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ANNUAL REPORT

ON

THE HEALTH, SANITARY CONDITIONS, &c.,

OF THE

BOROUGH OF LUTON,

For the year 1914,

BY

H. W. BARNES, M.B., B.C., B.A., D.P.H. (Camb.)

Acting Medical Officer of Health,

Acting Medical Officer to Education Committee,

Acting Medical Superintendent of Infectious

Diseases and Small Pox Hospitals,

Acting Police Surgeon.

STATISTICAL MEMORANDA

for 1914.

Area						3,1	34 acres
Population	, Census	1901					36,404
Population	, Census	1911					49,978
Average A	nnual In	crease dur	ing Inter-	Censal Pe	eriod		1,357
Estimated	Populati	ion, June,	1914				56,120
Average 1	Number	of perso	ns per	inhabited	house	(1911	
Census)							4.47
Birth Rate	per 1,00	00 living					23'7
Death Rat	e per 1,0	000 living	(a) crude				12.6
Death Rat	e per 1,0	000 living	(b) correc	ted			13'0
Total Zym	otic Dea	th Rate p	er 1,000 l	iving			1'94
Infantile D	eath Ra	te (deaths	under on	e year per	1,000 b	irths)	94.7

Public Health Department,

37, Waller Street,

Luton, 7th May, 1915.

To His Worship the Mayor, Aldermen and Councillors of the Borough of Luton.

Gentlemen,

I have the honour to submit to you my Annual Report, as Deputy Medical Officer of Health, which is also the thirty-sixth Annual Report on the Health, Sanitary Conditions, &c., of the Borough.

Dr. Archibald, your Medical Officer of Health, was called up for military service in August on the outbreak of war. Dr. Sworder kindly acted as Temporary Medical Officer of Health until my appointment in November.

I take this opportunity of thanking all the members of the staff for their loyal and able support in maintaining the efficiency of the Health Department.

I have the honour to be,

Gentlemen,

Your obedient servant,

HOWELL BARNES.

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Natural and Social Conditions of the District.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

Luton is situated in a narrow valley cut deeply into the chalky strata which forms the Chiltern Hills. From an average floor level of 350 feet the developed parts of the Borough extend to the north-east and south-west to over 500 feet above the sea-level.

The area of Luton covers 3,134 acres.

POPULATION.

The estimated population of Luton at the middle of 1914 was 56,120, which represents an increase of 1,400 on the population of the previous year. The following Table shows the figures made in the Borough since the year 1861 and gives the Census population, the increase since the previous Census, the average yearly increase during each inter-censal period, the number of inhabited houses and the rateable value at 31st March in each year.

Year.	Population according to Census Reports.	Increase since previous Census.	Average yearly increase during each inter- censal period.	Inhabited houses.	Rateable value at 31st March.
1861	15,329	4,681	468.1	2,724	32,341
1871	17,317	1,988	198.8	3,345	48,651
1881	23,960	6,643	664.3	4,597	80,806
1891	30,053	6,093	609.3	6,141	112,000
1901	36,404	6,351	635.1	7,736	150,545
1911	49,978	13,574	1,357.4	10,962	212,458

The following Table gives the Ward distribution of the Census figures, with the numbers of the sexes in each Ward:—

Ward.	Area in		Persons		
ward.	Acres.	Males.	Females.	Total.	per Acre
North	874	7,543	8,601	16,144	18
East	590	7,711	8,264	15,975	27
West	1670	8,271	9,588	17,859	10
Town	3134	23,525	26,453	49,978	16

In calculating the density of population in each Ward, and in the town as a whole, it must be clearly understood that all vacant spaces, recreation grounds and parks are included in the measurements.

EMPLOYMENT.

The staple employment of Luton is the manufacture of straw hats. A large percentage of the women of Luton are engaged in this trade. A certain number of men are also employed. The majority of men are employed in the large iron foundries and motor works in the Borough.

Extent of Medical Relief Afforded by Charitable Institutions.

THE BUTE HOSPITAL.

This Hospital is supported by voluntary contributions. Most of the patients are received from the Borough. By the courtesy of the Managing Secretary I am informed that in 1914:—

760 cases were treated as In-Patients. 252 operations have been performed. There is no out-patient department.

VITAL STATISTICS.

BIRTHS. During the year 1914, 1,326 births were registered as having occurred in the Borough. Four births which occurred outside the Borough have to be added.

The actual number of births for the year is therefore 1,330, an increase of 21 over last year's figures. The birth rate for the year is therefore 23'7 per 1,000 of the population as compared with 23'8 in 1913, 22'8 in 1912, 24'2 in 1911, 25'2 in 1910, 27'6 in 1909.

The following Table is inserted to show how the local figures compare with England and Wales, the 96 large towns and the 145 smaller towns.

BIRTH RATE, 1914.

England and Wales	 23'6 per	1,000 of	the population.
96 great towns	 24'9	,,	,,
145 smaller towns	 23.6	,,	,,
Luton	 23.7	,,	,,

The following Table shows the number of births per month, the number of deaths, and the excess of births over deaths.

Month.			Births.	Deaths.	Excess of Births over Deaths.
1914.					
January			97	55	42
February			103	54	49
March			119	- 66	53
April			110	67	43
May			119	59	60
June			121	55	66
July			110	47	63
August			115	52	63
September			109	56	53
October			109	50	59
November			101	61	40
December			113	74	39
Totals		1.00	1,326	696	630

Subjoined is a Table showing the number of births registered per month, the males and females born, and the number of illegitimate births.

NUMBER OF BIRTHS REGISTERED PER MONTH.

Month.		Males.	Females.	Total.		Illegitimate.	
Month.					Males.	Females.	Total.
January		48	49	97	2	1	3
February		52	51	103	1	3	4
March		61	58	119	2	1	3
April		50	60	110		4	4
May		56	63	119	1	2	3
June		66	55	121	2	3	5
July		59	51	110	***	4	4
August		58	57	115	3	1	4
September		58	51	109	1	1	2
October		58	51	109	1	2	3
November		55	46	101	3	1	4
December		53	63	113	2	4	6
Totals		674	652	1,326	18	27	45

The following Table shows the Ward distribution of the births, legitimate and illegitimate, during 1914, and also the Birth Rate per 1,000 living in each Ward.

		North.		East.		West.		Whole Town.	
		Number.	Rate per 1000	Number.	Rate per 1000	Number.	Rate per 1000.	Number.	Rate per 1000
Legitimate Illegitimate		452 14	24.9	350 14	19.5	479 *17	23.8	1281 45	22.9
	Ī	466	25.6	364	20.5	496	24.6	1326	23.7

^{*} Of this number (17) 10 in Workhouse Infirmary.

PRESERVATION OF 1NFANT LIFE.

MIDWIVES' ACT. This Act is administered by the Bedfordshire County Council. There were 8 midwives practising in the Borough during the year.

Cases of Ophthalmia Neonatorum are notified to the Medical Officer of Health, and are visited by the Health Visitor.

NOTIFICATION OF BIRTHS ACT. Stamped Postcards for the purpose of notification of births are supplied to all Medical Practitioners and Registered Midwives.

In accordance with the usual custom, the Report of the Health Visitor is subjoined:—

SIR.

I beg to make the following report on my work during the year 1914.

I have paid 1,738 visits in connection with Infant Mortality, 157 special visits at your request, and 64 in connection with notifications received under the Tuberculosis Regulations. In addition to this, 890 children were brought to my office for advice and for the purpose of being weighed. It is gratifying

to find that many doctors in the town are now taking advantage of this Clinique and are sending their baby patients to be weighed at regular intervals. When a baby brought to my office is found to require medical treatment, enquiry is at once made as to who the regular medical attendant is, and the case is referred to him. Attendance is given at Waller Street from 3 to 4 p.m. on Mondays and Thursdays for this purpose, and information to this effect is printed on the card of instructions which is left at each house.

The following is a list of the various visits paid during each month of the year:—

Month.	Infant Mortality.	Baby Clinique.	Special.	Tuberculosis.	Total.
January	 198	74	8	8	288
February	 171	111	2	5	289
March	 192	83	4	4	283
April	 208	60	4	3	275
May	 229	84	6	20	339
June	 201	90	11	16	318
July	 175	79	7	18	269
August	 45	7	11		158
September	 152	65	62	_	376
October	 19	95	_	-	114
November	 87	88	6	_	181
December	 61	54	36	_	151
Totals	 1,738	890	157	64	3,041

In addition to these visits, I made during the months of August and September, 192 house to house inspections in the poorer parts of the Borough, and during the last three months of the year my work has been almost entirely amongst Diphtheria cases and contacts.

The visits paid to the mothers of newly-born children often take up much time, as I frequently find it necessary to demonstrate to the mother (especially with a first child) how to wash and dress the baby, how to attend to its eyes, or how to prepare its food, when fed artifically. It is satisfactory to note that the time spent in this way has shown good results.

In connection with the Notification of Births Act, 1,368 post cards were received, 34 of these referring to still-births, which are not notified to the Registrar; 32 of the births were dually notified, this making an actual total of 1,336 notifications.

Wherever possible, I have taken the opportunity of impressing on any expectant mothers broughi under my notice, the necessity for rigorous attention to personal hygiene and diet during the latter months of the puerperium. I find a great many women in Luton who are, by force of circumstances, compelled to do homework right up to the time of confinement.

Dealing with my work as Sanitary Inspector, 229 inspections were made and 96 notices served, in reference to defects found. Most of these notices dealt with insanitary rooms, and the remainder with other defects found on inspection. In the great majority of these cases one notice referred to multiple defects. It is satisfactory to note that all these notices have been complied with.

Yours obediently,

J. JELLIE, Health Visitor, Cert. R.S.I., C.M.B. & I.S.T.M. The following Tables show the results, as far as these can be tabulated, of the enquiries carried out by the Health Visitor during the year. The various Wards have been kept separate for purposes of comparison.

Table showing per month, nature of pregnancy, kind of work at which mothers were employed, &c., &c., in each Ward.

	rous	rous	Wo	rk	Hea	lth	r of losis	ages	ate	ate	d by	d by	cure	ps
1914	Primiparous	Multi parous	House	Other	Good	Bad	History of Tuberculosis	Previous Miscarriages	Legitimate	Illegitimate	Attended l	Attended by	Premature	Deaths
February	14 12 18 15 16 18 20 10 15 19 12 15	24 33 23 37 30 28 24 27 30 27 27 35	25 27 16 30 24 23 24 22 22 23 28 31	13 18 25 22 22 23 20 15 23 21 11 19	21 35 22 39 31 33 33 30 39 37 29 43	17 10 19 13 15 13 11 7 6 9 10 7	4 3 3 6 3 4 4 4 3 1 3 1 1	2 3 4 5 7 2 6 3 2 — 3 5	37 44 41 50 44 46 42 35 43 43 38 48	1 1 2 2 2 2 2 2 2 3 1 2	31 39 36 37 36 34 36 30 35 32 29 29	7 6 5 15 10 12 8 7 10 14 10 21	1 2 9 5 3 2 3 1 2 2 2 2 2	4 2 4 7 4 3 1 4 4 2 4 4
February	9 9 11 9 6 9 6 9 6 9 8 14 98	27 12 37 24 23 24 18 30 23 21 20 27	23 11 25 16 19 9 16 24 14 19 15 25	13 7 16 19 12 24 8 14 15 11 13 16	23 11 32 27 14 24 21 29 21 22 18 31	13 7 9 8 17 9 3 9 8 8 10 10	4 5 3 7 5 2 - 2 3 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	9 4 9 1 3 5 3 2 4 4 5 1	36 16 39 32 30 31 24 36 28 29 28 39	-2 2 3 1 2 -2 1 1 -2	22 8 24 22 18 22 20 21 18 14 15 23	14 10 17 13 13 11 4 17 11 16 13 18	1 2 3 4 6 3 3 1 2 3 5	2 1 4 7 7 4 1 5 — 1 2 7
February March April May June July August September October November	12 10 10 16 11 11 14 15 11 10 9	30 26 26 32 30 26 28 24 24 26 31 28	30 23 21 31 23 17 28 28 26 24 27 32	12 13 15 17 18 20 14 11 9 12 13 5	32 27 24 35 24 26 35 28 27 27 33 27	10 9 12 13 17 11 7 11 8 9 7	4 8 5 3 5 1 3 4 1 2 1 2	4 4 3 6 6 2 1 6 2 5 5	39 35 36 45 40 36 42 37 35 33 39 37	3 1 -3 1 1 2 3 1 	32 29 20 37 30 28 31 33 26 30 28 29	10 7 16 11 11 9 11 6 9 6 12 8	2 7 4 2 3 2 2 1 2 2	2 1 4 5 2 1 3 3 1 2 4 3
Total	138	331	310	159	345	124	39	46	454	15	353	116	29	31

These results may be summarised as follows:-

Total number of births enquired into, 1382. 420 or 30 per cent. were primiparous cases. 962 or 70 per cent. were multiparous cases.

The nature of work carried on during Pregnancy was as follows:—

House work ... 821=59 per cent.

Straw, &c., work... .. 561=41 per cent.

372 or 27 per cent. of the mothers were in bad health during the pregnancy, and this was bound to have an ulterior effect on the child.

In 113 cases, or 8 per cent., there was a history of previous cases of Tuberculosis in one or other of the parents.

In 138 cases, or 10 per cent., there was a previous history of one or more miscarriages.

3'4 per cent. of the total births were illegitimate.

28 per cent. of the cases were attended by midwives, the remainder by doctors.

These 1,382 children were separated into groups as shown in the following Tables, which are designed to show how the conditions at birth and the nature of the feeding affect the child's chance of survival.

To put the above results into words. Of the 83 children born prematurely, only 36 were alive at the end of the year, 47 having died, a mortality rate of 566 per 1,000 born. Of the 1,017 children breast-fed, 89 died, giving a mortality rate of 87 per 1,000 births.

Of the 330 children fed from birth by artificial foods of all descriptions, 35 died, a mortality rate of 106 per 1,000 births.

2'6 per cent. of the births were still births.

These results again point most clearly to the fact that in order to combat the excessive mortality among infants under one year of age, one of the most important points is to endeavour to reduce the children fed artificially to a minimum. This work is being efficiently carried out by the Health Visitor, whose advice is eagerly sought after by mothers.

Of the 159 deaths among the 1,382 enquiries made during the year, 35, or 22'01 per cent. of the total deaths were still births. Of the remaining 124 deaths, 30, or 24 per cent., died before the end of the first week, and 54, or 43 per cent., before the end of the first month. These deaths, therefore, took place before the Health Visitor's advice could be followed with any chance of success, this again demonstrating the need for pre-natal visits. These are only possible when information is received in time.

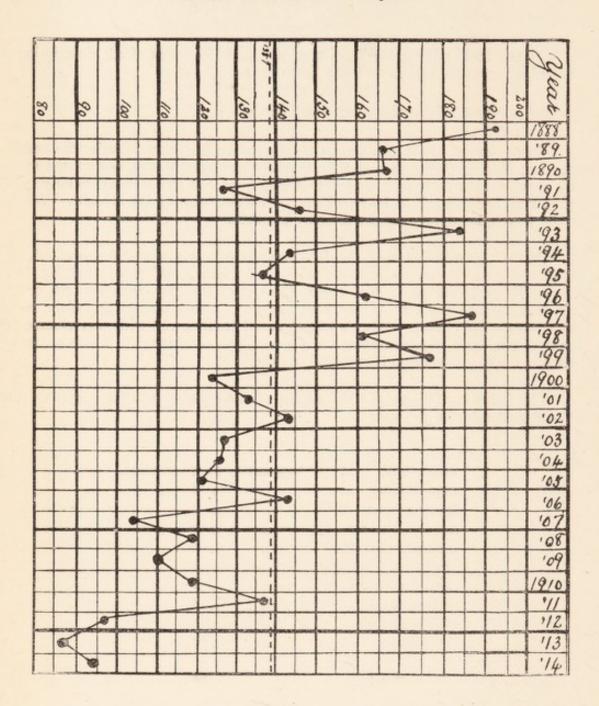
The following figures give the results of the enquiry into the causes of the 35 still births during the year:—

Prematurity		responsible	for 7 st	ill births
Injury, fright		***	,, 5	
Death of fœtus			., 4	**
Accidental hæme	orrhage	***	1	
Deformity of ch	ild		., 1	
Strangulation by	cord		., 1	
Contracted pelvi	S		., 1	
Bright's disease			., 1	
Malpresentation		11	1	**
Other causes		***	,, 13	2.0
Total			35	

It is becoming more and more apparent that one of the principal causes of prematurity is the home work carried on by the mothers, who frequently work right up to the confinement. The National Insurance Act makes no provision for the care of the mother before the birth, and in this respect might well be amended to cover the last four weeks of the pregnancy.

The following diagram; introduced three years ago, shows the course of the Infantile Death Rate in the Borough since 1888. The "curve" has been extended to include the present year. The rate in 1912 (99 per 1,000 births) was the lowest on record, and was the first annual rate under 100 recorded in the Borough, so that this year's figure (94'7) must be considered as highly satisfactory. Undoubtedly, the main cause of this decrease was the absence of diarrhæa in epidemic form, in the third quarter of the year.

Infantile Mortality—Luton, 1888-1914 inclusive. Dotted line—Mean of 27 years.



INFANTILE MORTALITY.

DEATHS UNDER THE AGE OF TWELVE MONTHS.

The nett total number of deaths in 1914 was 126, giving a mortality of 94'7 per 1,000 births, as compared with 87'8 in 1913, 99 in 1912, and 137'3 in 1911.

The following Table gives the Ward distribution of the infantile deaths: --

WARD.			NUMBER.
North	 ****		45
East	 		52
West	 		29
Town	 	***	126

The following figures are given for comparison:-

PLACE.		ths under 1 year er 1,000 births.	
Englaad and Wales		***	105
96 Great Towns			113
145 Smaller Towns			104
County of London			103
Luton			94.7

It is very gratifying to note that the Infant Mortality Rate is once again below 100.

Thirty deaths occurred among children under one week old and 54 among children under one month.

The deaths occurring in the first four weeks after birth are generally due to causes operating at or before birth.

The following Table gives the Mortality Rate and Number of Deaths occurring in the first month for the last 4 years:—

Veen	of Deaths u	ınder	Mortality
Year.	one month.		Rate.
1911	 63		51.5
1912	 50		41.5
1913	 44		33.7
1914	 54		40.7

It is thus seen that the small Infantile Mortality Rate in Luton is due to the saving of life after the first month; that the causes operating at or before birth, and resulting in the death of children in the first month of life, have not been to any extent alleviated.

This result can only be obtained by imparting advice and treatment to expectant mothers. The co-operation of the local midwives is indispensable, so as to obtain the necessary information as to expectant mothers.

The principal causes of Infantile Mortality were as follows, the figures for the last four years being given for comparison:—

	1914.	1913.	1912.	1911.	1910.
Diarrhœa	 7	9	1	45	6
Premature Birth	 26	17	29	32	42
Wasting Diseases	 35	27	_	21	10
Bronchitis	 5	10	_	12	18
Enteritis (Epidemic)	 12	3	-	8	7
Measles	 2	_	2	7	2

Comparative Table of Birth Rate, Death Rate and Infantile Mortality:-

ANNUAL RATES PER 1,000 LIVING.

	Births.	Des	Deaths under 1	
		Crude.	Corrected.	year per 1000 births
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
London	24.6	14.4	14.4	103
Luton	23.7	12.6	13.0	94.7

Deaths.

696 deaths were registered in Luton during 1914. Forty-six deaths of Luton residents were returned by the Registrar-General as having occurred outside the Borough, and the number of people who have died in Luton during the year but who were not residents in the locality, was returned as 30.

If the deaths of the Non-Residents be deducted and those of Residents who died outside Luton be added (as required by the Local Government Board) the nett total number of deaths was 712, giving a nett recorded Death Rate of 13'0 per 1,000 living.

Death Rates of various localities can only be accurately compared when the actual age and sex distribution of the population is known.

In order to make the returns of the various districts comparable, the Registrar-General has furnished each Medical Officer with a factor for correction. The crude Death Rate multiplied by the factor gives the Death Rate as it would appear in a "standard population," i.e., a population embracing the same age and sex distribution of England and Wales.

The factor for Luton as supplied by the Registrar-General is 1'0334.

If we multiply the crude Death Rate of 12'6 by 1'0334 we obtain 13'0, which is the standardised Death Rate for Luton during the year 1914.

The age periods at which the 696 deaths registered in the Borough (and the transferred deaths) occurred, are as follows.—

			Transfe	rable De	eaths
Under 5 years	 	 201		12	
5 to 15 ,,	 	 52		6	
15 to 25 ,,	 	 41		3	
25 to 65 ,,	 	 212		20	
Over 65 ,,	 	 190		5	
		000		10	
		696		46	

QUARTERLY DEATHS, ARRANGED IN AGE PERIODS.

The Table below shows the total number of deaths in each quarter of the year, and also the age periods of these deaths.

DEATHS IN	EACH	QUARTER,	1914.
-----------	------	----------	-------

	All Ages.	Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	Over 65 years.
1st Quarter	175	26	27	15	9	53	45
2nd Quarter	181	30	16	14	4	61	56
3rd Quarter	155	36	15	14	13	39	38
4th Quarter	185	35	16	9	15	59	51
Totals	696	127	74	52	41	212	190

WARD DISTRIBUTION OF DEATHS.

The following Table shows the actual number of deaths registered in each Ward, and also the number of deaths in the public institutions:—

WARD DEATHS, 1914.

	North Ward.	East Ward.	West Ward.	Total.
Total Deaths Registered in Borough	183	213	300	696
Institution Deaths: - (1) Residents		4	87	91
(2) Non-Residents	-	4	24	28
Total Deaths minus Institution Deaths	183	205	189	577

The following Table gives the principal diseases which show increased or diminished mortality in 1914 as compared with 1913.

INCREASED. DIMINISHED,
Bronchitis Cancer
Pneumonia Phthisis
Heart Disease Influenza
Nephritis Appendicitis
Diphtheria Scarlet Fever
Diarrhœa Measles

Respiratory Diseases, including Phthisis, caused 23'17 per cent. of the total mortality. Pneumonia caused 7'72 per cent. Bronchitis, 8'28 per cent. and Phthisis 7'16 per cent. of the mortality.

Tubercular Diseases (all kinds) caused 8'98 per cent. Heart Disease, 13'34 per cent. Cancer, 5'61 per cent. Old Age, 6'74 per cent. Diarrhœa and Enteritis, 3'09 per cent. Nephritis and Brights Disease, 1'82 per cent.

ZYMOTIC DEATH RATE. 109 deaths were due to Zymotic Diseases of which 75 were from notifiable, and 34 from non-notifiable diseases. The actual total Zymotic Death Rate is 1'94 per 1,000 of the population, as against '84 per 1,000 in 1913.

The number of deaths from the various Zymotic diseases was as follows:-

NOTIFIABLE	DISEASES:-				
	Typhoid Fever			1	
	Diphtheria			72	
	Scarlet Fever			2	
				_	75
NON-NOTIFIA	BLE DISEASES :-				
	Enteritis and Diarrl	nœa		23	
	Measles			7	
	Whooping Cough			4	
				-	34
					-
	Grand Total		***		109

Inquests.

Inquests were held on 27 persons during the year 1914. The verdicts of the jurors are classified as follows:—

Accidents Heart Failure			 	13 10
Suicides			 	4
Suicides		***	 	_
	Total		 	27

Six of these deaths occurred in the North Ward, 10 in the East Ward, and 1I in the West Ward of the Borough.

Prevalence of and Control over Acute Infectious Diseases.

SCARLET FEVER. 246 cases of Scarlet Fever were notified during the year 1914, as compared with 321 cases in 1913. During the first three months of the year this disease was a continuation of an epidemic which started in the fourth quarter of the year, 1913.

The following Table shows the behaviour of the disease in the Borough of Luton since 1897.

Year.	No	. of Cases.	Year.	No.	of Cases.	Year.	No	o. of Cases.
1897		185	1903		68	1909		177
1898		75	1904		65	1910	***	123
1899		43	1905		30	1911		74
1900		62	1906		180	1912		57
1901		268	1907		92	1913		321
1902		89	1908		42	1914	***	246

DISTRIBUTION. 67 of the cases occurred in the North Ward, 83 in the East Ward, and 96 in the West Ward.

Type of Case and Method of Spread. The type of the disease was mild in nature in the majority of cases. This increased the difficulty of diagnosis with the result that a certain number of cases in all probability were missed and a large number were only recognised when the patient showed signs of desquamation.

These mild cases and those cases not diagonised facilitated the spread of the disease. There was no reason to suspect milk or any other article of food as being a factor in the spread of the disease.

MORTALITY. 2 cases died from the disease, both of these were treated at home. The mortality rates were as follows:—

All cases				 81	per	cent.
Cases treated	at	Spittlesea	Hospital	-		,
Cases treated	at	Home		 96		

39 of the cases notified were removed to Spittlesea Hospital.

On the notification of a case full details of the sanitary condition of the premises were obtained and the source of infection was ascertained if possible.

Diphtheria.

The number of cases of Diphtheria notified in 1914 was 568, as compared with 166 notifications in 1913.

The following table gives the number of notifications since 1897:-

Year.	No	of Cases.	Year.	No	o. of Cases.	Year.	No	of Cases.
1897		12	1903		18	1909		75
1898		39	1904		4	1910		32
1899		50	1905		7	1911		45
1900		11	1906		103	1912		22
1901		12	1907		103	1913		166
1902		17	1908		56	1914		568

DISTRIBUTION AND DEVELOPMENT. 176 cases occurred in the North Ward, 196 in the East Ward and 196 in the West Ward.

The total monthly notifications show a slight increase in April, which was sustained to a certain extent until the end of August, the figures being 24, 19, 31, 55, 39, 21, 35, 29.

In September a rapid rise occurred, 77 cases being notified. In October the number of new cases was 82. The height of the epidemic was reached in November, when 85 cases were notified. In December the disease began to subside, 71 cases being notified, and since then there has been a steady decline in the number of notifications received.

Type of Cases and Method of Spread. The majority of the cases were mild in nature, and only a very small percentage suffered from Laryngeal Diphtheria.

The main factor in the spread of this disease was due to personal contact. The overcrowding of the houses, which necessitates the younger children sleeping in one room, aids the dissemination of the disease from personal contact. Since the presence of the troops in the town this overcrowding has increased, owing to the billeting of the soldiers in the smaller houses.

In addition there were a large number of cases complaining of sore throat who showed no signs of membrane, but on a swab being taken the Klebs Læffler Bacillus was found in their throats. A certain number of carrier cases were discovered by swabbing.

These mild cases and carrier cases are the most dangerous factors in spreading the disease. They can only be diagnosed by swabbing the throat and finding the bacillus. It is extremely difficult to get hold of all these cases.

MORTALITY. The number of deaths from Diphtheria for the year 1914 was 72, 57 of these were treated at home.

All cas	ies					 	72
Cases	treated	in	Spittlesea	Hosp	oital	 	15
Cases	treated	at	home			 	57

The total mortality rate was 12'67 per cent., the mortality rate for cases treated in Hospital was 6'66, and for cases treated at home 16'61.

The chief cause of the majority of deaths from Diphtheria was due to the fact that medical assistance was not obtained until the disease had been in progress for several days. Such children were often discovered sitting in the living room in their day clothes, although examination of their throats revealed large patches of membrane. Antitoxin was given in all cases. The value of antitoxin as a curative agent is enhanced by early administration.

PREVENTIVE MEASURES.

- (A). VISITATION OF EACH CASE ON RECEIPT OF NOTIFICATION.—
 Full particulars are obtained in each case of the number of inmates over and under 10 years; the number of rooms (living and sleeping), the water supply, the milk supply, the day school, the Sunday school, the means of removal of refuse (tins or pits), the previous cases in the house, and the date of sickening.
- (B.) ISOLATION AT HOME OR IN HOSPITAL.—225 cases were admitted to Hospital. In November the accommodation was entirely taken up and it was necessary to select cases for a few weeks, until the pressure on the beds was relieved. Cases where home isolation was inadequate were removed to the Hospital.

The difficulty in nursing a large number of cases at the Isolation Hospital is increased owing to accommodation in the Administration block being limited.

- (C). SWABBING OF THROATS.—Swabs are supplied to medical practitioners in the town, and the Medical Officer of Health examines and reports on these when required. Contacts of cases are swabbed. In special incidences of a large number of cases in a school the throats of children in that class are swabbed. No child with a sore throat was allowed to attend school. Such children were swabbed by the Medical Officer of Health. No patient suffering from Diphtheria was discharged from hospital until satisfactory bacteriological evidence was obtained of the absence of the bacilli in throat and nose.
- (D). PROVISION OF DISINFECTING FLUID.—Disinfecting fluid is supplied gratis in bottles to all households with printed instructions for its use.
- (E). Provision of Diphtheria Antitoxin.—Antitoxin is supplied free of charge to medical practitioners requiring the same. The serum is obtained direct from the chemist and the account is sent to the Medical Officer of Health.
- (F). DISINFECTION OF HOUSE AFTER TERMINATION OF CASE.—
 Thorough disinfection of all houses is carried out on information received from the doctor in attendance on the conclusion of a case, or on the removal of a patient to the hospital.

In conclusion, I beg to draw attention to the valuable work carried on by Dr. Wanklyn during his stay in Luton for the cessation of this disease. His energetic measures proved of utmost value in rounding up the cases and limiting the spread of the epidemic. His report on the subject has already been printed and distributed.

ENTERIC FEVER. Three cases of Enteric Fever were notified during the year. Two cases were removed to the Hospital. The number of deaths due to this disease was 2. The source of infection was not satisfactorily determined, as it seldom can be when dealing with sporadic cases.

One patient was a soldier who contracted the disease outside Luton.

SMALL POX. No cases of this disease were notified.

ERYSIPELAS. 42 cases of this disease were notified. The number of deaths due to this disease was 5.

PUERPERAL FEVER. The number of cases notified was 2. Three deaths occurred, one of which was notified at the end of the previous year.

CEREBRO SPINAL FEVER. No case of this disease was notified.

ACUTE POLIOMYELITIS. No cases of this disease was notified.

OPHTHALMIA NEONATORUM. There were 10 cases notified during the year 1914.

The Non-Notifiable Diseases.

MEASLES. During the year 1914 there were 7 deaths from Measles, as compared with 9 deaths in 1913. This disease was very prevalent and necessitated the closing of the Infants Departments of some schools.

WHOOPING COUGH. There were 4 deaths from Whooping Cough in the year 1914, as compared with 5 deaths in 1913.

Sanitary Circumstances of the District.

1.—Water Supply. The water supply of the Borough is derived from three tube wells, each 320 feet deep from the surface (in the chalk), and iron tubes are inserted down the bores so that no water can percolate into the bore holes until the depth of 100 feet from the surface. The water is pumped from these wells to reservoirs on Hart Hill, from which the town is supplied by gravitation. Two water towers are necessary to supply the highest parts of the town with water. The analyst's reports have always been highly satisfactory, the hardness of the water being its only drawback. The supply is unlimited.

The Water Engineer (Mr. W. R. Phillips) has kindly supplied me with the following data:—

```
Average daily consumption per head of population ... 27.4 gallons.

Total capacity of Storage Reservoir ... ... 3,622,000 ,...

Water Tower, Hart Lane ... 42,000 ,...

Bailey Hill ... 72,000 ,...

Total quantity of water pumped during the 12 months ending December, 1914 ... ... 603,134,663 ...
```

The following is a copy of the latest report of the Analyst (Mr. Colwell):

Total Solids		***		 	30'1 grai	ns pe	er gallon.
Chlorine	***			 	1.47 .		
Pree Ammonia				 	0.0001		
Albuminoid Amr	nonia			 ***	0.0003		- 11
Oxygen absorbed	1 (4 hou	irs at 8	80° F)	 	0.009		
Nitrogen as Nitr				 	0.298		
Hardness-Total				 	19.2		
Perm	anent			 	6.2		
Nitrites				 	Nii		

The above results indicate that this is a moderately hard water of great organic purity, and is in excellent condition at the present time. It is quite suitable for all dietetic purposes.

RIVERS AND STREAMS. There is one river, by name the River Lea. Its source is at Leagrave, two miles outside the Borough. There has been no serious pollution during the year 1914.

DRAINAGE AND SEWERAGE. The scavenging and sewerage of the Borough are under the control of the Borough Surveyor, to whom I am indebted for the following facts.

The whole of the built-up part of the Borough, with the exception of 20 houses situated at Round Green, are drained into sewers.

More than half of the occupied part of the town is provided with sewers for the collection of storm water. The sewers are flushed when necessary.

THE SEWAGE FARM. This farm consists of 64\frac{3}{4} acres. There is a complete bactereological treatment scheme installed, consisting of primary settling tanks, primary bacterial filters, secondary settling tanks and secondary bacterial filters. The effluent passes through large shallow lagoons before finally discharging into the River Lea near Park Road. At the present moment extensions are taking place so as to deal with the additional amount arising from the increased population of the Borough.

The effluent is regularly examined by the Lee Conservancy officials. This effluent has been always satisfactory with the exception of a very small percentage of Arsenic, which is derived from the various dye and bleaching works in the Borough. So far as possible steps have been taken to keep out this impurity by the users of chemicals exercising the greatest care.

SEWAGE PUMPED.

Year ended March 31st Rainfall in inches Total quantity, gallons Daily average, gallons 1912 24°57 703,888,550 1,928,462 1913 25°28 805,388,000 2,206,446 1914 22°54 684,580,000 1,875,558

CLOSET ACCOMMODATION. There are four privies in the Borough. Two are situated at the Laundry, Dunstable Road, one at 43, Kings Road, and one at Coupees Path. During the year 1914 no privies have been substituted by water closets.

SCAVENGING.

REMOVAL OF REFUSE. All refuse is removed at least once a week, and oftener if required. Most of the houses in the Borough are provided with sanitary dustbins, the numbers being as follows:—

Ash Tins Boxes *		 9,872 269
Open Ashpits Closed ,,		 889 936
	Total	 11,966

^{*} When boxes are found in use a notice is served, asking for a proper tin to be provided.

The following Table shows the number of loads of refuse collected annually since 1905, also the number dealt with at the Destructor, and the number disposed of elsewhere:—

Year.	Loads Collected.	Loads sent to Destructor.	Loads sent Elsewhere
1905	15,021	7,891	7,130
1906	15,706	12,062	3,644
1907	16,243	13,934	2,309
1908	16,572	13,422	3,150
1909	16,412	12,718	3,694
1910	16,575	13,335	3,240
1911	17,025	15,855	1,170
1912	17,587	14,170	3,417
1913	18,458	16,340	2,118
1914	20,245	16,840	3,405

The Destructor was used for the first time on March 30th, 1905.

Three tips are at present available, one at Caddington, one on New Bedford Road, and one at Stopsley.

Sanitary Inspections of District.

NUISANCES. The following list shows the nature of the nuisances which were dealt with during the year:—

-			
	. 173	Accumulations of manure	39
	. 195	Defective drains	34
out c	f	Slaughter houses requiring lime-	
		washing	4
	. 114	No receptacles for manure	3
		Insufficient sanitary accommodation	1
hing	. 40	Insanitary and defective ashpits	179
	. 37		
	. 4	Total	985
	. 55	/	-
	out o	out of 34 114 73 hing 40 37 4	Defective drains Slaughter houses requiring lime-

395 notices were served in connection with the above nuisances.

Premises and Occupations which can be controlled by Byelaws or Regulations.

COMMON LODGING HOUSES. The Chief Constable is the Inspector of Common Lodging Houses, and when he discovers any conditions requiring attention, these are immediately reported to the Health Department and steps taken to remedy the same. They are as satisfactory as these places can be from a health point of view. There are five licenced Common Lodging Houses in the Borough, containing 38 rooms, 172 beds, and providing accommodation for 178 persons, Last year an average of 117'82 persons were accommodated therein per night.

OFFENSIVE TRADES. There are no offensive trades as defined by Section 112 of the Public Health Act, 1875, in the Borough. The Local Government Board on 30th June, 1911, made an order under Section 51 of the Public Health (Amendment) Act, 1907, declaring the trades of Fish Fryer and Dealer in Hides, Skins and Fat to be offensive trades. Since that date no businesses of that description have been allowed to be set up in the Borough, unless by the sanction of the Council. Byelaws are now in operation.

Schools.

The Sanitary condition of the Schools in Luton is on the whole satisfactory. The schools are supplied with water from the public water supply.

The measures taken to prevent the spread of infectious diseases in the schools are described in the Annual Report of the Education Committee for 1914.

Food.

(a) MILK SUPPLY. Continuous attention has been given by our Sanitary Inspector to ensure the purity of the milk supply.

There are 8 cowsheds in the Borough. These are regularly inspected and found to be kept fairly clean.

(b) OTHER FOODS. The inspection of meat is carried out by the Sanitary Inspector. There are 27 slaughter houses over which constant supervision is maintained. The result of the inspection and the action taken thereupon, both in regard to meat and other foods, will be found in the Report of the Sanitary Inspector.

FOOD AND DRUGS ACT. In connection with this Act, 181 samples were submitted to the Public Analyst for analysis. These samples were as follows:—85 samples of new milk, 13 of butter, 11 of pork sausages, 7 of Irish whisky, 6 of Scotch whisky, 5 of gin, 5 of lard, 4 of margarine, 4 of

cream, 4 of sausages, 3 of vinegar, 2 of orange wine, 2 of raisin wine, 2 of black currant wine, 2 of separated milk, 2 of beef sausages. 2 of self-raising flour, 2 of poloney, 2 of cheese, 2 of pepper, 2 of brawn, and 1 each of ginger wine, Demarara sugar, raspberry jam, rum, saveloy, aslet, strawberry jam, black currant jam, mustard, citrate of magnesia, cocoa, custard powder, dripping, and flour.

Of these, 20 samples were reported by the Analyst to be adulterated, as

shown in the following Table:-

Article submitte for Analysis.	ed		ibmitted ample.	Result of Analysis.	Sum paid for Analysis.	Observations.
New Milk		Sanitary	Inspector	Adulterated 13:3% deficient in fat	10/6	Vendor fined £1 including costs
"				Contained 4.2 grains per pt. Crystallised Boric Acid	10/6	Vendor fined £1 including costs
"				Contained 7.1 grains per pt. Crystallised Boric Acid	10/6	Vendor fined €1
"		**	**	Adulterated 10% deficient in fat	10/6	Vendor fined £2 including costs
"				Adulterated 18.3% deficient in fat	10/6	Vendorfined10/- including costs
"		- 11		Adalterated 3% deficient in	10/6	Vendor
11		11		Adulterated 17% deficient in fat	10/6	Vendor fined £2 including costs
"		.,		Adulterated 9'6% deficient in fat	10/6	Vendor fined £5 including costs
				Adulterated 12% deficient	10/6	Vendor fined £2 including costs
.,				Adulterated 23% deficient	10/6	Vendor fined £1
Pork Sausage	s			Contained 9.87 grains per lb. of Crystallised Boric Acid	10/6	Vendor cautioned
				Contained 41'6 grains per lb. of Crystallised Boric Acid	10/6	Vendor fined £5 including costs
Sausages		,,,	**	Contained 16 ⁻¹ grains per lb. of Crystallised Boric Acid	10/6	Vendor fined £2 and £1/17/6 costs
Brawn				Contained 2.45 grains per lb. of Crystallised Boric Acid	10/6	Vendor cautioned
Aslet		**		Contained 26.0 grains per lb. of Crystallised Boric Acid	10/6	Vendor fined £3 including costs
Orange Wine		**	**	Contained 4'2 grains per pint of Salicylic Acid	10/6	Vendor fined £1 and £5/3/6 costs
		,,,	**	Contained 3.65 grains per pint of Salicylic Acid	10/6	Vendor cautioned
Raisin Wine		11	91	Contained 3.85 grains per pint of Salicylic Acid	10/6	Vendor fined £1 and £2/1/6 costs
**			**	Contained 3.65 grains per pint of Salicylic Acid	10/6	Vendor cautioned
Ginger Wine			.,	Contained 1.66 grains per pint of Salicylic Acid	10/6	Case withdrawn

Housing and Town Planning Act.

The following are particulars of the action taken during 1914, under the Housing and Town Planning, &c. Act, 1909.

A list of houses likely to come under the purview of Section 17 of the Housing and Town Planning Act is kept by the Medical Officer of Health, and these houses are systematically visited. In addition, any house reported as unsatisfactory is likewise inspected, and measures taken to rectify any defects existing.

The following table gives the results of visits paid during the year, these results being shown in the form desired by the Local Government Board.

HOUSING AND TOWN PLANNING ACT, 1909.

1.	Number of dwelling houses inspected	 	 		 143
2.	Number of houses found on inspection unfit for human habitation	 	 	>	 None
3.	Number of Representations made to Local Authority	 	 		 None
4.	Number of Closing Orders made by Local Authority	 	 		 None
5.	Number of Houses which, after C.O. had been made, were made fit for	 	 		 None
6.	General character of defects found	 	 		 None

All defects found in connection with the above inspections were remedied under the Public Health Act, 1875, without the necessity of a closing order.

Milk and Cream Regulations, 1912.

REPORT OF ADMINISTRATION IN CONNECTION WITH THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

Report for the year ended 31st December, 1914.

1. Milk; and Cream not sold as Preserved Cream.

	Number of Samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk	 87	2
Cream	 4	_

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

4.2 grains per pint of Crystallised Boric Acid.—Vendor fined £1 including costs.
 7.1 grains per pint of Crystallised Boric Acid.—Vendor fined £1 including costs.

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.

(1) Correct Statements made ... Nil (2) Statements incorrect ... Nil Total ... Nil

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

(1) Above 35 per cent ... Nil (2) Below 35 per cent ... Nil Total ... Nil

- (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.—Nil.
- (d) Particulars of each case in which the Regulations have not been complied with, and action taken.—Nil.
- 3. Thickening Substances. Any evidence of their addition to Cream or to Preserved Cream. Action taken where found.—Nil.
 - 4. Other observations, if any.—Nil.

Factory and Workshop Act, 1901.

By the 132nd section of this Act, the Medical Officer is required to report upon the administration of the Act as regards workshops and workplaces. A copy of such report has to be sent to the Secretary of State. As is to be expected, the number of workshops in which straw trade is carried on is very large in the Borough of Luton. Generally speaking, the workshops are kept in a very satisfactory condition, the cleanly state of the materials used in the manufacture of hats making such a state of affairs easily obtainable.

The following Tables show the details of inspections carried out during

the year 1914 under the Act :-

INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Premises.	Number of Inspections.	Number of Written Notices.
Factories (including Factory Laundries) Workshops (including Workshop Laundries) Workplaces (other than Outworkers' premises)	42 398 106	21 57 23
Total	546	101

DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	No. of Defects Found.	No. of Defects Remedied.
Other Nuisances		52 9 4 4
Total	69	69

HOME WORK.

OUTWORKERS' LISTS (Section 16 Nature of Work—Wearing Appar		ng, etc.:-	_		
Lists received from Employers	sending	twice in t	he year		 12
Outworkers-Workmen	***			***	 62
Lists received from Employers	sending	once in tl	he year		 23
Outworkers—Workmen	***			***	 344
OUTWORK IN INFECTED PREMIS	ES (Section	ons 109, 1	10):		
Instances					 239
Orders made (Section 110)		***		***	 239

REGISTERED WORKSHOPS AND OTHER MATTERS.

REGISTERED WORKSHOPS:— Total number of Workshops on Register	331
OTHER MATTERS:— Matters notified to H.M. Inspector of Factories:— Action taken in matters referred by H.M. Inspector as remediable	
under the Public Health Acts, but not under the Factory and Workshop Act (sec. 5, 1901):—	18
Notified by H.M. Inspector	18
Reports (of action taken) sent to H.M. Inspector	18

Prevalence of and Control over Tuberculosis.

Due to the courtesy of the County Tuberculosis Medical Officer, I am enabled to give the following particulars:—

Particulars of the cases of Tuberculosis dealt with during the year 1914.

LUTON AREA.—During the early part of the year the Luton Corporation kindly granted me the use of the School Medical Department in Waller Street on one day in each week as a place in which to interview and examine patients. The accommodation thus placed at my disposal greatly helped me in carrying on my work in Luton, whilst the premises in Church Street were being adapted for the purpose of a dispensary.

The Dispensary was opened in May, and from that time until the end of the year there were 911 attendances of patients there.

The Medical Officer of Health in his capacity as School Medical Officer has referred to me all children whom he has found to be either suffering from or threatened with tuberculosis. In cases where treatment is advisable I communicate with the family Doctor, informating him of the child's visit to the Dispensary and asking whether he wishes the child to become a patient at the Dispensary.

In every instance the Doctor has expressed his willingness for the case to attend at the Dispensary. Where sanitorium treatment has been required the cases have been sent to Harpenden Children's Sanatorium.

Particulars of Attendances at Luton Dispensary during the year 1914.

		Insured.	No	n-insure	ed.	Total.
 	 	12		3		15
 	 	105		12		117
 	 	119		28		147
 	 	58		16		74
 	 	113		49		162
	 	85		27		112
 	 	116		36		152
 ***	 	86	***	46	***	132
 	 	694		217		911

Particulars as to Diagnosis and Treatment of Cases examined during 1914.

LUTON URBAN AREA.

				Insured.	N	on-insu	red.	Total.
Number of cases examine	d	***		194		61		255
Pulmonary Tuberculosis			***	126		19	***	145
Surgical Tuberculosis				2		10		12
Under Observation				22		19		41
Not Tubercular				44		13		57
Dispensary Treatment				30				47
Domiciliary Treatment				42				42
Sanatorium Treatment				61		8		69
No application made for	treatn	nent		10				10

The following Table gives the number of notifications of Tuberculosis received during the year:-

Form A.	Form B.	Form C.	Form D.	Total.	Actual.
Pulmonary, 145 178 Other, 33 178 2 Pulmonary Duals 2 Other		36) 36 36 Duals	35 35 35 35 Duals.	216 \ 233 \ 249 73 Pul. Duals. 2 Other ,,	143) 174 31) 174

Sanitary Administration of the District.

The Staff consists of the Medical Officer of Health, a Chief Sanitary Inspector and an Assistant Inspector, who is also the Health Visitor. This is an additional officer, who investigates cases of infectious disease, superintends their removal, and the disinfection of the houses involved.

There is also an Office Clerk.

A summary of the Sanitary Inspector's work is given in his report.

SPITTLESEA HOSPITAL (Fever Pavilions). The accommodation of this Hospital has been taxed to its utmost on account of the prevalence of diphtheria.

The present administration block is limited in accommodation. This lack of room for the nurses greatly increases the difficulty of the administration of the Hospital.

At the present moment plans have been laid before the Local Government Board for the construction of a new Administration Block, Laundry, Mortuary, and a new Scarlet Fever Pavilion to hold 16 beds.

266 cases were treated at Spittlesea Hospital for the year 1914; 20 of these remained in from 1913.

The following Table gives the number of cases treated in the Hospital for Diphtheria, Scarlet Fever and Typhoid:

Disease.	Sex.	Remaining in at end of 1913.	Admitted during 1914.	Recovered.	Died.	Remaining in at end of 1914
Scarlet Fever	M. F.	8 11 — 19	22 17 — 39	22 17 — 39		4 1 — 5
Diphtheria	M. F.	1 — 1	93 132 ——— 225	83 127 —— 210	10 5 — 15	12 23 — 35
Typhoid Fever	M. F.		1 1 — 2		1 2 — 2	
Total		20	266	249	17	40

The Acts of Parliament, Adoptive Acts, Bye Laws and Regulations administered by the Public Health Department include:-

The Public Health Act, 1875.

- ., Public Health Acts Amendment Act, 1890.
- .. Public Health Acts Amendment Act, 1907 (Part II.)
- ., River Pollution Prevention Act, 1876-1893.
- ,. Housing of the Working Classes Acts, 1895, 1890, 1900, 1903.
- Infectious Diseases Notification Act, 1889—1899.
- ,, Infectious Diseases Prevention Act, 1890.
- .. Cleansing of Persons Act, 1897
- ., Factory and Workshop Act, 1901.
- ,, Housing and Town Planning Act, 1909.
 ,, Sale of Food and Drugs Act, 1875—1899.
- ., Rag Flock Act, 1911.
- ., Notification of Births Act, 1907.
- .. Luton Corporation Act, 1911.
- ., American Gooseberry Mildew Fruit Order, 1912.
- Dairies, Cowsheds and Milkshops Orders, 1885-1899.

Bye-Laws on Slaughter houses.

- on Common Lodging Houses.
- Nuisances.

Regulations (Cowsheds, Dairies and Milkshops Order).

LABORATORY WORK. During the year the following work was carried out in the Medical Officer of Health's Laboratory:—

				Positive.	Negative.	Totals.
Swabs for Diphtheria Bacilli				130	383	513
Sputum for Tubercle Bacilli				15	50	65
Blood submitted to Widal's Test	for Typ	hoid	Fever	1	0	1

TABLE I .- Vital Statistics of Whole District during 1914 and previous years.

	Births.		Regist	Deaths ered in istrict.		ferable ths.	Net	Nett Deaths belonging to the District.				
Year.	tion estimated		Net				the	not		1 Year Age.	At all	Ages.
	to Middle of each Year.	Uncor- rected	Number	Rate.	Number	Rate.	of Non-residents registered in the District.	of Residents n registered in t	Number	Rate per 1000 Nett Births	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909 1910	42,700 49,000	1182 1233	1182 1233	27.68 25.2	645 559	15°1 11°4			130 147	109 [.] 9 119 [.] 2	626 542	14.6 11.0
1911 1912 1913	50,500 52,750 54,720	1223 1202 1305	1223 1204 1309	24.2 22.8 23.8	670 572 631	13.3 10.8 11.5	19 19 16	30 25 28	168 119 115	137:3 99 87:8	681 578 643	13.5 10.9 11.7
1914	56,120	1326	1330	23.7	696	12.6	30	46	126	94.7	712	13.0

Total Population at all ages \dots 49,978 At Census, 1911 Total families or separate occupiers 11,205

Area of Distrrct-3134 Acres.

TABLE II .- Cases of Infectious Disease notified during the Year 1914.

	Number of Cases Notified.									Total Cases Notified in each locality.			
Notifiable Disease.		At Ages - Years.										Total Cases removed to Hospital.	
	At all Ages.	Under 1.	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwds.	North Ward	East Ward	West Ward	Tor	
Diphtheria (including Mem- branous Croup)	568	2	135	366	37	28			176	196	196	225	
Erysipelas	42	1	2	2	7	9	16	5	17	12	13		
Scarlet Fever	246	3	48	149	34	12			67	83	96	39	
Enteric Fever	3				2	1			1	1	1	2	
Puerperal Fever Ophthalmia	2					2				1	1		
Neonatorum Pulmonary	10	10			***				3	2	5		
Tuberculosis Other Forms of	143		1	11	47	68	15	1	52	37	54		
Tuberculosis	31	2	8	15	4	2			9	12	10		
Totals	1045	18	194	543	131	122	31	6	325	344	376	266	

Isolation Hospital-Spittlesea, near Luton.

TABLE III.

Causes of, and Ages at Death during Year 1914.

		Nett De		he subjoi ng within				whether		Total Deaths whether of "Residents" or "non-Resi-
Causes of Death.	All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards.	dents in Public Insti- tutions in the District.
All Causes { Certified Uncertified	695 17	123 4	27 1	55	57	38	100	116 3	179 9	118
Enteric Fever	1						1			
Small-pox										
Measles Scarlet Fever	7 2	2	1	2	2					***
When contain Count	4	2	2	1		***				
Diphtheria and Croup	72	1	3	6	30	2				
Influenza	5						1	2	2	
Erysipelas	5	2						2	1	3
Phthisis (Pulmonary				-			200		Yes	
Tuberculosis)	51			1		15	22	11	2	4
Tuberculous Meningitis Other Tuberculous	5	1	1	1	1	1	***			1
Diseases	8			1	2		5			3
Cancer, malignant disease						3	7	14	16	10
Rheumatic Fever										
Meningitis	10	3	1	2	2	1			1	1
Organic Heart Disease	95	1			7	4	19	30	34	17
Bronchitis	59	5	6	1	3	2	1	11	30	8
Pneumonia (all forms)	55	7	6	6	4	5	12	8	7	11
Other diseases of Respira-	5					1	1	3		
tory Organs (Pleurisy) Diarrhœa and Enteritis	23	20	2		1	-	-	100		
Appendicitis & Typhlitis						2		1		2
Cirrhosis of Liver	4							3	1	
Alcoholism	2						1	1		1
Nephritis and Bright's				-					1	
Disease	13	1			1	1	1	6	3	
Puerperal Fever	3		***				3		***	1
Other accidents & diseases										
of Pregnancy and Par- turition	3						3	30.5	1	
Congenital Debility and				***			0			
Mal-formation includ-					-				125	
ing Premature Birth	67	66	1							
Violent Deaths, excluding					THE				1	
Suicide		3	1	1			2		2	8
Suicide		100					3	3	49	22
Other Defined Diseases Diseases ill-defined or		12	4	3	3	1	17	21	43	33
Diseases ill-defined or unknown	0		1			1	1	1		1
							-	-		
Totals	712	126	29	55	57	38	100	119	188	118
Sub-Entries.										
Poliomyelitis										
Old Age	10			***				2	46	14

TABLE IV .- Infant Mortality.

1914. Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under I year.
All causes (Certified	28	9	8	6	51	21	18	16	16	122
An causes \ Uncertified	2	1			3		1			4
Measles								1	1	2
Whooping-Cough								2		2
Diphtheria and Croup									1	1
Erysipelas				1	1.	1				2
Tuberculous Meningitis									1	1
Meningitis, not Tuberculous					;	1	1	1		3
Convulsions	3	***	1	***	4			1		5
Laryngitis Bronchitis						2	1	1	2	1 5
Pneumonia (all forms)		1			1			2	4	7
Diarrhoea							4		3	7
Enteritis				1	1	3	2	6		12
Gastritis		1			1	2			1	4
Suffocation, overlying		2			2					2 5
Congenital Malformations	1	1			2	1	1	1		
Premature birth	17	3	1	2	23	2	1			26
Atrophy, Debility and	-	0	-	0	10	-	0			0.5
Marasmus	7 2	2	5	2	16	7 2	8	1	3	35 6
Other causes	2		1	•••	3	2	1	***		6
Totals	30	10	8	6	54	21	19	16	16	126

Nett Births in { legitimate, 1281. the year { illegitimate, 45.

Nett Deaths in { legitimate infants, 114. the year of (illegitimate infants, 12.

Sanitary Inspector's Report.

In accordance with the instructions issued by the Local Government Board, the Report of the Sanitary Inspector for the year 1914 is herewith appended:—

Infectious Disease Notification and Prevention Acts. The following table will show the number of cases reported under the provisions of the Infectious Disease Notification Act. I give, for comparison, the number of cases reported each year, since the adoption of the Notification Act within the Borough:—

		-	-	-	-	-		-				_	
					N	vame	of Dis	ease.					100
Year.	Scarlet Fever.	Erysipelas.	Typhoid Fever.	Diphtheria.	Membranous Croup.	Puerperal Fever.	Continued Fever.	Variola.	Choleraic Diarrhea.	Anthrax.	Acute Poli- omyelitis.	Ophthalmia Neonatorum.	Totals.
1896	236	35	16	13	2	3	1	1					307
1897	185	53	37	12		6	6		1				300
1898	75	36	16	39	3	2	2			1			174
1899	43	52	28	50	6	8	1						188
1900	62	40	22	11	7	8	2						152
1901	268	59	19	12	2	8	2	2					372
1902	89	30	7	17		3	4	5					155
1903	68	35	5	18		7	i						133
1904	65	49	5	4	1	6	1	200	***				131
1905	30	46	6	7		3							92
1906	180	52	9	103	1								345
1907	92	40	9	103		3							247
1908	49	20	9	56		4		***					138
1909	177	30	4	73	2	2							288
1910	123	46	3	32	***	5			***			***	209
1911	74	42	36	45		1	2			***		***	200
1912	57	33	13	22		5					4		134
1913	321	66	9	166		3			***	***	1	***	566
1914	246	42	3	568		2	•••					10	871
Totals	2440	806	256	1351	24	79	21	8	1	1	5	10	5002

Streets in which Infectious Diseases occurred. The following tabulated list shows the various streets in which infectious diseases occurred, and also from which cases were removed to Spittlesea Hospital:—

				i.				Ren	noved	to Ho	spital.
	Scarlet Fever.	Diphtheria.	Erysipelas.	Enteric Fever	Puerperal Fever.	Ophthalmia					Promi
Name of Street.	F	hea	ipel	e E	rpe	alt	Total.	9.5	Diphtheria	Enterie Fever.	-i
	rlet	pht	rys	eri	Fe	bt	To	Searlet Fever.	ptp	eve	Total.
	Sca	Ä	至	Ent	1	ő		200)ip	型田	P
	0.2			-				li li	-		_
Adelaide Street		4					4		2		2
Adelaide Terrace	2	2					4	1	2		3
Albert Road	3	11	1				15		6		6
Albert Terrace		3					3		1		1
Albion Road		4					4		1		1
Alfred Street		6					6		1		1
Alma Street	2	1					3			***	***
Althorp Road		1				1	2	***	1	***	1
Arthur Street	1	1					2		1		1
Ash Road	1	2					3 3	1	1		2
Ashburnham Road Ashton Road	7	2 4	***				11		2		2
Ashton Street		10					10		6		6
Back Street		2	1				3				
Bailey Street			1				1				
Baker Street	3	10	1	1			14		4		4
Beech Road			1				1				
Belmont Road	3	1					4	1	1		2
Biscot Road		4					4				
Blyth Place		3		***			3		***	***	*
Boyle Street	2	5	3				10				
Brache Street	2	1	***	***	***		2	1		***	1
Bridge Street Brook Street	1				***		1	***	1		
Brunswick Street		3	***		***	***	3	***	2	***	2
Burr Street		8					8		3		3
Bury Park Road	1	2	1				4		2		2
Bute Street		2					2				
Butlin Road	2	9				***	11	1	6		7
Cambridge Street	3	7					10	1	1		7 2 2 3
Cardigan Street	4	2					6		2		2
Castle Street	1	7	***				8		3		3
Chapel Street	12	6 2	1		1		20		3		3 2
Charles Street Chase Street	3				***	1	5 2	1	2		1
Chase Street Chatsworth Road	1	4		***			5		3		3
Chiltern Rise	1	1					2				
Chobham Street	2	1					3				
Church Street		1					1		1		1
Clarendon Road	1	1	1				3				
Clifton Road	3	21					24		8		8
Cobden Street		7					7		7	***	7
Collingdon Street	1	1					2				
Court Road		5	1		***	***	6	***	3	* -	3
Cowper Street	9	7	1			***	17		3		3
Crawley Road Crawley Green Road		2			***		1 2			***	***
Cromwell Road	3	1					4	1			1
Cross Street		î					1				
Cumberland Street		3					3		1		1
Dallow Road	1	4					5	1			1
Dane Road	2	4					6		1		1
Dorset Street		5	1				6		1		1
Downs Road	1						1				***
Dudley Street	3	1		***			4				
Duke Street Dumfries Street	2	4 4					6 5	1	1 4		2 4
Dumfries Street Dunstable Road	12	8	4	1		***	25	9	2	1	12
Ebenezer Street		1					1				
Elizabeth Street	2	3					5		3		3
Essex Street		8					8		5		5

	er.	d	ai ai	rer.	-	ia.		Ren	spital.		
Name of Street.	Scarlet Fever.	Diphtheria	Erysipelas.	Enteric Fever	Puerperal Fever.	Ophthalmia.	Total.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Total.
Francis Street	4						4	1			1
Gaitskill Row		1					1		1		1
George Street	1	1					2		1		1
Gloucester Road	1	1					2				
Grange Road	2	9				1	12	***	2	***	2 2
Granville Road	1	1 3					2 3	1	1		
Hampton Road		3	***				3	***	1		1
Harcourt Street	1	3					4				
Hartley Road	1	14					15		5		5
Hastings Street	1	2	1				4				
Hazelbury Crescent	1	2					3		***		***
Henry Street		3	1				4		1		1
Hibbert Street	1	1					2	1	1		2
Highbury Road	3	2				1	6				
Highfield Road High Town Road	4	10	1	***		1	16	1	1 5		1 6
Hillborough Road	1		1000			1000	1				
Hitchin Road	3	19					22		6		6
Inkerman Street	2						2	1			1
Ivy Road	5	7					12	3	6		9
John Street		1					1				
Jubilee Street		2					2		1		1
Kenilworth Road	4	1					5				
Kimpton Road	1	1	227	***			2	1	1		2
King's Road	1	3	1		***		5				***
Langley Place Langley Road	1	3		***			1 4		2	***	2
Langley Street		3					3		1		1
Lea Road	2	4	1				7		4		4
Leagrave Road	1	4	1				6		2		2
Liverpool Road	1	1	2				4				
London Road	4	1					5				
Lyndhurst Road	1			***		****	1	1			1
Malvern Road	3	3			***		6				
Manchester Street	***		1	***	***		1				
Manor Path Manor Road	3	2				1	3		2		2
Mansfield Road				1	***		1				
Maple Road	1						i				
May Street	1	3					4		1		1
Mill Street		1					1		1		1
Milton Road	1	1					2				
Napier Road	3	3					6		1		1
Naseby Road	***	2					2				
New Street		9			1,11		9	***	6		6
New Bedford Road Newcombe Road	5	1		***	***		7				
New Town Street	1	7	1		***		9		4		4
Norman Road	1	1	1 10000				2	1	1		2
North Street	4	15	1				20	i	4		5
Oak Road	1	4				1	6		3		3
Old Bedford Road	1	2					3		1		1
Oxen Road	***	3	/				3				
Oxford Road			1				1				
Park Lane		3					3				
Park Place	1	5			***	***	6		1 5		1 5
Park Road West Park Street	6	13 12					19	3	5		5 4
Park Street West	1						18			***	
Park Way		1					1				
Peache Street		3	2				5		1		1
Pondwicks Road	2	2					4				
Queen Street	6	8	1				15		3		3
Ramridge Road	8	2					10				

	rer.	ė	, , , , , , , , , , , , , , , , , , ,	Ter.	-	13.		Re	moved	to Ho	spital.
Name of Street.	Scarlet Fever.	Diphtheria	Erysipelas.	Enteric Fever	Puerperal Fever.	Ophthalmia	Total.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Total.
Regent Street	1						1	1			1
Reginald Street			1				1			***	
Ridgeway Road	5		1				6				
Rothesay Road		2	1				3				
Russell Rise	4	4	1				9		1		1
Russell Street	1	3					4	1	1		2
Saxon Road		8	***				8		7		7
Selbourne Road		3					3		1		1
Shaftesbury Road		3					3	***	2	***	2
Shirley Road Skefko Road		2		***	***		2				
Skefko Road Smart Street		1		1			1 2		1	1	1
South Road	1			1			1			3.1	
Spencer Road		5					5		4		4
Spring Place	2	2					4		2		2
Stanley Street	1	1					2				
St. Ann's Road		1	1				2		1		1
Stockingstone Road	1						1				
Stockwood Crescent		1	1				2				
St. Paul's Road		5					5				
St. Saviour's Crest.	2	2					4				
Stuart Street	2	3	***			1	6	***			
Surrey Street		1					1			***	
Talbot Road	2	6		***			8			***	
Favistock Crescent Favistock Street	2 2		***	***			2 2	***	***	***	***
Fennyson Road	3	6		***		***	9		1		1
Furner's Road		1					1		1	***	1
Union Street		3					3				
Vernon Road		2					2				
Vicarage Street		4					4		2		2
Villa Road		4					4				
Waldeck Road		1					1				***
Warwick Road		15	1				16		9		9
Wellington Street	2	4				1	7		4		4
Wenlock Street	2	5		***			7	***			***
Westbourne Road	1		***				1				
West Hill Road	3			,,,			3	***	***		***
Whitby Road		1	1	***			2				
William Street Wimbourne Road	1	1.0	***		***		17	***	8	***	8
Windmill Road		16				1	1				
Windmill Street		2			***		2		2		2
Windsor Street	1	6					7		4		4
Winsdon Road	2	1					3		1		1
Wood Street		1			1		2				
York Street		4					4		1		1
	246	568	42	3	2	10	871	36	227	2	265

Disinfection and other precautionary measures for the prevention of the spread of disease, were duly carried out free of cost; children from infected families were advised not to attend school, and any nuisances in the houses or localities were remedied. Disinfectants were also freely supplied to all who applied for them. The cost of disinfectants for the year was £119 1s. 1d., which sum includes the disinfectants sent to Spittlesea.

Spittlesea Hospital. 39 cases of scarlet fever, 225 of diphtheria, and 2 or enteric fever were removed to Spittlesea during the year, making a total of 266 cases, as against 107 last year.

Inspection of Streets. I have, in conjunction with the Medical Officer of Health, regularly visited the streets and alleys during the year, and have taken the necessary steps to remedy all the defects found in connection with these visits.

Nuisances. The following list shows the nature of the nuisances which were dealt with during the year:—

Insanitary Dwellings		173	Accumulations of manure	39
No receptacles for ashes		195	Defective drains	34
Water apparatus to W.C.s out	of		Slaughter houses requiring lime-	
order		34	washing	4
Drains and W.C.s blocked		114	No receptacles for manure	3
Defective W.C.s		73	Insufficient sanitary accommodation	1
Workrooms requiring limewashing		40	Insanitary and defective ashpits	179
Defective pavings		37		
Houses overcrowded		4	Total	985
Defective floors and ceilings		55		

395 notices were served in connection with the above nuisances.

Insanitary Dwellings. 173 houses were reported to be in an insanitary condition. The whole of these have been thoroughly cleansed and whitewashed.

Dumb-Wells. During the year 161 loads of night soil were removed from dumb-wells. The charge made for emptying same was £18 12s., and the expenditure in wages, £14 14s. 6d. Only four privies now remain in the Borough.

Ashes, Offal and Trade Refuse Collection. 20,245 loads of ashes, offal and trade refuse were collected by the Corporation teams during the year; this is an increase of 1,787 loads compared with last year's figures, it then being 18,458 loads.

The disposal of ashes was as follows:-

Destructor Elsewhere	 	 	Loads. 16,840 3,405
			20,245

The collection of ashes for the last five years has been :-

1910.	1911.		1912.		1913.		1914.
16,575	 17,025	***	17,587	***	18,458	***	20,245

The income in connection with this department was as follows:-

			£	S.	d.	
Collecting trade refuse		 	210	13	6	
Old iron, bottles, clinkers, as	 	49	18	8		
Collecting offal from slaughte	r houses	 	48	12	4	
Removing night soil		 	18	12	0	
			£327	16	6	

Ash Tins, Ashpits, etc. The following is the number of Ash Tins and Ashpits in the Borough.

Ash Tins	 		9,872
Boxes	 		269
J Open Ashpits	 		889
Closed ,,	 ***	***	936
			11 966

Ventilating Shafts. No additional shafts were erected during the year. The total number of ventilating columns in the Borough is 46.

Destructor. The total amount of refuse burnt at the Destructor during the year was 16,840 loads, giving an average of 46½ loads per day. The sale of old iron and other residuals has been £49:18:8.

Disinfector. This has again been used on numerous occasions for the disinfecting of bedding and clothing from infected houses.

Food and Drugs Act. In connection with this Act, 181 samples were submitted to the Public Analyst for analysis. These samples were as follows:—85 samples of new milk, 13 of butter, 11 of pork sausages, 7 of Irish whisky, 6 of Scotch whisky, 5 of gin, 5 of lard, 4 of margarine, 4 of cream, 4 of sausages, 3 of vinegar, 2 of orange wine, 2 of raisin wine, 2 of black currant wine, 2 of separated milk, 2 of beef sausages. 2 of self-raising flour, 2 of poloney, 2 of cheese, 2 of pepper, 2 of brawn, and 1 each of ginger wine, Demarara sugar, raspberry jam, rum, saveloy, aslet, strawberry jam, black currant jam, mustard, citrate of magnesia, cocoa, custard powder, dripping, and flour.

Of these, 20 samples were reported by the Analyst to be adulterated, as

shown in the following Table :-

Article submitt for Analysis.		Who sul the Sa		Result of Analysis.	Sum paid for Analysis.	Observations.
New Milk		Sanitary 1	Inspector	Adulterated 13.3% deficient in fat	10/6	Vendor fined £1 including costs
			.,	Contained 4.2 grains per pt. Crystallised Boric Acid	10/6	Vendor fined £1 including costs
"				Contained 7.1 grains per pt. Crystallised Boric Acid	10/6	Vendor fined £1 including costs
**				Adulterated 10% deficient in fat	10/6	Vendor fined £2
,,				Adulterated 18.3% deficient in fat	10/6	Vendorfined10/- including costs
				Adalterated 3% deficient in fat	10/6	Vendor cautioned
**				Adulterated 17% deficient in fat	10/6	Vendor fined £2 including costs
"		.,		Adulterated 9.6% deficient in fat	10/6	Vendor fined £5 including costs
**	***		- 11	Adulterated 12% deficient in fat	10/6	Vendor fined £2 including costs
**				Adulterated 23% deficient in fat	10/6	Vendor fined £1 including costs
Pork Sausage	s			Contained 9.87 grains per lb. of Crystallised Boric Acid	10/6	Vendor cautioned
-11		**	**	Contained 41'6 grains per lb. of Crystallised Boric Acid	10/6	Vendor fined £5 including costs
Sausages				Contained 16.1 grains per lb. of Crystallised Boric Acid	10/6	Vendor fined £2 and £1/17/6 costs
Brawn				Contained 2:45 grains per lb. of Crystallised Boric Acid	10/6	Vendor cautioned
Aslet		"	,,	Contained 26.0 grains per lb. of Crystallised Boric Acid	- 10/6	Vendor fined £3 including costs
Orange Wine				Contained 4'2 grains per pint of Salicylic Acid	10/6	Vendor fined £1 and £5/3/6 costs
		.,		Contained 3.65 grains per pint of Salicylic Acid	10/6	Vendor cautioned
Raisin Wine		"	21	Contained 3.85 grains per pint of Salicylic Acid	10/6	Vendor fined £1 and £2/1/6 costs
,,		"		Contained 3.65 grains per pint of Salicylic Acid	10/6	Vendor cautioned
Ginger Wine				Contained 1'66 grains per pint of Salicylic Acid	10/6	Case withdrawn

Dairies, Cowsheds and Milk Shops. Under the Dairies, Cowsheds and Milk Shops Order, 1885, 30 persons were registered as purveyors of milk.

At the end of 1914 the register contained the names of persons keeping 6 cowsheds. The approximate number of cows being milked is 51. There are also 156 purveyors of milk on the register, of which 18 reside outside the Borough, but retail milk within.

Slaughter Houses. The slaughter houses were regularly visited during the year, and on the whole were found to be in a satisfactory condition. 28 licences have been renewed.

Markets. I have visited the markets regularly during the year, and

have found nothing of which to complain.

The following articles of food were inspected at the request of the owners, before being exposed for sale. These were found to be unfit for human food, and forthwith condemned and destroyed:—February 14th, 1 box of white herrings; April 16th, 1 case of herrings; May 25th, 7 stone 7 lbs. Australian ribs of beef; June 13th, 10 boxes of mackerel; June 27th, 3 half-sieves of cherries; July 20th, 1 box of soles and 4 kits of frying fish; July 24th, 24 lbs. of cherries; July 25th, 1 stalk of bananas; August 14th, 1 kit and 1 case of codfish; August 21st, 2 boxes of gurnet; September 2nd, 10 stone of catfish; September 8th, 90 lbs. of plums; October 12th, 1 box of catfish; December 21st, 1 case of witches and 1 box of magrans witches; and December 28th, 1 kit of haddocks.

Factory and Workshop Act. The number of registered workshops in the Borough at the end of the year was 331. These include straw hat manufacturers, block makers, box and cartoon makers, tip and lining manufacturers, bakers, confectioners, milliners, dressmakers, upholsterers, tailors, joiners, tinplate workers, jewellers, bootmakers, ropemakers, cycle makers, laundresses, etc. The following table shews the number of inspections, and the result of such visits:—

Premises.	Number of						
Fremises.	Inspections.	Written Notioes.	Prosecutions.				
Factories	42	21					
Workshops	398	57	***				
Work-places	106	23					
Home-workers' Premises	356	114					
Totals	902	215					

DEFECTS FOUND.

	Number	of Defects.	
Particulars.	Found.	Remedied.	Prosecutions
Nuisances under the Public Health Acts:—	7		
Want of Cleanliness	52	52	
Want of Ventilation			
Overcrowding			
Want of Drainage to Floors	1	1	
Insufficient	4	4	
Sanitary Defective	4	4	
Accommodation Not separate for Sexes		***	
Other Nuisances	8	8	
Totals	69	69	

OTHER MATTERS.

MAT									CTORIES		1001	
									kshop A			18
UNI	ERGR	OUNI	BAR	EHOU	SES (sec. 10	1):—					
					13							24
	In us	e at t	he end	of 19	14							23
agaii in th	Lists, It win very eir lis	Twic 12. Il be smal ts twi	Outwood of the control of the contro	year. orkers ed tha y 12 e	s, 62. It the employ ne year	numbe vers cor r. 23	Lists r of I	Once , 23. (ists of strictly	in the ye Outwork Outwo with the	ar. kers. 344 rkers re ne Act b	eceive	
					ERS:-	es						51
						ties						9
	110001	, ou i										
									EMISES			
									nises			239
	Order	s pro	hibitin	g hom	iework	in inte	ected I	oremise:	s (sec. 1	10)		239

I am, Gentlemen,

Your obedient servant,

CHAS. WRIGHT.