

[Report of the Medical Officer of Health for Port of London].

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PORT OF LONDON SANITARY COMMITTEE.

ANNUAL REPORT

OF THE



MEDICAL OFFICER OF HEALTH,

To 31ST DECEMBER, 1916.

Presented 4th October, 1917.

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REPORT,

FOR THE YEAR ENDED 31ST DECEMBER, 1916,

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

PORT OF LONDON.

BY

WILLOUGHBY MASON WILLOUGHBY, B.A., M.D.,
B.C., Cantab., D.P.H. Camb.,

Medical Officer of Health, Port of London.



LONDON :

PRINTED BY CHARLES SKIPPER & EAST, 49, GREAT TOWER STREET, E.C.

THE HISTORY OF

THE CITY OF BOSTON

FROM THE FIRST SETTLEMENT TO THE PRESENT TIME

VOLUME NO. TWO

BY JOHN W. COOPER

NEW YORK: G. P. PUTNAM'S SONS

1893



DUNN, *Mayor.*

TRELOAR, *Locum Tenens.*

A Common Council holden in the Chamber of
the Guildhall of the City of *London*, on
Thursday, the *4th* day of *October*, 1917.

THE Port of London Sanitary Committee did this day deliver into this Court a Report in writing under their hands, of their proceedings, and submitting the Annual Report of the Medical Officer of Health of the Port to the 31st December, 1916 ; which was read.

ORDERED, That the Report be printed, and a copy sent to every Member of this Court.

BELL.

*To the Right Honourable the Lord Mayor, Aldermen and Commons
of the City of London, in Common Council assembled.*

WE, whose names are hereunto subscribed, of your Port of London Sanitary Committee, to whom it has been referred to carry into execution the powers assigned to the Corporation, as the Port of London Sanitary Authority by the Local Government Board, under the Public Health (London) Act, 1891, beg to submit for the information of your Honourable Court the Annual Report of the Medical Officer of Health for the Port of London, for the year ended the 31st December, 1916, which Report contains a full and detailed account of the work done in the Port during that period by the Medical Officers and Inspectors.

The number of cases of Infectious Disease admitted to the Hospital was below the average, and no case of Plague or Cholera was brought into the Port.

The examination of rats for evidence of Plague has been continued as work of considerable importance in the public interest. The number of rats specially examined and reported upon during the year was 4,132, while 52,258 were reported to have been destroyed in the docks and on ships entering the Port.

There would appear to be reason in concluding from observation that the campaign against rats which has been consistently maintained for some years is resulting in the reduction of the number at large in the docks.

The Public Health (Venereal Diseases) Regulations, 1916, on coming into force brought into prominence the question of the introduction of the diseases of seamen arriving in the Port, and steps were promptly taken to secure as far as was possible that such cases should be directed to Centres where a proper treatment was afforded.

The work of Food Inspection was increased by the arrival in abnormal quantities of damaged and deteriorated produce, and the importation of canned meat prepared from carcasses infected with tuberculosis raised questions of considerable importance in relation to the Public Health. The total quantity of foodstuffs seized was 5,664 tons.

Sanitary Inspection of vessels has been carried out to the number of 29,878 visits of inspection, but on the River it has been necessary to lay up one launch owing to the enlistment of four men.

Under the powers conferred by the Public Health (Shellfish) Regulations, 1915, Orders were made prohibiting the removal, except under conditions, of shellfish from certain layings within the Port, for purposes of human food.

Your Committee have had from time to time under consideration the condition of the fumigating plant and barge for the sustained service for which there had been a demand in connection with troopship disinfection and for the destruction of rats

A special report of the working of the Canal Boats Acts and Regulations is included in the Report, and an Account of Receipts and Expenditure in connection with the Port of London Sanitary Authority, for the year ended 31st December, 1916, is also appended, in accordance with the Order of your Honourable Court, for the information of the Court.

All which we submit to the judgment of this Honourable Court. Dated this second day of October, 1917.

E. S. BEAL.
E. S. JACOB.
W. FORTESCUE.
CECIL F. J. JENNINGS.
B. T. SWINSTEAD.
VAL. I. ROD. LONGMAN.
J. K. BROWN.

WALTER H. KEY.
JAMES WANN.
ROBT. PEACHEY.
H. PERCY MONCKTON.
JOHN F. BENNET.
W. LINDLEY-JONES.
H. M. GAYDON.
C. C. HODGES.
MARCUS R. SEWILL.

OFFICES

OF THE

Port of London Sanitary Authority

AND

Medical Officer of Health

AT

51, KING WILLIAM STREET,

GREENWICH, S.E. 10.

TELEGRAPHIC ADDRESS - "MEDOFF, GREEN," LONDON.

TELEPHONE No. - - - GREENWICH 360.

BOARDING STATIONS.

RIVER THAMES - - - HULK "HYGEIA," GRAVESEND.

RIVER MEDWAY - - - GARRISON POINT, SHEERNESS.

TELEPHONE No. (HULK "HYGEIA") - - - GRAVESEND 325.

HOSPITAL FOR INFECTIOUS DISEASES

AT

DENTON, NEAR GRAVESEND.

TELEPHONE No. (HOSPITAL) - - - GRAVESEND 957.

Ditto (MEDICAL OFFICER OF HEALTH) ,, 86

THE LONDON SANITARY AUTHORITY
OFFICES

THE LONDON SANITARY AUTHORITY
OFFICES

THE LONDON SANITARY AUTHORITY
OFFICES

21, KING-WILLIAM STREET,
GREENWICH, S.E. 10.

GREENWICH, S.E. 10.

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GREENWICH, S.E. 10.

GREENWICH, S.E. 10.

HOSPITAL FOR INFECTIOUS DISEASES
DENTON, NEAR GRAVESEND
GRAVESEND, ENGL.

PORT OF LONDON SANITARY OFFICES,
51, KING WILLIAM STREET,
GREENWICH, S.E. 10.

TO THE WORSHIPFUL THE PORT OF LONDON
SANITARY COMMITTEE.

GENTLEMEN,

I have the honour to present my Report for the year 1916, the first of a new series.

The abnormal conditions which have obtained in the port and in every department of work connected with shipping render comparison with former years difficult.

The number of cases of grave infectious disease dealt with has been small. No case of Plague or Cholera has been found in or has entered the port.

The routine examination of rats found in the Port District, which is an essential provision against the introduction of plague, has been carefully carried out.

I have recorded an epidemic of Enteric Fever on shipboard. Such occurrences appear to be now somewhat rare.

The supervision of shellfish layings in the Thames Estuary within the port limits has been continued. Action has been found necessary with regard to certain layings, as recorded below.

During the year the subject of Venereal Diseases has been brought into practical prominence by Regulations framed to procure free treatment for all suffering from these diseases, and an extended number of practitioners competent to administer the efficacious drugs or other curative treatment. There is scope for effective work in this matter in the port, and your officers have taken up this work.

Food inspection has been complicated by the arrival of abnormal quantities of damaged and deteriorated produce ; a useful outlet for such material has been found wherever possible under suitable guarantee against its use as human food.

Important questions arose in connection with imported canned meats prepared from tuberculous carcasses, and in connection with tuberculous pig carcasses.

Certain re-arrangements in the duties of Boarding Medical Officers have been necessary in the absence of one of these on military service, and in view of the vacancy created by the advancement of your Medical Officer from the post of Deputy.

One of three launches has been continuously laid up owing to the enlistment for military service of the crew of four men.

The clerical staff is substituted by female clerks to the extent of two out of five.

Possible loss of efficiency due to these reductions and substitutions has been largely compensated by the willing manner in which extra duties have been assumed throughout the whole staff.

TABLE I.

MEDICAL INSPECTION—GRAVESEND. From 1st January to 31st December, 1916.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of foreign arrivals	364	669	556	569	758	675	712	653	624	573	519	526	7,398
Number medically inspected	139	177	125	151	144	126	145	131	125	122	114	122	1,621
Number of passengers ...	2,344	2,420	1,689	1,737	2,809	5,252	1,064	794	1,175	836	673	1,307	22,100
Number of crew ...	6,211	5,634	5,327	7,326	7,813	1,086	6,560	6,719	7,134	5,545	3,888	6,010	69,253

MEDICAL INSPECTION.

The arrangements for medical inspection of foreign arrivals have been modified in view of the closure of the Medway to ordinary traffic. Dr. E. V. Legge, who formerly carried out these duties, has been transferred to Gravesend, where he fills the vacancy caused by the absence on military duties of your Deputy Medical Officer of Health, Lieut.-Col. J. S. Warrack, and is available for service at Sheerness should occasion arise.

The number of vessels medically inspected at Gravesend (see Table I.) was 1,621, or 21.9 per cent. of the total arrivals. The total number of passengers and crews carried by the vessels inspected was 91,353. The total number of cases of infectious disease discovered and removed to Denton Hospital for treatment was 53 (see Table II.).

TABLE II.—INFECTIOUS DISEASE.

DISEASE.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	Mean annual number for 10 years ending 31st December, 1916.	1916.
<i>(a) CASES REPORTED :</i>											
Cholera (including suspected cases)	9	5	3	5	9	2	19	...	2	5.9	5
Yellow Fever (ditto)	...	2	...	...	...	...	4	...	...	0.6	...
Plague (ditto)	4	1	4	6	...	9	4	4	...	3.2	...
Smallpox	27	16	27	8	13	34	19	9	47	21.5	15
Scarlet Fever	44	23	16	21	11	10	40	30	18	21.8	5
Diphtheria	7	18	11	11	18	37	16	10	18	15.3	7
Enteric Fever	55	90	36	39	70	61	65	67	64	60.8	61
Measles	51	86	19	23	175	61	64	228	337	188.0	836
German Measles ... ..	...	...	...	...	...	3	4	...	10	2.5	8
Erysipelas	2	7	5	5	11	3	3	3	9	4.9	1
Typhus Fever ... ..	...	...	...	...	...	1	...	...	...	0.1	...
Continued Fever	11	19	10	1	5	9	13	2	7	9.0	5
Relapsing Fever ... ..	...	...	1	...	...	...	...	...	...	0.1	...
Tuberculosis :—											
Pulmonary ... ..	...	...	...	...	...	71	151	127	96	49.8	53
Other kinds ... ..	...	...	...	...	...	...	7	45	6	7.7	19
Other diseases (including Chicken-pox).	42	41	57	25	38	42	38	50	48	42.5	44
TOTAL... ..	252	308	189	144	350	343	447	575	662	433.7	1059
<i>(b) TREATED IN PORT SANITARY HOSPITAL :</i>											
Cholera (including suspected cases)	1	...	1	2	...	...	...	...	...	0.4	...
Yellow Fever (ditto)	...	...	...	...	...	...	...	...	...	...	...
Plague (ditto)	3	...	1	2	...	1	2	1	...	1.0	...
Small-pox	8	...	4	2	6	2	9	2	10	4.5	2
Scarlet Fever	4	6	14	...	6	...	3	8	10	5.3	2
Diphtheria	3	5	1	4	3	...	7	1	3	2.8	1
Enteric Fever	27	42	11	17	22	35	29	30	17	26.4	34
Measles	14	13	5	2	7	27	18	9	33	13.2	4
Erysipelas ... ..	...	1	1	...	...	1	...	...	1	0.4	...
Typhus Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	10	6	10	1	4	7	9	1	5	5.7	4
Other diseases (including Chicken-pox).	5	15	10	7	8	7	14	9	11	9.2	6
TOTAL... ..	75	88	58	37	56	80	91	61	90	68.9	53

TABLE III.

Return of the Number of Cases of Infectious Disease Notified to the Local Government Board during the Year 1916, and of Deaths from the Diseases Notified :—

	<i>Notified.</i>	<i>Deaths.</i>
Small-pox - - - - -	2	...
Scarlatina or Scarlet Fever - - - - -	2	...
Diphtheria (including Membranous Croup) - - - - -	4	...
Enteric (Typhoid) Fever - - - - -	44	...
Puerperal Fever - - - - -	...	...
Typhus Fever - - - - -	...	...
Cholera - - - - -	...	...
Plague (Suspected) - - - - -	...	...
Relapsing Fever - - - - -	...	...
Continued Fever - - - - -	2	...
Erysipelas - - - - -	1	...
Tuberculosis : Pulmonary - - - - -	39	...
Other kinds - - - - -	10	...
Cerebro-Spinal Fever - - - - -	1	...
Acute Poliomyelitis - - - - -	...	...
Other Diseases :—		
Chicken-pox - - - - -	9	...
Measles - - - - -	14	...
German Measles - - - - -	4	...
Ophthalmia Neonatorum - - - - -	...	...
	<hr/> 132	<hr/> ...

NUMBER OF NOTIFICATIONS DURING 1916.

<i>Disease.</i>	<i>Passengers.</i>	<i>Crew.</i>	<i>Total.</i>
Small-pox - - - - -	232	189	421
Pulmonary Tuberculosis - - - - -	29	—	29
Miners' Phthisis - - - - -	15	—	15

TABLE IV.

VESSELS AND PREMISES DISINFECTED, FROM 1ST JANUARY TO 31ST DECEMBER, 1916.

Month.	Reason for Disinfection.															Total number of Disinfections.		
	Cerebro-Spinal Meningitis.	Chicken-pox.	Cholera.	Continued Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Leprosy.	Measles.	Whooping Cough.	Plague.	Remittent Fever.	Scarlet Fever.	Small-pox.	Pulmonary Tuberculosis, &c.		Precautionary Measure.	Vessels Fumigated.
January	...	...	...	...	...	1	...	...	4	...	...	...	...	...	...	...	1	6
February	...	2	...	...	...	3	...	...	...	...	...	...	...	...	1	...	2	8
March	...	...	...	...	...	2	...	...	1	...	...	...	...	1	1	...	...	5
April	...	...	...	...	...	1	...	...	...	...	...	...	1	1	2	...	...	5
May	...	...	...	...	2	3	...	...	...	...	...	...	...	1	...	...	...	6
June	...	...	...	...	1	2	...	...	2	...	...	...	...	...	1	...	...	6
July	...	...	...	2	...	2	...	...	1	...	...	...	1	1	2	...	1	10
August	1	...	...	...	...	1	...	...	2	...	...	...	...	...	...	1	...	5
September	1	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	1	5
October	1	...	...	...	...	1	...	...	1	...	...	...	...	...	1	...	5	9
November	...	...	...	...	...	4	...	...	1	...	...	...	...	...	1	...	1	7
December	...	...	1	...	...	...	...	1	1	...	...	...	...	3	...	...	3	9
Totals	3	2	1	2	4	21	...	1	14	...	...	...	2	4	12	1	14	81

TABLE V.

NUMBER OF DISINFECTIONS OF EFFECTS, BEDDING, &C., FROM 1ST JANUARY TO 31ST DECEMBER, 1916.

Month.	Reason for Disinfection.													Hospital Bedding, &c.	Total Effects.	Number of times Steam Disinfectant was used.	Disinfected by Fumigation.
	Cholera.	Chicken-pox.	Continued Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Pulmonary Tuberculosis, &c.	Plague.	Cerebro-Spinal Meningitis.	Scarlet Fever.	Small-pox.	Precautionary Measure.				
January	1	...	1	...	...	...	...	...	...	...	2	2	...
February	...	2	...	...	2	...	...	1	...	...	...	...	...	...	5	4	3
March	1	...	1	...	...	...	...	...	...	...	2	6	1
April	1	...	...	...	...	1	2	...	...	...	4	5	1
May	3	...	...	...	...	...	1	...	...	...	4	7	1
June	...	1	...	1	2	...	2	...	...	...	1	...	1	...	8	10	1
July	1	...	1	...	...	...	...	1	1	1	...	...	5	6	1
August	1	2	...	1	...	...	...	...	...	...	...	4	3	...
September	3	...
October	2	...	2	...	2	...	...	...	...	...	6	5	...
November	2	...	1	1	...	...	...	...	...	...	4	5	2
December	1	...	...	...	...	...	...	...	...	...	1	3	...
Totals	...	3	1	2	18	...	8	2	...	2	2	5	1	1	45	59	10

INFECTIOUS DISEASE.

The total number of cases reported to your Medical Officer of Health during the year was 1,059, the average annual number for the decennium ending 31st December last being 433·7 (see Table II.). It will be noticed that there was a large increase in the number of cases of Measles reported. Practically the whole of these were reported as having occurred on vessels in the transport service, and had been landed elsewhere.

Reported cases of Small-pox were below the average, while Enteric Fever was about normal, and Scarlet Fever and Diphtheria were below the mean.

Five cases of Cholera or Suspected Cholera were reported on vessels, but for the second year in succession no case of Plague.

Of the cases admitted to Hospital, the majority were of Enteric Fever, namely 34 or 64·1 per cent. of the total admissions.

I append as usual a few notes in such cases as are of general interest.

TABLE VI.

(CHOLERA.)

Date.	No. of Cases.
1916.	
July 20 - - - -	1
Sept. 6 - - - -	2
Oct. 19 - - - -	1*
Dec. 13 - - - -	1
Total - - - -	5

*This case was fatal and the body was buried at sea. The remainder were all landed at foreign ports.

CHOLERA.

A vessel arrived from Yokohama on the 18th October last, when it was reported that a case of Cholera had occurred on board during the voyage. Patient was taken ill on August 16th, and died on the 17th, the body being buried at sea. Disinfection of vessel and effects were carried out, and the water tanks pumped out. No further case occurred.

A vessel arrived on the 13th December, and it was reported that a case of Cholera had been removed therefrom at Basra on the 23rd September last. The fresh water tanks were emptied and cleaned and infected bedding landed with the patient. No further case occurred, and the facts were reported to the Local Government Board.

TABLE VII.

RETURN OF RATS CAUGHT AND DESTROYED DURING 1916.

The entire cost of destroying these rats has been borne by the Shipowners and Dock Companies.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS.
Millwall Dock—													
Warehouses - - -	109	144	133	198	105	359	95	85	223	225	151	284	2,111
Vessels during voyage	70	—	—	30	70	105	100	—	20	30	80	60	565
„ while in dock -	186	249	113	118	278	224	74	134	89	151	40	52	1,708
Surrey Commercial Dk.—													
Warehouses - - -	37	53	15	17	17	22	45	38	48	30	28	37	387
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	297	30	106	188	272	395	565	—	350	464	252	166	3,085
Regent's Canal Dock—													
Warehouses - - -	—	—	—	—	—	—	—	—	—	—	—	—	—
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Katharine's Dock—													
Warehouses - - -	55	38	48	51	49	74	66	53	75	49	42	64	664
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
London Dock—													
Warehouses - - -	83	62	78	93	92	180	134	153	207	145	147	97	1,471
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
Albert and Victoria Dks.—													
Warehouses - - -	387	345	388	442	405	426	422	434	514	326	571	664	5,324
Vessels during voyage	351	231	60	227	697	352	173	273	138	668	233	1,169	4,572
„ while in dock -	1,498	638	859	1,171	1,136	927	773	611	808	1,283	1,081	1,019	11,804
West India Dock—													
Warehouses - - -	103	105	85	111	100	110	128	123	185	133	140	223	1,546
Vessels during voyage	160	—	160	60	—	217	100	115	90	75	50	115	1,142
„ while in dock -	548	257	228	323	300	481	460	219	405	450	371	326	4,368
East India Dock—													
Warehouses - - -	22	32	15	23	22	31	38	28	35	31	22	22	321
Vessels during voyage	—	6	—	19	—	84	14	4	12	—	—	—	139
„ while in dock -	123	173	150	117	208	62	201	84	179	142	166	216	1,821
Tilbury Dock—													
Warehouses - - -	252	193	203	210	217	200	152	109	308	319	301	218	2,682
Vessels during voyage	164	301	45	258	—	—	240	—	443	—	158	—	1,609
„ while in dock -	481	829	127	499	531	532	870	371	644	768	860	427	6,939
River—													
During voyage - - -	—	—	—	—	—	—	—	—	—	—	—	—	—
While in river - - -	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS - - -	4,926	3,686	2,813	4,155	4,489	4,781	4,650	2,834	4,773	5,289	4,693	5,159	52,258

Total from February, 1901, to 31st December, 1915 - 879,588

Total from 1st January to 31st December, 1916 :—

In Dock Warehouses - - - -	14,506	}	52,258
On Vessels during voyage - - -	8,027		
On Vessels while in Dock and River -	29,725		

TOTAL - - - 931,846

TABLE VIII.

RETURN OF RATS BACTERIOLOGICALLY EXAMINED, 1916.

DOCK.	No.	Classification.			
		M.D.	M.R.	M.A.	M.M.
Royal Albert - - -	1,360	1,265	88	2	5
Royal Victoria - - -	1,170	1,023	124	23	—
East India - - -	30	22	7	1	—
Millwall - - -	154	134	17	3	—
West India - - -	54	52	2	—	—
Tilbury - - -	94	82	10	2	—
London - - -	699	316	266	117	—
Surrey Commercial - - -	—	—	—	—	—
St. Katharine - - -	560	249	243	68	—
Dock unknown - - -	11	9	2	—	—
	4,132	3,152	759	216	5

TABLE OF CLASSIFICATION.

M.D.— <i>Mus decumanus</i> (norvegicus) - - -	3,152
M.R.— <i>Mus rattus</i> - - -	759
M.A.— <i>Mus alexandrinus</i> - - -	216
M.M.— <i>Mus musculus</i> - - -	5
Total - - -	4,132

TABLE IX.

(SMALL-POX.)

Date.	No. of Cases.	Date.	No. of Cases.
1916.		1916.	
March 7 - - - -	2	Brought forward	8
„ 11 - - - -	1	April 15 - - - -	1
„ 16 - - - -	1	May 8 - - - -	1*
April 3 - - - -	1	June 23 - - - -	1
„ 13 - - - -	1*	July 13 - - - -	1†
„ 15 - - - -	2	Aug. 7 - - - -	3
Forward - -	8	Total - -	15

The cases marked * were removed to Denton Hospital, and † to the local Hospital at Grays.
The remainder were landed at foreign ports.

SMALL-POX.

The s.s. " * * " arrived at Gravesend on the 12th April. A native fireman was landed at Denton Hospital suffering from Small-pox. The date of appearance of the rash, April 6th, showed that infection had taken place during the stay of the ship at either Suez or Port Said on the 23rd or 24th March.

The bedding, clothing and effects of the native crew were disinfected. Also the native quarters. The whole of the native crew were vaccinated, together with five of the European crew who had not been recently re-vaccinated; sixty-six vaccinations in all.

The crew was under supervision during stay in the Port. No further case occurred.

The s.s. " * * " arrived at Gravesend for Tilbury Dock on July 5th. On examination the ship was found free from disease and suspicious illness during the voyage.

A case of Small-pox in one of the crew was notified on July 12th; this case was discovered living at Grays, Essex.

Your Medical Officer at once visited the ship in Tilbury Dock, and found the circumstances to be as follows:—

The patient was taken ill on July 8th, rash appeared on the 11th.

The date of this rash was exactly fourteen days from the date of the call of the ship at Marseilles. On re-inspection of the crew no hitherto unsuspected source of infection was found. Therefore, it was probable that the patient had been infected at Marseilles.

The patient had worked on the ship on the 9th and 10th July whilst ill, but before the rash appeared. The following measures were taken :—

The whole crew were re-vaccinated, the infected quarters disinfected and all persons working on the ship during the patient's attendance notified to the Medical Officers at their respective addresses.

No further case was reported to have arisen.

In a large passenger steamer which arrived during the month of May, a native fireman was declared to be suffering from Chicken-pox. The ship's surgeon had, however, during the voyage taken proper precautions as against the more serious disease.

On examining the vessel at Gravesend Dr. Kidd was unable to concur in the diagnosis of Chicken-pox, and dealt with the ship as infected with Small-pox. This would have been the proper course even were the evidences equivocal. On examination of this case I found the evidences to be those of unequivocal Small-pox.

No further case arose on or from the ship.

TABLE X.
(SCARLET FEVER.)

Date.	No. of Cases.
1916.	
April 13 - - - -	1
" 15 - - - -	1
July 12 - - - -	1*
Sept. 7 - - - -	1
" 14 - - - -	1*
Total - - - -	5

* Removed to Denton Hospital. The others to Metropolitan and other Hospitals.

TABLE XI.
(DIPHTHERIA.)

Date.	No. of Cases.	Date.	No. of Cases.
1916.		1916.	
April 19 - - - -	1†	Brought forward	4
May 2 - - - -	1	July 17 - - - -	1
" 26 - - - -	1†	Sept. 12 - - - -	1
June 14 - - - -	1†	" 19 - - - -	1*
Forward - - - -	4	Total - - - -	7

* Removed to Denton Hospital.

† Removed to Metropolitan and local Hospitals.
The remainder landed previous to arrival.

TABLE XII.

(ENTERIC FEVER.)

Date.		No. of Cases.	Date.		No. of Cases.
1916.			1916.		
			Brought forward		37
Jan.	6 - - - -	2*	July	15 - - - -	1*
"	14 - - - -	1†	"	22 - - - -	2*
Feb.	5 - - - -	1	"	" - - - -	1†
"	7 - - - -	1*	August	1 - - - -	2
"	16 - - - -	1†	"	17 - - - -	1*
"	28 - - - -	14*	Sept.	7 - - - -	1*
March	11 - - - -	1	"	8 - - - -	1
"	15 - - - -	1†	"	19 - - - -	1*
"	17 - - - -	1	Oct.	5 - - - -	1*
"	24 - - - -	1*	"	16 - - - -	1†
April	12 - - - -	1*	"	19 - - - -	1
"	15 - - - -	1	"	" - - - -	1
May	7 - - - -	1*	"	23 - - - -	1
"	13 - - - -	1	"	26 - - - -	1
"	25 - - - -	1	Nov.	10 - - - -	1†
"	30 - - - -	2*	"	11 - - - -	1*
June	22 - - - -	2*	"	14 - - - -	1*
"	24 - - - -	1	"	20 - - - -	1†
"	26 - - - -	1*	"	30 - - - -	1
"	27 - - - -	1†	Dec.	12 - - - -	1†
July	13 - - - -		"	20 - - - -	2
	Forward - -	37		Total - -	61

* Removed to Denton Hospital. † Removed to Metropolitan and local Hospitals.
The remainder were dealt with before arrival.

ENTERIC FEVER.

H.M. Transport " * * " arrived at Gravesend from Alexandria on February 27th. Thirteen members of the crew were declared to be ill. In most of these cases the diagnosis of Enteric Fever had been made; all were removed to Denton Hospital.

The epidemic was mild in character. Many of the men affected had worked through the earlier stage of their illness. Ten still had fever on admission; three were convalescent; of the three the diagnosis in one case was still doubtful.

A steward had been landed at Alexandria suffering from Enteric Fever. His illness had begun subsequently to that of some of his fellow sufferers. I presume his case was more marked in its earlier stages.

In the following list the dates of commencing illness are those on which complaint was made, and the last day of lysis is set out for comparison in each case :—

<i>No.</i>	<i>Name.</i>	<i>Rating.</i>	<i>Date of Illness.</i>	<i>Date of Normal T.</i>
1.	S.B.	Seaman	January 22	February 23
2.	P.A.	Cook's Mate	" 26	March 6
3.	W.T.	Steward	February 6	" 2
4.	R.R.	Seaman	" 6	" 23
5.	R.W.	Seaman	" 8	February 29
6.	P.T.	Seaman	" 10	March 1
7.	W.A.	Seaman	" 10	" 12
8.	W.B.	Steward	" 20	" 6
9.	W.D.	Steward	" 20	" 1
10.	R.S.	Carpenter	" 22	" 6
11.	C.G.	Fireman	" 23	" 13
12.	J.E.	Fireman	" 23	February 27
13.	A.B.	Fireman	(?) 3 weeks	" 27
14.	A.G.	Boy	February 28	-

The time of infection was evidently spread over about three weeks, from January 12th to 31st.

The insidious onset in each case and the mild course of the epidemic afforded no very reliable data.

The movements of the ship were as follows :—Left Port Said, January 13th ; at Marseilles, January 18th to February 5th ; at Alexandria, February 10th to 15th ; at London, February 27th.

Water was taken in at Port Said, and at intervals during the 18 days' stay at Marseilles—200 tons from a water barge for drinking purposes, and 200 tons from the quay for washing.

The ratings affected include seamen, firemen and stewards—a general ship infection which lasted from about January 12th to 31st.

When waters of two qualities are taken from two sources, as was done at Marseilles, there is a possibility of the error of inadvertently filling a drinking water tank with washing water : again, the crew may not in use sufficiently discriminate between "drinking" and "washing" water.

The dates, however, suggest that infection of a drinking water tank or the taking in of infected water occurred at Port Said, and that this infected water was gradually replaced at Marseilles.

Action was taken on the probability that the epidemic was one of water tank infection.

All infected bedding and effects were removed for steam disinfection, the infected quarters disinfected, and the water tanks emptied and cleansed.

TABLE XIII.

(MEASLES.)

Date.		No. of Cases.	Date.		No. of Cases.
1916.			1916.		
Jan.	4 - - - -	4	Brought forward		65
"	11 - - - -	16	Aug.	24 - - - -	13
"	13 - - - -	1	"	28 - - - -	1
"	14 - - - -	6	"	29 - - - -	23
"	27 - - - -	1*	Sept.	4 - - - -	1
"	27 - - - -	3	"	8 - - - -	1
March	13 - - - -	1	"	11 - - - -	2
"	24 - - - -	1†	"	12 - - - -	180
April	12 - - - -	1†	"	13 - - - -	25
"	27 - - - -	1	"	15 - - - -	66
May	12 - - - -	2	"	29 - - - -	1
"	24 - - - -	2	Oct.	5 - - - -	7
June	11 - - - -	1*	"	9 - - - -	11
"	13 - - - -	4	"	14 - - - -	1
"	24 - - - -	1*	"	14 - - - -	1
"	26 - - - -	1	"	20 - - - -	20
"	27 - - - -	1	"	30 - - - -	3
July	8 - - - -	12	Nov.	10 - - - -	5
"	19 - - - -	1	"	22 - - - -	7
"	30 - - - -	1	"	22 - - - -	1*
Aug.	8 - - - -	1	"	23 - - - -	1
"	8 - - - -	1†	"	24 - - - -	400
"	10 - - - -	1	Dec.	1 - - - -	1
"	19 - - - -	1†			
Forward - -		65	Total - - -		836

Marked * were removed to Denton Hospital. Marked † were removed to Metropolitan and local Hospitals.
The remainder had been landed or dealt with before arrival of the vessel in the Thames.

TABLE XIV.
(GERMAN MEASLES.)

Date.	No. of Cases.	How dealt with.
1916.		
Jan. 4 - - - -	1	Recovered before arrival of vessel.
" 21 - - - -	1	Removed to Eastern Hospital (M.A.B.).
Feb. 5 - - - -	1	Convalescent on arrival.
April 14 - - - -	1	Isolated at home.
May 7 - - - -	1	Isolated on board.
June 19 - - - -	1	Removed to ship's hospital, on shore.
Aug. 3 - - - -	1	Remained on board.
Oct. 26 - - - -	1	Proceeded home.
Total - -	8	

TABLE XV.
(ERYSIPELAS.)

Date.	No. of Cases.	How dealt with.
1916.		
Dec. 12 - - - -	1	Removed to Seamen's Hospital, Greenwich.

TABLE XVI.
(CONTINUED FEVER.)

Date.	No. of Cases.	How dealt with.
1916.		
Feb. 28 - - - -	1	Removed to Port Sanitary Hospital.
March 24 - - - -	1	Ditto.
July 21 - - - -	2	Ditto.
Oct. 19 - - - -	1	Isolated on board.
Total - -	5	

TABLE XVII.
(PULMONARY TUBERCULOSIS.)

Date.	No. of Cases.	Date.	No. of Cases.
1916.		1916.	
Jan. 14 - - - -	1	Brought forward	27
" 20 - - - -	2	May 25 - - - -	1
" 22 - - - -	1	June 1 - - - -	1
" 31 - - - -	1	" 7 - - - -	2
Feb. 3 - - - -	1	" 10 - - - -	3
" 16 - - - -	1	" 12 - - - -	1
March 2 - - - -	1	" 17 - - - -	1
" 6 - - - -	2	July 22 - - - -	1
" 16 - - - -	1	" 25 - - - -	1
" 25 - - - -	1	" 31 - - - -	1
" 27 - - - -	1	Aug. 10 - - - -	1
April 7 - - - -	1	Sept. 16 - - - -	2
" 12 - - - -	2	" 29 - - - -	3
" 14 - - - -	2	Oct. 9 - - - -	1
May 2 - - - -	2	" 18 - - - -	1
" 7 - - - -	2	" 19 - - - -	1
" 10 - - - -	1	Nov. 15 - - - -	1
" 12 - - - -	1	" 15 - - - -	1
" 17 - - - -	1	Dec. 2 - - - -	1
" 22 - - - -	1	" 12 - - - -	1
" 24 - - - -	1	" 22 - - - -	1
Forward - -	27	Total - - -	53

All cases of Pulmonary or other Tuberculosis landing in the Port of London have been notified to the Medical Officer of Health of the District to which they have proceeded.

TABLE XVIII.
TUBERCULOSIS (other than Pulmonary).

Date.	No. of Cases.	Date.	No. of Cases.
1916.		1916.	
Feb. 10 - - - -	1	Brought forward	12
" 14 - - - -	1	June 30 - - - -	2
" 16 - - - -	2	July 13 - - - -	1
March 21 - - - -	2	Sept. 11 - - - -	1
May 10 - - - -	3	Nov. 14 - - - -	1
June 22 - - - -	3	Dec. 9 - - - -	2
Forward - -	12	Total - - -	19

TABLE XIX.
(CHICKEN-POX.)

Date.	No. of Cases.	How dealt with.
1916.		
Feb. 2 - - - -	1	Convalescent on arrival.
" 3 - - - -	1	Ditto.
April 28 - - - -	2	Ditto.
May 5 - - - -	1	Landed before arrival in Thames.
June 14-19 - - - -	6	Removed to Port Sanitary Hospital.
" 30 - - - -	1	Landed before arrival in Thames.
July 1 - - - -	4	Isolated on board.
Aug. 18 - - - -	3	Landed before arrival in Thames.
Total - - - -	19	

TABLE XX.
(PARATYPHOID.)

Date.	No. of Cases.	How dealt with.
1916.		
May 10 - - - -	1	Proceeded home.

TABLE XXI.
(MENINGITIS.)

Date.	No. of Cases.	How dealt with.
1916.		
March 18 - - - -	1	Died and body buried at sea.
Sept. 12 - - - -	1	Ditto.
Total - - - -	2	

TABLE XXII.
(CEREBRO-SPINAL MENINGITIS.)

Date.	No. of Cases.	Date.	No. of Cases.
1916.		1916.	
		Brought forward	14
June 13 - - - -	1*	Sept. 29 - - - -	1
Aug 14 - - - -	1	Oct. 14 - - - -	2*
" 29 - - - -	3*	" 19 - - - -	1
Sept. 13 - - - -	5	" 20 - - - -	2
" 15 - - - -	4	Nov. 22 - - - -	2
Forward - - - -	14	Total - - - -	22

* Of these six cases, four were fatal, and the bodies were buried at sea. All the remainder were removed at other ports, none arriving in the Thames.

VENEREAL DISEASES.

In the month of May information was received from the Local Government Board that venereal disease was alleged to be rife on certain vessels which had been icebound in the port of Archangel ; the names of some of these vessels bound to London were given and the desirability of action on the lines of acquainting the captain and crew of each such ship of the facilities, if any, which existed in the port for treatment of these diseases was emphasised.

I found that the Seamen's Hospital, Greenwich, within easy reach of the berthing places of these vessels, was prepared to receive any seamen sent there.

In June, on arrival of one of the ships, two cases of gonorrhœa were found and advised ; and two other cases had occurred during the voyage.

At this time, in view of the recently published Report of the Royal Commission on Venereal Diseases, of the advance that has been made in the knowledge and treatment of the disease and of the ripeness of the matter for legislation, I caused a register to be kept of all cases of venereal disease which came under the notice of your boarding Medical Officers at Gravesend. The results of their observation over three months are appended.

TABLE XXIII.
(VENEREAL DISEASE.)

Date.	Case.	Passenger or Crew Rating.	Advice given.
1916.			
Aug. 3	Gonorrhœal rheumatism	Sailor - -	To attend Guy's Hospital.
„ 5	Gleet - - - -	Carpenter's Mate	To attend Greenwich Hospital.
„ 5	Gleet - - - -	Sailor - -	Ditto.
„ 11	Syphilis, soft chancres and bubo.	Fireman - -	To attend hospital in Hull.
„ 19	Gonorrhœa epididymitis	Sailor - -	Returning to Switzerland.
„ 24	Chancre primary rash -	Fireman - -	To attend Royal Albert Dock Hospital.
„ 24	Gonorrhœa - -	Trimmer - -	Ditto.
„ 26	Soft sore and bubo -	Fireman - -	Ditto.
„ 27	Gonorrhœa - -	Greaser - -	To attend hospital at Tilbury.
„ 27	Gonorrhœal rheumatism	Sailor - -	Ditto.
„ 27	Gonorrhœa - -	Engineer - -	To attend Royal Albert Dock Hospital.
„ 28	Syphilis (rheumatism) -	Sailor - -	Ditto.
„ 28	Soft sore and bubo -	Fireman - -	Ditto.
„ 30	Gonorrhœa - -	Donkeyman -	To attend London Hospital.
Sept. 1	Ditto - -	Fireman - -	Cured by Master of vessel during voyage.
„ 5	Chancre - -	Gunner - -	Dealt with by Naval Authorities.
„ 7	Soft chancre bubo -	Fireman - -	To attend Greenwich Hospital.

Date.	Case.	Passenger or Crew Rating.	Advice given.
1916.			
Sept. 14	Venereal bubo - -	Sailor - -	To attend Tilbury Hospital.
" 14	Gonorrhœa - -	Fireman - -	To attend Royal Albert Dock Hospital.
" 16	Chancre - - -	Sailor - -	Ditto.
" 19	Soft chancre and bubo -	Do. - -	Ditto.
" 25	Soft chancre bubo -	Two sailors -	Under treatment by ship's surgeon.
" 26	Gonorrhœa - -	Fireman - -	To go to Tilbury Dock Hospital.
" 26	Ditto - -	Apprentice -	Ditto.
" 26	Ditto - -	Naval passenger	To be treated by Naval Authorities.
" 28	Gonorrhœal rheumatism	Sailor - -	To go to Seamen's Hospital, Greenwich.
" 30	Soft chancre bubo -	Engineer - -	To consult practitioner.
" 30	Gonorrhœa - -	Sailor - -	Treated by ship's surgeon.
" 30	Soft chancre bubo -	Do. - -	To go to Seamen's Hospital, Greenwich.
Oct. 2	Buboes, syphilis - -	Trimmer - -	Ditto.
" 5	Gonorrhœa - -	Two sailors -	Cured by ship's surgeon.
" 7	Soft chancre - - -	Quartermaster -	To go to Royal Albert Dock Hospital.
" 7	Ditto - - -	Sailor - -	Ditto.
" 7	Soft chancre bubo -	D.B.S. - -	To go to London Hospital.
" 9	Syphilis - - -	Steward - -	To go to Royal Albert Dock Hospital.
" 9	Bubo - - -	Sailor - -	To go to Poplar Hospital.
" 11	Gonorrhœa - - -	Do. - -	To go to Seamen's Hospital, Greenwich.
" 16	Chancre - - -	Do. - -	Ditto.
Nov. 1	Gonorrhœa - - -	Two firemen -	Ditto.
" 1	Ditto - - -	Sailor - -	Ditto.
" 1	Soft chancre - - -	Do. - -	Ditto.
" 9	Ditto - - -	Do. - -	To attend Poplar Hospital.
" 11	Ditto - - -	Fireman - -	To attend Seamen's Hospital, Greenwich.
" 14	Gonorrhœa and bubo -	Sailor - -	Attended by ship's surgeon.
" 14	Syphilis - - -	Fireman - -	To attend Seamen's Hospital, Greenwich.
" 20	Ditto - - -	Sailor - -	Ditto.
" 20	Ditto - - -	Fireman - -	Ditto.
" 21	Suppurating bubo -	Sailor - -	To go to Royal Albert Dock Hospital.
" 28	Syphilis - - -	D.B.S. - -	To go to hospital at Glasgow.
" 29	Gonorrhœa - - -	Sailor - -	To go to hospital at Southampton.

Date.	Case.	Passenger or Crew Rating.	Advice given.
1916.			
Dec. 3	Syphilis - - -	Sailor - - -	To go to Seamen's Hospital, Greenwich.
" 22	Ditto (2) - - -	Do. - - -	Paid off abroad.
" 22	Ditto - - -	Engineer and Steward.	To go to Seamen's Hospital, Greenwich.
" 24	Ditto - - -	Steward - - -	Ditto.
" 24	Ditto - - -	Carpenter - - -	To go to Poplar Hospital.
" 26	Soft sore - - -	Sailor - - -	To go to Seamen's Hospital, Greenwich.
" 26	Gonorrhoea - - -	Do. - - -	To go to Poplar Hospital.
" 28	Soft sore - - -	Do. - - -	To go to Seamen's Hospital, Greenwich.

These cases do not fully represent the incidence of the disease. For various reasons concealment is a practice amongst seamen. The return shows, however, a large amount of disease in the acute stage and obvious scope for the exertion of influence by the Medical staff of the Port Sanitary Authority.

The Public Health (Venereal Diseases) Regulations, 1916, dated 12th July, came into immediate operation on that date.

They are addressed to :—

The Council of every County and County Borough in England and Wales.

The Mayor, Aldermen and Commons of the City of London, in Common Council assembled.

And to all others whom it may concern.

Article I.—Every Council shall, subject to the approval of the Local Government Board, make arrangements for enabling any medical practitioner, practising in the area of the Council, to obtain, at the cost of the Council, a scientific report on any material which the medical practitioner may submit from a patient suspected to be suffering from venereal disease.

Article II.—(1.) Every Council shall prepare and submit to the Local Government Board a scheme (a) for the treatment at and in hospitals or other institutions of persons suffering from venereal disease ; and (b) for supplying medical practitioners with salvarsan or its substitutes for the treatment and prevention of venereal disease ; and when the Board have approved the scheme the Council shall make arrangements for carrying it into effect at the cost of the Council.

(2.) All information obtained in regard to any person treated under a scheme approved in pursuance of this Article shall be regarded as confidential.

Article III.—(1.) Any Council may, subject to the approval of the Local Government Board, make arrangements for any of the purposes of this Order with the managers of any hospital, institution or society ; but until the Board have approved of those arrangements and of the hospital, institution or society, no expenditure under the arrangements shall be incurred.

(2.) Any approval given by the Local Government Board under this Article may be given for such term and subject to such conditions as the Board may think fit, and any such approval may be withdrawn by the Board.

Article IV.—Any Council may make such provision for the giving of instructional lectures and for the publication of information on questions relating to venereal disease as the Council may think necessary or desirable.

Article V.—For the purposes of this Order :—

(1.) The expression “Council” means County Council, County Borough Council, and the Common Council of the City of London.

(2.) The expression “area of the Council” means the Administrative County, the County Borough, or the City of London, as the circumstances may require ; and in the case of the Administrative County of London it means the Administrative County exclusive of the City of London.

(3.) “Venereal disease” means Syphilis, Gonorrhœa, and soft Chancre.

*Article VI.—The expenses incurred under these regulations shall in the case of a County Council be defrayed as expenses for general county purposes ; in the case of a County Borough Council as part of the expenses incurred by the Council in the execution of the Public Health Acts ; and in the case of the Common Council of the City of London, as part of the expenses incurred by the Council in the execution of the Public Health (London) Act, 1891.

Article VII.—These Regulations shall come into operation on the date of this Order, and shall then and thereafter apply and have effect throughout England and Wales, and shall be executed by every Council.

Article VIII.—These Regulations may be cited as “The Public Health (Venereal Diseases) Regulations, 1916.”

The address and the scope and nature of the articles exclude the Port Sanitary Authority as an authority for execution and enforcement of these Regulations.

The memorandum of the Local Government Board which accompanies the Regulations points out the Work of a Medical Officer of Health other than the Medical Officer of Health of a County or County Borough in relation to the Scheme.

THE WORK OF OTHER MEDICAL OFFICERS OF HEALTH IN RELATION TO THE SCHEME.

37. To co-operate with the County Medical Officer of Health and with the Pathologist and the Medical Officers of clinics in securing their maximum utility, by giving publicity to the arrangements, by encouraging educational efforts against venereal diseases, and particularly by keeping a supply of laboratory outfits for medical practitioners in the district in pursuance of arrangements with the County Medical Officer of Health.

• The Local Government Board will repay 75 per cent. of the expenditure incurred under these Regulations and approved by them.

The following circular was addressed to Port Sanitary Authorities :—

Prevention and Treatment of Venereal Diseases.

Local Government Board,
Whitehall, S.W.,

19th October, 1916.

Sir,

I am directed by the President of the Local Government Board to forward for the information of the Port Sanitary Authority the accompanying copies of the circular letters and regulations issued by this Department on the 13th July and the 29th August last, with reference to the prevention and treatment of venereal diseases.

Mr. Long considers that the facilities to be provided by the Councils of Counties and County Boroughs under the Public Health (Venereal Diseases) Regulations, 1916, should be available for seamen of whatever nationality who frequent the ports of England and Wales, and I am to suggest that the Port Sanitary Authority should confer with the Council or Councils responsible for carrying out these regulations in the area under the jurisdiction of the Port Sanitary Authority (1) as to the best means of ensuring that the facilities to be provided are made use of by seamen frequenting the port, and (2) as to the need for any special facilities for the treatment of seamen.

I am, Sir,

Your obedient Servant,

F. J. WILLIS,

Assistant Secretary.

The Clerk to the Port Sanitary Authority.

It will be noted that the facilities for treatment are to be available for seamen of whatever nationality who frequent the ports of England and Wales.

From inquiries made it appears that the following Treatment Centres will be available and at hand for the use of seamen in the Port of London :—

On the South side of the River :—

Guy's Hospital, London Bridge.

Seamen's Hospital, Greenwich.

Gravesend Hospital, Gravesend.

On the North side :—

The London Hospital, Whitechapel.

The shipping aggregates of the Pool, St. Katharine and the London Docks, Millwall, East and West India Docks, and Surrey Commercial Dock, and Tilbury Dock are thus provided for in the near future ; but a centre at hand for the Royal Albert and Victoria Dock, with their aggregate of shipping manned largely by natives of India, should form the subject of conference with the controlling authorities of the County and County Boroughs in which these docks are situated.

Every opportunity is and will be taken by the Medical Staff and the Sanitary Inspectors under your Worshipful Committee for the furtherance of the purposes of the Regulations.

TABLE XXIV.

HOSPITAL.

NUMBER OF CASES ADMITTED, COST OF MAINTENANCE, &c.

	Admitted.	Discharged.	Died.	Remaining under treatment.
Patients remaining in Hospital on 31st December, 1915	-	-	-	1
Cholera (including suspected cases) -	0	0	0	0
Plague (ditto) -	0	0	0	0
Small-pox - - - - -	2	2	0	0
Scarlet Fever - - - - -	2	2	0	0
Enteric Fever - - - - -	33	33	1	0
Continued Fever - - - - -	4	4	0	0
Diphtheria - - - - -	1	1	0	0
Measles - - - - -	4	4	0	0
Erysipelas - - - - -	0	0	0	0
Chicken-pox - - - - -	6	6	0	0
Other Diseases - - - - -	0	0	0	0
Totals - - - - -	52	52	1	0
Remaining in Hospital on 31st December, 1916	-	-	-	- Nil.
Total number of days treatment during the year	-	-	-	- 1,213
Average number of days treatment for each case	-	-	-	- 22·88
Average daily number of patients in Hospital	-	-	-	- 6·90
Average daily cost of maintenance per patient	-	-	-	1s. 10d.
Average total cost of maintenance per patient	-	-	-	£2 2s. 11d.

TABLE XXV.

QUANTITY AND DESCRIPTION OF UNSOUND FOOD SEIZED AND DESTROYED FOR THE
YEAR ENDING 31ST DECEMBER, 1916.

	Original packages.		Sundry quantities by weight.				Loose Articles.		Approximate Total weight of Goods destroyed.							
	No.	Description.	Tons.	cwts.	qrs.	lbs.	No.	Description.	Tons.	cwts.	qrs.	lbs.				
MEAT—																
Fresh and Frozen—																
Beef - - - -	1966	{ quarters and crops }	...	8	2	0	1,350	{ bags & pieces }	162	7	2	4				
Mutton and Lamb - - -	493	carcases	...	...	2	9	224	ditto	10	12	1	10		
Veal, Pork and Offal - -	2,005	various	...	...	...	...	670	pieces,&c.	45	15	0	7
Preserved—																
Tinned - - - -	151	cases	...	...	...	...	821	tins	6	15	1	26
Smoked and Salted - - -	20	cases, &c.	690	0	0	0	246	hams	693	6	2	9				
Sundry - - - -	...	...	...	...	...	...	...	...	...	...	...	...
RABBITS—																
Frozen - - - -	18,941	crates, &c.	...	...	...	...	...	...	471	10	1	12
Tinned - - - -	...	...	...	...	...	...	...	...	...	...	...	...
POULTRY and GAME—																
Frozen - - - -	141	cases	...	...	...	...	48	birds	1	9	2	27
FISH—																
Preserved, Dried - - -	27	barrels, &c.	...	...	...	...	...	...	3	1	0	15
„ Tinned and Bottled - -	82	cases	...	...	...	...	4,218	tins	3	15	1	20
„ Shell - - - -	...	...	15	0	0	0	...	...	15	0	0	0
Wet - - - -	435	barrels, &c.	...	...	...	...	...	...	65	0	0	10
FRUIT—																
Fresh - - - -	6,515	various	...	10	0	0	...	...	246	11	2	9		
Preserved, Dried - - -	11,552	various	...	...	...	...	...	...	262	8	1	10
„ Tinned and Bottled - -	30	cases	16	10	0	0	890	tins	19	1	3	7				
„ Jam and Marmalade - -	1,688	cases	...	...	...	...	...	...	37	10	2	2
VEGETABLES—																
Fresh - - - -	130	cases, &c.	1	4	0	0	...	...	7	1	1	0		
Preserved, Dried - - -	2,306	bags, &c.	...	...	...	...	144	tins	146	12	0	1
NUTS—																
Whole - - - -	19	bags	...	...	...	...	...	...	...	19	0	0
Desiccated and Shelled - -	119	boxes	...	...	...	...	2,351	tins	24	13	0	19
PROVISIONS—																
Tea - - - -	7,178	boxes	...	...	...	...	...	...	400	0	0	0
Coffee - - - -	2,697	bags	1	19	0	3	...	...	204	11	0	10		
Cocoa - - - -	...	...	...	...	...	...	...	...	...	...	...	...
Butter, Cheese, Lard, Margarine	924	boxes	9	3	0	3	...	...	32	10	2	13		
Condensed Milk - - -	8,815	cases	...	...	...	...	...	...	212	13	2	20
Prepared Foods - - -	559	cases,&c.	17	19	1	11	...	...	31	10	3	15		
Biscuits and Confectionery -	99	cases	...	...	...	...	...	...	7	5	3	14
Sugar - - - -	...	...	...	...	...	...	...	...	...	...	...	...
GRAIN—																
Wheat, Maize, Barley, Rice, &c.	1,092	bags	2291	17	1	26	...	...	2,373	17	1	26		
MEAL and FLOUR - - -	1,341	bags	...	...	...	...	...	...	138	7	0	26
CONDIMENTS and SPICES - -	46	bags	...	...	...	...	...	...	1	14	0	13
EGGS - - - -	119	barrels, &c.	...	...	...	...	...	...	6	16	3	3
EGG YOLK - - - -	5	cases, &c.	...	...	...	...	1	tin	...	8	0	21
SUNDRIES - - - -	411	bags, &c.	...	3	1	11	9	tins	31	2	0	20				
TOTAL - - - -	69,906	various	3044	15	1	7	10,972	various	5,664	9	2	5				
Approximate Total weight of Goods destroyed during the year									1909	-	-	-	1,415	7	0	22
„									1910	-	-	-	2,483	6	2	13
„									1911	-	-	-	1,408	4	3	1
„									1912	-	-	-	3,758	7	1	2
„									1913	-	-	-	2,458	0	2	21
„									1914	-	-	-	1,184	11	1	1
„									1915	-	-	-	3,118	5	3	19
„									1916	-	-	-	5,664	9	2	5

TABLE XXVI.

DESCRIPTION OF MEAT DESTROYED.

YEAR.	BEEF.				MUTTON.				VEAL, PORK, OFFAL.				TINNED.				SMOKED AND SALTED, &c.				TOTAL.			
	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.
1907	47	5	2	16	63	6	2	24	8	11	1	6	2	14	4	5	63	8	0	22	185	6	3	17
1908	47	14	2	6	22	12	2	10	1	3	0	8	3	12	2	8	2	19	1	13	78	2	0	17
1909	19	11	3	7	21	3	1	17	Pork and Veal— 4 15 3 23 Offal— 65 4 2 15	} 2 10 2 19	} 0 2 3 22	} 113 9 1 19												
1910	1,100	0	0	27	50	8	1	13	Pork and Veal— 3 5 0 13 Offal— 44 12 1 19				} 3 2 2 2	} 32 13 1 6	} 1,234 1 3 24									
1911	341	6	3	18	25	9	1	6	Pork and Veal— 4 8 1 19 Offal— 80 19 1 8	} 6 8 2 5	} 3 18 2 0	} 462 11 0 0												
1912	58	3	0	3	14	3	2	3	Pork and Veal— 7 14 2 13 Offal— 19 10 0 10				} 5 17 3 17	} 3 2 2 16	} 108 11 3 6									
1913	31	13	0	18	134	5	3	14	Pork and Veal— 0 16 1 2 Offal— 69 3 1 14	} 1 14 3 22	} 14 14 3 6	} 252 8 1 20												
1914	82	9	3	26	161	11	1	22	Pork and Veal— 11 6 1 27 Offal— 55 18 0 17				} 3 8 0 13	} 1 19 0 3	} 316 13 0 24									
1915	294	18	2	20	64	2	1	15	Pork and Veal— 13 7 0 27 Offal— 58 1 1 3	} 6 3 0 15	} 17 2 0 2	} 453 14 2 26												
1916	162	7	2	4	10	12	1	10	Pork and Veal— 21 9 2 4 Offal— 24 5 2 3				} 6 15 1 26	} 693 6 2 9	} 918 17 0 0									
Total for ten years ...	2,185	11	2	5	567	15	3	22	494	12	3	7	42	8	3	20	833	7	1	15	4,123	16	2	13

TABLE XXVII.

PUBLIC HEALTH (FOREIGN MEAT) REGULATIONS, 1908.

During the year Notices were served under Articles III. (5), IV. (1) and VI. of the above-mentioned Regulations, for the exportation of the following meat :—

Date of Arrival.	Name of Vessel.	Where from.	Where lying.	Description and quantity of meat in respect of which Notices were served.
1915.				
Dec. 20	s.s. "Highland Scot" -	Argentina -	Royal Albert Dock	9 pig-carcases.
„ 27	s.s. "Brodness" -	Hankow -	Royal Victoria Dock	61 pig-carcases.
1916.				
Jan. 4	s.s. "Highland Pride" -	Argentina -	Royal Albert Dock	3 pig-carcases.
„ 16	s.s. "Highland Loch" -	Do. -	Do. -	30 pig-carcases.
Feb. 14	s.s. "Cambrian" -	Boston -	Do. -	10 pig-carcases.
Mar. 1	s.s. "Highland Glen" -	Argentina -	Do. -	1 pig-carcase.
April 17	s.s. "Cromer" -	Rotterdam -	Tilbury Dock -	1 basket pig-kidneys.
„ 16	s.s. "Highland Corrie" -	Argentina -	Royal Albert Dock	2 pig-carcases.
„ 19	s.s. "Brussels" -	Rotterdam -	Tilbury Dock -	1 basket pig-kidneys.
„ 22	s.s. "Cambrian" -	Boston -	Royal Albert Dock	17 pig-carcases.
July 19	s.s. "Manchuria" -	New York -	Tilbury Dock -	1 barrel hog-livers.
Aug. 5	s.s. "Minnehaha" -	Do. -	Do. -	10 kegs hog-livers and 10 kegs hog-kidneys.
„ 20	s.s. "Mongolia" -	Do. -	Do. -	10 kegs chitterlings.
Nov. 21	s.s. "Kenilworth Castle" -	South Africa	Do. -	10 sides pork.

FOOD INSPECTION.

The carrying out of the Regulations issued by the Local Government Board, under the Public Health (Regulations as to Food) Act, 1907, in the Port of London has this year resulted in the seizure by your Officers of 5,664 tons 9 cwts. 2 qrs. 5 lbs. of Unsound Food, which have been destroyed or disposed of in such a manner as to prevent its being used for human consumption.

On no occasion has this quantity been exceeded.

A summary of the Unsound Food seized is shown in Table XXVII.

In no instance was it necessary to apply for a magistrate's order for the destruction of Unsound Food seized by your Officers.

The total receipts of all kinds of frozen and chilled meats into the United Kingdom in 1916 amounted to 533,811 tons, as against 662,925 tons in 1915, and 694,427 tons in 1914.

The world's output of frozen and chilled beef, mutton and lamb in 1916 is estimated at 915,380 tons, compared with 881,075 tons in 1915.

BEEF.

The total arrivals of frozen and chilled beef was 3,346,188 quarters, compared with 4,113,265 quarters in 1915, being a decrease of 767,077 quarters.

Australia contributed	-	-	591,998 frozen quarters.
New Zealand	„	-	639,684 „ „
South America	„	-	1,760,761 „ „
„	„	-	897,631 chilled „
Other countries	„	-	353,745 frozen „
„	„	-	241,891 chilled „

Total - 4,485,710 quarters.

The quantity seized by your officers as unfit for human food was 162 tons 7 cwts. 2 qrs. 4 lbs., and comprised 1,966 quarters and crops and sundry bags and trimmings.

The largest quantity seized on any ship was 1,317 quarters, weighing 92 tons 7 cwts. 1 qr. 26 lbs., on a vessel which arrived in the Port in a damaged condition.

AUSTRALIAN BEEF AFFECTED WITH "WORM" (ONCHOCERCA).

No beef affected with "Worm" (Onchocerca) came under the notice of your officers during the year.

ACTINOMYCOSIS IN OX-TONGUES.

Only a very small proportion of the Ox-tongues which arrived in the Port of London during the year 1916 were examined by your Officers. The remainder were, at the request of the consignees, allowed to leave the district of the Port of London

Sanitary Authority (without inspection) for removal to cold stores within the City of London, the Metropolitan Boroughs of Bermondsey and Finsbury, to be examined there under the supervision of the Medical Officers of Health of those districts.

Of the tongues examined by your Officers, in no instance were 2 per cent. of them found to be diseased.

MUTTON AND LAMB.

The total importations of frozen Mutton and Lamb into the United Kingdom during 1916 amounted to 8,472,136 carcasses.

From Australia -	-	-	-	671,888 carcasses.
„ New Zealand	-	-	-	5,407,222 „
„ South America	-	-	-	2,311,451 „
„ United States	-	-	-	81,575 „
Total	-	-	-	<u>8,472,136 carcasses.</u>

This was a decrease of 3,718,625 carcasses, or 30.5 per cent. on the total for 1915.

The quantity seized by your Officers and destroyed as unfit for human food was 10 tons 12 cwts. 1 qr. 10 lbs., and comprised 493 carcasses, 224 pieces and sundry trimmings.

The largest individual seizure was 171 carcasses, weighing 2 tons 14 cwts., on a vessel which arrived in the port in a damaged condition.

PORK.

The pork seized and destroyed was 520 carcasses, 105 heads and 2 pieces.

The seizures were made for the following reasons :—

From.	Tuberculosis.		Unsound.	
	Carcasses.	Heads.	Carcasses.	Pieces.
Australia - - - -	...	...	14	...
New Zealand - - - -	...	...	...	...
Canada - - - - -	...	...	...	...
United States - - - -	62	10	4	0
South Africa - - - -	10	...	...	...
China - - - - -	184	61	58	1
Brazil - - - - -	2	...	...	1
TOTALS - - - - -	439	105	81	2

With regard to the heads destroyed, these were removed from carcasses found to be affected with tuberculosis.

A concession to importers of foreign pig carcasses had been in operation since 4th November, 1915, permitting them to export any foreign pig carcass presenting only tuberculous glands in the neck, those parts which on examination had been found to be free from obvious tubercle. This was a departure from the former practice and for reasons which are now apparent, is unworkable. These, at best doubtful, re-examined carcasses accumulated in the dock stores to the number of 245, on February 1st, pending information from the importers of details as to shipment. On the 14th January I gave permission for certain carcasses to be exported. Following up this exportation I found they were exported, but not as cargo. On the 2nd February I was asked to permit export from Liverpool. On my making it clear that export meant export as cargo, and that guarantee and evidence of this would be required, the request was withdrawn. Later a representative of one of the importers asked that a large number of these pigs should be allowed to go as ship's stores. This request was of course refused. Notice was then given to all importers interested in carcasses which had been seized and placed under order for export, that time up to February 28th would be given them to make and submit arrangements for genuine export of this accumulation of doubtful meat, and that any of the meat not exported by that date would be destroyed in accordance with the Foreign Meat Regulations.

Article VII. (2) of the Foreign Meat Regulations, runs as follows :—

“Where, in pursuance of Article VI., a notice has been given by the Sanitary Authority with respect to any foreign meat, and within the time specified in the notice the Sanitary Authority have received such a written undertaking as is described in the notice to the effect that the importer will at his own expense export the meat, and within three days after the receipt by the Sanitary Authority of the undertaking the importer fails to export the meat, the Sanitary Authority shall cause the meat to be destroyed under the supervision of the Medical Officer of Health.”

In view of the certainty that the sale of this meat for ship's stores was contemplated, the concession has been withdrawn and the Regulations are now being strictly adhered to.

The s.s. “Highland Loch,” from Buenos Ayres, arrived in the Port of London on the 16th January last. Included in the cargo were 813 pig carcasses which were submitted to the usual examination by your Inspectors, who found 22 of them affected with tuberculosis. The heads were removed from the carcasses and destroyed, and the carcasses were split along the backbone throughout the whole length and placed in the Victoria Dock Cold Store for further examination.

In accordance with the provisions of the Public Health (Foreign Meat) Regulations, 1908, Articles III. (5) and IV. (1), on the 31st January a notice was served upon the consignees forbidding the removal of the 22 carcasses from the store for any purpose other than exportation. The notice required by the Public Health (Foreign Meat) Regulations, 1908, Article IV., signed by the Town Clerk, was also served upon the consignees on the 1st February.

On the 2nd February the consignees acknowledged the receipt of the latter notice and gave a written undertaking that “Everything contained in your notice will be duly complied with and that we will only dispose of the pigs by exporting them from the country, and with your permission.” Notwithstanding this, on the 15th February the consignees removed the 22 pig carcasses from the dock store to their stall in the Central General Market Annexe, where most of them were disposed of. I asked them for an

explanation of this, and on the 21st February their representative called upon me by appointment, and explained that owing to a series of clerical errors the 22 pig carcasses had not been marked in their books as "under detention," and therefore appeared by mistake as "available stock," and accordingly drawn upon.

Under the action taken and alluded to in my Report with reference to meat under notice for export, in more rigid enforcement of the Foreign Meat Regulations, such a situation as the above will hardly arise in the future.

The quality of the pork at present imported is maintaining a high standard as regards absence of tubercle.

OFFAL.

The offal seized and destroyed comprised :—

	Tons.	Cwts.	Qrs.	Lbs.
Livers, Ox and Calf—18 bags, 349 loose	- 2	2	2	24
„ Sheep and Lamb—4 bags, 19 loose	- 0	2	1	1
„ Pig—11 casks	- 0	3	3	12
Sweetbreads —10 cases, 2 baskets	- 0	1	3	18
Kidneys —10 cases, 45 bags, 962 boxes, 42 loose	- 4	5	1	21
Hearts, —62 bags, 3 loose	- 1	18	0	24
Tongues, Ox—94 bags, 123 loose, 9 casks	- 4	8	0	22
Cheeks, „—153 bags	- 5	10	0	26
Tripe —7 boxes, 16 bags	- 0	11	3	10
Tails, Ox—5 bags	- 0	2	2	12
Skirts, „—70 bags, 25 loose	- 2	4	2	21
Sundries —7 boxes	- 2	13	2	8
Total weight	- 24	5	2	3

MEATS—CANNED.

The tinned meats seized and destroyed comprised :—

	Tons.	Cwts.	Qrs.	Lbs.
Beef—60 cases, 132 tins	- 2	1	1	28
Brawn—4 cases	- 0	2	2	8
Pork and Beans—9 tins	- 0	0	0	18
Sausage Meat—38 cases, 611 tins	3	10	1	1
Sundries—49 cases, 69 tins	- 1	0	3	27
Total weight	- 6	15	1	26

CANNED FOODS.

“PREPARED FROM MEAT PASSED FOR STERILISATION.”

In May and June, consignments of “Corned Meat,” “Cooked Luncheon Tongues” and “Tinned Tongue,” bearing the words “Passed for Sterilisation” or their equivalent on the labels of the tins, were detained in the Port.

These meats were of a grade indicated by the subjoined regulations of the United States Department of Agriculture.

The system of meat inspection in England does not allow of the use for human food of meat from extensively tuberculous animals, and from such these canned foods are prepared.

One consignment was marked "second grade," but on the packing cases only, others showed no mark of inferiority except the wording on the label, which without explanation of its import is at least equivocal, or might even be accepted by the public as a guarantee of good quality.

The Regulations alluded to are as follows :—

Regulation 11, Rule D.—Carcases which reveal lesions more severe or more numerous than those described for carcasses to be passed (Rule C), but not so severe nor so numerous as the lesions described for carcasses to be condemned (Rule A), may be rendered into lard or tallow or otherwise sterilized in accordance with Regulation 15, if the distribution of the lesions is such that all parts containing tuberculous lesions can be removed.

Regulation 15, Section III.—

Paragraph 1.—Carcases and parts passed for sterilisation and which are not rendered into lard or tallow may be utilized for food purposes provided they are first sterilised by methods, and handled and marked in a manner, approved by the chief of bureau.

Paragraph 2.—Any carcasses or parts prepared in compliance with paragraph 1 of this section may be canned if the container be plainly and conspicuously marked so as to show that the product is second grade, class or quality, and has been sterilised.

Another regulation requires the embossed letters "S T R" to be placed on each can.

At the request of the importers, re-exportation of these and subsequent consignments of "Meat passed for Sterilisation" was permitted.

The matter was reported to the Local Government Board.

Importation of these goods in the Port of London has, in consequence of the action taken, ceased.

Meat "passed for sterilisation" having been found amongst ship's stores in July the matter was brought to the notice of the Secretary of the Board of Trade by your Medical Officer.

MEAT—SMOKED AND SALTED.

	Tons.	Cwts.	Qrs.	Lbs.
Bacon—2 boxes and 690 tons in bulk	690	4	3	14
Salt beef—1 cask - - - -	0	3	1	4
Hams—17 boxes, 246 loose - -	2	18	1	19
Total weight - - -	693	6	2	9

The large quantity of bacon was not intended for this country, but was landed from a vessel which put into the Port of London in a damaged condition.

RABBITS (Frozen).

Only six seizures of frozen rabbits were made during the year, but the total quantity seized, namely, 18,926 crates and 15 hampers, weighing 471 tons 10 cwts. 1 qr. 12 lbs., was a considerable increase compared with recent years. Of the total quantity, nearly 16,000 crates were seized on a vessel which had been on fire.

RABBITS (Tinned).

No tinned rabbit was seized during the year.

POULTRY AND GAME.

The total quantity of this class of goods seized and destroyed was 29 cwts. 2 qrs. 27 lbs.

FISH.

The fish of all kinds seized and destroyed totalled 85 tons 3 cwts. 0 qrs. 19 lbs., compared with about 4 tons in the previous year, and included :—

	Tons.	Cwts.	Qrs.	Lbs.
WET—443 barrels, 2 cases	66	10	0	10
DRIED—9 boxes Haddocks, 8 bags sundries	0	11	0	15
SHELL—Mussels	15	0	0	0
TINNED—Crab, 3,081 tins	0	13	1	25
„ Lobster, 3 cases	0	1	1	4
„ Salmon, 1,079 tins	0	9	2	15
„ Sardines, 79 cases, 121 tins	1	17	2	6
Total weight	85	3	0	19

FRUIT (GREEN).

The goods seized under this heading show a decrease of about 63 tons, compared with the previous year, and comprised :—

	Tons.	Cwts.	Qrs.	Lbs.
Apples—319 boxes, 1,192 barrels, 6 bags	19	13	2	19
Bananas—2,150 crates	75	0	3	4
Grapes—52 boxes, 14 baskets, 1 barrel	1	5	1	26
Lemons—77 boxes and a quantity loose	5	7	0	0
Limes—1 case	0	0	1	0
Melons—1 case	0	1	0	0
Pears—1,060 boxes, 28 barrels	23	16	3	20
Pineapples—778 cases	30	15	1	0
Peaches—6 cases	0	0	2	4
Oranges—154 boxes, 2 barrels	7	3	3	14
Tomatoes—1,144 crates, 461 bundles, 54 boxes	65	16	3	8
Sundries—76 barrels, 11 cases	17	9	3	26
Total weight	246	11	2	9

FRUIT (DRIED).

The total quantity of this class of goods seized and destroyed showed an increase of 175 tons compared with the previous year, and comprised :—

	Tons.	Cwts.	Qrs.	Lbs.
Currants—220 $\frac{1}{4}$ -cases, 26 bags, 2,241 half-bags	53	10	2	24
Dates—1,129 cases, 4 bundles - - -	32	14	1	19
Figs—954 taps, 295 cases, 1,012 bags, 4 barrels - - - - -	62	9	2	10
Plums—93 cases - - - - -	1	9	2	1
Raisins—13 cases - - - - -	0	7	3	20
Prunes—1,546 boxes - - - - -	27	6	0	23
Sultanas—8 bags, 7 cases and a quantity loose	1	17	0	22
Evaporated Peaches—16 cases - - -	0	4	3	3
„ Apples—132 cases - - - - -	4	1	2	0
Apple Rings—129 cases - - - - -	3	4	2	0
Pears—8 barrels - - - - -	0	8	0	0
Muscateles—1 box - - - - -	0	0	1	0
Various—3,963 boxes - - - - -	75	3	3	0
Total weight	262	18	1	10

Much of the fruit proved to be of commercial value for vinegar making or cattle food, and it was accordingly released for those purposes, the Medical Officers of Health of the districts in which it was to be used being notified of the facts.

FRUIT (TINNED AND BOTTLED).

Under this heading are included :—

	Tons.	Cwts.	Qrs.	Lbs.
Apples—6 tins - - - - -	0	0	2	4
Apricot pulp—2 cases, 5 tins - - -	0	1	1	8
Peaches—29 tins - - - - -	0	0	2	2
Pears—1 case - - - - -	0	0	2	4
Pines—288 tins - - - - -	0	5	0	16
Apple pulp—5 cases - - - - -	0	4	1	24
Tomato purée—22 cases - - - - -	0	12	3	17
Raspberry pulp—262 tins - - - - -	1	3	1	16
Various—300 tins and quantity by weight	16	13	0	0
Total weight	19	11	3	7

FRUIT, PRESERVED (JAM AND MARMALADE).

One thousand six hundred and eighty-eight cases of jam and marmalade, weighing 37 tons 10 cwts. 2 qrs. 21 lbs., were seized and destroyed.

VEGETABLES.

FRESH—	Tons.	Cwts.	Qrs.	Lbs.
Carrots—4 barrels, 1 bag	0	6	2	0
Onions—5 barrels, 51 bags and quantity loose	4	3	0	0
Potatoes—69 boxes	2	11	3	0
DRIED—				
Peas—784 bags	70	6	0	0
Beans—1,511 bags	75	12	1	21
TINNED—				
Spinach—144 tins	0	2	2	8
Pickles—11 casks	0	11	0	0
Total weight	153	13	1	1

NUTS.

Under this heading are included chestnuts, shelled walnuts and desiccated cocoanut, weighing 25 tons 12 cwts. Most of the goods were utilised, under suitable guarantees, for oil extraction and cattle food.

ACAJOU ("CASHEW") NUTS.

Large quantities of these nuts are imported from the East and elsewhere for various purposes in relation to human food.

A consignment of 350 cases was stopped, being in part unsound. On sorting, 80 cases were passed as fit for human food, the remainder were subsequently passed for oil extraction and cattle food.

The goods were obviously infested with some kind of destructive insect, and a sample was submitted to Lieut.-Col. Alcock, I.M.S., of the London School of Tropical Medicine, who reported as follows :—

"The insects found in the sample of damaged cashew-nut are beetles of three species and the larva of a moth (dead).

The beetles are :—

(1) *TRIBOLIUM FERRUGINEUM* (Fabr.). This is a very common pest of flour, meal and many kinds of grain, and has been carried in cargoes all over the world. It does a great deal of damage.

This species has been kept under observation here in the School Laboratory for some years ; its breeds freely and is not affected by the cold of winter.

(2) *SILVANUS SURINAMENSIS* (Linn.). This is as common as tribolium, or even commoner. It is omnivorous and extremely destructive to provisions and grain of every kind. It is known to live through the winter.

(3) *NIPTUS HOLOLEUCUS*, also omnivorous, destructive to provisions, and not affected by the winter.

All these three beetles are quick breeders, and may have several broods in the year.

As regards the moth, only one dead larva was found. It appears to be a meal moth."

It was also stated that on sifting 160 cwts. of nuts, about 2 cwts. of "dust" were recovered.

I examined this dust and found it to consist largely of *insect dung*.

This disclosure would appear to be of importance.

Many dried products, including fruits and nuts, are attacked in storage by various insects, and this "dust" may be readily observed in quantity, in goods thus infested.

Whatever may be argued as to the food value of any portion which may not have been devoured by the insects, there can be no question of the unsuitability of the intestinal excrement of even insects, for human food.

Your Officers therefore have no hesitation in holding up for careful examination articles of this kind.

WALNUTS.

A valuable consignment of these nuts were stopped on account of rancidity, which was very marked. These were also, ultimately disposed of for extraction first of the oil, and the residue for cattle food. The original purpose was of course for human food, the nuts being largely used in cakes and other confectionery. For this purpose they were quite unfit.

PROVISIONS.

With regard to the goods under this heading, the tea was utilized for the extraction of caffeine, the margarine for soap making, 187 tons 11 cwts. 2 qrs. 12 lbs. of the condensed milk for confectionery purposes and 25 tons for pig feeding.

The goods disposed of in this manner were only allowed to leave the district of the Port Sanitary Authority after your Medical Officer of Health had received satisfactory guarantees respecting them, and the Medical Officers of Health of the districts to which the goods were taken were furnished with full particulars.

	Tons.	Cwts.	Qrs.	Lbs.
Tea—7,178 boxes - - - - -	400	0	0	0
Coffee—2,697 bags and a quantity loose -	204	11	0	10
Cheese—123 boxes and a quantity loose -	11	6	2	13
Margarine—799 boxes - - - - -	21	3	0	0
Butter—2 boxes - - - - -	0	1	0	0
Condensed Milk—8,814 cases - - - - -	212	13	2	20
Total weight	849	15	1	15

CONDENSED MILK.

During December a consignment of 1,000 cases of condensed milk from Genoa was landed in the London Dock. On inspection, it was found that practically every tin was "blown" and the contents were in a state of active fermentation. The whole consignment was seized as unfit for human food. A sample of the milk was sent to Dr. H. B. Newham for information as to the organism at work in the milk, especially in view of the fact that the gases freely given off were sour, but not very disgusting. He reported as follows :—

" On opening a tin of this milk it was found to be of a somewhat yellow colour and of more or less solid consistency, very like butter. Bubbles of gas were seen on the surface, and the milk gave off an objectionable smell somewhat like rancid butter. The milk was inoculated on to some eight different media, and from the same I was able to isolate a large coccus. This tended to form sarcinae and was in pure culture. No other micro-organisms or yeasts were to be detected though they were carefully sought for. In addition, I fed a white rat on the milk but it has shown no signs of ill-health. I am of the opinion that the cause of the decomposition of the milk is due to the presence of this sarcina. I was unable to identify for certain the actual species of sarcina involved, but in all probability it is sarcina alba.

H. B. NEWHAM."

The brokers for the goods wrote :—" We are informed that many parcels of Italian milk, which is liable to thicken very quickly as this has done, have been used by manufacturers, and at the present time, owing to the scarcity of dried milk powder, the goods referred to in your letter would be in good demand.

This is true of preserved milk in which the thickening is due to caramelising of sugar, but not in case of decomposition due to micro-organisms.

Your Medical Officer declined to sanction the use of the milk for manufacturing purposes, or to permit shipment abroad.

Seeing that the organism in this case was a comparatively harmless one, the goods, which weighed about 25 tons, were eventually released, under a guarantee, to be used for pig feeding, the Medical Officer of Health of the district to which they were taken being informed of the facts.

PREPARED FOODS.

The greater part of these goods were also used for pig or poultry food, after your Medical Officer had been given satisfactory guarantees.

	Tons.	Cwts.	Qrs.	Lbs.
Quaker Oats—315 cases, 4 bags and a quantity loose - - -	22	6	2	10
Rolled Oats—120 bags and a quantity loose	9	1	1	5
Shredded Wheat—120 bags - - -	0	3	0	0
Total weight	31	10	3	15

BISCUITS AND CONFECTIONERY.

No biscuits were seized and destroyed during the year, and the confectionery was limited to two seizures, namely, 98 cases of chocolate and a box of Turkish delight, the total weight being 7 tons 5 cwts. 3 qrs. 14 lbs.

GRAIN.

Most of the grain seized as unfit for human food was subsequently released, under guarantees, for poultry or animal food, and notifications were sent to the Medical Officers of Health of the districts to which it was being taken.

The total quantity dealt with was :—

	Tons.	Cwts.	Qrs.	Lbs.
Wheat - - - - -	2,164	14	0	10
Maize - - - - -	122	13	3	11
Oats - - - - -	2	10	0	26
Barley - - - - -	1	19	1	27
Rice - - - - -	82	0	0	0
Total weight	2,373	17	2	18

MEAL AND FLOUR.

The meal and flour seized and destroyed during the year amounted to 137 tons 7 cwts. 0 qrs. 26 lbs., and of this all but 7 tons was used for pig or poultry feeding.

CONDIMENTS AND SPICES.

These goods were limited to 35 bags and 9 part bags of ginger and 2 bags of tumeric, the total weight being 1 ton 14 cwts. 0 qrs. 13 lbs.

EGGS.

Nineteen cases of eggs and 100 barrels of preserved eggs were seized and destroyed, the weight being about 6 tons 16 cwts. 3 qrs. 3 lbs. In addition, four cases and one barrel of egg yolk and one tin of egg melange were destroyed, weighing about 8 cwts. 0 qrs. 21 lbs.

DRUGS.

No drugs were seized.

SUNDRIES.

Included under this heading are :—

	Tons	Cwts.	Qrs.	Lbs.
Albumen—5 casks - - - - -	1	0	0	0
Cream, tinned—1 case - - - - -	0	0	0	14
Lentils—372 bags and quantity loose - - -	1	3	1	11
Preserves—2 cases - - - - -	0	1	1	14
Provisions—3 cases - - - - -	0	3	0	0
Tapioca—28 bags - - - - -	1	14	0	1
Tomato Purée—9 tins - - - - -	0	0	1	8
Total weight	4	2	0	20

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1915.

In May, a representation from the Borough Council of Southend-on-Sea, dated 21st March, 1916, was received by your Medical Officer through the Medical Officer of Health, Southend, together with information, dated 13th April, from that Medical Officer, was laid before your Worshipful Committee.

The representation called attention to the practice of collecting for sale direct to the public, shellfish from the foreshore in the vicinity of the Chapman Head, which the Southend Borough Council was advised is an undesirable ground for the collection of shellfish for human consumption without prior purification.

The information showed that cases of Enteric Fever in the Borough of Southend had been traced to shellfish collected at various points along the foreshore on the Northern side of the Thames Estuary from Canvey Island to Shoeburyness.

The information also showed the diminution in Enteric Fever incidence in the Borough of Southend, which from time to time had followed measures taken in connection with shellfish.

The most successful of these measures were (1) the steaming of cockles before sale which reduced the yearly average of the Enteric Fever incidence from 65 cases in the four years 1900 to 1903, to 16 in the four succeeding years, and (2) the leasing of the fishery rights for that part of the foreshore in possession of the Borough, which further reduced the average case incidence in the Borough to 4 per annum in the four years which succeeded this measure. The terms of the lease prevented the public collecting the contaminated shellfish.

These measures in their execution conveyed public warning, and their good results must have extended far beyond the Borough limits.

In the most recent lease of the Corporation foreshore, the register showing how and where the shellfish are dealt with by the lessee is specifically open to the Officers of the Port of London Sanitary Authority for inspection; and the terms of the lease should adequately safeguard the public as regards shellfish taken for sale from their portion of the foreshore.

To the West of the Southend Corporation foreshore lies the area on which representation was made, and to the East an area dealt with in the information.

The former consists of public layings for the most part, and the latter up to the Western Shoeburyness parish boundary of a private laying, and, eastward of this Shoeburyness boundary, of public and private layings of vague definition.

The term "laying" does not necessarily imply deposition of shellfish by the hand of man, but includes any place where shellfish are taken, *i.e.*, natural beds of shellfish. Such natural beds constitute the layings under consideration.

Your Medical Officer inspected the whole foreshore, and from the topographical and epidemiological consideration recommended that orders should be made and undertakings required for the public and private layings respectively, which lie between Canvey Island on the West and the limits of the Port jurisdiction on the East.

In accordance with Article IV. of the Regulations, notice was duly given to all persons interested to appear at the Guildhall to show cause why orders should not be made for the areas given in the appended orders.

The meeting was held on July 25th at the Guildhall.

After full subsequent Report by your Medical Officer the following Orders were made :—

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1915.

TO ALL PERSONS INTERESTED.

WHEREAS the Mayor, Commonalty and Citizens of the City of London is the Port Sanitary Authority of the Port of London and the "Local Authority" for the purposes of the "Public Health (Shellfish) Regulations, 1915," and is hereinafter referred to as the Port of London Sanitary Authority :

AND WHEREAS under the said Regulations the Port of London Sanitary Authority received a representation from the Corporation of the Borough of Southend, and also a Report from the Medical Officer of Health for the Port of London Sanitary Authority, that the consumption of Shellfish brought from certain layings situated within the district of the Port of London Sanitary Authority is likely to cause danger to public health :

AND WHEREAS the Port of London Sanitary Authority gave to the persons interested in the public laying situated in the area hereinafter described notice to appear before them on the 25th day of July last to shew cause why an Order should not be made prohibiting, as the circumstances may require, the distribution for sale for human consumption of Shellfish brought from the said public laying situated in the area hereinafter described :

AND WHEREAS the persons interested appeared on the 25th day of July last before the Port of London Sanitary Authority, and in the opinion of the Port of London Sanitary Authority sufficient cause is not shewn why an Order should not be made as the circumstances require :

NOW THEREFORE WE, the Port Sanitary Authority of the Port of London, by this our Order and in pursuance of the powers of the "Public Health (Shellfish) Regulations, 1915," DO prohibit the distribution for sale for human consumption of Shellfish brought from the public laying situated on the foreshores or waters immediately bordering thereon, or any tributary waters of that part of the Estuary of the River Thames in the County of Essex, and to the Westward of the Western boundary of the foreshore in possession of the Corporation of Southend-on-Sea, comprising the foreshores of Canvey Island Westward to the Chapman Light on the South, and to Benfleet on the North of the Chapman Head and of Leigh-on-Sea, and including the Chapman Sands, Canvey Point, Hadleigh Ray, Leigh Creek, Benfleet Creek, and the sands known respectively as the Bargander, Leigh and Marsh End Sands, unless the Shellfish have been re-laid in pure water for a period of at least four weeks.

PROVIDED ALWAYS that this Order shall not apply to any Cockles or Winkles which before distribution for sale have been subject to a process of sterilization by steaming under pressure in a suitable apparatus for at least six minutes, or, in the case of Winkles, by boiling in water maintained at the boiling point for at least fifteen minutes of time.

Dated the 16th day of November, 1916.

Guildhall,
London, E.C.

JAMES BELL,
Town Clerk.

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1915.

TO ALL PERSONS INTERESTED.

WHEREAS the Mayor, Commonalty and Citizens of the City of London is the Port Sanitary Authority of the Port of London and the "Local Authority" for the purposes of the "Public Health (Shellfish) Regulations, 1915," and is hereinafter referred to as the Port of London Sanitary Authority :

AND WHEREAS under the said Regulations the Port of London Sanitary Authority received a Report from the Medical Officer of Health for the Port of London Sanitary Authority, that the consumption of Shellfish brought from certain layings situated within the district of the Port of London Sanitary Authority is likely to cause danger to public health :

AND WHEREAS the Port of London Sanitary Authority gave to the persons interested in the public laying situated in the area hereinafter described notice to appear before them on the 25th day of July last to shew cause why an Order should not be made prohibiting, as the circumstances may require, the distribution for sale for human consumption of Shellfish brought from the said public laying situated in the area hereinafter described :

AND WHEREAS the persons interested appeared on the 25th day of July last before the Port of London Sanitary Authority, and in the opinion of the Port of London Sanitary Authority sufficient cause is not shewn why an Order should not be made as the circumstances require :

NOW THEREFORE WE, the Port Sanitary Authority of the Port of London, by this our Order and in pursuance of the powers of the "Public Health (Shellfish) Regulations, 1915," DO prohibit the distribution for sale for human consumption of Shellfish brought from the public and private layings situated on that part of the foreshore and waters immediately bordering thereon of the Estuary of the River Thames in the County of Essex between the Northern boundary of the Parish of North Shoebury and the Eastern boundary of the Borough of Southend, including the whole foreshore of Shoeburyness, unless the Shellfish have been re-laid in pure water for a period of at least four weeks.

PROVIDED ALWAYS that this Order shall not apply to any Cockles or Winkles which before distribution for sale have been subject to a process of sterilization by steaming under pressure in a suitable apparatus for at least six minutes, or, in the case of Winkles, by boiling in water maintained at the boiling point for at least fifteen minutes of time.

Dated the 16th day of November, 1916.

Guildhall,
London, E.C.

JAMES BELL,
Town Clerk.

Appeal has been lodged with the Local Government Board against these Orders and is pending.

SHEERNESS.

SHELLFISH FROM THE LAPWELL.

In May also, the following undertaking given by Messrs. Hole and Dodd with regard to the private laying known as the Lapwell, was laid before your Worshipful Committee :—

“To meet with your requirements, to prevent shellfish being taken from the Lapwell by any unauthorised person or persons for human consumption previous to relaying in pure sea water—

1. We hereby undertake to have notices affixed on the foreshore that offenders will be prosecuted, and will prosecute any person or persons reported either by the Sanitary Authority or by the Police.
2. That a circular letter will also be sent to the fish dealers in Sheerness, warning them against purchasing any shellfish for sale, taken from the Lapwell.
3. We will also insert a copy of the Notice in the Sheerness local paper for two consecutive weeks.
4. And we further undertake to relay all shellfish that we may take from the Lapwell in pure sea water in Stangate Creek for not less than one month before being sold for human consumption.

Yours faithfully,
HOLE AND DODD.”

The warning notice inserted in the “Guardian” and “East Kent Advertiser” for April 2nd and 29th, was as follows :—

SHELLFISH—WARNING.

Complaints of illness have recently been traced to Shellfish said to have been taken from the Lapwell.

NOTICE IS HEREBY GIVEN that any unauthorised person taking Shellfish from these grounds will be prosecuted.

21, Monument Street,
London, E.C.,
22nd March, 1916.

By Order,
HOLE AND DODD.

A circular letter of warning was sent to every fish salesman in Sheerness, by Sir J. Wrench Towse from the Fishmongers' Hall.

These were measures taken in discharge of the requirement of your Worshipful Committee, that unauthorised persons should be prevented from taking shellfish from the Lapwell.

It is of interest that according to the estimate of Professor W. H. Thompson, Trinity College, Dublin, taken from the recent Board of Trade Report on the food supply of the United Kingdom, the energy value per annum of shellfish consumed (including crabs and lobsters) is 19,000 millions of calories, out of a total supply from food of $49\frac{1}{4}$ millions of millions of calories, or .000397 of the available energy in the total food consumed.

This would be the energy supply for 13,471 man values of the total man value 34,916,712 in the population.

SANITARY INSPECTION.

In Table XXVIII. is given the usual Summary and Analysis of the inspection of vessels and other premises, and in Table XXXII. particulars of works carried out under the supervision of your officers, the plans of which had been submitted to your Committee.

In Tables XXIX. and XXX. the number and kind of nuisances are dealt with, both in vessels and in buildings ashore within the docks. Table XXXIII. deals with infringements of the Bye-laws relating to the carriage of offensive cargoes.

From these it will be gathered that the total number of visits of inspection during the year was 29,878, 7,727 of these being to vessels in the river, and the remainder in the Docks. Of the vessels 10,244 visits were to those from foreign ports, the number of cases in which cleansing of crews' quarters was necessary, was 1,910.

The total number of nuisances reported and dealt with was 2,886, of which 2,266 were in vessels, and 619 on other premises.

The remaining one was in the river, and arose from the carcase of a bottle-nosed whale about 18 feet in length, which had stranded on the foreshore of the lower river at Mucking.

The disposal of these large and putrid carcasses, on occasions, is very expensive, but in this case, being near open water, the carcase was towed out and sent adrift early on the ebb-tide and was carried out to sea.

The offences against the Bye-laws relating to offensive cargoes consisted almost entirely in the inadequate covering and overloading of barges with house and other refuse from the metropolis. As excuses, the difficulties at the present time in (a) replacing lost and worn coverings, (b) controlling the casual labour employed, and (c) the desirability of loading above the limit in order to deliver a full freight after allowing for "settling," have all been pleaded and are not new. All things considered, however, it was decided not to recommend summary proceedings in any case. The total number of offences reported—ten during the year—does not point to any serious disregard of the Bye-laws.

TABLE XXVIII.

GENERAL SUMMARY, and Analysis, of the Sanitary Inspections of Vessels, &c., in the Port of London, for the year ended 31st December, 1916.

FOREIGN.			COASTWISE.			INLAND NAVIGATION.						Shore Premises.			WATER BARGES.																	
Steam.		Sail.	Steam.		Sail.	Steam.		Sail.		Lighters (uninhabited).	Canal Boats.																					
Inspected.	Defective.	To be Cleaned.	Inspected.	Defective.	To be Cleaned.	Inspected.	Defective.	To be Cleaned.	Inspected.	Defective.	To be Cleaned.	Inspected.	Defective.	To be Cleaned.	Sick Seamen referred to Hospital.																	
															No. in District in good condition, 31st December, 1916.																	
															New Barges.																	
															Condensed.																	
															Use discontinued.																	
															No. in District 31st December, 1916.																	
9535	96	1095	709	10	47	1492	12	107	430	8	45	393	—	17	9766	87	367	2596	13	221	277	18	11	4680	27	565	6	—	—	—	—	14
Total Inspections to 31st December, 1915 -															1,135,539																	
Total Inspections from 1st January to 31st December, 1916 -																																
"Foreign" -															10,244																	
"Coastwise" -															1,922																	
"Inland Navigation" -															13,032																	
Premises on shore -															4,680																	
															<u>29,878</u>																	
Total -															<u>1,165,417</u>																	
Cleansing of Crew's Quarters, &c. :-																																
Total to 31st December, 1915 -															74,735																	
Total No. of Vessels from 1st January to 31st December, 1916 -															1,910																	
Total -															<u>76,645</u>																	
Number of vessels inspected :-																																
In the Launches—																																
" Lady Truscott " -															4,009																	
" David Burnett " -																																
" George Briggs " -															3,718																	
Total -															7,727																	
In the Docks, &c. -															17,471																	
Total -															<u>25,198</u>																	
																					Docks and River.											
																					No.											
																					St. Katharine's -											
																					London -											
																					Regent's Canal -											
																					Millwall -											
																					West India -											
																					Poplar -											
																					East India -											
																					Victoria -											
																					Royal Albert -											
																					Commercial -											
																					Tilbury -											
																					Gravesend District -											
																					River—*Upper District -											
																					*Middle " -											
																					*Lower " -											
																					Total vessels -											
																					Shore premises -											
																					Total -											
																					<u>29,878</u>											
																					*Upper District extends from Greenwich to Teddington.											
																					*Middle " " " Greenwich to Erith.											
																					*Lower " " " Erith to outer limits of the Port of London.											

COMPARATIVE TABLE.

Total number of Inspections of vessels from—	1907.	1908.	1909*	1910.	1911.	1912.	1913.	1914.	1915.	1916.	Yearly average for the 10 years ending 31st December, 1916.
"Foreign" -	17,971	15,258	14,887	13,710	14,015	15,177	14,425	13,539	12,472	10,244	14,169.8
"Coastwise," "Inland Navigation," and other Inspections -	19,414	20,014	25,469	24,857	24,009	28,035	24,501	24,475	22,237	19,634	23,264.5
Total -	37,385	35,272	40,356	38,567	38,024	43,212	38,926	38,014	34,709	29,878	37,434.3

TABLE XXIX.

NUMBER OF NUISANCES ON **VESSELS** REPORTED AND DEALT WITH during the year ending 31st December, 1916.

DESCRIPTION OF NUISANCES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
SMOKE NUISANCES :—													
Number of complaints received ...	...	...	...	...	1	...	...	...	...	...	...	...	1
Number of recurrences reported ...	...	...	...	...	...	...	...	...	...	...	...	...	...
OFFENSIVE CARGOES (Bye-laws) :—													
Number of Infringements reported	7	1	...	...	...	...	2	...	1	...	...	...	11
STRUCTURAL AND OTHER DEFECTS :—													
Ventilation ...	6	6	9	6	8	4	4	6	5	4	5	5	68
Lighting ...	1	7	8	3	6	4	3	3	3	3	2	3	46
Heating ...	7	2	10	1	...	2	...	1	1	2	3	6	35
Bare iron in crew's quarters ...	...	...	...	1	...	...	...	...	...	...	1	...	2
Leaky decks, hawse-pipes, cable casings, &c. ...	9	5	8	...	3	2	4	3	...	3	6	3	46
Defective bulkheads and floors ...	3	3	1	1	...	2	1	3	1	2	2	...	19
Sanitary conveniences ...	6	3	3	1	3	3	6	...	2	5	4	2	38
Ship's gear or stores stowed in crew's quarters ...	...	...	1	...	1	...	...	...	...	...	...	...	2
Foul bilges and peaks ...	1	1	4	2	2	1	4	1	1	1	...	...	18
Storage of drinking water (dirty or defective tanks) ...	...	1	3	2	...	...	...	...	...	...	1	...	7
Dirty quarters ...	107	173	160	155	190	159	135	140	129	202	179	181	1,910
Accumulation of offensive matter ...	...	...	...	...	...	1	3	...	...	7	1	...	12
Miscellaneous Nuisances ...	7	2	7	4	2	3	2	8	2	10	2	2	51
Totals ...	154	204	214	176	216	181	164	165	145	239	206	202	2,266
Total number of vessels on which structural alterations were ordered	20	17	23	7	13	10	12	11	6	13	16	12	160
Total number of vessels on which structural alterations were reported as carried out ...	8	10	5	21	9	5	2	23	12	5	6	28	134

NUMBER OF NUISANCES **IN THE RIVER** REPORTED AND DEALT WITH during the year ending 31st December, 1916.

From discharge of foul liquid, sewage, &c., into the River ...	...	...	...	...	...	...	...	...	1	...	...	...	1
Offensive condition of River water ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	...	...	...	...	...	...	...	...	1	...	...	...	1

TABLE XXXII.

SANITARY WORKS.

PART I.

Date completed.	Works.
1916.	
Feb. 2	Millwall Dock, General Offices—Alterations and additions to drains.
„ 10	Millwall Dock, South Side—Re-erection of conveniences at “ Z ” Shed.
Mar. 11	Royal Albert Dock—Drainage for Coffee and Dining Rooms. (Passed only as a temporary measure.)
May 20	West India Dock, North Quay—Surface water drain, No. 3 Shed.
June 2	South-West India Dock—Latrine for Lascars, South side. Ditto, Sanitary accommodation, North Side.

PART II.

Sanitary Works and alterations, not yet reported as completed :—

Date Plan submitted.	Works.
1916.	
March 7	Royal Albert Dock—Proposed drainage for New Cold Stores Engine House.
„ 28	Royal Victoria Dock, Engineers' Department—Proposed drainage of Sub-office.
May 12	Royal Albert Dock—Proposed latrines on North side.
„ 12	Millwall Dock—Proposed drainage to latrines.
„ 23	Surrey Commercial Dock—Proposed sanitary accommodation for women clerks.
„ 30	Royal Victoria Dock—Proposed drainage in connection with Messrs. Vernon's new mess-room.
July 5	Royal Albert Dock—Proposed latrines.
Aug. 4	St. Katharine Dock—Proposed improvement of latrine at No. 7 Yard.
Oct. 25	London and St. Katharine Docks—Proposed accommodation for women clerks.
Nov. 11	East India Import Dock, New Offices at No. 4 Shed—Proposed additional sanitary accommodation.

TABLE XXXIII.

BYE-LAWS—OFFENSIVE CARGOES.

Twelve cases of infringement of the above-mentioned bye-laws were reported during the year. In each case written notice was sent to the owners of the barges concerned :—

Date.	Name of Vessel.	Infringement.
1916.		
Jan. 5/11	Lighter "Honeysuckle"	Loaded with a cargo of house refuse totally uncovered and loaded above the coamings.
" 6	Lighter "Snowdrop" -	Ditto Ditto.
" 6/13	Lighter "Blackthorn" -	Ditto Ditto.
" 6	Lighter "Whitethorn" -	Loaded with a cargo of road sweepings totally uncovered.
" 26	s.v. "Eugene" - -	Loaded with a cargo of bones not properly covered, and also loaded above the coamings.
Feb. 15	Barge "Addlestone" -	Loaded with a cargo of refuse matter not properly covered, and also loaded above the coamings.
May 2	Lighter "Canliflower" -	Loaded with a cargo of rubbish not properly covered.
July 31	Lighter "Mate" - -	Loaded with skins in an offensive condition not properly covered.
" 31	Lighter "Annie" -	Loaded with fish offal not properly covered.
Sept. 13	Lighter "Whitethorn" -	Loaded with road sweepings not properly covered.

LAUNCHES.

"LADY TRUSCOTT" and "DAVID BURNETT."—Owing chiefly to the difficulty of obtaining suitable coal, the "David Burnett" has replaced the "Lady Truscott" for work on the Gravesend Station, the latter launch being held as a reserve or relief boat.

The total number of inspections made on this Station by one or other of these launches was 4,009.

MOTOR BOAT "GEORGE BRIGGS."—This launch was used in 3,718 inspections in the river from Woolwich upwards. The boat is somewhat light for general work, and duties have been restricted in the interests of petrol consumption.

The absence of any heating, and exposure of the crew, when under way render the working of the boat in severe weather a matter of hardship.

In January one of the piston rods broke, causing serious damage and stopping the launch. The launch was towed to Teddington for the necessary repairs.

The provisioning of a spare tail shaft to be fitted by the crew in the event of a breakdown of the present shaft, which does not run quite true, has been deferred owing to war conditions.

LAUNCH MOORINGS AT GREENWICH.

The old mooring barge "Collingwood," after being badly damaged in collision, has been broken up and replaced by the barge "Ella Vicars," purchased at a cost of 140/.

FUMIGATING APPARATUS, BARGE "THOMAS."

The fumigating plant was used on 13 occasions during the year, the largest ship fumigated being one of 8,635 tons, with a cubic capacity of 780,247 cubic feet.

TABLE XXXIV.

Date.	No. of Vessels.	Capacity in Cubic Feet.
1916.		
January - - -	1	317,000
February - - -	1	50,000
" - - -	1	780,247
July - - -	1	178,000
September - - -	1	519,200
October - - -	1	232,448
" - - -	1	300,000
" - - -	1	161,000
" - - -	1	115,190
" - - -	1	283,810
November - - -	1	406,258
December - - -	1	486,000
" - - -	1	182,600
	13	Total - 4,011,753

In reporting to your Committee in November last, I drew attention to the amount and frequency of fumigation by this plant in excess of that contemplated on its establishment.

The table shows five large vessels fumigated in one month alone. Further, that this may be likely to increase with return of vessels on demobilisation. This increased work means, of course, extra wear and tear in plant and barge, affecting the estimated "life" of the plant, and involving considerable expenditure in renewal of parts. It is probable that in the near future it may be necessary to fully consider the condition of the vessel and plant from the point of view of replacement.

PORT OF LONDON.

The limits of the Port of London as at present defined commence at High Water Mark in the River Thames at Teddington Lock, in the County of Surrey, and extend down both sides of the River Thames to an imaginary straight line drawn from the Pilot Mark at the entrance of Havengore Creek, in the County of Essex, to the Lands end at Warden Point, in the Isle of Sheppey, in the County of Kent, such point being the North-Western limit of the Port of Faversham, and shall extend up and include both sides of the River Medway to an imaginary straight line drawn from the South-East point of land westward of Coalmouth Creek, thence across the said River Medway to the Westernmost point of the piece of land which forms the Eastern side of the Stangate Creek, or, in other words, the North-West point of Fleet Marsh, and from thence in a Southerly direction to Iwade Church, in the said County of Kent, and thence in a North-Easterly direction to Elmley Chapel, in the said Isle of Sheppey, a supposed direct line from Elmley Chapel to Iwade Church, being the Western limit of the Port of Faversham, and the said Port of London shall include the Islands of Havengore Creek aforesaid, called Potton and Rushey Islands, and so much of the said Creek and watercourse as extends from it to the town of Rochford, and shall also include all other islands, rivers, streams, creeks, waters, watercourses, channels, harbours, docks and places within the before-mentioned limits contained.

"CANAL BOATS ACTS, 1884"

In accordance with Section 3 of the Canal Boats Act, 1884, I beg to present herewith the Annual Report on the working of the Canal Boats Acts and Regulations within the district of the Port of London Sanitary Authority, during the year ending 31st December, 1916.

The Acts and Regulations apply within the whole of the district under the jurisdiction of the Port of London Sanitary Authority, including the river and docks—as a “canal,” for the purposes of the Act, includes any river, inland navigation, lake, or water being within the body of a county, whether it is or is not within the ebb or flow of the tide.

The navigation in addition to the enclosed docks, includes the following navigable tributary waters and creeks of the River Thames :—

On the right bank from Teddington downwards :—

Wandsworth Creek (River Wandle).
 Part of the Grand Surrey Canal within the Surrey Commercial Docks.
 Hay's Dock.
 St. Saviour's Dock.
 Deadman's Dock.
 Deptford Creek (River Ravensbourne).
 Dartford Creek (Rivers Cray and Darent).
 The entrance to the Gravesend Canals.
 Cliffe Creek.
 Yantlet and Coalmouth Creeks.
 Part of the river Medway, and of the Swale.

On the left bank from Teddington downwards :—

The entrance to the River Brent.
 Chelsea Dock.
 Grosvenor Dock.
 Limekiln Creek.
 Part of the River Lea.
 Barking Creek (River Roding).
 Rainham Creek (River Ingrebourne).
 Mucking Creek.
 Thames Haven.
 Hole Haven.
 Potton and Rushley Creeks.
 River Roach as far up as Rochford.

The whole of this area is divided into three districts, known as the Upper, Middle and Lower, each district being in charge of an Inspector, as follows :—

RIVER.

UPPER DISTRICT.

Teddington to Greenwich.

Inspector Lambe	-	-	-	208l. per annum.
Inspector Shepherd	-	-	-	156l. „

MIDDLE DISTRICT.

Greenwich to Erith.

Inspectors Lambe and Shepherd.

LOWER DISTRICT.

Erith to seaward limits of the Port of London
(including part of the River Medway).Inspector Berry - - - 156*l.* per annum.

The Docks are divided into four districts, known as the Central, Eastern, Western and the Gravesend district.

CENTRAL DISTRICT.

West India Dock.
South West India Dock.
Poplar Dock.
Millwall Dock.Inspector Rolfe - - - 230*l.* per annum.

EASTERN DISTRICT.

Royal Victoria Dock.
East India Dock.Inspector Garland - - - 230*l.* per annum.Inspector Burr - - - 230*l.* „

Royal Albert Dock.

Inspector Wetjen - - - 230*l.* per annum.

WESTERN DISTRICT.

London Dock.
St. Katherine's Dock.
Regent's Dock.Inspector Hopkins - - - 230*l.* per annum.

Surrey Commercial Dock.

Inspector Elward - - - 195*l.* per annum.

GRAVESEND DISTRICT.

Tilbury Dock.
Left Shore, from Purfleet down.
Right Shore, from Erith down.Inspector Massie - - - 188*l.* 10*s.* per annum.

(2) The total number of inspections for the year was 280, representing a net number of 156 boats. The remainder, 124, represents repeated visits by Inspectors of this Authority.

The number of boats not conforming to the Acts and Regulations was 52 (inspected on 82 occasions, or 18·57 per cent. of the total inspections, the percentage for the previous five years being 12·11 per cent.).

In addition to the above, 9 boats were at the time of visit found with the cabin doors locked, there being no person on board. Inspection was therefore impossible, and these visits are not included in the number of boats inspected.

(3) With reference to the various infringements of the Act:—

UNREGISTERED BOATS.

The following boats were found, on inspection, to be unregistered within the meaning of the Act:—

Date.	Name of Boat.	Registration Authority.	Reason for Registration or Re-registration.
1916.			
Feb. 7	"Richard" - -	- - - -	New Boat.
" 18	"Nucleus" - -	- - - -	Ditto.
" 26	"Wey" - -	Port of London -	Ditto.
May 15	"Ruth" - -	- - - -	Ditto.
June 2	"Sandford" -	Brentford - -	Ditto.
" 22	"Rapid" - -	Port of London -	Ditto.
" 26	"Rapid" - -	Ditto - -	Ditto.
Aug. 15	"Clifton" - -	- - - -	Ditto.
Dec. 29	"Fawn" - -	Port of London -	Ditto.

NOTIFICATION OF CHANGE OF MASTER.

Nil.

CERTIFICATES.

Absence of certificate was found in the following cases, a complaint being sent to the owners. In the case of the boats marked * information was received that the Certificates were subsequently placed on board:—

1916.

Jan. 28	"Milner" - -	Registered Berkhamsted, No. 354.
Feb. 11	* "John" - -	" Uxbridge, No. 461.
" 18	* "Victory" - -	" Port of London, No. 437.
April 25	"William" - -	" " " No. 411.
June 21	"William" - -	" " " No. 411.
July 19	"Alice" - -	" Brentford, No. 305.
Oct. 3	* "Crawford" - -	" Uxbridge, No. 412.
" 6	* "Lansdowne" - -	" " No. 442.
Dec. 11	"Water Lily" - -	" Limehouse, No. 17.
" 18	* "Soho" - -	" Birmingham, No. 1,356.

CERTIFICATES NOT IDENTIFYING OWNER WITH BOAT.

1916.

Feb. 22	* "Glendower" - -	Registered Port of London, No. 457.
Mar. 27	* "Sarah Ann" - -	" Reading, No. 34.

MARKING, &c.

The following boats were found infringing in this respect. Those marked * were remedied :—

1916.					
Feb.	18	* "Victory"	- - -	registered	Port of London, No. 437.
"	18	* "Alice"	- - -	"	" " No. 5.
April	7	* "Crawford"	- - -	"	Uxbridge, No. 486.
"	18	"Walter"	- - -	"	Berkhamsted, No. 345.
"	25	"Nansen"	- - -	"	" No. 261.
May	9	* "Majestic"	- - -	"	Port of London, No. 421.
"	9	* "Lizzie"	- - -	"	Brentford, No. 216.
June	2	* "Sandford"	- - -	"	"
Aug.	15	"Clifton"	- - -	unregistered.	"

OVERCROWDING.

Nil.

SEPARATION OF THE SEXES.

Nil.

CLEANLINESS.

The following boats were found to require cleansing, and those on which the necessary improvement was made, are marked * :—

1916.					
Jan.	28	"Milner"	- - -	registered	Berkhamsted, No. 354.
Feb.	29	"Lily of the Valley"	- - -	"	" No. 361
April	25	"William"	- - -	"	Port of London, No. 411.
June	21	"William"	- - -	"	" " No. 411.

PAINTING.

The following boats were found to require painting with regard to the interior of the cabin, which was done in the cases marked * :—

1916.					
Jan.	1	* "Alice"	- - -	registered	Port of London, No. 5.
"	13	"Nansen"	- - -	"	Berkhamsted, No. 261.
Feb.	16	* "Scot"	- - -	"	Port of London, No. 416.
"	18	* "Victory"	- - -	"	" " No. 437.
"	18	* "Alice"	- - -	"	" " No. 5.
"	22	"Wandle"	- - -	"	Berkhamsted, No. 327.
March	28	* "Providence"	- - -	"	Ware, No. 46.
April	25	"Nansen"	- - -	"	Berkhamsted, No. 261.
"	29	* "Maud"	- - -	"	" No. 410.
May	9	* "Majestic"	- - -	"	Port of London, No. 421.
"	9	* "Lizzie"	- - -	"	Brentford, No. 216.
Aug.	26	"Trent"	- - -	"	Uxbridge, No. 392.
Nov.	24	"Nellie"	- - -	"	Brentford, No. 192.
Dec.	21	"Water Lily"	- - -	"	Limehouse, No. 17.

VENTILATION.

The following boats were found to require better ventilation. Those in which the alterations have been made, are noted thus* :—

1916.					
Feb.	7	"Richard"	- - -	(unregistered.)	
March	9	* "Cicero"	- - -	registered	Uxbridge, No. 480.
July	19	"Alice"	- - -	"	Brentford, No. 305.

DILAPIDATION.

1916.					
Jan.	28	"Milner"	-	-	registered Berkhamsted, No. 354.
Feb.	18	"Nucleus"	-	-	(unregistered.)
"	22	"Wandle"	-	-	registered Berkhamsted, No. 327.
March	11	*"Mole"	-	-	" " No. 334.
April	7	*"Crawford"	-	-	" Uxbridge, No. 486.
"	18	"Walter"	-	-	" Berkhamsted, No. 345.
"	25	"Nansen"	-	-	" " No. 261.
"	25	"William"	-	-	" Port of London, No. 411.
May	9	*"Majestic"	-	-	" " " No. 421.
"	16	"Alice"	-	-	" " " No. 5.
"	16	"Clent"	-	-	" Wolverhampton, No. 996.
"	16	"Henley"	-	-	" Uxbridge, No. 458.
"	24	*"Albert"	-	-	" Berkhamsted, No. 314.
June	2	"Sandford"	-	-	" Brentford.
"	21	"William"	-	-	" Port of London, No. 411.
Aug.	15	"Clifton"	-	-	(unregistered.)
Sept.	4	"Sarah"	-	-	registered Berkhamsted, No. 408.
"	18	"Amos"	-	-	" Uxbridge, No. 476.
Oct.	3	"Nansen"	-	-	" Berkhamsted, No. 261.
"	6	"Lansdowne"	-	-	" Uxbridge, No. 442.
Nov.	8	"Persevere"	-	-	" Reading, No. 38.
"	14	"Henley"	-	-	" Uxbridge, No. 458.

REMOVAL OF BILGE WATER.

1916.					
Feb.	29	"Lily of the Valley"	-	registered Berkhamsted, No. 361.	
June	2	*"Sandford"	-	" Brentford.	

PROVISION OF WATER CASK.

The following boats were not provided with proper vessel for containing drinking water. In the cases marked * I received information that this had been done:—

1916.					
Jan.	28	"Milner"	-	-	registered Berkhamsted, No. 354.
Feb.	22	"Wandle"	-	-	" " No. 327.
April	18	"Walter"	-	-	" " No. 345.
May	12	"Colne"	-	-	" " No. 333.
"	15	"Ruth"	-	-	" Port of London, No. 481.
Dec.	18	*"Netherton"	-	-	" Birmingham, No. 1,353.
"	18	"Soho"	-	-	" " No. 1,356.

NOTIFICATION OF INFECTIOUS DISEASE.

Nil.

ADMITTANCE OF INSPECTOR.

No difficulty has been experienced in regard to the visits of the Inspectors of this Authority.

LEGAL PROCEEDINGS.

Nil.

(5) The total number of infringements found was 82 on 52 boats, inspected on 82 occasions. Formal notice of each infringement was at once given to the owners, and in many cases they were remedied without further complaint.

The number of written notices was 39, and the number which has been certified as attended to was 38. This number includes infringements found in previous years, and reported remedied in 1916.

Of the complaints issued in the year now under review, 51·28 per cent. were remedied.

DOUBLE BULKHEADS.

(6) There were no infringements with regard to the provision of these.

(7) No boats have been detained for cleansing.

(8) On December 31st, 1916, there were 267 boats on the Register :—

Propelled by Tug and Oars	-	-	-	249
„ „ Steam	-	-	-	15
„ „ Motors	-	-	-	3
				<hr/>
				267
				<hr/>

(9) Six boats were registered in 1916. Of these, 4 were new boats.

TABLE OF CANAL BOATS CARRYING CHILDREN ON BOARD.

Year.	No. of boats.	No. of boats with children.	No. of children.	Average No. of children per boat.	Average No. of boats with children.	
1908	-	1,168	206	459	2·18	17·63
1909	-	1,432	219	495	2·26	15·29
1910	-	908	172	354	2·05	18·94
1911	-	926	173	400	2·31	18·03
1912	-	841	197	409	2·07	23·42
1913	-	451	61	196	3·21	13·52
1914	-	237	82	214	2·60	34·62
1915	-	197	56	256	4·57	21·52
1916	-	156	36	101	2·80	23·07

I have the honour to be, GENTLEMEN,

Your obedient Servant,

W. M. WILLOUGHBY,
Medical Officer of Health, Port of London.

TABLE XXXV.
SUMMARY OF CANAL BOATS FOR THE YEAR ENDING 31st DECEMBER, 1916.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	TOTAL FOR THE YEAR				
	1911.	1912.	1913.	1914.	1915.													
New boats registered ... ..	...	...	1	...	...	1	1	...	...	1	...	...	4	6	2	3	3	7
Registration owing to structural alterations ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Registration for other purposes ...	...	...	1	1	...	...	...	...	...	...	...	...	2	...	...	...	5	1
No. of Visits of Inspection ...	32	29	28	24	23	13	27	17	18	17	33	19	280	889	817	576	571	413
Conforming to Acts and Regulations	29	19	24	19	15	8	26	15	16	12	30	15	228	800	692	506	473	328
Infringements in respect to :—																		
Registration ... ..	...	3	...	...	1	3	...	1	...	...	...	1	9	8	9	4	20	23
Notification of change of master ...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	...
Absence of certificate	1	2	...	1	...	1	1	...	...	2	...	2	10	44	34	17	18	19
Certificate not identifying owner with boat ... ..	...	1	1	...	...	...	...	...	...	...	...	...	2	2	5	4	4	1
Marking, &c. ... ..	...	2	...	3	2	1	...	1	...	...	...	...	9	18	11	7	14	6
Overcrowding ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5	1	1	1
Partition separating sexes ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Males over age ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1
Females over age ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Cleanliness	1	1	...	1	...	1	...	...	...	...	...	...	4	12	23	11	14	10
Painting... ..	2	4	1	2	2	...	...	1	...	...	1	1	14	19	17	17	23	12
Ventilation ... ..	...	1	1	...	...	...	1	...	...	...	...	...	3	5	8	6	6	7
Dilapidation	1	2	1	4	5	2	...	1	2	2	2	...	22	33	68	39	52	37
Removal of bilge water ... ..	...	1	...	...	...	1	...	...	...	...	...	...	2	1	3	4	2	...
Without pump ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Refusal to admit Inspector ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No proper water vessel	1	1	...	1	2	...	...	...	...	...	...	2	7	9	9	8	7	8
Without double bulkhead ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Notification of infectious disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Detained for cleansing ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Proceedings taken... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...
Cautions given	2	8	3	5	8	2	2	...	1	3	2	3	39	70	97	59	79	69
" attended to ... ..	...	3	2	7	1	7	1	...	3	...	...	14	38	49	74	55	81	54

Total registered by Port Sanitary Authority since 1887 477
Cancelled 216

Actual number on the Register, 31st December, 1916 262

Registered for 668 persons.

Carrying males 287.
females 87.
children 101.

ADMINISTRATION OF THE PORT OF LONDON PUBLIC HEALTH (LONDON) ACT, 1891.

Dr.

REVENUE ACCOUNT for the Year ended 31st December, 1916.

Cr.

	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
To Salaries of Medical Officers and Clerk	2,553	17	11										
„ Payments to <i>Locum Tenens</i>	63	15	6										
„ Wages	4,826	12	10										
„ Contributions to Officers' Pension Funds... ..	318	4	6										
„ Ditto for Pensions	68	3	11										
„ Pensions	500	13	4										
„ Fidelity Guarantees	1	16	0										
„ Employers' Liability under Workmen's Compensation Acts	19	8	0										
„ National Health Insurance	3	11	3										
„ Officers' Uniforms	113	11	7										
„ Expenses of Steam Launches and Hulk	1,822	6	3										
„ Expenses of Offices at Greenwich, including Rent, Rates and Taxes, Lighting, Heating and Repairs	208	12	10										
„ Expenses of Medical Officer, including Office Expenses, Postages and Petty Cash Charges	381	18	0										
				10,882	11	11							
„ Hospital at Denton, viz. :—													
Expenses of Nursing Staff	184	15	6										
Rent, Rates, Taxes and Insurance	108	1	1										
Maintenance and Repairs	96	6	3										
Maintenance of Patients, &c.	111	11	7										
Miscellaneous Expenses, including Coal, Stores, and Telephone	230	12	11										
				731	7	4							
„ Printing and Stationery				90	10	4							
„ Expenses <i>re</i> Epidemic precautions, Examination of Rats, and Analysis of Food Samples				307	18	9							
„ Proceeds of Unsound Food paid to Consignees (for amounts received see contra)								836	12	0			
„ Expenses of Inspection of the River and Canvey Island... ..								75	0	0			
„ Disinfectants								44	0	5			
„ Committee Allowance								75	0	0			
„ Miscellaneous Expenses								67	11	3			
				£13,110	12	0							
											£13,110	12	0

CHAMBER OF LONDON,
25th June, 1917.









