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County Borough



of Halifax.

HEALTH DEPARTMENT.

Report

OF THE

MEDICAL OFFICER OF HEALTH,

TOGETHER WITH THE REPORTS OF THE

SANITARY INSPECTOR


AND

THE BOROUGH ANALYST,

FOR THE

53 Weeks ended January 2nd, 1897.

WHITLEY & BOOTH, PRINTERS, ETC., HALIFAX.



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Halifax:

WHITLEY & BOOTH, PRINTERS, ETC., CROWN STREET.

1897.

Staff of the Health Department.

Chief Sanitary Inspector.

DAVID TRAVIS.

Meat Inspector.

JOHN M. CARNIE.

Assistant Sanitary Inspectors.

JAMES ARCHBELL.

JOSEPH THOMPSON.

A. E. BOTTOMLEY.

J. E. FIRTH.

Gour Inspectors.

WILLIAM PARKER.

WALTER SEED.

Foreman Scavenger.

NATHAN GARSIDE.

Chief Clerk.

JOHN WM. JACKSON.

Assistant Clerks.

HARRY WILSON.

CHARLES CARLTON.

Matron of the Borough Hospital.

MISS ROBISON.

Disinfectors.

T. W. BOOTH.

Porter.

HENRY VICKERMAN.

Medical Officer of Health, and Superintendent
of the Infectious Diseases Hospital.

D. AINLEY, M.R.C.S., L.R.C.P., &c.

Members of the Health Committee, 1896-97.

Mayor.

Mr. COUNCILLOR G. H. SMITH.

Chairman.

Mr. COUNCILLOR WEST-SYMES, M.D.

Vice-Chairman.

Mr. COUNCILLOR NAYLOR.

Mr. ALDERMAN COE, J.P.,	Mr. COUNCILLOR W. C. F. SMITH,
„ COUNCILLOR CROSSLAND, J.P.,	„ „ TAYLOR,
„ „ BALDWIN,	„ „ TYSON,
„ „ FARNELL,	„ „ WHITLEY, J.P.,
„ „ HEY,	„ „ WHITAKER, J.P.

The Committee meets every alternate Wednesday, at
5-0 p.m., at the Town Hall.

County Borough of Halifax.

Report of the Medical Officer of Health

FOR THE 53 WEEKS ENDED JAN. 2nd, 1897.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour to present you with my twenty-fourth Annual Report on the Health of the Borough.

Speaking of the year as a whole, it has been somewhat uneventful. We have neither had the extreme low temperature of 1895 nor the high temperature of some previous years, either of which considerably affect the death-rate. In other words, a green Christmas and a moderately wet summer, with a low temperature, are important factors in keeping down the death-rate. If it is otherwise, the aged chiefly fall victims from bronchitis, and in the other, infants succumb from disorders of the bowels.

VITAL STATISTICS.—SUMMARY.

Area of County Borough ...	...	...	8,209 acres.
Rateable Value ...	...	...	£378,933.
Population in 1896 ...	...	...	94,775.
Do. 1891 Census ...	...	...	89,832.
Persons per acre, 1896 ...	...	...	11.54.
Average number of persons per house, 1891 Census ...	...	...	4.6.
Birth-rate, 1896 ...	...	...	24.4.
Do. average for previous ten years ...	...	...	25.7.
Death-rate, 1896 ..	...	...	17.4.
Do. average for previous ten years ...	...	...	19.58.
Do. for seven principal zymotic diseases ...	...	...	1.06.
Do. the mean, for ten years of zymotic diseases, 1887-96 ...	...	...	1.36.
Do. of Infants under one year of age per one thousand births ...	...	...	150.6.
Illegitimate births ...	...	...	65.
Average age at death, 1896, Males ...	...	...	35.54 years.
Do. do. Females ...	...	...	38.48 years.
(Infants under one year reckoned one year.)			

Analysis of the Vital and Mortal Statistics of Thirty-three of the largest English Towns during the year 1896.

TOWNS.	Estimated Population middle of 1896.	Births	Deaths.	Annual Rate per 1,000 Living.			Deaths from Zymotic Diseases	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Fever.	Diarrhoea	Deaths of Children under 1 year of age to 1,000 Births.	Rate per cent. of Uncertified Deaths.
				Deaths.		Principal Zymotic Disease.										
				Births.	Deaths.											
33 Towns	10,846,971	339,115	208,534	18.9	30.7	18.9	2.86	25	7,839	2,406	4,202	6,245	2,073	8,760	167	1.5
32 Provincial Towns	6,425,016	203,319	125,023	19.1	31.1	19.1	2.67	16	4,142	1,464	1,519	3,308	1,464	5,537	172	2.1
London ...	4,421,955	135,796	83,511	18.6	30.2	18.6	3.14	9	3,697	942	2,683	2,937	609	3,223	161	0.6
West Ham	261,297	8,658	4,268	16.1	32.6	16.1	3.00	4	117	55	187	158	61	215	165	3.7
Croydon ..	118,006	3,009	1,706	14.2	25.1	14.2	1.94	...	67	5	29	62	18	52	150	...
Brighton	120,499	3,022	1,975	16.1	24.7	16.1	1.63	...	55	6	19	32	14	73	135	1.7
Portsmouth	178,639	5,006	3,009	16.6	27.6	16.6	2.11	...	125	20	20	59	27	132	154	0.7
Plymouth	90,276	2,643	1,796	19.6	28.8	19.6	2.30	...	95	3	13	17	6	76	178	0.5
Bristol ...	230,623	6,465	3,961	16.9	27.6	16.9	1.90	5	143	59	37	61	18	121	142	1.2
Cardiff ...	162,690	5,591	2,784	16.8	33.8	16.8	2.27	3	38	28	62	105	13	127	165	1.3
Swansea...	98,645	3,061	1,689	16.8	30.5	16.8	1.18	2	6	4	10	56	15	25	161	1.1
Wolverhampton	86,530	3,023	1,755	20.0	34.4	20.0	3.11	...	9	21	53	31	36	124	184	1.3
Birmingham	501,241	16,603	10,600	20.8	32.6	20.8	3.57	...	307	148	270	378	107	613	197	5.0
Norwich..	108,630	3,400	1,919	17.4	30.8	17.4	2.33	...	117	4	24	9	21	82	164	1.6
Leicester	198,659	6,212	3,376	16.7	30.8	16.7	2.97	...	121	50	64	51	40	273	187	2.7
Nottingham	229,775	6,758	4,087	17.5	28.9	17.5	2.47	...	205	26	13	90	79	162	168	1.4
Derby ...	101,770	2,901	1,619	15.7	28.0	15.7	1.91	...	34	11	10	54	21	67	151	0.4
Birkenhead	109,343	3,527	2,133	19.2	31.7	19.2	2.97	...	115	32	22	59	26	76	177	1.0
Liverpool	632,512	22,416	14,617	22.7	34.9	22.7	3.01	...	306	227	157	294	206	748	173	3.4
Bolton ...	120,380	3,831	2,536	20.7	31.3	20.7	2.80	...	6	40	14	102	48	134	168	0.3
Manchester	529,561	17,787	12,184	22.6	33.0	22.6	3.42	...	570	197	81	360	122	504	176	1.3
Salford ...	210,707	7,480	4,848	22.6	34.9	22.6	4.10	...	202	104	49	189	71	264	199	2.1
Oldham ...	143,442	3,971	2,955	20.3	27.2	20.3	2.91	...	167	56	35	53	23	91	184	0.3
Burnley ...	102,805	3,245	1,830	17.5	31.0	17.5	2.19	...	63	4	48	28	13	73	170	1.4
Blackburn	129,459	3,649	2,351	17.9	27.7	17.9	1.82	...	41	9	10	47	34	97	171	2.7
Preston ...	113,864	3,776	2,403	20.8	32.6	20.8	1.86	...	4	3	12	43	26	129	203	4.3
Huddersfield	100,463	2,096	1,682	16.5	20.5	16.5	1.60	...	28	19	21	55	13	27	166	2.5
Halifax ...	94,775	2,387	1,669	17.3	24.3	17.3	1.10	...	16	..	21	33	20	15	149	1.7
Bradford	220,809	5,939	3,840	10.5	25.5	10.5	1.58	1	107	24	17	104	28	88	143	0.8
Leeds ...	402,449	12,574	7,670	18.8	30.7	18.8	2.28	1	199	71	49	246	87	284	169	0.6
Sheffield	347,278	12,011	6,797	19.3	34.0	19.3	2.91	...	200	102	56	205	101	360	173	3.5
Hull	220,844	7,171	4,245	18.9	31.9	18.9	3.32	...	260	57	51	113	62	202	173	2.8
Sunderland	140,386	4,873	2,828	19.8	34.2	19.8	3.00	...	143	27	8	76	53	121	158	0.9
Gateshead	98,436	3,583	1,910	19.1	35.8	19.1	3.10	...	137	26	18	35	22	72	172	0.9
Newcastle-on-Tyne...	212,223	6,701	3,981	18.5	31.1	18.5	2.08	..	139	26	39	103	33	110	165	0.5

Population.—The Borough is divided into Twelve Wards, and the following are the Areas and Estimated Population of the Divisions in the middle of 1896

WARDS.				Acres.	Population.	Number of Persons to an Acre.
SOUTHOWRAM	...	...	...	777	7470	9·6
SKIRCOAT	...	...	...	513	7821	15·2
EAST	...	...	...	191	8590	44·9
SOUTH	...	...	...	296	8570	28·9
KINGSTON	...	...	...	238	7140	30·0
WEST	...	..	...	86	9629	111·9
PELLON	...	...	...	241	7760	32·1
CENTRAL	...	...	...	82	8875	108·2
NORTH	...	...	..	168	7830	46·6
NORTHOWRAM	...	...	...	582	6927	11·9
OVENDEN	...	...	...	531	6925	13·0
ILLINGWORTH	...	...	...	4504	7227	1·6
TOTAL				8209	94764	11·5

Births.—The number of births registered within the Borough during the 53 weeks ended Jan. 2nd, 1897, is 2,329, composed of 1,175 males and 1,154 females, giving a birth-rate of 24·5. This is an increase of 1·2 upon the rate of 1895, but 1·4 below the mean rate of the preceding ten years, 1886-95. See Table on page 20. 65 births are returned as illegitimate, against 73 and 51 in the two preceding years. This number is 2·8 of the total births, against 3·4, 3·6, 3·4, and 2·3 of the four previous years. The birth-rate reached its lowest point

in 1894, when it was 22·9. Whether the improvement of the last two years will continue it is difficult to forecast. It has been noted, however, that with cheap commodities and a prosperous trade, an impulse is given to the marriage-rate, and this is followed as a rule by an increase in the birth-rate.

In the 33 large towns dealt with in the Registrar General's Weekly Returns, the mean birth-rate in 1896 is 30·7 of the estimated population, and ranges from 20·5 in Huddersfield, 24·7 in Brighton, to 34·2 in Sunderland, 34·4 in Wolverhampton, 35·8 in Gateshead.

As the vaccination of infants is in the hands of the Board of Guardians, it is carried out according to the divisions of the Union, and as the Borough is not one of the exact divisions, I append the returns of the whole of the Union, from which will be seen that only 4·2 per cent. of the children born are successfully vaccinated.

DISTRICT.	Births.	Successfully Vaccinated.	Unsuscep- tible to Vaccination.	Died Un- vaccinated.
Brighouse ...	485	26	1	64
Elland ...	465	13	0	62
Halifax ...	1363	57	3	197
Luddenden ...	123	0	0	13
Northowram ...	612	14	0	102
Ovenden ...	323	9	0	35
Rastrick ...	289	18	0	35
Hipperholme ...	160	35	0	13
Southowram ...	277	1	0	35
Sowerby ...	484	29	2	49
Totals ...	4581	202	6	605

Royal Commission of Vaccination.—In connection with this subject, I may state that the Royal Commission which was appointed in May, 1889, to enquire into this question, issued their final Report in August of last year.

During the seven years they have been sitting the Commission have taken and weighed an enormous amount of evidence, with the result that the beneficial merits of efficient vaccination as a preventative of small-pox are emphatically vindicated; although certain amendments of the present law are shown to be necessary with the view of securing a more complete enforcement of vaccination and re-vaccination, and greater efficiency in the performance of the operations than at present, whilst at the same time relieving, as far as the public safety will allow, those who have genuine conscientious objections to the practice.

Deaths.—The deaths registered within the Borough in the 53 weeks ended January 2nd, 1897, numbered 1,667, comprising 863 males and 804 females. The totals for the three previous years being 1,591, 1,522 and 1,803 respectively. The death-rate for 1896 is equal to 16·5 per 1000 of the population, against 17·3, 16·3 and 19·3 respectively, in the three years 1893-95, and is 3·6 below the mean rate for the ten years 1886-95.

In the 33 large towns, dealt with by the Registrar-General in his weekly returns, the death-rate in 1896 equalled 18·9 per 1000 of the estimated population, and ranged from 14·2 in Croydon, 15·7 in Derby, and 16·1 in West Ham, to 22·6 in Manchester and Salford, and 22·7 in Liverpool.

Infant Mortality.—Of the 1,667 deaths in the Borough in 1896, 351 were of infants under one year of age, being a decrease of three on the previous year. Infant Mortality, measured by the proportion of deaths under one year to registered births, is equal to 150 per 1000, against 158 and 137 in the years 1894-5.

In the 33 large towns the rate of Infant Mortality in 1896 averaged 167 per 1000 births, and exceeded the rate in Halifax by 18. It will thus be seen that we compare favourably with other towns. The figures of the other Yorkshire County Boroughs are: Leeds 169, Bradford 143, Sheffield 173, Hull 173, and Huddersfield 166. See Table 1, page 20.

TABLE SHOWING NUMBER OF BIRTHS AND BIRTH-RATES IN EACH QUARTER OF 1896.

1896.	Males.	Females.	Total.	Birth rate per 1000 living.
1st Quarter ...	267	307	574	24·2
2nd „ ...	292	289	581	24·5
3rd „ ...	292	264	556	23·4
4th „ ...	324	294	618	26·0

Mortality at Groups of Ages.—The 1,667 deaths in Halifax last year included 524 of children under five years or 30·7 per cent. of the total deaths; between the ages of 5 and 15 years 52 deaths occurred, or 3·1 per cent.; between 15 and 25 years 74 deaths took place, or 4·4 per cent.; 499 between 25 and 60 years, or 29·9 per cent.; and at 60 years of age and upwards, 518, or 30·0 per cent.

In Table 2 are given the rates of Mortality that prevailed in 1896 among the persons estimated to be living in each of the above-mentioned age periods as shown by the Census of 1891. In the same Table are inserted similar rates of Mortality in previous years for comparison. The death-rate of children under five years of age was 62·0, 50·7, and 56·5 per 1000 living at those ages in the years 1893-5, and 55·9 in the year under review, which is only 0·5 above the mean of the decade 1886-95. The rate of Mortality at the next age period 5-15 which was 2·6 and 2·1 in the two previous years fell to 1·8, between the ages 15-25 the rate is 4·4 as against 4·8 and 5·8 in 1894-5. Among persons aged 25-60 years the rate is 15·6 against 14·5 and 17·3 in the two preceding years. Among persons aged upwards of 60 years the rate of Mortality is equal to 85·0 per 1000 living at those ages, the mean for the last decennium being 87·2.

Causes of Death: Zymotic Diseases.—The 1,667 deaths in Halifax during 1896 included 100 which were referred to the principal zymotic cases, against 122, 127, and 157 in the three preceding years. These 100 deaths are equal to 6·0 per cent. of the total deaths, and to an annual rate of 1·5 per 1000 of the population, against 1·7, 0·9, and 1·3 in the years 1893-5. In the ten years 1886-95 the mean zymotic death-rate in Halifax was 1·4. It is a source of gratification to find that Halifax among the 33 large towns of England and Wales has the lowest zymotic death-rate for 1896.

Small - Pox.—The year under notice has been entirely exempt from small-pox, but from the almost utter neglect of vaccination on the part of the Board of Guardians, I am afraid if the disease gets a footing in the midst of a practically unvaccinated community, it

will give an object lesson on a par with Gloucester, which will be neither advantageous nor creditable to our town. In May of last year your Committee directed a letter to be sent to the Board of Guardians calling their attention to the subject of the neglect of vaccination, which was received and deferred for six months—practically ignored. It is one of the grosest anomalies of Local Government that the Sanitary Authority of a town should be called upon to pay in some cases thousands of pounds for the neglect of another elected body. The remedy is obvious. If the Municipal Authority have to pay the piper, in fairness they ought to call the tune.

Measles.—It is not usual to have two epidemics of measles in one year, but last year had that honour. In the month of May the disease was very prevalent, so much so that the School Board closed two of their largest schools. In October there was a very extensive recrudescence of the malady. On both occasions the districts most invaded had the special attention of the Sanitary Inspector, who also delivered large numbers of bills, giving detailed instructions for the general management of those attacked. These measures have had a very beneficial effect, for the deaths only numbered 15 out of a great many hundreds attacked. The subject of the notification of measles has been taken up during the year at the urgent request of both the Chairman and myself. The arguments in the Report of Dr. Theodore Thompson on the subject to the Local Government Board have been used both for and against its adoption. Other business of pressing import having very fully occupied the attention of the Committee for some time the subject of the notification of measles has been allowed to fall into abeyance for the present. The deaths for

the four preceding years are 64, 5, 32, and 9. The average for the ten years 1886-95 is 35.3.

Scarlet Fever.—During the year under notice 44 cases of scarlet fever have been notified to the Health Department, which is the lowest number on record, the four previous years being 256, 150, 114 and 52 respectively. The case mortality in 1894 was 4 in 114, in 1895, 6 in 52, but in 1896 not a single death was registered. This is exceedingly gratifying, and no doubt points to the mildness of the attacks which we now meet with. Whether this is due to the want of insanitary pabulum, or to a worn-out condition of infective material is difficult to say. See Tables B and 8.

Diphtheria.—During the year 37 cases of this complaint have been notified, against 29 and 43 in the two preceding years. 16 deaths have been registered, equal to a case mortality of 43.2 per cent. Respecting the sanitary surroundings of these cases see page 13.

Whooping Cough.—33 deaths were recorded of this disease in 1896, against 9, 32, 21, and 24 in the four preceding years. In the month of May this disease was very prevalent along with measles, and, no doubt, the coincidence increased the mortality. The mean of the ten years 1885-96 is 21.8.

Fever.—This term includes typhus, enteric, simple continued and ill-defined forms of fever, to which 22 deaths are referred against 16 in the previous year and 5 and 12 in 1893-4 respectively. The average for the last ten years is 13.2. The percentage of deaths to notified cases is 20.5 against 26.3, 17.4, and 9.6 respectively, in the three preceding years.

Diarrhœa, including Dysentery, caused 14 deaths during 1896 against 53, 38, and 4 in the three preceding

years respectively. The mean for the ten years 1886-95 is 20·8. No doubt the decrease in the number of deaths from bowel disorders in 1896 is due largely to the circumstance, that the mean temperature of the summer quarter never exceeded 60 degrees Fah., which was registered in the last week in July, and continuously fell through the months of August and September.

TABLE SHOWING THE SANITARY CONDITIONS AND PROBABLE CAUSES OF THE NOTIFIED CASES OF THREE PRINCIPAL ZYMOTIC DISEASES.

DISEASES.	Number of Cases notified.	Drainage		Ventilation		Old Midden.	Goux Closets.	Water Closets.	Probable or Assigned Cause.				
		Good	Bad	Good	Bad				From a Cold.	From a previous Case in the same House or School.	From Defective Drains.	Contracted from House or Workshop Visiting.	No Trace.
Scarlet Fever ... Deaths, 0	50	44	6	50	...	5	32	3	1	6	4	10	29
Typhoid Fever ... Deaths, 22	108	82	26	108	...	2	90	7	12	8	22	7	59
Diphtheria ... Deaths, 16	39	31	8	39	...	2	31	1	2	2	9	...	26
Total ...	197	157	40	197	...	9	153	11	15	16	35	17	114
Total Deaths, 38													

Taking the old middens at 712, the w.c's. at 4,300, and the Goux (pail) closets at 15,000, the percentage of cases to one or other will be as follows:—Old Middens, 1·12; w.c's., 0·25; Goux closets, 1·02. In 1895 the figures were, old middens, 1·5; w.c's., 0·38; Goux closets, 0·74 respectively.

Respiratory Diseases.—Under this heading are included bronchitis, pneumonia, and pleurisy, which together total 392 deaths, being a decrease of 4 on the year 1895 ; of this number 138 are under five years of age, and 254 over that period. The totals for the four preceding years were 490, 321, 297 and 396 respectively.

Phthisis or Pulmonary Consumption caused 161 deaths, against 134, 135, 141 and 185 in the preceding 4 years, 13 of these occurred under five years of age, and 148 of persons upwards. Among the other causes of death in 1896 one each were referred to rheumatic fever and erysipelas, and 139 to heart diseases, this latter disease shows a decline on the previous year of 48 deaths, the numbers for the three preceding years being 128, 163 and 185 respectively.

The deaths referred to different forms of violence within the Borough are 42, against 45, 39, 39 and 38 in the years 1892-5. These 42 deaths are equal to 2·5 per cent. of the total deaths from all causes, and to a rate of 0·44 per 1000 of the population. For further details see Table 4.

During the year 1896, 88 deaths were registered on the authority of the Coroner's certificate being inquest cases. These are equal to 5·2 per cent. of the total deaths against 5·1 and 5·3 in the preceding two years.

The causes of 29 deaths in Halifax last year were not certified by a registered Medical Practitioner or by the Borough Coroner. The proportion of uncertified deaths is equal to 1·7 per cent. of the total deaths, against 4·3, 4·5, and 2·0 in the preceding three years. 1896 shows a marked improvement on previous years, and is now below the average of other towns.

Influenza.—This infectious disease is evidently come to stay, although in a less fatal form than in previous years. During 1896 ten deaths are registered from this cause, against 30, 19, 15, 22, and 37 in the five preceding years. In Table A is seen the distribution of deaths in the Wards of the Borough. There is no marked incidence in any Ward and four of them are exempt. The deaths at the higher age periods come out again as in former years, of the ten deaths three occurred between the ages of 25-60, and 7 at 60 years and upwards.

The Borough Fever & Small-pox Hospitals.—On reference to Table 6 it will be found that on January 1st, 1896, the Fever Hospital contained five patients. 106 have been admitted during the year, 56 of typhoid fever, 30 of scarlet fever, and 20 others. The total deaths numbered 9, and 18 remained in the Hospital at the end of the year. The death-rate per cent. of the cases admitted during the year is 8·5, against 14·8 in the previous year. The mean for the last 24 years being 13·38. The case mortality would be reduced even still lower if we had the patients at an earlier stage of their complaint. Some are kept at home until all hope of recovery is gone, and in some cases die in a day or two after admission. But from the fact that 55·2 per cent. of the notified cases are sent to the Hospital, we see that the good work done for so many years by that Institution is becoming appreciated, and the majority of those who unfortunately are attacked not only are willing, but prefer to be so treated.

The changes in the *personnel* of the Staff have been few during the year. One Nurse, after seven years' faithful service, has been married, and the vacancy filled

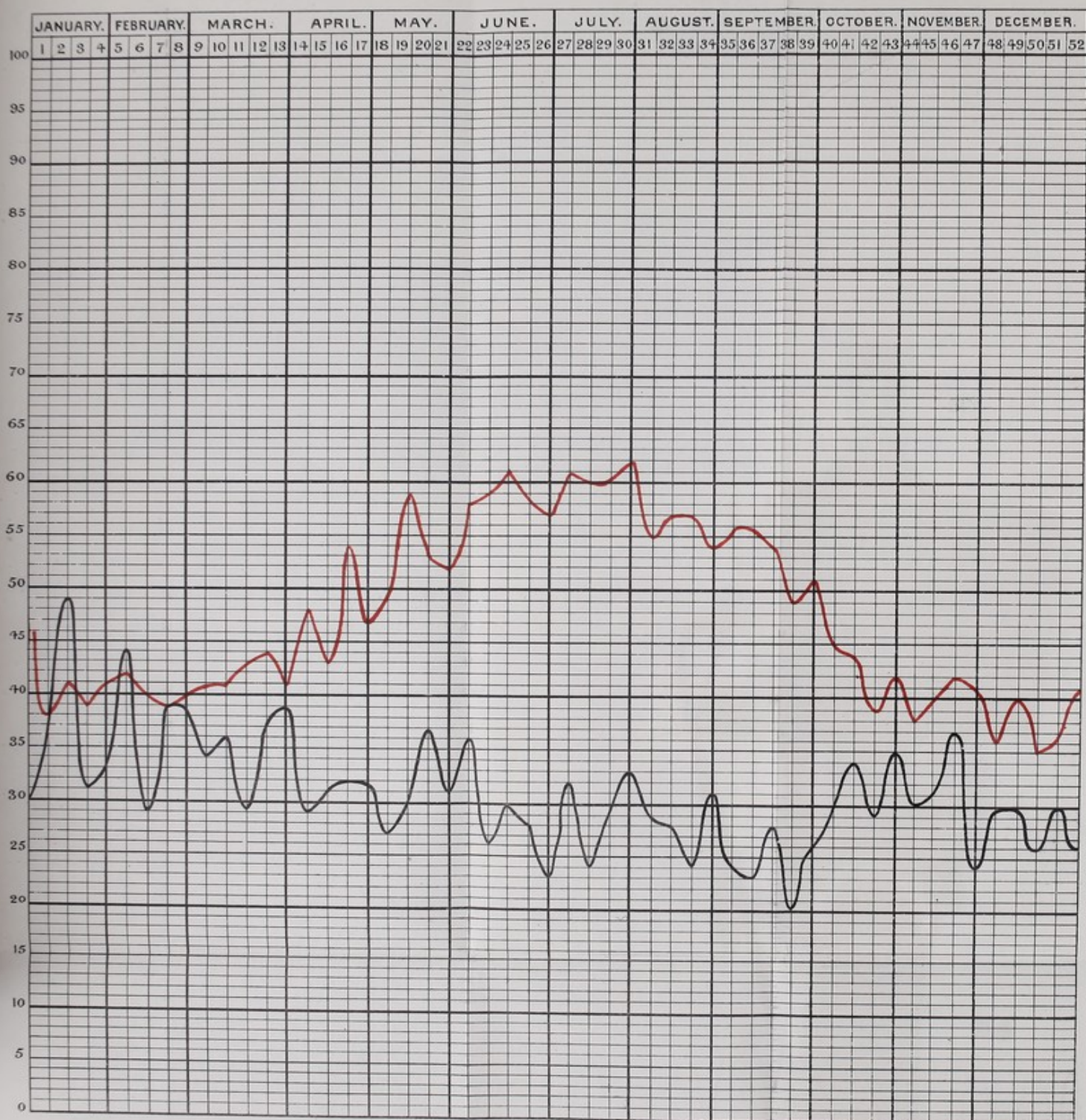
up. The present Staff consists of five nurses, four servants, porter, and matron (Miss Robison), who continues to discharge her duties for the seventh year, to the entire satisfaction of the Committee.

The religious needs of the patients have been generously attended to, as in former years, by the visits by the Rev. W. L. Stock, Curate-in-Charge of the Caddy Field Mission (in whose district the hospital is situated) and also by Mr. Hartley, one of the town missionaries. To both these gentlemen the thanks of the Committee are due for their gratuitous and much appreciated services.

Now that you have been obliged to utilise the Small-pox Hospital for scarlet fever patients, the town is practically without accommodation for small-pox. I would therefore urge upon you the necessity of making provision as rapidly as possible, for, although there is no present appearance of an epidemic of small-pox, several cases have recently been reported in a neighbouring town, and when that is the case one is never safe in the midst of a practically unvaccinated community.

Midsummer Fair.—As this is not only an annual institution, but brings with it a large number of travelling showmen and others, the Inspectors made the usual parole and visited every caravan in search of infectious diseases, but found them entirely free.

Congresses.—In August last year Mr. Alderman Coe, J.P., Councillor Dr. Smith, and myself represented our town at the Congress in Glasgow of the British Institute of Public Health. In September, the Chairman, Councillor Dr. West-Symes and the Chief Sanitary



NOTES:

The Black curve represents the Number of Deaths per Week, January 4th, 1896, to January 2nd, 1897.

The Red curve represents the Mean Temperature for Weeks ending January 4th, 1896, to January 2nd, 1897, as deducted from the readings of the Maximum and Minimum Thermometers.

The figures shew, in the case of the Black curve, the Number of Deaths, but in the case of the Red curve, degrees of Temperature.

Inspector performed the like duties at the Congress of the Sanitary Institute, held at Newcastle. Reports of both these meetings were printed and presented to the Committee and the Council. In the first report attention was called to the paper of Professor Ramsey, in which he showed how the inhabitants of a smoke laden town suffered in various ways in consequence, but very little has since been done in our town to improve matters in this respect. The Report of the second Congress *inter alia* called attention to the desirability of making measles a notifiable disease, but after several meetings the objections to such a course seemed pretty strong and the subject was allowed to drop.

Water Supply.—I mentioned in my last Report that Mr. Paskin, the Waterworks Engineer, and myself, had accompanied Dr. Houston, from the Local Government Board, on a survey of our sources of water supply, chiefly with a view of ascertaining the amount of acidity present. I am sorry to say that Dr. Houston has not yet reported.

At a recent Congress of the German Society of Public Health the question of water supply came prominently before them, when it was urged that a periodical and frequent examination, both chemical and bacteriological, should be made of the water supplied, and also laid great stress on the necessity of repeated inspections of the sources and surroundings.

The Meteorology of the year, so unlike that of 1895, has not been remarkable in any direction. The highest average wave of temperature registered was 62° degrees Fah. for the week ending July 30th, and the lowest 35 degrees in the third week of December. See Chart.

Excreta Removal.—Whether as a Municipality we are moving with the times, in reference to our mode of excreta removal, has been mentioned several times during the year.

Twenty-five years ago, many who were in the front rank as Sanitarians favoured the adoption of the "pail" system, and as a vast improvement on the old privy-middens no sane man can doubt. But we cannot shut our eyes to the fact that after all these years so few towns have adopted it, that it may be said not to have "caught on." The reasons no doubt are various, the chief one probably being the cost, but in the evolution of Sanitary science the question is now being asked whether the pail system ought not to give place to, what some people call, more scientific methods in the interests of the health of the Borough. In the consideration of the three chief modes of excrement removal, the old privy-middens may be at once struck out.

Which then of the other two—the "pail" and the "water-carriage"—offer the most satisfactory solution of this important problem. Halifax, now for 25 years, and some half-dozen other towns for shorter periods, have been using the "pail" system, and in every case the zymotic death-rate has been so largely reduced, that they are amongst the lowest of the large towns. There can be little doubt I think that the adoption of the "pails" in these towns has produced these beneficial results. The question is, can we improve upon them by a water carriage system? Quite a number of Municipalities think they can: hence Leicester, Birmingham, Manchester, Nottingham, Huddersfield, and Oldham are making attempts to lessen the number of their "pails" and increase their number of water closets. But from

GENERAL SUMMARY OF METEOROLOGICAL OBSERVATIONS TAKEN AT THE PUBLIC LIBRARY, BELLE VUE, FROM JANUARY 1st, 1896, TO DECEMBER 31st, 1896,
BY J. WHITELEY, CHIEF LIBRARIAN.

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

1896.	Pressure of Atmosphere in Month.		Temperature of Air in Month.							Mean Temperature.		Vapour.			Mean degree of Humidity = 100.		Mean weight of a cubic foot of Air.		Mean Reading of Thermometer.		Wind.				Rain.		REMARKS.
Month.	Mean.	Range.	Highest.	Lowest.	Range.	Mean.			Air.	Dew Point.	Elastic Force.	In a cubic foot of Air.		Mean degree of Saturation.	Mean weight of a cubic foot of Air.	Maximum in Rays of Sun.	Minimum on Grass.	Estimated Strength.	Relative proportion of				Mean amount of Cloud.	No. of days it fell.	Amount Collected.		
						Of all Highest.	Of all Lowest.	Daily Range.				Mean.	Short of Saturation.						N.	E.	S.	W.					
January ...	29.609	1.728	53.7	26.0	27.7	44.2	36.1	8.1	40.0	36.8	.218	2.5	0.4	89	549	52.1	34.0	0.5	6	3	5	17	8.4	11	1.06	The observations have been reduced to mean values by Glaisher's Barometrical and 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 ...	29.573	1.044	53.8	22.3	31.5	43.4	34.8	8.6	38.5	36.7	.221	2.5	0.2	91	550	56.3	32.1	0.6	6	7	6	10	9.4	8	1.54		
March ...	29.036	1.652	55.0	32.0	23.0	47.6	36.9	10.5	41.2	35.9	.210	2.4	0.6	82	537	76.5	33.5	0.7	7	3	3	18	7.1	21	5.90		
April ...	29.431	0.862	60.6	32.0	24.6	52.5	40.4	12.1	45.2	38.3	.232	2.7	0.8	79	540	88.6	35.4	0.6	9	8	2	16	7.0	13	1.30		
May ...	29.566	0.592	74.7	32.6	42.1	59.8	43.5	16.3	50.5	41.1	.259	2.9	1.2	71	537	99.5	38.5	0.5	14	9	1	7	6.3	3	0.47		
June ...	29.247	0.640	77.2	45.6	31.6	66.7	49.9	16.8	57.2	48.5	.342	3.8	1.4	73	523	109.3	45.5	0.6	11	4	5	10	7.0	13	2.84		
July ...	29.329	0.620	77.2	42.5	34.7	66.0	51.8	14.2	59.8	48.9	.345	4.1	1.5	73	524	102.2	47.6	0.6	8	5	5	13	6.7	10	1.42		
August ...	29.335	0.712	64.8	42.4	22.4	61.2	50.2	11.0	54.5	47.1	.323	3.6	1.2	76	528	98.3	44.8	0.6	4	5	3	12	7.6	14	1.41		
September ...	29.036	1.652	65.2	38.4	26.8	58.8	48.5	10.3	52.5	48.5	.340	3.8	0.6	86	525	85.5	45.3	1.2	6	6	6	12	8.0	22	6.27		
October ...	29.036	1.290	60.3	29.2	31.1	57.3	38.2	9.1	42.2	38.4	.233	2.7	0.4	87	536	66.6	34.3	0.8	11	5	5	10	7.4	23	4.60		
November ...	29.476	1.352	49.2	24.7	24.5	43.5	35.9	7.6	39.4	35.2	.206	2.4	0.5	86	547	51.7	31.9	0.4	10	5	6	9	7.7	12	1.46		
December ...	29.059	1.462	52.0	25.0	27.0	41.3	34.8	6.5	38.3	35.7	.209	2.4	0.3	91	541	45.8	31.1	0.5	7	7	6	11	8.7	22	3.75		
Annual Means	29.311	1.134	62.0	32.7	30.3	52.7	41.8	10.9	46.4	40.9	.262	3.0	0.8	82	537	77.7	37.8	0.6	8	6	5	12	7.6	172	32.02		
Annual Means between Latitudes 53° & 54°	29.713	...	69.9	30.8	39.1	54.6	42.6	12.0	48.0	42.1	.273	3.2	0.8	80	541	81.4	37.2	0.9	7	6	6	12	6.5	185	29.65		

NOTE.—The Annual Means give the Averages for the Twelve Months. The next lower line of numbers gives similar Averages for Stations between the 53rd and 54th Parallels of Latitude, between which Halifax lies; these numbers have been adapted from those given by Mr. Glaisher in his Meteorological Reports, published in the Registrar-General's Quarterly Returns.

several reports which have been published there does not appear, from a health point of view, much advantage in the water carriage system over the pails ; but both show a great improvement over the old middens. This question, like many others, has to be considered in relation to local circumstances. Suppose we assert that the water carriage system is the best all round, we are at once confronted with circumstances where its adoption is next to impossible. Take Ovenden for example, there we are bound to provide some other, but take the town as a whole, I think the time has come when the use of waste water or slop closets may be adopted in connection with such property as is occupied by the artisan population. At the same time we must be aware that the more complicated the system, the less smoothly will it work. There is much to be said in favour of both the systems we are considering. If Halifax had been an entirely water carriage town in February, 1895, when the temperature was below zero, we should have been in a most deplorable state.

Following my report is one by the Chief Sanitary Inspector, and also one by the Borough Analyst. From these several reports I think you will find that every branch of the Health Department has received adequate attention, and being probably the chief cause of Halifax showing the lowest zymotic death-rate in 1896.

I have to thank Mr. Harry Wilson, Clerk in the Office, for valuable help in compiling the tables, and the Committee for its continuous and generous help.

I am, Gentlemen,

Your obedient Servant,

D. AINLEY,

Medical Officer of Health.

TABLE 1.--POPULATION, BIRTHS, DEATHS, AND INFANT MORTALITY IN THE
BOROUGH OF HALIFAX, 1880-1896.

Years.	Population.	Births.	Deaths.	Rate per 1000 living.		Deaths of Infants under One Year to 1000 Births.
				Births.	Deaths.	
1880	...	2454	1632	33.6	22.4	156
1881	...	2338	1589	31.7	21.5	155
1882	...	2247	1519	30.1	20.3	167
1883	...	2162	1491	28.6	19.7	150
1884	...	2262	1786	29.6	23.4	180
1885	...	2231	1508	28.9	19.5	133
1886	...	2255	1775	28.8	22.7	173
1887	...	2249	1660	28.4	21.0	149
1888	...	2282	1571	28.2	19.6	154
1889	...	2192	1667	25.7	20.6	176
1890	...	2277	1827	27.8	22.3	173
1891	...	2160	1877	26.0	22.6	172
1892	...	2169	1642	25.8	19.5	163
1893	...	2254	1591	24.5	17.2	174
1894	...	2128	1522	22.9	16.3	135
1895	...	2186	1803	23.3	19.2	158
1896	...	2329	1667	24.4	17.4	150

TABLE 2.—DEATH RATES IN GROUPS OF AGES IN THE BOROUGH OF HALIFAX,
1880-96.

Years.	Death-Rate per 1000 living in each group.					
	All Ages.	0-5.	5-15.	15-25.	25-60.	60 and upwards.
1880	22.4	70.3	...	...	...	72.9
1881	21.5	68.0	...	...	...	77.5
1882	20.3	62.9	4.3	7.0	13.7	74.2
1883	19.7	49.6	5.1	5.7	14.0	90.1
1884	23.4	70.0	5.2	5.3	16.3	85.5
1885	19.5	50.3	4.9	5.2	14.7	83.3
1886	22.7	68.5	5.3	6.0	14.9	92.4
1887	21.0	54.8	4.0	6.0	16.2	88.2
1888	19.6	55.4	3.6	3.9	13.0	93.8
1889	20.6	59.7	3.5	4.6	15.3	84.2
1890	22.3	59.1	4.3	6.0	17.5	94.3
1891	22.6	63.3	4.2	5.6	16.4	96.6
1892	19.5	54.0	3.9	4.4	13.6	89.2
1893	17.2	62.0	2.1	3.0	10.7	75.6
1894	16.3	50.7	2.6	4.8	14.5	74.9
1895	19.2	56.5	2.1	5.8	17.3	92.9
1896	17.5	55.9	1.8	4.4	15.6	85.6

TABLE 3.--SHOWING DEATHS FROM ZYMOTIC DISEASES IN THE BOROUGH OF HALIFAX,
1880-1896.

Years.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria	Whooping Cough.	Typhus.	Enteric Fever.	Ill- Defined Fever.	Diarrhoea and Dysentery.	Principal Zymotic Diseases.	Death-rate per 1000 living from these Diseases.
1880	...	15	44	4	10	...	19	...	22	114	1.56
1881	6	6	102	4	17	...	21	...	6	162	2.19
1882	...	11	21	2	11	1	22	...	25	93	1.24
1883	...	1	9	3	7	1	26	5	8	60	0.79
1884	...	57	28	3	33	1	22	2	38	184	2.41
1885	1	...	32	7	12	1	12	2	20	87	1.13
1886	...	85	9	16	11	1	13	2	38	175	2.22
1887	...	14	33	6	11	...	12	...	23	99	1.24
1888	1	10	21	3	35	...	9	1	14	94	1.15
1889	1	70	7	7	2	...	22	3	16	128	1.58
1890	...	25	24	12	15	1	13	1	13	104	1.27
1891	...	39	36	2	58	...	22	...	2	159	1.91
1892	19	64	7	14	9	...	7	...	7	127	1.51
1893	33	5	3	18	32	...	12	...	38	141	1.7
1894	4	32	4	11	21	...	5	...	4	81	0.9
1895	...	9	6	12	24	...	17	...	53	121	1.29
1896	...	15	...	16	33	...	22	..	14	100	1.05

TABLE 4.—SHEWING WHETHER MOTHERS OF CHILDREN WHO HAVE DIED UNDER FIVE YEARS OF AGE IN 1896 WORK OUT OR ARE ENGAGED AT HOME.

WARDS.			At Home.	Work Out.
OVENDEN	..	...	30	1
NORTHOWRAM	...	...	25	6
NORTH	...	...	38	9
CENTRAL	...	...	58	4
WEST	...	...	38	...
SOUTH	...	...	32	1
EAST	...	...	32	3
SOUTHOWRAM	...	...	47	5
SKIRCOAT	...	...	42	1
PELLON	...	...	36	1
KINGSTON	...	...	38	1
ILLINGWORTH	...	...	23	...
WORKHOUSE	...	...	...	5
INFIRMARY	...	...	6	..
HOSPITAL	..	...	...	...
			*445	37
Total, 1895	...	...	454	41
„ 1894	...	...	418	42

* The particulars of 45 deaths, in addition to the above, were not given.

TABLE 5.—DEATHS FROM SEVERAL CAUSES AT SIX GROUPS OF AGES,
FOR THE YEAR ENDING JANUARY 2ND, 1897.

	All Ages.	Under 5 years.		5-15.	15-25.	25-60.	60 and upwards.
		0-1.	1-5.				
Small Pox	...	...	...	...	...	...	...
Measles	16	3	13	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...
Diphtheria	15	1	10	4	...	...	...
Whooping Cough	33	15	18	...	...	...	...
Typhus	...	...	...	...	...	...	...
Enteric Fever	21	1	...	2	4	14	...
Simple and Undefined Fever	...	...	...	...	...	...	...
Diarrhœa, Dysentery	13	12	1	...	...	...	...
Simple Cholera	1	1	...	...	...	...	...
Venereal Affections	...	...	...	...	...	...	...
Erysipelas	2	...	...	...	...	1	1
Pyœmia, Septicœmia	3	1	...	...	...	2	...
Puerperal Fever	1	...	...	...	...	1	...
Parasitic Diseases—Thrush	1	1	...	...	...	...	...
Dietetic Diseases—Starvation	...	...	...	...	...	...	...
Dietetic Diseases—Alcoholism, Del. Trem.	1	...	...	...	...	1	...
Rheumatic Fever, Rheumatism of Heart	2	...	...	...	1	...	1
Rheumatism	9	...	...	2	1	4	2
Rickets	2	1	1	...	...	...	...
Cancer, Carcinoma Sarcoma	105	1	...	1	2	58	43
Tabes Mesenterica, Marasmus	49	42	7	...	...	...	...
Tubercular Meningitis	41	11	16	8	1	5	...
Phthisis	135	1	1	7	30	84	12
Scrofula, Tuberculosis	31	5	6	5	3	12	...
Other Constitutional Diseases	25	1	1	...	6	10	7
Premature Birth, Inanition	68	68	...	...	...	...	...

TABLE 6.—SHOWING THE NUMBER OF CASES ADMITTED INTO THE BOROUGH INFECTIOUS DISEASES HOSPITALS DURING THE YEAR 1896.

	Small-pox.	Typhoid.	Scarlatina.	Others.	Total.
Cases remaining in Hospital January 1st, 1896	4	1	...	5
Cases admitted during the year	...	56	30	20	106
Total	60	31	20	111
Recoveries	52	31	19	102
Deaths	8	..	1	9
Cases remaining in Hospital December 31st, 1896	6	11	1	18

TABLE 7.—SHOWING THE NUMBER OF CASES ADMITTED SINCE OPENING, AND TOTAL DEATHS AND RATE PER CENT.

	Small-pox.	Typhus.	Typhoid.	Fever.	Scarlatina.	Others.	Total.
Number of Cases admitted since the opening ...	682	29	580	62	540	131	2024
Number of Deaths since the opening ..	71	14	124	8	41	13	271

Percentage of Deaths from all causes to whole number of Cases admitted since the opening .. 13.38

TABLE 7.—SHOWING INQUESTS IN THE BOROUGH DURING THE YEAR 1896.

Verdicts.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Accidental Deaths	1	4	2	1	1	3	2	6	2	2	2	3	29
Natural Causes	4	3	10	3	4	2	1	3	3	2	3	8	46
Found Drowned	1	...	...	...	...	...	...	...	...	...	...	...	1
Suicide by various means	...	...	...	...	1	3	2	...	...	1	...	3	10
Other Verdicts	...	...	...	...	...	...	...	...	...	1	..	1	2
Murder	...	...	...	...	...	...	...	...	...	...	...	...	..
Total 1896	6	7	12	4	6	8	5	9	5	6	5	15	88
" 1895	12	9	6	8	9	7	9	6	6	8	9	7	96
" 1894	13	7	7	6	2	6	10	4	3	6	3	11	78
" 1893	7	2	5	4	5	6	2	3	3	3	10	6	56
" 1892	3	1	11	10	4	7	6	6	6	3	6	6	69
" 1891	3	8	3	4	6	1	6	6	1	3	2	3	46
" 1890	4	8	7	3	3	4	4	8	3	3	3	6	56
" 1889	3	4	5	6	5	5	7	2	5	1	6	3	52
" 1888	3	6	2	1	5	8	3	3	2	3	1	2	39
" 1887	5	3	4	3	3	4	3	2	3	3	3	2	38
" 1886	1	...	7	5	5	7	6	...	4	4	2	1	43
" 1885	6	6	4	8	4	3	5	3	3	5	3	3	53
" 1884	...	6	5	8	4	10	6	5	5	6	9	5	73
" 1883	2	2	...	4	4	5	3	7	6	1	8	4	46

TABLE 8.—SHOWING THE NUMBER OF ZYMOTIC DISEASES NOTIFIED BY MEDICAL PRACTITIONERS IN EACH WARD OF THE BOROUGH, FOR THE YEAR ENDING DEC. 31ST, 1896, AND THE RATE PER CENT. OF POPULATION AND THE COMPARISON WITH THE SIX PREVIOUS YEARS.

	Small-pox.	Cholera.	Typhus Fever.	Enteric Fever.	Scarlet Fever.	Continued Fever.	Puerperal Fever.	Diphtheria.	Relapsed Fever.	Total.	Rate per centage of Population.
OVENDEN	4	5	...	...	4	...	13	0·18
NORTHOWRAM	10	1	2	1	6	...	20	0·28
NORTH	6	2	..	...	1	...	9	0·11
CENTRAL	12	2	...	1	...	...	15	0·16
WEST	7	1	...	1	5	...	14	0·14
SOUTH	8	1	...	...	3	...	12	0·14
EAST	8	7	...	...	4	...	19	0·22
SOUTHOWRAM	4	8	...	...	1	...	13	0·17
SKIRCOAT	8	5	...	...	3	...	16	0·20
PELLON	9	3	...	...	4	...	16	0·20
KINGSTON	12	1	..	1	2	...	16	0·22
ILLINGWORTH	17	8	..	...	4	...	29	0·40
Total, 1896...	105	44	2	4	37	...	192	0·20
„ 1895...	58	52	3	4	29	...	146	0·15
„ 1894...	16	...	...	52	114	3	6	43	...	234	
„ 1893...	346	5	..	69	150	5	6	57	...	638	
„ 1892 ..	159	...	1	56	256	9	4	71	2	558	
„ 1891	1	...	99	429	14	5	23	2	573	
„ 1890...	67	328	8	8	62	1	476	
PUBLIC INSTITUTIONS.											
WORKHOUSE	4	...	...	..	...	4	
INFIRMARY	3	...	...	..	2	...	5	
ROYAL INFIRMARY	2	...	...	..	..	2	

TABLE 9.—DEATHS OCCURRING WITHIN THE BOROUGH
AMONG PERSONS NOT BELONGING THERETO.*

The following are included in the Infirmary :—						
TODMORDEN	...	...	...	..	...	1
SOWERBY BRIDGE	...	...	...	..	...	5
HIPPERHOLME	...	...	...	...	...	2
QUEENSBURY	...	...	...	...	...	2
WARLEY	...	...	..	...	...	2
HEBDEN BRIDGE	...	...	...	...	...	3
LUDDENDEN	...	...	...	...	...	2
SHIBDEN INDUSTRIAL SCHOOL	...	...	...	...	...	1
WEST VALE	...	...	...	...	...	1
BRIGHOUSE	...	...	...	.	...	2
HALIFAX (R.D.S.A.)	...	...	...	...	...	1
GREETLAND	..	...	...	...	...	1
SIDDAL	..	...	..	...	...	1
SOYLAND	...	...	...	..	..	1
Total	...	...	...	...	...	25
The following are included in South Ward :—						
WARLEY	...	...	...	...	...	1
SOWERBY BRIDGE	...	...	...	...	...	1

* The List of Persons furnished to me of those who have died out of the District, who belonged to the Borough, number 21, so that the totals will not be greatly disturbed.

TABLE 10.—SHOWING RATES OF MORTALITY OF CHILDREN UNDER ONE YEAR OF AGE FROM CHIEF INFANTILE DISEASES PER THOUSAND BIRTHS, AND RATE PER CENT. OF TOTAL DEATHS.

DISEASES.	1896.		
	Total Deaths.	Rate per 1000 Births.	Rate per cent of total Deaths at all ages.
From all causes	351	150·7	21·0
Lung Diseases	85	36·4	5·0
Marasmus, Wasting Diseases ...	42	13·7	2·5
Premature Birth, Inanition ...	68	29·1	4·0
Diarrhœa	12	5·1	0·7
Whooping Cough	15	6·4	0·8
Convulsions	68	29·1	4·0
Scrofula, Tuberculosis	5	2·1	0·2
Dentition	9	3·8	0·5

TABLE 11.—SHOWING DEATH RATES PER THOUSAND
OF THE POPULATION IN EACH QUARTER
FROM THE FOLLOWING DISEASES.

1896.		Zymotic Diseases.	Consumption.	Lung Diseases including Consumption.	From all Causes.
1st Quarter	...	0·8	1·5	4·8	19·6
2nd „	...	1·3	1·4	4·9	17·1
3rd „	...	0·7	1·8	1·8	14·6
4th „	...	1·2	1·9	4·9	18·9
Whole Year	...	1·05	1·69	4·13	17·59

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH, DURING 53 WEEKS ENDING JANUARY 2nd, 1897, IN THE BOROUGH OF HALIFAX; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

(B)

NAMES OF LOCALITIES adopted for the purpose of these Statistics : Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.		Registered Births.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.												
	Census 1891.	Estimated to middle of 1896.		1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
				Small-pox.	Scarlatina.	Diphtheria.	Membranous Comp.	FEVER.					Typhus.	Erysipelas.	Measles.	Small-pox.	Scarlatina.	Diphtheria.	Membranous Comp.	FEVER.					Typhus.	Erysipelas.	Measles.		
								Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.								Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.					
(a.)	(b.)	(c.)	(d.)	Small-pox.	Scarlatina.	Diphtheria.	Membranous Comp.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.		Small-pox.	Scarlatina.	Diphtheria.	Membranous Comp.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	
Ovenden Ward	6469	6925	175	...	5	4	...	...	4	...	...	...	...	...	...	...	...	3	1	...	...	...	2	...	...	...	...	...
Northowram Ward	6463	6927	174	...	1	6	...	...	10	2	...	1	...	...	...	...	...	1	...	...	...	10	2	...	...	...	...	1
North Ward	7416	7830	235	...	2	1	...	...	6	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...
Central Ward	8658	8875	210	...	2	...	...	...	12	...	...	1	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...
West Ward	9017	9629	201	...	1	5	...	...	7	...	...	1	...	...	...	...	...	1	...	...	...	4	...	...	...	...	...	...
South Ward	8085	8570	193	...	1	3	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1
East Ward	8417	8590	164	...	7	4	...	...	8	...	...	...	...	...	...	...	...	5	...	...	...	1	...	...	...	...	...	...
Southowram Ward (H)	7042	7470	228	...	8	1	...	...	4	...	...	...	...	...	...	...	...	2	...	...	...	3	...	...	...	...	...	...
Skircoat Ward	7232	7821	174	...	5	3	...	...	8	...	...	...	...	...	...	...	...	5	2	...	...	4	...	...	...	...	...	...
Pellon Ward	7332	7760	215	...	3	4	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...
Kingston Ward	6732	7140	191	...	1	2	...	...	12	...	...	1	...	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...
Illingworth Ward	6969	7227	145	...	8	4	...	...	17	...	...	...	...	...	...	...	...	3	...	...	...	3	...	...	...	...	...	...
Workhouse ... ..	...	...	24	...	4	...	...	...	...	...	...	...	...	...	14	...	...	4	...	...	...	...	...	...	...	...	14	...
Infirmary ... ..	...	...	...	...	2	2	...	...	3	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
Borough Hospital ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	89832	94764	2329	...	50	39	...	...	108	2	...	4	...	...	14	...	...	28	4	...	...	46	2	...	...	...	...	16

The Notification of Infectious Diseases has been compulsory since 1882.

The Borough Fever Hospital is marked (H) and is situate in Southowram Ward.

County Borough of Halifax.

THE Sanitary Inspector's Report

FOR THE
Year ending 31st December, 1896.

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

GENTLEMEN,

I have the pleasure to submit for your consideration my Twenty-second Annual Report on the operations of the Health Department for the year ending December 31st, 1896.

TOWN HALL, HALIFAX,

January, 1897.

HEALTH DEPARTMENT.

Summary of Work done.

Total number of Visits made by the District Inspectors ..	34705
Total number of Visits to Houses	8276
Number of Visits to Houses with reference to Defective Drainage	2595
Number of Visits to Houses with reference to Cleanliness, Overcrowding, &c. ..	873
Number of Visits to Houses with reference to Infectious Diseases	747
Rooms Disinfected	312
Cases removed to the Hospital	106
Infectious Diseases reported	199
Nuisances reported ..	3532
Nuisances abated... ..	3588
Notices served	1283
Letters served (referring to Nuisances, &c.)	267
Summonses taken out	6
Smoke Observations taken	751
Old Ashpits abolished	1
Old Ashpits altered to Goux System... ..	60
Goux Closets registered ..	348

It must be remembered that many nuisances are frequently included under one notice, and therefore the number of nuisances represent considerably more than the number of notices.

Removal of Nuisances.

At the commencement of the year 449 complaints remained on the books and in course of removal, since then 3532 have been registered and 3588 removed, leaving at the close of the year 393 to be dealt with. The following Table shows the nature of nuisances registered.

Nature of Nuisances.				Number Registered.
Defective Sink Drains	...	...	...	112
„ „ Pipes	...	...	...	113
„ „ Syphon Traps...	...	...	...	107
„ Basement Drains	...	..	...	113
„ Yard Drains	...	...	...	100
„ Urinal Drains	...	...	...	7
„ W.C. Drains	...	...	...	84
„ Area Drains	...	...	..	59
„ Private Street Drains	...	...	..	41
Made-up Sink Pipes	..	...	...	115
„ Bath Pipes	...	..	...	3
„ Lavatory Pipes	...	...	...	5
„ Basement Drains	...	..	...	137
„ Water Closets	...	...	...	122
„ Yard Drains	...	...	...	89
„ Urinal Drains	..	...	...	18
„ Gullies ...	...	...	...	76
„ Private Street Drains	..	...	...	45

NUISANCES—*Continued.*

Nature of Nuisances.				Number Registered.
Untrapped Basement Drains	...	...	...	16
„ Sink Drains	...	...	...	39
„ Area Drains	...	...	...	19
„ Yard Drains	...	...	..	84
„ Urinal Drains	...	...	...	4
„ Bath Pipes	...	...	..	10
„ Lavatory Pipes	...	...	...	11
Drains not efficiently Trapped—				
Sink Drains	..	...	...	3
Cellar Drains	...	...	..	17
Area Drains	...	...	..	2
Yard Drains	...	...	...	9
Sink Drains requiring Disconnecting	...	...	...	78
Defective Fall-pipe Drains	...	...	...	38
„ Fall-pipes	...	...	...	88
„ Spouting	...	...	...	118
„ Roofing...	...	...	...	41
Broken Pot and Iron Traps	...	...	...	8
Insufficient Supply of Water to Closets	...	..	..	10
Nuisances from Water in Cellar	...	...	...	58
„ Want of Drains	...	...	...	27
„ Smoke	...	...	...	26
„ Poultry	...	...	...	3

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Nuisances from Pigeons	2
„ Rabbits	5
„ Swine	6
Houses Overcrowded	33
„ Unfit for Habitation	5
„ Requiring Limewashing	123
Accumulation of Offensive Matter	122
Privies requiring Limewashing	135
Ashpits requiring Reconstruction	41
Insufficient Privy Accommodation	96
Offensive Ashpits and Privies... ..	17
„ Goux Closets	54
„ Ash Tubs	53
Doors off Closets	56
„ Ashes Tub Places	20
Dilapidated Closets	56
COWSHEDS.	
Want of Light, Room, Air Space and Ventilation	157
Dilapidated Cowsheds and Floors	14
Cesspools requiring Emptying and Defective	28
Offensive Middensteads	26
Cowsheds requiring Limewashing	198

NUISANCES—*Continued.*

Nature of Nuisances.				Number Registered.
FACTORIES AND WORKSHOPS.				
Rooms requiring Limewashing	...	...	...	76
Workrooms Overcrowded	...	...	...	3
Want of Ventilation	...	...	...	5
Miscellaneous ..	...	...	...	146
Total				3532

The above lists do not include work carried out after mere verbal notice.

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	...	587	71	217	288
February	...	410	57	193	250
March	...	174	75	83	158
April	...	215	73	89	162
May	...	504	108	189	297
June	...	475	83	270	353
July	...	449	69	148	217
August	...	457	101	152	253
September	...	284	28	119	147
October	...	414	85	115	200
November	...	528	72	357	429
December	...	230	63	112	175
Total	...	4727	885	2046	2931

The total number of Ashpits cleansed during the year is 4727, as against 4696 in the previous year. 60 Ashpits with Privies have been altered to the Goux System, 1 abolished, and Ashes Tubs supplied in the place of 19 Dry Ashpits. The above includes Ovenden and Illingworth Wards.



TABLE SHOWING THE NUMBER OF ASHPITS WITHIN
THE BOROUGH, DECEMBER 31ST, 1896.

The Borough is divided into six Districts, each District including two Wards.

District.	Wards.	Ashpits with Privies.	Dry Ashpits.
1	Northowram and North ...	62	53
2	Ovenden and Illingworth ...	457	33
3	Central and East...	52	115
4	West and South ...	35	232
5	Skircoat and Southowram ..	67	49
6	Pellon and Kingston ...	11	42
	Total ...	684	524

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	...	...	..	48857	1791
February	...	...	...	38428	1488
March	...	...	..	40985	1487
April	...	...	...	46491	1358
May	...	...	...	44992	1527
June	...	...	...	48584	1401
July	...	...	...	50537	1208
August	..	...	...	45743	1146
September	...	...	...	48503	1286
October	...	...	...	49590	1450
November	...	..	...	46444	1546
December	...	...	...	48393	1626
Total ..				557547	17314

The above represents 26549 loads of night soil (each load containing 21 closet tubs), as against 22761, and 17314, and 16239 loads of ashes respectively for the preceding year.

The number of additional closets registered is 348, being a decrease of 1 on the number registered during the year 1895.

Goux Scavenging.

The following Table shows the number of Goux Closet Tubs registered each year since the commencement of the Goux System.

Year.			Number of Closet Tubs.	Number Registered during each year.
1871	...	...	1109	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	...	...	4858	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

During the year 256 closets have been erected in connection with new property, and 50 have been altered from the old system, 3 substituted for water closets, and 30 added where the accommodation was previously insufficient.

Birks Hall Tips.

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

Names.					Number of Loads.
Waterworks Department	...	...	...	...	160
Goux Department	...	...	...	..	18080
Electric Light Department	..	...	...	...	560
Gasworks Department	...	...	...	...	11600
Private Firms	...	...	...	...	6812
Total	...	...	...	...	37212

Streets Scavenging.

The subjoined Table gives at a glance the work done in this Department, with the previous year's figures.

	1896.	1895.
Number of Streets Swept ..	32204	26921
Area in yards	47627132	40346623
Number of Streets Watered ...	9762	10055
Loads of Water used for that purpose	11850	10965
Loads of Sweepings gathered ...	5364	4926
Loads of Snow removed from the Streets	41	14331
Number of Gullies emptied ...	175903	133784
Number of Street Drains flushed ...	592	709

During the year 400 loads of garbage have been removed from fishmongers, fried fish shops, and green-grocers.

THE FOLLOWING TABLE SHOWS THE AMOUNT OF WORK DONE IN THIS DEPARTMENT,
1883 TO 1896.

	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
Number of Streets swept	20878	22320	22457	20621	24234	25901	27149	28244	28869	27019	30700	29800	26921	32204
„ „ watered	4141	5008	5814	3592	3858	4157	8620	5337	5404	8016	7822	5382	10055	9762
Loads of Water used	5671	6561	7023	4798	5430	6255	12442	6877	6598	8057	8648	5969	10965	11850
„ Sweepings gathered	6247	5692	4546	4471	4855	4609	4574	6882	5102	4832	6571	5184	4926	5364
Number of Gullies emptied	39422	87317	74080	68094	74512	76661	89852	100103	122611	120004	144019	153411	133784	175903
Loads of Snow removed from the Streets	1274	617	...	29200	2843	8031	972	884	291	14564	8444	1215	14331	41
Drains flushed	...	...	130	302	943	789	306	523	1278	1822	2211	1006	709	592

ANALYSIS OF REFUSE COLLECTED IN THE BOROUGH
OF HALIFAX FOR THE YEAR 1896.

	Number of Loads.
From Wet and Dry Ashpits	2931
From Ashes Tubs	17314
From Goux Closet Tubs	26549
Sweepings gathered from the Streets and Refuse from Gullies	5364
Garbage removed from Market Hall	1060
Horse Droppings from Streets	250
Garbage from Fried Fish Shops	400
Total Number of Loads	53868

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 ...	751	
Number showing moderate Smoke or <i>nil</i>	} 145	
Number of Observations taken for a period of 60 minutes, each show- ing Dense Smoke	} 606	
Average number of minutes of Dense Smoke emitted from Chimneys }	...	1.97

Smoke Observations.

The following Table shows the number of observations taken, names of firms, and number of boilers working.

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Akroyd J. & Son ...	Bowling Dyke ...	3	8	0·7
„ ...	Range Lane ..	5	2	nil
Akroyd W. ...	Lucy Street ...	1	4	nil
Akroyd & Ambler ...	New Brunswick Mill ...	1	9	3
Baldwin & Walker ..	West Croft Mill ...	2	1	2
Baldwin J. & J. ..	Clark Bridge ..	5	9	2·3
Balme & Pritchard ...	Lister Lane stone chimney	2	5	2·2
„ ...	Lister Lane brick chimney	2	5	2·2
Bancroft W. ...	Fenton Estate ...	2	1	3
Bancroft Alfred ...	Lister Street ...	1	1	nil
Barraclough J. & Sons	Boys' Mill stone chimney	1	1	nil
„ ...	Boys' Mill brick chimney	2	1	3
Berry John ..	New Bank ...	1	3	nil
Berry Bros. ...	Hebble Lane ..	1	4	nil
Booth J. & Son ..	Lee Bridge ...	6	3	0·3
Bowman Bros. ...	Union Mills, Pellon Lane	6	6	3·1
„ ...	Lee Bank ..	2	6	0·3
Bradford and District Dyeing Co.	1, Lee Bank ...	4	6	0·6
„ ...	2, Lee Bank ...	6	5	nil
„ ...	1, Old Lane ...	4	5	0·8

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Bailey Alfred ...	Beacon Hill Road ...	1	1	nil
Butler James ...	Adelaide Street ..	1	4	1·7
Carter John & Co. ...	Dunkirk Mills ..	1	1	1
Calder and Hebble Co.	Engine House Lane ...	1	3	2·6
Calvert W. & Son ...	Illingworth Mills ...	2	3	1·6
Charnock G. & Sons . .	Pellon Lane ..	1	5	1·6
„ ...	Charlestown Road ...	1	5	0·2
Chambers James ..	Craven Edge Mills ...	1	1	nil
Charlestown Brick and Tile Co.	Charlestown Road ...	1	5	0·6
Clayton & Murgatroyd	Lower Wade Street ...	4	6	4·5
Crabtree Joseph ...	Well Lane ...	2	4	nil
Crabtree T. ...	Salterhebble Cotton Mill	2	3	4
Crossley J. & Sons, Ltd.	Bank Bottom ...	1	7	0·2
Crossley J. & Sons, Ltd.	Dean Clough ...	4	1	nil
„ ...	Old Lane ...	5	5	nil
„ ...	Office Chimney ...	8	7	1·1
„ ...	Lee Bridge stone chimney	6	5	1
„ ...	Lee Bridge brick chimney	6	6	0·6
„ ...	Range Royd ...	3	6	1·5
„ ...	Dye House chimney ...	2	3	0·3
„ ...	Albion Mills ...	3	7	0·4
„ ...	Hebble Mills ...	2	5	1·4

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Crossley & Porter Orphanage	Skircoat Moor ...	1	3	nil
Crown Hardware Co....	Corporation Street ...	1	2	nil
Charnock J. & Sons ..	North Parade ...	1	1	2
Carter & Wright ...	South Darley Street ...	1	1	1.0
Dyson J. & Sons ...	King Cross ...	1	8	1.5
Drake J. & Co. ...	Foundry Street ..	1	3	nil
Eastwood Albert ...	Craven Edge Mill ...	1	2	1.5
Earnshaw A. & Sons...	Grantham Road ...	1	4	0.5
Farrar Jabez B. ...	Lower Wade Street ...	2	7	2.4
„	Well Lane ...	1	8	3.5
Fleming Andrew ...	Grantham Road ...	1	4	nil
Farnell Elijah & Son...	Gibbet Street ...	1	4	0.2
Fleming, Birkby, Goodall & Co.	Hopwood Lane ...	1	4	0.7
Fletcher Bros. ...	Raglan Street stone chimney	4	5	5.8
„	Raglan Street brick chimney	1	1	1.0
Foster W. H. ...	Woolshops ...	1	4	2.0
Green Joseph ...	Corporation Street ...	1	4	nil
Greenwood J. ..	Cross Hills ...	1	4	1.7
Haley M. ...	Stannary Street ...	1	1	nil
Harrison & Singleton	Horton Street ...	1	5	nil
Hartley & Sugden ..	Gibbet Street ...	1	4	3.0
Hanson Samuel ...	Adelaide Street ..	1	4	0.7

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Hanson W. ...	Jumples Mill ...	2	3	0·3
Halifax Industrial Society	Northgate ...	1	4	nil
Halifax Workhouse ...	Gibbet Street ...	1	2	1·5
Halifax Corporation ...	Gasworks ...	4	5	nil
„	Electric Light Works	3	6	nil
Halifax Flour Society	Bailey Hall ...	4	10	3·4
Halifax Corporation Waterworks	Albert Road ...	1	2	0·5
Haigh Allan ..	Winding Road ..	1	4	nil
„	„ Foundry...	1	1	3·0
Haxby & Sewell ...	Well Lane ...	1	5	1·4
Hegginbottom — ...	Hay's Mill ..	2	5	3·0
Hebden W. C. ...	Winding Road ...	1	4	nil
Helliwell & Sons ...	Ingram Street ...	1	2	nil
Hirst & Sons ...	Weymouth Street ...	1	4	nil
Hitchen H. ..	Forest Mill ...	1	4	1·2
Hitchen John ...	Hall Street ...	1	4	1·5
Highley N. ...	Croft Mills ..	2	8	0·5
Howson J. M. ...	Albert Street Mills ...	2	1	3·0
Horsfall Eli ...	Commercial Road ...	1	5	nil
Horsfall & Co. ...	Pellon Lane ...	1	4	1·5
Holdsworth J. & Sons	Shaw Lodge Mills .	10	11	5·3
Hollingrake & Clegg...	Miall Street old chimney	3	6	0·8

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Hollingrake & Clegg...	Miall Street new chimney	3	5	1·6
Hoyle J. & F. ...	Range Bank ...	4	6	0·1
Hoyle Richard ..	Queen's Road ..	2	6	2·5
Hoyle Elkanah ...	Waterside No 1 chimney	1	5	1·6
„	„ „ 2 „	1	4	nil
Halifax Infirmary ...	Free School Lane ...	2	4	nil
Howarth Greenwood...	Pellon Lane ..	1	1	nil
Huntriss Exors. ..	Well Lane ..	2	4	3·5
Inman Bros. ..	Hope Hall ...	1	7	0·1
Jagger Emma Sophia ..	West Parade ...	2	1	1·0
Knight J. ...	Raglan Street ...	1	2	0·5
Law & Sons ...	Square Road ..	1	2	nil
Lightowler John .	Waterside ...	1	1	nil
Lees Thomas & Co. ...	Spring Edge Works ..	1	9	0·1
Lumby, Son & Wood	New Bond Street ..	1	4	1·5
Lees Bros ...	King Cross ..	1	5	0·6
Mackrell J. E. ..	Lower Wade Street ..	1	6	0·1
Martin & Sons ..	Pellon Lane ..	3	5	1·6
Martin W. ...	Falcon Laundry ...	1	2	nil
Maude & Turner ...	Gibbet Street ..	1	6	1·5
McCrea H. C. & Co....	Eastfield Works ..	1	4	nil
McNaught & Co. ..	Hare Street ...	1	2	1·5

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Milner & Co.	... Raglan Street ...	1	4	0·7
Morton J.	... Clipster Hall ...	1	4	2·5
„	.. Siddal Lane ..	1	3	0·6
Moore Z.	... Shaw Mill, Mixenden	1	5	2·6
Murgatroyd	.. Bottoms Mill ...	1	4	2·7
Mellor S. E.	... Corporation Street ...	1	2	nil
Northern Engineering Co.	High Level Works ...	1	1	nil
North Allen	... Old Lane Dyeworks ...	1	2	nil
Oakes John	... Regent Works ...	1	2	1
Oates James	... Ryburn Mill stone chimney	1	4	2·5
„	.. Ryburn Mill brick chimney	1	3	4·3
Oates & Green	... Horley Green Road ...	1	4	3
„	.. Ellen Royd ...	1	5	0·6
„	... Beacon Road ..	1	5	4·2
Ordish John	.. Waterside ...	2	6	0·1
Oldfield B.	.. Foundry Street ...	1	2	nil
Pulman John	... Hopwood Lane ...	1	3	1·3
Parker & Co.	... Chapeltown ...	1	5	1·4
Parker J. & Sons	... Horley Green Road ...	1	4	nil
Pickles W.	... Steam Laundry ...	1	1	2·0
Priestley James	... Ovenden ...	1	4	2·2
Pohlmann & Sons	.. Hall Street ...	1	4	0·7

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Patchett Bros. ...	Sedburgh Road, No. 1 chimney	1	10	1·4
„ ...	Sedburgh Road, No. 2 chimney	1	10	5·0
Pulman A. & Sons ...	Mount Street ..	1	2	1·5
Pickles & Sons ...	Victoria Mills ...	2	2	1
Rawson W. H. ...	Old Lane ...	2	1	nil
Ramsden T. & Sons ...	Trinity Road ...	1	10	3·6
Robinson J. & Sons ...	Lower Wade Street ...	1	5	0·6
Robinson Enoch ...	Battinson Road ...	3	2	3·0
Robinson J. ...	Prospect Mill ...	1	4	1
Robinson Jesse & Sons	Royal Mills ...	2	4	2·2
Redman Cornelius ...	Pioneer Works ...	1	1	nil
Sagar J. & Co. ...	Water Lane ...	1	10	3·1
Scott Bros. ...	Johnson Street ...	1	5	0·4
Sheard Jonathan ...	Brackenbed Lane ...	1	3	nil
Smeeton G. F. ...	Stoney Royd ...	3	8	1·7
Smith David ..	Woollen Mills, Siddal	1	3	1·6
Smith Thomas ...	Siddal Lane ...	1	3	nil
Smith & Wilshaw ...	Kingston ..	1	1	nil
Smith G. F. ...	Paragon Works ..	1	6	0·2
Smith B. G. ...	Stannary Street ...	1	3	1·6
Soothill & Simpson ...	North Castle Street ...	1	3	0·6
Smithson Joseph ...	Park Print Works ...	2	6	1·6

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Smithson Joseph ...	India Buildings ...	1	3	0·6
Simpson & Sons, Ltd...	Heath Road ...	1	3	0·3
Standeven & Earnshaw	Ladyship ...	3	3	0·3
Standard Screw Co. ...	Dispensary Walk ..	1	8	0·1
Stead Bros. ...	Hare Street ...	1	3	1
Stirk & Co. ...	Turney Street ...	1	3	1
Stott Bros. ...	Mount Street ..	1	3	2·3
Sutcliffe J. & Sons ...	Range Bank ...	1	3	nil
Swan Bank Brick and Tile Co.	Swan Bank ...	1	4	2
Speak Paul ...	Mixenden Shed ...	1	5	nil
Taylor Joseph ...	Archer Street ...	1	1	1
Taylor & Hanson ...	North Bridge ..	1	4	0·5
Tetley & Co. ...	Bradshaw Mill ...	2	1	3·0
Thompson Joseph ...	Adelaide Street ..	1	5	2·4
Tillotson J. W. ...	Atlas Carpet Works ...	2	11	4·0
Turner Edwin ...	Dapper Mills ...	3	7	4·8
Turner John ...	Bedford Street ...	1	1	1·0
Ward J. W. & Son ...	Walnut Street ...	5	4	2·7
Ward R. D. ...	Hanson Lane, brick chimney	6	7	3·7
„ ...	Hanson Lane, stone chimney	1	2	0·5
Wade Josiah ...	Hopwood Lane ...	1	2	nil
Walsh, Brearley and Eastburn	Beech Hill ...	1	5	1·6

SMOKE OBSERVATIONS—*Continued.*

Name of Firm.	Address.	Number of Boilers working.	Number of Observations taken.	Average number of Minutes of Dense Smoke emitted.
Wainwright E. M. ...	Sun Works ..	1	8	5·3
Whiteley J. ..	Jubilee Works	1	3	nil
Whitley S. & Co. ...	Hanson Lane ..	5	2	2·5
Whiteley J. & Sons ...	Brunswick Mill .	2	1	nil
Whitaker R. & Co., Ltd.	Corporation Street ..	1	5	nil
Willey R. C. ..	Trafalgar Works ...	6	9	3·7
Wood George ..	Pellon Lane ...	1	4	1·7

TABLE SHOWING NUMBER OF PREMISES REQUIRING
INSPECTION BY THE MEAT INSPECTOR,
JOHN M. CARNIE.

Description of Premises.				Number.
Public Slaughterhouses	...	...	...	1
Private Slaughterhouses	...	...	...	7
Fish Curing Houses	...	...	...	5
Borough Market	...	...	...	1
Wholesale Market	...	...	...	1
Cattle Lairs	...	...	...	5
Potted Meat and Tripe Boiling Houses	...	...	...	50
Fried Fish Shops	...	...	...	66
Knackeries	...	...	...	1
Fat and Bone Boilers	...	...	...	3
Total	...	...	...	140

TABLE SHOWING NUMBER OF VISITS MADE BY THE
MEAT INSPECTOR.

Description of Premises.				Number of Visits.
Public Slaughterhouses	...	...	...	1011
Private Slaughterhouses	...	...	..	281
Fish Curing Houses	...	..	...	68
Borough Market ..	...	...	...	405
Wholesale Market	...	...	...	400
Cattle Lairs	...	...	...	103
Fasting Sheds	...	...	...	589
Knackeries	..	...	...	19
Potted Meat and Tripe Boiling Houses	...	..	...	598
Butchers' Shops	...	..	...	411
Fried Fish Shops	...	...	...	449
Others	...	...	...	343
Total	...	...	...	4677

TABLE SHOWING NUMBER OF VISITS MADE AND FOOD
SEIZED BY THE LATE MEAT INSPECTOR,
MR. JOHN HUTCHINSON.

Description of Premises.					Number of Visits.
Public and Private Slaughterhouses	...	..			354
Fish Curing Houses	...	...	...		64
Cow Sheds	...	.	...	..	51
Cattle Lairs and Fasting Sheds	...		...		341
Knackeries	..	...	...	...	5
Potted Meat and Tripe Boiling Houses	...		..		294
Bakehouses and Confectioners			..	...	447
Milkshops and Dairies	..		...	...	447
Fried Fish Shops, &c.	...		...	...	219
Total	...		...	..	2222

MEAT AND FISH DESTROYED AS UNFIT FOR HUMAN FOOD.

Kind of Food Destroyed.					Quantity in lbs.
Beef and Offal	...	...	...	...	2160
Veal	...	...	..	...	190
Mutton	...	...	...	...	25
Three Pigs	..	...	...	...	340
Fish	...	...	...	...	4702
Mussels	..	...	...	...	1176
Total	...		...	...	8593

TABLE SHOWING MEAT, FISH, FRUIT, &c., DESTROYED
AS UNFIT FOR HUMAN FOOD, DURING THE
YEAR 1896.

Kind of Food Destroyed.					Quantity in lbs.
Seventeen Carcases of Beef	...	...	...	...	9694
Thirty-one Carcases of Pigs	...	...	...	...	3012
Mutton	...	...	...	..	27
Veal	...	...	...	...	380
Fish	...	...	...	...	5537
Shell Fish	..	...	...	..	4078
Mushrooms	...	...	...	...	125
Fruit	...	...	...	...	1083
Rabbits	...	...	...	...	2
Nettles	...	...	...	...	720
Offal	...	...	..	...	1307
Total	...	...	...	...	25965

12 Carcases of Beef and 9 Pigs were suffering from Tuberculosis, 10 Pigs from Jaundice and 3 from Swine Fever.

TABLE SHOWING NUMBER OF SEIZURES DURING THE
YEAR, BY MAGISTRATES' ORDER AND WITH
CONSENT OF OWNERS.

Month.			Destroyed by Magistrates' Order.	Destroyed with consent of Owner.	Total.
January	...	...	...	6	6
February	...	...	...	5	5
March	...	...	...	7	7
April	...	...	2	11	13
May ..	...	...	3	15	18
June...	...	...	8	9	17
July	...	...	9	5	14
August	..	...	1	7	8
September	...	...	7	9	16
October	...	..	8	2	10
November	...	...	3	3	6
December	...	...	5	3	8
Total	..	...	46	82	128

TABLE SHOWING MEAT, FISH, FRUIT, &c., DESTROYED
AS UNFIT FOR HUMAN FOOD,
FROM 1886 TO 1896.

Years.	Meat.	Fish.	Fruit.	Other Articles of Food.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
1886	4527	769	196	180	5672
1887	2110	17	...	...	2127
1888	6955	3672	30	80	10737
1889	3651	1646	70	...	5367
1890	15494	3062	230	2250	21036
1891	4182	6240	40	230	10692
1892	6724	5697	910	63	13394
1893	6028	3512	1064	989	11593
1894	6112	29156	177	406	35851
1895	8466	18661	180	458	27765
1896	14420	9615	1083	847	25965

Pig Killing.

The Sanitary Committee decided to restrict the number of Pigs killed on unlicensed premises, and have issued the following public notice :—

COUNTY BOROUGH OF HALIFAX.

PIG KILLING.

The Corporation of Halifax hereby give notice that any person found slaughtering Pigs on unlicensed premises (except in cases where not more than two Pigs are slaughtered annually, and notice has been given to the Sanitary Inspector, Town Hall, three days before the Pigs are killed), will be proceeded against for acting in contravention of the Acts of Parliament relating to Slaughterhouses.

Dated the 30th December, 1896.

By Order,

KEIGHLEY WALTON,

Town Clerk.

THE FOLLOWING TABLE SHOWS THE POPULATION
AND ACREAGE FOR EACH DISTRICT, WITH
NAMES AND ADDRESSES OF INSPECTORS.

District.	Population.	Area in Acres.	Name and Address of Inspectors.
1	23679	1481	J. Archbell, The Square.
2	27504	620	J. Thompson, 11, Melville Place.
3	23572	832	J. E. Firth, 7, Randolph Street.
4	20020	5276	A. E. Bottomley, Branch Office, Illingworth.
	94775	8209	

District No. 1.

INSPECTOR JAMES ARCHBELL.

Nature of Defects.	Number of Defects.
Defective Sink Drains	108
,, Cellar Drains	41
Made-up Cellar and Walled Drains	11
Defective Yard and Private Street Drains	100
,, Area Drains	21
Untrapped Sink Drains	11
Drains to Disconnect	17
Defective Water Closet Soil Pipes	47
Made-up Water Closets	22
Defective Water Closets	30
Untrapped Bath and Lavatory Waste Pipes	14
Bath and Lavatory Waste Pipes connected to Soil Pipes	15
Defective Roofing	12
,, Fall Pipes	16
,, Troughing	17
,, Urinals	8
Water in Cellars	63
Offensive Poultry	4
,, Pigeons	1
,, Swine	5
,, Swill Tubs	6
,, Rabbits	4
Houses Overcrowded	19

DISTRICT No. 1—*Continued.*

Nature of Defects.	Number of Defects.
Furnished Rooms Overcrowded	4
Offensive Accumulations	142
Ashpits requiring Reconstruction	10
Disused Closets	9
Closets and Ash Tub Places requiring proper Doors...	20
Insufficient Privy Accommodation	13
Bad Smells	63
Nuisances from Workshop Chimneys	10
Drains Tested	88
Smoke Observations taken	320
Houses requiring Limewashing	66
Furnished Rooms requiring Limewashing	35
Closets requiring Limewashing	49
Visits to Lodging Houses	16
,, Houses where Fever Cases existed ..	130
,, Workshops	890
,, Factories	17
,, Furnished Rooms	390
Visits under the Shop Hours Act	392
Houses Inspected	720
Rooms Disinfected	99
Fever Cases removed to the Borough Fever Hospital	21
Samples purchased for Analysis	41

District No. 2.

INSPECTOR JOSEPH THOMPSON.

Nature of Defects.	Number of Defects.
Defective Sink Drains	20
,, ,, Pipes	51
,, Syphon Traps	49
Made-up Sink, Bath and Lavatory Pipes ...	36
,, Cellar Drains	50
,, and Untrapped Area Drains	23
Defective and Made-up Basement and Walled Drains	98
Made-up Sink Drains	19
Defective Pan and other Closets	36
Made-up Water Closets	26
Defective Closet Drains	15
,, Water Closet Cisterns	4
Untrapped Bath, Lavatory and Sink Waste Pipes ...	17
,, Yard and Sumpstone Drains	13
,, Cellar Drains	9
Defective and Broken Fall Pipes	28
Made-up Fall Pipes and Drains	29
Defective Bell Traps in Cellars and Wash Houses ...	17
Made-up Yard and Private Street Drains ...	43
Defective Yard Drains	21
Broken Pot and Iron Traps	11
Made-up Gullies and Disconnecting Traps ..	37
Defective Urinal Drains	9
Bath Pipes to Disconnect	6
Defective Connections to Traps and Gullies ...	28
,, Roofing	9

DISTRICT No. 2—*Continued.*

Nature of Defects.	Number of Defects.
Offensive Middensteads and Accumulations ...	14
Offensive Ashpits and Privies	9
Defective Troughing	33
,, and Made-up Troughing	15
Water in Cellars from Burst Water Pipes and Defec- tive Flagging	14
Offensive Swine, Poultry and Rabbits	5
,, Swill Tubs	3
Dilapidated Closets	17
Insufficient Water Supply to Closets	5
Offensive Smells from Gas Mains	2
Houses Overcrowded	3
Dirty Houses	3
Doors off Closets and Ash Tub Places	25
Dirty Closets	11
Drains Disconnected	34
Visits to Workshops	567
,, Factories	10
,, Shops under the Shop Hours Act	260
Want of Ash Tub Places	5
Complaints of Untrapped Gullies	10
Broken Gulley Grates	5
Rooms Disinfected	85
Fever Cases Removed to the Borough Fever Hospital	13
Smoke Observations taken	196
Visits to Vans occupied as Dwellings	54
Drains Tested	130
Samples Purchased for Analysis	40

District No. 3.

INSPECTOR JAMES EDWARD FIRTH.

Nature of Defects.	Number of Defects.
Made-up and Leaky Sink Pipes	71
Defective Syphon Traps	40
,, Basement Drains	39
Made-up Cellar Drains	33
Defective and Made-up Water Closets ...	50
Old Pan Closets	4
Untrapped Bath, Lavatory, and Sink Waste Pipes .	4
,, Sink Drains	14
,, and Stone-walled Cellar Drains ...	37
,, Drains in Wash Kitchens ..	4
Defective Connections to Drain Pipes ...	32
Broken Fall Pipes	13
Made-up Fall Pipe Drains	24
,, Troughing	30
Defective Bell Traps in Cellars	10
,, Soil Pipes	5
Made-up Yard and Area Drains	46
Broken Pot and Iron Traps	25
Disconnecting Traps without Grates ...	6
Drains disconnected ..	61
Offensive Urinals	7
Insufficient Water Supply to Closets ..	2
Defective and Made-up Dry Traps ..	34
Made-up Street Gullies	65
Damp Houses from Defective Roofs and Soil against Walls of Houses	22

DISTRICT No. 3—*Continued.*

Nature of Defects.	Number of Defects.
Offensive Swine, Poultry, Pigeons, and Rabbits ...	8
„ Swill Tubs	2
Water in Cellars from Defective Drainage and Burst Water Pipes	24
Houses insufficiently Drained	2
Houses Overcrowded	14
Dirty Houses	48
„ Closets	95
Doors off Closets	60
Dilapidated Closets and Ashpits	28
Offensive Accumulations and Middensteads ...	45
Nuisances from Smoke	9
Defective and Made-up Street Gullies... ..	65
Insufficient Privy Accommodation	9
Rooms Disinfected	53
Drains Tested... ..	90
Visits to Workshops	436
„ Factories	102
„ Shops under the Shop Hours Act ...	396
„ Furnished Rooms	51
No Abstract hung in Shops	18
Visits to Vans used as Dwellings	20
„ Houses of Infectious Diseases ...	113
Fever Cases Removed to the Borough Fever Hospital	25
Smoke Observations taken	158
Samples Purchased for Analysis	51
Ashpits converted to Goux System	15

OVENDEN AND ILLINGWORTH.

District No. 4.

INSPECTOR ALBERT EDWARD BOTTOMLEY.

Nature of Defects.	Number of Defects.
Defective and Drawn-out Lead Syphon... ..	12
Made-up Drains	22
Defective Drains	80
„ Connection of Drain Pipes	13
„ Bell Traps	8
„ Fall Pipes	14
„ Troughing	22
Want of proper Drains	24
Drains to Disconnect	32
Untrapped Drains	42
Made-up Gullies	22
Water in Cellars	4
Dirty Closets	58
„ Houses	7
Damp Walls of Houses	4
Offensive Middensteads, Ashplaces and Accumulations	38
„ Swill Tubs	4
Defective W.C. and Soil Pipes	6
Untrapped Sumpstones	84
Dilapidated Closets	11

DISTRICT No. 4—*Continued.*

Nature of Defects.				Number of Defects.
Privies to Convert	..	...	...	27
Defective Flooring	...	...	..	7
Offensive Swine	...	...	...	6
Doors off Closets	...	...	...	11
Insufficient Closet Accommodation	..	...	...	18
Streets to Pave and Sewer	...	...	...	2
Offensive Privies	...	..	...	9
„ Urinals	...	...	...	3
Want of Ventilation	...	..	...	4
Overcrowded Houses	...	...	...	11
Polluted Water	...	...	...	5
Defective Pot Traps	...	---	...	3
„ Walled Drains	...	...	...	14
Offensive Cesspools	...	..	...	5
„ Rabbits	...	...	...	1
„ Chimney	..	...	..	1
„ Fowls	...	...	...	2
Rooms Disinfected	...	...	...	66
Cases removed to Hospital	..	...	...	12
Samples obtained for Analysis	...	...	...	50
Drains Tested	..	...	..	33
Smoke Observations taken	..	...	...	66
Notices Served...	...	...	...	117

FACTORIES AND WORKSHOPS.

TABLE SHOWING NUMBER OF VISITS MADE TO
FACTORIES AND WORKSHOPS BY THE
DISTRICT INSPECTORS.

District.	Number of Visits made to Factories.	Number of Visits made to Workshops.	Number of Visits under the Shop Hours Act.
1	17	890	392
2	10	567	266
3	102	436	396
4	35	86	43
	164	1979	1097

FACTORIES AND WORKSHOPS.

The following Table shows the nature of Nuisances registered :—

District No. 1.

INSPECTOR JAMES ARCHBELL.

Nature of Nuisances.				Number Registered.
IN FACTORIES.				
Insufficient Privy Accommodation	...	...	...	11
Defective Water Closets	...	...	..	31
„ Drains	...	..	...	4
Want of Ventilation	...	...	...	1
IN WORKSHOPS.				
Insufficient Privy Accommodation	...	...	...	8
Defective Water Closets	...	...	..	9
„ Drains	...	...	...	11
Want of Ventilation	...	...	...	4
Workrooms Overcrowded	..	..	...	3
„ requiring Limewashing	...	...	...	52
				134

FACTORIES AND WORKSHOPS.

The following Table shows the nature of Nuisances registered :—

District No. 2.

INSPECTOR JOSEPH THOMPSON.

Nature of Nuisances.				Number Registered.
IN FACTORIES.				
Insufficient Privy Accommodation	..	...		2
IN WORKSHOPS.				
Rooms requiring Limewashing	..	..		23
Insufficient Privy Accommodation	...			8
Defective Water Closets	...	..	...	2
„ Drains	...	...	...	7
„ Roofs	...	...	...	2
Offensive Urinals	...	..	...	5
Made-up Drains	...	...	...	4
Broken Fall Pipes and Troughing	...	...		6
Workrooms Overcrowded	...	...	...	3
Total				62

FACTORIES AND WORKSHOPS.

The following Table shows the nature of Nuisances registered :—

District No. 3.

INSPECTOR JAMES EDWARD FIRTH.

Nature of Nuisances.	Number Registered.
IN FACTORIES.	
Untrapped Water Closets	30
Made-up Water Closet Drains	4
Insufficient Water Supply to Closets	6
Defective Doors to Water Closets	2
IN WORKSHOPS.	
Defective, Broken, and Made-up Water Closets ...	5
Insufficient Privy Accommodation	2
„ Ventilation	2
Dangerous Floors	1
Workrooms requiring Limewashing	13
„ „ Ventilation	2
„ Overcrowded	3
Water in Cellar from Defective Drains	1
Total ...	71

FACTORIES AND WORKSHOPS.

The following Table shows the nature of Nuisances registered :—

District No. 4.

INSPECTOR ALBERT EDWARD BOTTOMLEY.

Nature of Nuisances.	Number Registered.
IN FACTORIES.	
Defective Closets 	6
IN WORKSHOPS.	
Dirty Workshops 	9
Workshops Overcrowded 	1
Want of Ventilation 	1
Total ...	17

Bakehouses.

TABLE SHOWING THE NUMBER OF VISITS MADE TO
BAKEHOUSES DURING THE YEAR.

	Number on Register.	Number of Visits made.
Wheat Bread and Muffin Bakers, including Confectioners	78	557
Oat Bread and Muffin Bakers	14	73
Pie Makers	3	50

TABLE SHOWING DEFECTS IN BAKEHOUSES.

Nature of Defects.	Number of Defects.
Defective Drains	5
Drains Disconnected	3
Bakehouses requiring Limewashing	27
Broken Fall Pipes	1
Dirty Floors	3
Horse kept in Bakehouse	1
Total	40

Cowsheds and Milkshops.

TABLE SHOWING NUMBER OF VISITS MADE
TO COWSHEDS AND MILKSHOPS.

Description of Premises.	Number on Register.	Number of Visits.
Cowsheds	69	169
Milkshops	95	580

DEFECTS IN COWSHEDS AND MILKSHOPS.

Nature of Defects.	Number of Defects.
Dilapidated Cowsheds	3
Sump Hole in Cowshed	1
Badly Ventilated Cowsheds	2
Cowsheds requiring Limewashing	27
Dirty Cans and Floors	6
Insufficient Ventilation	2
Defective Drains	5
Iron Bell Traps	4
Untrapped Stone Walled Drains	3
Drains Disconnected	3
Untrapped Drain	1
Total	57

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

Wards.				Enteric Fever.	Scarlet Fever.	Continued Fever.	Puerperal Fever.	Diphtheria.	Total.
Ovenden	...	...	...	4	5	...	...	4	13
Northowram	...	...	..	10	1	2	1	6	20
North	...	...	...	6	2	...	...	1	9
Central	...	...	...	12	2	...	1	...	15
West ...	...	..	...	7	1	...	1	5	14
South	...	...	...	11	1	...	..	5	17
East ...	...	...	...	8	7	...	...	4	19
Southowram	..	...	...	4	8	...	...	1	13
Skircoat	...	...	...	8	7	...	...	3	18
Pellon	...	...	...	9	3	...	...	4	16
Kingston	...	...	...	12	1	...	1	2	16
Illingworth	...	...	..	17	8	...	..	4	29
Total				... 108	46	2	4	39	199

Rooms Disinfected.

THE FOLLOWING TABLE SHOWS THE NUMBER OF
ROOMS DISINFECTED BY THE DISTRICT
INSPECTORS DURING THE YEAR.

Wards.					Number of Rooms Fumigated.
Illingworth	...	...	...	...	43
Ovenden	...	...	...	...	26
Northowram	...	...	...	...	33
North	...	...	...	...	9
Central	...	..	...	...	26
West	...	...	...	...	22
South	...	...	...	...	22
Kingston	...	...	...	...	29
Pellon	...	...	..	...	26
East	...	...	...	...	31
Southowram	...	...	...	...	15
Skircoat	...	...	...	...	30
Total					312

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	...	...	...	...	198
Mattresses	...	...	...	...	274
Pillows	...	...	...	...	390
Sheets	...	...	...	...	155
Bolsters	...	...	...	...	193
Blankets	...	...	...	...	323
Counterpanes	...	...	...	...	179
Bed Furniture	...	...	...	...	12
Curtains	..	...	...	...	13
Trousers	...	...	...	..	13
Coats and Vests	...	..	...	...	29
Rugs and Carpets	...	...	...	...	72
Drawers	...	...	...	...	2
Flannel Vests, Dresses and Petticoats	...	...	...	...	12
Cushions	..	...	...	...	4
Hose	...	...	...	...	6
Mats and Sundries	...	...	..	...	57
Dressing Gowns and Shawls	...	...	...	...	35
Shirts	...	...	...	...	9
Towels and Stockings	...	...	..	...	12
Jerseys	...	...	...	...	9
Total					1997

TABLE SHOWING THE NUMBER OF INFECTIOUS DISEASES
REMOVED TO THE BOROUGH FEVER HOSPITAL
BY THE DISTRICT INSPECTORS FOR
THE YEAR 1896.

Wards.	Typhoid Fever.	Scarlet Fever.	Diph- theria.	Continued Fever.	Measles.
Ovenden ...	2	3	1	...	...
Northowram ...	10	1	...	2	1
North ...	2	2	...	...	...
Central ..	8	...	...	...	...
West ...	4	5	...	..	13
South ...	2	...	..	...	1
East ...	1	5	...	..	...
Southowram ...	3	2	...	...	...
Skircoat ..	4	7	2	...	...
Pellon ...	4	..	...	...	...
Kingston ...	3	...	1	..	...
Illingworth ...	3	3	...	...	...
Outside the Borough	8	3	...	...	...
Total ...	54	31	4	2	15

Ovenden and Illingworth.

TABLE SHOWING NUMBER OF PREMISES REQUIRING
INSPECTION BY THE DISTRICT INSPECTOR,
ALBERT EDWARD BOTTOMLEY.

Description of Premises.				Number.	Number of Visits.
Private Slaughterhouses	...			3	25
Bakehouses and Confectioners	...			4	35
Oat Bread Bakers	...	...		12	43
Cowsheds	...	...	...	217	1050
				236	1153

Dairies and Cowsheds.

THE FOLLOWING TABLE SHOWS THE NUMBER OF
DEFECTS IN CONNECTION WITH COWSHEDS.

Nature of Defects.				Number of Defects.
Offensive Tanks and Middensteads	..	...	...	5
Dilapidated Cowhouses	...	...	...	11
Tanks to provide	...	...	...	24
Drains to provide	...	...	...	4
Want of Air-space and Ventilation	..	...	...	91
„ Light...	...	...	...	50
Defective Ventilator	...	...	...	1
Pigstye in Cowhouse	...	...	..	1
Defective Floors	...	...	...	5
Dilapidated Pigstye	..	...	...	1
Offensive Sewage	...	...	...	2
Fowls kept in Cowhouse	...	...	...	2
Cowhouses to Limewash	...	...	...	176
Total				373

THE FOLLOWING TABLE SHOWS THE NUMBER OF
 ASHPITS CLEANSED DURING THE YEAR IN
 OVENDEN AND ILLINGWORTH WARDS.

(FORMERLY THE LOCAL BOARD DISTRICT OF OVENDEN.)

Month.		Number of Ashpits emptied.	Loads of Soil.	Loads of Rubbish.	Total Number of Loads.
January	...	156	50	36	86
February	..	167	45	58	103
March	...	103	55	14	69
April	...	141	70	27	97
May	...	161	77	38	115
June	...	105	40	45	85
July	...	192	64	49	113
August	...	171	74	26	100
September	...	28	7	27	34
October	...	218	76	48	124
November	..	139	63	165	228
December	...	59	42	12	54
Total	...	1641	663	546	1209

Streets Scavenging.

The following Table shows the work done in this Department :—

OVENDEN AND ILLINGWORTH DISTRICTS.

Number of Miles of Setting	...	...	5½
Number of Miles of Macadamised Roads		..	16½
Number of Streets Swept	...	...	1601
Number of Loads of Sweepings gathered		...	913
Number of Gullies emptied	...	...	4992

Ovenden and Illingworth.

The following Table shows the nature of Nuisances registered in connection with Bakehouses and Slaughterhouses :—

Nature of Defects.				Number Registered.
IN SLAUGHTERHOUSES.				
Slaughterhouses requiring Limewashing	...			3
Defective Drains	...	...	...	3
Want of Proper Traps	..	...	...	3
Defective Ventilators	...	...	...	3
Drains to Disconnect	...	...	...	2
Want of Proper Water Supply	...	...	...	3
Dilapidated Slaughterhouse	...	..		1
IN BAKEHOUSES.				
Bakehouses requiring Limewashing	...	...		1
Bakehouse to Ventilate	...	...	...	1
Total				20

Canal Boats.

During the year 60 Inspections have been made, and in every case the Boats were found clean and in good condition.

There has not been a single case of sickness or overcrowding during the year, and where women and children were on board, proper provision was made for the division of the sexes.

Of the 60 Boats inspected there were 8 with women and children on board, and 13 with women.

The Boats were free from bilge water, and ventilation fairly good, and proper provision made for the storage of water for domestic purposes, neither has there been any objection to the Inspections.

Canal Boats, 1896.

Number of Boats Inspected.	Number Registered to carry.	Number of Males on Board.	Number of Females on Board.	Total.
60	298	89	21	110

Ages of Children found on Canal Boats.

Ages.	YEARS.						Total.
	2	3	6	8	10	13	
Number ...	3	4	1	2	1	1	12

TABLE SHOWING PROSECUTIONS UNDER THE FOOD AND DRUGS ACT.

Date.	Defendant's Name.	Nature of Offence.	Decision of Court.			Remarks.
			Penalties.	Costs.	Total.	
March 6th	Jowett Samuel ...	Selling Milk adulterated with 17 % of added Water ...	£ s. d. 2 0 0	£ s. d. 0 16 0	£ s. d. 2 16 0	
May 8th	Sutcliffe Arthur ...	Exposing for Sale a Carcase or Beef unfit for human food ...	3 0 0	1 4 0	4 4 0	
May 15th	Hanson Lewis John	Preparing for food a quantity of putrid Pork ..	3 0 0	0 16 0	3 16 0	
June 12th	Swift John Fernside	Obstructing the Inspector in the performance of his duty ...	1 0 0	0 5 6	1 5 6	

PROSECUTIONS UNDER THE FOOD AND DRUGS ACT—Continued.

Date.	Defendant's Name.	Nature of Offence.	Decision of Court.			Remarks.
			Penalties.	Costs.	Total.	
July 21st	Lee Charles Henry...	Hawking decayed Strawberries ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	Dismissed on the ground that there was a doubt about the matter
Sept. 22nd	Sutcliffe John ..	Slaughtering upon Unlicensed Premises ...	0 10 0	0 5 6	0 15 6	

I again beg to thank my Assistants and Mr. J. W. Jackson (Chief Clerk) for the valuable assistance rendered, which has materially assisted me in carrying out the very important duties of this Department.

I am, Gentlemen,

Your obedient Servant,

DAVID TRAVIS,

Chief Sanitary Inspector.

County Borough of Halifax.

Report of the Public Analyst

FOR THE YEAR ENDING DECEMBER 31st, 1896.

*To the Chairman and Members of the Health
Committee of the County Borough of Halifax.*

GENTLEMEN,

During the year just ended I have analysed for your Committee 218 samples of foods and drugs, in compliance with the provisions of the Sale of Food and Drugs Acts, 1875 and 1879 ; also 6 samples of water.

Water.—One of the waters was condemned as unfit to drink ; a second contained a tenth of a grain of lead per gallon—quite sufficient to produce lead poisoning, and of the rest only one was good the others being of questionable purity. Considering the great importance of water supply—public and private—I might be permitted to remark that systematic rather than spasmodic examination would be conducive to the general welfare, especially in face of the fact that last year 60 per cent. of the samples examined were condemned as being unfit to drink, which will be seen on reference to my last report.

Food and Drugs.—The nature of the various samples of foods and drugs examined is shown in the following Table :—

1896. Quarter ending	Milk.	Butter.	Lard.	Beer.	Coffee.	Ginger.	Pepper.	Yorkshire Duck.	Cheese.	Soda Water.	Sulphur.	Precipitated Chalk.	Sweet Nitre.	Total.
Mar. 31st ...	54	...	...	...	...	2	...	...	...	...	4	...	...	60
June 30th...	45	5	...	...	...	...	2	...	...	...	3	1	..	56
Sep. 30th ..	32	...	1	11	7	..	5	1	1	3	..	...	...	61
Dec. 31st ...	28	10	..	...	...	...	...	...	...	..	..	..	3	41
	159	15	1	11	7	2	7	1	1	3	7	1	3	218

As the result of my analyses I have as usual reported each sample as “genuine,” “of doubtful genuineness,” or “adulterated.” All the substances examined are classified under these headings in the following statement :—

	Genuine.	Doubtful.	Adulterated.
1st Quarter ...	56	3	1
2nd „ ..	52	4	0
3rd „ ...	54	2	5
4th „ ...	38	2	1
Total ...	200	11	7

The following are the cases of adulteration :—

Date.	Kind of Sample.	Nature of Adulteration.	Remarks.
Feb. 6.	Milk	17% added water..	Fine and costs imposed £2 16s. 0d.
Aug. 28	Coffee	Chicory	
Sept. 16.	Hop Beer	1·12% of alcohol..	Equal to 2·47 % proof spirit.
,, 17.	2 Syphons of Soda Water	$\frac{1}{2}$ Pharmacopœia strength.	
	1 Syphon of Soda Water	$\frac{1}{3}$ Pharmacopœia strength.	
Dec. 14.	Skimmed Milk ...	14% added water..	Fine and costs imposed £1 17s. 6d.

The sample of coffee was sold as coffee, but in a paper labelled “a mixture.”

The two milk prosecutions were for extreme cases of adulteration with water; on the average the milk of 11 cows being diluted up to the yield of 13, the pump thus taking the place of 2 cows.

The hop beer with its 2·47 per cent. of proof spirit was sold as non-intoxicant.

The soda waters in syphon bottles fell far below the legal standard of 30 grains of bicarbonate per pint. As I have before pointed out it is of importance that the strength should be put on the label, and this I observe is now being done by at least one firm.

The percentage of adulterated samples has been 3·2 which is below the average of former years, as will be seen from the following figures :—

Percentage of Adulterated Samples	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
	5	9·3	15	1·8	2·9	11·4	6	3	5·4	6·7	1·5	3·2

The doubtful samples were all milks in which the quality was so much below the average of other deliveries that they came dangerously near to being classed as adulterated. The analyses of milks, as befitting its importance as an article of food, have been far more numerous than those of any other food or drug forming indeed 73 % of the whole number of samples examined and reported on. Next in importance comes butter to the extent of nearly 7 %. All the butters were genuine both as regards the fats and the amount of water in them.

The drugs examined have been few in number, only some 5%. On account of their importance I should like to see their relative number increased.

Upon the whole, I have pleasure in reporting that the year's work is satisfactory, and that the low percentage of adulterated samples is a testimony to the efficacy of a continuous and consistent administration of the Food and Drugs Acts.

I am, Gentlemen,

Yours obediently,

WILLIAM ACKROYD,

Public Analyst.

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