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ROYAL STATISTICAL SOCIETY
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County Borough of Halifax,
— Health Department. —

Annual Report

ON THE

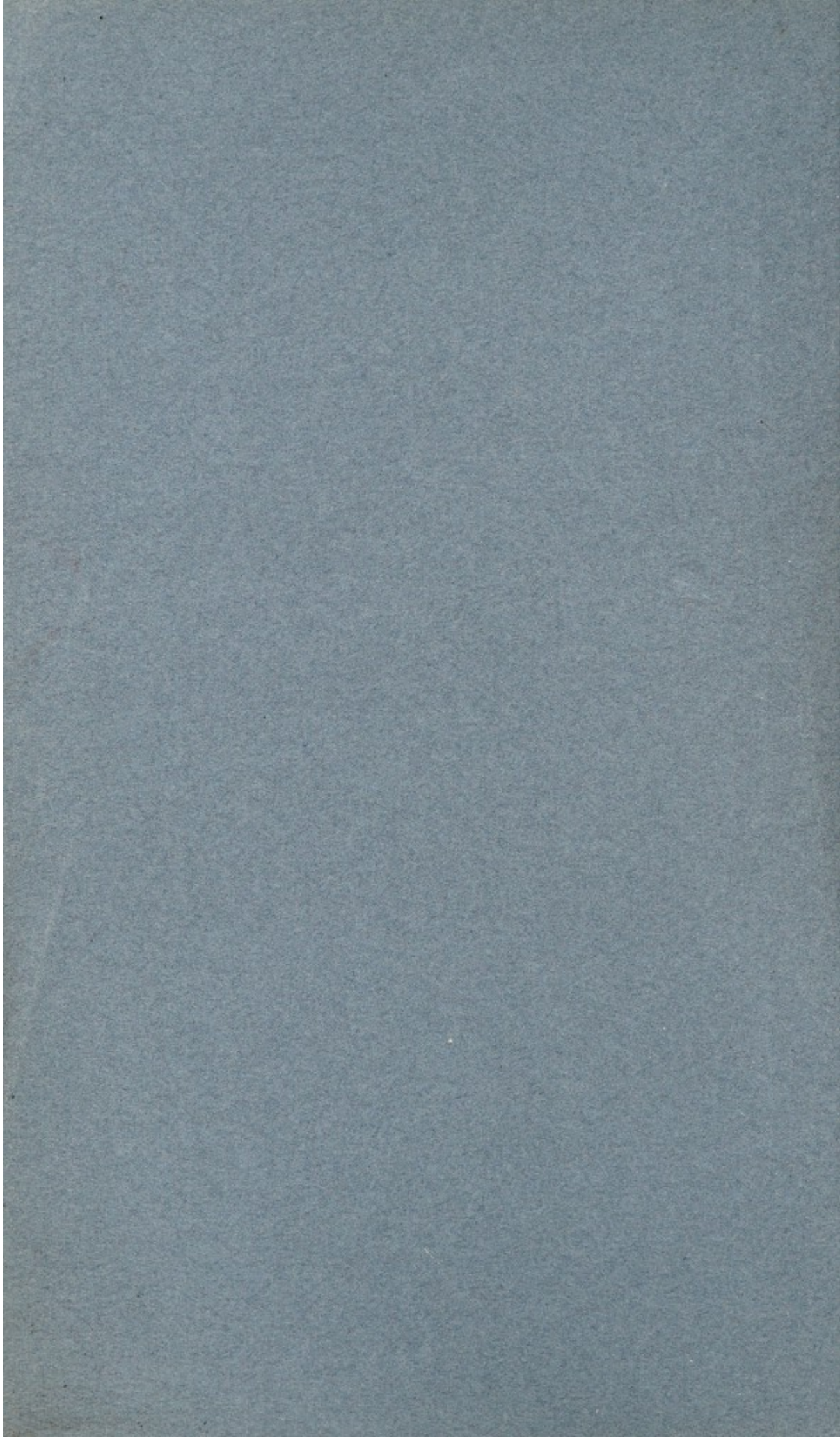
Health of the Borough

for the year ended Dec. 31st, 1909

Printed by Order of
the Health Committee.

HALIFAX:
N. ASHWORTH & SON, Printers, etc., Lister Lane.

1910.





With the
Medical Officer of Health's
Compliments.





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Health Committee.

Mayor.

ALDERMAN F. WHITLEY THOMSON, J.P.

ALDERMAN T. HEY, J.P., *Chairman.*

COUNCILLOR J. ASQUITH, *Vice-Chairman.*

Alderman J. F. COE, J.P. Councillor R. W. GOGGS.

„ J. W. CROSSLAND, J.P. „ J. PICKLES.

Councillor W. H. INGHAM. „ W. M. BRANSON, L.R.C.P.

„ A. GREENWOOD. „ T. G. LE DIEU.

„ C. H. SMITHSON. „ J. BURKE.

„ D. HANSON. „ E. PINDER.

Councillor A. TAYLOR, J.P.

Sub-Committees

Appointed by the Health Committee.

Hospital Sub-Committee.

THE CHAIRMAN. ALDERMAN CROSSLAND.
VICE-CHAIRMAN. COUNCILLOR INGHAM.
ALDERMAN COE. „ BRANSON.
COUNCILLOR TAYLOR.

Cleansing Sub-Committee.

THE CHAIRMAN. COUNCILLOR BURKE.
VICE-CHAIRMAN. „ LE DIEU.
ALDERMAN CROSSLAND. „ PINDER.

Buying Sub-Committee.

THE CHAIRMAN. COUNCILLOR GREENWOOD.
VICE-CHAIRMAN. „ HANSON.
COUNCILLOR PICKLES. „ INGHAM.

Accounts Sub-Committee.

THE CHAIRMAN. COUNCILLOR HANSON.
VICE-CHAIRMAN. „ SMITHSON.
COUNCILLOR GOGGS.

Housing Sub-Committee.

THE CHAIRMAN. COUNCILLOR HANSON.
VICE-CHAIRMAN. „ LE DIEU.
ALDERMAN COE. „ PINDER.
COUNCILLOR SMITHSON.

Staff of the Health Department.

Medical Officer of Health, Superintendent of the Borough Fever Hospital.

JAS. T. NEECH, M.D., D.P.H.

Assistant Medical Officer of Health.

J. F. HODGSON, M.D., D.P.H.

Public Analyst.

J. A. DEWHIRST, F.I.C., F.C.S.

Chief Sanitary Inspector and Scavenging Superintendent.

DAVID TRAVIS, A.R.S.I., F.S.I.A.

Veterinary and Meat Inspector.

J. POLLARD, M.R.C.V.S., D.V.S.M.

District Sanitary Inspectors.

J. E. FIRTH. R. PICKARD. F. TEAL.

J. G. WALSHAW.

Lady Health Visitor.

ALICE M. THOMPSON.

Assistant Scavenging Superintendent.

R. TRAVIS.

Chief Clerk.

J. W. JACKSON.

Assistant Clerks.

CHARLES CARLTON. ERNEST JUBB.

Matron of the Borough Hospital.

M. ROBISON.

Disinfecter.

T. W. BOOTH.

Laundry Engineer.

W. GUEST.

Porter.

A. GREENWOOD.

Goux Department.

Yard Foreman.

G. LEAPER.

Goux Inspectors.

J. HEATH. S. MAUDSLEY.

Clerk.

HARRY ASKE.

Assistant Clerk.

A. G. CRAVEN.

County Borough of Halifax.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

JAS. T. NEECH, M.D., D.P.H.

For the Year 1909.

INTRODUCTION.

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

GENTLEMEN,

I now have the pleasure of submitting to you my Tenth Annual Report, which is the Thirty-seventh Annual Report of the Medical Officer of Health of the Borough.

There is not very much in the Report which requires special notice. I regret that the improvement in the birthrate, to which I drew attention last year, has not been maintained. Compared with the previous year, there was a fall of 2·7, and the birthrate for the year under review is the lowest on record.

It is satisfactory to me to have again to report a fall in the infantile deathrate. The deathrate of infants under one year of age for 1909 is the lowest on record.

The Zymotic deathrate is also highly satisfactory, as it shows a considerable improvement upon that of the previous year, and the general deathrate shows an improvement of '1 per 1,000, when compared with the previous annual rate.

The Lady Health Visitor, assisted by the Voluntary Lady Workers, continue to do good work. A Report thereon, by Miss Thompson, is included herein.

I have also included a Report by Mr. J. Pollard, the Veterinary Inspector, which I requested him to make on the work he had carried out during the year under review.

The staff remains the same as for the previous year, there having been no changes during the year, and there was consequently no interference in the carrying out of the work of the department on that account.

In conclusion I have to acknowledge the assistance rendered me in carrying out the work of the department by Mr. Travis, the District Sanitary Inspectors, and Messrs. Jackson and Carlton, and also your Committee for its generous support.

I am,
Gentlemen,
Your obedient servant,

Jas. J. Keech M. D. D.P.H.

Medical Officer of Health.

TOWN HALL,
HALIFAX,

May 18th, 1910.

STATISTICAL SUMMARY.

	1909	1908
	ACRES	
Area of County Borough	13,650	....
Rateable Value	£495,401	£498,632
Population, estimated to middle of 1909	107,750	107,500
Population, 1901 Census	104,936	....
Persons per Acre	7·8	7·8
Average number of Persons per Inhabited House, 1901 Census	4·2	....
Average number of Persons per House, 1901 Census	4·0	....
Birth Rate, 1909	17·0	19·7
" Average for previous 10 years	23·9	20·8
Death Rate, 1909	15·3	15·3
" Average for previous 10 years	15·7	16·0
Death Rate Corrected for Institutions....	14·4	14·5
Death Rate for seven principal Zymotic Diseases	·77	1·0
Death Rate, the mean for pre- vious 10 years of Zymotic Diseases	1·0	1·1
Deaths of Infants under 1 year per 1,000 Births	99	101
Illegitimate Births	83	120
Average Age at Death, 1909— Males	42·0 years	40·6 years
Average Age at Death, 1909— Females	47·3 years	44·8 years
Latitude—North	53° 43'	....
Longitude—West	1° 52'	....
Height above Sea Level, feet	625	....
Total Rainfall, inches	35·69	30·75

Area and Population of the Borough.

I am of opinion that the population of the Borough, as estimated by the Registrar General for the year 1909, was too high. He estimated the number of inhabitants to be 111,911, but taking all the facts into consideration, I estimated the population to be in the middle of 1909, 107,750, and the deathrates in this Report are worked out on that basis. That being the case, the figures given in this Report will not quite agree with those of the Registrar General.

The Borough contains an area of 13,650 acres, and is divided into fifteen wards as the following table will show.

WARDS.	Population Estimated to Middle of 1909.	Acreage.	Persons per Acre.	Number of Houses Built during 1909.
Ovenden	7415	531	13·9	...
Akroydon	6710	582	11·5	...
North	7860	168	46·7	...
Central	7055	82	86·0	...
West	8530	86	99·1	...
South	7410	296	25·0	10
East	7010	191	36·7	...
Southowram ..	7230	777	9·3	1
Skircoat	10890	513	21·2	50
Copley	3210	532	6·0	4
Pellon	10020	241	41·5	3
Kingston	10960	238	46·0	2
Illingworth ...	7130	4504	1·5	3
Northowram ...	3350	1555	2·1	...
Warley	2970	3354	·8	...
Totals	107750	13650	...	73
Average ... ..	...	...	7·8	...

Marriages.

I have again to record a fall in the marriage rate. The number of marriages solemnised within the Borough during the year under review was 990, which gives a rate of 9·1 per 1,000, against 9·4 during the previous year, or a fall of ·3 per 1,000, and this is the lowest marriage rate on record in the Borough.

The following table compares the marriage rate of Halifax with that of England and Wales, and shows the marked fall in the former rate compared with the general rate of the country.

YEAR.	MARRIAGE RATE	
	Halifax.	England & Wales.
1897	15·9	16·0
1898	10·4	16·2
1899	12·3	16·5
1900	11·2	16·0
1901	10·5	15·9
1902	9·8	15·9
1903	9·5	15·8
1904	9·7	15·2
1905	9·7	15·2
1906	9·5	15·6
1907	9·9	15·7
1908	9·4	14·9
1909	9·1	14·5

The following table shows where the marriages were solemnised.

In Churches of the Church of England	563
In Nonconformist places of Worship, and at the Registry Office	427
Total	990

Births.

In my Annual Report for the previous year I was able to record an improvement in the birthrate of the Borough. I regret to say however that this has not been maintained, for there were registered during the year under review, 1,840 births, or a decrease of 378 when compared with the above year. The birthrate therefore was only 17·0 per 1,000 compared with 19·7 for the year 1908, and is the lowest yet recorded.

The births registered included 942 males, and 898 females. Fewer females were born compared with the number of males than has been the case for several years past.

The birthrate is unfortunately falling more quickly than the deathrate, and the excess of births over deaths in the Borough for the past year is the lowest on record. The following table compares these figures for the past ten years.

Year.	Births.	Deaths.	Excess of Births over Deaths.
1900	2316	1809	507
1901	2351	1709	642
1902	2225	1634	591
1903	2248	1592	656
1904	2154	1643	511
1905	2072	1618	454
1906	2070	1674	396
1907	1927	1558	369
1908	2118	1561	557
1909	1840	1552	288
Average	2132	1635	497

Birthrates in the country generally appear to be still falling, so that Halifax is not alone in this respect.

The following table compares the birthrate of Halifax with that of England and Wales during the past thirty-five years, and shows the marked fall which has taken place in the birthrate of the Borough compared with the general birthrate of the country.

Period.	England and Wales.	Halifax.	Difference.
1875-9	35·3	35·7	-| 0·4
1880-4	33·8	30·7	— 3·1
1885-9	31·4	28·0	— 3·4
1890-4	30·7	25·4	— 5·3
1895-9	29·7	23·1	— 6·6
1900-4	28·4	21·5	— 6·9
1905-9	26·5	18·5	— 8·0

The marriage rate in Halifax is considerably below that of England and Wales, and has been so for many years past. This is an important factor in connection with the birthrate, and will to a great extent account for the fall which has taken place.

The number of illegitimate births registered within the Borough during the past 16 years is shown in the following table, and the rate per cent. which these births bear to the total number of births registered.

Year.	Number of Illegitimate Births.	Rate per cent. to whole number of Births.
		Average.
1891	51	2.3
1892	78	3.5
1893	73	3.2
1894	73	3.4
1895	51	2.3
1896	65	2.7
1897	44	2.0
1898	58	2.6
		2.7
1899	58	2.5
1900	75	3.2
1901	101	4.2
1902	89	4.0
1903	102	4.5
1904	113	5.2
1905	97	4.6
1906	99	4.7
		4.1
1907	84	4.3
1908	120	5.6
1909	83	4.5
		4.8

The percentage of illegitimate births for the year under review is below that of the previous year, still the average percentage of these births is considerably above what obtained during the years 1891 to 1898.

The mean birthrate of the 76 great towns for the year 1909 was 25·7 per 1,000, and only three of those towns had a lower birthrate than Halifax, viz.:—Hornsey, 15·3; Hastings, 15·1; and Bournemouth, 16·7.

The birthrate of Halifax is considerably below all of the 33 largest towns in the country.

The birthrate of England and Wales for 1909 was 25·6 per 1000, against 26·5 for the previous year, or a decrease of ·9 per 1000.

The birthrates of the other Yorkshire great towns were:—Leeds, 22·8; Sheffield, 28·2; Bradford, 18·8; Hull, 29·4; Huddersfield, 24·5; York, 23·8; and Rotherham, 31·6 respectively.

The number of births and birthrates during each quarter of the year are shown in the following table.

Period.	Males.		Females.		Totals.		Birthrate per 1000 living.	
	1909.	1908.	1909.	1908.	1909.	1908.	1909.	1908.
1st Quarter	206	274	214	290	420	564	15·5	20·9
2nd „	254	265	231	271	485	536	18·0	19·9
3rd „	232	261	223	234	455	495	16·8	18·4
4th „	250	257	230	266	480	523	17·8	19·4
Whole Years	942	1057	898	1061	1840	2118	17·0	19·7

From the above table it will be observed that each quarter shows a diminished birthrate, but the most marked fall occurred during the first quarter.

The following table gives the birthrates of the different wards during the past five years.

WARDS.	BIRTHRATES.					Average.
	1905.	1906.	1907.	1908.	1909.	
Ovenden ...	17.5	19.9	20.2	21.6	17.6	19.3
Akroydon ...	27.0	23.2	24.0	22.3	19.8	23.2
North ...	21.2	25.1	21.1	25.6	22.9	23.1
Central ...	20.2	18.1	18.7	22.0	20.9	19.9
West ...	14.6	17.9	17.0	17.8	16.4	16.7
South ...	13.5	14.3	12.4	15.6	13.6	13.8
East ...	14.6	17.5	13.1	16.2	15.8	15.4
Southowram ...	23.2	22.4	20.3	24.7	20.3	22.1
Skircoat ...	21.2	17.5	18.9	19.5	15.1	18.4
Copley ...	21.5	17.7	22.2	16.9	21.8	20.0
Pellon ...	18.7	17.3	16.8	17.7	14.6	17.0
Kingston ...	17.3	18.3	15.0	17.9	13.1	16.3
Illingworth ...	17.8	18.1	15.0	16.1	15.9	16.5
Northowram ...	27.3	21.5	19.1	25.0	15.5	21.6
Warley ...	22.3	20.2	15.0	17.9	19.1	18.9

It will be observed from the above table that the birthrate varied from 13.6 in South Ward to 22.9 per 1000 in North Ward, and that the average for five years varied between 13.8 in South and 23.2 in Akroydon Wards.

According to information furnished me by the sextons and caretakers of the burial grounds in the Borough, there were 104 still-born children buried during the year.

One case occurred in which a child born alive was buried as still-born. The Registrar General ordered a prosecution of the sexton concerned in this case, and he was fined. This should act as a warning to others who occupy a similar position.

The number of still-born children buried in each of the burial grounds during the past two years is shown in the next table.

Name of Burial Ground.	Number of Still-born Children buried therein.	
	1909.	1908.
Moor End Chapel	0	0
Nursery Lane Wesleyan	0	0
St. George's, Ovenden	0	2
Providence Chapel, Ovenden	2	2
Illingworth Church	6	5
Christ Church, Mount Pellon	12	8
Illingworth Wesleyan Chapel	1	1
Mount Zion, Ovenden	1	3
Borough Cemetery	23	35
Wesleyan Chapel, Northowram... ..	0	0
All Saints' Church	6	3
Heywood Cemetery	6	4
Bradshaw Church	1	0
Mount Tabor Burial Ground	0	0
King Cross Wesleyan	10	9
St. Paul's Church, King Cross	10	12
All Souls' Cemetery	11	7
Warley Church	1	1
Wesleyan Chapel, Luddenden	0	0
Lister Lane Cemetery	0	2
St. Thomas' Church	14	7
Totals	104	101

The total number buried during the previous seven years was:—1901, 108; 1902, 86; 1903, 118; 1904, 121; 1905, 113; 1906, 112; 1907, 113.

Deaths.

During the year 1909 there were 1,654 deaths registered within the Borough, of which 132 belonged to outside districts. From information received from other towns, I ascertained that 30 deaths occurred outside the Borough among persons belonging thereto, consequently by excluding the former, and including the latter, the actual number of deaths for the year was 1,552.

The latter number included 764 males and 788 females, and gives a deathrate for the year of 14·4, which is '1 per 1000 below that of the previous year, and, with the exception of the year 1907, is the lowest deathrate on record.

The deathrate of the Borough has been gradually falling during the past 10 years, as the following table will show.

Period.	Deathrate.
1900	18·1
1901	16·2
1902	15·4
1903	14·9
1904	15·3
1905	15·0
1906	15·5
1907	14·3
1908	14·5
1909	14·4

The deathrate of England and Wales during 1909 was 14·5 per 1000, and the average of the 76 great towns was 15·6 per 1000. Of these, 37 had a lower deathrate than Halifax, but of the latter, 35 have a smaller population.

The deathrates of the other Yorkshire great towns were as follows:—Leeds, 14·1; Sheffield, 15·1; Bradford, 14·5; Hull, 14·9; Huddersfield, 16·3; York, 11·4; and Rotherham, 13·2 per 1000 respectively.

The following table compares the average deathrate of England and Wales for the undermentioned periods with that of Halifax.

Period.	Deathrates.	
	Halifax.	England and Wales.
1876-80	23·5	20·9
1881-5	21·1	19·4
1886-90	21·2	18·9
1891-5	17·9	18·7
1896-00	17·5	17·7
1901-5	15·3	16·0
1906-9	14·6	14·9

From the above table it will be observed that the deathrate of Halifax has fallen 9 per 1000 during the past 35 years, which means a saving of over 900 lives per annum, compared with the beginning of that period.

In the following table the general deathrates of the various wards of the Borough are compared. The density of population is also shown.

WARDS.	Population.	Acreage.	Persons per Acre.	Total Deaths.	Death- rate per 1000.
Ovenden ...	7415	531	13·9	109	14·6
Akroydon ...	6710	582	11·5	114	16·9
North ...	7860	168	46·7	143	18·1
Central ...	7055	82	86·0	126	17·8
West ...	8530	86	99·1	132	15·4
South ...	7410	296	25·0	112	15·1
East ...	7010	191	36·7	120	17·1
Southowram ...	7230	777	9·3	101	13·9
Skircoat ...	10890	513	21·8	118	10·8
Copley ...	3210	532	6·0	21	6·5
Pellon ...	10020	241	41·5	113	11·2
Kingston ...	10960	238	46·0	152	13·8
Illingworth ...	7130	4504	1·5	103	14·4
Northowram ...	3350	1555	2·1	50	14·9
Warley ...	2970	3354	·8	38	12·7
Totals ...	107750	13650	7·8	1552	14·4

The following table gives the average general deathrate of each ward for a period of five years.

WARDS.	DEATH RATES.					
	1905.	1906.	1907.	1908.	1909.	Average.
Ovenden ...	17·0	14·9	12·0	15·1	14·6	14·7
Akroydon ...	17·6	14·7	16·2	15·8	16·9	16·2
North ...	17·7	17·1	13·8	20·5	18·1	17·4
Central ...	17·2	17·6	17·8	15·9	17·8	17·2
West ...	14·1	14·5	14·4	16·7	15·4	15·0
South ...	13·6	14·0	14·9	15·4	15·1	14·6
East ...	19·4	22·6	21·6	17·0	17·1	19·5
Southowram ...	14·4	16·9	15·0	15·2	13·9	15·0
Skircoat ...	14·0	15·4	10·1	11·7	10·8	12·4
Copley ...	14·8	14·0	16·6	9·0	6·5	12·1
Pellon ...	11·9	12·0	12·2	10·9	11·2	11·6
Kingston ...	10·3	12·4	12·3	12·0	13·8	12·1
Illingworth ...	15·6	15·6	13·5	13·8	14·4	14·5
Northowram ...	16·1	13·6	13·6	14·6	14·9	14·5
Warley ...	16·0	19·5	15·7	12·7	12·7	15·3

While East Ward still shows the highest average deathrate, the fall in the deathrate of that ward which took place during 1908 is still practically maintained. North Ward, as in the previous year, has the highest deathrate, while Copley had the very low deathrate of 6·5 per 1000.

The following table shows the total number of deaths of each sex which occurred in the Borough, the total age lived, and the average age at death during the past 14 years.

MALES.				FEMALES.			
	Deaths.	Total Years.	Average Ages.		Deaths.	Total Years.	Average Ages.
0-1	107	107	...	0-1	76	76	...
1-5	61	140	2.2	1-5	61	152	2.4
5-15	34	324	9.5	5-15	33	267	8.0
15-25	40	795	19.8	15-25	35	683	19.5
25-65	317	15683	49.4	25-65	286	14288	49.9
65 and upwards	205	15039	73.3	65 and upwards	297	21880	73.6
Total...	764	32088	42.0	Total...	788	37346	47.3
1909	Average		42.0	1909	Average		47.3
1908	..		40.6	1908	..		44.8
1907	..		41.4	1907	..		47.8
1906	..		39.0	1906	..		44.9
1905	..		38.6	1905	..		44.1
1904	..		37.5	1904	..		41.2
1903	..		40.0	1903	..		43.3
1902	..		36.6	1902	..		40.2
1901	..		36.2	1901	..		40.1
1900	..		38.3	1900	..		41.2
1899	..		35.1	1899	..		38.4
1898	..		34.4	1898	..		38.2
1897	..		35.3	1897	..		37.9
1896	..		35.5	1896	..		38.4

The above table shows that the average age at death of both males and females was higher than during the previous year, and that the average age at death of males was greater than any year shown in the table. This is chiefly accounted for by the fact that a much smaller number of male infants died during the year, also a smaller number of males between the age of one and five years. It is also interesting to note that 92 more females died at the age of 65 and upwards than males. The average age at death of females during the year under review was five years greater than males, against four during the previous year.

Zymotic Deathrate.

The seven principal Zymotic diseases accounted for 84 deaths during the year, against 108 during 1908, which gives a deathrate of '77, against 1'0 per 1000 during the previous year. A satisfactory decrease, but on two occasions a slightly lower deathrate has been recorded, viz., in 1903 and 1907. Fewer deaths occurred from both Measles and Whooping Cough, which account for the lower Zymotic deathrate.

Two only of the 33 great towns of England and Wales had a lower Zymotic deathrate than Halifax, viz., Brighton, '65 and Bradford, '68.

The Zymotic deathrate for 1909 of the other Yorkshire great towns were as follows:—Leeds, '80; Sheffield, 1'78; Bradford, '68; Huddersfield, 1'84; Hull, 1'38; York, '55; and Rotherham, 1'21 per 1000 respectively.

In the following table the average Zymotic deathrate of England and Wales is shown.

	DEATHRATE FROM							
	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Zymotic Deathrate per 1000.
England and Wales ...	0.00	0.35	0.09	0.14	0.20	0.06	0.28	1.12
76 Great Towns ...	0.00	0.48	0.11	0.15	0.24	0.06	0.38	1.42
143 Smaller Towns ..	0.00	0.33	0.09	0.16	0.17	0.06	0.27	1.08
England and Wales, less the 219 Towns ...	0.00	0.21	0.06	0.14	0.16	0.06	0.17	0.80
HALIFAX ...	0.00	0.03	0.16	0.25	0.15	0.07	0.09	0.77

From the above table it will be observed that the Zymotic deathrate of Halifax compares very favourably with the average of that of the country generally.

The following table shows the number of Zymotic deaths which occurred in each ward during the year under review.

WARDS.	Smallpox.	Measles.	Scarlet Fever	Diphtheria.	Whooping Cough.	Fever	Diarrhoea.	Zymotic Deathrate per 1000.
Ovenden	2	3	...	...	.6
Akroydon	1	3	8	2	3	1	2.6
North	6	1	1	...	5	1.6
Central	1	...	...	1	...	1	.4
West	1	1	3	1	1	.8
South	1	...	.1
East	3	2	1	.8
Southowram	1	2	5	...	...	1	1.2
Skircoat	1	...	2	2	1	...	.5
Copley0
Pellon	2	1	...	...	...	.2
Kingston	2	4	1	...	...	.6
Illingworth	1	1	1	...	...	.4
Northowram	1	...	...	...	...	.2
Warley	2	...	...	...	.6
Totals...	...	4	18	27	17	8	10	avg. .7

It will be observed that Akroydon had the highest Zymotic deathrate, while no deaths occurred during the year from these causes in Copley Ward.

It was Diphtheria which chiefly accounted for the higher Zymotic deathrate in Akroydon Ward.

The following table gives the Zymotic deathrate of the various wards during the past five years, together with the average for each ward.

WARDS.	ZYMOTIC DEATHRATE.					
	1905.	1906.	1907.	1908.	1909.	Average.
Ovenden	1.9	1.9	0.5	0.8	0.6	1.1
Akroydon	0.6	1.6	1.3	1.9	2.6	1.6
North	1.3	1.3	1.1	3.0	1.6	1.6
Central	0.7	1.1	0.7	0.4	0.4	0.6
West	0.7	0.4	0.4	1.2	0.8	0.7
South	0.9	1.0	0.7	0.1	0.1	0.5
East	0.8	1.5	0.5	1.7	0.8	1.0
Southowram ...	1.8	3.0	0.3	1.9	1.2	1.6
Skircoat	0.5	0.9	0.0	0.9	0.5	0.3
Copley	2.0	1.6	0.6	1.5	0.0	1.1
Pellon	0.5	0.9	0.7	0.8	0.2	0.6
Kingston	0.3	1.1	0.4	0.2	0.6	0.5
Illingworth ...	0.4	0.8	0.9	0.7	0.4	0.6
Northowram ...	1.8	1.5	0.6	0.2	0.2	0.8
Warley	0.3	1.7	0.0	0.3	0.6	0.5

The above table shows that Akroydon, North and Southowram Wards have the highest, and Skircoat the lowest average Zymotic deathrate.

The following table gives the average Zymotic deathrate in quinquennial periods during the past 33 years.

Period.	Deathrate.
1877-81	2·50
1882-6	1·55
1887-91	1·43
1892-6	1·33
1897-01	1·40
1902-6	1·02
1907-9	·80

It will be observed that Halifax has had a satisfactory Zymotic deathrate for many years past, that there has been a continuous fall in this rate, and that to-day it is only one-third of what obtained 30 years ago.

Infantile Mortality.

It is satisfactory to me to have to report that the infantile deathrate still continues to fall, in fact there has been a gradual drop in this rate since the year 1905. In my annual report for the above year the following passage occurs—

“Attention has been drawn to this question, and great efforts are now being put forth throughout the Kingdom, with the object of bringing about a reduction in this mortality. It is hoped that these efforts will meet with success, because there is no doubt that a very large number of these deaths are preventable.”

Since the above was written, we have directed our attention to this matter in the Borough, and I think, at any rate some of the success which has been achieved in securing this fall in the infantile deathrate, may be with truth ascribed to the work that has been done in this direction. I am the more convinced that this has been the case, because the fall in this deathrate has been a gradual one.

During the year under review, 183 infants died under one year of age, against 216 during the previous year. It is true that a smaller number of births were registered during 1909, but notwithstanding that fact the infant mortality for the year was at the rate of 99 deaths per 1000 births.

This is the lowest infantile deathrate that has ever been recorded in the Borough, and it is two below the previous year when the rate was 101 deaths per 1,000 births.

The infantile deathrate of the Borough must be considered very satisfactory when compared with other manufacturing centres.

That there is room for a further diminution in the above deathrate is evident, when the average rate for five years in Wards like Warley and Skircoat are 67 and 70 respectively per 1,000 born, compared with East Central, and North, which show an average rate of 176, 161, and 143 respectively. It is to Wards like the latter that we must look for improvement.

During the year, on the instruction of your Committee, I got out figures showing what particular diseases caused the great difference in the infant mortality in Skircoat Ward and six other Wards, and the following table gives the mortality per 1,000 births from the chief causes of infantile deaths from 1904 to 1908 inclusive for the Wards concerned.

WARDS.	Zymotic Deaths, including Diarrhoea.	Enteritis and Gastro Intestinal Catarrh.	Diarrhoea.	Premature Birth.	Atrophy, Debility, Marasmus.	Convulsions.	Bronchitis and Pneumonia.
Akroydon ...	20	4	2	23	18	12	16
North ...	29	9	18	26	15	10	30
Central ...	14	10	9	27	27	9	32
West ...	14	9	2	16	16	6	33
East ...	29	7	18	39	26	18	27
Southowram	20	7	11	27	8	17	21
Total ...	126	46	60	158	110	72	159
Average ...	21	7	10	26	18	12	26
Skircoat ...	2	1	1	17	6	7	15
Difference	-19	-6	-9	-9	-12	-5	-11

The average infant mortality of the above six Wards for the five years was 149 per 1,000, and the causes of death in the above table account for a difference of 71 per 1,000, which with the 70 which is the average deathrate for Skircoat Ward, makes 141 per 1000, consequently the above diseases practically account for the difference in the deathrates in comparing the above Wards with Skircoat.

In connection with this matter I also prepared the following table, which shows the percentage of the total number of infantile deaths of each of the under-mentioned chief causes of death in the Wards concerned.

WARDS.	Zymotics	Diarrhoea.	Atrophy Debility.	Premature Birth.	Convulsions.	Bronchitis and Pneumonia.
Akroydon ...	15.3	1.8	13.5	17.1	9.0	11.7
North ...	19.4	12.5	10.4	17.3	6.9	20.1
Central ...	8.5	5.4	16.4	16.4	5.4	19.5
West ...	11.7	2.1	13.8	13.8	5.3	27.6
East ...	15.0	9.4	13.2	19.8	9.4	14.1
Southowram	16.2	9.0	6.3	21.6	13.5	17.1
Total ...	86.1	40.2	73.6	106.0	49.5	110.1
Average ...	14.3	6.7	12.2	17.6	8.2	18.3
Skircoat ...	3.4	1.7	8.6	24.1	10.3	22.4
Difference	- 10.9	- 5.0	- 3.6	+ 6.5	+ 2.1	+ 4.1

It will be observed that while under three headings the percentages for Skircoat are lower, under the remaining three they are actually higher than the average of the other six Wards. These are percentages of the total deaths, and the explanation of this is that in Skircoat Ward where infant mortality is low, there is a marked saving of life in connection with the more preventable diseases, hence there being fewer deaths, the less preventable diseases must of necessity show a larger percentage of the total deaths which occur.

A comparison between the percentage of infant deaths which occur under and over one month of age respectively in the six Wards concerned and Skircoat Ward is interesting. The following table shows this.

WARDS	Percentage of the total Infant Deaths, which occurred under one month of age in the undermentioned Wards.
Akroydon ...	34·2
North	29·8
Central	37·5
West	25·5
East	33·0
Southowram ...	42·3
Total	202·3
Average ...	33·7
Skircoat...	50·0
Difference ...	16·3

The average number of infantile deaths under 1 month per 1,000 children born in the above six Wards was 50, against 42 in Skircoat, so that although 8 per 1,000 fewer died in the latter Ward under that age, yet as the above table shows, 16 per cent. more of the infant deaths in that Ward occur under one month of age, compared with the average of the other six Wards.

The following table gives the number of births, birthrates, the number of deaths of infants, and the mortality per 1,000 births, for each Ward in the Borough.

WARDS.	Number of Births.	Birth-rates.	Number of Deaths under 1 Year.	Mortality per 1000 Births.
Ovenden ...	131	17·6	14	106
Akroydon ...	133	19·8	16	120
North	180	22·9	23	127
Central	148	20·9	17	114
West	140	16·4	17	121
South	101	13·6	7	69
East	111	15·8	14	126
Southowram ...	147	20·3	16	108
Skircoat	165	15·1	11	66
Copley	70	21·8	4	57
Pellon	147	14·6	9	61
Kingston	144	13·1	18	125
Illingworth ...	114	15·9	10	87
Northowram ...	52	15·5	4	76
Warley	57	19·1	3	52
Totals	1840	17·0	183	99

The following table shows the causes of deaths of infants under one year of age for the year under review.

CAUSE OF DEATH.		Under 1 week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.
All Causes.	Certified	48	16	6	5
	Uncertified...	2			
Common Infectious Diseases.	Small-pox ...	...	...	...	...
	Chicken-pox ...	...	...	...	...
	Measles ...	...	...	...	...
	Scarlet Fever ...	...	...	...	...
	Diphtheria (including Membranous Croup) ...	...	...	...	...
Diarrhœal Diseases.	Whooping Cough... ..	...	...	...	1
	Diarrhœa, all forms ...	...	...	...	...
	Enteritis, Muco-enteritis, Gastro-enteritis ...	...	...	...	...
Wasting Diseases.	Gastritis, Gastro-intestinal Catarrh ...	...	...	...	...
	Premature Birth	26	7	1	...
	Congenital Defects	4	1	...	1
	Injury at Birth	2	...	...	...
Tuberculous Diseases.	Want of Breast-milk, Starvation Atrophy, Debility, Marasmus ...	11	3	3	...
	Tuberculous Meningitis...	...	...	...	...
	Tuberculous Peritonitis: Tabes Mesenterica ...	...	...	...	...
	Other Tuberculous Diseases ...	...	...	...	1
Other Causes.	Erysipelas ... ..	...	...	...	...
	Syphilis	1	...	...	2
	Rickets ... ..	...	...	...	...
	Meningitis (<i>not Tuberculous</i>) ...	...	...	1	...
	Convulsions	3	5	1	...
	Bronchitis ... ..	...	...	...	...
	Laryngitis ... ..	...	...	...	...
Pneumonia... ..	...	...	...	...
Suffocation, overlying	1	...	...	...
Other causes	2	...	...	...
		50	16	6	5

Total under 1 month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
75	16	19	11	6	9	3	7	14	6	5	10	181
2												2
...
...
...	...	...	...	...	...	...	...	...	...	1	...	1
...
...
1	...	...	...	...	2	...	...	...	...	1	2	6
...	...	...	1	2	...	1	1	...	...	...	...	5
...	...	1	...	1	...	1	1	...	...	...	1	5
...	...	...	3	...	1	...	1	...	...	...	..	5
34	1	...	...	1	...	...	...	1	...	...	...	37
6	2	3	...	...	1	...	...	...	1	...	...	13
2	...	...	...	...	...	...	...	...	...	...	...	2
...
17	6	7	...	...	1	...	1	...	...	...	...	32
...	...	...	...	...	...	...	...	1	...	...	1	2
...
1	...	...	1	1	...	1	...	...	...	...	...	4
...
3	1	...	1	...	...	...	...	1	...	...	...	6
...	...	...	...	...	...	...	...	...	...	...	1	1
1	2	1	1	...	1	...	...	...	1	...	1	8
9	1	1	2	...	1	...	...	3	1	1	1	20
...	...	2	1	...	...	...	1	3	...	...	...	7
...	...	...	...	...	...	...	...	1	1	...	...	2
...	...	4	...	1	2	...	...	2	1	2	2	14
1	1	...	1	...	...	...	...	...	...	...	...	3
2	2	...	...	...	...	...	2	2	1	...	1	10
77	16	19	11	6	9	3	7	14	6	5	10	183

A much smaller number of infantile deaths occurred from Zymotic disease than during the previous year, viz.:—12 compared with 37. Atrophy, Debility and Marasmus claimed 3, and premature birth 1 less than during the previous year.

There were 83 illegitimate births, and only 8 illegitimate deaths of infants under one year of age, which gives a deathrate among illegitimate infants of 96 per 1,000, which is less than the average infantile deathrate of the Borough.

As has already been stated there is a marked difference between the infant mortality of the various Wards of the Borough, and the following table gives the average infant mortality and the birthrates of each Ward during the past five years.

WARDS.	Total under 1 year to 1000 Births registered.						Average Birth-rate during the past five years
	1905.	1906.	1907.	1908.	1909.	Average.	
Ovenden ...	132	116	87	93	106	106	19.3
Akroydon ...	167	96	161	86	120	126	23.2
North ...	197	137	102	154	127	143	23.1
Central ...	176	239	122	154	114	161	19.9
West ...	139	89	113	138	121	120	16.7
South ...	115	63	80	103	69	86	13.8
East ...	145	260	219	131	126	176	15.4
Southowram	148	130	142	95	108	124	22.1
Skircoat ...	82	80	42	80	66	70	18.4
Copley ...	93	56	103	92	57	80	20.0
Pellon ...	129	84	68	56	61	79	17.0
Kingston ...	71	62	62	81	125	80	16.3
Illingworth ...	85	99	82	104	87	91	16.5
Northowram	155	84	111	59	76	97	21.6
Warley ...	78	150	0	56	52	67	18.9

It will be observed from the above table that there was a marked fall in the infantile deathrate of East Ward during the previous year, and that this has been improved upon during the year under review. This is highly satisfactory, as East Ward has consistently had the highest infantile mortality.

Although the infantile deathrate of East Ward shows such a marked improvement during the past two years, it still has the highest average, viz. :—176 deaths per 1,000 births, Central coming next with 161, while Warley has the lowest average, showing only 67 deaths per 1,000 births.

The Lady Health Visitor, and the band of voluntary ladies, called the "Halifax Public Health Association," continue to do excellent work.

The work carried out during the year by these agencies is referred to in the report of the Lady Health Visitor attached hereto.

Leaflets containing "Hints on how to bring up a Baby" have been widely distributed, through the medium of the midwives and the lady visitors, and a number of individual applications were made to the office during the year for copies of this leaflet.

The following table shows the number of deaths which have taken place in the Borough from some of the chief infantile diseases, and gives the deathrate therefrom of each disease per 1,000 of the population.

DISEASES.	Number of Deaths under 1 year.					Rate per 1000 of Population.				
	1905	1906	1907	1908	1909	1905	1906	1907	1908	1909
From all causes ...	271	242	195	216	183	2·52	2·24	1·79	2·00	1·69
Respiratory Diseases	52	39	33	36	21	·48	·36	·30	·33	·19
Premature Birth ...	62	39	33	36	37	·57	·36	·30	·33	·34
Diarrhœa ...	10	12	12	7	5	·09	·11	·11	·06	·04
Whooping Cough ...	15	1	6	10	6	·14	·009	·07	·09	·05
Convulsions ...	22	20	19	18	20	·20	·18	·17	·16	·18
Tuberculous Diseases	15	8	17	4	6	·14	·07	·15	·03	·05
Measles ...	1	15	5	37	1	·009	·13	·04	·34	·009

The following table serves to compare the average infant mortality of England and Wales, the great Towns, &c., with that of Halifax for the past two years, with which Halifax favourably compares.

	Deaths under 1 year per 1000 Births.	
	1908.	1909.
England and Wales	121	109
76 Great Towns	128	118
142 Smaller Towns	124	111
England and Wales less the 218 Towns	110	98
HALIFAX	101	99

The infant mortality of the other Yorkshire great Towns for 1909 was as follows:—Leeds, 122; Sheffield, 118; Bradford, 116; Hull, 114; Huddersfield, 95; York, 99; and Rotherham 116 respectively.

The following table serves to compare the average infant mortality in quinquennial periods from 1875 to the present time, of the Borough, with that of England and Wales.

Period.	Halifax.	England and Wales.
1875-9	173	145
1880-4	161	141
1885-9	158	142
1890-4	163	148
1895-9	154	157
1900-4	132	143
1905-9	109	121

The following table shows the average infant mortality during the past five years, of 34 of the largest Towns of the Country, having a population of 100,000 and upwards, and it will be seen that only one has a lower average than that of Halifax, viz. :—Brighton.

34 LARGE TOWNS.	Deaths under 1 year to 1000 Births Registered.					
	1905.	1906.	1907.	1908.	1909.	Average.
Burnley ...	173	213	158	200	156	180
Rhondda ...	200	173	162	183	129	169
Middlesbrough ...	174	170	158	159	158	163
Stockport ...	168	186	159	167	132	162
Preston ...	153	202	158	154	136	160
Nottingham ...	155	171	165	145	150	157
Liverpool ...	154	172	144	141	144	151
Manchester ...	157	167	146	151	134	151
Birmingham ...	155	167	147	145	134	149
Salford ...	150	160	140	153	141	148
Blackburn ...	146	155	153	150	126	146
Sheffield ...	167	158	145	140	118	145
Bolton ...	166	140	146	149	128	145
Oldham ...	150	145	144	160	119	143
Leicester ...	148	168	131	131	127	141
Norwich ...	173	172	125	115	119	140
Hull ...	153	158	127	145	114	139
Gateshead ...	138	162	136	149	112	139
South Shields ...	145	150	133	134	137	139
Leeds ...	152	150	130	138	122	138
Sunderland ...	143	139	130	146	135	138
Bradford ...	144	151	124	143	116	135
Wolverhampton ...	136	139	130	132	138	135
Newcastle ...	137	151	123	136	119	133
Plymouth ...	136	152	110	129	131	131
Birkenhead ...	127	151	110	135	123	129
Derby ...	151	115	121	112	123	124
Cardiff ...	118	138	131	125	103	123
Portsmouth ...	133	129	123	98	96	115
Bristol ...	122	126	100	126	100	114
Southampton ...	133	113	108	113	106	114
Huddersfield ...	119	135	97	111	95	111
Halifax ...	130	116	102	101	99	109
Brighton ...	101	110	113	104	96	104

COMPARISON OF WARD DEATHRATES.

The table which follows compares the under-mentioned deathrates of the different Wards of the Borough for the year 1909.

WARDS.	General Deathrates.	Zymotic Deathrates.	Respiratory Deathrates.	Phthisis Deathrates.	Infantile Mortality.
Ovenden ...	14·6	·6	2·6	·8	106
Akroydon ...	16·9	2·6	2·6	·5	120
North ...	18·1	1·6	3·3	2·7	127
Central ...	17·8	·4	4·2	1·2	114
West ...	15·4	·8	2·4	1·2	121
South ...	15·1	·1	2·8	·9	69
East ...	17·1	·8	4·1	1·7	126
Southowram...	13·9	1·2	3·1	1·2	108
Skircoat ...	10·8	·5	1·4	1·1	66
Copley ...	6·5	·0	·6	·0	57
Pellon ...	11·2	·2	2·0	·5	61
Kingston ...	13·8	·6	2·2	·8	125
Illingworth ...	14·4	·4	3·6	·8	87
Northowram...	14·9	·2	2·6	·8	76
Warley ...	12·7	·6	1·0	1·3	52
Average	14·4	·7	2·6	1·1	99

In the next table the average deathrates from the undermentioned causes, for the past 10 years, in each Ward is shown, and the table serves to compare the same.

WARDS.	Average Deathrates, 10 years.			
	General.	Zymotic.	Phthisis.	Respiratory.
Ovenden ...	14·8	·9	1·0	2·3
Akroydon ..	15·5	1·3	·7	2·7
North	17·8	1·6	1·6	3·6
Central	17·5	1·3	1·3	3·2
West	15·4	·8	1·0	2·9
South	14·4	·6	·8	2·3
East	19·8	1·1	2·0	4·0
Southowram ..	15·3	1·6	1·1	2·7
Skircoat	13·2	·6	1·1	2·4
Copley	11·7	1·0	1·0	2·0
Pellon	12·8	·8	·9	2·0
Kingston ...	12·3	·5	·9	2·2
Illingworth ...	14·6	·7	* ·9	2·6
Northowram ...	15·7	·9	1·4	2·2
Warley	15·3	·6	1·4	2·4

It will be observed that East Ward has considerably the highest average deathrate, being 2 per 1,000 above North Ward, which has the next highest. This is partly accounted for by its high deathrate from Phthisis and respiratory diseases.

The average general deathrate of the whole Borough for the past 10 years is 15·4 per 1,000, consequently it will be seen that five Wards have a higher average general deathrate than that of the Borough.

Copley has the lowest average rate, while the averages of Kingston, Pellon and Skircoat Wards are satisfactory.

The following table serves to compare the deathrates from some of the chief diseases of the three Wards having respectively the highest and lowest deathrates during the past five years.

WARDS.	Average Deathrate per 1000 for 5 years, 1905 to 1909.						Total of Average.
	Zymotic Diseases.	Respiratory Diseases.	Phthisis.	Heart Diseases.	Diseases, Brain and Nervous System.	Other Tubercular Diseases.	
Copley ...	1.1	1.8	.8	1.1	1.4	.1	6.3
Pellon ...	.6	1.8	.8	1.3	1.2	.3	6.0
Kingston ...	.5	2.0	1.0	1.3	1.6	.2	6.6
Average ...	.73	1.86	.86	1.23	1.4	.2	...
East ...	1.0	3.6	2.0	2.1	1.6	.3	10.6
North ..	1.6	3.2	1.6	1.5	1.6	.4	9.9
Central ...	.6	3.2	1.4	1.9	1.6	.5	9.2
Average ...	1.06	3.3	1.66	1.83	1.6	.4	...

Notification of Infectious Diseases.

Infectious disease was more prevalent in the Borough during the year under review than was the case during 1908, and 766 cases were notified against a total of 363 during the latter year.

The following table shows the total number of cases of each disease notified, the distribution of these cases among the Wards of the Borough, and the Institutions situated therein.

WARDS.	Typhoid Fever.	Scarlet Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.	Total
Ovenden ...	1	40	...	8	2	51
Akroydon ...	3	79	...	26	7	115
North ...	4	96	...	8	1	109
Central ...	3	33	...	5	4	45
West ...	5	45	...	10	...	60
South ...	6	33	...	5	1	45
East ...	2	52	2	6	...	62
Southowram ...	2	37	1	16	7	63
Skircoat ...	12	30	...	15	10	67
Copley ...	...	10	...	1	...	11
Pellon ...	1	32	...	9	1	43
Kingston ...	...	42	1	10	2	55
Illingworth ...	4	5	...	6	7	22
Northowram ...	1	8	...	...	2	11
Warley ...	...	3	...	3	1	7
Total, 1909	44	545	4	128	45	766

INSTITUTIONS (which are included in the above.)

Poor Law Hospital	4	...	...	2	7	...
Royal Infirmary ...	2	1	...	6	...	...
Barracks ... ..	...	2	...	1	...	...
Waterhouse Charity School ...	...	1	...	...	...	...

Lists containing the names and addresses of persons notified were sent each week throughout the year to the chief librarian for his information, and all books found in infected houses, belonging to the libraries, were taken charge of by the Sanitary Inspectors, and disinfected before being again put into circulation.

The following table shows the number of cases of the various infectious diseases notified during each month of the year.

MONTH.	Typhoid Fever.	Scarlet Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.	Total.
January ...	3	29	1	13	7	53
February ...	10	35	1	9	2	57
March ...	...	45	1	11	3	60
April ...	5	36	...	11	1	53
May ...	3	66	...	13	5	87
June ...	1	73	...	9	3	86
July ...	6	84	1	7	4	102
August...	3	59	...	9	5	76
September ...	3	42	...	11	7	63
October ...	5	29	...	10	3	47
November ...	2	27	...	9	2	40
December ...	3	20	...	16	3	42
Total, 1909	44	545	4	128	45	766

From the above table it will be observed that the period of greatest prevalence for Typhoid Fever was during the month of February, and that during the month of March only were no cases reported.

Scarlet Fever was most prevalent during June and July, and Diphtheria was present in the Borough throughout the year, and was much more prevalent than during 1908, 128 cases being reported against 72 during that year.

Compulsory notification has been in force since the year 1883, and the following table shows the number of cases of each disease notified yearly since that date.

YEAR.	Small-pox.	Cholera.	Typhus Fever.	Enteric Fever.	Scarlet Fever.	Continued Fever.	Puerperal Fever.	Relapsed Fever.	Diphtheria.	Erysipelas.	Chicken-pox.	Membranous Group.	Total.	Rate percent- age of population.
1883	2	...	2	108	158	43	2	1	14	...	...	...	330	43
1884	1	...	1	69	269	24	4	4	13	...	...	...	385	50
1885	7	...	1	56	214	22	1	...	25	...	...	...	326	42
1886	3	1	...	57	124	7	5	...	59	...	...	...	256	32
1887	1	...	1	66	727	8	7	...	26	...	...	...	836	105
1888	1	...	1	36	440	16	1	...	29	...	...	...	524	65
1889	2	...	...	94	153	18	1	3	31	...	...	...	302	37
1890	...	...	...	67	328	8	8	1	62	...	...	...	474	58
1891	...	1	...	99	429	14	5	2	23	...	...	...	573	68
1892	159	...	1	56	256	9	4	2	71	...	...	...	558	66
1893	346	5	...	69	150	5	6	...	57	...	...	...	638	69
1894	16	...	...	52	114	3	6	...	43	...	...	...	234	25
1895	...	...	...	58	52	3	4	...	29	...	...	...	146	15
1896	...	...	...	105	44	2	4	...	37	...	...	...	192	20
1897	...	...	...	78	476	1	8	...	67	...	...	...	630	66
1898	...	...	...	79	626	1	9	...	23	...	...	...	738	76
1899	...	...	...	92	762	2	3	...	58	...	...	...	917	93
1900	2	...	5	79	330	1	4	3	41	1	...	...	466	46
1901	3	...	...	67	736	...	1	...	61	15	...	...	883	83
1902	1	...	...	65	452	1	3	...	37	27	...	...	586	55
1903	130	...	...	61	320	2	1	...	50	81	328	1	974	91
1904	80	...	...	47	486	...	9	...	80	73	...	...	775	72
1905	49	...	...	50	338	...	6	...	87	54	...	...	584	54
1906	...	...	...	38	214	...	7	...	158	56	...	...	473	43
1907	...	...	...	60	89	...	7	...	118	36	...	...	310	28
1908	...	...	...	53	186	1	6	...	72	44	...	...	362	33
1909	...	...	...	44	545	...	4	...	128	45	...	...	766	70

From the above table it will be observed that Typhoid Fever was less prevalent than during the two previous years, whereas Scarlet Fever was much more prevalent, more cases having been notified than during

any year since 1901. Such was also the case with reference to Diphtheria, as more cases were reported than during the previous two years, the number being exceeded only during the year 1906, which was the year of the greatest prevalence of this disease since notification was enforced.

The following table shows the average number of notifications of the chief notifiable diseases in each Ward of the Borough during the past 10 years.

WARDS.	Averages, 10 years—1900 to 1909.							
	Notifications.					Total Ave age of Notifications.	Average Population.	Average attack rate per 1000 Population per annum
	Small-pox.	Typhoid Fever.	Scarlet Fever.	Puer-peral Fever.	Diph-theria.			
Ovenden ...	1.5	2.3	50.9	.1	7.0	61.8	7261	8.5
Akroydon ...	.6	3.1	25.8	.3	6.7	36.5	6681	5.4
North ...	1.6	4.5	28.2	1.0	4.8	40.1	8193	4.8
Central ...	4.4	4.9	19.6	.5	5.6	35.0	7787	4.4
West ...	2.5	5.0	25.8	.2	7.1	40.6	9172	4.4
South ..	.9	3.0	19.9		5.6	29.4	7725	3.8
East ...	7.6	4.0	14.7	.7	3.5	20.5	7168	2.8
Southowram	.7	6.3	25.1	.4	5.4	37.9	7463	5.0
Skircoat ...	2.1	7.7	33.7	.4	10.7	54.6	9636	5.6
Copley ...	.4	1.4	10.8	.2	3.7	16.5	2968	5.5
Pellon ...	1.0	3.8	27.8	.5	9.0	42.1	9386	4.4
Kingston ...	.6	3.4	42.3	.3	5.5	52.1	10369	5.0
Illingworth	1.1	3.7	30.7	.2	4.3	40.0	7172	5.5
Northowram		2.1	12.8		1.6	16.5	3383	4.8
Warley ...	1.7	1.5	8.0		3.2	14.4	2877	5.0

It will be observed that the average attack rate of Diphtheria is much greater in Ovenden Ward, while in East Ward the attack rate was very low. Excluding the above two Wards, there was not a great deal of difference in the attack rate of the remaining Wards.

Causes of Death.

The causes of death in the Borough, of persons belonging thereto, are shown in the following table.

CAUSES OF DEATH.					Number.
Whooping Cough	...	...	...	...	17
Small-pox	...	...	...	...	4
Measles	...	...	...	...	18
Scarlet Fever	...	...	...	...	27
Diphtheria and Membranous Croup	...	...	...	...	10
Diarrhœa	...	...	...	...	8
Typhoid Fever	...	...	...	...	21
Epidemic Influenza	...	...	...	...	2
Croup...	...	...	...	...	5
Enteritis	...	...	...	...	2
Puerperal Fever	...	...	...	...	8
Erysipelas	...	...	...	...	120
Other Septic Diseases	...	...	...	...	23
Phthisis	...	...	...	...	89
Other Tuberculous Diseases	...	...	...	...	146
Cancer, Malignant Diseases	...	...	...	...	140
Bronchitis	...	...	...	...	4
Pneumonia	...	...	...	...	15
Pleurisy	...	...	...	...	15
Other Diseases, Respiratory Organs	...	...	...	...	9
Alcoholism, Cirrhosis of Liver	...	...	...	...	162
Venereal Diseases	...	...	...	...	21
Diseases and Accidents of Parturition	...	...	...	...	34
Heart Diseases...	...	...	...	...	8
Other Diseases, Circulatory System	...	...	...	...	1
Accidents	...	...	...	...	150
Suicides	...	...	...	...	61
Murder	...	...	...	...	54
Diseases of Brain and Nervous System	...	...	...	...	127
Diseases of Digestive System	...	...	...	...	6
Diseases of Urinary System	...	...	...	...	10
Old Age	...	...	...	...
Acute Rheumatism	...	...	...	...	4
Rheumatoid Arthritis	...	...	...	...	1
Constitutional Diseases...	...	...	...	...	4
Starvation	...	...	...	...	37
Diseases of Reproductive System	...	...	...	...	14
Diseases of Locomotive System	...	...	...	...	26
Dentition	...	...	...	...	3
Premature Birth	...	...	...	...	2
Congenital Defects	...	...	...	...	35
Convulsions	...	...	...	...	17
Chicken Pox	...	...	...	...	9
Gastritis	...	...	...	...	8
Injury at Birth	...	...	...	...	1
Want of Breast Milk	...	...	...	...	14
Atrophy, Debility, &c.	...	...	...	...	6
Tubercular Meningitis	...	...	...	...	15
Tuberculous Peritonitis, Tabes Mesenterica	...	...	...	...	2
Syphilis	...	...	...	...	15
Rickets	...	...	...	...	2
Meningitis (not Tuberculous)	...	...	...	...	4
Laryngitis	...	...	...	...	1
Suffocation, Overlaying	...	...	...	...	32
Diabetes Mellitus	...	...	...	...
Diseases of Bone	...	...	...	...
Diseases, Organs of Special Sense	...	...	...	...
Lead Poisoning	...	...	...	...
Other Causes	...	...	...	...
All causes	...	...	...	...	1552

Smallpox.

No case of this disease occurred within the borough during the year.

Scarlet Fever.

For the year 1908 I had to report an increased prevalence of this disease in the borough. The period of greatest prevalence occurred during the last two months of that year. The disease continued to spread within the borough, and each successive month during the year under review, brought an increased number of notifications, until the maximum was reached, which occurred during July. After that month a gradual subsidence took place, but during the year a total of 545 cases were reported against 186 during the previous year.

Scarlet Fever is not now nearly so serious nor fatal as it was 30 years ago, in fact the average case mortality in the borough to-day is only about half what it was 20 years ago.

The deathrate however for the past year was higher than that of 1908, which could only be expected considering the much greater prevalence of the disease.

While the deathrate from this cause has had such a marked fall during recent years, the average attack rate per 1,000 of the population of the borough had remained about the same up to the year 1904, but notwithstanding the great prevalence of the disease during the year under review, the average attack rate for the past five years, is below that of any quinquennial period since the year 1885, as the following table will show.

Period	Average No. of Cases of Scarlet Fever per annum notified	Average population	Average attack rate per 1000 population	Average case Mortality per cent. attacked.
1885-9	331	79,207	4.1	6.1
1890-4	255	86,808	2.9	5.8
1895-9	392	95,755	4.0	3.4
1900-4	465	105,211	4.4	3.4
1905-9	274	107,850	2.5	2.9

It is to be hoped that in the future, the attack rate will show as favourable a result as the deathrate has done.

The disease appears to be of a milder type than formerly obtained, and to this fact no doubt the diminished mortality is chiefly due, in fact the disease is frequently so mild that it becomes most difficult to diagnose its true nature.

The following table gives the number of cases notified during each month of the year.

SCARLET FEVER	January	February	March	April	May	June	July	August	September	October	November	December	Total
Cases notified	29	35	45	36	66	73	84	59	42	29	27	20	545

Of the above 545 cases, 18 died, which gives a deathrate of .16, and a case mortality of three per cent. of those notified. During the previous year the deathrate was .03, and the case mortality 2 per cent.

Fever.

The borough has remained free from typhus fever during the past 10 years, and no cases of so-called continued fever have been notified, consequently all the cases to be included under the above heading were typhoid or enteric fever.

During the year under review, 44 cases of typhoid were reported, against a total of 53 during the previous year. This is also the smallest number that has been notified during one year since 1906.

The disease was most prevalent during February, when 10 cases were reported, and March was the only month of the year during which no notifications were received.

The following table gives the sanitary conditions connected with, and the probable or assigned causes of the notified cases of typhoid fever.

Disease	Number of Cases reported	Drainage			Ventilation		Old Middens	Goux Closets	Water Closets	Probable or assigned cause			
		Good	Bad	None	Good	Bad				No trace	From eating shell fish	From a cold	From a previous case in same house
Typhoid Fever....	44	36	7	1	44	....	1	27	16	37	3	3	1

In discussing the cause of this disease last year, I called attention to the fact that 20 per cent of the total cases reported, appeared to be connected with the consumption of shell fish. I am informed by my inspector that the scare created last year through these facts becoming known, caused a marked diminution in the consumption of this class of fish, and during the year under review, only three cases could be in any way connected with this cause, which works out at 6 per cent of the total number of cases reported. Moreover, only one case occurred in a house in which a previous case had been notified.

The following table gives the number of cases reported since the year 1899, and the number of deaths since that date.

Year	Number of cases reported	Number of deaths
1899	92	22
1900	79	20
1901	67	15
1902	65	14
1903	61	11
1904	47	10
1905	50	9
1906	38	4
1907	60	9
1908	53	10
1909	44	8

It will be observed from the above table that 8 of the 44 reported cases ended fatally, which gives a death-rate of '07, and a case mortality of 18 per cent, against a deathrate of '09 per 1,000 and a case mortality of 18 per cent during the previous year.

Diphtheria.

I regret to have to report that this disease was much more prevalent in the borough than during the previous year, in fact more cases were notified than in each year since 1906, and with the exception of that year, than in any year since the notification act has been in force.

During recent years this disease has become much more prevalent amidst great centres of population than formerly obtained, and this borough unfortunately offers no exception to that state of matters. It is a disease which appears to be very difficult to control, and hospital isolation does not appear to help us very much in controlling its spread. This possibly arises from the fact that a number of very mild cases escape notice, and also from the probability that in some cases healthy mouths harbour the germs of this disease, in fact these germs have been isolated from apparently healthy mouths.

The following table shows the number of cases reported, and the number of deaths from the disease each year since 1902.

Year	Number of cases reported	Number of deaths
1902	37	8
1903	50	10
1904	80	17
1905	87	27
1906	158	42
1907	118	28
1908	72	11
1909	128	27

The disease was present in the borough, throughout the year, notifications having been received during each month, but its greatest prevalence occurred during December, when 16 cases were reported.

The largest number of cases occurred in Akroydon Ward, from which no less than 26 notifications were received.

The other wards chiefly affected were Southowram, Skircoat, West and Kingston; Northowram being the only ward which remained free from the disease throughout the year.

The following table gives the sanitary conditions connected with, and the probable or assigned causes of the notified cases of diphtheria.

Disease	Number of Cases reported	Drainage			Ventilation		Old Middens	Goux Closets	Water Closets	Probable or assigned cause						
		Good	Bad	None	Good	Bad				No trace	Contracted away from home	From a cold	From a previous case in same house	Contracted at School	From defective drains	From other cases in the neighbourhood
Diphtheria	128	104	21	3	128	....	2	101	25	93	1	14	9	8	1	2

Of the 128 cases reported, 27 died, giving a deathrate of $\cdot 25$, and a case mortality of 21 per cent, against a deathrate of $\cdot 1$ per 1,000, and a case mortality of 15 per cent during the previous year. Thus there was an increase in both the deathrate and case mortality, showing that the disease must have been of a rather more virulent type.

The following table shows the mortality from the disease during the past five years.

Year	Deathrate per 1000	Mortality per cent.
1905	$\cdot 25$	31
1906	$\cdot 38$	26
1907	$\cdot 25$	23
1908	$\cdot 10$	15
1909	$\cdot 25$	21

On referring to the mortality percentage in the above table, it will be seen that the deathrate has fallen during the past five years, but notwithstanding the increased mortality of the year under review, the deathrate compares favourably with that of five years ago.

Erysipelas.

There were 45 cases of this disease reported during the year, and no deaths occurred therefrom, against 44 reported and 2 deaths during the previous year.

Measles.

The disease was present in the borough during December of the previous year, and as far as our information goes, a few cases cropped up from time to time during the first six months of the year under review, after which the borough continued to be practically free therefrom. On the whole therefore the disease was much less prevalent than during the previous year.

I believe that parents are now in the habit of more frequently calling in medical aid in this disease, than was formerly the case. This is in my opinion a mark of progress, and will I am sure be a factor in tending to avert the complications which are liable to arise in connection therewith and in that way favourably affect the deathrate therefrom.

The disease caused four deaths during the year, against 37 during the previous year, and the lower deathrate from this disease, was an important factor in reducing the zymotic deathrate for the year under review.

All the above four deaths were of children under five years of age, and they give a deathrate of .03 per 1000, against .34 during the previous year.

Whooping Cough.

This disease was present in the borough more or less, but became more prevalent during the latter four months of the year, and appeared to attain its maximum prevalence during December.

This is a highly infectious disorder, and is chiefly fatal to children under five years of age. Of the 17 deaths, no less than 16 occurred under the age of five, and only one above that age.

The 17 deaths resulting therefrom give a deathrate for the year of '15 per 1,000, against '28 during the previous year.

Diarrhoea.

This borough is remarkable for its freedom from those diseases which are classified under diarrhoea.

There were only 10 deaths registered, against 15 during the previous year.

The highest point which the four foot earth thermometer reached during the year was 55°, which was attained on August 14th and remained at that height until September 3rd.

Between the former date, and the middle of October, seven of the above deaths occurred, showing that a high ground temperature favours the development of this disease.

The past summer was cold and wet, and was unfavourable to the development of flies, which are undoubtedly "carriers" of the germs of this disease. That being so, all accumulations of organic matter, filth, horse manure &c., which are the breeding places of flies, should be more frequently removed. During a hot and dry summer, this should be more particularly attended to.

The following table serves to compare the average diarrhoea deathrate of Halifax, with that of England and Wales, and other towns.

	Deathrate per 1000.
England and Wales	0·28
76 Great Towns	0·38
143 Smaller Towns	0·27
England and Wales, less the 219 Towns ...	0·17
Halifax	0·09

The above table indicates the favourable position which Halifax occupies with reference to this disease.

The above 10 deaths give a deathrate of '09, against a deathrate of '13 for the previous year.

The deathrate from diarrhoea of the other Yorkshire great towns for 1909 were as follows:—Leeds, '22: Sheffield, '55: Bradford, '15: Hull, '55: Huddersfield, '26: York, '22: and Rotherham, '58 per 1,000 respectively.

Influenza.

This appears to have been more prevalent in the Borough during the year under review, as 21 deaths were registered therefrom against 18 during the previous year.

The majority of the deaths from this disease occurred during the month of March.

Respiratory Diseases.

Under this heading the diseases included are Bronchitis, Pneumonia, and Pleurisy, and the number of deaths registered therefrom was 290, against 252 during the previous year.

The above 290 deaths included 146 from Bronchitis, 140 from Pneumonia, and 4 from Pleurisy, and give a deathrate of 2·6 per 1,000, against 2·3 during the previous year.

The respiratory deathrates for the previous 10 years were 2·3, 2·5, 2·6, 2·6, 2·6, 2·8, 3·1, 3·0, 3·7 and 3·6 respectively.

The above figures show that the respiratory death-rate of the Borough has been gradually diminishing, although that for the year under review is slightly above that of the two previous years.

There were fewer deaths from respiratory disease among children under five years of age than during the previous year, the number being 49 against 70 in the latter year.

The following table gives the number of deaths from respiratory disease during each month of the year under notice, and the seven previous years, also the average of those years.

Deaths from Respiratory Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
1909	29	30	58	23	25	18	7	6	8	16	24	46	290
1908	26	31	42	20	18	14	7	15	6	12	24	37	252
1907	27	38	25	36	21	12	13	14	8	25	33	29	281
1906	32	28	27	29	29	14	11	18	10	30	28	33	289
1905	48	26	31	24	24	16	7	8	9	29	31	33	286
1904	38	28	25	28	18	20	13	10	13	23	26	43	285
1003	39	29	30	34	29	18	16	15	14	21	24	40	309
1902	35	46	38	30	22	23	21	16	15	15	30	37	328
Average	34	32	34	28	23	16	12	12	10	21	27	37	....

It will be seen on referring to the above table that the largest number of deaths from respiratory disease occur during the months of January and February, and that nearly half the deaths from these causes are registered during the months of January, February, March and December.

Phthisis.

The number of deaths resulting from Phthisis was 120, against 146 during the previous year.

This gives a deathrate of 1.1 per 1,000 against 1.35 during the previous year.

The following table shows the deathrate from this disease during the past 10 years.

Year	Deathrate
1900	1.5
1901	1.38
1902	1.02
1903	1.25
1904	1.25
1905	1.25
1906	1.12
1907	1.1
1908	1.35
1909	1.1

From the above table it will be observed that while the deathrate for the year under review is considerably below that of last year, it is the same as that of 1907, but slightly above that 1902, which was the lowest on record.

This is an infectious disease, and is no doubt preventable, and the improvement in the deathrate compared with the previous year is to a certain extent satisfactory, although more deaths result from this cause each year than from all the principal zymotic diseases.

It is to be hoped that in the future, greater progress will be made in reducing this deathrate.

To accomplish this, no doubt the education of the public will be an important factor.

With that in view, during the year I gave several public lectures on this subject, illustrated with lantern slides. Leaflets have been distributed, and pocket spittoons supplied free to those who applied for the same.

Other forms of tubercular disease caused 49 deaths during the year, which added to the above, make a total of 169 deaths due to the various forms of tubercle. This gives a total deathrate from all tubercular diseases, of 1.5 per 1,000, against 1.8 during the previous year.

The causes of death from tubercular disease, other than Phthisis were as follows:—

Tubercular Meningitis	17
Tuberculous Peritonitis	
Tabes Mesenterica	9
Other Tubercular Diseases	23

The following table shows the decline which has taken place in the Phthisis deathrate of Halifax during the past 29 years.

	Average Deathrate from Phthisis
Ten Years - 1881-1890	2'00
Ten Years - 1891-1900	1'50
Nine Years - 1901-1909	1'20

Under the Regulations of the Local Government Board, which makes the occurrence of Phthisis in a poor person compulsorily notifiable to the Medical Officer of Health, 170 notifications were received during the year. This number corresponds to 105 primary cases, as the remaining notifications were duplicates.

The following table shows the number reported more than once, and the number of duplicate notifications received in connection therewith.

						Total
Number of notifications received	62	62	18	8	20	170
Number of primary cases	62	31	6	2	4	105
Number of times each case was notified....	1	2	3	4	5	....

Enquiries were made as far as practicable, not only into the family history of persons reported under the above Regulations, but also in connection with deaths that were registered during the year from the disease, which had not been notified, and it was found that in nine houses, previous cases had occurred, and in 30 families there was a history of one or more previous cases having occurred therein. Also in two cases the patients had previously slept with a person suffering from the disease.

Disinfection was offered in cases of death or removal to Hospital or elsewhere, of consumptive persons, and 61 houses were disinfected after death, while in 28 this was refused.

Anthrax.

No case of this disease was reported during the year.

Cancer.

The number of deaths registered during the year from all the various forms of malignant disease was 89, against 110 during the previous year, which gives a deathrate of '82 per 1,000, against 1'0 for 1908.

Though malignant disease appears to be on the increase in some parts of the country, it would not appear that such has been the case in Halifax, as the following table will show.

Year	1892	1893	1894	1895	1896	1897	1898	1899	1900
Deathrate	'8	'7	'8	'8	1'1	'6	'6	'7	'7
Year	1901	1902	1903	1904	1905	1906	1907	1908	1909
Deathrate	'8	'8	1'0	'8	'9	'9	1'0	1'0	'8

On referring to the above table it will be seen that the years 1907 and 1908 showed a slight increase, but there was an improvement during the past year, the deathrate for which was the same as fifteen years ago.

Inquests and Uncertified Deaths.

The number of inquests held by the Coroner during the year was 120, which included 15 on persons not belonging to the Borough.

The 105 deaths which belonged to the Borough, and were certified by the Coroner after inquests, are equal to 6·7 per cent. of the total deaths in the Borough, and the 12 deaths which were neither certified by a Medical Practitioner nor the Coroner, corresponds to 0·7 per cent. of the total deaths.

There were 5 cases reported to the Coroner, in which an inquest was deemed unnecessary.

The following table shows the percentage of deaths certified by the Coroner, and the percentage of uncertified deaths during the past 9 years.

YEARS.	1901	1902	1903	1904	1905	1906	1907	1908	1909
Percentage certified by Coroner ...	2·6	2·9	3·1	2·8	3·5	4·7	5·1	6·0	6·7
Percentage uncertified ...	3·4	2·6	1·5	1·0	0·7	0·7	0·9	1·0	0·7

It will be observed that the percentage of deaths certified by the Coroner has gradually increased, and that there has been a corresponding diminution in the percentage of uncertified deaths.

Water Supply.

The water is supplied to Halifax by gravitation, and is obtained from five separate valleys.

It is collected at such levels that it can be conveyed into the reservoirs for both storage and supply.

The source of supply and the collecting grounds, or drainage area of the reservoirs, is chiefly moorland or high mountain pasture, and of the mill-stone-grit formation.

The water thus collected is conveyed to the town by means of covered conduits, and large iron pipes, and is delivered pure, and at a high pressure, with a constant supply.

The higher portion of the town is supplied from a service reservoir at Royles Head, to which water is pumped from Albert Reservoir, the lift being 300 feet.

The new reservoirs at Walshaw Dean were completed and opened in 1907. Since then certain leakages have been discovered with which the committee has had to deal. It is expected that these defects will be remedied in the near future. No water has so far been drawn from these reservoirs.

The waterworks committee now own 10 storage, and 6 service reservoirs, having a total capacity of 1,955,222,000 gallons.

There was a greater rainfall during the year under review and there was thus a plentiful supply of water of excellent quality.

Storage reservoirs are relied upon for the purification of the water supplied to the main portions of the Borough, and that supplied from Ogden, and Ogden Kirk reservoirs only is filtered, there being two 8' pressure filters, made by Messrs. Mather and Platt of Manchester, at Ogden, and one 3' filter of the same make, for filtering the Ogden Kirk supply.

The gathering grounds being of a moorland character, the water is liable to contain an excessive amount of peaty acids, hence it is liable to have a certain amount of solvent action upon lead. That being the case, the water has now for some years been treated with lime. The lime is added at three different points, viz:—Ramsden Wood, Ogden and Ogden Kirk reservoirs, through which all the water supplied by the Waterworks Committee has to pass before its final distribution.

One grain of slaked Buxton lime is added to each gallon of water, as milk of lime, except in the case of Ogden Kirk, which is very acid, and to which 8 grains per gallon are added, also in connection with the latter supply, $\frac{1}{4}$ grain per gallon of alumina-ferric is utilised, for the purpose of clarifying the water.

The following table, which is prepared from figures obtained from the analyses of Mr. Dewhirst, the Borough Analyst, gives the acidity of the water, before and after treatment.

Month	Average acidity of sample of Water in parts per 100 000			
	Ogden Reservoir		Ramsden Wood Reservoir	
	Before Treatment	After Treatment	Before Treatment	After Treatment
January ...	No estimation	No estimation	No estimation	·13
February ...	1 15	·29	..	·09
March ...	No estimation	No estimation	..	·16
April ...	..	..	..	·12
May ...	..	..	..	·18
June ...	·8	·17	..	·11
July ...	No estimation	No estimation	..	No estimation
August ...	..	..	..	·20
September ...	..	..	..	·14
October ...	..	·18	..	·12
November ...	..	No estimation	..	·10
December ...	..	..	..	·14

It will be observed that very few estimations were made in connection with the Ogden supply but those given show that the treatment had the effect of markedly reducing the amount of acid present in the water.

No estimations were made during the year of the water in Ramsden Wood, before, but a large number of samples were submitted to analysis after treatment.

The average acidity of Ramsden Wood water is about .4 parts per 100,000. The success of the treatment of Ramsden Wood water will thus be seen on referring to the above table.

I am glad to be able to report that these figures are a great improvement upon those of the previous year, as they show a reduction of about 30 per cent in the acidity, compared with that year.

These figures are the averages of a number of estimations made when the water was found to contain a definite amount of acid, but several analyses made from time to time during the year have shown that the water was neutral, or slightly alkaline, consequently the average water supplied to the Borough, so far as the presence of acidity is concerned, was actually better than these figures show.

The following table shows the average acidity of the Ramsden Wood and Ogden water, for each month, during the past eight years.

Period	Ramsden Wood, Acidity parts per 100,000											
	Month											
	January	February	March	April	May	June	July	August	September	October	November	December
1902-6	.36	.31	.29	.39	.45	.35	.33	.31	.29	.34	.32	.38
1907-9	.29	.40	.35	...	.37	.30	.32	.30	...	.37	...	...
Period	Ogden Reservoir											
	January	February	March	April	May	June	July	August	September	October	November	December
	January	February	March	April	May	June	July	August	September	October	November	December
1902-6	.83	.91	.95	.73	.75	.66	.65	.76	.68	.78	.84	.90
1907-9	.97	1.07	.9	.92	1.1	.9	.8	.85	.65	...	1.0	.95

I should like to see the amount of acidity a little further reduced, because I am of opinion that the water would be better were it supplied somewhere near the neutral point. I have impressed this upon Mr. R. J. Hartley, the Waterworks Engineer, to whom I am very much indebted for his hearty co-operation, and for the information he has supplied me with relative to this matter.

Sewerage and Drainage.

I am indebted to Mr. Lord, the Borough Engineer, for the following particulars.

The sewers generally in the Borough are in a satisfactory condition, and have been, as usual, regularly flushed.

The scheme for the drainage of Copley Ward has been extended by the construction of a 9" pipe sewer for the purpose of draining Copley village. The sewer is 48 yards long, and affords drainage to about 150 houses. This sewer is on a lower level than the main in Wakefield Road, consequently the sewage has to be raised, and this is done by Shones Pneumatic Ejectors.

Seven houses in Upper Washer Lane, which formerly drained into a tank, causing a serious nuisance, have been connected up to the sewer, so also has the Washer Lane Dyeworks.

A 9" sewer, 175 yards long, has been laid in Green Lane to intercept the drainage of The Wells, which previously drained into a cesspool and caused a serious nuisance.

A 12" pipe sewer, 166 yards long, has been laid in Burnley Road, for the purpose of draining Willow Hall.

With regard to the sewage scheme for the drainage of Northowram district, negotiations have been proceeding with neighbouring districts, and borrowing powers have been obtained for carrying out the scheme, which will be commenced during the ensuing year.

In connection with the Warley scheme, 140 houses have been connected to the sewers during the year, so that practically the whole of the houses in the ward which are within a reasonable distance of the sewers, are now connected up.

An intercepting sewer 5' x 3' 4" and 143 yards long has been laid in Queen's Road, in order to remedy the flooding of certain of the lower parts of Hopwood Lane.

A sewer has been constructed to Mount Tabor, consisting of 860 yards of 15" pipes, and 506 yards of 12" pipes, for the purpose of draining the district of Mount Tabor, the houses in which previously drained on to adjoining farm land, causing a nuisance, more especially during the summer months.

In connection with the outfall works at Salterhebble, additional filter beds have been constructed during the year.

Scavenging, disposal of Night Soil and House Refuse.

The Health Committee is responsible for the scavenging and cleansing of all the paved streets and roads, and also undertake the watering of all streets and roads.

From a health standpoint, this is a very important work, and I believe it has been satisfactorily carried out during the year.

I am of opinion however that sufficient use is not made of our excellent water supply, in the way of flushing streets, back streets, courts, alleys and back yards, as I feel sure that a more thorough cleansing of the above, during the summer months especially where the lower class property in the town is concerned, would tend to promote the health of the inhabitants.

Pure water used in this way, is of far greater value than the many so-called disinfectants which are used to cover smells.

The "Goux" system still exists in the town, and the greater part of the night soil is dealt with in that way. There are now 18,038 goux closets in the borough, an increase of 63 during the year. There are 6,097 water closets, or an increase of 245 during the year.

Wherever there is a sewer and a water supply, no new houses are now allowed to be built without a water closet.

The goux tubs are renewed at periods varying from 3 to 10 days according to circumstances, and 20 horses and vans, and 30 men are engaged on this work.

The tubs after being emptied at the Dépôt, are washed, and partly filled with fresh shoddy before they are returned to the closets.

The re-arrangement effected two years ago, in the method of collecting these tubs, continues to work in a satisfactory manner, and is less costly.

The following table gives the number of water closets in the borough, and the increase which has taken place since the year 1893.

Year	Number of W.C.'s in the Borough
1893	3796
1894	3837
1895	3880
1896	3921
1897	3962
1898	4003
1899	4166
1900	4331
1901	4496
1902	4661
1903	4826
1904	4991
1905	5157
1906	5317
1907	5566
1908	5852
1909	6697

During the past five years, the number of water closets has more rapidly increased in the borough than was formerly the case.

The Waterworks Committee proposed to place a charge of five shillings per annum upon all water closets in the borough. This was successfully opposed by your Committee, and I am strongly of opinion that your action in this matter was a correct one, because the charge placed upon these conveniences, would tend to prevent the introduction of water closets, more especially where conversions from the goux system are necessary.

There are still 809 privy middens in the Borough, against 821 during the previous year, or a decrease of 12, and 432 dry ashpits, against 433 a year ago, or a decrease of one only during the year.

Steps are being taken to have these privy middens converted into water closets where possible, and where the latter are impracticable, into goux closets.

The removal of house refuse is also undertaken by the Health Committee, in most cases tubs being provided by the Corporation for its reception at the house.

The average number of horses and carts used for the removal of this refuse was 15, and the number of men engaged in the work was 30 during the past year.

The refuse is still disposed of on tips, which is not a satisfactory way of dealing therewith. The Corporation however has sanctioned the purchase of a machine called a "Dust Manipulator" and steps are being taken for its installation. When this machine is ready, a

certain quantity of house refuse will be dealt with thereby, as well as the garbage and fish refuse from the markets which is at present removed to a field and there buried. The treatment of the garbage and fish refuse in this way will remedy a serious nuisance in the Southowram district, caused by depositing and burying this refuse in a field which is situated there.

Common Lodging Houses.

The number of common lodging houses situated within the Borough is 16, or an increase of 3 during the year.

These houses are required to be re-registered in May of each year, under a local Act of Parliament.

They are registered to accommodate 699 lodgers, against 834 for the previous year.

These lodging houses are under the control of the police, who are responsible for their general conduct, and carrying out of the Regulations in force with reference thereto.

I am informed by the Chief Constable that he has had no cause for complaint during the year, and that they appear to have been conducted in a satisfactory manner generally.

Factories and Workshops.

Considerable attention was given during the year to the administration of the Factories and Workshops Act, so far as the provisions of that Act affect the Health Department.

Although several factories and workshops in the Borough still have sanitary conveniences which are not of a satisfactory kind, they are being gradually dealt with, and during the year under review, considerable improvement has been made in this direction.

In connection with this work, no legal proceedings were taken during the year, as all the improvements which were made, were secured without that necessity, and mostly on verbal and informal notices.

With regard to limewashing, and the general cleanliness of workshops, these matters appear to have been better attended to during the year, as fewer complaints were made in reference to these matters.

The number of complaints made regarding workshops which required limewashing were 45, against 56, and dirty closets, floors, &c., 13 against 26 during the previous year respectively.

Only one complaint was received of overcrowding, and four cases were reported of defective ventilation. The above were all remedied.

The following table gives the number of visits that were made to factories and workshops and to shops under the Shop Hours Act, by the district sanitary inspectors.

District	Number of Visits made to Factories	Number of Visits made to Workshops	Number of Visits under the Shop Hours Act
A	62	308	286
B	77	443	241
C	61	261	307
D	39	99	6
Total	239	1111	840

It will be observed from the above table that the Borough is divided into four districts for the purposes of inspection, each being under the supervision of a sanitary inspector. Each sanitary inspector carries out the necessary inspection of factories and workshops within his own district, and the work done in connection therewith is set out in the tables which follow.

The nature and number of the various sanitary defects are also shown in these tables.

The total number of visits made by the district sanitary inspectors, to factories and workshops, was 1,350, against 1,268 during the previous year, and 9 visits were paid by myself, in order to inspect the sanitary conveniences, advise regarding alterations that were required thereto, and other matters.

The following tables indicate the amount of work done by the district sanitary inspectors in their respective districts.

DISTRICT A.

INSPECTOR JOHN GEORGE WALSHAW.

Number of Workshops on the Register, 289.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive smoke	3
Insufficient closet accommodation	4
Defective and made up drains	2
Closets not marked for sexes	28
Insanitary closets	34
Closets requiring ventilation, or intervening ventilated space	24
Defective troughing	1
Offensive accumulation	1
IN WORKSHOPS.	
Rooms requiring limewashing	7
Dirty closets	6
Inadequate ventilation	2
Defective water closets	2
Defective drains	3
Defective troughing	2
Offensive accumulation	1
Total	120

DISTRICT B.

INSPECTOR ROBERT PICKARD.

Number of Workshops on the Register, 369.

Nature of Defects	Number Registered
IN FACTORIES.	
Closets not labelled for sexes	10
No screens in front of closets	23
Nuisance from gas engine exhaust	1
Offensive smoke	3
Offensive urinals	2
Insufficient flush to water closets	15
Insufficient ventilation to water closets	5
Unsuitable closets	21
Insufficient closet accommodation	3
Defective, made up, and untrapped drains	5
IN WORKSHOPS.	
Rooms requiring limewashing	24
Insufficient ventilation	2
Insufficient closet accommodation	3
Defective drains	3
Untrapped drains	1
Made up drain	1
Offensive privy and defective water closets	2
Offensive smoke	1
Offensive accumulations	1
Dirty floors, staircases, and closets	5
Abstracts not provided	7
Overcrowded room	1
Total	139

DISTRICT C.

INSPECTOR JAMES EDWARD FIRTH.

Number of Workshops on the Register, 191.

Nature of Defects	Number Registered
IN FACTORIES.	
Want of intervening ventilated space	6
Made up Water closets	28
Broken W.C. trap	1
Offensive Goux closets	2
Offensive trough closet	1
Nuisance from dust	1
Made up lavatory	1
Offensive fumes from gas engine	2
Closets insufficiently ventilated	4
IN WORKSHOPS.	
Broken seal to water closets	1
Defective W.C. cistern	1
Workrooms requiring limewashing	13
Dirty closets	1
Total	62

DISTRICT D.

INSPECTOR FRED TEAL.

Number of Workshops on the Register, 94.

Nature of Defects	Number Registered
IN FACTORIES.	
Made up water closets	2
Insufficient closet accommodation	3
Offensive closets	10
Water closets insufficiently lighted	3
Water closets insufficiently ventilated	3
IN WORKSHOPS.	
Workrooms requiring limewashing	1
Made up drain	1
Dirty closet	1
Abstracts not provided	4
Total	28

It will be observed on referring to the foregoing tables that the total number of nuisances and sanitary defects dealt with numbered 249, against 235 during the previous year.

The number of defects which remained unabated at the end of the previous year was 20, which together with the above 349, made a total of 369. Of these 232 were remedied, and 137 remained unabated at the end of the year.

Under section 5 of the Factories and Workshops Act, the factory inspectors sent 32 notices regarding sanitary defects, of which 28 were in connection with factories, and 4 in connection with workshops.

The above notices were attended to in due course, but it was not possible to secure the remedy of all, within the year under review, and several were outstanding at the end of the year.

In each case, after completion of the work, including those which were outstanding from the previous year, a notice was sent to the factory inspector informing him of the abatement of the nuisances complained of, and the number of notices of abatement sent to the factory inspector were as follows:

Factories ....	....	....	15
Workshops	....	....	6
Bakehouses	....	....	1

Under section 107 of the Factories and Workshops Act, the occupiers were rather more punctual in sending in their lists of outworkers than during the previous year. There was also a slight increase both in the number of lists sent in, and in the number of outworkers.

All the outworkers were visited during the year, the sanitary inspectors having made 48 visits for that purpose. It is true that the number of visits made is not much greater than the number of outworkers, but this is explained by the fact that a number of those who are reported as outworkers have workshops of their own, and are visited in connection therewith.

There were 13 lists sent in, against 12 during the previous year, and the number of outworkers notified was as follows.

	Tailors	Shoemakers	Seamstresses	Total
Number of Outworkers	20	6	4	30

A number of the above, themselves occupy workshops, the premises of the remainder, who work in their own houses, on being visited, their premises were found to be satisfactory.

One outworker returned, resided outside the Borough, at Hipperholme, and a notice thereof was sent to the Medical Officer of Health of that district.

The workshops register has been kept up to date from lists received from the factory inspector, and all new workshops discovered by the inspectors have been reported to the factory inspector.

The following is a detailed list of all the workshops in the borough, which shows a decrease of 159 during the year.

Pattern Card Maker ...	1	Dress & Mantle Makers	111
Joiners and Cabinet Makers	64	Saddlers... ..	11
Brush Makers	14	Milliners	60
Provision Merchants ...	5	Cotton Doubler ...	1
Rag Sorters	5	Coopers	3
French Polishers	15	Bakehouses	66
Tailors	71	Wood Turner	1
Marine Store Dealers	4	Drug Packing	1
Blacksmiths	24	Whitesmiths	8
Upholsterers	12	Coach Builders	4
Umbrella Makers	3	Rope Makers	3
Box Makers	2	Wood Carvers	5
Surgical Inst'm't M'ker	1	Wool Sorters	5
Fruit Boilers	1	Cork Cutter	1
Plasterers	3	Gun Makers	2
Hosiers and Knitters...	19	Carpet Repairers ...	7
Wheelwrights	12	Picture Frame Makers	4
Painters	11	Wire Worker	1
Plumbers	28	Basket Makers	3
Printers	11	Tinners	15
Sweet Boilers	2	Locksmiths	2
Cistern Maker	1	Cutler	1
Clog Sole Makers	3	Underclothing Makers	16
Belt and Brace Makers	3	Blind Makers	2
Oil Merchants	2	Electrical Engineers ...	4
Rug Makers	3	Piano Makers	6
Watch Makers and Jewellers	15	Firelight Makers	5
Motor Repairers	4	Drysalters	4
Leather Cutters	4	Boot Upper Maker	1
Sugar Packer	1	Cycle Works	2
Designers	4	Tea Packers	2
Metal Engravers	2	Brass Works	3
Hair Dressers	11	Laundries	7
Metal Polish Makers ...	2	Hair Pad Makers	7
Carpet Beater	1	Machine Makers	8
Chair Maker	1	Machine Brokers	2
Photographers	10	Marble Masons	3
Billiard Table Maker ...	1	Shoeing Smiths	4
Ventilating Engineers	3	Firewood Cutters	3
Trunk Maker	1	Paper Bag Makers	2
Soap Maker	1	Dentists	6
Boot, Shoe and Clog Makers	158	Steel Skewer Maker ...	1
		Slipper Makers	2
		Concreter	1
Total number of Workshops, 945.			

Bakehouses.

The bakehouse register has been thoroughly revised and this partly accounts for the decrease which has taken place during the past two years in the number of bakehouses.

The number of bakehouses on the register was 100 against 132 the previous year, being a decrease of 32 for the year. The decrease for 1908 was 36.

There were 3 new bakehouses opened during the year, and in each case was inspected by myself, to ascertain their fitness for the purpose before they were allowed to be occupied as such.

Although the number of bakehouses show such a diminution, it is worth noting that no underground bakehouse has been closed, the number remaining the same, viz :—26.

The bakehouses are inspected by the district sanitary inspectors, each being responsible for those situated in his own district.

The number of visits paid to the bakehouses during the year was 349, as the following table will show.

Description of Premises	Number on Register	Number of Visits made
Wheat bread and muffin bakers, including confectioners ...	89	349
Oat bread and muffin bakers ..	11	

One underground bakehouse had been illegally occupied as such, and was closed.

Greater attention appears to be paid by occupiers to the condition of bakehouses than formerly was the case, although it appears that more complaints were received with reference to limewashing, than was the case during the previous year.

The largest number of complaints usually has reference to the neglect of this important matter in connection with the cleanliness of bakehouses.

The number of defects reported during the year was 44 and 3 having remained over from the previous year, made a total of 47, of which 44 were removed, leaving 3 unabated at the end of the year.

The following table shows the number and character of the defects reported, and the number remedied.

Nature of Defects	Number Reported	Number Remedied
Brought forward from last year ...	3	
Dirty and defective closets ...	3	2
Bakehouses requiring limewashing ...	29	29
Sink pipes to disconnect ...	2	
Defective sink drains ...	2	3
Defective fall pipes ...	1	2
Defective roof ...	1	1
Illegal occupation of underground bakehouse ...	1	1
Insufficient ventilation ...	1	1
Dirty sink ...	1	1
Drain opening inside bakehouse ...	1	1
Dirty floor ...	1	1
Made up drain ...	1	1
Defective flush to water closet ...		1
Total ...	47	44

Ice Cream Makers and Vendors.

There was no complaint during the year regarding those engaged in this work.

Offensive Trades.

The number of offensive trades carried on in the borough under section 112 of the Public Health Act, 1875, was as follows:—

Bone Boilers	....	....	2
Blood Boiler	....	....	1
Soap Boilers	....	....	2
Tripe Boilers	....	....	9
			14
			14

The above premises have been regularly visited during the year, and on the whole appear to have been well conducted, no complaints having been received during the year regarding any of them.

Public Health Laboratory.

The number of specimens examined in the public health laboratory was greater than during the previous year, viz :— 78, against 67.

The following table gives details regarding the specimens examined.

Disease	Number of Specimens	Results of Examination	
		Positive	Negative
Diphtheria (Swabs) ...	39	9	30
Diphtheria (Membrane) ...	1	1	...
Anthrax (Blood) ...	2	1	1
Anthrax (on Agar) ...	1	1	...
Tuberculosis (Sputum) ...	27	...	27
Tuberculosis (Milk) ...	3	...	3
Tuberculosis (Pus) ...	1	...	1
Typhoid (Widal's) ...	4	1	3
Total ...	78	13	65

A rather larger percentage of swabs examined for diphtheria were found to be positive, than was the case during the previous year. This is no doubt accounted for by the fact that diphtheria was more prevalent in the Borough.

The fact that all the 27 samples of sputum examined for the tubercle bacillus gave a negative result, is very unusual. In seven of the specimens examined during the previous year, the tubercle bacillus was found to be present.

One sample of sputum examined was found to contain cells indicative of the presence of malignant disease.

The two specimens of blood examined were from the slaughterhouse.

Disinfection.

There having been a greater prevalence of notifiable infectious disease in the borough during the year, a much larger amount of work under this heading was necessary than during the previous year.

The disinfecting apparatus is by Messrs. Goddard, Massey and Warner, and is situated at the Borough Fever Hospital.

The number of articles of bedding, clothing, &c. disinfected therein by steam was 13,443 against 6,072 during the previous year.

For fumigation purposes, fomaldehyde is now invariably used, and 1,141 rooms in private houses were so disinfected, against 549 during the previous year. In a few cases also, the formalin spray has been used.

It was not however found necessary to fumigate so many schools as during the previous year, and only 10 rooms in the infants department of one elementary day school were so disinfected.

Strict attention has been paid during the year to the disinfection of any library books found in infected houses. There is a special apparatus provided for this purpose at the Hall Street Dépôt.

Disinfecting fluid is supplied free of charge to infected houses, and a much larger quantity was distributed than during the previous year. Disinfecting powder is also supplied free of charge on application at the Hall Street Dépôt,

Schools and Infectious Disease.

Although there was a greater prevalence of notifiable infectious disease during the past year, the Borough was comparatively free throughout the year from those infectious diseases which are non-notifiable.

It is the occurrence of the latter which most frequently necessitates school closure, consequently there was much less interference with the work of the

elementary day schools than during the previous year, in fact it was not found necessary to close a single school during the year under review.

The following table gives a list of the schools affected with scarlet fever and diphtheria, and shows the number of cases reported in connection with each school.

Name of School	Scarlet Fever	Diphtheria	Total
St. Augustine's	15	...	15
Portland Road	31	5	36
Battinson Road	9	3	12
Moorside	5	2	7
St. Joseph's	29	...	29
Haugh Shaw	7	2	9
Warley Road	14	1	15
Boothtown	29	19	48
Pellon Lane	17	1	18
Parish Church	24	...	24
Luddenden	1	1	2
Akroyd Place	23	2	25
Lee Mount	21	5	26
Queen's Road	10	4	14
Siddal	5	5	10
Holy Trinity	30	4	34
Parkinson Lane	16	1	17
Salterhebble	5	2	7
Sunnyside	21	...	21
St. Maries'	6	2	8
Council Secondary	6	...	6
Caddy Field	3	...	3
Christ Church, Pellon	1	1	2
Mechanics' Institute	2	...	2
Bermerside	4	1	5
Northowram	1	...	1
Bradshaw	1	...	1
Private School	1	..	1
Total	337	61	398

There were 128 cases of diphtheria reported, and as will be seen from the above table, 61 of those were of school age. This is a slightly larger percentage than was the case during the previous year.

With reference to scarlet fever, out of 545 cases reported, 337 were children of school age, which is also a slightly higher percentage than occurred during the previous year.

It would appear therefore that school influence had rather more to do with the spread of these diseases than was the case during the year 1908.

A large number of suspicious cases of fever were reported to this department by the education officials. These were all visited as soon as possible, and in connection therewith I paid 41 visits myself to various parts of the Borough. In this way several cases of infectious disease were discovered, which otherwise might have escaped detection.

Furnished Rooms, Houses Let in Lodgings, House-to-House Inspection.

Houses let off as furnished rooms are now included among houses let in lodgings, section 90 of the Public Health Act, 1875 having been extended to include these by the Halifax Corporation Act of 1905.

The Bye-laws made by the Council with respect to houses let in lodgings, have been satisfactorily carried out during the year.

The number of furnished rooms in the borough was 156 against 163 during the previous year.

They have been kept under supervision by the sanitary inspectors, who paid 355 visits during the year to these premises.

The work of house to house inspection was continued during the year, and 1,776 houses were inspected. The number of defects of various kinds found in connection therewith was 286, and the percentage of houses found to have defects of some kind or other was 16.7. These included 125 defects in connection with drainage or a percentage of seven. In two cases only was there any overcrowding discovered.

Meteorology.

The meteorological station is situated at Belle Vue, and has an altitude of 625 feet above sea level. Mr. Green, the Chief Librarian of the Public Library has charge of the station.

The instruments under his charge do not include a Sunshine Recorder, nor an Anemometer for registering the velocity of the wind.

Mr. Green has supplied me with a general summary of his observations, which are given on the next page

The summer of 1909 was wet and cold, rain falling on 199 days during the year, and the amount collected was 35.69 inches, against 30.65 during the previous year, and is the highest recorded rainfall since the year 1903.

General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1909, to December 31st, 1909.

By E. GREEN, LIBRARIAN.

LATITUDE OF STATION - 53° 43' N. LONGITUDE - 1° 52' W. HEIGHT ABOVE SEA LEVEL - 625 FEET.

Month	Pressure of Atmosphere in Month		Temperature of Air in Month						Mean Temperature		Vapour		Mean reading of Thermometer				Wind									Rain		REMARKS			
	Barometer at 34.0° K. sea level	Range	Highest	Lowest	Mean			Air	Dew Point	Felastic Force	In 1 cubic foot of Air		Mean degree of Saturation	Mean weight of water in 1 cubic foot of air	Maximum in Sun	Minimum on Grass	Relative Strength	Relative proportion of									Mean amount of Cloud		Number of days it fell	Amount Collected	
					Of all Highest	Of all Lowest	Daily Range				grs.	grs.						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm					
January	30.079	1.502	49.2	17.5	31.7	41.9	31.7	10.2	36.6	32.9	.188	2.3	.3	91	549	52.6	27.9	2.2	4	1	1	0	2	6	18	11	8	7.0	15	2.09	The observations have been reduced to mean values by Glaisher's Barometrical & Diurnal Range Tables, and the Hygrometrical results have been deduced from the seventh edition of Hygrometrical Tables, after corrections for Index errors of the Instruments employed.
February	30.164	1.176	50.8	24.9	25.9	42.2	31.1	11.1	36.4	33.2	.190	2.2	.3	89	551	57.8	26.9	1.7	5	8	1	3	4	2	2	11	11	6.9	11	1.45	
March	29.498	0.996	53.2	22.2	31.0	41.0	31.0	10.0	35.9	34.5	.195	2.3	.2	95	540	66.3	.....	1.2	10	7	3	5	1	4	3	8	13	7.3	21	3.27
April	29.923	1.054	65.7	28.9	36.8	53.1	36.4	16.7	44.7	39.1	.237	2.8	.6	80	538	91.8	32.5	2.5	0	3	5	7	3	12	8	10	2	5.2	17	3.10	
May	30.064	0.972	75.4	31.1	44.3	56.5	39.3	17.2	48.7	40.8	.256	2.9	1.2	72	535	97.2	32.2	2.3	4	6	8	4	8	7	8	4	4	4.5	13	2.36	
June	29.970	1.096	64.7	35.3	29.4	56.8	42.7	14.1	49.8	44.7	.297	3.5	.6	83	533	98.0	37.9	2.1	11	13	5	1	2	4	6	8	1	7.7	15	2.50	
July	29.985	0.862	70.5	41.1	29.4	60.6	49.2	11.4	58.0	44.8	.297	3.3	2.7	55	520	105.2	42.8	2.3	3	4	0	0	1	12	14	17	0	6.9	20	4.33	
August	29.983	0.856	79.8	44.9	34.9	63.6	50.1	13.5	57.5	52.5	.393	4.4	1.0	81	524	103.2	41.0	1.9	4	2	0	1	5	10	19	11	3	5.8	16	2.78	
September	30.003	1.264	63.5	36.5	27.0	56.5	45.3	11.2	50.3	48.3	.342	3.8	.4	91	532	83.5	36.2	1.8	8	15	5	2	1	2	8	6	4	8.0	14	3.06	
October	29.709	0.998	68.4	25.0	43.4	54.2	43.2	11.0	48.7	44.8	.299	3.3	.5	86	530	82.8	33.2	2.6	0	6	0	0	10	17	10	7	3	6.1	22	4.00	
November	29.998	1.268	54.5	26.5	28.0	45.4	35.9	9.5	40.7	36.9	.219	2.5	.5	85	543	60.3	26.1	1.4	10	4	0	0	1	7	7	18	5	6.9	9	1.11	
December	29.647	1.824	51.6	19.9	31.7	41.6	30.0	11.6	36.5	34.5	.197	2.3	.3	90	541	48.7	24.5	1.7	1	7	4	0	0	9	14	9	9	7.4	26	5.64	
Annual Means	29.918	1.155	62.3	29.5	32.8	51.1	38.8	12.3	45.3	40.6	.259	2.9	.7	83	536	78.9	32.8	2.0	5	6	3	2	3	8	10	10	5	6.6	.....	.....

Rain fell on 199 days, and measured 35.69 inches.

Mean Monthly Readings of	January	42.5°;	April	42°;	July	52°;	October	51.6°;	Highest Readings	- -	55°
Earth Thermometer, four	February	40.2°;	May	46°;	August	54°;	November	46.4°;	August 14th to September 3rd.		
feet below surface.	March	39.3°;	June	49°;	September	53°;	December	42.6°.	Lowest Readings	- -	39°
									March 7th to 26th.		

General Summary of the

of the

No.	Name	Age	Sex
1	John Smith	25	M
2	Mary Jones	22	F
3	James Brown	30	M
4	Elizabeth White	28	F
5	Robert Black	35	M
6	Sarah Green	20	F
7	William Grey	40	M
8	Jane Hill	24	F
9	Thomas Lee	32	M
10	Anna King	26	F
11	George King	38	M
12	Elizabeth King	34	F
13	John King	36	M
14	Mary King	32	F
15	James King	34	M
16	Elizabeth King	30	F
17	Robert King	32	M
18	Sarah King	28	F
19	William King	30	M
20	Jane King	26	F
21	Thomas King	28	M
22	Anna King	24	F
23	George King	26	M
24	Elizabeth King	22	F
25	John King	24	M
26	Mary King	20	F
27	James King	22	M
28	Elizabeth King	18	F
29	Robert King	20	M
30	Sarah King	16	F
31	William King	18	M
32	Jane King	14	F
33	Thomas King	16	M
34	Anna King	12	F
35	George King	14	M
36	Elizabeth King	10	F
37	John King	12	M
38	Mary King	8	F
39	James King	10	M
40	Elizabeth King	6	F
41	Robert King	8	M
42	Sarah King	4	F
43	William King	6	M
44	Jane King	2	F
45	Thomas King	4	M
46	Anna King	0	F
47	George King	2	M
48	Elizabeth King	0	F
49	John King	0	M
50	Mary King	0	F

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The following table gives the rainfall for the past 16 years.

Year	Number of Days Rain Fell	Amount of Rainfall
		inches.
1894	158	30·31
1895	149	33·78
1896	172	32·02
1897	187	29·72
1898	182	29·49
1899	153	35·33
1900	205	39·68
1901	179	29·41
1902	191	28·03
1903	219	44·25
1904	191	29·32
1905	187	25·94
1906	207	33·84
1907	208	34·00
1908	184	30·65
1909	199	35·69

The rainfall is also collected at 10 stations distributed over the gathering grounds of the Halifax Corporation Waterworks, and the following table shows the amount collected in each case.

HEIGHTS ABOVE SEA LEVEL IN FEET.

1909	1380	1350	1325	1375	1040	1050	1060	990	815	795	568
	Walshaw Dean *	Midgley Moor *	Warley Moor *	Ovenden Moor *	Walshaw Dean Lodge	Widdop	Castle Carr Lodge	Ogden	Ramsden Wood	Albert	Gibbet
	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
January ...	2.75	2.81	2.69	3.16	3.02	2.17	2.42	2.36	2.02	1.96	2.30
February ...	3.44	2.61	2.72	3.56	3.97	3.13	2.57	2.27	1.71	1.93	1.76
March ...	3.40	3.47	3.21	4.02	3.58	3.10	3.26	3.46	2.86	3.10	3.38
April ...	3.81	3.95	4.07	4.47	4.10	3.76	3.81	3.96	3.67	3.22	2.96
May ...	2.64	3.02	2.83	3.29	2.53	2.49	2.90	2.87	2.87	2.50	2.41
June ...	2.80	2.75	2.90	2.96	2.79	3.11	2.72	2.73	2.35	2.56	2.49
July ...	6.53	5.64	5.79	5.90	6.86	6.33	5.34	5.17	4.82	4.50	4.39
August ...	4.18	3.26	3.48	3.72	4.25	3.84	3.68	3.30	2.97	2.75	2.69
September...	3.45	3.91	3.89	3.96	3.34	2.92	3.77	3.70	3.13	3.20	3.12
October ...	5.35	5.06	5.00	4.90	5.80	5.03	4.83	4.39	4.66	4.32	4.11
November ...	2.13	1.67	1.82	1.92	2.32	1.57	1.71	1.64	1.28	1.21	1.10
December ...	6.36	5.76	6.02	6.07	6.62	4.86	6.06	6.12	4.75	5.57	5.90
Totals ...	46.84	43.91	44.42	47.93	49.18	42.31	43.07	41.97	37.09	36.82	36.61

Average rainfall over all the gauges, 1909 42.74

Do. do. 1908 37.47

Difference 5.27

The average rainfall collected at the above stations is always greater than that of Halifax, the difference for the year under review being 7.05 inches.

The average increased rainfall for 1909, over the Halifax gathering grounds was 5.27 inches, as the above table shows.

Miscellaneous Matters.

I paid regular and daily visits during the year to the Borough Fever Hospital and the Goux Depôt, and from time to time to the Smallpox Hospital, Hall Street Depôt and Ovenden and Warley Stables.

I paid 47 visits in various parts of the Borough to examine suspicious cases of infectious disease, and on 6 occasions met the family Doctor in consultation thereon.

The tips situated at Birks Hall, Southowram and Charlestown were visited and inspected by me on 15 occasions during the year.

I paid 30 visits to various parts of the borough for the purpose of generally inspecting the same. Ten visits for the purpose of inspecting the conditions of drains, and the sanitary condition of houses to give advice thereon.

I paid 9 visits to the slaughterhouse and wholesale market, chiefly for the purpose of inspecting meat, and to give advice as to seizure, &c.

The common lodging houses were visited on 6 occasions by me to inspect the sanitary conditions of the same.

In June last I attended the National Conference for the Prevention of Consumption, on behalf of your committee, which was held at Whitechapel. I made a report at the time thereon, which was published in the Minutes of the Council, and therefore it is not necessary to reproduce it here.

On April 2nd last I was requested to give evidence before the Departmental Committee of the Local Government Board, to enquire into the value or otherwise of the intercepting trap. I accordingly attended to give evidence before that Committee.

Borough Fever Hospital.

On January 1st, 1909, there were 12 cases of Enteric fever, and 20 of Scarlet fever, a total of 32 patients remaining in the hospital from the previous year, and there were admitted during the year 388 cases, including 25 from outside districts, against a total of 208, which included 36 non-residents during the previous year.

The following table shows the number that were admitted from each disease, and the mortality from the same.

Disease	Number Admitted	Deaths	Case Mortality per cent.
Diphtheria	27	8	29·6
Scarlet Fever	340	10	2·9
Typhoid Fever	21	6	28·5
Total	388	24	....

During the previous year the case mortality per cent of diphtheria was 19·2, scarlet fever, 1·3, and typhoid fever 11·1.

It will be observed therefore that the deathrate in each case was greater than during the previous year.

There were a much larger number of cases admitted during the year, and a larger number of a more serious type, hence the increased mortality. There were 7 cases which died within 24 hours after admission, and the deathrate was consequently increased thereby.

Two of the deaths from typhoid fever which occurred in the hospital were of persons not belonging to the borough.

The following table shows the number of cases that have been admitted to the fever hospital since the year 1881.

Year	Small-pox	Cholera	Typhus Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Others	Total
1881	16			17	34		2	69
1882	13		3	24	15		5	60
1883	2		2	26	8		5	43
1884	1			29	23		2	45
1885	15		1	16	23		4	59
1886	3			18	24		3	48
1887	3			18	54		1	76
1888	5		1	25	28		7	66
1889	4			54	33			91
1890				35	39		7	81
1891		1		47	47		6	101
1892	188		1	17	15		1	222
1893	340			4	1			345
1894	15			15	39		1	70
1895				39	25		7	71
1896				56	30		20	106
1897				32	237		3	272
1898				28	341			369
1899				38	515			553
1900	3			44	250		9	306
1901	3			18	597	12	43	633
1902	1			30	365	7		403
1903	140			24	219	17	4	404
1904	84			22	349	25	6	486
1905	57			29	246	22		354
1906				20	110	30		160
1907				43	42	45	1	131
1908				36	145	26	1	208
1909				21	340	27		388

As the above table shows, a larger number of cases were treated in the hospital during 1909 than in any year since 1904, and this has been done without at any time overcrowding the wards.

The possibility of treating so many cases in the hospital without any overcrowding, has chiefly resulted from the fact that patients suffering from scarlet fever are now discharged at a much earlier period than used to be the case. Formerly these cases were detained for a period of eight weeks, then it was reduced to six weeks then five and now where the cases are mild and quite uncomplicated, some are discharged at the end of four weeks.

We pay much less attention to the question of desquamation than formerly, in fact cases are frequently discharged before peeling is completed.

This arrangement enables a much larger number of patients to pass through the hospital in any given year, than formerly was the case, and it also considerably reduces the cost of maintaining patients therein.

I may also add that experience shows that patients as now discharged, are quite as free, if not even freer from infection than when they were detained in hospital for longer periods. The number of return cases if anything, is less than was the case at that time.

In conclusion I desire to record my appreciation of the manner in which the hospital has been managed throughout the year by the Matron, Miss Robison, and of the unremitting care and attention which the nurses bestowed upon the patients treated therein.

Medical Inspection of School Children.

Under section 13 of the Education (Administrative Provisions) Act, 1907, there was no regular and systematic inspection of school children carried out during the year.

Arrangements have however now been made for this work to be carried out.

The Board of Education has sanctioned my appointment as Schools Medical Officer. Dr. Taylor has been appointed as full time Assistant Schools Medical Officer, and the services of Dr. Hunt have been retained to assist in this work, and also to do special work in connection with the medical inspection of school children.

The work of systematic inspection was commenced early in the current year, and in my next annual report, I shall be able to give detailed information regarding this work.

Dr. Hunt carried out the usual amount of inspection during the year under review, and made a report to the Education Committee as follows:—

“The Schools have suffered as usual in the past year from Epidemic Sickness, 873 children being excluded by the Sanitary Authority, while the prevalence of Measles and Chickenpox accounts for the absence of many more.

Ophthalmia is still present, but to a much less extent and in a mild form.

356 children have been examined at the Office as to their fitness for School. Of these 122 were found fit; 40 were delicate, suffering from Catarrhs or some ailment which made it inadvisable to insist on regular attendance; the remainder were unfit altogether. Of these 35 had Ringworm, 14 Ophthalmia, 6 the Itch, 25 Unclean Heads, 2 Consumption, 11 St. Vitus' Dance, 1 Heart Disease, and 3 Epilepsy; 1 was Blind, 1 Deaf, and 6 Mentally defective.

31 Candidate Pupil Teachers were examined—22 girls and 9 boys, a separate report upon whom was sent to you.

On my visits to the Schools I found various defects about which circulars have been sent to parents in 250 instances. There were 122 cases of Defective Vision and 7 of Inflammation of the Eyes, 41 of Deafness, 14 of Enlarged Tonsils and 16 of Adenoids; 9 of Obstruction in the Nose, leading to defective speech; 23 of Discharging Ears; 21 of Ringworm; 10 of Irregular Teeth 5 of Bowlegs.

As regards the Special Class in Parkinson Lane, 24 are in attendance; 5 were admitted during the year and 5 were discharged. Of these 5, 3 have gone to work, 1 to ordinary School, and 1 has left the town. A Class for Stammerers was held at the end of the year, attended by 8 boys all of whom were much improved.

Of the Open-Air School, which absorbed much of my attention in the Summer, I need say little, because a special report has been prepared. In accordance with the requirements of the Board of Education, a detailed record was kept of each child, at least three examinations being made in each case. The more constant

supervision enabled their defects to be more certainly discovered, and the presence of a Nurse secured the treatment of certain conditions, *e.g.*, the syringing of ears and bathing of inflamed eyes, which are often neglected in poor homes. About a dozen of these required daily attention. In eight children there was need for the removal of adenoids, and in some cases the parents complied with the request to have them attended to. In 28 children teeth needed extraction, and notices were sent to their parents. In comparatively few cases were these attended to until the Nurse offered to take them to the Infirmary, and then only four parents objected. This, I think, shews it is want of time or indifference that leads to so many notices being ignored.

At the end of two months many of the children were so well as to be in no need of further special treatment, and were certified fit for ordinary School. Others had to leave on account of infectious disease at home, so there was no need to reject any bad case from want of room. On the other hand, when the time for closing the School arrived, some of the children were far from strong, and in need of further treatment on the same lines.

T. H. HUNT, M.D. (Lond.) "

Notification of Births Act,

This Act has been in force in the Borough for about 1 year and 10 months. The number of births notified during the year under review was 1700.

During the same period 1,840 births were registered, so that 92 per cent. of the births were reported in accordance with the provisions of the above Act, a slight improvement on that of the previous year.

Now that the provisions of the above Act are known, I consider that a larger percentage ought to be notified.

During the year 56 still-births were reported, and according to the figures supplied me by the Registrars of the Cemeteries, 104 were buried, consequently it is evident that all the still-born children were not reported during the year.

Halifax Public Health Association.

The lady members of the above Association render most valuable assistance to the official Lady Health Visitor.

The Committee of the Association is constituted as follows :

Alderman T. Hey, Chairman, Health Committee.	
Dr. J. T. Neech, Medical Officer of Health.	
Miss Alice M. Thompson, Lady Health Visitor.	
Mrs. E. N. Whitley, Lady Superintendent.	
Mrs. C. Smithson,	" "
Mrs. Haddon,	" "
Mrs. E. H. Hill,	" "
Mrs. Crabtree,	" "
Miss Wright.	Mrs. Ward.
Mrs. Drury.	Mrs. A. Clay.
Mrs. G. H. Smith.	Mr. A. W. Whitley.
Mrs. Hack.	

The ladies of the Committee meet monthly to transact the business of the Association, to which Miss Thompson acts as Secretary.

In order to assist the work of the voluntary assistant lady helpers, the Borough is divided into the following five districts, a lady Superintendent having charge of each district.

The following table gives the names of the lady Superintendents and their respective districts.

District	Lady Superintendent
Ovenden, Pellon and Kingston Wards	Mrs. E. N. Whitley
Akroydon and North Wards	Mrs. C. Smithson
Central and West Wards	Mrs. Haddon
South and East Wards	Mrs. E. H. Hill
Skircoat and Southowram Wards	Mrs. Crabtree

The following are the names of the assistant Visitors :

Mrs. Simpson	Mrs. Hepworth	Mrs. W. Clark
„ Seed	„ Taylor	„ Greenwood
„ Lumb	„ Hack	„ Mitchell
„ Bentley	„ Bottomley	„ Winks
„ Wilson	„ Balme	„ Hogg
„ Smith	„ Watkins	„ Parkinson
„ Meskimmon	„ Sunderland	„ Clark
„ Ackroyd		

The number of visits paid by the assistant Visitors in the various districts were as follows :

Ovenden, Pellon and Kingston Wards	230
Akroydon and North Wards	450
Central and West Wards	186
South and East Wards	120
Skircoat and Southowram Wards	247

Lady Health Visitor's Report for 1909.

Miss A. M. Thompson, the Lady Health Visitor has submitted to me the following report.

In presenting my report for the year, I am convinced that the Health Association is doing a good work.

I have not so many cases to report as last year, as we have been concentrating our efforts upon the very poorest houses. Instead of passing every case visited by myself on to the Lady Visitors, only those that really need visiting have been so dealt with, as the committee thought it quite unnecessary to visit homes where the mother could, and did look after their infants in a satisfactory manner.

Of the 1,700 births notified, 937 were attended by medical men, or 55 per cent, against 52 per cent during the previous year, and the rest by midwives. I have visited 727 notified births. Out of this number 702 were breast fed, 25 only being bottle fed. A very large proportion of the infants are breast fed for 12 months.

In connection with my work I have found 179 houses fairly clean, 80 dirty, and the remainder clean.

I have paid 1,868 visits in all.

I have weighed infants during the year, where the mother has approved. Some are very superstitious and think their babies will die, others are delighted. Out of 95 infants weighed, I obtained the following results :—

2	weighed	11 lbs.
2	„	10 lbs.
22	„	9 lbs.
32	„	8 lbs.
17	„	7 lbs.
13	„	6 lbs.
7	„	5 lbs.

The Annual Meeting of the Association was held in the Council Chamber of the Town Hall, on April 29th, Dr. Neech presiding. Dr. Margaret Ross gave an interesting and instructive address on the work of the Huddersfield Association.

The Babies Welcome Club is making steady progress. Mrs. G. H. Smith kindly allowed us to have the Annual Meeting at the Gleddings. About 60 were present. Dr. Muir gave an interesting address on the "Feeding of Infants." 28 members have joined the club during the year.

The supervision of the midwives is having a beneficial effect, many mothers testifying to the more regular attendance and better attention in every particular. I constantly meet them out, and as a rule find them very clean. I have paid 191 visits on this work.

As a result of my visits, I obtained the following particulars relative to the midwives case books.

Number on Register.	Case Books.			
	Well kept.	Fairly well kept.	Not up-to-date	No case book.
28	14	10	2	2

With reference to the two who did not possess a case book, one is employed as a monthly nurse, and the other only attends her own relatives when necessary, having really ceased to practice.

We had a very successful meeting of midwives at Mrs. C. Smithson's house on July 6th. Dr. Dora Mann addressed them on "Surgical cleanliness in Midwifery." They seemed thoroughly interested, and asked questions after the address. I consider that if we are to get the best work out of the midwives, we must let them feel we are interested in their work.

I have persuaded about 18 of them to take in a monthly paper called the "Midwives Record." In this way they will be kept up-to-date, and in touch with the work done in other parts of the country.

There were 28 midwives registered during the year, two out of this number being qualified by examination, the rest through long practice. The old ones are gradually dropping out, two having died, and two ceased to practice.

I have supplied nourishment, in the way of cocoa, milk and oatmeal, to 84 poor maternity cases.

We hope in the near future to have a special nourishment fund for mothers, tickets being supplied to really needy cases, enabling a mother to get one nourishing meal a day, for a fortnight after her confinement. This scheme is at present under discussion.

The following is a list of the midwives registered at the Health Office during 1909.

Name.	Address.
Jowett Sarah Alice ...	27, New Bank
Crowther Hannah Elizabeth	39, Hammond Street
Buckley Mary Ann ...	8, Wainhouse Terrace
Marsland Emma	16, Cherry Street
Ogden Emma	6, Ingram Street
Shelley Emelina	6, Ellen Royd
Robinson Mary Ann ...	14, Ashbourne Grove
Smith Clara	40, Winding Road
Fielden Louisa	33, Commercial Road
Wade Hannah	10, Clog Yard, King Cross
Crossley Hannah Holroyde	25, Fairview Terrace
Wilson Elizabeth Ann ...	1, Shoemith's Buildings
Crabtree Isabella	31, Bright Street
Connew Sarah	23, Clay Street
Wood Mary Elizabeth ...	9, Fern Street, Boothtown
Sutcliffe Ellen	6, Spindle Street
Hargreaves Mary Ann ...	1, Cleveland Avenue
Aaron Hannah	7, Lane Ends, Wheatley
Smith Emma	21, Causeway Foot
Halstead Frances Ellen ...	3, Aspinall Street East
Lake Lucy	14, Kell Lane
Milner Mary Hannah ...	8, Chesnut Street
Hitchen Phœbe Alice ...	66, St. Peter Street
Turner Elizabeth	7, Highroad Well Court
Arnold Mary Ann	13, Exchange Street
Woodhead Lucy	38, Chesnut Street
Edwards Sarah	47, St. Stephen Street
Warren Harriet	17, Spring Grove, Newstead

Veterinary Inspector's Report.

In connection with the above report, I desire to make one or two observations.

During the past year the question of the necessity of boiling milk before use has been raised. It is stated not to be necessary, and that the milk is injured as an article of food by the process.

I quite admit that boiled milk may not be quite so digestible, and may not be quite so good in other ways for the diet of children, as fresh and pure milk direct from the cow, and unboiled. In my opinion however the alleged dangers in connection with boiled milk have been very much exaggerated. Could a pure and perfectly clean milk supply, quite free from pathogenic organisms be obtained, I would prefer such milk, and would consider boiling unnecessary. But a milk supply of this character can scarcely be said to be on the market, consequently it is necessary to choose the lesser of two evils, and boil the milk before it is used.

Any one who has made any observations on the question, is conversant with the fact that when milk is allowed to stand for a prolonged period, the sediment in the vessel contains more or less filth and dirt. In fact, did a towns water supply contain as much extraneous organic matter as is found in some samples of milk, and of a similar nature, and did it contain as many organisms of a similar kind to those present in many of those samples, it would be condemned as being unfit for domestic use.

Mr. J. Pollard, M.R.C.V.S.: D.V.S.M. has submitted the following report:—

Dairies, Cowsheds, and Milkshops.

The number of cowsheds and milkshops on the register are as follows:—

Cowsheds	....	....	507
Milkshops	....	....	<u>55</u>
		Total	562

The total during the previous year was 577, being a decrease of 15.

There were 392 Dairy Farmers and purveyors of milk on the register, against 393 for the previous year, a decrease of one.

In accordance with the usual practice, a further number of cowsheds which did not conform to the Regulations, were selected for alteration or reconstruction, and during the year under review, nine cowsheds were so dealt with. This number, together with 91 previously reported on, make a total of 100 cowsheds which now comply with the requirements of the Regulations.

It is necessary to draw attention again to the question of cleanliness in dealing with the milk supply, as some appear to be utterly careless and indifferent in that respect.

I should like to see washable overalls more generally in use during the milking process than is the case.

It is pleasing to be able to meet the arguments of those who say it is impossible to keep the cows as clean as desired, by being able to take them to a few places where those obstacles are overcome.

With regard to the question of hair and dirt getting into the milk,—apart from the previous cleansing of the udder,—I do not consider the concave flange on the ordinary milking can an advantage, as hair and dirt fall from the udder during the process of milking, collect on the flange, and afterwards become mixed with the milk. A detachable convex flange to fit closely on the rim of the milking can would be much preferable, and prevent that.

I have noticed that some of the purveyors of milk do not appear to give the consideration to the vehicles used for its conveyance, which is due, some being in a very dirty and dilapidated condition. I have seen box carts with evidence of having been used for general farm purposes, used for the conveyance of milk. Suitable vehicles should be kept for that purpose solely.

Very few of the wives and daughters of the farmers in this district milk, a fact to be regretted, as speaking generally they are much tidier and neater than men.

It is to be regretted that the Government withdrew their Milk Bill, likewise the Board of Agriculture the Tuberculosis Order as the latter would have given the Local Authorities control of cattle clinically tubercular, and thus prevent trafficking in that class of animal, and possibly further loss to the owner.

Cases have occurred where milk from a cow which has turned out to be tuberculous, has been given to pigs unboiled, and the result has frequently not been considered until the disease was detected when they were slaughtered.

In the course of examination of the udders of cows, cases do occur where there is insufficient evidence to enable one to express a definite opinion, and even the microscopical examination of the centrifuged deposit of milk is unsatisfactory, as the Tubercle bacilli are frequently difficult to find.

In those cases, the inoculation of guinea pigs has to be resorted to, and I would strongly urge that arrangements be made for that test to be applied.

During the year under review I paid 441 visits, and the Inspector for Illingworth district 538 visits, a total of 979 to the various cowsheds within the borough, and the District Inspectors paid 142 visits to the registered milkshops.

In consequence of these visits a total of 112 defects were discovered and reported, and 98 remedied as the following table will show.

Nature of Defects	Number Reported	Number Remedied
Want of Light	11	11
Do. Airspace	6	5
Do. Ventilation	10	9
Privies abutting on Cowsheds	2	
Defective, Made-up, and Untrapped Drains	5	3
Defective Floors	20	14
Dirty Stands and Floors	2	2
Cowsheds requiring Limewashing	38	40
Pigs kept in Cowsheds	2	2
Accumulations of Manure	3	3
Overflowing Liquid Manure Tanks	5	7
Defective Middensteads	8	2
Total for 1909	112	98
No. of Defects on books, Jan. 1st, 1909	191	
Total	303	
No. of Defects on books, Dec. 31st, 1909	205	

During the year 1561 cows have been individually examined, against 1363 during the previous year.

Ten were found to have diseased udders, two of which were tuberculous. One cow was destroyed, the other removed outside the borough, destination unknown.

Details of the above inspections are set out in the following table.

INSPECTION OF CATTLE.

Date of Inspection	No. of Folio	Cattle and Condition		Condition of Shed	Remarks
		Number Examined	Udders Diseased			General Condition
1909.					
Jan. 7	119	13		Good	
" 7	135	5		Fair	1 Cow sick Floor defective
" 7	136	3		"	
" 7	116	13		Excellent and well groomed	
" 8	25	5		Good	
" 8	139	8		Fair	
" 8	a	9		Good	
" 8	172	6		"	
" 8	179	12		Fair	
" 8	171	15		Good	
" 8	170	5		Fair	
" 13	45	17		"	
" 14	101	20		Good	
" 14	a	5		"	
" 14	108	7		Fair	
" 21	93	5		"	
" 21	60	6		"	
" 21	52	4		"	
" 21	97	1		"	
" 21	107	1		"	
" 21	43	25		Good	
" 25	210	11		10 Fair; 1 poor clinically tubercular	Overcrowded Tubercular cow sent to knackers
" 29	209	13		Fair, several dirty	
" 29	194	9		Good	
" 29	114	5		"	Moderate

Feb.	2	217	8	Fair		Moderate	1 Sick after calving
"	2	217	10	"		"	
"	10	223	3	"		Poor	
"	10	223	9	"		Moderate	
"	10	223	6	"		Poor	
"	10	223	15	"	1	Moderate	1 Cow with Mammitis of one quarter
"	10	223	10	"		1 Moderate; 1 poor	
"	17	229	11	"	1	1 "	1 Udder tubercular
"	17	229	8	6 Poor and dirty; 5 fair			
"	17	229	15	Good and very clean			
"	19	231	8	Fair		"	1 Sick, cold
"	19	231	5	"		"	Deficient light and space
"	19	231	3	Good		Good	
"	19	231	3	Fair		Poor	
"	19	231	3	"		Moderate	
"	24	235	10	Fair, few dirty		Good	
"	24	235	3	Fair		Moderate	
"	24	235	8	"		"	
"	25	236	3	Good		"	
"	25	236	3	"		"	
"	25	236	7	Fair		1 Moderate; 1 poor	
"	25	236	9	"		Good	
"	25	236	5	Good		Moderate	
Mar.	1	239	30	"	1	Good	
"	1	239	6	"		Moderate	
"	1	239	15	"		Good	
"	3	241	9	Good, 2 with dirty udders		1 Moderate; 1 poor	
"	3	241	15	Good		Poor	
"	3	241	5	Fair		Moderate	Overcrowded
"	3	241	2	"		Poor	
"	3	241	11	Fair, few dirty		1 Moderate; 1 poor	Floor defective, in one
"	4	242	8	Fair		Moderate	

Inspection of Cattle—continued.

Date of Inspection	No. of Folio	Cattle and Condition		Condition of Shed	Remarks
		General Condition	Udders Examined Diseased		
Mar. 4	242	9		1 Good; 1 moderate	
" 4	242	9		1 Moderate; 1 poor	
" 4	242	6		Moderate	
" 4	242	11		"	
" 4	242	9		"	
" 4	242	4		"	
" 5	243	7		"	
" 11	248	1		Good	
" 17	253	1		Poor	
" 17	253	13		1 Good; 1 moderate; 1 poor	
" 17	253	6		1 Moderate; 1 poor	
" 18	254	8		Moderate	
" 18	254	12		2 Good; 1 poor	
" 25	259	11		Poor	
" 25	259	4		Moderate	
" 25	259	6		Poor	
" 25	259	7		"	
" 26	260	12		Good, but dirty	
" 26	260	8		1 Good; 1 moderate	
" 26	260	5		Moderate	
" 26	260	2		"	
" 26	260	4		Bad	
" 26	260	4		Good	
" 26	260	5		Moderate	
Apr. 1	265	9		Poor	
" 1	265	7		Bad	
" 1	265	4		"	

1 Cow sick

Apr.	1	265	5	Good							
"	2	266	14	Fair	1	Moderate 1 Good; 2 poor	1 Cow with Mammitis affecting one quarter				
"	2	266	8	Good		Moderate	Deficient in light				
"	15	273	21	Fair, 2 dirty		"					
"	15	273	7	Fair		Poor					
"	15	273	4	"		Moderate					
"	21	278	23	Good, but few dirty		"					
"	22	279	4	Fair		Good					
"	28	284	13	Excellent		Poor	Accumulation of manure and liquid tank overflowing				
"	29	285	7	Fair		Bad					
"	29	285	4	"		1 Moderate; 2 poor					
"	29	285	16	15 Fair; 1 poor		Moderate, but dirty	Requires new middenstead				
May	5	289	10	Fair; 1 udder dirty		Moderate					
"	5	289	2	Good		Moderate, but dirty					
"	5	289	11	"		Moderate					
"	5	289	5	"		Poor					
"	5	289	5	"		"					
"	7	291	8	7 Good; 1 poor		1 Moderate; 1 poor	1 Cow with Mammitis affecting one quarter				
"	7	291	9	Fair	1	Moderate					
"	10	293	5	Good		"					
"	12	295	3	"		1 Moderate; 1 good	Accumulation of manure				
"	12	295	12	10 Fair; 2 poor		Poor					
"	12	295	15	Fair		Good					
"	12	295	8	"		Poor					
"	12	295	6	Good		Good					
"	12	295	4	"		Poor					
"	12	295	9	Excellent		Good					
"	13	296	9	Fair		"					
"	13	296	8	"		"					

Inspection of Cattle—continued.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
May 14	296	2		Good	Moderate	
" 14	296	6		" Fair	"	
" 19	301	5		Very good	1 Good; 2 poor	
" 19	301	16		"	Moderate	
" 26	3	20		Good	Poor	Floor defective
June 3	8	8		"	Good	
" 3	8	11		"	Moderate	
" 3	8	7		" Fair	Poor	
" 3	8	5		Good	Good	1 Retaining placenta
" 7	10	10		Very good	1 Moderate; 2 good	Accumulation of manure
" 7	10	15		Fair	Poor	
" 9	13	6		"	"	
" 9	9	2		"	"	
" 14	16	14	1	"	1 Poor; 1 good	1 Mammitis, floor defective
" 14	17	21	1	Good	Poor	1 Mammitis
" 16	19	10		Fair	Moderate	
" 16	19	22		Good	"	
" 18	20	5		4 Fair; 1 poor	"	Poor one suspected Tuberculous, and was sold
" 18	21	2		Good	Poor	Dirty
" 18	21	13		7 Good; 6 fair	1 Moderate; 2 poor	
" 21	22	10		Excellent	1 Good; 2 poor	
" 21	22	1		Good	Poor, dirty	
" 21	22	8		Fair	1 Good; 1 moderate	
" 21	22	5		"	2 Poor	
" 21	22	4		"	Good	Stands dirty
" 22	23	1		Thin Clinically Tubercular	Poor	Sold. Unable to trace destination

June 22	23	8	7 Fair; 1 poor	Moderate	
" 23	24	9	Very good	1 Good; 2 poor	
" 23	24	7	Fair	Poor	
" 30	29	7	Fair	Moderate	
Oct. 25	97	1	Ill, udder diseased	Bad	Tuberculous. Destroyed
Nov. 17	112	5	Fair	Poor	
" 17	112	2	"	"	
" 17	112	8	"	"	
" 18	113	14	"	"	2 with dirty udders
" 18	113	8	"	Good, but rather dirty	
" 18	113	6	Good	Moderate	
" 22	115	6	Fair	Bad	
" 22	115	9	"	Moderate	
" 22	116	17	"	Poor	
" 22	117	5	Fair	1 Moderate; 1 poor	{ Middenstead too near the cowsheds
" 24	117	5	Good	Poor	{ Defective in light
" 24	117	5	Fair	Moderate	{ Not re-limewashed
" 24	117	6	Good	2 Poor	
" 25	118	14	Fair	Good	
" 25	118	8	Good	"	
" 25	118	4	Fair	Poor	Not re-limewashed. Udder Mammitis
" 26	119	6	"	Bad	
" 26	119	5	5 Fair; #1 thin	Poor	*Clinically Tuberculous
" 26	119	5	Fair	Moderate	
" 26	119	4	Good	Good	
" 26	119	3	"	"	
" 26	119	11	Fair	Good, but dirty	
" 26	119	6	Good	Moderate	Deficient ventilation. Not re-lime-washed
" 26	128	4	Fair	Poor	Not re-limewashed
Dec. 8	128	2	"	"	
" 8	129	5	"	Moderate	

Inspection of Cattle—continued.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
Dec. 9	129	23		Good	Poor	
" 9	129	6		Good, but dirty	Moderate	
" 13	131	9		Fair and clean	Poor	
" 13	131	15		Fair	Good	
" 13	131	11		"	"	
" 15	133	3		2 Good, *1 poor	"	1 Cow with Mammitis *Consider Tuberculous, returned to vendor
" 15	133	4		Fair	Poor	
" 15	133	4		"	"	
" 16	134	17		Good, except one	1. Good; 1 poor	
" 16	134	6		Fair	Moderate	Middenstead required
" 23	139	5		Fair, one dirty	Poor	
" 23	139	4		Good and clean	Moderate	
" 29	140	11		Fair	1 Good; 1 moderate	
" 29	140	14		Fair, several dirty	Good	
" 29	140	13		Very good	1 Good; 2 poor	Deficient in space. Overcrowded
" 30	141	2		Good	Poor and dirty	
" 30	141	9		Fair	1 Moderate; 1 poor	
" 30	141	13		"	Moderate and dirty	
" 30	141	6		"	Moderate	Accumulation of manure being removed
" 30	141	4		"	Poor	
" 30	141	2		Good	"	
" 31	142	4		Fair	"	
" 31	142	6		Fair, one dirty	Good, recently altered	
" 31	142	9		Good	1 Good; 1 moderate	

Slaughterhouses.

There are eight private slaughterhouses in the borough against nine last year, one having been discontinued.

Of the eight, three have not been used, to my knowledge, for the purpose of slaughtering during the past year. All have been kept in a fairly satisfactory condition.

During the year I have paid 1,097 visits to the public slaughterhouse, and the number of animals slaughtered during the year ended December 31st was as follows :

Cattle	Calves	Sheep	Pigs	Total
5,730	3,258	20,793	6,091	35,872

There were 513 separate seizures of meat and offal during the year, and the following table shows the number of carcasses condemned and the total weight of the same.

	Cattle	Calves	Sheep	Pigs	Total
Number of Animals killed	5730	3258	20793	6091	35872
do. condemned	13	14	17	34	78
Weight of those condemned in lbs.	4750	740	812	3850	10152

In the following table the diseases and other conditions which led to the condemnation of the meat during the year are shown.

	Anthrax	Tuberculosis	Inflammatory Diseases	Parturition	Jaundice	Septicemia	Excessively bruised	Parasites Liver	Otherwise unsound	Cadavers	Worried	Decomposition
Cattle	1	5	1	..		1	2		3	..	..	..
Calves	1	5	..			1		7	..	..	..
Sheep	4	..				6	5	2		..
Pigs	15	5	1	10				1	1	1	..
Rabbits				1	..	..	..	16

In addition to the above there were 30 seizures of fish, fruit, &c., and the following table shows the weight of the various kinds of food destroyed.

Kind of Food destroyed	Weight in lbs.
13 Carcases of Beef	4750
Beef not in Carcase	325
14 Carcases of Veal	740
34 Carcases of Pork	3850
Pork not in Carcase	1258
17 Carcases of Mutton	812
Mutton not in Carcase	9
17 Rabbits	26
Fish	2976
Fruit	4467
Offal	6884
Other food	1203
Total	27300

There was considerably less fish condemned during the past year than for the previous year.

The total amount of meat destroyed on account of tuberculosis was greater than the previous year, and as in previous years was the chief cause for the seizure and condemnation of meat, as the following table will show.

	lbs.
Total amount of Meat destroyed	19,628
Total amount of Meat destroyed on account of Tuberculosis	5,372
Total amount of Offal destroyed on account of Tuberculosis	6,042
Total amount destroyed on account of Tuberculosis	11,414
	<hr/>
Total amount destroyed from other causes	8,214

The greater part of the meat, fish, &c., destroyed during the year was voluntarily surrendered by the owner for destruction, and in only six cases was it necessary to get a Justice's order.

There were no prosecutions during the year.

Number of visits made during the year.

Description of Premises	Number of Visits.
Public Slaughterhouses	1097
Private Slaughterhouses	123
Borough Market	347
Wholesale Market	291
Fasting Sheds	246
Potted Meat Houses	258
Tripe Boiling Houses	86
Butcher's Shops	3238
Fried Fish Shops	59
Cowsheds	441
Other visits....	131
Total	6317

In addition to the above, I have paid numerous visits in attendance on the horses of the Health Department, at the Hall Street and Goux Depôts, also visited the stables at Ovenden and Warley, and attended horses for other committees.

The Sale of Food and Drugs Act.

The Borough Analyst, Mr. J. A. Dewhirst, has presented the following report.

There were 215 samples of Food and Drugs analysed during the year 1909. The following table gives the number analysed etc., per 1000 of the population in some recent years.

YEAR	Number of Samples Analysed.	Percentage Adulterated	Estimated Population of the Borough	Number of Samples Analysed per 1,000 of the Population
1896	218	3·2	94,764	2·30
1898	211	3·3	96,729	2·18
1900	210	4·7	101,187	2·07
1902	217	8·7	105,978	2·04
1904	209	9·1	107,000	1·95
1906	230	10·4	108,000	2·13
1907	206	4·8	108,500	1·89
1908	213	7·5	109,000	1·95
1909	215	8·0	109,000	1·97

The proportion throughout the country has risen from 2·88 per 1000 in 1907 to 2·92 in 1908. This rise is constantly going on everywhere but in HALIFAX. At the general rate mentioned, viz., 2·92 per 1000, our samples in Halifax would number 318 per annum.

The following table shews the kind of samples, and the number of each dealt with, together with results of the analyses.

Article	Total	Genuine	Adulterated	Doubtful	Percentage Adulterated
Milk... ..	148	139	9	0	6.1
Cream	6	6	0	0	0
Butter	6	6	0	0	0
Lard	7	5	1	1	1.4
Cheese	6	6	0	0	0
Beer	6	6	0	0	0
Peas (tinned) ...	2	2	0	0	0
Cream of Tartar	13	9	4	0	30.8
Vinegar (malt) ...	8	4	0	4	0
Sweet Nitre ...	6	4	2	0	33.3
Camphorated Oil	7	6	1	0	1.4
Totals ...	215	193	17	5	8.0

Only 11 classes of Food and Drugs were examined. All the milks were examined for preservatives and none found. No informal samples were taken. In Scotland many samples are taken irregularly, that is to say without all formalities and presence of an official. The result shows how much more adulteration is discovered in this way.

SCOTLAND. Samples in 1908	Found Adulterated (per cent.)	
	Formal Samples	Informal Samples
Milk.... ..	14	29
Butter	9	21
All articles	10	21

The Local Government Board strongly recommends this method as mentioned in my report for last year (1907).

With regard to our samples, Milk remains at the same degree of adulteration as last year v.i.z. 6.1%. As to Cream, 5 out of the 6 samples taken contained Boric Acid, but not beyond the limit of .25%, though its presence should be plainly stated on the label. Of the Lards, one was wrong, but unfortunately no prosecution could result. The Cheese and Beer samples were beyond reproach, but the Tinned Peas contained a little Copper. The Cream of Tarter showed somewhat serious contamination with Lead and some Arsenic, whilst the presence of Copper was unexpected and has scarcely been recognised previously. Much Vinegar is more or less sophisticated nowadays and it would not be difficult to find some entirely artificial. Sweet Nitre continues its bad reputation but now is less widely sold, carelessly and of deficient strength.

The Camphorated Oil proved good, though one sample had evidently been prepared without due regard to the Pharmacopœia instructions.

As usual the prosecutions were mostly directed to milks and in one or two cases substantial penalties were inflicted. Detailed information of these will be found in another part by reference to the index.

Concerning adulteration generally in the country, attention has been drawn particularly to the bleaching of flour by nitrous fumes, produced either chemically or electrically. The 'facing' (polishing) of Rice with talc. The thickening of cream in various ways. The 'toning' of milk by addition of separated milk. The adulteration of milk with milk-powder (imported) and water, and the use of arachis oil in butter. Also the addition of paraffin wax to lard and the importation of spurious Cheshire and Cheddar Cheese from Holland.

The Local Government Board have issued more reports similar in character to those mentioned in my 1907 report, and which are most valuable, viz. :

“Preservatives in Meat Foods packed in cans and glass.”

“Tin in Tinned Foods ”

“Facing of Rice.”

“Use of Formaldehyde in Preservation of Meat.”

“Use of Preservatives in Cream.”

In connection with Tinned goods, it is urged that the place and date of preparation should be stated on the label, and that any two years old, or containing two grains of tin per pound, should be regarded with grave suspicion.

The Royal Commission appointed in February, 1908, to inquire into whisky and other potable spirits resumed its sittings in March after an interval of 7 months. Having expressed its conclusions on whisky it is now dealing with brandy.

The Fertilisers and Feeding Stuffs Act, 1906.

This Act which should have come into operation on January 1st, 1907, was taken up in Halifax during the last quarter of 1909, and four samples were subjected to examination, viz., two Fertilizers and two Feeding Stuffs.

The Act has been passed to operate against the gross adulteration which has been so common amongst these articles. Cattle foods have been frequently found containing large quantities of wood dust, plaster of paris,

chalk, etc., and Fertilisers filled to any amount with worthless earths and ashes. The ordinary buyers were quite unable to discriminate between the good and the bad, and it was high time some means were adopted to protect them against fraud. By the provisions of the Act, an invoice or label must be given with every sale or package of Fertiliser or Feeding Stuff, such invoice or label stating the strength of the article in its essential ingredients, and having the force of a warranty. The buyer is now able to compare quality and prices, and become familiar with what should be standards. Deviation from the strengths stated on the invoice or label renders the seller liable on conviction to a fine not exceeding £20 for a first offence, and not exceeding £50 for any succeeding offence.

In the case of a Fertiliser, the percentages it contains of nitrogen, potash, soluble and insoluble phosphates must be stated, and in the case of a Feeding Stuff, the percentage of oil and albuminoids. Moreover the offering for sale of such articles implies on the seller's part that they are suitable for the respective purposes, wholesome, and in no way injurious.

The Act specifies its use of the word "cattle" (in reference to Feeding Stuffs) to include "bulls, cows, oxen, heifers, calves, sheep, goats, swine, and horses." I have obtained from the Board of Agriculture and Fisheries the opinion that the term does not include dogs, which is an omission that should be rectified; also that the term "poultry" includes ducks and geese, but not caged birds. This also requires amending. Many foods are sold for dogs and caged birds which need examination.

Many authorities are issuing leaflets to farmers and agriculturists explaining the advantages obtainable under the Act, and as the full cost of analysis is rather too heavy for a small buyer to bear—and it is chiefly the small buyer who is victimised—offering to bear the chief cost themselves, the farmer paying only a nominal fee. This arrangement is but little different from the common practice under the Food and Drugs Act, where a purchaser, thinking himself defrauded, brings a sample of the article to the Health Department for analysis and report thereon. It is to be hoped that Halifax will be one of these authorities.

The Board of Agriculture state that it is their wish that official samplers should be authorised to obtain on their own initiative, samples of articles which they think should be analysed, and should not be limited to taking samples when a purchaser requests, and that to detect fraud in the district he should have authority to take a considerable number free of cost to purchasers and without notice to seller.

The Act has already had the effect of shewing that one of the most advertised Fertilisers is one of the weakest.

As regards the four samples analysed there were small deficiencies and omissions detected which should be rectified in future.

COUNTY BOROUGH OF HALIFAX.

THE
Sanitary Inspector's Report

FOR THE
YEAR ENDED 31st DECEMBER, 1909.

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

GENTLEMEN,

I have the honour and pleasure of laying before you for your consideration my Thirty-fifth Annual Report on the operations of the Health Department for the year ended December 31st, 1909.

TOWN HALL, HALIFAX,

May, 1910.

Removal of Nuisances.

The following table shows the nature of nuisances registered, and work carried out after mere verbal notice.

Nature of Nuisances	Number Registered.
Defective Sink Drains	254
" " Pipes	61
" " Syphon Traps	60
" Basement Drains	91
" Yard Drains	38
" Urinal Drains	10
" W.C. Drains	95
" Area Drains	32
" Private Street Drains	2
Made-up Sink Pipes	124
" Sink Stones	12
" Bath Pipes	4
" Lavatory Pipes	6
" Basement Drains	45
" Water Closets	23
" Yard Drains	46
" Urinal Drains	4
" Gullies	87
" Private Street Drains	3
" Intercepting Traps	15
Untrapped Basement Drains	6
" Sink Drains	96
" Area Drains	24
" Yard Drains	15
" Urinal Drains	2

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Untrapped Bath Pipes	2
„ Lavatory Pipes	9
Drains not efficiently Trapped :	
Sink Drains	34
Cellar Drains	11
Yard Drains	8
Area Drains	1
Sink Drains and Pipes requiring Disconnecting ...	224
Defective Fall-pipe Drains	48
„ Fall-pipes	112
„ Spouting	116
„ Roofing	15
Broken Pot and Iron Traps	40
Insufficient Supply of Water to Closets ...	25
Nuisances from Water in Cellar	77
„ Want of Drains	21
„ Smoke	3
„ Swine	13
„ Poultry	7
„ Rabbits	2
Houses Overcrowded	10
„ requiring Limewashing	52
Accumulations of Offensive Matter	59
Privies requiring Limewashing	66
Dirty Passages	31
Insufficient Privy Accommodation	37
Offensive Ashpits and Privies	57
„ Goux Closets	210

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Offensive Ash Tubs	449
Doors off Closets	17
,, Ashes Tub Places	23
Dilapidated Closets	62
Ashpits requiring Re-construction	41
Miscellaneous	77
Convert Goux Closets to Water Closets	30
COWSHEDS.	
Defective Drains	10
Want of Light, Room, Air Space, and Ventilation ..	22
Dilapidated Cowsheds and Floors	17
Cesspools requiring Emptying and Defective	11
Offensive Middensteads	8
Cowsheds requiring Limewashing	26
FACTORIES AND WORKSHOPS.	
Defective Drains	4
Insufficient Privy Accommodation	3
Defective and Made-up Water Closets	8
Insufficient Ventilation and Light to W.C.'s	8
Goux Closets converted to Water Closets	4
Dirty Closets	7
Rooms insufficiently Ventilated	1
,, requiring Limewashing	7
Defective Fall Pipes	2
Accumulations	1
Offensive Smoke	7

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
BAKEHOUSES.	
Bakehouses to Limewash	29
Insufficient Ventilation	1
Dirty Sink	1
,, Closets	3
Drain Opening inside Bakehouse	1
Sink Pipes to disconnect	2
Dirty Floor	1
Made-up Drain	1
Defective Sink Drains	2
,, Fall Pipes	1
,, Roof	1

At the close of the year there remained on the books 147 complaints to be dealt with.

Night Scavenging.

The following table shows the number of ashpits cleansed during the year, and the number of loads of manure and rubbish collected.

Month.	Number of Ashpits emptied	Loads of Soil	Loads of Rubbish	Total Number of Loads
January	328	136	84	220
February	351	234	36	270
March	235	109	42	151
April	347	198	75	273
May	316	175	55	230
June	294	132	65	197
July	256	125	35	160
August	228	125	33	158
September	354	193	56	249
October	443	194	79	273
November	238	139	50	189
December	158	78	30	108
TOTAL	3548	1838	640	2478

The total number of ashpits cleansed during the year was 3548, as against 4252 in the previous year.

15 Ashpits with privies have been altered to the Goux system, and ashes tubs supplied in the place of 3 dry Ashpits. The above includes Ovenden, Illingworth, Copley and Northowram Wards.

TABLE SHOWING THE NUMBER OF ASHPITS
WITHIN THE BOROUGH, DECEMBER 31st, 1909.

District	Wards	Ashpits with Privies	Dry Ashpits	Total
1	Akroydon and North ...	38	46	84
2	Ovenden and Illingworth...	253	26	279
3	Central and East... ..	25	80	105
4	West and South	8	174	182
5	Skircoat and Southowram	24	18	42
6	Pellon and Kingston ...	5	32	37
7	Copley	95	35	130
8	Warley	217	21	238
9	Northowram	144	...	144
	Total	809	432	1241

Goux Scavenging.

The following table shows the number of closet tubs and loads of ashes collected during the year.

Month.	Number of Closet Tubs Collected.	Loads of Ashes Collected.
January	51348	2064
February	48149	1665
March	53850	1954
April	50749	1945
May	47839	1715
June	53460	1759
July	54438	1612
August	52143	1424
September	52190	1614
October	52154	1754
November	53297	1867
December	51640	1821
TOTAL	621257	21194

The above represents 28238 loads of night soil as against 29577, and 20746 loads of ashes respectively for the preceding year.

The number of additional closets registered is 63, being an increase of 8 on the number registered during the year 1908.

The following table shows the number of Goux closet tubs registered since the commencement of the Goux system.

Year	Number of Closet Tubs	Number Registered during each year
1871	1102	1109 in 15 months
1872	1895	786
1873	2440	545
1874	2820	380
1875	3088	268
1876	3316	228
1877	3769	453
1878	4277	508
1879	5858	576
1880	5071	218
1881	5552	481
1882	6057	505
1883	6506	449
1884	7405	899
1885	8049	644
1886	8727	678
1887	9327	600
1888	9831	504
1889	10446	615
1890	11098	652
1891	11644	546
1892	12068	419
1893	13047	984
1894	13450	403
1895	13797	347
1896	14145	348
1897	14444	299
1898	14881	437
¹⁴⁵ Tubs returned in connection with property pulled down		
1899	15287	551
1900	15974	687
1901	16397	461
³⁸ Tubs returned		
1902	16808	411
1903	17164	356
1904	17428	264
1905	17662	234
1906	17823	161
1907	17920	97
1908	17975	55
1909	18038	63

During the year 5 closets have been erected in connection with new property, and 58 have been altered from the old system.

Streets Scavenging.

Table showing number of lineal yards and miles swept during the year in each ward.

Wards.	Number of Lineal Yards Swept.	Miles.	Yards.
East	3063628	1740	1228
Central	1066285	605	1485
South	1404795	798	315
West	783525	445	325
North	783996	445	796
Akroydon	406360	230	1560
Southowram	593363	337	243
Skircoat	312314	177	794
Kingston	231599	131	1039
Pellon	339468	192	1548
Ovenden & Illingworth Part swept by Halifax Gang	938507	533	427
TOTAL	9923840	5638	960

Streets Scavenging.

The subjoined table gives at a glance the work done in this department during 1909.

Number of Streets swept	....	....	39931
Lineal yards swept	....	....	9923840
Square yards swept	....	....	78227313
Number of Streets watered	....	....	15690
Loads of Water used for that purpose	....	....	20981
Loads of Sweepings gathered	....	....	8966
Loads of Snow removed from the streets	....	....	18757
Number of Gullies emptied	....	....	211151
Garbage removed from Market Hall	....	....	1140
Loads of Ashes and Sand put on streets	....	....	344

During the year 150 loads of garbage have been removed from fishmongers, fried fish shops, and green-grocers.

Birks Hall Tips.

Table showing the number of loads of ashes and rubbish tipped during the year.

Name.			Number of Loads.
Goux Department	....	....	19315
Highways Committee	....	....	400
Private Firms	....	....	1920
Waterworks	....	....	80
Total			21715

ANALYSIS OF REFUSE COLLECTED IN THE
BOROUGH OF HALIFAX DURING THE YEAR 1909.

		No. of Loads.
From Wet and Dry Ashpits	....	2478
From Ashes Tubs	....	21194
From Goux Closet Tubs	....	28238
Sweepings gathered from the Streets, and Refuse from Gullies	....	8966
Garbage removed from Market Hall	....	1140
Horse Droppings from Streets	....	260
Garbage from Fried Fish Shops	....	150
Total Number of Loads	....	62426

Smoke Observations.

The following table shows the number of Smoke Observations taken during the year, and the average number of minutes of dense smoke emitted.

	Number of Observations taken.	Average Number of minutes of dense smoke emitted.
Number of Observations taken	544	
Number showing moderate Smoke or <i>nil</i>	367	
Number of Observations taken for a period of 60 minutes, each showing Dense Smoke	177	
Number of Observations show- ing Dense Smoke above the maximum adopted by the Committee	11	
Average number of minutes of Dense Smoke emitted from Chimneys		1'0

The number of Observations taken during the year is 544. 11 of these showed dense smoke above the maximum allowed by your Committee.

The average number of minutes of dense smoke emitted from the chimneys is 1'0.

TABLE SHOWING THE NUMBER OF INFECTED HOUSES VISITED BY THE DISTRICT INSPECTORS.

WARDS.	Enteric Fever.	Scarlet Fever.	Puerperal Fever.	Diphtheria	Erysipelas.
Ovenden	1	40		8	2
Akroydon	3	79		26	7
North	4	96		8	1
Central	3	33		5	4
West	5	45		10	
South	6	33		5	1
East	2	52	2	6	
Southowram	2	37	1	16	7
Skircoat	12	30		15	10
Pellon	1	32		9	1
Kingston		42	1	10	2
Illingworth	4	5		6	7
Northowram	1	8			2
Warley		3		3	1
Copley		10		1	
TOTAL	44	545	4	128	45

TABLE SHOWING THE NUMBER OF INFECTIOUS DISEASES REMOVED TO THE BOROUGH FEVER HOSPITAL, BY THE DISTRICT INSPECTORS DURING THE YEAR 1909.

	Typhoid Fever.	Scarlet Fever	Diph- theria.	Total.
Ovenden		23	2	25
Akroydon	2	38	5	45
North	2	75		77
Central	3	21	2	26
West	2	25	2	29
South	2	16		18
East		35	1	36
Southowram		30	5	35
Skircoat	3	7	3	13
Pellon		19	1	20
Kingston		18	1	19
Illingworth		4	2	6
Warley		2		2
Northowram	1	7		8
Copley		3	1	4
Out of Borough	6	17	2	25
TOTAL	21	340	27	388

Disinfection.

THE FOLLOWING TABLE SHOWS THE NUMBER AND DESCRIPTION OF THE ARTICLES DISINFECTED AT THE DISINFECTING HOUSE, STONEY ROYD, DURING THE YEAR.

Description of Articles.	Number of Articles.
Beds	871
Mattresses	595
Pillows	1431
Sheets	1285
Bolsters	838
Blankets	1944
Counterpanes	684
Carpets and Rugs	24
Drawers and Hose	971
Flannel Vests, Dresses and Petticoats	1338
Mats and Sundries	2331
Dressing Gowns and Shawls	449
Coats	304
Cushions	11
Trousers	172
Waistcoats	156
Miscellaneous	39
TOTAL	13443

Canal Boats.

During the year 1909, 49 inspections of Canal Boats were made, as compared with 45 in the preceding year.

These inspections are made periodically by the Chief Sanitary Inspector.

In all cases where females were on board, proper provision was made for the separation of the sexes. Of the 49 boats inspected there were 4 with women and children on board, and 6 with women only.

The generally satisfactory condition of the boats has been well maintained, and all of them were found to conform with the Acts and Regulations. There has not been a single case of sickness on board during the year.

The Captains have been obliging, and at all times gave full information required.

The boats plying in this district chiefly belong to one company, and are registered either at Goole, Mirfield, or Leeds, consequently no arrangements have been made for registration.

Number of Boats Inspected.	Number Registered to carry.	Number of Males on board.	Number of Females on board.	Total.
49	347	99	11	110

AGES OF CHILDREN FOUND ON CANAL BOATS.

	Years.				Total.
	1	4	5	9	
Number	4	1	2	1	8

TABLE SHOWING PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACT.

Date	Defendant's Name.	Nature of Offence.	Decision of Court.			Remarks.
			Penalties.	Costs	Total.	
1909			£ s. d.	£ s. d.	£ s. d.	
Aug. 24th ...	Halifax Industrial Society, Northgate.	Cream of Tartar adulterated with lead.	...	0 5 6	0 5 6	Dismissed upon payment of costs.
Sept. 7th ...	Elizabeth Kitson, Lower Grove Farm, Siddal.	Selling Milk adulterated with 10.7 per cent of added water.	2 0 0	0 5 6	2 5 6	

The preceding table shows 2 prosecutions as against 16 in the previous year.

The total fines, including costs, amount to £2 11s. as against £25 19s. 6d.

Vans and Tents.

They were regularly visited while they were in the Borough. No Cases of Infectious diseases, overcrowding or other nuisance were found.

During the year 2461 houses have been inspected, and it is gratifying to know that the percentage of defects discovered was not large. Particular attention has been paid by the Inspectors in the way of supervising the carrying out of alterations where defects were found, and in no case has a recurrence of the nuisance taken place after the work has been completed.

In looking over the table of nuisances, it will be seen that 7746 visits were made during the time alterations were in progress.

With reference to cleanliness and overcrowding 390 visits were paid, and in this connection it was generally found that two and sometimes more families were living together and saving or spending the rent of another house. In many cases where notices have been served, we have found the same families in some other part of the Borough living under similar conditions. They have made a change certainly, but the change has not reduced the number of overcrowded houses.

There is a class of people who live this migratory kind of life, moving about from one house to another, and never settling down to a home of their own. The reason is not easy to find. In some cases it may be due to extreme poverty, or, as stated above, it may be due to a disinclination to settle down in one place for any length of time.

During the short period of the summer months, which is the only time available, a considerable amount of work has been done in the way of altering cowsheds to conform with the requirements of our Regulations, but much still remains to be done in this connection.

In dealing with old buildings there are many difficulties to contend with, and when the best has been done we cannot say in many cases that it is altogether satisfactory, although a great improvement has been effected.

Street Refuse.

In concluding this report I beg to draw the attention of the Committee to the condition of our streets which are often in a disgraceful state in consequence of the large quantity of paper strewn upon them. News boys, bill distributors, fried fish shops, draymen and others all contribute towards bringing about this condition of things, in fact many people seem to think the streets are a sort of public tip, and if they have anything to dispose of, the most convenient way of getting rid of it is to throw it on the street, where it will be removed by the scavengers. Only a few days ago I saw two men distributing bills at one of the schools (at 12 o'clock noon) to the children, every one of which was thrown on

the street as they went along, not one being taken home, as was intended by the men distributing them. The condition of the roads in less than five minutes was something to be remembered. This is a very common occurrence and ought to be stopped. I understand that an attempt is being made in Bradford to prevent distributing bills in the street.

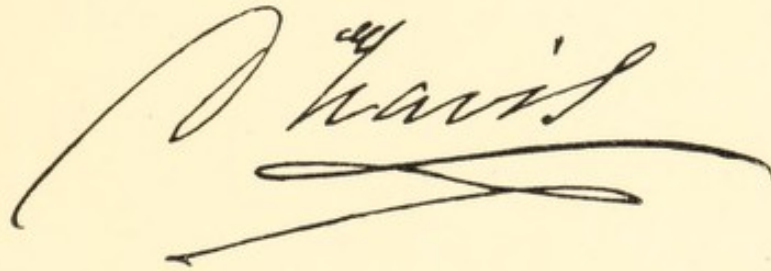
Two years ago the question of placing wire baskets at different points in the centre of the town came before your committee, and samples were procured, but the prices were considered excessive and the matter was allowed to drop. Would it not be wise after all to try a few, say eight or ten (not very expensive ones), to be placed in the most busy streets in the centre of the town? In a few weeks time we should find out whether the public appreciated the efforts of your Committee to keep the streets clean and as free from paper, orange peel, etc. as possible. This adds very much to their dirty appearance, and could be avoided if the public would assist by putting this refuse in the baskets.

Streets Scavenging.

The work in this department is gradually increasing year by year, but for a number of years no increase has been made in the staff, consequently some parts of the Borough have not received the attention which is due, especially some of the main roads leading into the town, such as Boothtown, Haley Hill, Gibbet Street and King Cross Road. All these roads ought to be swept daily instead of three times a week, as the amount of traffic over them is considerable. This is a matter which should have the attention of your Committee in the near future.

I desire again to acknowledge the valuable assistance rendered me by the District Inspectors and the Chief Clerk (Mr. J. W. Jackson) and his staff during the year.

I am, your obedient Servant,

A handwritten signature in cursive script, appearing to read "P. Davis". The signature is written in dark ink on a light-colored paper. It features a large, sweeping initial "P" on the left, followed by the name "Davis" in a fluid, connected script. The signature ends with a long, horizontal flourish that extends to the right and then loops back under the name.

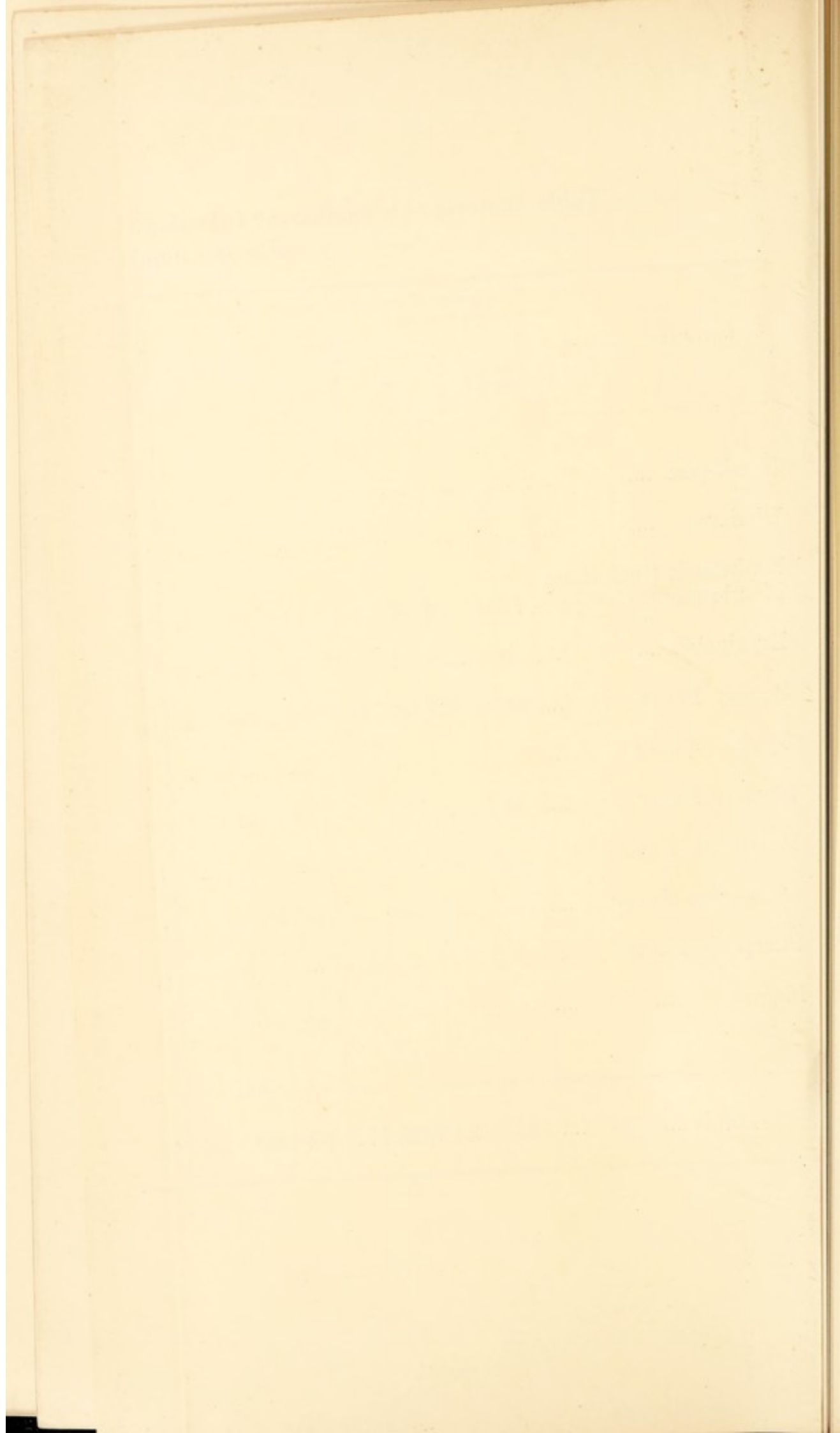
Chief Sanitary Inspector and
Scavenging Superintendent.

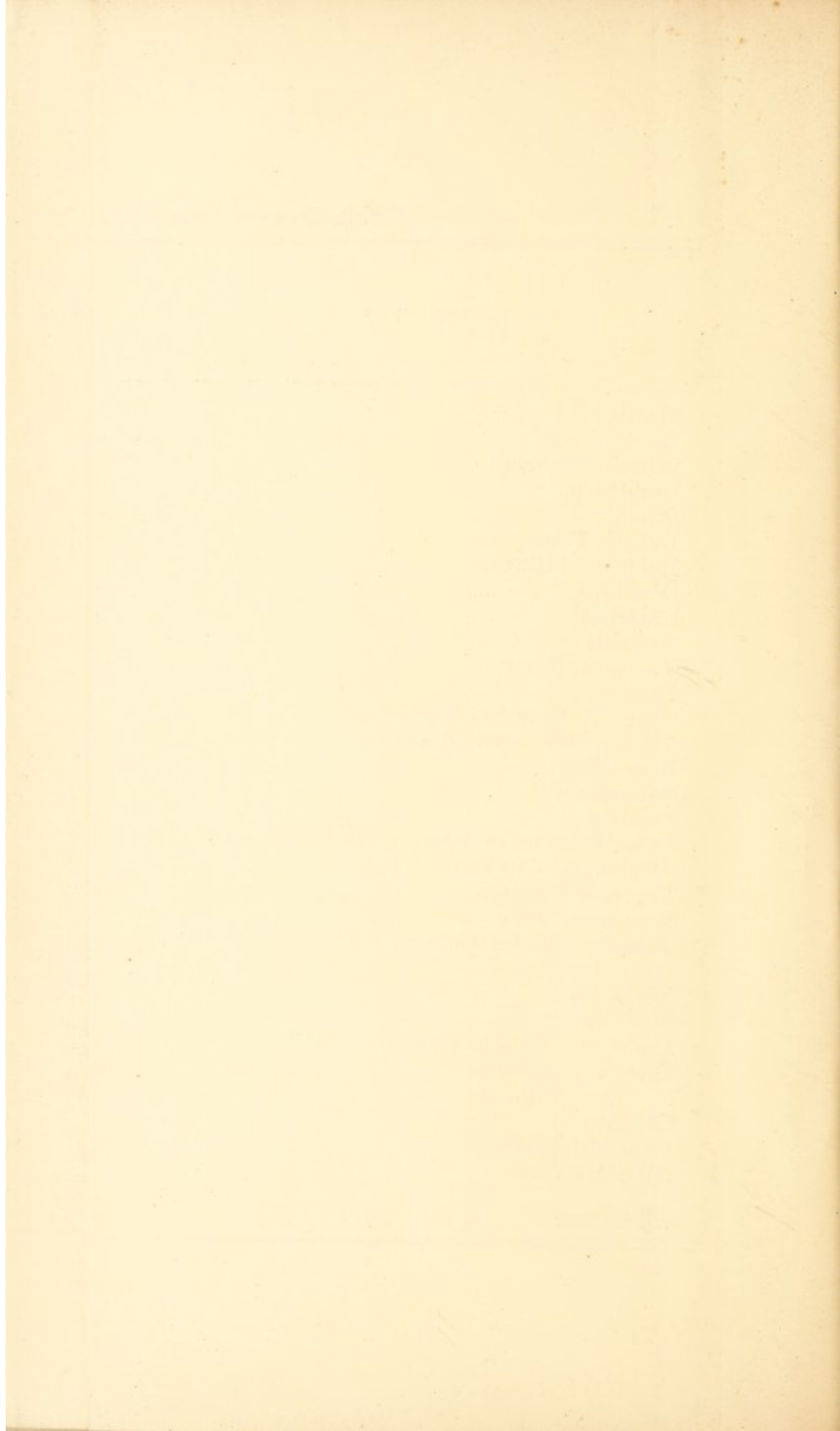
APPENDIX.

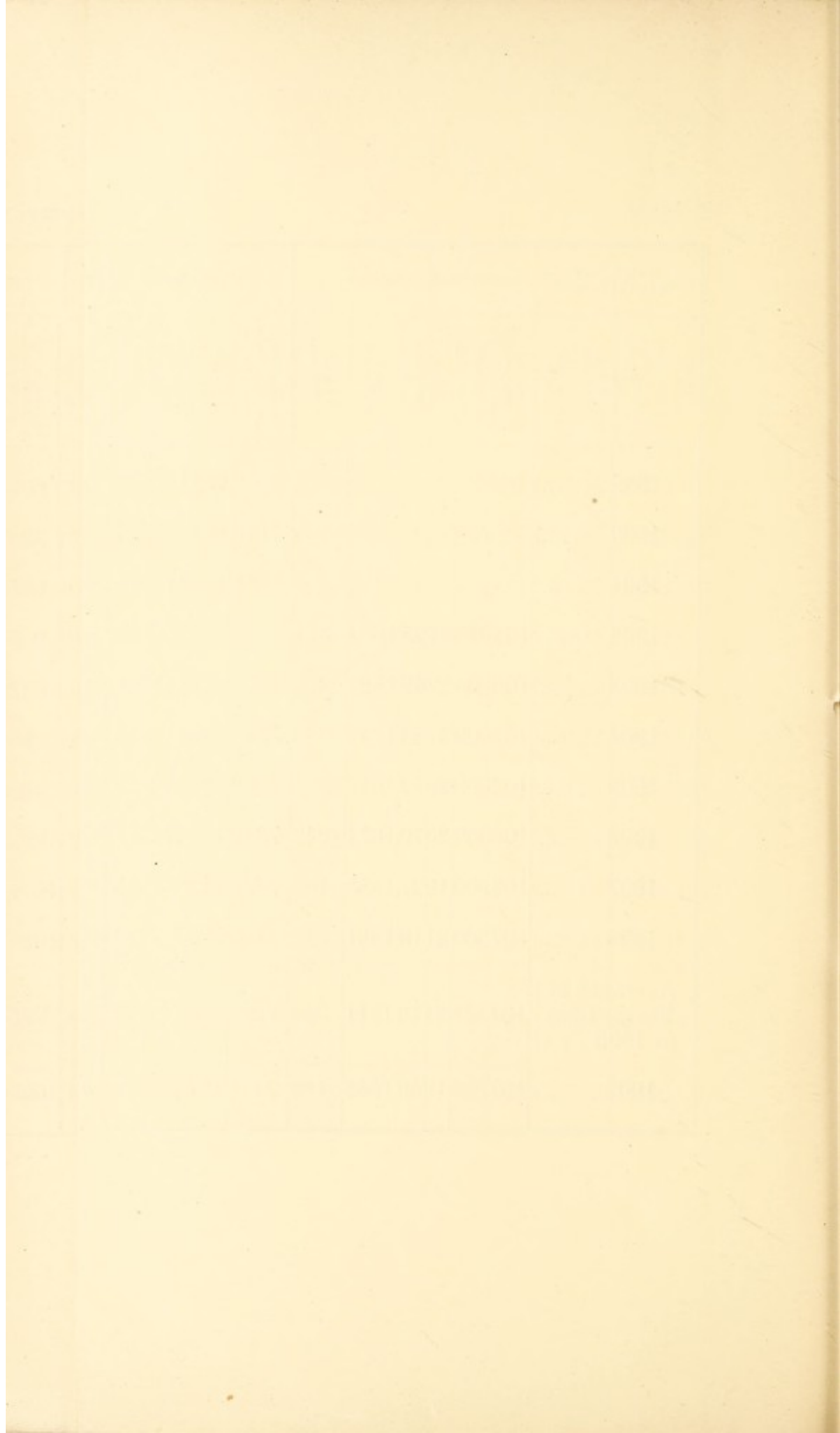
VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1909 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.				TOTAL DEATHS REGISTERED IN THE DISTRICT.						DEATHS OF NON-RESIDENTS REGISTERED IN PUBLIC INSTITUTIONS IN THE DISTRICT.			DEATHS OF RESIDENTS REGISTERED IN PUBLIC INSTITUTIONS BEYOND THE DISTRICT.		NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number	Rate *	Under 1 Year of Age		At all Ages		Total Deaths in Public Institutions in the District	Deaths of Non-Residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Number.	Rate *	Number.	Rate *				
				Number	Rate per 1,000 Births Registered	Number	Rate *											
1	2	3	4	5	6	7	8	9	10	11	12	13						
1899	95,767	2239	23.3	363	162	1806	18.8	258	34	30	1802	18.8						
1900	98,910	2316	23.4	314	135	1874	18.9	277	42	19	1851	18.7						
1901	105,120	2351	22.3	301	128	1726	16.4	294	38	21	1709	16.2						
1902	105,950	2225	21.0	324	145	1645	15.5	282	36	25	1634	15.4						
1903	106,800	2248	21.0	279	124	1610	15.0	308	54	36	1592	14.9						
1904	107,000	2154	20.1	282	130	1662	15.5	303	52	33	1643	15.3						
1905	107,500	2072	19.2	271	130	1651	15.3	319	75	42	1618	15.0						
1906	108,000	2070	19.1	242	116	1741	16.1	420	107	40	1674	15.5						
1907	108,500	1927	17.7	195	102	1655	15.2	377	145	48	1558	14.3						
1908	107,500	2118	19.7	216	101	1664	15.4	426	139	36	1561	14.5						
Averages for years 1899-1908	105,104	2172	20.6	278	127	1703	16.2	326	72	33	1664	15.8						
1909	107,750	1840	17.0	183	99	1654	15.3	445	132	30	1552	14.4						

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated gross population.







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