

[Report 1894] / Medical Officer of Health, Haydock Local Board / U.D.C.

Contributors

Haydock (England). Local Board.

Publication/Creation

1894

Persistent URL

<https://wellcomecollection.org/works/tud65xbs>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

HAYDOCK URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

1894.

ST. HELENS:

DROMGOOLE & Co., BOROUGH PRINTING WORKS, PUBLIC HALL.

1895.

THE UNIVERSITY OF CHICAGO

ANNUAL REPORT

1911-12

THE BOARD OF TRUSTEES

1911

Published by the University of Chicago Press
Chicago, Ill., U.S.A.

1911

HAYDOCK,

4th March, 1895.

To the Chairman of the Haydock Urban District Council.

SIR,

I have the honour to submit to your Council my Annual Report for the year 1894, being the sixth complete Annual Report which I have presented since my appointment as Medical Officer of Health for the Urban Sanitary District of Haydock.

POPULATION.

Only once in ten years, when the Census is taken, is it possible to obtain data for stating with absolutely reliable accuracy what is the population of a district.

At the last Census in 1891, the enumerated population for the Township of Haydock was 6,535, including 3,509 males and 3,026 females.

Since that time, as always in all centres of population, two causes have been co-operating in varying the population:

- (1) The balance between the number of Births and the number of Deaths;
- (2) The balance between the number of persons who have left the Township (or "emigrated") and the number of persons who have come into it (or "immigrated").

In most communities, and especially in those like Haydock, with a Birth-rate very much above the average, the number of Births considerably exceeds the number of Deaths. This is known as the "natural increase" of population. From the returns made by the District Registrar, it is at any time an easy matter to ascertain the number corresponding to this natural increase. During the period extending from the end of the first quarter in 1891 to the middle of the year 1894 (the time of the year for which the estimation of population for the year is made) the excess of Births over Deaths in Haydock was 478. Were the population entirely stationary the simple addition of this number to 6,505 would give 7,013 as the population for the year 1894.

However, the second cause above alluded to is continually in operation, and there are no means of exactly ascertaining the numbers of those who leave and those who come into the district, depending as they do upon ever varying local conditions.

The method, therefore, usually adopted, and the one used by the Registrar-General in estimating the population for any given year, is to take the enumerated population at the last Census, and the enumerated population at the Census preceding, and, finding the difference, to assume that the same rate of increase or decrease will continue to exist until the next Census.

For example, the population of Haydock at the Census of 1891 was 6,535. At the Census of 1881 it was 5,863, giving an increase of 672 in 10 years. It is assumed that the same "rate of increase" will continue to prevail until the next census, in 1901. The increase being in what is known as "geometrical progression," a mathematical calculation is involved by the aid of "logarithms," which need not be more than alluded to. By this method the population of Haydock for the year 1894 is estimated as 6,770. To show that this method, although it cannot be absolutely relied upon, may come very near the mark, I may point out that by it the estimated population of Haydock at the time when the Census was taken in 1891, was 6,502, and the actually enumerated population 6,535, giving a difference of only 33.

Another method which may be used, is a calculation based on the number of inhabited houses for the year, and the average number of inhabitants of each house, as determined by the Census returns. For example, at the Census of 1881 the population of Haydock was 5,863, and the number of inhabited houses was 1,002, giving an average per house of 5.85; at the Census of 1891 the population was 6,535, and the number of inhabited houses was 1,111, giving an average per house of 5.88 inhabitants.

As determined by the rate-books, the number of inhabited houses in Haydock in the year 1894 was 1,296. Taking the mean of the average number of inhabitants per house, as ascertained at the two Censuses of 1881 and 1891, this would give an average number to each house of 5.86. Thus calculated the population of Haydock for the year 1894 would be 7,594. It is probable, however, that the building of new houses has to some extent meant less overcrowding of population, and that the average number of inhabitants per house is now less than formerly.

Taking the mean of the three results obtained—

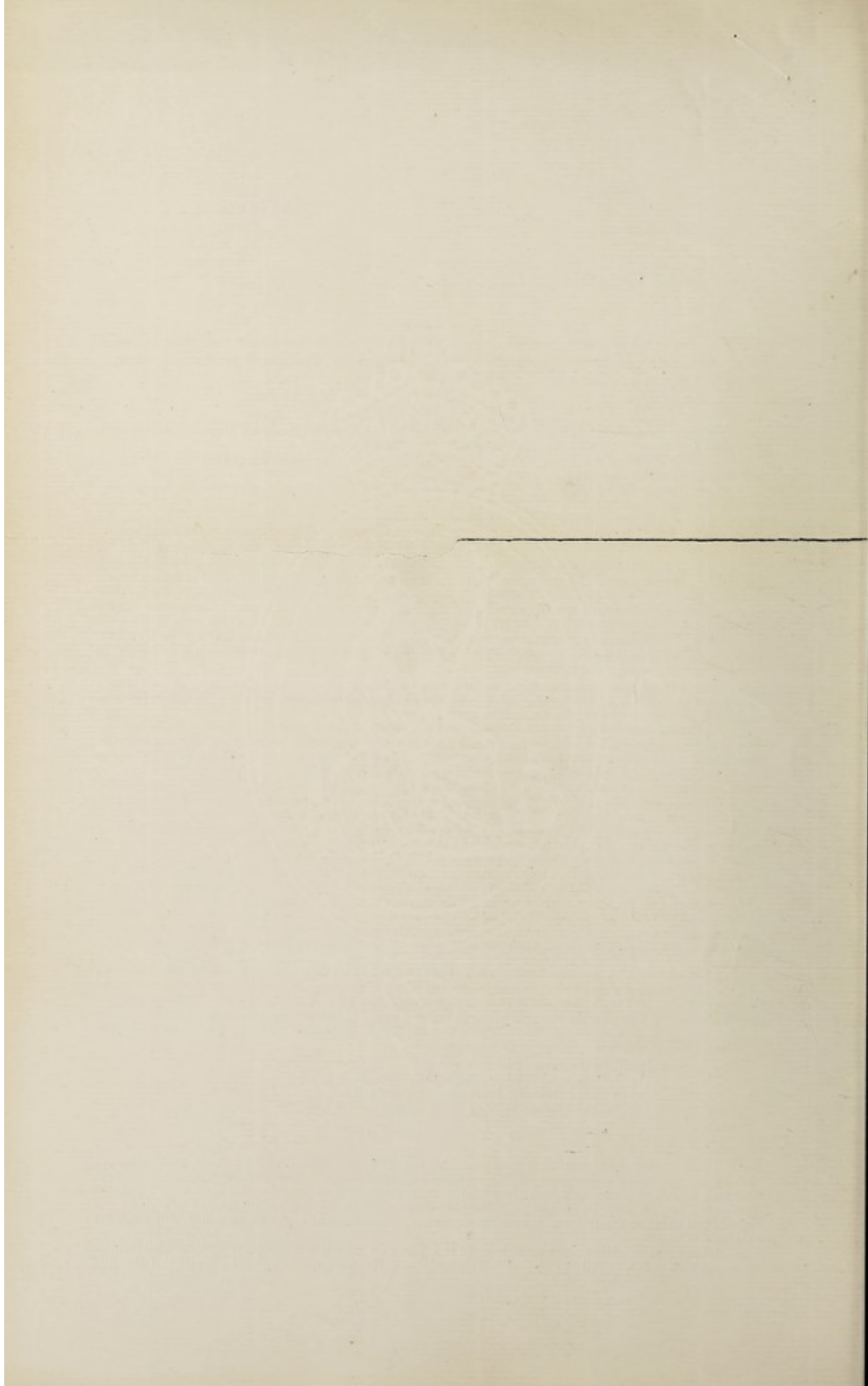
(1) by the method of the Registrar-General	...	...	6,770
(2) by the "Natural Increase" of Population	...	...	7,013
(3) by the average number of inhabitants per house	...	...	7,594
			3)21,377

the number 7,125 is produced.

7,125

I take it, therefore, that the actually existing population of Haydock for the year 1894 was over 7,000, and consequently in excess of the estimated population as determined by the usual method. Although I have, in conformity with the usual custom, based the calculations for the statistics of the year on the number 6,770, it should be understood that the Birth-rate has not been quite so high as will appear, and that the Death-rates have been somewhat more favourable than those which will hereafter be given.

Under this heading it may be of interest if I place on record the complete statistics relating to the population of the "Civil Parish" or "Township" of Haydock since the year 1801 (when the first



census was taken), which, by the kindness of a friend holding an official position at Somerset House, I have been able to obtain:

Census.	Population of Haydock.	Increase in 10 years.	No. of Inhabited Houses.	Average No. of inhabitants per house.
1801	734	—	138	5.31
1811	805	71	147	5.47
1821	916	111	148	6.18
1831	934	18	155	6.02
1841	1,296	362	215	6.02
1851	1,994	698	338	5.89
1861	3,615	1,621	601	6.01
1871	5,286	1,671	903	5.85
1881	5,863	577	1,002	5.85
1891	6,535	672	1,111	5.88

AREA.

The Area of the Township in statute acres is 2,409, giving an average population of 2.8 persons per acre.

BIRTHS.

During the year there were registered in the Township of Haydock 274 Births, including 145 males and 129 females.

The Birth-rate was equivalent to 40.4 per 1,000 of the estimated population.

Only 2 of the Births were "illegitimate."

The following table will show how Haydock compares in this respect with the whole of England and Wales, and with the "Registration County" of Lancaster.

PROPORTION OF ILLEGITIMATE BIRTHS.

England and Wales ... Year 1893 ... 4.2 per cent., or 42 in 1000 Births.

Registration County of Lancashire 1893 ... 4.0 per cent., or 40 " "

Haydock ... 1894 ... 0.7 per cent., or 7 " "

(The returns for the whole of England and Wales for 1894 are not yet available for comparison.)

DEATHS.

The number of Deaths registered as having occurred in the Township during the year was 135, including 70 males and 65 females. Of these deaths, 14 were those of inmates at Haydock Lodge Lunatic Asylum, and one was that of a patient from St. Helens at the "Old Wint" Hospital.

These 15 deaths are therefore classed as "non-residents," and deducting them from the total number, "the corrected number" of deaths, on which the death-rate is calculated, is 120. Accidents and injuries accounted for 2 deaths.

The Death-rate per 1,000 of the estimated living population was—

19.9 on the whole number of deaths.

17.7 excluding non-residents.

17.4 excluding also deaths from other than natural causes.

Bearing in mind what has been already said under the heading of population, it may be noted that the actually true death-rate was probably about 1 per 1,000 less; that is, 16.7 instead of 17.7.

The following table gives a classification of the Deaths from all causes according to ages:—


Under 1 year	40	total under 5 years	74
1 year and under 5 years	34		
5 years and under 15 years	4	total 5 years and upwards	61
15 years and under 25 years	7		
25 years and under 60 years	28		
60 years and upwards	22		
	135		135

The rate of Infant Mortality measured by the proportions of deaths of Infants under 1 year to 1,000 Births was 14.5.

THE CAUSES OF DEATH were as follows:—

Small-pox	1	(a patient from St. Helens in the "Old Wint" Hospital)	
Scarlatina	2		
Diphtheria	1		
Membranous Croup	7		
Measles	16	complicated with	(Bronchitis ... 9 cases Pneumonia ... 3 cases Convulsions ... 1 case Membranous Croup 3 cases Measles ... 1 case Bronchitis ... 1 case)
Whooping Cough	2	complicated with	
Diarrhœa	2		
Influenza	1		
Phthisis	4		
Tubercular Meningitis	8		
Tabes Mesenterica	3		
General Tuberculosis	1		
Bronchitis	4	Death-rate from Respiratory Diseases, 1.92 per 1000	
Pneumonia	7		
Heart Disease	7		
Cancer	3		
Premature Birth	13		
Debility from Birth			
Senile Decay	9		
Other Diseases	33		

Total mortality from the "Seven Principal Zymotic Diseases" (excluding the Small-pox case) 31; corresponding to a Death-rate of 4.57 of the living population.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29751093>

Childbirth & Pregnancy	7	... complicated with	Puerperal Fever	...	2 cases
			Hæmorrhage	...	2 cases
			Puerperal Convulsions	...	1 case
			Nephritis	...	1 case
			Heart Disease and Broncho-Pneumonia	...	1 case
Injuries	...	2			
Total			135		

Of the Deaths 9 were "not certified" by a medical practitioner; 5 of these were cases of sudden death which were reported to the Coroner, and in which, after enquiry, inquests were judged by him to be unnecessary, and the remaining 4 were deaths of infants who scarcely survived their birth.

Only 2 inquests have been held during the year in the Township - 1 in a case of death from burns, and 1 in a case of death from scalding.

I have the satisfaction of recording that no death from Colliery Accident has occurred during the year. The statistics of Colliery Fatalities during the preceding 10 years were as follows:—

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Average
No. of Fatalities	4	4	8	1	3	2	5	6	3	1	3.7

The statistics of any Sanitary District for any one year, in order that they may be properly understood and appreciated, require to be compared—

- (1) with the average statistics for the same District, taken on a number of years preceding;
- (2) with the corresponding statistics for the country generally.

The method adopted by the Registrar-General is to compare the statistics of the year with the averages of the 10 years preceding. In order to follow this method I have been at some pains to calculate the statistics for Haydock for the five years preceding my own first complete annual report. I beg, therefore, to place on record the following Tables, which will serve to allow of comparisons being made, not only for the year of this report, but for future years.

I should explain that some of the figures given will vary slightly from those already given in my preceding Annual Reports. This has arisen from my having formerly adopted a more simple method of calculating the "estimated population" than that adopted by the Registrar-General.

I.—Table showing the estimated Population, number of Births, corrected number of Deaths, number of Deaths from the Zymotic Diseases, &c., for the several years from 1884:—

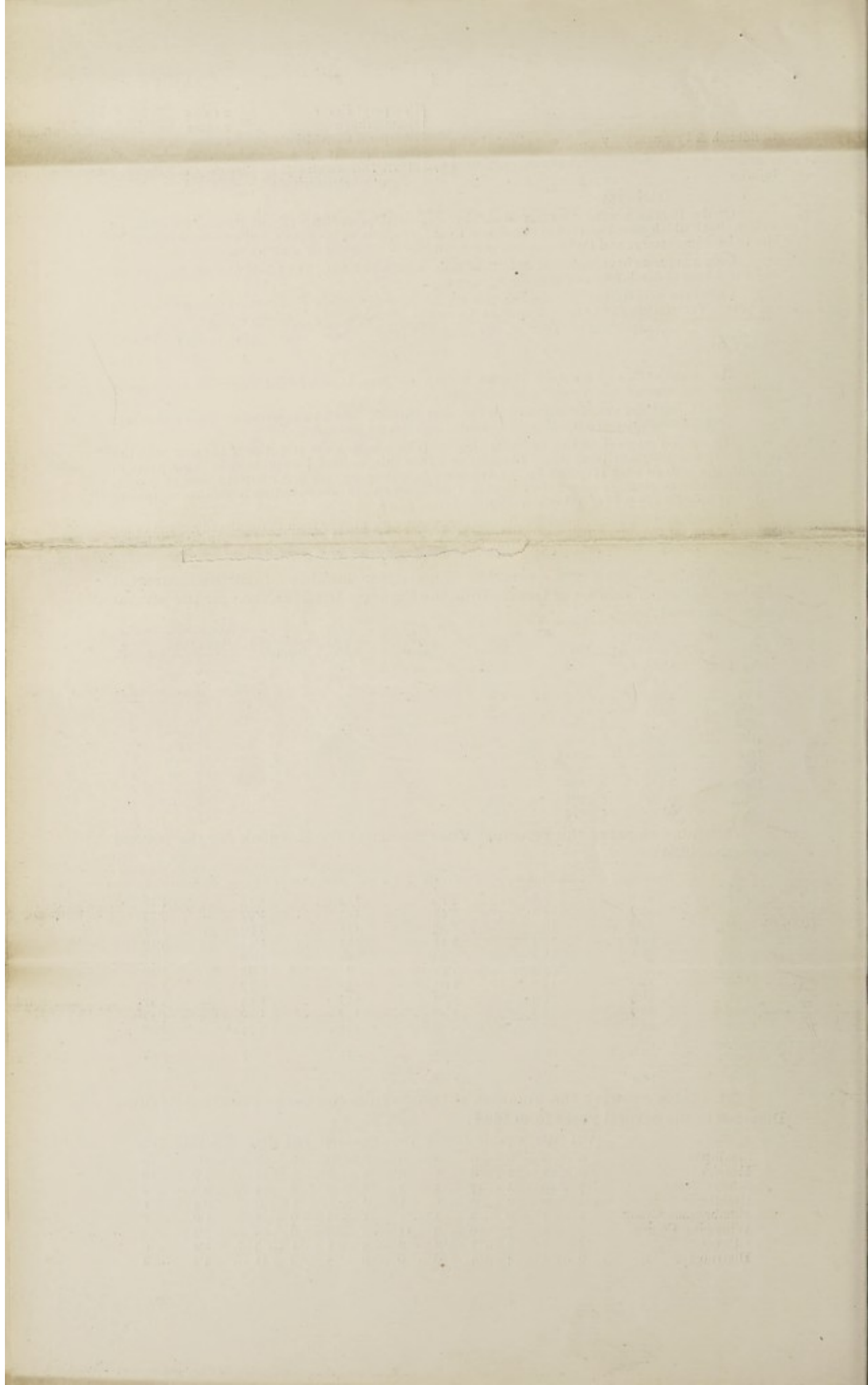
Year.	Estimated Population.	Births.	Corrected No. of Deaths.	Deaths from Zymotic Diseases.	Infants Deaths.	Deaths from Phthisis.	Deaths from Respiratory Diseases.	Deaths from Influenza.
1884	6,064	238	106	23	27	7	29	—
1885	6,127	239	130	52	29	6	23	—
1886	6,191	245	100	16	37	6	24	—
1887	6,255	256	127	32	32	9	20	—
1888	6,320	222	101	16	27	7	11	—
1889	6,386	229	102	24	37	6	21	—
1890	6,452	252	101	13	33	5	21	2
1891	6,520	272	117	12	39	10	26	5
1892	6,624	270	115	15	37	8	29	7
1893	6,697	304	114	20	37	5	18	0
1894	6,770	274	120	31	40	4	13	1

II.—Table showing the principal Vital Statistics for Haydock for the several years from 1884:—

Year	Birth-rate.	Death-rate	Zymotic Death-rate.	Infants Deaths per 1,000 Births.	Death-rate from Phthisis.	Death-rate from Respiratory Diseases
1884	39.2	17.5	3.79	113	1.15	4.78
1885	39.0	21.2	8.48	121	0.97	3.75
1886	39.5	16.1	2.58	151	0.96	3.87
1887	40.9	20.3	5.11	125	1.43	3.19
1888	35.1	15.8	2.53	122	1.07	1.73
1889	35.8	15.9	3.75	161	0.93	3.28
1890	39.0	15.6	2.01	130	0.77	3.27
1891	41.5	17.8	1.83	143	1.53	3.97
1892	40.7	17.3	2.26	137	1.20	4.37
1893	45.3	17.0	2.98	121	0.74	2.68
Average for 10 years	39.6	17.4	3.53	132	1.07	3.48
1894	40.4	17.7	4.57	145	3.59	1.92

III.—Table showing the numbers of Deaths from the Seven Principal Zymotic Diseases in the several years from 1884:—

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Yearly Average for 10 Years.	1894
Small-pox	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	28	2	8	1	0	4	1	1	1	4.6	16
Scarlet Fever	7	19	1	17	5	3	2	0	2	4	6.0	2
Diphtheria	0	0	0	0	1	1	0	1	1	0	0.4	1
Membranous Croup	1	1	0	2	7	1	1	2	0	1	1.6	7
Whooping Cough	3	1	7	0	0	11	1	2	8	0	3.3	2
" Fever "	4	1	2	1	2	2	5	1	1	3	2.2	0
Diarrhoea	8	2	4	4	0	6	0	5	2	11	4.2	2



IV.—Table showing the respective Death-rates from the seven principal Zymotic Diseases, for the several years from 1884 per 1000 of the population.

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Yearly Average for 10 years	1894
Small Pox ...	0'00	0'00	0'00	0'00	0'00	0'00	0'00	0'00	0'00	0'00	0'00	0'00
Measles ...	0'00	4'56	0'32	1'27	0'16	0'00	0'62	0'15	0'15	0'15	0'73	2'35
Scarlet Fever ...	1'15	3'09	0'16	2'71	0'79	0'46	0'31	0'00	0'30	0'59	0'95	0'29
Diphtheria ...	0'16	0'16	0'00	0'31	1'26	0'31	0'15	0'46	0'15	0'15	0'31	1'17
Membranous Croup ...	0'49	0'16	1'13	0'00	0'00	1'72	0'15	0'30	1'20	0'00	0'51	0'29
Whooping Cough ...	0'65	0'16	0'32	0'16	0'31	0'31	0'77	0'15	0'15	0'45	0'34	0'00
Fever ...	1'31	0'32	0'64	0'63	0'00	0'93	0'00	0'76	0'30	1'63	0'65	0'29
Diarrhoea ...												

V.—Table showing the comparison of the Annual Average Death-rates from the seven principal Zymotic Diseases respectively, for the Urban Sanitary District of Haydock, during the 10 years 1884-93, with the corresponding Death-rates for England and Wales for the same period.

	Small Pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhoea
England and Wales ...	0'03	0'45	0'24	0'19	0'43	0'20	0'68
Haydock ...	0'00	0'73	0'95	0'31	0'51	0'34	0'65

VI.—Table showing the comparison of the principal Vital Statistics for the Urban Sanitary District of Haydock with those for the principal whole of England and Wales for corresponding periods.

			Birth-rate	Death-rate	Death-rate from the seven principal Zymotic Diseases		Infant Deaths per 1000 Births
(a)	For the separate Quarters of the Year 1894	1st Quarter	England and Wales ...	30'9	20'0	1'76	151
		"	Haydock ...	45'4	15'3	0'59	51
		2nd Quarter	England and Wales ...	29'5	15'8	1'72	121
		"	Haydock ...	37'8	14'1	2'95	125
	3rd Quarter	England and Wales ...	27'7	14'2	1'92	134	
		Haydock ...	38'4	10'0	1'18	153	
	4th Quarter	England and Wales ...	29'5	16'4	1'63	143	
		Haydock ...	40'1	31'1	12'99	164	
(b)	For the whole Year 1894	England and Wales ...	29'6	16'6	1'76	137	
	Haydock ...	40'4	17'7	4'57	145		
(c)	Yearly average of the 10 yrs. 1884-93	England and Wales ...	31'6	19'2	2'68	147	
	Haydock ...	39'6	17'4	3'53	133		

VII.—Table showing the comparison of the Death-rates from Phthisis and from Respiratory Diseases for Haydock with the Death-rates for these Diseases (a) for England and Wales, and (b) for the Registration County of Lancashire.

Annual Average Death-rate for the 10 years 1884-93		Phthisis		Respiratory Diseases	
	England and Wales ...	1'63	...	3'70	...
	Registration County of Lancashire ...	1'84	...	5'02	...
	Haydock ...	1'07	...	3'48	...

For the sake of convenience the foregoing Tables have been grouped together. As occasion may require they will be referred to and commented on in the succeeding text of this Report.

Appended to this Report are also the Tables "A" and "B" on the forms required, and provided by the Local Government Board.

Table "A" relates to "Deaths classified according to Diseases, Ages, and Localities," and Table "B" to "Population, Births, and also to new cases of Infectious Sickness coming to the knowledge of the Medical Officer of Health, classified according to Diseases, Ages, and Localities." The substance of these Tables has been, or will be, otherwise given, so that they need not be quoted in full.

The "Classification according to Ages" simply distinguishes between those who are under 5 years of age and those who are five years and upwards.

The classification according to "Localities" is required to relate to "Areas of known population," such as parishes, townships, or wards; "Public Institutions" being, however, regarded as separate localities.

The newly constituted "wards" of the Township of Haydock are not yet "areas of known population," nor can they be until the next Census. I have not, therefore, attempted any classification according to these wards. Moreover, they are not so separated by any natural boundaries or distinctions as to make such classification of much practical worth.

The classification according to localities, therefore, shows that the Deaths occurred as follows:—

Township of Haydock	...	119
Haydock Lodge Lunatic Asylum	...	14
Old Wint Small-pox Hospital	...	1
Haydock Cottage Hospital	...	1

INCIDENCE OF SICKNESS DURING THE YEAR.

The year 1894 has been the first complete year during which the "Compulsory Notification of Diseases Act" has been in force in Haydock. During the year 66 cases have been notified, as against 70 during the period extending from May 29th, 1893 (when the Act came into force), until the end of that year.

1870

The following is a tabular statement of the Notified Cases, distinguishing the numbers of the separate Diseases and the months in which they occurred :

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Small Pox ... ..	...	...	...	...	1	...	...	...	...	...	...	...	1
Scarlet Fever	6	4	2	3	1	...	3	...	...	2	1	1	23
Diphtheria ... ..	...	...	...	...	1	...	...	2	...	1	...	...	4
Membranous Croup ... ..	...	2	5	3	...	...	...	1	1	7	1	3	23
Puerperal Fever ... ..	...	...	1	...	...	...	...	2	1	...	...	...	4
Erysipelas	1	1	1	1	...	1	...	...	...	1	...	2	8
Enteric Fever ... ..	...	...	...	...	1	1	...	...	1	...	...	...	3
Totals	7	7	9	7	4	2	3	5	3	11	2	6	66

Only 2 cases of Infectious Disease have been removed during the year to the Peasley Cross Hospital, one a case of Enteric Fever, and the other a case of Scarlet Fever, both from Lyme Street, and both in the month of May. The case of Enteric Fever was one in the person of a lodger without proper accommodation. The case of Scarlet Fever was one of a first case in a large family in a crowded locality. No other case occurred in the house or neighbourhood. It is to be regretted that more use has not been made during the year of the provision for isolation made by the Local Sanitary Authority. Although the Medical Attendant may advise removal, yet, except in extreme cases, such as those in which a magistrate's order can be obtained, no compulsory powers exist to enforce such removal. A more general spread of knowledge as to the advantages of Hospital treatment, both as regards the welfare of the individual patients, and the safety of those by whom they are surrounded, it may be hoped will in time remove the prejudices which at present exist.

I may here take occasion to advert to the fact that the joint arrangements which the late Haydock Local Board, as the existing "Local Sanitary Authority," had made with the Corporation of St. Helens, for the separate isolation of Small-pox, and other Infectious Diseases, came, in December last, under the inspection of Dr. Sergeant, the county Medical Officer of Health. The result of such inspection will appear from the following copy of a Special Report, which I made to the "Local Board," dated 17th December, 1894:—

LOCAL BOARD OFFICES,

HAYDOCK, near St. Helens.

17th Dec., 1894.

To the Chairman of the Haydock Local Board,

SIR,—From newspaper reports of the last meeting of your Board, on 6th inst., I gathered that Dr. Sergeant, the county Medical Officer of Health, had expressed dissatisfaction with the existing joint arrangements between your Board and the St. Helens Corporation, for the isolation of Infectious Diseases, and that he purposed making a visit of inspection with the view of taking steps to include Haydock in a proposed scheme for a large Central Small-pox Hospital for the Leigh and Warrington Unions.

Being without official knowledge of these matters, I wrote on 10th inst. to Dr. Sergeant, enclosing a newspaper cutting, and asking for authentic information, and also assuring him of my readiness to aid him in any enquiry which he might think fit to make.

After thus writing, I learned on Monday morning, 10th inst., that Dr. Sergeant was coming on that same day to have an interview with yourself and the Clerk to your Board, at the Town Clerk's Office, at St. Helens. Dr. Sergeant, therefore, had not received my communication before setting out on his journey to St. Helens.

I have to report to your Board that after the conclusion of the interview above referred to, Dr. Sergeant, on Monday afternoon, accompanied by Dr. Robertson, the Medical Officer of Health of St. Helens, and by myself, made a visit of inspection, first of all to the St. Helens Fever Hospital at Peasley Cross, and then to the Small-pox Hospital at Old Wint. I have to acknowledge the courtesy with which Dr. Robertson facilitated the thorough and deliberate inspection of both places which Dr. Sergeant made. With regard to the Peasley Cross Hospital, Dr. Sergeant could not but express approval of the excellent new separate "Blocks" for isolating Scarlet Fever and Typhoid Fever respectively, which have been constructed according to the approved models of the Local Government Board, and also of the thoroughly efficient modern Steam Disinfecting Apparatus which has been provided.

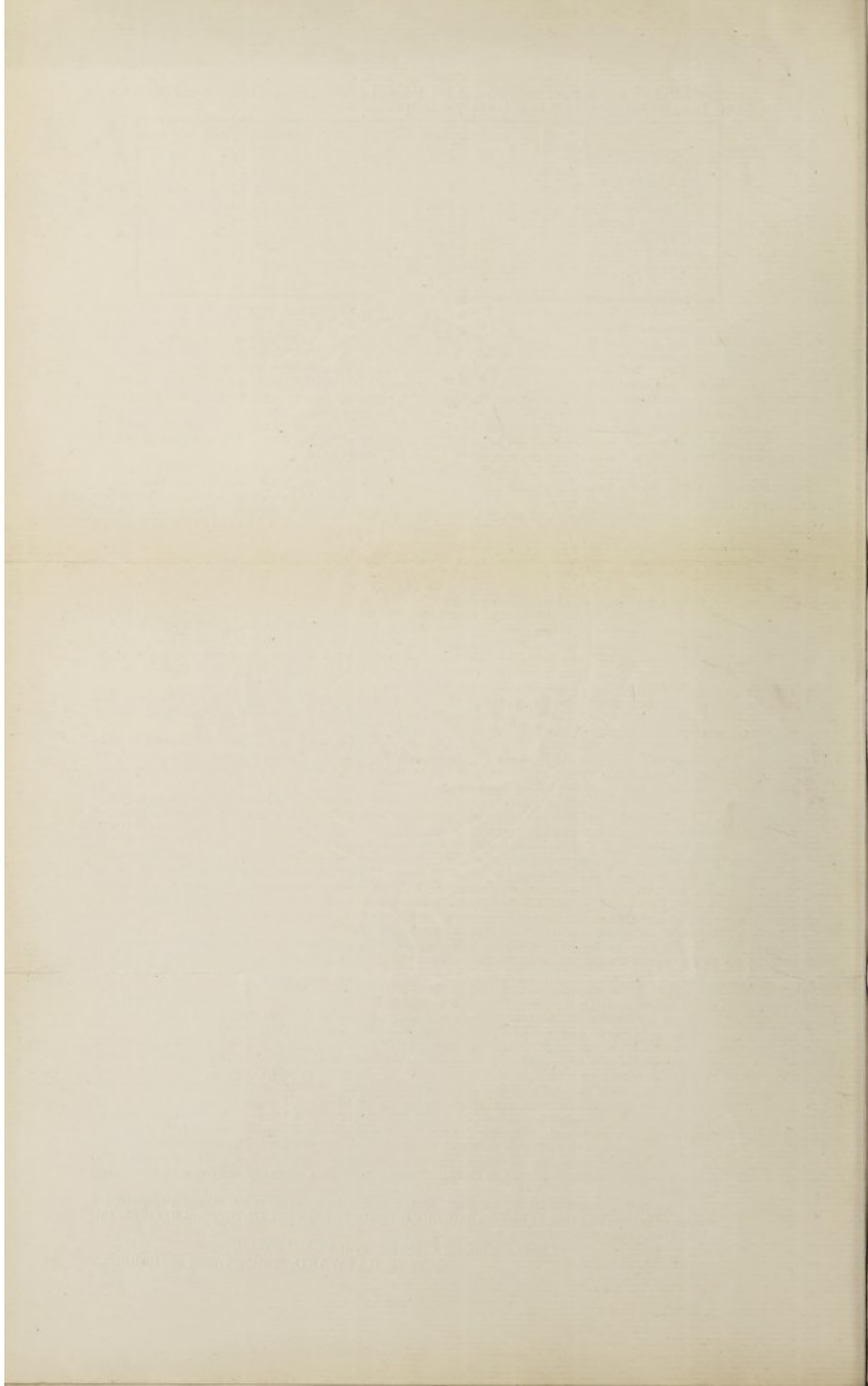
With regard to the Old Wint Hospital, while he held that exception could be taken to it on the ground that it has none of the outward attractiveness or pleasing surroundings which it is desirable that an ideal Hospital should have (in which I quite agree with him), he admitted that the Hospital was *efficient*, and that for practical purposes it was *sufficiently isolated*.

Subsequently, I received from Dr. Sergeant a letter, dated 11th inst., from which I have his permission to quote to your Board such portion of it as is relevant. This reads as follows:—"I have just perused your letter, received this morning, and also the newspaper cutting which you enclosed. I am very sorry to find that my views with respect to Haydock have not been quite fairly explained. I may inform you that at the meeting in Warrington, attended by the Clerk to your Board, it was stated that the Hospital provided by St. Helens for joint use with Haydock in cases of Small-pox, consisted of three or four cottages by the roadside, and that the accommodation was not of a satisfactory character. I then promised to make an inspection of the Hospital complained of, and I also hinted that if I found the condition such as described, it was possible that the County Council might be compelled to include Haydock in a joint scheme. Not having personal knowledge of the Hospital accommodation provided by St. Helens, I could not, of course express the definite opinion I am credited with, and from my inspection yesterday I do not see that the County Council could reasonably interfere with your present arrangement."

It will, I doubt not, be to your Board collectively, as it is to myself personally, a matter of satisfaction that so high an authority in sanitary matters as Dr. Sergeant has made this visit of inspection with such result.

I have the honour to be, Sir, your faithful servant,

T. E. HAYWARD, Medical Officer of Health.



With regard to the objection which has been raised as to the distance to which it is necessary to remove patients to the Peasley Cross Hospital, it may be noted that the establishment of the New Joint Hospitals for Infectious Diseases, which the County Councils are proceeding to construct under "Lord Thring's Act," will entail probably in some cases the removal of patients for distances of 10 or 12 miles.

SMALL POX.—The case of this disease, notified in May, was in the person of an elderly man, the care-taker at the Old Wint Hospital. The illness was of a slight degree, and of a somewhat doubtful nature. As it had occurred, however, shortly after known exposure to the infection of Small Pox, it was considered by Dr. Robertson, the Medical Officer of Health of St. Helens, and myself, the safest course to isolate the patient for a sufficient period.

In this connection I may give a statement, for which I am indebted to the courtesy of Dr. Robertson, of the use which has been made of the Old Wint Joint Small-Pox Hospital during the year.

Only two cases have been sent from St. Helens.

- (1) A man, aged 30, who arrived in St. Helens on May 7th, with the eruption "out." He was sent to the Hospital on the same day. He had not been re-vaccinated. He died on May 15th.
- (2) A woman, aged 35 years, sister to the above patient, from whom she contracted the disease. The case was discovered by the Female Sanitary Inspector, on May 30th, and removed the same day to the Hospital. It was a mild attack. She recovered, and was discharged on June 18th.

After each time that the Hospital has been used the wards and nurses' rooms have been repeatedly fumigated, and afterwards thoroughly washed with disinfectants.

INFLUENZA.—Cases of this disease occurred during the first and last quarters of the year. They were chiefly of a mild type, and only one death is registered as due to this ailment.

ENTERIC (OR TYPHOID) FEVER.—Only 3 cases of this disease have come to my knowledge during the year, as against 32 in the previous year.

DIARRHOEA.—Only 2 fatal cases have been registered, as against 11 in 1893.

The meteorological conditions of the year have doubtless tended to limit the prevalence of both Diarrhoea and Typhoid Fever, as in the previous year they so greatly helped to favour their extensive spread.

SCARLET FEVER.—The cases of this disease which were notified were chiefly in the first four months of this year, and occurred in the localities of New Boston, Old Boston, Penny Lane, and Millfield Lane. They were, as a rule, of a mild type, and only 2 fatal cases were registered. The "Eucalyptus Disinfectant" referred to in my last Annual Report has been continued to be supplied.

MEASLES.—The general Death-rate for the whole of England and Wales for the year 1894 was the lowest on record. Reference to Table VI. will show that in so far as Haydock was concerned, the Death-rates for the first three quarters of the year were considerably below even the low Death-rates for the country generally, and there seemed a probability that the general Death-rate for Haydock for the year would be a "record" one. However, it unfortunately happened that about the middle of the last quarter of the year an epidemic of Measles began, the most serious which has occurred since the year 1885. The Death-rate for the quarter was therefore by this disease alone raised so considerably as to quite counterbalance the advantage gained in the preceding quarters. The general Death-rate for the whole year was by Measles alone raised to the extent of 2.35 per 1,000 of the population.

The disease broke out first at the Blackbrook end of the Township, the infection having been apparently derived from Parr, where an epidemic of Measles had been existing. The infection spread very rapidly, and in the course of a few weeks cases were occurring throughout the whole extent of the Township.

Measles not being one of the infectious diseases to which the Compulsory Notification Act applies, it is impossible to give any exact statistics as to the number of cases which existed, but it is certain that they must have numbered at least four or five hundred.

Epidemics of this disease occur in all populous localities at intervals of a few years, and occasionally circumstances concur to make them more than usually widespread and fatal. The chief cause which contributes to the diffusion of Measles and to the difficulty of limiting its spread is that a patient who is "sickening" for this disease is actively infectious to others for some days before it is possible even for a medical man to be sure what the illness is going to be, so that by the time the disease is manifest the mischief is already done.

Since the aggregation of children together in schools is one of the chief agencies by which this disease is spread, it is always desirable, in the presence of a well-marked epidemic of it, to temporarily close the schools. The usual procedure is for the Medical Officer of Health to report on the necessity of this to the Local Sanitary Authority, and then for the Authority to issue a compulsory order. However, I found that a semi-official representation on my part to the managers of the various schools in the Township, as to the desirability of closing their schools, was quite sufficient to secure their ready concurrence. About the middle of December, therefore, the schools were closed until after the Christmas holidays.

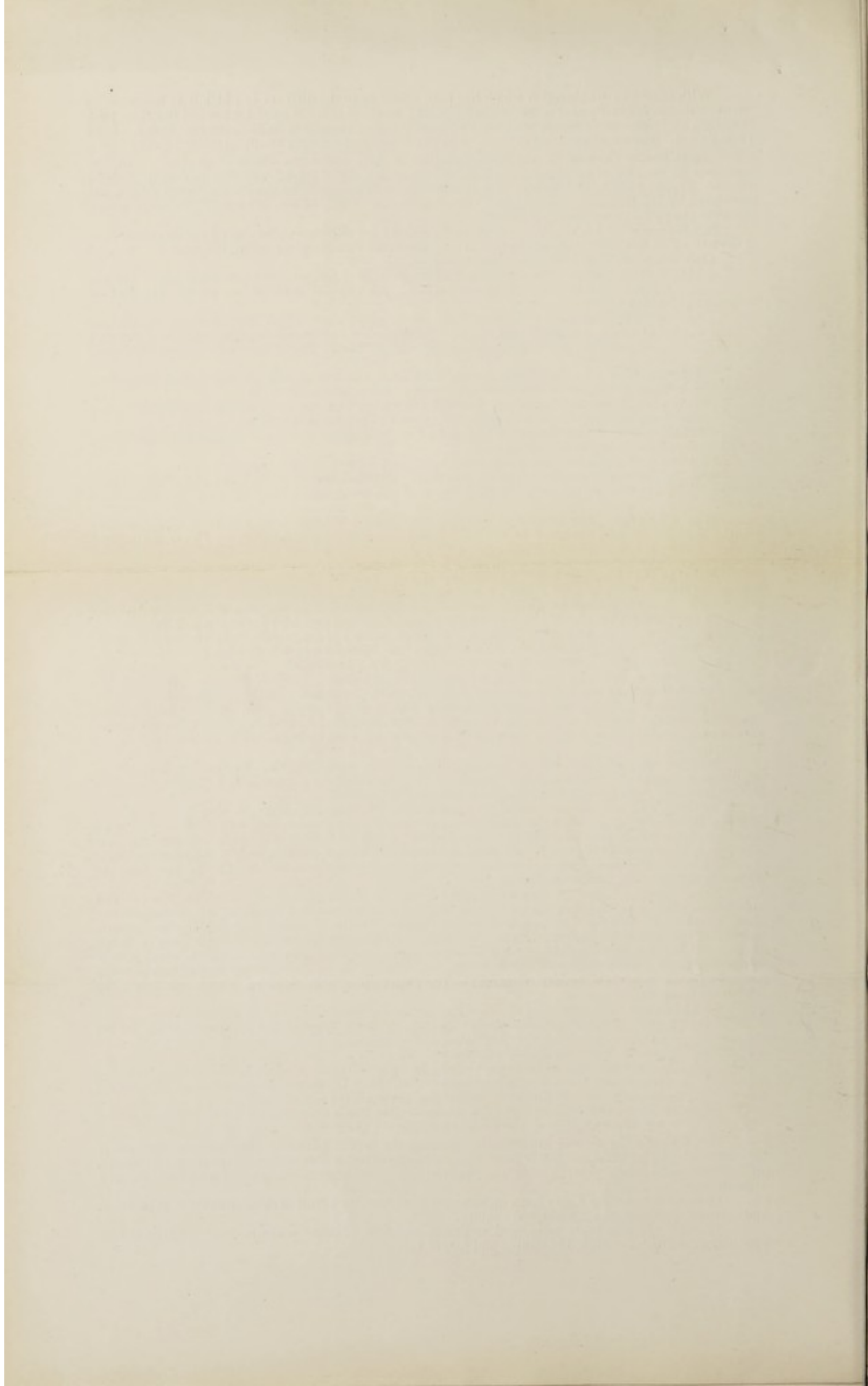
Several causes have concurred in helping to increase the mortality during the epidemic.

- (1) First, and chiefly, its occurrence during the winter season; the tendency, which always exists in Measles, to the development of acute Lung Diseases (Bronchitis and Pneumonia) having been thus greatly aggravated.
- (2) Another probable cause is the popular idea that Measles is only a trivial ailment, and thus proper care has not been taken of the children at the beginning, and medical attendance has only been sought when fatal complications have already arisen.
- (3) In some cases, too, owing to the existence of so much depression in trade, a want of proper necessaries may have diminished the chances of recovery.

MEMBRANOUS CROUP AND DIPHThERIA.—During the year 23 cases of Membranous Croup have been notified. In 3 of the cases the Membranous Croup occurred as a secondary complication of Measles, and all three were fatal. Of the other 20, 7 proved fatal. Of Diphtheria, 4 cases were notified, with 1 death.

These statistics show a very large incidence of Membranous Croup in proportion to the population, and demand some special comment and enquiry.

"Croup" is a popular term used to denote cases of children suffering from a characteristic metallic cough, with obstructed breathing and loss of voice.



In some of these cases, the symptoms are due to a membrane forming over the upper part of the air passages; others are merely due to a temporary spasmodic affection. Further, in some of the cases of Membranous Croup, the membrane is of the same nature as that which forms in the throat in cases of Diphtheria; in others, it is different. The only means of actually and certainly distinguishing many cases is by an examination, directed to the finding of the special bacillus associated with Diphtheria.

On the average, however, it is found that in about 80 to 85 per cent. of cases of Croup in which membrane is present, such membrane is truly diphtheritic.

In the statistics of the Registrar-General deaths from Membranous Croup and Diphtheria are grouped together.

Cases of Membranous Croup affecting young children are found to occur with unusual frequency in damp and cold seasons, and a varying proportion of these are undoubtedly non-diphtheritic.

True Diphtheria is found to be associated with *damp and filth*—especially the former. There is something, however, which is yet not altogether understood about its origin. I may here quote from the Annual Report of Dr. Sergeant, the County Medical Officer of Health, the following:—"To show that Diphtheria is not altogether dependent on insanitary conditions, during the last ten years, notwithstanding the improved sanitation of the country and the accompanying diminution of Typhoid Fever, which is, essentially, a filth disease, *Diphtheria has been making continuous progress.*"

I have been very far from seeking to 'cloke or dissemble' in my past reports with regard to the sanitary condition of Haydock, especially in its relation to Typhoid Fever.

I think, however, I have sufficient authority to support my own opinion that we are not driven to attribute *all* this large incidence of Membranous Croup to local insanitary conditions, but that climatic and meteorological conditions, such as dampness of subsoil and dwelling-houses, excessive rainfall, and deficiency of sunshine, may have largely contributed to favour the origin of these cases.

I can show by statistics, moreover, that the cases, if they have been proportionally numerous, have been unusually mild in their nature.

The following Tables make comparison between the statistics of Diphtheria and Membranous Croup for the Administrative County of Lancaster, for the year 1894, and those for the Urban Sanitary District of Haydock for the same year:—

Administrative County	Population.	Cases of Diphtheria notified.	Per 1,000 of population.	Cases of Membranous Croup notified.	Per 1,000 of population.
Administrative County ... (about)	1,692,000	961	= 0.57	244	= 0.14
Haydock	6,770	4	= 0.58	23	= 3.4
Administrative County	Deaths from Diphtheria.	Percentage mortality.		Deaths from Membranous Croup.	Percentage mortality.
Administrative County	217	= 22.5		200	= 80.2
Haydock	1	= 25.0		7	= 35.0

(excluding the cases secondary to Measles).

These statistics show:—

- (1) That, as regards Diphtheria, the proportion of notified cases and the percentage of mortality are about the same in Haydock as the average for the county.
- (2) That, as regards "Membranous Croup," while the number of notified cases for Haydock was 24 times the average for the county, in Haydock the mortality was less than half that for the county.

Had a large proportion of the notified cases of Membranous Croup in Haydock been truly Diphtheritic in their nature, it might have been expected that there would have been evidence of the disease spreading to older children and adults in the same houses or neighbourhood.

The distribution of the cases locally was as follows:

Membranous Croup.	Diphtheria.
Blackbrook Road 7	Railway View 1
Lime Kiln Row 4	
Clipsley Lane 3	
Lyme Street 1	Lyme Street 1
Holly Bank 3	
Church Road 2	Haydock Green 1
Boston Cottages 1	
Old Boston 1	
Haydock Lane 1	Haydock Lane 1

Should this unusual incidence of membranous Croup continue, it will be desirable to have, as now can readily be secured, a "bacteriological" examination made of the morbid secretions obtained from the cases, and in those cases proved to be Diphtheritic, the use of the recently introduced "antitoxin" treatment, which is now available for general use, may be expected to diminish the mortality.

PHTHISIS AND RESPIRATORY DISEASES.—The Death-rates from these causes for the year were considerably below the averages for the last 10 years.

Table VII. shows, too, that the average Death-rates from these causes for 10 years in Haydock have been markedly lower than the same rates as regards both the whole of England and Wales and the Registration County of Lancashire.

From the dampness of the subsoil, and from the known fact that most of the male adult population are engaged in coal-mining, it might be supposed beforehand that the Death-rates from these causes would exceed the average. It has been found, however, by wide observation and general experience, that coal-mining has not such a deleterious effect in causing Consumption and other Lung Diseases as most other kinds of mining have, coal-dust being apparently not so irritating as other mineral and metallic particles.

On the whole it cannot be said that the vital statistics of Haydock are unfavourable as compared with those for the country generally, or those for the County of Lancaster.

MORTALITY FROM PUERPERAL FEVER AND THE ACCIDENTS OF CHILDBIRTH.—The following Table gives the Statistics of Mortality for the respective years since 1884:—

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Yearly Averages for 10 years.	1894
Puerperal Fever	0	0	1	4	0	1	1	2	1	1	1.1	2
Other Accidents of Childbirth	0	3	1	0	1	0	2	0	0	3	1.1	5
Total	0	3	2	4	1	2	1	4	1	4	2.2	7

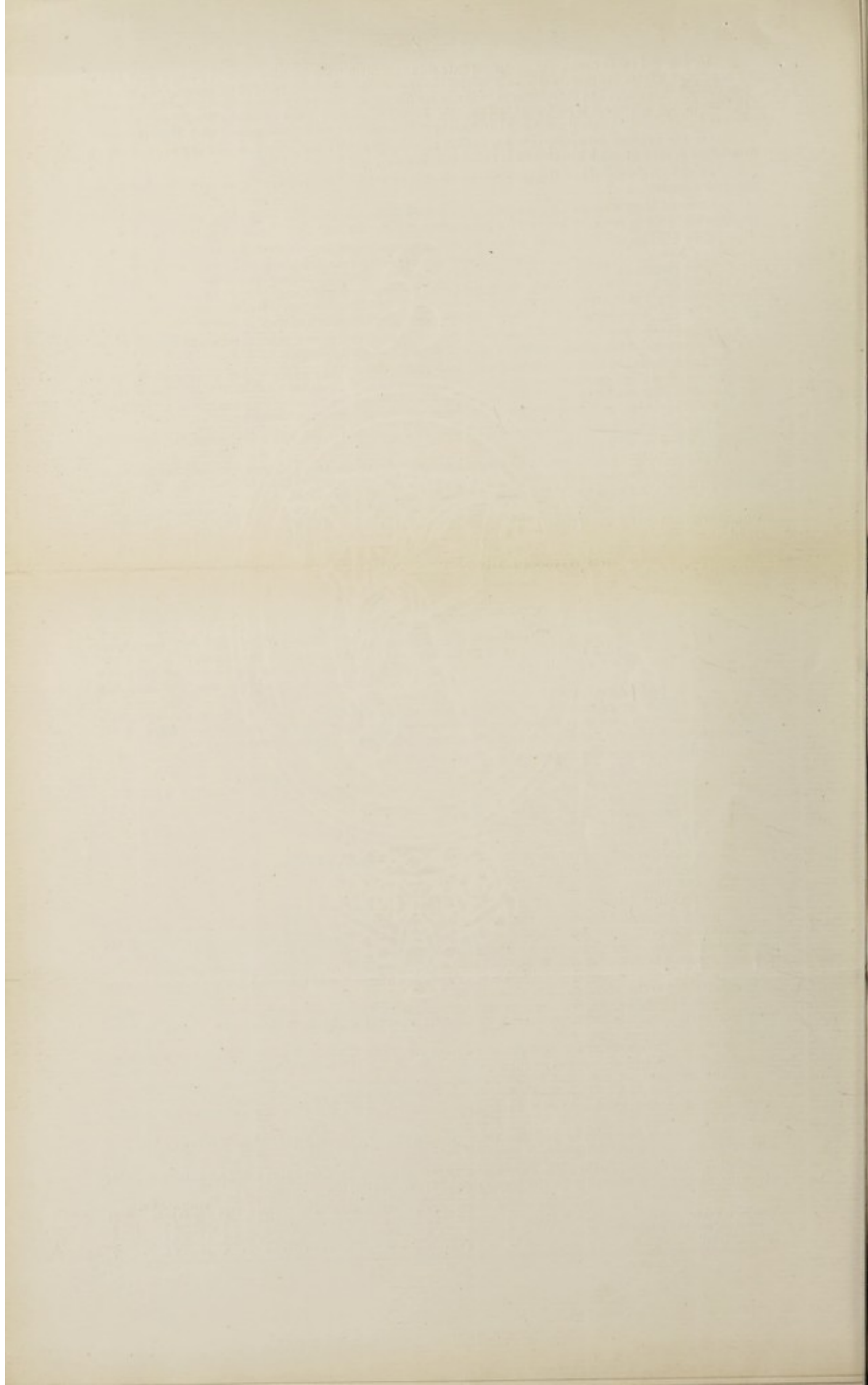


Table showing the average yearly Maternal Mortality per 1,000 registered Births, from Puerperal Fever and other Accidents of Childbirth taken together at Haydock, compared with England and Wales, and the Registration County of Lancashire, for the 10 years 1884-93.

England and Wales	...	...	...	4.99
Registration County of Lancashire	...	...	...	5.92
Haydock	...	...	...	8.70

In 1894 the Maternal Death-rate for Haydock per 1,000 Births was 25.5.

PARTICULARS AS TO TOPOGRAPHY, SURFACE GEOLOGY, &c., OF THE TOWNSHIP.—Since human beings, like all other living organisms, are closely related to, and affected by, their environment, it may be appropriate in this report to briefly allude to some of the chief points under this heading.

The tract of land on which the township of Haydock is situated is without any very marked undulations of surface, and may be said to gradually slope towards the south and west, and to rise towards the south and east. The subsoil consists of clay and marl, with occasional beds of sand, pointing to, as regards the most recent geological history, alluvial deposit and glacial action.

Sankey Brook, which for a considerable distance forms the southern boundary of the Township, appears to have been at one time an estuary of considerable width, a branch of the much wider estuary of the Mersey, and, therefore, some part of the land must, at a comparatively recent epoch, have been submerged.

The surface drainage is related to Sankey Brook and its tributaries, its chief of which (as regards Haydock) are Rake Brook, Wicken-edge Brook, Clough Brook, Clipsley Brook, and Black Brook.

The climate of Haydock may be said to be decidedly 'damp,' as the subsoil is chiefly clayey, and the rainfall is, in common with the whole of the western side of England, excessive.

As has been already alluded to, it might be expected that Phthisis, Respiratory Diseases, Rheumatism, Diphtheria, &c., would be among the diseases most prevalent.

The inhabited houses of Haydock are chiefly grouped along one long straggling street extending for about three miles through the whole length of the Township, with abundance of free open space on either side.

Reference to the Ordnance Map gives the following data as to the heights above sea-level:—

Bottom of Blackbrook	...	...	...	68 feet
Toll Bar	...	...	...	141 "
Near Colliery Offices	...	...	...	161 "
Near "Ram's Head"	...	...	...	183 "
Kenyon's Lane	...	...	...	200 "
Near Haydock Lodge	...	...	...	165 "

HISTORY OF LOCAL SELF-GOVERNMENT IN HAYDOCK WITH REGARD TO SANITARY MATTERS.—The present time would seem a suitable one to make some reference to the past history and development of Haydock in relation to these matters.

Your Council, a body elected by and representing the people of Haydock, has now been entrusted with the duties and responsibilities belonging to the Local Sanitary Authority. It is, therefore, appropriate to go back to what *was*, to take stock of what *is*, and to consider what *may be* and *should be*, as regards the sanitary conditions of the Township.

During the past 50 years Haydock has been undergoing a process of transition and development from an isolated rural community to being an urban district. A reference to the table of Census returns already given will show the rate and degree of advance as regards population, such advance having been closely related to the development of the local coal industry.

It is not difficult to picture what the condition of the place was 40 years ago or so, when a population of about 3,000 existed.

For Water Supply the inhabitants had to depend on stored rain-water, water from drains and ponds, and from surface wells, liable to be easily contaminated with excremental filth.

Privy Middens of the worst and most filthy type abounded, and were emptied very casually and infrequently, as no public scavenging arrangements existed.

Offensive ponds and ditches existed even by the main roadside, which were nothing better than open sewers, from which the road was but poorly fenced off.

The roads were miry and unlighted.

Under such circumstances it is scarcely to be wondered at that epidemics of Cholera, Typhoid Fever, and Diphtheria had existed from time to time.

The germ of local self-government seems to have been the Annual Vestry Meeting of the Ratepayers of the Township, at which Overseers and Guardians were elected, and also a Highway Committee and Highway Surveyor. This meeting also had the power of levying a highway rate.

Some sort of supervision appears to have been exercised with regard to sanitary matters, by the Board of Guardians of the Warrington Union.

Such being the condition of things, the spirit of Sanitary Reform began in the year 1871 to "breathe on the dry bones."

A public notice appeared as follows:—

"Special meeting of the Ratepayers of the Township of Haydock.

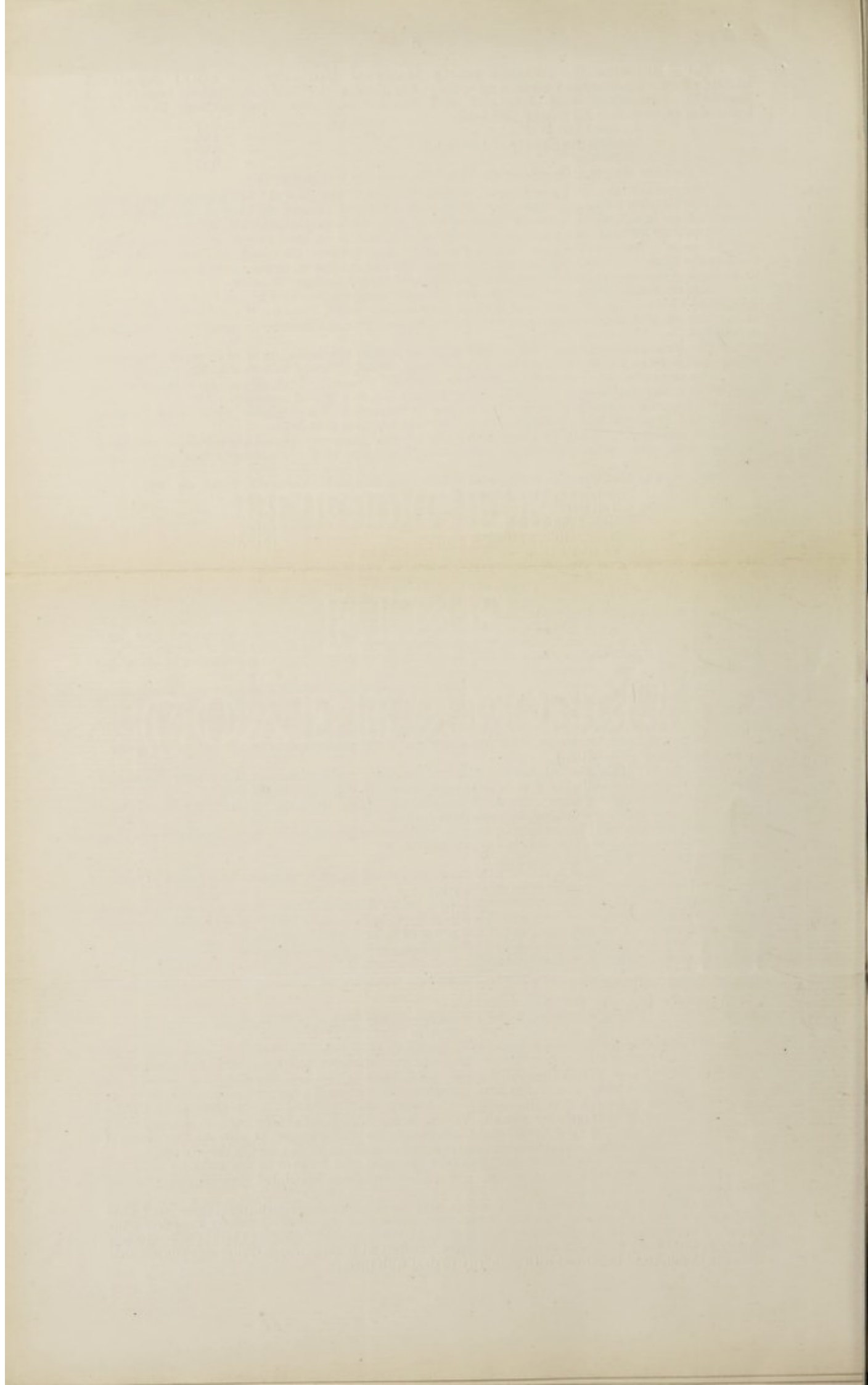
NOTICE.

"In consequence of having received a communication from the Board of Guardians of the Warrington Union, stating that Dr. Beard, one of the Medical Inspectors of Her Majesty's Privy Council, had reported that *the Water supply of Haydock and its drainage generally* are questions which demand anxious consideration, and requesting our co-operation as to the action to be taken in the matter, we hereby call a meeting of the Ratepayers of the Township of Haydock, in public Vestry, at the National School-room, on Monday, 14th April, 1871, at 3 o'clock in the afternoon, for the purpose of considering the said communication, and deciding, if any, and what action shall be taken in the matter.

(Signed by the two Overseers, the two Churchwardens, and Richard Evans and Co.)"

This meeting was held in due course, and a Committee was appointed "to enquire into the Water question."

After various adjournments, the Committee, at a meeting on August 29th, 1871, resolved, "That this meeting report to a general meeting of the Ratepayers that they have carefully considered the question of Water supply and sewerage of Haydock, and they consider that as there is not sufficient authority vested in any person or persons in Haydock to deal with these matters, they recommend that a 'Sewage Committee' be formed with authority to deal with them."



On 5th September, at a meeting of ratepayers, held in the National School, it was proposed and carried, "That a committee be formed to carry out the provisions of the Sewage Utilization Act," twelve gentlemen being nominated and appointed.

History is silent as to the deliberations of this "Sewage Committee," but they too must have found that their powers were too limited, since we find in May 1872, the following public notice issued:—

TOWNSHIP OF HAYDOCK. "We, the undersigned, being 20 ratepayers or owners within the Township of Haydock, in the County of Lancaster, do hereby request you to summons a public meeting for the purpose of deciding as to the adoption of the Local Government Act, 1858, within and for the said Township of Haydock.

To the Churchwardens of St. James' Church, in Haydock aforesaid.

To the Churchwardens of St. Thomas' Church, Ashton-in-Makerfield.

To the Overseers of the said Township of Haydock, or some, or one of them."

A public notice, in accordance with this requisition, was thereupon issued, dated 16th May, 1872.

At the public meeting thus convened, it was resolved, "That the Local Government Act of 1858 be adopted, and that the Local Board, for carrying into execution the provisions of the said Act in the said Township, shall consist of 9 elective members." An amendment, that the number of members be 12, was put and lost.

ELECTION OF LOCAL BOARD.—Finally, at a meeting of the owners and ratepayers of the Township of Haydock, on August 1st, 1872, convened by public notice, 24 being present, it was agreed to nominate as members of a Local Board the following gentlemen:—Rev. H. Sherlock, Joseph Evans, Esq., Dr. Lister, John Chadwick, H. Balharry, Joseph Gibbon, James Cunliffe, W. Alker, and Thomas Hunt.

The first meeting of the Local Board was held on 27th August, 1872, at the National School, at 7 p.m., and was adjourned to October 3rd, at 3.30 p.m.

At a meeting held on October 31st, a proposition was first made to appoint a Medical Officer of Health. This does not appear to have been finally carried out until November, 1873.

The question of **WATER SUPPLY** appears to have been discussed again and again for a number of years. Various schemes were proposed, only to be abandoned. It was proposed to endeavour to take joint action, first with the neighbouring district of Newton, then with Ashton; but nothing came of the negotiations. Then it was proposed to utilize the abundant supply of water from the Lyme Pits, but this was found on analysis to possess an excessive degree of hardness, and also to be contaminated by sewage; therefore this had to be abandoned. Next it was proposed to bore for water in Haydock Park.

At the date of my own first knowledge of Haydock in the middle of the year 1880, things still remained *in statu quo* as regards water supply.

Finally it was decided on May 9th, 1881, to apply to the Liverpool Corporation to ascertain if they would be willing on any terms to supply water to the Township from their Rivington Main, which runs within a short distance of the boundary of the Township. On 27th June it was agreed to by the Liverpool Corporation to supply water to Haydock on certain conditions, one of which was the providing by the Township of a storage reservoir capable of containing a supply for 90 days. On August 29th, 1881, all other schemes were definitely abandoned by the Local Board, and the terms of the Liverpool Corporation were accepted. On 30th April, 1883, it was reported to the Local Board by the Water Engineer that the works were all but completed, and that the supply of water was ready to be turned on.

An often quoted maxim enjoins the propriety of saying nothing but good concerning the departed. Whatever, then, may have been the faults and shortcomings of the Haydock Local Board, it can scarcely be said that it did not leave Haydock considerably better than it found it.

Its work as regards sanitary matters may be thus summarised:—

- (1) The gradual effecting from year to year of considerable improvements in **DRAINAGE**, in the way of relaying drains, covering in and sewerage open ditches, &c., &c.
- (2) However much yet remains to be done, the effecting of improvements in the condition of the Roads, and especially in the providing for the use of Gas-light.
- (3) Even though it took them long to do it, the ultimate provision of an abundant supply of pure and good water.
- (4) The substitution of some system at least of public scavenging applying to the whole Township for the former extremely casual and happy-go-lucky condition of things.
- (5) The adoption of the "Compulsory Notification of Diseases Act."
- (6) The provision in 1893, effected by a joint arrangement with the St. Helens Corporation, of accommodation for the **ISOLATION OF INFECTIOUS DISEASES**, which, whatever may be its objections and disadvantages, may be said to have the following advantages:
 - (a) Provision for the entirely separate and distinct isolation of Small Pox in one place and other Infectious Diseases in another.
 - (b) The sharing in the use of a modern thoroughly efficient Steam Disinfecter.
 - (c) The sharing in a definite proportion and at a fixed charge of perfectly equipped Hospitals, always in a state of readiness and efficiency.

Just as it would have been impossible for Haydock alone to have borne the expense of bringing water from Rivington, so it would have been equally impossible for Haydock alone to have become possessed of such efficient Hospital and Disinfecting arrangements as those which are now available.

GENERAL REVIEW OF THE EXISTING SANITARY CONDITIONS OF HAYDOCK, AND RECOMMENDATIONS AS TO THE LINES OF FURTHER IMPROVEMENT.

1. **WATER SUPPLY**—I have already alluded to the excellence of the provision which has been made in this respect, and I may now give some details:—

- (a) as to the quality of the water;
- (b) as to the extent to which it is distributed throughout the Township.

(a) By the courtesy of Mr. J. Parry, the Water Engineer of the Liverpool Corporation, I am enabled to give the following analysis (the most recent) of the Rivington water.

25th September, 1894.

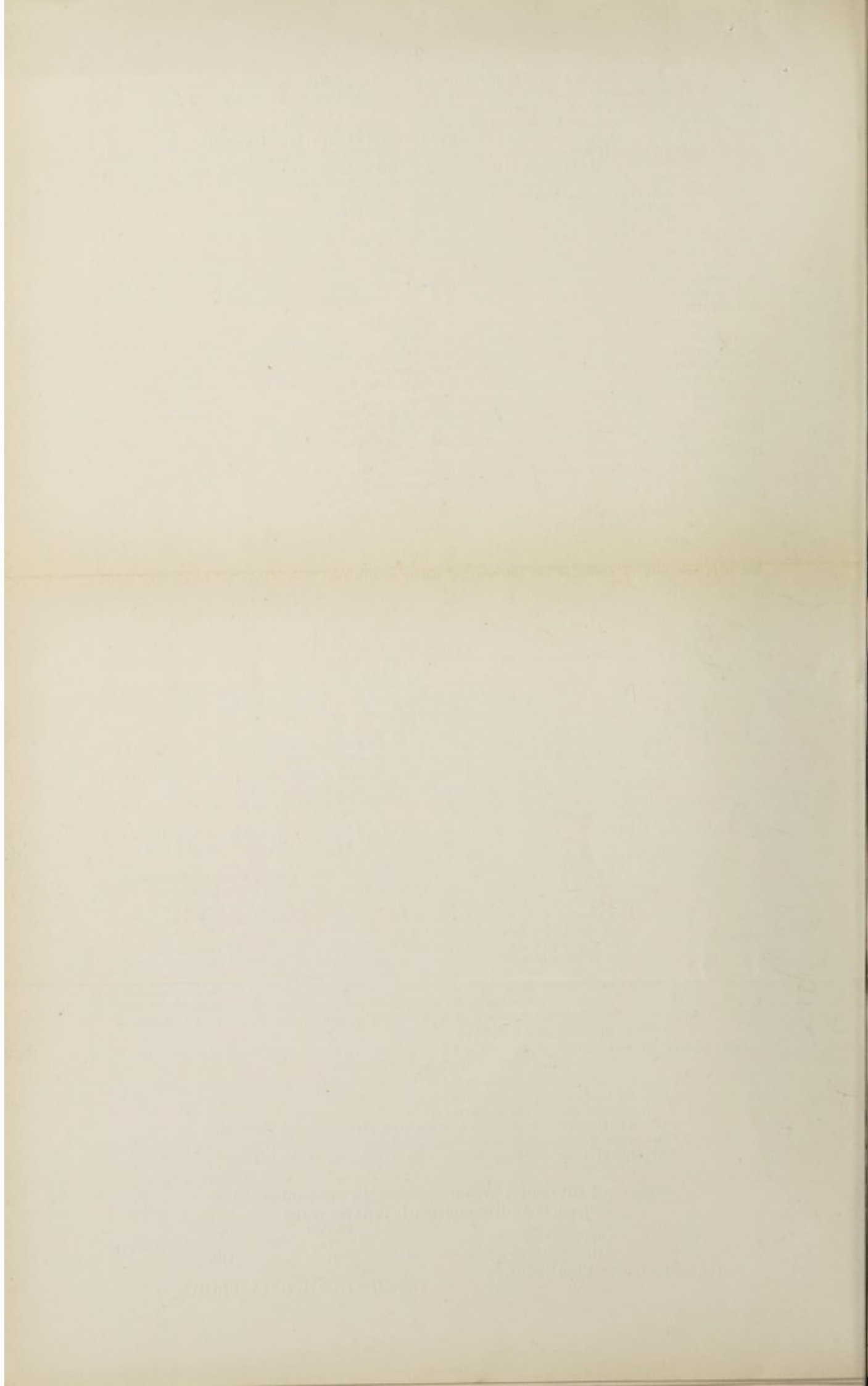
Sample of Rivington Water, taken 15th September, 1894.

Result of Analysis expressed in parts per 100,000.

Total Solid Matter in Solution	Organic Carbon	Organic Nitrogen	Ammonia	Nitrogen as Nitrates	Total Combined Nitrogen	Chlorine	Hardness Total	Slightly Peary
8.6	.251	.046	.002	.021	.069	1.2	3½ degrees	

The sample is of excellent quality.

(Signed) J. CAMPBELL BROWN, D.Sc.



- (b) All the dwelling-houses in the main portion of the Township are furnished with the public water supply. The only exceptions are completely detached and outlying dwelling-houses, which may be tabulated as follows:—

Haydock Asylum and adjoining Dwellings	...	...	8
Haydock Park Farm and Cottages	...	...	4
Cottages near Dean Dam	...	...	4
Cottages near Canal	...	...	4
Cottage near Newton Common	...	...	1

21

The supply during the year has been constant, direct from the Rivington mainpipe, with the exception of four or five days in September, when there was a breakdown in the main at Hindley.

In a previous Special Report, which relates to Precautions against Cholera, I have already taken occasion to point out that the weak point in the water supply of Haydock is the existing principal storage Reservoir, near the top of Haydock Lane. This is practically a large shallow backed-up open pond, not entirely free from the possibility of contamination. For instance, only a few days ago I noticed in passing that an adjoining field was being manured with privy-midden refuse. It would be quite possible, either by soakage through the soil or by dust being carried by the wind, for the water to be infected by Typhoid germs. Now that the Vyrnwy water scheme is completed we have practically an unlimited supply direct from the Rivington main, and the storage reservoir has only to be drawn upon in case of a breakdown. Should such occur however, there are possibilities of diseases which it is desirable to guard against.

2 DRAINAGE—There cannot be said to exist any regularly planned system of drains and sewers in Haydock. Although, as I have before remarked, very great improvements have been made in this respect, yet the fact remains that as the Township has grown and new rows of houses have been erected drains have been made to carry off the rain-water and slop-water, on no fixed or systematic plan. These, with or without having the sediment first collected in pits or cesspools, discharge themselves into Sankey Brook or its tributaries.

Sankey Brook, as is well known, is not a pellucid stream as it first flows past the boundaries of the Township, laden as it is with sewage and chemical refuse, and it is scarcely likely that what goes into it from Haydock makes it much worse. Still, your Council will have sooner or later to face the question of sewerage the Township on a regular and systematic plan. I am well aware that, owing to mining subsidences and other causes, some difficulties would be met with. It is not in my province to discuss or point out the means of overcoming these difficulties, which requires an expert engineer to give advice upon, but it is my duty to advise in the interests of public health that this matter be taken into serious consideration.

3 REMOVAL OF EXCRETA—One of the observed laws of nature is that all living creatures are poisoned by their own excretions if these are not removed. This holds good, therefore, for human beings. What nature intends for human excretions is that they shall be returned to the earth as speedily and as completely as possible. By natural processes, which go on in the soil through the agency of minute living organisms, these excreta are thus soon rendered inoffensive and innocuous, and tend also to fertilize the earth and promote the growth of vegetation. Dirt has been said to be "matter out of its place," and human excretions out of the earth are very much out of place.

The problem of disposing of excreta is a very simple one in single houses with plenty of cultivated ground around, if only the requisite trouble is taken about the matter. In so far as houses become aggregated and population becomes more crowded in a given area, the problem becomes one of increasing difficulty and complexity, and transgressions of nature's law become visited with "just recompense of reward."

In semi-rural communities like Haydock, consisting chiefly of houses of the poorer class, and where no proper system of sewers exists, the "water carriage" system, by which the excreta are carried away from the dwelling by the flushing action of water, is not available.

The choice then lies between collecting the excreta in a fixed and permanent receptacle (the privy-midden system) or in some kind of removable and exchangeable receptacle (the pail system).

While not ideally the best, I am yet disposed to think that with *proper construction and management* the privy and ashpit system may be, for the needs of a place like Haydock, the best practically available.

I have repeatedly taken occasion, and especially in my last Annual Report (for 1893), to comment on the defects and dangers of the privy-midden system as it actually exists in Haydock.

In this system when properly carried out the excreta are deodorized and kept dry by the admixture of ashes.

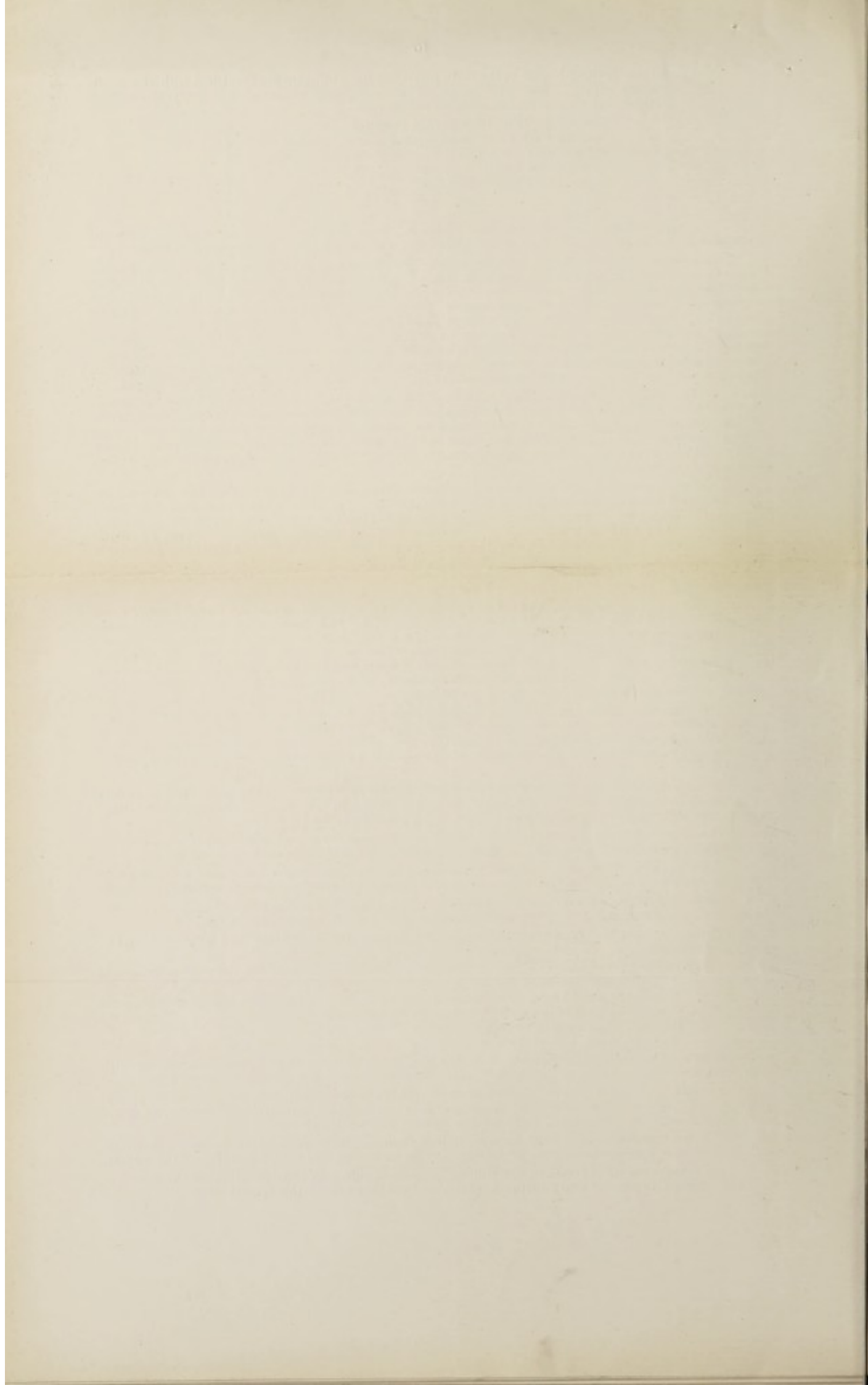
- (1) The properly constructed privy-midden should be so arranged that the excreta are covered by the ashes thrown in.
- (2) The ashpit should have its sides and floor cemented; and the floor, instead of being sunk below the level of the ground, should be slightly raised above it.
- (3) It should be covered in to keep out rain.
- (4) It should be emptied at least once a week.

However, most of the privy-middens in Haydock are pits of liquid filth, polluting the air with their effluvia and the soil around by soakage, such soil being the breeding-ground of disease germs.

It would be desirable for your Council to see to it that no further plans for new cottages are passed which do not conform to the above-mentioned conditions; and it may be possible, by degrees, to secure such reconstruction as shall remove the more glaring defects actually existing.

4 PUBLIC SCAVENGING—Although some improvement has taken place in this respect, I still think that there is room for more to be done in the way of more frequently and regularly emptying the ashpits.

(5) INSPECTION OF NUISANCES—It will be for your Council to consider whether there is not sufficient work to do for a Sanitary Inspector to devote his whole time to this special work.



Sanitary Inspection during the Year.

It is reported that the Milkshops, Cowsheds, Slaughterhouses, and Bakehouses in the District have been inspected, and found in good order.

Besides verbal notices which have been attended to without further trouble, written notices have been served in the following cases :—

Nuisances caused by Defective Drainage	...	...	...	...	...	15
Keeping a Horse in an Empty House adjoining other dwelling-houses	...	...	...	...	...	1
Keeping a Goat in a Dwelling-house	..	...	...	...	...	1

The present time, when a new era of Local Self-Government has begun, has seemed to demand that this Report should deal with such matters as fall within the province of your Council, as the Local Sanitary Authority, more fully than has hitherto been attempted in my Annual Reports.

As it will be impossible for a popularly elected body to go very far in advance of the general amount of intelligence and knowledge possessed by the electors generally, one object of such a Report as this should be to attempt the diffusion of knowledge relating to sanitary matters.

An often quoted saying of a great religious teacher of the last century is that "cleanliness is next to godliness." This will be found to be true of communities as well as of individuals. For, while it is an undoubted fact that men make to some extent their own surroundings, it is perhaps more obviously true that their surroundings affect themselves. The teachings of sanitary science resolve themselves into endeavours to secure personal and public cleanliness. In so far, then, as Nature's teachings are understood and acted upon by individuals and the community generally, will moral as well as physical wellbeing be promoted.

I have the honour to be, Sir,

Your obedient Servant,

T. E. HAYWARD, M.B.,

Medical Officer of Health.

