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CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle,

FOR THE YEAR 1914,

BY

JOSEPH BEARD,

D.P.H. (Cantab.), F.R.S. (Edin.)

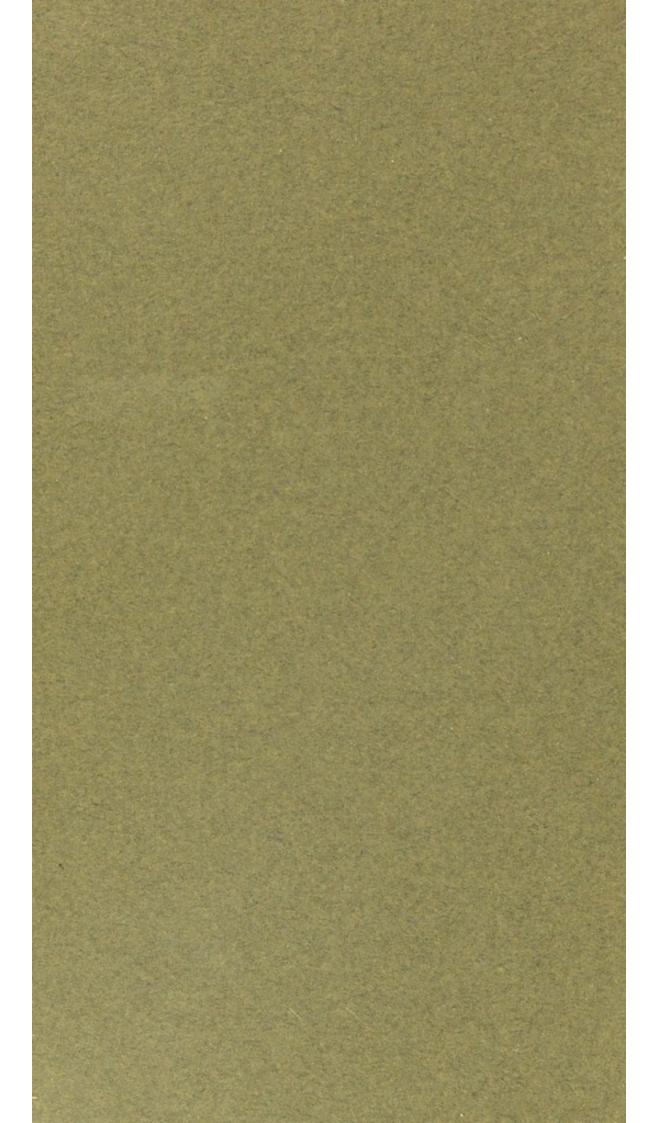
Of Gray's Inn, Barrister-at-Law;

Fellow of the Royal College of Surgeons, Edinburgh; Member of the Royal College of Surgeons, England: Licentiate of the Royal College of Physicians, London.

> Medical Officer of Health, School Medical Officer, Chief Tuberculosis Officer, etc.

> > CARLISLE:

CHAS. THURNAM & SONS, PRINTERS, ENGLISH STREET.





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HEALTH COMMITTEE

OF THE

CARLISLE CITY COUNCIL, 1914-1915.

HIS WORSHIP THE MAYOR (ALDERMAN DIXON, J.P.), Chairman.

Mr. ALDERMAN DALTON, Deputy Chairman.

MR. COUNCILLOR EDMONDSON

, FITZSIMMONS

" " Foster

" Hutchinson

RIDLEY

,, Thomson

,, ,, WHEATLEY

,, ,, WRIGHT

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To the Chairman and Members of the Health Committee.

Mr. Chairman and Gentlemen,

In accordance with the Regulations and Memoranda of the Local Government Board, I have the honour to submit my Annual Report upon the Health and Sanitary Condition of the City of Carlisle during 1914.

The latest Memorandum of the Board asks for more information than previous Memoranda, so that in addition to Birth and Mortality Statistics, and the other work carried out during the year, including the measures adopted against the prevention of epidemic and other diseases, I have made additions relating to such matters as are at present to hand.

I have to thank you for your support during the year.

I am, Gentlemen,

Your obedient Servant,

JOSEPH BEARD.

Health Department,

19 Fisher Street, Carlisle,7th May, 1915.

Statistical Summary for the year-1914.

Area in Acres			4,488
Population (Estimated 1914) .			52,530
Population per acre (Density)			11.7
Number of Families or separa	te Occupiers	(estimated)	10,723
Rateable Value		,	£261,959
Number of Inhabitants per He	ouse (Census,	1911)	4.4
Birth-rate per 1,000 living .			23.0
Death-rate per 1,000 living .			15.5
Infant Mortality Rate .			122.4
Percentage of Uncertified Deat	ths	1 11 11	3.1
Total Deaths from Diarrhœa			30
Phthisis, Death rate per 1,000	living		1.3
Infectious Cases Notified (includ	ing Tubercul	osis 287¶cases	663
Infectious Cases Isolated at th	e Fever Hos	pital	229
Total Rainfall in inches			28:31

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE CITY.

Carlisle is an episcopal city, a County Borough, and the capital of Cumberland. It is an Assize Town, and Poor Law Union of a number of parishes, and is in the Diocese of Carlisle.

It is distant about 300 miles both by rail and road from London (Euston).

The City occupies a slight eminence at the confluence of the River Eden with its tributaries the Caldew and Petteril. The central portion of the old City is situate on a slight rocky eminence about 70 feet above ordnance datum, while the remainder of the City, with the exception of Stanwix (which is partly on hard red sandstone), stands upon alluvial land, as a result of which the lower parts of the City have a high ground water level, which gives rise to a humid atmosphere. The average annual rainfall is 32 inches, and the prevailing wind is south-westerly.

It is a City of great antiquity, and is said to be the only one in England bearing an entirely British name.

A town built by a powerful tribe of Brigantes occupied part of the site on which the City now stands, and bore the name of Caer-lywelydd, which in course of time was corrupted to Caer-luel, and so by easy transition into Carleol and Carlisle.

The Romans built a fortress here, and vestiges of the walls erected as a barrier against the Picts and Scots are yet to be seen in parts of the City.

Carlisle was a borough by prescription and became a Corporation by charter, granted by Henry II; confirmatory charters were subsequently granted by Edward III, Henry VII, Henry VIII, and succeeding monarchs to Charles I. It has a Commission of Peace, with Quarter Sessions, and possesses ancient privileges and customs, valuable rights, lands, and properties. The City is well governed, and is complete with modern requirements relating to all Public Health and Sanitary matters.

The district is one which has a large variety of industries, the chief sources of which are the railways of several companies which have their termini in the City and employ 12.7 per cent. of the males, while engineering works employ a further 6.9 per cent. There are also printing and lithographic works, textile, dyeing and bleaching works, carpet factories, breweries, tanneries, felt hat works, biscuit and confectionery factories, and smaller miscellaneous trades. An extensive trade is also carried on in cattle and timber. The manufacture of woollens was established by Hamburg merchants about 1747, and coarse linen cloths and calico works were shortly afterwards established, whilst cotton spinning was commenced towards the close of the last century.

The percentage of female labour employed in textile factories is 5.8, this percentage being larger than in the county as a whole, and larger than that which obtains in Durham and Northumberland, whilst female labour is also employed in the lithographic, biscuit, carpet, sweet, and several other factories.

STATISTICS

RELATING TO

BIRTHS, DEATHS, AND CAUSES OF DEATHS, &c.

BIRTHS.

The number of births registered during the year was 1209, of which 629 were males and 580 females; these figures show an increase of 45 births over the figure for 1913.

Calculations based upon the estimated population of 52,530, give a birth-rate of 23.0 per 1,000, which shows an increase of 0.9 per 1,000 over the figure for the year 1913.

	Numbe			
Year.	Males.	Females.	Fer 1,000 of the population.	Total.
1913	569	595	22.1	1164
1914	629	580	23.0	1209

The birth-rate for England and Wales during 1914, calculated as a whole, was 23.6 per 1,000, and for the 97 great towns, to which classification Carlisle belongs, 24.9 per 1,000. The 145 smaller towns show an average birth-rate of 23.6 per 1,000, whilst the rate for England and Wales, less the 242 great and small towns, was 21.9 per 1,000.

ILLEGITIMATE BIRTHS.

The number of illegitimate births registered during 1914 was 76, making a figure equal to 62.8 per 1,000 of the total births.

The distribution of the illegitimate births to the Registration Sub-Districts was as follows:—

- St. Cuthbert's—51, equivalent to 91.0 per 1,000 of the total births in that district.
- St. Mary's—25, equivalent to 41.5 per 1,000 of the total births in that district.

Stanwix-Nil.

Dalston-Nil.

Wetheral-Nil.

The number of illegitimate births registered shows an increase of 19 over the figure for 1913, which was 57, the distribution being as follows:—

- St. Cuthbert's—31, equivalent to 56.5 per 1,000 of the total births in that district.
- St. Mary's—22, equivalent to 39.9 per 1,000 of the total births in that district.

Stanwix—4, equivalent to 68.9 per 1,000 of the total births in that district.

Dalston-Nil.

Wetheral-Nil.

Upon investigating the births, to which the figures for 1914 relate, I find that in 5 instances, which is equal to 6.5 per cent. of the total illegitimate births, the mother was not a resident of the City.

Table showing details of the Births in the several Sub-Registration Districts, 1914.

E KOB	SIATOT TTIO	310	333	307	259	1209
ERAL.	Females.	:	:	:	***	:
WETHERAL.	Males.	-	:	:	:	1
DALSTON.	Females.	-	. :	2	:	63
DAE	Alales.	:	:	:	1	1
STANWIX.	Females.	9	2	1	4	21
STAN	Males.	2	1	+	9	22
Сотнвект.	Lemsles.	81	7.6	02	45	272
St. Cu	Males.	61	84	65	78	288
St. Mary.	Kemales.	80	78	7.3	553	284
Sr. D	Males.	76	83	98	72	317
	QUARTER ENDING.	March 31	June 30	September 30	December 31	Totals

The following table shows the number of births registered, and the annual birth-rate per 1,000 living at all ages in Carlisle since 1875, the earliest record available:—

		No. of					No. of		
Year.		Births	Birth-	Y	ear.		Births	Birth-	
		Registered.	rate.			h	Registered.	rate.	
1875		1,136	35.5	1	896		1,246	29.6	
1876		1,236	38.6	1	897		1,324	30.8	
1877		1,265	38.5	1	898		1,311	30.0	
1878		1,347	38.7	1	899		1,300	29.4	
1879		1,319	-37.7	1	900		1,354	30.1	
1880		1,288	37.0	*1	901		1,248	27.3	
*1881		1,291	36.0	1	902		1,245	27.0	
1882		1,272	35.3	1	.903		1,322	28.4	
1883		1,229	32.3	1	904		1,278	26.9	
1884		1,303	35.0	1	905		1,168	24.3	
1885		1,285	34.0	1	906		1,227	25.3	
1886		1,262	33.0	1	907		1,178	23.8	
1887		1,214	31.3	1	908		1,223	24.4	
1888		1,307	33.5	1	909		1,149	22.6	
1889		1,224	30.6	1	910.		1,145	22.2	
1890		1,215	30.0	*1	911		1,109	23.8	
*1891		1,207	30.8	+1	912		1,142	24:6	
1892		1,213	30.5	‡1	912		1,149	20.2	
1893		1,389	34.5]	1913		1,164	22.1	
1894		1,315	32.0	1	914		1,209	23.1	
1895		1,311	31.4				4		
	*Ce	ensus yea	rs.	+Old	City		‡Exten	ded C	ity

DEATHS.

The total number of deaths registered during 1914 was 848, as compared with 821 in 1913, making a gross death-rate of 16.1 per 1,000 for the year, calculated upon the estimated population living at all ages.

22 deaths occurred of persons belonging to the City in institutions and other places outside, while the deaths of 69 persons not belonging to the City occurred in public institutions and other places within the City.

Excluding the 69 deaths of persons belonging to other districts, and substituting the 22 deaths of Carlisle residents which occurred in the districts beyond the City boundaries, a nett figure of 801 remains. This gives a nett death-rate for 1914 of 15.2 per 1,000 of the estimated population living at all ages.

The standardised death-rate for the City, which is obtained by multiplying the nett death-rate by the factor supplied by the Registrar-General, viz.:—1.0200, is equivalent to 15.5 per 1,000 of the estimated population living at all ages.

The standardised death-rate for the whole of England and Wales for 1914 was 13.6 per 1,000 living at all ages, and for the 97 great towns, amongst which Carlisle figures, 14.9 per 1,000; the death-rate for the 145 smaller towns was 12.9 per 1,000, whilst the death-rate for England and Wales (less the 242 great and small towns) was 12.2 per 1,000 living.

Table showing details of the Deaths in the several Sub-Registration Districts, 1914.

L'ALLE	S FOR (TATOT	235	217	208	188	848
-		5 years	64		-		
	ales	Over		:	:		-
BRAI	Females.	Under 5 years	1	:	:	:	:
WETHERAL.	eg.	Over 5 years	- :	:	-	:	-
=	Males.	Under	1		;	: \	
-	es.	by years	-	:	:	: -	-
N.	Females.	5 years	:		-	:	-
DALBTON.	-	D years				-	4934 /
DALST	Males.	19VO	7	:	:	:	-
	Ma	Under	:	:	:	1	:
	ales.	Over 5 years	2	2	4	9	17
WIX.	Females.	Under	-		:	-	64
STANWIX.		Over 5 years	00	9	2	00	19
02	Males.	staby 6	-	:	н	:	34
-		5 years Under			20"		0
ST.	ales	T9vO	34	88	32	31	130
HBE	Females.	Under	6	11	00	9	34
Sr. Cuthbert.	68,	Over 5 years	36	40	26	25	127
Sr.	Males.	Under	11	10	20	1	48
	les.	sassy č	42	51	300	41	172
BY.	Males. Females.	5 years	14	on	19	9	47
St. Mary.	- F	5 years	19	41	40	41	
ST	Male	D years	20 5	15	16 4	21 4	72 173
1		Under				and the same of	-
	QUARTER ENDING.		March 31	June 30	Sept. 30	Dec. 31	Torals

Table showing the number of Deaths at all Ages and at several Age periods.

-	
Wetheral.	23
Dalston.	60
Stanwix.	40
St. Cuthbert's.	339
St. Mary's.	464
65 and up- wards.	265
25 and under 65.	308
15 and 25 and 65 and under up-	40
and nder 15.	31
1 and 5 under u	19
Under	153
All Ages.	848
	No. of Deaths at all ages and at several age periods

The following list shows the number of deaths of persons not belonging to the district occurring in public institutions and other places within the City:—

7
3
1
1
15
3
1
3
2
1
1
1
-
69

The following list shows the number of deaths of persons belonging to the district occurring in public institutions and other places outside the City:—

Garlands Asy	lum	 	14
Brampton '		 	1
Aldershot		 	1
Silloth		 	1
Kirkandrews-	on-Eden	 	1
Lazonby		 	1
Brierfield		 	1
Kingstown		 	1
Coleford		 	1
			_
To	otal	 	22

The following table shows the Birth-Rate and Death-Rate as compared with England and Wales for the year.

	Annual F	Deaths		
		De	aths.	under 1 Year to 1,000 Births.
	Births.	Crude.	standard- ised.	
England and Wales	23.6	13.9	13.6	105
97 Great Towns (including London)	24.9	14.6	14.9	113
145 Smaller Towns	23.6	12.8	12.9	104
England and Wales, less the 242 Towns	21.9	13.3	12.2	93
CARLISLE	23.0	16.1	15.5	122.4

[†] Includes deaths of Non-Residents in the City.

[‡] The factor for correction as supplied by the Registrar-General is 1.0200.

The following table shows the Vital Statistics for the whole City during 1914 and five previous years.

	ated	E	Ne	tt.	REGIST	DEATHS TERED THE	TRANSF DEA	THS.		DEATHS I	BELON	GING				
YEAR.	estim of es	scted er.			DIST	RICT.	dents in the t.	ts not n the t.		1 Year age	AT AG	ALL ES.				
TEAR.	Population estimated to Middle of each Year	Uncorre	Uncorrected Number.	Uncorre	Uncorre	Uncorre	Number.	Number Rate.	Number.	Rate.	of Non-residents registered in the District.	of Residents registered in District.	Number,	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13				
1909	50,675	1149	1149	22.6	735	14.5	53	27	142	123	709	13.9				
1910	51,433	1145	1145	22.2	683	13.2	63	28	125	110	648	12.6				
1911	46,420	1109	1106	23.8	776	16.7	60	17	161	145	733	15.7				
1912	52,225	1149	1149	20.2	823	15.7	63	23	120	104.4	783	14.0				
1913	52,497	1164	1164	22.1	821	15.6	76	24	148	127.1	769	14.6				
1914	52,530	1209	1209	23.0	848	16.1	69	22	148	122.4	801	15.2				

	Census. 1911.	1914.
Area of District in acres (exclusive of area covered by water)	2,025	4,488
Total population at all ages	46,420	*52,530
Number of families or separate occupiers	10,181	*10,723
Average number of persons per house	4.4	*4.8

^{*} Estimated.

The following public and other Institutions are within the City:-

The Union Workhouse and its Infirmary.
The Cumberland Infirmary.
Carlisle Non-Provident Dispensary.
The Crozier Lodge Isolation Hospital.
Strathclyde House (Home for Incurables).
St. Joseph's Home (aged and infirm persons).
Chadwick Memorial (Industrial School).
Corporation Dispensary and School Clinic.

The following table sets out the Cause of and the Ages at Death of 801 persons belonging to the City.

-							2-510			
CAUSES OF DEATH.	All Ages.	"RESI	OR T	" WHE	THER THE	DISTE	25and	45 and	65 and	IN THE
1	2	3	4	5	- 6	7			7.0	-
Il Cangas / Certified	776	139	24	24	27	34	8	9	10	11
All Causes Uncertified	25	9		1	21	04	99	177	252	215
Enteric Fever							***			
Smallpox	***					***				***
Measles	2	***			1	1				***
Scarlet Fever	9	***	3	4	2			***		10
Whooping Cough	9	7	***	1	1	***				The second second
Diphtheria and Croup	3	***	***	2		149		1	***	ï
Influenza	8		***		1	***		3	5	î
Erysipelas	1		***	***	***	***	1	***		î
Phthisis (Pulmonary Tuberculosis)	70	1	1	1	3	14	39	19	1	8
Puberculous Meningitis Other Tuberculous Diseases	14	4	2	5	1	2	***			1
No. of the second of the secon	18	3	1	***	3	4	5	1	1	7
Dhaman at Dani	68	***	***	***	***	141	12	30	26	25
Vaningitia	11	4	***	ï	1 5	1	***	***		***
Organic Heart Disease	97		***	27	1	1	7	33	56	3
Bronchitis	37	8	1	***	1000	***	2	Ď	21	17
Pneumonia (all forms)	56	14	8	4	3	***	4	10	13	9
Other Diseases of Respiratory Organs	6	1		0		***	1	1	2	3
Diarrhoes and Enteritis	30	25	2	ī		1			ı ı	2
Appendicitis and Typhlitis	4			1			2		î	5
Cirrhosis of Liver	2						100	1	î	4
Alcoholism	1	-11.					1			î
Nephritis and Bright's Disease	19	1	2		***		4	6	6	2
uerperal Fever	***		***			***	***	***	***	
Other Accidents and Diseases of Preg-							-			
nancy and Parturition	5	***	***	103	***	***	5	***		1
longenital Debility & Malformation,		ED	-		1000	7.80	1	1000	1	
including Premature Birth Violent Deaths, excluding Suicide	54 30	52	1	1		3	6	6	70	5
	12			***		1	3	4	10	11
When Doffmed Discourse	227	26	2	2	3	7	16	59	112	3 91
Diseases ill-defined or unknown	6	1						4	1	2
The state of the s				1		***			1	4
Totals	801	148	24	25	27	34	99	183	261	215
b- Cerebro-spinal Meningitis										
itries Poliomyelitis	144			422		***				
luded Lobar Pneumonia	8	1	2	1		***	1	2	1	2 6
above Pneumonia not defined	29	6	3	2	2		1	6	9	6
					_					

The following table shows the gross Death-rate from 1881 to 1914 inclusive:—

V	Deaths from	m all causes.		om Principal Diseases.
Year.	No. Registered.	Rate per 1000 of Population.	No. Registered.	Rate per 1000 of Population.
*1881	717	20.0	67	1.8
1882	852	23.6	189	5.0
1883	779	21.0	67	1.8
1884	783	21.0	38	1.0
1885	769	20.3	66	1.7
1886	745	19.4	62	1.6
1887	772	19.9	75 /	1.9
1888	722	18.5	59	1.5
1889	723	18.1	69	1.7
1890	792	19.5	65	1.6
*1891	789	20.1	63	1.6
1892	805	20.2	55	1.3
1893	868	21.6	145	3.6
1894	780	19.2	44	1.1
1895	794	19.4	33	0.8
1896	753	18.2	30	0.7
1897	811	19.4	54	1.3
1898	935	22.2	103	2.4
1899	818	19.2	42	0.9
1900	807	18.8	60	1.4
*1901	810	17.8	64	1.4
1902	856	18.5	. 82	1.7
1903	813	17.4	58	1.2
1904	933	19.7	63	1.3
1905	783	16.3	66	1.3
1906	811	16.7	34	0.7
1907	848	17.1	77	1.5
1908	713	14.2	42	0.8
1909	735	14.5	30	0.5
1910	683	13.2	21	0.4
*1911	776	16.7	96	2.06
+1912	813	17.5	81	1.7
1913	821	15.6	44	0.8
1914	848	16.1	51	0.9

*Census Years.

†Old City.

Statistics under the above heading for years previous to 1881 have been taken out to facilitate printing, for which see previous reports.

The following table shows the diseases causing the largest number of Deaths during 1914, and a comparison with those of 1913.

	1913.	1914.	Increase or Decrease
Pulmonary Tuberculosis & Phthsis	71	70	- 1
Tuberculous Peritonitis and Tabes Mesenterica	4	4	
Tuberculous Meningitis and Hydro- cephalus	15	15	
Cancer and Malignant Disease	63	68	+ 5
Prematurity and Injury at Birth	35	23	_12
Old Age	50	62	+12
Syncope, Heart Disease (not specified)	65	47	-18
Valvular Disease of Heart	34	40	+ 6
Cerebral Hæmorrhage, Embolism, Thrombosis and Apoplexy	51	57	+ 6
Pneumonia	51	54	+ 3
Bronchitis	40	37	3
Kidney and Bladder Disease	24	26	+ 2
Debility, Atrophy, Inanition, & Marasmus	18	20	+ 2
Measles	3	2	_ 1
Diarrhœa	25	30	+ 5

⁺ Shows an increase in the number of deaths.

⁻ Shows a decrease in the number of deaths.

Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year.

	Totals.				***	:	: 0	77	:0	. :		6	6		00					:		2	14	-	
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	CAUSE OF DEATH.	I.—GENERAL DISEASES.	(Vaccinated	Smallpox- Not Vaccinated		Cowpox & other effects of Vaccination	Chicken-pox	£	Kas	Typhus Fever	g Fever		::	Mumps	Diphtheria, Membranous Croup	Cerebro Spinal Fever	Simple Continued Fever	Enteric Fever	Asiatic Cholera		Epidemic Diarrhœa, Epid. (or Zym.)	Enteritis	Diarrhan (not otherwise defined)	Dysentery	Malarial Fever

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Rabies (Hydrophobia) Glanders, Farcy Anthrax, Splenic Fever Tetanus	Syphilis Gonorrhœa	Puerperal Septicaemia – Sapra Puerperal Pyæmia — — — — — — — — — — — — — — — — — — —
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Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year—continued.

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	CAUSE OF DEATH.		Alcoholism, Delirium Tremens Opium, Morphia Habit Ptomaine Poisoning Industrial by Lead Poisoning (by Arsenic and other Metals	Rheumatic Fever, Acute Rheumatism Rheumatism of Heart Chronic Rheumatism Rheumatoid Arthritis, Rheumatic Gout	Carcinoma Sarcoma Cancer (Malignant Disease) not other- wise defined	Rickets Purpura Hæmophilia (Hæmorrhagic Diathesis) Anæmia, Leucocythæmia Diabetes Mellitus	Premature Birth Congenital Defects

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Injury at Birth Atelectasis Want of Breast Milk Teething	II. LOCAL DISEASES. 1.—Diseases of Nervous System. Meningitis, Inflammation of Brain Softening of Brain. General Paralysis of Insane Insanity (not Puerperal) Chorea Epilepsy Convulsions Locomotor Ataxy Laryngismus Stridulus Locomotor Ataxy Paraplegia and Disease of Spinal C Neuritis Periph, Poly-Neuritis Brain Tumour (not specific) Nervous System, other Diseases	2.—Diseases of Organs of Special Sense. Otitis, Mastoid Disease Epistaxis, Nose Disease Ophthalmia, Eye Disease 3.—Diseases of Heart. Valve Disease, Endocarditis (not Infective) Pericarditis Hypertrophy of Heart Angina Pectoris Dilatation of Heart Fatty Degeneration of Heart Syncope, Heart Disease (not specified)

Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year-continued.

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	CAUSE OF DEATH.	II.—Local Diseases—continued.	4.—Diseases of Blood Vessels. Cerebral Hæmorrhage, Embolism,	Thrombosis	Aneurism		Embolism, Thrombosis (not Cerebral)	Phiebras	Pland Vessel, other Discour.	DOOG Vessels, other Diseases	5 - Diseases of Remisestrass Overens	Laryngitis	us Laryngitis (not	Diphtheritic)	Croup (not Spasmod. or Membr.)	Larynx and Trachea, other Diseases	Bronchitis	Emphysema, Asthma	Pleurisy	=	Kespiratory Diseases, other

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6.—Diseases of Digestive System. Tonsilitis, Quinsy Mouth, Pharynx, Disease (not specific) Gastric Ulcer Gastric Ulcer Stomach, other Diseases(not Malignant) Ulceration of Intestines Enteritis (not Epidemic) Gastro-Enteritis. Appendicitis, Perityphlitis Hernia Intestinal Obstruction Other Diseases of Intestine Peritonitis (not Puerperal) Cirrhosis of Liver Liver and Gall Bladder, other Diseases Digestive System, other Diseases	7.—Lymphatic Diseases Spleen Disease Lymph. System, other Diseases Thyroid, Body Disease Supra Renal Capsules Disease	8.—Diseases of Urinary System. Nephritis (Acuté), Uræmia Chronic Bright's Disease, Albuminuria Calculus (not Biliary) Bladder and Prostate Disease Urinary System, other Diseases	9 Diseases of Generative System. Ovarian Tumour (not Malig.) Other Diseases of Ovary Uterine Tumour (not Malig.) Other Diseases of Uterus and Vagina Disorders of Menstruation Generative and Mam. Orgs., other

Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year—continued.

	TOTALS.	: : 63 : 65	: : 61	1111	24 : 64 60
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	CAUSE OF DEATH.	II.—Local Diseases—continued. 10.—Accidents of Chiedbirth. Abortion, Miscarriage Puerperal Mania Puerperal Convulsions Placenta Prævia, Flooding Other Accidents of Pregnan Childbirth	11.—Diseases of Bones and Joints. Caries, Necrosis Arthritis, Periostitis Other Diseases of Locomotor	12.—Skin Diseases. Ulcer, Bcdsore Eczema Pemphigus Skin Diseases, other	III.—DEATHS FROM VIOLENCE. 1.—Accident or Negligence. Fractures and Contusions Gunshot Wounds Cut, Stab Burn, Scald

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2.—Homicide. Manslaughte Murder	3.—Suicide. Gunshot Wo Cut, Stab Poison Drowning Hanging Otherwise	4—Execution Hanging
	ughter	t Wounds

INFANT MORTALITY.

This term is used as an interpretation of the mortality amongst infants under one year of age, and the mortality rate is calculated upon the number of deaths of such infants per 1,000 born during the same period.

The number of deaths of infants under one year during 1914 was 148, giving an Infant Mortality rate of 122.4 per 1,000.

The Infant Mortality rate for the whole of England and Wales during 1914 was 105 per 1,000 born; for the 97 great towns (of which Carlisle is one) 113 per 1,000; for the 145 smaller towns 104 per 1,000, and for England and Wales, less the 242 great and small towns, 93 per 1,000.

The death-rate of legitimate infants under one year of age was 108.5 per 1,000 legitimate births registered.

The death-rate of illegitimate infants under one year of age was 328.9 per 1,000 illegitimate births registered.

INFANT WELFARE, &c.

Notification of Births Act, 1907. Summary of the Work carried out in connection therewith.

nection there water
Number of live births notified by official letter card 1199
Number of still births notified by official letter card 58
Number of births notified otherwise than by official letter card (all of which were live births) 28
Number of births in which the first notification was the Sub-Registrar's return 21
Total 1306
Number of Infant deaths under one year 148
Number of deaths from Diarrhœa under one year 25
Total number of primary visits made by the Health
Visitor to houses 1419
Total number of re-visits 1596
Number of visits in respect of other conditions, principally Measles and Whooping Cough 21
PARTICULARS OF ENQUIRIES WITH RESPECT TO FEEDING.
Number of children fed entirely on the breast 873
,, ,, ,, by means of hygienic (boat-shaped) bottle 108
,, ,, ,, by means of long tubed bottle 20 } 128
", ", " partly breast and partly bottle 20
,, ,, ,, by other means—Spoon (all pre- mature) 3
", " dying soon after birth and not fed 16
No information obtained 49

PARTICULARS SHOWING THE RELATION OF DEATHS TO FEEDING.

Number of deaths of	f breast-fed infants	49 or 5.6%	of breast-fed
2) 11	bottle ", ",	61 or 47.6%	of bottle-fed infants
"	infants fed by spoor	10	
	of infants partly fee partly bottle		
No information		. 4	
	after birth and no		
Total		148	

CONDITION AS TO CLEANLINESS OF HOUSES VISITED.

Number of	houses fou	nd to 1	oe cle	an			1162
,,	,,	,,	mo	derately	clean		88
,,	,,	"	dir	ty			4
Number of obtaina		in w	hich i	informat	ion was	not	3
Houses not	visited						49

INFANT MORTALITY. St. Mary's Sub-District.

Nett Deaths from stated causes at various ages under One Year of Age.

CAUSE OF DEAT	н.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes. Certified Uncertified		17 2	8	4	3	32	15	9 2	7	6	69 4
Small-pox Chicken-pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Erysipelas Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Dise Meningitis (not Tubercu Convulsions Laryngitis Bronchitis Pneumonia (all forms) { Diarrhœa Castritis Syphilis Syphilis Rickets Suffocation, overlying Injury at Birth Atelectasis	ases		· · · · · · · · · · · · · · · · · · ·				2				1 2 2 4 5 8 3 5 2 1 1 1
Congenital Malformatic Premature Birth Atrophy, Debility & M. Other Causes		9 5	1 3 1 	1 1 1	 1 	14 7 3	2 1	 1 1			6 14 10 5
Nett Births in the Legitimate, 576. Nett Deaths in the Legitimate Infants, 65. year. Illegitimate, 25. Year of Illegitimate , 8.											

INFANT MORTALITY.

St. Cuthbert's Sub-District.

Nett Deaths from stated causes at various ages under One Year of Age.

	Andrew Williams		and the last of	· Cu							
CAUSE OF DEA	гн.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	8-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months	Total Deaths under One Year,
All Causes Certified Uncertified		1 7	5	2	5	22 1	14	13 2	10 1	7	66 5
Erysipelas Tuberculous Meningitis Abdominal Tuberculous Other Tuberculous Dise Meningitis (not Tubercu Convulsions Laryngitis Bronchitis Pneumonia (all forms) Diarrhœa Enteritis Gastritis Syphilis Rickets Suffocation, overlying Injury at Birth Atelectasis Congenital Malformatio	eases dous)	1					1 1 2 3 1 2 2 2				6 1 1 2 6 2 6 10 5 3 1 1 1 2 9 8 7
Tot	als	11	5	2	5	23	15	15	11	7	71
Nett Legitimate, 509. Nett Deaths in the Legitimate Infants, 55. Births in the year Illegitimate, 51. Year of Illegitimate 16.											

INFANT MORTALITY. Stanwix Sub-District.

Nett Deaths from stated causes at various ages under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	8 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months	Total Deaths under One Year.
All Certified Uncertified	1					1		1	1	3
Small-pox Chicken-pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Erysipelas Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Diseases Meningitis (not Tuberculous) Convulsions Laryngitis Bronchitis Pneumonia (all forms) Diarrhœa Enteritis Gastritis Syphilis Rickets Suffocation, overlying Injury at Birth Atelectasis Congenital Malformations Premature Birth Atrophy, Debility, & Marasmus										
Other Causes						1				1
Nett Births in the Legitimate, year.	43 0	Ne		aths	in th			nate mate		ts, 2.

INFANT MORTALITY.

Dalston Sub-District.

Nett Deaths from stated causes at various Ages under One Year of Age.

							-				
CAUSE OF DEATH.		Under 1 Week.	1.2 Weeks.	2.3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4Weeks & under 3 Months.	8 Months and under 6 Months.	6 Months and under 9 Months	9 Months and under 12 Months	Total Deaths under One Year.
All (Certified		1				1					1
Causes Uncertified								***			
		_	-	-	-	-	-	-	-	-	
4.5 11											
Small-pox	4.01	***	***	***	***				***	***	***
Chicken-pox Measles	•••		***					***			
Canalat Dans					***			***	***	***	
Whooping Cough	***				***	*					
Diphtheria and Croup											
Erysipelas											
(Tuberculous Meningitis								***			
Abdominal Tuberculosis						***	***	***			
Other Tuberculous Diseases		***						***	***	255	
Meningitis (not Tuberculous)											
Convulsions									***		
Laryngitis		***	***		***			200			***
Bronchitis		***	* *					***		***	***
Pneumonia (all forms) Diarrhœa	***	***	***	•••					***	***	
1 Testanitie	***		***		***		***	***	**		
Cashitia	***	***	***				2***	.7.		***	
Syphilis	***	***	***	**		3	***				
Rickets											
Suffocation, overlying								***			
Injury at Birth	**										
Atelectasis		***									
Congenital Malformations											
Premature Birth										,	
Atrophy, Debility, & Marasm	ius	1				1	***				1
Other Causes			***		***	***	**	25.0	***		***
Totals		1				1					1
Nett Births in the Legitimate, 4. Nett Deaths in the Legitimate Infants, 1. year. (Illegitimate, 0. year of (Illegitimate ,, 0.											

INFANT MORTALITY.

Wetheral Sub-District.

Nett Deaths from stated causes at various Ages under One Year of Age.

CAUSE OF DI	ЕАТН.	Under 1 Week.	1-2 Weeks.	2–3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under12 Months	Total Deaths under One Year.
All Causes (Uncertified	l fied	 		***							
Small-pox Chicken-pox Measles Scarlet Fever Whooping Cough Diphtheria and Cro Erysipelas Tuberculous Mening Abdominal Tubercu Other Tuberculous I Meningitis (not Tub Convulsions Laryngitis Bronchitis Pneumonia (all form Diarrhœa Enteritis Syphilis Rickets Suffocation, overlyin Injury at Birth Atelectasis Congenital Malform Premature Birth	itis losis Diseases erculous) es)										
Atrophy, Debility, & Other Causes											
Nett Births in the f I	Totals	1.	Ne		aths			gitin		Lufan	ts 0.

Details of the number of Deaths of Infants under one year of age for the years 1913 and 1914, respectively.

Cause of Death.		1913	1914
Premature Birth		33	23
Diarrhœa		22	25
Atrophy, Debility, Inanition, Marasmus		15	19
Bronchitis		12	8
Pneumonia		9	14
Convulsions		8	10
Tuberculous Meningitis	1	6	4
Meningitis (not Tuberculous)		3	4
m-1 - D it it		3	1
At 1		4	
TTT 1 (1)		4	2 7
	***	3	8
Congenital Defects	***		0
Castritio		3	1
	4	3	1
Syphilis		3	5
Injury at Birth		2	
Suffocation	***	2	2
Influenza		1	
Phthisis		1	1
Rickets			2
Hydrocephalus		1	
Tubercular Disease of Mastoid		1	1
Tubercular ulceration of Intestine		1	
Jaundice		1	1
Want of Breast Milk		1	
Defective formation of Spine		1	
Paraplegia	***	1	
Poliomyelitis		1	
Cyanosis		1	
Bronchial Catarrh		1	
Hernia			2
Intestinal Obstruction			1
Nephritis			
Status Lymphaticus			1 1
Tuberculous Abscess			
Tuberculosis of Intestines			1
Oidium Albicans			1 1 2
Other Causes		1	1
Totals		148	148

Distribution of Deaths of Infants under one year in the several Sub-Registration Districts.

Whale Distairt	Legitimate	123	140
Whole District	Legitimate	25	140
St Many's Sul Projection District	Legitimate	65)	7.0
St. Mary's Sub-Registration District	Illegitimate	85	13
St Cuthbout's Sub Posistuation District	Legitimate	55)	71
St. Cuthbert's Sub-Registration District	Illegitimate	16	11
Stanwix Sub-Registration District	Illegitimate	1	3
Dulaton Sub Posistration District	Legitimate	1)	1
Dalston Sub-Registration District	Legitimate Illegitimate	0)	1
Wetheral Sub-Registration District	Nil.		

Deaths of Infants under One Year of age showing Occupation of Parents.

Legitimate.

	LCGI	umate.		
Labourer				 48
Railway Employ	ee			 25
Joiner, Painter, I	Plumber,	and Fitte	r	 10
Warehouseman a	nd Factor	ry Worke	r	 6
Engineer				 5
Clerk and Accoun	ntant			 4
Ironmonger and	Blacksmi	th		 3
	*			 3
Bricklayer				 3
Hotel Proprietor,				 3
Schoolmaster				 2
Compositor				 2
Carter, Groom				 2
Tailor				 1
Shoemaker				 1
Police Constable				 1
Window Cleaner				 1
Verger				 1
Soldier				 1
Chemist				 1
				123

Illegitimate.

Осс	Numbers.				
Factory Worker					8
Domestic Servant					7
Shop Assistant		***			4
					6
	*		W.		
		Total			25

Table showing the population, births, birth-rate, and infant mortality rates for a series of years, 1884-1914.

Year.	Population.	No. of Births.	Rate per 1000.	Infant Death-Rate per 1000 births.
1884	37,285	1303	35.0	158
1885	37,881	1285	34.0	164
1886	38,402	1262	33.0	146
1887	38,793	1214	31.3	141
1888	39,027	1307	33.5	129
1889	39,944	1224	30.6	142
1890	40,500	1215	30.0	150
*1891	39,200	1207	30.8	137
1892	39,750	1213	30.5	123
1893	40,150	1389	34.5	178
1894	41,022	1315	32.0	133
1895	41,658	1311	31.4	142
1896	42,294	1246	29.6	137
1897	42,930	1324	30.8	134
1898	43,566	1311	30.0	183
1899	44,202	1300	29.4	145
1900	44,838	1354	30.1	134
*1901	45,478	1246	27.3	129
1902	46,078	1245	27.0	117
1903	46,500	1322	28.4	118
1904	47,350	1278	26.7	152
1905	47,920	1168	24.3	139
1906	48,425	1227	25.3	132
1907	49,400	1178	23.8	143
1908	50,047	1223	24.4	129
1909	50,675	1149	22.6	123.6
1910	51,433	1145	22.2	110.0
*1911	46,432	1109	23.8	145.0
+1912	46,420	1142	24.6	102.4
1913	52,497	1164	22.1	127.1
1914	52,530	1209	23.0	122.4

^{*}Census Population.

Table showing population and rates from principal in England and Wales

NAME OF TO	OWN.		Population.	Birth-Rate.	Death-Rate. (after correction for Non- Residents.)	Infant Mortality Rate.
				1		
Accrington			45,775	19.31	13,98	117.64
Acton			61,000	24.6	11.9	91.0
Ashton-under-Lyne			45,179	23.7	18.4	183.0
Barrow-in-Furness		*	68,523	28.7	14.6	104.6
Barnsley			54,000	30.51	17.77	155.6
Bath .			70,292	15.3	11.25	59.0
Blackpool			66,364	14.47	13.76	110.0
Bootle			73,230	31.7	17.9	123.0
Burton-on-Trent			48,000	21.79	13.14	90.0
Crewe			45,964	22.4	12.24	89.0
Darlington			59,500	27.1	13.75	99.9
Dewsbury			54,082	23.9	15.9	113.7
Eastbourne			54,500	15.35	9.55	59.7
Enfield			60,682	21.83	10.32	80.75
Gillingham			54,641	22.7	12.5	99.6
Gloucester			50,759	25.4	13.46	90.27
Grimsby			78,670	26.93	14.65	131.0
Lancaster			38,593	20.49	13.19	86.0
Newport (Mon.)			89,404	25.44	13.28	122.2
Oxford		***	54,348	16.8	11.17	72.4
Reading		2	90,083	20.19	11.47	88.5
Stockton-on-Tees			52,311	30.5	18.16	121.0
Swindon			53,000	22.5	11.5	74.3
Tynemouth		***	61,408	28.26	16.4	132.0
Wallasey			85,000	21.7	13.2	90.0
West Hartlepool			65,000	29.1	15.9	111.4
Wigan	***		92,868	29.18	17.09	139.0
Wimbledon			59,598	18.6	10.1	69.0
York			83,802	22.7	13.5	118.0
CITY OF CA	RLISI	LE	52,530	23.0	15.5	122.4

causes of death in a number of Towns compared with Carlisle.

Zymotic Death-Rate.	Respiratory Diseases, Death-Rate (other than Phthisis).	Phthisis Death-Rate.	Other Tuberculous Diseases, Death-Rate.	Malignant Diseases, Death-Rate.
To be seen				
1.09	2.40	0.87	0.48	1.07
0.85	0.2	0.85	0.2	0.9
3.3	3.8	1.2	0.4	0.7
0.94	2.03	0.91	0.56	0.72
2.93	2.92	1.00	0.70	0.74
0.28	1.89	0.90	0.30	1.27
0.4	2.00	1.04	0.3	1.41
2.31	3.81	1.17	0.37	0.94
_	1.98	1 10	0.29	1.08
0.69	2 21	0.73	0.2	0.97
1.41	1.97	1.01	0.40	1.16
1.2	2.7	1.13	0.26	1.02
0.40	0.89	0.57	0.27	1.26
0.87	1.13	0.79	0.14	1.00
0.8	0.8	1.2	0.2	0.8
0,65	2.21	0.89	0.27	1.04
1.84	2.27	0.86	0.35	1 24
0.46	1.81	1.39	0.32	0.93
1.40	2.41	1.15	0.24	0.97
0.53	1.9	0.94	0.2	1.37
0.39	2.09	1.08	0.33	1.20
1.9	3.3	1.3	0.7	1.1
0.52	0.26	0.98	0.07	0.88
1.54	2.99	1.22	0.63	0.81
0.8	2.3	0.7	0.27	1.2
0.6	1.9	1.1	0.6	0.9
2.38	4.13	0.95	0 31	0.64
0.75	1.4	0.68	0.11	0.93
1.33	1.61	0.95	0.42	1.01
1.0	1.8	1.3	0.6	1.2

ZYMOTIC DISEASES.

(Syn. Infectious Diseases.)

The total number of cases of Infectious Disease (excluding Tuberculosis, which is contained elsewhere in this Report) notified during the year was 376, an increase of 105 over the number notified during 1913.

The notifiable diseases to which the Infectious Disease Notification Acts and Regulations now apply are as follows:—Smallpox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Cerebro-spinal Meningitis, Acute Poliomyelitis, Scarlatina or Scarlet Fever, Typhus Fever, Enteric or Typhoid Fever, Relapsing, Continued, or Puerperal Fever, Ophthalmia Neonatorum, and Tuberculosis.

The term Zymotic death-rate is applied to the aggregate death-rate from Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (Typhus, Simple Continued, and Enteric), and Diarrhoea.

The number of deaths from Zymotic Disease registered was 53, which, calculated upon the estimated population (52,530), gives a death-rate of 1.0 per 1,000.

The causes of death were registered as follows:-

Diarrhœa		 30
Diphtheria		 3
Scarlet Fever		 - 9
Whooping Cough		 9
Measles		 2
		-
	Total	 53

The number of deaths from Zymotic Disease in 1912 and 1913 was 81 and 44 respectively.

Table showing the number and nature of Infectious Disease at the several age groups notified in the several Sub-Registration Districts.

		Nu	umber	of Ca	ses N	otified			Total Cases Notified in each Locality.				MOVED
Notifiable	,	1		At A	ges—	Years.			Sub-	80			S REN PITAI
DISEASE.	At all ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	St. Mary's St. District.	St. Cuthbert's Sub-District.	Stanwix Sub- District.	Dalston Sub- District.	TOTAL CASES REMOVED TO HOSPITAL.
Smallpox													
Cholera, Plague							***	***					
Diphtheria (in- cluding Mem- branous Croup)	44		12	17	5	9	1		22	18	4		31
Erysipelas	57	2	2	3	8	20	16	6	31	23	. 3		1
Scarlet Fever	250	1	81	155	10	3			104	144	2		196
Typhus Fever								***					
Enteric Fever	2					2			2				1
Relapsing Fever, Continued Fever						.,.							
Puerperal Fever	1					1				1			
Cerebro-spinal Meningitis					***								
Poliomyelitis	2		2				***			2			
Ophthalmia Neonatorum	20	20					**	***	11	9		h	
Pulmonary Tuberculosis	231	3	4	94	52	51	24	3	121	100	8	2	
Other forms of Tuberculosis	56	6	11	15	16	6	1	1	25	18	11	2	
Totals	663	32	112	284	91	92	42	10	316	315	28	4	229

Isolation Hospital or Hospitals, Sanatoria, &c.

Crozier Lodge, Newtown, Carlisle—Total Available Beds 50
Smallpox Hospital, Belle Vue ,, ,, ,, 12
Number of Diseases which can be concurrently treated, 5

Table showing the number of notifications of Infectious Diseases during each of the quarters of the year.

	Number				
Notifiable Disease.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
Scarlet Fever	42	64	75	69	250
Diphtheria (including					
Membranous Croup)	14	14	10	6	44
Erysipelas	15	12	14	16	57
Enteric (or Typhoid) Fever			2		2
Typhus Fever					
Smallpox	***				
Puerperal Fever			1		1
Acute Poliomyelitis			1	. 1	2
Ophthalmia Neonatorum		6	10	4	20
Totals	71	96	113	96	376

Table showing the total number of notifications of each class of notifiable Infectious Diseases, 1912, 1913, and 1914.

Notifiable Disease.			1912†	1913	1914
Scarlet Fever			109	159	250
Diphtheria (including Membra	anous				
Croup)			47	52	44
Erysipelas			76	51	57
Enteric (or Typhoid) Fever			2	5	2
Typhus Fever			9		
Smallpox					
Puerperal Fever			7	1	1
Acute Poliomyelitis			2	3	2
Ophthalmia Neonatorum	+++				20
Totals		%	252	271	376

+ Old city.

Table showing the total number of Deaths from the principal Infectious Diseases, including Diarrhoea and Dysentery, 1909-1914, inclusive.

Year	1909	1910	1911	1912+	1913	1914
Total number of deaths	30	21	96	81	44	53

Table showing the Number and Nature of the Deaths from the principal Zymotic Diseases, 1903 to 1914 inclusive.

1914	1	63	6	00	6		30	553	1.0
			-	2					
1913	:	00	:	6	7	1:1	25	44	0.8
*1912	:	88	2	9	18	. 12	14	81	1.7
1911	:	13	67	**	21	1111	56	96	2.06
1910	:	00	2	c)	11	:::	60	21	.40
1909	:	11	9	4	00	- : :		30	0.5
1908	:	:	1	4	864	:::	14	42	0.84
1907	:	10	9	00	11	:::	60	77	1.5
1906	:	1	6	2	10	:- :	13	34	0.7
1905	:	17	10	9	11	000 :	19	99	1.3
1904		7	60	14	50	:20 ;	16	63	1.3
1903	4	00	2	20	20	:00 :	00	58	1.2
Notifiable Disease,	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Enteric or Typhoid	Diarrhœa	Totals	Rate per 1,900 of population

* Old City.

Table showing the several localities where Deaths from the principal Zymotic Diseases occurred:—

LOCALITY			Smallpox.	Measles.	Scarlet Fever.	Whooping- Cough,	Diphtheria	Typhus Fever.	Enteric (or Typhoid) Fever.	Diarrhœa.	Tota's.
Warwick Square									***	1	1
Milbourne Crescent										1	1
Milbourne Street										3	3
Infirmary										1	1
Fever Hospital					10		1				11
Monksclose Road		*					1				1
Dacre Street						1					1
Bridge Lane						***				1	1
Peter Street		***				***		100	***	1	1
Head Street					***		***	***		1	1
Lewthwaite's Square										1	1
Queen Street					***	1					1
Denton Street				1			1 . 1		***		1
Bowman Street				*	***		++			1	1
Sebergham Terrace			4							1	1
Boundary Road						2					2
Robert Street					***	***			***	1	1
Oswald Street	***	***				1					1
Harraby Green Road	***								1	1	1
Edward Street	***							***		1	1
Crown Street						1				1	2 2
Harrison Street	***	***			***	2					2
South John Street	***	***						***		1	1
Upperby										1	1
Sowerby Street		***								1	1
King Street	***			•••	***					1	1
Brook Street	***	***		***	***	1			***	1	2
Union Street		***			***	***				2	2 2 1
Irving's Lane	*** 1.	***				***				1	
Water Street	***				***	***			***	2	2
Margaret Street	***	***				***		***	**	1	1
Currock Street Millholme Avenue				***						1	1
William Street		***				***			***	1	1
Scotland Road	***				***		ï	***		1	1
Scotland Road	***	***			**	***	1	***			1
Totals			1	1	10	9	3			30	53

SCARLET FEVER.

(Syn. Scarlatina.)

The number of cases of Scarlet Fever notified or brought to my notice by other means during 1914 was 251, being an increase of 87 on the figure for 1913.

Of the 251 cases thus recorded, 196, or 78.0 per cent., were isolated in Hospital.

19 of the cases notified occurred in public and other institutions in the city.

9 deaths were registered from this disease during the year.

During 1913, no deaths were registered from this disease.

Out of the 251 cases notified as Scarlet Fever, I was found not to be suffering from the disease, but was suffering from a drug rash.

RETURN CASES OF SCARLET FEVER.

10 cases of Scarlet Fever occurred in houses to which a patient recently isolated in Hospital had returned, as shown in the following table:—

Address.	Date of Noti- fication of first case.	Date of Discharge of first case from Hospital.	The state of the s
The Castle	3rd Sept.	1914. 10th Jan. 30th March 21st Oct. 21st Oct.	1914. 22nd Jan. 15th April 28th Oct. 28th Oct. 4th Nov.
Charles Street Botchergate William Street	19th Oct.	4th Nov. 12th Dec. 17th Dec.	9th Nov. 28th Nov. 19th Dec. 28th Dec.

Table showing simultaneous and secondary cases of Scarlet Fever in the same house or Institution:—

Address.	Date of Notifica- tion of first case or cases.	Date of Notifica- tion of a second or more cases in the same house.	Whether isolated in Hospital or not.
Backhouse Walk Montreal Street Harraby Hill House	12th Feb., 1914	Sth Jan., 1914 10th April, 1914 8th March, 1914 8th , , ,, 14th ,, ,,	Yes Yes Yes Yes Yes
Adelphi Terrace	12th March, 1914	23rd ",", 26th May, 1914 26th ", ", 9th June, 1914	Yes Yes Yes Yes
Nelson Street Burns Street	23rd March, 1914 23rd ,, ,, 6th April, 1914		Yes Yes Yes
Warwick Road	6th ,, ., 20th ,, .,	28th April, 1914 28th ,, ,,	Yes No No
Granville Road South Street	27th April, 1914 21st May, 1914	28th July, 1914 12th June, 1914	Yes Yes Yes
Charles Street	8th June, 1914	5th Nov., 1914 19th ,, ,,	Yes Yes
South Street Boundary Terrace	9th ,, ,, 11th ,, ,,	21st Aug., 1914	Yes Yes 1st case not isolated
Clift Street	13th ,, ,, 13th		2nd case isolated No No
Charles Street Greystone Road	16th ,, ,, 16th ,, ,,		Yes Yes Yes
Barrock Street	16th ,, ,, 24th ,, ,,		Yes Yes Yes
Stoney Holme Cottages	24th Aug., 1914	12th Nov., 1914 16th ,, ,,	1st case isolated 2nd case not isolated 3rd case not
Warwick Road	26th Aug., 1914 26th ,, ,,		isolated No No
Atkinson's Square, King Street Lorne Crescent	2nd Sept., 1914 2nd " " 5th ", "	7th Sept., 1914 29th Oct., 1914 4th Nov., 1914 6th ,, ,,	Yes Yes 1st case isolated 2nd, 3rd, & 4th cases not iso- lated

Table showing simultaneous and secondary cases of Scarlet Fever in the same house or Institution (Continued):—

Address.	Date of Notifica- tion of first case or cases.	Date of Notifica- tion of a second or more cases in the same house.	Whether isolated in Hospital or not.
Gamma Court, William Street Eldred Street Flower Street Charles Street Adelaide Street William Street William Street Denton Street Cumberland Street Graham Street Cumberland Infirmary	3rd " " 19th " " 23rd " " 25th " " 29th " " 19th Oct., 1914 22nd " " 22nd " " 26th " " 6th Nov., 1914 16th " " 16th " "	21st Sept., 1914 24th ,, 26th Nov., 1914 2nd Oct., 1914 27th ,, ,, 29th ,, ,, 18th Nov., 1914 26th ,, ,,	Yes Yes No Yes Yes Yes 1st case isolated 2nd case not isolated Yes No No Yes Yes Yes Yes Yes All the cases were removed to hospital

Table showing number of notifications, number of cases isolated, number of deaths, and death-rates per 1,000 of population at all ages, 1908-1914.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Death-rate per 1,000 of population.
1908	89	56		
1909	119	87	. 6	.11
1910	248	171	2	.03
1911	139	104	2	.04
1912	110	101	2	.04
1913	164	131	2	.04
1914	251	196	9	.17

Table giving name of school attended and number of cases in which a school child was infected with Scarlet Fever, 1911 to 1914 inclusive.

		1911	1912	1913	1914
Ashley Street	 	8	16	12	14
Bishop Goodwin	 1	9	1	. 37	13
Brook Street	 	4	6	6	16
Caldewgate	 	14	12	6	12
Christ Church	 	2	5	2	23
Denton Holme	 	3	1	5	8
Fawcett	 	4	0	7	2
Higher Grade	 	1	1	1	2
Holy Trinity	 	. 1	3	0	5
Lowther Street	 	2	3	3	4
Norman Street	 	7	2	8	20
Robert Ferguson	 	2	2	6	11
St. Bede's	 	2	2	1	6
St. Cuthbert's	 	5	4	2	5
St. John's	 	3	2	1	13
St. Patrick's	 	0	2	1	4
St. Stephen's	 	7	0	7	1
Botcherby	 	()	0	0	1
Stanwix	 	0	0	0	2
Upperby	 	0	0	0	1
Belle Vue	 	0	0	0	0
Private Schools	 	6	1	1	2
		_	_		-
		80	63	106	165
		-			

DIPHTHERIA.

(Including Membranous Croup.)

The number of cases of Diphtheria notified during 1914 was 52, as against 57 during 1913 and 47 during 1912.

Of this number, 24 occurred in St. Mary's, 23 in St. Cuthbert's, and 5 in Stanwix Sub-Registration Districts respectively.

Two of the cases were notified by the military authorities, viz., at the Castle and at the Camp on the Swifts respectively.

Out of the 52 cases notified, 8 were found to be suffering from a disease other than Diphtheria, viz.:—

Follicular Tonsilitis	 	4
Scarlet Fever	 	3
Vincents Angina	 	1
		-
		8

During 1914, 3 deaths were registered as due to Diphtheria, the death-rate being equal to .05 per 1000 of the estimated population, or 5.7 per cent. of the cases notified.

Of the 52 cases, 31, or 56.9 per cent., were removed to the Isolation Hospital.

No return case occurred during the year.

Table showing number of notifications, number of cases isolated, number of deaths, and death-rates per 1,000 of population at all ages, 1908-1914.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Death-rate per 1,000 of population.
1908	31	20	4	.07
1909	36	18	4	.07
1910	37	27	2	.03
1911	44	33	4	.08
1912	47	33	6	.17
1913	57	42	9	.17
1914	52	31	3	.05

Table showing localities of cases notified as Diphtheria during the year, with action taken thereon:—

Date.	Locality.	Insanitary conditions present	Action taken.
1014			
1914 8th Jan.	Newtown	Daires	Downwall to Toolstion IIit-1
oth Jan.	Newtown	Privy	Removed to Isolation Hospital
12th	Story's-ct., Duke-st.	None	and subsequent disinfection Do.
90+h	Colville Street	Do.	Do.
27th ,,	South-Western	Do.	Isolated at home and subsequent
-, ,,	Terrace		disinfection
9th Feb.	Dale Street	Do.	Removed to Isolation Hospital and subsequent disinfection
19th ,,	Greystone Road	Do.	Do.
25th ,,	Warwick Road	Do.	Do.
2nd Mar.	Abbey Street	Rooms	Do.
		damp and	
10/3		dilapidated	
19th ,,	Brewery Row	None	Do.
19th ,,	Ruthella Street	Do.	Do
23rd ,, 29th ,,	Melbourne Road	Do.	Do.
	Burlington Place	Do.	Isolated at home and subsequent disinfection
30th ,,	Scotland Road	Do.	Removed to Isolation Hospital and subsequent disinfection
31st ,,	Granville Road	Do.	Isolated at home and subsequent disinfection
1st Apr.	Myddleton Terrace	Do.	Removed to Isolation Hospital and subsequent disinfection
14th ,,	Orfeur Street	Do.	Died, subsequent disinfection
25th ,,	Abbey Street	Do.	Isolated at home and subsequent disinfection
2nd May	Clifford Street	Do.	Removed to Isolation Hospital
20th ,,	Tilbury Road	Privy	and subsequent disinfection Do.
22nd ,,	Edward Street	None	Do.
24th ,,	Collingwood Street	Do.	Do.
27th .,	Warwick Road	Do.	Do.
4th June	Lawson Street	1)0.	Do.
5th ,,	Warwick Road	Do.	Do.
9th ,,	Do.	Do.	Do.
27th ,, 29th	Monksclose Road	Do.	Died, subsequent disinfection
2901 ,,	Margery Street	Do.	Isolated at home and subsequent
30th July	Thornton Road	Privy	disinfection Removed to Isolation Hospital and subsequent disinfection

Table showing localities of cases notified as Diphtheria during the year, with action taken thereon—continued:

Date.	Locality.	Insanitary conditions present.	Action taken.
1914			
4th Aug.	Thirlwell Avenue	None	Isolated at home and subsequent disinfection
5th ,,	Caldcotes	Do.	Do.
13th ,,	Do.	Do.	Removed to Isolation Hospital and subsequent disinfection
29th ,,	The Castle	Do.	Do.
9th Sept.	Gloucester Road	Do.	Do.
14th ,,	The Camp, The Swifts	Do.	Do.
19th ,,	Caledonian B'dings	Do.	Do.
26th ,,	Milbourne Street	Do.	Do.
29th ,,	Delta Court, William Street	Do.	Do.
7th Oct.	Etterby Street	Do.	Isolated at home and subsequent disinfection
17th ,,	Warwick Road	Do.	Removed to Isolation Hospital and subsequent disinfection
21st "	Norfolk Street	Do.	Isolated at home and subsequent
4th Nov.	Abbey Street	Do.	Removed to Isolation Hospital and subsequent disinfection
16th .,	East Norfolk Street	Do.	Do.
19th ,,	Nelson Street	Do.	Isolated at home and subsequent
			disinfection

Table giving name of school attended and number of cases in which a school child was infected with Diphtheria, 1911 to 1914 inclusive.

			1911.	1912.	1913.	1914.
Ashley Street			1	3	2	2
Bishop Goodwin			2	0	6	1
Brook Street			3	0	0	0
Caldewgate			.0	0	0	2
Christ Church			2	0	0	1
Denton Holme			0	2	2	1
Fawcett			1	0	0	1
Higher Grade			.0	0	2	1
Holy Trinity			2	1	0	1
Lowther Street			1	2	1	- 0
Norman Street			2	1	0	1
Robert Ferguson			1	1	7	2
St. Bede's	*		. 0	0	2	1
St. Cuthbert's			1	0	0	0
St. John's		1	0	1	0	0
St. Patrick's			0	0	0	0
St. Stephen's	*		2	0	0	0
Botcherby			0	0	0	2
Stanwix			0	0	0	2
Upperby			0	0	0	0
Belle Vue			0	0	0	0
Private Schools			1	1.	1	1
			-		_	-
			19	12	23	19
				-		

ANTITOXIN.

3 applications by medical practitioners were made during the year for the free supply of Anti-Diphtheric Serum, 16,000 units being supplied.

SMALLPOX.

The district was free from Smallpox during the year.

PUERPERAL FEVER.

During the year 1 case was notified as suffering from this disease.

The case was carefully investigated and the necessary precautions were taken.

MEASLES.

During the year 2 deaths from this disease were registered.

Calculated upon the estimated population this gives a mortality rate of .03 per 1,000 living at all ages.

The seasonal relationship to death was as follows:—

December 2

SCHOOL CLOSURE.

No school was closed during the year.

Table showing the figures supplied by Head Teachers & Attendance Officers of the number of children suffering from several non-notifiable diseases during 1914.

Name of School (All Departments)	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
Ashley Street		90	66	34	45.	235
Bishop Goodwin		*	1	***		1
			1-0			
01 . 01 1		2	13	1	7	23
D II-1					80	80
E		***				
TI: 1 C 1	***		***	***		1 ***
Holy Trinity		2	***			2
T - 11 CV 1			1	111	8	9
N Ct t			38			38
Robert Ferguson	7715	1	27	***	64	92
Ct Dadala			19	1	10	30
St Coulband						
C4 Talanta						
St. Patrick's						
St. Stephen's						
Belle Vue			1 1			
Botcherby						
Stanwix						
Upperby						
		a line				
						No.
Totals		95	165	36	214	510

Table showing the figures supplied by Head Teachers and Attendance Officers of the number of school children who suffered from several non-notifiable diseases, 1911 to 1914 inclusive.

Year.	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
1911	437	165	231	963	1796
1912	954	283	238	56	1531
1913	153	43	100	11	307
1914	95	165	36	214	510

Table showing the annual mortality from measles, 1881 to 1914 inclusive.

Year.	No	of Deaths.	Year.	No. of Death	8.
1881		0	1898	 59	
1882		36	1899	 5	
1883		11	1900	 13	
1884		0	1901	 5	
1885		22	1902	 10	
1886		4	1903	 3	
1887		16	1904	 7	
1888		3	1905	 17	
1889		44	1906	 1	
1890		1	1907	 54	
1891		22	1908	 0	
1892		3	1909	 11	
1893		77	1910	 3	
1894		20	1911	 13	
1895		5	1912	 39	
1896		1	1913	 3	
1897		1	1914	 2	

ENTERIC FEVER.

(Syn. Typhoid Fever).

During the year 3 cases of Enteric Fever were notified.

In 2 of the cases the clinical features subsequent to notification were characteristic of the disease. The third case, however, was, in my opinion, not at any time characteristic of Enteric Fever, the clinical symptoms and signs being more in keeping with Toxæmia from intestinal putrefaction. A specimen of the blood taken from the patient was negative to Widal's test.

The patient, an adult female, was a member of a very dirty family, the house throughout being extremely dirty and neglected, and it is in such dwellings as this that this kind of case is most likely to occur.

Table showing locality of the cases notified during the year 1914, with action taken.

Date.	Locality.	Insanitary conditions present.	Action taken.	Result.
12th Aug.	Cumberland Infirmary	None	Isolated and nursed at the Infirmary	Recovered
26th Aug.	*Cecil Street	Housedirty		Recovered
14th Sept.	The Castle	None	Removed to Isolation Hospital	Recovered

^{*} Not Enteric Fever.

Table showing the annual number of cases of Enteric Fever notified from 1890-1914 inclusive.

					Annual	No. of Cases.
	(1890					21
	1891					18 50 81
	1892					Average of 5 years 21.2
	1893					verage years
25	1894					
	1895				·	20
rrin	1896					13 5%
de.	1897					Average of 5 years 18.6
fied	1898					era 22
noti	1899		100	***		1:1 / 40
Cases of Enteric (Typhoid) Fever notified during years of compulsory notification.	1900					7
Fev y no	1901					19 16 61 A 15.6 years 12.6
d) 1	1902					Average of Syears 12.6
hoi	1903					era era
Cyp om)	1904					141) A 10
c) o	1905					7
eric	1906					5 50
Ent	1907					1 lage
of]	1908					Average 5 years 5.
ses	1909					1/40
Ca	1910	***				6
	1911					3 000
	1912	***				Average of 5 years 3.8
	1913					Average 5 years
	(1914				***	2) 44 6

TYPHUS FEVER.

The district was free from Typhus Fever during the year.

POLIOMYELITIS.

During the year 2 cases of acute Poliomyelitis were notified, neither of which terminated fatally.

The notifications were received on the 23rd September and 3rd November respectively.

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1914.

On February 5th, 1914, the Local Government Board extended the provisions of the Infectious Disease (Notification) Act, 1889, to Ophthalmia Neonatorum.

The Board were advised that general notification of this disease was desirable, as a large proportion of the blindness contracted in childhood is due to neglect of proper precautions against the disease, and in the Board's view Medical Officers of Health should have early information of all cases of the disease.

Article V of the regulations require that every medical practitioner on first becoming aware that a child is suffering from Ophthalmia Neonatorum shall forthwith make and begin a notification of the case in the form prescribed for the purpose of certificates, and shall transmit the notification and statement to the Medical Officer of Health for the district within which the place of residence of the parent or other person (if any) having charge of the child is situate at the date of notification. Provided that a medical practitioner shall not be required to notify a case of Ophthalmia Neonatorum if the case has been notified by a certified midwife, as provided by these regulations.

Articles VI of the regulations provides that every certified midwife who has grounds for supposing that a child upon whom she is in attendance, or whom she is called in to visit in the course of her practice, is suffering from Ophthalmia Neonatorum, shall, unless the case has been already notified by a medical practitioner, forthwith make and sign a notification of the case on the form set out in the schedule to these regulations, and shall transmit the notification to the Medical Officer of Health for the district within which the place of residence of the parents or other person (if any) having charge of the child is situate at the date of notification.

These regulations came into force on the 1st April, 1914, and between that date and the 31st December, 20 cases of the disease (16 males and 4 females) were notified.

In 18 cases the child suffered from the disease in both eyes, the remaining 2 being affected in one eye only.

I personally investigated each case on receipt of the notification, and subequently kept them under observation, in addition to which all the cases were frequently visited by the Health Visitor.

A careful record of the condition of the eyes of each child at the time of notification, with subsequent notes as to the progress, is made in each instance, and I am of opinion that the supervision thus carried out has been of the utmost value in preventing cases of blindness.

In 19 cases out of the 20, recovery took place without any trace of the disease remaining. In the remaining case, which occurred previous to the regulations coming into force, but which was subsequently notified to me, the sight of both eyes was destroyed. The child had been badly neglected, and shortly afterwards died of gastro-intestinal disease.

ISOLATION HOSPITAL.

Table showing number of cases removed to Hospital-

Diseases.	No. of cases admitted	No. of cases recovered.	No. of cases died.		
Scarlet Fever	196	187	9		
Diphtheria	31	28	3		
Enteric (Typhoid) Fever	1	1			
Erysipelas	1		1		
Totals	229	216	13		

NOTIFICATION FEES.

The total amount paid in fees for notifications of all notifiable diseases during 1914 was £78 8s. 0d.

DIARRHŒA.

During the year 30 deaths from this disease were registered as against 25 in 1913 and 14 in 1912.

Calculated upon the estimated population, the mortality rate shows a figure of .59 per 1,000 living at all ages.

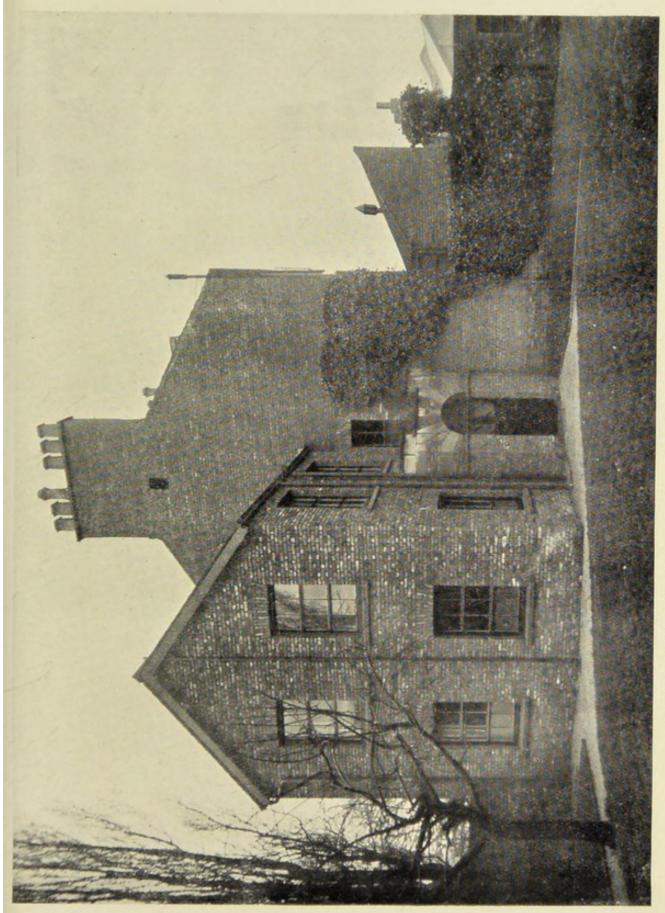
The	ages at	deat	h were	as follo	ws:		
Under 1 year						25	
	1—2 years					2	
	2-5 ye	ears				1	
	15 - 25	yea	rs			1	
	65 - 75	yea	rs			1	
						30	
Seaso	1						
January			4	July			 2
February			2	Aug	rust		 3
March		***	1	Sept	tember		 12
April			2	Octo	October		 1
May			_	Nov	November		 _
June		2 December		ember		 1	
							-
							30

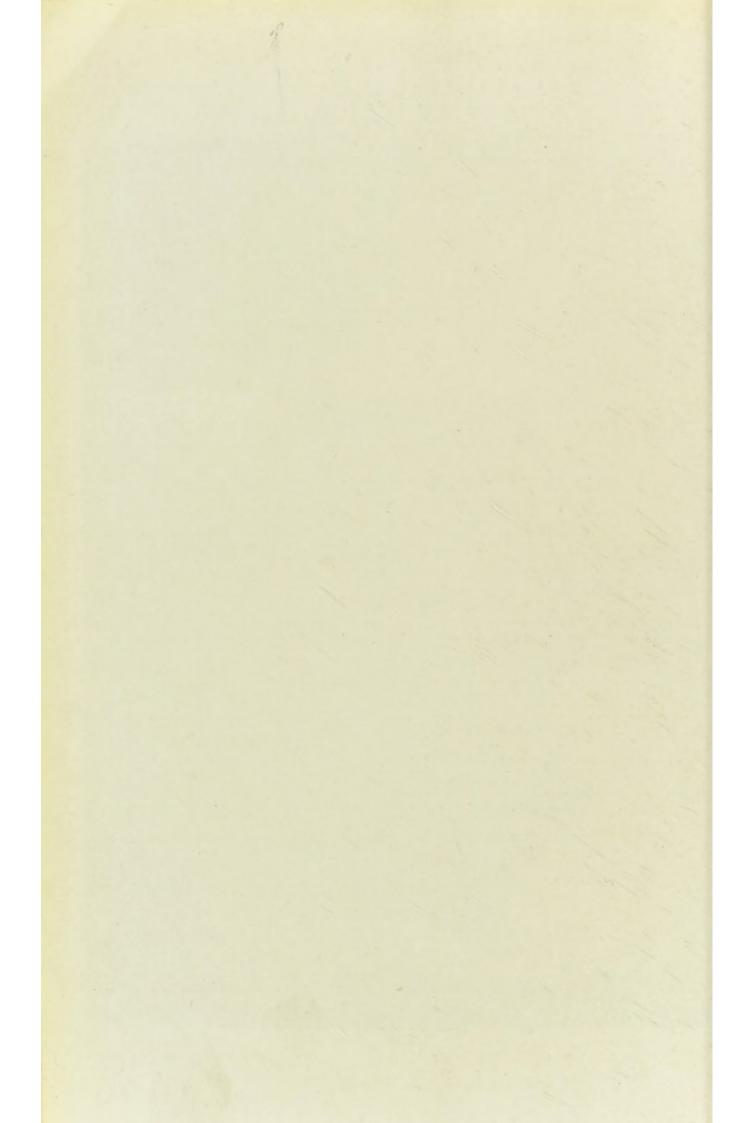
A warning was again issued on the approach of summer by means of a large poster displayed at or near the entrance to all the lanes and courts in the City, pointing to the prevalence of the disease in hot weather, and the precautions which householders and other should take with regard to the care of food, and especially with regard to the storage, preparation, and care of the food of infants.

See Zymotic Table, page 50, for locality of deaths.

Annual Mortality from Diarrhoea and Enteric (Typhoid) Fever since 1874.

	DEATHS FROM DIARRHŒA.												Deaths from			
Year.	Autumn Quarter. No. Regis- tered.	Rate per 1000 of population	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Total for Year.	(Typhoid) Fever. No. Registered.
874 875 876 877 878 878 889 881 882 883 884 885 886 887 888 889 891 892 893 894 895 896 897 898 899 890 890 890 890 890 890 890 890	12 10 26 3 1 8 14 4 8 7 8 6 16 5 2 9 1 3 4 16 10 7 11 11	1.50 1.30 1.10 .84 1.06 .34 1.20 .50 .55 .45 .61 .26 .60 .36 .33 .27 .54 .22 .10 .49 .09 .2421 .57 .25 .53 .43 .04 .06 .33 .39 .26 .05 .2805 1.20 .30 .47 .59	2 2 3 2 1 2 2 1 1 1 1 2 2	2 1 1 2 1 2 1 2 2	4 3 2 1 1 5	1 3 1 1 1 2 1 2 1 2 1 1 1 1 1 1 1 1 2 1 2 1	1 2 1 2 3	1 4 2 3 2 2 1 1 1 2 2 1 4 1 1 1 2 1 1 2 2 2	6 5 2 2 9 2 3 2 5 7 2 1 1 1 1 1 1 1 1 1 2 1 2	20 12 5 6 8 2 7 2 7 3 3 2 1 5 3 5 7 2 4 3 5 4 5 2 3 5 4 5 4 5 4 5 5 4 5 5 5 5	9 10 5 2 9 2 1 3 5 5 4 6 2 5 5 1 8 2 2 7 1 2 1 3 5 5 5 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	6 2 1 1 1 5 3 1 6 3 7 1 1 1 1 2 1 1 1 3 2 2 1 8 3 2 2 3 1		3 2 7 4 1 2 1 2	50 44 37 28 40 12 42 18 20 17 23 10 23 14 13 11 22 9 4 20 4 10 9 24 11 23 20 11 23 11 20 11 20 20 20 20 20 20 20 20 20 20 20 20 20	23 24 10 5 11 11 15 7 9 8 7 1 6 17 8 1 2 2 3 5 2 4 3 3 2 1 2 5 7 3 3 3 1





TUBERCULOUS DISEASES.

Under this heading are included deaths occurring from any of the following conditions:—

Pulmonary Tuberculosis (Consumption of the Lungs), Tuberculous Meningitis (including Acute Hydrocephalus), Tuberculous Peritonitis, Tabes Mesenterica, Generalised Tuberculosis, Tuberculosis of bones, joints, and other organs, Lupus, and Scrofula.

The total number of deaths registered from Tuberculosis of all forms during 1914 was 102 = 1.9 per 1,000of the estimated population. Of this number 70 = 68.6per cent. were from Pulmonary Tuberculosis, giving a death-rate of 1.3 per 1,000 of the estimated population at all ages.

During 1913, 96 deaths were registered from all forms of Tuberculosis, of which 71 = 73.9 per cent. were from Pulmonary Tuberculosis, giving a death-rate of 1.3 per 1,000 of the estimated population at all ages.

The above figures show that during 1914 there was an increase of 6 in the number of deaths from all forms of Tuberculosis, and a decrease of 1 in the deaths from Pulmonary Tuberculosis.

Sixteen deaths from Tuberculosis of all forms occurred in institutions within the City, of which number 8 were due to Pulmonary Tuberculosis.

PULMONARY TUBERCULOSIS.

Upon receipt of a notification under the Public Health (Tuberculosis) Regulations, 1913, the information conveyed on the form is transmitted to the Dispensary for the

information of the nurse responsible for certain tuberculosis work in the district from which the case has been notified. As soon as practicable after the receipt of this information the home of the notified person is visited by the nurse, and notes are made by her upon the general condition of the house and the occupation and habits of the patient; an effort is also made to trace the source from which the patient had been infected. If the patient is not confined to bed, an appointment is made for him to attend at the Tuberculosis Dispensary for examination by the Tuberculosis Officer, and in the case of a person too ill to attend at the Dispensary, he is visited by the Tuberculosis Officer at his home. At the time of the visit to the home the nurse also instructs the patient in the value of fresh air, in the arrangement of the patient's bedroom, and the prevention of the spread of infection.

All cases of Tuberculosis notified during the year have been examined by the Tuberculosis Officer as soon as practicable after notification, and the patient's mode of life carefully regulated and supervised. After examination of the person, and the stage of the disease has been ascertained, steps are taken to obtain for the patient the treatment most appropriate to his condition, if such treatment is not being obtained, arrangements being made for those who are likely to benefit by sanatorium treatment to be sent to a suitable institution, while other patients who are unsuitable for sanatorium treatment are treated at home by their own medical attendant, while additional supervision and assistance in the treatment, as far as possible, is given by the Tuberculosis Officer and nurses.

The Dispensary is open on two afternoons in each week, viz., Tuesday and Friday, from 2 to 4, for the examination of persons suffering from Tuberculosis, and

also on Wednesday evenings, from 7 to 9, for the convenience of those suffering from Tuberculosis who are still able to follow their occupations.

From the opening of the Dispensary in October to December 31st, 124 cases of Tuberculosis were under observation. Of this number 114 were persons able to attend at the Dispensary, while 10 patients were visited in their own homes, 163 visits being made to the Dispensary by those attending. As the Institution has been open for such a short period only, I do not propose in this report to furnish a detailed analysis of the cases treated and the results of the treatment.

The treatment and supervision of patients at the Dispensary, and work ancillary thereto, has consisted of advice as to personal and general hygiene and mode of life, the value of fresh air, good food and regular hours, and in suitable cases the administration of Spengler's Immune Korper (I.K.), together with appropriate literature bearing upon vital matters in relation to the disease. Medicines or prescriptions for medicines are not supplied to the patients at the Dispensary, any such matter of treatment being left entirely in the hands of the person's own medical practitioner. Advice and assistance are also given to the doctors in charge of the cases, if requisite, and the life of the sufferer is supervised by the periodical visits which are paid by the nurse to the house. During the part of the year under review, 260 visits were paid to homes of tuberculous persons by the nurses for this purpose.

The following up of persons who have been in contact with a consumptive person is an extremely important factor in the work, as in this way an affected person may be discovered in the early stage of the disease, when treatment is more likely to produce permanent benefit by completely arresting the disease. It has, unfortunately, been impossible to carry out this part of the work completely, owing to the large amount of time taken up by work in connection with the medical inspection of school children and the treatment of defective cases at the School Clinic, but wherever possible contacts have been examined, especially those who showed any sign of ill-health, or were suspected to be suffering from the disease in an incipient form

On April 12th, when the City Council became responsible for the treatment of cases of tuberculosis in the City, 10 people were receiving treatment in sanatoria, of whom 5 were at Blencathra Sanatorium and 5 at the Philipson Children's Sanatorium, Northumberland. During the remainder of the year 12 additional children and 8 additional adults have been sent to sanatoria, 12 of whom were sent to the Philipson Children's Sanatorium, 5 to Blencathra, and 3 to the Westmorland Sanatorium at Meathop, making a total of 30 patients who received sanatorium treatment during the year. Eight of the total number of cases remained under treatment on December 31st, namely, 3 at Stannington, 3 at Meathop, and 2 at Blencathra. The average duration of treatment of the 22 patients whose treatment in the various sanatoria was completed at the end of the year was 103.9 days, the condition of the patients on discharge from the sanatoria being as follows :-

Disease arrested	 	13
Much improved	 	5
Improved	 	4
		-

On December 31st there were 10 patients waiting for admission to sanatoria, 4 of whom were children and 6 adults.

The work in connection with the treatment of tuberculosis will be considerably facilitated when the extensions which are being carried out at the Blencathra Sanatorium are completed, the Corporation will then be able to avail themselves of a first call upon 20 beds, which will mean that it will be possible to get patients away to the sanatorium without the prolonged waiting which has hitherto obtained.

This accommodation at Blencathra, when complete, does not, however, provide for those unfortunate sufferers in an advanced stage of the disease, but for these cases an agreement has been entered into with the Cumberland County Council for the provision of 15 beds in a hospital, which it is contemplated will be soon established. Beds will then be available for advanced cases of tuberculosis in persons who live under insanitary conditions, and by whom the disease is principally spread.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from the 4th January, 1914, to the 2nd January, 1915, in the County Borough of Carlisle.

		Age Periods.	Pulmonary Males Females Non-pulmonary Males Females	Ava Pariods		Pulmonary Males Females Non-pulmonary Males Females		Pulmonary Males Non-pulmonary Males Females Females
			1111		Under 5.	::::		
-		0-1	:::::		5-10	16		Poor Law
		11-6	4:00					Law
	1	2-10	15 2 5 5		10-15	15		
		1-5 5-10 10-15 15-20 20-25 25-35 35-45 45-55 55-65	10 10 8					Institutions. 15 2 3
	Num		15-20 13 15 7	13 15 7	Non		No.	2
Z		20-25	15.	NOTIFICATIONS ON	Prima		TIFIOA	1
OTIFIC.	ber of	25-35	19 13 3 3 3 3	NONS (y Not	229	LIONS	
NOTIFICATIONS ON FORM A.	Number of Primary Notifications.	35-45	∞ ∞ : ⊢	N FORM	Total Primary Notifications.		NOTIFICATIONS ON FORM C.	
ON F	ury No	45-55	11 8 :1	вм В.	ns.		RM C.	
OBM A	tificat	55-65	94::		To			
1	ons.	& up- wards.	1: 22 :-		tal Not			Sanatoria, 19 10
		Total Primary Noti- fications,	23 82 83 83 83 83 83 83 83 83 83 83 83 83 83		Total Notifications on Form B.	29		ia.
		Total Prim-Total Noti- ary Noti- fications on fications. Form A.	101 83 85 23		Form B.			

Ages at death of cases of Pulmonary Tuberculosis during 1913 and 1914.

Year.	Under 1 Year.	1-2	2-5	5-15	15-25	25-35	35-45	45-55	55-65	65–75	All Ages.
1913 1914	1 1	2 1	1 1	9	22 14	15 17	8 13	4 13	7 6	2	71 70

The distribution of the deaths during 1914 was as follows:—

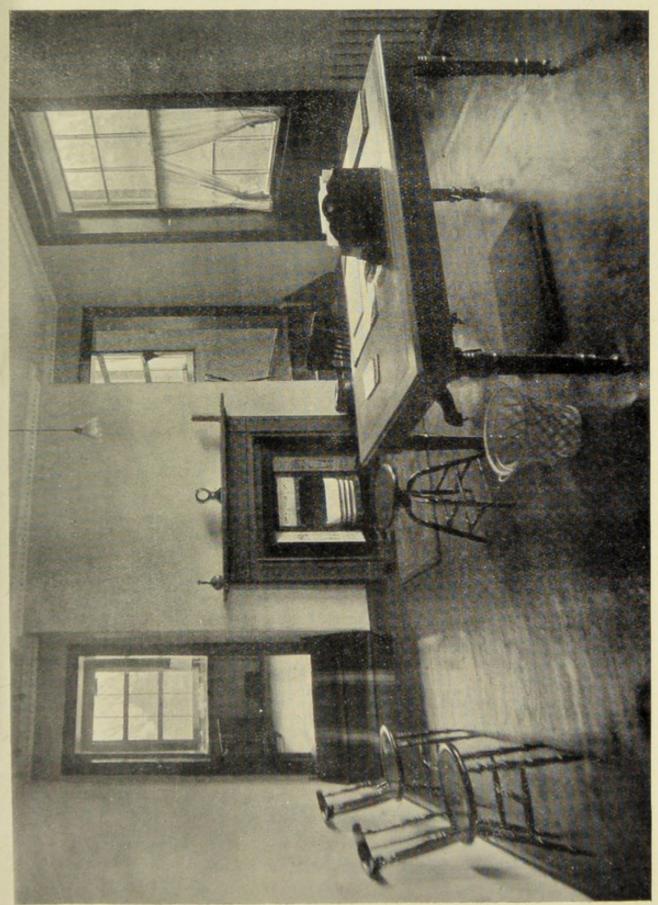
St. Mary's Sub-Registration District	40
St. Cuthbert's Sub-Registration District .	28
Stanwix Sub-Registration District	1
Dalston Sub-Registration District	1
	70

Two other diseases of the chest, viz., Pneumonia and Bronchitis, were responsible for 91 deaths during 1914.

Disease.	St. Mary's	St. Cuthbert's.	Stanwix.	Total.
1	. 1			
Broncho-Pneumonia	13	4		17
Pneumonia (all other				
forms)	23	12	2	37
Bronchitis	17	19	1	37
Totals	53	- 85	3	91

Deaths from Tuberculosis and Respiratory Disease from 1901 to 1914 inclusive.

Year.	Number of Deaths from Phthisis.	from Tuberculosis	Number of Deaths from other Respiratory Disease
1901	71	35	144
1902	57	42	118
1903	73	23	92
1904	70	36	167
1905	62	32	130
1906	67	30	122
1907	54	15	137
1908	56	34	112
1909	64	28.	108
1910	52	30	91
1911	75	19	98
1912	65	11	116
1913	71	25	91
1914	70	32	96





Midwives Act, 1902.

(SUPERVISION OF MIDWIVES).

On and after the 1st April the supervision of midwives under the above Act, which had previously been carried out by the County Council, became the duty of the Corporation. The work of supervision comprises a considerable amount of administrative and other matters, which are carried out by the Medical Officer of Health.

The duties of the Corporation as the Supervising Authority, in addition to the registration of midwives, comprise:—

- I. A general supervision over all midwives practising within their area, in accordance with the rules drawn up by the Central Midwives Board under Section 3 of the Act and approved by the Privy Council.
- II. Investigation into the charges of malpractice, negligence, or misconduct on the part of a midwife.
- III. Suspending a midwife from practice, if necessary, in accordance with the Board's rules.

During the year 1914 16 certified midwives were registered for the practice of midwifery in the City.

At the end of each quarter of the year (and all other times when necessary) the midwives have been visited at their homes, the necessary inspections of their books, bags, appliances, &c., being made.

No case came to my notice during the year of any unregistered or uncertified woman carrying on the practice of midwifery.

During the year 623 confinements were attended by certified midwives. In 36 cases complications either during or after labour were recorded, while medical assistance was obtained in 29 cases.

The following notices upon the prescribed forms were sent in by midwives:—

I.	Notice relating to sending for medical	help	29
II.	Notice of having laid out a dead body		2
III.	Notification of death		6
			37

INQUESTS.

During the year the City Coroner held 53 inquests, as compared with 50 during 1913.

Of this number 45 were held upon the bodies of those who had been resident within the City, and 8 upon the bodies of persons who had resided in other districts, but who died within the City.

4 of the inquests were held upon the bodies of children under 5 years, 3 of these being children under 1 year.

The finding of the Jury and the ages in these 4 cases respectively were :—

		Ca	use.		Age.
Suffocated	in bed				 11 weeks
Do.	do.				 7 weeks
Do.	do.				 3 months
Accidental	burning				 1½ years

MORTUARY.

During 1914, 13 bodies were removed to the Public Mortuary, West Walls, and a post-mortem examination was performed in each instance.

UNCERTIFIED DEATHS.

During the year 25 deaths were registered in which no certificate was given by a medical man, and in which no inquest was held.

During 1913, 21 such deaths were registered.

The 25 deaths in question were registered as follows.

No.	Sex.	Age.	Cause of Death as Registered.
1	Female	*3 months	Broncho-Pneumonia
2	Male	51 years	Dropsy
3	Male	82 years	Heart Failure
4	Male	71 years	Heart Disease
5	Male	67 years	Heart Failure
6	Female	69 years	Heart Failure
7	Female	*4 months	Rickets
8	Male	*1 day	Inanition
9	Male	*5 hours	Inanition
10	Male	4 years	Injury to Spine
11	Male	83 years	Heart Disease
12	Male	63 years	Heart Failure
13	Female	64 years	Heart Failure
14	Female	79 years	Fractured Arm
15	Male	47 years	Bright's Disease
16	Female	72 years	Heart Failure
17	Female	*3 months	Diarrhœa
18	Female	*8 months	Convulsions
19	Female	*2 months	Convulsions
20)	Male	56 years	Alcoholic Multiple Neuritis
21	Male	71 years	Heart Failure
22	Male	*5 months	Convulsions
23	Male	*1 day	Premature Birth
24	Female	83 years	Heart Failure
25	Female	58 years	Heart Disease

^{*}It will be observed that nine of these twenty-five uncertified deaths were infants under one year of age.

CANCER.

The following figures include all registered deaths from causes within the general term Cancer. The number of deaths registered during 1914 was 68, as against 63 in the year 1913.

Calculating the 68 cases upon the estimated population, a mortality rate of 1.2 per 1,000 at all ages is obtained.

Table of Deaths, 1909 to 1914.

	Age.	Numbers.					
		1909	1910	1911	1912	1913	1914
1	to 5 years	 		• 1		1	
5	to 15 years	 	****	2		1	
15	to 25 years	 	1	2	3		
25	to 35 years	 2		5	2	1	2
35	to 45 years	 6	7	5	6	5	10
15	to 55 years	12	11	6	18	11	10
55	to 65 years	 15	11	11	18	25	20
35	to 75 years	 17	11	7	10	14	16
75	and upwards	 6	6	6	5	5	10
	Totals	 58	47	45	62	63	68

MILK SUPPLIES.

(Dairies, Cowsheds, Milkshops, &c.)

The milk supply to the inhabitants of the City is derived partly from cows belonging to cow-keepers within the City and partly from those belonging to farmers and cow-keepers in the County area.

There are 54 cow byres in existence within the City, accommodating at the present time 420 milk cows.

The byres and dairy buildings and other places from which milk is sold within the City are regularly inspected by members of the staff of the Health Department, and the milk cows are subject to the constant supervision and the frequent and regular examination of the City Veterinary Surgeon.

During the past year, 33 samples of milk were purchased and submitted to the City Analyst for the purpose of chemical analysis, which also included tests for determining the presence of preservatives. In addition, 22 samples of milk were purchased for the purpose of bacteriological observation, from the carts of persons vending milk within the City whose dairies are situate in the County area. These samples were submitted to Professor Delépine for the purpose of inoculation experiments upon guinea pigs, in order to ascertain the presence or absence of the tubercle bacillus in the milk sample. In connection with the 22 samples of milk thus experimented with, two of the samples contained the tubercle bacillus, concerning which I made the following report to the Health Committee:—

"I have to report in connection with certain samples of milk taken from carts belonging to farms outside the City on 10th December, for the purpose of ascertaining the presence or absence of tubercle bacilli in the milk, the report of Professer Delépine showed that two of the samples from farms (which I propose to call Nos. 30 and 33), after inoculation experiments, demonstrated the presence of tubercle bacilli.

"On receipt of Professor Delépine's report I visited the two farms, accompanied by Mr. Robinson, the City Veterinary Inspector, and interviewed the respective farmers upon the matter, both of whom offered every facility for the examination of the whole of their milk cows.

"In the case of farm No. 30, 45 cows were in milk at that time, whilst in the case of farm No. 33, 5 cows were in milk.

"With regard to farm No. 30, the suspicion of the Veterinary Inspector fell upon five of the cows, each of which exhibited signs of induration of the posterior quarter or quarters of the udder; a sample of milk was therefore taken from the affected quarter of the udder in each instance. At the same time the owner of the cows gave me an undertaking that the milk from two of the more suspicious animals would not be sold.

"In the case of farm No. 33 the suspicion of the Veterinary Inspector fell upon an animal which exhibited some induration of one of the posterior quarters of the udder, from which a sample was taken.

"The six samples thus obtained were sent to Professor Delépine who reported that tubercle bacilli were found in one of the samples from farm No. 30.

"It was thought advisable that further samples should be taken from certain of the cattle at both farms, for which purpose the two farms were again visited, when four further samples were taken from cows at farm No. 30, and two samples from cows at farm No. 33. Professor Delépine certified that he failed to find tubercle bacilli in any of the six specimens.

"On my first visit I found at farm No. 30 a cow which had been isolated by the owner on account of the animal having lost the use of its hind legs. I advised him to send the animal to the Public Slaughter-houses, when after slaughter it was found to be suffering from advanced tuberculosis of the spine and other parts of the body.

"On my third visit to the farm one of the two cows isolated, which was shown to be giving tuberculous milk, had been dried off; and as the milk of the second animal was found to be free from tubercle bacilli, this animal was put back into a small byre.

"With regard to farm No. 33 a somewhat peculiar incident was observed, for whilst tubercle bacilli were found in the samples of milk first taken from the cart, no tubercle bacilli could be found in the samples taken from the udders of the suspected cows at the farm, in which one would have expected the bacillus would have been found. The explanation of this circumstance is probably due to the fact that during the time the samples were taken from the cart, in December, the owner of the cows at farm No. 33 was buying milk from various milk carts coming from the same district, in order to help him out with his round. It is therefore not unreasonable to suppose that on the particular occasion on which the samples were taken he might have been supplied with milk from the cart coming from farm No. 30."

Public Health (Milk and Cream) Regulations, 1912.

Analytical Report for the year ended 31st December, 1914:—

1. Milk; and cream not sold as preserved cream.

	(a) Number of samples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk	33	Nil
Cream	7	2

Nature of preservative in each case in column (b) and action taken under the Regulations in regard to it.

Cream sold as preserved cream.
 (a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.
 (i) Correct statements made 5
 (ii) Statements incorrect 2

Total 7

(b) Determinations made of milk fat in cream sold as preserved cream.

(i) Above 35 per cent. ... 6 (ii) Below 35 per cent. ... 1

Total 7

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) of the Regulations have not been observed...

- (d) Particulars of each case in which the Regulations have not been complied with, and action taken:—
 - 1 sample with less than 35% milk fat contained boric acid.
 - 1 sample containing boric acid bore no label to that effect.
- 3. Thickening substances. Any evidence of their addition to cream or to preserved cream. Action taken where found Not sought for
- 4. Other observations, if any:

As all the above samples of cream were taken informally, no action was taken; but vendors were cautioned.

REPORT OF VETERINARY INSPECTOR.

During the first four months of the year 172 newly purchased cows were examined in the several byres of the City. All the animals were subjected to the Tuberculin Test, and 79 gave a characteristic re-action. These animals were certified as suffering from tuberculosis, and were returned to the sellers.

Soon after the commencement of the war the Board of Agriculture and Fisheries suspended all the Orders relating to the Diseases of Animals Act, including the Tuberculosis Order of 1914.

Previous to the suspension of the Tuberculosis Order of 1913, two notifications were received under the provisions of the Order. Both animals were slaughtered and dealt with in the manner provided by the Order.

All the bovine animals exposed for sale at the Sands Cattle Market and also at the Auction Marts were examined by me, a total of 54,924 such examinations being made, and the following disease was discovered:—

Chronic disease of the udder ... 2

Statutory notices were served upon the owners, the County Veterinary Inspector being at the same time notified as to the destination of the animals.

The Auction Marts were regularly visited each Monday, and 13,197 pigs were examined.

At the request of the Medical Officer of Health or Chief Sanitary Inspector I examined 21 carcases of beef and one carcase of a pig at the Public Abattoir, two carcases of beef deposited in lock-up shops, and two forequarters and 11 smaller pieces of beef in a shamble in the Public Market, which, with the exception of one carcase of beef, I certified to be unfit for human food,

On the outbreak of Foot and Mouth Disease in Ireland. detention notices were served upon all owners of Irish cattle within the City. The number of cattle detained was 283. These animals were examined every second or third day until the expiration of the notices. On the re-opening of the Sands Market on 14th March, a heifer presented symptoms of the disease in the tongue and lips which was accompanied by a high temperature. Mr. J. Bell, M.R.C.V.S., saw the animal in consultation with me, and whilst we were both satisfied that it was not Foot and Mouth Disease we thought it a case for further investigation by the Board of Agriculture. After a consultation with the Town Clerk upon the matter, he (the Town Clerk) telegraphed to the Board, who sent an Inspector down from London, and upon investigation the Inspector certified that the animal was not suffering from Foot and Mouth Disease.

Examinations of milk cows in the byres of the City made during the year in order to ascertain the presence or absence of diseases likely to affect the milk supply, resulted in the discovery of the following conditions:—

Milk Fever	 3
Congestion of Lungs	 1
Septicæmia	 8
Tubercular Pneumonia	 1
	-
	13

The animal suffering from tubercular pneumonia was slaughtered. The two animals suffering from septicæmia died, whilst the milk of the other 10 animals was destroyed until convalescence was established.

The Corporation stud, consisting of 21 horses, was under constant observation. I regret to say that during the spring months a serious outbreak of influenza occurred amongst the horses, in consequence of which two aged animals died of septic pneumonia following upon the influenza.

Upon the purchase by the Corporation of the motor fire engine the two horses formerly used for fire brigade work were not required, and were sold by tender for £75.

During the month of October the War Office commandeered eight of the Corporation horses, for which the sum of £468 10s. Od. was obtained. I purchased other horses to fill the places of those sold, for which the sum of £446 5s. Od. was paid.

COVERED MARKETS.

In each of my Annual Reports I have spoken of the nuisance from the presence of dogs in the Covered Markets, and the danger to the health of the public from the contamination of food exposed for sale.

Notices are posted up at several points inside the Market warning the public against bringing dogs into the building, but in spite of these notices there are to be seen every day, chiefly belonging to occupiers of shops and stalls, dogs which spend their whole daytime in the Markets. I hope the committee concerned will take some action in the matter, for which purpose there is a provision in the Bye-laws relating to the Covered Markets.

SEWAGE WORKS.

During the past year I have paid several surprise visits to the Sewage Works, and am satisfied that the work is carried out by the men employed there in a careful manner.

AMBULANCE.

The Horse Ambulance provided by the Corporation is under the superintendence of the Head Constable, and is housed at the Chief Fire Station, Spring Gardens Lane. The Ambulance, which is in keeping with modern requirements, is available for use by the public in case of accident, injury by fire, &c., or its use may be obtained for the removal of a sick or convalescent person other than a case of infectious disease (for which a special ambulance is provided).

During the year its use was requisitioned on 70 occasions.

HOUSING OF THE WORKING CLASSES.

Housing of the Working Classes Act, 1890.

Housing, Town Planning, &c., Act, 1909.

As a result of the procedure subsequent to the inspection of houses in accordance with the regulations made under the Housing, Town Planning &c., Act, 1909, a scarcity of dwelling houses suitable for the working classes has become apparent.

During the past five years a large number of insanitary dwelling houses have been made habitable by remodelling or the conversion of two or more small tenements into satisfactory houses, but unfortunately in a large number of instances, owing to the dilapidated condition of walls and other undesirable defects, closure followed by demolition has been found necessary, and the present shortage of houses would appear to be the result of this procedure either alone or in conjunction with the fact that only a comparatively small number of dwelling houses have been erected by private enterprise during the same period.

Having regard to the increasing demand for houses in the City, the Corporation have carefully considered the matter in its various aspects, and have decided to proceed with a scheme for the erection of dwelling houses, plans, estimates, &c., have been prepared by the City Surveyor in connection therewith, and it has been thought advisable in the first instance to proceed with the construction of 30 houses, some of which it is proposed shall be erected in the neighbourhood of Caldewgate and others on land owned by the Corporation at Boustead's Grassing.

During the past year 1076 dwelling houses have been inspected under and for the purposes of the above Acts.

Forty-five houses (comprising 52 dwellings) were dealt with under the provisions of Section 17 (2) of the Housing, Town Planning, &c., Act, 1909, particulars of which are set out in the following pages.

In the case of 307 houses no action has yet been taken. This group occupies a circumscribed area in the west central portion of the City, and many of the houses, courts, &c., in the area are dangerous to the health of the inhabitants by reason of their dilapidated and damp condition, of the want of light, ventilation, and other sanitary defects, which, in my opinion, cannot be effectually remedied otherwise than by re-arrangement and reconstruction of a considerable number of the streets and houses.

The remaining 724 houses were found to be satisfactory, except for certain minor defects which were discovered, and which were capable of being dealt with, either under the provisions of Section 15 of the Housing, Town Planning, &c., Act, 1909, or the Public Health Acts, particulars of which are set out in tables later.

Housing, Town Planning, &c., Act, 1909.

		-		
Number and Situation.	Date represented to Committee.		Date of Demolition Order served under Housing, Town Planning, &c., Act, 1909.	Remarks.
Broadguards	1st March, 1912	12th April, 1912		House made ha
, 10, & 12 Drovers' Lane, 17 and 18 Slack's Court, Drovers' Lane	18th Oct., 1912	11th Dec., 1912	9th Sept., 1913	Houses demolished
, 3, 4, 5, 6, 7, 8, 9, and 10 Young's Lane, Rickergate	28th Feb., 1913	8th April, 1913		Houses made ha
3 & 15 Rickergate, and 1 and 2 Swifts Row, Rickergate	28th Feb., 1913	8th April, 1913	28th Oct., 1913	Houses in proces demolition
houses, Thompson's Court, Fisher Street	28th Feb., 1913	8th April, 1913	28th Oct., 1913	Houses demolished
1 & 13 Mary Street, 7 houses in Watt's Court, Mary Street	28th Feb., 1913	14th Oct., 1913	16th Sept., 1914	Houses demolished
5 & 17 Mary Street, 12 houses in Pattin- son's Court, Mary Street	26th Sept., 1913	14th Oct., 1913	16th Sept., 1914	Houses demolished
2, 14, 16, 18, 20, 22, 24, 26, 28, 30, and 32 Mary Street	26th Sept., 1913	14th Oct., 1913	4	Houses made ha
7, 39, & 41 Rickergate, and 1, 2, and 3 Drovers' Lane	24th Oct., 1913	28th Oct., 1913		Houses made ha
1 & 33 Rickergate. , 2, 3, 4, 5, 6, 7, and 9 Barley Stack Lane	21st Nov., 1913 21st Nov., 1913	9th Dec., 1913 9th Dec., 1913	10th June, 1914	Houses made has able In process of dention

Housing, Town Planning, &c., Act, 1909-continued.

THE RESIDENCE OF SHARPS AND ADDRESS OF THE PARTY OF THE PARTY.	OWNERS OF TAXABLE PARTY AND PERSONS IN	PROPERTY AND ADDRESS OF THE PERSON OF THE PE	THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUM	
mber and Situation.	Date represented to Committee.	Date of Closing Order served under Housing, Town Planning, &c., Act. 1909.	Date of Demolition Order served under Housing, Town Planning, &c., Act, 1909.	Remarks.
, & 11 Peascod's	21st Nov., 1913	9th Dec., 1913	10th June, 1914	Houses demolished
d, 3, 4, 5, 6, 7, 8, and 9 Hutchinson's Lane, Stanwix	27th Feb., 1914	16th March, 1914		Houses made habi
Kell's Place,	27th Feb., 1914	16th March, 1914	28th Oct., 1914	In process of demol
14, & 15 Brewery low	27th March, 1914	17th April, 1914	28th Oct., 1914	Houses made habi
2 Mc.Cutcheon's Court, Milbourne treet	27th March, 1914	17th April, 1914	28th Oct., 1914	Houses made habi
la, 3, 5 Chapel Street	19th June, 1914	15th July, 1914		Nothing done
13, 15 Chapel treet	19th June, 1914	15th July, 1914		Houses made habi
14, 16, 18, 22, 26, 28 Chapel Street	19th June, 1914	15th July, 1914		Nothing done
26, 28, 30, 32, nd 34 Jane Street	19th June, 1914	15th July, 1914		Houses made habi
ouses in Donald's Court, Willow Holme	19th June, 1914	15th July, 1914)	Nothing done. Par
houses Willow	19th June, 1914	15th July, 1914		of proposed site for new housing schem
ouses on Stanwix Sank	23rd Oct., 1914	28th Oct., 1914		Houses made habit

Table showing number of dwelling houses erected in the City from 1891 to 1914 inclusive.

		No. of Houses	3		No	o. of Houses
Year.		erected.		Year.		erected.
1891		149		1903		170
1892		81		1904		269
1893		148		1905		181
1894		184		-1906		183
1895		176		1907		42
1896		198		1908		27
1897		217		1909		7
1898	1	208		. 1910		23
1899		226		1911		11
1900		262		1912		11
1901		181		1913		18
1902		178		1914	·	38

WATER SUPPLY.

During the year samples of water were regularly taken from a domestic tap and submitted to chemical and bacteriological examination, the quality of the water, as in previous years, being uniformly good.

Chemical and bacteriological results of quarterly samples are given in the following pages, together with the results of a special examination as to the action of the water upon lead.

Total monthly distribution of Water from Cumwhinton covered reservoir during 1914—

Month.	Number of Gallons.	No. of Gallons per head, per day.
January	55,370,000	31.89
February	48,660,000	31.03
March	54,500,000	31.39
April	55,580,000	33,08.
May	56,370,000	31.90
June	60,560,000	35.41
July	63,470,000	35.92
August	63,960,000	36.19
September	59,600,000	34.85
October	58,430,000	33.07
November	54,840,000	32.07
December	59,070,000	33.33

Total annual distribution of Water from Cumwhinton covered reservoir during the years 1911—1914.

Year.	Number of Gallons.	No. of Gallons per head, per day.
1911	645,490,000	31.48
1912	645,080,000	31.47
1913	665,410,000	32.53
1914	690,410,000	33.34

Reports on Samples of Water from Domestic Tap.

CHEMICAL ANALYSIS BY DR. HELLON, WHITEHAVEN.

Results shown in grains per gallon.									
CHEMICAL.	APRIL.	JULY.	OCT.	DEC.					
Total Solid Matter in solution dried at 212° F	7.280	7.840	7.000	7.280					
Chlorine existing as Chlorides	.630	.595	.260	.595					
Ammonia	traces	traces	traces	traces					
Albuminoid Ammonia	.005	.002	.002	.003					
Nitrogen existing as Nitrates	traces .	traces	traces	traces					
Oxygen absorbed in 15 minutes at 80° F	.045	.022	.025	.038					
Oxygen absorbed in 4 hours at 80° F	.078	:045	.044	.073					
Lead and other Poisonous Metals	None	None	None	None					
Hardness before boiling	6 <u>1</u> °	7°	61.	6°					
Hardness after boiling	110	1°	110	I°					
Appearance in two-foot tube	Clear greenish- yellow	Clear yellowish- green	Clear yellowish- green	Clear yellowish- green					
Smell when heated to 100° F	None	None	None	None					
Microscopical Examination	Vegetable debris	Slight deposit of Vegetable debris	Vegetable debris	Slight deposit of Vegetable debris					

A determination of the plumbo solvent action of the water was made according to the method of the Local Government Board in all samples taken during the year, with the following results:—

Lead dissolved at 11° C-

APRIL	$\begin{cases} 1st \\ 50 c c. \\ .02 \end{cases}$	2nd 50 c.c.	3rd 50 c.c. .02	4th 50 c.c. .02	5th 50 c.c. .02	Average.
Lead	dissolved	at 17° C-	-			
JULY	$\begin{cases} 1st \\ 50 \text{ c.c.} \\ .02 \end{cases}$	2nd 50 c.c. .03	3rd 50 c.c. .04	4th 50 c.c. .04	5th 50 c.c.	Average.
Lead	dissolved	at 11° C-	-			
OCT.	1st 50 c.c.	2nd 50 c.c.	3rd 50 c.c.	4th 50 c.c.	5th 50 c.c.	Average.
	dissolved					
DEC		2nd 50 c.c.	3rd 50 c.c.	4th 50 c.c.	5th 50 c.c.	Average.

BACTERIOLOGICAL EXAMINATION BY PROF. DELÉPINE, MANCHESTER.

	QUANTITATIVE ANALYSIS		1		1914.				
A Aerobic micro-organisms growing for 3 days in nutrient gelatine at 25° C				colonies me of wate		· N	o. of ki	inds cle nisable.	
	to 21° C.	APRIL.	JULY.	ocr.	DEC.	APL.	JULY	. ocr.	DEC.
No	n-Liquefying Bacteria	4	6)	1 4	5)-7	1	2)	1 4	2)4
Lie	quefying Bacteria		0 7	3)	2 7 2 7		0 3	3)	2)
Otl	her Micro-Organisms		1)				1)		
В	Anærobie Micro- Organisms			•••					
	QUALITATIVE ANALYSIS.	APRIL		JULY.	1914.	OCT		D	EC.
A	Bacteria associated with sewage or fæcal pollution	B. Coli communis found in C. C.	not co	Coli minunis i and in 1 C.	not co	B. Coli communis not found in 100 C. C. B. Col commu not fou 15 C. C Found 100 C.		unis und in C.	
В	Bacteria associated with disease	Not foun	d I	Not found	i	Not fou	nd	Not f	ound

PUBLIC SLAUGHTER-HOUSES.

The following Table gives particulars of carcases killed and examined.

Animal		Total number of animals slaughtered and examined	Number of carcases specially examined for disease	cases in which the whole	Number of cases in which portions of a carcase were pro- nounced un- fit for food	with Tuber~
Oxen		3668	76	66	10	46
Sheep		15320	7	6	1	0
Calves		616	2	2	0	0 .
Pigs		3687	4	4	0	0
Totals	***	23291	89	78	11	46

Each carcase of an animal killed at the public slaughter-houses is seen and carefully examined by the resident Superintendent. In the case of a carcase which, in his opinion, is unfit for food, and in all doubtful cases, he at once communicates with the Medical Officer of Health or the Chief Sanitary Inspector, who makes a further examination of the carcase, and decides upon the fitness or otherwise of the carcase for human food.

During the year, 89 diseased carcases were thus specially referred by the Superintendent for further examination, and in 78 instances the whole carcase was certified as unfit for food, while in 11 instances part or parts of the carcase only were considered to be unfit for food.

A glance at the above table shows that out of a total of 76 diseased bovine animals examined, in 46 instances the whole carcase was affected with tuberculosis, which means that the whole carcase was so badly affected with disease that it was destroyed.

All carcases and parts of carcases certified as unfit for food are destroyed by burning at the Corporation destructor.

PUBLIC BATHS.

Number of Bathers during 1914.

The total number of bathers was 68,625, as compared with 63,701 in 1913, and 58,647 in 1912.

SWIMMING BATHS.		1st Class.	2nd Class.	Total.
The second secon		4,583	14,621 14,742	19,204 14,742
Boys' Brigade, &c. (swimmers charged ld. each)	ed		4,608	4,608
D ' D 1 D ' (C)	nd 		5,384	6,009 5,384
PRIVATE BATHS.	**		0,001	0,001
Adults (both sexes)		4,681	The state of the s	16,434
0.11		8	5	74 13
TURKISH BATHS.				
77		405	1,238	1,643
Females		39	475	514
Totals				68,625

METEOROLOGICAL STATISTICS, 1914.

OBSERVATIONS TAKEN AT THE CEMETERY BY J. T. CHARLTON, ESQ.

Like 1913, last year was distinguished by a deficiency in rainfall in comparison with the average for a number of years, and the deficiency would have been more pronounced but for the very wet weather in November and December. The average in this part of the country is 30½ inches, and the following figures indicate that in recent years we have been passing through a cycle of drier weather than usual:—

1914, 28.31ins. falling on 201 days.1913, 27.17ins. falling on 194 days.1912, 30.01ins. falling on 217 days.1911, 30.20ins. falling on 181 days.

November was the wettest month last year with 4½ inches, and June the driest with a little over 1 inch, July being a very wet month in comparison with the corresponding months of previous years, as shown by the following table —

PA		TIT	7 A	T	т.
PC A	A	N H	- 64		

			LULE	TAIL TAXABLE						
		1914.			1913.			1912.		
		Rainy			Rainy			Rainy		
	Inche	s. days.		Inches.	days.		Inches.	days.		
January	. 2.64	17		2.17	20		1.45	16		
February	. 2.59	22		1.27	15		1.39	19		
March	. 2.67	26		3.37	21		3.81	26		
April	. 1.36	14		2.77	15	***	0.42	8		
May	. , 1.73	17		1.78	16		1.81	17		
June .	. 1.06	10		2.40	17		4.13	24		
July	. 3.04	14		1.12	11		1.83	14		
August .	. 2.73	3 13		2.17	10		4.47	24		
September	1.28	3 11		2.11	8		2.22	10		
October .	. 1.11	14	***	2.51	16		2.1	18		
November	4.59	2 20		3.4	29		2.65	18		
December	3.58	23		2.46	16		3.73	23		
Total	. 28.31			27.17	194		30.01	217		
Total	. 20.01	201		21.11	194		30.01	217		

The barometrical readings somewhat singularly give the highest atmospheric pressure in the wet month of November. The maximum reading for the year was 30.504 on November 18th, as compared with 30.506 on December 18th, 1913, and 30.610 on February 1st, 1911. The lowest reading was 28.252 on February 22nd, as compared with 28.368 on March 19th, 1913, these being the lowest readings in recent years. The following are the monthly records:—

BAROMETRICAL READINGS.

	Highe	st.	Lowe	st.	Mean.	Monthly.
	Inches.		Inches.		Inches.	Range.
January	 30.392 on	1st	29.390 on	5th	29.690	1.002
February	 29.885 on	27th	28.252 on	22nd	29.361	1.634
March -	 29.826 on	28th	28.858 on	20th	29.337	0.968
April	 30.456 on	26th	28.930 on	27th	29.792	1.526
May	 30.286 or	17th	29.132 on	8th	29.857	1.154
June	 30.198 on	25th	29.582 on	7th	29.929	0.616
July	 30.076 on	9th	29.322 on	25th	29.552	0.754
August	 30.216 on	12th	29.355 on	2nd	29.793	0.860
September	 30.280 on	29th	29.082 on	14th	29.886	1.198
October	 30.268 on	4th	29.374 on	28th	29.913	0.894
November	 30.504 on	18th	29.014 on	30th	29.660	1.490
December	 30.116 on	24th	28.688 on	14th	29.319	1.428

As far as temperature goes, last year showed a mean temperature the same as in the warm summers of 1911 and 1913. In arriving at the mean, the readings of the exposed and shaded thermometers are combined with the following results:—1914, 57 degrees; 1913, 57 degrees; 1912, 55.4 degrees; 1911, 57 degrees; 1910, 55.1 degrees.

THERMOMETER READINGS.

		Solar					Te				
		Radiation.					Minimum.				Mean.
			deg.				de	g.			deg.
January			75 o	n 26th	a & 31st	t	16	on	1st		42.9
February			104 o	n 28th	1		23	on	25th		42.6
March	***		115 o	n 31st			23	on	10th	& 11th	45
April		***	133 o	n 20th	1		26	on	15th		71
May			123 o	n 15th	1		27	on	25th		96
June	***	***	129 o	n 4th	& 30th		35	on	8th		81.3
July			131 o	n 21st			36	on	4th		82.1
August			132 o	n 13th	& 14th	1	39	on	16th		82.3
September			127 o	n 5th	1		29	on	21st 8	t 29th	78.0
October	***		112 o	n 3rd			27	on	19th		65.0
November			90 o	n 10th	1		19	on	18th		50.3
December			77 o	n 31st			18	on	23rd		43.6

			Shade Shade Maximum. Maximum. deg. deg.	
January	***	***	56 on 25th & 31st 19 on 1	st 38.2
February	·		64 on 15th 23 on 2	5th 44.3
March	***		59 on 31st 24 on 1	0th & 11th 41
April	***		70 on 20, 21, & 22nd 27 on 1	5th 49
May	***		73 on 15th 29 on 2	5th 44
June			80 on 17th 36 on	8th 58.6
July	***		84 on 21st 38 on	4th 62.1
August			86 on 14th 41 on 1	6th 61.1
September		***	78 on 10th 29 on 2	21st 55.8
October			64 on 3rd & 10th 29 on 1	9th 49.6
November			59 on 26th & 30th 21 on 1	8th 42.9
December	***		52 on 2nd 20 on 2	3rd 38.4

		d	Mean at lew point.	Monthly range.	
January		 	35.6	 37	
February		 	38.6	 41	
March	***	 	38.7	 35	
April		 	43.0	 43	
May	***	 	46.0	 51	
June		 	56.2	 44	
July	***	 	54.0	 46	
August	\	 	58.0	 45	
September		 	54.1	 49	
October		 	44.8	 35	
November		 	39.4	 38	
December		 /	33.6	 32	

The following are details of wind, &c. For comparison 10 is taken as a maximum for ozone, 12 for wind, and 10 for cloud:—

			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January	***	 ***	2	7	-	6	1	8	1	6
February		 	1	-	_	3	9	15		- 1
March		 	2	1	2	3	4	2	14	3
April		 	1	1	_	1	5	9	10	3 .
May	***	 	2	2	2	3		6	9	7
June		 	2	3	_	3	-	3	9	10
July		 ***	_	3	-	5	7	2	7	7

			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
August			-	-	3	4	9	. 5	7	3
September			1	1	3	5	4	5	5	6
October			-	3	4	11	5	-	5	3
November			-	1	4	4	4	8	5	4
December	***		-	2	4	9	3	4	5	4
			-	_	-	-	-	_	-	_
1914		***	11	24	22	57	51	67	77	56
1913			5	54	21	60	31	117	34	18

In 1913 on 24 days the wind was north-west.

		(Ozone	Sun.	,	Wind.		Cloud	tempe lft.	arth	
January			3.9	 .37		4.4					
February			5.1	 2.18		7.2			 		
March		***	4.9	 2.48		5.7	***		 41		43
April			3.9	 7.17	***	5.3		4.1	 48		46
May			4.2	 3.56		3.6		5.7			50
June			3.9	 6.21	***	3.6		6.2	 59		55
July		***	4.1	 4.14		3.1		6.1	 62		59
August			3.8	 6.16	450	3.0		5.3	 61		59
September	***		3.9	 5.43		3.3		5.0	 57		58
October			2.0	 2.30		2.9		6.4	 50		53
November		***	2.9	 1.36		4.9	,	6.9	 43		48
December			3.1	 7.56		6.2		7.0	 39		44

The following local particulars upon observations made at the Denton Holme Allotment Gardens, were supplied to me by W. Eggleston, Esq.

RAINFALL IN DENTON HOLME.

The rainfall taken weekly at the Denton Holme Allotments, with a gauge of 5 inches, 2 feet above the ground and 57 feet above sea level, amounted last year to 25.185 inches, giving a weekly average of about 0.84. There have been five weeks during the year without rainfall, viz.: April one, June two, August one, and September one. The driest month was June with a rainfall of 1.04 inches The wettest was November with a fall of 4.19 inches. The evaporation, gauged from an open vessel two feet above ground, during the year was 32.37 inches. The greatest evaporation took place during the month of June, viz.: 5.95 inches; the lowest in the month of December, viz.: 0.59 inches.

RAINFALL.

A versore for		in.	2.08	2.15	9.63	2.04	2.53	2.27	2.41	3.46	2.45	3.01	2.7.2	2.89	30.35	3.
1914.	Rainfall. days on which		17	22	26	14	17	10	14	13	11	14	20	23	201	
	Rainfall.	in.	2.64	2.59	2.67	1.36	1.73	1.06	3.04	2.73	1.28	1-11	4.52	3.58	28.31	
	1913	in.	2.17	1.27	3.87	2.77	1.78	2.40	1.12	2.17	2.11	2.51	3.40	2.46	27.17	194
	1912	in.	1.45	1.38	3.81	.45	1.81	4.13	1.83	4.47	2.5.5	2.10	2.65	8.73	30.01	217
	1911	in.	1.04	3.62	1.33	2.75	2.35	8.79	69.	2.50	2.16	2.28	3.34	4.73	30 20	181
	1910	in.	2.73	4.04	1.25	. 1.69	2.07	1.53	3.76	4.58	88.	1.68	3.61	2.62	129.61	197
	1909	in.	1.69	1.50	3 14	2 52	.81	2.95	4.44	89.8	2.50	5.22	98.	3.85	83-13	162
	1908	in.	2.92	2.68	89.8	2.08	8-58	1.70	3.50	3.18	3 88	1.98	2.56	1.86	33-30	201
	1907	in.	1.16	1.74	2.65	2.06	3.30	4.64	2.38	3.32	04.9	6.52	2.68	5.64	36.49	211
	1906	in.	4.02	1.70	2.00	16.	3.80	1.46	2.04	4.72	1.30	4.40	3.02	2.48	31.88	194
_	1905	in.	1.42	1.38	2 56	2.90	1.56	1.56	2.54	3.06	2.20	2.55	2 54	1.34	24.98	182
	1904	in.			.2.54					3.54	1.14	1.54	-		26.72	198
	Months.		January	^						18t	Der		ner.	December	Totals	Total number of days \

In August last, soon after the commencement of the war, the weather forecasts for this district, which were during the past two years received daily from the Meteorological Office, South Kensington, ceased, owing to instructions by the Government.

The forecasts were most reliable and were much appreciated by the citizens, and I hope that the time is not far distant when the responsible authority will again permit us to be supplied with the daily forecasts. In the meantime the weather observations taken at the Cemetery continues to be posted up at the Town Hall.

ANNUAL REPORT

OF

CHIEF SANITARY INSPECTOR.

CHIEF INSPECTOR'S ANNUAL REPORT.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have the honour of presenting to you my Annual Report upon the work of the Sanitary Inspectors for the year 1914.

The inspection of the district has been carried out as in previous years, but owing to the depletion of the staff consequent upon three men joining the army, the activities of the department have been limited.

I am, Gentlemen,

Your obedient Servant,

C. W. HILL,

Chief Sanitary Inspector.

HOUSE INSPECTION.

Table giving name of street, number of houses inspected, and particulars of defects found.

Name of S	Street			Number of houses inspected	Defective water-closets	Choked and defective drains, gullies, and waste pipes	Dilapidated flagging and paving	Defective roofs and spouting of houses	Defective walls, floors, stair-cases, & ceilings of houses	Insufficient light & ventilation	Miscellaneous	Houses unfit for human habitation.
Nelson Street				57	5	12	7				3	
East Dale Street	***	***	***	19	3	The same of	7 2	2	***	***	1	***
Denton Street			***	114	4	9	10	30	3	***		
Dalston Street				23	1	100	3	40.00		***	4	***
Hope Street	***	***		22	1	***		6			***	
East Norfolk Str		***	***	52	6	2	8	13	2			***
0 1 0 1		***	***	44	7	8	7	19	3	. 7	1	***
East Nelson Stre				27	4	100		1000	2	***	1	***
Metcalfe Street				42	3		3	4			**	***
Garfield Street		***		22		4		8				***
Denton Crescent	***	***			5	1	4	1	9	***	2	
Elm Street			***	37	1	1	2	6	122		***	
Lime Street	***			14			1	4		***		
Thomas Street				35	2	3	4	4				
Colmore Street	***	***	***	19	3	***	1	7		***		
North Street	***		***	3	***	***	***		***	***	***	
Bridge Terrace	***	1.		19	***					***	***	
Caldew Terrace	***	***		11	***				***		***	
Randall Street				18	***					***		
Lorne Crescent	***	***	***	12		***	1	1		***	+++	200
Charlotte Street				11			***			***		**
Milbourne Street			***	62	4	3	5	7	1		3	
Milbourne Cresce				8	1	***	***		1			***
		***		32	1		1	4			***	
Chapel St., Wille		me	***	29		***	***		2	***	-	14
Jane Street Willow Holme		***		6	**	***	***			***		6
				10	**							8
Brewery Row	· MED		91	3	***							3
Mc.Cutcheon's C	The state of the s			2								2
Hutchinson's Lan				9	***	101		***		***		9
Kell's Place, Star				1	***		100		***			1
Church Street, S Stanwix Bank				4			2		1			
Stanwix Dank	***	***	***	2								2
Crown Street				00								
Crown Street Currock Street				66							ngest	
South John Street				5							Citac	
		***	***	137	-	ation.					et be	
Robert Street				40							t is i	
Water Street	nant.			43							ea in	a,
South George St	reet	***		16	cor	npreh	nensiv	e ma	nner.			
- Charles and Control	V. 175-700	-				A						
			-	1		110000						1
-				1076	51	42	65	124	24		14	
Totals					- A		B4 50	1 7 2 /5	2.2.4			45

BAKEHOUSES.

There are 45 bakehouses upon the register, 4 of which are underground bakehouses.

These premises have been carefully supervised and 24 notices served to procure compliance with the provisions of the Factory and Workshop Act, viz.:—22 for limewashing, 1 for defective paving, and 1 for a defective gully.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 44 cow-keepers and milk-sellers upon the register. Their premises have been inspected, and the provisions of the Dairies, Cowsheds, and Milkshops Order as to air space and ventilation, cleansing of milk vessels, &c., have been enforced.

COMMON LODGING-HOUSES.

There are 3 licensed common lodging-houses within the City. Several visits have been paid to these houses both day and night, and the conditions found were generally satisfactory.

FRIED FISH AND POTATO SHOPS.

There are 28 fried fish and potato shops on the register. These places have been frequently inspected, and the occupiers enjoined to observe cleanly methods in the management of their business.

ICE CREAM SHOPS.

There are 7 ice cream shops in the City. They have been frequently inspected for the purpose of ascertaining their sanitary condition, and attention has also been paid to the articles used in the manufacture of this commodity.

OFFENSIVE TRADES.

The premises whereon offensive trades are carried on have received attention, and in each case the business was found to be conducted in a proper manner.

VANS USED AS DWELLINGS.

All the vans entering the City to attend fairs, &c., have been inspected in order to ascertain their sanitary condition. On the whole they were found to be satisfactory.

URINALS AND GULLIES.

These have been regularly cleansed by the staff of men employed for this purpose.

PUBLIC MARKETS.

The Public Markets and premises where food is prepared or exposed for sale have been regularly inspected, and the necessity of the observance of hygienic measures being taken have been constantly pointed out.

DISEASED AND UNSOUND FOOD.

The following table shows the amount of food seized or surrendered as being unfit for human consumption:—

N	lature of F	ood Cond	emned,		Quantity.
Beef		7			28,884 lbs.
Mutton					423 ,,
Pork				7	791 ,,
Veal		***		1	85 ,,
Fish					56 ,,

PROSECUTION RELATING TO UNSOUND MEAT.

On November 28th two forequarters and several smaller pieces of beef, all of which were in a putrefactive condition and unfit for human consumption, were seized at a shop in the Public Market.

The forequarters and two at least of the pieces of beef were parts of an animal which, when alive, was in an emaciated and unsound condition.

The person to whom the meat belonged was prosecuted, a conviction was obtained, and a fine of £50 was imposed with costs, in all £52 9s. 6d.

PUBLIC ABATTOIR AND RAILWAY SLAUGHTER-HOUSES.

Frequent visits have been paid to the Public Abattoir, which has been kept in a satisfactory condition.

The Railway Slaughter-houses have also been frequently visited, but difficulty has been experienced in securing satisfactory conditions at the places.

The following tables give the number of animals killed during the years 1905—1914:—

PUBLIC SLAUGHTER-HOUSES.

Year.	Beasts.	Sheep and Lambs.	Calves.	Pigs.	Total.
1905	3,946	15,657	751	4,674	25,028
1906	4,059	15,274	797	4,139	24,269
1907	4,020	14,745	962	4,419	24,146
1908	3,772	14,911	760	4,064	23,507
1909	3,713	16,799	690	3,744	24,946
1910	3,562	16,491	716	3,444	24,213
1911	3,462	15,711	808	4,018	24,000
			& 1 goat		
1912	3,294	15,499	653	3,993	23,439
1913	3,441	15,424	654	3,412	22,931
1914	3,668	15,320	616	3,687	23,291

L. & N. W. RAILWAY COY.'S SLAUGHTER-HOUSE.

Year.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913	38,922		2		38,924
1914	45,494				45,494

N. E. RAILWAY COY.'S SLAUGHTER-HOUSE

Year.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913		39,426				39,426
1914		56,779				56,779

M. R. Coy.'s Slaughter-House.

Year.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913		20,289				20,289
1914	·	17,856	.,.			17,856

FOOD AND DRUGS.

During the year the articles set out in the following table have been purchased and submitted to the Public Analyst for analysis:—

The following table shows the number of articles purchased, result of analysis, and action taken :--

Remarks.	Informal sample. Another sample purchased and found to be genuine. Vendor proceeded against and ordered to pay costs of case. No action taken. (e) Informal sample from source E. As a result of the deficiency in samples E and F an appeal to the cow was made. The sample of milk from the cow was found to be genuine. Vendor cautioned. Informal sample. Vendor cautioned. """ """ """ """ """ """ """
Extent and Form of Adulteration.	Water 14% beyond legal limit (a) Contained 3.3% of added water (b) Milk fat 0.10% below legal limit (c) ". 0.10% ". ". ". (d) ". 0.10% ". ". ". (e) Non-fatty solids 0.40% below legal (f) ". 0.58% ". ". ". (f) ". 0.58% ". ". ". (a) Sample 3.3% below legal limit (b) ". 10.2% ". ". (b) ". 10.2% ". ". (c) ". ". (d) ". ". (e) Non-fatty solids 0.40% below legal (f) ". ". (ii) ". ". (iii) ". ". (iv)
Adulter- ated.	11 2 3 6 1
Genuine.	33 27 13 11 11 11 11 11 11 11 18
No. of Samples taken.	34 38 38 38 11 11 11 11 149
Article,	Milk Whiskey Cream Coffee Margarine Lard Lard Blackcurrant Jam Number of Samples taken Genuine Adulterated

FACTORY AND WORKSHOP ACTS.

The total number of workshops upon the register, excluding bakehouses, is 244, as compared with 232 in the year 1913.

These workshops have been inspected, and where any infringement of the Factory and Workshop Acts were discovered, steps were taken to have the same remedied.

17 workshops were found to be without the Factory Abstract affixed, as prescribed by Section 128 of the Act. In each instance the Factory Inspector was notified.

7 complaints were received from H.M. Inspector of Factories relating to sanitary defects in factories and workshops.

All the complaints were investigated and the defects remedied, viz.:—

Defective Sanitary	Conven	ience	 3
Unsuitable Sanitary	Conven	ience	 1
Dirty Workshop			 2
Smell from Urinal	***		 1
			~
			-

OUT-WORKERS.

7 lists of out-workers have been received, as required by the home-work provisions of the Factory and Workshop Act, 1901.

All the premises were visited and were found to be in a satisfactory condition.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—Inspection of Factories, Workshops, and Workplaces.

Including Inspections made by Sanitary Inspectors of Inspectors of Nuisances.

	Number of							
Premises.	Inspections.	Written Notices.	Prosecutions					
FACTORIES	86							
Workshops (Including Workshop Laundries)	381	54						
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	10							
TOTAL	477	54						

2.—Defects found in Factories, Workshops, and Workplaces.

	N	Number			
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	of Day	
Nuisances under the Public Health Acts:— Want of cleanliness	44	44			
Want of ventilation	1	1			
Overcrowding	2	2			
Want of drainage of floors					
Other nuisances	2	2			
Sanitary accommodation :-	2	2			
Unsuitable or defective	2	2			
Not separate for sexes	1	1			
Offences under the Factory and Workshop Acts:— Illegal occupation of under- ground bakehouse (s. 101)		-			
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)					
Other offences (Excluding offences relating to outwork, which are included in Part 3 of this					
report)				-	
Total	54	54			

Wilsondowski o America Construction and Construction of Cons		Home				
	01	UTWORK	CERS' L	ISTS, SE	CTION 1	107.
NAMED OF		Lists	received f	rom Emp	loyers.	46.6
NATURE OF WORK.	Sending twice in the year. Send		Sending	ing once in the year.		
		Outwo	orkers.		Outworkers.	
	Lists.	Con- tractors.	Work- men.	Lists.	Con- tractors.	Work- men.
Wearing apparel— Making, &c Cleaning and	6		11	1		1
Washing						**
Total	6		11	. 1		1
4	Regis	stered	Wor	kshop	s.	
Workshops on the Re	gister (s.	131) at the	end of th	e year	Numb	er.
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	mber of v	Workshop Domestic Bakehous workshops	Worksho		223 21 45 289	
	50	Other	Matte	ers.		
	Class.				Numbe	er.
Matters notified to I Failure to affix A shop Acts (s. 133 Action taken in m as remediable u	Obstract of 3, 1901) natters refunder the	erred by I Public H	H.M. Inspealth Act	Work- pector s, but	17	
not under the Fa	H.M. In	spector			7	
Reports (contraction of the contraction of the cont			sent to	H.M.	8	
Underground Bakeh In use at the end	ouses (s. 1	101):			4	

SHOPS.

Frequent inspections have been made under the provisions of the Shops Act, 1912, both during the day and at night time.

15 shop-keepers were summoned at the Police Court for infringing the provisions of the Shops Act.

In 6 instances a fine was imposed, and in 9 instances the Magistrates dismissed the case with a caution to each shop-keeper.

HOUSE REFUSE REMOVAL.

15,007 loads of refuse have been collected and removed to the refuse tips and destructor, this being an increase of 187 loads as compared with 1913.

GARBAGE.

181 loads of garbage have been removed by the Corporation carters from the Public Slaughter-houses, as compared with 132 in 1913.

INFECTIOUS DISEASES.

356 cases of infectious diseases, excluding tuberculous diseases and ophthalmia neonatorum were notified, as compared with 271 in 1913.

All the cases were investigated and reported upon to the Medical Officer of Health, and 229 cases were removed to the hospital for isolation.

DISINFECTION.

All the houses from which cases of infectious disease were removed to hospital, and rooms in which cases were isolated at home, were either sprayed with formaldehyde or cleansed under supervision of your inspectors. The bedding, clothing, &c., used, or which had been in contact with the infected person, was also disinfected by steam.

The following is a list of articles disinfected: -

Mattresses			 556
Beds			 306
Bolsters and Pillows			 1,196
Blankets			 4,230
Quilts			 819
Sheets			 286
Carpets and Rugs	12.1		 449
Wearing Apparel			 1,450
Miscellaneous Articl	es		 1,211
	Total		 10,503

HORSES.

The number of horses under my charge at the Depôt, Boustead's Grassing, is 21. 11 of these are engaged in house refuse removal, 9 are used for street cleansing purposes, and 1 is kept as a relief horse.

Summary of Sanitary Work performed in connection with Inspection of District.

	Number of		
INSPECTIONS.	Premises Inspected.	Visits Paid.	
HOUSES—			
Houses inspected in routine	1055	1175	
,, inspected on complaint	71	83	
,, , for special enquiry -	120	132	
Visits re Infectious Diseases	547	676	
Common Lodging-houses inspected -	3	28	
Common Yards, Courts, & Alleys inspected	Nume	ous	
'RADE PREMISES—			
Bakehouses	4.5	187	
Laundries	1	2	
Stables	9	42	
Cowsheds	34	86	
Milkshops	10	- 81	
Ice Cream Shops	7	34	
Fried Fish Shops	28	98	
Food Manufactories	15	37	
Slaughter-houses	4	174	
Markets	4	172	
Other Factories	71	71	
,, Workshops and Workplaces -	391	582	
Chimneys observed (smoke nuisances) -	6	35	
Visits after serving notice to supervise			
works in progress	-	1824	

Remedial Works.

HOUSES—				323
Houses disinfected	-	for d	iein-	020
" from which bedding, &c., wa	s removed	tor a	18111-	316
fection -	,	191		6
,, in which overcrowding abate	d -	100		7
Dirty houses and bedding cleansed	-		-	
Walls, damp and defective, remedie	d -	-	-	28
Roofs, guttering, or spouting repaire	d -	-	-	133
DRAINAGE—		1	-	7
New water-closets provided	d			85
Water-closets repaired and unstoppe	u -			47
Cisterns and flushing apparatus repa	irea			4
Sinks provided -	-			11
Drains reconstructed -				100
,, tested by water, smoke, or c	hemicals	-		
,, repaired and unstopped -	-	-	-	63
New gullies provided	-	-	-	36
Downspouts disconnected from sewe	r -		-	25
WATER-				29
Samples taken for analysis -				21
Wells closed -				29
Houses connected with water mains		-		20
YARDS—				
Yards paved and repaired -	-	-	-	54
Accumulations of manure, &c., rem	oved	-	-	28
TRADE PREMISES—				
Workshops cleansed and limewashe	d -	-		8
Bakehouses ,, ,,		-	-	36
Other improvements affected	- 1	-	-	10
FOOD—				71
Carcases condemned			5.0	lbs. fish
Other foods		-	96	ios. usu
VARIOUS—				
Refuse tips (visits)		-	-	48
Temporary or movable dwellings in		- "	-	138
Birds and animals improperly kept		1- 1	-	16
Smoke emission abated -		-		6
LEGAL WORK—				
Notices served, informal -		-	-	890
,, statutory -	-		-	0
Notices complied with	9	-	-	697
,, not ,,	-	-	-	193



TEXT IN GUTTERS TIGHT. GUTTERS

