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URBAN SANITARY AUTHORITY.

ANNUAL REPORT

OF

THE MEDICAL OFFICER OF HEALTH,

For the Year 1915.

Lincoln:

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CITY OF LINCOLN.

ANNUAL HEALTH REPORT FOR 1915.

BY

C. J. COLEMAN, M.D., M.A., D.P.H.,

Medical Officer of Health.

MEMBERS OF THE HEALTH COMMITTEE.

COUNCILLOR C. T. PARKER (MAYOR).

ALD. M. H. FOOTMAN (Chairman). COUN. MILNER.

ALD. H. A. COTTINGHAM.

" H. E. NEWSUM.

COUN. SMALLEY.

" W. H. KILMISTER.

" Auckland.

" J. HAGUE.

" GRAVES.

SANITARY STAFF.

MARCH, 1916.

Medical Officer of Health:

C. J. COLEMAN, M.D., M.A., D.P.H.

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CHARLES HARRISON, M.D., D.P.H.

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E. M. CHAPLIN, Ph.D., F.I.C.

Chief Sanitary Inspector:

J. K. CRAWSHAW, M.S.I.A., Cert. San. Insp. Assoc.

Assistant Sanitary Inspectors:

CHAS. STREET, C.R.S.I.. J. P. MASON, C.R.S.I.

Health Visitor:

Miss E. M. DAVIES (Trained Nurse), C.R.S.I., C.M.B.

Assistant Health Visitor:

Miss MUSGRAVE, C.R.S.I., C.M.B.

Olerk:

H. HOE.

(Now on Military Service).

Miss A. BEARD.

HEALTH DEPARTMENT, CORPORATION OFFICES, LINCOLN,

July, 1916.

MR. MAYOR AND GENTLEMEN,

I have the honour to submit to you my report on the health and sanitary conditions of Lincoln during 1915.

The chief feature of the past year has been the opening of the New Dawber Sanatorum for Phthisis in September last. This institution is administered in connection with the City Hospital.

The Health Department has continued to undertake a large amount of special work with respect to Army Sanitation, including the inspection of billets, food supplies to troops, disinfection, fumigation of military material, and the isolation of infectious cases.

I remain, Gentlemen,

Your obedient Servant,

C. J. COLEMAN.

CITY OF LINCOLN.

STATISTICAL SUMMARY FOR 1915.

Population at Census, 1911					57,285
Estimated Population by Reg	gistrar	-Genera	l to mic	ldle	
of 1915	• • • •				55,226
Area of Municipal Borough				(acres)	3,755
Average Number of Persons	per ac	ere			16
Birth-rate per 1,000 Populati	ion, 19	15			21.4
Crude Death-rate, 1915					15
Corrected Death-rate, 1915					14.68
Zymotic Death-rate					1.19
Infantile Mortality, per 1,000	o Birth	ıs			99.9
Phthisis Death-rate					.94
Respiratory Diseases Death-	rate				2.9
Malignant Diseases Death-ra	ate				.99

NATURAL AND SOCIOLOGICAL CONDITIONS OF THE DISTRICT.

THE AREA OF THE MUNICIPAL BOROUGH is 3,755 acres, and is divided into North and South Districts by the River Witham. The district on either side of the river, especially to the south, is flat, and the soil consists of river alluvium. To the north, the land rises to a considerable eminence, on which the Cathedral stands; this is the northern escarpment of the Lincoln Gap. To the south, the Canwick Hill forms the southern escarpment, and the valley through which the river flows towards the Wash is the gap formed by the prehistoric Trent. The geological formation of the hills to the north and south is oolitic limestone. The slope of the northern hill as it descends to the river is mostly covered with clay.

POPULATION.

Census of	1871	 	26,766
do.	1881	 	37,312
do.	1891	 	41,491
do.	1901	 	48,784
do.	1911	 	57,285

Estimated population at the middle of 1915, 55,226.

The estimate of the population for 1915 is made by the Registrar - General who makes allowances for deduction of males formerly resident in the district who have now joined the army.

In a circular letter on the subject the Registrar-General points out the extreme difficulty of arriving at an accurate estimate under the present conditions, and it is also pointed out that the National Register of 1915 has afforded data for compiling his estimate. It will be observed that this estimate for 1915 is about 2,000 less than the Census of 1911.

EMPLOYMENT.

The staple employment of Lincoln is furnished by the large iron foundries situate near the river bank to the south of the City. According to the figures by the 1911 Census 19,928 males were engaged in various occupations, and of this number no less than 9,576 (i.e., nearly half) were engaged in engineering, machine, and miscellaneous metal trades. 1,741 were employed in various branches of the building trade.

Before the war there were no manufacturers which employed women to any large extent. Out of a total of 5,692 employed females at the last Census 2,434 (somewhat less than half) were engaged in various forms of domestic service. The total of employed females has been greatly increased during the year by women taking the places of men in shops and other employment.

Vital Statistics.

DEATHS.

During the year 929 deaths were registered; these divided into sexes for each quarter are—

	Males.	Females.	Total.
1st quarter	173	122	295
and "	117	81	198
3rd "	81	94	175
4th ,,	145	116	261
	516	413	929

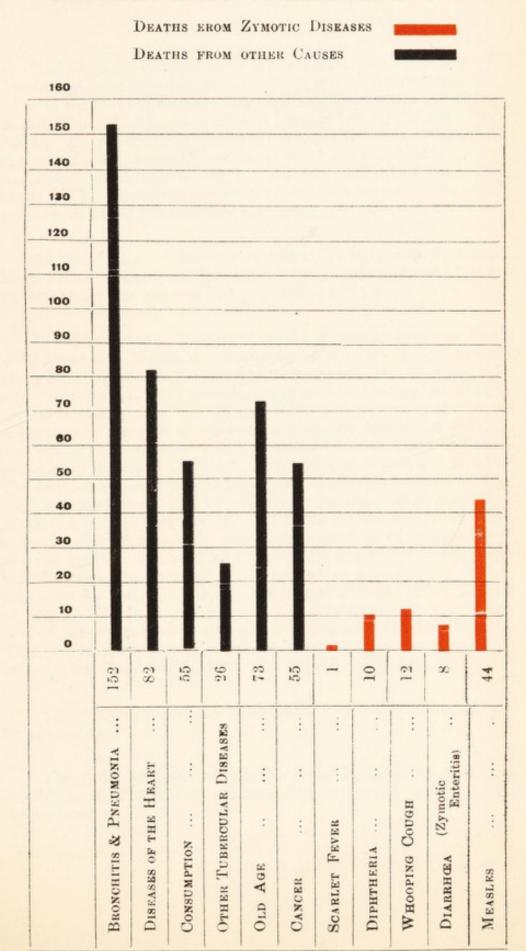
The total compares with previous years as follows:-

1901	 	 784	1908	 	 767
1902	 	 769	1909	 	 775
1903	 	 800	1910	 	 782
1904	 	 816	1911	 	 874
1905	 	 962	1912	 	 797
1906	 	 877	1913	 	 772
1907	 	 807	1914	 	 804

Sixty-six persons died in the Workhouse, 61 in the County Hospital, 16 in the City Hospital, 10 in the Lawn Asylum, two in Nursing Homes, three in H.M. Prison, three in Red House, and 58 at the 4th Northern Hospital.

CHART

SHOWING THE COMPARATIVE NUMBER OF THE PRINCIPAL CAUSES OF DEATH DURING 1915.



AND SHARE OF TRANSPORTED THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF T

The Registrar-General now sends particulars of deaths of Lincoln residents who die elsewhere, but whose deaths must be added to the total of deaths registered locally; he also gives the number of people who have died in Lincoln during the year, but who are not residents in the locality, and this number must be substracted from the total number of local deaths. I have therefore, added 42 deaths to the total of 929, and substracted 142 deaths. This leaves 829 deaths of Lincoln residents for the year 1915, which forms the basis for my future analysis.

As the deaths of Lincoln residents in 1915 were 829, and the population at the middle of the year is estimated at 55,226, the death-rate per 1,000 of the population is 15.0.

In order that this death-rate should be comparable with that of England and Wales, it is necessary to multiply it by a factor which is obtained as follows:-The mean death-rates for England and Wales (1891-1900) at certain age groups are applied to the Census populations of the corresponding age groups in the City of Lincoln. The sum of the results gives the number of deaths that would have occurred had the mortality in each sex and age group been the same as that in England and Wales as a whole. The death-rate based on this aggregate number of deaths is called the "Standard Rate." The difference between this standard death-rate for the City and the mean rate for the whole country is due to differences of sex and age constitution of population; and the quotient obtained by dividing the death-rate in England and Wales by the standard death-rate gives a multiplier called the factor for correction, which, when applied to the crude deathrate in the City in any given year, will eliminate a large proportion of the error due to difference in sex and age distribution. This factor has been supplied for Lincoln from the Census of 1911 by the Registrar-General, and is given as .9787.

The number of deaths from Phthisis is rather more, i.e., 52 as against 44.

The total number of deaths from Respiratory Diseases exclusive of Phthisis is considerably increased, i.e., 163 as against 108.

There are 80 deaths from Heart Disease as against 100 in 1914.

As regards Zymotic Diseases there has been a large increase in number of deaths due to Measles, *i.e.*, 44 as against 4; also in Whooping Cough, *i.e.*, 11 as against 1.

Ten deaths were attributable to Diphtheria as against 9 in 1914. One death occurred from Scarlet Fever and two from Typhoid Fever. The number of deaths from Zymotic Diarrhœa have been diminished, *i.e.*, 8 as against 23.

Seni-decay accounted for 73 deaths, and Malignant Disease for 54 deaths.

The figures for the years 1912-1915 are compared below :-

					1912.	1913.	1914	1915
Zymotic Diseases, De	eath-ra	te per	1,00	0	1.02	.92	.6	1.19
Respiratory "	,,	"	"		1.8	1.9	1.7	2.9
Phthisis "	"	"	"		.95	.95	.73	-94
Other Tuberculous Diseases	23	,,	,,		.2	.24	.48	-4
Malignant Disease	,,	>>	33		1.06	1.04	1.1	.99

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1915.

		lett Der								Deaths r of resi- non-resi- ts in tions in istrict.
CAUSES OF DEATH.	All Ages	Under 1 year	under	under	under	under		under	65 & up- wards	otal sether ts or deni stitu
All Causes { Certified Uncertified	823	109	61	47	33	29	87	162	295 1	
1 Enteric Fever	2 0 44 1 12 10 29 0 55 7 19 55 2 6 82 85 67 17 8 4 2 1 14 0 7 47 17 3 159 73		19 2 7 10 2 2 2 7 2 2 7	14 1 3 1			2	1 9 14 23 18 7 4 1 1 8 1 1 39 1 39		1 1 1 9 4 17 3 18 1 1 3 12 8 12 6 6 1 5 1 7 6 1 90 6
Totals	829	112	61	47	35	29	87	162	296	219

INFANTILE MORTALITY.

118 deaths occurred in Infants under one year of age, giving a mortality of 99.9 per 1,000 births. Forty-one deaths occurred within a month of birth.

Premature Birth, Atrophy, Malformation and Debility were responsible for 48 deaths, and forms the largest factor in the mortality.

Pneumonia and Bronchitis were responsible for 23 deaths.

As regards Zymotic Diseses, five deaths were due to Measles, and four to Whooping Cough.

Gastro-Enteritis caused seven deaths.

Attempts to reduce Infant Mortality were never more important than in the present crisis, as the future welfare of the nation will depend upon the vitality and numbers of the coming generation.

INFANTILE DEATH INQUIRIES.

Number of deaths investigate	ed, 101 :—		
Breast fed			27
Artificially fed			35
Breast and artificial food			17
Died shortly after birth		•••	22
		Total	101

HOUSING CONDITIONS NOT FAVOURABLE TO INFANT HYGIENE.

Houses	s with unsuitable storage ac		ion	25
>>	with no through ventilatio	n		12
"	dirty and ill-kept			3
33	damp			I
,,	where parents were in lodg	gings		2
				_

DEATHS OF ILLEGITIMATE INFANTS.

Nine of the 118 deaths were of illigitimate infants.

Details of ages and sex and cause of death :-

Sex.	Age.	Cause of Death.
Male	8 months.	Bronchitis.
,,	I month.	Bronchopneumonia
1)	3 months.	,,,
Female	ı day.	Premature Birth.
,,	2 days.	Inanition.
17	16 days.	Premature Birth.
,,	5 minutes.	22
"	4 months.	Inanition.
15	7 months.	Gastro-Enteritis.

INFANT MORTALITY TABLE.

1915. Nett Deaths from stated causes at various Ages under 1 year of age.

	-	-	-								
CAUSES OF DRATH.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months,	3 months and under 6 months.	6 months and under 9 months.	9 mouths and under 12 months	Total Deaths under I year.
All causes { Certified Uncertified											
Small-pox Chicken-pox Measles Scarlet Fever Whooping Cough									 1	 4 	5 4
Diphtheria and Croup Erysipelas Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Disease	 s				 1	 1	 1 	3	 1		 1 6
Meningitis (not Tuberculos Convulsions Laryngitis Bronchitis Pneumonia (all forms)	is)	i ::: :::		 1	 1	1 1 1	 1 2 3	1 1 1 1 4	1 4 3	 2 3	2 7 1 9 14
Diarrhœa Enteritis Gastritis Syphilis Rickets Suffocation, overlying					 1	 1	··· 1 ···	 2 1	4	ïi	7 1 2
Injury at birth Ateleclasis Congenital Malformations Premature birth Atrophy, Debility and		 1 1 19			 1 2	 2 1 27	1 1 1		 1	 1	1 2 4 28
Marasmus Other Causes		5		1		6 	7 	2 2	1 5	 1	16 8
Totals		27	3	5	6	41	20	19	24	14	118

during the calendar year of 1915 . . . (illegitimate 65.

during the calendar year of 1915. . . (illegitimate infants 9.

BIRTHS.

During the year 1915, 1189 births were registered of which 55 were illegitimate. These divided into sexes for each quarter of the year, were as follows:—

	Males.	Females.	Total.
2nd Quarter 3rd Quarter	176 132 144 147	164 148 151 127	340 280 295 274
	599	590	1189

Information supplied by the Registrar-General showed that there were eleven outward transfers and four inward, leaving a balance of seven births to be subtracted. The net number of births belonging to the City of Lincoln is therefore 1182. The birth-rate for the year was 21.4 per 1,000 of the population.

COMPARATIVE TABLE OF BIRTH-RATE, DEATH-RATE AND INFANTILE MORTALITY

during 1915:-

	Annual			
-	Births.	D	eaths.	Deaths under 1 Year per
	DITUIS.	Crade.	Corrected.	1,000 Births.
England and Wales 96 Great Towns, including	21·9 22·8	15·1 15·6	14·8 15·9	110 117
London	21·6 20·7 21·4	14·8 14·8 15·1	14·2 13·6 14·8	114 98 99·9

VITAL STATISTICS OF WHOLE DISTRICT DURING 1915 AND PREVIOUS YEARS.

		Births,			Total Deaths Registered in the		ferable ths.	Nett Deaths belonging to the District,				
	Population estimated		Ne	tt.:		rict.		3 2	Under	I year.	Atali	Ages,
YEAR.	to Middle of each Year.	Uncor- rected Number.	Number.	Rate.	Number,	Rate.	Of Non-resi- dents regis- tered in the District.	Of residents not registered in the District.	Number.	Rate per 1,000 Nett Births	Number.	Rate.
1	2	3	4	5	- 6	7	8	9	10	- 11	12	13
1910	55,474	1,323		23.58	782	14.1	40	5	138	104.3	748	13.48
1911	57,507	1,441	1,439	25.02	874	15.19	57	31	196	136.2	848	14.74
1912	58,358	1,389	1,384	23.71	797	13.65	83	21	142	102.6	735	12.33
1913	59,322	1,430	1,423	23.98	772	13	65	33	150	105.4	740	12.47
1914	60,172	1,335	1,336	22.2	804	13.3	74	21	123	92.1	751	12.4
1915	55,226	1,189	1,182	21.4	929	16.2	142	42	118	99-9	829	15.1

Area of District in acres 3755

Total Population at all ages ... 58,285 At Census Total families or separate occupiers 13,281 1911.

PRESERVATION OF INFANT LIFE.

NOTIFICATION OF BIRTHS ACT.

Under the Notification of Births Act, every birth should be notified to the Medical Officer of Health within 36 hours. This should be done by a person in attendance at the time or within six hours of the occurrence, and by the father of the child if resident in the house at the time. This Act does not affect the registration of the birth with the Registrar.

During the year it was found necessary to send out 182 notices to parents, pointing out their duties under this Act, and asking them to comply forthwith. In every case the warning given was followed by receipt of the proper notification.

On Wednesday afternoon a Clinic for Mothers and Babies has been established, and medical advice and treatment given to suitable cases.

The work of the year may be briefly summarised as follows:--

Birth enquiry visits	 	1027
re-visits		2116
Wednesday afternoon	ce at Clini	
Attendances of Mothe		
advice from Health		4992

Infant Welfare was first seriously undertaken in Lincoln by a Society now defunct, termed the Lincoln Infant Health Society. The Society was formed, I believe, in 1907, and employed a trained Health Visitor. The Notification of Births Act was adopted by the City in 1908, and the services of the Societies' Health Visitor was placed at the disposal of the Corporation. In 1910 the Society determined to dissolve as it was considered the duty of the Lincoln Corporation to carry on the work that had been commenced. The Corporation thereupon appointed their own Health Visitor. In 1911 a start with an Infant Clinic was made, and 155 attendances of Mothers with Babies took place during the year. In November, 1914, an additional Health Visitor was appointed by the Corporation, and in 1915 arrangements were completed to give medical advice at the Infant Clinics. During 1915, no less than 8,849 attendances of Mothers were made at the Wednesday afternoon Clinic and 4,992 attendances were made at the Corporation Offices on other days in the week, to interview the Health Visitors.

In 1915 a mutual arrangement was made between the National Union of Women Workers and the Lincoln Corporation for the combined use of the same premises on Wednesday afternoons, enabling the former to manage a School for Mothers on the same afternoon as the Corporation Infant Clinic.

MIDWIVES' ACT.

Twelve Midwives gave notification of their intention of practising during the year. Thirty-two records of sending for medical help were notified to the Health Office, in accordance with the requirements of the Central Midwives' Board.

Twenty-six still births were notified

Twenty-four visits of inspection to Midwives were made re their house, bag, and appliances. Ophthalmia Neonatorum has now been made compulsorily notifiable, and two cases were notified by Midwives during the year; they were instructed as to their duties in cases of discharge from the eyes in the newly born,

Sixteen visits were made in this connection by the Health Visitors.

PREVALENCE AND CONTROL OF ACUTE INFECTIOUS DISEASE.

SCARLET FEVER.

During 1915 there were 119 cases of Scarlet Fever notified in the City, as against 170 in 1914.

The number of cases notified in each year for the past ten years is given below:—

1906—137	1911-221
1907-553	1912—97
1908—188	1913-92
1909-209	1914-170
1910-170	1915—119

There was one death attributable to this disease, which is a sufficient guarantee of its mild character.

Twenty-nine of the notified cases were removed to the City Hospital, and made satisfactory progress without any serious complications.

As in previous years the Medical Officer of Health offered his services to medical men in cases of doubtful diagnosis.

On the notification of a case, details of the sanitary condition of the premises and any possible source of infection were investigated.

DIPHTHERIA.

Fifty-six cases of diphtheria were notified during 1915, as compared with 95 notifications in 1914.

Ten deaths resulted from this cause, giving a case mortality of 19.6 per cent. This is an increase on the mortality as compared with the four previous years, as will be seen from the table below:

1904	case	mortality	33.2	1910	case	mortality	8.5
1905	,,	٠,	19	1911	19	,,	6.9
1906	,,	,,	17	1912	,,	"	2.4
1907	,,	,,	16	1913	"	,,	4.4
1908	23	"	12.5	1914	,,	"	9.4
1909	,,,	.,	0.11	1915	,,	,,	19.6

The notifications received during the past ten years are as follows:—

1906-279	1911—145
1907-102	1912-122
1908-152	1913-67
1909-397	1914 95
1910-152	1915— 56

Twenty-two of the cases were removed to the City Hospital.

A large amount of work was done in the Bacteriological Laboratory with respect to diagnosis and contact swabs.

Antitoxin was given to medical men when applied for on request at the Health Offices, as in former years.

TYPHOID FEVER.

Only three cases of Typhoid Fever were notified in 1915. Two of these cases died.

CASE I. Male.—This man had only been resident in the City for a few days and was taken ill immediately afterwards.

He was visited by the Medical Officer of Health immediately after notification, but found to be moribund. Bacteriological confirmation was therefore impracticable.

CASE II. Male.—This case was removed to the City Hospital and died in that Institution. The symptoms were typical, and were confirmed bacteriologically. Origin unknown.

CASE III. Female.—This case was removed to the City Hospital and made a good recovery. Bacterological examination of blood and the clinical symptoms were entirely negative.

I am of the opinion that this was not a

case of Typhoid Fever.

PREVALENCE & CONTROL OVER TUBERCULOSIS.

PULMONARY TUBERCULOSIS.

Under the Tuberculosis Regulations, 1912, 102 cases of Phthisis were notified.

The total number of deaths from Phthisis in 1915 was 55, and equivalent to a death-rate of .99 per 1,000.

DEATHS FROM PHTHISIS SINCE 1903.

Year.	Est. Pop.		aths. er 1,000.	Year.	Est. Pop.		aths. r 1,000.
1904.	51,152	49	.93	1910.	55,474	45	.85
1905.	51,882	49	.92	1911.	57,285	60	1.4
1906.	52,611	51	.95	1912.	58,358	56	.96
1907.	53,341	68	1.38	1913.	59,322	57	.95
1908.	54,017	68	1.3	1914.	60,172	44	.73
1909.	54,765	63	1.18	1915.	55,226	55	.99

Occupations of persons notified as suffering from Pulmonary Phthisis:—

Males.		Female	es.	
Foundry Workers	 20	House Wives		 19
Miscellaneous	 14	Domestic Service		 3
School Children	 10	Children		 12
No occupation	 6	No occupation		 4
Clerks	 2	Dressmakers		 2
General Labourers	 5	Miscellaneous		 5
	F7			45
	57			45

Housing Conditions of Notified Cases. List of unsatisfactory Houses.

No. of houses damp or dark			 9
No. of houses found dirty			 5
No. of houses with no through	ventilati	on	 II
No. of houses over-crowded			 5

FORMS OF TUBERCULOSIS OTHER THAN PHTHISIS.

Forty-three cases were notified during the year according to the following diagnosis:—

Tuberculous Glands of Neck Tuberculous disease of Bone Tuberculous disease of Mes- entry or Bowels Tuberculous disease of Joints	3 30 2	Tuberculous Mediastinal Tuberculous Larynx	Glands disease	 3
Tuberculous disease of Men-				-
inges	I			43

ADMINISTRATIVE MEASURES in force in Lincoln for dealing with Tuberculosis:—

These have been given fully in the report for 1914.

Arrangements have now been completed for advice and treatment to be given at the Dispensary for Dawber patients as well as facilities for institutional treatment. Fifty insured persons and fifteen Dawber patients attended the Dispensary in 1915.

The Phthisis Nurse paid 3,130 visits to patients during the year inclusive of 119 visits to bed-ridden cases.

The new Dawber Sanatorium for Phthisis has now been completed and was formally opened in September last.

NON-PULMONARY CASES.

The notified cases are visited by the Health Officials, and any deleterious conditions of hygiene are dealt with, but the treatment must necessarily be largely carried on by charitable organisation such as the County Hospital and Dispensary.

HOSPITAL. REMOVED CASES TOTAL 44 179 00 58 68 : With'm TOTAL CASES NOTIFIED IN EACH LOCALITY. (e.g. Parish or Ward) of the District. 01 4 17 Park. OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1915. 15 : : Minster T 10 2 9 20 Castle. 22 : 12 6 : : 23 : : : 138 Oar. 10 : : : 29 64 Abbey. α 19 : : 1-26 11 -65 and upwards. : 45 to 65. :: 11 9 : : : : NUMBER OF CASES NOTIFIED. 25 to 45. 9 03 13 00 : 37 At Ages-Years. 15 to 25. : 0 8 17 35 : 5 to 15. 10 : 38 83 : : 17 24 : 1 to 5. 13 10 : : : : Under 1. 9 ages. 119 43 99 68 367 : CASES TOTALS..... Cerebro-spinal Meningitis.... Ophthalmia Neonatorum ... Other forms of Tuberculosis. Typhus Fever..... Scarlet Fever Enteric Fever..... NOTIFIABLE DISEASE. Erysipelas Relapsing Fever (R) Continued Fever (C) Diphtheria (including)
Membranous croup) Pulmonary Tuberculosis Poliomyelitis Cholera (C) Plague (P). Small Pox Puerperal Fever....

THE NON-NOTIFIABLE DISEASES.

MEASLES.—The disease was very prevalent in the latter half of the year. The number of deaths in age periods is given below:—

Under 1 year	 		5
1 and under 2	 	***	19
2 and under 5	 		14
5 and under 15	 		5
Over 15	 		I
			-
			44
			-

The prevalence and mortality of the disease is extremely irregular, but it would appear that Measles is present in epidemic form every third or fourth year.

By courtesy of the Education Department, I give a list of cases occurring among scholars of the Elementary Schools:—

Total number of cases, 827.

Jan. —	April	61	July	108	Oct	142
Feb. 6	May		Aug.		Nov.	195
March 7	June	103	Sept.	97	Dec.	

Measles became compulsarily notifiable on Jan. 1st, 1916. and therefore in the future more exact data will be available It is worthy of note that this disease has caused more deaths, in Lincoln, during 1915, than any of the notifiable diseases. Measles is extremely infectious by direct contact, especially in the early or catarrhal stage. It is doubtful if it is ever carried by a third person from patient to patient. One attack as a rule protects for life. Measles is extremely fatal to young children if broncho-pneumonia supervenes. At the present time arrangements have been made for the attendance of a Dawber Nurse on all notified cases of the poorer class where nursing assistance is required. Instructions and precautions against the spread of the disease are given from the Health Office on notification. I give below a copy of the printed form on measles which is supplied by the Lincoln Health Department.

MEASLES.

After 1st January, 1916, every Parent or Guardian or other person, as soon as he becomes aware of, or has reasonable grounds for supposing that, any person in his charge is suffering from Measles or German Measles shall, unless the case has been already notified by a Medical Practitioner, forthwith notify the case o the Medical Officer of Health, stating the name and age of the patient and his address.

Measles is highly Infectious and Dangerous.

Measles is very catching and very dangerous to children. It is specially dangerous to those under five years of age. Almost 10,000 children die every year in England and Wales from measles, and over 9,000 of these are less than five years of age. The older the child, the less dangerous an attack of measles becomes.

Measles may lead to Consumption.

Even when measles does not cause death, it may lead to the development of convulsions, consumption, bronchitis, chronic diarrhœa, blindness or deafness. Every care should, therefore, be taken to prevent children from catching measles.

Measles is infectious from the Beginning.

At its commencement measles is like an ordinary heavy

cold, and it is very infectious at this stage.

The rash does not appear till a few days later. It is therefore important that, when measles is about, all children suffering from a heavy cold in the head, with red and running eyes, sneezing, and running nose, should, if they have not already had measles, be kept indoors apart from other children and preferably in bed, and watched for several days to see if a rash comes out.

Picture Palaces and Measles

It is most important that they should not be allowed to attend school, picture palace, church or Sunday school, as they would spread the disease.

Notification of Measles.

The Medical Officer of Health must at once be notified of any known or suspected cases of measles. The parent should send word to the Head Teacher to explain the cause of absence of any school children. Official instructions as to which of the other children should be kept from school should be strictly carried out; and these children should not be allowed to attend Sunday school or enter neighbours' houses.

MEASLES IS SERIOUS,

Call in a Doctor.

If the illness proves to be measles, a doctor should be called in, as complications may set in and cause death or severe illness.

The child must be kept quiet in a well-aired room, apart from other children.

The window and bed should be free from hangings.

The mouth, eyes, nose and ears should be cleansed frequently with clean rags, which should be burnt immediately after use as the discharge is infectious.

For the Person nursing Measles.

The person looking after the patient should be careful to wash her hands and change apron or overall before attending to other children.

When the Patient is Better.

After the illness is over, all clothing and bed-linen should be washed, and the room thoroughly ventilated and scrubbed

Great care must be taken to avoid chill when the patient gets out of bed.

The patient should not return to school for a month, and during this time should not be allowed to mix with other children.

WHOOPING COUGH.

Whooping Cough was far more prevalent than in 1914 and 12 deaths occurred. Apparently this disease often accompanies an outbreak of measles

The following figures show the number of absentees from School from this cause:—

Total number of cases, 105.

Jan.	I	April	2	July	8	Oct.	9
Feb.		May	0	Aug.		Nov.	
March	0	June 1	0	Sept.		Dec	-

MUMPS AND CHICKEN-POX.

Total number of cases in Schools, 413.

 Jan.
 Feb.
 Mch.
 April
 May
 June
 July
 Aug.
 Sept.
 Oct.
 Nov.
 Dec.
 Total

 Mumps
 ...
 31
 23
 11
 102
 7
 30
 34
 11
 3
 8
 3
 1
 277

 Chicken Pox 12
 25
 17
 27
 14
 12
 15
 5
 1
 2
 14
 6
 136

No deaths resulted from the above diseases. It will be noticed that both diseases were most prevalent in the first half of the year.

INVESTIGATION OF OTHER DISEASES.

There were no cases of SMALL POX, ACUTE POLIO-MYELITIS, reported during the year.

INFANTILE DIARRHŒA was not very prevalent in 1915. In cold wet summers the mortality from this cause is very low, but attains epidemic form in August and September in those years when the Meteorological conditions favour its spread. I would again call attention to the extreme importance of the constant removal of accumulation of garbage and manure in the summer months in order to limit the breeding of countless millions of flies, which undoubtedly infect food and assist in spreading diarrhœal diseases. Posters on the importance of the fly question and its remedy are displayed by the Health Department in the summer months.

CANCER.—The incidence of cancer in Lincoln is remarkably constant, and the mortality for the past ten years is about one per 1,000 per annum. The disease apparently shows little inclination to increase or decrease.

CEREBRO-SPINAL FEVER.—One case of this disease was reported in April, 1915, and was removed immediately to the City Hospital.

The patient was a male child, age 5 months, who had been brought by its parents for a week-end visit to the City from Stamford.

Death resulted in forty-eight hours. All contacts were examined but showed no bacteriological evidence of the disease,

SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER SUPPLY.

The Elkesley water supply continues to give every satisfaction. As regards hardness I may say that a sample taken at the end of 1915 showed that the total hardness was equivalent to 7 degrees (Clarke's Soap Test) and the permanent hardness to 6.3 degrees.

This is extremely satisfactory from a domestic point of view.

RIVERS AND STREAMS.

These include the River Witham, the Foss Dyke, the Sincil Dyke, and the several smaller dykes, such as the West Drain, etc. In was mentioned in my last report that the Sincil Dyke had been polluted by a flow of oil and condenser water from certain works. At present arrangements have been completed to abstract oil when the volume of the water in the dyke is low, but there is still some contamination when water reaches flood level.

SEWERS, SEWAGE DISPOSAL & SCAVENGING.

I am able to give the following statistics by courtesy of the City Surveyor:—

Amount of Refuse disposed of for 1915. 17,053 loads or 13,734 tons.

> WEEKLY AVERAGE. 328 loads or 264 tons.

The Refuse Destructor was described in the Annual Report for last year.

NIGHT SOIL.

During the year 330 tons were sold to farmers, the quantity during the previous year being 600 tons.

CLOSET ACCOMMODATION.—The City Surveyor informs me that at the present time there are 48 box closets, 39 up-hill and 9 down-hill, and also 28 privy vaults, 21 up-hill and 7 down-hill. This makes a total of 76 instances of the conservancy system in Lincoln, the remaining sewage being dealt with by the water carriage system.

The total mileage of the Main Sewers (exclusive of surface water drains) is as follows:—

			3	files.	Yards.
Brick Sewers		 		2	1053
Pipe Sewers		 		45	65
TOT.	AL	 Miles 47		ards.	

Flushing Manholes with Automatic Syphons. The following is a list, with the dates of their construction:—

- 1883. Northgate: Junction with Nettleham Road.
- 1897. Carholme Road: West end of Sewer, beyond Hewson Road.
- 1902. Riseholme Road: At north end of sewer.
- 1903. Long Leys Road: Opposite City Hospital.

One sewer flushing van is at work daily. They flush every sewer once in ten days, except on occasion of heavy rainfall.

The number of public ventilating pipes in the City is 276.

SEWAGE PUMPING STATION.—At the Sewage Pumping Station pumping is carried on from 6 a.m. to 7 p.m., and longer if required. On Sundays considerably shorter hours are worked. A record is kept, showing the height of the sewage in the pump well at various hours during the day and night.

THE SEWAGE FARM.—This farm, exclusive of 14 acres in the Fen used as sludge lagoons, contains 82 acres, of which 31 are under-drained. Part of the land is rented; the remainder is the property of the Corporation.

A list of Bacteria Beds and Sprinkling Filters was given last year.

Sewage pumped :-

Year ended March 31st.	Rainfall in inches.	Total Quantity. Gallons.	Daily Average Gallons.
1913	27.9	830,149,310	2,274,382
1914	17.01	639,407,535	1,751,800
1915	22.66	710,944,215	1,947,792
1916	25.31	736,194,455	2,011,491

PREMISES WHICH CAN BE CONTROLLED BY BYE-LAWS OR REGULATIONS.

Mr. CRAWSHAW reports:

COMMON LODGING HOUSES.

Eight houses are registered as Common Lodging Houses, with accommodation for 224 lodgers:—

Arthur Taylor 31, Waterside	South,	with	accommodatio	n for	53
Joseph Smith, 27, Waterside	North	,,	,,	"	16
Charles Austin, 33, ,,	,,	,,	"	,,	54
Thomas Austin, 2, Thorngate	9	11	,,	"	38
Edwin Holland, 14, ,,	11	,,	1)	,,	7
Edwin Holland, 16 ,,	"	,,	,,	21	26
,, ,, 12 ,,	"	21	"	"	10
James H. Page, 8, Brayford	Street	,,	"	,,	20

These places have been visited regularly.

SCHOOL HYGIENE.

PREVENTION OF SPREAD OF INFECTIOUS DISEASES IN THE SCHOOLS.—In previous Annual Reports I have given the routine adopted in full.

SCHOOLS CLOSED FOR INFECTIOUS DISEASE DURING 1915.

	School & Department	Closed on	Until	Reason.
1.	Dio, Prac. I	September 17	October 11	Measles.
2.	Eastgate Infants'	December 2	After Xmas	,,
3.	Monks Road Inf.	October 12	Nov. 2	,,
4.))))))	November 5	Nov. 22	,,
	St. Faith's Inf.	September 17	October 11	,,
6.	St. Martin's Boys	April 6	April 26	Mumps.
7, 8.	" " Girls	,, 6	,, 26	,,
8.	St. Peter's I.	Nov. 12	Nov. 29	Measles
9.	Spring Hill	April 6	April 26	Mumps.

CLEANSING OF SCHOOLS.—The Schools are cleansed under regulations made by the Education Committee which have been carried out very satisfactorily. A regular monthly inspection of the Out-offices is made, and adequate supplies of disinfectant are provided where and when necessary.

SCHOOL BUILDINGS.—The proposed new Counci, School in Mount Street and the building of a new Infants Department at the Monks Road Council School, both of which were referred to in my last report, are still postponed owing to War emergency.

OPEN-AIR SCHOOL.—The Lincoln Open Air School, opened in October, 1913, is still being carried on with satisfactory results and Lincoln has the satisfaction of knowing that several other Education Authorities are so much interested in the Lincoln Open Air School and its working, that they have started Open Air School schemes in their own district.

FOOD.

MILK SUPPLY.—Thirty-three cowkeepers in the City are supplying milk. Two cowsheds changed hands during the year. Ten persons were registered for the sale of milk and four have gone off the register by reason of death or leaving the City.

MEAT INSPECTION.

Unsound meat and food destroyed during 1915:-

					st.	lbs.	
Beef	9 carcas	ses with	offals	 	377	II	tuberculous.
,,	31 "	,,	,,	 	117	0	non-tuberculous.
,,	parts of			 	96	7	tuberculous.
,,	", "	5	,,	 	25	II	non-tuberculous.
Pork			th offals	 	523	0	tuberculous.
,,	16 ,,	,,	,,	 	150	4	non-tuberculous.
"	parts of	62 car	cases	 	205		tuberculous.
,,	,, ,,	5	11	 	10	8	non-tuberculous.
Mutton	7 carcas			 	38	6	unsound
Veal	I carcas	se with	offals	 	3	0	,,
Offals,	miscella	neous		 	128	10	"
Fish				 	13	2	"
Rabbits	142			 	16	0	19
Hares	3			 	I	0	,,
Pidgeons	27			 	0	13	11

SLAUGHTERHOUSES.

One Abattoir belonging to the Corporation.

PRIVATE SLAUGHTERHOUSES.

I.	Herrick, J. W .	 Craven street	 licensed
2.	Nissler, J. A. & Sons	0	 ",
	Sowerby, Geo	 7, Sincil street	 registered
4.	Clayton, Thomas	 171, High street	 "

SLAUGHTERHOUSES (continued).

5.	Maddison, J. B	St. Paul's lane		registered
6.	Maddison, J. B Hill, Mrs. R. & Taylor Bro	s. Alfred street		,,
7· 8.	Horton, E	Peel street		,,
8.	Dalton, S. S	Boundary street		"
9.	Tinker, G			29
10.	Varty, J	Grantham street		,,
	Pateman, F. J			**
12.	The Industrial Co-operati	ve Society, Sincil Ba	ınk	
	including Slaughterhon A. A. Mays. H. Gaunt. Booth Brothers. Foster & Son.	ses occupied by—		

SALE OF FOOD AND DRUGS ACT, 1875-1899.

List of samples submitted for analysis during 1915:-

New milk	 		50	
Skimmed milk	 		7	
Milk for sediment	 		15	
Butter	 		19	
Cream	 		7	
Preserved cream	 		2	
Gregory powder	 		I	
Baking powder	 		3	
Rice	 		2	
Olive oil	 		2	
Camphorated oil	 		3	
Liquorice powder	 		I	
Cream of tartar	 		I	
Laudanum	 		2	
Paregoric	 		3	
Whiskey	 		3	
Rum	 		I	
Brandy	 		1	
Gin	 		I	
Lard	 		4	
Cheese	 		I	
Pepper	 		I	
Flour	 		2	
Bread and Butter	 		I	
		_		

100					_			32								
Information as to previous Convictions.		1	1	1	2nd Conviction	1	1	2nd Conviction	1	1	1	1	1	25	1	i
SAMPLES. Course adopted where proceedings are not instituted. B. Porther countles were taken from wholesale	fulling samples were were firm.	The attention of the manufacturers was called to this and the matter was remedied.	Further samples genuine.	Further samples were purchased but were always properly labiled. No action was taken		1	Informal samples	Same				No action taken.		Explanation asked for and further samples taken. Action deferred.	1	No action taken.
ADULTERATED Speedings Legal Proceedings C. & D. Acts, under Acts other esult.	1	1	1	1	1	1	1	1	1	1	1	T	1	1	1	1
OF Legal Proder S. of F	ı	ı	ı	1	Fined £5 7s. 0d.	Fined £2	1	Fined £3	Cases dismissed	summons were not signed by the same	information.	1	Fined £1	1	Fined £1	ı
PARTICULARS Result of Analysis. un	2.4% available CO2	$5.52\%~\text{available}~\text{CO}^2$	21.6% Camphor 78.4% Oil	0.4% Boric Acid	6.83°/o S.N.F. 2.80°/o Fat	7.86% S.N.F. 2.70% Fat	7.68% S.N.F. 2:10% Fat	8.36°/o S.N.F. 2°°/o	8.25°/o S. N.F 0.46°/o F at	8.5°/, S.N.F. 2.55°/, Fat	8.32°/o S.N.F.	8.37°/o S.N.F. 3.07°/o Fat	Dirt 5 parts in 100,000	7.83°/, S.N.F. 3.12°/, Fat	7.9°/o S.N.F. 3.7°/o Fat	2°/, deficient in Camphor.
Identification Number.	01	26	œ	13	15	17	36	38	45	47	48	70	75	73	74	107
	J	ar	Oil	:	:	:	:	:	.: ::	:	:		:	:	:	li Oil
Name of Article.	Baking Powder	Baking Powder	Camphorated Oil	Cream	New Milk		2 2	:	Skimmed milk	New Milk	Skimmed milk	New milk	:	:	11 11	Camphorated Oil

HOUSING.

The following are the particulars of the action taken during 1915 under the Housing, Town Planning, etc., Act, 1909:—

No. of Dwelling- houses inspected under and for the pur- pose of Section 17.	Number considered to be in a state so dangerous or injurious to health as to be unfit for human habitation.	Number of representa- tions made to the Local Authority with a view to the making of closing orders.	Number of Closing Orders made.	Number of Dwelling- houses the defects in which were remedied without the making of closing orders.	Number of Dwelling- houses which, after the making of Closing Orders, were put in a fit state for human habitation.	The general character of the defects found to exist.
321	2		-	106	_	Dampness, in- sufficient light and veutilation, defective drain- age, and unsuit- able accom- modation for house refuse.

Two houses were closed by private arrangement.

CHARACTER AND SUFFICIENCY OF HOUSES.

There are in the City 14,246 houses, of which 13,004 are within the limit of rent applicable to the District under Sec. 14 of the Housing and Town Planning Act, viz., £26 per annum.

170 houses were brought into assessment between Sept. 30th. 1914, and Sept. 30th, 1915.

NEW HOUSES.—We learn from the City Surveyor that for the year 1915, 55 new houses were built.

FACTORY AND WORKSHOPS' ACTS. — The statistical tables given below show the details of inspections under the Act during the year.

INSPECTIONS.

PREMISES	NUMBER OF						
TREATISES.	Inspections.	Written Notices.	Prosecutions,				
Factories Workshops Workplaces	290 298 88	4 5 					
Total	676	9					

DEFECTS FOUND.

	NUM	No. of		
PARTICULARS.	Found.	Remedied.	Referred to H.M. Inspector	Prose- cutions.
Want of Cleanliness	30	30	T TA	
Want of Ventilation	4	4		
Overcrowding		1		
Want of Drainage of Floors				
Other Nuisances	1	1		
Insufficient	3	3		
Unsuitable or Defective	10	10		
Not separate for sexes Illegal occupation of underground				
Bakehouses				
ments for Bakehouses	2	2		
Total	50	50	-91	

ESOME			Notices	act year	1	0			Number	(3)	2 0 2 2 0 0	
OUTWORK IN UNWHOLESOME	PREMISES.	SECTION 108.	Instances.		1	0		MATTERS.			spector of Factories:— t of the Factory and Workshop Notified by H.M. Inspector Reports (of action taken) sent to H.M. Inspector workplaces received from H.M. s. 101):— ng the year rear	
	tions.		railing to send	List.	0	0	- Annual Control of Control	5OTHER MAT	188.	(1)	H.M. Inspector of Factories:- Abstract of the Factory an tressector but but but che but he but A.M. Inspector new workplaces received nouses (s. 101):- ed during the year of the year	
	Prosecutions.	Falling to	keep or permit	of Lists.	0	0	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT	5,-0	o,—OTE	5.—0'	0	to H.M. Inspersor The matters of the peak of new wo when the peak of new wo when the peak anted during anted during
107.		served on	Occupiers as to keeping or sending	Lists.	23	60	-				re to affit (s. 133) t (s. 133) taken in by H.M. I diable usu Health Acr the Fact p Act (s. 5) r notices prector round Ba ficates gr	
SECTION		e year.	rkers.	Workmen.	0	22						Matters Failu Action referred as reme Public not unde Worksho Othee Ins Underg Gertii
LIST.	oć.	Sending once in the year.	Outworkers.	Contractors	0	0			Number	(3)	381	
OUTWORKERS'	m Employer	Send	Lists		0	1					ister	
LOO	List received from Employers.	ie year.	Outworkers.	Workmen.	168	0		WORKSHOPS.	nd of the year.		of Bakehouses on register ,, other workplaces Total number of workshops on Register	
	I	Sending twice in the year.	Outwo	Contractors.	0	0		4REGISTERED WG	Workshops on the Register (8, 131) at the end of the year.	(1)	No. of Bakehouses on register ,, ,, other workplaces Total number of workshop	
1 4		Sen	Liste		38	0	-	4.—REG	he Register	Ú	No. of Bakehouses on r., ,, other workplaces Total number of w	
3		E OF	IK.		Vearing	se u	-		rkshops on th		No. of	
7		NATURE OF	WORK		Making Wearing Apparel	Pea Picking			We		Important classes of workshops anch as workshop bakehouses may be enumerated here.	

SANITARY ADMINISTRATION OF DISTRICT.

NEW LEGISLATION DURING 1915.

The "Lincoln Corporation Act, 1915," contains important new legislation affecting the department:—

Section 96 compels the provision of a suitable food store in all new houses, and gives power to enforce a similar provision in all houses built before the passing of the Act "where reasonably practicable."

By Section 100 any person repairing a drain must give notice in writing to the Inspector of Nuisances so that proper supervision can be maintained.

Section 101 gives power to the Corporation to repair any drain (including a combined drain) and to recover the cost of so doing from the owner or owners.

Section 103 makes a combined drain repairable by the owners of the various properties drained.

Section 106 reads:—If a water closet drain or soil pipe is so constructed or repaired as to be a nuisance or injurious or dangerous to health, the person who undertook or executed such construction or repair shall be liable to a penalty not exceeding £20.

Section 107 makes provision for a regulation dust bin, such bin to be a portable galvanised iron bin.

Sections 114, 116, 117 and 118 extend the powers for dealing with infectious diseases and give power to close Sunday Schools to prevent the spread of infectious disease, and where any school or Sunday School has been closed for this purpose no child attending such a school shall be permitted to attend any place of public entertainment without having procured from the Medical Officer of Health a certificate that in his opinion such child may attend such place of public entertainment or assembly without undue risk of communicating disease to others.

Section 115 makes regulations governing the manufacture and sale of ice cream.

Section 119 clears up any doubt as to whether any article of food deposited in the cold store or in the abattoir is intended for sale for human food. The wording is:—Where any article of food (whether solid or liquid) has been deposited in the abattoirs or cold stores of the Corporation it shall be deemed to have been deposited for purposes of sale or of preparation for sale for the food of man, and the provisions of Section 117 of the Public Health Act, 1875, shall if such article be diseased apply accordingly.

Section 120 is intended to protect meat, such as sausage, brawn and pie meat from contamination during manufacture.

Section 122 deals with offensive trades and reads as follows :-

- (1). For the purpose of Section 122 (restriction on establishment of offensive trade in urban district) of the Public Health Act, 1875, a trade business or manufacture shall be deemed to be established not only if it is established for the first time, but also if it is removed from any one set of premises to any other premises or if it is renewed on the same set of premises after having been discontinued for a period of six months or upwards or if any premises on which it is for the time being carried on are enlarged without the consent in writing of the Corporation, but a trade business or manufacture shall not be deemed to be established for the first time on any premises by reason only that the ownership of such premises is wholly or partially changed or that the building in which it is established having been wholly or partially pulled down or burnt down has been reconstructed without any extension of its area;
- (2). Any consent of the Corporation to the establishment of any offensive trade or to the enlargement of any premises on which any offensive trade is carried on may be given so as to continue in force for such period only as the Corporation may prescribe by such consent and Section 112 of the Public Health Act, 1875, and this section shall be construed accordingly;
- (3). If any person shall carry on such offensive trade beyond the period aforesaid he shall be liable to a penalty not exceeding five pounds and to a daily penalty not exceeding forty shillings;
- (4). The expression "offensive trade" in this section means any trade which is for the time being an offensive trade within the meaning of Section 112 of the Public Health Act, 1875, as extended by Section 51 of the Public Health Acts Amendment Act, 1907.

Section 124 makes provision for dealing with infectious diseases in Common Lodging Houses.

Section 125 gives power to make bye-laws dealing with houses let in Lodgings.

PUBLIC HEALTH ACTS AMENDMENT ACT, 1907.

The most of this Act was adopted during 1915.

Part 3 deals with Sanitary provisions, and was adopted with the exception of Sections 39-42.

Parts 4 and 5 dealing with Infectious Diseases and Common Lodging Houses were adopted in the entirety.

The adoption of Section 51, amending the law relating to offensive trades, necessitated making a schedule of the trades which should be classed as offensive.

With the consent of the Local Government Board the following trades where scheduled as offensive after November 22nd:—

)	
\	By Section 112
(Public Health Act, 1875.
/	
1	
!	By Section 51
}	Public Health Amendment Act, 1907.
	r done treatth Amendment Act, 1907.
r	
]	

*(In this order the expression "a rag and bone dealer" means any person who for the purpose of sale carries on upon any premises the trade of receiving, storing, sorting and manipulating any rags in an offensive condition, or in a condition likely to become offensive, or any bones, rabbit skins, fat or other putrescible animal products of a like nature.)

To obtain full advantage of these new powers it is necessary to adopt bye-laws relating to offensive trades and houses let in lodgings.

SUMMARY OF THE WORK OF THE SANITARY INSPECTORS.

The staff consists of the Medical Officer of Health and an Assistant Medical Officer, a Chief Sanitary Inspector and three Assistant Inspectors, one of whom is also Health Visitor. There is also an Assistant Health Visitor and an Office Clerk. The names are given at the commencement of this report. I wish to refer to the whole-hearted and loyal support of my staff during the past year, who have done their work conscientiously and well. I give below a summary of the Sanitary Inspectors' work:—

Statutory notices served	 	 	18
Informal notices served	 	 	635
Circular letters re notices	 	 	45

SUMMARY OF THE WORK OF THE SANITARY INSPECTORS (continued).

Privy vaults abolished			2
,, boxes ,,			8
New waterclosets provided			20
W.C. pans provided			96
" ,, connected to traps			141
", ", cleansed			83
" cisterns repaired			118
" ,, overflow pipes repaired			49
" flush pipes repaired			44
" supply pipes repaired			20
, seats repaired			62
Choked W.C.'s cleansed			365
Urinals cleansed			21
Drains tested with smoke, etc			738
,, found defective and repaired			295
,, relaid			169
" found choked and cleansed			473
New inspection chambers built			115
Manhole covers provided			103
Drain ventilating pipes tested			757
" " ,, choked			95
", " " repaired			76
,, ,, ,, fixed new			20
" " " lengthened			20
Sink waste pipes trapped			64
", ", " repaired			38
Foul sinks removed			II
" catchpits abolished			17
Eaves spouts and down spouts repaired			202
Yards and passages asphalted			184
Defective roofs repaired			142
Windows of houses made to open			84
Ashpits abolished			2
Covered metal ashes bins provided			200
Houses inspected, apart from Housing Acts			IOII
" found to be dirty			67
" cleansed			67
" found to be overcrowded			14
Pigsties inspected			389
" found in insanitary condition			II
Visits to Cowsheds, Dairies and Milkshops			128
,, Factories, Workshops and Bakehou			512
" Outworkers premises			164
" Common Lodging Houses			231
" Abattoir and private slaughter-house			770
" Cattle Market, Butter Market and N	ew Ma	arket	253

SUMMARY OF THE WORK OF THE SANITARY INSPECTORS (continued).

Visits to Ice Cream Shops	1	69
" Fried Fish Shops		80
,, Canal Boats		65
" House Boats		43
" Living Vans at fair-time		90
Complaints investigated		386
Re-visits re-complaints		256
Smoke observations taken		2
Cases of notifiable infectious diseases investigated		242
" " " re-visited		371
,, Phthisis (not including above) investigated		91
,, ,, re-visited		146
" Tuberculosis (other than phthisis) investiga	ted	30
", ", re-visited		44
" Non-notifiable diseases visited		60
" Infectious diseases removed to Hospital		109
Premises disinfected		407
Bundles of wearing apparel passed through ste	eam	
disinfector		141
Beddings and mattresses		527
Bundles of bedclothing, etc		578
Verminous beddings and mattresses destroyed		35
Rooms stoved to destroy vermin		139
Carpets disinfected		26
New W.C. cisterns fixed		16
Miscellaneous visits		309
Visits re sanitary defects		121
Visits re notices		139
New traps provided		40
Rust pits provided for V.P		11
Glazed stoneware sinks provided		6
Walls and floors repaired		6
Visits re disinfections		248
House roofs repaired		24
Manure removed (loads)	***	300
Soldiers' billets inspected		890
Rubbish removed (loads)		55
Notices to education re infectious cases in sch		
children		198
Children excluded from school		306
Articles disinfected for military authority		890
Halls and billets disinfected for military authority		187

CITY HOSPITAL (Fever Pavilions).

Two hundred and twenty-four cases were under treatment in the City Hospital Pavilions during 1915; eleven of these cases remaining in from 1914.

One hundred and twenty of these cases were military patients belonging to different areas in the Northern Command, and were admitted under agreement with the Military Authorities.

I give below number of cases and diseases treated :-

	Scarlet Fever.	Diphtheria.	Typhoid.	Measles.	Oerebro spinal	Eyrsipelas.	Mumps.
Civilians	55	46	2	0	1	0	0
Military cases	14	13	15	72	2	2	2

TABLE OF TOTAL ADMISSIONS.

DISEASE.	Sex.	Remaining in at end of 1914.	Admitted during 1915.	Recovered.	Died.	Remaining in at end of 1915.
Scarlet Fever {	М.	4	32	31	1	6 2 2 1 2 0
Scarlet Level	F.	0	37	37	0	2
Diphtheria {	Μ.	3	32	26	6	2
Dibutuetia [F.	3	27	23	4	1
Typhoid Fever {	Μ.	1	14	11	3	2
Typhold rever	F.	0	1	1	0	0
Massles (М.	0	72	71	1	-
Measles	F.	0	0	0	0	_
Faminala (M.	0	4	4	0	
Erysipelas }	F.	0	0	0	0	-
Cerebro-spinal	M.	0	3	0	3	-
Fever (F.	0	0	0	0	-
(M.	0	2	2	0	1 -
Mumps {	F.	0	0	0	0	-
Total		11	224	206	18	13

CITY HOSPITAL, (Dawber Sanatorium Pavilion).

Thirteen cases remained in at the end of 1914. Eighty-five fresh cases were admitted during the year, fifteen of these being military cases. Twenty-four cases remained in at the end of 1915. Sixty-eight cases were discharged much improved, and six died in hospital

Printed pamphlets of advice to those who have been in Sanatorium were given to patients on the completion of their stay, and lectures on Phthisis were also given by the Assistant Medical Officer.

In concluding these details concerning the City Hospital, I would like to bear testimony to the invaluable assistance of the Resident Medical Officer, Matron, and Nursing Staff.

With the growth of the Institution the difficulties of administration have immensely increased, and the successful working during the past year has been largely due to the efficient and loyal staff.

EXAMINATIONS CARRIED OUT AT THE BACTERIOLOGICAL LABORATORY.

Year 1915.

EXAMINED.	Total.	Positive,	Negative.
Diphtheria Swabs	353	98	255
Sputum for Tuberculosis	166	50	116
Widal test for Typhoid Fever	24	7	17
Other examinations of varied character	17	7	10
Total	560	162	398

RAINFALL.

		Greatest I	Daily Fall.	
1915.	Total Depth in inches.	Depth.	Date.	No. of Rainy Days
January	 2.34	•37	3rd	19
February	 2.41	.56	13th	16
March	 .97	.30	18th	13
April	 .58	.29	12th	8
May	 1.94	.50	1st	8 9 7
June	 1.88	.92	30th	7
July	 4.68	1.18	4th	15
August	 2.11	.47	2nd	15
September	 -67	.42	24th	5 8
October	 -88	.50	27th	8
November	 4.49	.46	15th	12
December	 4.67	-90	4th	23
Total, 1915	 27.52			150
Total, 1914	 20.42			157

RAINFALL, 1892 to 1915.

Year.	Inches.	Year.	Inches.	Year.	Inches.	Year.	Inches.
1892	27.65	1898	20.59	1904	19:72	1910	24.83
1893	18.14	1899	22.57	1905	18.22	1914	18.88
1894	25.50	1900	27.01	1906	23.53	1912	27.76
1895	24.27	1901	23.01	1907	24.47	1913	1 19.80
1896	26.50	1902	21.43	1908	20.75	1914	20.42
1897	26.29	1903	29.53	1909	27.24	1915	27.52

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