[Report 1908] / Medical Officer of Health, Maidstone U.D.C. / Borough.

Contributors

Maidstone (England). Urban District Council.

Publication/Creation

1908

Persistent URL

https://wellcomecollection.org/works/d7z3e48t

License and attribution

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

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

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



1908.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

Borough of Maidstone.

CHARLES PYE OLIVER, M.D., Lond.,

DOCTOR IN STATE MEDICINE, UNIVERSITY OF LONDON:
DIPLOMATE IN PUBLIC HEALTH, ENGLAND:
M.R.C.S., L.R.C.P.

Medical Officer to the Education Authority for the Borough of Maidstone; Fellow of the Incorporated Society of Medical Officers of Health.

Maidstone:

WALTER RUCK, GENERAL PRINTER, 11, HIGH STREET.

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

BOROUGH OF MAIDSTONE.

00-

REPORT OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1908.

TO THE URBAN DISTRICT COUNCIL.

MR. MAYOR AND GENTLEMEN,

I have the honour to present my Annual Report for the year 1908, and for the convenience of comparison the report is based on a plan similar to that for preceding years.

The calculations submitted are based on the assumption that the rate of increase of population of the Borough during the year ended December 31st, 1908, has been the same as prevailed during the ten years forming the last inter-censal period, 1892—1901.

On this assumption the estimated population of the Borough is fixed at 34,771 at June 30th, this date being the date selected in previous years.

From out of this population there were r	egistered :—
Of Births	831
" Deaths	452
" Marriages	287
So that the rates per thousand were :-	
Of Births	23.9
" Deaths	12.9
" Marriages	8.4

BIRTH RATE.—The Birth rate for Maidstone during the year under notice was 23'9 per thousand of the total population. This is an improvement over last year when it was 21'8, and is a slight improvement over the average of the previous ten years when it was 23'4. This is satisfactory in view of the fact that throughout the country generally the Birth rate has, since 1876, declined almost uninterruptedly, but Maidstone is still below the average for England and Wales, this being in 1908 26'5 per 1000.

Of the Births in Maidstone 434 were males and 397 females giving as usual an excess of boys over girls, viz.:

Included in this number are 46 births of illegitimate children, giving a rate in Maidstone of 5.5 per 100 of births in Maidstone.

DEATH RATE.—The Annual Death rate of persons residing in the Borough during the year was 12'9 per 1000, of the total population. This is as low as any Death rate we have on record in Maidstone. The average for the previous ten years was 14'9 per 1000.

This rate of 12.9 is the corrected Death rate for Maidstone and is the rate which would have been recorded had the sex and age constitution of the population in Maidstone been indentical with that of England and Wales as enumerated in 1901.

The Death rate for England and Wales during the year under notice was 14.7.

In Table I. of the Appendix to this Report details of the Births and Deaths for the past year are given, together with the details and averages for the previous ten years.

In Table III. the 452 Deaths are classified in their various age periods, and also under their various causes.

Among the causes it will be noticed that in Maidstone 35 persons died of Consumption of the Lungs, if, to this number, be added those who died from other forms of Consumption it will be seen that we lost 52 people from this cause of death alone.

At present Consumption is not a notifiable disease either voluntarily or otherwise in Maidstone, so that the only indication of the presence of this infectious disease that the Health Authorities have is when a death occurs.

By the recent action of the Local Government Board an order has been issued that the Medical Officer of the Poor Law Institution receiving poor cases from Maidstone, shall notify to the Medical Officer of Health all those cases of Consumption that he has received from Maidstone. It is also the duty of the District Medical Officers to notify similar cases that may occur among the poor on whom he is in medical attendance. By this means considerable facilities will be afforded for the extension of administrative action in checking the spread of this infectious malady.

CANCER.—The number of Deaths attributed to Cancer is 33. The records of this as a separate cause of death are only available in Maidstone for the past nine years. It is well known that the number of deaths attributed to Cancer has shown for many years a very

marked and steady increase, and I find that in Maidstone the number of deaths last year from this cause is higher than the average for the previous nine years, which was 29.

Epidemic Influenza has not entirely disappeared as a cause of death, there being two last year.

Measles was entirely absent as a fatal disease, and Whooping Cough caused but one death and that in a Infant.

INFANTILE MORTALITY.

The rate of Infantile Mortality, that is to say the number of children who died under one year of age per thousand of those born during the year, was unusually low this year, being 104 per 1000. This is eminently satisfactory and is lower than the average of the rural districts of England and Wales which was 110 per 1000, and also lower than that of the 76 great towns, and the 142 smaller towns. For a town the size of Maidstone and possessing a large industrial population this low rate of Infantile Mortality is one of the best indications of the general attention that is paid to sanitation.

An examination of the subjoined table will reveal the fact that this diminution of the loss of infants has been very steady and continuous since 1870.

In analysing the causes of deaths of these infants I find that but one died of any of the common infectious diseases, 14 died of Diarrhœal diseases, 26 of Wasting

7

Deaths per 1,000 Births of Children under one year in Maidstone.

Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Whole Year.							
1870	165	97	263	115	160							
1871	258	107	278	117	190							
1872	181	116	171	144	153							
1873	136	118	246	127	157							
1874	182	93	261	119	164							
1875	187	106	157	165	154							
1876	147	112	141	98	124							
1877	211	140	187	84	155							
1878	161	176	209	155	175							
1879	135	145	122	165	142							
Average	176.3	121.0	203.5	128.9	157.4							
1880	135	120	229	118	153							
1881	120	119	122	64	106							
1882	138	110	100	151	125							
1883	218	79	122	139	138							
1884	189	79	159	139	138							
1885	140	75	187	125	133							
1886	118	105	191	166	142							
1887	80	59	158	114	103							
1888	167	136	167	145	154							
1889	132	99	173	137	135							
Average	143.7	98.0	160.8	129.8	132.7							
1890	136	136	136	136					117	93	113	115
1891	140	113	150	157	140							
1892	128	87	110	80	102							
1893	64	90	222	80	111							
1894	167	119	112	116	128							
1895	133	62	172	157	129							
1896	156	82	129	162	133							
1897	143	80	219	100	138							
1898	153	89	234	155	152							
1899	81	58	239	197	129							
Average	130	89	168	131	127							
1900	108	87	143	128	115							
1901	157	73	162	104	132							
1902			106	145	117							
1903	147	141	97	123	128							
1904	128	57	165	81	108							
1905	161	70	84	129	109							
1906	88	106	127	102	107							
1907	237	82	94	107	131							
1908	128	62	87	136	104							

diseases, 5 of Tuberculous diseases, and 22 of Bronchitis and Pneumonia.

The comparatively large number of deaths from Bronchitis and Pneumonia suggests want of maternal care and solicitude and it is in this direction that efforts should be made to reduce this loss of infant life.

In this connection I was instructed in April to prepare a report on Infantile Mortality in Maidstone, a copy of which is herewith appended.

"REPORT RE INFANTILE MORTALITY IN MAIDSTONE

"During the year ending December 31st, 1907, the death returns relating to Maidstone showed that 99 children died before they reached the age of one year; there were born during the same period 755 so that the rate of infantile mortality for Maidstone, during the past year, was 131 per thousand. The rate for England and Wales was 108 per thousand.

"The average for the previous ten years was 123. This is the highest that has been received since 1901 when the number was 132 and is accounted for by the fact that in the first quarter an outbreak of Measles and Whooping Cough was present.

"The rate for legitimate infants during the same period was 127 per thousand, while for illegitimate it was much higher, viz. 186 per thousand.

"I have extracted from the death returns the various localities where these deaths occur and find that in certain streets a large proportion of these children die; these streets are in particular:—Upper

Stone Street, Woollett Street, Brunswick Street, Bower Place and Camden Street.

"In considering the age at which these 99 children died I find that 44 did not reach the age of three months. It is obviously at this tender age when maternal care and solicitude are of the greatest value.

"Amongst the various causes of death are the following:-

Measles 4
Whooping Cough ... 12
Diarrhœa ... 8
Wasting Diseases ... 33
Pneumonia ... 15

"The methods adopted to check a corresponding waste of Infantile life in other towns include the adoption of the Notification of Births Act, 1907, which imposes on those in attendance at the birth of a child the duty of informing the Medical Officer of Health within 48 hours of such event.

"When a birth has taken place in such families where it is known that the infant is not likely to receive the necessary care and attention, either from poverty, ignorance or inability on the part of the mother, the Local Authority have appointed qualified women to call and superintend and direct the health and feeding of the infant.

"In Maidstone this duty alone would not be sufficient to occupy the whole of the time of a Lady Health Visitor but with the extension of duties in other directions of a Public Health nature, such as visiting the homes of certain children attending the Public Elementary Schools, an appointment of this character may be found to be both advisable and necessary."

NOTIFIABLE DISEASES.

SCARLET FEVER.

The 63 cases of Scarlet Fever notified were all of the mildest character so mild indeed that in many cases the difficulty of recognising them as such was considerably increased. There were no deaths.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th	2 5 4 1	17 17 22 14	8 19 7 11	6 17 34 73	22 9 7 22	12 10 5	1 11 11 9	3 35 27 198	78 60 87 44	21 11 11 24	19 11 11 22	16 19 20 40
Year	12	70	45	130	60	27	32	263	269	67	63	95
Cases removed to Sanatorium.	8	31	34	75	47	25	29	170	218	56	58	69

TYPHOID FEVER.

The record of cases of Typhoid Fever arising within the district is very satisfactory.

Four cases were notified and of these two occurred at Barming Asylum in demented patients. The initial case probably contracted the malady from habits of gross uncleanliness, the second case was from contact.

The subsequent history of one of the other notified cases threw considerable doubt on the correctness of the diagnosis. The remaining case occured in a young man whose duty took him not unfrequently into the surrounding country where he ran the risk of drinking water from doubtful sources.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th	14 5 8 8	5 8 4 6	13 2 2 11	7 3 4 7	1 2 3 5	1 1 2 5	3 1 1	 2 1	 3 2	2 1 4	1 2 1	4 2 2·5 5
Year	35	23	28	21	11	9	5	3	5	7	4	14

DIPHTHERIA AND CROUP.

The record of cases of Diptheria is still low there being but 37 notified; for the previous ten years the annual average was 85. Towards the end of the year a number of cases were reported—15 in all—the initial cases of which were associated with the opening up of a considerable length of old sewer and it was along this line that the cases appeared. The type of the malady in this particular outbreak was of a mild nature there being but one death. Throughout the year however five cases proved fatal equivalent to a case mortality of 135 per cent.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th	40 24 80 96	94 47 36 72	16 9 9 16	25 18 14 25	38 23 15 13	4 5 2 5	13 6 9 11	6 3 12 3	10 6 3 6	10 6 13 12	13 3 6 15	25 14 19 25
Year	240	249	50	82	89	16	39	24	25	41	37	85
Removed to Sanatorium.	154	103	34	54	68	11	35	17	13	34	32	52

SMALL POX.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th	 1 			 1 2	6 11 15 							.6 1.2 1.6 .3
Year	1		1	3	32							3.7

No cases of Small Pox were notified during the year this making the sixth year in succession without a case occurring in our midst.

I would, however, again remind the Council that no accommodation exists should an outbreak occur, and it is instructive to carefully analyse the records of the number of children born in Maidstone who are not protected by Vaccination from this scourge. From these

tables it will be seen that this number of unprotected children is a steadily increasing one, so much so that for the first six months of the year under review, nearly one half of the children are unvaccinated and are thus not only a danger to themselves but are a menace to the general community.

VACCINATION.

Year.	Births.	Successfully Vaccinated.	Insusceptible to Vaccination.	Had Small Pox.	Died unvaccinated.	Number in respect of whom Certificates of Conscientious Objection have been received.	Vaccination postponed.	Removals.	Remaining.	Children not vacci- nated (including cases postponed) per cent. per birth.
1898	716	314	1		84	27	41	69	180	44.2
1899	818	433	2		64	59	79	87	94	38.9
1900	825	420	1		61	35	35	81	192	53.6
1901	763	567	1		61	95	2	33	15	19.0
1902	815	649	3		63	71	10	16	3	12.2
1903	806	620	2		76	84	7	12	5	12.1
1904	832	661	1		59	91	3	14	3	13.3
1905	799	591			68	111	6	23		17.4
1906	830	629			61	112	6	20	3	24.3
1907	763	520			58	169	5	11		26.4
1908 *	433	223			25	167	5	11	2	46.1

^{*} January to June.

ERYSIPELAS.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th	6 4 7 12	9 6 2 6	3 5 3 9	3 3 3 8	6 5 6 13	10 4 5 6	3 3 1 1	4 0 4 8	4 8 3 10	6 5 4 7	7 3 2 3	5 4 3 8
Year	29	23	20	17	30	25	8	16	25	22	15	20

The cases of Erysipelas were in the main of a mild character only one death occurring.

PUERPERAL FEVER.

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average.
1st 2nd 3rd 4th		1 1 1		1	 1 1 2	1 3 1	2		 1 1 1	1 1	1 2	·6 ·6 ·2 ·7
Year	1	3		1	4	5	2		3	2	3	2.1

None of the three cases of Puerperal Fever were fatal. No cases occurred in the practice of the registered Midwives of the District.

TOTAL NOTIFICATIONS.

The total number of notifications of infectious diseases received throughout the year amount to 122. This is very satisfactory the average for the previous ten years being 222. It is also the lowest since 1904. It will be seen that the reduction is not common to any one disease but there is a reduction in each of the five principal notifiable diseases.

The detail appears in the following tables:-

Quarter.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years average.
1st 2nd 3rd 4th	62 39 99 118	126 79 64 99	40 35 21 18	42 41 56 115	73 51 47 55	28 23 14 17	19 24 22 23	12 40 43 210	92 78 94 63	40 22 29 48	41 17 21 43	53 43 48 75
Year	318	368	114	254	226	82	88	306	327	139	122	222

DISEASE.	Previous 10 Years' average.	1908.
Diphtheria	52	37
Scarlet Fever	69	63
Typhoid Fever	14	4
Erysipelas	20	15
Puerperal	2.1	3
Small Pox	3.7	3.7

THE SANATORIUM.

During the year the following cases have been admitted to treatment, viz.:—

Diphtheria 32 Scarlet Fever 58

DIPHTHERIA.—Of the 32 cases admitted to the Sanatorium, 5 died, equalling a case mortality of 13.5 °/,; last year the case mortality was 7.3 °/.

The Diphtheria block was closed on two occasions from April 23rd until June 22nd and again from July 31st until October 27th.

SCARLET FEVER.—All the cases were of a mild character, none proving fatal. It was necessary however to keep this block open throughout the year.

The number of patients treated in the Sanatorium for the past year and for the previous ten years is as follows:—

DISEASE.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Previous 10 Years' average,
Diphtheria	154	103	34	54	68	11	35	17	13	34	32	52
Scarlet Fever	8	31	34	75	47	25	36	170	205	56	58	68
Small Pox	1	***	1	2	31							3
Totals	163	134	69	131	146	36	71	187	218	90	90	123

GENERAL SANITARY CONDITION AND PROGRESS.

From Mr. Bunting, the Borough Surveyor, I learn that the following works of Sanitary interest have been carried out during the year:—

New Houses erected	105
Buildings undergone alterations	19
Buildings of the Warehouse class	
erected	6
Number of connections to Sewer	43
	,

The following Sewer extensions have been made:-

SOIL SEWERS.

Sutton Road 222 yards. Camden Street 124 ,,

The work of reconstructing the sewers in London Road, Upper and Lower Fant Roads was in hand at the close of the year covered by this Report and the particulars as to the length will be included in the next Report.

SURFACE WATER SEWER, LONDON ROAD.

This also was in hand and the particulars will be included in the next Report.

With regard to Sutton Road this is an extension to the Cemetery Gate, and has caused the removal of one of the few Cesspools in the Borough.

The renewal of the sewer in Camden Street was caused by the collapse of a very old and defective brick sewer which fortunately collapsed and thereby gave us the opportunity of reconstructing the drainage of this street in a satisfactory manner to the great benefit of the inhabitants whose drains connected therewith.

The London Road sewer mentioned above is an entirely new scheme which will enable the Cesspools in Queen's Avenue and in the adjacent parts of London Road to be done away with and the drainage of a number of houses in the district being connected to the town system.

The renewal in the Lower and Upper Fant district has enabled us to remove what was one of the most defective sewers in the whole of the Borough. This sewer was practically an elongated Cesspool in itself, the pipes being in places more than half choked with sewage, with the result that after a moderately heavy rain-fall, the pressure out of the sewer relieved itself by escaping out of the house drains.

Union Street was a similar case to Upper Fant, the previous sewer being in a deplorable state, and this was removed in view of the erection of the new school there in the immediate future. Length, 338 yards.

The routine work of sanitary interest accomplished during the year is set forth in the following table compiled by Mr. Jackling, the Chief Sanitary Inspector:—

Table shewing the Number of Premises dealt with by notice or otherwise.

Sink wastes disconnected or trapped	House drains reconstructed		 	41
New Gullies fixed	,, ,, repaired		 	17
W.C. 's repaired	Sink wastes disconnected or trapped		 	37
W.C. flushing apparatus repaired	New Gullies fixed		 	79
W.C. flushing apparatus repaired	W.C.'s repaired		 	52
W.C. basins replaced	W.C. flushing apparatus repaired		 	407
Houses provided with new W.C.'s	W.C. basins replaced		 	38
W.C.'s provided with new flushing apparatus Houses provided with dustbins House roofs repaired Back Yards paved or repaired Overcrowding abated New Sinks provided Shooting to houses provided or repaired Houses cleansed and limewashed House refuse collected on complaint Cesspools emptied, cleansed and filled up Manure Pits constructed Urinals repaired New Urinals built and provided with automatic flushing apparatus New Vent Shafts provided Manure and other refuse removed Pigeons, Poultry, Pigs, Rabbits, &c., removed Miscellaneous 31 32 34 35 36 37 38 39 30 30 30 31 31 31 31 31 31 31			 	10
Houses provided with dustbins		ratus	 	16
House roofs repaired			 	315
Back Yards paved or repaired			 	36
Overcrowding abated	Back Yards paved or repaired		 	62
New Sinks provided			 	17
Shooting to houses provided or repaired			 	50
Houses cleansed and limewashed			 	40
House refuse collected on complaint			 	38
Cesspools emptied, cleansed and filled up			0.0000	25
Manure Pits constructed				2
Urinals repaired New Urinals built and provided with automatic flushing apparatus New Vent Shafts provided Manure and other refuse removed Pigeons, Poultry, Pigs, Rabbits, &c., removed Wells closed Miscellaneous	Manure Pits constructed			2
New Urinals built and provided with automatic flushing apparatus				3
apparatus			100000	
New Vent Shafts provided 2 Manure and other refuse removed Pigeons, Poultry, Pigs, Rabbits, &c., removed Wells closed Miscellaneous				3
Manure and other refuse removed 1 Pigeons, Poultry, Pigs, Rabbits, &c., removed 1 Wells closed				20
Pigeons, Poultry, Pigs, Rabbits, &c., removed Wells closed Miscellaneous				10
Wells closed			25555	17
Miscellaneous				1
				38
New Stoneware dramage laid leet 590				
보고 있다면 하는 경기 경기에 있는 경기에 있다면 하는 것이 없는 것이 없다면 하는 것이 없다. 그리고 있다면 하는 것이 없는 것이 없는 것이 없는 것이 없다면 없는 것이 없다면	[6 No. 10 To Fee For State Control of the Control		1000000	84

HOUSING OF WORKING CLASSES ACT.—On several occasions action has been taken, under the various provisions of the Act, when it has been necessary to close buildings as unfit for human habitation. Twenty-two certificates have been issued.

BAKEHOUSE REGULATION ACT.—The bakehouses in the Borough both underground and otherwise have from time to time been inspected and found to be clean and in order.

CANAL BOAT ACT.—No cases of infectious disease have been introduced into the Borough by the occupants of barges coming to the town and the various provisions of this Act have been complied with.

FACTORY AND WORKSHOP ACT 1901.—The details of work accomplished under this Act will be found in the Appendix. A copy has been forwarded to the Secretary of State (Home Office) as required by the Act.

THE MIDWIVES ACT.

REPORT upon the administration of the above Act during the year ended March 31st, 1909:—

"During the year 13 midwives signified their intention to practise within the area, and of this number 7 have received a regular course of practical instruction and have certificates, the remaining 6 being allowed to practise, in virtue of having acted as such prior to the Midwives Act coming in force. There is an increasing number of births attended by midwives in Maidstone, 433 out of a total of 831 being looked after by midwives, or 52 %. Last year it was 44 %.

"Medical help was sought in 18 of these cases and there were seven still births.

"The midwives have all been interviewed from time to time and their methods enquired into. I am pleased to say that increasing attention is paid to the extreme value of cleanliness as regards the clothes and person of the midwives as well as of the bags and instruments they are provided with. The records of all the certificated midwives are well kept."

WATER REPORT.

During the past year the Borough has been supplied with water from three sources two being from springs situated in the chalk at Boarley and Cossington, the other source being from the Lower Greensand, the boring of which is situated at Forstal.

THE COSSINGTON SUPPLY.—The grounds immediately surrounding the spring heads, three in number, have been from time to time inspected and found to be clean and in order. The protecting fences are in good

order, and the guard houses in substantial repair. In No. I some large overhanging boughs have been removed in order to allow of a freer access of sunshine and air.

This supply has been chemically examined 26 times a sample being collected as near the source as possible every 14 days. The water has remained constant in composition, except as regards the amount of albuminoid ammonia present, but on no occasion has this exceeded '04 parts per million.

THE BOARLEY SUPPLY.—The reservoir has been inspected on several occasions, the fence surrounding is in good condition, and the turf on the roof is compact and well grown. Specific and definite enquiries have been made as to the cultivation of the ground within the enclosure. No fertilizing material of any character is used for the fruit trees that are planted here.

Moreover this ground is on a lower level than the reservoir, and the reservoir itself is watertight so that nothing whatever can reach it except through the iron main feeding it from the spring heads.

The grounds around the spring heads, three in number, are well protected by means of stout fences and guard houses, and these are in good condition. The head of the shaft at No. 3 has recently been renovated and is sealed by a heavy iron lid. The ground immediately surrounding is pasture land, the turf being of a very compact nature.

This supply has been analysed 52 times, the supply being collected once a week.

The specimen for analysis is collected as near the source as possible, alternately with that from near its point of distribution.

The chemical composition of this supply approximates closely to that from Cossington—both being derived from the chalk—the main difference being that the water derived from Boarley contains a larger amount of nitrogen as nitrates.

THE FORSTAL SUPPLY.—The pumping station has been visited from time to time. The head of the deep well remains efficiently protected from any liability to contamination.

This supply has been chemically examined on 26 occasions and has been found uniformly good in composition. It is somewhat harder than that from Boarley and Cossington, and contains more solids.

Cossington and Forstal (MIXED).—This supply has been analysed on 52 occasions, the specimen for analysis being collected from taps selected in various parts of the town. On all occasions the analysis was satisfactory, and with one exception the water was uniformly clear.

The Detling High Level reservoir, situated near the foot of the hill, has also been visited and on all occasions has been found to be well protected. The turf is now closing in and becoming very compact.

BACTERIAL EXAMINATION.—The supplies from Boarley, Cossington and Forstal have been examined by Professor Sims Woodhead, who in his report states that "these waters from a bacteriological point of view are "still of a high standard of purity."

The detail of the various chemical analyses, 156 in number, appear in the appendix.

As in previous years the average results have been tabulated as below. These results do not materially differ from those obtained in 1907.

NAME OF SUPPLY.		BOARLEY.	Cossington.	FORSTAL.	Cossington and Forstal Mixed.
Total Solids		39.7	39.4	41.7	41.6
Chlorine		2.3	2.3	2.9	2.4
Nitrogen as Nitrates		.549	.415	.122	.282
Free Ammonia		.00	.00	.00	.00
Albuminoid Ammonia		.01	.02	.01	.01
Oxygen absorbed in 4 hours		.004	.005	.004	.004
Hardness, Total		24.5	25.3	28.7	25.7
Permanent		7.1	7.3	8.3	7.4
Colour and Appearance in 2-fo	oot }	clear	clear	clear	clear
Smell		none	none	none	none
Phosphoric Acid		none	none	none	none

All results are given in parts per hundred thousand, except Free and Albuminoid Ammonia, which are in parts per million.

In only one case was it found necessary to examine the water from a private well and in this instance the water showed no evidence of organic pollution and in consequence it could be used with safety for drinking purposes.

METEOROLOGY.

The detail of meteorological observations is set forth in the Appendix. The mean reading of the barometer for the year is 29.82 inches, the highest monthly mean being for April, 30.08, and the lowest for July 29.61. The hottest month was July, giving a mean of the maximum readings of the thermometer in the shade of 70°, and a mean of the minimum readings of 56°, while the coldest month was January, with a mean of maximum readings of 41°, and a mean of minimum readings of 29°. The prevailing winds were S.W., there being 127 days on which the wind was in this quarter. The total rainfall for the year was 22.37 inches, the heaviest amount falling in August, viz., 3.78 inches, while during September the amount registered was 9 inch, this being the driest month of the year. There were 157 days in the year on which of of an inch or more rain fell.

SUMMARY.

In summarizing the health report for the year it is satisfactory to note that the Death rate is as low as any yet recorded in Maidstone. The loss of infant life in the Borough compares most favourably with that which holds in England and Wales generally. Further there has been a steady reduction in the amount of infectious disease present as compared with the average of the previous ten years.

These facts indicate that the increasing attention that is paid to the great laws of health are attended with satisfactory results and should encourage and stimulate further activities in the same field. In this connection certain administrative measures are being instituted with a view, in the first place, to localize the various centres of infection of consumption, and secondly to gather such information as may lead ultimately to definite steps being taken for the isolation and treatment of such cases of this great white plague as may be deemed suitable.

I have the honour to be,

Mr. Mayor and Gentlemen,

Your obedient servant,

C. PYE OLIVER, M.D.

AND

Doctor in State Medicine (Lond).

THE GABLES,

MAIDSTONE,

March 31st, 1909.

BOROUGH OF MAIDSTONE, 1908.

GENERAL SUMMARY.

POPULATION (estimated to the middle of 1908) 34,771
Number of Inhabited Houses at Census of 1901 6,648
AVERAGE NUMBER OF PERSONS TO A HOUSE 5.14
Area $\left\{\begin{array}{lll} \text{East Maidstone 2,019 acres} \\ \text{West} & ,, & 1,989 & ,, \end{array}\right\}4,008 \text{ acres}$
Density 8.6 persons per acre
Annual Birth Rate per 1,000 23.9
Annual Death Rate ,, 12.9
ZYMOTIC DEATH RATE ,, '48
PHTHISIS AND OTHER TUBERCULAR DISEASES'
DEATH RATE ,, 1.5
RESPIRATORY DEATH RATE ,, 1.8
Infantile Death Rate per 1,000 Births 104
BIRTHS {Males 434} Females 397} 831
Deaths $\left\{ \begin{array}{ll} \text{Males} & 215 \\ \text{Females} & 237 \end{array} \right\} \ 452 \ \left\{ \begin{array}{ll} \text{East Maidstone 253} \\ \text{West} \end{array} \right\}$ 452
Excess of Births over Deaths 379
ELEVATION.—the population reside at a mean Elevation of 70 feet above the sea level, ranging from 20 to 120.
AREA.—The area of 4,008 acres is divided into two divisions, by Week Street, Gabriel's Hill, and Stone Street; all to the West, including the Western sides of those Streets constituting West Maidstone; the Eastern portion forming East Maidstone.

Vears. TABLE 1.-Vital Statistics of Whole District, 1908 and previous

	_			-	_		_		_		_	_	_	_		
NEIT DEATHS	BELONGING TO	THE DISTRICT.	Rate.º	13	15.4	17.8	16.4	14.8	14.9	19:0	14.4	15.1	13.6	15.4	14.9	12.9
NETT 1	BELONG	THE DI	Number.	12	496	578	24.00	489	470	438	491	520	470	534	502	452
Deaths of Residents	registered in Public	Institu- tions	the	11	50	0.20	000	68	9	8 4 8	59	00 10	47	52	50	55
Deaths of Non-	87	in Public Institu-	the	10	214	168	215	197	666	297	197	210	178	187	195	197
TOTAL	DEATHS	PUBLIC INSTITU- TIONS	IN THE	9	- 236	179	313	272	00	260	210	244	224	231	248	234
RED.	Ages.	Rate o		80	20.5	21.1	21.3	19.0	18.5	18.5	16.6	19.7	17.4	19.3	19.1	17.8
REGISTE	At all Ages.	Number.		7	099	702	710	640	632	617	586	219	601	699	649	594
TOTAL DEATHS REGISTERED.	sar of age.	Rate per 1,000 Births	registered	9	152	129	115	182	117	128	108	109	107	131	122	104
TOTA	Under 1 year of age.	Number.		ũ	108	106	94	101	95	104	91	87	68	66	76	87
rhs.		Rate.		4	21.55	24.65	24.41	22.11	23.50	23.94	24.69	23.22	24.12	21.8	23.4	23.9
BIRTHS		Number.		00	714	820	813	762	792	810	841	795	830	755	793	831
	Population estimated to	Middle of each Year.		67	33,121	33,262	33,305	33,548	33,717	33,832	34,052	34,225	34,403	34,585	33,805	34.771
		YEAR.		1	1898	1899	1900	1901	1905	1903	1904	1905	1906	1907	Averages for years 1898-1907.	1908

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

NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within 10 and the addition of the number in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 11.

By the term "Non-resident" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there—these institutions are: (1) The Kent County Asylum, Barming: (2) West Kent General Hospital, Maidstone; (3) Ophthalmic Hospital, Maidstone; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere, viz.: Union Workhouse, Coxheath.

The "Public Institutions" taken into account for the purpose of these Tables are those into which persons are habitually received on account of infirmity, such as Hospitals, Workhouses and Lunatic Asylums.

Area of District in acres (exclusive of area covered by water)

33.516 6.648 5.04 At Census of 1901. Total population at all ages...... Average number of persons per house

TABLE II. - Cases of Infectious Disease Notified during the Year 1908.

Total	Cases removed to	Hospital.	:	:	32	:	58	:	:	:	:	:	:	90
CASES ED TO L FROM OCALITY.		West Maidstone.	:	:	21	:	38	:	::	:	:	:	:	59
No. of Cases Removed to Hospital from Each Locality		East Maidstone.	:	:	11	:	20	:	:	:	:	:	:	31
CASES IN EACH LITY.	I	East West East West Maidstone. Maidstone	:	:	24	4	42	:	က	:	:	1	:	74
TOTAL CASES NOTIFIED IN EACH LOCALITY.		East Maidstone.	:	:	13	11	21	:	1	:	:	63	:	48
		65 and up- wards.	;	:	:	1	:	:	:	:	::	:	:	1
ISTRICT.		25 to 65.	:	:	67	_	4	:	4	:	:	က	:	20
HOLE D	-Years.	15 to 25.	:	:	1	4	-	:	:	:	:	:	:	12
CASES NOTIFIED IN WHOLE DISTRICT.	At Ages—Years.	5 to 15, 15 to 25, 25 to 65.	:	:	25	67	43	:	:	:	:	:	:	70
OTIFIE		1 to 5.	:	:	00	1	L-		:	:	:	:	:	16
CASES N		Under 1.	:	:	1	:	7	:	:	:		:	:	63
		At all Ages.	:	:	37	15	63	:	4	:	::	က	:	122
	NOTIFIABLE DISEASE.		Small-pox	Cholera	Diphtheria (including Membranous Croup)	Ervsipelas	ver .	Typhus Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Plague	Totals

Total available beds-40. Isolation Hospital (Name and Situation)—The Sanatorium, Maidstone. Total Number of Diseases that can be concurrently treated—3.

TABLE III.

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

			I	DE	ATH	DEA LOCA (AT	PUBLIC					
CAUSES OF D	All Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	1 3	an	East Maidstone.	West Maidstone.	DEATHS IN PUBLIC		
Measles		***	***	***								1
Scarlet Fever Whooping Cough		•••	1 7	1								
Diphtheria (includ	ing Me	m	1	1	***				***		1	
branous Croup) .	ing me		3	2	1			1			3	
Croup								1	1		3	3
Typhus .			***	***	***							***
						***	***				1	2
Conti	nued			***	***	***						
Epidemic Influenza Cholera		***	2	***	***	***	***	2		1	1	1
Dlagna		***	***	***	***	***	***			***	***	
Diarrhœa			13	10	2				";			:::
Datamiti-			8	4	3		***		1	8	5	16
Decomposed Process											-	2
Erysipelas			1						1	1		
Other Septic Diseas Phthisis (Pulmonar	es y Tube	- ···			•••							
other Tubercular D		•••	35	***	1	1	4	26	3	21	I4	33
Cancer, Malignant I	liseases	***	17	5	6	3	***	2	1	10	7	6
Bronchitis		•••	33 28	9		***	***	19	14	21	12	7
Pneumonia			35	14	1 4	3	ï	3 7	15	15	13	3
Pleurisy				1.4			-		6	20	15	15
Other Diseases of	Respira	tory					***	***		***		***
Organs		200	1						1	1		1
Alcoholism, Cirrhosi		er	5					2	3	3	2	2
Venereal Diseases Premature Birth		***	3	2	***			1		2	1	
Diseases and Accide	ents of	Par-	14	14						8	6	
Heart Diseases			51	***	***			01	07	00	***	***
Accidents			6			2 2	3 2	21	25	23	28	40
Suicides	-		9					8	1		9	3
All other causes			187	28	7	3	1	48	100	111	76	98
All Car	1ses		152	87	26	15	11	140	173	253	199	234

TABLE IV.

Infantile Mortality during the Year 1908.

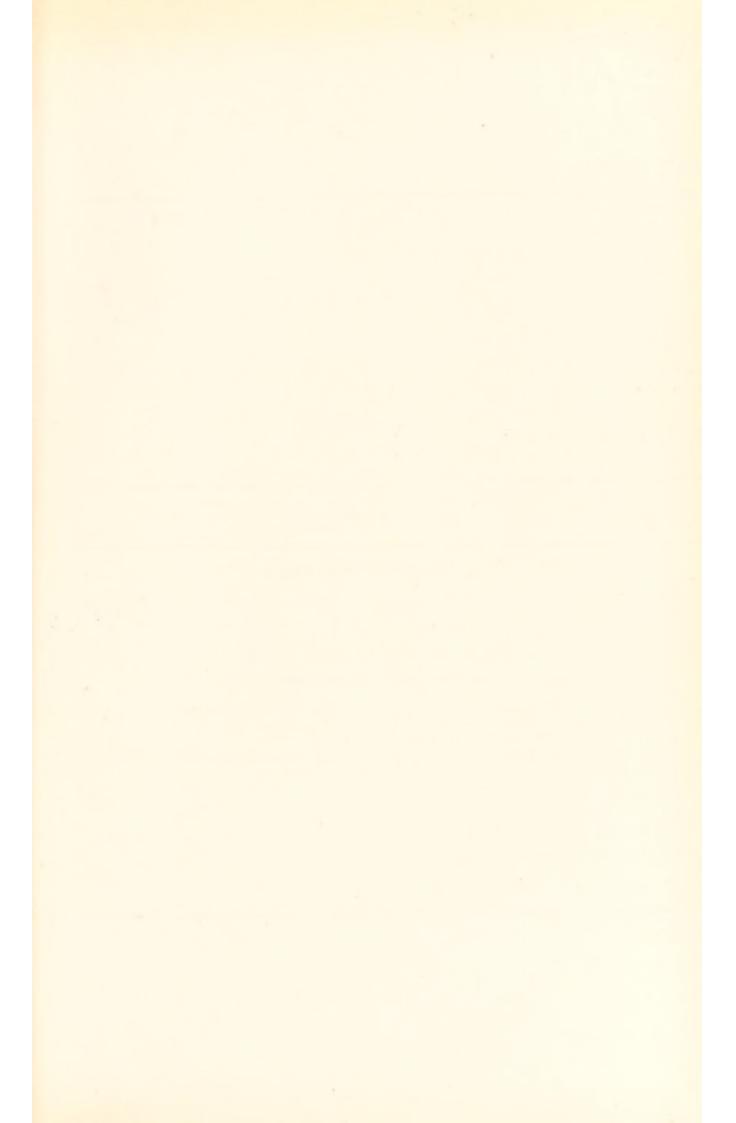
Deaths from stated causes in Week and Months under One Year of Age.

CAUSES O	of De	атн.			Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Mth.	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.	II-12 Months.	Total Deaths
ALL CAUSES:— Certified					9	10	6	5	30	6	8	4	6	5	5	5	5	2	7	1	84
Uncertified																					3
COMMON INFECT	ious	DISE	ASES :-	_																	
Small Pox																					***
Chicken Pox	***	***	***																		***
Measles Scarlet Fever	***	***	***	***																	***
Diphtheria (inc	ludine	, Mor	mbran.	2.												***	***			***	
Dipitueria (me	inani		Croup					•••		•••	•••	***	***	•••							***
Whooping Coug	h	***														1					1
DIARRHŒAL DIS																					
Diarrhœa, all fo							1		1		1			1		2	1		1		7
Enteritis, Muco				-													7		1		5
		eı	ateritis														1	***	1	***	
Gastritis, Gastre	o-intes	stinal	Catar	rh	•••	***					1		1	***						***	2
WASTING DISEAS	SES:-																				
Premature Birtl			***																		14
Congenitial Def		***	***	•••																	
Injury at Birth Want of Breast		Story	otion																		***
Atrophy, Debili				***		1	9		2	ï	4	9		9							12
					-	-	-			-	-	-		-				-			
Tuberculous D Tuberculous Me																			1		1
Tuberculous Pe			Tabes	7		***		***	***	***	***	***	***				***				16
I diociculous I c	A I COM	Mese	Tabes nterica	1	•••					***				_					***	***	2
Other Tubercul											1								1	-	2
OTHER CAUSES :-	_																				
Erysipelas																					
Syphilis	***	***	***			1		1	2			***								***	2
Rickets			***																		***
Meningitis (not				***	***			7			***		***	***		***	***				4
Convulsions Bronchitis	***	***	***	***			***			1											9
Laryngitis				***						1							-				
Pneumonia										2								2	1	1	13
Suffocation, ove																***					***
		,			10				8	1			1		. 9						13
Other Causes	***	***	***	***	-	1.7		1	.03	- 4			- 4		100						.2.4.

BIRTHS IN THE YEAR Legitimate ... 785 POPULATION, estimated to middle of 1908—34,771.

DEATHS IN THE YEAR Legitimate Infants 78
Illegitimate ... 9

DEATHS FROM ALL CAUSES AT ALL AGES-452.



3.-HOME WORK.

				OUTW	ORKER	s' LIST	s, sect	ION 107					OUTWORK PREMIS	IN UNWI	HOLESOME ON 108.		RK IN IN	FECTED is 109, 110.
		Lists re	ceived f	rom En	ployers.		Addre Outw	Addresses of Outworkers,		Prosec	Prosecutions.							
NATURE OF WORK.	Twic	ce in the	year.	One	e in the	year.	Receiv-	For-	on Oc- cupiers I as to t keeping			of Out- workers'		Notices served.	Prosecu-	Instances	Orders made	Prosecu tions (Section
(1)	† Outworkers.		† Outwo		orkers.	Coun-	n- Coun-	or	permit	Failing	premises.					(S. 110).	109, 110).	
		† Lists.	Con- tract'rs. (3)	Work- men. (4)	Lists.	Con- tract'rs. (6)	Work- men. (7)	(8)	(9)	lists.	tion of lists. (11)	to send lists. (12)	(13)	(14)	(15)	(16)	(17)	(18)
Wearing Apparel— (1) Making, &c (2) Cleaning and Washing		4	20	1		3	1	4				22						
Тотац	20	4	20	1		3	1	4				22						

[†] The figures required in columns 2, 3 and 4 are the total number of lists (received from employers who sent them both in February and August as required by the Act) and of the entries of names of outworkers in those lists. They will, therefore, usually be double of the number of such employers and (approximately) double of the number of individual outworkers whose names are given, since in February and August lists of the same employer the same outworker's name will often be repeated.

4REGISTERED WORKSHOPS.		5OTHER MATTERS.						
Workshops on the Register (s. 131) at the end of the year.	Number.	Class. _ (1)	Number.					
Workshops	255 31	Matters notified to H.M. Inspector of Factories:— Failure to affix Abstract of the Factory and Workshop Act (S. 133) Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5). Other	1 1 1 8					
Total number of workshops on Register	286	Underground Bakehouses (S. 101):— Certificates granted during the year						

TABLE V.

Factories, Workshops, Laundries, Workplaces and Homework.

1.-INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

		Number of	f
Premises.	Inspections.	Written Notices.	Prosecutions
Factories (Including Factory Laundries.)	11	2	
Workshops (Including Workshop Laundries.)	298	41	
Workplaces (Other than Outworkers' premises included in Pt. 3 of this Report.)		2	
Total	329	45	

2. DEFECTS FOUND.

Postford	Nu	mber of De	efects.	er fo
Particulars.	Found.	Remedied	Referred to H.M. Inspector	Number fo Prosecutions
Nuisances under the Public Health Acts:—* Want of cleanliness	19 5 2 2 6 3 15	19 5 2 2 6 2 15		
Illegal occupation of underground bake- house (s. 101) Breach of special sanitary requirements for bakehouses (ss. 97 to 100) Other offences (excluding offences re- lating to outwork which are included in Part 3 of this Report				
Total	52	51		

[°] Including those specified in Sections 2, 3 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.
† Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council; the standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced, as laid down by the Sanitary Accommodation Order of Feb. 4th, 1903.

32

TABLE VI. Boarley Water.

				as	Amm	onia.	E.	Hard	lness.	in in		
Source of Sample.	Date of Collection.	Total Solids.	Chlorine.	Nitrogen a Nitrates.	Free.	Albu- minoid.	Oxygen absorbed in 4 hrs. at 80° F.	Total.	Perman'nt	Colour and appearance 2-ft, tube.	Smell.	Phosphoric Acid.
4, Gordon Square, King Street Gathering Grounds	,, 13	38.6	2·8 2·5	·349 ·411	.00	·02	·005 ·004	24·3 24·4	7·5 7·3	clear	none	none
15, Albert Street 1, Oak Yd., King St.	. 20	39.0	2.4	·329 ·294	.00	·01 ·02	·004 ·004	24·5 25·2	7·4 7·6	**	**	19
19, Tufton Street Gathering Grounds	Feb. 3	38.0	2.5	·329 ·308	.00	·02	·005	24.8	5·3 5·7	**	**	19
56, Marsham Street	., 17	39.6	2.6	.349	.00	.02	.002	25.6	5.6	**	"	"
Gathering Grounds 37, Scott Street	Mar. 24	38·0 42·0	2.6	·382 ·658	.00	·02	·005 ·004	26·2 22·8	5·8 8·5	"	**	faint trace
Gathering Grounds 19. Tufton Street	9 16	38.0	2.3	·460 ·691	.00	·03	·004 ·006	22.0	9.0	- 11	"	none
Gathering Grounds	,, 23	42.0	2.6	.362	.00	.02	.004	23.2	8.1	**	**	"
12, Astley Street Gathering Grounds	April 6	40.0	2.5	·411 ·806	.00	.03	·004 ·004	24·7 24·8	8.0	**	**	**
81, Perryfield Street	13	41.0	2.3	.724	.00	.01	.005	25.7	6.6	33	11	**
Gathering Grounds 56, Marsham Street	21 27	38.0	2.5	·592 ·773	.00	·00 ·04	·003	22·0 22·7	8.5	**	"	"
Gathering Grounds 5, Boxley Road	May 4	38.0	2·5 2·4 2·3	·674 ·691	.00	·03	·004 ·004	24·2 25·0	8.0	**	**	**
Gathering Grounds	., 18	43.0	2.4	*625	.00	.03	-004	26.2	8.5	"	11	33
6, Camden Street Gathering Grounds	June 1	40.0	2.4	·773 ·724	·02	·02	·005 ·004	26·1 25·1	7·8 9·4	"	***	***
94, Sandling Road	10	38.0	2.8	.427	.00	.00	.005	21.4	6.3	",	**	"
Gathering Grounds Ivy Cott., Perry St.	15 22	39.0	2.3	·543 ·823	.00	.00	·005 ·004	25·0 24·8	7·1 6·2	**	**	**
Gathering Grounds	., 29	40.0	2.4	.674	.02	.04	.005	26.1	7.8	,,	"	"
13, Albert Street Gathering Grounds	July 6	39.0	2.4	·641 ·381	.00	.00	·005	25·4 24·8	6.6	"	11	"
Gordon Sq., King St.	,, 20	38.0	2.3	·382 ·386	.00	·01	-006 -005	25·2 24·8	7·1 6·8	"	"	"
Gathering Grounds 58, Ashford Road	Aug. 4	39.0	2.3	.592	-00	.01	.004	24.9	7.9	**	**	**
Gathering Grounds 24. Perry Street	" 10 " 17	38.0	2.5	·510 ·559	.00	·01	·005	25·2 23·8	8.4	11	**	**
Gathering Grounds	., 24	40.0	2·3 2·5	.477	.00	.02	.004	27.5	7.8		**	11
94, Sandling Road Gathering Grounds	Sept. 3	39.0	2.1	·460 ·477	.00	·01	·004 ·004	23.4	6.5		**	**
14. Perry Street	14	38.0	2.6	•526	.00	.00	.005	25.5	6.7	"	**	**
Gathering Grounds 40, Marsham Street	,, 22 ,, 28	40.0	2.2	·658 ·625	.00	·04 ·02	·005 ·005	25·7 25·4	7·1 6·6	**	**	11
Gathering Grounds	Oct. 6	40.0	2.4	.592	.02	.04	.005	26.8	7·9 7·1	33	11	***
20, Perryfield Street Gathering Grounds	" 12 " 19	39.0	2.1	·592 ·510	.00	·01	·005	24·8 24·2	6.8	"	**	12
56, Marsham Street	., 26	40.0	2.6	:564	:00	·02	:004 :006	25·1 24·2	6.6	**	"	99
Gathering Grounds Union Pl., Union St.	9	42·0 4·15	2.6	:477 :460	·01	.04	.005	24.1	6.9	""	19	11
Gathering Grounds 50, Brewer Street	., 16	42.5	2.4	·921 ·510	·02	·02	·004 ·005	23.6	7·8 6·8	"		**
Gathering Grounds	Dec. 1	40.8	2.3	-823	.01	.01	.005	23.2	6.5	**	"	11
65, Boxley Road Gathering Grounds	15	39.6	2.3	·493 ·516	.02	·03	-004 -004	25·2 24·3	6.5	**	11	**
92, Sandling Road Gathering Grounds	21 29	40.5	2·2 2·1	·855 ·411	·02	.02	·004 .004	24·6 24·5	6.8	"	**	
	Mean results for 1908.	39.76	2:39	-549	-00	-01	-004	24.5	7:1	clear	none	none

TABLE VII.—Cossington Water.

		ds.		as	Amn	nonia.	d in 80° F.	Hardness		n e in	1	
Source of Sample.	Date of Collection.	Total Solids.	Chlorine.	Nitrogen (Free.	Albu- minoid.	Oxygen absorbed i 4 hrs. at 80	Total.	Perman'nt	Colour and appearance 2-ft, tube	Smell.	Phosphoric Acid.
Gathering Grounds	Jan. 7 20 Feb. 3 17 Mar. 2	39·0 38·8 39·6 38·4 44·0	2·3 2·2 2·3 2·7 2·2	·329 ·290 ·246 ·283 ·562	.00 .00 .00 .00	·01 ·01 ·02 ·02 ·04	.006 .005 .006 .005	23·7 23·6 25·2 26·1 23·4	7·0 7·0 5·7 5·8 7·1	clear	none	Very faint
75 75 75 75 75 75 75 75 75 75 75 75 75 7	", 16 ", 30 April 13 "ay 27 May 11 ", 25 June 10 ", 22 July 6 ", 20 Aug. 4 ", 17 ", 31 Sept. 14 Oct. 12 Nov. 9 ", 28 Nov. 9	40·0 34·0 30·0 36·0 39·0 42·0 39·5 39·5 38·0 40·0 38·0 41·0 39·5 41·0 40·0 40·0 40·0 40·0 40·0	2:316222013044633555452221 2:22222222222222222222222222222222	:510 :592 :411 :625 :493 :674 :296 :641 :395 :283 :279 :427 :312 :691 :312 :395 :472 :239 :493	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	·03 ·04 ·01 ·02 ·00 ·02 ·01 ·01 ·01 ·02 ·02 ·02 ·02 ·02 ·02 ·02 ·02 ·04 ·01 ·04 ·04 ·04	·005 ·006 ·006 ·006 ·003 ·004 ·005 ·004 ·005 ·004 ·005 ·004 ·005 ·004 ·004	$\begin{array}{c} 29\cdot0\\ 23\cdot1\\ 24\cdot2\\ 21\cdot0\\ 26\cdot1\\ 24\cdot6\\ 23\cdot9\\ 23\cdot2\\ 22\cdot0\\ 23\cdot7\\ 22\cdot26\cdot3\\ 25\cdot2\\ 22\cdot6\cdot3\\ 25\cdot6\\ 23\cdot7\\ 22\cdot4\cdot2\\ 24\cdot4\\ 24\cdot4\\ \end{array}$	8.5 7.4 7.5 7.0 8.1 7.4 6.9 6.2 6.4 7.6 6.8 6.8 6.9 7.6 5.9 7.1 6.6	"" "" "" "" "" "" "" "" "" "" "" "" ""	"" "" "" "" "" "" "" "" "" "" "" "" ""	tracenon
	Mean results for 1908.	39.4	2.3	·415	.001	.02	•005	25.3	7.3	clear	none	none

TABLE VIII.-Forstal Water.

Source of Sample.	Date of Collection.	Total Solids.	Chlorine.	Nitrogen as Nitrates.	Free.	Albu- minoid.	Oxygen absorbed in 4 hrs. at 80° F.	Total.	Perman'nt ssau	Colour and appearance in 2-ft. tube.	Smell.	Phosphoric Acid.
Pumping Station.	Jan. 13 27 Feb. 11 24 Mar. 9 23 April 6 21 May 4 3 18 June 1 3 29 July 14 3 27 Aug. 10 Sept. 3 Oct. 6 3 Oct. 24 Sept. 3 0 0ct. 6 3 Oct. 29 Dec. 15 3 Oct. 29	$\begin{array}{c} 38.6 \\ 39.6 \\ 38.2 \\ 36.8 \\ 42.0 \\ 48.0 \\ 42.0 \\ 46.0 \\ 41.5 \\ 42.0 \\ 40.5 \\ 41.0 \\ 40.0 \\ 41.5 \\ 41.0 \\ 42.0 \\ 41.1 \\ 41.0 \\ 41.0 \\ 41.0 \\ 41.5 \\ 41.4 \\ 41.2 \\ 41.8 \\ 41.4 \end{array}$	2:9 2:7 2:8 3:0 2:7 3:9 2:2 3:9 2:2 2:8 3:1 2:7 2:8 3:9 2:7 2:8 3:0 2:7 2:8 2:8 2:8 2:8 2:8 2:8 2:8 2:8 2:8 2:8	***.061***.062**.053**.053**.092**.116**.148**.181**.106**.246**.049**.061**.082**.131**.164**.181**.164**.197**.181**.131**.148***.181**.148***.181**.148***.181**.148***.181**.148***.181**.148***.181**.148***.181**.148****.181**.148****.181**.148****.181**.148****.181**.148****.181**.148****.181**.148*****.181**.148*****.181**.148*****.181**.148*****.181**.148******.181**.148******.181**.148*******.181**.148********.181**.148**********	·00 ·00 ·00 ·00 ·00 ·00 ·00 ·00 ·00 ·00	*01 *01 *01 *03 *03 *01 *03 *01 *00 *00 *00 *00 *00 *01 *00 *01 *02 *01 *02 *01 *00 *01	·005 ·004 ·004 ·005 ·007 ·004 ·003 ·006 ·004 ·004 ·007 ·005 ·007 ·005 ·007 ·005 ·004 ·007 ·005 ·007 ·005 ·007 ·005 ·007 ·005 ·006 ·006 ·006 ·006 ·006 ·006 ·006	$\begin{array}{c} 25 \cdot 1 \\ 25 \cdot 7 \\ 25 \cdot 8 \\ 27 \cdot 1 \\ 30 \cdot 1 \\ 32 \cdot 5 \\ 27 \cdot 8 \\ 32 \cdot 6 \\ 27 \cdot 6 \\ 33 \cdot 0 \\ 27 \cdot 5 \\ 28 \cdot 6 \\ 27 \cdot 5 \\ 28 \cdot 6 \\ 31 \cdot 3 \\ 26 \cdot 1 \\ 33 \cdot 8 \\ 30 \cdot 1 \\ 27 \cdot 5 \\ 26 \cdot 2 \\ 27 \cdot 4 \\ 26 \cdot 8 \\ 26 \cdot 7 \\ \end{array}$	$\begin{array}{c} 7.6 \\ 7.2 \\ 6.1 \\ 5.3 \\ 9.8 \\ 10.1 \\ 9.1 \\ 9.2 \\ 9.8 \\ 8.4 \\ 8.5 \\ 8.1 \\ 7.2 \\ 8.9 \\ 7.2 \\ 8.5 \\ 8.5 \\ 8.5 \\ 8.3 \\ 7.3 \\ 7.4 \\ 7.2 \\ \end{array}$	clear	none	none
	Mean results for 1908.	41.7	2.9	.122	.00	•01	-004	28.7	8.3	clear	none	none

TABLE IX.—Cossington and Forstal Water.

		1			Amn	ionia.	fv.	Hon	Imaga	Ë		1
		Solids,		æ	Aiiiii	round.	en bed in at 80° F	-	lness.	e i		0
	Date of Collection.	o	0	fitrogen fitrates.			Oxygen absorbed 4 hrs. at 80		Perman'nt	Colour and appearance 2.ft tube	3	Phosphoric Acid.
Source of Sample.	9.5	O.	Chlorine.	500		4	a Sen		=	LEG		pp
	9.9	7	OI	25	5	20	50 L ×	=	ä	ES t	=	6.
	ola	Total	王	===	Free,	Albu- minoid	H S K	Total.	E	Colour appears	9	100
	80	H	0	ZZ	14	AU	024	Ĕ	P	0 83	Smell.	PF
				-		_			10.0			
88, Grecian Street	Jan. 7	40.0	2.6	.164	.00	.01	.004	25.1	7.7	clear	none	none
2, Fairmeadow	., 13	39.6	2.6	.193	.00	.01	.006	23.8	7:7		110110	1
94. Upper Stone St.	., 20	38.6	2.4	.164	.00	.01	.008	25.1	7.6			11
50, St. Faith Street	. 27	38.8	2.4	.168	.00	.01	.002	24.4	8.8	14	11	
60, Hartnup Street	Feb. 3	38.6	2.4	193	.00	.01	.002	23.9	5.1	***	**	**
20, Mill Street 88, Grecian Street	11	40.0	2.4	.160	.00	.02	.002	24.3	5.2	11	**	11
48.King Edward Rd	24	39.0	2.5	172	.00	:01	*004	24.8	5.4	11	99	- 11
7. Buckland Road		40.0	2.6	·164 ·362	.00	.02	.006	24.9	5.1	"	**	- 11
a Duck and Road	Mar. 2	40.0	2.0	702	.02	.04	:006	24.2	6.3	Very	***	Trac
										slight		-
										ly		
Marine Total Control										tur-		
40, Bower Place	9	36:0	2.3	.279	.03	.03	-006	23.8	0.0	pid.		1
1, Fant Lane	16	45.5	2.4	.312	.00	.01	-003	26.0	8:0	clear	.,	none
29, John Street	23	38.0	2.3	.362	.00	.01	.002	23.4	8.1	319	**	**
36, Grecian Street	30	36.0	2.2	.362	-00	-02	-004	23.5	7.1	"	**	**
19. Charlton Street	April 6	44.0	2.4	.329	.00	.03	.005	26.6	8.8	**	11	19
"Tunstall." Sheals				10000		1747	000	20 0	0.0	11	*11	,
Crescent	13	30.0	2·5 2·7	.230	.00	.01	.007	28.4	7.6			
28, Charlton Street	21	46.0	2.7	.329	.00	.00	.004	24.2	7.1	"	"	**
34. Broadway	27	39.0	2.3	.543	.00	.04	_	26.5	8.7	30.00	**	***
52, St. Faith Street	May 4	37:0	2.5	.315	.00	.02	.003	26.0	9.2	**	**	.,
"Engadine,' Lon.Rd.	11	41.0	2.5	.230	.00	.03	.004	27.0	9.2			
Barming Asylum	., 18	41.0	2.3	*460	.00	.03	.005	27.1	8.7		**	
Rose & Crown Yard 9. Whitehall Place	25	42.0	2.5	.312	.00	.00	.002	27.8	8.1	- 00	**	
Slingswood Cotts	June 1	41.5	2.3	411	.00	.05	.006	26.0	10.3	- 11	11	- 11
120, Upper Fant Rd.	" 10 " 15	40.0	2.0	263	.00	.00	.005	22.5	6.5	*9	,,,	11
20, Thornhill Place	00	40.5	2.5	164	.00	.00	.004	26.5	7.7	.,,	19	**
34. Boxley Road	29	42:0	2·3 2·5	·411	.00	.00	.006	25.2	6.8	19	12	- 11
Quarry Square	July 6	42.0	2.7	.312	.00	.02	.006	26.2	7.5	19	11	**
16, Warwick Place	14	40.0	2.4	216	-00	·02	.006	27.2	7.5	**	44	**
21. Loose Road	20	40.0	2.3	.172	-00	.02	*004	25:4	7.8	**	**	13
32. St. Faith Street	27	39.0	2.5	.172	.00	.02	·004 ·004	25·7 24·5	7.8	11	**	**
36, Charlton Street	Aug. 4	40.0	2.7	-230	.00	.00	.006	28.1	6·4 8·5	11	**	31
78. Peel Street	., 10	38.0	2.4	•460	-00	.01	.004	27.1	7.8	**	11	78
1. Melville Road	17	38.5	2.4	.411	.00	.02	.006	22.5	7.1	**	**	**
15, James Street	., 24	42.0	2.4	.296	.00	.01	.003	28.8	8.1	**	**	**
20. Upper Fant Rd.	., 30	40.0	2.5	.197	.00	-00	.003	26.1	7.5	"	**	**
29. John Street	Sept. 3	39.0	2.5	.205	.00	.00	.005	23.3	6.4	11		***
Corner of Church				1000	11133-00					**	*1	.,
Street & Church Road, Tovil		00.0			10000			Wast and				
21. Florence Road	14	39.0	2.8	246	.00	.00	.007	27.8	$\frac{7 \cdot 2}{7 \cdot 7}$	17	11	
Rose Inn, Mote Rd.	22 28	40.0	2.3	:329	.00	.02	.006	26.8	7.7	**	.,	
9, Waterloo Street		39.0	2.6	246	.00	.01	.005	27.7	7.4	**	**	
71, Dover Street	Oct. 6	40.5	2.4	:329	.02	.03	.006	28.3	8.2	**	**	"
78. Peel Street	. 12	41.0	2.6	·296	.00	.01	.006	27.6	8.1	**	**	**
2. Leonard Terrace	. 26	42.0	2.2	·296 ·205	.00	:02	.004	25.3	7.1	***	**	**
Sanatorium	Nov. 2	41.0	2.8	*362	.00	:00	:007	27:4	7.5	11	-11	*19
4. Gladstone Road	. 9	39.5	2.6	263	-00	.04	:005	24.8	6.7	11	**	**
Western Road	., 16	40.6	2.6	.378	-01	.04	:005	28.2	8:6	**	48	**
13. Hardy Street	. 23	41.2	2.2	.468	.00	.01	·005	23.1	7:4	91	**	**
"Violet Cottage "				200	00	01	000	21 0	6.9	**	**	11
Boxley Road	Dec. 1	40.6	2.4	.312	.00	.01	.004	24.6	6.8			
23, Gladstone Road	., 7	40.8	2.6	-187	.00	-00	.003	27.0	7.3		- 11	**
81, Mote Road	15	40.5	2.5	.279	.00	.01	.003	25.8	7.0	"	**	**
34, Milton Street	,, 21	41.2	2.6	.329	.00	.00	.003	25.9	7.4	**	11	**
Health Departm'nt	29	41.2	2.5	.246	.00	-01	.005	25.8	6.9		**	**
	31				-		7.50			**	**	-11
	Mean)				1				1		1	Variation 1
	results	41.6	2.4	.282	.00	.01	.004	25.7	7.4	oloon	none	men.
	for	1000	7		00	UL	001	Mary 4	1.1	Cicar	none	попе
	1908.											

TABLE X.- Monthly Record of Meteorology.

(Taken at the Borough Surveyor's Office.)

-															
	MHICH .01 OB	11	14	18	16	8	7	12	16	14	11	11	19		157
	BVIZEVIT.	1.34	1:22	2.00	2.29	2.40	1.18	3.16	3.78	06-	1.80	1.02	2.28		22.37
	w.	1	6	9	i.	5	::	C1	2	7	1	00	:		38
	젎	.4	::	::	:	1	1	::	:	:	:	:	:		9
F WINI	S.W.	1	=	10	+	15	7	12	11	16	11	13	10		127
RELATIVE PROPORTION OF WIND	S. E.	œ	::	က	က	1	1	67	:	00	7	63	13		44
PROPO	oć.	. 00	4	4	67	4	7	C1	1	00	7	4	9		44
SLATIVE	N.W.	00	20	_	7	-	11	1	14	00	4	4	67		89
RE	NE	63	:	:	20	က	2	2	27	-	-	00	:		27
	z	80	:	П	7	-	1	-	1	:	:	::	:		15
	Mean of Min.	Degrees.	33	33	38	49	53	26	53	20	46	37	35		42
10	Mean of Max Thermometer	Degrees.	46	46	49	65	89	20	29	61	69	49	41	1	55
lo a	Mean Reading Barometer.	30.05	29.99	30.03	30.08	29.71	29.68	19.62	29.63	29.70	29.88	29.88	29.70		29.82
		:	:	:	:	:	:	:	:	:	:	:	:		:
	Month.		February	March	April	May	June	July	August	September	October	November	December	,	Means