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ANNUAL REPORT

ON THE

HEALTH

OF THE

CITY OF SHEFFIELD

FOR THE YEAR 1898.

JOHN ROBERTSON, M.D., B.Sc.,
Medical Officer of Health.

LOXLEY BROTHERS, PRINTERS, ATLAS PRINTING WORKS, FARGATE, SHEFFIELD.

City of Sheffield.

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NOVEMBER 1898.

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TOWN HALL,

SHEFFIELD.

June 8th, 1899.

To the Chairman and Members of the Health Committee,
Corporation of Sheffield.

Gentlemen,

I have the honour to present for your consideration my Annual Report on the Public Health of the City for the year ending December 31st, 1898.

The general mortality rate during the year may be considered as not an excessive one when it is remembered that the general climatic conditions during the summer were just those most conducive to the production of Summer Diarrhœa and Enteric Fever in a city where there is a large susceptible population and where many of the conditions exist which predispose to such diseases.

It is with great satisfaction that I have to record in the present Report a considerable number of important works which have been initiated during the year, and which will, in the course of time, have a most important influence in raising the standard of healthiness of our City.

Probably the most important work, from a health point of view, which has been undertaken by the City Council, has been the purchase of the Tramways and the subsequent extension of a quick and cheap service all over the City. I anticipate that this will enable our large artizan population to spread themselves over a much larger area than it has hitherto been possible. This will undoubtedly reduce the overcrowding in the centre of the City and will enable steps to be taken to reduce the number of houses in some of the most crowded districts.

The various statistics in this Report are, to a large extent, identical in form with those in former Reports.

I have pleasure in reporting that the various officials in the Health Department have carried out their duties in a conscientious manner.

Much assistance has been gratuitously rendered by the medical profession in what has been purely preventive medicine, and I desire to tender to them my most hearty thanks.

I am, Gentlemen,

Your obedient Servant,

JOHN ROBERTSON.

SUMMARY OF VITAL AND MORTAL STATISTICS FOR 1898.

AREA OF CITY	19,651 Acres, divided into NINE Registration Sub-Districts.
POPULATION	356,478.
DENSITY	18·1 Persons per Acre.
INHABITED HOUSES	Census of 1891, 66,783, with 2,596 uninhabited, and 321 building.
HOUSES CERTIFIED AS FIT FOR HUMAN HABITATION, APRIL, 1891, TO JUNE 30th, 1898	6,767.
NUMBER OF NEW DWELLING-HOUSES CERTIFIED AS FIT FOR OCCUPATION DURING THE YEAR	2,259*
MARRIAGES	3,496.
BIRTHS	12,066; Birth-rate, 33·8.
DEATHS	7,213; Death-rate, 20·2.
INFANTILE MORTALITY	2,347 under 1 year, or 195 per 1,000 Births.
ZYMOTIC DEATH-RATE (7 PRINCIPAL ZYMOTICS)	3·94
ESTIMATED INCREASE OF POPULATION	4,630, but the natural increase, *i.e.*, excess of Births over Deaths, was 4,853.

* This figure includes also a few houses which at the time were not certified, although occupied.

REPORT.

POPULATION.

The rate of increase of population varies so much from year to year in large cities that it is a matter of the utmost difficulty to arrive at an estimate which is approximately correct. Not only is it impossible to make an accurate estimate of the population of Sheffield during 1898, but estimates of the number of persons living in the Registration Sub-Districts are less accurate than is the estimated population for the whole City.

It therefore follows that all the Health Statistics for the City as a whole, and also of the individual Registration areas, are only approximately accurate.

The Registrar-General has adopted the only available means of estimating our population without taking into consideration local conditions. His method is to assume that the same rate of increase is taking place at present as took place during the years 1881 to 1891.

If trade and other conditions remained the same this method would give fairly accurate results.

If, too, the increase or decrease which obtained during the last intercensal period in the several Registration Sub-Districts continued, the population at present living in each of these districts might be much more accurately computed. Such, however, is not the case.

Anybody who knows the conditions of trade in the City cannot but recognise how much the estimated population is liable to error, and still more how much the population of the constituent areas of the City vary from time to time.

At the 1881 census the error in the estimated population was no less than 26,280 persons—equal to 9% above what it ought to have been.

At the 1891 census it was found that the estimated population of this City was 14,291 above what it actually proved to be by the census enumeration.

If the death-rate for 1881 had been calculated on the estimated population, it would have been 19·01 per 1,000 persons, whereas the actual death rate for the year was 20·78.

In several towns the error has been a very serious one, *e.g.*, in Liverpool it was no less than 100,659 too high. There is, therefore, a great need for a quinquennial census.

The estimated population at the 1881 and 1891 censuses was found to be higher than the enumerated population. It is almost certain that at present there is an error in under-estimating the population, so that our Health statistics, when stated as a rate per 1,000, will be too high.

The error will be much greater in the case of statistics in regard to the various Registration Sub-Districts of the City.

There appears to be no means of preventing these errors other than by a quinquennial census.

Such intercensal enumeration need not be in any way so elaborate as the decennial census. Probably all that is required is the number of persons living at each age, and the sex.

The reasons for thinking that the population is at present under-estimated are as follows:—

1st. Trade has been exceptionally good in Sheffield during recent years, and as a result, the demand for house accommodation has been greater than in any years of which there are records. During the year ending December, 1898, no less than 2,259 new houses were inhabited—a number far in excess of any previous year (see table on page 9). Notwithstanding this enormous increase in the City, there occurred a very large increase in several of the areas immediately outside the City boundary, and such houses were tenanted by persons who could not find accommodation in the City. In addition to such evidence, there has been during the past few years the greatest difficulty in finding houses for the working classes in the City. Over crowding is still a frequent occurrence. On several occasions, when action has had to be taken in such cases, it has been found almost impossible to enforce the requirements of the notice on account of the difficulty of finding another house.

2nd. The natural increase in the population which proved to be a fairly accurate guide in 1891, shows that the estimate of 356,478 is too low.

3rd. The birth-rate shows less variation from year to year than do other statistics; and if we assume that relatively the same number of children are born per 1,000 of the population now as in 1891, the present estimate will be seen to be too low.

For the purpose of this report the Registrar-General's estimate of 356,478 is used, and it should be borne in mind that the rates calculated on it are all probably too high.

DISTRIBUTION OF POPULATION.

In every district the population is unevenly distributed, and this is very marked in the case of Sheffield. Bearing in mind the influence of density of population upon the health of the people, it is important to note the great difference in density in the various districts of the City (see Table II). It must also be remembered that certain areas in some of the districts are much more densely populated than others, *e.g.*, in the Park Registration District part is purely rural, while another portion is densely populated.

TABLE I.—*Showing the Population of each of the Nine Registration Sub-Districts at the Census of 1881 and 1891, also the computed Population at the middle of 1898.*

District.	Population 1881.	Population 1891.	Middle of 1898.
Sheffield West	14,957	14,105	13,400
Do. North	38,982	37,499	36,459
Do. South	17,919	18,411	18,726
Do. Park	19,948	21,401	22,420
Brightside	56,719	67,083	74,862
Attercliffe	26,965	35,883	43,642
Nether Hallam	38,967	46,328	52,447
Upper Hallam	2,513	2,709	2,860
Ecclesall.....	67,538	80,824	91,662
Totals	284,508	324,243	356,478

TABLE II.—*Showing the Area in Acres, and the Number of Persons per Acre in each of the Nine Registration Sub-Districts.*

District.	Area in Acres.	Population 1898.	Persons per Acre.
Sheffield West	198	13,400	67·7
Do. North	160	36,459	227·8
Do. South	253	18,726	74·0
Do. Park	2,417	22,420	9·3
Brightside	2,821	74,862	26·5
Attercliffe	1,297	43,642	33·6
Nether Hallam	1,538	52,447	34·1
Upper Hallam	6,334	2,860	0·5
Ecclesall.....	4,633	91,662	19·8
Totals	19,651	356,478	18·1

In the accompanying Table is set out the number of new houses in each of the districts. The Table indicates pretty clearly the districts where the increases are most marked.

TABLE III.—*Showing the number of New Houses Certified by the City Surveyor as Fit for Human Habitation, from the Census of 1891 to the middle of 1898.*

Year.	West.	North.	South.	Park.	Bright-side.	Atter-cliffe.	Nether Hallam.	Upper Hallam.	Ecclesall.	Totals.
1891 (part of)	...	17	14	29	126	116	55	4	175	536
1892 ...	...	22	11	32	121	155	170	7	268	786
1893 ...	...	11	15	42	165	186	198	17	194	828
1894 ...	1	3	4	36	120	123	153	16	175	631
1895 ...	...	...	13	20	85	106	141	4	155	524
1896 ...	2	18	14	68	135	288	221	7	207	1,060
1897, to June 30	1	4	4	16	107	186	239	4	159	720
*June '97 to June '98	2	7	15	26	179	467	522	13	451	1,682
Totals...	6	82	90	269	1,038	1,627	1,699	72	1,884	6,767

* These figures include also a few houses which at the time were not certified although occupied.

MARRIAGES.

3,496 Marriages were registered in the City during 1898. An increase of 31 over the previous year. In other words, **6,992** persons, or **19·6** in every 1,000 of the population, were married. In 1897, 19·6 per 1,000 were married.

TABLE IV.

	Total Number of Marriages in Sheffield.	Persons Married per 1,000 in Sheffield.	Persons Married per 1,000 in England and Wales.
1888	2,885	17·9	14·4
1889	3,073	18·7	15·0
1890	No Record	No Record	15·5
1891			15·6
1892	3,091	18·7	15·4
1893	2,797	16·7	14·7
1894	3,215	19·0	15·1
1895	2,810	16·0	15·0
1896	3,322	19·0	15·7
1897	3,465	19·6	16·0
1898	3,496	19·6	16·2
Mean	3,128	18·4	15·3

BIRTHS.

The number of Births registered during 1898 was 12,066, against 12,132 in 1897. The birth-rate for 1898 was 33·8, against 34·4 in 1897. The average rate for the previous 10 years was 34·2.

In Table VII the birth-rate for Sheffield, and also that for England and Wales, is set out for each year since 1871. It will be noted that in each case there is evidence of a slow but marked decline in the birth-rate, and in the case of Sheffield it will be seen from the marriage-rates shewn above that there is coincident with this decline in the birth-rate an increase in the marriage-rate. This decline in the birth-rate has continued notwithstanding the general prosperity of the City and the increased number of marriages.

A very similar condition of affairs is found to be taking place in other districts of this country. So, too, in most European countries very similar conditions are found to exist.

The natural result of an increase in the marriage-rate in former years was an increase in the birth-rate. It is, unfortunately, too obvious that unnatural causes are at work. The registered deaths in England and Wales from premature births are increasing, so also are those from abortion and miscarriage.

It might be thought that there would be a lessened mortality among young infants as an indication that greater care was being taken with the smaller number of children born, but this is not the case, either in England as a whole, or in large cities like Sheffield, where the death-rate under one year shows a tendency to increase rather than to decrease.

The decline in the birth-rate has not been coincident with an increase in the rate of illegitimacy.

The birth-rate in Sheffield during 1898, while relatively a low one when compared with previous years, is, when compared with that in other towns, a high one. In the 33 great towns the rate in 1898 was **30·3** per 1,000. It varied from **35·8** in Wolverhampton,
35·5 ,, Gateshead,
35·4 ,, Sunderland,
to **24·0** ,, Bradford,
22·9 ,, Halifax,
22·5 ,, Huddersfield.

TABLE V.—BIRTH-RATE in Registration Sub-Districts.

	West.	North.	South.	Park.	Brightside.	Attercliffe.	Nether Hallam.	Upper Hallam.	Ecclesall.
1889	37·4	34·8	32·5	38·4	37·8	35·6	28·8	19·6	28·5
1890	33·8	35·5	32·5	34·8	35·3	39·9	31·1	18·1	28·9
1891	38·7	35·9	32·9	40·5	37·2	40·2	36·9	25·4	33·7
1892	34·7	37·7	33·1	38·9	36·6	39·0	34·8	20·1	31·6
1893	37·9	37·5	33·3	38·7	35·0	38·2	34·5	26·8	30·6
1894	38·5	38·2	31·7	36·9	33·3	34·6	32·7	23·6	29·7
1895	40·5	37·9	30·8	39·3	35·9	37·9	34·8	26·4	31·0
1896	37·9	37·5	32·3	42·2	33·8	35·8	33·8	30·0	30·1
1897	38·4	38·7	30·0	37·9	34·3	36·8	36·4	27·4	30·2
1898	40·2	38·5	29·3	37·9	33·4	38·4	33·9	20·6	29·6
Mean	37·8	37·2	31·8	38·5	35·3	37·6	33·8	23·8	30·4

TABLE VI.—*Showing the Birth-Rate during the year for the whole City, and for each of the Registration Sub-Districts; also the total number of Births, Legitimate and Illegitimate, in each.*

District.	Estimated Population in the middle of 1898.	Legitimate.		Illegitimate.		Totals.	Birth Rate per 1,000 per annum.
		Male.	Female.	Male.	Female.		
Sheffield West...	13,400	252	254	17	16	539	40·2
,, North..	36,459	634	680	45	43	1,402	38·5
,, South .	18,726	258	258	17	16	549	29·3
,, Park...	22,420	418	392	20	19	849	37·9
Brightside	74,862	1,220	1,152	64	61	2,497	33·4
Attercliffe	43,642	804	819	23	32	1,678	38·4
Nether Hallam..	52,447	880	840	27	29	1,776	33·9
Upper Hallam...	2,860	32	26	1	...	59	20·6
Ecclesall	91,662	1,285	1,322	64	46	2,717	29·6
Totals.....	356,478	5,783	5,743	278	262	12,066	33·8

ILLEGITIMACY.

The number of illegitimate births registered was 540, equal to 4·5 per cent. of the total children born. The percentages of illegitimate births varies in the different districts, and were as follows during 1898 :—

West	6·3 %	Brightside	5·0 %
North	6·3 ,,	Attercliffe	3·3 ,,
South	6·0 ,,	Nether Hallam	3·2 ,,
Park	4·6 ,,	Upper Hallam	1·7 ,,
Ecclesall	4·0 %		

TABLE VII.—*Showing the Population of Sheffield, and the number of Births and Deaths in past years. The Birth-rates and Death-rates deducible from these figures are also shown, also the Birth-rates and the Death-rates in England and Wales.*

YEAR.	SHEFFIELD.					ENGLAND.	
	POPULATION.	BIRTHS.		DEATHS.		Birth-rates.	Death-rates.
		Number of Births.	Birth-rate per 1,000 per annum.	Number of Deaths.	Death-rates per 1,000 per annum.		
1736	14,105						
1801	45,758						
1811	53,231						
1821	65,272						
1831	91,702						
1841	110,891						
1851	142,635	5,946	41·6	4,027	28·2	34·2	22·0
1861	186,375	7,561	40·5	4,610	24·7	34·6	21·6
1871	241,506	9,764	40·4	6,843	28·3	35·0	22·6
1872	245,023	9,973	40·6	6,445	26·3	35·6	21·3
1873	248,954	10,761	43·2	6,558	26·3	35·4	21·0
1874	253,645	10,861	42·8	7,009	27·6	36·0	22·2
1875	257,827	11,026	42·7	6,642	25·7	35·4	22·7
1876	262,080	11,265	42·7	6,568	25·1	36·3	20·9
1877	266,401	10,859	40·7	6,154	23·1	36·0	20·3
1878	270,791	10,985	40·3	7,208	26·6	35·6	21·6
1879	275,356	10,822	39·2	6,422	23·3	34·7	20·7
1880	279,800	10,723	38·3	6,410	22·9	34·2	20·5
1881	284,508	10,814	38·0	5,909	20·7	33·9	18·9
1882	289,194	10,837	35·4	6,281	21·1	33·8	19·6
1883	293,001	10,812	36·9	6,755	23·0	33·5	19·6
1884	296,856	11,272	37·9	6,832	23·0	33·6	19·7
1885	300,762	10,737	35·6	6,328	21·0	32·9	19·2
1886	304,720	10,567	34·6	6,130	20·1	32·8	19·5
1887	308,730	10,389	33·6	6,820	22·0	31·9	19·1
1888	312,793	9,863	31·5	6,611	21·1	31·2	18·1
1889	316,901	10,844	34·2	6,841	21·5	31·1	18·2
1890	321,079	10,691	33·2	8,316	25·9	30·2	19·5
1891	325,304	11,862	36·4	7,775	23·9	31·4	20·2
1892	329,585	11,846	35·2	6,840	20·7	30·5	19·0
1893	333,922	11,584	34·7	7,419	22·2	30·8	19·2
1894	338,316	11,267	33·3	6,028	17·8	29·6	16·6
1895	342,768	12,012	35·0	7,008	20·4	30·4	18·7
1896	347,278	11,853	34·1	6,732	19·3	29·7	17·1
1897	351,848	12,132	34·4	7,464	21·2	29·7	17·4
1898	356,478	12,066	33·8	7,213	20·2	29·4	17·6

DEATHS.

During 1897 the deaths of 7,213 persons were registered. Of this number **3,439** were of females, and **3,774** of males.

In the last Table will be found the number of deaths occurring in each year since 1871.

During 1898, 20·2 persons died in every 1,000 of the population living, as compared with 21·2 in 1897, and 21·4 during the 10 years ending December, 1897.

In the column of death-rates in Table VII., it will be noted that with certain minor exceptions, there has been a steady reduction in the death-rate taking place in Sheffield during the past 40 years. There is undoubtedly room for a still further reduction in the Annual Mortality rate, and there appears to be no reason whatever why the rate should not diminish as fast during the next 40 years as it has done in the past. In order to make it possible that this should take place, a much higher standard of sanitation will need to be recognised than is at present generally accepted. The four most needed improvements are :—

1st. That houses and workshops should have the greatest possible amount of direct sunlight. Those who live and work in cellars, or in houses or workshops which are little better than cellars, are notoriously liable to illness. It may be said that in direct proportion as sunlight is present, so is the health of the people maintained.

2nd. It is becoming every year more obvious that abundance of fresh air is as important as abundance of sunlight.

3rd. All organic polluting matters liable to decomposition should be removed from populous areas so frequently and so efficiently that there should be no chance of putrefaction taking place, and no chance of pollution of the soil in proximity to dwelling houses. The ideal condition to be aimed at is one where :—

(*a*) All fœcal and other sewage matters are removed by the water-carriage system into sewers which do not admit of stagnation or putrefaction.

(*b*) Dry refuse is removed daily or weekly from every house, and

(*c*) Where the surfaces of the roadways, yards, and courts are kept in such a condition that the smallest possible amount of organic matter is ground into dust and blown about.

4th. The greatest reduction in the death-rate is to be made among young children—among whom the waste of human life is at present enormous on account of ignorance and negligence in methods of rearing such.

None of the towns in this country have as yet adopted any exceptionally high standard of sanitary requirement. As a matter of fact, every year sees the standard increased slightly.

If we take one of the healthiest of the 33 great towns in England, and compare the corrected death-rate for that town with the corrected death-rate for Sheffield, we find that instead of 7,213 deaths occurring in Sheffield in 1898, only 4,640 deaths would have occurred had the death-rate been the same in Sheffield as at Croydon. The explanation of the difference is, of course, that in Sheffield the conditions are less sanitary, and also that the trades are more unhealthy.

Comparing the death-rate in Sheffield during 1898 with that of the other 33 large towns, it will be seen that Sheffield occupies the 6th position from the unhealthy end of the list, as shown in Table XIV.

In the accompanying table I have indicated the comparative mortality figure, and the position of Sheffield in the list for each year since 1892.

TABLE VIII.

Year.	Comparative Mortality Figures.	Position on List.
1892	1,218	9th from bottom.
1893	1,294	8th ,,
1894	1,191	15th ,,
1895	1,216	11th ,,
1896	1,253	8th ,,
1897	1,352	7th ,,
1898	1,280	6th ,,

INFANTILE DEATH-RATE.

The births of 12,066 infants were registered in the City during 1898, and the deaths of 2,347 infants under 1 year of age were also recorded during the year. This gives an infantile mortality rate of 195.

In previous years the mortality rates were as follows :

1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
170	195	170	167	193	157	195	171	197	195

TABLE IX.—*In the 33 Great Towns the following Infantile Mortality rates were recorded during 1898.:—*

33 Great Towns	178	Bolton	168
London	167	Manchester	197
West Ham	170	Salford	212
Croydon	150	Oldham	175
Brighton	181	Burnley	195
Portsmouth	156	Blackburn	206
Plymouth	170	Preston	225
Bristol	164	Huddersfield	153
Cardiff	158	Halifax	163
Swansea	184	Bradford	185
Wolverhampton	200	Leeds	182
Birmingham	191		
Norwich	192	**SHEFFIELD ... ...**	**195**
Leicester	191		
Nottingham	178	Hull	182
Derby	169	Sunderland	202
Birkenhead	186	Gateshead	208
Liverpool	184	Newcastle	190

Among the 100 largest towns in England and Wales, 18 had infantile mortality rates as high as, or higher than that of Sheffield, while 81 had lower rates.

The infantile mortality rates in Sheffield among legitimate and illegitimate children were as follows:—

Legitimate ... ... 188 deaths per 1,000 births.
Illegitimate ... ... 319 „ „ „

In Table X will be found further details in regard to the deaths of illegitimate children who died during 1898.

TABLE X.—*Analysis of the Deaths which occurred during the year 1898 among Illegitimate Children under the age of five years.*

DISTRICTS.	DEATHS.			AGES AT DEATH.				CAUSES OF DEATH.							CERTIFIED, NOT CERTIFIED, INQUEST.		
	TOTAL.	MALE.	FEMALE.	UNDER 1 WEEK.	BETWEEN 1 WEEK AND 1 MONTH.	BETWEEN 1 MONTH AND 1 YEAR.	BETWEEN 1 YEAR AND 5 YEARS.	ZYMOTIC DISEASES.	DIARRHŒA.	CHEST INFLAMMATIONS.	MENINGITIS AND CONVULSIONS.	VIOLENCE.	INANITION.	OTHER CAUSES.	CERTIFIED.	NOT CERTIFIED.	INQUEST.
Sheffield West..	21	10	11	2	3	10	6	3	4	2	4	1	5	2	18	...	3
„ North	30	14	16	1	...	22	7	...	12	4	4	...	5	5	27	1	2
„ South	14	7	7	1	1	9	3	2	3	2	1	...	3	3	13	1	...
„ Park.	18	8	10	3	2	12	1	1	3	1	1	...	4	8	17	1	...
Brightside ...	36	20	16	...	5	22	9	2	10	3	4	...	9	8	34	1	1
Attercliffe ...	33	15	18	5	7	18	3	1	8	3	3	1	9	8	31	1	1
Nether Hallam	22	8	14	4	...	15	3	2	9	4	3	...	2	2	22	...	...
Upper Hallam	1	...	1	...	...	1	...	...	...	1	...	...	...	...	1	...	...
Ecclesall ...	31	20	11	5	4	20	2	...	3	3	4	...	13	8	26	4	1
Totals ...	206	102	104	21	22	129	34	11	52	23	24	2	50	44	189	9	8

CHART I.—WEEKLY NUMBER OF DEATHS, SHEFFIELD, 1898.

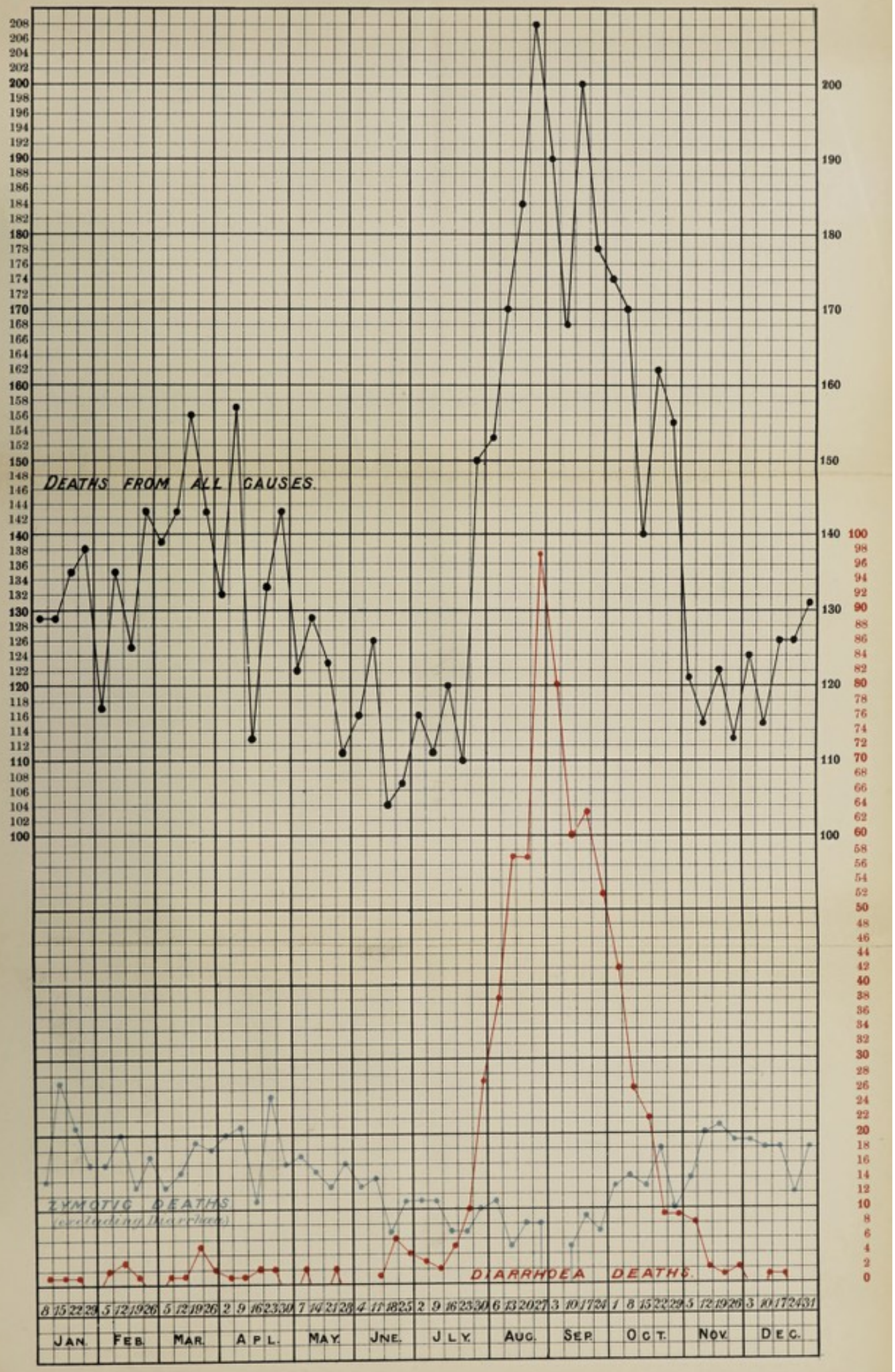

TABLE XI.—*Showing the number of Deaths at different ages, and from various causes, in each of the Nine Registration Sub-Districts, for the year 1898.*

DISTRICTS.	AGES AT DEATH.							CAUSES OF DEATH.				
	All Ages.	Under 1 Year.	1 and under 5 Years.	5 and under 15 Years.	15 and under 25 Years.	25 and under 60 Years.	Over 60 Years.	Zymotic Diseases (excluding Diarrhœa).	Diarrhœa.	Phthisis.	Chest Inflammations.	Other Causes.
Sheffield West	400	119	59	9	25	107	81	32	45	34	74	215
Do. North	1,032	320	177	36	43	294	162	95	127	93	152	565
Do. South	385	112	69	10	9	120	65	39	51	30	69	196
Do. Park	510	164	98	12	22	115	99	68	50	24	84	284
Brightside	1,360	483	220	51	50	299	257	145	140	77	216	782
Attercliffe	956	380	173	45	33	176	149	116	101	31	165	543
Nether Hallam	1,058	330	170	55	41	248	214	132	97	62	164	603
Upper Hallam	33	4	2	1	3	9	14	4	...	3	3	23
Ecclesall	1,479	435	147	56	63	390	388	108	102	94	238	937
TOTALS	7,213	2,347	1,115	275	289	1,758	1,429	739	713	448	1,165	4,148

This Table has been compiled after distributing the Deaths which occurred in the various Public Institutions over the Sub-Districts from which they were admitted.

TABLE XII.—*Showing the Death-rate per 1,000 per annum, at various ages and from a number of causes, during the year 1898, in each of the Registration Sub-Districts.*

DISTRICTS.	AGES AT DEATH.							CAUSES OF DEATH.				
	All Ages.	Under 1 Year.	1 and under 5 Years.	5 and under 15 Years.	15 and under 25 Years.	25 and under 60 Years.	Over 60 Years.	Zymotic Diseases (excluding Diarrhœa)	Diarrhœa.	Phthisis.	Chest Inflammations.	Other Causes.
Sheffield West	29·85	303·5	45·6	2·9	9·4	20·5	116·7	2·38	3·36	2·54	5·52	16·04
Do. North	28·31	300·2	50·3	4·2	5·9	20·7	85·8	2·61	3·48	2·55	4·17	15·50
Do. South	20·56	204·8	38·2	2·3	2·4	16·4	67·0	2·08	2·72	1·60	3·68	10·47
Do. Park	22·75	250·3	45·2	2·3	4·9	13·2	85·3	3·03	2·23	1·07	3·75	12·67
Brightside	18·16	220·6	30·5	2·9	3·4	10·2	66·3	1·94	1·87	1·03	2·89	10·45
Attercliffe	21·91	297·8	41·1	4·4	3·8	10·3	65·9	2·66	2·31	0·71	3·78	12·44
Nether Hallam	20·17	215·3	33·6	4·4	3·9	12·1	78·8	2·52	1·85	1·18	3·13	11·50
Upper Hallam	11·54	47·6	7·2	1·5	5·3	8·1	94·6	1·40	...	1·05	1·05	8·04
Ecclesall	16·14	162·3	16·6	2·6	3·5	10·9	81·7	1·18	1·11	1·03	2·60	10·22
City	20·23	225·2	32·4	3·3	4·1	12·7	77·4	2·07	2·00	1·26	3·27	11·64

DISTRIBUTION OF MORTALITY IN THE CITY.

In Tables XI and XII will be found certain information in regard to the number of deaths and the death-rates at different ages, and from various causes, in each of the nine Registration Sub-Districts in the City. It will be noted that during 1898 the mortality rate was specially high in certain of the Districts, and, on referring to previous Reports, it will be found that almost every year the mortality rate is much higher in these Districts than in others. During 1898 in the Districts of West and North the mortality rate amounted to 28·7, while in Brightside and Attercliffe it was 19·5. Had the same mortality rate occurred in the West and North Districts as in Brightside and Attercliffe **450** lives would probably have been saved.

In the accompanying Table the two most unhealthy Districts are compared with the two large Districts of Brightside and Attercliffe, which are chosen on account of their being populated with persons of the artisan class. Such a comparison is more reasonable than one between Districts inhabited by the poorest class and those where the wealthier classes reside.

TABLE XIII.—*Comparative Death-rates from All Causes, and from a number of Diseases in the Registration Sub-Districts of West and North, and Brightside and Attercliffe, for the 10 years 1889 to 1898.*

Sub-District.	Disease.	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Average 10 Years
WEST. Population, 13,400	All Causes...	28·6	33·0	31·7	24·1	29·8	22·1	26·0	26·7	27·3	29·8	27·9
	Zymotics ...	4·0	3·5	3·7	4·1	3·4	2·2	4·6	4·0	4·4	5·7	4·0
	Phthisis ...	2·0	3·3	2·8	1·9	2·3	1·5	2·3	2·2	2·1	2·5	2·3
	Convulsions.	2·5	2·1	2·1	1·2	1·8	0·9	0·8	1·4	1·3	1·6	1·6
	Bronchitis ...	4·7	5·0	5·5	3·4	4·9	3·3	3·1	3·6	2·5	3·6	4·0
	Pneumonia..	2·1	2·4	3·3	2·3	2·6	2·1	2·0	2·5	2·8	1·9	2·4
	Enteritis ...	0·1	0·3	0·1	0·0	0·3	0·4	0·4	0·2	0·5	0·4	0·3
	Debility ...	1·2	1·3	1·1	0·6	1·4	1·0	1·2	1·4	1·0	1·5	1·2
NORTH. Population, 36,459	All Causes...	25·3	33·6	33·4	27·6	30·6	24·5	28·7	27·7	29·4	28·3	28·9
	Zymotics ...	3·9	4·7	3·8	4·0	6·3	3·4	5·0	5·7	4·8	6·1	4·8
	Phthisis ...	2·4	2·7	2·6	2·3	2·7	2·3	2·1	1·9	2·8	2·5	2·4
	Convulsions.	1·6	2·0	1·9	1·5	1·3	1·3	1·6	1·4	1·3	1·8	1·6
	Bronchitis ...	2·8	4·2	6·0	4·1	3·9	2·9	3·4	3·2	3·1	2·1	3·6
	Pneumonia..	1·9	2·0	3·8	3·2	3·7	2·7	2·7	2·7	3·3	2·0	2·8
	Enteritis ...	0·1	0·4	0·6	0·3	0·3	0·3	0·3	0·4	0·6	0·6	0·4
	Debility ...	1·7	1·4	1·1	0·9	1·3	1·0	1·4	1·3	2·1	1·1	1·3
BRIGHT-SIDE. Population, 74,862	All Causes...	21·3	25·2	21·7	20·2	20·9	16·5	18·9	17·6	20·6	18·2	20·1
	Zymotics ...	3·3	3·3	2·4	3·3	2·7	2·2	3·1	2·7	4·2	3·8	3·1
	Phthisis ...	1·5	1·6	1·6	1·2	1·4	1·2	1·2	1·1	1·1	1·0	1·3
	Convulsions.	1·3	2·0	1·7	1·0	1·5	0·9	1·1	1·1	1·1	0·9	1·3
	Bronchitis ...	2·3	2·6	2·6	2·0	2·3	1·7	2·1	1·6	1·6	1·1	2·0
	Pneumonia..	2·7	3·4	3·5	2·8	2·7	1·9	2·2	2·2	2·5	1·7	2·6
	Enteritis ...	0·2	0·2	0·3	0·2	0·7	0·2	0·3	0·4	0·5	0·5	0·4
	Debility ...	1·1	0·8	0·7	0·9	1·1	1·1	1·4	1·2	1·2	1·1	1·1
ATTER-CLIFFE. Population, 43,642	All Causes...	16·9	27·7	23·2	21·2	20·1	17·6	19·8	19·1	20·3	21·9	20·8
	Zymotics ...	2·4	4·7	2·1	3·2	2·8	2·5	4·1	3·3	3·7	5·0	3·4
	Phthisis ...	1·1	1·3	1·1	0·8	1·3	1·3	1·4	1·0	1·2	0·7	1·1
	Convulsions.	0·8	1·6	1·4	1·3	1·5	1·2	1·1	1·1	1·2	1·4	1·3
	Bronchitis ...	2·3	3·5	4·4	3·3	3·6	2·4	2·1	2·4	1·8	1·5	2·7
	Pneumonia..	1·1	2·5	2·2	2·6	1·8	1·9	1·7	2·4	2·3	2·2	2·1
	Enteritis ...	...	0·1	0·1	0·1	0·4	0·1	0·3	0·4	0·8	0·9	0·3
	Debility ...	0·8	1·2	1·6	0·9	0·9	1·1	1·2	0·9	0·6	1·2	1·0

It will be noted that in addition to the mortality rate from all causes of death, the mortality rate from certain diseases is detailed for each year. These diseases were chosen, as in each instance insanitary surroundings and neglect play a part in their production. The following is a summary of the Table:—

CAUSES OF DEATH.	MORTALITY RATE PER 1.000.	
	North and West.	Brightside and Attercliffe.
All Causes	28·4	20·4
All Zymotic Diseases ...	4·4	3·2
Phthisis	2·3	1·2
Convulsions	1·6	1·3
Bronchitis	3·8	2·3
Pneumonia	2·6	2·3
Enteritis	·3	·3
Debility	1·2	1·0

During ten years the average death-rate in the West and North Districts was 28·4, while in the two other districts it was 20·4.

Such figures justify the most strenuous efforts being made to deal with the insanitary conditions of life which produce so large a difference in the mortality rate.

Unfortunately it is impossible to map out the worst areas in these districts, as in past years the census returns referred to Registration Sub-Districts alone, and not to individual streets or groups of streets. It would be of the greatest value to have accurate statistics of the population living in small areas in each district, and means should be taken to obtain such at the next census

The two unhealthy districts together form a triangular area, the boundaries of which are, roughly, on one side High Street, Fargate, Division Street, and Devonshire Street; on the second side St. Philip's Road, and on the third side the River Don, from Rutland Road to Lady's Bridge.

What is required most in this large area is the following:—

1st. The abolition of a considerable quantity of property which is insanitary.

2nd. A house to house inspection by a competent Sanitary Inspector at frequent intervals.

3rd. A better condition of many of the workshops.

4th. Frequent visits by Female Sanitary Inspectors to see that reasonable cleanliness and care is observed in the rearing of children.

TABLE XIV.—*Recorded and Corrected Death-rates per 1,000 persons living in 33 Great Towns in 1898.*

Towns in the order of their Corrected Death-rates. 1	Recorded Death-rate, 1898. 2	Corrected Death-rate, 1898. 3	Comparative Mortality Figure. 4
England and Wales	17·58	17·58	1,000
England and Wales, less the 33 Towns	16·78	16·52	940
33 Towns	19·03	20·58	1,171
Croydon	13·89	14·48	824
Cardiff	14·82	16·54	941
West Ham	15·41	16·62	945
Portsmouth	16·30	16·67	948
Brighton...	16·91	17·10	973
Bristol	17·20	17·85	1,015
Norwich	18·96	18·16	1,033
Leicester	16·93	18·38	1,046
Huddersfield	15·92	18·51	1,053
Derby	16·82	18·55	1,055
Burnley	16·30	18·72	1,065
Plymouth	19·54	18·99	1,080
Nottingham	17·67	19·00	1,081
Birkenhead	17·44	19·17	1,090
Hull	18·36	19·29	1,097
Halifax	17·87	19·89	1,131
London	18·68	19·91	1,133
Oldham	17·58	20·13	1,145
Bradford	17·60	20·14	1,146
Swansea	18·57	20·29	1,154
Blackburn	18·45	20·72	1,179
Preston	19·35	21·27	1,210
Leeds	19·21	21·29	1,211
Bolton	19·38	21·96	1,249
Birmingham	20·00	22·10	1,257
Gateshead	20·61	22·14	1,259
Wolverhampton	21·27	22·26	1,266
SHEFFIELD	**20·24**	**22·51**	**1,280**
Newcastle	21·42	23·33	1,327
Sunderland	22·63	23·75	1,351
Manchester	21·89	24·80	1,411
Salford	22·70	25·52	1,452
Liverpool	23·98	26·33	1,498

TABLE XV.—*Showing the number of Deaths and the Death-rate per 1,000 of the Inhabitants of Sheffield during 1898, from all causes, and from a number of specified causes. Also the number of persons alive, the number of Deaths and the Death-rate per 1,000 of those living at all ages and at certain specified age-periods. The number of Marriages, and of Births, together with the rates deducible therefrom, are also given.*

	Annual Death-rate per 1000	All Ages.	Under 1 Year	1 and under 2 Years	2 and under 3 Years	3 and under 4 Years	4 and under 5 Years	Total under 5 Years	5 and under 10 Years	10 and under 15 Years	15 and under 20 Years	20 and under 25 Years	25 and under 35 Years	35 and under 45 Years	45 and under 55 Years	55 and under 65 Years	65 and under 75 Years	75 Years and upwards.
Annual Death-rate per 1,000 ...	..	20·23	225·2	74·7	28·0	15·3	10·5	77·2	4·5	2·1	3·2	5·0	6·3	10·8	19·3	39·9	80·8	179·4
Age Distribution of Population ...	...	356478	10422	8772	8565	8495	8573	44827	42667	40638	37099	33816	55867	43084	30219	17552	8424	2285
All Causes	20·23	7213	2347	655	240	130	90	3462	190	85	119	170	350	464	582	700	681	410
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	·50	177	40	80	26	15	11	172	4	1	...	...	...	...	...	...	...	...
Scarlet Fever	·16	58	1	9	13	12	6	41	14	1	...	1	1	...	...	...	...	...
Diphtheria and Membranous Croup	·26	94	3	12	17	13	9	54	32	4	...	1	1	2	...	...	...	...
Whooping Cough	·61	219	86	79	26	21	4	216	3	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	·40	143	...	1	1	2	...	4	11	15	28	22	29	18	11	3	2	...
Simple, &c., Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	·08	28	...	...	...	...	...	...	...	...	2	4	13	9	...	...	...	...
Diarrhœa and Dysentery ...	2·00	713	510	116	19	...	...	645	1	1	1	2	2	6	7	18	16	14
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer	·68	244	...	...	...	...	...	...	2	1	...	2	15	32	48	89	42	13
Scrofula	·16	56	20	12	4	2	3	41	7	1	2	2	...	1	2	...	...	...
Tabes Mesenterica	·18	65	34	18	4	2	4	62	2	1	...	...	...	...	...	...	...	...
Phthisis	1·26	448	3	4	3	1	3	14	10	6	19	50	85	111	89	57	7	...
Hydrocephalus and Tubercular Meningitis	·27	98	28	23	9	10	10	80	10	2	1	3	...	1	...	...	1	...
DISEASES OF THE Nervous System	2·46	878	340	49	23	10	10	432	20	10	8	8	22	32	82	108	105	51
DISEASES OF THE Circulatory ,, ...	1·29	460	10	1	1	...	1	13	4	11	13	17	29	50	95	100	97	31
DISEASES OF THE Respiratory ,, ...	3·35	1195	297	145	58	29	12	541	24	11	11	19	49	68	95	153	154	70
DISEASES OF THE Digestive ,, ...	1·58	563	254	70	15	5	7	351	10	7	10	5	12	28	46	47	37	10
DISEASES OF THE Urinary ,, ...	·53	190	1	1	2	1	1	6	1	3	2	5	16	32	33	47	31	14
DISEASES OF THE Generative ,, ...	·03	9	...	...	...	...	...	...	...	...	...	...	1	3	1	4	...	...
Childbirth	·12	41	...	...	...	...	...	...	...	...	1	11	16	12	1	...	...	...
Suicide	·07	24	...	...	...	...	...	...	...	...	1	...	4	6	9	4	...	...
Other Violence	·41	147	25	9	5	5	7	51	20	4	5	3	12	10	9	16	12	5
Other Causes	3·82	1363	695	26	14	2	2	739	15	6	15	15	43	43	54	54	177	202

Deaths of Infants (under one year) to 1,000 Births...195

Marriages	3,496	Annual rate per 1,000 living { Persons married ... 19·6
Births	12,066	Births ... ... 33·8

TABLE XVI —*Mortality at Various Ages.*

Ages.	Number of Deaths.		Death-rate per 1,000 Persons living at each age of group.	
	1897	1898	1897	1898
Under 1 year...	2,384	2,347	231·7	225·2
1 and under 2 years	691	655	79·8	74·7
2 ,, 3 ,, ...	232	240	27·4	28·0
3 ,, 4 ,, ...	122	130	14·5	15·3
4 ,, 5 ,, ...	91	90	10·7	10·5
Total under 5 ,, ...	3,520	3,462	79·5	77·2
5 and under 10 ,, ...	156	190	3·7	4·5
10 ,, 15 ,, ...	83	85	2·0	2·1
15 ,, 20 ,, ...	111	119	3·0	3·2
20 ,, 25 ,, ...	154	170	4·6	5·0
25 ,, 35 ,, ...	374	350	6·7	6·3
35 ,, 45 ,, ...	524	464	12·3	10·8
45 ,, 55 ,, ...	654	582	21·9	19·3
55 ,, 65 ,, ...	748	700	43·1	39·9
65 ,, 75 ,, ...	691	681	83·0	80·8
Over 75 years	449	410	199·2	179·4
At all ages	7,464	7,213	21·2	20·2

MORTALITY AT VARIOUS AGES.

In Table XVI will be found the number of deaths at each age group, together with the mortality rate per 1,000.

It will be noted that during 1898 nearly one-half of the deaths were of children under five years of age.

Again, in every 1,000 infants living under one year of age, no less than 225·2 died during the past year.

Such figures appear to indicate very clearly that special action should be directed to preventing so enormous a waste of human life, and justify the recent action of the Health Committee in appointing four female sanitary inspectors to visit the homes of the poor, and to give instructions in the rearing of infants.

CAUSES OF DEATH.

Zymotic Diseases.

In the group of Zymotic Diseases in Table XLIII., page 37, will be found certain details as regards the age and sex of the persons who died from each disease of this group.

The seven principal Zymotic Diseases together form a group which includes:—1, Small Pox; 2, Measles; 3, Scarlet Fever; 4, Diphtheria; 5, Fever (including Typhus, Typhoid, and Continued Fevers); 6 Whooping Cough; 7 Diarrhœa.

In 1898, 1,404 deaths were due to these causes, which is equal to a mortality-rate of 3·94 per 1,000 of the population.

In the following table is shown the number of deaths and the rate per 1,000 from the seven principal Zymotic Diseases during the last 11 years.

TABLE XVII.

	DEATHS FROM PRINCIPAL ZYMOTICS.	
	No. of Deaths.	Rate per 1,000.
1888	1,188	3·69
1889	1,107	3·39
1890	1,197	3·72
1891	914	2·79
1892	1,060	3·22
1893	1,207	3·61
1894	792	2·33
1895	1,176	3·22
1896	1,072	3·03
1897	1,251	3·52
1898	1,404	3·94

In England and Wales the death-rate from the principal Zymotic Diseases in 1898 was 2·22 per 1,000.

In the 14 largest towns (each having a population of over 200,000) the rate for the principal Zymotics as given by the Registrar-General, was as follows :—

London	2·78	Salford	4·03
West Ham	2·68	Bradford	2·12
Bristol	2·69	Leeds	3·12
Birmingham	2·78		
Leicester	3·35	**SHEFFIELD ... ...**	**3·82**
Nottingham	2·37		
Liverpool	3·22	Hull	2·99
Manchester	3·11	Newcastle	2·84

In the 33 great towns the rate was 2·85 per 1,000. In the 67 smaller towns it was 2·41.

***TABLE XVIII** *affords a means of comparison between the Zymotic Death-rates of Sheffield during 1898 and the ten years immediately preceding, and also between the rates of Sheffield in 1898 and the average rates of the 33 large towns.*

	Birth and Death-rate to 1,000 Persons.		
	Sheffield.		
	Average for 10 years, 1888-1897.	1898.*	Average for Large Towns. 1898.
Births	34·2	33·8	30·3
Deaths	21·4	20·2	19·0
Deaths from Small Pox	0·14	...	0·00
Do. Measles	0·55	0·50	0·56
Do. Scarlatina	0·36	0·16	0·14
Do. Diphtheria and Membranous Croup...	0·16	0·26	0·31
Do. Whooping Cough	0·51	0·61	0·42
Do. Fever	0·23	0·40	0·20
Do. Diarrhœa and Dysentery	1·21	2·00	1·22
Total for the above 7 Causes	3·16	3·94	2·85

* Compiled from the Registrar-General's Annual Summary for 1898.

TABLE XIX.—*Cases of Infectious Disease notified during the year 1898 under the Infectious Diseases (Notification) Act, 1889.*

Diseases.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Totals.
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	150	121	143	133	136	102	101	75	108	166	129	129	1,493
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Croup ...	8	9	12	13	7	11	7	6	12	46	110	91	332
Continued Fever ...	1	...	1	...	...	...	...	...	1	3	7	3	16
Enteric Fever	70	39	38	23	15	14	20	23	102	168	243	148	903
Puerperal Fever ...	5	4	...	3	5	5	3	5	...	6	3	5	44
Erysipelas	25	30	27	19	27	17	23	16	24	27	25	38	298
Totals	259	203	221	191	190	149	154	125	247	416	517	414	3,086

TABLE XX—*Cases of Infectious Diseases notified since the Act came into operation.*

Diseases.	Number of Cases Notified.									Average of 9 Years.
	1890	1891	1892	1893	1894	1895	1896	1897	1898	
Small Pox	...	...	47	102	8	1	...	...	...	18
Scarlet Fever	2,202	1,310	1,448	1,826	832	766	2,002	1,608	1,493	1,498
Typhus Fever	17	...	...	...	...	...	...	...	...	2
Diphtheria and Membranous Croup ...	276	194	296	170	149	122	138	136	332	201
Continued Fever ...	40	45	21	35	18	12	14	14	16	24
Enteric Fever	374	354	197	452	347	469	617	671	903	487
Puerperal Fever ...	41	33	49	60	45	32	38	37	44	42
Erysipelas	209	232	291	403	360	334	403	330	298	318
Totals	3,159	2,168	2,349	3,048	1,759	1,736	3,212	2,796	3,086	2,590

TABLE XXI.—*Showing the monthly admissions to Hospital during the year 1898 of cases of each Disease, also the average number of cases admitted suffering from these Diseases during the five years 1894, 1895, 1896, 1897, and 1898.*

Disease.	JAN.	FEB.	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPT.	OCT.	NOV.	DEC.	TOTAL 1898	AVERAGE OF 5 YEARS.
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Scarlet Fever ...	80	76	77	80	79	70	63	65	80	94	72	76	912	805
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria & Membranous Croup ..	1	2	1	...	1	1	...	1	3	1	3	3	17	18
Enteric Fever ...	40	17	22	10	4	7	13	18	42	69	59	68	369	304
Measles	...	2	3	1	...	...	...	...	...	...	...	...	6	8
Other Diseases ...	5	3	5	2	5	7	4	2	9	4	...	2	48	45
Total Admissions	126	100	108	93	89	85	80	86	134	168	134	149	1,352	1,182

SMALL POX AND VACCINATION.

No cases of Small Pox occurred in Sheffield during 1898, and, speaking generally, the country as a whole was particularly free from this disease during the year.

It is, perhaps, well to reiterate what was said last year in the Annual Report, namely: 'There is in Sheffield at the present time a large amount of inefficient vaccination being done, and from experience of Small Pox in the case of persons who are inefficiently vaccinated it can be confidently asserted that a considerable proportion of the vaccinations done in Sheffield give little, if any, protection.'

During the year Parliament passed the Vaccination Act of 1898. By this Act several very important changes have been introduced. They are, briefly, as follows:—

(1) (*a*) The period allowed to parents or guardians within which every child must be vaccinated is extended from three to six months.

(*b*) Every child not vaccinated within four months after birth is to be visited by the Public Vaccinator, who is to offer to vaccinate the child with glycerinated Calf Lymph.

(*c*) Power is given to the Public Vaccinator to postpone vaccination if, in his opinion, the condition of the house or the prevalence, or recent prevalence, of infectious disease in the district makes the operation unsafe.

(2) Persons who conscientiously believe that vaccination would be prejudicial to the health of their child are empowered to apply to the justices for the district, and if such justices are satisfied of such belief, vaccination is not to be performed.

Doubtless in principle many of the conditions of this Act are of a retrograde character; in practice it is probable that a larger number of children will be vaccinated than formerly. There can be no doubt that were efficient primary vaccination and re-vaccination carried out, no Small Pox would occur in this country. At the present time those persons who have been efficiently vaccinated and re-vaccinated, and who are therefore free from any chance of taking Small Pox, have to pay for keeping up a staff to deal with Small Pox when it does occur among others, and also for Small Pox hospital accommodation. They also suffer from the general loss of trade, &c., which occurs during a Small Pox epidemic.

In last year's Annual Report the fact was recorded that the Corporation had decided upon the erection of a Small Pox Hospital. If Small Pox had occurred during the year, great inconvenience would have ensued in attempting to isolate such cases, and it is to be hoped that provision will be made at the earliest possible opportunity for the treatment of cases of this disease by the erection of a hospital of sufficient size, and of a permanent character, on the land purchased for the purpose.

MEASLES.

During 1898, 177 deaths were caused by this most dangerous disease. As will be seen by the following table this number is not in excess of many previous years. It represented a mortality rate of ·50 per 1,000, against a rate of ·57 in the preceding 10 years.

TABLE XXII.—*Measles.*

Years.	Total Deaths.	Mortality Rate per 1,000.	Males.	Females	AGE AT DEATH.							
					Under 1 Year.	1 and under 2 Years.	2 and under 3 Years.	3 and under 4 Years.	4 and under 5 Years.	5 and under 10 Years.	10 and under 15 Years.	Over 15 Years.
1887	266	·84	147	119	59	117	40	26	13	11	0	0
1888	52	·16	31	21	11	19	12	5	3	2	0	0
1889	226	·69	119	107	40	88	44	22	12	20	0	0
1890	235	·73	116	119	51	84	41	24	19	13	2	1
1891	180	·55	86	94	33	82	24	13	11	17	0	0
1892	248	·75	133	115	59	92	41	30	13	13	0	0
1893	171	·52	78	93	48	61	31	13	10	8	0	0
1894	170	·50	78	92	30	78	36	12	7	7	0	0
1895	189	·55	99	90	42	84	31	11	12	5	1	3
1896	208	·59	109	99	50	85	32	20	11	9	0	1
1897	196	·55	91	105	48	91	22	11	8	15	0	1
1898	177	·50	89	88	40	80	26	15	11	4	1	...
TOTAL..	2318		1176	1142	511	961	380	202	130	124	4	6
Mean ..	193	·58	98	95	43	80	32	17	11	10	·3	·5

Of the 177 children who died, no less than 172 were under five years of age. From statistics obtained from towns where this is one of the notifiable diseases, it is found that Measles is not only less prevalent but is also much less fatal in children over five years of age than in those under this age. It is most important, therefore, to ward off the disease from very young children. There appears to be evidence that the closing of the infant departments of our public Elementary Schools is of value when Measles threatens to become epidemic.

The mortality rate from Measles was ·56 per 1,000 in the 33 great towns during 1898, and ranged from 1·03 per 1,000 in Leicester to ·02 in Preston. In the 67 smaller towns the rate was ·41 per 1,000.

The system of dealing with cases of this disease which are reported to the Health Department by the school authorities in the city was described in detail in last year's Annual Report. This system has been continued during 1898 without interruption.

In the following table the number of deaths from Measles in each of the Registration Sub-Districts is set out for five years.

TABLE XXIII.—*Measles.*

Year.	Registration Sub-districts.								
	West.	North.	South.	Park.	Bright-side.	Atter-cliffe.	Nether Hallam.	Upper Hallam.	Eccles-all.
1894	...	16	9	21	59	12	25	2	26
1895	10	35	8	6	21	34	26	2	47
1896	7	52	12	21	25	26	34	1	30
1897	8	16	18	13	54	34	28	...	25
1898	5	17	11	23	48	40	21	...	12

SCARLET FEVER.

The deaths of 58 persons were registered as due to this disease during 1898, as against 93 in the previous year. This gives a mortality rate of 0·16 per 1,000.

In the 33 great towns the rate was 0·14 per 1,000, and it varied from 0·29 in Salford and Leeds to 0·04 in Plymouth and Bristol. In the 67 smaller towns the rate was 0·10 per 1,000 of the population.

TABLE XXIV.—STATISTICS IN REGARD TO SCARLET FEVER IN SHEFFIELD.

Year	1890	1891	1892	1893	1894	1895	1896	1897	1898
Notified Cases of Scarlet Fever	2202	1310	1448	1826	832	766	2002	1608	1493
Deaths...	264	113	63	89	40	36	100	93	58
Percentage Mortality... ...	11·9	8·6	4·3	4·8	4·8	4·6	4·9	5·6	3·9

The notified cases of Scarlet Fever were distributed throughout the year as follows:—

TABLE XXV.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total cases	150	121	143	133	136	102	101	75	108	166	129	129
Removed to Hospital.	80	76	77	80	79	70	63	65	80	94	72	76
Treated at Home ...	70	45	66	53	57	32	38	10	28	72	57	53

It will be noted from the above Tables that the total number of cases of sickness from the disease was 1493 during the year, and also that in every 100 persons attacked, 3·9 died. This is the lowest percentage mortality registered in Sheffield since the passing of the Notification Act.

The number of cases of Scarlet Fever removed to hospital during the year was 912, which is equal to 61 per cent. of the total cases.

It will be seen that a very large number of cases are treated at home in the cottages of the city, and it will easily be realised how difficult it is to limit the spread of such a disease without sufficient hospital accommodation.

The cases of Scarlet Fever were distributed over the City during 1898, as is shown in table XXVI, where also the distribution in previous years is shown.

TABLE XXVI.—*Showing the Notifications of Scarlet Fever in each of the Registration Sub-Districts since 1890.*

Year.	Registration Sub-Districts.									City.
	West.	North.	South.	Park.	Brightside.	Attercliffe.	Nether Hallam.	Upper Hallam.	Ecclesall.	
1890 (11 mos.)	44	155	126	164	378	196	203	22	538	1826
1891	58	182	55	41	320	84	210	26	334	1310
1892	56	136	63	109	337	64	228	20	435	1448
1893	65	190	66	90	405	98	475	8	429	1826
1894	22	46	42	41	154	208	93	14	212	832
1895	15	62	55	57	196	165	68	7	141	766
1896	45	194	167	109	312	397	270	6	502	2002
1897	54	171	59	98	320	274	228	4	400	1608
1898	26	130	55	61	382	232	227	27	353	1493

It is most gratifying to have to record that during 1898 the formal assent of the City Council was given to a scheme for extending the accommodation at Lodge Moor in a substantial manner. In this instance, too, the difficulty of dealing with the sewage from this large Hospital has been most satisfactorily dealt with, so that the present most insanitary condition of affairs will probably be remedied within a few months.

DIPHTHERIA OR MEMBRANOUS CROUP.

In last year's report it was stated,—"It is gratifying to have to record the fact that Sheffield continues to enjoy a comparative immunity from this very fatal disease. This is specially so in view of the fact that a number of other towns have suffered severely from outbreaks of Diphtheria within recent years."

Scarcely had this statement been made when the disease appeared in a virulent form, and has continued as an epidemic ever since.

The mortality from Diphtheria during 1898 was 56, equal to a rate of 0·26 per 1,000 of the population. In the 33 great towns the mortality rates were as follows :—

TABLE XXVII.

London	0·39	Bolton	0·07
West Ham	0·63	Manchester	0·10
Croydon	0·14	Salford	0·15
Brighton	0·17	Oldham	0·07
Portsmouth	0·30	Burnley	0·27
Plymouth	0·11	Blackburn	0·23
Bristol	0·14	Preston	0·07
Cardiff	0·73	Huddersfield	0·13
Swansea	1·22	Halifax	0·08
Wolverhampton	0·43	Bradford	0·07
Birmingham	0·26	Leeds	0·54
Norwich	0·13	**SHEFFIELD**	**0·26**
Leicester	0·30		
Nottingham	0·10	Hull	0·07
Derby	0·09	Sunderland	0·06
Birkenhead	0·43	Gateshead	0·10
Liverpool	0·23	Newcastle	0·13

TABLE XXVIII.—*Mortality from Diphtheria and Simple Croup in the City of Sheffield.*

Year.	Population.	Combined Diphtheria and Simple Croup. Death-rate per 1,000.	Combined Diphtheria and Simple Croup Death-Rate per 1,000 Living of the Population Distributed According to Ages.									No. of Public Elementary Schools.	Approx. Average No. of children attending Public Elementary Schools (Yearly Average Attendance).
			0—1 Year.	1—2 Years.	2—3 Years.	3—4 Years.	4—5 Years.	5—10 Years.	10—15 Years.	15—20 Years.	20 Years & over.		
1880	279,800	·23	·89	1·71	·89	1·87	1·28	·31	...	...	...	92	34,887
1881	284,508	·26	·33	2·28	2·49	·98	1·01	·39	·07	·04	...	90	36,827
1882	290,516	·31	1·39	2·00	1·47	1·20	1·48	·58	·10	...	·01	86	37,309
1883	295,497	·22	·73	1·27	1·32	1·06	·49	·38	·19	...	·01	85	39,287
1884	300,563	...	...	No	Record	...	...	...	...	...	...	87	41,103
1885	305,870	·17	·61	1·68	·58	·69	·82	·34	...	...	·01	88	43,391
1886	310,957	·16	·50	1·32	1·60	·56	·69	·18	...	...	...	89	44,393
1887	316,288	·22	·98	1·94	·67	1·66	·79	·33	·03	...	·01	92	44,500
1888	321,907	·29	·58	2·34	1·10	2·50	1·23	·47	·03	...	·01	95	46,912
1889	327,438	·33	1·14	1·36	1·08	1·81	1·32	·85	·09	·03	·03	97	46,788
1890	321,079	·32	·87	1·49	1·99	1·74	·89	·77	·17	...	·01	97	47,111
1891	325,304	·30	·86	1·37	1·64	1·40	1·43	·69	·06	·03	·02	96	52,050
1892	329,585	·39	·73	2·71	1·52	2·55	2·52	1·07	·08	·03	·01	96	51,697
1893	333,922	·28	·72	2·31	2·24	2·26	1·37	·30	...	·03	·03	92	52,782
1894	338,316	·26	1·01	2·40	1·85	1·61	2·21	·22	...	...	·01	92	53,909
1895	342,768	·20	·50	1·78	1·34	1·84	·97	·32	...	...	·02	97	53,848
1896	347,278	·22	·69	1·99	1·08	1·45	·96	·46	·08	...	·01	97	54,263
1897	351,848	·17	·39	1·85	1·06	·95	1·42	·14	·05	·03	·01	95	54,514
1898	356,478	·28	·38	1·48	2·10	1·53	1·05	·75	·12	...	·02	94	55,567

N.B.—The above calculations are based upon the actual population figures as estimated from year to year.

In previous years the mortality rate from Diphtheria was as follows in Sheffield :—

The following table shows the number of cases of sickness reported during each month for a number of years.

TABLE XXIX.—*Notifications of Sickness from Diphtheria, 1892-1898.*

Months.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
January	15	26	16	21	9	9	8
February	24	19	10	7	20	11	9
March	46	9	14	12	14	14	12
April	46	17	12	13	14	15	13
May	19	13	6	6	9	9	7
June.....	26	16	9	4	12	14	11
July	16	6	10	9	8	7	7
August.....	15	9	15	12	9	8	6
September	15	9	17	6	8	6	12
October	29	19	11	7	7	15	40
November	19	12	10	14	14	15	110
December	26	15	19	11	14	13	90
Totals	296	170	149	122	138	136	325

TABLE XXX.—*Notifications of Sickness from Diphtheria in each of the Registration Sub-Districts, together with the attack-rate per 1,000 of the population during 1898.*

Months.	West.		North.		South.		Park.		Brightside.		Attercliffe.		Nether Hallam.		Upper Hallam.		Ecclesall.	
	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.	Cases Notified.	Attack Rate.
1898. January..	—	—	1	·32	—	—	1	·53	1	·16	—	—	1	·22	—	—	4	·51
February.	—	—	4	1·43	1	·70	—	—	1	·17	—	—	—	—	—	—	3	·43
March ...	—	—	1	·32	2	1·26	—	—	4	·63	1	·27	4	·90	—	—	—	—
April.....	—	—	1	·33	—	—	—	—	3	·48	—	—	5	1·16	—	—	4	·53
May	1	·88	—	—	—	—	1	·53	3	·47	—	—	1	·22	—	—	1	·13
June.....	—	—	2	·67	1	·65	—	—	2	·33	—	—	—	—	—	—	6	·80
July	—	—	—	—	—	—	—	—	1	·16	—	—	1	·22	—	—	5	·64
August ...	—	—	1	·32	—	—	—	—	3	·47	—	—	—	—	—	—	2	·26
Sept.....	1	·91	2	·67	—	—	—	—	2	·33	1	·28	3	·70	—	—	3	·40
October...	—	—	6	1·94	1	·63	1	·53	7	1·08	1	·27	29	6·51	—	—	1	·13
November	2	1·82	21	7·01	—	—	—	—	8	1·30	2	·56	71	16·48	1	4·23	5	·66
December	4	3·52	30	9·69	—	—	—	—	7	1·10	2	·53	31	6·96	1	4·13	16	2·06

The cases which originated the present epidemic could be clearly localised. The first few cases occurred in families related to one another, and in which there was the clearest evidence of direct infection taking place. Following these there occurred scattered cases in the same district, in most of which direct infection could not be traced. On November 14th I reported that certain of the departments in one of the public Elementary Schools appeared to be acting as a centre of infection, and this school was closed and kept closed until December 12th. The effect of this action appears to have been justified, as the number of reported cases in this district declined, whilst at the same time the number of cases in adjacent districts increased. This is indicated in the following table.

TABLE XXXI.

	Weekly Notifications in Nether Hallam.												
Months ...	October.				November.				December.				
Weeks.....	8	15	22	29	5	12	19	26	3	10	17	24	31
Cases	2	7	13	5	10	**16**	**22**	**14**	**10**	**12**	10	2	6

N.B.—The figures in bold type are cases notified during period of School closure.

The epidemic has continued into the present year, and even now shows little sign of abatement, despite most strenuous efforts to deal with it.

WHOOPING COUGH.

This most dangerous disease caused no less than 219 deaths, against 139 in the previous year.

The mortality during the preceding 10 years was as follows:—

TABLE XXXII.

Years.....	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Total Deaths ...	145	147	160	224	232	129	239	73	202	139	219
Rate per 1,000...	·45	·44	·49	·69	·70	·38	·70	·21	·58	·39	·61

In the 33 great towns in England the mortality rate was 0·42 per 1,000. It varied from 0·64 in Gateshead to 0·04 in Blackburn.

The deaths occurred at the following age periods:—

TABLE XXXIII.

Ages.	1897.	1898.
Under 1 year	61	86
1 and under 2 years	35	79
2 and under 3 years	18	26
3 and under 4 years	6	21
4 and under 5 years	8	4
Over 5 years	11	3

It will be noted that the disease is specially fatal among children under two years of age. No less than 165, or 75 % of all the fatal cases of this disease, were in children under two years of age. In this respect it resembles Measles.

It is to be feared that the majority of deaths from this disease are due to complications, such as Bronchitis and Pneumonia, which in most cases could be prevented were more care taken to prevent children attacked with the disease from catching cold; so that not only could the mortality be reduced by preventing the infected children from mingling with the susceptible, but also the case mortality could be reduced were many of the infants better cared for.

It is extremely difficult to suggest any line of action which will have a fair chance of success, and which will at the same time be free from objectionable interference. It is probable that in time the verbal instructions of the Female Sanitary Inspectors will be the means of saving some lives. Until the stupid and most prevalent belief that Whooping Cough is a necessary and unimportant disease of childhood is eradicated from the minds of the people, it is to be feared that little progress will be made. Whooping Cough causes twice as many deaths annually in Sheffield as Typhoid Fever, and the fact that no public alarm occurs, indicates that there is a general opinion that little, if anything, can be done.

Not only is there this apathy, but also there is the fact that in a certain number of cases the patient recovers quicker when allowed out of doors. In the innumerable common yards of Sheffield these features of the disease form a fertile means of spreading the infection.

FEVER.

Under this heading are included (*a*) Typhus Fever; (*b*) Typhoid or Enteric Fever; and (*c*) Simple or Continued Fever.

(*a*) Typhus Fever. No case of this once most fatal disease was reported during the year 1898.

(*b*) Typhoid or Enteric Fever caused 143 deaths, equal to a mortality rate of ·40 per 1,000 of the population. This is considerably in excess of the mortality in previous years, and it will be noted from the following figures that only three of 33 great towns had as high or higher mortality rates. Among the 67 smaller towns the rate was as high or higher in seven instances.

TABLE XXXIV.—*Mortality rates per 1,000 from Fever in the 33 Great Towns.*

London	0·13	Bolton	0·31
West Ham	0·25	Manchester	0·23
Croydon	0·09	Salford	0·37
Brighton	0·15	Oldham	0·15
Portsmouth	0·23	Burnley	0·25
Plymouth	0·06	Blackburn	0·24
Bristol	0·08	Preston	0·37
Cardiff	0·10	Huddersfield	0·10
Swansea	0·13	Halifax	0·19
Wolverhampton	0·23	Bradford	0·21
Birmingham	0·22	Leeds	0·22
Norwich	0·40	**SHEFFIELD**	**0·40**
Leicester	0·14	Hull	0·25
Nottingham	0·24	Sunderland	0·48
Derby	0·27	Gateshead	0·17
Birkenhead	0·34	Newcastle	0·30
Liverpool	0·26		

In the following Table will be found the number of reported cases of sickness from the disease in each of the Registration Sub-Districts since the Notification Act came into force in Sheffield.

TABLE XXXV.—*Reported Cases of Sickness—Enteric Fever.*

Year.	Registration Sub-Districts.										Sickness Rate per 1,000
	West.	North.	South.	Park.	Brightside.	Attercliffe.	Nether Hallam.	Upper Hallam.	Ecclesall	Total Cases.	
1890	10	48	22	10	67	30	66	2	109	364	1·13
1891	19	62	20	23	62	38	56	...	111	391	1·20
1892	10	16	9	7	55	11	28	...	61	197	0·59
1893	12	65	25	20	147	28	35	1	120	453	1·35
1894	7	120	14	13	79	15	40	...	61	349	1·03
1895	28	101	24	21	95	42	28	...	131	470	1·37
1896	23	48	21	73	184	67	48	1	153	618	1·77
1897	25	96	44	77	104	61	62	1	203	673	1·91
1898	47	121	36	127	148	91	136	1	196	903	2·53
Totals ...	181	677	215	371	941	383	499	6	1145	4418	.....
Sickness Rate per 1,000, 1898	3·51	3·31	1·92	5·66	1·98	2·09	2·59	0·35	2·14		2·53

In order to ascertain whether the disease was persistently present in one district more than in another, the following Table has been worked out. In order to arrive at the figures there shown, the sickness rate per 1,000 was obtained for each district for each of the years 1890 to 1898.

The figures in the Table show the percentage above or below the mean rate for the whole City which obtained in the Registration Sub-Districts.

TABLE XXXVI.—*Percentage of Sickness in each Registration Sub-District above or below the mean rate for the year.*

Year.	Registration Sub-Districts.								
	West.	North.	South.	Park.	Bright-side.	Atter-cliffe.	Nether Hallam.	Upper Hallam.	Eccles-all.
1890	—37	+ 12	+ 5	— 58	—10	—24	+27	— 34	+20
1891	—12	+ 37	— 9	— 10	—23	—12	+ 0·1	—100	+13
1892	+19	— 28	—18	— 45	+34	—50	— 1	—100	+23
1893	—36	+ 28	— 0·6	— 32	+55	—45	—46	— 73	+ 5
1894	—51	+215	—27	— 42	+ 8	—63	—20	—100	—31
1895	+48	+ 99	— 6	— 30	— 3	—24	—59	—100	+ 9
1896	— 5	— 26	—36	+ 86	+42	— 9	—46	— 80	— 3
1897	— 2	+ 37	+22	+ 80	—26	—25	—37	— 81	+17
1898	+39	+ 29	—24	+124	—22	—17	+ 2	— 86	—15

In the following table is shown the number of cases notified in each Registration District in Sheffield during 1898.

TABLE XXXVII.—*Showing Enteric Fever Notifications in the several Registration Sub-Districts during each Month of the Year 1898.*

	Registration Sub-Districts.								
	West.	North.	South.	Park.	Bright-side.	Atter-cliffe.	Nether Hallam.	Upper Hallam.	Eccles-all.
January ..	2	11	2	10	7	20	4	1	13
February	...	7	7	8	3	3	...	...	11
March ...	...	4	3	4	9	3	3	...	12
April ...	1	3	1	1	5	3	2	...	7
May	...	1	1	3	3	...	1	...	6
June.....	3	1	...	...	7	1	...	...	2
July	...	2	...	1	5	1	2	...	9
August ...	...	8	1	3	3	2	3	...	3
Sept. ...	4	18	5	27	13	11	4	...	20
October...	6	23	6	31	41	25	11	...	25
November	18	19	7	21	38	12	62	...	66
December	13	24	3	18	14	10	44	...	22
Totals...	47	121	36	127	148	91	136	1	196

The period of the year when the disease was most prevalent is clearly shown in the following Table of Notifications in the City :—

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
70	39	38	23	15	14	20	23	102	168	243	148

On November 18th a special report was presented dealing with the prevention of this disease. In this report the following opinion, based on all available evidence, was expressed as the most probable explanation of the continued prevalence of the disease :—

"I feel certain that this (the epidemic) is due to the fact that we have had for two or three years in succession weather favourable to the propagation of the disease ; that during the autumn of these years the infection has been spread to new areas, and that the infection in these new areas not having been killed out by unfavourable seasons we have now an accumulation of infected places. Should another favourable year follow, a repetition of this year's experience is reasonably to be expected."

In the same report the following recommendations are made :—

"There are three points I should like to emphasize as essential if any large reduction in the sickness from this disease is to be expected.

First.—The foul privy-middens should be abolished in the densely crowded areas of the City at a much greater rate than at present. It is true that since the letter from the Local Government Board, dated December 1st, 1896, urging upon the authorities the necessity for dealing with this work faster, was received, an additional draughtsman has been appointed ; but at the present time we cannot overtake the cases where reasonable complaints have been made, and I should urge most strongly that means be adopted to hasten this work, as I feel certain that storing human fæcal matter and urine for long periods in the confined yards of the City is a very fertile source of Typhoid Fever, Epidemic Diarrhœa, and other diseases.

I am aware that the action of the Local Government Board in refusing to grant the necessary borrowing powers for this work has tended to prevent greater progress in this direction, and is at variance with the desire expressed in their letter referred to, but I feel that this work is so important that an effort should be made to overcome the objection of the Board.

SECOND.—A large amount of cottage property in the older districts of the City has, practically, no proper drainage; the sink pipes discharge into more or less imperfect channels in the yards, and thence the slop-water is conducted through the passage, across the pavement, and along what is often a more imperfect street channel to the nearest street gully. With arrangements such as these it has become a common custom to throw the slop-waters on the surface of the street. In a large number of these unimportant streets the paving is imperfect—often boulders set in ashes; the result is that the organic matter in the slop-water is allowed to soak into the spaces between the stones, there to produce what is, in my opinion, a good breeding-ground for the organism of Typhoid Fever.

The contrast between some of the recently paved streets and lanes and those having conditions I have described is very marked.

THIRD.—I am of opinion that in cases of Typhoid Fever more may be done than at present in efficiently removing infecting material. In this respect it is important that a large number of patients should be removed to hospital, thus limiting the amount of infectious matter left in the City.

We have at the present time (17th November) 76 cases in hospital, and 147 cases which are being treated at home.

It is frequently noted that several cases will occur in succession in the same yard, which points strongly to the fact before stated, that the privy is the means through which the disease is spread.

I think that all privies should be emptied, with special precautions, as soon as a patient has been removed to hospital, or has recovered.

A system which has worked well in many large towns is—the daily collection of all infectious matter from houses (having privies) in which there are cases of Typhoid Fever, and the burning or boiling of this material by the Sanitary Authority."

The above mentioned report was most carefully considered, and in order to carry out the recommendations in regard to the abolition of foul privy-middens the staff employed in this work was doubled. So, too, in regard to the second recommendation, an increased amount of work is being done by the Highway Department in preventing slop water and other sewage matter from stagnating in the streets.

In regard to the isolation and Hospital nursing of cases of this disease, the accommodation at our Hospitals was altogether inadequate during a considerable part of the year. Great hardship was experienced in many cases; and many cases were undoubtedly due to direct infection. The steps taken during the year to increase our Hospital accommodation will, in the course of a year or two, make a recurrence of these conditions impossible.

SERUM DIAGNOSIS OF TYPHOID FEVER.

During 1898 arrangements were made whereby any Medical Practitioner in the City could have the assistance of this method of early recognising cases of Typhoid Fever free of charge. Pending the equipment of laboratory the work was very kindly undertaken by Professor Delépine, of the Owen's College, Manchester.

The total number of specimens sent was 107. In many cases the true nature of doubtful cases of Typhoid Fever was determined by this means.

DIARRHŒA.

Diarrhœa was the cause of 713 deaths during 1898. This is equivalent to an annual mortality rate of 2·00 per 1,000 of the population. During the preceding 10 years the rate was 1·38. In the 33 great towns the mortality rate was 1·22 per 1,000, and it varied from 2·16 per 1,000 in Salford to 0·49 in Swansea.

This is essentially a disease affecting young infants, and with a virulence which does not occur in adults, as will be seen from the following figures:

TABLE XXXVIII.—*Showing Deaths from Diarrhœa at several age periods.*

AGES.	1897	1898
Under 1 year	485	510
1 and under 2 years	115	116
2 „ 3 „	14	19
3 „ 4 „	3	0
4 „ 5 „	0	0
5 „ 10 „	3	1
10 „ 45 „	6	12
Over 45 years	37	55

CHART II.—Showing Diarrhœa Mortality and its relation to Meteorological Conditions.

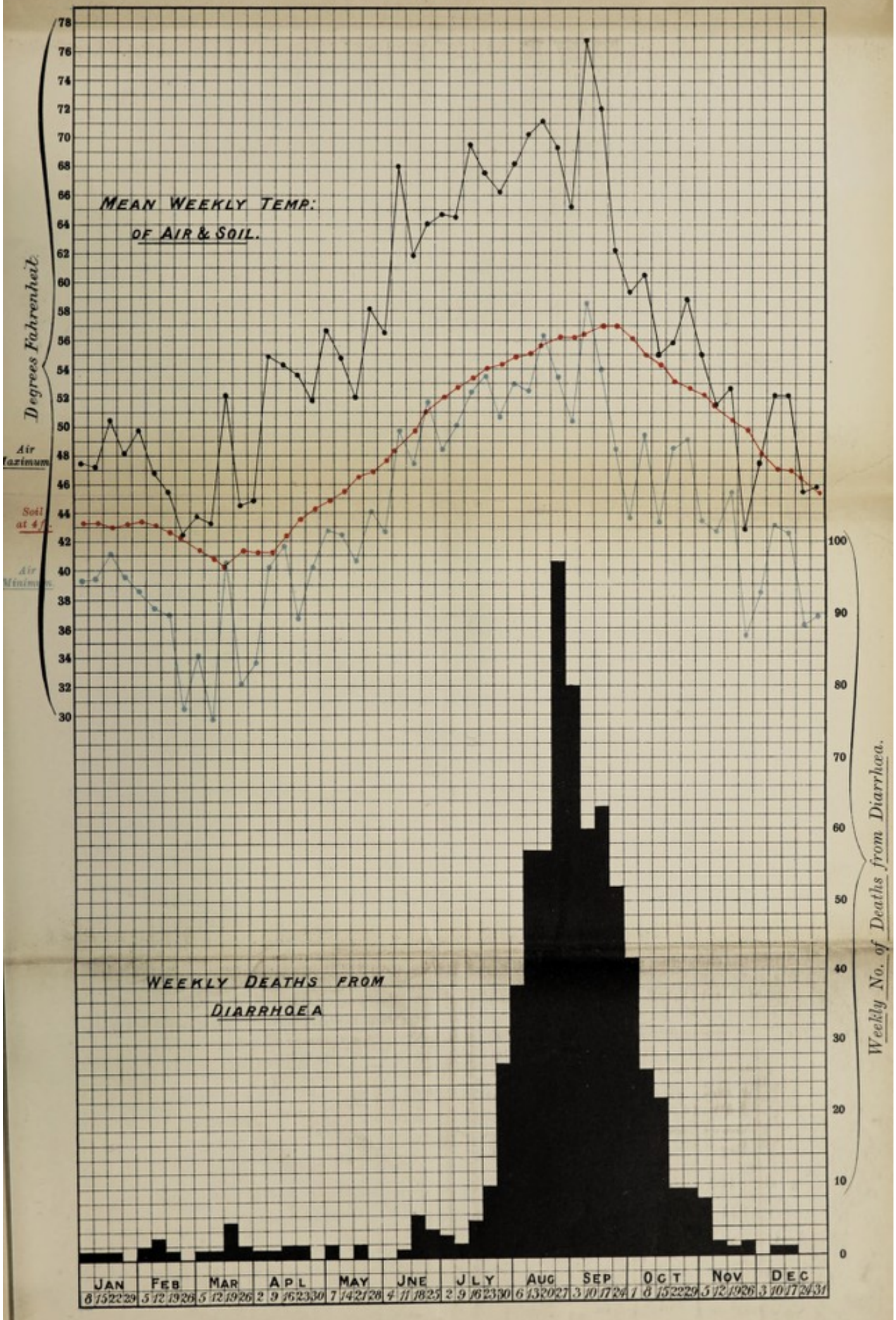

TABLE XXXIX.—*Monthly Deaths from Diarrhœa.*

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1897	4	6	0	2	4	8	104	380	118	25	10	2
1898	3	6	10	5	4	14	44	291	251	73	10	2

The mortality rate in the various Registration Sub-Districts is set out in the following Table:

Mortality Rate per 1,000 from Diarrhœa.

West	3·36	Attercliffe	2·31
North	3·48	Nether Hallam	1·85
South	2·72	Upper Hallam	—
Park	2·23	Ecclesall	1·11
Brightside	1·87		

The long, warm summer of 1898, together with the fact that most ample breeding grounds exist in Sheffield for the organisms which cause this disease, is the most probable explanation of the great prevalence of this disease.

In the accompanying chart it will be noticed that there is an intimate indirect connection between the temperature of the soil and the prevalence of this disease.

MINOR ZYMOTICS.

Influenza caused 51 deaths during 1898 as compared with the following numbers in the previous ten years.

1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
0	0	96	399	33	100	14	61	7	101	51

Erysipelas caused 20 deaths. There were 298 cases reported of sickness from this disease.

TABLE XL.

	1890	1891	1892	1893	1894	1895	1896	1897	1898
Reported Cases of Sickness...	209	232	291	403	360	335	403	330	298
Deaths	27	20	14	28	12	16	21	14	20

TABLE XLI.—PUERPERAL FEVER.

	1890	1891	1892	1893	1894	1895	1896	1897	1898
Notified Cases	41	33	49	60	45	32	38	37	44
Deaths	22	19	30	27	26	14	20	21	28
No. of Births to every Death from Puerperal Fever ...	486	624	395	429	433	858	593	578	431

PLUMBISM.

Only two deaths were due to this preventable disease during 1898.

The recommendations of the Dangerous Trades Committee of the Home Office are as follows:—

*(i.) (a) In all existing file cutting "shops," the amount of cubic feet of air space should bear to the number of persons employed therein the proportion of 350 to 1; and

(b) in all file cutting "shops" erected after August 1st, 1899, such proportion should be 450 to 1.

*(ii.) There should be a clear space of not less than 4 feet between the "stocks," measured from the outside extremity of the "stock" to the nearest edge of the adjacent one.

*(iii.) (a) All file cutting "shops" should be provided with adequate methods of ventilation other than by windows except where the sash or the shutter window system is in use.

(b) Where there is one occupier such occupier, and where there is more than one occupier the occupiers jointly and severally, should see that the "shop" is adequately ventilated.

*(iv.) In or immediately adjoining each file cutting "shop," there should be supplied fixed basins, provided with running water and a waste-pipe; the basins to be in the proportion of one to every five or fraction of five persons working in the "shop." In any place or village where there is no main pipe or running water within one hundred yards of the file cutting "shop," and where it is the custom to use water from a stream or well, the provision of running water should not be required.

(v.) (*a*) Where the persons in a file cutting "shop" are employed by one occupier, such occupier should provide and maintain an adequate supply of soap, and should provide and maintain in a cleanly condition an adequate supply of towels and nail-brushes.

(*b*) In the case of all other file cutting "shops," the occupiers should jointly and severally be responsible for these duties.

(vi.) The occupiers should take measures to secure that every person employed by them wash his or her hands and face before meals and before leaving the file cutting "shop."

(vii.) The occupiers should set apart and enter in the notice a period of at least five minutes in addition to the regular meal times for washing immediately before each meal time, and also before the end of each day's work, and they should see that it is observed.

(viii.) (*a*) All file cutters should wear overall suits; these should be supplied by the occupier.

(*b*) Where the persons in a file cutting "shop" are employed by one occupier, such occupier should be responsible for the maintenance of the overalls in a cleanly condition, and for their being washed not less than once a week.

(*c*) In the case of all other file cutting "shops" the occupiers should jointly and severally be responsible for this duty.

(ix.) (*a*) Where the persons in a file cutting "shop" are employed by one occupier, such occupier should see that the "shop" is kept in a cleanly state; the walls and ceiling should be lime-washed at least once every six months.

*(*b*) In the case of all other file cutting "shops" the owner should be responsible for the lime-washing of the file cutting "shop."

*(x.) The floors of all file cutting "shops" should be paved with flagstones, cement, asphalte, or concrete, or boarded with wood, and kept in an efficient state of repair.

(xi.) No meal or food should be taken into or eaten in a file cutting "shop."

(xii.) On and after the first day of January, 1899, the business of file cutting by hand should not be carried on in any room or place without a certificate granted to the owner by the Inspector of Factories for the district, stating that the law, so far as it relates to such owner, has been complied with; and if, after the granting of such certificate, it should appear to an Inspector that all or any of such requirements are no longer observed, a Secretary of State may authorise an Inspector to cancel or withdraw the certificate.

(xiii.) An official notice explanatory of the dangers of the trade, and of the importance of conforming to the regulations, should, as well as the regulations themselves, be affixed in all file cutting "shops" in such a position as to be conspicuous and easily consulted by the workers.

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* The owner should be responsible for the execution of these duties.

TABLE XLII.—*Showing Deaths from Cancer during 1898, under several age periods, and the Organs affected.*

ORGANS AFFECTED.	Totals, All Ages.			Under 5 Years.		5 and under 10 Years.		10 and under 15 Years.		15 and under 20 Years.		20 and under 25 Years.		25 and under 35 Years.		35 and under 45 Years.		45 and under 55 Years.		55 and under 65 Years.		65 and under 75 Years.		75 Years and Over.	
	TL.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Larynx	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...
Lungs	4	2	2	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	1	...	...	...	...	...
Tongue	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...
Mouth	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	...	...	...
Neck...	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	1	...	...	...
Thyroid	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Spleen	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Chest	1	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Mediastinum	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Female Generative Organs ...	44	...	44	...	...	...	...	...	...	...	...	...	...	3	...	10	...	9	...	13	...	9	...	...	...
Pelvis	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Male Generative Organs ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Rectum	13	2	11	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	1	...	5	...	1	1	2
Breast	18	1	17	...	...	...	...	...	...	...	...	...	...	...	1	...	6	1	6	...	4	...	...	...	...
Stomach	24	13	11	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	...	5	5	3	5	1	...
Œsophagus	4	2	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	1	...	...	...	...
Omentum	2	...	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...
Abdomen	7	1	6	...	...	1	1	...	...	...	...	...	...	1	...	2	...	...	...	2	...	...	...	...	...
Intestines	14	7	7	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2	1	2	2	1	3
Colon	5	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	...	1
Peritonæum	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	1	...	...
Liver	46	18	28	...	...	...	...	...	...	...	...	...	...	1	...	1	2	1	7	11	11	3	6	1	2
Pancreas	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Kidney	4	2	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	...	...	...	...
Bladder	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Pylorus	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Extremities	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...
Bones...	9	5	4	...	...	...	...	...	...	...	...	...	...	1	...	2	...	2	1	1	2	...	...	...	...
Not Specified	14	5	9	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	3	4	...	4	...	...
Totals	244	81	163	...	...	1	1	...	1	...	...	1	1	6	9	6	26	17	31	32	57	13	29	5	8

TABLE XLIII.—*Causes of Death at Different Periods of Life in the two Sexes, for the year 1898.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
Miasmatic Diseases.																																								
Small Pox... Vaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small Pox... Unvaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small Pox... No statement	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	177	89	88	24	16	38	42	12	14	8	7	4	7	86	86	172	2	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5
Scarlet Fever	58	35	23	...	1	7	2	10	3	5	7	3	3	25	16	41	8	6	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	10	7	17
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	219	79	140	37	49	25	54	8	18	7	14	1	3	78	138	216	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Diphtheria and Membranous Croup	94	38	56	1	2	4	8	8	9	5	8	5	4	23	31	54	12	20	3	1	...	...	...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	15	25	40
Cerebro-Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Simple and Ill-defined Fever ...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	143	83	60	...	...	1	...	...	1	1	1	..	...	2	2	4	3	8	6	9	14	14	17	5	17	12	15	3	6	5	2	1	1	1	...	...	...	...	81	58	139
Chicken Pox	2	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	51	30	21	1	...	1	...	...	1	...	..	...	...	2	1	3	1	...	...	...	...	...	2	2	1	2	2	8	3	5	2	3	5	5	4	2	...	...	1	28	20	48
Other Miasmatic Diseases ...	1	1	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Miasmatic Diseases...	745	357	388	65	68	76	106	38	46	27	37	13	17	219	274	493	27	38	11	10	14	16	20	7	19	16	23	8	11	7	5	6	6	5	2	...	...	1	138	114	252
Diarrhœal Diseases.																																									
Diarrhœa and Dysentery ...	713	375	338	274	236	63	53	8	11	...	...	...	...	345	300	645	...	1	1	...	...	1	2	...	1	1	1	5	4	3	9	9	6	10	6	8	...	...	30	38	68
Malarial Diseases.																																									
Ague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Remittent Fever	...	...	...	...	...	..	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Malarial Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
ZOOGENOUS DISEASES.																																								
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cowpox and other effects of Vaccination	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Zoogenous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VENEREAL DISEASES.																																								
Syphilis	...	...	...	16	13	3	6	3	...	...	...	...	...	...	...	...	...	6	3	9	...	...	...	...	...	...	...	...	1	...	1	...	3	...	2	...	...	...	...	...	7	...	7
Gonorrhœa, Stricture of Urethra				4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	4	...	4
Total for Venereal Diseases	...			20	17	3	6	3	...	...	...	...	...	...	...	...	...	6	3	9	...	...	...	...	...	...	...	...	1	...	1	...	4	...	3	...	1	...	1	...	11	...	11
SEPTIC DISEASES.																																								
Phagedæna	...	...	...	3	2	1	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	1	...	...	...	2	...	2
Erysipelas	...	...	...	20	13	7	3	2	...	1	...	...	...	...	...	...	3	3	6	...	...	1	...	...	...	...	...	2	...	1	1	1	1	3	2	2	...	...	...	10	4	14
Pyæmia, Septicæmia	...	...	...	14	7	7	...	...	...	...	...	...	...	...	...	...	1	...	1	3	...	...	...	...	1	...	1	4	...	1	1	2	...	...	...	...	...	...	...	6	7	13
Puerperal Fever	...	...	...	28	...	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	4	...	13	...	9	...	...	...	...	...	...	...	...	...	...	28	28
Total for Septic Diseases	...			65	22	43	3	2	...	2	...	...	...	...	1	...	...	4	4	8	3	...	1	...	...	2	1	4	2	17	2	10	2	3	1	1	4	2	2	...	...	...	18	39	57
PARASITIC DISEASES.																																								
Thrush	...	...	...	6	5	1	5	1	...	...	...	...	...	...	...	...	...	5	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Vegetable Parasites	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydatid Disease	...	...	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	1	2
Other Dis. of Animal Parasites	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Total for Parasitic Diseases	...			8	6	2	5	1	...	...	...	...	...	...	...	...	...	5	1	6	...	...	...	...	...	...	...	...	1	..	...	1	...	...	...	...	...	...	...	...	1	1	2

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
Dietetic Diseases.																																								
Malnutrition	5	3	2	3	2	...	...	...	...	...	...	...	...	3	2	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intemperance (Chronic Alcoholism ...	8	6	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	4	...	1	...	...	...	...	...	6	2	8
Intemperance (Delirium Tremens ...	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	1	...	4	...	1	...	...	...	...	...	...	...	10	...	10
Plumbism	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Total for Dietetic Diseases ...	25	21	4	3	2	...	...	...	...	...	...	...	...	3	2	5	...	...	...	...	...	...	2	...	4	...	2	1	4	1	5	...	1	...	...	...	...	...	18	2	20
Constitutional Diseases.																																								
Rheumatic Fever—Rheumatism of Heart	20	6	14	...	...	...	...	...	...	...	...	...	1	...	1	1	...	3	...	...	2	4	...	...	3	2	1	1	...	...	...	1	...	2	...	...	...	...	6	13	19
Rheumatism	9	1	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...	1	...	2	...	2	...	...	1	8	9
Gout	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	2	...	...	...	...	...	5	0	5
Rickets	13	6	7	3	2	3	3	...	1	...	...	...	...	6	6	12	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	0	1	1
Cancer	244	81	163	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	1	1	6	9	6	26	17	31	32	57	13	29	5	8	...	...	81	163	244
Tabes Mesenterica	65	27	38	15	19	9	9	1	3	...	2	1	3	26	36	62	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Tubercular Meningitis, Acute Hydrocephalus	98	50	48	17	11	8	15	5	4	6	4	8	2	44	36	80	4	6	1	1	...	1	1	2	...	...	...	1	...	...	...	...	...	1	...	...	...	...	6	12	18
Phthisis	448	303	145	...	3	2	2	2	1	...	1	2	1	6	8	14	6	4	2	4	11	8	27	23	56	29	71	40	74	15	43	14	7	...	...	...	...	...	297	137	434
Other forms of Tuberculosis and Scrofula	56	27	29	9	11	7	5	...	4	1	1	2	1	19	22	41	3	4	1	...	1	1	1	1	...	...	1	...	1	1	...	...	...	...	...	...	...	...	8	7	15
Purpura and Hæmorrhagic Diathesis	3	2	1	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
Anæmia, Chlorosis, Leucocythæmia	9	6	3	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	...	1	...	...	1	1	2	...	...	2	...	. .	...	1	...	...	...	...	...	5	3	8
Diabetes Mellitus	28	16	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	4	2	3	3	1	2	...	4	2	1	1	...	...	16	12	28
Other Constitutional Diseases ...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
Total for Constitutional Diseases	1000	531	469	45	46	29	34	9	13	7	8	13	8	103	109	212	15	20	4	9	15	14	31	30	69	47	84	71	97	49	80	73	27	36	6	11	...	...	428	360	788

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DEVELOPMENTAL DISEASES.																																								
Premature Birth	276	151	125	150	125	1	...	...	...	...	...	...	...	151	125	276	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	23	11	12	11	12	...	...	...	...	...	...	...	...	11	12	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cyanosis	2	2	...	2	...	...	...	..	...	...	...	...	...	2	...	2	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spina Bifida	5	4	1	4	1	...	...	...	...	...	...	...	...	4	1	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Imperforate Anus	6	5	1	5	1	...	...	...	...	...	...	...	...	5	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cleft Palate, Hare Lip ...	2	...	2	...	2	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Congenital Defects ...	25	14	11	14	11	...	...	...	...	...	...	...	...	14	11	25	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Old Age	325	136	189	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	7	55	82	63	84	14	16	136	189	325
Total for Developmental Diseases	664	323	341	186	152	1	...	...	...	...	...	...	...	187	152	339	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	7	55	82	63	84	14	16	136	189	325
DISEASES OF THE NERVOUS SYSTEM.																																								
Inflammation of the Brain and its Membranes	120	61	59	22	15	5	9	4	7	5	3	1	4	37	38	75	8	5	4	4	2	1	2	...	3	1	2	2	1	3	...	4	1	1	1	...	...	...	24	21	45
Apoplexy	249	116	133	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	4	5	8	6	20	33	30	33	39	33	12	21	1	1	116	133	249
Softening of the Brain... ...	24	8	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	4	1	8	3	4	1	...	...	...	8	16	24
Hemiplegia, Brain Paralysis ...	59	26	33	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	1	2	9	2	6	10	3	12	5	6	...	...	26	33	59
Paralysis Agitans	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	1	...	...	...	...	...	1	...	1
Insanity, General Paralysis of Insane	6	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	1	1	...	1	...	2	...	...	...	1	...	...	...	5	1	6
Chorea	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	2
Epilepsy	18	8	10	2	...	...	...	...	...	...	...	...	...	2	...	2	...	...	1	...	...	...	...	2	2	2	1	...	4	1	...	2	2	...	...	...	1	...	...	6	10	16
Convulsions	344	190	154	162	132	17	14	8	4	...	1	2	1	189	152	341	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Laryngismus Stridulus ...	9	7	2	5	1	2	1	...	...	...	...	..	...	7	2	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Idiopathic Tetanus	4	3	1	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
Sunstroke	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Paraplegia and Disease of Spinal Cord	21	14	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	1	...	1	...	1	1	2	1	4	3	3	1	1	...	...	..	14	7	21
Other Diseases of the Nervous System	21	13	8	1	...	...	1	...	...	1	...	1	...	3	1	4	...	1	..	...	1	...	...	1	1	1	1	2	3	...	2	1	2	1	...	...	...	...	10	7	17
Total for Diseases of the Nervous System	878	452	426	192	148	24	25	12	11	6	4	4	6	238	194	432	11	9	6	4	6	2	4	4	12	10	15	17	39	43	47	61	52	53	21	28	1	1	214	232	446

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DISEASES OF ORGANS OF SPECIAL SENSE.																																								
Otitis, Otorrhœa	10	4	6	...	1	...	...	1	1	...	...	...	...	1	2	3	...	1	...	...	1	1	...	1	...	...	2	...	...	1	...	...	...	...	...	...	...	...	3	4	7
Epistaxis and Disease of Nose...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia and Disease of Eye	1	...	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Diseases of Organs of Special Sense	11	4	7	...	2	...	...	1	1	...	...	...	...	1	3	4	...	1	...	...	1	1	...	1	...	...	2	...	...	1	...	...	...	...	...	...	...	...	3	4	7
DISEASES OF THE CIRCULATORY SYSTEM.																																								
Endocarditis, Valvular Disease of Heart	415	199	216	2	3	...	1	...	...	...	...	...	...	2	4	6	...	3	4	7	6	5	4	12	11	17	26	22	40	50	56	34	39	47	11	14	...	1	197	212	409
Pericarditis	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	3	...	3
Hypertrophy of Heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angina Pectoris	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	1	1	...	...	...	...	1	1	2
Syncope	21	13	8	1	...	...	...	...	...	...	...	1	...	2	...	2	...	1	...	...	...	1	...	...	1	...	1	...	2	...	4	2	2	3	1	1	...	...	11	8	19
Aneurism	3	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	1	2	3
Senile Gangrene	7	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1	2	...	...	3	4	7
Embolism, Thrombosis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlebitis	2	1	1	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Varicose Veins	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Other Diseases of the Circulatory System	6	3	3	2	2	...	...	...	...	...	...	...	...	2	2	4	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
Total for Diseases of the Circulatory System ...	460	225	235	5	5	...	1	1	...	...	...	1	...	7	6	13	...	4	4	7	6	7	5	12	12	17	28	22	45	50	62	38	43	54	13	17	...	1	218	229	447

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DISEASES OF THE RESPIRATORY SYSTEM.																																								
Laryngitis	13	6	7	2	...	...	2	2	...	...	2	...	..	4	4	8	1	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	2	3	5
Croup	4	2	2	1	...	1	...	...	1	...	...	...	...	2	1	3	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Other Diseases of Larynx and Trachea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema and Asthma ...	5	4	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	..	...	...	...	...	1	...	2	...	...	...	...	...	4	...	4
Bronchitis	559	298	261	75	67	28	21	10	7	6	2	2	...	121	97	218	...	3	2	...	1	1	...	4	3	5	8	10	29	14	56	39	51	61	23	26	4	1	177	164	341
Pneumonia	590	339	251	82	67	45	48	18	20	7	12	4	6	156	153	309	12	6	6	2	1	7	8	6	24	12	28	14	39	8	34	22	27	10	4	9	...	2	183	98	281
Pleurisy	16	11	5	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	2	1	2	1	3	1	1	...	1	1	...	1	...	...	10	5	15
Other Diseases of the Respiratory System	8	5	3	...	1	...	...	...	...	...	...	...	...	...	1	1	..	...	...	...	...	1	...	...	...	1	4	...	1	...	...	...	...	...	...	...	...	...	5	2	7
Total for Diseases of the Respiratory System ...	1195	665	530	161	136	74	71	30	28	13	16	6	6	284	257	541	13	11	8	3	2	9	9	10	30	19	43	25	72	23	92	61	81	73	27	36	4	3	381	273	654
DISEASES OF THE DIGESTIVE SYSTEM.																																								
Stomatitis	1	...	1	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dentition	66	35	31	23	18	12	12	...	1	...	...	...	...	35	31	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sore Throat, Quinsy	9	6	3	1	...	...	1	1	...	1	1	1	1	4	3	7	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Dyspepsia	4	2	2	2	1	...	1	...	...	...	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hæmatemesis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
Melæna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disease of Stomach	64	28	36	17	13	2	4	...	...	...	...	...	...	19	17	36	1	1	...	...	...	3	...	1	...	...	1	5	2	4	2	1	1	1	2	3	...	...	9	19	28
Enteritis	222	114	108	85	74	13	16	5	2	1	1	1	1	105	94	199	...	1	2	...	...	1	1	...	...	...	1	2	2	6	2	2	1	2	...	...	...	...	9	14	23
Ulceration of Intestines ...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	2
Stricture or Strangulation of Intestines	1	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of Intestine ...	19	10	9	2	...	...	1	1	...	...	...	...	...	3	1	4	1	...	...	...	1	...	...	1	...	...	...	...	1	...	2	2	2	3	...	2	...	...	7	8	15
Intussusception of Intestine ...	7	5	2	1	1	...	...	...	...	...	...	1	...	2	1	3	..	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	2	...	...	...	...	...	3	1	4
Hernia	17	9	8	1	...	2	...	...	...	...	...	...	...	3	...	3	...	...	...	...	...	...	...	...	...	...	1	...	...	2	2	2	3	3	...	1	...	...	6	8	14
Fistula	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	1	1	2
Peritonitis	38	18	20	2	1	1	1	3	1	...	...	1	...	7	3	10	3	...	2	2	1	2	1	1	3	2	1	5	...	...	...	3	...	1	...	1	...	...	11	17	28
Ascites	3	1	2	...	...	1	...	...	...	...	...	..	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	2

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DISEASES OF THE DIGESTIVE SYSTEM.—*Continued.*																																								
Gall Stones	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	1	...	...	...	2	2	4
Cirrhosis of Liver	71	37	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	3	8	10	12	12	8	8	5	...	...	...	...	37	34	71
Other Diseases of Liver ...	24	15	9	6	4	1	...	...	...	...	...	...	...	7	4	11	...	...	...	...	1	...	...	...	1	1	...	1	...	2	5	1	1	...	...	...	...	8	5	13
Other Diseases of Digestive System	8	6	2	1	...	1	...	...	1	1	...	...	1	3	2	5	1	...	...	...	...	...	..	...	...	..	...	1	...	...	...	...	1	...	...	...	...	3	...	3
Total for Diseases of Digestive System.	563	292	271	142	112	33	37	10	5	3	2	4	3	192	159	351	7	3	5	2	4	6	2	3	8	4	7	21	17	29	26	21	21	16	3	7	...	...	100	112	212
DISEASES OF THE LYMPHATIC SYSTEM AND DUCTLESS GLANDS.																																								
Diseases of Spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Lymphatic System	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2	...	2
Diseases of Thyroid Body ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Supra Renal Capsules	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Diseases of the Lymphatic System ...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2	...	2
DISEASES OF THE URINARY SYSTEM.																																								
Acute Nephritis	9	3	6	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	2	...	1	1	1	1	1	...	1	...	...	...	...	...	...	...	...	2	6	8
Bright's Disease	149	79	70	...	1	1	...	1	1	...	...	...	1	2	3	5	1	...	1	2	...	...	...	4	7	6	13	12	17	12	19	21	15	7	4	3	...	..	77	67	144
Uræmia	9	7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	1	...	...	1	...	...	2	...	...	...	7	2	9
Suppression of Urine	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Calculus	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	4	...	4
Hæmaturia	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	..	2	...	2
Extravasation of Urine ...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	..	...	...	...	...	...	...	...	2	...	2
Disease of Bladder and Prostate	12	12	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	6	...	1	...	1	...	12	...	12
Other Diseases of the Urinary System	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	2
Total for Diseases of the Urinary System ...	190	111	79	...	1	1	...	1	1	1	...	...	1	3	3	6	1	...	1	2	...	2	...	5	9	7	18	14	20	13	25	22	23	8	9	3	2	...	108	76	184

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DISEASES OF THE ORGANS OF GENERATION.																																								
Ovarian Disease	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	3	...	...	...	...	...	...	...	5	5
Diseases of Uterus and Vagina	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	..	...	...	1	...	...	...	...	...	...	...	4	4
Disorders of Menstruation ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pelvic Abscess	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Testes, Penis, and Scrotum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Organs of Generation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Diseases of Organs of Generation	9	...	9	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	1	...	4	...	...	...	...	...	...	...	9	9
DISEASES OF PARTURITION.																																								
Abortion, Miscarriage	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	1	...	...	...	...	...	...	...	...	...	...	5	5
Puerperal Mania	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Puerperal Convulsions... ...	8	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	4	...	2	...	...	...	...	...	...	...	...	...	...	8	8
Placenta Prævia, Flooding ...	11	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	6	...	4	...	...	...	...	...	...	...	...	...	...	11	11
Phlegmasia Dolens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Accidents of Childbirth...	16		16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	4	...	5	...	1	...	...	...	...	...	...	...	...	16	16
Total for Diseases of Parturition...	41	...	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	11	...	16	...	12	...	1	...	...	...	...	...	...	...	...	41	41
DISEASES OF ORGANS OF LOCOMOTION.																																								
Caries, Necrosis	17	10	7	...	...	...	...	...	1	...	...	...	...	...	1	1	4	2	1	1	...	...	...	...	3	1	1	1	1	1	...	...	...	...	...	...	...	...	10	6	16
Arthritis, Ostitis, Periostitis ...	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1	...	...	...	2	2	4
Other Diseases of Organs of Locomotion...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for Diseases of Organs of Locomition	22	12	10	...	1	...	..	...	1	...	...	...	...	...	2	2	4	2	1	1	...	...	...	...	4	1	1	1	1	2	...	1	...	...	1	...	...	...	12	8	20

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
DISEASES OF THE INTEGUMENTARY SYSTEM.																																								
Carbuncle	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1	2
Phlegmon, Cellulitis	5	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	1	1	...	...	...	...	...	.	...	4	1	5
Eczema	2	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lupus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulcer, Bedsore	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	2
Pemphigus	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Other Diseases of the Integumentary System	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	2	...	2
Total for Diseases of the Integumentary System ...	14	11	3	2	...	...	...	...	...	...	...	...	...	2	...	2	...	...	1	...	...	...	...	...	1	...	2	...	...	1	4	1	...	1	1	...	...	...	9	3	12
ACCIDENTS AND NEGLIGENCE.																																								
Fractures and Contusions ...	68	55	13	...	...	1	3	1	...	...	1	1	...	3	4	7	6	2	1	...	3	...	2	...	9	1	4	...	8	...	9	2	6	4	4	...	...	...	52	9	61
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cut, Stab	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Burn, Scald	33	14	19	1	2	4	...	2	...	1	1	2	3	10	6	16	1	8	...	2	...	1	...	...	...	...	...	1	...	3	...	...	1	...	...	...	...	4	13	17
Poison	5	3	2	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	1	...	...	...	...	...	2	2	4
Drowning	8	5	3	...	...	...	1	...	1	1	...	...	1	1	3	4	3	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4
Suffocation	27	9	18	8	13	...	...	...	1	...	...	...	...	8	14	22	...	...	...	...	...	1	...	...	...	1	1	...	1	...	...	...	...	...	1	...	...	1	4	5
Otherwise	5	3	2	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	...	...	...	3	1	4
Total for Accidents and Negligence	147	90	57	9	16	5	4	3	2	3	2	3	4	23	28	51	10	10	2	2	3	2	3	...	10	2	7	3	8	1	13	3	7	5	4	1	...	...	67	29	96
HOMICIDE.																																								
Murder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Manslaughter	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Total for Homicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE XLIII.—*Continued.*

CAUSE OF DEATH.	TOTALS—ALL AGES.			Under 1 year.		1 & under 2 years.		2 & under 3 years.		3 & under 4 years.		4 & under 5 years.		TOTALS—UNDER FIVE YEARS.			5 & under 10 years.		10 & under 15 years.		15 & under 20 years.		20 & under 25 years.		25 & under 35 years.		35 & under 45 years.		45 & under 55 years.		55 & under 65 years.		65 & under 75 years.		75 & under 85 years.		85 years & upwards.		TOTALS—ABOVE FIVE YEARS.		
	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
SUICIDE.																																								
Gunshot Wounds	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	1	...	1
Cut, Stab	6	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	...	...	...	1	...	...	...	.	...	...	...	4	2	6
Poison	7	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	2	1	2	...	...	...	...	...	...	...	4	3	7
Drowning	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Hanging	7	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	4	...	1	...	...	...	...	...	...	6	1	7
Otherwise	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...	1	...	...	...	..	...	...	...	...	2	...	2
Total for Suicide	24	17	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	3	4	2	7	2	4	...	...	...	...	...	...	17	7	24
ILL-DEFINED AND NOT SPECIFIED CAUSES.																																								
Dropsy	2	2	...	1	...	...	...	...	..	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1
Debility, Atrophy, Inanition ...	346	190	156	160	134	12	4	4	3	...	1	...	...	176	142	318	...	...	...	...	...	...	...	...	...	1	...	1	2	3	3	1	3	3	6	2	...	3	14	14	28
Mortification	1	...	1	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Tumour...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1	2
Abscess	8	5	3	3	2	...	...	1	..	...	...	...	...	4	2	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	1	1	2
Hæmorrhage	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	..	...	...	...	...	...	...	1	1	2
Sudden (Cause unascertained)...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	2
Other Ill-defined and Not Specified Causes	56	42	14	11	7	...	...	...	...	...	...	...	...	11	7	18	...	...	...	...	3	1	3	...	...	1	5	1	11	1	7	1	1	1	1	...	...	1	31	7	38
Total for Ill-defined and Not Specified Causes	417	241	176	175	143	12	4	5	3	...	1	...	...	192	151	343	...	...	...	...	3	1	3	1	1	3	6	2	15	5	10	2	4	5	7	2	...	4	49	25	74
GRAND TOTALS... ...	7213	3774	3439	1273	1074	318	337	118	122	60	70	45	45	1814	1648	3462	91	99	45	40	55	64	82	88	186	164	246	218	347	235	390	310	331	350	166	197	21	26	1960	1791	3751

TABLE XLIV.—*Mortality in reference to Trades.*

Diseases.	Ages at Death.	Grinder.	Cutler.	Tool, Fork and Scissors Forger.	Filecutter, Forger, Hardener.	Engineer, Turner, Fitter, Mechanic.	Bricklayer and Bricklayer's Labourer.	Butcher.	Baker and Confectioner.	Carter, Draymen, Cab, 'Bus, &c., Driver	Groom and Horsekeeper.	Engine Driver, Tenter, Fireman.	Blacksmith and Blacksmith's Striker.	Furnaceman.	Steel Melter, Moulder, Puddler.	Hammerman.	Roller.	Farmer.	Gardener.	Hawker, Coster.	Joiner, &c.	Labourer.	Mason and Builder.	Coal Miner.	Hotel Keeper, Publican, &c.	Boot and Shoe Maker.	Tailor.	Painter, Plumber, &c.	Clerk.	Merchant and Manufacturer.	Silversmith, Chaser, Engraver, &c.	Horn and Bone Cutter, Grinder, &c.	Horn Presser.	Printer, Compositor.	General Shopkeeper,
Diseases of the Nervous System.	Under 25	..	..	..	1	..	..	..	..	1	..		..	..	..	1	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
	25 & ,, 35	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	1	4	..	1	..	..	..	1
	35 & ,, 45	1	1	1	2	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	2	1	..	..	..	1	..	..	..	1	..	..	..	..	..
	45 & ,, 55	5	2	2	5	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	2	3	1	1	1	..	..	..	4	1	1	1	..	..	1
	55 & ,, 65	3	5	1	3	..	..	..	1	3	1	1	2	1	2	1	..	..	..	..	..	7	3	1	..	..	..	1	1	1	3	..	..	1	2
	65 & upwards.	..	2	6	2	4	..	..	1	1	..	1	1	..	3	2	1	3	1	2	3	8	3	1	2	..	4	1	3	2	1	2	..	1	4
	Totals ..	9	11	10	13	6	..	..	3	6	1	2	3	1	6	4	2	5	1	3	8	23	7	3	3	1	4	3	12	5	6	3	..	2	8
Diseases of the Respiratory System other than Phthisis.	Under 25	1	2	..	2	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..
	25 & ,, 35	2	..	2	1	..	..	..	..	..	..	1	1	..	1	..	1	..	..	..	1	10	..	..	2	1	..	1	1	..	..	..	..	..	1
	35 & ,, 45	1	3	3	1	1	1	..	..	6	..	2	1	..	1	..	2	..	1	..	2	7	3	1	..	..	1	..	3	..	2	..	..	1	3
	45 & ,, 55	3	2	5	5	4	1	..	..	3	..	2	2	3	..	2	1	..	..	1	2	14	3	1	3	..	..	1	3	2	3	1	..	..	3
	55 & ,, 65	10	10	5	2	7	..	..	..	2	..	1	..	2	2	2	..	..	1	1	4	18	5	3	5	2	1	..	5	..	2	2	1	..	2
	65 & upwards.	3	10	4	7	3	1	1	..	3	..	2	2	1	3	..	..	2	..	3	4	12	5	8	6	3	1	1	8	6	6	..	1	1	5
	Totals ..	20	27	19	18	15	3	1	..	15	..	8	7	6	7	4	4	2	2	5	13	65	16	13	16	6	3	3	20	8	13	3	2	2	14
Phthisis.	Under 25	1	4	6	..	2	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	2	4	..	1	..	1	..	1	2	..	6	..	..	2	1
	25 & ,, 35	6	6	5	6	..	..	1	..	1	2	..	2	..	..	..	1	..	..	..	1	4	1	..	1	..	1	..	3	1	3	1	..	1	2
	35 & ,, 45	17	6	3	4	1	..	1	..	2	1	..	2	2	1	1	..	..	1	1	1	10	2	1	..	..	1	1	2	1	2	..	..	1	1
	45 & ,, 55	15	7	3	2	1	..	..	..	..	..	..	..	3	4	..	..	..	1	3	3	13	3	1	1	..	1	1	3	..	2	2	..	..	..
	55 & ,, 65	7	2	5	3	..	1	2	..	1	..	..	1	..	3	..	1	..	..	1	..	8	2	..	..	1	..	..	..	1	1	..	..	1	1
	65 & upwards.	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	..	..	..	1	..	..	..
	Totals ..	46	26	22	15	4	1	4	..	5	3	..	6	5	8	1	2	..	2	5	7	42	8	3	2	3	3	3	10	3	14	4	..	5	5
Diseases of the Urinary System.	Under 25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
	25 & ,, 35	1	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..	..	1	..	..	..	..	..	..	..
	35 & ,, 45	1	2	3	..	2	2	1	..	..	..	..	..	..	1	..	1	..	..	..	1	1	..	..	..	..	2	..	..	1	..	..	..	..	..
	45 & ,, 55	..	1	1	2	1	..	1	..	..	1	..	..	1	1	1	..	..	..	..	..	7	..	..	1	1	..	..	1	1	..	..	..	1	..
	55 & ,, 65	2	3	3	2	..	..	..	1	1	..	..	..	1	1	1	..	..	..	..	3	2	..	..	..	..	..	..	..	..	..	..	..	..	2
	65 & upwards.	..	3	5	..	2	..	1	..	..	..	1	..	..	..	..	..	1	..	..	2	4	..	..	2	..	..	..	3	4	..	..	..	..	..	6
	Totals ..	4	9	14	4	5	2	3	1	1	1	1	..	2	4	2	1	1	..	..	5	16	1	1	3	1	..	3	4	5	2	..	..	1	8
Diseases of the Circulatory System.	Under 25	..	..	..	..	1	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	2
	25 & ,, 35	..	..	..	..	1	2	1	..	1	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	35 & ,, 45	3	2	1	1	..	..	1	..	1	..	..	2	1	..	..	1	..	..	1	..	6	2	..	..	..	..	..	..	..	1	..	..	..	..
	45 & ,, 55	2	2	3	7	2	..	..	..	2	..	2	1	2	4	..	1	..	..	..	..	8	1	1	..	..	..	..	..	1	..	1	..	..	1
	55 & ,, 65	4	2	7	3	2	1	..	..	2	..	..	1	2	1	1	..	..	..	..	1	6	1	1	3	..	1	3	3	2	1	..	1	1	3
	65 & upwards.	..	2	2	1	3	1	1	1	..	..	..	..	..	..	..	..	..	2	2	..	6	4	1	2	2	..	..	1	4	3	1	2	..	1	4
	Totals ..	9	8	13	12	9	4	4	1	8	..	2	5	5	5	1	2	2	2	1	7	25	5	5	5	..	1	5	8	5	5	2	1	2	10
Diseases of the Digestive System, exclusive of Liver.	Under 25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
	25 & ,, 35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
	35 & ,, 45	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
	45 & ,, 55	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	..
	55 & ,, 65	..	..	..	..	..	1	1	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
	65 & upwards.	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	2	..	1	..	..	..	..	..	..	..	..	..	..	1	1
	Totals ..	..	1	1	1	..	2	1	..	..	..	..	2	1	3	..	..	1	1	1	2	6	1	2	..	..	..	..	..	..	1	..	..	2	1
Diseases of the Liver.	Under 25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	25 & ,, 35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
	35 & ,, 45	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
	45 & ,, 55	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	2	..	..	1
	55 & ,, 65	..	..	2	1	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1	1	..	2	..	..	..	2	..	2	..	..	..
	65 & upwards.	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	1	1	..	2	1	..	..	..	..
	Totals ..	..	2	2	2	1	..	1	1	..	..	..	..	1	..	1	..	1	..	2	1	5	1	1	4	..	1	1	3	3	2	5	..	..	3
All other Diseases.	Under 25	3	1	..	2	3	1	..	..	2	..	1	..	..	..	1	1	..	..	..	3	9	2	3	1	..	..	..	4	..	2	..	..	..	2
	25 & ,, 35	3	1	3	1	2	1	1	..	6	..	2	2	1	..	2	..	1	..	1	..	10	1	1	1	..	1	1	4	..	3	1	..	..	1
	35 & ,, 45	2	2	4	4	2	..	1	..	1	..	1	3	1	2	..	1	..	..	..	1	5	..	2	1	..	..	2	5	..	3	1	..	..	1
	45 & ,, 55	3	4	3	2	2	1	2	..	5	..	1	1	..	3	4	2	..	..	..	..	14	..	2	6	..	..	..	2	1	1	..	..	..	4
	55 & ,, 65	4	10	4	6	4	2	2	..	5	..	2	5	1	1	..	..	1	..	..	1	12	1	2	..	4	1	1	3	1	4	..	2	..	1
	65 & upwards.	4	15	14	4	..	1	..	1	7	..	3	9	2	8	1	1	2	2	..	12	31	6	1	3	15	4	2	6	4	7	4	1	..	10
	Totals ..	19	33	28	19	13	6	6	1	26	..	10	20	5	14	8	5	4	2	1	17	81	10	11	12	19	7	6	24	6	20	6	3	..	19
All Causes.	Under 25	5	7	6	5	6	1	1	..	7	..	1	2	..	1	2	2	1	..	..	7	19	2	4	1	1	1	2	6	..	10	..	..	2	6
	25 & ,, 35	12	8	12	8	3	3	3	..	8	2	3	6	1	3	2	2	2	..	3	3	31	3	4	4	1	2	4	12	1	7	2	..	1	6
	35 & ,, 45	25	16	15	12	7	4	5	..	11	1	3	9	4	6	1	5	..	2	2	6	32	8	4	1	1	2	5	10	2	9	1	..	2	5
	45 & ,, 55	28	19	17	24	12	2	3	1	10	1	5	4	10	12	8	4	1	1	4	7	61	8	7	13	1	1	2	15	5	11	4	..	1	10
	55 & ,, 65	30	32	27	20	13	5	5	3	14	1	4	10	8	11	5	1	1	1	2	10	55	13	7	10	7	3	5	14	5	13	2	4	4	11
	65 & upwards.	7	35	32	15	12	3	3	3	11	..	7	12	3	14	3	2	11	6	7	27	65	15	13	16	19	10	6	24	21	16	9	2	4	30
	Totals ..	107	117	109	84	53	18	20	7	61	5	23	43	26	47	21	16	16	10	18	60	263	49	39	45	30	19	24	81	34	66	18	6	14	68

TABLE XLV.—SUMMARY OF WORK DONE BY INSPECTORS OF NUISANCES DURING THE YEAR, 1898.

Nature of Cases dealt with.	Registration Sub-Districts.									
	West.	North.	South.	Park.	Brightside.	Attercliffe.	Nether Hallam.	Upper Hallam.	Ecclesall.	Total.
Total Number of Inspections of premises	1028	2723	1885	2311	4735	3096	4601	160	7326	27865
1. Inspections of premises for nuisances ...	727	1912	959	1038	2124	1905	2653	116	5182	16616
2. Inspections of premises where Zymotic Diseases have occurred	104	501	693	1168	2437	956	1786	42	1737	9424
3. Inspections of premises where offensive trades are conducted	—	—	2	2	1	10	—	—	3	18
4. Inspections of Workshops	185	290	228	101	134	165	152	2	357	1614
5. ,, Bakehouses	12	20	3	2	39	60	10	—	47	193
Number of complaints investigated	156	350	66	73	362	172	283	7	590	2059
Number of notices served for abatement or abolition of nuisances	76	242	90	116	278	143	267	6	400	1618
Number of notices in regard to workshops ...	11	15	11	9	17	8	12	—	19	102
Number of premises where Zymotic Diseases have occurred	125	463	318	494	1226	675	933	16	1127	5377
Number of premises, where Zymotic Diseases have occurred, disinfected	52	288	225	410	924	520	540	12	788	3759
Number of houses cleansed, repaired, white-washed, etc.	14	25	6	6	19	14	29	1	46	160
Number of cases of overcrowding abolished ...	3	7	1	8	7	—	6	—	10	42
Waste water pipes disconnected from house drains	18	89	12	—	159	143	14	5	242	682
House drains and water-closets repaired, cleansed, and ventilated	43	115	68	51	246	275	447	26	853	2124
Smoke test applied	1	1	—	9	10	7	41	11	167	247
Water test applied	—	—	—	—	4	—	52	7	117	180
Old privies and ashpits repaired	11	4	3	3	34	57	61	—	144	317
New privies and ashpits provided	—	—	—	—	—	2	—	—	9	11
New water-closets provided...	28	174	42	4	61	38	35	1	148	531
Urinals provided, repaired, &c.	2	7	2	4	5	4	5	—	5	34
Refuse bins provided	—	—	—	—	1	—	—	—	2	3
Accumulations of stagnant water, manure, and other refuse removed	28	45	7	5	29	78	15	—	31	238
Removal of animals improperly kept	2	12	—	6	8	3	10	—	11	52
Yards repaired, flagged, or asphalted	1	8	14	7	18	21	19	—	38	126
Manure bins provided or repaired	—	—	1	1	—	—	3	—	—	5
Impure water supply abolished	—	—	—	1	—	—	—	—	—	1
Legal proceedings for failing to comply with requirements of notice	—	—	1	2	2	1	—	—	—	6
Magistrates' order for abatement, with costs ...	—	—	1	2	2	1	—	—	—	6
Proceedings withdrawn on performance of work and payment of costs	—	—	—	—	—	—	—	—	—	—
Cases dismissed	—	—	—	—	—	—	—	—	—	—

WORK OF THE INSPECTORS OF NUISANCES.

The amount of work done by the District Inspectors was about equal to that in former years; indeed, with the present staff it would be impossible to overtake more than the work which has been done during each of the past few years.

The question of putting the staff on a reasonably satisfactory basis is one of the most important matters which must be dealt with in the immediate future. A great deal of the work has to be rushed through in an unsatisfactory manner, and quite as much has to be left untouched as is attempted. Some of the points which require to be attended to, and which are not done satisfactorily at present, are :—

1st. Infectious Diseases.—At present a visit is made to every case notified to inquire as to its origin and to leave instructions. No subsequent visits are regularly made to see that reasonable precautions are being carried out, with the result that carelessness is allowed to exist, and the best results commensurate with the amount expended on Notification, Disinfection, &c., are not obtained.

2nd. Nuisances.—The staff is at present only sufficient to deal with nuisances in regard to which complaint has been made at the Town Hall. It is necessary that a visit should be paid at intervals to most of the cottage property in the City to ascertain the existence of nuisances without waiting for the occupiers to complain.

3rd. Drains.—The condition of the drains at a large number of houses has been found to be very defective. In most instances these defects have been found as a result of inquiry made into the origin of fever cases, or as a result of complaints of sewer gas or sewage getting into the dwelling-house. I append a statement as to the condition of the drains at some of the villa residences in one district during 1898; but it is even more important that the drains in connection with cottage property should be systematically examined. In the older districts of the City open channels or defective rubble drains are the rule, not the exception.

4th. Workshops.—I append some remarks on the necessity of undertaking a systematic inspection of workshops which is not done at present.

The abatement of a nuisance generally requires several visits from an inspector. So also the records, &c., which are absolutely necessary take up an appreciable part of the time of each inspector.

DRAIN TESTING IN ONE DISTRICT.

The drainage arrangements at many of the larger houses in the City have been examined during the year. This work has been gradually increasing during the past few years, and the evidence which has been obtained as the result of the work already done goes to show very pointedly that house drainage arrangements which were put down years ago are in a very unsatisfactory condition at the present time, except, of course, in those cases where the drains have been relaid.

In every case where the house drainage was tested the drains were filled with smoke, and it was assumed that if smoke escaped from the drains into the house that sewer gas would also escape. In regard to this it must be remembered that there is an even greater probability of sewer gas getting into such house than of smoke being forced into the house, because, in the one case, the sewer gas is sucked in, while, in the latter the smoke has to be forced.

(*a*) *Disconnection from Sewer.*

As an illustration of the defective condition of the drains in the larger houses, it may be stated that out of 122 houses where the Inspector applied the smoke test, only two had drains without some defect, and these had only a short time previously been relaid at the request of the Health Department. In 68 of these houses the drain was disconnected from the sewer by means of a disconnecting trap; in other 10 part of the drains were so cut off, and in the remaining 44 houses there was no disconnection whatever.

(*b*) *Ventilation.*

It was found, in regard to the ventilation of the drains of the 122 houses, that in 63 cases the drains were efficiently ventilated, in 7 instances the drains were partly ventilated, and in the remaining 52 there was no means of ventilation whatever.

(*c*) *Means of Inspection.*

In 36 cases there was sufficient means of inspection of drains without the necessity of opening the ground; in 13 instances there was partial means of inspection, and in the remaining 73 there was no means of inspection provided.

(*d*) *Untrapped drain-openings within the house.*

In 27 instances there were one or more untrapped drains inside the dwelling-house, and in most of the cases these untrapped openings carried sewer gas directly from the City sewers into the house.

(*e*) *Untrapped drains near the house, outside.*

In 27 instances untrapped drains existed within a short distance of the house, and these carried sewer gas to within a short distance of the house.

(*f*) *Results of the Smoke-tests.*

Of the 122 houses no less than 80 had drains so defective as to allow smoke to escape from them into the dwelling-house. In 70 cases the defects were in the drains immediately outside the house, and in such a position that there was a liability of sewer gas getting inside the house. In a large number of houses improperly-laid drains were found to exist under the house itself—in many cases consisting of rubble—while in the majority of cases they were of pipes with clay joints or without any jointing material whatever. In 75 of the 122 cases it was found, on the drains being exposed, that a portion of the drains was leaking into the subsoil.

(*g*) *Sanitary fittings out of order.*

In 42 instances the sanitary fittings were found to be out of order, and in such a condition as to be liable to produce disease. In 5 cases the bath, lavatory, or slop-sink wastes discharged directly into the soil-pipe.

The *Time* occupied in making the tests detailed above was considerable. In each instance the Inspector had the assistance of a builder's labourer with ladders, and the time of this labourer has been accurately noted down in every instance, and it is found that, in order to apply the smoke tests, the Inspector has spent, on an average, about 3 hours for each test (in the case of the larger houses as long as 4 hours has been occupied). It is much to be desired that a systematic testing of drains should be carried out, not confined to the better class districts, but all over the town. At the present time the more intelligent people ask that their drains should be examined, and they are gradually having them put right. There are large areas in the town where nothing but old rubble drains exist, passing through back yards and under dwelling-houses, and these require, in the first instance, to be tested by a competent Inspector. Unfortunately, the staff of Sanitary Inspectors is so small that this work is not attempted at the present time.

Ample powers exist to enable us to carry out such work. The only instances where we have not sufficient power at the present time would be those cases where the occupier refused to give permission to have the drains in connection with his premises tested. The number of such cases would be extremely small.

WORKSHOPS AND FACTORIES.

On February 17th I reported specially on the necessity there is for systematic inspection of work places in the city. At present there is no Inspector specially detailed for this work; each district Inspector is expected to attend to the workshops, &c., in his district. This arrangement, if carried out, might be satisfactory, but in any case the work will not be so well or so uniformly carried out as if performed by specially appointed Inspectors.

Unfortunately, the amount of time which can be devoted to workshops and factories by the present staff is so limited that it may be said that practically no systematic inspections are made. The staff of Sanitary Inspectors is at present only able to deal with complaints received and with the reported cases of infectious diseases.

Each district Inspector has to deal with the complaints and infectious diseases occurring in a population of nearly 50,000 persons, and a large amount of systematic visiting and drain testing should be done which is not now attempted.

The sanitary condition of workshops, including their cleanliness, ventilation, over-crowding, limewashing, water supply, closet accommodation, drainage, &c., is, by the Act of 1891, placed under the control of the Local Sanitary Authority. So also in the case of factories, most of the sanitary requirements are under the control of the Local Authority.

The number of workshops in Sheffield is very large. There are about 2,000 workshops in which women or young persons are employed, the number in which men only are employed is not known, but it will be at least 2,000. There are, too, in the city 1,356 factories.

While the majority of workshops and factories are healthy and clean, with good closet and drainage arrangements, there are many ill ventilated, dark, and dirty shops, having either no closet accommodation, or privies of the foulest type.

In suggesting remedies for such, the services of a skilled Inspector is necessary. It is most important from the point of view of the workers that a systematic inspection of every workshop should be made at least twice every year. It will probably be necessary to appoint at least one male Inspector and also one female Inspector to deal with factories and workshops where women are employed.

No complete record is given of the work actually done, as it has been fragmentary. It has consisted of attending to gross and obvious insanitary conditions brought to the notice of the Health Department by H.M. Inspector of Factories and by other persons.

BLACK SMOKE NUISANCE.

Owing to the continued illness of one Inspector the total number of observations of black smoke made during the year amounted to only 4,778, as against 5,038 in the previous year. Each of these observations has been of one hour's duration.

The average emission of black smoke has been 2·06 minutes. This includes the chimneys in connection with boiler furnaces alone, or with boiler furnaces and other furnaces as well, and does not refer to those chimneys which are attached to the metallurgical furnaces in the city. An average of 2·06 minutes of black smoke per hour is the lowest yet recorded in Sheffield. In making such a statement it must be remembered that it refers to chimneys having attached to them from 1 to 10 or 12 boilers, and in some cases from 1 to 8 metallurgical furnaces in addition. It is quite true that the averages for the year may, when looked at from one point of view, be considered satisfactory. It must be considered, however, that in the great majority of boiler furnaces there is no necessity to make black smoke at any time during normal working conditions.

The question of increasing the amount of work done in order to still further improve the condition of the atmosphere received the most careful attention of the Health Committee during the year, and as a result Inspector Nicholson was appointed Senior Smoke Inspector, Joseph H. Hardy was appointed Smoke Inspector for the district to the south and west of the River Don, and Henry Rich was appointed Smoke Inspector for that portion of the city to the north and east of the Don.

The usual procedure in making observations in the first instance has been continued. When excessive emissions of black smoke are found, Inspector Nicholson, together with the District Inspector, makes observations, so that in future proceedings in Court may not be quashed because the evidence of one Inspector is not relied upon. In a case which came before the Stipendiary Magistrate on August 5th, 1898, the Stipendiary said:—"If there were further proceedings he hoped the complainants would bear in mind how difficult it was for the Court to deal with a case where there was such little evidence. There seemed to be almost an art in bringing the minimum amount of evidence before the Court."

The total number of cases where excessive emissions of black smoke were found was 101, and in each of these cases a notice was served under Section 91 of the Public Health Act.

In 5 cases proceedings were taken with the following results:—

TABLE XLVI.—*Proceedings in regard to Smoke Nuisance.*

Date.	Nature of Works.	Result.
Feb. 8th ...	Steel Maker ...	Withdrawn after four adjournments.
Aug. 5th ...	Steel Maker ...	Dismissed with verbal caution.
Aug. 5th ...	Vinegar Brewer ..	Order made to abate nuisance.
Nov. 2nd ...	Builder	Fined £2 and costs, and order made.
Nov. 16th...	Steel Maker	Fined £3 and costs, and order made.
Dec. 16th ...	Butcher..	Fined £3 and costs, and order made.

In Table XLVII the details of the work done by the Inspectors in 1898 is shown, and in Table XLVIII a statement is given of the various results of the action taken by the manufacturers to better the condition of their chimneys.

TABLE XLVII.—*Details of Work done by Smoke Inspectors during 1898, and during the previous eleven years.*

	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
No. of Observations upon Chimneys, of each one hour	1901	2007	2555	6013	5751	6000	6157	6686	4935	5201	5038	4778
Average No. of Minutes of Black Smoke per hour	9·7	10·0	11·0	7·0	6·3	5·2	2·8	2·8	2·1	2·2	2·25	20·6
No. of Notices served	53	48	55	47	14	97	81	125	72	100	89	101
No. of Complaints received	3	9	43	75	40	32	23	23	22	22	27	25
No. of New Boilers put down	2	9	14	31	7	15	31	19	9	30	32	7
No. of Chimneys erected	2	4	7	8	6	15	10	17	5	18	16	4
No. of Chimneys raised	7	8	11	6	8	15	9	5	6	9	15	6
Furnaces re-erected or re-arranged	65	67	84	77	13	7	6	24	41	41	44	46
Appliances of Improvements introduced	...	...	...	...	...	117	34	38	52	81	49	46

TABLE XLVIII.—SMOKE ABATEMENT.

Number of Chimney.	Boilers and Furnaces attached.	Minutes for which Notice was served.	Smoke-consumer on when Notice was served.	Remarks.
119	1 Boiler	4	Grids	
88	1 ,, ...	5	,,	
51	2 Boilers	5½	Forced Draught	
B. 116	1 Boiler and 1 Kiln ...	19	Grids	
15	1 ,, ...	6½	,,	
41	1 ,, ...	4	,,	
30	1 ,, ...	4	,,	
20	1 ,, ...	3½	,, Forced Draught	
116	2 Boilers	3	,, ,,	Plenty of boiler room; work one boiler
2	1 ,, ...	11½	,, ,,	Plenty of boiler room
3	1 ,, ...	9½	,, ,,	,, ,,
37	1 ,, ...	4½	,, ,,	,, ,,
28	1 ,, ...	4½	,, ,,	,, ,,
57	1 ,, ...	5	,, ,,	,, ,,
93	1 ,, ...	4		Chimney raised, and burning coke
51	2 Boilers	8	Forced Draught	
112	1 Boiler	10	,, ,,	
50	1 ,, ...	5		Boiler removed
117	1 ,, ...	6		Burning coke
103	1 ,, ...	6½		,,
119	1 ,, ...	5		Premises closed
30	1 ,, ...	8½	Grids	
146	2 Boilers	5	,,	Plenty of boiler room
161	1 Boiler	4½		,, ,,
153	1 ,, ...	5½		Fined £3 and costs, also Magistrates' Order made
102	1 Copper	9	Holes in the Door	Magistrates' Order made; put on a forced draught
61	1 Boiler	3	Grids	Magistrates' Order made; raised the chimney
15	1 ,, ...	8		Plenty of boiler room
29	1 ,, and 1 Furnace ...	7	Grids	,, ,,
162	1 ,, ...	4½		Burning coke
3	2 Boilers	7½	Forced Draught	
134	3 ,, and 2 Furnaces ...	10½	Grids	Alterations to be made
70	2 ,, ...	16	Hollow Bridges	Plenty of boiler room
19	1 Boiler and 2 Furnaces ...	6	Grids	,, ,,
144	1 ,, ...	8½	,,	,, ,,
13	3 Boilers	6	Forced Draught	,, ,,
6	1 Boiler	5½		Burning coke
48	1 ,, ...	8½	Grids	Plenty of boiler room
152	1 ,, ...	7	,,	Magistrate's Order made

CHART III, SHOWING (a) *Yearly number of observations, each of one hour's duration.* (b) *Average number of minutes of Black Smoke.*

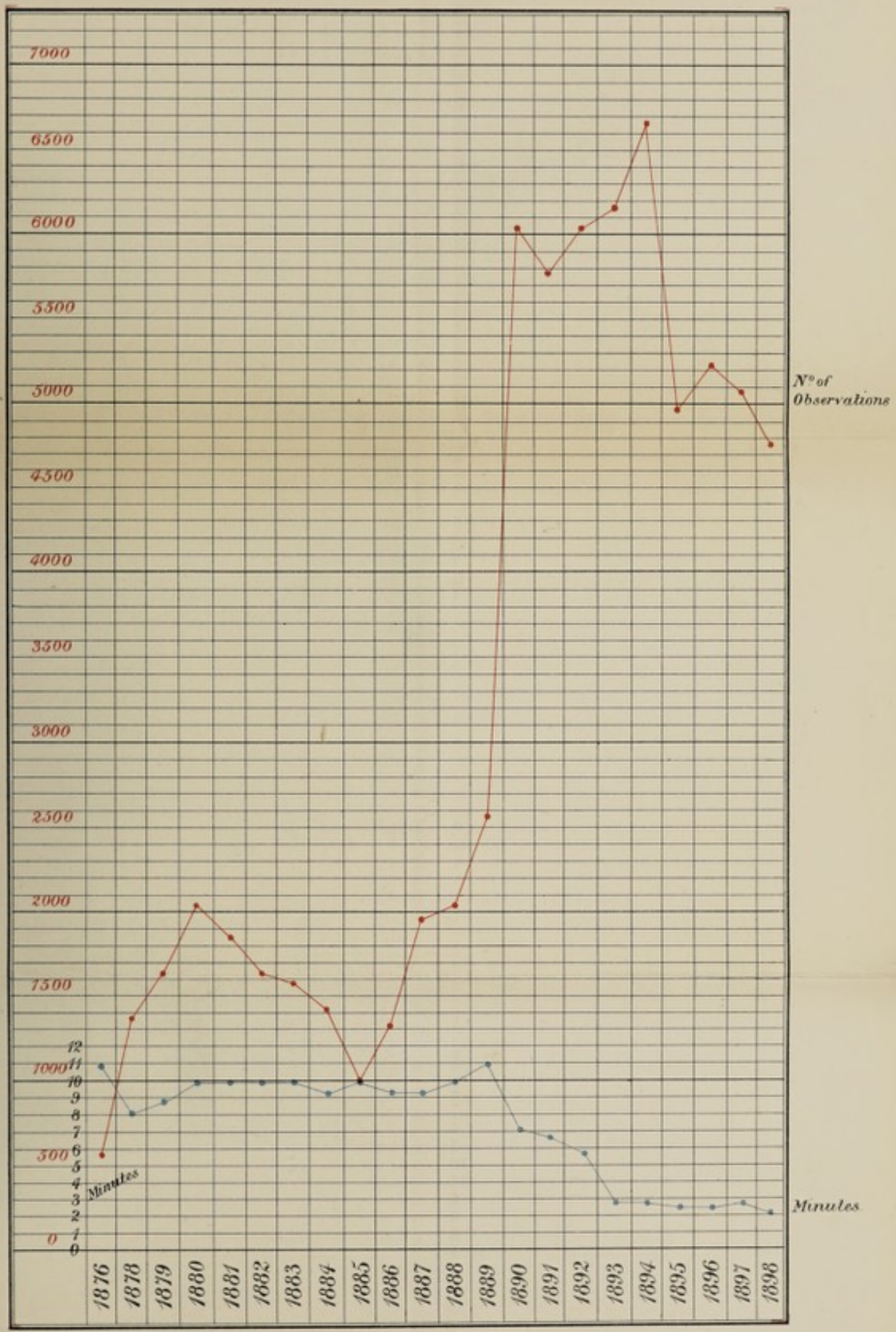

TABLE XLVIII.—*Continued.*

Number of Chimney.	Boilers and Furnaces attached.	Minutes for which Notice was served.	Smoke-consumer on when Notice was served.	Remarks.
83	1 Boiler	9	Grids	Plenty of boiler room
132	2 Boilers	10½	,,	,, ,,
34	1 Boiler	5	,,	,, ,,
63	1 ,, ...	11	Hollow Bridges	,, ,,
19	1 ,, and 1 Furnace ...	8	,, ,,	,, ,,
147	1 ,, ...	7	Grids	Burning coke
105	1 ,, ...	7	,,	Plenty of boiler room
72	1 ,, and 1 Furnace ...	9½	,,	,, ,,
13	2 Boilers ,, ...	8½	,,	,, ,,
89	1 Boiler	11½	,,	,, ,,
154	1 ,, ...	13½	Hollow Bridges	,, ,,
102	1 ,, ...	11½	,, ,,	,, ,,
118	1 ,, ...	12	Grids	,, ,,
L.R. 15	3 Boilers and 2 Furnaces...	12	,,	Grid doors on the furnaces
S.J. 148	1 Boiler	8	,,	Intending getting larger boiler
L.S. 148	1 ,, ...	3	,,	Intended putting down a gas engine
128	1 ,, and 1 Kiln ...	7	,,	Plenty of boiler room
T.C. 86	4 Boilers and 5 Furnaces...	13	Forced Draught	Two jets burnt off; heating furnaces not working
S.R.T.A. 86	1 Boiler and 1 Furnace ...	10	Hollow Bridges	Engine-tenter had constantly to leave the boiler
17	3 Boilers	7	Forced Draught	Plenty of boiler room
143	1 Boiler	3	Grids	Short of boiler room
88	1 ,, ...	4	,,	Plenty of boiler room
90	1 ,, ...	6	Forced Draught	Condensing engine to be put down
C.C.A. 105	1 ,, and 2 Coppers ...	13	,, ,,	Plenty of boiler room
135	1 ,, ...	7	Grids	Got on an automatic door
S.S. 145	1 ,, ...	7		Would burn coke in future
L.H. 11	4 Boilers and 2 Furnaces...	17	Forced Draught	Heating furnaces not working
S.S. 51	2 ,, 1 Furnace ...	17	,, ,,	Short of boiler room
87	1 Boiler	4	Grids	,, ,,
L.H.A. 2	3 Boilers	8	,,	Plenty of boiler room
N.R.C.W. 2	3 ,, ...	16	,,	,, ,,
L.S A. 137	1 Boiler	5	,,	Put on automatic doors
L.N.S. 23	2 Boilers	15	Washing Apparatus	Plenty of boiler room
L.N.C. 17	1 Boiler	3	Forced Draught	,, ,,
82	4 Boilers	27	,, ,,	Pipe burst and flooded the flues
L.H.A. 30	1 Boiler and 9 Furnaces ...	15	,, ,,	Been worse since the adoption of "forced draught"
S.J.B. 167	1 ,, ...	6	Grids	Would burn coke in future
40	2 Boilers	9	,,	One boiler off for repairs
S.R. 66	1 Boiler and 8 Furnaces ...	10	Double Door	Boiler taken out of the chimney
S.I.A. 167	1 ,, ...	3	Holes in the Door	Boiler removed
P.M.C. 133	7 Boilers and 2 Furnaces...	23	Forced Draught	Intended to put down bigger boilers
S.I.C. 132	1 Boiler	10	Grid	,, ,, ,,
32	1 ,, and 1 Copper ...	9	,,	Plenty of boiler room
L.S. 1	2 Boilers	4	Forced Draught	One boiler off for repairs
70	1 Boiler	5	Hollow Bridges	Plenty of boiler room
C.C.R. 100	1 ,, and 2 Furnaces ...	6	Hollow Bars	,, ,,
S.S. 171	1 Furnace	7		Carried it into tall chimney
76	2 Boilers and 1 Furnace ..	14	Fuel Economiser	Plenty of boiler room
R.M.C. 39	3 Boilers	22	,, ,,	One boiler off for repairs
F.S. 39	2 ,, ...	6	Grids	Plenty of boiler room
R.D. 60	5 ,, and 1 Furnace ...	7	Forced Draught	Forced draught out of order
B.H. 9	6 ,, ...	13	Hollow Bridges	Fitted them with "forced draught"
85	1 Boiler	7	,, ,,	Apparatus out of repair
L.S. 24	1 ,, and 9 Furnaces ...	16	Grids	Plenty of boiler room
65	2 Boilers 3 ,, ...	10	,,	The furnaces make a lot of smoke
96	2 ,, ...	9	Patent Bars	Plenty of boiler room
L.N.S. 23	2 ,, and 2 Furnaces ...	17	Grids	,, ,,
2		11		
136				
L.H. 11		12	Forced Draught	Fair amount of boiler room
B. 7	1 Boiler	4½	Hollow Bridges	Plenty of boiler room
B.S.C. 39	1 ,, and 1 Furnace ...	7	Forced Draught	Careless firing

SWINE FEVER.

J. Abson, Esq., F.R.C.V.S., the Inspector under the Contagious Diseases (Animals) Act, reports that "during the year 1898, 115 cases of suspected Swine Fever were reported to the Police. Of this number reported fifteen outbreaks of Swine Fever actually occurred as against one in 1897. Through this cause the Board of Agriculture has deemed it necessary to close the market against the sale of swine."

ANTHRAX.

"One outbreak of Anthrax occurred during 1898, against 4 in the preceding year, prompt measures being taken to prevent the further spread of the fatal malady."

RABIES.

"No case of Rabies occurred within the City boundaries in 1898, but many dogs were killed as being suspected."

Three cases of suspected Glanders were reported but none of these proved to be Glanders on examination.

There was no outbreak of Pleuro-pneumonia or Foot and Mouth Disease during 1898.

OFFENSIVE TRADES.

Fellmonger	1
Gut-cleaners	3
Tripe-boilers	24
Hide and Skin Markets	2
Bone Crushers	2
Total	32

488 visits have been paid to these premises during 1898 by the Meat Inspector.

MEAT INSPECTION.

TABLE XLIX.—*Showing the amount of Meat, &c., condemned as unfit for human food during the year 1898.*

Meat, etc.		Fish.		Fruit and Vegetables, etc.	
54	Carcases of Beef	6	Boxes, Barrels, &c., of Bloaters		
44	Pieces ,,	10	,, ,, Cod		
1	Cwt. ,,	12	,, ,, Dab		
13	Beasts' elders	2	,, ,, Gurnett		
4	,, livers	142	,, ,, Herrings		
12	,, lungs	50	,, ,, Haddock		
5	,, tripes	26	,, ,, Halibut		
1	Set beast's heels	30	,, ,, Hake		
830	Carcases of Mutton	163	,, ,, Kippers		
10	Pieces ,, ,,	27	,, ,, Ling		
60	Sheeps' heads & plucks	248	,, ,, Mackerel	12	Boxes of Lemons
50	,, paunches	19½	,, ,, Mixed	8½	Stones of Tomatoes
1	Carcase of Goat	175	,, ,, Salmon	7	Bags of German Yeast
20½	Carcases of Pork	2	,, ,, Rock do.		
12	Pieces ,,	1	,, ,, Skate		
29	Carcases of Veal	14	,, ,, Sprag		
7	,, ,, Lamb	2	,, ,, Sprats		
2853½	Couples of Rabbits	2	,, ,, Whiting		
14	,, ,, Ducks	4	,, ,, Cockles		
1	Couple of Chickens	219	,, ,, Mussels		
33	Turkeys	10	,, ,, Oysters		
3	Hares	5	,, ,, Periwinkles		
1	Brace of Partridges	20	,, ,, Shrimps		
5	Shoulders of Bacon	9	,, ,, Whelks		
	Weight, 34 tons, 8 cwt., 1 qr., 24½ lb.		Weight, 56 tons, 11 cwt., 0 qr., 7lb.		Weight, 7 cwt., 0 qr., 7 lb.

TABLE L.—*Showing the number of Carcases condemned and destroyed as being affected with Tuberculosis, and also with various other diseases and from other causes, during the years 1892-1898.*

Year.	No. of Carcases of Meat, Condemned and Destroyed, affected with Tuberculosis.						No. of Carcases of Meat Condemned and Destroyed, affected with various diseases, and from other causes.					
	Beef.	Mutton.	Pork.	Veal.	Lamb.	Goat.	Beef.	Mutton.	Pork.	Veal.	Lamb.	Goat.
1892	44	—	—	1	—	—	38¾	85½	17	41	4	—
1893	70	—	—	—	—	—	41½	69	9	38½	1	3
1894	43	1	2	3	—	—	44¼	54	48	40	13	2
1895	40	—	—	1	—	—	38¾	54	45	29	5	—
1896	34	—	—	1	—	—	39¼	86	60½	34	6	2
1897	30	1	2	—	—	—	29½	154½	11	68	46	—
1898	21	—	1	1	—	—	33	830	19½	28	7	1
Totals	282	2	5	7	—	—	265	1333	210	278½	82	8

TABLE LI.—INSPECTION OF SLAUGHTER-HOUSES, SHOPS, STORES, ETC.

No. of Slaughter-houses in use previous to 1865.	No. of Slaughter-houses on the Register of 1865.	No. of Slaughter-houses on the Register of 1875.	No. of Licences under the Sheffield Corporation Act.	No. of Horse Slaughter-houses on the Register.	Total No. of Slaughter houses on the Register.	No. of Visits to Slaughter houses.	No. of Visits to Shops and Stores.
49	52	76	9	2	188	2900	1984

During the year 22 changes of occupation of Slaughter-houses have taken place, and three have been closed by the occupiers, and are now used solely for other purposes.

One yearly licence has been granted to slaughter cattle on approved premises.

Of the carcases condemned as being unfit for human food, 23 were affected with Tuberculosis, viz.:—21 carcases of Beef, 1 of Pork, and 1 of Veal.

During the year two Magistrates' Orders were required, and two persons were summoned and fined; one £2, and 9/- costs, and the other £10, including costs.

SLAUGHTER-HOUSES.

During the year 1898 negotiations were entered into by the Corporation for the Purchase of the Markets and Market-rights. For this purpose a Bill is being promoted in Parliament. It is to be hoped that the purchase of the Shambles by the Corporation will be a step in the direction of doing something to remedy the most insanitary condition of many of the Slaughter-houses in the City.

TABLE LII.—HOUSES LET IN LODGINGS.

	1897.		1898.	
Number of Houses Registered during the year		43		26
Number of Lettings in the above houses		106		53
Number of Persons inhabiting the same:—				
(*a*) Adult Males	128		32	
(*b*) Adult Females	108		17	
(*c*) Children	76		10	
		312		59
Total number of Inspections made		2,592	...	3,721
Total number of Notices served		68	...	70
(*a*) Overcrowding		34	...	22
(*b*) Whitewashing and Cleansing		35	...	48
(*c*) Minor Structural Defects		6	...	2
(*d*) Cleansing Courts and Drains		2	...	2
(*e*) Ventilation to be Maintained		1	...	0
(*f*) Animals so kept as to be a Nuisance		1	...	2
(*g*) Rooms improperly Occupied		4	...	0

TABLE LIII.—DAIRIES, MILKSHOPS AND COWSHEDS.

	1897.		1898.	
Number of Inspections—Cowsheds	1,925		2,484	
Milkshops	935		1,123	
Milk vessels	4,147		3,919	
		7,007		7,526
Number of Written Notices Served		19		16
Alterations and Improvements Effected.—(*a*) By written notices ...		19		15
(*b*) „ verbal „ ...		10		12
(*a*) In Cowsheds—New cowsheds built		3		4
New drainage provided		3		4
Air-space increased		4		5
Grain troughs removed		2		18
Manure pit repaired		3		5
New manure pits		...		2
Yards paved and repaired		2		7
Sanitary troughs provided		20		...
Number of cowsheds closed		11		7
(*b*) In Dairies and Milkshops—New cupboards provided		7		12
Improvements in lighting		3		7
Milk vessels dirty		15		...
Milkshops closed		12		...
Infectious Diseases—(*a*) On Cowkeepers' premises		2		1
(*b*) „ Milksellers' „		4		2
Changes of Occupation—(*a*) Cowsheds		25		3
(*b*) Milkshops...		8		2
Registered During Year—(*a*) Cowkeepers		26		12
(*b*) Milksellers		47		51
Present Number on Inspector's Books—(*a*) Cowkeepers		263		248
(*b*) Milksellers		244		262

TABLE LIV.—FOOD AND DRUG ACTS.

In the following Table will be found a list of the various articles purchased in pursuance of the above Acts during 1898 and the preceding ten years, together with information as to the number of such samples found to be adulterated.

Articles Purchased for Analysis.	1888.		1889.		1890.		1891.		1892.		1893.		1894.		1895.		1896.		1897.		1898.	
	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.	Total Samples.	No. Adulterated.
Milk	24	0	50	4	31	1	20	2	114	20	130	17	181	11	200	4	154	15	167	19	143	17
Butter	26	9	10	2	10	0	18	0	30	6	33	3	40	3	44	4	23	0	26	1	15	1
Cheese	...	...	...	...	...	...	...	...	...	...	...	...	6	0	...	...	...	...	5	0	...	...
Lard	24	2	10	0	...	...	24	0	12	0	...	...	12	0	10	0	...	...	...	...	24	0
Bread	...	...	12	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bread and Butter	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0	...	...
Whisky	...	...	...	...	...	...	...	...	6	1	...	...	6	2	6	3	10	3	12	0	...	...
Gin	...	...	...	...	...	...	...	...	6	1	...	...	6	1	4	1	10	2	...	...	...	...
Brandy	...	...	...	...	...	...	...	...	...	...	...	..	...	...	6	0	...	...	...	...	5	0
Honey	...	...	16	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Flour	...	...	...	...	...	...	...	...	...	...	9	0	...	...	...	...	...	...	...	...	...	...
Tea	...	...	...	...	6	0	...	...	...	...	7	0	...	...	...	...	...	...	...	...	...	...
Coffee	...	...	...	...	10	0	32	9	15	2	15	7	...	...	10	1	...	...	...	...	19	13*
Jam	...	...	...	...	...	...	...	...	...	...	6	0	12	0	...	...	...	...	...	...	...	...
Vinegar	...	...	...	...	...	...	...	...	...	...	12	8	1	1	10	0	...	...	...	...	...	...
Pepper	...	...	8	0	...	...	21	0	16	0	...	...	...	...	...	...	10	0	...	...	1	0
Mustard... ...	...	...	8	0	..	...	10	6	...	...	9	0	...	...	6	0	10	0	...	...	...	...
Ground Ginger ...	...	...	...	...	...	...	...	...	...	...	10	3	...	...	...	...	...	...	...	...	6	1
Medicines ...	...	...	...	...	39	4	...	...	...	...	...	...	6	0	...	...	...	...	...	...	...	...
Tinct. of Rhubarb	...	...	...	...	...	...	...	...	...	...	...	...	3	0	...	...	...	...	...	...	...	...
Sal Volatile ...	...	...	...	...	19	4	...	...	...	...	...	...	3	1	...	...	...	...	...	...	6	0
Cream of Tart....	...	...	...	...	15	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	0
Paregoric ...	...	...	...	...	.	...	...	...	...	...	...	...	3	0	6	0	...	...	...	...	...	...
Laudanum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	0	...	...	...	...	...	...
Glycerine ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	0	6	0
Lint. of Camphor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	1	...	...
Totals. ...	74	11	114	6	130	11	125	17	199	30	231	38	279	19	308	13	217	20	223	21	231	32
Percentage of Adulterated Samples.	14·8		5·2		8·4		13·6		15·0		16·4		6·8		4·2		9·2		9·4		13·9	
Percentage of Do. for all England	10·8		11·5		11·2		12·2		12·4		12·9		10·3		9·3		9·2		9·4		...	

* In 12 of these 13 cases no proceedings were taken.

FOOD AND DRUGS ACTS.

TABLE LV.—*Details of Proceedings during 1898.*

Milk...	Number of Samples purchased during 1898	143
	Number of Samples found to be genuine or of fair quality ...	95
	Number of Samples found to be inferior or suspiciously poor ...	27
	Number of Samples found to be inferior or deficient in fats ...	4
	Number of Samples found to be inferior or adulterated... ...	17
	Fines imposed :—One at £7, two at £3, including costs ; one at 40s., three at 27s., three at 20s., and costs ; one at 35s., and four at 10s., including costs. In one case, costs only allowed ; two cases dismissed.	
Butter	Number of Samples purchased	15
	(One adulterated, fined £2, and 7s. costs.)	
Lard	Number of Samples purchased	24
	(All genuine.)	
Coffee	Number of Samples purchased	19
	Thirteen adulterated. Proceedings taken in one case only. Fined 20s. and costs ; on appeal, the decision was reversed, with costs.	
Pepper	Number of Samples purchased	1
	(Genuine.)	
Ground Ginger ...	Number of Samples purchased	6
	(One adulterated ; no proceedings taken.)	
Brandy	Number of Samples purchased (all genuine)	5
Cream of Tartar .	Do. do. do.	6
Sal Volatile ...	Do. do. do.	6
Glycerine	Do. do. do.	6

During 1898, as in previous years, milk was the chief article brought for analysis, and the percentage of such samples found to be adulterated was considerable. In addition to the samples found to be adulterated, the Public Analyst found 17 other samples to be of "suspiciously poor quality."

Of the other samples purchased, those of Coffee call for a passing note. No less than 13 of the 19 purchased contained chicory, and in each case such samples were sold as "coffee." In most of the instances it was not thought necessary to prosecute. In one case proceedings were taken and a conviction obtained. But this was afterwards reversed on appeal to Quarter Sessions. It was held that in this case the package was sufficiently labelled for disclosing to the purchaser the nature of the contents. "Coffee" was asked for and was served as follows:—The coffee having been weighed out, a piece of plain brown paper was laid on the counter, and on the top of this a piece of yellow paper, on the lower side of which there was in relatively small type a statement of the fact that the contents were a mixture of coffee and chicory. The coffee was placed on these papers, and each paper was folded round it separately. Unless the two papers were separated, and the printing on the yellow coloured one examined pretty carefully, the fact that such sample contained chicory could not have been detected by the purchaser. The law, as it at present stands, requires the purchaser not only to ask for the article, but to examine the outside of the package most carefully to see that there is no statement on the outside as to the altered quality of the contents. This is obviously disadvantageous to the purchaser, and a temptation to sell as genuine, mixed articles. In a very similar manner publicans contract themselves out of the Act by putting up a label stating that all spirits sold are under the standard strength. In a similar manner milk vendors and restaurant keepers can to a large extent defraud the public by putting up such notices, notices which may in themselves be quite explicit and distinct, but which are of no value so far as the purchaser is concerned, as at the time of purchase they are not seen. It should not be necessary to have to look about for such notices in order to avoid getting adulterated articles.

TABLE LVI.—TOTAL NUMBER OF PERSONS TO EACH SAMPLE PURCHASED UNDER FOOD AND DRUGS ACTS.

Towns.	1888. Number of Population per Sample.	1889. Number of Population per Sample.	1890. Number of Population per Sample.	1891. Number of Population per Sample.	1892. Number of Population per Sample.	1893. Number of Population per Sample.	1894. Number of Population per Sample.	1895. Number of Population per Sample.	1896. Number of Population per Sample.	1897. Number of Population per Sample.
Birmingham ...	1 in 594	1 in 521	1 in 498	1 in 530	1 in 499	1 in 486	1 in 436	1 in 439	1 in 440	1 in 417
Bradford	1 ,, 1083	1 ,, 1442	1 ,, 1336	1 ,, 1276	1 ,, 1291	1 ,, 1011	1 ,, 903	1 ,, 901	1 ,, 850	1 ,, 819
Leeds	1 ,, 2757	1 ,, 1975	1 ,, 1461	1 ,, 1741	1 ,, 1661	1 ,, 1600	1 ,, 1613	1 ,, 1627	1 ,, 1609	1 ,, 1544
Liverpool... ...	1 ,, 746	1 ,, 619	1 ,, 641	1 ,, 520	1 ,, 553	1 ,, 526	1 ,, 493	1 ,, 485	1 ,, 521	1 ,, 442
Manchester ...	1 ,, 235	1 ,, 235	1 ,, 235	1 ,, 312	1 ,, 315	1 ,, 313	1 ,, 321	1 ,, 317	1 ,, 320	1 ,, 296
London	1 ,, 618	1 ,, 617	1 ,, 645	1 ,, 578	1 ,, 577	1 ,, 530	1 ,, 505	1 ,, 430	1 ,, 399	1 ,, 380
Nottingham ...	1 ,, 3446	1 ,, 2308	1 ,, 2472	1 ,, 2151	1 ,, 1656	1 ,, 2625	1 ,, 1644	1 ,, 1421	1 ,, 1618	1 ,, 1143
SHEFFIELD...	**1 ,, 4350**	**1 ,, 2872**	**1 ,, 2469**	**1 ,, 2602**	**1 ,, 1656**	**1 ,, 1403**	**1 ,, 1212**	**1 ,, 1112**	**1 ,, 1600**	**1 ,, 1577**
England & Wales	1 ,, 7864	1 ,, 964	1 ,, 5151	1 ,, 999	1 ,, 894	1 ,, 779	1 ,, 734	1 ,, 661	1 ,, 636	1 ,, 619

HOUSING OF THE WORKING CLASSES ACT, 1890.

The various formalities and negotiations which have been necessary in regard to the Crofts Insanitary Area have occupied over 6 years. The representation in regard to this area was made by the Medical Officer of Health on March 6th, 1893.

Progress is now being made with the work of pulling down No. 1 Section of the area, and it is to be hoped that rebuilding operations will be commenced during the present year.

During 1898 a large area was cleared by the London and North-Western Railway Company in the Park District. Much of the property was in bad repair, and its demolition was necessary. The number of dwelling houses pulled down was 77, containing a population of 374.

In order to provide for this number of people 55 cottages were built on land adjoining Broad Oaks.

During the year 1898 five certificates were presented to the Health Committee in regard to the following houses, all of which were certified as unfit for human habitation :—

Crimicar Cottage, Crimicar Lane, Fulwood.
No. 13, in Court 9, Pea Croft.
Wood Cottage, East Bank Road.
Nos. 6, 7, 8, 9, 13, 14, and 15, in Court 31, Pond Street.
No. 2, in Court 35, Pond Street.

Four of the properties have been closed, and one has been repaired and made habitable.

CANAL BOATS ACTS.

The following is a copy of the report required by the Local Government Roard on the work carried out during 1898 in pursuance of the Canal Boats Acts :—

Report on Work done under the Canal Boats Acts during 1898.

Town Hall, Sheffield, January 19th, 1899.

"*To the Chairman and Members of the Health Committee of the Corporation of Sheffield.*

Gentlemen,—

In compliance with Section III. of the Canal Boats Act of 1884, I have to present to you the Annual Report on the work done under the Canal Boats Acts of 1877 and 1884, within this City, during the year ending December 31st, 1898.

1.—Inspector Samuel Talford has acted as Inspector under the above Acts.

In addition to these duties he has performed certain duties in connection with the attendance at School of Children on Canal Boats, and also has had supervision of Houses Sub-let in Lodgings.

His salary for the above was at the rate of £71 10s. per annum.

2.—The number of Boats inspected during the year 1898 was 1448, an increase of 148 over the previous year; and of the 1448 Boats inspected 1438 were found to conform with the Acts of Parliament and Regulations made thereunder.

On 10 of the Boats inspected, one or more infringements were found to exist.

3.—The nature and extent of the infringements were as follows:—

(*a*)	Registration: Act of 1877, Section I.	1
(*b*)	Notification of the Change of Master, Regulation IV.	1
(*c*)	Absence of Certificate: Act of 1877, Section III.	1
(*d*)	Certificate not identifying owner with Boat	0
(*e*)	Marking: Act, 1877, Section III.; Act, 1884, Section VII.; Regulation VII.	3
(*f*)	Overcrowding: Regulation VIII	2
(*g*)	Partition separating the sexes: Regulation VIII.	0
(*h*)	Females over 12 improperly occupying: Regulation VIII.	0
(*i*)	Cleanliness: Regulation XI.	2
(*j*)	Painting: Regulation IX.	2
(*k*)	Ventilation: Regulation III.	0
(*l*)	Dilapidation: Regulation XI.	2
(*m*)	Removal of Bilge Water: Regulation X.	0
(*n*)	Without Pump: Regulation III. and X.	0
(*o*)	Refusal of Admittance to Inspector: Act, 1877, Section V.	0
(*p*)	No proper water vessel: Regulation III.	1
(*q*)	Without requisite double bulk heads: Regulation III.	0
(*r*)	Notification of Infectious Disease: Regulation XII.	0

4.—It was not found necessary to take Legal Proceedings in any of the above cases.

5.—It was also not found necessary to take any other steps to secure compliance with the Acts and Regulations.

6.—No cases of Infectious Disease were found on any of the Boats.

7.—No Boats were detained for Cleansing or Disinfection.

8.—The number of Boats on the Register on December 31st, 1898, was ... 105

No Registrations have been cancelled during the year.

9.—No new Boats were registered or re-registered during 1898.

The total number of Infringements was		10
Notices not abated December 31st, 1897		2
Notices served in the year 1898		5
Verbal cautions		1
Notices complied with during the year		2
Verbal cautions complied with		1
Notices not abated December, 31st, 1898		5
Visits to the Canal during 1898 to inspect Boats	226	432
,, ,, in regard to school attendance	206	
Number of Women on Boats inspected		933
Number of Children between 5 and 12 years		323
Number of Children 5 years and under...		599

I am, Gentlemen, your obedient servant,

JOHN ROBERTSON, Medical Officer of Health."

CONVERSION OF PRIVIES INTO WATER-CLOSETS.

It is gratifying to be able to record that the work of converting privies into water-closets has been put on a satisfactory basis by reason of a resolution passed by the Health Committee as a result of the Special Report which was presented on the prevalence of Typhoid Fever during 1898. The staff for undertaking the work of conversion into water-closets has been increased so that double the amount of work can be done. The people are appreciating the great sanitary improvement which takes place when privies in densely crowded neighbourhoods are converted into water-closets. The horrible stench, which was formerly borne without a grumble, is now being complained of, and, as a result, complaints of stench from privies getting into dwelling-houses and leakage of privy middens into yards, &c., are much more numerous than they formerly were.

As is well-known the conversion of privies into water-closets in Sheffield is done under a local Act passed in 1890.

In the accompanying Table is shown various details during each year and the total cost of such work.

Much more has been done than is represented in the Table. There are, every year, many privies which are converted into water-closets without any compulsion being required; and also, after receiving notice from the Corporation there are a number of owners of property who convert privies into water-closets at their own expense.

TABLE LVII.

Year ending Dec. 31st.	No. of Notices Served to Convert.	No. of Notices to provide Additional Accommodation.	No. of Premises where Work has been Completed.	No. of Houses Involved.	No. of Workshops Involved.	Total Cost of Converting.	Total Cost of Additional.	Amount paid by Corporation either as ½ Cost or in lieu of ½.
						£ s. d.	£ s. d.	£ s. d.
1890 and 1891	18	8	14	26	...	...	...	37 11 6
1892	40	35	28	264	4	570 8 0	...	313 1 4
1893	49	40	36	264	12	810 15 11	...	397 5 3
1894	74	21	56	365	7	1,363 2 11	...	601 11 8
1895	38	38	29	220	4	581 3 5	...	273 14 5
1896	93	47	28	200	2	629 15 6	...	272 1 6
1897	123	100	80	769	...	2,778 19 2	1,228 11 8	1,161 16 6
1898	151	93	114	1,027	41	3,427 8 0	1,486 14 0	1,365 11 0

TABLES LVIII.—DISINFECTING STATION.

SUMMARY FOR THE YEAR ENDING 31ST DECEMBER, 1898.

Number of Articles.	Name of Articles.	Number of Articles.	Name of Articles.	Remarks.
2127	Beds	2311	Counterpanes	
28	Bed Hangings	349	Mattresses	
3118	Blankets	228	Carpets	These Articles were brought in from : 2146 Private Houses and 33 Public Institutions.
1506	Bolsters	2151	Articles of Female Clothing	
1226	Bolster Cases	1077	Articles of Male Clothing	
3800	Pillows	204	,, Children's ,,	
2876	Pillow Cases	2295	Various Articles	
2200	Sheets			

TABLE LIX.—*Showing Meteorological data for each week during* 1898. *Compiled from the daily returns sent by Mr. Howarth, and taken by him by instruments which are annually compared with the Standard Instruments at the Meteorological Office.*

Week Ending	Mean Barometer Corrected.	Mean Daily Sunshine. H. M.	Mean Daily Temperatures.									Total Rainfall for the Week.
			Dry Bulb.	Wet Bulb.	Humidity.	Dew Point.	Grass Min.	Soil 1 foot.	Soil 4 feet.	Air Max. (Shade).	Air Min. (Shade)	
Jan. 8...	29·961	1 4	42·8	41·4	89·5%	39·8	33·7	40·8	43·4	47·6	39·2	0·547
,, 15...	30·385	1 28	41·7	40·0	86·4%	37·9	31·3	40·2	43·4	47·1	39·5	0·010
,, 22...	30·333	1 15	45·9	44·1	87·0%	42·0	37·0	41·1	43·1	50·5	41·2	0·081
,, 29...	30·489	1 10	42·8	40·2	81·3%	37·2	33·4	41·3	43·3	48·4	39·6	0·160
Feb. 5...	29·907	1 32	43·0	40·1	78·3%	36·4	35·6	42·2	43·5	49·7	38·8	0·983
,, 12...	30·011	2 9	42·1	40·1	84·6%	37·5	33·0	38·8	43·2	46·9	37·4	0·427
,, 19...	30·027	1 39	41·5	38·2	75·0%	34·0	33·0	40·2	42·8	45·7	37·0	0·468
,, 26...	29·703	4 10	35·7	33·0	74·4%	28·2	25·6	36·6	42·5	42·3	30·3	0·214
Mar. 5...	29·789	3 43	38·9	36·6	81·9%	33·6	31·5	37·5	41·5	43·7	34·2	0·983
,, 12...	30·141	1 6	35·4	33·4	80·6%	30·0	23·2	35·5	41·0	43·3	29·8	0·025
,, 19...	29·927	3 22	44·8	41·9	79·4%	38·6	37·3	39·7	40·5	52·1	40·6	0·150
,, 26...	30·026	3 42	39·8	37·2	79·3%	33·8	29·0	39·7	41·4	44·4	32·2	0·345
April 2...	29·664	1 27	39·0	37·1	85·7%	34·8	29·7	37·9	41·2	44·9	33·8	0·606
,, 9...	29·971	5 19	47·9	44·2	75·6%	40·1	34·6	42·1	41·3	54·9	40·2	0·574
,, 16...	29·764	4 28	49·0	45·6	77·3%	41·9	37·7	45·3	42·6	54·1	41·7	1·376
,, 23...	30·044	4 55	45·2	41·6	75·1%	37·5	29·6	45·3	43·8	53·6	36·8	——
,, 30...	29·831	1 22	46·5	44·4	85·1%	42·0	36·4	45·5	44·4	51·9	40·3	1·305
May 7...	29·801	5 6	50·5	47·1	78·3%	43·7	37·0	46·7	45·0	56·7	42·8	0·402
,, 14...	29·676	5 25	48·8	45·9	80·4%	42·7	Brok'n	49·2	45·8	54·8	42·4	0·864
,, 21...	30·054	4 45	49·1	45·4	76·6%	41·5	35·6	48·0	46·8	52·0	40·7	0·969
,, 28...	29·897	3 34	50·8	48·0	82·7%	45·1	40·7	49·2	47·0	58·1	44·1	0·110
June 4...	29·783	4 7	51·0	47·3	76·7%	43·6	39·1	50·2	47·8	56·5	42·6	0·535
,, 11...	30·052	7 27	60·7	55·7	72·0%	51·3	45·3	54·1	48·4	68·0	49·9	0·050
,, 18...	30·274	3 35	53·8	50·7	80·7%	47·8	45·0	54·5	49·9	61·7	47·5	——
,, 25...	29·793	5 30	59·6	55·2	74·4%	51·3	48·4	56·8	51·1	64·0	51·8	0·738
July 2...	29·953	5 44	59·4	55·2	75·1%	51·4	44·6	56·1	52·1	64·8	48·5	0·474
,, 9...	30·195	6 43	58·2	53·7	73·7%	49·6	45·4	56·9	52·8	64·4	50·1	0·024
,, 16...	30·165	8 47	61·4	55·3	67·6%	50·2	45·2	57·5	53·5	69·5	52·3	——
,, 23...	29·974	5 9	60·6	56·3	76·1%	52·7	48·8	58·6	54·2	67·6	53·6	1·105
,, 30...	30·094	5 2	57·6	54·4	80·7%	51·4	45·7	58·1	54·5	66·1	50·8	0·270
Aug. 6...	29·924	4 43	61·4	57·8	80·0%	54·8	50·5	58·7	54·9	68·1	53·0	1·950
,, 13...	29·956	4 28	61·4	57·5	78·0%	54·3	47·4	58·1	55·0	70·1	52·7	0·300
,, 20...	30·125	3 30	61·7	58·8	83·3%	56·3	51·5	61·0	55·7	71·1	56·4	0·010
,, 27...	30·039	4 49	63·0	59·2	78·4%	56·0	49·7	60·2	56·3	69·2	53·6	0·780
Sept. 3...	30·084	5 43	58·5	53·6	72·0%	49·3	46·0	57·5	56·2	65·1	50·7	0·355
,, 10...	30·121	6 26	66·2	62·5	80·1%	59·6	52·0	61·4	56·3	76·8	58·8	0·030
,, 17...	30·100	5 10	63·2	59·5	79·0%	56·4	47·2	59·8	57·0	72·0	54·0	0·060
,, 24...	30·093	4 7	55·8	52·1	77·4%	48·6	43·7	58·0	57·0	62·2	48·5	0·090
Oct. 1...	29·988	3 37	51·8	48·9	80·9%	45·9	37·1	52·2	56·2	59·2	43·8	0·365
,, 8...	30·262	1 50	54·7	53·5	92·0%	52·3	44·5	53·8	55·0	60·6	49·6	0·080
,, 15...	29·904	2 5	49·5	47·8	88·4%	46·0	37·0	51·1	54·3	55·0	43·3	0·115
,, 22...	29·352	0 41	52·0	51·2	94·4%	50·4	47·5	50·9	53·1	55·9	48·8	2·057
,, 29...	29·914	1 34	53·4	51·9	90·0%	50·4	43·8	51·7	52·8	58·9	49·1	0·966
Nov. 5...	29·596	3 22	49·6	47·3	84·3%	44·9	40·1	50·0	52·3	55·0	43·5	0.506
,, 12...	30·067	0 57	46·0	45·4	95·9%	44·7	37·4	47·6	51·4	51·4	42·6	0·384
,, 19...	30·225	0 40	48·8	47·8	92·6%	46·6	41·3	48·4	50·6	52·8	45·6	0·140
,, 26...	29·515	0 48	39·6	38·6	91·4%	37·2	31·6	43·7	49·9	42·9	35·5	1·874
Dec. 3...	29·588	1 36	42·1	40·5	87·0%	38·4	33·6	42·3	48·1	47·4	38·4	0·103
,, 10...	29·799	1 47	49·4	47·3	85·6%	45·1	39·6	45·3	47·2	52·2	43·2	0·857
,, 17...	30·210	1 37	47·2	45·0	85·0%	42·7	36·9	44·4	47·0	52·2	42·6	0·060
,, 24...	30·294	2 10	41·4	38·9	80·6%	35·7	32·6	42·3	46·7	45·4	36·1	0·045
,, 31...	29·627	0 53	41·8	40·2	87·4%	38·1	32·6	40·8	45·6	45·9	36·7	2·200