and compares favourably with the rate (0.83) for the 76 great towns, yet it is unsatisfactory when we take into consideration the fact that the rate in Leeds was only 0.8, Edinburgh 0.12, Cardiff 0.34, and Huddersfield 0.49 per 1,000 respectively. Another unsatisfactory feature was the large proportion of deaths occurring in children under one year of age. Of the 44 deaths from Diarrhoea 33, or 75 per cent., occurred in infants during the first year of life.

### MONTHLY INCIDENCE.

January		 	 	 	 	 	I
February		 	 	 	 	 	2
March		 	 	 	 	 	0
April		 	 	 	 	 	I
May		 	 	 	 	 	0
June		 	 	 	 	 	1
July		 	 	 	 	 	1
August		 	 	 	 	 	15
September		 	 	 	 	 	15
October		 	 	 	 	 	4
November		 	 	 	 	 	I
December	***	 	 	 	 	 	3

### WARD DISTRIBUTION.

Ward.			No. o	f Deaths.
Moorside	 	 	 	II
East				
Church	 	 	 	10
Redvales	 	 	 	6
Elton	 	 	 	2

### AGE PERIODS.

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 upwards.
33	5	0	0	3	3

On enquiry as to the feeding of the 33 children under one year of age, it was found that 27, or 82 per cent., were bottle fed.

### DIARRHŒA AND INFANT MORTALITY.

Of the 33 deaths from Diarrhæa in children under one year of age, 24 occurred during the period of epidemic Diarrhæa, which commenced about the middle of August and ended about the third week in September. There were three deaths in October, but in each case the onset of Diarrhæa occurred in September. Of the other deaths, eight occurred in August and 13 in September. All these cases were the subject of special investigation by the Female Inspector (Nurse Walton).

FEEDING.—Five of the infants had been fed by the breast, 18 were bottle fed, and one spoon fed, the latter living only two days after birth. Of the bottle fed children, ten were fed from the tube bottle and eight by the "boat" shaped bottle.

Insurance.—Sixteen of the 24 infants were insured and eight not insured.

LEGITIMACY.—Three of the children were illegitimate and 21 legitimate.

Houses.—Nineteen of the cases occurred in four-roomed houses, one in a three-roomed house, and four in two-roomed houses. Two of the latter were back to back houses. In five instances there was distinct overcrowding. As regards *cleanliness* of the houses, this was good in 15 instances, moderate in five, and bad in four cases. It should be noted, however, that as the

investigations took place after the death of the child and after the funeral, the cleanliness of the house at the time of the Inspector's visit was only a general criterion of the condition of the house before the illness of the child. The ventilation was found to be good in 14 instances and bad in ten cases. The sanitary conveniences connected with the houses were privy middens in 11 cases, water closets in ten, and waste water closets in three instances.

House Flies.—These were found in numbers in 19 instances, and practically absent from the household in five other instances. Included in the latter number are the three cases of which the deaths occurred in October, after the Diarrhœa season was over. These cases, however, commenced in September.

It will thus be seen that no cases occurred in better class households, and the observations (limited though they were) tended to show a distinct connection with the presence of flies in the house, in fact, the onset of the Diarrhœa season in Bury seemed to coincide with a great increase in the number of house flies and allied insects, and this occurred at a time when the weather, though warm, was decidedly wet.

### TUBERCULOUS DISEASES.

### PHTHISIS.

Phthisis caused 73 deaths during the year, of which 45, or 61.64 per cent., were males, and 28, or 38.36 per cent., were females, the rate of mortality being equal to 1.24 per 1,000, as compared with a rate of 1.66 per 1,000 in 1904. Eighteen of the deaths occurred in the Union Workhouse.

Of the deaths from Phthisis, the following table shows the age and sex distribution:—

	Under	to 5	. 5 to	0 15.	15	to 2	5. 25	to	35- 3	35 to 4	5- 45	to 6	Over 60.	All ges.
Male	2 .	 I		3		3		7		12		15	 2	 45
Female	1 .	 I		1		8		6		5		6	 0	 28

### MEAN AGE AT DEATH FROM PHTHISIS.

Males	 	 	37	years.
Females	 	 	29	years.

### WARD DISTRIBUTION OF DEATHS FROM PHTHISIS.

		M	loorsi	de.	East.	Church	h.	Redvale	es.	Elton.	Total
Males	 		9		14	 16		I		5	 45
Females	 		4		5	 5		II		3	 28

### DEATH RATES FOR PHTHISIS IN THE SEVERAL WARDS.

Moorside.	East.	Church.	Redvales.	Elton.	Entire	e Borough.
0.81 .	 1.59	 3.02	 1.12	 0.13		1.24

DISINFECTION.—A summary of the disinfection which has been carried out will be found on reference to page 64.

# Occupations of Persons Dying from Phthisis during the Years 1899-1905.

	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Cotton Operatives	20	18	24	13	16	11	10
Woollen Operatives	2	1	3	0	2	0	1
Felt Hat Workers	2	4	2	3	2	2	1
Paper Mill Workers	2	2	3	2	2	0	0
Iron Operatives	4	7	0	11	8	6	8
Stone Masons	3	4	2	2	0	5	2
Dressmakers and Tailors	4	3	0	3	0	2	5
Joiners and Cabinetmakers	4	0	2	2	2	3	2
Shoemakers and Cloggers	1	2	0	2	0	2	0
Clerks	3	0	0	0	2	1	1
Outdoor Labourers and Carters	14	- 6	8	10	6	25	7
Other or no employment	31	51	49	27	29	40	36
Totals	90	98	93	75	69	97	73
	-					10,000	

VOLUNTARY NOTIFICATION OF PHTHISIS.—This system of notification has resulted in 31 fresh cases being notified during the year, making a total of 216 notifications since the adoption of voluntary notification by the Council on September 5th, 1901.

Twenty-eight of the notified cases were visited by the Female Sanitary Inspector, the remainder (three in number) either dying immediately after the notification, or having been previously notified.

Sex.—Of the 31 cases, 13 were males and 18 females.

AGES T	he	2006	were	
AUGESI	HC	ages	WCIC	

- no aB or many	
Under one year	0
I to 20	8
20 to 40	11
40 to 50	10
50 to 60	І
60 upwards	I

The following are the occupations of the 28 investigated cases:—

School Children	4
Chemist	1
Plumber	1
Outdoor Labourers	3
Cotton Workers	5
Mill Hands	6
Railway Porter	I
Stone Mason	1
Joiner	1
Waitress	1
Housewives	4
	_
	28

Spittoons were loaned, and antiseptic handkerchiefs were gratuitously supplied, to the patients

Handbills on "How to prevent Consumption" and on "Fresh Air and Ventilation" were left at the houses of the notified cases.

OTHER TUBERCULOUS DISEASES.—Twenty-five deaths were recorded from tuberculous diseases other than Phthisis, as compared with 44 deaths in the preceding year. Of these, 10 deaths were due to Tuberculosis of Brain, two to Abdominal Tuberculosis, and 13 to other forms of Tuberculosis. The following are the age periods of these deaths:—

Tuberculosis, therefore, was responsible for 98 deaths in 1905, a rate mortality of 1.69 per 1,000.

BACTERIOLOGICAL EXAMINATION OF SPUTUM.—The sputa of 16 suspected cases of Phthisis were sent in special tins to the Public Health Laboratory, Manchester.

In five cases the presence of tubercle bacilli was revealed. In the remaining 11 cases the examination was negative.

### CANCER.

During the year 54 deaths have been certified as due to various forms of Malignant Disease, as compared with 41 deaths in the preceding year. Of these deaths 19 were males and 35 females.

In two other instances, however, the primary cause of death was certified as due to "Old Age" and Heart Disease, and the secondary cause as "Cancer" of Lip and "Cancer" of Stomach respectively.

The following table gives the ward distribution of these deaths and the rate of mortality in each ward; a comparison also being made with the preceding two years:—

			1005.				1004				1007	
Ward.	No De	o. of aths.	F	ate per	N De	o. of eaths.	F	late per	D D	No. of leaths.	Ř	ate per
Moorside		ΙI		0.75		15		1.03		17		1.17
East		18		1.51		6		0.51		9		0.76
Church		8		1.10		6		0.82		5		0.61
Redvales.		8		0.75		10		0.93		9		0.84
Elton		9		0.63		4		0.28		13		0.92
		_				_				-		
Total	s	54		0.92		41		0.70		53		0.99
		_				_				_		

### CHARACTER OF DISEASE:

	Males	Females.	Total.
"Cancer"	7	13	20
Malignant Disease	I	5	6
Carcinoma	5	16	21
Epithelioma	2	0	2
Sarcoma	4	I	5
	-		_
Totals	19	35	54
	_	_	_

### ORGANS AFFECTED.

	Males.	Fe	emales.
Jaw	I	Œsophagus	I
Tongue	2	Stomach	5
Pharynx	I	Gall Bladder	і
Œsophagus	2	Liver	3
Stomach		Rectum	2
Sigmoid	I	Peritoneum	І
Kidney		Abdominal	. 2
Liver		Breast	2
Testis		Uterus	13
. Scrotum		Pelvis	
Foot		Renal	I
Not stated		Larynx	і
		Clavicle	
		Spine	
	_ "		-
	19		35
	_		-

### MIDWIVES' ACT, 1902.

During the year 1905 twenty-one midwives were registered under the Midwives' Act of 1902. Of these six possess certificates from St. Mary's Hospital, Manchester, from the London Obstetrical Society, or other examining body; two have had hospital training in midwifery, but possess no certificate; while 13 have had no hospital training, and possess no certificate. Three of the Midwives are illiterate, and are unable to write.

Since the completion of the register for the year, the work of supervision and instruction has been carried on both at the respective homes of the Midwives and at the Health Office by Nurse Walton, Dr. Kerr, and myself. The instruction given has been of a practical character, chiefly in the direction of inculcating strict personal cleanliness. Explanatory instructions as to the provisions of the Act have been given in all cases.

In the appendix will be found a list containing the names and addresses of the registered midwives practising in the Borough.

### DISINFECTION.

The following is a summary of the disinfection carried out during the year in the reported cases of Infectious Diseases:—

354 rooms in 290 houses were disinfected with the fumes of either sulphur or formaldehyde, and the walls of 623 rooms in 303 houses sprayed with a solution of either formalin or carbolic acid.

38 rooms in 19 houses have been fumigated with sulphur, and the walls of 133 rooms in 40 houses syringed with a solution of formalin or "chloros" after the occurrence of Smallpox.

143 rooms in 34 houses have been fumigated at the request of either the tenant or owner.

Four public schools have been fumigated with sulphur, and the desks, books, walls, &c., sprayed with a solution of formalin or "chloros" after the occurrence of Infectious Diseases.

In addition, the walls of one chapel and two public schools, and the walls, &c., of two wards in the Dispensary Hospital have been sprayed with a solution of formalin. The rooms afterwards being fumigated with sulphur, after the occurrence of Smallpox.

22 rooms in 11 houses have been stoved with sulphur, and the walls of 59 rooms in 23 houses syringed with a solution of formalin, after the occurrence of deaths from Phthisis.

148 parcels of clothing and 296 sets of bedding have been disinfected by steam for Infectious Diseases, and 19 parcels of clothing and 49 sets of bedding after the occurrence of Smallpox.

It may be said that in the disinfection of rooms, the spraying of the floor, walls, ledges, &c., with either formalin, carbolic or other disinfectant solution, is now the routine procedure.

A small room attached to the new Health Offices has been utilised during the year as a disinfection chamber. In this room such articles as furs, leather goods, books, books, ladies' dresses and hats are exposed to the fumes of formaldehyde and disinfected without damage. The provision of a bathroom in connection with the new offices has also been of very great advantage during the year, for dealing with Smallpox contacts, and in other circumstances. Contacts can have their clothing fumigated while having a disinfectant bath, little loss of time resulting.

Both disinfection chamber and bathroom may be considered as very important adjuncts to our means of controlling Infectious Diseases.

### MEAT INSPECTION. THE PUBLIC ABATTOIRS.

The returns for the year shew an increase in the number of animals slaughtered in the Abattoirs of 2,028 over the number killed in 1904. Sheep and lambs, beasts and calves shew an increase, the former of 1801, beasts of 371, and calves of 250, while pigs shew a decrease in number killed of 394. The decrease in pigs is attributed to the increased price of these animals during the latter half of the year. Of the 4,275 beasts (cows, heifers, bulls and bullocks) 51, or 1.2 per cent., were found to be affected with tuberculosis, as compared with 32, or 0.8 per cent., in the preceding year. In only one instance, however, was it necessary to have the entire carcase destroyed.

Of the 4,194 pigs 26 were affected with tuberculosis, or 0.6 per cent., as compared with 4,588 pigs and 8 (or 0.17 per cent.) affected in 1904. Details of these cases are given in Inspector Openshaw's report.

It is pleasing to again report that no legal measures were found necessary during the year in dealing with unsound meat. The great majority of the carcases, of both beasts and pigs, affected with tuberculosis, were in other respects in prime condition. Anthrax.—Two cases of Anthrax in cattle were discovered by Inspector Openshaw during the year. In one case, found at the knacker's yard, the animal (cow) had died outside the Borough, but in the other instance the cow had been slaughtered on a farm within our own district. In each case the carcase was destroyed on the spot by cremation in a trench constructed according to the recommendations contained in the Board of Agriculture's circular. It is very satisfactory to record that no further spread of the disease took place.

### MILK SUPPLY.

Some progress was made in 1905 in the improvement in the sanitary condition of some farms in the district; details of the procedures being given in the Inspector's report.

The number of farms registered is now 62. There were five applications for registration during the year.

MILK ANALYSIS.—76 samples of milk were submitted to the Borough Analyst, as compared with 51 samples taken in 1904. Of these 76 camples nine were found to be adulterated (11.8 per cent.). In six cases the vendors were cautioned, in another instance the prosecution was withdrawn, after explanation by the farmer, on payment of costs. In the other two instances the vendors were each fined £2 and costs.

### SMOKE NUISANCE.

The number of observations taken by the Inspectors has been 43 during 1905, a considerable increase over the number (10) taken in 1904. Ten of the 43 observations were of half-an-hour's duration, while the remainder were of one hour. In 17 instances (or 39.5 per cent.) the generous limit of 10 minutes' black smoke per hour fixed by the Health Committee was exceeded. In 15 cases legal notices to abate the nuisance were served, while prosecutions were ordered in the other two cases, since notices to abate had been previously served recently. One firm was fined £3 and costs, with an order to abate the nuisance; the other was fined 10s. and costs,

### FACTORIES AND WORKSHOPS.

FACTORIES.—During the year 14 Notices have been received from H.M. Inspector of Factories, a summary of which will be found in the Report of Inspector Haworth. In 13 cases the necessary work required was carried out, and in the remaining case the work was left in abeyance owing to the want of a suitable sewer for the conversion of the closets to the water carriage system.

Workshops.—These have, during the year, been kept under supervision by the Sanitary Inspectors.

General Sanitation.—The workshops within the Borough have, as regards cleanliness, light, air space, &c., been found generally to comply with requirements. The willingness shown by the employers to carry out any suggestion that would tend to the increased comfort and health of their workers is one of the marked features of this branch of public health work.

Bakehouses.—The number of Bakehouses on the register is 104, being an increase of 17 over the preceding year. These have been kept under supervision, and with a few exceptions have been found to be well conducted. In one instance, however, baking was found to be carried on in premises which were unfit for such purpose on sanitary grounds. The occupier, however, voluntarily agreed to discontinue the use of the premises for such a trade.

The number of Cellar Bakehouses within the Borough, for which certificates have been granted, is two, the same number as in the previous year. The whole of the Bakehouses have, in accordance with requirements, been limewashed during the year.

SHOP HOURS' ACTS.—The duties of carrying out the provisions of these Acts, also the provisions under the Seats for Shop Assistants' Act, have been entrusted to Nurse Walton and Inspector Haworth. The Inspectors have paid 136 visits to the various shops in the performance of these duties, and with the exception of failure to exhibit Notices, as required by Section 4, they found that the requirements of the Acts were being carried out. Under the Shop Hours' Act, 1904, a Closing Order in relation to Hairdressers and Barbers' Shops was obtained, and came into force in October, 1905.

HOMEWORK.—Lists containing the names and addresses of home workers have been received from several firms and entered in the register. The diffidence exhibited by several of the firms in forwarding their list of outworkers at the specified time is to be regretted. The Female Inspector has paid 87 visits to the various homes in which the work is carried on, and it is pleasing to note that in the majority of cases the work is performed under satisfactory conditions, and in houses which may be termed of the better class.

A Notice was also received in respect of an outworker residing in Bury who was employed in another district.

Copy of Table sent to the Home Office at the request of the Secretary of State.

### Annual Report of Medical Officer of Health for 1905, for the County Borough of Bury.

## FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

### 1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

		Number of		
Premises.	Inspections.	Written Notices.	Prosecutions	
Factories (Including Factory Laundries	60	6		
Workshops	309			
Workplaces	8			
Homeworkers' Premises	87		F. 7	
Total	464	6		

### 2.—DEFECTS FOUND.

	Ne	amber of Det	ects.	Number
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	of Prosecutions.
Nuisances under the Public Health Acts:—				
Want of cleanliness				
Want of ventilation				
Overcrowding				
Want of drainage of floors				
Other nuisances	5	5		
Sanitary \ insufficient				
accommodation unsuitable or defective	14	13		
accommodation unsuitable or defective not separate for sexes				
Offences under the Factory and Workshop  Act:-				
Illegal occupation of underground bakehouse (S. 101)				
Breach of special sanitary requirements for bakehouses (SS. 97 to 100.) Failure as regard lists of outworkers				
(S. 107)				
be done in (S. 108)				
premises which are infected (S. 110)				
Allowing wearing apparel to be made in premises infected by scarlet				
fever or smallpox (S. 109)				
Other offences				
Total	19	18		

### OTHER MATTERS.

	Class.		Nu	mber.
Matters notified	to H.M. Inspectors of Factor	ories:—		
Failure to affix	Abstract of the Factory & W	Torkshop Act (S. 133)		_
Inspectors a	n matters referred by H.M. as remediable under the	Notified by H.M. Inspector  Reports (of action taken) sent to		14
r netory rice	(0. 5)	H.M. Inspectors.		14
Other (Failure	to provide a General Registe	er)		1
Underground Ba	kehouses (S. 101):-			
Certificates gra	anted during the year			_
	end of the year			2
Homework:			Nun	nber of
List of Outwo	rkers (S. 107):		Lists.	Outworkers.
Lists rece	eived		6	19
Addresses	of outworkers { forwarded to received from	o other Authorities om other Authorities		
Homework in	unwholesome or infected prem	ises :-	Wearing Apparel	Other.
Notices p	rohibiting homework in un o8)	wholesome premises	Apparer	
Cases of	infectious disease notified	l in homeworkers'		
	ohibiting homework in infec			
portant classes of work- hops, such as workshop akehouses, may be enu- nerated here.	Cloggers	94 46 32 40 42 33 44		450

### WATER SUPPLY.

Public Supply.—The public service of the Borough is derived from three of the Reservoirs belonging to the Bury and District Joint Water Board. The Board includes the following Authorities:—Bury, Radcliffe, Ramsbottom, Tottington, Haslingden, Rawtenstall, Whitefield, Little Lever, and Bury Rural. The area supplied is 80 square miles.

The three Reservoirs supplying Bury are :-

Gin Hall (situated in Bury) supplying 10,173 houses.

Calf Hey (situated in Haslingden Borough) supplying 1,690 houses, chiefly in the districts of Limefield, Bell Lane, Blackford Bridge, Woolfold, and Walshaw.

Hapton (situated partly in Rawtenstall Borough, partly in the Burnley district) supplying 1,392 houses, chiefly in the Chesham district.

The total number of houses supplied at March 31st, 1906, was 13,255.

### RAINFALL, 1905.

Gin Hall: 38.34 inches, compared with 38.01 in 1904 and 53.06 in 1903.

Calf Hey: 41.54 inches, compared with 43.66 in 1904 and 61.53 in 1903.

Hapton: 36.64 inches, compared with 37.63 in 1904 and 54.88 in 1903.

An average of 38.84 inches, compared with 39.76 inches in 1904 and 56.49 in 1903.

DISTRIBUTION.—5,330 yards of 12-inch, 238 yards of 6-inch, and 474 yards of 4-inch mains have been laid during the year.

The mains are flushed when required; several "dead ends" have been removed.

From April 1st, 1905, to March 31st, 1906, there were 59 new houses connected to the public service, and 36 houses were disconnected.

WATER CLOSETS.—During the year (April 1st, 1905, to March 31st, 1906) water supply was connected to 127 water closets and 32 baths, in accordance with the regulations of the Water Works Department.

PRIVATE WATER SUPPLY.—At the end of the year 1905 there were eight houses, 100 cottages, and two schools supplied with water from private sources. The following list shows the situation and number of houses supplied:—

- 2 houses, Springs.
- 4 cottages, Well Brow.
- 1 cottage, Bury Ground.
- 2 cottages, Holebottom.
- 2 cottages, The Hagg.
- 2 cottages, Spring Cottages.

School, Woodgate Hill.

- 1 cottage, Cinder Hill.
- 3 cottages, Woodhill Road.
- 3 cottages, near Bury

Reservoir.

- I house, Green Bank.
- I house, Chesham.
- 4 cottages, Springs.

- 1 house, Chesham Green.
- 1 house, South View.
- r house, Birchen Bower.
- 1 house, Broom House.
- 44 cottages, Woodhill.

School, Woodhill.

- 9 cottages, School Street.
- 12 cottages, Yates Terrace.
- 4 cottages, Duckworth Fold
- 1 cottage, Chesham.
- 1 cottage, Gipsy Brook.
- 2 cottages, Chesham Green.
- 3 cottages, Cinder Hill.
- 2 cottages, Lowes.

WATER SUPPLY DURING THE YEAR.—The average rainfall during the year was even less than that of 1904, the latter being much less than the average for 1903.

Water Analysis.—Samples were taken from a private source of supply and submitted to the Borough Analyst. The report of the latter was, "The samples were bright, clear, and without taste or odour upon heating; they appear to be of great organic purity, and are (though hard) suitable for potable purposes."

WATER SUPPLY TO WATER CLOSETS AND WASTE WATER CLOSETS.—An interesting series of experimental tests were made by the Joint Water Board during the year with the view of eliciting the amount of saving (if any) effected by waste water closets as compared with fresh water closets. The following is a summary of the results:—

WASTE WATER CLOSETS.

WASIE WAIER OLOGEIS.	No. of Days' Test.	Consumption per head per day
Street A	100	5.4 gals.
Street B	100	5.5 ,,
Street C	99	6.5 ,,
Street D	· · · 75	5.2 ,,
FRESH WATER CLOSETS.		
Street E	100	6.0 gals.
Street F		15.9 ,,
Street G	100	16.0 ,,

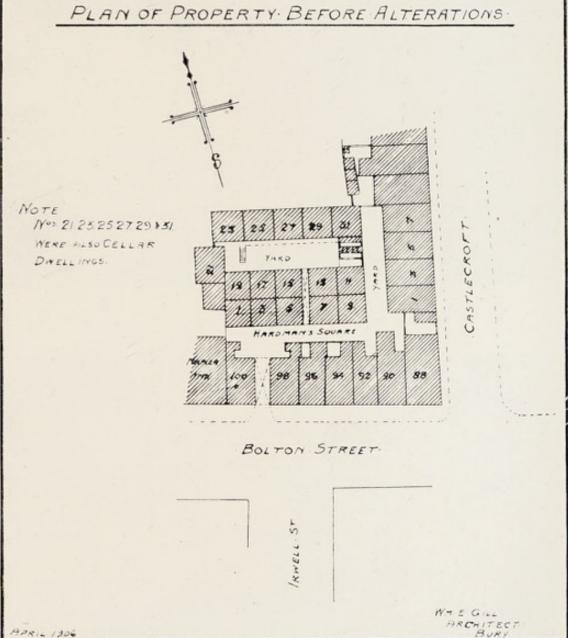
These results would consequently tend to shew that there is a very considerable saving of water effected by the use of waste (or slop) water closets. This is important, as it has not infrequently been urged that no economy in water results from the adoption of slop water closets owing to the fact that the house tap is often left running in order to flush the closet.

#### INSANITARY PROPERTY.

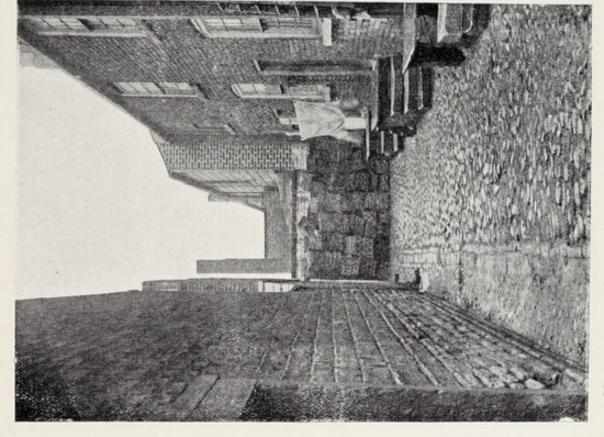
Important improvements have been carried out during the year in connection with a small insanitary area known as Hardman Square. Much legal difficulty was experienced in dealing with the property, owing to this being in Chancery. Private negotiations, however, with the agents, have resulted in demolition of the insanitary houses comprising the "Square," clearing the site, and the provision of yards, with conveniences, &c., for the shops fronting the main street (Bolton Street), these yards being separated by substantial brick walls. All these improvements were carried out without cost to the Corporation. The accompanying plans and photographs will illustrate the above description.

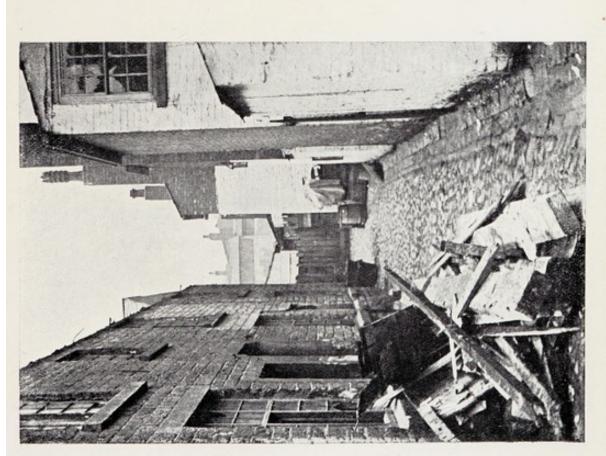
Another improvement during the year was that carried out in connection with a small area known as Gilding Court. This area was unpaved, and had insanitary, dilapidated ashpits at either end. These latter were demolished, water closets were provided for the houses in the Court, and the surface paved. The photographs illustrate the condition of the premises before and after alterations.

# PLAN OF PROPERTY BEFORE ALTERATIONS



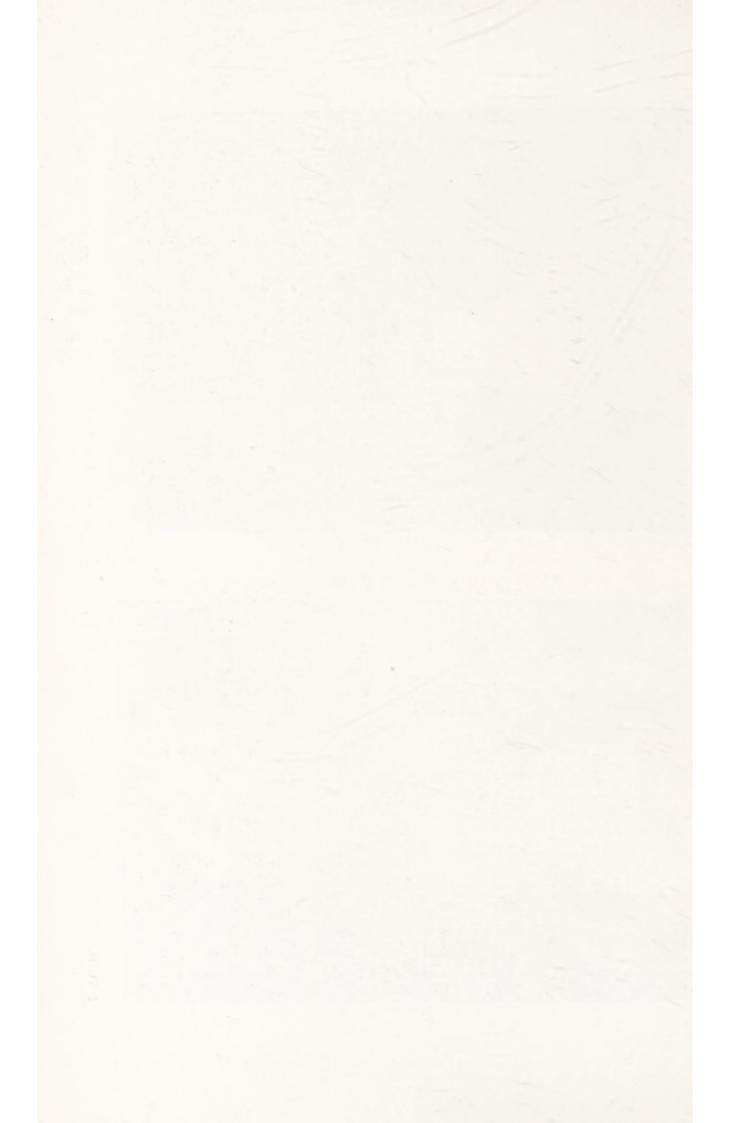


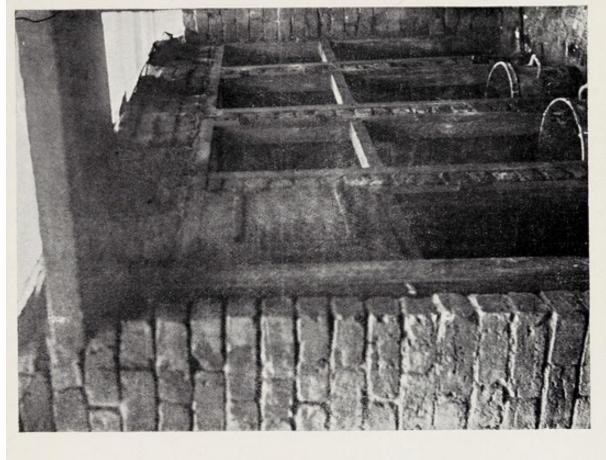




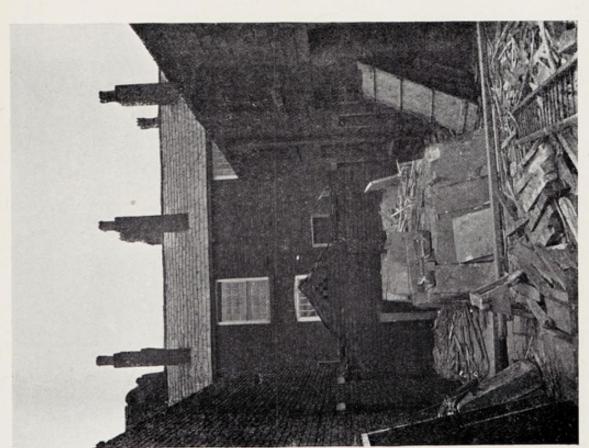
I TO 9, HARDMAN'S SQUARE (BEFORE ALTERATIONS), AND 88 TO 100, BOLTON STREET.

Hardman's Square (before alterations), and i to 7, Castlecroft.





Pail Closets, Hardman's Square (before alterations).

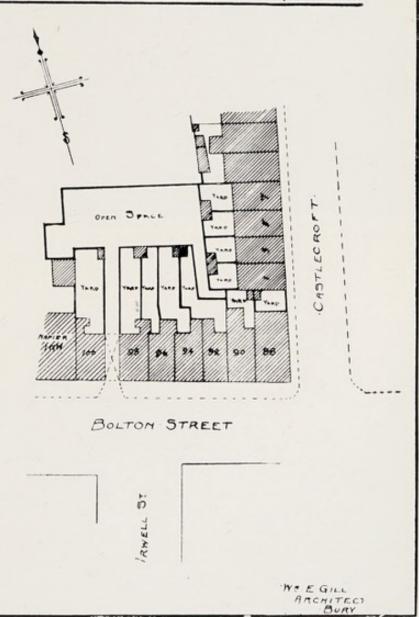


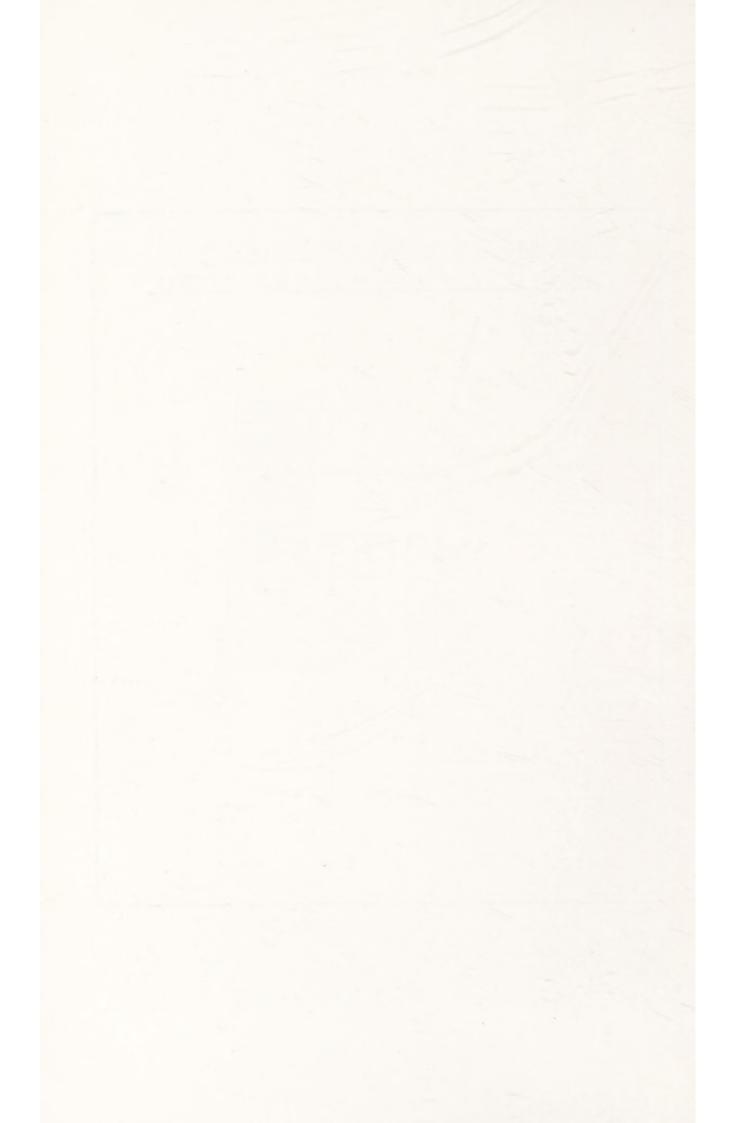
Hardman's Square Yard (before alterations), Looking East.

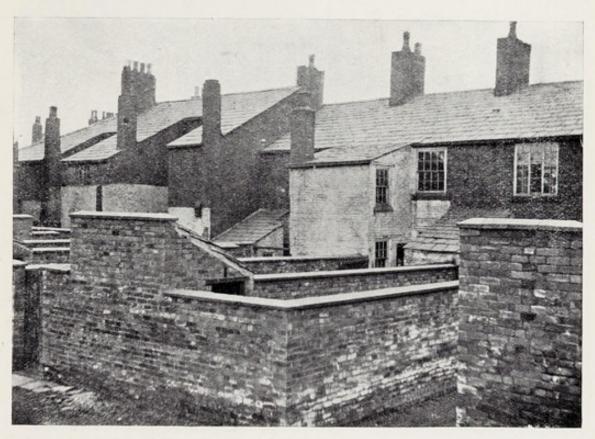


# HARDMANS SQUARE BOLTON STREET BURY PLAN OF PROPERTY AFTER ALTERATIONS

APRIL 1906





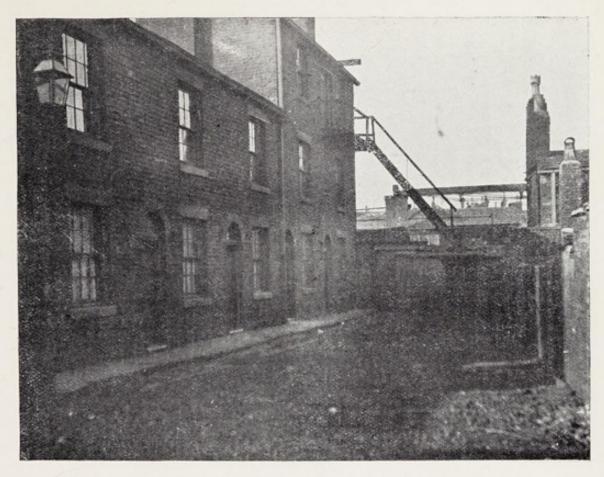


HARDMAN'S SQUARE (AFTER ALTERATIONS), SHEWING SEPARATE YARDS, &c., PROVIDED FOR 88 TO 100, BOLTON STREET.



HARDMAN'S SQUARE (AFTER ALTERATIONS), SHEWING OPEN SPACE AND YARDS, &c., PROVIDED FOR I TO 7, CASTLECROFT.



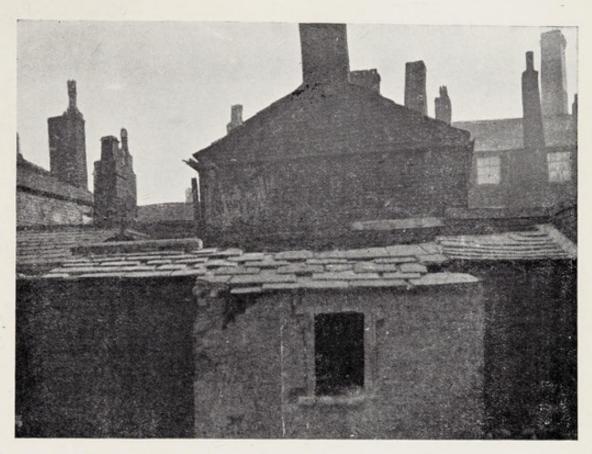


GILDING COURT (BEFORE ALTERATIONS), LOOKING SOUTH.



GILDING COURT (AFTER ALTERATIONS), LOOKING SOUTH.

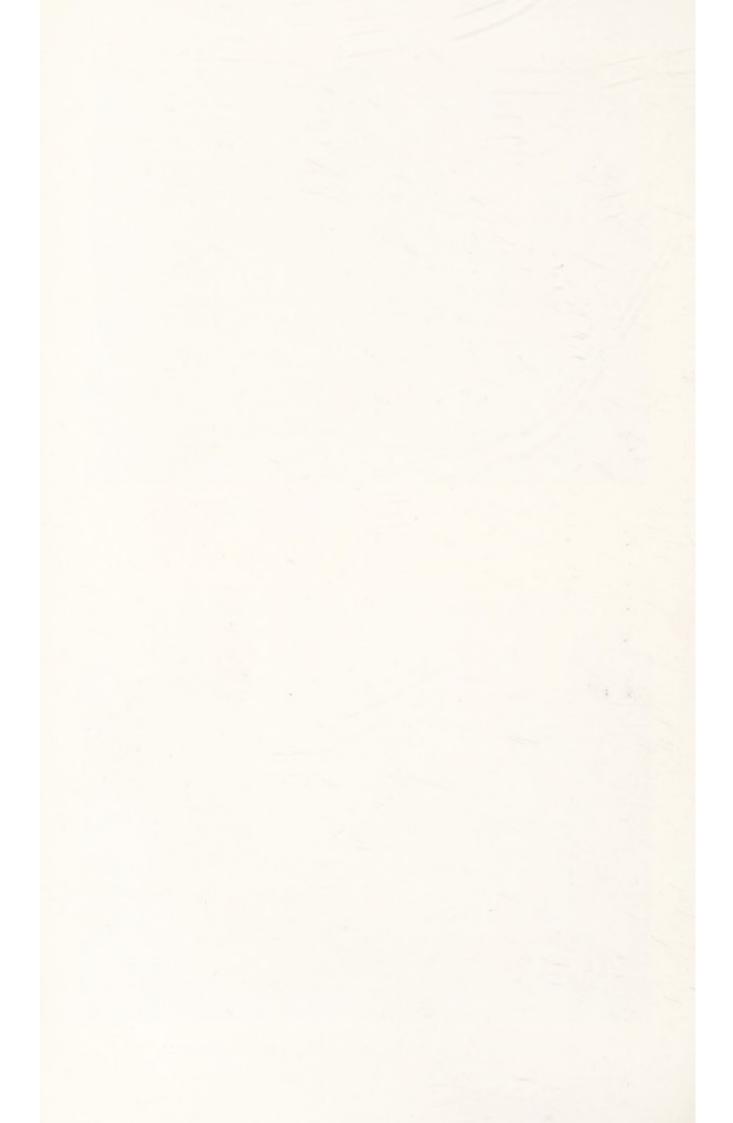




GILDING COURT (BEFORE ALTERATIONS), LOOKING NORTH.



GILDING COURT (AFTER ALTERATIONS), LOOKING NORTH.



#### CLEANSING DEPARTMENT.

# CLEANSING COMMITTEE, 1905-6.

Chairman—Councillor John Taylor.

Deputy Chairman - Councillor T. B. Smith.

THE MAYOR.

ALDERMAN COLLINGE.

COUNCILLOR GREENHALGH.

HOLT.

,, ROTHWELL.

" SMITH.

, Sharp.

COUNCILLOR AINSWORTH.

Joseph Taylor.

Chief Officials:

MEDICAL OFFICER OF HEALTH.

BOROUGH ENGINEER.

Duties.—To have the control and management of the Stable Yard at Fernhill.

To have charge of all the horses, carts, and carriages of the Corporation, with powers to buy, sell, and exchange horses, carts, and carriages, corn, hay, and other provender, and all other articles and things necessary for the working thereof, and keeping the same in proper repair.

To have control and management of the scavenging and watering of roads, streets, highways, and places of public resort, and the collection, reception, storing, dealing with, sale, and disposal of excreta, ashes, noxious matter, manure, garbage, offal and refuse, made, produced, found, accumulated, or being within the Borough, such last-mentioned works to be under the supervision of the Medical Officer of Health; also to have control and management of the smith and wheelwright's department, salting and sanding of streets, snow removal, and the Fernhill Destructor, such last-mentioned works to be under the supervision of the Borough Engineer.

The Medical Officer of Health and the Borough Engineer to be the responsible officers of the Committee, each to have control of the horses and carts in his department, with power to engage and dismiss carters.

MEETINGS.—The Committee meet on the Monday in each month immediately preceding the 16th day before the Council Meeting, at 4-15 o'clock in the afternoon.

### NIGHTSOIL DEPARTMENT.

DISPOSAL OF REFUSE. - From the figures given in the appendix it will be noticed that over 77 per cent, of the loads of refuse have been cremated at the Fernhill Destructor, less than 23 per cent. of the loads being disposed of for agricultural purposes or by tipping. The number of loads, however, is not strictly a measure of the weight disposed of in the two cases, for the loads sent to the Destructor include those contained in the large cart and waggon used for the collection of dry ashes, each load weighing on an average over two tons; the "loads" sent to tips are often partial loads; also the average weight contained in the ordinary carts (considered as full loads) is only a little over 21cwt. there is no doubt that considerably over 80 per cent. of the ashpit refuse in the borough is dealt with in the Destructor. very fair percentage of refuse cremated, especially when it is recalled that as recently as 1897 only 34 per cent. of the loads of refuse (not then including the larger load of the waggon and big cart) were dealt with at the Destructor, while 66 per cent. of the refuse was disposed of by tipping.

Little objection could be urged, I think, to a certain percentage of loads being disposed of for agricultural purposes, such material, for example, as is removed from certain open ashpits of a semi-liquid nature, and quite unsuitable for cremation. Also the refuse removed from outlying districts of the borough, e.g., Springside View, Birtle, Brandlesome Road, &c., can very well be disposed of in this way.

The desirability of increasing the holding capacity of the ash carts is a question which should be considered, inasmuch as the average weight of the loads taken to the Fernhill Destructor was only 1-ton 4-cwts. 1-qr. (and this included the loads of the large cart and waggon, which always average over two tons each).

Conversions to the Water Carriage System.—It is satisfactory to report that the number of water closets (including waste water closets) provided at the behest of, and under the supervision of, the Sanitary Inspector, was the largest recorded, a total of 413, as compared with 390 in 1904 and 227 in 1903.

It is satisfactory to record the continued diminution of insanitary ashpits and pails in the Borough with a corresponding increase in the number of water closets, dry ashpits, and ashbins. decrease in number of midden privies is 155, as compared with the number existing in the year 1904, and of pails 25, leaving 2,480 midden privies still in the town and 689 pails. It is obvious, therefore, that much work in the process of conversion to the water carriage system still remains to be done. One of the most satisfactory alterations carried out during the year was the conversion of a large midden ashpit known as "Pimhole Cess" to the water carriage system, with associated dry ashpits. The old ashpit was in connection with eight privies, and was emptied halfyearly, 12 to 17 cart loads of refuse being removed at these times. In the new structure 16 water closets are provided, also two small ashpits, which are emptied weekly. The accompanying photographs serve to illustrate this description.

As regards water closets, these shew a total increase of 487 upon the previous year, this number including 253 water closets and 234 waste water closets.

The number of dry ashpits was increased by 155 during the year, and the ashbins have had 66 added to their total. There are at present only 690 of the latter in the town, but it is hoped that new building bye-laws will be adopted at an early date rendering the provision of ashbins obligatory in all new property. In the

recent Bill (to amend the Public Health Acts) is a clause (No. 49) giving power to local authorities "to require the owner or occupier of any dwelling-house to provide galvanised iron dust-bins." It is to be hoped, therefore, that the provision of ashbins instead of ashpits, not only in connection with new property, but also in as many cases as possible in the process of alterations to old ashpits, will become general in the borough.

Collection of Waste Paper.—This system has proved eminently satisfactory not only to shopkeepers and others, but also to the Cleansing Department. A certain amount of revenue results from the sale of the paper, which ordinarily more than covers the cost of collection. During the year, however, a large shed had to be erected at the Town's Yard for the sorting and storage of the paper, the shed originally used for the waste paper being required for other purposes. The cost of erection of this new shed will swallow all the profit from the sale of the paper for some years to come.

The further extension of the system of collection to private houses might be advantageous, not only for the collection of waste paper, but also for bottles, broken pots, tins, &c., which now find their way into the ashpit.

#### SCAVENGING.

The chief difficulty experienced during the year was that due to lack of water during the summer and early autumn months. Fortunately we were able to obtain supplies of water from two sources—the Vulcan Cotton Spinning Company's well in the centre of the town and from the Elton Cop Dyeing Company's private source in the Elton district. The distance of these two sources of supply from many of the streets which required watering militated against these private sources adequately fulfilling the part played by the public source from the stand pillars placed at convenient spots throughout the town. The price of the water itself also was twice that charged by the Joint Water Board.

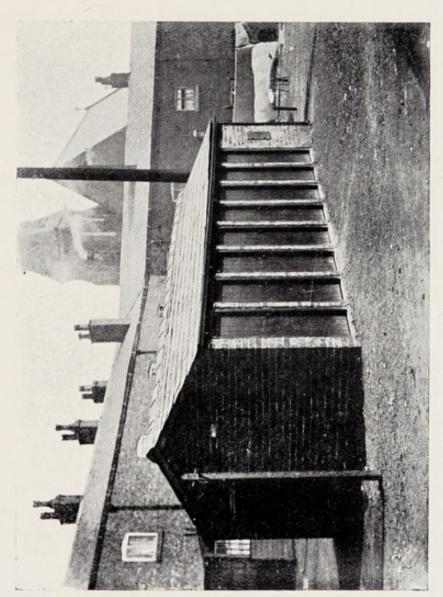


Ashpit—" Pimhole Cess" (Before Alterations).

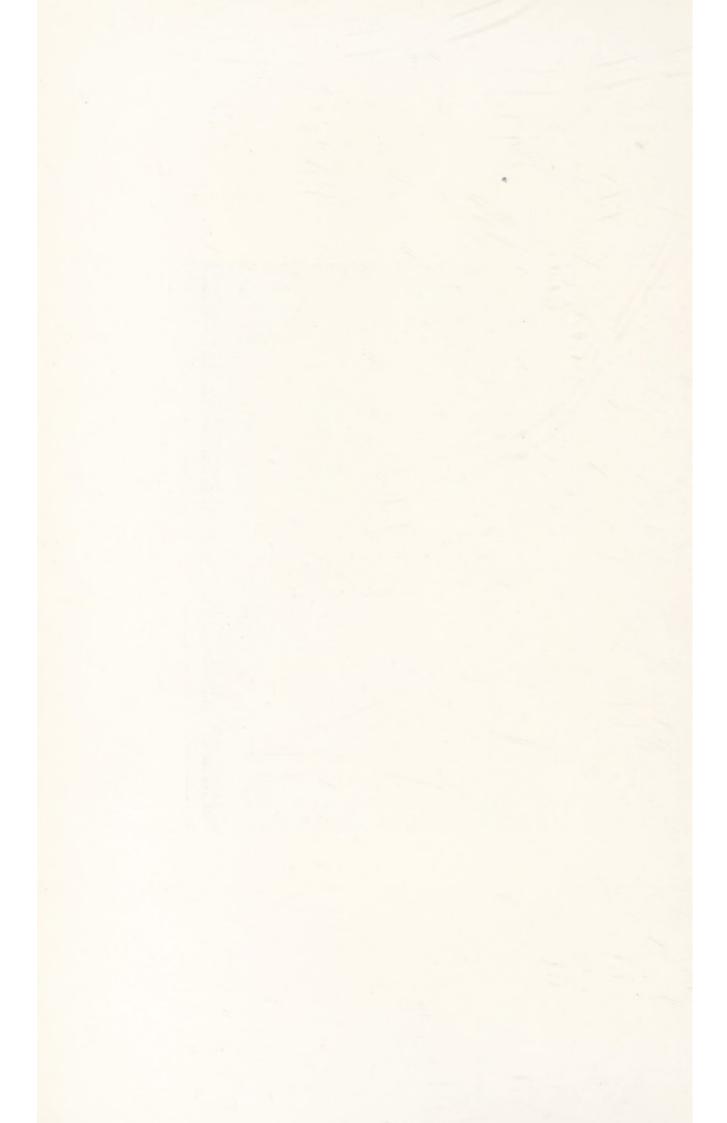


Interior of Ashpit—" Pimhole Cess" (Before Alterations).





" PIMHOLE CESS " (AFTER ALTERATIONS).



THE DUST PROBLEM.—This has now become a very serious question; the electric trams have introduced a very serious dust-disturbing factor into the town, which cannot be adequately dealt with by the same staff and appliances, nor at the same cost, as has been the case in previous years.

The idea of co-operation between the Tramways Committee and Cleansing Committee was mooted during the year with the view of adopting an electrically-driven water cart, and it is to be hoped that the idea will fructify at an early date.

Owing to the scarcity of water and the street stand pillars not being available, the combined street watering and sweeping machine could not be utilised to the full during the summer and autumn months of the year. The use of the original rotary brushes (i.e., with no water spray) was interdicted also during the dry weather, these brushes being the most pernicious dust-raisers imaginable, and though used only during the night-time, raise sufficient dust to penetrate through the interstices of closed windows. How the use of these brushes, without previous watering of the streets, has been tolerated so long in many places seems incomprehensible.

Dust-laying Preparations.—The majority of these seem to be more adapted for macadam roads rather than for granite setts. During the year an attempt was made to discontinue the practice of putting sand, gravel, &c., on the streets during the dry weather, by the Borough Surveyor's Department. Complaints were at once made by the owners and drivers of horses as to the difficulty of horses keeping their feet and the dangers resulting therefrom. The practice of sanding the streets, therefore, had to be continued. Hence it is essential for the public comfort as well as the public health, that water should be used fairly freely in the main streets, and that an increased amount should be allowed in the estimates for this purpose.

### ANNUAL REPORT OF THE BOROUGH ANALYST.

54, ARCADE CHAMBERS, St. MARY'S GATE,

MANCHESTER,

January 20th, 1906.

To the Chairman and Members of the Health Committee of the Corporation of the County Borough of Bury.

# Gentlemen,

In accordance with Section 19 of the Sale of Food and Drugs Acts, 1875-1899, I have pleasure in submitting you Reports upon the samples received and examined by me for the quarters of the year 1905.

During the twelve months ending December 31st, 1905, your Inspector (Mr. H. C. Cass) has submitted to me 130 samples, as follows:—

	(	denuine.	Adu	ilterated.
Milk		76		9 adulterated.
				I found to be Margarine.
Margarine				
Cheese				
Spirits		17		
Wine				
Coffee				
Pepper		I		
Beeswax		I		
Olive Oil		1		
Glycerine		1		
Camphorated Oil		I		
Liquorice Powder		2		
				_
		130		14

It will be seen that out of the 130 samples submitted, 14 were found to be adulterated, or not otherwise satisfactory to the purchaser, as follows:—

- 6 cases of milk, vendors cautioned.
- 2 cases of milk, vendors prosecuted and convicted—fines, £,2 and costs in each case.
- I case of milk, prosecution withdrawn after explanation and payment of costs.
- 1 case of butter, proved to be Margarine.
- 3 cases of Margarine, not labelled in accordance with the Margarine Act; vendors prosecuted and fined 20s. and costs, £5 and costs, and £2 and costs respectively.
- 1 case of Margarine, not labelled; summons withdrawn.

14

These samples form 10.6 per cent. of the total number examined during the year.

I remain,

Yours faithfully,

THOS. J. HUTCHINSON, F.I.C.,
Public Analyst, County Borough of Bury.

# INSPECTION OF CANAL BOATS.

Public Health Department,

Parsons Lane, Bury,

January 12th, 1906.

To the Medical Officer of Health.

Dear Sir,

In compliance with the Canal Boat Acts of 1877 and 1884, I have pleasure in submitting to you a report of the work done thereunder for the year 1905.

As in the past few years, the number of boats visiting the Canal Wharf has been few, only five boats having been inspected.

All these were found to comply in every respect with the regulations made under the Acts. On one of the boats there were two children of school age, and it was ascertained that they were not receiving the educational attention desirable, as the boat, previous to coming to this town, had been "lying up" at Outwood for some time. The Chief School Attendance Officer was informed of this, and it is pleasing to report that the children attended school for the time the boat remained in dock here.

I am, Sir,

Yours faithfully,

SAMUEL KAY.

# REPORT OF NURSE WALTON.

# PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee.

Gentlemen,

I beg to present to you the following report, being a summary of the work carried out during the year 1905:—

#### SUMMARY OF VISITS.

1256 visits to houses where births have been registered.

178 visits to houses in which deaths of infants under one year of age have occurred.

283 visits to workshops where women are employed.

87 visits to the homes of outworkers.

3 visits re cases of overcrowding.

698 visits to houses in which cases of suspected Measles, Whooping Cough, Ringworm, &c., existed.

31 visits re voluntary notification of Phthisis.

BIRTHS.—During the year I have been able to obtain information in 1,256, or 99.35 per cent., of the total (1,271) births registered as regards the feeding, &c., of the infants. Advice has also been given where necessary with regard to the feeding and general care of the children.

FEEDING.—888, or 70.70 per cent., of the infants were being fed naturally, while 368, or 29.30 per cent., were being fed by the bottle.

From the above it will be seen that the percentage (29.30) of bottle-fed children shews a slight diminution as compared with the previous year (34.23).

During the course of my visits I regret to find the apathy exhibited by some mothers with regard to the general welfare and the feeding of their children, e.g.:

- (a) The giving of solid food during the first few weeks of life.
- (b) Negligence with regard to the washing of babies' bottles after use.
- (c) Adherence to the use of the old-fashioned bottle with its long tube, so liable to become offensive.
- (d) Preparation of large quantities of food, in order to last the whole day, instead of being prepared as required.
- (e) The neglect of taking the children into the open air. In very few instances have I come across mothers who make a practice of giving their children a daily airing.

Of the 1,271 births registered, 124 died before the end of the year. Of these 43, or 34.68 per cent., occurred in breast-fed children, and 81, or 65.32 per cent., occurred in children fed by bottle.

OCCUPATION OF MOTHERS.—In 987 instances the mother was engaged at home, and in 268 cases the mother was engaged in the mill.

DEATHS.—184 deaths have been recorded of children under one year of age. The following is an analysis of the nature of feeding, &c.:—

> 120, or 65.22 per cent., were bottle-fed. 48, or 26.09 per cent., were fed naturally.

In the remaining cases (16) the character of feeding was not obtained, this number including those prematurely born and those dying shortly after birth.

Of the above deaths (184), 33 were attributed to Diarrhœa, and from the information obtained it was found that 27, or 82 per cent., occurred in bottle-fed children, as compared with six, or 18 per cent., in children who were fed naturally, thus showing the greater liability of bottle-fed children to this disease.

During the summer months I impressed upon mothers the desirability of seeing that the bottles were thoroughly scalded after use; also that the food (especially milk) be kept covered and in a cool place, in order to keep out the dust and flies.

Workshops.—During the year I have paid 283 visits to workshops in which females only are employed, and it is pleasing to record that the conditions under which the work is carried on are very satisfactory, as regards cleanliness, light, ventilation, and provision of suitable sanitary conveniences.

SHOP HOURS ASSISTANTS (SEATS) ACT.—52 visits have been paid to shops, and in each case it was found that the sections contained in the above Act were being complied with.

Outworkers.—Lists of outworkers have been received during the year containing 19 names and addresses, to which I have paid 87 visits. In the majority of cases I found the room in which the work was being carried on in a satisfactory condition. In a few instances, however, I have recommended that the work-room be cleansed and limewashed, and in each case the necessary work has been carried out.

Overcrowding.—During the year I have visited three houses in which overcrowding occurred. The following are the particulars of the cases:—

- (1) This was a single house consisting of one room up and one down, and was occupied by a man, his wife, and four children, aged nine, seven, five, and three years respectively. Prior to my visit a child aged three months had been overlaid in bed.
- (2) This was a house similar to the above, and was occupied by the following:—

 Father
 aged 69 years.

 Son
 ,, 27 ,,

 Daughter
 ,, 23 ,, (Married.)

 Daughter
 ,, 21 ,, (Consumptive.)

 Daughter
 ,, 17 ,,

 Daughter
 ,, 14 ,,

 Two grandchildren
 ,, 4 & 2yrs. respectively.

Two of the daughters (aged 21 and 17) were removed to the Workhouse Infirmary, and the house, which was in a filthy condition, was fumigated, and the rooms afterwards limewashed.

(3) This was another single house, and was occupied by a family of nine. The tenant was, however, persuaded to remove into a larger house.

School Notices.—The number of notifications received from the Headmasters of schools was not so large as the previous year. This number would have been considerably reduced but for the epidemic of Measles, which commenced during the later part of the year.

Visiting by mothers with their children has been the means of spreading much of the disease. During my visit to cases of Measles I have met women with children from neighbouring houses visiting at houses where Measles existed, and in several instances the little visitors have subsequently contracted the disease and died.

During the early part of the year, prior to the compulsory notification of Chicken-pox, I came across several cases of this disease, where no doctor was in attendance, and when in doubt, owing to the similarity of this disease to Smallpox, I called the attention of the Medical Officer of Health to these cases.

Voluntary Notification of Phthisis.—During the year 31 fresh cases of Phthisis have been notified, to all of which I have paid visits. Owing to the cases, in most instances, not being notified until the disease is in an advanced stage, very little can be done, beyond giving such advice as is necessary for the comfort of the patient.

In one instance, during the course of my visits, I came across a young woman, aged 21 years, who was in a very advanced stage of the disease. Owing to there being no one at home who was capable of giving her the necessary attention, I persuaded her to apply for admission to the Workhouse Infirmary. She did not, however, long survive the change of residence.

The gratuitous supply of antiseptic handkerchiefs is much appreciated, as are also the spitting cups (which are loaned) and refills for same.

After the occurrence of death from this disease, an endeavour is made to have the rooms, as well as the bedding, &c., used by the patient disinfected, and it is pleasing to record that, in 41 instances, the consent of the occupier of the house was obtained for the necessary disinfection to be carried out.

I remain, Gentlemen,

Yours obediently,

L. E. WALTON.

# REPORT OF INSPECTOR HAWORTH, INSPECTOR OF NUISANCES.

PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have pleasure in submitting to you the following Report of the work done in the Sanitary Department during the past year. It is most satisfactory to note that the adoption of the water carriage system in place of the privy midden is still making some progress. By the table it will be seen that this year an increase is again shown in the number of closets fixed on this system, 358 privy closets combined with 155 middens and 10 tanks having been removed and 413 water closets fixed, including an additional provision of closet accommodation of 55 water closets. numbers would have been considerably increased had the Sanitary Department been provided with an unlimited amount of money for the carrying out of this work, for during the latter part of the year the work was practically at a standstill owing to the non-providing During this interval nuisances of the fittings free of cost. occurring in connection with these privy closets were abated by resorting to the old temporary method of cementing the walls. As the majority of the privy middens within the district are constructed in such a manner that the floors of same vary from two to four feet below the surface of the adjoining ground (which is contrary to the Model Bye-laws of the Local Government Board), it can only be expected that the ground water finds its way to these receptacles, and saturates the brickwork, then rising therein to its natural level. A large number are found to have been provided with drains (being again contrary to the Model Byelaws), which are usually choked, for it cannot be expected that a drain can keep itself clean unless there is sufficient water to carry the solid matter, so the cleaning out of these drains and cementing the walls can only temporarily abate the nuisance. But as the main factor of the owner of property is to get as much money out of the property as possible, we cannot expect him changing his system for any such considerations as the general health of the district. I can only repeat that the privy midden under the best conditions must be a means of disseminating disease, not always by the effluvia arising from same, but by the flies visiting these places and then finding their way into the houses and contaminat-Viewed from the cleansing point of view, we find that in the emptying of the privy middens (which is usually carried out during the night) the surface of the street is fouled, and although it may be carefully swept, a stain is left behind. When deposited on an unpaved surface, coupled with the fact of the darkness of the night, the spot requires visiting again as soon as daylight appears; hence the depositing on the ground and then loading same into carts (being lifted twice) must be more expensive than emptying an ashbin direct into the cart, or emptying the dry ashpit direct from the pit into the cart, and as the nature of the refuse makes it much lighter, a larger quantity can be conveyed, thus reducing the expense of cleansing by a considerable amount. In the case of tanks or cesspools, after these have been cleared there is no further expense attached. I can, therefore, with confidence recommend to you the advisability of continuing the practice of providing fittings free of cost to all owners who will adopt same in place of their present privy closets before such privy closets get into such a state as to require re-building, believing it to be the most economical method of improving the insanitary conditions arising from privy closets.

One of the tanks cleared away was constructed in the form of a vault running underneath the closets, and was the only convenience attached to a very good house, no available sewer being within a reasonable distance. The whole of the drains were re-laid and tested; water closets fixed, inspection and intercepting chambers provided, with proper ventilation; the drain being then conveyed to a closed septic tank, and afterwards through an aerated filter before passing into the land drains. The number of water closets and waste water closets fixed in connection with old property during the past eight years is as follows:—

Year-	-1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.
Fresh Water Closets Waste Water Closets								76 54
	413	390	227	266	132	164	135	130

#### INFECTIOUS DISEASES.

In referring to the table of visits made by your Inspectors, it will be seen that 483 visits have been made to cases of infectious and contagious diseases, the number of notifications received from the Medical Officer of Health being 371. During the enquiry into the respective diseases for the purposes of submitting the reports to the Medical Officer, nuisances were found in several cases to exist upon the premises. In connection with one house, in which two cases of Enteric Fever had proved fatal, the drains in the yard were found to be defective on the application of the smoke test, smoke issuing from the joints of the yard wall. further examination it was found that a branch drain had been connected to an old surface water drain underneath the wall. Complaints were also made by the tenant of bad smells occurring periodically inside the house. Examination proved that the drains at one time were conveyed underneath the cellar floor, and had been cut off from the inside of the cellar, and that the joints of the pipes still left in and connected to the sewer were defective, the sewer gas passing in the cavity wall and from thence under the dwelling-house floor. In other cases, foul privy middens, defective yard pavements, defective waste pipes from slopstones, and defective rainwater pipes were found, which received immediate attention as to their abatement. In Smallpox cases the contacts, i.e., all persons who had visited the house or been in direct contact with the patient, were visited, and kept under observation until the incubation period had passed; their clothing being disinfected.

#### COMMON LODGING-HOUSES.

472 visits have been made to the 15 Common Lodging-Houses within the Borough. Although 33 cases of Smallpox occurred in the town, we were fortunate not to have any cases in these houses. We were kept informed of the places where lodgers came from by the keepers, so that we could keep under observation those coming from infected districts. The houses are kept fairly clean, and are limewashed within the respective periods mentioned in Section 82 of the Public Health Act, 1875, viz., in the first week of April and October.

In the month of December a report was submitted to the Committee by the Superintendent of the Fire Brigade respecting the egress from these houses in cases of fire, and within it suggestions were made for improvements by providing in several cases additional handrails to staircases, and windows and doors to open in opposite directions. A new staircase was suggested for one house. Most of the alterations and suggestions have been carried out with the exception of the new staircase, which, unless complied with, may cause the house to be struck off the register. One occupier was reported to the Committee for an alleged breach of the bye-laws, and received warning respecting same.

#### HOUSES LET IN LODGINGS.

These houses have received periodical visits from your Inspectors. The houses are not yet registered, and as they exist in different parts of the district the absence of such registration renders then somewhat difficult to deal with. They are found to be kept fairly clean. One occupier received a notice to have the yard and passage cleansed, which was immediately complied with.

#### EXPLOSIVES ACTS.

Thirty-six persons were registered for the sale of explosives during the year, thirty-three being for the sale of fireworks, three for the sale of gunpowder and other explosives, and one for storing explosives. Greater care is now being taken in exposing fireworks, most of the shopkeepers now showing "dummies." The trade in fireworks only lasts for about three weeks, viz., the last week in October and the first and second weeks in November, and during this period your Inspector visited the premises, and on a few occasions had to call the shopkeepers' attention to uncovered receptacles containing fireworks, these being placed for easy access during the sales. Gunpowder and other mixed explosives, of which the shopkeepers only keep a very limited quantity, are kept in safe receptacles, and, I believe, in conformity with the Acts. One of the registered premises is a storeroom for storing

explosives used for blasting purposes in a quarry. The storeroom is well situated, away from any public road, railway, or other premises.

#### PETROLEUM ACTS.

Under these Acts five licences have been granted for the keeping of petroleum, one for petrol, and three for calcium carbide. Two works within the Borough manufacture their own acetylene gas, and appear to be carried on under safe conditions.

### SHOP HOURS ACT.

About 84 visits have been made under these Acts. The hours employed are well within the limit specified in Section 3 of the Act, e.g., 74 hours; and with the exception of exhibiting the notices as required by Section 4, the Acts appear to have been observed. A Closing Order was obtained under the Shop Hours Act, 1904, in relation to Hairdressers and Barbers' Shops, a copy of the appended Order being sent out to all the shops carrying on these trades within the district.

# SHOP HOURS ACT, 1904. CLOSING ORDER.

It is hereby ordered,

(1) That each Hairdresser's and Barber's shop throughout the Borough shall be closed to customers on the several days of the week, except as hereinafter provided, at the following hours, namely:—

Mondays... ... 8 o'clock p.m. Thursdays ... 8 o'clock p.m. Fridays ... 9 ,, Wednesdays ... 9 ,, Saturdays ....10 ,,

- (2) That the provisions of this order shall not apply to the closing of shops during
  - (a) The week commencing on the Mondav immediately preceding Good Friday;
  - (b) The week commencing on the Saturday immediately preceding Whit-Monday;
  - (e) The week commencing on the August Bank Holiday; and
  - (d) The period from the 18th day to the 31st day of December, both inclusive.

A. AKERS DOUGLAS,

One of His Majesty's Principal Secretaries of State. Whitehall, 11th October, 1905.

## SMOKE OBSERVATIONS.

During the year 43 smoke observations of the chimneys in connection with factories were made, 33 being of 60 minutes' duration, and ten of 30 minutes. The following table gives particulars:—

	Bla Mins.	ack. Secs		Mode Mins	rate. Secs.	M	Nor	
J. K. S. & Co	, î	30		44	30		14	o
* B. C. Co	11	30		18	0		30	30
A. A. & S	1	30		- 9	30		49	0
* S. S. & S	22	0		20	0		18	0
* O. B. Ltd	19	30		35	30		5	0
* J. A	14	30		20	0		25	30
* S. S. & S., No. 1	29	30		16	0		14	30
* S. S. & S., No. 2	23	30	*****	24	0		12	30
J. R. C. & B	3	30		35	30		21	0
N. V. S. & M. Co	4	30		37	30		18	0
W. R. & Co. Ltd	5	15		23	45		31	0
* B. & H. C. M. Co. (No. 1, C.F.)	13	0		28	30		18	30
W. L. & S	3	0		29	0		28	0
W. L. & S	8	0		44	0		8	0
R. P	0	30		5	0		54	30
S. R. & S., B. M	0	30		6	0		53	30
M. D. Co., Ltd	8	30		33	0		18	30
W. & J. H., Ltd	6	0		19	30.		34	30
* M. B. & H	10	0		10	0		40	0
* B. C. M. Co	18	30		37	0		4	30
J. A	3	30		10	0		46	30
J. W. T	3	0		10	0		47	0
B. C. M. Co	9	0		26	0		25	0
• T. H. & S., No. 1	. 10	30		. 14	0		35	30
* J. K. S. & Co	13	30		30	0		16	30
G. E. & W. W	2	0		6	30		51	30
* B. and H. C. (No. 1, W. M.)	25	0		17	30		17	30
B. & H. C. (No. 2, W. M.)	2	30		13	30		44	0
R. P	8	30		24	0		27	30
* W. and I	15	0		26	30		18	30
W. R. & Co	1	30		23	30		35	0
‡ B. C. M. Co	15	30		39	0		5	30
‡ N. V. S. & M. Co	22	30		34	0		3	30
R. P	0	0		9	0		21	0
J. H. O	0	0	· · · · ·	15	30		14	30
T. H. & S., No. 2	0	0		7	0		23	0

#### SMOKE OBSERVATIONS-Continued.

Initials of Firm.	Mins.	Secs.	Mode Mins.	Secs.	М	Non ins. S	e. ecs.
W. & G. O	. 0	0	 18	0		12	0
T. & N., No. 1	. 2	0	 16	30		11	30
T. & N., No. 2	. 0	0	 1	0		29	0
A. A. & S	1	30	 13	0		15	30
A. & S	0	0	 19	0		11	0
* E. C. D. Co. Ltd	11	30	 9	0		9	30
* M. & Co	10	0	 7	0		13	0

\*Legal notices have been served on these firms (who exceeded the time limit, viz., ten minutes per hour) to abate the nuisance.

‡Legal proceedings were taken against these two firms; in one instance for non-compliance with legal notice served under Section 94 of the Public Health Act, 1875 (the Magistrates inflicting a fine of £3 and costs, and making out an order to abate); and in the case of the other firm, for non-compliance with a Magistrates' order of abatement, the Magistrates inflicted a fine of 10s. and costs, being the maximum penalty for one offence.

After an observation has been taken, and the result shows that the time limit has been exceeded, your Inspectors visit the works and report the result to the occupiers. In every case the occupiers have been notified of the result of the observations made. By this means the manufacturers are kept informed of the efforts made to keep the nuisance within reasonable limits. Letters have been sent calling the occupiers' attention to black smoke having been emitted from their chimneys at such other times than when set observations were being taken. These intimations have a tendency to prevent carelessness, to which much of the black smoke nuisance is due.

## NOTICES.

Thirty-two Legal Notices have been served during the year in connection with the following matters:—

FACTORIES AND WORKSHOPS.

Fifteen to abate smoke nuisances.

Six to abate nuisances arising from insanitary privy closets.

Five to provide additional closet accommodation.

One to provide doors to female closets.

Four to provide efficient means for escape in case of fire.

## DWELLING-HOUSES.

One to abate nuisance arising from insanitary privy closet.

It has only been necessary in two cases to resort to legal proceedings to get the above matters attended to, these two cases being for the non-abatement of black smoke. Before the legal notices are served a preliminary notice, detailing the nuisances existing and advising the method of abatement, is served on the owner or occupier, and it is satisfactory to note that practically all are complied with without having to resort to legal measures.

Number of Preliminary Notices served	142
Number of Letters in lieu of Preliminary Notices	285
Number of Verbal Notices	71
Number of Letters sent other than Notices	227
Number of Special Reports re Sanitary Houses	11
Number of Notices served on Occupiers	34
Number of Notices served on Occupiers of Factories	15

The following table gives particulars of nuisances occurring in which Notices have been served:—

	1		
Number of Notices.	Affect- ing.	NUISANCE.	Houses Affected.
		Factories.	
8	19	Insanitary privy middens	-
4	14	No doors to female closets	-
2	2	Water closets insufficient	
1	1	Defective flushing apparatus	_
		Dwelling-Houses.	
125	358	Foul privy closets and middens	536
17	62	Defective pail closets	85
61 21	78 36	Ashpits without proper doors	148
21	90	Ashpits and closets, roofs and walls to repair	60
10	28	Insufficient closet accommodation	38
6	7	Insufficient ashpit accommodation	7
7	11	Privy middens to cleanse (in added areas)	35
25	85	Fresh water closets out of order	55
28	25	Waste water closets out of order	30 11
4 7	11 21	Defective sail and wests since	21
46	71	Defective soil and waste pipes	
		gutters	84
54	98	Defective and untrapped drains	117
88	96	Choked drains	138
2	2	Houses without a sufficient drain	2
8	40	Street grids choked	
14	1 19	Sewer choked	_
2	10	Back streets in foul condition	_
22	29	Dilapidated and damp houses	29
14	21	Premises to cleanse	21
8	8	Houses overcrowded	3
20	20	Accumulations of refuse	7
$\frac{7}{2}$	7 2	Animals kept as to be a nuisance	- '
2		Smoke issuing from Chimneys other than dwelling-houses or factories	2
1	_	Exhaust from gas engine	_
1	_	Reservoir in a foul condition as to be a	
		nuisance	-
606	1112		1429

The difference between the figures (606) in the above table and the number of Notices served (498) is accounted for by having specified on the Preliminary Notice several distinct nuisances requiring abatement in connection with the house under notice.

## SUMMARY OF VISITS.

Infectious and Contagious Diseases	483
Common Lodging-houses	472
Houses Let in Lodgings	55
Houses to Cleanse	21
Houses Overcrowded	6
Factories and Workshops	85
Re Drains choked, dilapidated, and untrapped	427
" Waste and Fresh Water Closets	239
" Offensive Privy Middens	434
" Testing Drains and Sanitary Fittings	27
"Sanitary Fittings and Ventilation of Public	
Buildings	18
" Defective Pavement in back yards	8
" Defective Rain Water Spouts and Gutters	70
"General Dilapidation	23
,, Accumulations of Refuse	19
,, Animals kept as to be a Nuisance	6
,, Offensive Water Course	4
,, Effluvium Nuisance	2
,, Smoke Nuisance	42
,, Canal Boats and Canal Wharf	6
,, Cellars flooded	3
,, Work in progress	688
Other Nuisances of a General Character	202

Sanitary improvements carried out in pursuance of Inspections made and Notices served in connection with

## FACTORIES AND WORKSHOPS.

FACTORY OR WORKSHOP.	NUISANCE.	Manner of Abatement.
S. R. & S., Britannia Mill.	Insufficient closet ac- commodation.	2 additional w.c.'s provided.
B. D. & C. M. Co., Elton Fold.	Closets insufficient in number: 3 insanitary pan closets.	1 set of latrines for 4 seats substituted.
J. K. & S., Roach Bank Mill.	Closets insufficient in number, and no doors to female closets; present accommoda- tion, 10 pail closets.	2 sets of isolated latrines for 16 seats provided, and also one 3-stall white enamel urinal, fitted with automatic flush- ing cistern.
J. S., Fox Street.	No closet accommoda- tion.	1 w.e. provided.
R. & S., Elton.	Closet accommodation very unsatisfactory, consisting of a privy closet without a pro- per receptacle.	Privy closet removed and 1 w.c. provided.
B. & H. C. Co. Ltd., Chesham Fields.	Insufficient closet accommodation and insanitary midden closets, consisting of 2 privy closets and tank.	Closets pulled down, tank filled up, and a block for 5 w.c.'s (trough closets) pro- vided.
J. H. S. Croft Street.	Insanitary closet accommodation, con- sisting of privy pail closet, in dark and wet position.	Old closet removed and a w.c. provided.
B. C. S. & M. C., Wellington Mills	Insanitary midden closets, consisting of 6 privy closets and 2 tanks.	Tanks and closets re- moved, and 2 sets of isolated latrines fixed for 8 seats.
H. H., Cook Street.	Insufficient closet ac- commodation.	Two additional w.c.'s provided.
S. R. & S York Street.	Insufficient closet ac- commodation.	Two additional w.c.'s provided.
B & H. C. Co., Woodhill Mill.	Insufficient closet ac- commodation.	One additional w.c. provided.
J. & A. E., Wash Lane.	Insanitary closet accommodation, con- sisting of 1 block of 4 privy closets with tank, and 1 block of 2 privy closets and midden.	Prive tanks filled up, and w.c.'s fixed in closets, and midden also removed; 5 w.c.'s provided.

## FACTORIES AND WORKSHOPS.—Continued.

FACTORY OR WORKSHOP.	Nuisance.	MANNER OF ABATEMENT.
H. B., Daisyfield Mill.	Insanitary midden closets, consisting of a block of 7 privy closets, with tank.	Privy closets and tank removed, and 1 set of isolated latrines fixed for 7 seats.
W. & L. Ltd., Moorgate.	Insanitary midden closets, consisting of 2 blocks of 5 and 3 seats respectively, with tank.	Closets pulled down, tank filled up, and 2 new blocks of closets for 5 and 3 seats (trough closets) provided.
S. C. & S., Bridge Street.	Insanitary privy closets, consisting of 4 privy closets with tank, in covered shed.	Closets pulled down, tank filled up, and 1 block of isolated latrines, w.c.'s pro- vided for 3 seats.
W. & G. O., Pimhole.	Female closets without doors (pail closets).	Closets pulled down, and 2 new blocks pro- vided, fitted with 2 sets of isolated latrines, for 5 seats each.
H. & S., Fountain Street.	Insanitary privy closets, consisting of 1 privy closet with tank, in very dark room.	2 w.c.'s provided in new position.
J. W., Chesham.	Insanitary midden closet and 1 pail closet.	Privy closets cleared away, and 2 w.c.'s substituted
B. C. S. & M. Co., Barnbrook.	Insufficient closet ac- commodation.	4 additional w.c.'s pro- vided.
J. K. & S., Earl Street.	Insanitary trough closets.	Old closets removed, and one block fitted with 2 sets of isolated latrines, for 4 and 3 seats respectively, and a 2-stalled urinal, fitted with an auto- matic flushing cistern, provided.
R. B. Ltd. Jericho.	Insanitary midden closet.	W.C.'s substituted.

## SUMMARY.

Thirty-six privy closets, 23 pail closets connected with two middens and eight tanks have been cleared out, and 84 water closets substituted.

IN CONNECTION WITH DWELLING-HOUSES AND OTHER PREMISES.

Privy closets converted to fresh water closets	91
Privy closets converted to waste water closets	199
Pail closets converted to fresh water closets	6
Pail closets converted to waste water closets	1
Additional fresh water closets fixed {outside 29 } inside 24 }	53
Additional waste water closets fixed	2
Number of fresh water closets fixed	150
Number of waste water closets fixed	204
Privy middens altered structurally and converted	
to dry, ashpits	153
Privy middens repaired or modified	54
Ashbins provided in lieu of ashpits	41
Additional ashpits and ashbins provided	33
Ashpits provided with new doors or repaired	75
Traps of water closets and waste water closets	
unstopped and cleared	244
Water closets or soil pipes repaired or renewed	21
Sanitary fittings repaired or renewed other than	
water closets	35
Choked drains unstopped and cleansed	98
Defective drains, brick and stone drains taken out	
and new stoneware drains laid	103
Defective channels and yard pavements repaired	18
Houses without eaves troughing, or defective	
troughing, provided or repaired	21
Houses without rain water spouts or with defective	
spouting, provided or renewed	50
Cellars re-drained or drains removed	2
Houses cleansed and limewashed	25

Houses in which repairs to plastering, brickwork, and woodwork have been carried out	18
Houses and premises taken down or boarded-up	
to prevent nuisances recurring	8
New pails and urinal guards provided	34
New drains provided to urinals and trapped	2
Foul accumulations removed	23
Animals and fowls removed	6
Cases of overcrowding removed	3
Other sundry nuisances abated	14

As mentioned in my last report, a considerable number of drains in connection with rain water pipes have been choked. This method of connecting either direct to a bend or a closed P. trap cannot be commended, and causes much expense in the unstopping of same to the property owners.

In conclusion, I wish to express my sincere thanks to Inspector Kay for his most able services which he has always willingly rendered in the carrying out of the work embodied in this report. I also wish to express my thanks to you for your kind considerations.

I am, Gentlemen,

Your obedient Servant,

JOHN HAWORTH, A.R.S.I.

Certified Inspector of Nuisances, and Sanitary Engineer.

#### REPORT OF MEAT INSPECTOR.

## PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee of the County Borough of Bury.

## Gentlemen,

I have pleasure in submitting to you my report for the year ending December 31st, 1905, on the inspection of Meat, Dairies, Cowsheds, Bakehouses, &c.

During the past year the various animals, carcases, &c., passing through the Public Abattoirs have been carefully examined, both when alive and after slaughter, and, speaking generally, the class of meat retailed in the Borough has been of a high standard, and fully equal to that of the past few years.

During the year it was found necessary to pay special attention to 103 carcases, of which number 77 were affected with tuberculosis in varying degrees. These consisted of 29 cows, 10 bulls, seven heifers, five bullocks, and 26 pigs.

The remaining 26 were variously affected, as will be seen from the appended table.

Of the cattle affected with tuberculosis, in only one instance was it deemed necessary to condemn and destroy the entire carcase, the disease being extensive and generalised; in another, one side and one clod were destroyed; in eight instances portions of the carcase were destroyed, as well as the whole of the internal organs; while the remainder were carefully stripped, and such of the internal organs as proved to be diseased were destroyed.

Of the pigs found to be affected, one entire carcase was destroyed, the disease being generalised; in several instances the heads and portions of the neck or forequarter; and in the remainder the heads and such of the internal organs as were diseased.

The number of pigs found affected with tuberculosis shows a considerable increase over the previous year, being 26 against eight, this increase being principally due to the greater incidence of tuberculosis amongst Cheshire-fed pigs, of which a larger number than usual were slaughtered; while Irish pigs, on the other hand, are comparatively free from the disease, and this is probably due in great part to the feeding, Cheshire pigs having a large proportion of milk-products (whey from cheese making), which is rarely or probably never boiled. When used as calf food, however, it is almost invariably scalded, to prevent white scour. Another frequent source of infection is the feeding of pigs with unboiled milk from so-called cases of garget (i.e., tuberculosis of the udder of cows), in which the milk is thick and ropy, or contains a large proportion of pus, and probably swarms with tubercle bacilli.

Whatever may be the reason, the fact remains that Cheshirefed pigs are more frequently the subjects of tuberculosis than are those from Ireland, and it is to be regretted that owing to the impossibility of detecting the disease in well-nourished animals during life, the feeders of tuberculous pigs can with impunity, and without loss to themselves, pass them on to the butcher, whose loss, if transferred to the feeders, would, in my opinion, speedily result in the disease being regarded not only as preventable, but prevented.

I have also to report that two cases of anthrax were discovered during the year. One of these was found at the knacker's yard during visits of inspection, and the appearance of the carcase and organs was so suggestive of anthrax that a bacteriological examination was made of the blood from the spleen, with the result that the bacillus anthracis was demonstrated therein; this result being afterwards confirmed by Prof. Delépine (Public Health Laboratory). The outbreak was reported to Superintendent Noblett (the Inspector under the Contagious Diseases Animals' Acts), whose enquiries elicited the information that the cow had died suddenly on a farm outside the Borough. Acting on, the instructions of the Medical Officer and Superintendent Noblett,

the whole of the carcases on the premises, with hides, &c. (eight carcases in all) were destroyed by cremating, and the premises thoroughly disinfected.

The second outbreak occurred on a farm in the Borough, where a cow being taken suddenly ill was slaughtered. The occupier of the farm afterwards invited my inspection, upon which, the carcase showing evident signs of anthrax, the usual microscopical examination of the blood was made, with a positive result (afterwards confirmed by Prof. Delépine). The carcase was destroyed by burning on the farm, the premises being disinfected.

It is satisfactory to note that as yet there has been no further outbreak, although, owing to the manner in which the blood had been spread about, the danger of this occurring was considerable.

In three instances sides of beef have been found containing abscesses in the lumbar fat; these, and the surrounding tissues, being carefully removed and destroyed, as were also portions of a pig which had been damaged during transit.

It was also found necessary to condemn and destroy the carcases and organs of five sheep (these having died or been slaughtered while in a moribund condition), and also the following organs, variously affected, viz.: 18 beast livers, seven sheep livers, five pig livers, five beast lungs, three pig lungs, two sheep lungs, two beast udders, and one beast heart.

Three cases of actinomycosis were discovered at the Abattoirs, in two of which the disease was confined to the tongue and lower jaws; in the third the lower jaws only were affected. In two of these cases a bacteriological examination was made before the true nature of the tumours was ascertained.

On four occasions I have been called upon to inspect carcases slaughtered in emergency upon farms in the Borough. In one of these the animal (a cow) was slaughtered owing to inflammation of the udder, and being normal, was passed as fit for food, the udder being destroyed. The second occasion was to inspect the carcase of anthrax beef above-mentioned; and the third case (a cow), which was stated to have been partially strangled. An examination of this carcase disclosed nothing inconsistent with

strangulation. The carcase was, however, obviously unfit for food, being moist, flabby, and poor in condition; consequently the carcase and organs were condemned and destroyed. The remaining case was of a cow which, having ruptured herself during calving, was slaughtered on the advice of a veterinary surgeon, and being subsequently inspected by me, was, being perfectly healthy and normal, passed as fit for food.

Enforced slaughter has also been necessary in several instances in the Abattoirs, in most cases slaughter being performed sufficiently early to enable the carcase being passed as fit for food. In one case (a cow), however, it was necessary to condemn and destroy a considerable portion of one side, this being infiltrated with blood and serum owing to rupture of blood vessels as the result of accident.

In every instance where the extent or nature of the disease has rendered the carcase doubtful, it has been reported to the Medical Officer of Health, and his advice sought thereon, this necessitating the attendance of the Medical Officer on several occasions.

During the same period the butchers' shops, fish shops, &c., have been constantly kept under supervision, regular and frequent visits having been made to the same; the meat, fish, &c., coming under observation having been, with few exceptions, very satisfactory in quality. On one occasion it was necessary to call the attention of the Medical Officer to a quantity of turkeys, rabbits, &c., a portion of which were condemned owing to putrefaction, being surrendered by the owner, who was cautioned.

During the year my attention has been invited to various articles of food, which proved to be in an unsound condition, these comprising one half-barrel of mackerel, half box of grilse (salmon), about 170-lbs. weight, five beast bellies, a small quantity of fruit, &c., these being removed to Fernhill and destroyed.

I have again to thank the various tradesmen with whom my duty brings me in contact, for the courtesy they have invariably extended to me, and the readiness with which they have complied with any suggestions as to the destruction of diseased or unsound food,

## CARCASES TO WHICH SPECIAL ATTENTION WAS NECESSARY.

- 00		1		
No. of Carcases	Descrip- tion	Disease.	Extent of Disease.	How disposed of.
1	Heifer	Tuberculosis	Slight on Peritoneum	Stripped
1	Cow	,,	Pleura & Peritoneum (slight)	Stripped
1	Sheep.	Apoplectic fit		Carcase normal and passed
1	Cow	Tuberculosis	Lungs and Pleura	Pleura stripped and lungs destroyed
1	Bulloek	Abscess in loin.		Removed with surrounding
1	Cow	Tuberculosis	Peritoneum (slight)	tissues Stripped
1	Cow	,,	Lungs	Lungs destroyed
1	Cow	Actinomycosis.	Tongue	Diseased organ destroyed, Bacteriological exam. by Prof Delepine
1	Pig	Pleurisy	(Slight)	Pleura stripped and lungs destroyed
1	Cow	Tuberculosis	Peritoneum (slight)	Stripped, and stomach destroyed
1	Heifer	Pericarditis	Heart and Pericardium	Diseased organs destroyed
1	Pig	Tuberculosis	Tonsils	Head, lungs, and liver destroyed
1	Cow	,,	One Lung and one Pleura	Stripped, lungs and dia- phragm destroyed
1	Heifer.	,,	Pleura and Peritoneum	Carcase and all organs destroyed
1	Bull	,,	Peritoneum (slight)	Peritoneum stripped
1	Cow	,,	Pleura (one side) slight	Pleura stripped, lungs and diaphragm destroyed
1	Cow	,,	Pleura (one side)	Pleura stripped
1	Sheep.	Died		Carcase and all organs destroyed
1	Cow	Tuberculosis	Peritoneum	Stripped, and diseased internal organs destroyed
1	Pig	Apoplectic fit		Passed
1	Sheep	,,		Passed
1	Bullock	Tuberculosis	One Lung and one Pleura (slight)	Stripped; lungs, diaphragm & one brisket destroyed
2	Bull'ks.	,,	Lungs (slight on Pleura)	Stripped and lungs de- stroyed
1	Cow	,,	Pleura and Peritoneum	Stripped, briskets and all internal organs destroyed
2	Sheep.	Apoplectic fits.		Carcases normal & passed
1	Sheep	Moribund		Carcase and all organs destroyed
2	Cows	Tuberculosis	Pleura and Peritoneum	Stripped, all internal organs destroyed
2	Pigs		Tonsils	Heads, lungs, and livers destroyed
1	Sheep		(Slight)	Carcase passed and lungs destroyed
1	Sheep	Pleurisy	(Slight)	Pleura stripped and lungs destroyed

No. of Carcas es	Descrip- tion.	Disease.	Extent of Disease,	How disposed of.
1	Cow	Tuberculosis	Pleura and Peritoneum	Stripped, lungs, dia- phragm, liver, stomach, and bowels destroyed
1	Pig	,,	Tonsils	Head destroyed
1	Bull	,,	Lungs	Diseased organs destroyed
1	Pig	Healed Pleurisy & Liver atro- phied		Stripped, lungs, heart and liver destroyed
1	Cow	Actinomycosis.	Bones of lower jaw	Diseased parts destroyed
1	Pig	Tuberculosis	Tonsils	Head destroyed
1	Bull	,,	Peritoneum (slight)	Stripped, and liver de-
2	Cows	,,	Lungs (slight)	stroyed. Lungs, one liver and one
1	Bull	,,	Lymphatics affected	pancreas destroyed One side, one clod and all
1	*Cow	Anthrax		internal organs destroyed Carcase and all others in
1	Cow	Tuberculosis	Lungs	contact cremated (four horses and four cows) Lungs destroyed
1	Pig	,,	Tonsils	Head, neck and lungs
4	Pigs	,,	Tonsils	destroyed Heads destoyed
1	Pig	,,	Slight in Lungs	Lungs destroyed
1	Sheep	Moribund		Carcase and all organs
1	Pig	Tuberculosis	Head Lymphatics	destroyed Head and mesentery de-
1	Bull	,,	Slight on Pleura	stroyed Stripped
1	Pig	***	Head Lymphatics and	
1	Heifer.	,,	Mesentery Slight on one Pleura	stroyed Stripped
1	Pig	,,	Tonsils	Head destroyed
1	Cow	,,	Pleura and Peritoneum	Stripped, and diseased in-
1	Pig	Peritonitis	(Slight)	Stripped, internal organs
1	Pig	Tuberculosis	Tonsils	destroyed Bead destroyed
1	Heifer.	n	Pleura and Peritoneum	Carcase stripped, neck and all internal organs de-
2	Cows	,,	Lungs (slight)	stroyed Lunge destroyed
1	Cow	,,	Liver only	Liver destroyed
1	Pig	.,	Tonsils	Head destroyed
1	Pig	,,	Head and Shoulders	Head, shoulders, lungs and
1	Bull	,,	Pleura and Peritoneum	liver destroyed Stripped, and diseased in- ternal organs destroyed

#### RE OUTBREAK OF ANTHRAX.

<sup>\*</sup> This was a cow which had died and been removed to the Knacker's yard, where cause of death was discovered. Owing to the floor of the slaughter-house being covered by hides, loose boned beef, &c., all of which had been contaminated by blood from the Anthrax carcase, it was deemed necessary to destroy the whole, this comprising the carcases of four horses and four cows.

## CARCASES TO WHICH SPECIAL ATTENTION WAS NECESSARY. - Con'd.

Descrip- tion	Disease.	Extent of Disease.	How disposed of.
Bull	Tuberculosis	Slight on one Pleura	Stripped, and lungs de-
Pig	,,	Generalised	stroyed Carcase and all organs
Pig	,,	Tonsils	destroyed Head, lungs and liver
Bull	,,	Peritoneum and slight on	destroyed Stripped, briskets and all
Pig	* ,,	Tonsils	internal organs destroyed Head and liver destroyed
Cow	,,	Pleura & Glands of Brisket	
Bullock	,,	Pleura and slight on Perito-	diaphragm and liver
Clam	Mantitia		Stripped, lungs, diaphragm and stomach destroyed
Cow	Mastitis	(Sugnt)	Emergency slaughter on farm; carcase passed,
Cows	Tuberculosis	Slight on one Pleura	udder destroyed Stripped
Sheep	Pneumonia	Died	Carcase and all organs destroyed
Pig	Tuberculosis	Tonsils	Head and lungs destroyed
Cow	,,	Pleura & Peritoneum (slight)	all internal organs de-
Cow	Ruptured blood	One side damaged by infil-	Stroyed Damaged parts removed
Cow	Ruptured blood		& destroyed, remainder passed
			Carcase normal and passed (farm slaughter)
			Pleura stripped and lungs destroyed
			Heads, lungs, hearts and livers destroyed
Bullock			Diseased portions destry'd (Bacteriological exam)
			destroyed
Pigs	"	Tonsils	Heads and lungs destroyed
Pig			Head and lungs destroyed
Cow			Stripped and lungs de- stroyed
Sheep			Carcase and all organs destroyed
Cow	Anthrax		Carcase destroyed by cre- mation (Bacteriological exam.)
Cow	Tuberculosis	Pleura and Peritoneum	Stripped, diseased organs destroyed
Cow	Strangulation		Carcase and all organs destroyed (farm slaughter)
Cow	Tuberculosis	Lungs and Pleura	Pleura stripped and lungs destroyed
Cow	,,	Lungs	Lungs destroyed
Cow	,,	Lungs and Pleura	Stripped, and lungs de- stroyed
Bull		Lungs and one Pleura	Stripped, lungs and liver destroyed
	Bull Pig Pig Bull Pig Cow Bulleck Cow	Bull Tuberculosis Pig, Pig, Bull, Pig, Cow, Bulloek, Cow Tuberculosis Sheep Pneumonia Pig, Cow, Cow Ruptured blood vessel Cow Ruptured blood vessel Heifers Tuberculosis Pigs, Bulloek Actinomycosis Heifer Tuberculosis Pigs, Pigs, Pigs, Pig, Cow Cow Anthrax Cow Tuberculosis	Bull Tuberculosis Slight on one Pleura

#### FARMS.

of which there are 62, which have been kept in a very fair state of cleanliness. On two occasions it has been necessary to warn the occupiers against the keeping of pigs in cowsheds.

One farm was kept under observation owing to complaints of slaughtering pigs being carried on from time to time, with the result that on one visit a recently-slaughtered carcase of a pig was found, which, on examination, proved perfectly healthy. Enquiry elicited the information that the animal had been brought from another farm in the Borough, and removed without a licence. This offence was reported to the Superintendent of Police, who prosecuted the occupier, a penalty of 5s. and costs being inflicted. For the offence of slaughtering on premises other than the Public Abattoirs the occupier of the farm was warned by letter.

Several cowsheds have undergone extensive alterations, with the object of bringing them in accordance with the regulations, especially as regards the lighting, cleaning, ventilation, and drainage, a short summary of which is given below.

Wood Bank Farm.—At this farm one old cowshed has been demolished and two new ones erected, with stalls for six and eight cows respectively, with provender house between. The lighting and ventilation are exceedingly good, and the cubic space ample for all requirements. The stalls are paved with hard brick, grouted with cement, with open channels to outside gulleys, drains connected to tank, &c. New piggeries have also been erected.

Gorsey Brow Farm.—This cowshed was in a very dilapidated condition, quite unfit for the keeping of cattle. Notice was served on the owner, with the result that the entire ceiling and internal walls, floors, stalls, &c., were removed. The alterations comprise the raising of ceiling from 7-ft. to 9-ft. high, the provision of two opening windows, new stalls for five cattle, with loose box, the demolition of a wall in front of heads of cattle, new brick

floor for stalls, with open channel and brick-paved pasage behind cows, and open passage 3-ft. wide in front of cattle, the whole being well grouted with cement. Removal of drain opening from within cowshed, and substitution of trapped gulley outside cowshed, with stoneware pipe drains.

ELTON GRANGE FARM.—At this farm the whole of the drains of cowsheds, stables, &c., have been taken up and re-laid.

During the year five applications have been received under the Dairies, Cowsheds, and Milkshops Orders, 1885-6, this bringing the number registered to 85.

#### BAKEHOUSES.

The bakehouses have been kept under observation, and, generally speaking, have been carried on in a satisfactory manner. In several instances, however, complaints have been received of nuisances arising from smoke, and the occupiers cautioned, this in each case being effective.

In one instance baking was found to be carried on in premises which were unfit, on sanitary grounds, to be occupied or used as a bakehouse. This was reported to the Medical Officer of Health, who visited the premises. On the occupier's attention being brought to the matter he voluntarily agreed to discontinue using the premises as a bakehouse.

#### OFFENSIVE TRADES.

370 visits have been paid to the various Offensive Trade establishments in the Borough. No complaint has to be recorded against any of these premises, they having been carried on in a satisfactory manner.

#### ICE CREAM SHOPS.

These have been kept under observation, there being no cause of complaint.

## KNACKER'S YARD.

Regular and frequent visits have been paid to the Knacker's Yard, generally three times weekly. The business has been carried on with as little nuisance as possible, having regard to the nature of the work.

As stated elsewhere, one case of Anthrax was discovered during the year at these premises.

The returns from the Knacker's Yard are:-175 cows and 261 horses.

Of the cattle 87, or 49.71 per cent., were returned as being affected with tuberculosis; 72, or 41.14 per cent., as due to some form of inflammation; and 16, or 9.14 per cent., to various causes.

I am, Gentlemen,

Your obedient servant,

W. P. OPENSHAW, Assoc. San. Inst., Cert. Insp. Meat and other Foods.

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## APPENDIX A.

## SUMMARY OF DEATHS, 1905.

SOMM			OF		EA		-,		00.					
						A	GES							13
DISEASES.	0	1	5	10	15	20	25	35	45	55	65	75	85	ALL
small-pox									1					
leasles	3	2	1											
carlet Fever		2	1		2				.:		.:			
pidemic Influenza	1		100		2	**	1	**	1	2	4			
Vhooping Cough	1	3	2		30	**	**							
Interic Fever		1			2	2	3	2	1					
Diarrhoea, Dysentery	33	4						1	1	2	1	2		
etanus	1					ï		**						
yphilisrysipelas		1						i	1					
uerperal Fever						1								
yæmia			1.1			1	1		.:					
arbuncle				**	i	**		1	1	**				
heumatic Feverheumatism of Heart			1	::									**	
uberculosis of Brain	3	2	3		1.	1	21	1		100				
hthisis	3	1	1	3	5	5	14	18	19	3	1	4.4		
bdominal Tuberculosis	1 2	2	1		i	ï	2	2	i	2	**		**	
ther forms Tuberculosis xyuris Vermicularis		1	**				-							
hrush	1				1.6									
cute Alcoholism							1							
hronic Alcoholism		1.0	440		**		2		2	2				
theumatismsteo-arthritis	**			**			ï	i	2	::	ï	::		
ancer				1		2		7	20	21	3			
todent Ulcer											1	1		
piabetes Mellitus	.:	**	**		**		1	**	1	1	-			
Iemophilia	1						i	ï		2		11		
næmia							1							B
remature Birth	26						.,		0.					H.
Debility at Birth	3		**		**					10	**	**		1
telectasis	7		i	**		**				**				
Congenital Heart Disease	2													
mperforate Rectum	1	11										**		
Iydrocephalus	1			**	**			**	**					
Want of Breast Milk	28	**						::				1		
Atrophy, Debility, Marasmus . Dentition	4	4										18		
Rickets		1								· ÷	29	32	8	
Old Age, Senile Decay	iò	2	1	**						3		02		
Convulsions	3	2	î	1	2	i	i	1	2					
Meningitis								4	6	8	8	8		
Softening of Brain	**								2	3	5	1		
Hemiplegia	1	**						2	ï	1	2	1		
Jeneral Paralysis of Insane					100	17.5		1	î	1				
Other forms of Insanity Derebral Tumour								2						
pilepsy	22			1	1	2	2					**		
aryngismus Stridulus	1				**		40	**			i			
araplegia	**							1				1.		
Veurasthenia Verebro-Spinal Sclerosis						::			1		1			
eripheral Neuritis			ï							1		11		
leat Apoplexy								**		ï				
Iyelitis	i													
nfantile Paralysis	100								1					F
erebral Congestion											1	**		
titis						1		**	ï			11		
Disease of Nose, Epistaxis				i			ï	i	9	1	2	3		
Indocarditis								1		2			**	
Angina Pectoris								1		7.				
							1	1	2	3			2.5	11
Aneurism									-		-			10

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## SUMMARY OF DEATHS, 1905-Continued.

						A	GES	š					- Company	13
DISEASES.	0	1	5	10	15	20	25	35	45	55	65	75	85	ALL
Totals brought forward	140	28	14	7	14	18	33	48	78	61	61	47	8	
Senile Gangrene										1	2		4.0	
Embolism, Thrombosis	1			11		1.1	1			1	1.	1		
Other Diseases, Heart & Vessels.	1		3.5	2	3	3	6	12	14	19	24	3		
Laryngitis			2	++			1		2	12				
Acute Bronchitis	11	5		**		111	1	3	2	3	2	111		
Chronic Bronchitis		**				:		1	10	32	14	7	i	
Lobar Pneumonia	1	2	1		2	3	6	-4	5	5	6		1	1
Lobular Pneumonia	12	10	3	1.1			1	1.1	1	4				
Pneumonia		*:	1	1		**	2		3	**	2	1	4.0	
Pleurisy		1	**	1			1:	1		**	2		4.4	
Fibroid Phthisis				**			1	**		1	i	**		
Asthenia	1		1.5	**	**	4.5		**	11	1	0.00	4.0	**	
Sublingual Abscess	1					7.5	100	1.1	1	0.1		**	**	
Dental Abscess			**		1	11		4.1		**		4.4		Н
Stomatis	4			100	0.0			**		i	1.1			
Diseases of (Esophagus Ulcer of Stomach and Duodenum		2.2	**	1.	i	**		1.1	2	-	i	1		
Other Diseases of Stomach		ï	**		1		1	i		i		1	**	
	1	1	**				1			i	i	1		
Enteritis		1	1	i	1	i	1		2	-	1		11	
Appendicitis	i					-		1	-	3	i	i		
Other Diseases of Intestine			**	11		3.5		1	**	-	7		1.4	
Cirrhosis of Liver	1 3		**	1 11	1		i	1	5		2			
Other Diseases of Liver					10.55			1	ĭ	2	2		11	
Peritonitis	1	**	2				**	1	1					
Bright's Disease	î	**	757	i	i		2	1	2	5	2	i	*	
Diseases of Bladder & Prostate.			11			1::		1			3	î		
Renal Colic		**	1			1000			1		1		**	
Fyonephrosis			1	1::		i		::						
Diseases of Ovaries			1	1::	1			2				10		
Accidents of Parturition			1			1	2	2						
Ulcer, Bedsore				100	1	1.			1				1	
Lichen Planus				1		1	1	1			1	1		П
Accidents and Negligence:				1			1	1 1	100		-			١.
In Mines and Quarries									100				1.7	П
In Vehicular Traffic					100		2		1	1				
In Building Operations					1			1						Н
By Machinery				1	1	1					1			Ш
By Weapons and Implements .			1	100			1						1.1	Ш
Burns and Scalds				111			1	1	1				1.3	ш
Poisons, Poisonous Vapours .			1		100	100	1							н
Drowning			1				1					100	11	ш
Suffocation, Overlaid in Bed .		4.0	1.5						1	11	11		1.0	Ш
Falls not specified		**		1			1		2	1	1	1	***	ı
By Poison								3	1					
By Hanging or Strangulation							1			2	1			
By Drowning							1	1		100	1			
Ill-defined & Unspecified Cause	8						1	1	1	2		-		1
Grand Totals	184	50	27	13	24	28	66	86	133	148	130	66	9	

#### APPENDIX B.

# COPY OF RETURN SUPPLIED TO THE LOCAL GOVERNMENT BOARD.

BOROUGH OF BURY.—Return of the number of cases of Infectious Disease reported to the Medical Officer of Health during the year 1905, and of deaths from the diseases notified.

	Cases Notified in 1905.	Deaths Registered in 1905.
Smallpox	88	1
Scarlet Fever	197	- 3
Diphtheria	52	5
Membranous Croup	3	_
Typhus Fever		_
Enteric or Typhoid Fever	33	11
Continued Fever	3	_
Relapsing Fever		_
Puerperal Fever	4	1
Cholera		-
Erysipelas	46	8
Plague	_	
Chicken Pox	. 79	

## ALBERT E. BRINDLEY,

Medical Officer of Health.

Dated February 1st, 1906.

## APPENDIX C.

# CHRONOLOGICAL ORDER OF DEATHS FROM CANCER DURING THE YEAR 1905.

WARI	).	ADDRESS.	SEX	. AGI	DESCRIPTION.	ORGAN AFFECTED.	OCCUPATION.
East		31, Lima Street	F	59	Carcinoma	Uterus	Wife
East		29, Cedar Street . 12, Bridge Street 15, Cobden Street	F	66	Cancer	Liver	Widow
East		12, Bridge Street	F	62	Cancer		Wife
East		15, Cobden Street	F	51		Cervix Uteri	Widow
East		25, Bell Lane	F	64	Cancer	Stomach	Wife
Elton		136, Tottington Road	F	52	Malignant	Clavicle	Widow
Dadwalaa		O Trobom Street		47	Disease	Titome	
Redvales	**	8, Ingham Street 53, Walshaw Road	-			Uterus	Weaver
Elton	**	82, Crostons Road	. A		Carcinoma	Stomach	Crane Attend'n
Elton East Elton Moorside	**	56 Van Street	. F		Cancer	Bowels Uterus Uterus	Widow
Elton		56, Kay Street 15, Birch Street 24, Argyle Street Nangreaves 74, Bell Lane	F		Carcinoma	Uterus	Daughter
Moorside		Od Apoulo Street	. 3		Cancer Cancer Sarcoma	Abdominol	Wife
		24, Argyle Street	3		Cancer	Abdominal	Engine Tenter
Moorside		Nangreaves	. F		Carcina	Testicle Liver Uterus Stomach	Weaver
East		74, Bell Lane			Carcinoma	Liver	Wife
Moorside		25, Kaven Street		46	Cancer	Oterus	Widow
East		23, Raven Street 8, St. Paul's Villas 11, Massey Street	· · ·	60	Mallement	Bootsum	Wife
East		II, Massey Street		54	Malignant Disease	Rectum	Wife
Redvales		13, Cook Street	F	58	Malignant Disease	Peritoneum	Wife
Elton		10, Belbeck Street .	. F	58	Carcinoma	Uterus	Widow
Elton		CC 101 1 1 1 10 1	1		Epithelioma	Foot	Painter
Moorside		Bornby Street			Cancer	Uterus Foot Uterus	Wife
		21 Shaw Street	F	60			Wife
Moorside		28 Peter Street	F	52	Cancer	Stomach	Wife
Elton		21, Shaw Street 28, Peter Street 48, Crostons Road	. F	57		Thomas	Widow
		Rank's Farm	F	37		Abdominal	Weaver
Redvales		Bank's Farm 14, Burst Street	F	50	Cancer	Renel	Wife
Church		3, Wyndham Street	. M	49		Renal Kidney Uterus Stomach	Draper
		9 Sedner Street	F	52	Carcinoma	Utorne	Wife
East Redvales	**	8, Sydney Street 163, Gigg Lane	M	63	Cancer	Stomach	Labourer
Redvales		25, Manchester Old Ros	d F	63	Cancer	Uterus	Wife
Fact		30 Show Street	M M	57	Carcinoma	Stomach	Gardener
East Elton	**	30, Shaw Street 27, Newbold Street	M	55	Cancer		Iron Moulder
arcon		9, Water Street	· A	54	Carcinoma	Sigmoid	Sub-Postmaster
Redvales		6, James Street	. I	69		Sigmoid Stomach	Widow
Moorside		43, Walmersley Old Ros	ad F	64	Malignant	Pelvis	Wife
niooioine.		io, it aimerately official		-	Disease		***************************************
Moorside		59, Regent Street	F		Carcinoma	Stomach	Wife
Church		44, Edward Street	. M		Carcinoma	Œsophagus	Pavior
East		26, Pine Street	. M	60	Cancer	Tongue	Night Watchmn
Church		36, Hayward Street	F	52	Cancer	Rectum	Wife
Moorside		4, Eldon Street	F	56	Carcinoma	Rectum Liver Uterus Liver Stomach	Widow
Moorside		7, Scholes Walker Stree	et F	41	Carcinoma	Uterus	Wife
East		12, John Street 4, Geoffrey Street 55, Wyndham Street	. M	47	Cancer	Liver	Shoemaker
Moorside		4, Geoffrey Street	. M	58	Carcinoma	Stomach	Cotton Worker
Church		55, Wyndham Street	F	18.7	Carcinoma	Uterus	Widow
East		71, Deal Street	. F	57	Carcinoma	Breast	Wife
Church		71, Deal Street 4, Openshaw's Yard	. M	52	Cancer	Jaw	Goods Carrier
		78, George Street	M	39	Epithelioma .	Scrotum	Cotton Spinner
Church		31, North Back King S	t. M		Cancer	Tongue	Labourer
Redvales		0 114 100	M		Malignant	Not stated	Labourer
		11 0-141 0		FO	Adenoma	(Parahamus	Wildow
	9.1		F		Carcinoma	Œsophagus	Widow
East		11, High Street	F	52	Malignant	Larynx	Wife
Redvales		12, Tenterden Street	F	59	Disease Carcinoma	Spine	Widow
7 .		Dall 1 (14	5.1		Sarcoma	Pharyngeal	Son
Moorside		To Observe Don't	M		Sarcoma	Not stated	Joiner

## APPENDIX D.

## DEATHS FROM PHTHISIS.

-			- /-	-	-	-	-	
Ward.	Address.				-	Sex.	Age.	Occupation.
East	5, Church Street					М 6	mths.	. Son
East	3, Barrett Street					M	49	Cotton Worker
East	143, Wash Lane					M	56	Coachman
Church	Clerke Street (Union Wo	rkhe	use)			M	45	Labourer
Moorside	15, Denton Street					M	55	Journalist
Elton	4, Byrom Street					F	49	Wife
Elton	"Globe Inn"					M	37	Licensed Victualler
Moorside	60 Cateaton Street					M	41	Chemists' Traveller
Church	30, South Cross Street .					M	50	Hackmsith's I abourer
East	22, Queen Street					M	1	Son
Church	77, Edward Street					F	18	Assistant Smallware Deale
East	145, Bell Lane					M	27	Tailor
Church	40, Union Square					M	50	Iron Turner
Elton	Wellington Barracks					M	32	Army Sergeant
East	20, Wood Street				**	M	10	Son
Moorside	27, Todd Street				**		25	Cotton Worker
Moorside								
	35, Badger Street (Union					F	2	Daughter
Church	South Cross Street				**		39	Widow
Redvales						F	17	Cotton Worker
Redvales						F	31	Wife
East	155, Bell Lane					M	20	Cabinet Maker
Church	10, Agur Street					M	37	Hay and Straw Dealer
Redvales	10, Handley Street					F	40	Wife
East	26, Rochdale Old Road			**		M	45	Stonemason
East	Hole Bottom			17		F	29	Cotton Worker
East	110, Pine Street					F	27	Cotton Worker
East	2, Pits o'th' Moor					M	35	Confectioner
Church	1, South Cross Street	110				M	49	Iron Furnace Attendant
Elton	33, Lord Street	4.2				M	29	Bricksetter
Elton	16, Belbeck Street					M	41	Joiner
Church	4, Garden Street					F	25	Dressmaker
Redvales						F	48	Wife
Elton						F	16	Cotton Weaver
Redvales	8, Parliament Place					F	47	Wife
East	13, Bridge Street					F	20	Cotton Worker
Church	Clerke Street (Union Wo						44	Spindle Maker
Redvales	13, Nuttall Yard						26	Outdoor Labourer
Redvales	17, Oxford Street					F	16	Confectioner
	Buckley Wells (Union						200	s. Daughter
Redvales							22	Railway Porter
Moorside	5, How Lane					-	5	Daughter
Elton	79, Bolton Road						35	House Painter
Moorside			**		**	**		Cotton Weaver
Redvales	28, Gigg						23	Iron Turner
Church						-	50	
Moorside							29	Wife
Moorside					- 64		33	Cotton Warehouseman
Church	13, Hamer's Yard					F	38	Wife

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## DEATHS FROM PHTHISIS-Continued.

Ward.	Address.	Se	ex	Age.	Occupation.
Church	39, Clerke Street		F	52	Smallware Hawker
East	Downham's Yard (Union Workhouse)		F	20	Cotton Ring Spinner
Redvales	6, Hill Street		F	46	Wife
East	29, Bridge Street		M	55	Plumber
Church	22, Cross Street		M	10 mt	hs Son
Redvales	16, School Street	1.4	F	27	Wife
Redvales	19, Hurst Street		F	51	Wife
East	8, Duckworth Fold		M	51	Wheelwright
Moorside	24, Porter Street		F	17	Woollen Worker
Church	28, Clerke Street (Union Workhouse)		M	74	Boilermaker
Church	9, Cooper Street		M	27	Mill Furnisher
Moorside	Taylor Street (Union Workhouse)		M	55	Hatter
Moorside	75, Brook Street		M	14	Son
Church	28, Clerke Street (Union Workhouse)		M	41	Labourer
Moorside	5, Joseph Street	14	F	42	Widow
Church	28, Clerke Street (Union Workhouse)		M	43	Labourer
East	57, Lucas Street		F	39	Wife
Church	7, Clerke Street (Union Workhouse)		M	48	Engine Tenter
Church	28, Clerke Street (Union Workhouse)		M	23	Labourer.
East	31, Queen Street		M	30	Barman.
Moorside	102, Walmersley Road		M	75	Retired Iron Moulder
Church	9, South Garden Street		M	35	Tailor
East	34, Audlam Street		M	10	Son
Church	33, Union Square		M	51	Stonemason
Elton	Union Workhouse		M	39	Labourer
East	3, Horrocks Street		M	50	Labourer

## APPENDIX E.

The following is a Census of the Sanitary Conveniences within the Borough, a comparison being made with those of the preceding years:—

preceding years.—					
	1905	1904		1903	1902
Number of privies	4682	 5016		5278	 5458
Number of ashpits in connection					
with privies	2480	 2635		2782	 2867
Number of pails	689	 714		784	 795
Number of dry ashpits in connec-					
tion with pails	356	 365		391	 397
Number of mill tanks	25	 35		41	 44
Number of fresh water closets					
(outside)	1723	 1478		1243	 1186
Number of fresh water closets					
(inside)	739	 731		723	 723
Number of waste water closets	2317	 2083		1789	 1569
Number of dry ashpits in connec-					
tion with water closets	1490	 1335		1154	 1042
Number of bins in connection					
with water closets	690	 624	•••	492	 450

Work performed in the Nightsoil Department during the Year 1905, also comparison with the Two preceding Years.

	1905		1904		1903
Number of privies and ashpits emptied.	26566		25886		26330
Number of loads removed from same	12158		12962		13070
Number of loads removed from dry					
ashpits	2308		2584		3018
Number of barrels of excreta removed					
from pail closets, &c	953		953		965
Number of Notices received for ash-					
pits to be emptied	763		1122		1013
Amount of waste paper collected-94-to	ons 7-c	wts	. o-qr.		
Amount of waste paper collected (1904)	-30-to	ons	11-cwt	s. 1	-qr.

#### APPENDIX E. Continued.

## DISPOSAL OF REFUSE.

During the year 14,466 loads of refuse have been removed from ashpits, and these have been disposed of as follows:—

To Destructor at Fernhill	11176
To the various Tips	3290

The following are the weights of the refuse taken to the Fernhill Destructor:—

	Tons	Cwts.	Qrs.
Household refuse	13540	8	3
Market refuse	115	16	0
Fish and other refuse	267	15	1
Total	13924	0	0

## SCAVENGING.

Loads of	sweepings	collected		3328
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## WATERING OF STREETS.

Number of barrels of water used			 2756
Approximate number of gallons of	water	used	 963600

#### APPENDIX F.

## LIST OF MIDWIVES, 1906.

\*Miss Emily Dodd, 130, Walmersley Road, Bury.

Mrs. Julia Ingham, 98, Taylor Street, Bury.

\*Mrs. Mary Jane Carrington, 25, Geoffrey Street, Bury.

Mrs. Sophia Cotterell, 108, Wash Lane, Bury.

Mrs. Eliz. Isherwood, 9, Shepherd Street, Bury.

Mrs. Ellen Taylor, 35, Union Square, Bury.

Mrs. Louisa Morrison, 52, Manchester Old Road, Bury.

Mrs. Esther Nabb, 51, Regent Street, Bury.

Mrs. Ellen Wiley, 20, School Street, Bury.

\*Mrs. Annie James, 251, Crompton's Terrace, Bolton Rd., Bury.

Mrs. Eliza Chadwick, 136, Rochdale Road, Bury.

Mrs. Eliz. Benson, 86, Horne Street, Bury.

†Mrs. Sarah Booth, 286, Woolfold, Bury.

Mrs. Mary Ann Pickup, 4, Eldon Street, Bury.

\*Miss Ada Yarwood, 22, Dawson Street, Bury.

Mrs. Jane Yarwood, 22, Dawson Street, Bury.

Mrs. Sarah Benson, 47, Fairy Street, Elton, Bury.

†Mrs. Harriet Rostron, 48, East Street, Bury.

\*Miss Annie Eliz. Storey, Union Hospital, Jericho, Bury.

Mrs. Isabella Hardman, 27, Bambury Street, Bury.

\* Trained and Certificated. † Trained, but not Certificated.

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