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DROYLSDEN
URBAN DISTRICT COUNCIL.

Annual Report

OF THE

Medical Officer of Health and Sanitary Inspector,

1908.

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URBAN DISTRICT OF DROYLSDEN.

Area.—1144 acres.

Population.—11,097 (at Census 1901).

Number of Inhabited Houses. - 2447 (at Census 1901).
Average number of persons per house—4·53.

Number of Inhabited Houses end of 1908—2844.

Population Estimate to middle of 1908—12,300.

Birth Rate for 1908—28·6 per 1000.

Death Rate for 1908—16·9 per 1000.

To the Chairman and Members of the Council.

Gentlemen,

I beg to submit to you my first Annual Report as to the health and sanitary condition of the district for the year 1908.

During the year, the deaths of 208 persons (100 males and 108 females) have been registered in your district from all causes, as against 188 registered the previous year. These 208 deaths give a death rate of 16·9 per 1000 of the estimated population.

A reference to table I. will show that this rate is ·1 per 1000 below the average of the previous ten years, which was 17 per 1000.

Of the deaths, 62 or 29·8 per cent. were of children under 1 year of age; under 5 years of age, 31 deaths occurred, or 14.9 per cent.; under 15 years there were 4 deaths, or 1·9 per cent.; under 25 years there were 8 deaths, or 3·8 per cent.; under 65 years there were 67 deaths, or 32·2 per cent.; and from 65 years and upwards there were 36 deaths, or 17·3 per cent.

8 males and 12 females died between the ages of 70 years and 80 years, and 1 male and 1 female died between 80 and 90 years of age.

During the year 1908, the births of 354 persons (172 males and 180 females) were registered in the district. The birth rate for the year is therefore 28·6 per 1000. The average birth rate for the previous ten years was 29·7, and thus both birth and death rates are slightly lower than the average for the previous ten years.

The deaths under 1 year, measured in proportion to the recorded births, give a rate per 1000 of 170·4. The average of the previous ten years was 167·9.

Diseases of the respiratory organs, such as bronchitis, pneumonia, and pleurisy, caused 41 deaths, or 19·7 per cent. of the total deaths, as compared with 19·6 per cent. in last year.

All tubercular diseases caused 34 deaths, or 16·3 per cent. of the total number, as compared with 8 per cent. last year. 16 of the deaths were from phthisis. During the previous year, phthisis caused 9 deaths and other tubercular diseases 6 deaths.

Diseases of the zymotic or infectious class caused 17 deaths, namely:—measles 8, whooping cough 7, diphtheria 1, and enteric fever 1. The zymotic death rate was therefore 1·39 per 1000. The average zymotic death rate for the previous 10 years was 1·4 per 1000.

The following table will show the number of deaths from the chief zymotic diseases during the past ten years:—

	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Smallpox	0	0	0	0	0	0	2	0	0	0
Measles.....	8	5	2	19	1	9	7	13	5	8
Scarlet Fever	0	0	1	0	0	0	0	8	4	0
Whooping Cough	6	7	8	0	2	6	1	1	3	7
Diphtheria	5	2	5	6	2	0	4	3	3	1
Enteric Fever...	7	1	1	1	0	1	0	2	2	1
	26	15	17	26	5	16	14	27	17	17

During the year, under the infectious disease (notification) acts, 73 cases of infectious diseases were notified, as compared with 92 cases in the year 1907. These cases were as follows :—scarlet fever 47 cases diphtheria 7 cases, erysipelas 8 cases, enteric fever 10 cases, puerperal fever 1 case.

Scarlet fever, which was less prevalent in 1907 than in 1906, was still less so this year, as only 47 cases were notified as compared with 63 in 1907, and this year there were no deaths from the disease. 8 cases of scarlet fever were removed to Hyde infectious diseases hospital.

In the 7 cases notified of diphtheria, 1 death occurred, and 1 case was removed to Hyde hospital.

There were 10 cases of enteric fever notified during the year. 1 death occurred, and 1 case was removed to Hyde hospital. Your sanitary inspector and myself visited these cases, and made strict inquiries as to the source of infection, but only in one case could we find any reason, and that was one where the water used for domestic purposes was obtained from a surface well into which pig sewage drained directly. The Council are taking steps to have the well closed and an efficient supply of good water provided for this quarter. In the other 9 cases the sanitary conditions were good.

In my opinion, the Council are well advised in obtaining extra hospital accommodation at Hyde for the ensuing year.

With the chairman and several members of the health committee, the sanitary inspector and myself have visited different parts of the township where nuisances and sanitary defects have been reported. The results of our visits and of notices served are fully shown in the sanitary inspector's report.

Besides the above visits, the sanitary inspector and myself have made systematic visits to other parts of the township, to inquire into their sanitary condition.

The Council have wisely still pursued the course of converting privies into water closets wherever possible, but there still remains a great deal of this to be done, and I would urge on the Council the advisability of pushing this work on. There are still in the district 730 privies and ashpits.

All the factories, workshops, as well as the houses of outworkers, have, as required under the factory and workshops' act, 1901, been regularly supervised. A list of visits, &c. will be found in the appended table.

The work of flagging, paving, and sewering of side streets, is still being carried on, and this, I think, tends to the benefit of the public health.

Like my predecessor, I would like to urge upon the Council the necessity of pressing forward the erection of a refuse destructor. The system of tipping refuse is most objectionable; not only being a nuisance to different inhabitants, but, in my opinion, fast becoming a source of danger to the public health.

I am, gentlemen,

Your obedient servant,

A. B. HOUSTOUN,

Medical Officer of Health.

Sanitary Inspector's Report for the Year 1908.

Gentlemen,

I have pleasure in submitting to you the following report relating to sanitary works and matters in the district, for the year 1908, and have to say that the sanitary conditions continue to shew a steady improvement.

The enquiry by the L. G. B. inspector into the application for sanction to borrow £5300 for a two-cell Refuse Destructor of the Meldrum type, Sludge Pressing House and Machinery, Steam Disinfector, and Men's Rooms and Baths, at the Sewage Works, has been held, and the Council are now anxiously waiting the decision of the Board so that the scheme can be proceeded with at the earliest possible moment.

The extensions and alterations at the Sewage Works are being pushed onwith, and owing to unforeseen difficulties, a further application has been made to the L. G. B. for sanction to borrow a further sum to cover the cost of extra works necessitated.

During the year, building plans for 78 new houses, rebuilding 1 public house, 2 alterations to chapels, 1 extension of works, 6 alterations and additions to houses, 1 new shippon, and 1 large stable have been approved.

New houses, to the number of 30, have been approved as fit for human habitation.

A large amount of work has been accomplished in converting old and defective privies and ashpits into w.c.'s and ashboxes, and 63 w.c.'s have been constructed on this account during the year. The whole of the new houses erected have also been supplied with w.c.'s. Many other ashpits which were built below the level of the adjoining ground have been repaired, and the bottoms lifted above the ground level and roofed over to exclude the rain. There are now 81[illegible] w.c.'s in the District and about 730 privies and ashpits.

Thirty-nine notices for the abatement of nuisances have been served upon the owners of insanitary properties, and dealt with defective drains, sink wastes and gutters, insanitary privies and ashpits, and the provision of w.c.'s, badly paved back yards and back passages, and the keeping of live stock in back yards. Under these notices, 209 houses were dealt with, and in 4 cases it was found necessary to take legal proceedings.

In 3 cases where notices have been served, the properties have been pulled down, and in another case, which was a small farmstead, the place has been permanently closed.

There have also been many petty nuisances remedied, such as :— draining off stagnant water in open spaces, removal of old mattresses and other rubbish from places and watercourses, clearing away accumulations of refuse and decaying matter from behind premises, stoppage of keeping live stock in unsuitable places, the removal of sheds and other structures in back yards, the provision of adequate rainwater spouts and fall pipes to buildings.

The conversion of privies and ashpits into w.c.'s and dustboxes entails upon the Council each year a sum approximately to £200 for the providing of adequate sewers in place of the existing ones, which are in many cases incapable of taking the sewage from w.c 's. A considerable length of sewers, with the necessary manholes, &c. has for this purpose been constructed during the year.

One new license for the sale of milk has been granted during the year, viz.: at 95, Ashton Hill lane.

The places for the sale of milk in the district now number 30.

Observations of the emission of black smoke from chimneys, other than those of dwelling houses, have been taken regularly, with the result that this class of nuisance is gradually being remedied.

Observations have also been taken of certain chimneys outside the District, but from which the black smoke creates a nuisance in Droylsden, and the firms have been communicated with on the matter when necessary.

The clarification of refuse liquors from the dye works in the District has had the serious consideration of the Council, along with the degree of temperature at which such liquors are allowed to pass into the Council's sewers, and a great improvement has been effected in this matter, and one firm has constructed a large settling tank for the purpose.

The main sewers of the Council have been kept in a fairly clean state, and several improvements made in same so as to facilitate their self cleansing.

The Council have experienced considerable trouble during the year with breakdowns to the Fairfield sewer.

The Mersey and Irwell Rivers Committee have drawn attention to the fact that sewage from the District enters into the Gore Brook and causes pollution. This matter is now having attention and will be remedied.

A similar pollution to the Edge Lane watercourse has been stopped by diverting the drains.

The sewage works have been carefully worked and as good results as could be expected obtained while the alterations and extensions to the works are being carried out.

The whole of the slaughter houses in the District have had constant supervision, and notice has been taken that same have been kept in a thoroughly sanitary condition. No seizures of meat have been made during the year.

Private Street Works have been finished in Bright street and Vance street, and jointly with Audenshaw U. D. C., Williamson lane. Works under this head are proceeding in Bailey street, Alfred street, and Durham street.

Application is about to be made to the L. G. B. for sanction to borrow a large sum to carry out further works in private streets.

Many of the unadopted streets in the District are in a shocking condition.

Several undedicated streets which were in a bad condition have been mended by the owners.

The Council have had the matter of extraordinary traffic in the District before them, but it was not found necessary to take steps against any person.

The highways and secondary roads have had a considerable amount of repairs done to them, but owing to the many openings which the Manchester Gas and Water Departments, &c. have made, do not appear in as good a condition as should be expected.

A long length of the main road has been repaired, and a further long length of granite sett paving substituted for the gritstone paving.

The main road should be paved the whole width and length with granite, and it is proposed to apply to the L. G. B. for sanction to borrow a large sum for this purpose.

Much annoyance has been caused by shopkeepers obstructing the footways with goods, but I am pleased to say that owing to the steps taken by the Council, this has been practically stopped.

A very large amount of money has been spent upon scavenging and watering the roads, which have been kept in a cleanly state. The heavy snowstorms of the year also helped to augment the cost.

The street lighting has been further improved this year by the replacement of the flat flame burners with incandescent lights in the lanterns in most of the side streets, and it is proposed to convert the whole of the remainder of the flat flame burners next year.

The total amount of nightsoil refuse removed was 4141 loads. The available tipping spaces for this refuse is becoming very restricted. The greatest care however is exercised to keep the tips in as sanitary and innocuous condition as possible, men being employed to straighten them up every day, and to cover over the refuse with soil, and it is very necessary that the Refuse Destructor should be erected with the utmost dispatch.

Handbills have been sent round to all householders asking them to burn all animal and vegetable matter as far as possible, instead of depositing same in the ashpits.

The whole of the shippons, slaughter houses, and places selling milk, have had constant and careful superintendence, and no complaints have been found with same.

The premises where infectious diseases have been notified, have as usual, been thoroughly disinfected after recovery or removal of the patients, and during the continuance of the disease. Strict enquiries are, in all cases, made to trace the origin of the trouble, and every precaution taken to hinder the spread of same by complete isolation, the plentiful supply of disinfectants, and the separation of the children in the house, of school age, from their fellow scholars.

Disinfection is by means of formaldehyde, sprayed and vapourized, while izal in liquid and powder is supplied to all applicants.

10 cases were removed to the Hyde Infectious Diseases Hospital.

The L. G B. Medical Inspector in his report drew attention to the insufficient Hospital accommodation for infectious diseases. This matter has had the Council's serious attention.

All the factories, workshops, and workplaces, as well as the houses of outworkers, have, as required under the factory and workshops act, 1901, been regularly supervised. A list of visits &c. will be found in the appended table IX.

A licence for a bakehouse has been granted during the year.

Application has been applied for to the L. G. B. to allow the Public Health Acts (Amendment Act), 1907, to be adopted.

I am, gentlemen,

Yours obediently,

CHARLES HALL,

Inspector of Nuisances.

TABLE I.

Vital Statistics of whole District during 1908, and previous Years.

Year	Population estimated to middle of each year	Births		Total Deaths Registered in the District			
				Under one Year of age		At all Ages	
		Number	Rate	Number	Rate per 1000 Births registered	Number	Rate
1	2	3	4	5	6	7	8
1898	10500	302	28·7	54	162	156	14·8
1899	10700	359	33·5	78	217	226	21·1
1900	10900	334	30·6	57	175	198	18·1
1901	11100	316	28·46	48	152	186	16·8
1902	11200	359	32·5	59	164	194	17·3
1903	11500	305	26·5	47	154	169	14·1
1904	11700	341	29·1	66	196·5	224	19·1
1905	11800	344	29·1	53	154	190	16·1
1906	12000	359	29·9	52	145	214	17·8
1907	12200	351	28·7	56	159·5	188	15·4
Averages for years 1898-1907	11360	337	29·7	57	167·9	194	17
1908	12300	352	28·6	60	170·4	208	16·9

TABLE III.

Cases of Infectious Disease notified during the Year 1908

Notifiable Disease.	Cases Notified in Whole District.							
	At all Ages	At Ages—Years						Total Cases Removed to Hospital
		Under 1	1 to 5	5 to 15	15 to25	25 to65	65 and upwards	
Diphtheria(includ'g Membranous croup)	7		2	3		2		1
Erysipelas	8	2		1		4	1	
Scarlet Fever ...	47		12	29	5	1		8
Enteric Fever ..	10				6	4		1
Puerperal Fever ...	1				1			
Totals	73	2	14	33	12	11	1	10

TABLE IV.

Causes of, and Ages at Death during the Year 1908.

Causes of Death	Deaths at the subjoined ages of "Residents," whether occuring in or beyond the District						
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and Upwards
1	2	3	4	5	6	7	8
Measles	8		8				
Whooping-Cough...	7	3	4				
Diphtheria(includ'g Membranous croup	1		1				
Fever—Enteric ...	1					1	
Epidemic influenza	1					1	
Diarrhœa	11	10					1
Enteritis	3	1					2
Erysipelas	1	1					
Phthisis Pulmonary Tuberculosis.) ..	16	1			5	10	
Other tuberculous diseases ...	18	6	7	3		2	
Cancer, malignant diseases	7					4	3
Bronchitis	27	11	1			11	4
Pneumonia	14	3	3		1	5	2
Alcoholism Cirrhosis of liver ...	1						1
Premature birth ...	9	9					
Diseases&Accidents of Parturition ..	2	1				1	
Heart diseases ...	20	1			2	13	4
Accidents	2		1	1			
Suicides	3					3	
All other causes ...	56	15	6			16	19
All causes	208	62	31	4	8	67	36

TABLE V.

Infantile Mortality during the Year 1908.

CAUSE OF DEATH.	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under one year
Common Infectious Diseases :—																	
Whooping Cough						1									2		3
Diarrhœal Diseases :—																	
Diarrhœa, all form						1	1	2		1	1	1		1	2		10
Enteritis, Muco-enteritis, Gastro-enteritis ..								1									1
Wasting Diseases :—																	
Premature Birth	8		1		9												9
Congenital Defects														1			1
Injury at Birth	1				1												1
Want of Breast-milk, Starvation		1		1	2	1											3
Atrophy, Debility, Marasmus						2		1	2		1				1		7
Tuberculous Diseases :																	
Tuberculous Meningitis						1											1
Tuberculous Peritonitis : Tabes Mesenterica..														1	1		2
Other Tuberculous Diseases															3		3
Other Causes :—																	
Erysipelas													1				1
Convulsions								1									1
Bronchitis			1	1	2			1	.	2	1	1	1			1	10
Pneumonia				1	1								1		1		3
Other Causes	1	1		1	3					1	1		1				6
	10	2	2	4	18	6	1	6	3	4	4	2	4	3	10	1	62

TABLE VI. SLAUGHTER HOUSES.

Date of Reg. or Lic'ce	No. in Reg.	Position	Owner.	Occupier	Remarks
1865	3	New Street, back of Market Street	W.Torkington	Jas. Newton	Good state of repair.
1865	4	62 Market Street	W.Torkington	E. A. Clark	Has been made by covering over part of backyard of house and abuts on the same.
1865	7	1 Greenside Lane	S. Williamson	J. Williamson	House opens into slaughter house.
1904		421-3 Manchester Road	H. Smith	Sam Etchells	This slaughter house is on same premises as one registered in 1865, good state of repair.
1904	13	Albert Street	Droylsden Co-op.	Droylsden Co-op.	This is a model slaughter house and is in substitution of one erected about 1878 on same site.
		Greenside Lane (Farm Fold)	Greave's Trustees	H. Wood	In bad condition should be closed, no record of registration or license.
		Back of Hart St.	Baguley's Trustees	E. Ridgway	No record of registration or license. Good state of repair
1904		Chapel Street, behind No. 170 Market Street	Stopford's Estate	T R Grundy	Council granted license for same Feb 1903. Good state of repair.
		Off Moorcroft St.	W.Torkington	W.Torkington	In substitution of one at other side of Moorcroft St. used formerly No record of registration or license. Good state of repair.
		108 Market St.	I. Newton	I. Newton	
1906		Clock House, Greenside Lane	Hurst's Trust	S Garside	Only occasionally used.
1906		Benny Lane	Hulme's Trust	G. F. Day	Only occasionally used

TABLE VII.—MILK SHOPS.

Position	Occcupier	Remarks.
62 Edge Lane	F. Bentley	
136 Edge Lane	W. Liversedge	
250 Edge Lane	W. Hardy	
300 Edge Lane	F. Openshaw	
197 Edge Lane	R. Haves	
266 Edge Lane	Mrs. Hope	
540 Edge Lane	Mrs. Lea	
41 Edge Lane	Baker & Thompson	
Fairfield Square	W. Bolton	
190 Fairfield Road	H. Faulkner	
123 Fairfield Road	H. Roberts	
107 Fairfield Road	A. Cunliffe	
225 Manchester Road	A. Hetherington	
41 Manchester Road	H. Chapel	
31 Market Street	Mrs. Morris	
25 Market Street	Mrs Clarke	
375 Manchester Road	W. Wharmby	
14 John Street	W. Taylor	
1 Mellor Street	W. Mayo	Discontinued selling
1 Moorside Street	Jos. Belfield	
48 Market Street	E. P Heap	
146 Market Street	J. Marshall	
251 Market Street	J H. Settle	
1 Greenside Lane	J. Williamson	
11 Greenside Lane	P. Yates	
1 Market Street	B. Charlesworth	
13 John Street	J. A. Cheetham	
22 Angola Street	M. Berry	
132 Market Street	W. Newton	
95 Ashton Hill Lane	Wm. Forrester	

TABLE VIII.—SHIPPONS.

Position.	Occupier	Stalls	Cubic feet air space per Cow	Remarks
Lumb	G. F. Day	12	286	
Hoppett Lane	A. Newton	8	465	
Oldham Street	G. Hibbert	12	317	
Dunkirk Street	E. Ridgway	7	518	
Greenside Lane	W. Cordon	8	252	
Greenside Lane	H. Snelson	15	693	Council's Property
Greenside Lane	W. Newton	9	383	
		5	358	
		4	394	
Greenside Lane	J. H. Headlam	12	303	
		6	261	
Greenside Lane	W. Day	4	664	Council's Property
		8	302	Council's Property
Greenside Lane	S. Williamson	10	351	
Greenside Lane	J. Potts	19	366	
Edge Lane	R. Coates' Exors.	12	440	
Alderdale	G. W. Laughton	26	456	
		10	678	
		3	352	Isolation Stalls
		8	338	
Edge Gate Farm, Edge Lane	G. W. Laughton	4	630	
Christy's Farm	A. Mellor	6	756	
		12	690	
Sunny Bank	J. Higginbottom	14	525	
Water Lane	R. Cooper	8	416	
15 Yew Street	W. Walker	2	420	
Fairfield Square	W. Bolton	8	790	
Yew Tree Farm	J Jackson	3	660	

Table IX.—Factories, Workshops, Laundries, Workplaces and Homework.

1.—INSPECTION.

INCLUDING INSPECTION MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises	Number of		
	Inspections	Written Notices.	Prosecutions
Factories (including Factory Laundries)	83		
Workshops (including Workshop Laundries	61		
Workplaces	27		
Homeworker' Premises...	6		
Total	177		

2.—DEFECTS FOUND.

Particulars	Number of Defects			Number of Prosecutions
	Found	Remedied	Refer'd to H.M. Insp't'r	
Nuisances under the Public Health Acts:—				
Want of Cleanliness				
Want of Ventilation	1	1		
Overcrowding				
Want of Drainage of floors				
Other Nuisances				
Sanitary accommodation { insufficient ... ... / unsuitable or defective / not separate for sexes...	2	2		
Offences under the Factory & Workshop Act:				
Illegal occupation of underground bakehouse (s. 101)	1	1		
Breach of special sanitary requirements for bakehouses (ss 97 to 100)	1	1		
Failure as regards list of outworkers (s 107				
Giving out work to be done in premises which are { unwholesome (s 108) / infected (s. 110)				
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (s. 109)				
Other offences	2	1		
Total	7	6		

Table IX. continued—3—OTHER MATTERS.

Class	Number	
Matters notified to H.M. Inspectors of Factories		
Failure to affix Abstract of the Factory and Workshop Act (s. 133		
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (s. 5) — Notified by H.M. Inspectors		
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (s. 5) — Reports (of action taken) sent to H.M. Inspectors		
Other		
Underground Bakehouses (s. 101):—		
Certificates granted during the year ...	1	
In use at the end of the year	1	
Homework:—	Number of Lists	Number of Outworkers
List of Outworkers (s. 107):—		
Lists received	2	10
Addresses of Outworkers — forwarded to other Authorities ...	2	3
Addresses of Outworkers — received from other Authorities ...	2	13
Homework in unwholesome or infected premises:	Wearing Apparel	Other
Notices prohibiting homework in unwholesome premises (s. 108)		
Cases of infectious disease notified in home workers' premises		
Orders prohibiting homework in infected premises (s. 110)		
Workshops on the Register (s. 131) at the end of the year		
Important classes of Workshops, such as workshop bakehouses, may be enumerated here. — Bakehouses	8	
Tailors	4	
Printing Works	2	
Dressmakers	4	
Pickle Works	3	
Others	26	
Total number of workshops on Register ...	47	

Table X.—Particulars of SMOKE OBSERVATIONS taken in connection with Factory and other Chimneys in the District.

1908	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Reference No of Chimney.	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour	No. of Observations	Average No of mins. black smoke per hour	No. of Observations	Average No. of mins. black smoke per hour
1											2	3	2	2½	2	5¼	2	5¼	1	2½	2	2	2	1
2	2	2¼	2	2¾	2	2¾	2	2¾	2	2½														
3							2	8	2	6½	2	5¼	2	8½	1	6	1	4			2	4¾	2	3
4	2	3	2	3	2	3	2	2¾	2	3½	2	3¼	2	2¾	1	3	2	2½			2	2½	2	2¾
5																								
6	2	1¼	2	2¾	2	6½	2	16¾	2	23	2	5¾	2	5½	2	12	2	6¼			2	11¾	2	6½
7																								
8																								
9	2	3	2	3½	2	3	2	3¾	2	2	2	2½	2	3	1	9	1	4½			2	2¾	2	3
10													1	3			1	3½	2	3¾	2	3½	1	2
11	2	3¾	2	3	2	3¾	2	7	2	4¼	2	2¼	2	3½	2	4½	2	3	2	3½	2	¾	2	3½
12	2	1¼	2	1½	2	1¾							1	2	2	5	2	6½	2	3½	2	1¾		
13	2	4½	2	4½	2	4	2	7¼	2	6	2	4	2	3	2	3¾	2	4	2	4¾	2	9½	2	4½
14	2	3½	2	2¾	2	7½	2	4¼	2	3	1	1½	2	3½	2	3½	1	4			2	4½	2	3¼
15	2	4¼	2	4¾	2	5¾	2	7	2	6½	2	9	2	13	2	10¾	2	5½	2	5¼	2	12½	2	13
16													1	14½						16		5¼	1	4
17																								
18			2	19	2	10½	2	8	2	9½	2	7	2	5½	2	0	1	5	2	7½	2	4	1	6½

TABLE XI.—RAINFALL.
Number of days on which rain fell.

Month	1906	1907	1908
January	21	12	10
February	19	15	18
March	17	18	16
April	10	13	15
May	18	18	18
June	15	26	10
July	18	15	17
August	18	17	12
September	8	8	19
October	23	17	8
November	19	20	15
December	18	18	16
Totals ...	204	196	174

TABLE XII.

	1906	1907	1908
Average rainfall per day	·084 ins.	·083 ins.	·077 ins.
" " per week	·593 ins.	588 ins.	·554 ins.
" " per month	2 573 ins.	2 546 ins.	2·361 ins
" " per year		29 918 ins.	

TABLE XIII.—Average Rainfall for 3 years 1906-8.

Month	Inches
January	2·262
February	2 090
March	2·788
April	1 218
May	2 913
June	2 738
July	2 990
August	2·843
September	1 923
October	2 605
November	2 543
December	3·003

TABLE XIV.—Exceptional Rainfalls.

1906		1907		1908	
Date	Inches	Date	Inches	Date	Inches
Jan. 6	·570	Mar. 10	·68	Feb. 17	·55
Mar. 8	·650	Mar. 20	·87	June 2	·80
April 24	·660	May 31	·54	July 8	·61
Aug. 17	·650	June 16	·50	July 9	·61
Oct. 18	1·060	June 25	·63	July 10	·50
Oct. 19	·540	July 22	·86	July 17	·85
Oct. 29	·640	Aug. 15	1·00	Aug. 21	·73
		Oct. 17	·70	Sept. 21	1·10
		Nov. 24	·61	Nov. 22	·60

Table 15.—Record of Temperature (in shade) at Sewage Works.

1906.

Month.	Week Ending.	No. of Week in Year.	Maximum Temperature. 8 a.m.	Maximum Temperature. 5 p.m.	Minimum Temperature. 8 a.m.	Minimum Temperature. 5 p.m.
January.....	Jan. 7	1	47	46	30	34
	Jan. 14	2	46	47	32	36
	Jan. 21	3	47	47	27	35
	Jan. 28	4	50	52	28	30
February....	Feb. 4	5	56	49	33	35
	Feb. 11	6	47	45	26	27
	Feb. 18	7	45	45	26	31
	Feb. 25	8	42	44	28	34
March.....	Mar. 4	9	48	53	28	31
	Mar. 11	10	51	57	34	37
	Mar. 18	11	54	56	27	27
	Mar. 25	12	45	48	29	34
April.....	April 1	13	49	50	28	36
	April 8	14	58	62	32	41
	April 15	15	64	68	29	41
	April 22	16	58	60	31	39
	April 29	17	52	53	27	37
May.....	May 6	18	59	66	35	37
	May 13	19	66	68	41	46
	May 20	20	70	57	36	41
	May 27	21	64	71	40	45
June.....	June 3	22	64	65	45	45
	June 10	23	74	76	41	56
	June 17	24	77	78	44	53
	June 24	25	76	80	46	61
July.....	July 1	26	69	68	42	52
	July 8	27	72	78	47	53
	July 15	28	74	69	41	54
	July 22	29	74	75	47	52
	July 29	30	76	79	48	57
August.....	Aug. 5	31	75	80	54	61
	Aug. 12	32	74	79	48	57
	Aug. 19	33	77	74	50	53
	Aug. 26	34	73	75	50	58
September..	Sept. 2	35	85	86	46	59
	Sept. 9	36	84	75	45	49
	Sept. 16	37	63	73	38	50
	Sept. 23	38	61	64	41	52
	Sept. 30	39	57	59	35	41
October.....	Oct. 7	40	63	67	50	49
	Oct. 14	41	61	67	30	36
	Oct. 21	42	55	63	37	39
	Oct. 28	43	61	65	35	46
November..	Nov. 4	44	51	51	36	40
	Nov. 11	45	51	54	32	33
	Nov. 18	46	57	53	30	34
	Nov. 25	47	57	61	31	34
December..	Dec. 2	48	56	55	37	37
	Dec. 9	49	54	56	30	30
	Dec. 16	50	43	45	26	28
	Dec. 23	51	51	51	27	31
	Dec. 30	52	44	40	20	22

1907.

Month	Week Ending.	No. of Week in Year	Maximum Temperature. 8 a.m.	Maximum Temperature. 5 p.m.	Minimum Temperature 8 a.m.	Minimum Temperature 5 p.m.
January	Jan. 6	1	50	47	31	32
	Jan. 13	2	48	49	38	38
	Jan. 20	3	47	53	33	34
	Jan. 27	4	42	45	19	21
February...	Feb. 3	5	50	50	21	22
	Feb. 10	6	46	45	27	29
	Feb. 17	7	51	53	27	30
	Feb. 24	8	51	51	23	24
March.....	Mar. 3	9	45	50	29	33
	Mar. 10	10	51	53	30	30
	Mar. 17	11	51	53	26	34
	Mar. 24	12	53	55	31	32
	Mar. 31	13	61	63	33	37
April.....	April 7	14	59	64	34	40
	April 14	15	49	58	37	41
	April 21	16	54	55	26	33
	April 28	17	58	61	31	40
May.....	May 5	18	53	55	35	38
	May 12	19	70	79	44	47
	May 19	20	78	68	37	45
	May 26	21	63	73	33	40
June.....	June 2	22	67	65	40	46
	June 9	23	68	77	42	46
	June 16	24	77	68	47	51
	June 23	25	64	64	45	52
	June 30	26	64	67	40	48
July.....	July 7	27	60	63	38	50
	July 14	28	67	73	40	47
	July 21	29	78	77	50	59
	July 28	30	69	73	44	54
August	Aug. 4	31	71	73	46	53
	Aug. 11	32	68	70	50	55
	Aug. 18	33	70	70	50	53
	Aug. 25	34	63	66	47	50
September..	Sept. 1	35	67	67	41	51
	Sept. 8	36	68	71	35	36
	Sept. 15	37	70	74	42	45
	Sept. 22	38	61	69	41	45
	Sept. 29	39	77	76	40	44
October.....	Oct. 6	40	58	65	39	43
	Oct. 13	41	62	60	36	45
	Oct. 20	42	55	68	32	36
	Oct. 27	43	54	57	34	35
November...	Nov. 3	44	55	58	33	41
	Nov. 10	45	54	53	41	44
	Nov. 17	46	53	54	30	32
	Nov. 24	47	50	47	30	32
December...	Dec. 1	48	47	51	28	30
	Dec. 8	49	50	51	34	33
	Dec. 15	50	59	48	29	30
	Dec. 22	51	53	53	31	40
	Dec. 29	52	49	44	31	31

1908.

Month.	Week Ending.	No. of Week in Year.	Maximum Temperature. 8 a.m.	Maximum Temperature. 5 p.m.	Minimum Temperature. 8 a.m.	Minimum Temperature. 5 p.m.
January.....	Jan. 5	1	35	35	21	20
	Jan. 12	2	50	49	24	20
	Jan. 19	3	52	51	23	27
	Jan. 26	4	46	49	26	31
February....	Feb. 2	5	52	53	27	32
	Feb. 9	6	47	48	27	34
	Feb. 16	7	48	52	32	33
	Feb. 23	8	51	51	36	42
March.....	Mar. 1	9	48	41	28	31
	Mar. 8	10	40	46	28	29
	Mar. 15	11	54	53	28	31
	Mar. 22	12	44	46	27	35
	Mar. 29	13	51	54	33	40
April.....	April 5	14	54	57	34	40
	April 12	15	53	54	30	41
	April 19	16	58	56	31	36
	April 26	17	47	50	32	29
May.....	May 3	18	69	67	39	40
	May 10	19	61	63	44	44
	May 17	20	63	71	41	50
	May 24	21	72	68	40	43
	May 31	22	75	78	44	51
June.....	June 7	23	84	79	43	51
	June 14	24	70	70	48	51
	June 21	25	67	68	40	52
	June 28	26	81	80	42	56
July.....	July 5	27	83	80	49	61
	July 12	28	70	75	43	52
	July 19	29	64	70	45	53
	July 26	30	80	78	49	53
August	Aug. 2	31	74	74	45	53
	Aug. 9	32	80	74	46	54
	Aug. 16	33	69	71	38	49
	Aug. 23	34	64	68	43	52
	Aug. 30	35	65	68	47	50
September..	Sept. 6	36	63	63	39	48
	Sept. 13	37	62	66	34	40
	Sept. 20	38	71	69	43	50
	Sept. 27	39	62	64	41	51
October	Oct. 4	40	71	75	51	59
	Oct. 11	41	66	65	44	49
	Oct. 18	42	60	68	54	58
	Oct. 25	43	59	58	34	41
November..	Nov. 1	44	58	62	35	37
	Nov. 8	45	57	61	31	37
	Nov. 15	46	55	55	27	29
	Nov. 22	47	54	53	28	29
	Nov. 29	48	54	54	30	35
December...	Dec. 6	49	54	49	30	30
	Dec. 13	50	48	50	30	32
	Dec. 20	51	48	51	35	38
	Dec. 27	52	52	52	25	26

Table 16.—Record of Rainfall at Sewage Works.

Month.	Week Ending.	No. of Week in Year.	Total Rainfall for Week. Inches.	Total Rainfall for Month Inches.	Total Rainfall for Year. Inches.
January	Jan. 7	1	·910		
	Jan. 14	2	1·130		
	Jan. 21	3	1·320		
	Jan. 28	4	·375	3·735	
February	Feb. 4	5	·590		
	Feb. 11	6	1·020		
	Feb. 18	7	·240		
	Feb. 25	8	·410	2·260	
March.....	Mar. 4	9	1·000		
	Mar. 11	10	1·070		
	Mar. 18	11	·990		
	Mar. 25	12	·065	3·125	
April	April 1	13	·010		
	April 8	14	·000		
	April 15	15	·040		
	April 22	16	·185		
	April 29	17	1·290	1·525	
May.....	May 6	18	·750		
	May 13	19	·420		
	May 20	20	·520		
	May 27	21	1·270	2·860	
June	June 3	22	·445		
	June 10	23	·000		
	June 17	24	·165		
	June 24	25	·260	·870	
July.....	July 1	26	·330		
	July 8	27	·050		
	July 15	28	·450		
	July 22	29	·630		
	July 29	30	·370	1·830	
August	Aug. 5	31	·250		
	Aug. 12	32	·320		
	Aug. 19	33	1·220		
	Aug. 26	34	·840	2·630	
September ..	Sept. 2	35	·030		
	Sept. 9	36	·450		
	Sept. 16	37	·740		
	Sept. 23	38	·030		
	Sept. 30	39	·000	1·250	
October.....	Oct. 7	40	·530		
	Oct. 14	41	1·090		
	Oct. 21	42	1·875		
	Oct. 28	43	·620	4·115	
November ..	Nov. 4	44	1·060		
	Nov. 11	45	·450		
	Nov. 18	46	·870		
	Nov. 25	47	·565	2·945	
December...	Dec. 2	48	·780		
	Dec. 9	49	1·470		
	Dec. 16	50	·950		
	Dec. 23	51	·070		
	Dec. 30	52	·460	3·730	30·875 Inches.

1907.

Month.	Week Ending.	No. of Week in Year.	Total Rainfall for Week. Inches.	Total Rainfall for Month Inches.	Total Rainfall for Year. Inches.
January	Jan. 6	1	·970		
	Jan. 13	2	·120		
	Jan. 20	3	·090		
	Jan. 27	4	·080	1·260	
February . .	Feb. 3	5	·370		
	Feb. 10	6	·080		
	Feb. 17	7	·620		
	Feb. 24	8	·670	1·740	
March	Mar. 3	9	·100		
	Mar. 10	10	·910		
	Mar. 17	11	·770		
	Mar. 24	12	·950		
	Mar. 31	13	·000	2·730	
April	April 7	14	·250		
	April 14	15	·060		
	April 21	16	·340		
	April 28	17	·340	·990	
May	May 5	18	·940		
	May 12	19	·330		
	May 19	20	·890		
	May 26	21	·450	2·610	
June	June 2	22	1·290		
	June 9	23	1·330		
	June 16	24	1·360		
	June 23	25	·760		
	June 30	26	1·025	5·765	
July	July 7	27	·730		
	July 14	28	·740		
	July 21	29	·000		
	July 28	30	1·180	2·650	
August	Aug. 4	31	·730		
	Aug. 11	32	·855		
	Aug. 18	33	1·685		
	Aug. 25	34	·560	3·830	
September ..	Sept. 1	35	·080		
	Sept. 8	36	·815		
	Sept. 15	37	·005		
	Sept. 22	38	·005		
	Sept. 29	39	·015	·920	
October.....	Oct. 6	40	·120		
	Oct. 13	41	1·090		
	Oct. 20	42	·900		
	Oct. 27	43	·770	2·890	
November...	Nov. 3	44	·315		
	Nov. 10	45	·180		
	Nov. 17	46	·460		
	Nov. 24	47	·920	1·875	
December...	Dec. 1	48	·690		
	Dec. 8	49	1·160		
	Dec. 15	50	·900		
	Dec. 22	51	·530		
	Dec. 29	52	·010	3·290	30·550 Inches.

1908.

Month.	Week Ending.	No. of Week in Year.	Total Rainfall for Week. Inches.	Total Rainfall for Month. Inches.	Total Rainfall for Year. Inches.
January	Jan. 5	1	·00		
	Jan. 12	2	·80		
	Jan. 19	3	·43		
	Jan. 26	4	·56	1·79	
February ...	Feb. 2	5	·47		
	Feb. 9	6	·12		
	Feb. 16	7	·50		
	Feb. 23	8	1·18	2·27	
March.	Mar. 1	9	·75		
	Mar. 8	10	·35		
	Mar. 15	11	·49		
	Mar. 22	12	·04		
	Mar. 29	13	·88	2·51	
April	April 5	14	·71		
	April 12	15	·09		
	April 19	16	·01		
	April 26	17	·33	1·14	
May	May 3	18	1·68		
	May 10	19	·82		
	May 17	20	·35		
	May 24	21	·33		
	May 31	22	·09	3·27	
June.....	June 7	23	·88		
	June 14	24	·53		
	June 21	25	·17		
	June 28	26	·00	1·58	
July	July 5	27	·05		
	July 12	28	2·07		
	July 19	29	2·16		
	July 26	30	·21	4·49	
August	Aug. 2	31	·04		
	Aug. 9	32	·00		
	Aug. 16	33	·27		
	Aug. 23	34	·74		
	Aug. 30	35	1·02	2·07	
September ..	Sept. 6	36	·47		
	Sept. 13	37	·62		
	Sept. 20	38	1·10		
	Sept. 27	39	1·31	3·60	
October	Oct. 4	40	·02		
	Oct. 11	41	·17		
	Oct. 18	42	·00		
	Oct. 25	43	·62	·81	
November ..	Nov. 1	44	·41		
	Nov. 8	45	·00		
	Nov. 15	46	·54		
	Nov. 22	47	·88		
	Nov. 29	48	·98	2·81	
December ..	Dec. 6	49	·18		
	Dec. 13	50	·89		
	Dec. 20	51	·87		
	Dec. 27	52	·05	1·99	28·33 Inches.