

[Report 1908] / Medical Officer of Health, Portsmouth Borough.

Contributors

Portsmouth (England). Borough Council.

Publication/Creation

1908

Persistent URL

<https://wellcomecollection.org/works/ufcewy6r>

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.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

MAP SHEWING INCIDENCE OF CERTAIN INFECTIOUS DISEASES IN PORTSMOUTH DURING THE YEAR ENDING DECEMBER 31st, 1908.




Scarlet Fever - - Red Dot
 Diphtheria - - - Blue Cross
 Typhoid Fever - - Red Cross

REGISTRATION DISTRICTS.

- No. 1.—Portsmouth Sub-District
 " 2.—Portsea " "
 " 3.—Kingston " "
 " 4.—Landport " "
 " 5.—Southsea " "

MAP OF PORTSMOUTH
 W. H. BARRELL,
 Publisher, Printer, Stationer & Bookbinder,
 101 High Street, PORTSMOUTH.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b29995504>

"SALUS POPULI SUPREMA LEX."



REPORT

ON THE

Health of Portsmouth

FOR THE YEAR 1908

BY

A. MEARNS FRASER,

M.D. (EDIN. UNIV.), D.P.H. (CAMB. UNIV.)

Medical Officer of Health,

Medical Superintendent to the Small Pox Hospital,

and

Medical Officer of Health to the Port of Portsmouth.

INCLUDING

THE REPORTS OF THE

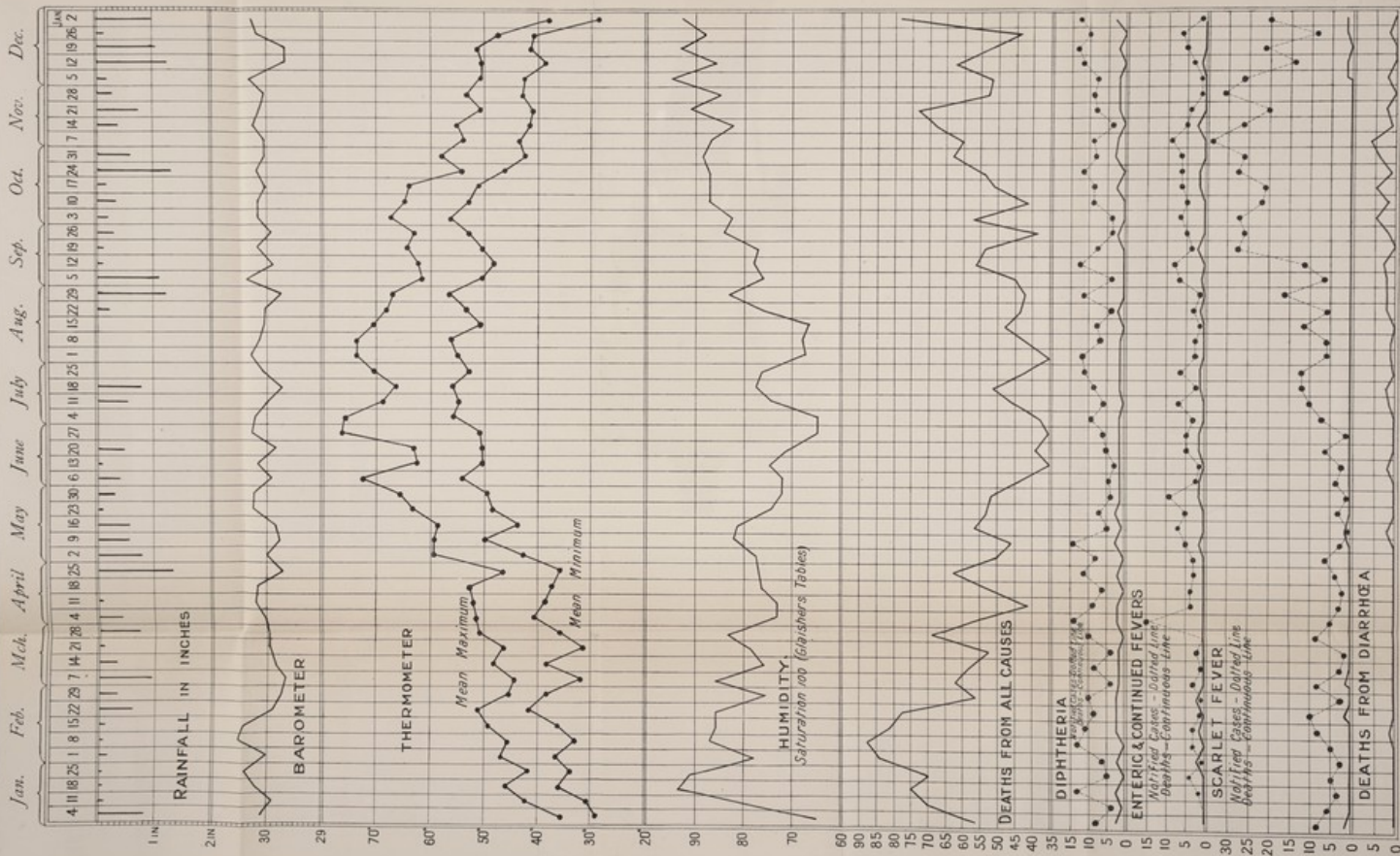
Medical Superintendent, Milton Hospital

and the Public Analyst.



BOROUGH OF PORTSMOUTH.

METEOROLOGICAL AND DISEASE CHART FOR 1908.





Health Committee, 1907=8.

THE WORSHIPFUL THE MAYOR—
COUNCILLOR F. G. FOSTER.

CHAIRMAN :

ALDERMAN SIR GEORGE E. COUZENS, K.L.H., O.R.O.R., J.P.

VICE-CHAIRMAN :

COUNCILLOR B. MURTOUGH, J.P.

ALDERMAN A. LEON EMANUEL, J.P.

ALDERMAN T. E. FULLJAMES.

COUNCILLORS :

J. E. PINK

M. GILL, J.P.

J. VAUX

H. J. C. JONES

J. TIMPSON

H. R. PINK, J.P.

W. J. LIGHT

W. E. DUCK

A. HEMINGWAY

J. MULVANY, L.R.C.P., J.P.

T. BREWIS

J. DUMMER, J.P.

F. T. SHORT

H. PALIN

Officers of the Medical Officer of Health's Dept.

Medical Officer of Health :

A. MEARNS FRASER, M.D., D.P.H.

Chief Inspector of Nuisances :

F. L. BELL, Cert. San. Inst.

Inspector of Diseases of Animals Act :

G. W. MONKCOM.

Chief Clerk : C. W. HEARN.

Inspectors of Nuisances :

H. J. LOVELOCK, Cert. San. Inst.

F. R. LOVETT, Cert. San. Inst.

H. HOLMAN, Cert. San. Inst.

C. W. HALL, Cert. San. Inst.

E. J. G. SINNETT, Cert. San. Inst.

A. F. PARDO, Cert. San. Inst.

Inspector of Workshops and Inspector of Nuisances :

H. G. GRAY, Cert. San. Inst.

Inspector of Drains and Inspector of Nuisances :

W. H. TURNER, Cert. San. Inst.

Inspector under the Sale of Food and Drugs Act and Inspector of Nuisances :

J. S. HOBBS, Cert. San. Inst.

Female Sanitary Inspector : MISS M. MONK, L.O.S., C.M.B.,
Cert. San. Inst.

Assistant Clerks : G. BOWDEN and R. W. HARVEY.

Port Sanitary Inspector : T. MEADES.

Disinfector : A. AYLMER.

Infectious Diseases Hospital.

Medical Superintendent :

J. MCGREGOR, L.R.C.P., L.R.C.S.

Matron : MISS F. PETCHEY.

PUBLIC ANALYST : F. W. F. ARNAUD, F.I.C.

Borough of Portsmouth.

1908.

SUMMARY.

POPULATION (Estimated to middle of 1908) .. 211,493

TOTAL BIRTHS .. 6,110 Rate per 1000 .. 28.4

„ DEATHS .. 2,957 „ „ .. 13.77

DEATHS—Under 1 year .. 607 Deaths under 1 year
to 1000 Births .. 99.3

„ 60 years and upwards .. 1,022 Percentage of Deaths
to total Deaths .. 34.5

„ Principal Zymotic Diseases 205 Death-rate per 1000 0.95

„ Small-pox .. 0 „ „ 0

„ Measles .. 13 „ „ 0.06

„ Scarlet Fever .. 8 „ „ 0.04

„ Diphtheria .. 49 „ „ 0.23

„ Whooping Cough .. 55 „ „ 0.25

„ Fever .. 26 „ „ 0.12

„ Diarrhoea .. 54 „ „ 0.25

„ Violence .. 122 „ „ 0.57

„ Inquest Cases 294 Percentage to total Deaths 9.94

„ Public Institutions 619 „ „ 20.9

„ Uncertified Causes 14 „ „ 0.48

Average Death-rate for 10 years, 1898—1907 .. 16.95

Mean Temperature .. 50.9

Total Rainfall, in inches .. 20.495

ANNUAL REPORT

ON THE

HEALTH OF PORTSMOUTH.

I N presenting what is now my Thirteenth Annual Report on the Health of Portsmouth, I would first draw attention to a Memorandum recently issued by the Medical Officer of the Local Government Board to Medical Officers of Health. This Memorandum states that Annual Reports "are for the information of the Board and of the County Council, as well as of the Council of the District, and that a statement of the local circumstances and a history of local sanitary questions, which may seem superfluous for the latter, may often be needed by the former bodies." This will explain the presence in this Report of some additional matter that is usually omitted.

The Borough of Portsmouth comprises 5,861 acres in extent, and is sub-divided for statistical purposes into the sub-districts of Portsmouth, Portsea, Landport, Kingston, and Southsea. The whole is surrounded by water, and there is only one entrance by road to the town, namely, by the London Road, which is carried by the Portsdown Bridge at the northern end of the town. The oldest parts of the Borough are Portsmouth and Portsea ; these in the past—owing to their being surrounded by moats and fortifications—were very densely populated. Landport and Kingston are of comparative recent creation, and comprise the commercial part of the Borough ; in this area reside also most of the workers in the Dockyard. Southsea, on the southern aspect of the town, is largely residential in character ; its residents are recruited largely from the families of retired officers of the Navy and Army, and also forms the residential quarter of a large number of professional and business men, and is becoming more and more popular as a seaside and winter resort.

The chief industry of Portsmouth is of course the Royal Dockyard ; the number of men employed here daily on an average during the past year was 11,000. The principal

other local industries are the building and brickmaking trade, which employs probably over 6,000 men, brewing and stay-making. The Stay Manufactories are practically the only ones in which women are employed in the Borough, and last year the number of female workers there numbered 2,800. In Portsmouth and Portsea there live a large number of pensioners from the Army and Navy.

The average number of men belonging to the Navy and Army stationed in the Borough and Port during the past year were : Sailors, 20,741 ; Marines, 1,323 ; Soldiers, 2,957.

The Population of the Borough, estimated to the middle of the year, was 211,493, distributed in the five sub-districts as follows : Portsmouth, 6,696 ; Portsea, 15,950 ; Kingston, 83,207 ; Landport, 84,076, and Southsea, 20,564.

These sub-districts may be described roughly as follows :

- (1) PORTSMOUTH, is the old town of Portsmouth proper.
- (2) PORTSEA, is the old town of Portsea, including in its boundaries Victoria Park and the Naval Barracks.
- (3) KINGSTON, comprises most of the Borough north of the railway, with the exception of the Fratton and St. Mary's Wards ; it includes the Mile End, North End, Buckland, Kingston, and Charles Dickens Wards.
- (4) LANDPORT, comprises the following Wards : Fratton, St. Mary's, St. Paul's, Town Hall, Havelock, Highland, and that part of St. Simon's which lies east of Festing Road.
- (5) SOUTHSEA, The southern boundary is the sea-front from the Clarence Pier to Festing Road ; it is bounded on the west by Castle Road, on the north by Elm Grove and Albert Road, and on the east by Festing Road. It includes the Southsea part of the Portsmouth Ward and the western half of St. Simon's Ward.

Generally speaking, the health of Portsmouth, as will be seen later, has been satisfactory during the past year, and has exhibited a marked improvement upon previous years. It is, however, too early to say if this improvement will prove a permanent one, and in all probability the low death-rate recorded is to some extent due to certain meteorological conditions, which were unfavourable to a heavy infantile

mortality rate. It is important that the effect of meteorological conditions should be borne in mind in considering the weight to be attached to vital statistics of a community, otherwise disappointment may be caused in some future years, when owing to adverse meteorological conditions, an anticipated improvement in the death returns may not be able to be recorded.

In referring generally to the circumstances affecting the health of the Borough, I feel constrained to give expression to a matter that has occurred to me frequently during late years. The Corporation of Portsmouth is an exceptionally busy one ; it has during the past few years successfully embarked upon a number of huge trading concerns, namely, Electric Lighting, Electric Tramways, Municipal Telephones, and the South Parade Pier. In addition to this it has recently become also the Local Education Authority of the Borough, and has undertaken further responsibilities in connection with the Technical Institute and Secondary Education. With all this increase of work, necessitating the formation of new departments and new committees, it is inevitable that there must be less time at the disposal of the Council for the consideration of the work of each department. It is inevitable therefore that the working of each of the old-standing departments must receive less time and be less a subject of deliberation than formerly. Moreover, the trading concerns must naturally appeal to business men more than other departments, for they are concerns, the success or failure of which is easily ascertained by means of the yearly balance sheet, and of which the success, both from the point of view of finance and of benefit to the public, is at once appreciated by the ratepayers. I cannot help feeling that under these circumstances there is a danger that the Health Department—which must always be a “ spending ” department, and the result of whose work can never be shown in the shape of a balance sheet, may not receive so large a share of the attention of the Council as it has in the past. I think there is a danger that in the fascination of the working of the trading concerns to which I have referred, the fact may become obscured that the successful guarding and forwarding of health interests of the general public, is, and must remain, far and away the most important of the duties of the Council.

It must not be assumed that I am presuming to suggest neglect on the part of the Council ; any such deduction from my remarks would be utterly unwarranted, and, indeed, I should be one of the first to controvert any imputation of

the neglect of health matters to the Council. I do think, however, that unless the Council resolutely guards against it, there is a danger that the trading concerns, owing to their prominence, may tend in the future, imperceptibly at first, but with increasing force, to occupy more and more of the Council's time at the expense of purely health measures. It is the importance of being alive to this danger, and to prevent such a state of affairs developing in Portsmouth, that is my apology for venturing to call attention to the subject.

BIRTHS.—The total number of Births registered during the year was 6,110, giving a rate of 28.4 per 1,000 living. This is the first time that over 6,000 births have been registered in the Borough during one year. The birth-rate of 28.4 per 1,000 is, with the exception of 1906, when it was 28.71, slightly higher than it has been for any year since 1896. Although there has been a slightly increased birth-rate, it is satisfactory to find that the infantile mortality rate, on the other hand, has been extremely low, so that the natural increase in the population has been much larger than usual.

The births were registered in the different quarters of the year as follows :—

First Quarter, ending March 28th, 1908	1,540 births
Second " " June 27th " "	1,485 "
Third " " Sept. 30th " "	1,496 "
Fourth " " Jan. 2nd, 1909	1,589 "

MARRIAGES.—The total number of Marriages registered during the year was 1,930. This is a decrease of 85 compared with the number for the previous year, and is 82 in excess of the average for the past ten years.

DEATHS.—The total number of Deaths registered in the Borough during the year was only 2,957. This gives the extremely low death-rate of 13.77 per 1,000, which is, I believe, the lowest death-rate that has been registered for this town. The next lowest death-rate was 14.75, which occurred in 1903, and the next lowest that of 1894, which was 15.44.

It is interesting at this point to go back half a century and see the difference between the death-rate of then and now. Taking no exceptional year, but the average of the ten years 1851-1860, it is found that the death-rate for that period was 22.8 per 1,000. The progress of sanitation indicated by these

figures will be more apparent possibly if I point out, that if the same proportion of the population died last year as died during each of the years 1851 to 1860, the number of deaths would have been not 2,957, but 4,921, or nearly 2,000 more.

I may perhaps be pardoned for calling particular attention to this contrast, for the results of the expenditure of health departments are of necessity slow in making their appearance, with a result that, in many towns, money is apt to be rather more grudgingly granted for health reforms than for other projects in which the profits are tangible and immediate. But although the profit on health expenditure cannot be written down exactly in so many pounds, shillings and pence, and results must be patiently waited for, still figures like the above, which show a saving of nearly 2,000 lives a year, have an uncontrovertible effect on the prosperity of a community, and should be steadfastly kept in view when deliberating upon the financial aspects of health measures.

The corrected death-rate of the Borough (corrected for purposes of comparison with other large towns) is 14.16. This, as will be seen from Table IV., places Portsmouth 13th in the list of the 37 great towns of England and Wales, Leyton being first, with a death-rate of 10.69, and Oldham last, with a death-rate of 22.26.

Statistics.

POPULATION.—The population estimated to the middle of 1908 was 211,493.

TABLE I.

Table showing the Population, Marriages, Inhabited Houses, Births and Deaths, for the year 1908, and the ten preceding years.

GROSS NUMBERS.

Year	*Estimated Population	No. of Inhabited Houses	Marriages	Registered Births	Total Number of Deaths		
					Total, all ages	Under 1 year	Under 5 years
1908	211,493	* 44,734	1,930	6,110	2,957	607	825
1907	208,291	43,897	2,015	5,796	3,332	714	1,089
1906	205,118	43,036	2,005	5,870	3,049	761	1,006
1905	201,975	43,059	1,939	5,641	3,345	755	1,179
1904	198,038	41,053	1,969	5,579	3,333	791	1,126
1903	194,960	39,874	1,882	5,431	2,867	620	889
1902	191,909	38,967	1,772	5,284	3,269	800	1,153
1901	188,855	37,983	1,766	5,267	3,367	858	1,199
1900	185,725	38,007	1,711	4,995	3,350	771	1,123
1899	182,576	35,851	1,719	5,000	3,737	986	1,419
1898	179,500	34,967	1,684	4,971	3,048	681	1,036
Average 10 years 1898-07	193,694	39,669	1,848	5,383	3,270	773	1,121

*Revised in accordance with Census Returns, 1901.

NOTES.

- 1.—Population at Census, 1901 : { Males 91,069 ... } 188,133
 { Females 97,064 ... }
- 2.—Area in Acres (including extended area) ... 5,861
- 3.—Average number of Persons in each house at Census ... 5
- 4.—Average number of Persons per Acre at Census ... 37

TABLE II.

Showing Births, Deaths and Meteorology during the four quarters ending 2nd January, 1909.

Quarter	Births	Deaths	The Deaths registered include															Mean Temperature	Rainfall (Inches)
			Deaths of		Deaths from								Inquest Cases	Deaths in Public Institutions	Uncertified Causes of Deaths				
			Infants under 1 year of age	Persons aged 60 years and upwards	Principal Epidemic Diseases	Small-pox	Measles	Scarlet-fever	Diphtheria	Whooping Cough	Fever	Diarrhoea				Violence			
1st Quarter	1540	939	173	366	44	—	7	3	17	7	6	4	35	81	193	6	41.0	4.36	
2nd "	1485	633	115	212	53	—	6	1	13	23	7	3	25	69	125	2	54.0	4.25	
3rd "	1496	581	118	189	53	—	—	—	8	20	7	18	27	61	128	1	61.0	4.69	
4th "	1589	804	201	255	55	—	—	4	11	5	6	29	35	83	173	5	50.0	7.225	
TOTAL	6110	2957	607	1022	205	—	13	8	49	55	26	54	102	294	619	14	Mean 51.1	20.525	

TABLE III.

*Table showing the Annual Birth-rate, Rate of Mortality, and Death-rates among children for the year 1908, and ten preceding years.

Year	Birth-rate per 1000 of the Population	Annual Rate of Mortality living from all causes	Annual Rate of Mortality per 1000 living from 7 Principal Zymotic Diseases	Deaths of Children under 1 year : Percentage to total Deaths	Proportion of Deaths of Children under 1 year per 1000 Registered Births	Deaths of Children under 5 years : Percentage to total Deaths
1908	28.4	13.77	0.95	20.5	99	28.9
1907	27.90	16.02	1.83	21.4	123	32.6
1906	28.71	14.91	1.84	24.9	130	33.0
1905	28.02	16.62	2.65	22.5	134	35.2
1904	28.27	16.88	2.11	23.7	142	33.5
1903	27.95	14.75	1.49	21.6	112	31.0
1902	27.53	17.03	2.35	24.4	151	35.2
1901	27.88	17.82	2.87	25.4	162	35.6
1900	26.89	18.09	2.46	22.9	174	33.4
1899	27.33	20.47	3.53	26.4	197	37.8
1898	26.58	16.98	2.38	22.3	137	34.0
Average of 10 years, 1898-1907	27.70	16.95	2.35	23.5	146	34.1

*Revised in accordance with the Census Returns of 1901.

TABLE IV.—Showing the Population, Birth-rates, Recorded Death-rates, Corrected Death-rates, Zymotic Death-rates, and Deaths under 1 year to 1000 Births in the 37 Large Towns for the year 1908 (53 weeks.)

Name of Town	Population Estimated to middle of 1908	Per 1000 living			ZYMOTIC DEATH-RATE							Deaths of Children under 1 year of age to 1000 Births	
		Birth-rate	Recorded Death-rate	Corrected Death-rate	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhoea		Total of cols. 5-11
Cols.	1	2	3	4	5	6	7	8	9	10	11	12	13
1 LEXYTON ..	125,815	25.8	10.4	10.69	..	0.19	0.14	0.14	0.09	0.03	0.21	0.80	77
2 EAST HAM ..	142,976	24.8	10.3	10.98	..	0.22	0.17	0.45	0.06	0.03	0.34	1.27	110
3 WALTHAMSTOW ..	131,486	26.2	10.5	11.10	..	0.28	0.08	0.35	0.02	0.11	0.34	0.98	106
4 WILESDDEN ..	154,792	26.1	10.5	11.26	..	0.36	0.08	0.08	0.08	0.04	0.34	0.98	113
5 SOUTHAMPTON ..	122,196	26.4	12.9	12.82	..	0.16	0.04	0.13	0.28	0.04	0.52	1.17	113
6 CROYDON ..	157,698	25.4	12.8	13.12	..	0.59	0.04	0.24	0.17	0.03	0.30	1.37	101
7 NORWICH ..	122,841	25.2	14.1	13.46	..	0.01	0.02	0.21	0.20	0.29	0.39	1.12	116
8 TOTTENHAM ..	126,146	30.2	12.4	13.48	..	0.39	0.12	0.17	0.08	0.05	0.40	1.21	96
9 LEICESTER ..	240,172	23.4	12.9	13.92	..	0.69	0.11	0.03	0.13	0.03	0.50	1.49	132
10 BRISTOL ..	372,785	23.1	13.5	13.97	..	0.25	0.02	0.16	0.34	0.02	0.34	1.13	126
11 DERBY ..	127,583	25.9	13.0	14.11	..	0.15	0.01	0.23	0.12	0.04	0.33	0.93	112
12 CARDIFF ..	191,446	26.6	12.9	14.13	..	0.02	0.05	0.11	0.24	0.03	0.64	1.09	126
13 PORTSMOUTH ..	211,493	28.4	13.7	14.16	..	0.06	0.04	0.23	0.26	0.12	0.26	0.97	99
14 BRIGHTON ..	129,967	21.3	14.7	14.48	..	0.17	0.01	0.07	0.14	0.03	0.22	0.64	104
15 LONDON ..	4,795,757	25.4	13.8	14.50	..	0.31	0.11	0.14	0.20	0.04	0.28	1.08	113
16 WEST HAM ..	315,000	28.9	13.8	14.86	..	0.70	0.15	0.17	0.26	0.09	1.00	2.37	129
17 PLYMOUTH ..	122,113	2.22	15.0	14.52	..	0.01	0.02	0.12	0.22	0.08	0.48	0.91	129
18 HALIFAX ..	111,018	19.0	14.1	15.27	..	0.33	0.04	0.11	0.28	0.10	0.16	1.00	101
19 GATESHEAD ..	128,393	30.9	14.9	15.70	..	0.13	0.04	0.19	0.53	0.03	0.98	1.90	149
20 NOTTINGHAM ..	260,449	26.6	15.2	16.01	..	0.11	0.04	0.11	0.23	0.11	0.63	1.23	146
21 BIRMINGHAM ..	558,357	28.4	15.9	16.10	..	0.10	0.13	0.18	0.55	0.09	0.80	1.85	145
22 SOUTH SHIELDS ..	115,535	30.1	15.4	16.40	..	0.27	0.07	0.19	0.18	0.05	0.61	1.40	134
23 HULL ..	271,137	30.2	16.1	16.60	..	0.21	0.01	0.18	0.21	0.08	1.37	2.06	145
24 LEEDS ..	477,107	24.8	15.3	16.78	..	0.37	0.03	0.09	0.28	0.05	0.68	1.50	141
25 BIRKENHEAD ..	119,830	31.5	15.8	16.84	0.01	0.36	0.06	0.10	0.51	0.09	0.77	1.90	136
26 SHEFFIELD ..	463,222	30.7	15.8	17.02	..	0.22	0.08	0.08	0.53	0.05	0.86	1.82	140
27 BRADFORD ..	292,136	20.2	15.5	17.13	..	0.24	0.04	0.14	0.19	0.10	0.65	1.36	143
28 NEWCASTLE ..	277,257	29.7	15.9	17.23	..	0.11	0.03	0.12	0.48	0.05	0.46	1.25	137
29 BOLTON ..	185,358	24.5	15.5	17.41	..	0.02	0.11	0.09	0.42	0.19	0.85	1.68	149
30 BLACKBURN ..	135,961	25.1	15.6	17.75	..	0.12	0.17	0.09	0.21	0.11	0.83	1.53	150
31 SUNDERLAND ..	157,693	33.0	17.7	18.55	..	0.15	0.04	0.17	0.75	0.09	0.15	1.35	147
32 SALFORD ..	239,294	29.6	17.8	19.66	..	0.69	0.27	0.50	0.43	0.16	0.98	3.03	153
33 PRESTON ..	117,799	27.7	17.9	19.69	..	0.81	0.01	0.09	0.16	0.21	0.95	2.23	154
34 RHONDDA ..	133,137	40.3	18.4	20.24	..	0.77	0.05	0.21	0.39	0.16	1.94	3.32	184
35 MANCHESTER ..	649,251	29.2	18.2	20.28	..	0.56	0.14	0.18	0.33	0.41	0.93	2.25	151
36 LIVERPOOL ..	753,203	31.8	19.2	20.54	..	0.34	0.28	0.17	0.46	0.10	0.84	2.19	142
37 OLDHAM ..	142,507	28.0	19.8	22.26	..	0.56	0.19	0.15	0.37	0.08	1.14	2.29	160

TABLE V.—Continued.

CAUSE OF DEATH	AGES										DISTRICTS				Totals			
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea		Kingston	Landport	Southsea
<i>Class I.—Continued.</i>																		
Order 5.—Venereal Diseases.																		
Syphilis ..	10	3	..	1	2	3	1	1	..	1	19	1	1	21
Gonorrhoea, Stricture of Urethra ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	2
Order 6.—Septic Diseases.																		
Erysipelas ..	2	..	1	..	1	..	1	1	..	2	..	..	..	..	2	1	3
Pyæmia, Septicæmia ..	..	..	1	..	1	..	1	1	..	..	..	..	..	..	5	1	6
Puerperal Fever ..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1	2
CLASS II.																		
PARASITIC DISEASES—																		
Thrush ..	2	1	..	..	..	..	..	..	..	..	..	..	2	..	1	..	3
CLASS III.																		
DIETETIC DISEASES—																		
Chronic Alcoholism ..	..	..	..	..	1	2	1	..	1	1	..	..	..	..	3	2	5
Delirium Tremens ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	2
CLASS IV.																		
CONSTITUTIONAL DISEASES—																		
Rheumatic Fever, Rheumatism of Heart ..	..	..	1	2	3	1	1	..	1	2	..	..	..	..	5	3	9
Rheumatism ..	..	..	3	..	1	1	1	..	1	1	..	..	..	..	4	2	9
Gout ..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	2	1	2
Rickets ..	1	4	..	1	6	23	42	21	16	51	19	3	3	8	100	61	5	
Cancer, Malignant Disease ..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	1	3
Tabes Mesenterica ..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	182
Tubercular Meningitis, Hydrocephalus ..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3
Phthisis ..	8	23	5	1	2	63	44	11	7	8	3	..	2	4	23	12	39	
Other forms of Tuberculosis, Scrofula ..	7	8	23	61	65	..	..	..	..	..	..	..	..	17	171	100	390
Purpura, Haemorrhagic ..	6	8	8	3	3	5	..	1	1	..	..	..	1	4	18	12	35
Diathesis ..	1	..	..	1	..	..	1	2	..	..	..	..	..	1	4	..	5
Anæmia, Chlorosis, Leucocythæmia ..	..	..	1	..	2	2	3	3	4	1	..	..	..	..	5	3	9
Glycosuria, Diabetes Mellitus ..	..	..	1	..	1	3	2	..	4	3	..	..	..	..	13	5	20
Other Constitutional Diseases ..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	3	1	4

TABLE V.—Continued

CAUSE OF DEATH	AGES											DISTRICTS					Totals	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Kingston	Landport		Southsea
<i>Class VI.—Continued.</i>																		
Order 5.—Diseases of Digestive System.																		
Dentition ..	8	6	..	..	..	..	..	..	..	..	..	..	..	1	6	7	..	14
Diseases of Stomach ..	18	3	..	..	..	..	..	..	..	..	..	..	..	2	19	14	..	39
Enteritis ..	14	..	..	..	..	5	..	..	..	3	..	..	..	1	8	5	..	14
Obstructive Diseases of Intestines ..	5	..	1	1	..	1	..	..	5	..	..	..	..	..	18	6	3	27
Peritonitis ..	..	2	3	4	6	6	3	..	..	1	..	..	..	1	11	9	4	19
Cirrhosis of Liver ..	..	..	..	..	2	..	1	..	4	1	..	..	1	..	7	1	1	18
Jaundice and other Diseases of Liver ..	6	1	..	1	..	..	1	..	2	3	..	..	..	3	6	1	4	14
Other Diseases of Digestive System ..	9	..	..	..	..	..	1	..	2	..	..	..	..	..	5	7	..	12
Order 6.—Diseases of Lymphatic System (e.g., of Lymphatics and of Spleen) ..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Order 7.—Diseases of Gland-like Organs of Uncertain Use (e.g., Bronchocele, Addison's Disease) ..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	2	1	..	3
Order 8.—Diseases of Urinary System.																		
Nephritis ..	..	1	1	1	4	11	6	8	8	10	3	..	2	5	24	18	4	53
Bright's Disease, Albuminuria ..	..	..	..	1	..	5	8	..	1	5	..	..	2	..	11	7	..	20
Diseases of Bladder or of Prostate ..	..	..	..	..	..	1	4	2	1	6	3	1	..	..	8	6	4	18
Other Diseases of Urinary System ..	1	..	..	..	..	..	1	..	..	1	..	..	..	..	2	1	..	3
Order 9.—Diseases of Reproductive System.																		
(a) Of Organs of Generation :																		
Female Organs ..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	3	..	..	3
(b) Of Parturition ..																		
Puerperal Convulsions ..	..	..	..	2	1	2	..	..	..	..	..	..	..	1	2	2	..	5
Placenta Proevia ..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	1	..	2
Other Accidents of Child-birth ..	..	..	..	1	5	..	..	..	..	..	..	..	..	..	5	4	..	9

SUMMARY OF TABLE V.

Class	DISEASES	Number of Deaths
I.	ZYMOTIC DISEASES—	
	1. Miasmatic Diseases	188
	2. Diarrhoeal Diseases	48
	3. Malarial Diseases	2
	4. Zoogenous Diseases	—
	5. Venereal Diseases	23
	6. Septic Diseases	11
II.	PARASITIC DISEASES	3
III.	DIETETIC DISEASES	7
IV.	CONSTITUTIONAL DISEASES	621
V.	DEVELOPMENTAL DISEASES	436
VI.	LOCAL DISEASES—	
	1. Diseases of the Nervous System	325
	2. " Organs of Special Sense	2
	3. " Circulatory System	361
	4. " Respiratory System	408
	5. " Digestive System	157
	6. " Lymphatic System	2
	7. " Gland-like Organs of Uncertain Use	3
	8. " Urinary System	94
	9. " Reproductive System—	
	(a) Organs of Generation	3
	(b) Parturition	16
	10. " Bones and Joints	10
	11. " Integumentary System	8
VII.	VIOLENCE—	
	1. Accidents or Negligence	92
	2. Homicide	—
	3. Suicide	26
VIII.	ILL-DEFINED OR NOT SPECIFIED CAUSES ..	111

TABLE VI.
Deaths Registered at several groups of ages from different classes of Diseases during Quarter ending March 28th, 1908.

CAUSE OF DEATH	AGES											DISTRICTS					Totals	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Kingston	Landport		Southsea
Class I.—ZYMOTIC DISEASES—																		
Order 1.—Miasmatic Diseases.																		
Measles ..	3	4	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	7
Scarlet Fever ..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	2	1	..	3
Whooping Cough ..	4	3	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	7
Diphtheria ..	..	6	11	..	..	..	..	..	..	..	..	..	..	..	14	3	..	17
Enteric or Typhoid Fever ..	..	..	..	3	2	1	..	..	..	..	..	..	..	2	3	1	..	6
Other Miasmatic Diseases (Influenza) ..	2	3	..	..	..	4	4	..	4	3	5	1	..	2	13	9	2	26
Order 2.—Diarrhoeal Diseases.																		
Diarrhoea, Dysentery ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Order 3.—Venereal Diseases.																		
Syphilis ..	5	..	..	..	..	1	..	1	..	..	..	..	..	1	5	1	..	7
Gonorrhoea, Stricture of Urethra ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1
Order 4.—Septic Diseases.																		
Erysipelas ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Pyæmia, Septicæmia ..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2
Puerperal Fever ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Class II.—PARASITIC DISEASES																		
III.—DIETETIC DISEASES	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
IV.—CONSTITUTIONAL DISEASES	11	16	12	21	25	33	29	10	11	18	4	1	3	15	100	67	6	191
V.—DEVELOPMENTAL DISEASES	39	1	..	..	..	..	..	..	1	21	61	40	3	3	83	63	11	163
VI.—LOCAL DISEASES	74	18	11	9	23	40	43	39	40	87	48	10	8	25	234	144	31	442
VII.—DEATHS FROM VIOLENCE	10	3	3	..	2	4	5	..	..	3	4	2	1	1	25	9	..	36
VIII.—NOT SPECIFIED OR ILL-DEFINED ..	23	2	..	..	..	..	..	..	..	..	1	..	1	1	10	14	..	26
TOTALS	173	59	38	33	52	84	82	52	57	132	123	54	17	50	502	318	52	939

TABLE VII.

Deaths Registered at several groups of Ages from different classes of Diseases during Quarter ending June 27th, 1908.

CAUSE OF DEATH	AGES										DISTRICTS					Totals
											Portsmouth	Portsea	Kingsston	Landport	Southsea	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over				
Class I.—ZYMOTIC DISEASES— Order 1.—Miasmatic Diseases. Measles .. Scarlet Fever .. Whooping Cough .. Diphtheria .. Enteric or Typhoid Fever .. Other Miasmatic Diseases (Influenza) ..	2 .. 7	2 1 16 6 2 2 1	2 7 1 ..	.. .. .. .. 2 ..	.. .. .. .. .. ..	.. .. .. .. 2 1	.. .. .. .. .. 1	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. 1	3 1 9 8 7 .. 2	3 10 5 .. 1	.. .. .. .. .. 1	6 23 13 7 4
Order 2.—Diarrhoeal Diseases. Diarrhoea, Dysentery ..	..	..	..	1	..	..	1	..	..	..	..	..	2	..	..	2
Order 5.—Venereal Diseases. Syphilis ..	2	1	..	1	1	1	..	..	..	..	..	..	6	..	..	6
Order 6.—Septic Diseases. Pyæmia, Septicæmia ..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
II.—PARASITIC DISEASES III.—DIETETIC DISEASES IV.—CONSTITUTIONAL DISEASES V.—DEVELOPMENTAL DISEASES VI.—LOCAL DISEASES VII.—DEATHS FROM VIOLENCE VIII.—DEATHS FROM ILL-DEFINED OR NOT SPECIFIED CAUSES ..	.. .. .. .. .. .. ..	.. .. 11 .. 22 2 21	.. .. 18 .. 8 .. ..	.. .. 11 .. 11 1	.. 1 16 .. 15 3	1 1 24 .. 33 3	.. .. 21 .. 25 1	.. .. 6 29 3	.. .. 4 .. 33 5	1 1 18 12 46 2	.. .. 8 23 33 1	.. .. 1 18 6 ..	1 2 65 33 158 8 9	.. .. 50 38 104 6 12	1 1 7 5 25 3 ..	2 3 132 81 309 23 21
TOTALS	115	64	26	26	38	65	48	38	42	79	66	25	314	229	42	633

TABLE VIII.
Deaths Registered at several groups of Ages from different classes of Diseases during Quarter ending October 3rd, 1908.

CAUSE OF DEATH	AGES										DISTRICTS					Totals		
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Kingsston		Landport	Southsea
Class																		
I.—ZYMOTIC DISEASES—																		
Order 1.—Miasmatic Diseases.																		
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	12	8	..	..	..	..	..	..	..	..	..	..	..	2	10	8	..	20
Whooping Cough ..	..	2	6	..	..	..	..	..	..	..	..	..	..	..	7	1	..	8
Diphtheria ..	..	..	2	2	..	1	..	..	..	..	..	..	..	..	5	2	..	7
Enteric or Typhoid Fever ..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Other Miasmatic Diseases (Influenza) ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Order 2.—Diarrhoeal Diseases.																		
Diarrhoea, Dysentery ..	9	4	..	..	..	1	..	..	1	..	..	..	1	5	5	4	..	15
Order 3.—Malarial Diseases.																		
Remittent Fever ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Order 5.—Venereal Diseases.																		
Syphilis ..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	3	..	..	3
Order 6.—Septic Diseases.																		
Erysipelas ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Pyæmia, Septicæmia ..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	2
Puerperal Fever ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
II.—PARASITIC DISEASES	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
III.—DIETETIC DISEASES	..	..	..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2
IV.—CONSTITUTIONAL DISEASES	3	7	9	20	19	13	20	8	10	5	1	1	..	3	81	44	3	131
V.—DEVELOPMENTAL DISEASES	30	..	..	..	..	..	..	..	..	23	11	11	1	2	46	29	3	81
VI.—LOCAL DISEASES	39	21	4	7	16	27	37	11	25	27	9	9	6	13	131	87	26	263
VII.—DEATHS FROM VIOLENCE	2	4	2	2	2	6	2	..	1	..	..	..	2	1	15	3	1	22
VIII.—NOT SPECIFIED OR ILL-DEFINED ..	21	1	..	..	..	..	..	..	..	..	..	..	5	2	6	9	..	22
TOTALS	118	49	24	31	41	48	62	19	36	77	55	21	15	28	314	191	33	581

TABLE IX.
Deaths Registered at several groups of ages from different classes or Diseases during Quarter ending January 2nd, 1909.

CAUSE OF DEATH	AGES											DISTRICTS					Totals	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Kingston	Landport		Southsea
Class I.—ZYMOTIC DISEASES—																		
Order 1.—Miasmatic Diseases.																		
Measles ..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
Scarlet Fever ..	..	2	1	..	..	..	..	..	..	..	..	..	1	..	3	..	..	4
Whooping Cough ..	5	..	7	..	..	..	..	..	..	..	..	..	..	2	1	2	..	5
Diphtheria ..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	10	1	..	11
Enteric or Typhoid Fever ..	..	..	1	..	3	1	1	..	..	..	..	..	..	1	5	..	..	6
Other Miasmatic Diseases (Influenza) ..	..	..	..	..	..	1	..	..	1	1	1	1	..	..	1	2	2	5
Order 2.—Diarrhoeal Diseases.																		
Diarrhoea, Dysentery ..	23	5	1	..	1	..	..	..	..	..	..	..	..	..	22	8	..	30
Order 4.—Malarial Diseases.																		
Remittent Fever ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Order 5.—Venereal Diseases.																		
Syphilis ..	3	1	..	..	..	1	..	..	..	1	..	..	..	..	5	1	..	5
Gonorrhoea, Stricture of Urethra ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Order 6.—Septic Diseases.																		
Erysipelas ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1
Pyæmia, Septicæmia ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1
II.—PARASITIC DISEASES	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
III.—DIETETIC DISEASES	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
IV.—CONSTITUTIONAL DISEASES	7	10	13	18	24	28	24	12	6	19	5	1	..	9	105	42	11	167
V.—DEVELOPMENTAL DISEASES	32	1	..	..	..	..	..	1	2	21	41	13	..	2	63	42	4	111
VI.—LOCAL DISEASES	82	15	7	9	25	36	30	19	35	69	38	7	6	27	180	131	32	376
VII.—DEATHS FROM VIOLENCE	10	2	..	2	2	4	7	1	5	3	..	1	2	5	19	10	1	37
VIII.—NOT SPECIFIED OR ILL-DEFINED ..	38	1	..	..	..	..	..	..	..	1	..	..	1	5	18	14	2	40
TOTALS	201	47	32	28	56	72	67	42	40	116	85	23	11	51	436	254	53	804

TABLE X.

Table showing the Numbers and Death-rates per 1000 of Population from the Seven Principal Zymotic Diseases, from Lung Diseases (excluding Phthisis), from Phthisis, and from all causes, during each Quarter and for the whole year 1908.

Quarter ending	The Seven Principal Zymotic Diseases*		Lung Diseases (excepting Phthisis†)		Phthisis		From all Causes	
	No.	Rate per 1000	No.	Rate per 1000	No.	Rate per 1000	No.	Rate per 1000
March 28th, 1908 ..	44	0·83	155	2·93	97	1·84	939	17·8
June 27th, 1908 ..	53	1·00	93	2·10	60	1·14	633	12·0
Sept. 30th, 1908 ..	53	1·00	37	0·70	64	1·21	581	11·0
Jan. 2nd, 1909 ..	55	1·01	117	2·18	79	1·46	804	14·9
THE YEAR 1908 ..	205	0·95	402	1·36	300	1·39	2957	13·7

*Includes Small-pox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Enteric or Typhoid Fever, and Diarrhoea.

† Includes Emphysema, Asthma, Bronchitis, Pneumonia, Pleurisy, and other Diseases of the Respiratory System.

Infectious Diseases.—During the past year there have been exceptionally few deaths from infectious diseases. The total number, including all deaths registered from diarrhoea, amounted only to 200. On referring to Table XII. it will be seen that back to 1861, which is as far as our records exist, in no year has the number of deaths from infectious diseases been so small. The death-rate from these diseases (which include small-pox, measles, scarlet-fever, diphtheria, whooping cough, typhoid fever, fever and diarrhoea) was for last year only 0.94 per thousand persons living. During the previous ten years, 1898-1907, the death-rate from the same diseases was 2.34 per 1,000. This means that if no improvement had been made, and if infectious diseases had claimed the same number of victims as in the previous decade, the deaths instead of numbering only 200 would have amounted to 494.

The three most prevalent infectious diseases, scarlet fever, typhoid or enteric fever, and diphtheria, are reported upon as usual under separate headings, and I would like to draw attention to an addition that this year I have made to the tables accompanying my remarks, namely, Tables XV., XVI., and XVII. I have worked out and added the *attack-rate per 100,000 population* of each of these diseases during the past 25 years. The advantage of these figures is that they show at once the proportionate prevalence of each disease during each of these years and afford a ready opportunity for the comparison of any one year with any other year, or with the average for the 25 years.

The method of procedure in dealing with infectious diseases is as follows: As soon as a medical practitioner is aware of the presence of a case of any of the following infectious diseases, namely, small-pox, cholera, diphtheria, membranous croup, erysipelas, scarlet fever, epidemic cerebro-spinal meningitis, and the fevers known by any of the following names—typhus, typhoid, enteric, relapsing, continued or puerperal, he is bound at once to notify the Medical Officer of Health of the name and address of the patient so suffering. Immediately on receipt of this notification a sanitary inspector is sent to ascertain if possible how the infection has been conveyed, to examine the premises for the presence of any insanitary conditions likely to promote or conduce to infectious disease, to caution the person having charge of the patient as to the precautions to be taken to avoid the spread of infection, and to make arrangements for the removal to the Infectious Diseases Hospital of such cases as it is deemed

advisable to remove. This is followed by the leaving of suitable disinfectants, accompanied with instructions how these should be used to minimise any risk of the spread of the disease ; and lastly, at the conclusion of the illness, the room occupied by the patient, together with the clothing and all other articles used by him are disinfected by means of formalin gas, the bedding being removed and disinfected in the steam disinfectant at the Hospital.

For the better isolation of cases of infectious disease, two hospitals are provided, the Milton Hospital for cases of scarlet fever, diphtheria, and typhoid fever, and the Locks Hospital, at the Locks, Milton, for cases of small-pox—the latter is also employed as the Port Sanitary Hospital. The Milton Hospital contains accommodation for 120 patients and the Locks Hospital for 10 patients. At ordinary times this accommodation has proved sufficient for the needs of the Borough, but at times, owing to the prevalence of scarlet fever, it has been found impossible to admit forthwith all the patients suffering from this disease who desired admittance. I refer to this matter again under the head of scarlet fever.

One important institution that is needed in this Borough to complete the machinery for dealing with infectious diseases, is a temporary shelter for persons who are compelled to leave their dwelling in cases when it is necessary to shut up for 24 hours and disinfect the whole of a house occupied by a family. I have reported several times previously on the necessity for such a shelter, but up to the present, when it has been necessary to disinfect a whole dwelling-house, accommodation has been found for the persons displaced in an empty ward at the Milton Hospital ; this, however, can hardly be regarded as a satisfactory arrangement, as at some time when needed the Hospital may be so full as not to permit of a ward being available for this purpose.

Such a shelter might be particularly useful in helping to prevent the spread of tuberculosis, or consumption. Under the Tuberculosis Regulations just issued (December, 1908), the Medical Officer of any Poor Law Institution is obliged, within 48 hours of his becoming aware that a patient admitted to that institution is suffering from pulmonary tuberculosis, to notify the Medical Officer of Health of the fact and to forward the address at which the patient has been residing, before being admitted to the Poor Law Institution. In many such cases it can be readily understood, that, owing to the infectiousness of tuberculosis,

it would be extremely desirable in the interests of the other inmates of the house to have that house thoroughly disinfected. This, however, in the majority of cases is not practicable unless some temporary shelter be provided for the remaining inmates. In view therefore of the increased potential utility of a shelter, I trust the Sanitary Authority may now re-consider their former decision, and that during the coming year adequate steps for the provision of a shelter may be adopted. The Act dealing with the provision of shelter is the Infectious Disease (Prevention) Act, 1890, which has been adopted in this Borough, and of which Section 15 reads as follows: "The local authority shall from time to time provide, free of charge, temporary shelter or house accommodation, with any necessary attendants, for the members of any family in which any infectious disease has appeared, who have been compelled to leave their dwellings for the purpose of enabling such dwellings to be disinfected by the local authority."

Small-pox.—For the second year in succession there has been no case of Small-pox notified in the Borough.

I append a table giving the Vaccination returns for the last half-year and the previous ten years. It will be noticed there is a decided increase during the past year and a half of children who have not been vaccinated, owing to certificates of conscientious objection. In 1907 the total number was 149, and in the first six months of 1908 the number was 148. Up to the present, however, this is a well vaccinated town, and I sincerely hope for the sake of its inhabitants that it will continue to remain so. The transference of the administration of the Vaccination Act from the Guardians to the Local Sanitary Authority has not yet been effected, but it is a reform, which, for reasons I have mentioned previously, is eminently desirable.

TABLE XII.

VACCINATION RETURNS—1st January to 30th June, 1908.

Registration Sub-Districts comprised in the Vaccination Officer's District	Number of Births returned in the Birth List Sheets as registered from 1st January to 30th June, 1908	Number of these Births duly entered by 31st Jan., 1908 in Columns 1, 2, 4 and 5, of the Vaccination Register Birth List Sheets, viz.:					Number of these Births which on 31st January, 1908, remained unentered in the Vaccination Register on account (as shown by Report Book) of				Number of these Births remaining on 31st January, 1908, neither duly entered in the Vaccination Register (columns 3, 4, 5, 6 & 7 of this Return) nor temporarily accounted for in the Report Book (columns 8, 9 and 10 of this Return)
		Col. 1 Success- fully Vaccin- ated	Col. 2		Col. 4 Number in respect of whom Certifi- cates of Con- scientious Objection have been received	Col. 5 Dead Unvac- cinated	Postpone- ment by Medical Certificate	Removal to Districts the Vaccination Officer of which has been duly appraised	Removal to places un- known, or which cannot be reached; and cases not having been found		
			Insuscep- tible of Vaccin- ation	Had Small- Pox							
1	2	3	4	5	6	7	8	9	10	11	
1. North End and Buckland	945	793	9	..	60	53	18	6	4	2	
2. Kingston and East Southsea	776	644	6	..	35	61	13	10	6	1	
3. Portsea and Landport	778	643	..	..	25	76	20	7	5	2
4. Portsmouth and Mid-Southsea	524	441	2	..	28	34	9	7	2	1	
Totals	3023	2521	17	..	148	224	60	30	17	6	
VACCINATION OF CHILDREN whose Births were registered in this District from Jan. 1st to Dec. 31st, 1907, inclusive.											
1. North End and Buckland	1775	1547	3	..	68	127	13	14	3	..	
2. Kingston and East Southsea	1629	1420	10	..	35	125	8	21	10	..	
3. Portsea and Landport	1447	1229	7	..	20	148	14	20	7	2	
4. Portsmouth and Mid-Southsea	1012	873	..	..	26	95	5	8	5	..
Totals	5863	5069	20	..	149	495	40	63	25	2	

TABLE XIII.

VACCINATION RETURNS FOR PAST TEN YEARS.

Year	No. of Births returned in birth sheets so registered from 1st Jan. to 31st Dec.	Successfully Vaccinated	Insusceptible to Vaccination	Had Small-pox	Dead Unvaccinated	Postponement by Medical Certificate	Removed to Districts the Vacc. Officer of which has been apprised	Removed to places to which unknown	No. of these births remaining	No. in respect of which certificates of conscientious objections have been received
1898	4973	4243	22	..	518	32	46	26	10	61
1899	4981	4171	37	..	645	18	36	21	7	23
1900	5036	4385	60	..	521	26	27	20	4	37
1901	5287	4564	16	..	587	14	38	18	2	41
1902	5192	4509	31	..	547	26	29	19	..	31
1903	5446	4831	12	..	471	23	35	24	..	50
1904	5609	4916	23	..	556	28	23	17	1	45
1905	5637	5015	15	..	477	25	35	26	..	44
1906	5891	5117	35	..	552	43	47	28	2	67
1907	5863	5069	20	..	495	40	63	25	2	149
1908 (to June)	302	2521	17	..	..	60	30	17	6	143

Scarlet Fever.—During the first part of the year the Borough was comparatively free from this disease, but after the opening of the schools in September it became rather prevalent. The total number of cases notified during the year amounted to 597, and of these 390 occurred during the last five months. It will be noticed in Table XV. that the average number of cases notified in the past 25 years was 329 per 100,000 ; last year the total of 597 gives an attack-rate well under this, namely, 282 per 100,000. The disease, however, was more prevalent than in the two previous years, and I believe was spread largely through the agency of the public elementary schools. Drayton Road School was markedly affected, and this school was disinfected throughout, also the drains on being examined and found defective, were put in order.

The type of disease was unusually mild in character ; only eight deaths occurred, of which five were amongst children under 5 years of age. This gives a death-rate of 1.34 per 100 cases notified, the average death-rate for the previous 25 years being 2.56 per cent.

343, or 57 per cent., of the cases were removed and treated in the Milton Infectious Diseases Hospital ; of these, as will be seen from the Superintendent's Report, 23 suffered from nasal discharge, 18 from ear discharge, 25 from enlarged glands and 10 from kidney disease. 13 of the cases with nasal discharge were found on bacteriological examination to be suffering from diphtheria.

The unusually large number of cases notified during the latter half of the year strained the scarlet fever accommodation at the Hospital to its utmost, and for about a week we were obliged to keep several cases waiting a day or two before they could be admitted. The stringent regulations in force at H.M. Dockyard were responsible for a number of cases being admitted to the Hospital who would otherwise have been nursed at home. According to these regulations no man is allowed to work at the Dockyard if there is in his house a case of scarlet fever or diphtheria. We therefore always endeavoured to make room at the Hospital for the children belonging to the family of any workers in the Dockyard, as otherwise the man would lose his work and pay. It has always seemed to me that this regulation might, in the interests both of the Admiralty and the dockyardmen, be relaxed. It is, in my opinion, very unlikely that any man working in the shops or the open-air in the Dockyard would convey the infection of scarlet fever or diphtheria to others because there happened to be a case of one of these diseases in his home.

Sanitary defects were found in 129, or 21.6 per cent., of the premises on which cases of scarlet fever occurred.

TABLE XV.

Showing the number of cases of SCARLET FEVER notified, the number of Deaths, and the percentage of Deaths to cases notified for the years 1884 to 1908.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884	266	194	9	3.38
1885	314	224	5	1.59
1886	343	239	18	5.24
1887	647	441	26	4.02
1888	465	310	12	2.58
1889	728	475	11	1.51
1890	573	366	19	3.31
1891	326	203	9	2.76
1892	1023	630	18	1.76
1893	1176	712	32	2.73
1894	458	273	14	3.06
1895	311	182	7	2.25
1896	524	302	19	3.62
1897	699	396	11	1.57
1898	710	395	27	3.80
1899	578	316	22	3.80
1900	348	187	11	3.16
1901	452	239	15	3.31
1902	603	314	14	2.32
1903	1167	599	17	1.46
1904	726	367	22	3.03
1905	530	262	11	2.07
1906	383	186	3	0.80
1907	282	135	4	1.42
1908	597	282	8	1.34
Total (24 years)	14,229	329	364	2.56

Table showing the number of cases of SCARLET FEVER admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to number of cases of Scarlet Fever admitted for the years 1884 to 1908.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884	13	..	..
1885	16	..	..
1886	29	..	..
1887	56	1	1.78
1888	120	1	0.88
1889	278	1	0.36
1890	384	11	2.86
1891	180	3	1.66
1892	532	6	1.12
1893	503	6	1.19
1894	238	8	3.36
1895	177	2	1.13
1896	352	11	3.15
1897	413	9	2.17
1898	436	23	5.27
1899	333	6	1.80
1900	198	6	3.03
1901	270	6	2.20
1902	339	6	1.77
1903	572	5	0.87
1904	340	8	2.38
1905	274	4	1.44
1906	243	2	0.82
1907	202	5	2.48
1908	343	4	1.17
Total (25 years)	6,841	134	1.96

Diphtheria.—There were 434 cases of diphtheria notified during the year; these were distributed pretty equally throughout the twelve months. 49 case proved fatal, giving a mortality of 11.28 per 100 cases, and all the 49 cases occurred amongst children under the age of 15.

The last ten years have seen a considerable increase in the number of cases of diphtheria in the Borough, the attack-rate has more than doubled during the last ten years that of the previous 15 years. At the same time, however, probably solely due to the use of antitoxin, the mortality has fallen in the same periods from 20.1 to 14.6 deaths per 100 persons attacked. I feel convinced that the spread of diphtheria is largely due to the congregating together of children in the public elementary schools. Much closer contact is probably necessary for the spread of diphtheria compared with say, scarlet fever, small-pox, or measles, and I think it probable that at school the vehicles of infection are often found in drinking cups, pencils and slates, etc. I have frequently found in investigating cases of diphtheria amongst children, that one case in a school is often followed by one or two more of children who have been sitting next the first child attacked.

Of the cases notified, 284, or 65 per cent., were removed and treated at Milton Hospital. As usual, there was a slightly greater proportion of recoveries amongst those cases treated at the Hospital compared with those treated at home.

Sanitary defects were found upon 98 or 22.5 per cent. of the premises upon which cases of diphtheria occurred.

TABLE XVI.

Table showing the number of cases of DIPHTHERIA notified, the number of Deaths, and the percentage of Deaths to cases notified, for the years 1884 to 1908.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884 ..	174	127	41	23.44
1885 ..	173	123	42	24.25
1886 ..	232	161	55	26.72
1887 ..	260	175	47	19.08
1888 ..	128	86	17	13.28
1889 ..	126	82	33	26.19
1890 ..	212	135	47	22.69
1891 ..	140	87	23	16.42
1892 ..	121	74	26	21.48
1893 ..	140	84	29	21.48
1894 ..	139	82	34	24.46
1895 ..	124	72	18	14.51
1896 ..	124	71	20	16.12
1897 ..	148	83	22	15.07
1898 ..	283	157	54	19.08
1899 ..	566	310	120	21.20
1900 ..	568	305	104	18.30
1901 ..	454	240	70	15.41
1902 ..	495	257	62	12.52
1903 ..	633	325	75	11.84
1904 ..	601	303	71	11.81
1905 ..	457	226	69	15.10
1906 ..	430	209	60	13.95
1907 ..	423	203	61	14.89
1908 ..	434	205	49	11.28
Total (25 years)	7,585	167	1,249	16.46

Table showing the number of cases of DIPHTHERIA admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to cases of Diphtheria admitted, for the years 1884 to 1908.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884 ..	4	1	25.00
1885 ..	6	..	..
1886 ..	11	1	9.09
1887 ..	27	8	23.70
1888 ..	23	..	..
1889 ..	18	..	..
1890 ..	64	18	28.12
1891 ..	51	4	7.84
1892 ..	27	6	22.22
1893 ..	12	4	33.33
1894 ..	38	8	21.05
1895 ..	46	5	10.87
1896 ..	41	4	9.80
1897 ..	37	3	8.11
1898 ..	118	19	16.10
1899 ..	225	27	11.90
1900 ..	211	28	13.27
1901 ..	170	24	14.11
1902 ..	197	23	11.67
1903 ..	211	14	6.63
1904 ..	220	23	10.45
1905 ..	198	24	12.12
1906 ..	239	35	14.64
1907 ..	235	28	11.91
1908 ..	284	23	8.10
Total (25 years) ..	2,713	330	Mean 12.16

Enteric or Typhoid Fever.—Of this disease 207 cases were notified during the year, and out of these 26, or 12 per cent., proved fatal. During the last six years there have been considerably fewer cases of enteric than in former years. The attack rate last year was 98 per 100,000 population; this is one of the lowest on record, and has only been surpassed in 1905 and 1906, when it was 81 and 71 respectively.

I must again call attention to the danger of eating shell-fish collected from polluted areas. Out of the cases that occurred in this town last year, 47, or 23 per cent., were, I believe, attributable to this practice. The principal shell-fish suspected were, in 28 cases cockles, in 5 cases butterfish, and in 5 cases oysters. A large proportion of the cockles that are hawked in the town are collected from the sewage-polluted mud in the neighbourhood; the ingestion of these must inevitably give rise to enteric fever in a certain proportion of those who eat them. No oysters, cockles, butterfish, mussels, or other similar shell-fish picked up off the mud in the neighbourhood of a large town can be eaten without risking an attack of enteric. Even if enteric does not supervene, violent internal derangement, accompanied by sickness, colic, diarrhoea, and severe prostration, is likely to result.

The prevention of enteric fever, arising from eating shell-fish gathered from polluted sources, is an extremely difficult matter for local authorities to deal with under the existing lack of legislation governing the subject. In this town, for instance, the public have been warned time and again of the danger, yet year after year, on making enquiries, I find that a large percentage of the cases have almost certainly arisen from this source. Take for instance the mud bank off Fort Cumberland. This bank is within three hundred yards of the main sewage outfall of the Borough; it is also a favourite hunting ground for mussels and cockles. Many people have already contracted enteric fever, and a number have lost their lives from eating shell-fish collected here. Now public notices have been issued; attention has been drawn to it in my Annual Reports; I have published letters in the local press, pointing out the danger, yet in spite of all, shell-fish are still collected from there, and I am perfectly certain that during this next year I shall find certain of the inhabitants of Portsmouth have contracted enteric fever from eating shell-fish gathered off this very bank. And again, very possibly, amongst this number some will lose their lives.

As I mentioned in my last Annual Report, I believe the best method of procedure would be the adoption of legislation

making it illegal, under a penalty sufficiently heavy to be deterrent, to gather shell-fish from polluted areas. I think legislation might be enacted on the following lines. It should be the duty of any Medical Officer of Health to report to the Local Government Board, whenever he has reason to suspect that cases of illness in his district have been caused by eating shell-fish from polluted sources, and to notify at the same time the place from which the shell-fish have been gathered. It should then be the duty of the Local Government Board, in conjunction with the Board of Agriculture and Fisheries, if deemed expedient, to send a qualified inspector to visit the locality, and if satisfied of the correctness of the Medical Officer's report on the subject, and that danger is likely to arise from eating shell-fish gathered from the locality, to issue an order making it illegal, under penalty, to gather any shell-fish from that place. It is possible that the services of the Coastguard Officers might be employed in giving local authorities notice of any infringement of this order, as in many places, unless a sanitary inspector were specially detailed for the duty, it would be impossible for the local authority to ensure compliance with the order. This and other matters of detail would doubtless be taken into consideration in drawing up such an Act as I have indicated, and I believe a short Act dealing with the subject in this manner would present little difficulty, either in drafting or in administration. To prevent undue hardship, it should contain a clause providing for a notice to be affixed at some suitable spot near the polluted area, warning the public of the penalties that would be incurred by gathering shell-fish from there, and due notice should also be given in the local newspapers. Such an Act I confidently believe would have in a short time considerable effect on the prevalence of enteric fever and should in the end also prove of advantage to the shell-fish trade. I am satisfied that there is no method of procedure that can be relied upon for the effective prevention of diseases arising from the eating of polluted shell-fish, than that of absolute prohibition of their being gathered.

Most other articles of food present some signs by which a careful person can tell whether they are wholesome or not, but, once shell-fish have been collected, there is nothing in their appearance to indicate the dangerous qualities of which they may be possessed. Shell-fish therefore are eminently articles of diet against injury from which the public is entitled to protective legislation.

The premises on which cases of enteric fever occurred were in every case examined for sanitary defects, and these were discovered and remedied in 56, or 22 per cent.

TABLE XVII.

Table showing the number of cases of TYPHOID FEVER notified, the number of Deaths, and the percentage of Deaths to cases notified, for the years 1884 to 1908.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884	539	392	58	10.76
1885	762	542	93	11.48
1886	1249	870	124	9.90
1887	554	378	53	9.52
1888	313	208	27	8.60
1889	317	207	32	10.01
1890	457	292	50	10.94
1891	265	165	33	12.40
1892	330	203	38	11.51
1893	361	218	54	14.96
1894	201	119	25	12.44
1895	258	151	33	12.74
1896	235	135	27	11.49
1897	320	181	42	13.08
1898	305	170	43	14.10
1899	531	290	75	14.12
1900	1083	583	92	8.49
1901	324	171	43	13.27
1902	448	233	54	12.05
1903	216	111	23	10.65
1904	223	113	33	14.80
1905	165	81	18	10.91
1906	146	71	17	11.64
1907	233	111	30	13.73
1908	207	98	26	12.07
Total (25 years)	10,042	244	1,143	Mean 11.38

Table showing the number of cases of TYPHOID FEVER admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to cases of Typhoid Fever admitted, for the years 1884 to 1908.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884	2	..	..
1885	6	..	..
1886	66	4	6.06
1887	37	1	2.70
1888	35	..	..
1889	48	6	12.50
1890	114	5	4.38
1891	51	4	7.84
1892	81	6	7.41
1893	94	3	3.19
1894	53	3	5.85
1895	83	4	4.20
1896	83	6	7.23
1897	102	11	10.78
1898	92	14	15.31
1899	96	12	12.50
1900	157	18	11.46
1901	101	11	10.89
1902	105	13	12.38
1903	70	3	4.28
1904	73	9	12.19
1905	57	7	12.28
1906	72	7	9.72
1907	109	14	12.84
1908	102	15	14.70
Total (25 years)	1,889	176	Mean 9.31

Measles.—Last year Measles was considerably less prevalent than in the previous year. Altogether 159 cases were notified to me by the School Attendance Officers, and there were registered from this disease 13 deaths. 108 cases were notified in the early part of the year, up to the week ending May 23rd. No more cases were notified until the week ending September 12th. Each case notified was visited by the Lady Inspector, printed directions as to certain precautions to be taken were left, and advice generally was given. As I dealt at some length with Measles in my last Annual Report, it is unnecessary for me to comment further on this disease this year.

Tuberculosis.—No system of notification of pulmonary tuberculosis exists in this town. A visit is paid, however, to all houses in which a death has taken place, and thorough disinfection is carried out of the room occupied by the deceased person. Leaflets giving instructions for various measures which should be adopted in the residences of persons suffering from tuberculosis are issued from this department. Bacteriological examinations for the presence of tubercle bacilli in sputa are also carried out at the request of medical practitioners, last year 109 cases were investigated.

There are in the Borough no institutions provided for the treatment of pulmonary tuberculosis; at the Union Infirmary, however, two male wards have been adapted for the partial open-air treatment of cases; some improvement is recorded, but I am told by Dr. Morley, the Medical Superintendent, that, as a rule, the cases which go into the Union are too advanced to benefit by the treatment. The wards in question have accommodation for 28 patients, and I believe the Guardians intend in future to make further provision.

From the table which I append it will be seen there has been a regular, though slight, decline in the death-rate from various forms of tuberculosis during the past 30 years. In considering the prevalence of tuberculosis in this town, the fact must not be lost sight of that a number of people living in various parts of the country, when affected by tuberculosis, come on medical advice to live in Portsmouth and Southsea, also that there are a large number of deaths recorded from men invalided from the Navy and Army for phthisis.

Table showing the number of Deaths and Death-rates per 1000 living from
TUBERCULAR DISEASES for Thirty Years (1879 to 1908).

Year	(1) Tabes Mesenterica Deaths	(2) Tubercular Meningitis, Hydrocephalus Deaths	Phthisis.		(3) Other forms of Tuberculosis Deaths	Totals of Cols. 1, 2 and 3	
			Deaths	Rate		Deaths	Rate
1879	54	44	271	2.05	4	102	.77
1880	69	49	234	1.74	12	130	.96
1881	43	44	275	2.14	18	105	.81
1882	62	33	269	2.07	5	100	.76
1883	69	41	262	1.20	3	113	.84
1884	59	34	292	2.12	3	96	.69
1885	45	36	290	2.06	9	90	.64
1886	52	38	285	1.98	33	123	.86
1887	54	41	261	1.77	41	136	.92
1888	67	38	240	1.60	23	128	.85
1889	69	35	251	1.63	24	128	.83
1890	46	37	319	2.03	11	94	.60
1891	45	41	252	1.57	41	127	.79
1892	36	31	308	1.89	15	82	.50
1893	38	32	254	1.53	21	91	.55
1894	28	21	241	1.43	22	71	.42
1895	37	43	280	1.64	13	93	.54
1896	36	51	283	1.63	19	106	.61
1897	19	39	245	1.38	14	72	.39
1898	40	37	277	1.54	17	94	.52
1899	33	40	295	1.61	31	104	.57
1900	33	42	286	1.53	20	95	.51
1901	33	37	278	1.47	58	128	.67
1902	36	31	308	1.60	15	82	.43
1903	16	35	269	1.38	18	69	.35
1904	16	44	321	1.62	16	76	.38
1905	12	42	314	1.55	13	67	.33
1906	14	38	306	1.48	22	74	.36
1907	4	47	282	1.35	32	83	.40
1908	3	39	300	1.41	35	77	.36

Table showing the Death-rate from PHTHISIS, and other forms of Tuberculosis per 1000 living, for periods of Five Years since 1879.

Periods of 5 years	Death-rate per 1000 Living from	
	Phthisis	Other Forms of Tuberculosis
1879-1883	1.84	0.83
1884-1888	1.90	0.79
1889-1893	1.73	0.65
1894-1898	1.52	0.50
1899-1903	1.51	0.51
1904-1908	1.48	0.37

Infantile Mortality.—By “ Infantile Mortality ” is meant the number of deaths amongst children under 1 year of age. But the mere record of the number of deaths does not convey much information, unless it is also known how many children under 1 year of age were living, therefore to obtain some rate by which different periods and different towns can be compared there has been adopted the “ Infantile Mortality Rate.” By this is meant the proportion of deaths amongst children under one year of age, to the number of births that have been registered during the same period. In last year’s Report, in mentioning that the infantile mortality rate was 123 deaths per 1,000 births, I remarked that (with the single exception of 112 per 1,000 births in 1903) this was the lowest rate that had been recorded in the Borough for 25 years. I have the further satisfaction of reporting that this year the deaths under one year of age only numbered 607, and the infantile mortality rate was only 99 per 1,000. This is not only a lower infantile mortality rate than has ever been recorded in Portsmouth before, but it is the first time in the recorded history of the town that the rate has been below three figures.

There was last year a general reduction throughout the country in the infantile mortality rate, but the rate of 99 registered in Portsmouth is, as shown by the following figures from the Registrar General’s Report, not only considerably below the average of the other large towns, but is actually below that of the rural districts.

	<i>Deaths under one year per 1000 births</i>	
In the 76 large towns	128
„ „ 142 smaller towns	124
„ England and Wales	121
„ England and Wales (less the 218 towns <i>i.e.</i> , country districts)	110
„ PORTSMOUTH	99

Of the 607 deaths amongst children under one year of age the following were registered as the principal causes :—

Premature Birth and Congenital		
Malformations ..	..	125
Debility and Inanition ..	..	105
Bronchitis ..	..	55
Pneumonia ..	..	49
Convulsions ..	..	39
Diarrhoea ..	..	33
Whooping Cough ..	..	28
Tubercular Diseases ..	..	22
Suffocation ..	..	22
Measles ..	..	6
Other Causes ..	..	123
Total		607

The principal cause of infantile mortality is as a rule Diarrhoea, and this to a large extent varies with the meteorological conditions. Last year, as in the previous year, these were unfavourable to this disease. On referring to Table XVIII. it will be noted that there was no prolonged period of great heat and extreme drought, conditions that are usually found to favour the prevalence of summer diarrhoea. It is not the hot weather, however, that is the actual cause of the usually summer mortality amongst babies, this is only the exciting cause, and it acts in the following manner. During the warm summer months bacterial life is most active, consequently the slightest particles of dirt—which all contain bacteria—which gain admission to the babies' food, multiply in it so rapidly, that by the time the food, say milk, has been waiting for a few hours, it is seething with micro-organisms ; these organisms, or their products, acting on the delicate intestinal tract, set up irritation, followed by inflammation, and frequently fatal results. It is obvious from this that artificially fed children suffer in a far larger proportion than breast-fed ; indeed, it is only by the most minute, careful, and never-relaxing personal attention to the baby's food, that a mother can expect to rear an artificially-fed baby through a very hot summer.

No one who has had any experience in investigating infantile mortality can have any doubt that a lot of babies' lives are lost, not from any neglect on the part of the mother, but owing to lack of any training in child-rearing, and for

want of a little advice in season as to the dietary and the general management of babies. About two years ago I presented a special report on the subject of infantile mortality, and I recommended that I should be allowed to have printed, and issue, through the instrumentality of the Lady Inspector and of the Midwives in the Borough, a small booklet of advice on the care of babies. I hoped that advantage would be taken of the recent Notification of Births Act, and that a considerable amount of good might thus be effected in the Borough. I regretted, that although my suggestions were adopted by the Health Committee, they were thrown out by the Council, and that further, the Notification of Births Act was not adopted. I hope that this subject will be reconsidered, for I believe that the Council must have refrained from adopting the Notification of Births Act—upon which the success of the recommendations I made depend—owing to a misunderstanding. It was, I believe, thought that the notification of births would result in an Inspector forcing his or her way into every house where a birth took place, and would so give rise to annoyance and irritation. This however is very far from what would be the case. In the first place it was not my intention to have the Lady Inspector visit any case which was under the care of a registered medical practitioner, unless, on the notification form sent in, the medical man stated that in his opinion a visit would be helpful. It was only intended to visit those cases where there was no medical man, and where the mother wished to have the benefit of any advice and assistance in rearing her baby in health that we could give her. From past experience of the work of the Lady Inspector, I can confidently say that, so far from such a visit being resented, it would be welcomed by the working classes of this Borough, and I believe that by the adoption of the scheme I have indicated, we should add a valuable branch to the work of the Health Department, and one which would have a marked effect on the infantile mortality of the Borough.

TABLE XVIII.

Table showing the Relationship of Temperature and
Fatal Cases of Diarrhoea.

Week ending			Temperature		Earth Therm.		Rain in inches	Deaths from Diarrhoea
			Max.	Min.	1 ft.	4 ft.		
1908								
July	4	....	76.3	57.3	68.9	60.7	..	..
"	11	....	68.4	56.5	66.6	62.0	.59	1
"	18	....	65.8	57.1	63.7	61.6	.72	2
"	25	....	70.5	54.6	64.3	61.0	..	..
Aug.	1	....	73.9	55.3	67.2	62.0	..	1
"	8	....	73.9	56.5	68.4	63.3	..	1
"	15	....	70.3	51.6	67.3	63.7	..	..
"	22	....	68.4	54.2	64.6	63.0	.23	2
"	29	....	66.8	56.8	63.0	62.3	1.13	2
Sept.	5	....	62.1	50.2	58.3	61.2	1.50	2
"	12	....	62.8	48.4	57.2	59.9	.07	3
"	19	....	64.7	49.1	56.6	58.6	.09	..
"	26	....	63.7	54.2	59.2	59.0	.24	1
Oct.	3	....	68.2	56.1	60.0	59.2	.12	5
"	10	....	66.1	54.0	60.3	59.2	.34	2
"	17	....	64.8	51.6	57.6	58.6	.16	5
"	24	....	54.5	46.2	54.5	58.2	1.27	2
"	31	....	59.4	44.5	50.1	55.5	.59	4
Nov.	7	....	54.6	44.8	50.8	54.8	..	6
"	14	....	55.1	42.1	46.6	52.7	.36	1
"	21	....	51.1	41.3	47.6	52.2	.76	2
"	28	....	54.6	44.4	47.1	51.4	.23	..
Dec.	5	....	50.8	43.6	47.8	51.0	.17	2
"	12	....	50.4	39.2	45.5	50.4	1.24	..

TABLE XIX.

WEEKLY RETURN of cases of Infectious Diseases reported in accordance with the Infectious Disease (Notification) Acts, 1889 and 1899, during the year 1908.

Week ending		Small-pox	Scarlet Fever	Diphtheria	Fevers		Puerperal Fever	Erysipelas	Croup	Epidemic Cerebro Spinal Meningitis	Total
					Enteric	Con- tinued					
January	4	..	8	8	..	..	1	7	..	..	24
"	11	..	6	4	..	..	1	6	..	..	17
"	18	..	4	13	1	..	1	1	..	..	20
"	25	..	5	5	4	..	..	2	..	..	16
February	1	..	3	6	1	..	..	3	..	..	13
"	8	..	5	13	3	..	..	1	..	..	22
"	15	..	8	11	3	..	..	..	..	..	22
"	22	..	10	9	1	..	1	2	..	..	23
"	29	..	3	10	1	..	..	..	..	..	14
March	7	..	8	4	3	..	..	4	..	..	19
"	14	..	3	8	1	..	..	1	..	..	13
"	21	..	2	4	2	..	..	2	..	..	10
"	28	..	8	10	..	..	..	1	..	..	19
April	4	..	5	14	15	..	1	1	..	..	36
"	11	..	3	9	4	..	..	..	..	..	16
"	18	..	2	6	3	1	..	..	..	..	12
"	25	..	4	11	3	..	..	1	..	..	19
May	2	..	6	8	3	..	..	4	..	..	21
"	9	..	3	14	5	..	..	1	..	..	23
"	16	..	1	5	7	..	..	..	..	..	13
"	23	..	3	7	5	..	..	..	..	..	15
"	30	..	1	4	9	..	..	2	..	..	16
June	6	..	3	5	2	..	..	3	..	..	13
"	13	..	2	3	1	..	..	2	..	..	8
"	20	..	6	5	5	..	..	1	..	..	17
"	27	..	1	6	5	..	..	..	..	..	12
July	4	..	7	9	4	..	..	1	..	..	21
"	11	..	10	6	6	1	1	2	..	..	26
"	18	..	12	9	3	..	..	2	..	..	26
"	25	..	12	11	6	1	..	3	..	..	33
August	1	..	6	12	2	1	..	3	..	..	24
"	8	..	6	7	3	..	..	..	..	..	16
"	15	..	12	8	1	..	..	1	..	..	22
"	22	..	6	4	3	..	..	1	..	..	14
"	29	..	16	11	2	..	..	2	..	..	31
September	5	..	7	4	7	..	1	1	..	..	20
"	12	..	12	12	8	..	..	4	..	..	36
"	19	..	28	8	4	..	..	2	..	..	42
"	26	..	27	4	5	..	2	4	..	..	42
October	3	..	26	4	7	..	3	3	..	..	43
"	10	..	22	9	5	1	..	4	..	..	41
"	17	..	21	9	6	2	..	3	..	..	41
"	24	..	27	12	6	1	1	1	..	..	48
"	31	..	26	8	6	..	..	4	..	..	44
November	7	..	33	9	9	..	..	2	..	..	53
"	14	..	26	4	5	..	..	4	..	..	39
"	21	..	20	8	4	..	..	5	..	..	37
"	28	..	31	9	1	..	..	..	..	..	41
December	5	..	27	8	1	..	..	2	..	..	38
"	12	..	14	12	3	..	..	2	..	..	31
"	19	..	21	13	5	..	..	..	..	..	39
"	26	..	9	10	6	..	..	..	..	..	25
January	2	..	20	12	2	..	..	3	..	..	37
Totals	..	..	597	434	207	8	13	104	..	..	1363

Bacteriology.—This branch of public health work has again proved extremely valuable. No fewer than 674 cases of infectious disease were investigated by me, involving considerably over a thousand examinations in the course of the year. As in former years bacteriological examinations were found most useful in the case of diphtheria, where the possibility of obtaining a rapid diagnosis of a doubtful case is of the utmost importance.

The cases examined, with the results obtained, were as follows :—

DISEASE	RESULT		TOTAL
	Negative	Positive	
Diphtheria	284	270	554
Tuberculosis	33	76	109
Enteric Fever	6	6	12
Gonorrhoea	10	6	16
Cerebro-spinal Meningitis .. ..	..	1	1
Ringworm	1	2	3
TOTAL	334	361	695

General Sanitary Supervision.—The details of the work done by the staff of Sanitary Inspectors will be seen from the Chief Inspector's Report. One of the principal matters receiving attention has been the provision of water-closets, with flushing apparatuses. During the year 939 were so provided. This brings the total dealt with during the past four years up to 2,905. Steady progress is being made with those still remaining.

The inspection of the house drains and sanitary fittings of new houses before occupation was carried out by Inspector Turner, as usual. The duty of inspecting the drains of new houses was transferred to the Health Department twelve years ago, and the arrangement has on the whole worked satisfactorily.

A card system register of all the houses in the Borough is being kept in the Health Department. The system consists in allotting one card to each house, and as any one house comes under the notice of any of the Inspectors, the particulars are entered on the particular card dealing with this house.

The effect of this system will be in a few years to give us a complete register of most of the dwelling-houses in the Borough, so that at a moment's notice, the previous history of the house, as to drainage, general sanitary condition, infectious diseases, tuberculosis, and other particulars can be obtained.

With regard to offensive trades carried on in the town, the largest is the Soap Works in Commercial Road. Complaints were made of a nuisance arising from this place in August ; it was abated, however, on a visit by an Inspector. There has been little nuisance from any other offensive trade.

Water Supply.—The Water Supply of the Borough is from deep-seated springs at Havant and Bedhampton. The water-collecting area is probably on the outcrop of the chalk in the north of Hampshire, and the springs come up near the surface at Havant and Bedhampton under the thinning of the London and Reading beds. On occasions the water has been very cloudy in appearance, and in view of the proximity of the town of Havant, it has been deemed advisable to filter the water before delivering it to consumers in Portsmouth. I have called attention for many years to the necessity for filtration beds, and these were eventually provided for in the Water Works Company's Act of 1906. They are now in course of construction, and are required by the above Act to be ready for effective filtration by January 1st, 1910. The present Company, for the purpose of supplying Portsmouth with water from the Havant and Bedhampton springs originated in 1857. At first the supply was intermittent, but in 1879 a constant service was substituted. The supply is very abundant ; it is estimated by the Company that the springs are capable of yielding 15,000,000 gallons per diem. The water, with the exception of the periods of cloudiness after heavy rains already referred to, is of an excellent quality, being clear, well aerated, and palatable, one great advantage is its constant low temperature, which renders it in the hottest summer months cool and refreshing. The chemical analysis shows it to be a characteristic chalk water, the total solids amount to about 30 parts per 100,000, the bulk of which consists of calcium carbonate. I append a table, giving the results of the monthly analysis by the Public Analyst.

TABLE OF ANALYSES OF PUBLIC WATER SUPPLY DURING 1908.

(RESULTS EXPRESSED IN PARTS PER 100,000)

Date	Source	Total Solids	Chlorine	Chlorine expressed as common salt	Nitrogen as Nitrates & Nitrites	Total Hardness	Saline Ammonia	Albuminoid Ammonia	Physical and Microscopic Characters.
1908 Jan. 10	Company's Water, The Laboratory, Park Road ..	..	1.8	2.96	0.26	23.4	0	0.0005	Colourless, slightly turbid.
Feb. 12	do. ..	29.5	1.7	2.80	0.26	23.8	0	0.0005	Clear and Colourless.
Mar. 11	do. ..	30.0	1.8	2.96	0.23	23.4	0	0.0005	Clear and Colourless.
April 8	do. ..	30.0	1.75	2.88	0.26	23.2	0	0.001	Clear and Colourless.
May 12	do. ..	30.5	1.75	2.88	0.26	23.4	0.0	0.0005	Clear and Colourless.
June 10	do. ..	30.0	1.8	2.96	0.27	23.2	0	..	Clear and Colourless.
July 19	do. ..	30.0	1.8	2.96	0.23	22.2	0	0.0005	Clear and Colourless.
Aug. 13	do. ..	30.0	1.8	2.96	0.26	23.0	0	0.0005	Clear and Colourless.
Sept. 11	do. ..	30.0	1.75	2.88	0.23	23.0	Nil	0.0005	Clear and Colourless.
Oct. 14	do. ..	31.0	1.8	2.96	0.28	23.4	Nil	Nil	Clear and Colourless.
Nov. 13	do. ..	28.0	1.7	2.8	0.28	23.4	.0005	0.001	Clear and Colourless.
Dec. 9	do. ..	31.0	1.7	2.8	0.28	22.8	Nil	0.0005	Clear and Colourless.

Food Inspection.—I reported at considerable length in my last Annual Report on the subject of Meat Inspection, and also presented a Special Report on the question of a Municipal Abattoir. A very close supervision is exercised over the meat supply in this Borough. There are 98 slaughter-houses in occupation ; these are constantly inspected, and taking all things into consideration, are, for the most part, well looked after and kept in as sanitary condition as possible. Unfortunately a number of them are old and structurally unfitted for their purpose, which renders it extremely difficult for their owners to maintain them in that scrupulously clean condition that is desirable in connection with a food supply.

I have before drawn attention to the system we have for some years past adopted, of having the neighbouring country cattle markets attended by an Inspector of this Department, who watches the sales by auction and notes the purchase of any suspicious looking animal with a view to prevent its being disposed of for food in this Borough. This practice has been attended with considerable success, and owing doubtless to the publicity we have given to the sale of diseased animals in certain of these markets, a pronounced improvement has resulted. Very few diseased animals are now exposed for sale, and in one market, our representations have resulted in a stringent set of market bye-laws being adopted by the controlling local authority, the enforcement of the powers under which must have a still further beneficial effect. In another market a veterinary surgeon has been appointed to attend each market, to enforce the bye-laws which already existed, but which had hitherto not been enforced.

It will be seen from the Chief Inspector's Report, that, although a large quantity of food was given up to the Sanitary Authority and destroyed as being unfit for human consumption, in only two cases was it found necessary to take legal proceedings ; in both of these cases, one in respect to unsound cherries and the other in respect to tuberculous pork, a conviction before the Magistrates was obtained.

Included in the meat given up for destruction by the Local Authority were the carcasses of 14 cows and 1 ox, affected with tuberculosis. I have dealt in my Report last year on the dangers to the public that exist from the ingestion of tuberculous meat, and on the still greater danger of milk from animals suffering from tuberculosis, together with the action that suggests itself to me as most likely to remedy the evil. Although the milk in this Borough has not been

specially examined for tubercle bacilli, the fact that so many cows infected with tuberculosis have during the past few years been exposed for sale in neighbouring cattle markets, affords grounds for assumption that the milk in this town is no more exempt from tubercle bacilli than in certain other large towns, where 10 per cent. of the churns sent in have been found to contain the tubercle bacillus. As regards the ensuring of the purity of the milk supply we are under the same disadvantage as other towns, that is, we have no control over the farms upon which the bulk of the milk consumed in this town is produced. In the Borough itself only 172 cows are kept, and I estimate that fourteen-fifteenths of the milk supply come from farms over which we can exercise no sanitary supervision whatever.

Under the Sale of Food and Drugs Acts 1027 samples have been submitted to the Borough Analyst ; full particulars of the different articles of food examined, and the results, will be found in the Report of the Borough Analyst included in this volume. The practice of employing an agent, usually a woman, to take the samples has been found advantageous in detecting fraud. It is almost impossible for an Inspector, who soon becomes known to interested parties, to obtain any evidence against persons whom there is every reason for suspecting of selling sophisticated foods. Purchase of articles by an agent, who becomes in time to be looked upon as a safe customer, is the only means that promises any chance of success in detecting certain fraudulent practices.

Housing of the Working Classes.—This year again a considerable amount of work has been done in one direction and another in connection with the improvement of the Housing of the Working Classes. Fortunately, there is not a great deal of overcrowding, and further, as regards the amount of accommodation available, there is not a great deal to complain of. In this, however, as in all large towns, there are certain areas in the older parts of the Borough, which were built upon before the adoption of suitable bye-laws, and the houses in these areas, by reason of their age, lack of air-space and dilapidation, are fast becoming unfit for human habitation. An area that has occupied the attention of the Health Department for two or three years now, is that in Portsea, situated between Queen Street and Kent Street. In this area, which comprises roughly 200 properties, about 80 have been either closed and demolished under the Housing of the Working Classes Act, 1903, or acquired by the Corporation for purposes of street widening. In the near future the remaining properties will probably be dealt with as a whole, by means of an

Improvement Scheme under the Housing of the Working Classes Acts. We are anxious, however, not to proceed with this scheme until the Town Planning Bill has been passed, as by taking advantage of its provisions it is hoped greater improvements can be effected.

The following is a list of houses in respect of which I have submitted written representations that they were unfit for human habitation :—

Nos. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 and 32 St. Catherine Street. Application was made to the Magistrates for Closing Orders, and these were granted on March 17th, and the houses have subsequently been demolished.

Nos. 1, 2, 3, 4, 5, 6, 7 and 8 Hanover Court, Hanover Street, Portsea. Closing Orders in respect of these eight properties were granted by the Magistrates on July 21st.

Nos. 6, 8, 10, 12 and 14 Rudmore Road. Application was made for Closing Orders on November 17th, but on the that the Local Authority deemed necessary, an adjournment was agreed to. Repairs to these properties are now in hand.

258 Commercial Road.

52 Hyde Park Road. A Closing Order was granted by the Magistrates in respect to this property on November 17th.

1, 2, 3, 4 and 1a and 2a Red Lion Yard, Portsmouth. Written representations were made by me on December 16th and 17th, to the effect that the above dwelling-houses were unfit, and not reasonably capable of being made fit, for human habitation. Applications for Closing Orders will be made to the Magistrates in due course.

Closing Orders in respect of 23, 25 and 27 South Road, Buckland, which had been granted on March 20th, 1906, were rescinded on May 8th, 1908, these dwelling-houses in the meantime having been repaired or made fit for human habitation.

I have mentioned an area in Portsea which is receiving attention from the Health Committee. But there is another area, right in the very centre of the Borough, which, if properly dealt with, would effect a far greater improvement to Portsmouth. This is the triangular area off the east side of Commercial Road ; bounded on the north by Commercial Place, and on the south by Craswell Street. It comprises the following streets : Jacob, Wells, Temple, Voller, Brighton, Matrimony and Town Streets. These streets are, for the

most part, narrow, dirty and gloomy, and the houses in them mostly old, dilapidated, small, and badly built ; many are exceedingly dirty, especially those in Voller Street. It is true that one or two of the streets, and the houses in them, present a better appearance than the others, but take it altogether, it is not an area in which one would expect children to grow up healthy and strong, nor an area in which the inmates are able to get enough sun and fresh air to give them a reasonable enjoyment of life. In 1904 a scheme was brought forward by Councillor Harold Pink for purchasing this area demolishing the houses and erecting in their stead a Public Market. It was a great scheme, and a good scheme, but unfortunately, whilst it was being considered, the question of the purchase, both of the Water Works and the South Parade Pier, was brought forward, and as a result the Market scheme was not proceeded with. It is, however, a project well worthy of the further consideration of the Council. The cost under Mr. Pink's scheme was estimated at about £50,000, and this is not a large sum compared with the vast improvement to the Borough generally which would be effected. Not only would it be a noble sanitary reform, which is the aspect with which I am principally concerned, but it would provide a Public Market, in keeping with the size and importance of the Borough, and would remove a very great inconvenience from the main thoroughfare of the town. I know of no improvement that can be made in Portsmouth which would be so beneficial from so many different aspects.

Refuse Collection and Disposal.—The collection and disposal of house refuse in this Borough is under the control of the Scavenging Committee, and carried out by the Borough Engineer's Department, and I am indebted to the Borough Engineer for the following particulars. The house refuse is collected from dwelling-houses twice a week, and from five to six times a week from the large hotels and restaurants. The weekly amount is 686 loads, amounting to 35,672 loads in the course of the year. The collection is made by 52 carts, some with a wooden flap cover, and the remainder with tarpaulin coverings. The total normal cost per annum is £8,174.

The disposal of this refuse, up to the present time, has been by dumping. Although I have always objected to this method as being insanitary and the cause of nuisance and injury to health, it must be admitted that in the past it has been utilized to effect certain improvements—a good example

of which is the Stamshaw Recreation Ground. This was done, however, before the Borough had reached its present size ; now, owing to the very extensive building operations of the last ten years, which have extended the Borough in all directions, it is extremely difficult to obtain a site where dumping can be carried on without causing a nuisance. This nuisance can, of course, always be prevented by the effectual and rapid covering of the refuse with a sufficiently deep layer of fresh earth, but the expense of the latter procedure, if it be done effectively, is so great as to make the method extremely costly. Towards the end of this year the substitution of Destructors for dumping was decided upon, and the initial steps for the provision of these were adopted. The decision of the Council to erect Destructors was due to the action taken by the owners of an estate adjoining the present tip at Baffins, to secure an injunction for a nuisance caused by that tip. It is now proposed to erect two destructors, one at Eastney (near the Pumping Station) and the other at Baffins. It is anticipated that in the future a third destructor may be needed ; if this prove to be the case, it will probably be erected on a site situated on the north-eastern part of the Borough. The proposed destructors will each consist of four cells, and will each be capable of dealing with 100 tons of material a day. They will be provided with mechanical lifts, to avoid any handling of the refuse, and other modern improvements. They are to be erected by Messrs. Heenan & Froude, Ltd., at an estimated cost of £28,895.

I anticipate that the method of dealing with the refuse will be a great improvement, and exercise a beneficial effect on the general health of the Borough. Modern refuse destructors have now been brought to such a state of perfection, that it is not anticipated that these will give rise to any nuisance or to any legitimate cause for complaint.

Sewerage System.—The Sewerage of the Borough, owing to the flat low-lying character of the land, has been in the past rather a difficult problem. Up to a few years ago there were two main sewers—the high and the low level. Of these, the high level took most of the northern and about half the southern part of the Borough; they gravitated to the Pumping Station at Eastney, whence the sewage was pumped up to the tanks at Fort Cumberland, at the extreme south-east point of the Borough, from there it is discharged during the ebb of the tide and is carried out to sea. A few years back, however, owing to the large increase in the northern part of the town, it was found that during heavy rainfalls these two

sewers were insufficient to carry off the sewage and rainfall from the north of the Borough sufficiently rapidly to prevent flooding, consequently what is known as the high level relief sewer was constructed. This sewer taps the high level sewer at the junction of Somers Road and Bailey Road, Southsea ; it there collects the sewage from the northern part of the town and conveys it in almost a direct line to the Eastney Pumping Station. The effect of this relief sewer has proved satisfactory in relieving the flooding, which used to occur over a considerable area. There still remain, however, one or two small circumscribed low-lying areas in Southsea, which are liable to be flooded during periods of exceptional rainfall if this occurs at high tide. This could be remedied, in the Borough Engineer's opinion, by the installation of a system of Shaw's Ejectors, to act directly on the low-lying areas when required.

One of the worst features of the sewerage system is the ventilation of the sewers by manholes in the roads. I have spoken of the nuisance caused by these road ventilators in many annual reports ; it is true a number have been closed by the Borough Engineer, and ventilating shafts substituted in their place, but a large number still exist, and during the year no fewer than 150 complaints of the smells from these manholes were received from the public. Another source of nuisance is the disconnecting traps on house drains. When twenty or thirty houses are connected to the sewer by a single large drain, the disconnecting trap on this drain, which is usually ventilated on the edge of the pavement, gives rise at times to considerable nuisance. The principle of doing away with all disconnecting traps and road ventilators, and providing for the ventilation of the sewers by carrying all house drains up full bore four feet clear of the eaves of the roofs of houses, and clear of all windows, seems to me far less likely to cause nuisance or injury to health.

Factory and Workshop Act, 1901.—I append tables showing the work done by the Health Department in connection with the above Act. The condition generally found in the workshops, workplaces and out-workers' premises was satisfactory. One of the most important class of workshops dealt with under this Act are the Bakehouses. These have been closely inspected and kept in a cleanly, wholesome condition. Legal proceedings had however to be taken in respect of one bakehouse in Eastney, where the owner refused to carry out certain necessary alterations and on being brought before the Magistrates, the owner, on paying the costs, was granted an adjournment, and our requirements were at once put in hand.

The largest number of workshops, and the largest number of out-workers, are connected with the making of wearing apparel. Of these, the males are visited by Inspector Gray, who carries out the duties in this Borough under the Factory and Workshop Act, and Miss Monk, who visits those places where women only are employed.

With regard to the notices sent for insufficient sanitary accommodation, although these are not yet remedied, the necessary steps are being taken to enforce them.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
FACTORIES (Including Factory Laundries)	278	12	—
WORKSHOPS (Including Workshop Laundries)	4232	201	2
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	750	53	—
TOTAL ..	5260	266	2

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars	Number of Defects			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of Cleanliness	66	66	—	1
Want of Ventilation	2	2	—	—
Overcrowding	10	10	—	—
Want of drainage of floors	6	6	—	—
Other Nuisances	187	181	—	—
**Sanitary Accommodation { insufficient	5	—	—	—
{ unsuitable or defective	—	—	—	—
{ not separate for sexes	4	—	—	—
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	55	55	..	1
Other Offences (Excluding offences relating to outwork which are included in Part 3 of this Report)	—	—	5	—
TOTAL ..	335	320	5	2

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

**Public Health Acts Amendment Act, 1890, has been adopted by the Local Authority; the standard of sufficiency for sanitary accommodation is one w.c. to 25 employees.

56

OUTWORKERS' LISTS, SECTION 107										OUTWORK IN UNWHOLESALE PREMISES, SEC. 108			OUTWORK IN INFECTED PREMISES SECTIONS 109, 110		
NATURE OF WORK	Lists received from Employers					Addresses of Outworkers		Notices served on Occu- plers as to keeping or sending lists	Prosecutions		Inspections of Outworkers' premises	In- stances	Prose- cutions (S. 110)	Orders made (S. 110)	Prose- cutions (Ss. 109, 110)
	Sending Twice in the year		Sending Once in the year		received from other Councils	forwarded to other Councils	Failing to keep or permit in- spection of lists		Failing to send lists						
	Lists	Con- tractors	Work- men	Outworkers											
										Lists						Con- tractors	Work- men
Wearing Apparel— (1) making, etc. .. (2) cleaning and washing	150	380	858	8	11	19	45	30	..	..	867	..	..	..	..
Furniture and Upholstery	..	..	..	1	2	..	..	..	..	..	2	..	..	..	..
Paper Bags and Boxes	2	..	24	..	..	..	..	..	..	..	12	..	..	..	..
TOTAL	152	380	882	9	13	19	45	30	..	..	881	..	..	..	..

4.—REGISTERED WORKSHOPS.			5.—OTHER MATTERS.		
Workshops on the Register (s. 131) at the end of year		Number	Class		Number
Bakehouses	..	180	Matters notified to H.M. Inspector of Factories :—		
Dress and Mantle Makers	..	480	Failure to affix Abstract of the Factory and Workshop Act (s. 133)		
Milliners	..	121	Action taken in matters referred by H.M. Inspector (Notified by H.M. Inspector as remediable under the Public Health Acts, but Reports (of action taken) not under the Factory and Workshop Act (s. 5) sent to H.M. Inspector		
Tailors	..	457	Other		
Other Workshops	..	672	Underground Bakehouses (s. 101) :—		
Total number of workshops on Register	..	1910	Certificates granted during the year		
			In use at the end of the year		

NUISANCES IN RESPECT OF WORKSHOPS, WORKPLACES, etc.

Drains repaired	..	..	..	..	44
„ cleansed	..	..	..	..	19
Workshops and Workplaces cleansed	..	..	..	..	66
„ „ ventilated	..	..	..	..	2
Bakehouses cleansed	..	..	..	..	55
Overcrowding in Workshops discontinued	..	..	..	..	10
Sanitary Accommodation provided	..	..	..	..	5
Separate Sanitary Accommodation for sexes provided	..	..	..	..	4
W.C. fittings repaired	..	..	..	..	31
Yard paving „	..	..	..	..	56
Spouting „	..	..	..	..	42
Floors „	..	..	..	..	10
Roofs „	..	..	..	..	22
New W.C. pans provided	..	..	..	..	46
Flushing cisterns to water closets provided	..	..	..	..	104
Water closets cleansed	..	..	..	..	5
„ ventilated	..	..	..	..	3
Soilpipes „	..	..	..	..	4
Ventilating shafts raised or repaired	..	..	..	..	2
Yards and Stables drained	..	..	..	..	9
„ „ cleansed	..	..	..	..	3
Manure pits constructed	..	..	..	..	5
Manure and refuse removed	..	..	..	..	4
Animals removed	..	..	..	..	2
Smoke nuisances abated	..	..	..	..	5
Waste and rain-water pipes provided or repaired	..	..	..	..	9
Other Nuisances	..	..	..	..	28
TOTAL					595

REGISTERED WORKSHOPS.

TRADE	No. of Workshops		Persons employed		Totals
			Male	Female	
Bakers	..	180	730	2	732
Blindmakers	..	2	8	2	10
Bootmakers	..	93	250	..	250
Bookbinders	..	8	32	24	56
Boatbuilder	..	2	7	..	7
Brassworkers	..	3	18	..	18
Brushmakers	..	2	30	14	44
Carpenters	..	51	274	..	274
Cabinet Makers	..	17	85	..	85
Capmakers	..	7	12	35	47
Cigarette Makers	..	2	3	6	9
Coach-builders	..	14	133	..	133
Corset Makers	..	6	2	38	40
Cork Cutters	..	3	9	..	9
Cycle Makers	..	43	156	..	156

TRADE		No. of Workshops	Persons employed :		Totals
			Male	Female	
Dress and Mantle Makers	..	480	..	1950	1950
Drug Packers	..	2	2	14	16
Firewood Cutters	..	35	102	..	102
Fitters	..	9	48	..	48
French Polishers	..	7	30	..	30
Furriers	..	3	..	7	7
Glue-maker	..	1	4	..	4
Gut-scraper	..	1	6	..	6
Jewellers	..	21	63	..	63
Laundries	..	90	..	610	610
Lath-renders	..	3	12	..	12
Lamp-maker	..	1	..	4	4
Milliners	..	121	..	502	502
Plaster Modellers	..	2	10	..	10
Pea Packer	..	1	..	24	24
Plumbers	..	15	60	..	60
Picture-frame Makers, &c.	..	20	90	..	90
Photographers	..	35	50	72	122
Piano Makers	..	3	57	..	57
Pin-cushion Makers	..	3	4	13	17
Rag Sorters	..	4	15	..	15
Smiths	..	28	110	..	110
Sugar Boilers	..	7	27	..	27
Sewing Machine Maker	..	1	6	..	6
Stonemasons	..	9	83	..	83
Saddlers	..	12	36	..	36
Shirtmakers, &c.	..	9	..	30	30
Scale-maker	..	1	6	..	6
Sailmakers	..	2	6	..	6
Tailors	..	457	1070	1825	2895
Tinsmiths	..	8	32	..	32
Ticket Writers	..	12	37	..	37
Trunk Makers	..	3	21	..	21
Toy Makers	..	2	3	2	5
Upholsterers	..	28	86	8	94
Umbrella Makers	..	3	9	..	9
Wheelwrights	..	15	60	..	60
Miscellaneous Trades	..	23	64	16	80
TOTALS	..	1910	3958	5198	9156

Inspection of Midwives.—There were 45 Registered Midwives practising in the Borough during the year, of whom 22 were registered by the Central Midwives' Board, the remainder being those who were in practice before July 1st, 1901. All have been kept well under supervision during the year. On the whole they are a very good lot of hardworking women ; they give very little trouble, and seem anxious in every way to carry out the instructions they receive from the Health Department. It is gratifying to find that not a single case of puerperal fever occurred during the year in cases attended by Midwives. I had to caution one midwife, a Mrs. W., for not sending in notice of having called in a medical man.

The more I see of its effect the more I appreciate the value of the Midwives Act, 1902. It has already proved greatly beneficial in this Borough, and has been responsible for a vast improvement in the practice of midwifery amongst the poorer classes.

In reporting on the successful administration of the Midwives Act in this Borough, I must acknowledge the splendid work done by Miss Monk. Her work has not been confined merely to inspection, for being herself particularly well qualified, she is able to assist and instruct the midwives in their profession, and to the infinite pains she has taken the success of the department's work in this direction is largely due. Further particulars as to the administration of the Midwives Act will be found in Miss Monk's report on page 95.

In my Annual Report for 1906, commenting upon the Midwives Act, I drew attention to the unsatisfactory nature of Rule 18, which compels Midwives to send for the assistance of Medical Practitioners in certain eventualities, but makes no provision for the payment of medical men so called in. I am glad to say that the Guardians, on the circumstances being put before them, have endeavoured to remedy to some extent this state of affairs, and have agreed—providing a certain procedure is adopted—to pay medical men so called in the same fee that the Poor Law Medical Officers are paid under similar conditions.

The arrangement arrived at will be readily understood by a perusal of the following two letters, which I sent out to medical men and midwives respectively practising in the Borough :—

*(LETTER TO MEDICAL PRACTITIONERS.)*HEALTH DEPARTMENT,
TOWN HALL.

21st July, 1908.

DEAR SIR,

MIDWIVES' ACT, 1902.

In the past no provision has been made for the payment of medical men when called in under No. 18 of the Rules of the Central Midwives' Board, to attend persons who cannot afford to pay for medical attendance.

To amend this state of affairs, the Guardians have undertaken, tentatively, for the space of one year, to pay medical practitioners under the above conditions the same fee, ten shillings and sixpence, as paid to their District Medical Officers in similar cases.

To ensure payment of this fee, however, it is necessary for the midwife when engaged by a person who cannot afford to pay for medical attendance, to obtain the name of her usual medical attendant from the patient. The midwife must then go to the Guardians' Offices in St. Michael's Road, when an order will be given her to use in case of necessity. This order must be given to the medical practitioner when sending for his assistance, and must subsequently be presented to the Clerk to the Guardians for payment.

As this is a new arrangement in the Borough, I have thought it would be advantageous to notify the particulars to you, and at the same time I have sent details of the required method of procedure to all midwives practising in the Borough.

Although the fee is doubtless inadequate payment for the very laborious services that are often required of medical men in these cases, I feel certain that the action of the Guardians, in attempting to deal with what has proved in the past a very unsatisfactory state of affairs, will be appreciated by medical gentlemen practising in the Borough.

I am, yours faithfully,

A. MEARNS FRASER,

Medical Officer of Health.

*(LETTER TO MIDWIVES.)*HEALTH DEPARTMENT,
TOWN HALL.

21st July, 1908.

MADAM,

MIDWIVES' ACT, 1902.

You are required, as you are probably aware, under No. 18 of the Rules of the Central Midwives' Board, to call in a medical man under certain conditions enumerated in those Rules.

Some difficulty has occurred in the past amongst the poor who have not been able to pay the fee for such attendance, and in order to surmount this difficulty the Guardians have arranged to pay the fee for such medical attendance, provided the midwife observes the following regulations:—

Every midwife, when any person engages her for a confinement, must ascertain, *at the time of engagement*, if the person is able to pay the

medical fee if it should become necessary to call in a medical man. If she is too poor to pay, the midwife must go to the Guardians' Offices in St. Michael's Road, and apply for an order for medical attendance. This order must only be used in the case of necessity, and will ensure the attendance of the Poor Law Medical Officer for the District.

If the person engaging the Midwife has a regular medical attendant she may secure the attendance of this particular doctor by giving his name and address to the midwife. The midwife in this case when applying at the Guardians' Offices for an order will state the name and address of the medical man whom it is proposed to call, and the Guardians will pay this gentleman the same fee (10/6) as would be paid to the District Medical Officer.

This arrangement will last for one year, and the Guardians will in no case pay any fee unless the above directions are carefully observed, and of course this only applies to those poor persons who are so poor as to be unable to pay for medical attendance themselves.

It will now therefore be the duty of every midwife practising in the Borough when engaged by any person who is too poor to pay for medical attendance :

- (a) To ascertain whether the patient will have her regular medical attendant or the District Medical Officer.
- (b) To go to the Guardians' Offices some time before she expects to attend her patient, and obtain an order, to be used if required.
- (c) To take this order with her when called to the case.
- (d) To send the order on to the medical man whose name it bears should medical assistance be required.

Your particular attention is requested to these regulations, which it will be necessary for you to carefully observe. The Orders referred to may be obtained at the Guardians' Offices in St. Michael's Road, between the hours of 9 a.m. and 7 p.m. ; after 7 in the evening application must be made to the District Relieving Officers, the names, addresses and districts of whom are enclosed.

Yours faithfully,

A. MEARNS FRASER,

Medical Officer of Health.

It will be noted that the above arrangement is a tentative one, lasting for 12 months, and of course the fee of half-a-guinea is inadequate payment for the services rendered by medical men, for the cases they are called to under these circumstances are invariably very difficult and trying ones. At the same time the action of the Guardians in making this attempt to remedy a very unsatisfactory state of affairs, will, I am sure, meet with general approval.

I append a list of the names of Midwives who have given notice of their intention to practise within the Borough during 1909.

ROLL OF MIDWIVES PRACTISING WITHIN THE BOROUGH OF PORTSMOUTH.

Regd. No. in Midwives' Roll	NAME	ADDRESS	Date of Enrolment	QUALIFICATION
23295	Barnes, Eliza	226 Sultan Road, Landport	1906—April 26th	C.M.B. Examination
27020	Barnes, Elizabeth	136 Queen Street	1908—Oct. 15th	C.M.B. Examination
8025	Bone, Eliza	23 Mary Street, Southsea	1904—Sept. 29th	In Practice, July, 1901
20124	Bullen, Rose	27 Bath Square, Portsmouth	1905—April 27th	Ditto
4208	Challis, Kate	61 New Road East, Buckland	1904—April 28th	L.O.S., Feb. 25th, 1904
4039	Cranley, Cecilia	206 Somers Road, Southsea	1904—April 28th	In Practice, July, 1901
6611	Davis, Ann	45 Tipnor Street, Stanshaw	1904—July 21st	Ditto
17788	Dyson, Susanna	Nyphon Villa, 23 Gladys Avenue	1905—Mar. 23rd	Ditto
5487	Elliott, Mary Ann Leah	27 Eastfield Road, Eastney	1904—June 30th	L.O.S., Jan. 13th, 1897
17240	Evans, Edith Augusta	297 Fawcett Road, Southsea	1905—Mar. 23rd	L.O.S., July 26th, 1893
3853	Feehally, Charlotte	227 Lake Road	1904—April 28th	In Practice, July 1901
26426	Ford, Annie	73 Cottage Grove	1908—May 21st	C.M.B. Examination
15703	Golding, Mary	10 Henrietta Street, Southsea	1905—Jan. 26th	In Practice, July, 1901
11583	Gray, Eliza Ann	35 Herbert Street, Landport	1905—Mar. 23rd	Ditto
23045	Gwyther, Ada Lavinia	The Laurels, Chichester Rd., North E.	1906—Feb. 22nd	C.M.B. Examination
27750	Harding, Victoria Maud	84 St. Augustine Road, Eastney	1908—Dec. 16th	C.M.B. Examination
4034	Harding, Mary Jane	264 Twyford Avenue, Stanshaw	1904—April 28th	In Practice, July, 1901
15559	Hayes, Annie	105 Toronto Road, Buckland	1905—Mar. 23rd	Ditto
6700	Hayward, Hester Ellen	46 Beach Road, Southsea	1904—Sept. 29th	L.O.S., Nov. 26th, 1903
11790	Henchley, Mary Elizabeth	"Elmhurst," Elm Grove, Southsea	1905—Jan. 26th	L.O.S., July 11th, 1899
6226	Holloway, Mary	70 Stansted Road	1905—Jan. 26th	In Practice, July 1901
3915	Howard, Jane Elizabeth	58 Fratton Road, Fratton	1904—July 21st	In Practice, July 1901
12691	Huches, Laura Mirian	15 Jessie Road, Southsea	1904—April 28th	L.O.S., Nov. 26th, 1903
9290	Humphrey, Eliza Ann	42 Simpson Road, Northsea	1905—Jan. 26th	In Practice, July, 1901
23268	Jaco, Clara Sara	8 Outram Road, Southsea	1904—Oct. 27th	C.M.B. Examination
10663	Jeffery, Jane Elizabeth	219 St. Augustine Road, Southsea	1906—Feb. 22nd	L.O.S., Nov. 27th, 1903
11214	Kerby, Charlotte	2 Highland Street, Eastney	1904—Dec. 22nd	In Practice, July 1901
14211	Langstreeth, Maria	13 St. Paul's Road, Southsea	1905—Feb. 23rd	L.O.S., July 11th, 1900
3625	Maxfield, Elizabeth	64 Shearer Road, Kingston	1904—April 28th	In Practice, July, 1901
3900	Mills, Catherine	"Bold Forester," Fawcett Road, S.	1904—April 28th	Rotunda Hos., May 3, 1886
9322	Murley, Mary Ann	44 Cumberland Street, Portsea	1904—Oct. 27th	In Practice, July, 1901
15662	Pigg, Mary Ann	21 Montgomerie Rd., Southsea	1905—Mar. 23rd	In Practice, July, 1901
8755	Ricketts, Marion	16 Regent Street, Mile End	1904—Oct. 27th	L.O.S., July 9th, 1901
11818	Silvester, Ann	23 Derby Road, North End	1905—Jan. 26th	In Practice, July, 1901
9997	Skinner, Martha L.	76 Bath Road, Southsea	1904—Nov. 24th	L.O.S., July 29th, 1904
18246	Taylor, Lily Mary	22 Frensham Road, Southsea	1905—April 27th	L.O.S., July 24th, 1903
8167	Terry, Louisa	169 Arundel Street, Landport	1904—Sept. 29th	In Practice, July, 1901
15515	Tomes, Ellen	16 St. George's Square, Portsea	1905—Mar. 23rd	Ditto
22860	Trowbridge, Edith Mary	1 Collins Road, E. Southsea	1905—Nov. 23rd	C.M.B. Examination
23257	Tynan, Helga	20 Andover Road	1906—Feb. 22nd	C.M.B. Examination
10756	Turvey, Josephine	251 Twyford Avenue	1904—Dec. 22nd	In Practice, July 1901
9263	Watson, Ada Jane	64 Chichester Road, North End	1904—Oct. 27th	L.O.S., July 23rd, 1903
11514	Westropp, Rebecca	17 Exeter Road, Southsea	1905—Jan. 26th	L.O.S., Jan. 13th, 1897

MEDICAL INSPECTION OF SCHOOL CHILDREN.

By order of the Local Government Board.

I am directed to include in my Annual Report the arrangements which have been made in the Borough for the Medical Inspection of Children under the Education (Administrative Provisions) Act, 1907.

In accordance with the above I have to report that in December, 1907, I was requested by the Education Committee to submit a scheme for the carrying out of these provisions. I therefore on January 18th submitted the following report :—

Report as to Scheme for the Medical Inspection of Children, with special reference to the Memorandum of the Board of Education.

To the Chairman and Members of the Portsmouth Local Education Committee.

GENTLEMEN,

In accordance with your instructions I beg to submit to you a scheme for the Medical Inspection of Children.

Medical Inspection is provided for by the Education (Administrative Provisions) Act, 1907, Sec. 13, which enacts that the powers and duties of Local Education Authorities shall include :—

(b) The duty to provide for the Medical Inspection of children immediately before or at the time of, or as soon as possible after their admission to a Public Elementary School, or on such other occasions as the Board of Education direct, and the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health or physical condition of the children educated in Public Elementary Schools.

Subsequent to this Act, on the 22nd November last, the Board of Education issued a Memorandum indicating the way in which Medical Inspection should be carried out. In this Memorandum emphasis is laid on the principle that authorities should “use to the utmost extent the existing machinery of Medical and Sanitary Administration, developing and supplementing it as required, rather than supplanting it by bringing into existence new agencies partially redundant and possibly competing.” The Memorandum points out the necessity for regarding the medical inspection of school children as an integral part of the general sanitary administration of the community, and also that for the sake of efficiency and economy there must be an organic relationship between the daily work of the school authority, and the authority responsible for the administration of the wider branches of public health.

One further paragraph in the Memorandum must not escape attention, namely, that the effectiveness of medical inspection "will in future be one of the elements to be considered in determining the efficiency of each school as a grant-aided school."

In submitting the following scheme therefore, the principal objects which I have kept in view are :—

- (a) The efficiency of the Medical Inspection to be instituted.
- (b) The submission of such proposals as are likely to be approved by the Board of Education, and,
- (c) The necessity for the restriction of expenditure so far as is compatible with efficiency.

In order to comply with the above I deemed it advisable to obtain direct the views of the Medical Officer to the Board of Education. He was kind enough to grant me a long interview on the 8th instant, and the measures I advise in this report are in accordance with what I gathered at that interview.

I do not propose at present to deal with the actual details of the Medical Inspection itself ; I may mention, however, that I had an opportunity of seeing an advance prospectus of the Examination Form which will be sent out by the Board of Education at an early date, and that it follows closely the lines indicated in the Memorandum. Just in passing I may mention one point, namely, that in addition to the examination, a history of the past infectious diseases from which each child has suffered will be obtained. This will be of considerable value in regard to school attendances. At present it is the practice if there is a case of infectious disease in a house to keep all the other children of that house away from school until the one child is free from infection. With an accurate past history of the other children it will now be possible in certain infectious diseases, especially in the case of Measles, to allow those other children in the house who have already had that disease to still attend school. I mention this one point, not because of its importance from a medical point of view, but because, by reason of the increased attendances so resulting, it must have a marked effect on the marks obtained, the revenue from which may be regarded to a certain extent as a set-off against the cost of medical inspection.

In considering what staff will be required to carry out the minimum medical inspection required by the Board of Education, it is necessary first to ascertain :

- (1) How long each medical inspection will take.
- (2) How many children there are to be examined, and
- (3) How much time is available for inspection.

First then, it is probable that after a little practice the first examination will occupy about ten minutes, but for the first few months the time will likely be from 12 to 15 minutes per child. It will be safe to allow for this year 12 minutes per child. This is assuming that the teachers are able to assist in certain particulars.

Secondly—The Board advise that during this year (1908) they will regard as satisfactory an examination of all new entries, and of those about to leave school. The new entries may be taken at 4,500 and those leaving school at 3,500, giving a total, sufficiently near for working purposes, of 8,000.

Thirdly—As to the time available for medical inspection: The school year consists of 44 weeks, of 5 days each. The schools meet in the morning from 9 to 12, and in the afternoon from 1.30 till 4—a daily total of $5\frac{1}{2}$ hours. But, as pointed out to me by your Secretary, Mr. Bascombe, the whole of this time is not available for medical inspection; the roll call is not completed till about 9.20, and then religious instruction is given from 9.20 to 9.40. As for various reasons it is inadvisable to interfere with this, the time really available for medical inspection is $4\frac{3}{4}$ hours per day, or say 23 hours per week, giving a total for 44 weeks of roughly 1,000 hours. This year, owing to a late start, the time available will be considerably less.

To examine 8,000 children this year, and this is the smallest number there will ever be to examine in one year, it is obvious that one Medical Inspector is insufficient. Two are the least that can be relied upon to carry out the medical inspection effectively to your satisfaction and to that of the Board of Education. To assist these, and to carry out the principle enunciated by the Board that medical inspection at the school "will be incomplete unless the personal and home life of the child are also brought under systematic inspection," it will be necessary that the medical inspectors shall be supplemented by two trained nurses or health visitors. Of the two medical inspectors it is desirable that one should be a qualified medical woman, the advantages of which as regards the inspection of the elder girls, female pupil teachers, are too obvious to need comment.

The qualifications that you should look for in your medical inspectors are briefly indicated in the Board's Memorandum. They should be men and women who:

- (1) Have had adequate training in State Medicine or hold a Diploma in Public Health.
- (2) Have had some definite experience of School Hygiene, and
- (3) Have enjoyed special opportunities for the study of diseases in children.

These qualifications are very essential, especially the Public Health Diploma, which necessitates a knowledge of bacteriology, without which a school doctor would be considerably handicapped. In addition I think preference should also be given to those who have had experience in ophthalmic work.

Those appointed as school nurses or health visitors should be properly trained nurses, who have had experience in a children's hospital. I do not expect that at present you will be able to obtain those who have also combined with the above experience in school hygiene; as long, however, as they have had experience of child management in a hospital they will soon pick up the extra qualifications necessary for school nurses.

In connection with the employment of school nurses there is an alternative scheme which has been adopted in certain towns and is well worth consideration. Instead of engaging two whole-time nurses, an arrangement may be made by which the necessary nurses might be supplied to the Authority by the Queen Victoria's Jubilee Institute for Nurses. The advantages of this arrangement would be :—

- (1) The Queen's Nurses can be relied upon as being thoroughly capable and exceptionally experienced ; moreover, they are now being specially trained with a view to acting as school nurses.
- (2) They are accustomed to working among the working classes ; they are invariably well received, and being in touch with the homes of the children, these could where necessary be followed up by them in the ordinary routine of district nursing.
- (3) The Local Authority will only need the services of the nurses for 44 weeks of the year. In the case of whole-time nurses therefore they will be paying for eight weeks of the year, during which there will probably be no work for them to do.
- (4) We should not, as in the case of illness of one of our own nurses, be left short-handed, as owing to their large staff the Jubilee Institute could easily keep us supplied. On the other hand, if suddenly for some reason we needed increased nursing staff, temporary assistance could be procured at once and more cheaply from the Institute than by the ordinary methods of advertisement.
- (5) I have not made enquiries as to the cost of the arrangement, but I have no doubt it could be made for about £130 to £140 per year.

The minimum staff therefore with which I believe the medical inspection of school children can be effectively carried out in this Borough, would be :—

- (1) The Supervising Medical Officer.
- (2) One Male Qualified Medical Inspector.
- (3) One Female Qualified Assistant Medical Inspector.
- (4) Two Trained School Nurses, or Health Visitors.

The duties of these officers would be as follows :—

1. The Medical Officer, who, in the opinion of the Board of Education, should be the Medical Officer of Health, will under the Education Committee direct and supervise the work of the Medical Inspectors. He will prepare such annual and other special reports as the Education Authority may desire; he will advise the Authority generally on all matters affecting the health of the scholars or the condition of the schools. He will attend such committee meetings as is considered desirable, and will be responsible that the instructions of the Authority regarding medical inspection are effectively carried out.

2. The Medical Inspectors will make and record such medical examinations of the children as are required by the Education Authority ; they will, when required, visit at the houses of those children absent from school on account of illness. They will, if required, examine as to medical fitness candidates for pupil teachers, also teachers, before being appointed, and visit and report on any teachers absent from duty on account of illness. They will give such lectures on hygiene to teachers and at the Day Training Colleges as may be deemed advisable. They will also act as medical attendants to the pupils and staffs of the hostels ; they will generally, under the Medical Officer, carry out all such measures in connection with school hygiene as shall be ordered by the Education Authority.

3. The School Nurses will be attached one to each Medical Inspector, whose instructions they will follow. They will assist in the medical examinations of the children, and will have special duties in connection with personal cleanliness, skin diseases, etc., and as Health Visitors they will form a useful link between the doctor, the school and the home, and will be able to advise the parents of the child in regard to certain defects that may be discovered by the doctor during the medical examination.

As regards apparatus, etc., This need not be expensive ; it must include weighing machines, measuring rods, and a few smaller instruments. The most costly item will be the register for recording the results of examinations.—The only method that can promise satisfactory results is the Card System, and the schedule to be issued by the Board of Education is drawn up with a view to its adaptability to this system. Each school will need two drawers, one for the record cards of boys and the other for those of girls ; this will necessitate a cabinet of about 80 drawers altogether. It is also advisable that an office should be provided for the use of the Medical Inspectors and Nurses ; this would probably be the most suitable place also for storing the record cards, and should, if possible, be situated in the Town Hall.

In formulating the above scheme I have had the financial aspect ever in view, realising the necessity for strict economy. I have been anxious to keep the inclusive cost of medical inspection under a $\frac{1}{4}$ d. in the pound rate³; at the present time this realises over £900. From the following estimates you will see that this can easily be managed.

I believe there will be no difficulty in obtaining efficient Medical Inspectors, thoroughly qualified in all the essentials previously enumerated, at minimum salaries of £250 for the senior and £200 for the junior. In addition you will need to pay at least £140 (*i.e.*, £70 each) for the School Nurses, or else an annual payment of about the same amount to the Victoria Jubilee Institute—also it will be advisable to give the Medical Inspectors annual increments of £25 each, reaching in two years the maximum of £300 and £250 respectively. This gives a total for salaries for the first year of £590, and a maximum during the third and subsequent years of £690.

In the first year there will be the cost of the Card Record System, apparatus, books, stationery, fitting up a room, etc., amounting possibly to

£170. Excluding however this expenditure on "plant," there remains a margin, after the salaries of the officers have reached their maximum, of at least £200 a year below the present amount realised by a $\frac{1}{4}$ d. rate. There will be a few more unforeseen expenses, but in any case I do not think there is any reason to fear that for some years to come this rate need be exceeded. Taking into consideration the vast amount of benefit that will be conferred on the rising generation by medical inspection, I do not think anyone will be disposed to regard this scheme as in any way extravagant; personally I know of no other direction in which so valuable a return can be so certainly secured at so small an expenditure.

It will be noted that in this report I have so far made no mention of medical treatment. It goes without saying however that medical inspection is of itself only the first step, and that it will prove of little value unless it is supplemented by some arrangements for the amelioration of the defects discovered by the inspection. I have not formulated any scheme for treatment, however, because I think it best at present to move very carefully in this matter, and to wait until the results of medical inspection have taught us what are the principal matters that need to be dealt with. In this I am following out the course indicated in the Board's Memorandum, which reads: "The subject of specific medical treatment is, however, one which will require subsequent consideration in the light of the findings of medical inspection and the collateral issues raised thereby, and it is clear that, speaking generally, and subject to the observations in the following paragraphs, Local Education Authorities will be unable to formulate and submit for the Board's sanction any comprehensive scheme for the furtherance of this object until they have considered the results of their medical inspection in various directions." The "following paragraphs" referred to in the foregoing deal with certain of the so-called minor ailments, such as ring-worm verminous heads, and with the promotion of personal cleanliness, baths, cleansing of the teeth, etc.—Local Education Authorities are advised that they should without delay initiate steps for the amelioration of these conditions.

In submitting for your approval the above scheme I have to acknowledge the assistance kindly afforded me by your Secretary, Mr. J. J. Bascombe.

I have the honour to be, Gentlemen,

Your obedient servant,

A. MEARNS FRASER, M.D.,

Medical Officer of Health.

This Report was considered by the Education Committee in the early part of the year. They felt, however, unable to adopt many of the suggestions I had made.

In May one Medical Practitioner and one Nurse was appointed to carry out the work. The work of inspection was commenced on September 1st, and at the end of the year Dr. V. J. Blake, the gentleman appointed, presented a report to the Education Committee, from which the details of the work he has carried out can be ascertained.

METEOROLOGICAL OBSERVATIONS
in Portsmouth and Southsea during the Year 1908.

STATIONS SITUATED IN VICTORIA PARK
AND SOUTHSEA ESPLANADE.

Latitude $50^{\circ} 47' 4''$ N. Longitude $1^{\circ} 6'$ W.

TO A. MEARNS FRASER, ESQ., M.D.,
Medical Officer of Health, Portsmouth.

SIR,

In presenting you with my Report on the atmospheric conditions of Portsmouth and Southsea for the year 1908, I am pleased to be able to put before you figures which show the great improvement in the weather experienced during the year. Not only in this town were the climatic conditions more favourable, but in a good many divisions in the eastern and western districts, English Channel, and Scotland and Ireland. The mean temperature and bright sunshine in these areas were above the average for 25 years.

The rainfall in each district, with the exception of Scotland and Ireland, was also below the average. In Portsmouth and Southsea the figures for the year are particularly noticeable compared with other towns, especially with reference to the number of hours of bright sunshine, for out of the 113 towns giving sunshine results, only three, viz., Totland Bay, Worthing, and Bognor shew more than that recorded here (1,951 hours); the fewest number of hours recorded (927) were at Newcastle, and the most (1,994) at Totland Bay.

Likewise with regard to the mean temperature; for out of 167 towns only 6 were above Portsmouth and Southsea, with 51.3. The highest mean temperatures were at Ventnor and Plymouth, with 51.7 each, and 51.8 at Killarney and Valencia.

During the year Telegraphic reports have been forwarded each evening to the Meteorological Office and the London Press, and also daily reports to the Local Press.

I submit a summary of the Meteorological statistics for the year, together with a monthly summary, a table showing the means for 10 and 20 years, and also an abstract for each week during the whole year.

I am, Sir,

Yours obediently,

C. W. HEARN.

SUMMARY OF METEOROLOGICAL STATISTICS FOR 1908.

Barometer.—The mean barometer reading, at 9 a.m. (corrected to sea-level), was 30.06. The highest observed reading was 30.755 on February 7th, and the lowest 29.115 on January 8th.

Temperature.—The mean temperature in the shade was 51.3.

MAXIMUM.—The mean maximum temperature was 57.5, the highest being 83 degrees on July 2nd.

MINIMUM.—The mean minimum temperature was 45.0, the lowest on January 10th (20.5), and December 30th (17.3).

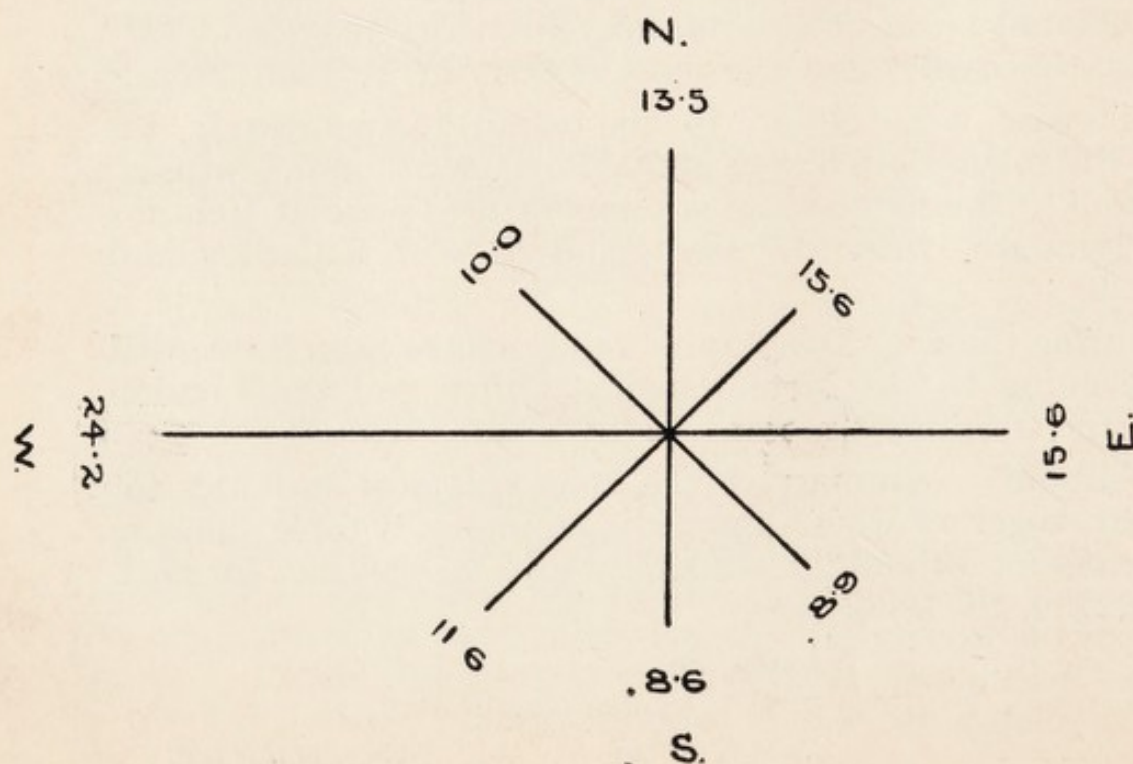
MAXIMUM IN SUN.—The highest maximum temperature in the sun was 144.5, on July 14th.

MINIMUM ON GRASS.—The lowest minimum temperature on the grass was 11 degrees, on January 6th, and 12 deg. on December 31st.

Bright Sunshine.—The bright sunshine registered by the Campbell-Stokes Recorder amounted to 1,951 hours, 5 minutes. The greatest amount in one day being 14 hours 40 minutes, on June 29th and July 1st. Bright sunshine was registered on 312 days.

Frosts.—The minimum thermometer in the shade, four feet above the ground, fell to and below freezing point on 27 occasions, and that on the grass on 81 days.

Winds.—The most frequent of winds were westerly. The following shows the percentage of winds throughout the year.



MONTHLY SUMMARY OF OBSERVATIONS, 1908.

JANUARY ..The pressure during January was normally high. With the exception of five occasions the barometer was considerably above 30 ins., principally of a North-easterly to a South-easterly type. Although more than usual fog occurred during the second two weeks of the month, the duration of bright sunshine was abnormally high, no less than over 87 hours being recorded. The rainfall was exceptionally deficient, on 6 days only did rain fall—the total registered being 0.92 in., or nearly 1.5 ins. less than the average—the greatest fall being on January 7th (0.66).

FEBRUARY ..Different atmospheric pressure was experienced during February, the barometer again reaching above 30 ins. during the greater part of the month, but the pressure was of a westerly type. The highest reading of the year (30.755) occurred on the 7th. Rainfall registered during the month was again one inch below the average, and there were 95 hours of bright sunshine. During the last two days of the month, although there was an abundance of sunshine, cold snow and sleet showers occurred during the last two days.

MARCH ..The month came in bright and sunny, but snow and sleet occurred on the first day; on the third day a heavy snow storm occurred during the afternoon, ending in rainfall. Although there was an excess of rainfall, there were only three sunless days, no less than 126 hours of bright sunshine being registered.

APRIL ..The barometric pressure was fairly high during the first two weeks, but a sudden fall commenced on the 18th, and a snow storm took place in the afternoon of the 19th, also a slight fall occurred during the next morning, and again on the night of the 23rd.

On the 25th there was a low temperature, the barometer falling to 29.33. A heavy snow-storm, to a depth of six inches, took place in the morning; rain occurred at 9 a.m., and at 2.30 there was another heavy fall of snow. During this storm the lamentable collision between the S.S. "St. Paul" and H.M.S. "Gladiator" occurred in the Solent. A much higher temperature was experienced the next day, with 11.4 hours of bright sunshine, and a total of 175.3 hours for the whole month.

MAY ..The pressure was somewhat low during the earlier part of the month, but rose during the third week, and on the 18th reached as high as 30.516. There was an abundance of sunshine, no less than 231 hours being recorded. The rainfall was slightly below the average.

- JUNE ..The month opened dull, with a thunder and lightning storm in the evening of the first day, but the weather was generally very fine. The thermometer in the shade on the 4th reached as high as 82.8. During the month the barometer was generally high, with sunshine on each day (over 299 hours). On the 29th no less than 14.7 hours were recorded. The rainfall (0.68) was over 1 inch below the average.
- JULY ..The mean pressure during the first week was above 30.2, but on the 7th there was a fall, and this continued until the 18th. During this depression rain occurred on 10 days. On the 19th the barometer again rose above 30 ins. and kept high during the remainder of the month. The highest temperature occurred on the 2nd, when the thermometer rose to 83 degrees. There were 247.5 hours of sunshine, and the rainfall was 1 inch below the mean.
- AUGUST ..The month came in with brilliant weather and continued so until the 19th, this being the 33rd continuous day without rainfall. The fine spell of weather broke up on the 20th, and some rough weather was experienced, rain occurring, with the exception of one day, until the end of the month, when a gale, with heavy rain, took place on the night of the 31st. 262.5 hours of bright sunshine were recorded, the rainfall of 2.33 being 0.22 above the average.
- SEPTEMBER ..This month opened with squally weather. The barometer falling to 29.3, the fluctuations of the barometer during the month being more pronounced and varying from 30.32 to 29.34. The weather, however, was fairly bright, with 140 hours of sunshine. The rainfall was 1.4 inches below the average.
- OCTOBER ..The atmospheric pressure during this month was above 30.1, and was of unusual steadiness. On the 18th a heavy rainfall (0.95) took place, and the following three days were dull and sunless. There were 134.3 hours of bright sunshine, the rainfall being 1 inch below the average—although October is on the average the wettest month in the year.
- NOVEMBER ..A good and mild month, with a fairly high barometer and with little rain, being 2 inches below the mean for this month. There were 110.5 hours of bright sunshine.
- DECEMBER ..The range of the barometric pressure was far in excess of that in previous months, ranging from 29.18 on the 10th to 30.41 on the 31st. There was general mildness in the weather up to the 24th, when it became much colder, although there was an average of 4.6 hours of sunshine both on the 24th and Christmas Day. The total sunshine for the month amounted to 42.7 hours. The rainfall was above the average for December, 3.48 inches being recorded.

The following table shows the total Rainfall and the number of days on which rain fell during each month, together with the greatest fall in 24 hours during the year.

RAINFALL.

1908	Total amount in inches	Number of days on which 0·01 or more rain fell	Greatest fall in 24 hours	Date of greatest fall
January	·92	8	·66	7th
February	·985	14	·48	16th
March	2·45	19	·59	5th
April	2·15	11	·60	25th
May	1·415	13	·38	14th
June	·68	4	·39	16th
July	1·31	10	·57	16th
August	2·33	12	·83	31st
September	1·05	14	·43	3rd
October	2·365	11	·95	18th
November	1·36	7	·50	21st
December	3·48	21	·565	29th
Total	20·495	144	·95	Oct. 18th

The following table shows the total Rainfall for the past 19 years.

Year	Total rainfall in inches	Number of rainy days	Greatest fall in 24 hours	Date of greatest fall
1890	21·65	171	1·11	July 17th
1891	31·24	182	1·15	Aug. 20th
1892	23·27	146	1·11	Aug. 18th
1893	23·15	157	0·88	July 4th
1894	35·88	187	1·78	Nov. 11th
1895	27·60	147	1·17	Oct. 30th
1896	25·54	156	1·31	Sept. 2nd
1897	28·87	163	1·13	Aug. 26th
1898	22·66	142	1·45	Nov. 23rd
1899	25·63	118	3·25*	July 23rd
1900	28·40	171	0·98	Jan. 6th
1901	24·31	131	1·30	June 30th
1902	24·22	148	1·14	Aug. 18th
1903	35·18	181	1·80	Sept. 4th
1904	26·70	177	1·36	May 20th
1905	24·05	153	2·35	June 5th
1906	28·74	161	1·85	Jan 2nd
1907	25·33	167	1·12	Oct. 14th
Means	26·8	158	Greatest fall in 24 hours 3·25	July 23rd 1899
1908	20·495	144	0·95	Oct. 18th

*Fell between 1.30 and 3 o'clock p.m. Sunday, July 23rd.

REGISTER OF RAINFALL IN 1908.

Kept at Portsmouth, in the County of Hampshire. Lat. $50^{\circ} 47' 4''$ N. ; Long. $1^{\circ} 6'$ W.

Nearest Railway Station—PORTSMOUTH.

RAIN GAUGE.—Time of Observation—9 a.m. Diameter, 5-in.

Height of top above Ground, 1-ft. ; Height of top above Sea Level 18 ft.

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1	..	..	·05	..	..	·24	..	..	·03	·00	..	..
2	..	..	..	·05	..	..	..	..	·01	·00	..	..
3	..	·02	·26	·06	·23	..	..	..	·43	..	..	..
4	..	..	·005	·02	·07	..	..	..	·06	..	..	·08
5	..	..	·59	·04	·25	..	..	..	..	..	..	·08
6	·07	..	·03	·00	..	..	..	..	..	..	..	·01
7	·66	..	·04	..	..	·03	·09	..	·01	..	..	..
8	·01	..	·23	..	·01	..	·15	..	·06	·00	..	·25
9	..	..	·07	..	..	..	·17	..	..	·33	..	·43
10	..	..	·01	..	..	..	·18	..	..	·01	..	·38
11	..	·00	..	..	·03	..	..	..	·00	..	·12	..
12	..	·01	·02	..	..	..	·02	..	..	..	·24	·17
13	..	·01	..	..	·05	..	·03	..	..	..	..	·17
14	..	·005	..	..	·38	..	·01	..	..	·01	..	·52
15	..	·05	·05	..	·07	..	·05	..	..	..	..	·02
16	·03	·48	·02	..	..	·39	·57	..	·04	·14	..	·07
17	..	·045	..	..	..	·02	·04	..	..	·01	..	·10
18	..	..	..	..	..	..	..	..	·04	·95	·26	·07
19	..	·01	..	·02	..	..	..	·02	·01	..	..	·075
20	..	·00	..	..	..	..	..	·07	·02	·30	..	·01
21	..	..	..	..	·00	..	..	·04	..	..	·50	·10
22	..	·02	·37	..	·03	..	..	·10	·17	..	·12	..
23	..	·035	·03	·16	..	..	..	·40	..	..	..	..
24	..	..	·33	·36	·015	..	..	·15	..	·02	·11	..
25	·03	·01	·025	·60	·01	..	..	..	·04	..	..	..
26	·00	·09	..	·24	..	..	..	·30	·01	·21	..	..
27	..	·07	·05	·30	..	..	..	·04	·12	·365	..	·01
28	·04	·11	·095	·30	..	..	..	·22	..	..	..	·10
29	·00	·02	·155	..	·20	..	..	·02	·00	·02	·01	·565
30	..	..	·02	..	..	..	..	·14	..	·00	..	·06
31	·06	..	..	..	·07	..	..	·83	..	..	..	·21
Totals	·92	·985	2·45	2·15	1·415	·68	1·31	2·33	1·05	2·365	1·36	3·48
Total from Jan. & 1	·92	1·905	4·355	6·505	7·92	8·60	9·91	12·24	13·29	15·655	17·015	20·495

ABSTRACT OF METEOROLOGICAL OBSERVATIONS made at

DATE Week ending		Barometer reduced to Sea Level and 32° F.	TEMPERATURE								
			IN SHADE						IN SUN	ON GRASS	
			Mean 9 a.m.	Mean Max.	Mean Min.	Mean of Max. and Min.	Highest Max.	Lowest Min.	Blk. Bulb in vacuo Mean	Mean Min.	Lowest Min.
1908											
Jan.	4	30.080	32.02	35.5	29.7	32.6	38.3	23.5	53.9	27.2	18.5
"	11	29.984	35.5	42.1	30.4	36.25	50.2	20.5	58.3	25.6	11.0
"	18	30.232	41.4	46.7	35.9	41.3	53.0	22.2	74.8	30.8	15.0
"	25	30.454	37.4	43.5	34.5	39.0	49.2	29.0	63.6	30.5	21.0
Feb.	1	30.040	42.7	46.6	37.6	42.1	52.7	32.8	75.5	34.8	28.0
"	8	30.524	44.1	45.4	33.3	39.3	49.0	29.5	74.7	27.7	24.0
"	15	30.401	41.8	49.33	36.6	42.9	53.2	32.7	81.8	30.8	24.8
"	22	29.910	46.4	51.9	42.4	47.15	54.0	37.3	86.1	38.3	32.0
"	29	29.769	41.9	46.8	38.1	42.45	49.2	34.0	91.4	33.7	30.3
March	7	29.678	38.1	45.05	33.4	39.22	49.2	30.0	84.9	28.8	21.0
"	14	29.856	42.5	48.4	38.5	43.95	54.6	31.0	98.7	33.4	22.0
"	21	29.986	38.1	45.33	32.0	38.66	48.5	29.0	90.3	26.4	23.0
"	28	29.963	44.4	50.9	37.6	44.25	56.0	34.0	102.1	34.2	26.5
April	4	30.068	47.3	52.3	40.5	46.4	56.3	37.0	107.3	35.5	29.5
"	11	30.108	46.3	52.4	38.9	45.6	59.0	33.5	107.4	34.0	24.5
"	18	30.116	47.3	54.4	38.3	46.35	61.3	35.0	109.1	33.1	29.0
"	25	29.689	43.3	47.5	35.3	41.4	52.8	32.0	99.7	33.1	26.0
May	2	29.955	52.5	59.1	44.1	51.6	72.0	32.0	112.2	42.6	31.8
"	9	29.791	54.04	58.6	50.1	54.35	64.8	48.7	112.4	48.1	42.0
"	16	29.895	52.2	57.9	44.4	51.1	61.2	46.3	111.4	42.8	40.0
"	23	30.221	57.01	63.5	48.6	56.05	68.0	43.5	122.1	44.6	41.3
"	30	30.200	60.3	66.1	49.7	57.9	73.3	44.5	123.4	45.8	37.0
June	6	29.998	64.4	72.7	55.4	64.05	82.8	51.2	127.5	52.4	49.0
"	13	30.186	58.4	64.4	50.5	57.45	72.0	43.3	124.4	46.1	38.0
"	20	29.868	59.4	64.5	50.5	57.5	69.5	45.6	123.6	47.9	40.0
"	27	30.268	62.3	77.1	51.4	64.24	76.6	46.8	127.4	45.7	39.5
July	4	30.228	67.7	76.3	57.3	66.8	83.0	54.7	130.6	54.9	51.8
"	11	29.950	63.8	68.4	56.5	62.4	71.0	54.0	126.7	53.7	49.0
"	18	29.752	60.4	65.83	57.1	61.4	67.5	54.5	122.3	52.4	48.0
"	25	30.121	64.1	70.51	54.3	62.57	75.0	51.2	124.6	49.3	45.7
Aug.	1	30.278	66.2	73.94	55.3	64.57	79.0	52.0	130.6	48.8	45.5
"	8	30.179	65.5	73.93	56.5	65.21	79.5	52.0	130.4	52.5	45.5
"	15	30.090	61.8	70.3	51.64	65.97	74.3	48.0	127.5	46.5	42.0
"	22	30.034	62.7	68.4	54.2	61.3	70.0	49.0	118.9	50.0	40.0
"	29	29.774	62.5	66.8	56.08	61.8	71.0	54.0	119.7	54.4	53.8
Sept.	5	30.318	57.1	62.1	50.2	56.1	66.7	42.5	109.7	46.4	37.0
"	12	29.942	56.6	62.8	48.4	55.6	68.0	45.0	116.2	42.7	40.0
"	19	30.157	59.1	64.7	49.07	52.38	71.0	41.5	116.1	41.6	32.5
"	26	29.975	58.1	63.7	54.2	58.9	66.0	47.5	107.2	50.3	39.5
Oct.	3	30.148	64.1	68.2	56.07	62.13	71.0	53.0	112.9	51.2	46.0
"	10	30.152	60.83	66.1	54.0	60.03	76.0	51.5	103.1	48.9	43.3
"	17	30.095	59.4	64.8	51.7	58.2	67.2	46.5	108.8	45.4	37.0
"	24	30.153	47.4	54.5	46.2	50.3	64.0	40.0	90.1	42.7	31.0
"	31	30.090	52.9	59.4	44.5	51.9	63.5	34.7	94.4	39.2	29.5
Nov.	7	30.081	48.3	54.6	44.8	49.7	62.0	41.0	88.5	41.0	37.2
"	14	30.199	47.3	55.1	42.07	48.5	58.2	32.0	87.2	37.7	25.0
"	21	30.126	44.8	51.1	41.3	46.2	53.0	34.0	80.5	35.3	26.0
"	28	30.060	50.5	54.6	44.4	49.5	57.0	37.5	87.3	39.2	31.0
Dec.	5	30.337	45.5	50.8	43.6	47.2	56.8	39.0	61.5	40.5	37.0
"	12	29.639	44.6	50.4	39.2	44.8	54.0	36.0	76.6	35.5	31.0
"	19	29.668	46.4	51.3	42.0	46.6	56.0	37.0	74.6	38.5	32.0
"	26	30.171	42.1	48.3	40.8	44.5	52.0	35.0	69.4	36.6	29.0
Jan.	2	30.231	33.9	38.1	28.2	33.1	49.5	17.3	50.5	22.7	12.0
Sums	..	1593.128	2723.8	3043.02	2378.05	2710.78	3308.9	2105.3	5309.9	2151.8	1782.0
Means	..	30.059	51.4	57.41	44.87	51.14	62.4	39.7	100.2	40.6	33.6

PORTSMOUTH during the 53 weeks ending January 2nd, 1909.

State of Earth and ground			Wet Bulb				WIND								RAINFALL					
ft.	4 ft.	Mean 9 a.m.	Humidity Mean, 9 a.m.	Total Bright Sunshine (Campbell-Stokes)	Amount of Cloud Mean, 9 a.m.	Number of Days								Total (Inches)	No. of days 0.01 inch or more rainfall	Greatest fall in 24 hours	Date of greatest fall			
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.							
5	46.9	28.9	65	20 45	5.7	..	6	1	..	..	..	..	..	..	..	..	..
8	44.3	33.6	81	13 5	8.0	3	1	..	..	2	..	1	..	.74	3	.66	Jan. 7	
6	43.2	40.5	93	22 5	4.3	..	..	2	1	1	2	..	1	.05	2	.03	" 16	
9	43.9	36.4	91	15 0	9.7	..	..	4	3	..	..	..	..	.03	1	.03	" 25
1	44.1	40.7	79	21 45	5.7	3	..	..	..	..	1	3	..	.10	2	.06	" 31
9	43.0	42.7	88	26 5	6.4	1	..	..	..	..	5	1	..	.02	1	.02	Feb. 3
1	43.8	40.2	87	23 40	8.4	1	..	..	2	..	..	3	1	.075	3	.05	" 15
5	44.4	44.7	87	14 10	8.1	..	..	..	..	..	3	3	1	.555	4	.48	" 16
4	45.1	39.4	77	26 5	5.7	..	..	..	..	..	1	3	3	.335	6	.11	" 28
3	44.3	36.7	87	17 30	6.7	..	1	..	..	..	1	3	2	.975	5	.59	March 5
8	44.4	39.6	77	31 30	4.7	3	..	1	..	..	1	1	1	.33	4	.23	" 8	
8	44.6	35.6	79	33 30	3.8	1	2	2	1	..	1	..	..	.07	2	.05	" 15
0	45.0	42.2	83	30 25	5.4	..	..	..	1	2	..	2	2	.805	5	.37	" 22
3	45.8	43.6	74	33 20	6.7	..	..	..	..	1	2	3	1	.40	6	.155	" 30
8	46.8	42.6	74	43 30	4.1	6	..	..	..	..	..	..	1	.04	1	.04	April 5
0	47.2	43.9	76.5	50 10	4.7	2	5	..	..	..	..	..	..	..	..	..	..
2	47.1	40.1	77	35 5	5.5	3	..	..	..	1	..	2	1	1.14	4	.60	April 25
2	47.3	49.1	78	48 50	5.0	..	..	1	2	1	..	3	..	.84	3	.30	" 28 & 29	
7	50.4	51.3	81.5	33 50	9.1	..	..	..	2	..	2	3	..	.56	4	.25	May 5
4	52.1	49.5	81	41 20	7.5	..	..	..	..	2	1	4	..	.53	4	.38	" 14
1	53.4	52.9	75	66 30	5.2	1	..	..	..	..	1	3	2	.03	1	.03	" 22
8	55.0	55.5	72	56 15	3.5	..	2	2	..	1	..	2	..	.225	3	.20	" 29			
0	57.0	59.4	72	72 55	3.5	2	1	1	2	1	..	..	..	.31	2	.24	June 1
4	58.3	54.1	74	53 10	6.1	1	..	..	..	..	2	2	2	.03	1	.03	" 7
0	59.0	54.4	71	59 20	7.0	..	..	1	..	1	1	2	2	.41	2	.39	" 16	
3	59.0	55.9	65	84 50	2.5	4	1	1	..	..	..	1	..	..	..	..	..
9	67.0	61.6	65	87 10	1.4	..	1	6	..	..	..	..	..	..	..	..	..
6	62.0	58.9	73	47 5	6.4	..	..	1	..	2	4	..	..	.59	4	.18	July 10
7	61.6	56.6	77	30 50	7.4	1	..	..	..	..	..	6	..	.72	6	.57	" 16
3	61.0	59.9	76	53 30	4.8	1	..	..	..	2	1	1	2	..	..	..	..
2	62.1	60.0	67	82 5	3.0	2	2	..	..	..	..	2	1	..	..	..	..
4	63.3	59.4	68	72 30	2.4	2	2	..	1	1	..	..	1	..	..	..	..
3	63.7	55.6	66	64 0	3.0	4	..	..	..	..	1	..	2	..	..	..	..
6	63.0	58.2	74.5	49 55	7.1	1	2	3	..	..	1	..	..	.23	4	.10	Aug. 22
0	62.3	59.5	82	49 20	6.8	..	..	..	..	..	7	..	..	1.13	6	.40	" 23
3	61.2	52.4	76	35 55	5.5	1	1	1	..	..	2	2	..	1.50	6	.83	" 31	
2	59.9	53.4	78	50 25	1.8	..	..	..	1	2	1	3	..	.07	2	.06	Sept. 8
6	58.6	55.3	77	35 25	6.4	..	..	..	1	1	2	3	..	.09	3	.04	" 16 & 18
2	59.0	55.6	84.5	18 25	9.1	2	..	1	1	..	1	1	1	.24	4	.17	" 22			
1	59.2	61.3	83	40 25	3.8	..	..	..	4	2	..	1	..	.12	1	.12	" 27
3	59.2	59.0	88	32 15	5.4	..	..	1	3	1	1	1	..	.34	2	.33	Oct. 9	
6	58.6	57.5	88	31 10	6.2	..	..	3	2	..	..	2	..	.16	3	.14	" 16
7	54.5	49.0	88	15 25	8.2	1	..	6	..	..	..	..	..	1.27	3	.95	" 18
1	55.5	51.3	89	27 20	5.4	1	1	1	3	..	1	..	..	.595	3	.365	" 27
8	54.8	46.6	88	35 10	4.0	..	1	6	..	..	..	..	..	..	..	..	..
6	52.7	44.9	82	33 10	1.0	..	..	3	..	1	..	3	..	.36	2	.24	Nov. 12	
6	52.2	43.6	90.5	18 35	6.5	1	..	1	..	..	..	3	2	.76	2	.50	" 21
1	51.4	48.2	84	20 30	6.0	..	..	..	..	1	1	3	2	.23	2	.12	" 22
8	51.0	44.7	94	6 45	9.5	1	..	3	1	2	..	..	..	.17	3	.08	Dec. 4 & 5
5	50.4	42.8	86	18 30	8.1	1	..	..	..	2	3	1	..	1.24	5	.43	" 9
5	50.6	45.4	92	8 5	7.0	..	..	..	..	1	3	3	..	1.02	7	.52	" 14
4	49.0	40.7	88	10 20	8.5	..	1	1	2	3	..	..	..	.11	2	.10	" 21
3	47.2	33.0	92	2 10	7.7	..	1	2	1	3	..	..	..	.985	7	.565	" 29
3.6	2806.4	2567.9	4241.5	1951 5	305.4	50	31	55	33	32	43	99	37	20.535	146	.95	Oct. 18			
9	52.9	48.4	80	36 48	5.7															

Milton Hospital.

To the Chairman and Members of the Hospital Committee.

GENTLEMEN,

The total number of admissions during the year was 731 (against 546 last year), with 42 deaths. The combined mortality in respect of all cases was 5.7. The greatest number in the Hospital on any one day was 137. The increase is due to the large number of Scarlet Fever cases admitted, and also to an increase in the Diphtheria.

SCARLET FEVER.—The number of cases admitted was 343 (last year 202) ; discharged 259, remaining 80. The number of deaths was 4, the mortality being 1.16 per cent. Twenty-three of these had a nasal discharge either on admission or during their stay in the Hospital, and in 13 of these the bacillus of Diphtheria was found. 18 had discharge from one or both ears, 25 enlarged glands, and 10 kidney disease. Two cases admitted with no rash developed the disease after admission. The greatest number of cases on any one day was 102 ; as a result the wards were much overcrowded, and I attribute the number of septic cases we have had this year largely to that cause.

DIPHTHERIA.—There were 284 admissions ; discharged 229, died 24, remaining 31. The mortality being 8.4 per cent. Obstruction to breathing, requiring surgical relief, was present in six cases. Tracheotomy was performed ; five recovered, one died.

ENTERIC FEVER.—There were 102 admissions ; 76 discharged, 14 died, 12 remaining. The death-rate was 13.7. The original diagnosis was not confirmed in 13 cases.

VARICELLA.—One case was admitted.

MEASLES.—One case sent in as Scarlet Fever was found to have a good Measle rash.

ILLNESS OF STAFF.—4 Nurses contracted Scarlet Fever, 1 Diphtheria, 2 Enteric, and 1 Wardmaid Enteric. All recovered.

The new Steam Laundry is now in full working order, and has proved to be a much needed addition.

My thanks are due to the Matron and Nursing Staff for their valuable assistance.

I have the honour to be, Gentlemen,

Your obedient servant,

JAMES MCGREGOR,

Medical Superintendent.

TABLE XX.

MILTON HOSPITAL.

NUMBER OF PATIENTS ADMITTED.
during the Year 1908.

DISEASES	AGES								TOTAL
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 and over	
Small-pox .. ..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	1	62	243	29	4	3	1	..	343
Typhoid Fever ..	..	8	41	24	19	6	2	2	102
Diphtheria	2	79	164	25	7	6	1	..	284
Measles .. ..	..	..	1	..	..	..	..	..	1
Varicella .. ..	..	..	..	..	1	..	..	..	1
TOTALS	3	149	449	78	31	15	4	2	731

TABLE XXI.

NUMBER OF PATIENTS ADMITTED to the MILTON HOSPITAL (Small-pox Patients—the Locks Hospital)
for the Years 1883 to 1908.

DISEASES	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Small-pox	5	1	8	7	20	4	6	1	..	..	6	22	..	6	..	..	1	..	1	8	3	..	10	1	..	..
Scarlet Fever	1	13	16	29	56	120	278	384	180	532	503	238	177	354	413	436	333	198	270	339	572	340	274	243	202	343
Enteric or Typhoid	..	2	6	66	37	35	48	114	51	81	94	53	83	76	102	92	96	157	101	105	70	73	57	72	109	102
Diphtheria	..	4	6	11	27	23	18	69	52	27	12	38	46	38	37	118	225	211	170	197	211	220	198	239	235	284
Measles	1	2	1	11	4	8	5	1	22	..	6	22	15	10	6	6	..	1	..	..	..	..	..	..	..	1
Other Diseases	..	..	..	1	3	8	8	7	18	5	5	9	25	17	11	10	2	..	..	..	2	3	..	..	..	1
TOTALS	7	22	37	125	147	198	363	576	323	645	626	382	346	499	569	662	657	567	542	649	858	636	539	555	546	731

APPENDIX.

TABLE I.—FOR WHOLE DISTRICT.

Year	*Popula- tion estimated to middle of each year	Births		Deaths under 1 year of age		Deaths at all ages—Total		Total Deaths in Public Institu- tions
		No.	†Rate	No.	Rate per 1000 Births Regd.	No.	†Rate	
1898 ..	179,500	4,971	26·58	681	137	3,048	16·98	502
1899 ..	182,576	5,000	27·33	986	197	3,737	20·47	560
1900 ..	185,725	4,994	26·89	771	154	3,359	18·09	687
1901 ..	188,885	5,267	27·88	858	162	3,367	17·82	644
1902 ..	191,909	5,284	27·53	800	151	3,269	17·03	571
1903 ..	194,960	5,431	27·95	620	114	2,867	14·75	517
1904 ..	198,038	5,579	28·27	791	141	3,333	16·88	625
1905 ..	201,975	5,641	28·02	755	134	3,345	16·62	596
1906 ..	205,118	5,870	28·70	761	130	3,049	14·91	609
1907 ..	208,291	5,796	27·90	714	125	3,332	16·05	634
Averages for 10 years, 1898-1907)	193,697	5,183	27·70	773	144	3,270	16·3	594
1908 ..	211,493	6,110	28·4	607	99	2,957	13·77	619

*Revised according to census returns of 1901.

† Rates calculated per 1000 of estimated population.

APPENDIX.—TABLE II.

Name of Localities)	WHOLE BOROUGH				PORTSMOUTH				PORTSEA				KINGSTON				LANDPORT				SOUTHSEA			
	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year	Population estimated to middle of each year	Births registered	Deaths at all ages	Deaths under one year
1898	179,500	4,971	3,048	681	6,800	170	84	24	14,500	333	204	53	69,250	2,219	1,531	303	73,876	2,063	1,075	282	15,073	186	154	19
1899	182,576	5,000	3,737	986	6,500	..	95	31	14,200	..	218	62	72,050	..	1,349	462	74,033	..	1,326	380	15,823	..	186	11
1900	185,725	4,995	3,359	771	6,200	..	79	28	14,000	..	248	70	73,072	..	1,607	328	75,603	..	1,224	317	16,850	..	201	28
1901	188,885	5,267	3,367	858	6,500	..	90	30	14,200	..	234	66	73,670	..	1,621	438	76,803	..	1,230	293	17,812	..	192	31
1902	191,909	5,284	3,269	800	6,500	..	74	18	14,500	..	195	46	75,694	..	1,620	405	77,103	..	1,197	317	17,812	..	183	14
1903	194,960	5,431	2,867	620	6,671	..	70	13	13,533	..	211	38	77,468	..	1,436	326	78,476	..	983	233	18,612	..	167	10
1904	198,038	5,579	3,333	791	6,671	..	68	17	15,433	..	186	49	77,768	..	1,750	410	79,276	..	1,113	281	18,890	..	216	34
1905	201,975	5,641	3,345	755	6,671	..	71	18	15,433	..	222	44	79,455	..	1,740	390	81,276	..	1,136	285	19,190	..	176	18
1906	205,118	5,870	3,049	761	6,750	..	59	20	16,033	..	171	49	80,505	..	1,634	376	82,276	..	998	294	19,554	..	187	22
1907	208,291	5,796	3,332	714	6,696	..	58	8	15,950	..	163	41	82,205	..	1,751	373	83,576	..	1,159	277	19,864	..	201	14
Avg. of 10 years 1898-1907	187,697	5,383	3,270	773	6,595	*	74	20	14,778	..	205	51	76,113	..	1,603	381	78,229	..	1,144	295	17,381	..	186	20
1908	211,493	6,110	2,957	607	6,696	..	53	17	15,950	..	165	48	83,207	..	1,570	276	85,076	..	989	246	20,564	..	180	5

* In 1899 the Registration Districts were altered and do not now correspond to the above sub-districts, the births therefore in each sub-district can no longer be given.

APPENDIX.—TABLE III.

Cases of Infectious Disease notified during the Year 1908.

Notifiable Disease	Cases notified in whole District						Total Cases notified in each Locality					No. of Cases Removed to Hospital from each Locality					Total cases Removed to Hospital
	At all Ages	At Ages—Years					Portsmouth 1	Portsea 2	Kingston 3	Landport 4	Southsea 5	Portsmouth 1	Portsea 2	Kingston 3	Landport 4	Southsea 5	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65												65 and upwards
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	434	3	120	245	40	26	7	9	199	196	23	5	4	123	140	9	281
Membranous croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	104	2	6	8	8	75	2	6	55	38	3	..	..	..	..	..	..
Scarlet fever ..	597	5	120	414	41	17	7	18	398	150	24	5	16	228	91	3	343
Typhus fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever ..	207	3	18	81	49	56	3	10	116	74	4	2	2	54	42	2	102
Relapsing fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever ..	8	..	1	3	..	4	..	..	5	3	..	..	..	..	..	..	..
Puerperal fever ..	13	..	..	..	4	9	..	2	7	3	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS ..	1363	13	265	751	142	187	19	45	780	464	54	12	22	405	273	14	726

APPENDIX.—TABLE IV.

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

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" occurring in the District.							Deaths at all ages of "Residents" belonging to Localities, occurring in 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 up- wards	Portsmouth	Portsea	Kingston	Landport	Southsea
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	14	6	6	2	..	..	..	..	..	7	6	..
Scarlet fever	8	5	2	..	1	..	..	..	..	6	1	..
Whooping-cough	55	28	27	..	..	..	..	1	..	25	22	..
Diphtheria and Membranous croup	49	18	31	..	..	..	..	..	8	..	..	..
Croup	1	1	..	..	..	..	..	..	..	39	10	..
Fever { Typhus .. ..	..	..	..	..	..	..	..	..	..	..	1	..
{ Enteric	26	2	4	7	7	1	5	..	3	20	3	..
{ Other continued .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	34	4	..	..	..	16	14	..	2	14	13	..
Cholera .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Plague .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoea	48	33	9	1	..	4	1	1	5	29	13	..
Enteritis	14	14	..	..	..	..	..	..	1	8	5	..
Puerperal Fever	2	..	..	..	..	2	..	..	..	1	1	..
Erysipelas	3	2	..	..	..	1	..	..	..	2	1	..
Other Septic Diseases	6	..	..	1	..	3	2	..	..	5	1	..
Phthisis (Pulmonary Tuberculosis)	300	7	8	23	61	190	11	2	17	171	100	100
Other Tubercular Diseases	77	15	32	13	5	12	..	1	8	43	25	..
Cancer, malignant disease	182	..	..	..	1	108	73	3	8	100	61	100
Bronchitis	237	55	14	..	1	49	118	4	13	107	95	188
Pneumonia	140	49	23	2	5	40	21	5	9	79	43	44
Pleurisy	7	1	..	..	..	5	1	..	..	4	1	22
Other diseases of Respiratory Organs	8	2	1	..	1	1	3	..	..	5	3	..
Alcoholism .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver	25	..	..	..	..	19	6	1	..	12	9	3
Veneral Diseases	23	10	3	..	1	8	1	..	1	20	2	..
Premature Birth	114	114	..	..	..	..	..	4	4	55	50	1
Diseases and Accidents of Parturition	16	..	..	..	3	13	..	..	2	7	7	..
Heart Diseases	340	8	6	8	5	195	118	2	24	174	106	34
Accidents	92	24	11	5	4	34	14	5	11	50	24	2
Suicides	26	..	..	..	1	22	3	1	1	17	4	3
All other causes	1110	209	41	57	23	315	465	23	48	570	382	87
All Causes	2957	607	218	119	119	1038	856	53	165	1570	989	180

APPENDIX.—TABLE V. Infantile Mortality during the year 1908.

Deaths from stated Causes in Weeks and Months under One Year of Age.

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	
I. Common Infectious Diseases	Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
	Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria (including Membranous Croup)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II. Diarrhoeal Diseases	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diarrhoea, all form	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Enteritis, Muco-enteritis, Enteritis, Gastro-enteritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Gastritis, Gastro-intestinal	1	2	1	1	5	3	5	4	2	1	2	1	1	1	..	..	..	25
	Catarrh	..	1	..	2	3	..	..	4	2	1	1	..	..	..	..	..	..	12
III. Wasting Diseases	Premature Birth	69	13	6	9	97	12	1	1	1	..	..	..	..	..	..	..	..	114
	Congenital Defects	3	5	2	1	11	4	3	..	1	..	..	..	..	..	..	..	..	20
	Injury at Birth	3	1	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	4
	Want of Breast-milk, Starvation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophy, Debility, Marasmus	27	3	2	8	40	15	14	8	4	6	..	1	1	1	4	3	..	95
IV. Tuberculous Diseases	Tuberculous Meningitis	..	..	..	..	..	..	1	2	..	..	..	1	..	1	3	..	..	8
	Tuberculous Peritonitis	..	..	..	..	..	..	1	1	..	1	..	..	..	..	1	1	..	7
	Tabes Mesenterica	..	..	..	..	..	2	1	3	1	3	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases	..	..	..	..	..	1	3	..	1	3	..	..	..	..	..	..	..	..
	Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Other Causes	Syphilis	..	..	..	2	2	..	3	..	2	..	..	..	..	..	1	..	..	10
	Rickets	..	..	..	..	..	..	3	1	..	..	..	2	2	3	1	..	..	13
	Meningitis (not Tuberculous)	..	..	..	..	..	..	..	5	1	3	1	2	2	3	1	..	..	39
	Convulsions	11	5	3	2	21	6	2	5	1	4	5	9	2	4	2	1	..	55
	Bronchitis	1	..	3	4	8	6	7	1	6	4	5	9	2	4	2	3	..	49
	Laryngitis	..	..	..	..	..	..	3	10	3	3	2	9	3	1	1	..	..	20
	Pneumonia	..	..	1	2	3	6	3	4	3	1	5	9	3	3	1	..	..	60
	Suffocation, overlying	..	..	1	1	8	2	4	2	3	3	1	2	1	1	..	..	..	..
	Other Causes	8	7	2	6	23	6	6	5	2	3	5	1	1	8	1	..	..	..
		129	37	21	38	225	76	64	51	34	36	18	30	21	19	19	14	14	607

Births in the year: Legitimate 5890, Illegitimate 220.

Port Sanitary Authority.

To the Chairman and Members of the Port Sanitary Authority.

GENTLEMEN,

During the past year there was only one case of Infectious Disease in the Port. This was a case of Diphtheria, and occurred on the steam yacht "Pampa"; the patient was the chief engineer, and had apparently contracted the disease at Southampton, from which port the yacht had sailed on July 1st. The case was seen by me on July 3rd, and at once moved to the Hospital and the yacht disinfected.

In January last, owing to the old mooring station for infected vessels at the Motherbank being partly occupied by non-effective ships of His Majesty's Navy, a consultation took place between the King's Harbour Master, Dr. Reece of the Local Government Board, and myself, and a new mooring station, adjoining the old one, was finally fixed upon; this has subsequently received the approval of the Local Government Board.

With regard to the Unsound Food Regulations there is practically no food imported at this port, except onions, which are brought over in large quantities from France in the spring of the year, and occasionally a cargo of potatoes. The Port Sanitary Inspector has received instructions to report at once should any articles of food be imported, when they will be inspected by me, and any action necessary will be taken as required by the regulations.

During the year 10,383 vessels—the large majority from places in the Solent—arrived at the Port; of these 327 were from foreign ports, 1,184 coasting vessels, and 8,872 from the Solent.

The nationalities of foreign vessels were:—

Norwegian	..	46	Spanish	..	4
French	..	44	Swedish	..	7
Dutch	..	9	Argentine	..	2
Danish	..	5	Russian	..	7
German	..	18	Belgian	..	4

Total—146

These were all inspected by the Port Sanitary Inspector, who found no insanitary conditions on board.

I have the honour to be,

Your obedient servant,

A. MEARNS FRASER, M.D.,

*Medical Officer of Health to the
Port Sanitary Authority.*

Report of the Chief Inspector of Nuisances

FOR THE YEAR 1908.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour of submitting my twenty-third Report as Chief Inspector of the work carried out by the Inspectors of Nuisances for the past year.

During the period under review, 3,489 notices were served for the abatement of nuisances, and the following works for the abatement of nuisances have been carried out, viz.:—

DRAINAGE DEFECTS.

Drains cleansed	506
„ repaired or relaid with water-tight cement joints	541
„ ventilated, or ventilating shafts repaired or raised	68
Waste pipes or rain-water pipes disconnected from drains	21
Soil-pipes repaired or removed from inside to outside of houses	14
New water-closet pans provided	645
New pedestal wash-down closets provided	18
Water-closet fittings repaired	245
Water-closets repaired	12
Water-closets cleansed	25
New flushing apparatus provided to water-closets	939
Extra water-closet accommodation provided	6
Separate „ „ „ „	4
Waste-pipes provided or trapped	145
Glazed stoneware sinks provided	68
Dwelling-house yards drained	5
Water-closets ventilated	4
Premises connected with the main sewer	19

DEFECTS IN CONNECTION WITH DWELLING HOUSES.

Rain-water spouting cleansed, provided, or repaired	680
Roofs repaired	366
Outside walls protected	65
Sashes, lines or frames repaired or renewed ..	243
Stairs, doors, or flooring repaired or renewed ..	269
Space under flooring ventilated and sites concreted	59
Damp courses provided	8
Houses, or part of houses cleansed and lime-washed	374
Walls and ceilings repaired	207
Sanitary dustbins provided	16
Yards repaved or paving repaired	692
Urinals repaired or cleansed	6
Overcrowding discontinued in dwelling-houses ..	18
" " " workshops ..	10
Smoke nuisances abated	6
Workshops cleansed and lime-washed	66
" ventilated	2
Other nuisances in connection with dwelling-houses	56
" " " workshops ..	10

OFFENSIVE MATTER, &c.

Manure removed	36
Refuse	68
Excrement	4
Offal, bones, rags, etc., removed	3
Cesspits cleansed	25
Animals removed	34
Stagnant water removed	15
Bedding cleansed	18

SLAUGHTER-HOUSES, BAKEHOUSES, &c.

Slaughter-houses cleansed	15
Bakehouses	55
Cowsheds	2
Stables, yards, etc., paved and drained ..	25
Manure pits provided	9
Yards, stables, sties, etc., cleansed and lime-washed	45

BYE-LAWS, &c.

Notices under slaughter-house bye-laws complied with	3
" to number slaughter-houses ..	10
" under Nuisance Bye-laws ..	20
" Common Lodging Houses Bye-laws ..	3

The following articles of food have either been seized or given up after inspection by your Inspectors, and destroyed as being unfit for the food of man, viz. :—

Carcases of Beef and Offal..	..	..	16
„ Mutton (Colonial)	..	..	6
„ „	..	..	1
„ Pork	..	..	43
Salted Beef (Colonial)	..	..lbs.	120
Pieces of Meat „	..	.. „	236
Loin of Beef „	..	..	1
Bullocks' Livers „	..	..	3
Kegs of Tripe „	..	..	1
„ Plucks „	..	..	2
„ Kidneys „	..	..	4
„ Mixed Meat (Colonial)	..	..	1
Sets of Pigs' Offal	..	..	2
„ Lungs	..	..	4
„ Maws	..	barrel	1
Haddock (Dried)	..	boxes	176
„ (Wet)	..	stone	6
Hake	..	boxes	18
„	..	barrels	2
„	..	stone	6
Sprats	..	barrels	4
Kippers	..	boxes	208
Herrings	..	cases	13
„	..	barrels	10
„	..	..	100
Bloaters	..	boxes	421
Shrimps	..	cases	10½
„	..	baskets	4
„	..	bushels	137
Pollock	..	cwts.	2
„ and Ling mixed	..	case	1
Codling	..	boxes	15
Dutch Eels	..	case	1
Salt Fish	..	cwts.	14
Bream	..	boxes	11
„	..	barrels	2
Lemon Soles	..	cwts.	3
„	..	boxes	5½
Mullet	..	„	2
Cod Fish	..	stone	30
„	..	barrels	17
Smelts	..	boxes	30
Mackerel	..	„	28

Gurnet	..	..	..	kits	2
Whiting	..	..	..	boxes	13
„	..	..	..	barrel	1
„	..	..	..	stone	4
Plaice	..	..	..	box	1
Filleted Haddock	..	..	..	boxes	49
Dabs	..	..	..	stone	1
Cods' Roes	..	..	..	boxes	5
Cockles	..	..	..	gallons	4
Winkles	..	..	..	bag	1
Crabs	..	..	..	..	50
Mixed Fish	..	..	..	kits	8
Potatoes	..	..	..	sacks	416
Tomatoes	..	..	..	boxes	2
„	..	..	..	lbs.	256
Grapes	..	..	..	cases	9
Oranges	..	..	..	„	25
Lemons	..	..	..	„	1
Melons	..	..	..	..	11
Cherries	..	..	..	baskets:	7
„	..	..	..	lbs.	46
Apples	..	..	..	boxes	25
Greengages	..	..	..	baskets	13
Plums	..	..	..	„	10
„	..	..	..	case	1
Fowls	..	..	..	..	5
Chicken	..	..	..	..	1
„ (Colonial)	..	..	..	..	82
Rabbits ( „ )	..	..	..	..	98

GENERAL INSPECTION.

During the year 6,087 dwelling-houses were visited and inspected, and notices were served to abate nuisances found to be existing.

10,890 re-inspections of premises under notice were made while the necessary work was in progress.

644 complaints relative to alleged nuisances were made at the office and investigated.

SLAUGHTER-HOUSES.

4,760 visits were made to the different slaughter-houses.

COMMON LODGING-HOUSES.

1,188 visits have been paid to the registered Common Lodging-houses, which have been generally well-kept.

WORKSHOPS, &c.

5,260 visits have been made to the Workshops of the Borough, 3,519 being paid by Inspector Gray, and 1,741 by Miss Monk. Inspector Gray has also visited 867 Out-workers' premises, and made 535 visits under the "Shop Hours' Act," as well as 1,003 visits to the different Bakehouses.

DAIRIES, COWSHEDS AND MILKSHOPS.

275 persons during the year applied to be registered as Cowkeepers or Purveyors of Milk. One new cowshed was approved, having accommodation for four cows. All the cowkeepers, with one exception, kept their premises and cows in a very satisfactory manner, and the person who neglected to comply with the order with regard to cleanliness, drainage, etc., has since given up cowkeeping in the Borough. 2,264 visits of inspection have been made.

DRAINAGE.

3,819 house drains have been tested or re-tested during the year, of which number 670 were found to be defective, or 17.5 per cent. A considerable number of drains, so far as the combined portion is concerned, have been relaid by the Borough Engineer's Department. Inspector Turner also tested or re-tested 1,734 drains and the fittings of 1,089 new properties. The drains of Drayton Road Council School have also been tested and various defects found.

INFECTIOUS DISEASES.

1,422 cases of Infectious Diseases have been visited and the houses examined. Disinfectants have also been freely supplied to all cases.

Miss Monk has visited and enquired into 277 fatal cases of tuberculosis, and made the necessary arrangements for disinfection. Arrangements were also made for the removal of 698 cases to the Infectious Diseases Hospital. 1,609 rooms have been disinfected.

MIDWIVES' ACT.

Miss Monk has paid during the year 947 visits to the Midwives and their patients.

SALE OF FOOD AND DRUGS ACT.

The collection of samples under this Act has been carried out by Inspector Hobbs, who has on numerous occasions acted through an agent. 1,027 samples were taken, of which 86, or 8.36 per cent., were returned by the Public Analyst as adulterated. 518 samples of milk were taken, of which 149 were taken on delivery ; of these 107 were the owners' milks, and the remainder were taken from vendors in the town, at the Infectious Diseases Hospital, Royal Portsmouth Hospital, the Kingston Workhouse, and other places. The results of the legal proceedings which were taken in the list which follows, and the list of the various articles submitted to the Borough Analyst appears in his annual report printed in this volume.

This year the town has been visited by several hawkers, who went from house to house selling what they termed "Devonshire Butter," at a shilling a pound. After considerable trouble samples were secured from two of these hawkers, which proved on analysis to be margarine. Before summons could be served however they left the town, and the next that we heard of them was that they had commenced the same business at Hastings. Here, however, they were detected, but instead of adopting the rather slow process of issuing a summons, which gives guilty parties ample time to decamp and start operations in another place, the Hastings Authority had them apprehended on a warrant for obtaining money by false pretences, with a result that a sentence of three months imprisonment was passed upon each.

Before they left this town they sold their round to another hawker, who also sold margarine for butter. Samples were taken from this man ; they proved to be margarine on analysis—a summons was served—naturally he did not appear. A warrant was issued for his arrest, but he had left the town, and of course this could not be executed.

Proceedings were also taken against several persons for selling margarine in a plain paper wrapper, not bearing the name "Margarine," as required by the Act. In four cases, however, the summons were withdrawn, as convictions were obtained for selling margarine for butter. In one case a conviction was obtained and a fine imposed, and in another case the defendant left the town after being served with the summons and has not been able to be apprehended.

PROSECUTIONS AND FINES.

Under the Public Health Act, 1875, the following prosecutions were instituted, viz. :—

For exposing for Sale unsound Cherries ..	Fined £1-10-6, inc. costs.
For depositing in a slaughter-house Pork diseased with tuberculosis ..	Fined £10-11-6, inc. costs.
For non-compliance with a Notice to abate Nuisance ..	Fined 18/-, inc. costs.
Ditto ..	Fined 18/-, inc. costs.
For the recovery of the cost of supplying flushing apparatus ..	£1-7-9 and 2/- costs.
Ditto ..	£1-7-10 and 2/- costs.
Ditto ..	£1-9-5 and 2/- costs.
Ditto ..	£1-4-2 and 2/- costs.

Under the Housing of the Working Classes Act, 1903, sixteen applications were made to the Magistrates for Closing Orders, relating to Nos. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 and 32 Catharine Street ; eight applications with respect to Nos. 1, 2, 3, 4, 5, 6, 7 and 8 Hanover Court ; one application with respect to No. 52 Hyde Park Road, and five with regard to Nos. 6, 8, 10, 12 and 14 Rudmore Road. Closing Orders were made in all cases, except the Rudmore Road property, in which cases the applications were adjourned for two months, the owner having signed a declaration that he would carry out the requirements to the satisfaction of the Medical Officer of Health.

Under the Food and Drugs Acts the following proceedings were instituted, viz. :—

For selling Milk 12 per cent. deficient in fat ..	Fined £1-8-6, inc. costs.
„ Coffee with 50 per cent. Chicory ..	Adjourned <i>sine die</i> .
„ Margarine as Butter ..	Fined £5, inc. costs.
„ Milk containing 4.9 per cent. added water ..	Fined 17/6, inc. costs.
„ Milk 21 per cent. deficient in fat ..	Fined £3-8-6, inc. costs.
„ Milk 5.3 per cent. „ ..	Fined £1-7-6, inc. costs.
„ Milk 65.3 per cent. „ ..	Fined £4, inc. costs.
„ Milk 19.3 per cent. „ ..	Fined £1-14-0, inc. costs.
„ Milk 7 per cent. „ ..	Fined £4-8-3, inc. costs.
„ Milk 5 per cent. „ ..	£3-0-9, inc. costs.
„ Camphorated Oil 67.1 per cent. deficient in Camphor ..	Fined £2-13-0, inc. costs.
„ Tincture of Iodine containing Methylated Spirits ..	Dismissed.
„ Milk 16 per cent. deficient in fat ..	Defendant absconded.
„ Milk 6 per cent. „ ..	Fined £1, inc. costs.
„ Margarine as Butter ..	Fined £2-9-6, inc. costs.
„ Ditto ..	Fined £2, inc. costs.

Three summonses were also issued against hawkers for selling Margarine as butter, but were not served, the defendants having absconded. Two of them, however, were sentenced to three months imprisonment at Hastings for the same offence shortly afterwards.

Under the Margarine Act one person was fined £1, including costs, for selling Margarine in a paper not properly marked. In one case the information was withdrawn, the defendant being fined £5 under the Food and Drugs Act. In a second case the information was also withdrawn, the defendant being fined £2 9s. 6d., under the Food and Drugs Act; in another case the Magistrates inflicted no penalty, this defendant being fined £2 under the Food and Drugs Act, whilst one defendant absconded, and a warrant was issued, but has not been served.

Under the Factory and Workshops Act proceedings were taken against a baker for occupying a bakehouse which was not in a sanitary state. The case was adjourned on the payment of 3/6 costs, to enable the occupier to rebuild the premises. Plans were submitted and the work has been carried out.

I have the honour to remain, Gentlemen,

Your obedient servant,

FRED L. BELL,
Chief Inspector of Nuisances.

TO A. MEARNs FRASER, ESQ., M.D., D.P.H.,
Medical Officer of Health.

SIR,

I beg to present to you my Report for the year ending December 31st, 1908.

I have paid 1,741 visits to workrooms where women are employed, and out-workers' premises.

Several sanitary defects have been remedied, and complaints received from workrooms dealt with. These have chiefly been connected with overtime and have been forwarded to the Home Office.

I have visited 198 homes where there have been infectious disease amongst children, chiefly gastric and intestinal disease. The mothers are more intellectual in these matters, and were grateful for advice given for the prevention of such disease. They are also more sensible regarding the feeding of their babies, but there is still a strong inclination for artificial rather than natural feeding.

I have visited 277 houses where tuberculous disease has occurred.

I have paid 947 visits to Midwives and their cases, 69 being cases of still-birth, reported by the midwives. There have been 166 reports sent in by the midwives.

Three mild cases of Puerperal Septicaemia have occurred amongst the midwives' cases, all making good recovery, and in each case the midwife and all her appliances were at once disinfected. No second case appeared. Judging by reports from the meeting of the Central Midwives' Board, very few, if any, large towns can give such a favourable report as Portsmouth in this matter.

One Midwife has been reported for not complying with the rules of the C.M.B. One unregistered midwife was censured by the Midwives' Committee for practising midwifery and two notices sent warning women reported to be practising as midwives, not being registered under the Act.

Six additional Midwives have notified their intention to practice in the Borough; six have had their names removed from the Midwives' List, at their own request, and one midwife has died.

I am, Sir,

Your obedient servant,

MARY MONK.

The Diseases (Animals) Act.

TO A. MEARNS FRASER, ESQ., M.D.,
Medical Officer of Health.

SIR,

I beg to present to you my Annual Report for the year ending December 31st, 1908.

Inspection of Cattle.—The following is a list of animals which have been imported into the Borough during the year. The greater number arrived at Fratton Station from various markets. This list does not include the total number of cattle imported into the Borough, as a great number arrived by road and at Cosham Railway Station from markets situated down the western part of England.

Beasts	..	..	8,469
Sheep	..	..	24,251
Calves	..	..	4,569
Pigs	..	..	31,661
			68,950

Inspection of Cattle Trucks, etc.—2,751 cattle trucks, 600 horse-boxes and 93 tow-boats have been inspected during the year, and all were found to be properly cleansed and lime-washed, in accordance with the requirements of the Act.

Swine Fever.—Only one outbreak of this disease occurred during the year ; this was at piggeries situated at Copnor. There were 20 fat and store pigs upon the premises at the time of the outbreak. One pig had died before being reported, one was killed by the Board's Veterinary Surgeon, three by the Board's Inspector, four by the owner—which were free from disease and the carcasses passed as fit for food ; eleven

store pigs were killed by the owner, and buried in lime, with those that had been killed or died, as required by the Act.

All the premises, including sties and outhouses, together with the manure, were disinfected under my supervision.

The pigs were traced to have been sold at Cosham Sale.

In consequence of this outbreak I was instructed by the Inspector of the Board of Agriculture to serve Form B upon ten owners of pigs in the immediate neighbourhood, which detained upon their premises no less than 316 pigs. This confined the disease to that part of the district, and eventually stamped it out.

Owing to the Orders made by the Board of Agriculture, and put into force by the various Authorities in the counties, for the restriction of moving swine otherwise than by license from markets and other places, for the whole year, I have issued and received from other districts no less than 3,448 licenses, which licensed into this Borough 31,661 pigs by road and rail.

I also received 115 reports from the Police relating to the movement of pigs. These received my attention.

Rabies.—During the year several suspicious cases of this disease were reported, but in all cases I failed to find any trace of Rabies, the dogs suffering with diseases common to dogs, such as distemper and teething.

Importation of Dogs Order, 1901.—Licenses from the Board of Agriculture for performing dogs, etc., and intimations from the Customs Officers under the Order, have been duly attended to by Inspector Turner and myself. Supervision and isolation have been satisfactorily carried out, with the exception of one case, and that was a dog belonging to a Commander of one of H.M. ships, who reported that he had lost the dog after arriving at this port. The case was reported to the Board of Agriculture, who ordered proceedings to be instituted against the owner for not keeping the dog secured and isolated as required by the Act. He was fined 1/- and 9/- costs.

Dogs under this Order have arrived at the following places during the year, viz. :—

H.M. Dockyard	..	6
The Camber	.. ..	11
Flathouse	.. ..	5
Fareham	.. ..	3

Parasitic Mange.—Two outbreaks of this disease have occurred during the year. The two horses were isolated and treated by Mr. H. Green, Veterinary Surgeon, in both cases. They remained under our supervision until they were free from the disease, and the premises were thoroughly disinfected as required by the Order.

Glanders.—No cases, or suspicious cases of Glanders occurred in the Borough during the year.

Sheep-dipping (England) Order of 1908.—I received 91 declaration papers from the various markets, showing that 1,322 sheep and 18 lambs had been dipped in a solution approved of by the Board of Agriculture and Fisheries for the prevention of the spread of Sheep-scab ; these were all taken to slaughter-houses and there killed.

I have the honour to be, Sir,
Your obedient servant,

G. W. MONKCOM,
Inspector Diseases of Animals Act.

Public Analyst's Report.

FOR THE YEAR ENDING 31ST DECEMBER, 1908.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to present to you my Report for the year ending 31st December, 1908.

During the year 1,027 samples were submitted to me by your Inspector for analysis under the Sale of Food and Drugs Acts ; of these 941 were reported of genuine quality and 86 adulterated.

The variety and number of the food samples examined were similar to the previous year, but more specimens of drugs were analysed, owing to many cases of adulteration ; these are referred to later.

Only a very small number of samples were submitted by private purchasers, but undoubtedly a large amount of adulteration would be stopped if the ordinary householder could be induced to consult the department more frequently when provisions are doubted.

The following table shows the nature of the samples examined, with the number adulterated, in each case :—

TABLE A.

Nature of Samples	Number Examined	Number Genuine	Number Inferior	Number Adulterated	Percentage Adulterated
Milk	518	491	48	27	5·2
Skimmed Milk ..	15	15	2	0	..
Butter	229	205	..	24	10·4
Milk blended Butter	2	2	..	0	..
Margarine ..	26	26	..	0	..
Cream	7	6	..	1	14·2
Cheese	15	15	..	0	..

TABLE A.—Continued.

Nature of Samples	Number Examined	Number Genuine	Number Inferior	Number Adulterated	Percentage Adulterated
Lard	8	8	..	0	..
Bread and Butter	5	5	..	0	..
Suet	6	2	..	4	66·6
Olive Oil ..	6	6	..	0	..
Coffee	14	10	..	4	28·5
Coffee & Chicory ..	3	3	..	0	..
Cocoa	16	15	1	1	6·2
Chocolate Powders	2	2	..	0	..
Arrowroot ..	2	2	..	0	..
Rice & Ground Rice	6	4	..	2	33·3
Mustard	10	10	..	0	..
Pepper	11	11	..	0	..
Ground Almonds ..	4	4	..	0	..
Ground Ginger ..	4	4	..	0	..
Ground Carraway Seed ..	3	3	..	0	..
Worcestershire Sauce ..	1	1	..	0	..
Salmon and Shrimp Paste, etc. ..	7	6	..	1	14·2
Tinned Lobster ..	6	6	..	0	..
German Sausage ..	7	1	..	6	85·7
Jam	10	10	..	0	..
Whisky	9	8	..	1	11·1
Brandy	4	4	..	0	..
Gin	3	2	..	1	33·3
Camphorated Oil ..	28	21	..	7	25·0
Oxymel of Squill ..	8	7	..	1	12·5
Potassium Iodide and Bromide ..	6	6	..	0	..
Tincture of Iodine ..	7	5	..	2	28·5
Saffron	6	6	..	0	..
Lime Water ..	6	2	..	4	66·6
Glycerine ..	5	5	..	0	..
Opium 1, Syrup of Iodide of Iron 1 ..	2	2	..	0	..
	1027	941	51	86	8·3

TABLE B.
ADULTERATED SAMPLES.

No.	Sample	Nature and extent of Adulteration	Results, Fines, &c.
3	Milk	2% of added water ..	Letter of caution sent.
22	Rice	0.4% of Silicate of Magnesium and Aluminium	Sample from Workhouse.
23	Do.	Do.	Do.
46	Camphorated Oil ..	29.5% deficient in camphor	(Test Sample).
73	Milk	1% of added water ..	
77	Camphorated Oil ..	40.2% deficient in camphor	Letter of caution sent.
83	Do.	80% deficient in camphor and contained a foreign ingredient mineral oil ..	Letter of caution sent. (Test sample.)
88	Milk	12% deficient in fat ..	Fined 20/- and 8/6 costs.
91	Coffee	50% of Chicory ..	Case adjourned <i>sine die</i> .
93	Camphorated Oil ..	82.7% deficient in camphor and contained a foreign ingredient mineral oil ..	Letter of caution sent. Letter of caution sent.
94	Do.	Do.	Sent in by private person.
128	Butter	Margarine	Fined £5 including the costs.
133	Do.	Do.	Fined 10/- and 7/6 costs.
182	Milk	4.9% of added water ..	Fined 60/- and 8/6 costs.
204	Do.	21% deficient in fat ..	(Test sample.)
231	Butter	Margarine	
255	Milk	1% of added water ..	Fined 20/- and 7/6 costs.
284	Do.	5.6% deficient in fat ..	(Test sample.)
301	Do.	8.3% of added water ..	
308	Cocoa	Contained foreign ingredients: sugar 40%, starch 20% ..	(Test sample.)
320	Milk	3% of added water ..	Letter of caution sent.
358	Do.	1% do.	
378	Oxymel of Squills ..	25% of cane sugar ..	(Test sample.)
403	Butter	6.3% excess of water ..	(Test sample.)
411	Milk	2% of added water ..	No prosecution.
415	Butter	Margarine	Purchased from hawker as test sample.
425	Milk	21% deficient in fat ..	Letter of caution sent.
427	Butter	Margarine	(Private sample.)
434	Suet	19.6 grains of Boric Acid per pound ..	(Test sample.)
436	Do.	21 grains do. ..	Do.
437	Do.	1.4 grains do. ..	Do.
438	Do.	11.9 grains do. ..	Do.
447	Butter	5.8% excess of water ..	Letter of caution sent.
453	Milk	65.3% deficient in fat ..	Fined £4 including costs.
455	Do.	3% do.	No prosecution.
456	Do.	2.1% of added water ..	Do.
457	Do.	19.3% deficient in fat ..	Fined 20/- and 14/- costs.
470	Do.	7% deficient in fat ..	Fined £3 and £1 8s. 3d. costs.
496	Do.	5% do.	Fined £2 and £1 0s. 9d. costs.
513	Salmon & Shrimp Paste ..	7.5 grains of Boric Acid per pound ..	(Test sample.)
528	Milk	11% deficient in fat ..	Summons withdrawn.
551	German Sausage ..	46.3 grains of Boric Acid per pound ..	(Test sample.)
556	Milk	4.6% deficient in fat ..	Letter of caution sent.
561	Do.	22.6% do.	Summons withdrawn.
572	Do.	6.6% do.	Letter of caution sent.
581	Butter	Margarine	(Purchased from hawker as test sample.)
595	Do.	Do.	Do.
657	Do.	Do.	Summons not served, hawker absconded.
659	Do.	Do.	Do.
711	Milk	2.3% of added water ..	No prosecution.
735	Coffee	30% of Chicory ..	(Test sample.)
737	Do.	65% do.	Do.
762	Camphorated Oil ..	34.6% deficient in camphor	Do.

TABLE B—Continued.

No.	Sample	Nature and extent of Adulteration	Results, Fines, &c.
766	Butter	Margarine	Summons not served, hawker absconded.
779	Milk	3·7% of added water ..	No prosecution.
780	Camphorated Oil ..	67·1% deficient in camphor	Fined £2 and 13/- costs.
781	Coffee	15% of Chicory ..	Letter of caution sent.
800	Cream	0·52% of Boric Acid ..	(Test sample.)
829	Milk	3·5% of added water ..	No prosecution.
848	German Sausage ..	55·3 grains of Boric Acid per pound ..	(Test sample). Letter of caution sent.
849	Do.	18·9 grains do. ..	Do.
850	Do.	21·0 grains do. ..	Do.
851	Do.	14·0 grains do. ..	Do.
852	Do.	26·6 grains do. ..	Do.
864	Butter	30% of Margarine ..	(Test sample.)
870	Do.	Margarine	Do.
878	Tincture of Iodine ..	7% of Methyl Alcohol, traces of Acetone ..	Do.
882	Lime-water	30% deficient in lime ..	Do.
885	Do.	31·6% do. ..	Do.
892	Do.	15·3% do. ..	Letter of caution sent.
893	Do.	28·2% do. ..	Do.
897	Tincture of Iodine ..	7% of Methyl Alcohol, traces of Acetone ..	Case dismissed.
899	Butter	38% of Margarine ..	(Test sample.)
912	Do.	25% do. ..	Do.
929	Milk	16% deficient in fat ..	(Defendant did not appear, warrant issued.)
947	Do.	6% do. ..	Fined 20/- including costs.
966	Butter	38% of Margarine ..	(Test sample.)
974	Do.	38% do. ..	Do.
977	Do.	42% do. ..	Do.
988	Do.	50% do. ..	Fined £2 and 9/6 costs.
994	Do.	Margarine	(Test sample.)
1008	Do.	Margarine	Do.
1004	Whisky	6·4% excess of water ..	Letter of caution sent.
1005	Gin	4·1% do. ..	Letter of caution sent.
1021	Butter	Margarine	Fined £2 including costs.
1022	Do.	Margarine	Case withdrawn, after previous case.

The total Fines, including Costs, under the " Food and Drugs " and " Margarine Acts," amounted to £34 7s. 6d.

There were no cases of refusing to serve, or of obstructing or impeding the Inspector. One person was fined £1, including costs, for selling Margarine in a plain paper wrapper.

TABLE C.

Table showing the number of Samples analysed and the number found adulterated during the last five years in Portsmouth.

	Year	Samples Examined	Number Adulterated	Percentage Adulterated
Portsmouth	1904	997	72	7·2
Do.	1905	962	90	9·3
Do.	1906	1003	138	13·7
Do.	1907	1043	112	10·7
Do.	1908	1027	86	8·3
England and Wales ..	1906	..	..	9·3
Do.	1907	93088	7070	7·5

It will be seen from Table C that the samples returned as adulterated continue to fall in numbers and percentage. A great decrease in the number of adulterated milk samples accounts for this diminution, for, whereas there were 58 samples of milk returned as adulterated in 1907, last year only 27 were reported against. Compared with the average figures for England and Wales the total adulteration in Portsmouth is still high, and in fact is higher than most of our large towns. Below Portsmouth is compared with other large English towns, the returns being for 1907 (the latest available).

TABLE D.

Name of Town			No. of Samples examined	Number adulterated	Percentage adulterated
Metropolitan Boroughs	...	...	23,676	2337	9.8
Bristol	...	...	1,300	122	9.4
Birmingham	...	...	2,024	189	9.3
Liverpool	...	...	2,167	199	9.1
Manchester	...	...	2,719	83	3.0
Portsmouth	...	...	1,043	112	10.7

Unquestionably the food supply of a large town requires very careful supervision, and the fact that in 1907 almost exactly one-third of the food samples returned as adulterated in England and Wales were purchased in the Metropolitan Boroughs, bears out this statement.

Many samples have again been submitted to me during the year containing excessive quantities of preservatives, and though there are no regulations yet definitely limiting the use of preservatives, the recommendations of the Departmental Committee (1901) may be used as standards. These recommendations are of great importance, and are as follows :

- (a) That the use of Formaldehyde or Formalin, or preparations thereof, in foods or drinks, be absolutely abolished and that Salicylic acid be not used in a greater proportion than one grain per pint in liquid food, and one grain per pound in solid food. Its presence in all cases to be declared.
- (b) That the use of any preservative or colouring matter whatever in Milk offered for sale in the United Kingdom be constituted an offence under the Sale of Food and Drugs Acts.

- (c) That the only preservative which it shall be lawful to use in cream be boric acid, or mixtures of boric acid and borax, and in amount not exceeding 0.25 per cent. expressed as boric acid. The amount of such preservative to be notified by a label upon the vessel.
- (d) That the only preservative permitted to be used in butter and margarine be boric acid, or mixtures of boric acid and borax, to be used in proportions not exceeding 0.5 per cent. expressed as boric acid.
- (e) That in the case of all dietetic preparations intended for the use of invalids or infants, chemical preservatives of all kinds be prohibited.
- (f) That the use of copper salts in the so-called greening of preserved foods be prohibited.

With regard to the supply of Milk in this Borough, it is satisfactory to observe that in no case was a preservative detected present. It is only a very short time ago since it was argued that the presence of a small quantity of boric acid, or other preservative, was necessary in milk, in order that it might be got from the cow to the consumer in a fit condition for consumption, but this argument has been entirely negatived. In a like manner the theory put forward that boric acid is necessary in butter, cream, sausages, etc., will be doubtlessly exploded before long.

The sealing of samples was recently discussed by the Society of Public Analysts, for in several cases it was shown that portions of samples left with vendors had been tampered with. It is unfortunate that there is no method of sealing known at present which does not permit of tampering by a dishonest person.

In answer to the suggestion that a vendor might have the right to put his seal on the Inspector's portion of a sample, the Board of Agriculture reply that they see no reason why the vendor should not be allowed and encouraged to fix a seal to a reference sample.

Five reports were issued by the Local Government Board dealing with various food products. These reports are very useful to the analyst, and it is to be hoped that they will be followed by similar ones dealing with other subjects.

MILK.

The percentage of adulterated samples of this article continues to fall, as the following table shows :—

TABLE E.

Year	Number examined	Number adulterated	Percentage adulterated
1905	610	68	11.1
1906	567	78	13.5
1907	591	58	9.8
1908	518	27	5.2

The number of samples falling below the standard, and therefore returned as adulterated, is small, in fact smaller than any figure of recent years published in this Borough ; nevertheless a large number of the remaining samples were returned as of inferior quality. The inferior milk samples increase in number year by year, for in 1906 only 12 were returned under this heading ; in 1907 there were 29, whereas last year they increased to 48. This inferior milk is mostly the result of scientific adulteration, and is produced by either adding skim milk to new milk, until the cream is brought down to the legal minimum, or water is added until the standard is reached ; in some cases both processes are resorted to. In support of this statement I give the average composition of milk samples obtained from four of the largest dairy companies in Portsmouth during the last three years :—

TABLE F.

Company	Number of milk samples examined	Average percentage of fat	Average percentage of solids not fat	Percentage of samples in which fat was below 3.2 or solids not fat below 8.6	Percentage of samples containing more than 3.5% fat
" A "	24	3.70	8.92	8.3	66.6
" B "	23	3.75	8.98	8.6	69.5
" C "	36	3.46	8.97	11.1	41.6
" D "	34	3.29	8.77	76.4	5.8

Further comment on these figures is not necessary, for it is evident that the quality of the milk sold by Company D is of a very inferior quality, and the greater portion of it unquestionably adulterated.

In fairness to the honest trader this traffic in skim milk should be stopped. It appears to me the only means of

attaining this end would be to publish the names of the few firms whose practice it is to foist this stuff upon the public.

The samples I usually certify as of inferior quality are those which contain less than 3.1 per cent. of fat or less than 8.55 per cent. of solids not fat.

The monthly averages of the results obtained on the whole unadulterated milks (Table G) differ very little from the monthly figures of last year, the solids-not-fat, however, were slightly higher throughout the year.

TABLE G.

Month	Fat	Solids not Fat
January	3.59	8.92
February	3.81	8.88
March	3.51	8.94
April	3.59	8.89
May	3.40	8.99
June	3.48	8.84
July	3.62	8.73
August	3.53	8.61
September	3.81	8.73
October	3.70	8.73
November	3.37	8.88
December	3.47	8.88
Annual Mean	3.57	8.83

On the last page of this report will be found a curve comparing the above results with those obtained by Mr. H. D. Richmond, F.I.C. His figures are the mean of 60 herds of cows milked morning and evening every day throughout the year, and therefore may be taken to represent the average monthly quality of milk given by cows in this country. The above solids-not-fat figures are all obtained by actual experiment, for I not unfrequently find large errors in calculated results. The small variation in the mean annual figures obtained during the last three years at Portsmouth is shown by the following figures :—

TABLE H.

Year	Number examined	Fat	Solids not Fat
1906 ..	489	3.61	8.96
1907 ..	533	3.54	9.00
1908 ..	491	3.57	8.83

The adulterated samples have been excluded from the number given as examined in the above table, also in the determination of the average composition.

Altogether 107 samples of farmers' milk were taken on arrival in the town, and of these 7 were returned as adulterated and 10 of inferior quality. The latter figures are not large, as the majority of these samples were taken at the request of milk vendors, when the quality of the milk supplied to them was doubted.

The quality of the genuine samples was good, the mean figures being, fat 3.55, and for solids-not-fat 8.78 per cent.

There were also 45 samples of milk taken from large consignments after it had passed through the yards of dairymen, and had been delivered at public institutions, etc. None of these samples were adulterated, and their average composition was as follows: fat 3.74, solids-not-fat 8.78.

Out of the 518 samples of milk examined during the year there was not one that contained boric acid or other preservative. This is a most satisfactory statement to make, for it shows that local dairymen are anxious to supply milk that has not been tampered with in this respect. The decrease in the use of boric acid as a milk preservative in Portsmouth is shown by the following table:—

TABLE I.

Year	Number examined	Number containing Boric Acid
1905	610	40
1906	567	14
1907	591	5
1908	518	0

Two samples of skim milk were returned of inferior quality owing to the total solids falling below the limit of 9 per cent., but in neither case was the deficiency sufficient to certify adulteration.

It is to be regretted that only too often does the dairymen look upon the Food and Drugs Act with hostility, whereas they should be regarded as a means of ensuring fair trade. It is to the benefit of the trade, as well as the public, that the sale of adulterated milk is prevented, for such milk can obviously be sold at a lower price by a dishonest tradesman than the pure article, as sold by the honest tradesman.

Though a considerable amount of attention is devoted to the milk supply of the Borough, it cannot be deemed

excessive, when the ease with which milk can be adulterated is taken into consideration, the very limited time any particular consignment is on sale, and the fact that milk is frequently the sole food of infants and invalids.

BUTTER.

There was a large increase in the number of adulterated butter samples submitted for analysis during the year. This increase is shown by the record of results extending over the last three years :—

TABLE J.

Year	Number examined	Number adulterated	Percentage adulterated
1906 ..	168	17	8.3
1907 ..	166	17	8.4
1908 ..	229	24	10.4

Of the 24 samples of adulterated butter, 15 consisted entirely of margarine, and 7 were mixtures of butter and margarine. Two samples of butter contained excessive amounts of water, the percentages being 22.3 and 21.8 respectively.

The Butter and Margarine Act (1907) acknowledges three substances : Firstly—Genuine butter, which must not contain more than 16 per cent. of water ; Secondly—Milk-blended butter, the percentage of water not exceeding 24 per cent ; Thirdly—Margarine, the water contained being limited to 16 per cent. and the butter-fat to 10 per cent.

In no case was a sample under the last two headings returned as adulterated. It will be remembered that in 1907 there were several cases in which Margarine contained an excessive amount of water, so it must be assumed, as there were none during the year under consideration, that the fixing of a standard by the Board of Agriculture has had a good effect.

I pointed out in my last yearly report that the weak point in the 1907 Butter Bill is that butter is allowed to be imported from countries whose butter factories are not under government inspection. At the third International Dairy Congress, held last year at Scheveningen, this point was raised by the delegates of the English Agricultural Associations.

A large number of the condemned butter samples were sold by itinerant vendors, men not infrequently dressed as farmers or countrymen. These men go from door to door,

using a well-worn yarn, that they keep their own cows and by retailing direct to the public, save the profit of the middleman, and are thus enabled to retail goods at a lower price than shopkeepers. Frequently last year butter could not be bought wholesale at 1/- per pound, so a splendid opportunity was afforded these men of acquiring extensive rounds, for by selling margarine as butter at 1/- per pound, they made a handsome profit, of course meeting with no opposition as far as price was concerned from shops. However, in no case was one of this class of vendor brought into the Police Court, for they always carefully disappeared as soon as the Inspector had taken an official sample. Two of the men wanted here have since been arrested elsewhere and been sentenced to three months imprisonment for similar offences. In another case a warrant was issued for the hawker's arrest, but so far his whereabouts has not been discovered.

The defence made by a shopkeeper charged with selling margarine as butter is invariably that a mistake occurred on the part of an assistant. Generally we have every proof that a "mistake" occurs whenever butter is purchased from such a shopkeeper, and the Magistrates might well ask the Inspector after they have decided to convict, whether anything is known about the way the shopkeeper in question conducts his business.

Starch does not appear to have entered into the composition of any butter or margarine analysed. Of the 229 samples of butter examined, 76.6 per cent. contained boric acid. In 1907 the percentage was 74.7. The average amount of boric acid present in the samples that contained it was 0.28 per cent., the quantity varying from 0.1 to 0.55 per cent. In 18 cases the amount of boric acid exceeded 0.49 per cent. Of the samples of margarine, boric acid was present in 77.7 per cent. of the samples, the amount varying from 0.1 to 0.30 per cent.

CREAM.

Seven samples of Cream were examined during the year, one of which was returned as adulterated. In every case the amount of fat was normal, and varied from 54.4 to 61.7 per cent. Boric acid was contained in all the samples but one, the average amount present being 0.25 per cent. In one case the amount of boric acid was 0.52 per cent., and this sample I returned as adulterated.

In London a sample of cream was returned as adulterated which contained 0.31 per cent. of boric acid, notwithstanding the fact that the presence of a borax preservative was declared

on the outside of the pot, and a prosecution followed. The Magistrates, after hearing the evidence, decided to convict, as they found such cream was injurious to infants and invalids, and their decision was subsequently upheld in the High Court of Justice, King's Bench Division. Evidence was given by Mr. H. D. Richmond as to the length of time cream would keep with and without boric acid, and he also showed it was quite possible to keep unpreserved cream for several days provided it was kept cool.

Cream containing no boric acid kept 2 days at 60° F.

Cream containing 17½ grains of boric acid per lb. kept 5 days at 60° F.

Cream containing no boric acid kept for 5 days at 40° F.

SUET.

Four samples of Suet were returned as adulterated, as they contained boric acid amounting to 21 grains per pound. As many samples contain no preservative at all, the presence of boric acid is not necessary, and is therefore to be condemned. I have examined suets containing as much as one per cent. of boric acid.

GERMAN SAUSAGE.

Several samples were examined for boric acid, and the amount of that preservative present varied from nil to 55 grains per pound. There is therefore a divergence of opinion amongst manufacturers as to the quantity of boric acid necessary to keep their products. Indeed, as some manufacturers rely solely on the freshness of the meat, and use no preservative, it would appear that others have recourse to boric acid because the meat used is stale and therefore would not be in a fit state for human consumption by the time it reached the purchaser.

GROCERIES.

COFFEE.—On four occasions the Inspector was given a mixture of coffee and chicory, when coffee had been asked for, and no notice was conveyed to the purchaser that he had been served with a mixture. In one case the mixture contained only 35 per cent. of coffee, the rest consisting of chicory.

The mixtures sold as coffee and chicory usually contain excessive quantities of chicory, and purchasers would get better value for their money if they bought their coffee and chicory separately and subsequently mixed them.

COCOA.—One sample was returned as adulterated, as it contained 40 per cent. of sugar and 20 per cent. of starch. A disclosure that this was not pure cocoa should have been made to the purchaser, preferably by a plainly printed notice on the packet.

RICE.—In my last yearly report I drew attention to the fact that rice was frequently polished with talc and similar substances. Two samples of rice examined this year contained talc to the extent of 0.4 per cent. Talc is an insoluble mineral substance, but nevertheless capable of causing injury to health. Rice, being a food largely given to invalids, its purity should be unquestionable.

SPIRITS.

One sample of whiskey and one sample of gin contained excessive water, and the vendors in each case were cautioned.

The interim report issued by the Royal Commission on whiskey is of some interest, and is as follows :—

- (1) That no restrictions should be placed upon the processes or apparatus used in the distillation of any spirit to which the term whiskey may be applied as a trade description.
- (2) That the term whiskey having been recognised in the past as applicable to a potable spirit, manufactured from (1) Malt, or (2) Malt and unmalted barley or other cereal, the application of the term whiskey should not be denied to the product manufactured from such material.

DRUGS.

A larger number of drugs were examined during the year than usual, and comparatively a large number were returned as adulterated. Altogether out of 68 samples, 14 were reported against, corresponding to 20 per cent. Some of the dealings in adulterated drugs were of a very fraudulent nature, particularly the tincture of iodine cases.

CAMPHORATED OIL.—Of the 28 samples submitted to me, 7 were adulterated. According to the *British Pharmacopoeia* camphorated oil should contain 21.4 per cent. of camphor, and be compounded with olive oil. I found in some instances that mineral oil, that is ordinary paraffin oil, had been substituted, and that in every case reported against

there was a deficiency in camphor. In one case the deficiency in camphor amounted to 82.7 per cent.

OXYMEL OF SQUILL.—According to the *British Pharmacopoeia* this should be prepared with honey, acetic acid and squill. In one instance I found that ordinary cane sugar had been used instead of honey and condemned the sample. The difference in the therapeutic action of ordinary sugar and honey is common knowledge.

TINCTURE OF IODINE.—This should consist of a solution of iodine and potassium iodide in alcohol, in specified proportions. In two samples returned as adulterated, ordinary methylated spirits had been substituted for alcohol, and as this tincture is frequently used for internal purposes, the substitution was condemned. The methylated spirit used was the commercial variety, containing ordinary petroleum and other impurities.

LIME WATER.—Six samples were examined and four found deficient in the essential ingredient, *i.e.*, lime. In two cases the deficiency amounted to over 30 per cent., and in one case 28 per cent., and I consider in these cases the deficiency was excessive. It is true that lime water loses its strength somewhat on keeping, but the following results I obtained on a sample of genuine lime water, show this loss of lime to proceed at a very slow rate indeed even in the atmosphere of the laboratory. On the 18th November a sample contained in a medicine bottle was found to contain 0.1086 per cent. of lime (CaO). The bottle, which was never tightly corked, was uncorked for one minute or so every week day for two months, and an estimation of the lime again made. The percentage on the 19th January was 0.0985, the loss being equal to 9.3 per cent.

In addition to the samples of food and drugs examined, 105 analyses of various substances were made for Corporation departments, as follows :—

Waters	..	..	78
Water sediment	..	..	1
Lubricating Oils	..	..	6
Soils	..	..	2
Paving Asphaltes	..	..	3
Paints	..	..	10
Turpentine	..	..	3
Soap	..	..	2

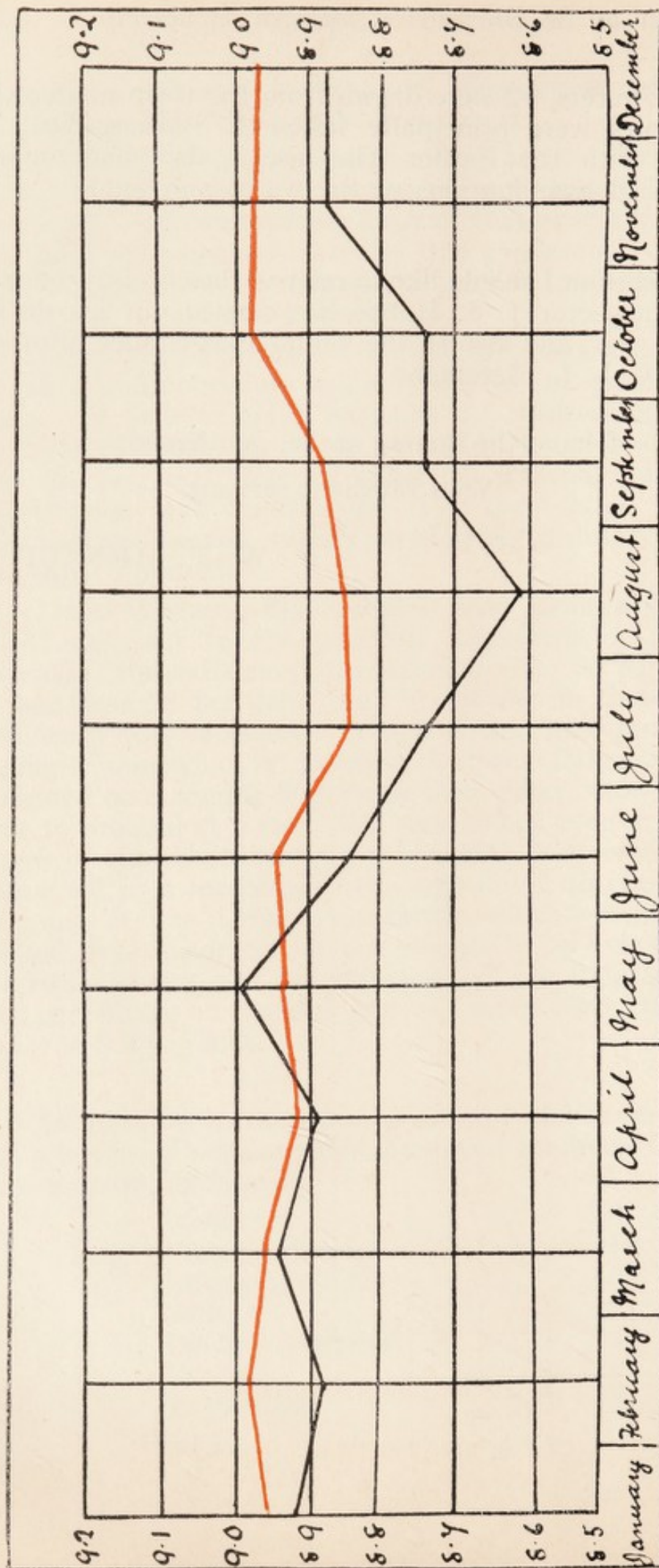
Of the waters, 12 were drawn from the town mains, the other samples were principally taken at Baffins Tip. In connection with the Baffins Tip case I also made many bacteriological examinations of the water and mud.

In conclusion I should like to refer to the efficient manner in which Inspector J. S. Hobbs has carried out his duties during the year, and also to the valuable assistance afforded me by Mr. C. L. L. Claremont.

I have the honour to be, gentlemen,

Your obedient servant,

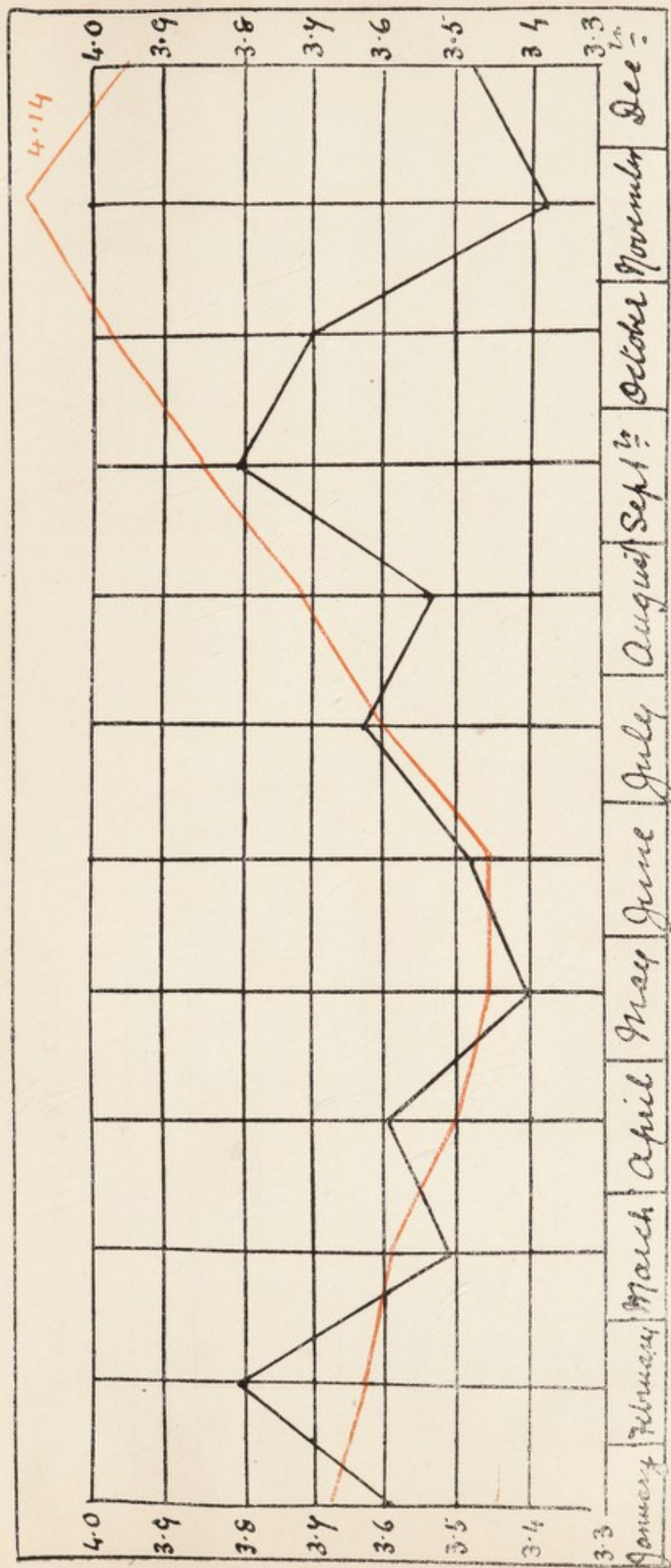
F. W. F. ARNAUD.



BLACK LINE.....Portsmouth figures, 1908.

RED LINEMr. D. D. Richmond's figures, 1907.

SOLIDS-NOT-FAT CURVE.



BLACK LINE.....Portsmouth figures, 1908.

RED LINEMr. D. Richmond's figures, 1907.

FAT CURVE.

© 2000 Blackwell Science Ltd *Journal of Internal Medicine* 247: 391–397

Acreeage	..	..	..	..	11
Analyst's Report	..	..	..	..	97-115
Appendix	..	..	..	..	81-85
Bacteriology	..	..	..	..	46
Births, Deaths and Meteorology	..	..	..	..	12
Births	..	..	..	..	9
Birth-rate	..	..	..	..	13
Census, 1901	..	..	..	..	11
Common Lodging Houses	..	..	..	..	90
Dairies, Cowsheds and Milkshops	..	..	..	..	91
Deaths, total	..	..	..	..	9
" different causes of	..	..	..	5, 15-20,	84
" quarterly	..	..	..	..	21-2
" children under 1 year	..	..	..	..	22, 85
Death-rate for 10 years	..	..	..	..	5-13
Diarrhoea	..	..	..	..	42, 44
Diphtheria	..	..	..	..	34, 35
Diseases of Animals Act	..	..	..	..	96-98
Dogs Order, Importation of	..	..	..	..	97
Drainage Defects	..	..	..	..	91
Factory and Workshop Act	..	..	..	..	54-58
Female Inspector's Report	..	..	..	..	95
Food Inspection	..	..	..	..	49-50
Food and Drugs Act	..	..	..	..	92
Food, unsound or destroyed	..	..	..	..	89-90
General Sanitary Supervision	..	..	..	46-47,	90
Glanders	..	..	..	..	98
Health Committee	..	..	..	..	3
Housing of the Working Classes Act	..	..	..	..	50-52
" " " " Proceedings under	..	..	..	..	93
Infantile Mortality	..	..	..	13, 41-43,	85
Infectious Diseases	..	..	..	27-29,	83
" " weekly numbers	..	..	..	..	45
" " Notified, ages of patients	..	..	..	..	83
" " Hospital, list of cases admitted from 1883	..	..	..	..	80
Inspection of Cattle	..	..	..	..	96
" Cattle Trucks, etc.	..	..	..	..	96
Inspector of Nuisances Report	..	..	..	..	87-94
Lung Diseases, Number and Rate of	..	..	..	..	25
Marriages	..	..	..	..	9
Measles	..	..	..	..	39
Medical Inspection of School Children	..	..	..	..	63-68
Meteorological and Diseases Chart	..	..	..	..	2
Meteorological Observations	..	..	..	..	69-77
Milton Hospital	..	..	..	..	78-80
" " Medical Superintendent's Report	..	..	..	..	78
Midwives' Act	..	..	..	60-61,	91
Midwives, Roll of	..	..	..	..	62
Midwives, Inspection of	..	..	..	..	59
Parasitic Mange	..	..	..	..	98
Population	..	..	..	..	11
" at Census, 1901	..	..	..	..	1
Port Sanitary Report	..	..	..	..	86
Prosecutions	..	..	..	..	93-94
Rabies	..	..	..	..	97
Rainfall	..	..	..	..	73-74
Refuse Collection and Disposal	..	..	..	..	52-53
Scarlet Fever	..	..	..	..	32, 33
Sewerage System	..	..	..	..	53-54
Slaughterhouses	..	..	..	..	90
Small-pox	..	..	..	..	29
Staff of Health Department	..	..	..	..	4
Summary of Deaths	..	..	..	..	20
Summary of Statistics	..	..	..	..	5
Swine Fever	..	..	..	..	96-97
Sheep-dipping (England) Order of 1908	..	..	..	..	98
Sub-Districts, Population, etc., of	..	..	..	..	82
Towns, statistics of other large towns	..	..	..	..	14
Typhoid Fever	..	..	..	..	36-38
Vaccination Returns	..	..	..	..	30, 31
Water Supply	..	..	..	..	47
" Analysis of	..	..	..	..	48
Workshops	..	..	..	..	57-58
" Nuisances in respect of	..	..	..	..	57
Zymotic Death-rate	..	..	..	..	14, 25
Zymotic Diseases (48 years)	..	..	..	..	23