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BOROUGH OF DARLINGTON.

ANNUAL REPORT

FOR THE YEAR 1911,

BY

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MEDICAL SUPERINTENDENT OF THE BOROUGH ISOLATION HOSPITALS.

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DARLINGTON:

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1912.

BOROUGH OF DARLINGTON.

To the Chairman and Members of the

Health and Sanitary Committee.

GENTLEMEN,

I herewith submit for your consideration my First Annual Report on the Health and Sanitary condition of Darlington during the year 1911, the Thirty-first Annual Report presented to you by successive Medical Officers of Health. I wish to thank you for the sympathetic support which I have received from you since I took up my duties in Darlington, and at the same time I would express my indebtedness to the Members of the Staff of the Health Department, as well as to other Corporation Officials for the valuable and ready help they have given me.

I am, Gentlemen,

Your obedient Servant,

S. G. MOSTYN.

HEALTH OFFICE,

HOUNDGATE,

MAY 14TH, 1912.

HEALTH REPORT, 1911.

Area of the Borough.—3,956 acres.

Excluding a detached portion of the Borough at Oxneyfield, which consists of 345 acres of agricultural land about a mile to the south of the main portion, Darlington lies at a height above sea-level varying from 123 to 223 feet. The natural drainage of the town is to the Cockerbeck and Skerne valleys.

Population.—The population of the Borough at the census taken on the third of April, 1911, according to the preliminary report of the Registrar-General consisted of 55,633 persons, or of 12,289 "families or separate occupiers." This gives an average of 4·52 persons to each family or occupier.

The estimated population for the middle of the year 1911 is 55,911. Census returns are not available for the different wards, but by distributing the population in proportion to the number of burgesses in the wards the ward-populations may be taken to be:—

North Ward	10,425
East Ward.....	9,080
North-West Ward	13,529
West Ward	6,180
South Ward	8,784
Central Ward	7,913

The total number of houses in the Borough on the 31st of December, 1911, was 12,568.

Owing to its census population exceeding 50,000 Darlington now takes its place among the "Great Towns" of England and Wales; its position being the 81st among 94.

Births.—There were 1,500 births registered in the Borough, but of these 4 were transferable to other districts. The remainder 1,496 gives a **birth-rate of 26·8 per 1,000 of the population per**

annum; a rate slightly higher than the corresponding figure for last year, 26·5.

The birth-rate for the administrative County of Durham is 31·7, and for England and Wales, 24·4 per 1000 of the population. The number for England and Wales is the lowest on record.

Deaths.—During the year 830 deaths were registered in the Borough; of these 18 were of non-residents and have been transferred to other districts; on the other hand the deaths of 25 Darlington residents occurred outside the Borough. These corrections give 837 net deaths belonging to the district, corresponding to a **death-rate of 15·0 per 1,000 of the population.**

Particulars of the causes of death, and the ages at which death took place, will be found in Table III., page 34; in Table V., pages 36 and 37, the deaths are assigned to the wards and the quarters of the year in which they occurred.

The following Table compares Darlington with the County of Durham and the rest of England and Wales for 1911:—

	Annual Rates per 1,000 of the Population.										
	Birth.	Death.	Zymotic Death-rate.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria and Membranous Croup	Whooping Cough.	Enteric Fever, Continued Fever, &c.	Diarrhœa and Enteritis under 2 years.	Deaths under 1 year of age per 1,000 births.
England and Wales ..	24·4	14·6	1·88	0·00	0·36	0·05	0·13	0·21	0·07	1·06	130
77 Great Towns ..	25·6	15·5	..	0·00	0·47	0·06	0·15	0·24	0·06	1·31	140
136 Smaller Towns ..	23·4	13·8	..	0·00	0·41	0·06	0·12	0·18	0·07	1.14	133
England & Wales less 213 Towns ..	23·4	13·9	..	0·00	0·22	0·04	0·11	0·19	0·07	0·77	118
Durham Admnistrative County	31·7	16·1	3·01	0·00	0·44	0·07	0·16	0·38	0·16	1·65	158
DARLINGTON ..	**26·8**	**15·0**	**1·82**	**0·00**	**0·20**	**0·34**	**0·05**	**0·21**	**0·05**	**0·97**	**135**

In the following Table statistics are given with regard to Darlington and England and Wales for the last ten years. In this Table and throughout this Report the populations given for Darlington are determined from the census returns for 1891, 1901, and 1911 by the method used by the Registrar-General for the last ten years, and the various rates for Darlington have been recalculated for these populations:—

Year.	Population.	DARLINGTON.				ENGLAND AND WALES.			
		Annual Rate per 1,000 of the Population.			Infant Mortality Rate per 1,000 Births.	Annual Rate per 1,000 of the Population.			Infant Mortality Rate per 1,000 Births.
		Birth.	Death.	Deaths from Zymotic Diseases		Birth.	Death.	Zymotic	
1902	45,873	30·1	14·9	1·74	119	28·5	16.2	1·64	133
1903	46,971	29·5	17·9	2·29	185	28·4	15·4	1·46	132
1904	48,069	30·1	16·7	1·89	137	27·9	16·2	1·94	145
1905	49,173	30·1	14·7	1·32	121	27·2	15·2	1·52	128
1906	50,283	28·2	15·7	2·27	143	27·1	15·4	1·73	132
1907	51,398	27·5	14·1	0·84	115	26·3	15·0	1·26	118
1908	52,519	30·4	14·3	1·56	119	26·5	14·7	1·29	120
1909	53,646	28·0	13·3	0·76	102	25·6	14·5	1·12	109
1910	54,779	26·5	12·9	1·15	105	24·8	13·4	0·99	106
1911	55,911	26·8	15·0	1·82	135	24·4	14·6	1·88	130

Coroner's Inquests were held regarding 26 deaths, the proportion of inquest cases to the total number of deaths during the year being 3·1 per cent. Seven of these deaths were of children under six years of age, and five of these seven deaths were due to burns or scalds; four deaths were due to tetanus, five to suicide, one to improper feeding, and the rest to accidents.

Uncertified Deaths.—During 1911 there were 40 deaths the causes of which were not certified by the Coroner or by medical men; this is equivalent to 5 per cent. of the total deaths. Of these deaths 10 occurred under one year of age and 14 at the age of 65 and upwards.

Infant Mortality.—The number of deaths under one year of age was 202, corresponding to an **Infant Mortality-Rate of 135 per 1,000 births**. Reference to the Table above will shew that, as in the whole country, this rate is considerably higher than in recent years. This increase can be accounted for by the large number of deaths (see Table IV., page 35) due to Diarrhœa and Enteritis during the hot dry weather last summer. Of these 44 deaths, 37 occurred in the North, East, and North-West wards (see Table, page 38); the districts occupied by the more well-to-do inhabitants largely escaped, but there is no reason why the rest of the town should not do as well. These deaths are in almost all cases avoidable; they are due to food pollution, and may be prevented if the house and its surroundings are kept clean and free from decomposing matter; special attention should be paid to keeping milk clean.

and unpolluted. No case of summer diarrhœa in an infant should be neglected; medical advice should be sought at once and scrupulously followed.

The infant mortality-rate is an excellent index of the social and sanitary conditions of a district, as it is increased by those conditions which it is the special object of social workers and sanitary reformers to ameliorate. A high infant-mortality rate is accompanied by a higher death-rate, not only in the early years of life, but at succeeding periods up to adult life. The chief requisites for a low infant mortality are knowledge and intelligence in the mothers, absence of overcrowding and healthy conditions in the house, cleanliness of yards and streets, and a decent and efficient method of disposing of refuse so as to avoid pollution of the air and food.

Four deaths from **Tetanus**, and one from **lead poisoning** occurred during the year.

Zymotic Diseases.—The principal Zymotic Diseases caused 107 deaths (see Tables, pages 34 and 36, and Table below); of these, 54 were due to Diarrhœal Diseases under two years of age, 19 to Scarlet Fever, 12 to Whooping Cough, 11 to Measles, 5 to Puerperal Fever, 3 to Diphtheria, and 3 to Enteric Fever.

TABLE—THE FOLLOWING TABLE GIVES THE NUMBERS OF DEATHS AND DEATH RATES PER 1,000 OF THE POPULATION FOR EACH OF THE PRINCIPAL ZYMOTIC DISEASES SINCE 1892.

Year.	Mid-Year Population.	Smallpox.		Scarlet Fever.		Enteric Fever, &c.†		Diphtheria and Membranous Croup.		Measles.		Whooping Cough.		Diarrhœa and Enteritis.*		Puerperal Fever.		Total Zymotic Death Rate.	
		No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1892	38,837	..	..	1	·03	2	·05	6	·15	8	·21	2	·05	21	·54	9	·23	49	1·26
1893	39,464	..	..	2	·05	17	·43	5	·13	12	·30	11	·28	36	·91	3	·08	86	2·18
1894	40,097	..	..	2	·05	9	·22	10	·25	20	·50	5	·12	7	·17	1	·02	54	1·35
1895	40,735	..	..	2	·05	14	·34	12	·29	..	..	6	·15	55	1·35	..	..	89	2·18
1896	41,378	..	..	15	·36	6	·15	5	·12	19	·46	16	·39	6	·14	..	..	67	1·62
1897	42,028	..	..	9	·29	3	·07	4	·10	..	..	13	·31	13	·31	..	..	42	1·00
1898	42,681	2	·05	..	..	10	·23	5	·12	26	·61	3	·07	42	·98	1	·02	89	2·09
1899	43,341	..	..	11	·25	4	·09	5	·12	3	·07	11	·25	27	-62	2	·05	63	1·45
1900	44,006	..	..	7	·16	7	·16	6	·14	9	·20	13	·30	37	·84	..	..	79	1·80
1901	44,779	..	..	4	·09	18	·40	9	·20	20	·45	7	·16	31	·69	2	·04	91	1·03
Mean 1892-1901.	41,735	·2	·005	5·3	·13	9·0	·22	6·7	·16	11·7	·28	8·7	·21	27·5	·66	1·8	·04	70·9	1·70
1902	45,873	..	..	14	·31	8	·17	28	·61	19	·41	2	·04	9	·20	..	..	80	1·74
1903	46,971	3	·06	3	·06	5	·11	22	·47	5	·11	23	·49	47	1·00	4	·09	112	2·38
1904	48,069	..	..	1	·02	5	·10	19	·40	8	·17	24	·50	34	·71	1	·02	92	1·91
1905	49,173	..	..	3	·06	8	·10	11	·22	11	·22	..	..	32	·65	1	·02	66	1·36
1906	50,283	..	..	2	·03	9	·18	10	·20	10	·11	5	·10	78	1·55	..	..	114	2·27
1907	51,398	..	..	1	·02	5	·10	9	·18	4	·08	21	·41	3	·06	..	..	43	·84
1908	52,519	..	..	1	·02	2	·04	10	·19	15	·29	18	·34	38	·72	..	..	84	1·60
1909	53,646	..	..	2	·04	4	·07	4	·08	..	..	23	·43	8	·15	2	·04	43	·80
1910	54,779	..	..	7	·13	1	·02	4	·07	14	·26	11	·21	26	·47	1	·02	64	1·17
1911	55,911	..	..	19	·34	3	·05	3	·05	11	·20	12	·12	54	·97	5	·09	107	1·91
Mean 1902-1911.	50,862	·3	·01	5·3	·09	5·0	·09	12·0	·21	9·7	·20	13·9	·27	32·9	·65	1·5	·03	80·5	1·58

* The numbers and rates for Diarrhœa aud Enteritis refer to deaths under five years of age foı the years 1892 to 1910 (inclusive). The numbers for 1911 refer to deaths under two years of age. As most of these deaths occur under one year of age this difference is not important.

† A few cases of Continued Fever and Relapsing Fever are included in this column.

INFECTIOUS DISEASES.

TABLE shewing the number of **Notifications** of Notifiable Diseases, the **deaths** occurring therefrom, and also the number of Darlington Patients admitted to and discharged from the Borough Fever Hospitals during 1911 :—

Diseases.	Cases Notified.	Deaths Registered.	Number in Hospital at beginning of year.	Admitted to Hospital during year.	Discharged from Hospital.	Died in Hospital.	Remaining in Hospital at end of year.	Case Mortality Per Cent. among Patients Admitted to Hospital During the Year.
Scarlet Fever	719	19	88	671	620	19	117	2·8
Diphtheria (including Membranous Croup)	57	3	4	44	44	2	2	4·5
Enteric (or Typhoid) Fever	18	3	2	9	11	1	1	11·1
Continued Fever ..	1	..	..	1	1	..	..	..
Puerperal Fever ..	1	5	..	..	..	..	..	..
Erysipelas	28	2	..	..	..	..	..	..
Total for 1911 ..	824	33	94	725	676	22	120	3·0
Total for 1910 ..	443	15	20	392	308	10	94	2·6

In addition to the above, 25 cases from the Rural District were admitted to the Borough Hospital. These included 19 cases of Scarlet Fever, 4 of Diphtheria, and 2 of Enteric Fever. No deaths occurred among these patients.

COMPARATIVE RATES OF PREVALENCE OF SICKNESS AND DEATH FROM INFECTIOUS (NOTIFIABLE) DISEASES IN DARLINGTON.

(Rates calculated per 1,000 of the population, estimated to the middle of each year).

Year.	Smallpox		Erysipelas		Diphtheria and Membranous Croup		Scarlet Fever		Enteric Fever, &c.*		Puerperal Fever.	
	Attack	Death	Attack	Death	Attack	Death	Attack	Death	Attack	Death	Attack	Death
1901	..	..	.36	·02	·51	·20	4·4	·09	1·47	·40	·02	·04
1902	..	..	·24	·02	2·14	·61	8·9	·31	·94	·17	·04	..
1903	1·79	·06	·60	..	3·85	·47	2·7	·06	·43	·11	·06	·09
1904	·04	..	·54	·04	3·00	·40	1·7	·02	1·58	·10	·08	·02
1905	·04	..	·59	·04	2·48	·22	2·8	·06	1·03	·10	·06	·02
1906	..	..	·42	·04	1·07	·20	2·3	·03	·80	.18	.04	..
1907	·02	..	·21	..	1·03	·18	1·0	·02	·35	·10	..	..
1908	..	..	·23	..	1·41	·19	1·0	·02	·40	·04	·04	..
1909	..	..	·35	·02	·75	·08	1·2	·04	·55	·07	·06	·04
1910	..	..	·46	·04	·91	·07	6·2	·13	·44	·02	·04	·02
1911	..	..	·50	·04	1·02	·05	12·9	·34	·34	·05	·02	·09

No cases of Typhus Fever, Asiatic Cholera, or Plague, occurred during the above period.

* A few cases of Continued Fever and Relapsing Fever are included under this heading.

The following Table shews the number of **cases** of Infectious Diseases notified each month during 1911.

	Scarlet Fever.	Diphtheria and Membranous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.	Totals.
January	46	2	3	..	..	3	54
February	55	9	1	1	..	1	67
March	103	3	1	..	..	6	113
April	62	4	2	..	..	2	70
May	37	2	..	..	..	3	42
June	32	6	1	..	..	2	41
July	64	8	..	..	1	2	75
August	62	4	3	..	..	1	70
September	46	6	2	..	..	1	55
October	71	5	2	..	..	4	82
November	66	7	1	..	..	..	74
December	75	1	2	..	..	3	81
Total for 1911 ..	719	57	18	1	1	28	824
Total for 1910 ..	342	50	20	4	2	25	443

The Infectious Diseases (Notification) Act, 1889, was brought into force within the Borough at the beginning of 1890. Since then the Notifications have been as follows:—

Disease.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	Total.	Average for the 22 years.
Smallpox	..	..	..	2	1	..	..	..	6	..	..	..	..	84	2	2	..	1	..	..	..	..	98	4·45
Diphtheria & Membranous Croup ..	17	21	11	11	13	26	11	8	10	17	16	23	98	181	144	122	54	53	74	40	50	57	1057	48·04
Erysipelas	37	28	28	36	30	34	35	25	7	33	27	16	11	26	26	29	21	11	12	19	25	28	544	24·73
Scarlet Fever ..	241	104	128	92	54	71	268	228	49	270	112	196	407	125	80	137	115	52	50	63	342	719	3903	177·41
Enteric Fever ..	189	102	40	140	53	65	27	35	88	38	40	64	43	20	76	50	39	17	21	28	20	18	1213	55·14
Puerperal Fever ..	6	4	5	3	1	..	2	1	1	6	3	1	2	3	4	3	2	..	2	3	2	1	55	2·50
Continued and Relapsing Fevers	5	9	7	11	..	5	4	1	2	1	..	2	..	..	..	1	1	1	..	1	4	1	56	2·54
*Measles	223	1483	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1756	†842·48
‡Totals without including Measles	495	268	220	295	152	201	347	298	163	365	198	302	561	439	332	344	232	135	159	154	443	824	6927	314·81

* Ceased to be notifiable at beginning of February, 1892.
† This is the average for $2\frac{1}{12}$ years, the period during which Measles was compulsorily notifiable.
‡ Excluding Measles the total average for 22 years is based on 6,927 cases.
No cases of Typhus Fever, Asiatic Cholera, or Plague were notified during the above period.

Scarlet Fever.—The outbreak of Scarlet Fever which began in 1910, continued throughout 1911. The maximum number of notifications was 103 in March, and the smallest number 32 in June. The number of cases notified was 719, of these 671, rather more than 93 per cent. were treated in the Borough Isolation Hospital. Among the 719 cases there were 19 deaths, equivalent to 2·6 per cent.

The extension of the Hospital, decided on in October, 1910, was insufficient, and in March, 1911, the second extension, consisting of a large Ward and Discharge Block was begun. The Hospital, as thus extended, contains 112 beds, distributed in four Ward Blocks and a Discharge Block.

The large proportion of patients removed to Hospital is evidence of the popularity of the Hospital, both with the medical men of the town and the parents of the patients. The Table below shows that though the attack rate is by far the highest for the last 21 years, the cases were usually mild in type, and the mortality among the patients has been greater in eight of the twenty-one years.

In May all the public Elementary Schools were closed for six weeks on account of Scarlet Fever, and thoroughly cleansed and disinfected. Later in the year a Girls' Boarding School and a Girls' Home were treated in the same way.

The following Table gives the Scarlet Fever Attack-, Death-, and Mortality-rates, together with the percentage of cases removed to the Hospital from the Borough, and also the number of cases removed to the Hospital from outside the Borough since 1891 :—

Year.	Estimated Mid-Year Population.	Attack Rate per 1,000 Population.	Death Rate per 1,000 Population.	Mortality Rate per cent. of cases.	Percentage of cases removed to Hospital.	Number of cases removed to Hospital from outside Borough.
1891	38,215	2·7	·16	1·9	56	2
1892	38,837	3·3	·03	0·8	42	0
1893	39,464	2·3	·05	2·2	46	1
1894	40,097	1·3	·05	3·7	41	3
1895	40,735	1·7	·05	2·8	55	7
1896	41,378	6·5	·36	5·6	62	8
1897	42,028	5·4	·29	3·9	60	6
1898	42,681	1·1	..	..	90	0
1899	43,341	6·2	·25	4·8	69	19
1900	44,006	2·5	·16	6·3	71	6
1901	44,779	4·4	·09	2·0	83	10
1902	45,873	8·9	·31	3·5	78	40
1903	46,971	2·7	·06	1·4	84	18
1904	48,069	1·7	·02	1·3	84	8
1905	49,173	2·8	·06	2·2	82	2
1906	50,283	2·3	·03	1·7	88	1
1907	51,398	1·0	·02	1·9	85	0
1908	52,519	1·0	·02	2·0	90	10
1909	53,646	1·2	·04	3·8	90	10
1910	54,779	6·2	·13	2·0	95	4
1911	55,911	12·9	·34	2·6	93	19

Diphtheria (including Membranous Croup). — The number of notified cases of this disease was 57. Owing to the large number of cases of Scarlet Fever under treatment in the earlier part of the year it was necessary for a time to refuse admission to Hospital to cases of Diphtheria. In spite of this, 44 cases in all—i.e. 77 per cent.—were removed to Hospital. Three deaths from this disease occurred during the year corresponding to 5·3 per. cent. of the cases notified.

Enteric (or Typhoid) Fever.—Eighteen cases of Enteric Fever were notified during the year, of these nine were removed to Hospital, and nine were treated at home. Three deaths occurred, one in Hospital, and two among home-treated cases.

Puerperal Fever.—Six cases of this disease occurred during the year, and five deaths were registered.

Erysipelas.—Twenty-eight cases of Erysipelas were notified, and two deaths occurred during the year from this disease.

Diarrhœa.—Sixty-nine deaths occurred from Diarrhœal diseases, distributed as follows:—North Ward, 15; East Ward, 24; North West Ward, 14; West Ward, 6; South Ward, 4; Central Ward, 6; in the first quarter of the year 6, in the second 8, in the third 48, and in the fourth 7. Forty-four of these deaths were of children under one year of age, the numbers in the various Wards as above, being 12, 14, 11, 2, 2, and 3, and in successive quarters of the year, 2, 4, 36, and 2. These deaths among children from Diarrhœa are usually, if not always, preventable, as is explained earlier in this report under Infant Mortality.

Measles caused 11 deaths and Whooping Cough 12. Few deaths would occur from Measles if the serious nature of this illness was recognized and precautions were taken to avoid complications, and to secure early treatment when they arise. Reference to Table V., page 36, will show that the deaths from these diseases are distributed among the Wards as follows: North 10, East 7, North-West and West none, South 3, and Central 2. Here too there is an opportunity for saving lives.

Tuberculosis.—There were 83 deaths from Tuberculosis during 1911, as follows:—

Pulmonary Tuberculosis	-	-	60
Tuberculous Meningitis	-	-	10
Other Tuberculous Diseases	-	-	13

Under the Public Health (Tuberculosis) Regulations, 1908, cases of Pulmonary Tuberculosis occurring in the practice of Poor Law Medical Officers became notifiable, and, by the Public Health

(Tuberculosis in Hospitals) Regulations, 1911, this notification was extended to patients treated at Hospitals and Dispensaries supported wholly or partly by charitable contributions. Under these orders 27 cases were notified, 18 males and 9 females; three between the ages of 15 and 25, thirteen between 25 and 45, ten between 45 and 65, and one over 65. Of these patients 9 came from the Central Ward, 6 each from the North-West and the South Wards, 5 from the East Ward, and 1 from the North Ward. Of the 27 cases mentioned above, 2 from the North-West Ward, 1 from the South Ward, and 1 from the Central Ward died in the Workhouse Infirmary; two died in the Central Ward.

Under the Public Health (Tuberculosis) Regulations, 1911, this Notification has been extended to cases occurring in private practice, so that after the first of January, 1912, all cases of Pulmonary Tuberculosis will be notifiable. It is to be hoped that the efforts about to be made in consequence of this notification, and in connexion with the National Insurance Act, will soon bring to an end the misery and loss of life now resulting from this disease. Special powers are given to County Councils under the Insurance Act, but the co-operation of all Local Authorities will be needed if the fight against Tuberculosis is to be successful.

No case of **Smallpox**, **Typhus Fever**, **Cholera**, or **Plague** occurred during the year.

GENERAL.

Water Supply.—The Borough is supplied by the Corporation Water Works with water pumped from the Tees at the extreme west end of the Borough, and purified by filtration; its quality is regularly examined for the Water Works Committee by the County Analyst. This water is treated with milk of lime to avoid plumbo-solvency. The quantity of lime is increased in the autumn at the time when decaying vegetation on the moorland gathering grounds would cause greater acidity of the water. Since this practice has been adopted the amount of lead compounds found in the water as supplied in the town has not exceeded the equivalent of one part of metallic lead in ten million, an amount considerably below the quantity permissible.

Rivers and Streams.—While the industries of the neighbourhood are not likely to lead to any great pollution of the streams, carelessness on the part of occupiers of premises by the stream side

sometimes gives rise to pollution. It is important that the bed of the Cocker Beck and the old bed of the Skerne should be cleared of obstructions and kept clean.

Drainage and Sewerage.—The sewage of the town is all conveyed to the Sewage Farm, situated in the Skerne Valley about a mile to the south of the town. Storm overflows are provided at certain points. I am informed that the question of the adequacy of the sewers and the introduction of a more satisfactory method of sewage treatment are under consideration.

Closet Accommodation.—In many of the older houses in the Borough the closet accommodation consists of a privy with a midden attached. These middens number about 2,600, and are of a most objectionable character. In most cases there is no roof or impervious floor; the walls frequently are dilapidated, and at the best only consist of rough uncemented brickwork which it is impossible to keep clean.

During the last twenty years 5,400 privy ashpits—*i.e.*, small privies with fixed receptacles in which household refuse is deposited—have been built, either in connexion with new buildings or in place of middens of the older type.

There are about 3,500 water closets in the Borough.

Attention has been frequently called by Dr. Lawrence, my predecessor as Medical Officer of Health, to the insanitary nature of the old middens, and the advisability of substituting water carriage for conservancy methods. Shortly after my appointment, at the request of the Council, I submitted a report on the sanitary accommodation of the Borough, which was considered at a joint meeting of the Health and Sanitary and Streets Committees.

Subsequently, at a meeting of the General Purposes Committee, the following resolution was passed:—

"(1) That the Streets, &c., Committee be instructed henceforth to "require in all plans for new buildings or substantial alterations "submitted for their approval, that the 'Water Carriage System' of "sewage disposal be adopted.

"(2) That in cases where plans have been already passed but the "buildings either not commenced or not too far advanced, the "builders or parties interested be notified in order that they may have "an opportunity of complying with this change.

"(3) We are, however, not prepared to advise that the Council "should at once seek to have all conveniences converted to the 'Water "'Carriage System,' but we do recommend that in future any necessary "alteration should proceed gradually towards the attainment of that

"end, and that owners of property should be required to alter all "old privies and privy-ashpits into water closets, only as, and when "they create nuisances which cannot be abated without the provision "of a water closet, and then only after the Health and Sanitary "Committee have made a special report to the Council, calling "attention to the need for the alteration to be made, and have "obtained its approval thereto."

The alteration likely to proceed from this resolution is of the highest importance to the town, especially in view of the rapid growth of the Borough which is taking place in consequence of the large works which are now being built or extended in the northern half of the town.

Scavenging.—The contents of small privies and ashpits are removed once a week; the large midden-privies, of which, as previously stated, some 2,600 still exist, have their refuse removed about once a month. The infrequency of this cleansing is a menace to the public health, and the abolition of these middens, which has now begun, will do away with a source of serious food pollution. It is equally important that midden-steads in connexion with stables should be cleared at least once a week. The principal source of epidemic diarrhœa, from which many infants die yearly in the hot weather, is through germs from decomposing organic matter being carried to the food by dust and flies. As the time taken for the development of flies is under favourable circumstances about a week, if the refuse is removed once a week most of the flies will be taken away as maggots before they have time to develop to the adult form.

The Work of the Sanitary Inspectors and other officers engaged in sanitary work is fully described in the Report of the Chief Sanitary Inspector which is printed herewith. This report gives particulars of the work done during the year to protect the food supply. The samples of milk taken were usually of remarkably good quality as shewn by chemical analysis, but to completely safeguard this important article of food, arrangements are needed to examine samples of milk for tubercle bacilli. I would recommend your Committee to consider this important matter, and if necessary to obtain special powers from Parliament as has already been done by some other towns.

Details with regard to Meat Inspection will be found on page 25. There are 40 private slaughterhouses in the Borough, in which killing takes place on all days of the week. The work of inspection is in consequence difficult and much time is occupied in carrying it out.

The work required under the Housing and Town Planning Act, 1909, has been begun, and arrangements have been made for the

systematic survey and records required by that Act. Only one Closing Order was made during the year.

There are in the Borough ten common lodging houses, one underground bakehouse. five tripe preparers, one gut-scraper, one bone boiler, five fat renderers or fat extractors, thirty-three fish fryers, eleven rag and bone dealers, and one fellmonger.

The above premises have been regularly inspected—see pages 28 and 29. An underground bakehouse was found in use contrary to Section 101 of the Factory and Workshop Act, 1901. On the occupier's attention being called to the matter its use was at once given up.

The following Acts of Public Health interest have been adopted in the Borough :—

Baths and Wash-houses Acts of 1846 and 1847.
Infectious Disease (Prevention) Act, 1890.
Public Health Acts Amendment Act, 1890.
Public Health Acts Amendment Act, 1907 (except sections 48, 82, 83, and 92).

The Shop Hours Act, 1904, is in force for the following trades :— Chemists and Druggists, Boot and Shoe Dealers, and Hairdressers and Barbers, the Chief Sanitary Inspector being Inspector under the Act.

The most important Local Act dealing with Public Health matters is the Darlington Extension and Improvement Act, 1872. This Act conferred on the Darlington Council powers with regard to closing property unfit for human habitation, of the same character as those contained in the most recent Acts.

On May 30th, an Order was obtained from the Local Government Board, under section 50 of the Public Health Acts Amendment Act, 1907, declaring the trades of fat melter or fat extractor, fish fryer, gut scraper, rag and bone dealer, and candle maker within the Borough to be offensive trades.

Sanitary Inspector's Report for the Year ending 31st December, 1911.

To the Chairman and Members of the
Health and Sanitary Committee.

Gentlemen,

I have pleasure in submitting for your information and consideration my Annual Report as Borough Sanitary Inspector.

The year has being a very busy one indeed, and the work of the Department is ever increasing.

In addition to all the duties devolving upon the Department under the Public Health Acts, Food and Drugs Acts, Infectious Disease Prevention and Notification Acts, Dairies, Cowsheds, and Milkshops Regulations, Factory and Workshop Act, Poisons and Pharmacy Act, Shop Regulations Act, and the various Bye-laws, considerable additional duties have recently been created under the Housing and Town Planning Act, 1909, and the Housing (Inspection of District) Regulations, 1910.

Scarlet Fever has been epidemic during the year, and the necessary inquiries and disinfection has taken up a considerable portion of the Inspectors' time.

Several changes in the staff have taken place during the year. Owing to the lamented death of Percy Coverdale (one of the Assistant Inspectors) and the resignation of Francis Arnold (another assistant) to take up an appointment elsewhere, it was necessary to fill their places, and William Linsley, of Darlington, and Ernest Brittain, of Sunderland, were appointed.

General Sanitary Work.—During the year no less than 1,361 Informal Notices for the abatement of nuisances were served, and in most cases were complied with without the necessity of any report to the Council. Two hundred and eighty-three Statutory Notices were served in accordance with your instructions.

The following is a summary of the various headings under which such notices were served :—

	Number of Informal Notices by Inspector.	Number of Formal Notices by order of Council.	Number of Nuisances abated after Notice.
Dwelling-houses—Foul condition ..	33	2	33
Structural defects ..	385	103	413
Lodging-houses	7	3	8
Cowsheds	7	—	7
Bakehouses	4	—	4
Slaughter-houses	3	—	3
Ashpits and Privies	253	46	277
Deposits of Refuse and Manure ..	7	4	9
Water Closets—Drains stopped up ..	36	1	36
Fittings defective ..	71	11	80
Defective yard paving	125	40	137
House drainage—Defective yard and scullery traps ..	31	4	33
No disconnection from sewers ..	118	27	130
Other faults—Yard, scullery, and cellar drains stopped up and defective ..	218	34	250
No water supply to water closets ..	4	—	4
Pigsties	5	—	5
Animals improperly kept	16	4	20
Offensive trades	1	—	1
Smoke nuisances	1	—	1
Filthy yards	11	1	12
House not provided with sufficient sinks or slopstones	25	3	27
	1361	283	1490

The difference between the number of notices served and the nuisances abated is accounted for by the fact that in many cases the notices were still outstanding at the end of the year, because the time had not expired and other reasons.

Sanitary Conveniences.—Only 34 water closets have been substituted for the old-fashioned privies and ashpits, under notice from the Council, during the year, owing to the fact that the principle as to what class of convenience should be substituted in cases where the old-fashioned privies and ashpits were reported upon by the Medical Officer of Health and myself was not decided by the Council until near the end of the year, and in the meantime hundreds of cases which required to be dealt with were held over. There are still 2,631 of the old-fashioned privies and ashpits remaining in the Borough, and in many cases they are in a very bad condition, but I hope to be able to report a substantial diminution in that number in the course of another year.

During the year there were 346 new houses erected and inhabited in the Borough, and of these 259 were provided with privy-ashpits and 87 with water closets.

Having regard to our experience of the many nuisances occurring in connection with these privy-ashpits, it is a source of considerable satisfaction that the Council have decided to insist upon water closets in all new buildings, and also where alterations of sanitary conveniences take place in connection with old property.

Infectious Diseases.—The work of the department under this heading has been very heavy, the epidemic of Scarlet Fever continuing during the whole of the year. The necessary investigation work following each of the 824 cases of Infectious Disease referred to in the report of the Medical Officer of Health, and the subsequent disinfection of infected premises, notification to the school authorities, &c., has taken up a very large amount of time.

In addition to the ordinary work under this heading, 10 rooms have been fumigated and 4 lots of bedding disinfected after deaths from pulmonary tuberculosis, and we have also had several requests to disinfect houses following such diseases as cancer, septic throat, etc., which we have readily complied with.

The whole of the Elementary Schools, as well as one private school and several public institutions in the Borough, were also thoroughly cleansed and fumigated.

Factories and Workshops.—The total number of Workshops, including Bakehouses, on the register for the Borough at the end of the year was 354, and the following is a summary of the various trades represented :—

Bakers and Confectioners	55
Dressmaking, Millinery, &c.	72
Boot Repairing	41
Joiners, Cabinet Makers, &c.	53
Tailors	33
Plumbers	16
Blacksmiths	11
Painters	14
All other Workshops	59
	354

The whole of the Workshops were regularly inspected, and the following are particulars of the defects found and dealt with :—

Defects Found.

	No. of Notices served.	No. complied with.
Want of Cleanliness	25	25
Defective ventilation	6	6
Sanitary conveniences insufficient ..	2	2
Defective fittings	12	12
Structural defects	6	6

The following notices were received from His Majesty's Inspector of Factories during the year pointing out defects remediable under the Public Health Acts:—

Workshops requiring cleansing	5
Defective ventilation	3
Defective water closet fittings, &c. ..	2
	10

The whole of the defects to which our attention was drawn have been remedied.

One underground bakehouse was in use without being certified, but on the attention of the proprietor being called to Section 101 of the Factory and Workshop Act, 1901, the use of such room was forthwith discontinued.

Section 107 of the Factory and Workshop Act, 1901, provides that Lists of Outworkers must be kept by every Occupier of a Factory or Workshop who gives out work of certain classes to be done by persons in his employ outside the Factory or Workshop, and copies of such Lists are to be sent half-yearly to the Local Authority.

During the year I have only received Lists from 3 Tradesmen although I am aware that this is only about one-sixth of the number entitled to send such Lists.

In August, 1907, special Circulars were printed and distributed from this Department to all tradesmen likely to employ Outworkers calling attention to their duties under this Section, and although we then received Lists from 18 persons, they soon discontinued sending same, and in February, 1909, a special letter was sent out calling attention to the previous Circular and threatening proceedings if the requirements of the Act were not complied with. This letter brought immediate responses from 14 tradesmen, but in August of the same year the number was down to 7, and, as before stated, Lists were only received from 3 tradesmen last year.

It is important that these Lists of Outworkers should be regularly sent in so that the premises can be inspected, and also to provide us

with the necessary information to enable us to prevent goods being sent out from such Outworkers' homes in the event of a case of Infectious Disease occurring there, and I am afraid it will be necessary for the Council to prosecute one or more of the defaulters in order to bring home to them the necessity of discharging their obligations under the Section.

Food and Drugs.—183 samples have been taken during the year as follows :—

	No. taken.	Genuine.	Adulterated.
Milk	119	107	12
Spirit	15	14	1
Flour	3	3	—
Butter	3	3	—
Yeast	3	3	—
Lard	3	3	—
Cheese	3	3	—
Ground Almonds ..	3	3	—
Bread Meal	2	2	—
Oatmeal	5	5	—
Sago	1	1	—
Pepper	2	2	—
Tartaric Acid ..	3	3	—
Cream of Tartar ..	3	3	—
Arrowroot	1	1	—
Ground Ginger ..	2	2	—
Tincture of Myrrh ..	1	1	—
,, Rhubarb ..	1	1	—
Carbonate of Soda ..	1	1	—
Tincture of Ginger ..	1	1	—
Sweet Nitre	1	1	—
Precipitated Sulphur ..	1	1	—
Cornflour	1	1	—
Ground Rice	1	1	—
Self Raising Flour ..	1	1	—
Tea	1	1	—
Mustard	1	1	—
Jam	1	1	—
Total	183	170	13

The samples of Milk and Spirit were taken by me in person, but the whole of the remaining samples were taken informally, which method is not only a saving of expense but cannot fail to be more satisfactory as the Vendor is not aware that the articles purchased are to be submitted for analysis, and it is most satisfactory and creditable to our tradesmen for me to be able to report that none of such informal samples of provisions, drugs, &c., were found adulterated.

Of the 119 milk samples, 96 were morning and 23 afternoon samples.

The following is a list of the adulterated samples :—

No. of Sample.	Nature of Sample.	Result of Analysis.	Remarks.
21	Milk.	Deficient in non-fatty solids corresponding to an addition of 8·60% of water.	Proceedings taken and defendant ordered to pay the costs 18/6.
27	Milk.	Deficient in non-fatty solids corresponding to an addition of 10·40% of water	Proceedings taken and defendant ordered to pay the costs £6 0s. 8d.
42	Milk.	7% deficient in fat.	Letter of warning by Town Clerk.
45	Milk.	Deficient in non-fatty solids corresponding to an addition of 9·70% of water.	Letter of warning by Town Clerk. NOTE. — The circumstances in this case were of an exceptional nature.
53	Milk	Deficient in non-fatty solids corresponding to an addition of 6% of water.	Letter of warning by Town Clerk.
62	Milk.	30·4% deficient in fat.	Proceedings taken and defendant fined 10/- and 7/6 costs.
68	Milk.	19% deficient in fat.	Proceedings taken and defendant fined £5 and £4 6s. 6d. costs.
73	Milk.	Slightly deficient in fat.	Letter of warning by Town Clerk.
74	Milk.	Do.	Do.
116	Milk.	Deficient in non-fatty solids corresponding to an addition of 11·2% of water.	The circumstances in this case were of an exceptional nature. Further samples were ordered to be taken.
152	Milk.	Deficient in non-fatty solids corresponding to an addition of 4·40% of water.	Letter of warning by Town Clerk.
155	Milk.	Deficient in non-fatty solids corresponding to an addition of 3% of water.	Do.
171	Whiskey.	35·24 degrees under proof.	Proceedings taken and defendant fined 5/- and 18/- costs.

Inspection of Meat and Other Foods.—Special attention has been paid to the systematic inspection of the various food stuffs exposed for sale during the year, and particularly to meat, fruit, and fish.

All food traders are constantly liable to have food turn unsound whilst in their possession, and in the case of butchers, to find unexpected diseased conditions of various kinds in carcasses. The course adopted by me, particularly as regards meat, is to invite notification of these occurrences to this department, and in such cases that portion which is considered by me to be unfit for human food to be surrendered by the owner and no further proceedings taken. The results have been very satisfactory and about 41 % of the cases I have had to deal with have been notified in this way, the remaining 59 % being found on inspection chiefly at the time of slaughter.

I endeavour to arrange that every carcass prepared for sale in the Borough is inspected, together with the organs belonging thereto, at the time of slaughter, but as there are 40 private slaughter-houses in the Borough and no restriction in the slaughter-house bye-laws regulating the times of slaughtering, which takes place on almost every day in the week, and at all hours of the day and evening, it will be fully realized that the work is both arduous and necessitates a good deal of night work.

Although the work, including the regular inspection of the markets, takes up quite two-thirds of one man's time, I think the Council will agree that such time and expense is well spent when I inform you that during last year no less than 5 tons, 10 cwts., 24 lbs. of diseased and unsound food was either seized by or surrendered to me, and destroyed.

Three formal seizures were made and proceedings taken in one case, the defendants all being convicted, and fines of £10, £5, and £25, respectively, with costs in each case, inflicted.

In two cases the meat was Tubercular and certain signs of the disease had been removed, but the work had not been well done as sufficient signs were left to permit of detection, the third was a case of Unsound Meat which was totally unfit for food.

The total number of animals slaughtered in the Borough during the past year (exclusive of sheep and swine) is about 5,000, and it is due from me to our meat traders to say that from the majority of them I receive every assistance, the relations between them and this Department are satisfactory, and their chief desire seems to be to carry on their business in a honest, staightforward manner, and supply the public with good wholesome meat.

The following is a list of all food seized or surrendered during the year:—

Meat.	Stones	lbs.
13 carcasses of Beef, weighing ..	633	7
Beef, not in carcass	125	8
Veal	10	6
Ox Livers, Heads, Lungs, etc. ..	33	10
Rabbits	3	3
	806	6

Fish.	Stones	lbs.
6 Cod Fish	3	8
Small Haddocks	2	7
Lobsters	0	11
	6	12

Fruit and Vegetables.	Stones	lbs.
Cherries	1	2
Peaches	0	13
Strawberries	63	13
Vegetable Marrows	1	6
Apples	1	0
	68	6

Summary.

	Tons	cwts.	qrs.	lbs.
Meat	5	0	3	6
Fish	0	0	3	12
Fruit and Vegetables ..	0	8	2	6
Total	5	10	0	24

Slaughterhouses.—There are 40 Slaughterhouses in the Borough, of which 11 are subject to annual licence.

One application for a licence to premises situate in Hollyhurst Road was refused.

One licence has lapsed during the year through disuse.

Many of the old slaughterhouses leave much to be desired so far as regards their position, surroundings, and arrangement, and would not be likely to receive a licence if application had to be made at the present time.

The whole of the slaughterhouses have been regularly and frequently inspected, and the Bye-laws as to lime-washing, provision of receptacles for garbage, etc., have been fairly well observed, verbal intimations of any breach having the desired effect.

Offensive Trades.—The following is a list of the offensive trades carried on in the Borough :—

1 bone boiler,
1 fellmonger,
1 gut scraper,
4 fat rendering and tripe boiling,
1 tripe boiling only,
1 fat rendering only,
1 fish fryer.

By virtue of Section 112 of the Public Health Act, 1875 as amended by Section 51 of the Public Health Amendment Act, 1907, an Order was made by the Local Government Board on the 30th May, 1911, declaring the following trades, namely, Fat Melter or Fat Extractor, Fish Fryer, Gut Scraper, Rag and Bone Dealer, and Candle Maker within the Borough to be offensive trades.

In addition to the above list there are 32 Fish Fryers and 11 Rag and Bone Dealers in the Borough.

Frequent visits have been made to the various premises, and with one or two exceptions the trades were found to be carried on satisfactorily.

The Town Clerk is at present preparing a set of Bye-laws for regulating the conduct of all offensive trades which will probably be put into force at an early date.

Dairies, Cowsheds, and Milkshops.—There are 25 Cow-keepers and 98 Milk-sellers on the Register—1 Cowshed and 14 Milk-sellers have been added, and 1 Cowshed and 12 Milk-sellers discontinued during the year.

The Cowsheds have been kept in a satisfactory condition, but some of the Milkshops are not satisfactory. In several cases the milk is stored in unsuitable places and in open bowls and tins instead of proper covered receptacles. The attention of the purveyors has been called to the matter, and an intimation given that unless better methods are adopted steps will be taken to compel them to discontinue selling milk.

Living Vans, Tents, and Sheds.—I have frequently had to deal with persons occupying these structures, who come into the town and locate themselves on certain waste lands.

Invariably they are not provided with sufficient water supply or sanitary accommodation, and from their filthy habits they become a nuisance and source of danger to the neighbourhood in which they are located.

In most cases the supplying of a copy of our Bye-laws and a verbal intimation to move on has had the desired effect, but in 7 cases it was necessary for the Town Clerk to serve 24-hour notices threatening to prosecute, before they were removed.

HOUSING & TOWN PLANNING ACT, 1909.

Housing (Inspection of District) Regulations, 1910—Additional responsibilities have been placed upon Local Authorities under the above Act, amongst which is the systematic House to House Inspection in their particular districts.

Owing to changes in the Staff of the Department, and the continued prevalence of the Scarlet Fever Epidemic during the year, this work did not receive as much attention as it otherwise would have done.

I had the pleasure of submitting a system of obtaining and recording the necessary information to our Medical Officer of Health shortly after he took up his duties, and on his approval thereof have had same put into operation.

During the year 201 Inspections were made and 25 notices served for remedying certain defects, which were, with 2 exceptions, duly complied with.

It is not necessary for us to proceed under this Act for the closing of premises unfit for human habitation, as the Council have powers under the Darlington Extension and Improvement Act, 1872, similar to those contained in the Act, and during the year 1 house was closed under this Local Act.

Common Lodging-Houses.—There are 10 Registered Common Lodging-houses in the Borough with accommodation for 418 lodgers. Two of the keepers of such lodging-houses are only registered for a period of 12 months under the provisions of the Public Health Acts Amendment Act, 1907.

One of these lodging-houses was added during the year and registered for 18 lodgers. The house is situate at Number 9 Park Place, and was formerly the Exchange Inn. The premises were overhauled and proper and sufficient sanitary conveniences and lavatory accommodation provided before being registered.

Several changes in the Deputies registered have occurred during the year.

The whole of the Lodging-houses have been regularly inspected, and the Bye-laws are fairly well observed.

Notices to abate nuisances were served in 10 cases, and in 9 cases such notices were promptly complied with. The notice outstanding is in respect of Tanfield's Home, and in this case part of the work has been carried out, but there are sets of trough closets and lavatories in two sections of the Home which have direct communication with the kitchen. The necessary alterations to these conveniences have not yet been done, but I am informed that our requirements are receiving attention and will be complied with at an early date.

In conclusion, I have pleasure in thanking you for your support, and also in recording the valuable assistance I have at all times received from the Town Clerk and Medical Officer of Health, and also the hearty co-operation of every member of the staff of the Health Department.

I am, Gentlemen,

Your obedient servant,

JNO. R. COPPING,

Chief Sanitary Inspector.

Health Office, Houndgate,
14th May, 1912.

LIST OF STATISTICAL TABLES.

		PAGE.
Table I.	—Vital Statistics for 1911 and previous years (L.G.B. Table)..	32
„ II.	—Cases of Infectious Disease notified and removed to Hospital during 1911, classified according to Ward and Age (L.G.B. Table)	33
„ III.	—Causes of Death, 1911, arranged according to classification of Registrar-General (L.G.B. Table)	34
„ IV.	—Infant Mortality during 1911 (L.G.B. Table)	35
„ V.	—Total Deaths in Wards and Quarters of Year during 1911 ..	36, 37
„ VI.	—Infant Mortality during 1911—Deaths distributed in Wards and Quarters of Year	38, 39
„ VII.	—Summary of Meteorological Observations	40

TABLE I.—VITAL STATISTICS OF DARLINGTON DURING 1911 AND PREVIOUS YEARS.

Year.	Population Estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths		Net Deaths belonging to the District.			
		Uncorrected.	Net.				of Non-Residents registered in the District.	of Residents not registered in the District.	Under 1 year of age.		At all ages.	
			Number.	Rate.	Number.	Rate.			Number.	Rate per 1,000 net Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	50,283	1,422	..	28·2	800	15·9	20	11	203	143	791	15·7
1907	51,398	1,413	..	27·5	739	14·4	23	9	163	115	725	14·1
1908	52,519	1,575	..	30·4	765	14·6	20	6	187	119	751	14·3
1909	53,646	1,511	..	28·0	716	13·3	16	14	154	102	714	13·3
1910	54,779	1,451	..	26·5	718	13·1	26	17	152	105	709	12·9
1911	55,911	1,500	1,496	26·8	830	14·8	18	25	202	135	837	15·0

Area of Borough in Acres .. 3,956.

Total population at all ages 55,633
Number of inhabited houses 12,289
Average number of persons per house .. 4·52
} At Census of 1911.

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED AND REMOVED TO HOSPITAL DURING THE YEAR 1911, CLASSIFIED ACCORDING TO WARD AND AGE.

Notifiable Disease.	Cases notified in whole Borough.								Total Cases notified in each Ward.						Number of Cases removed to Hospital from each Ward.						
	At all Ages.	At Ages—Years.							1 North	2 East	3 North-West	4 West	5 South	6 Central	1 North	2 East	3 North-West	4 West	5 South	6 Central	Total
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards.													
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	57	..	15	22	10	9	1	..	14	6	15	11	7	4	14	3	12	7	4	4	44
Erysipelas	28	1	..	2	1	9	9	6	9	5	6	4	2	2	..	..	..	..	..	..	..
Scarlet Fever	719	5	117	509	74	14	..	..	120	130	193	89	89	98	118	122	181	78	82	90	671
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	18	..	2	3	5	7	1	..	5	2	2	2	5	2	2	1	1	1	3	1	9
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1
Puerperal Fever	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis — Under Tuberculosis Regulations 1908	27	..	..	..	3	13	10	1	1	5	6	..	6	9	..	..	..	..	..	..	..
Phthisis — Under Tuberculosis Regulations 1911	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis — Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL ..	851	6	134	536	94	53	21	7	149	149	222	107	109	115	134	127	194	86	89	95	725

BOROUGH ISOLATION HOSPITALS — Borough Fever Hospital, Hunden's Lane, Darlington, 112 beds used for Enteric and Scarlet Fevers, and Diphtheria. Four Ward Blocks and Discharge Block.
Borough Smallpox Hospital on the Eastern Boundary of the Borough—35 beds.

TABLE III.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1911.

CAUSES OF DEATH.	Net Deaths at the subjoined ages of "Residents" whether occurring within or without the district.									Total deaths whether of residents or non-residents in institutions in the district.
	All ages.	Under one 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 upwards.	
1	2	3	4	5	6	7	8	9	10	11
All causes { Certified	804	192	41	40	47	37	96	141	203	125
All causes { Uncertified	40	10	..	1	..	1	3	11	14	..
Enteric Fever	3	..	..	1	..	1	1	..	..	1
Smallpox	..	..	..	..	..	..	..	..	..	..
Measles	11	..	5	5	1	..	..	..	..	..
Scarlet Fever	19	..	..	7	11	1	..	..	..	19
Whooping Cough	12	8	1	3	..	..	..	..	..	..
Diphtheria and Croup	3	..	..	1	2	..	..	..	..	2
Influenza	6	..	..	..	..	..	2	2	2	..
Erysipelas	2	..	1	..	..	..	1	..	..	..
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..
Tetanus	4	..	..	..	1	..	2	1	..	3
Lead Poisoning	1	..	..	..	..	..	..	1	..	1
Phthisis (Pulmonary Tuberculosis) ..	60	..	..	..	1	17	26	14	2	8
Tuberculous Meningitis	10	1	3	1	3	2	..	..	..	..
Other Tuberculous Diseases ..	13	2	2	1	4	..	3	..	1	3
Rheumatic Fever	4	..	..	..	1	..	2	1	..	..
Cancer, malignant disease ..	53	..	..	..	1	..	7	26	19	9
Bronchitis	62	18	2	3	..	1	..	14	24	3
Broncho-Pneumonia	30	13	7	4	1	..	..	1	4	2
Pneumonia (all other forms) ..	23	2	4	1	..	1	3	5	7	3
Other diseases of Respiratory organs	8	1	..	2	..	..	1	1	3	2
Diarrhœa and Enteritis	68	46	8	2	2	1	2	3	4	2
Appendicitis and Typhilitis ..	3	..	..	..	2	..	1	..	..	3
Alcoholism	1	..	..	..	..	..	..	1	..	..
Cirrhosis of Liver	7	..	..	..	..	..	1	5	1	..
Nephritis and Bright's Disease ..	16	..	..	..	1	..	4	6	5	3
Puerperal Fever	5	..	..	..	..	1	4	..	..	1
Other accidents and diseases of Pregnancy and Parturition ..	3	..	..	..	..	1	2	..	..	..
Congenital Debility and Malformation, including Premature Birth	73	72	1	..	..	..	..	..	..	1
Violent Deaths, excluding Suicide	16	1	..	4	3	3	1	3	1	5
Suicides	7	..	..	..	..	1	4	1	1	2
Other Defined Diseases	216	19	3	4	11	7	26	55	91	40
Diseases ill-defined or unknown	98	19	4	2	2	1	6	12	52	12
Total	837	202	41	41	47	38	99	152	217	125

TABLE IV.

INFANT MORTALITY.

1911. NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 month.	1-3 Months.	3-6 Months.	6-9 Months	9-12 Months.	Total Deaths under 1 Year.
All causes { Certified.	47	10	7	3	67	43	33	33	16	192
All causes { Uncertified.	6	..	..	..	6	3	1	..	..	10
Smallpox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup ..	..	..	..	..	..	..	..	..	..	..
Whooping-cough ..	..	..	..	..	..	4	1	1	2	8
Diarrhœa	..	1	2	..	3	5	7	7	3	25
Enteritis	..	..	..	1	1	7	7	3	1	19
Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	1	1
Abdominal Tuberculosis..	..	..	..	..	..	..	1	1	..	2
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..
Congenital Malformations	2	..	..	..	2	1	..	..	..	3
Premature birth ..	20	1	1	1	23	1	..	..	..	24
Atrophy, Debility, and Marasmus	18	4	3	1	26	12	2	4	1	45
Atelectasis	4	..	..	..	4	..	..	..	..	4
Injury at birth	..	1	..	..	1	..	..	..	..	1
Erysipelas	..	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	..	..	1	1	..	..	2
Rickets	..	..	..	..	..	..	..	..	1	1
Meningitis (*not Tuberculous*)	..	..	..	..	..	..	1	1	2	4
Convulsions	8	..	..	..	8	6	1	2	1	18
Gastritis	..	..	..	..	..	..	2	..	..	2
Laryngitis	..	..	..	..	..	..	..	1	..	1
Bronchitis	..	..	..	..	..	5	6	6	1	18
Pneumonia (all forms) ..	..	1	..	..	1	1	5	5	3	15
Suffocation, overlying ..	..	..	..	..	..	..	..	..	..	..
Other causes	1	2	1	..	4	3	..	2	..	9
	53	10	7	3	73	46	34	33	16	202

Net Births in the year, 1,496. Net Deaths in the year, 837.

TABLE V.—NET DEATHS DURING 1911 OF PERSONS BELONGING TO DARLINGTON, CAUSES, AND QUARTERS IN WHICH THE DEATHS OCCURRED.

CAUSES OF DEATH.	WARDS.																								Total Deaths:				
	North.				East.				North-West.				West.				South.				Central.								
Total Deaths from all Causes	174				158				166				88				127				124				837				
	Quarters				Quarters				Quarters				Quarters				Quarters				Quarters				In Quarters				For Whole Year.
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
All Causes—																													
Certified	50	41	49	22	36	32	51	31	32	37	38	54	23	26	16	20	34	32	24	31	32	30	25	31	207	198	203	189	797
Uncertified..	3	3	2	4	1	1	5	1	..	1	3	1	..	1	1	1	..	1	3	2	1	..	..	5	5	7	14	14	40
Enteric Fever	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	3
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	5	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	11	..	..	..	11
Scarlet Fever..	1	3	..	..	..	1	2	..	2	..	..	1	..	1	2	..	1	..	..	..	2	1	2	..	6	6	6	1	19
Whooping Cough	2	..	2	1	..	1	1	2	1	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	4	2	3	3	12
Diphtheria and Croup	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	3
Influenza	1	..	..	1	..	..	..	..	..	.	..	..	1	..	..	..	..	..	..	2	1	..	..	..	3	..	..	3	6
Erysipelas	1	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	2
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	1	..	4
Lead Poisoning	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Phthisis (Pulmonary Tuberculosis) ..	5	4	1	2	5	2	3	..	3	1	5	4	3	2	2	..	1	2	..	2	3	2	3	5	20	13	14	13	60
Tuberculous Meningitis	..	1	..	1	..	1	..	..	1	..	1	1	..	..	..	..	..	1	..	2	..	1	..	..	1	4	1	4	10
Other Tuberculous Diseases	1	1	2	..	1	1	..	1	..	..	1	..	..	..	..	..	2	..	..	1	..	1	..	1	4	3	3	3	13

Rheumatic Fever	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	3	..	1	4
Cancer, Malignant Disease	1	4	..	2	1	1	4	..	2	6	1	7	3	2	..	2	3	3	4	1	1	..	3	2	11	16	12	14	53
Bronchitis	7	2	1	2	1	3	2	6	1	4	2	7	1	..	..	1	2	1	..	2	7	1	..	9	19	11	5	27	62
Broncho-Pneumonia	2	..	..	1	1	..	..	1	3	1	1	8	3	..	..	1	2	..	1	..	1	2	..	2	12	3	2	13	30
Pneumonia (all other forms)	2	1	1	2	..	2	1	3	..	2	1	1	1	..	..	1	..	..	1	..	1	2	..	1	4	7	4	8	23
Other Diseases of the Respiratory Organs ..	2	1	..	1	..	1	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	2	4	1	8
Diarrhœa and Enteritis	1	2	12	..	3	3	17	1	1	..	10	3	1	2	1	2	..	1	3	..	..	..	5	1	6	8	48	7	69
Appendicitis and Typhlitis..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	2	3
Alcoholism	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Cirrhosis of Liver	1	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	2	1	..	..	3	2	1	1	7
Nephritis and Bright's Disease	1	..	1	..	..	..	..	1	..	2	2	..	..	..	1	2	1	..	..	..	1	1	1	2	3	3	5	5	16
Puerperal Fever	1	..	..	..	..	1	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	3	1	..	5
Other Accidents and Diseases of Pregnancy and Parturition	..	1	..	..	1	..	..	.	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	3
Congenital Debility and Malformation, including Premature Birth	3	4	6	2	2	5	6	2	4	4	4	2	1	2	..	4	4	2	3	3	1	4	3	1	15	21	22	14	72
Violent Deaths (excluding Suicide) ..	..	..	..	1	1	1	1	1	..	..	1	3	..	..	..	..	2	..	1	1	2	1	..	..	5	2	3	6	16
Suicides	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..	1	..	1	2	2	2	7
Other defined Diseases	11	11	15	4	11	7	7	7	11	11	7	11	8	10	6	6	12	19	7	13	8	4	5	5	61	62	47	46	216
Diseases ill-defined or unknown ..	5	6	9	6	4	4	9	3	1	4	3	6	..	4	4	2	1	1	6	4	2	7	1	6	13	26	32	27	98
Total Deaths	53	44	51	26	37	33	56	32	32	38	41	55	23	27	17	21	34	33	27	33	33	30	25	36	212	205	217	203	837

TABLE VI.—INFANT MORTALITY, DARLINGTON, DURING THE YEAR 1911.

DEATHS FROM STATED CAUSES ALLOTTED TO THE WARIOUS WARDS AND QUARTERS OF THE YEAR.

CAUSES OF DEATH.	WARDS.																				Total Deaths under 1 year.				
	North. Deaths—under 1 year 40; all ages, 174				East. Deaths—under 1 year 50; all ages, 158				North-West. Deaths—under 1 year 17; all ages, 166				West. Deaths—under 1 year 13; all ages, 88.				South. Deaths—under 1 year 21; all ages, 127				Central. Deaths—under 1 year 37; all ages, 124				In Quarters.				For Whole Year.
	Quarters.				Quarters.				Quarters.				Quarters.				Quarters.				Quarters.								
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
All Causes—																													
Certified	11	5	19	5	6	11	18	10	9	6	17	8	2	2	1	7	6	4	6	4	10	11	8	6	44	39	69	40	192
Uncertified	..	..	..	..	..	1	4	..	..	..	..	1	..	..	1	..	..	..	1	..	1	..	..	1	1	1	6	2	10
Chicken Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough..	1	..	1	1	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2	2	3	8
Diarrhœa	..	..	7	..	..	..	6	..	..	..	7	1	..	..	1	..	..	..	1	..	..	..	2	..	..	..	24	1	25
Enteritis	1	2	2	..	..	2	6	..	1	..	2	..	..	..	..	1	..	..	1	..	..	..	1	..	2	4	12	1	19

Tubercular Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1					
Abdominal Tuberculosis	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2					
Other Tubercular Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					
Congenital Malformations	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	..	1	3					
Premature Birth	1	1	..	2	..	2	2	2	..	2	2	1	..	1	..	1	..	2	..	2	..	1	2	..	1	9	6	8	24					
Atrophy, Debility, and Marasmus ..	2	1	6	..	2	4	3	..	2	2	3	1	1	1	..	2	3	1	3	1	1	4	1	1	11	13	16	5	45					
Atelectasis	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	3	..	1	..	4					
Injury at Birth	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1					
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					
Syphilis	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	2					
Rickets	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1					
Meningitis (not Tuberculous) ..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	2	..	1	4					
Convulsions	..	..	1	2	1	1	4	1	1	..	..	..	..	..	1	..	1	..	1	..	1	2	..	1	4	3	7	4	18					
Gastritis	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	2					
Laryngitis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1					
Bronchitis	2	..	..	..	..	..	..	2	1	..	..	1	..	..	..	..	..	..	..	..	6	1	..	5	9	1	..	8	18					
Pneumonia (all forms)	1	..	1	..	..	..	..	1	2	..	1	3	1	..	..	1	1	..	1	..	1	1	..	..	6	1	3	5	15					
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					
Other causes	..	..	..	..	1	..	..	..	1	1	2	1	..	..	..	1	1	..	.	..	..	..	1	..	2	1	4	2	9					
Total Deaths under 1 year of age ..	11	5	19	5	6	12	22	10	9	6	17	9	2	2	2	7	6	4	7	4	11	11	8	7	43	41	76	42	202					
Total Deaths at all ages	53	44	51	26	37	33	56	32	32	38	41	55	23	27	17	21	34	33	27	33	33	30	25	36	212	205	217	203	837					

TABLE VII.—SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1911, TAKEN DAILY AT THE SOUTH PARK, DARLINGTON.

Month.	Barometer Reading.		Temperature Registered.		Total Rainfall (in inches).	Greatest Rainfall in any 24 hours.	Date of Greatest Fall.	Number of days on which rain fell ·01 inches or more.
	Highest.	Lowest.	Highest.	Lowest.				
January	30·6	29·4	53	14	1·70	0·40	11th	13
February	30·6	29·1	56	23	1·16	0·27	21st	14
March	30·2	29·4	55	29	2·38	0·52	16th	19
April	30·3	29·4	58	28	1·36	0·32	28th	14
May	30·2	29·5	75	35	1·91	0·75	14th	13
June	30·4	29·3	79	36	2·82	0·96	23rd	11
July	30·5	29·5	85	41	0·67	0·28	20th	10
August	30·3	29·6	88	39	1·90	0·58	21st	10
September	30·3	29·2	79	31	2·85	1·16	12th	10
October	30·5	28·6	59	22	2·59	1·50	26th	21
November	30·1	28·6	57	25	4·60	0·81	19th	23
December	29·9	28·6	53	25	5·15	0·64	6th	25
Totals	..	..	..	..	28·55	..	..	183
Averages	..	..	..	..	2·38	.	..	15·25

BOROUGH OF DARLINGTON.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER,

S. G. MOSTYN, M.A., M.B., B.Ch. (Oxford), D.P.H. (Camb.),

FOR THE

YEAR ENDED 31ST DECEMBER, 1911.

ANNUAL REPORT.

To the Chairman and Members of the Elementary Education Sub-Committee.

MR. CHAIRMAN, LADIES, AND GENTLEMEN,

I herewith present for your consideration my First Annual Report as Medical Inspector of School Children in the Borough—the Fourth Report presented by your School Medical Officers. For the first half of the year the Inspection was carried out by Dr. F. T. H. Wood, my predecessor, and I wish here to acknowledge his kindness in doing everything possible to explain to me the system of School Medical Inspection which he instituted.

No important alteration has taken place since my appointment in the methods of carrying out the School Medical Inspection; the principal change has been that the work is now more closely co-ordinated with the work of the Health Department, and there is reason to believe that the co-operation of the two departments will in the next few years make itself evident both by a diminution in the sickness- and mortality-rates from the diseases of childhood and by improvement in the attendance at the schools. As the education of the parents and the eradication of dangerous and mistaken beliefs of long standing are a necessary part of this process its full effect cannot be looked for at once.

During the earlier part of the year children were inspected belonging to four age groups, "entrants," 7 year olds, 10 year olds, and "leavers." Owing to the closing of the schools for six weeks in the months of April and May on account of Scarlet Fever it was not found possible to finish the scheme thus begun. before the end of the summer term. This more complete scheme had to be curtailed on the appointment of your present School Medical Officer owing to the time required for it not being now available; the work remaining from the earlier part of the year, was, however, taken in hand in addition to the inspections—of "entrants" and "leavers"—actually required by the Board of Education. Though the work in arrear was not completely made up the greater part of it was carried out. By the scheme at present at work, only the inspections actually required by the Board are made, and for this purpose each school is visited every term. This gives the teachers an opportunity for calling attention to any

pupil in whom they may suspect defects; such pupils are examined as "specials."

The parents are invited to attend at the inspections and a great number do so; the total number of parents thus present was 1,088; 45 per cent. in the case of children at age four, 52 per cent. for age five, 52 per cent. for age seven, 39 per cent. for age ten, and 20 per cent. for age thirteen; on the whole the percentage of attendance of parents is not so high as in previous years. Many parents who attend take a great interest in the examination and shew a real desire to do the best they can for their children's welfare.

The School Nurse assisted as before at the inspections by taking the weights and heights, and by helping the children with their clothes. The work is carried out in a class-room, or, where possible, in the Head Teacher's room. In some schools such use of the rooms was not contemplated when they were built, and the rooms are, in consequence, ill adapted for the purpose.

The total number examined at the inspections was 2,950, made up as in the Table below :—

TABLE I.—Children Examined during the Year.

	Age 4.	Age 5.	Age 7.	Age 10.	Age 13.	Other Ages.	Total
BOYS ..	208	266	210	333	394	68	1,479
GIRLS ..	191	306	189	312	396	77	1,471
Total ..	399	572	399	645	790	145	2,950

The method adopted when any remediable defect was noticed was the same as in previous years. The parent was advised as to the need of treatment, verbally if present, otherwise by a letter, or occasionally by a special visit of the School Nurse. After a month or more the School Nurse visited the home to see what had been done, and where the results were not satisfactory urged further treatment. The parents in no instances resent these visits; the Nurse is welcomed and her advice asked on other points. During the hot weather many opportunities occurred for explaining the simple but important precautions needed to prevent deaths from infantile diarrhœa. Directions to treat defects, excluding verminous conditions, were given in 728 instances. Table II. sets out the results obtained as far as can be ascertained.

TABLE II. Result of Advice Given to Parents.

DISEASE.	Number where advice was attended to.			Number where advice was not attended to.			Percentage attended to.
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
Pediculi : nits ..	17	152	169	—	—	—	100
Skin disease ..	4	6	10	—	—	—	100
Teeth	6	10	16	28	50	78	17
Enlarged tonsils ..	13	7	20	21	23	44	31
Adenoids—advised breathing exercises..	76	56	132	36	28	64	67
Adenoids referred for operation	18	10	28	45	32	77	27
Enlarged glands ..	2	4	6	5	5	10	38
Squint	4	8	12	15	14	29	29
External eye disease ..	8	5	13	2	3	5	72
Defective vision ..	9	13	22	39	51	90	20
Ear discharge ..	4	4	8	3	1	4	67
Deafness	2	4	6	2	5	7	46
Other diseases ..	14	16	30	8	5	13	70

It will be noted that the percentage of cases attended to is smallest for defective teeth, defective vision, adenoids, and squint. With regard to teeth, though many parents are concerned about the condition of their children's teeth, this is far from being general ; frequently no care is taken of the temporary teeth and the permanent teeth make their appearance in mouths already full of decay. The expense involved in a visit to the dentist is the principal cause why the permanent teeth are neglected ; worthless and decayed teeth are retained and infect others. Expense and ill-founded optimism that things will come right of themselves also account for neglect of defective vision and adenoids. Squint needs skilled attention, and parents are, in general, unaware of the importance of early treatment, and do not know that soon after Squint begins there is a probability that one eye will become almost useless for vision. It is to be feared that neglect of these important defects is not likely to disappear under present conditions.

TABLE III. Height and Weight in Relation to Age and Sex.

	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Number Examined ..	208	191	266	306	210	189	333	312	394	396
Average Age	$4\frac{5}{12}$	$4\frac{5}{12}$	$5\frac{4}{12}$	$5\frac{4}{12}$	7	$6\frac{11}{12}$	10	10	$13\frac{6}{12}$	$13\frac{6}{12}$
Standard Height .. .	3ft. $2\frac{1}{2}$in.	3ft. $2\frac{1}{4}$in.	3ft. 5in.	3ft. $4\frac{1}{2}$in.	3ft. 10in.	3ft. $8\frac{1}{2}$in.	4ft. $3\frac{3}{4}$in.	4ft. 3in.	4ft. $8\frac{7}{8}$in.	4ft. $9\frac{3}{4}$in.
Average Height observed ..	3ft. 2in.	3ft. $0\frac{1}{2}$in.	3ft. 4in.	3ft. $4\frac{1}{2}$in.	3ft. 5in.	3ft. $5\frac{1}{2}$in	4ft. $1\frac{1}{2}$in.	4ft. 1in.	4ft. 9in.	4ft. $8\frac{1}{2}$in.
Standard Weight	37·3 lbs.	36·1 lbs.	39·9 lbs.	39·2 lbs.	49·7 lbs.	47·5 lbs.	67·5 lbs.	62·0 lbs.	82·6 lbs.	87·2 lbs.
Average Weight observed ..	36·0	36·0	37·0	37·5	42·5	42·5	57	55	77	79·2

Comparison with the heights and weights obtained in 1910 shews that except for boys of 13 there is a slight falling off in height, and except for boys and girls of 4 and girls of 5 there is a falling off in weight. In the absence of returns for the whole country it is difficult to form an opinion whether this may be due to the exceptional weather last summer. The standard heights and weights given in the above table include both town and country children ; this may account for the fact that the heights and weights observed here are lower.

TABLE IV. Infectious Disease in Relation to Age and Sex.

	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.	
	Boys (208)	Girls (191)	Boys (266)	Girls (306)	Boys (210)	Girls (189)	Boys (333)	Girls (312)	Boys (394)	Girls (396)
	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage
Measles	55	53	65	60	81	82	87	88	76	83
Whooping Cough ..	35	33	38	42	38	51	45	49	36	41
Chickenpox	18	15	15	18	29	32	26	31	24	24
Scarlet Fever	6·2	1·6	6·8	3·9	1·9	4·8	9·6	8·3	10	11
Diphtheria	1·0	0	1·1	2·0	0·5	3·2	2·4	6·1	4·3	4·8
Typhoid Fever	..	..	..	..	1 case	..	2 cases	..	3 cases	5 cases

With the exception of Scarlet Fever no infectious disease was very prevalent during 1911. It must be remembered in comparing this Table with the corresponding Tables for the previous years that the figures given above are the result of the epidemic history of the town for a number of past years. In spite of the prevalence of Scarlet Fever during the year the percentage of children leaving the school who have suffered from this disease is considerably less than for last year. Consideration of the number of cases of Scarlet Fever notified since these children were born would lead to the conclusion that the 10 or 11 per cent. obtained this year at age 13 more fairly represents the condition of the children of the town than the 16 or 17 per cent. last year. Even though the outbreak was most severe during 1911 the number of children who had not suffered from this disease was increasing.

TABLE V. General Appearance and Condition of Children.

	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.		Total.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Number	Percentage
Total number examined ..	208	191	266	306	210	189	333	312	394	396	2,805	..
Number in whom no defect was found	51	81	43	46	15	19	21	27	54	51	408	14·5
Defective clothing	34	18	22	18	28	10	68	20	65	30	313	11·2
Defective footgear	53	44	46	35	14	10	35	20	58	51	366	12·8
Nutrition excellent	35	35	45	65	21	37	16	33	62	63	412	14·7
Nutrition normal	125	139	187	197	135	119	230	220	286	286	1,924	68·4
Nutrition below normal ..	47	17	33	43	54	33	86	59	46	47	465	16·6
Nutrition bad	1	..	1	1	..	..	1	..	..	..	4	0·1
General dirtiness	9	1	3	6	10	3	29	5	10	3	79	2·8
Verminous clothing	..	..	..	..	2	..	4	7	..	..	13	0·5
Pediculi or nits in hair ..	..	15	..	21	1	18	2	57	..	55	169	6·0
Disease of skin	4	5	2	30	14	5	9	8	10	6	93	3·3

The clothing was noted as defective in 313 cases or 11·2 per cent. of those examined. The defect was usually due to want of repair or cleanliness, rarely to insufficiency. Boots or shoes were defective in 366 cases or 12·8 per cent. Seven children were without boots.

Seventy-nine children were noted as dirty—a great improvement on previous years. Children whose hands and faces alone are dirty are not included under this heading.

Eighty-three cases of skin disease were noted. A small number of children were sent home at once at the time of inspection on account of ringworm, itch, or verminous conditions.

Thirteen children were found with verminous clothing, and nits or pediculi in the hair were noted in 169 cases. The School Nurse paid 588 home cases in connexion with these cases. In addition to these cases found at the routine medical inspection, cases were also discovered by the teachers and by the School Nurse occasionally examining whole classes or a school, see Table XII.

TABLE VI. Percentage of Children with Decayed Teeth.

	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Total number examined	208	191	266	306	210	189	333	312	394	396
Percentage with sound teeth	68·1	74·4	66·5	68·9	52·2	47·7	37·6	44·2	55·0	52·6
Percentage with 1 or 2 teeth decayed ..	12·4	9·4	6·0	8·2	14·9	13·2	19·8	16·4	16·0	19·7
,, ,, 3 ,, ,, ..	7·4	6·8	5·7	6·2	8·6	13·2	14·1	13·9	13·7	10·9
,, ,, 4 ,, ,, ..	3.9	4·2	6·4	6·2	6·2	8·4	11·4	9·0	7·1	9·1
,, ,, 5 ,, ,, ..	2·4	0·5	4·9	3·9	6·7	7·9	6·0	5·8	4·1	3·5
,, ,, 6 ,, ,, ..	2·9	2·6	3·0	1·3	3·8	3·2	6·0	5·5	2·5	1·8
,, ,, 7 ,, ,, ..	2·4	0·5	1·5	2·0	2·4	3·2	3·6	2·6	0·8	2·0
,, ,, 8 or more teeth decayed ..	0·5	1·6	6·0	3·3	5·2	3·2	1·5	2·6	0·8	0·3
,, ,, 4 or more ,, ,, ..	8·1	9·4	22·0	16·7	24·3	25·9	28·5	25·5	15·3	16·8

Generally speaking the condition of the teeth shews a slight improvement, but a large proporation of the parents do not realize the importance of good teeth to the children, or their own responsibility. No doubt, too, expense prevents many from taking their children to the dentist. The prevalent notion that the temporary teeth are unimportant and not worth troubling about is hard to eradicate.

TABLE VII. Adenoids and Enlargement of Tonsils.

		Enlargement of Tonsils.			Adenoids.	
		Moderate	More Marked.	Extreme.	Moderate	Severe.
Age 4 ..	Boys ..	39	26	2	23	7
	Girls ..	21	15	2	13	4
Age 5 ..	Boys ..	37	21	3	46	2
	Girls ..	34	18	1	31	5
Age 7 ..	Boys ..	7	5	1	33	5
	Girls ..	7	9	5	18	5
Age 10 ..	Boys ..	30	17	4	67	15
	Girls ..	26	14	2	41	12
Age 13 ..	Boys ..	45	15	5	43	18
	Girls ..	41	23	4	39	16
TOTAL	Number ..	287	163	29	354	89
	Percentage	9·7	5·5	0·98	12	3·0

In the case of moderate obstruction, due to enlarged tonsils and adenoids, and associated with mouth-breathing, simple breathing exercises are recommended. Where the obstruction is serious, and where the breathing exercises are not successful, operation is urged. Though a fair number of parents of their own accord have these defects remedied in their children a large number cannot be persuaded to do so. Perhaps expense and the dislike of anything of the nature of a surgical operation may largely account for this.

TABLE VIII. Cases of Enlarged Lymphatic Glands.

Degree of Enlargement.	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Slight ..	31	35	56	35	34	24	25	20	23	15	298
Moderate ..	8	4	22	15	37	28	25	24	24	4	191
Great ..	..	2	3	3	4	6	5	2	3	4	32
Percentage of Moderate and Great	3·9	3·1	9·4	5·9	20	18	9	8·3	6·9	2	8

The Glands examined are those lying below the lower jaw and and about the neck. The commonest causes of enlarged glands in these regions are decayed teeth, enlarged tonsils, vermin in the hair, acute illnesses such as scarlet fever, measles, german measles, and tuberculosis.

TABLE IX. Defects and Diseases of the Eyes.

		Diseases of the External Eye.		Squint.		Defective Vision.	
		Number	Percentage	Number	Percentage	Number	Percentage
Age 4.	Boys ..	5	2·4	4	1·9	—	—
	Girls ..	15	7·8	4	2·1	—	—
Age 5.	Boys ..	6	2·3	7	2·6	—	—
	Girls ..	6	2·0	10	3·3	—	—
Age 7.	Boys ..	6	2·9	12	5·7	—	—
	Girls ..	3	1·6	8	4.2	—	—
Age 10.	Boys ..	9	2·7	8	2·4	19	5·7
	Girls ..	11	3·5	9	2·9	24	7·7
Age 13.	Boys ..	6	1·5	9	2·3	33	8·4
	Girls ..	6	1·5	5	1·3	31	7·9
TOTAL		73	2·6	76	2·7	107	7·9

The percentage of cases of squint and external eye disease are the same as last year. The older children alone have their eyes tested for defective vision; with the younger children the only method that time allows would not give trustworthy results. This is much to be regretted, as early diagnosis of defective eyesight is of importance. The vision is taken as defective if the child can read the standard type at only one third the distance at which a normal eye can do so.

TABLE X. Mental Ability.

		Age 7.		Age 10,		Age 13.		Total.
		Boys	Girls	Boys	Girls	Boys	Girls	
Above average	Number ..	30	27	69	67	79	66	338
	Percentage	19	20	21	22	23	19	21
Average ..	Number ..	96	94	203	184	207	216	1000
	Percentage	60	70	62	60	60	61	62
Below average	Number	33	14	54	54	57	69	281
	Percentage	21	10	17	18	17	20	17

In Table X. the estimate of mental ability is furnished by the teachers.

TABLE XI. Other Defects and Diseases.

	Age 4.		Age 5.		Age 7.		Age 10.		Age 13.		All Ages.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total.	Percentage
Ear discharge	2	7	5	1	2	3	6	0	3	6	35	1·24
Deafness	1	0	2	4	3	7	6	6	2	5	36	1·28
Defective speech	3	2	3	7	5	0	4	0	5	2	31	1·10
Disease of heart or circulation	3	1	2	2	1	1	1	2	2	4	19	0·68
Disease of lungs	3	2	5	5	4	2	3	1	0	0	25	0·89
Disease of the nervous system	1	1	3	3	2	0	0	1	0	2	13	0·46
Tuberculous	0	1	1	1	3	0	3	1	1	3	14	0·50
Rickets	15	12	13	6	7	4	6	2	3	2	70	2·50
Anæmia	1	2	2	0	3	2	2	3	0	11	26	0·92
Other diseases	6	3	10	7	7	3	16	5	13	8	78	2·78

Under the heading "other diseases" are included:—one case of scarlet fever, two cases each of scars from burns, scars of tracheotomy, epilepsy, and congenital syphilis; and three cases each of thyroid enlargement and congenital malformations.

TABLE XII. Verminous Condition at one of the Schools as ascertained by an examination of all the scholars by the School Nurse.

	December, 1908.			January, 1910.			January, 1911.			December, 1911.			January, 1912.		
	Infants 86	Boys 103	Girls 95	Infants 69	Boys 113	Girls 86	Infants 60	Boys 114	Girls 76	Infants 59	Boys 121	Girls 88	Infants 59	Boys 121	Girls 88
Nits only on hair ..	17	—	58	7	—	28	11	—	15	6	1	28	4	—	11
Lice and nits on hair..	3	3	6	4	—	5	—	—	1	—	—	3	—	—	—
Lice on body and clothing	5	9	6	2	6	4	1	4	1	3	7	3	—	3	1

The results of the inspections in December, 1911, and January, 1912, shew the need of constant inspection and the good results that follow. Many of these cases belong to families who relapse into a verminous condition as soon as supervision becomes less vigorous.

The visits paid to the homes by the School Nurse during the year were as follows:—

General visits (to follow up advice of School Medical Officer)	672
Visits on account of verminous conditions	588
Miscellaneous visits	422
Total	1,682

The following cases of infectious disease were reported by the teachers during the year:—

Scarlet Fever	360
Measles	124
Whooping Cough	78
Diphtheria	28
Ringworm	27
Chickenpox	22
Mumps	16
Other conditions	14
	669

The previous year 1,186 cases were thus notified, the large number being due to 608 cases of measles.

During the year only one Department (Gurney Pease Infant School) was closed on account of measles, from February 16th to May 14th.

All the schools were closed on account of scarlet fever, from March 31st to May 14th.

There are at the present time one blind boy and three deaf girls and one deaf boy from the Darlington area, in attendance at four Special Schools in the neighbourhood. There is no special provision made for the education of the physically defective.

At the end of the year there were 10 boys and 11 girls on the register of the Special School for the mentally defective. During the year one boy was transferred to this school from the West Hartlepool Special School, and left to go back to that school.

The Open Air School.

This school was open during the school terms from the 29th of May to the 6th of October. Its position at North Lodge Park was required for the new Higher Elementary School, and the Open Air School, was, in consequence, removed at the beginning of 1911 to a field adjoining Dodmire School. Though this position was not so central it had the advantage of being open to the fresh country air. The routine of the school was the same as in 1910, as described in the report of the School Medical Officer for that year. The sliding cloth screen or curtain used during 1910, was found unsatisfactory, and was, in consequence, replaced by movable wooden frames covered with canvas which could be placed on any side of the school shelter as required, to keep out wind or rain.

Part of the shelter in the Dodmire School-yard was separated off as a kitchen and fitted with water, a gas stove, and a geyser; another part was divided off as a bathroom and fitted with a simple bath-pan and shower; the open part of the shelter was used as a dining room.

Adjoining the school shelter, hammocks were swung from wood frames beneath a light canvas roof, which was found necessary to protect the children from the sun.

Twenty children, ten boys and ten girls, from eight to fourteen years of age, were chosen by the School Medical Officer from candidates nominated by the head teachers. The children who lived at a distance were provided with tram tickets by the Education Committee. Each child brought its towel, hair brush and comb, and tooth brush, and proper attention to personal cleanliness was an important part of the training. The daily shower bath, which was always taken under supervision, was much enjoyed by the children. In consequence of medical advice, one of the children was not allowed to have this bath. One meal only was provided at the school; this was served at noon, and when it was over the children were sent to rest in their hammocks. In order that this time may be used for rest, it is necessary to have strict supervision by someone in authority. On the teacher's return all children washed themselves and brushed their teeth before beginning the afternoon school. Those, however, who were asleep in their hammocks were allowed to finish their sleep.

Special attention was paid to physical exercises and breathing exercises, and the healthiness of the life was obvious to any visitor. The food provided at dinner, was the same in character as in 1910, and is described in the School Medical Officer's report for that year.

The children at the school were chosen for a variety of reasons; five suffered from various forms of tuberclous disease, three from diseases of the eye, two from anaemia, three from enlarged glands, and the rest from general malnutrition and debility. During the time the

school was open the average gain in weight was two and a quarter pounds, and the average gain in height, 0·41 inches. The gains in weight were, however, very unevenly distributed, three children gained 4lb. or more, two from 3 to 4lb., seven from 2 to 3lb., three from 1 to 2lb., and four less than 1lb. One child suffering from tuberculosis seemed to be making good progress during the summer term, but was found to have lost ground when the school re-opened after the summer holiday. She died soon after.

Miscellaneous Work.

No children were fed during the year under the Education (Provision of Meals) Act, 1906.

Children were seen at the Education Office in order that an opinion might be given as to their fitness for attendance at school; some were brought by their parents, but most are sent by the Attendance Officers or Teachers. The following table gives the reasons for these examinations:—

Ringworm	88
Scabies	13
Other skin diseases	17
Fitness for Open Air School	6
Admission to Industrial Schools	8
Miscellaneous conditions	29
	161

Twenty-five candidates for Pupil Teacherships, Bursaries, and Student Teacherships were medically examined and reported on.

S. G. MOSTYN.

May, 1912.

INDEX TO HEALTH REPORTS.

	PAGE.
Introductory	3
Adopted and Local Acts	19
Area of Borough	5
Births	5, 6
Birth-rates and Death-rates, etc., compared with the large towns, etc. ..	6, 7
Closet Accommodation	17
Coroner's Inquests	7
Deaths	6, 7, 8
Deaths, classified according to Causes, Ages, and the Quarters of the Year in which they occurred	32, 34, 35, 36, 37, 38, 39
Drainage and Sewerage	17
General Sanitary Work—	
Common Lodging Houses	19, 29, 30
Dairies, Cowsheds, and Milkshops	28
Factories and Workshops	19, 22, 23
Food and Drugs	24, 25
Housing Acts	18, 29
Meat, Inspection of	18, 26, 27
Milk	18, 28
Living Vans, Tents, and Sheds	28, 29
Nuisances	20, 21
Offensive Trades	19, 28
Scavenging	18
Sanitary Conveniences	17, 18, 21, 22
Slaughter-houses	27
Water Carriage	17, 18, 21, 22
Infant Mortality	7, 8
Infectious Diseases Notification Act, 1889	10-16
Infectious Diseases—	
Cholera	16
Diarrhœa	7, 15, 18
Diphtheria (including Membranous Croup)	15
Enteric (or Typhoid Fever)	15
Erysipelas	15

INDEX TO HEALTH REPORTS—CONTINUED.

Infectious Diseases—
- Measles .. 15
- Plague .. 16
- Puerperal Fever .. 15
- Scarlet Fever .. 14
- Smallpox .. 16
- Tuberculosis .. 15, 16
- Typhus Fever .. 16

Lead Poisoning .. 8

Meteorology .. 40

Population .. 5

Rivers and Streams .. 16

Sanitary Inspector's Report .. 20-30

Schools, Disinfection of .. 14

Statistical Tables .. 31-39

Tetanus .. 8

Uncertified Deaths .. 7

Water Carriage .. 17, 18, 21, 22

Water Supply .. 16

Work of Sanitary Inspectors .. 18, 19

Zymotic Diseases .. 6-16

INDEX TO SCHOOL REPORT.

	PAGE.
Adenoids and Tonsils	53
Advice to Parents	45
Condition of Children	50
Defective Children	59
Defects and Diseases	57
Eye Defects and Diseases	55
Glands, Enlarged	54
Height of School Children	46
Infectious Disease	48, 59
Mental Ability	56
Miscellaneous Work	61
Open Air School	60
School Closure	59
School Nurse	44
Teeth	52
Vermin	58
Weight of School Children	46