

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

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**74.**

PORT OF LONDON SANITARY COMMITTEE.

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**ANNUAL REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH,**

To 31ST DECEMBER, 1918.

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*Presented 11th December, 1919.*

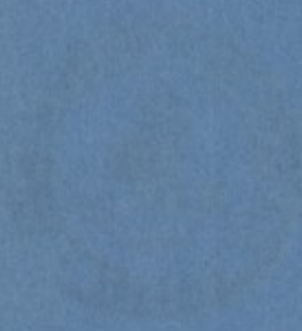




PORT OF HONORARY MEMBERS

ANNUAL REPORT

MEDICAL OFFICERS OF THE ARMY



PUBLISHED BY THE ARMY



# REPORT,

FOR THE YEAR ENDED 31ST DECEMBER, 1918,

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. 3.



# REPORT

For the Year ending 31st December 1918

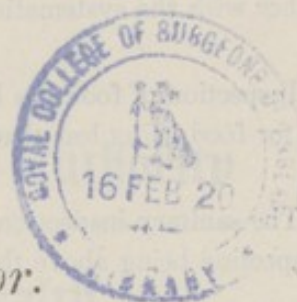
## MEDICAL OFFICER OF HEALTH

### PORT OF LONDON

WILFRID MASON, M.D., F.R.C.S., F.R.S.

Retired Surgeon-General, Indian Army

Medical Officer of Health, Port of London



COOPER, *Mayor.*

A Common Council holden in the Chamber of  
the Guildhall of the City of *London*, on  
*Thursday*, the *11th* day of *December*, 1919.

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, 1918; 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 Dr. Willoughby Mason Willoughby, the Medical Officer of Health of the Port of London, for the year ended the 31st December, 1918, 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 work of your Medical Officers has been effectively carried out.

The total number of cases of infectious disease reported as having occurred on vessels during the voyage was much above the average, and is explained by the prevalence of epidemics of Influenza, &c., on vessels conveying troops.

Eight cases of Plague and four of suspected Plague were admitted to hospital.

The expert examination of rats for evidence of this disease has\* been continued together with the systematic destruction of the animals.

Inspection of food has been adequately carried out—the total amount condemned as unfit for food being less than usual.

The sanitary inspection of shipping, &c., has been maintained, the number of visits of inspection being above the average.

The repairs to the hulk "Hygeia" sanctioned by your Honourable Court have proved entirely satisfactory, in all probability prolonging the useful existence of the vessel for many years.

The usual report upon the working of the Canal Boats Acts is appended.

An Account of Receipts and Expenditure in connection with the Port of London Sanitary Authority for the year ended the 31st March, 1919, is 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 December, 1919.

WM. GIBSON.

C. J. SMITH.

HORACE S. DOVE.

B. T. SWINSTEAD.

E. S. JACOB.

W. W. GREEN.

A. C. STANLEY STONE.

GEORGE BRIGGS.

H. P. MONCKTON.

J. G. HOWELL.

W. LINDLEY-JONES.

H. ROPER BARRETT.



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.

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**LIMITS OF THE 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 Pottton 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.

# INDEX.

	PAGE		PAGE
Acajou Nuts - - -	43	Mumps - - -	24
Actinomycosis - - -	37	Mutton and Lamb - - -	36
Australian Beef - - -	37	Notification of Infectious	
Beef - - -	36	Disease - - -	10
Beri-Beri - - -	26-28	Nuisances - - -	49
Biscuits and Confectionery -	41	Nuts - - -	40
Canal Boats Acts - - -	51-56	Offal - - -	38
Canned Meats - - -	38	Offensive Cargoes - - -	50
Cerebro-spinal Meningitis -	17	Onchocerca (see Australian Beef)	37
Chicken-pox - - -	17	Plague - - -	11, 12
Continued Fever - - -	18	Pneumonia - - -	22, 23
Diphtheria - - -	15	Pork - - -	37
Drugs - - -	42	Port, Limits of, &c. - - -	3
Enteric Fever - - -	14	Poultry and Game - - -	39
Establishment, &c. - - -	3	Prepared Foods - - -	41
Fish - - -	39	Preserves, Jam, &c. - - -	40
Food Inspection - - -	36	Provisions - - -	41
Foreign Meat Regulations -	42, 43	Rabbits - - -	38, 39
Fruit - - -	39, 40	Rat Order, 1918 - - -	32
Fumigating Apparatus - - -	50, 51	Sanitary Conveniences, &c.-	49
German Measles - - -	16, 17	Sanitary Inspection - - -	46
Grain - - -	41	Scarlet Fever - - -	15
Hospital - - -	33	Shell-fish - - -	44, 45
Infectious Disease - - -	9	Small-pox - - -	13
Influenza - - -	22, 23	Smoked and Salted Meats -	35
Introductory - - -	7	Staff - - -	6
Launches, Hulks, &c. - - -	51	Sundry Food Stuffs - - -	42
Malaria - - -	18-20	Tinned Meats - - -	35
Meal and Flour - - -	42	Tuberculosis (Pulmonary,	
Measles - - -	16, 17	&c.) - - -	21, 22
Meats, Canned - - -	38	Unsound Food - - -	34
„ Smoked, Salted and		Vegetables - - -	40
Sundry - - -	38	Venereal Disease - - -	45
Medical Inspection - - -	7, 8		



# INDEX TO TABLES.

TABLE.	PAGE
I. Medical Inspection - - - -	8
II. Infectious Disease—Summary - - -	9
III. Compulsory Notification of Infectious Disease, with number of Deaths - - - -	10
IV. Plague - - - -	11
V. Small-pox - - - -	13
VI. Enteric Fever - - - -	14
VII. Diphtheria - - - -	15
VIII. Scarlet Fever - - - -	15
IX. Measles and German Measles - - -	16
X. Chicken-pox - - - -	17
XI. Cerebro-spinal Meningitis - - -	17
XII. Continued Fever - - - -	18
XIII. Malaria - - - -	18
XIV. Tuberculosis—Pulmonary - - -	21
XV. Ditto Various - - - -	22
XVI. Influenza and Pneumonia - - -	22
XVII. Mumps - - - -	24
XVIII. Venereal Disease - - - -	25
XIX. Beri-Beri - - - -	26
XX. Miscellaneous Diseases, &c. - - -	28
XXI. Vessels and Premises Disinfected - - -	29
XXII. Effects - - - -	29
XXIII. Rats destroyed - - - -	30
XXIV. Rats, Bacteriological Examination of - - -	31
XXV. Hospital—Admissions, Discharges, Deaths, &c. -	33
XXVI. Unsound Food—Seized, &c. - - -	34
XXVII. Unsound Meat—Destroyed, Weights, &c. - -	35
XXVIII. Foreign Meat—Notice to Export - - -	42
XXIX. Sanitary Inspection—Summary - - -	46
XXX. Ditto Nuisances on Vessels - - -	47
XXXI. Ditto Ditto Store Rooms - - -	48
XXXII. Ditto New Works - - - -	49
XXXIII. Ditto Offensive Cargoes - - -	50
XXXIV. Fumigation of Vessels - - - -	50
XXXV. Canal Boats - - - -	56



## STAFF.

LIST OF OFFICERS FORMING THE STAFF OF THE PORT OF LONDON  
SANITARY AUTHORITY, 31ST DECEMBER, 1918.

Office.	Name of Officer.	Date of Appointment to Present Position.	Condition as to Military Service. (See footnote.)
MEDICAL OFFICER OF HEALTH -	W. M. Willoughby, B.A., M.D., B.C., D.P.H.Camb.	February, 1916 -	O. (Enrolled.)
DEPUTY - - - - -	Lieut.-Col. J. S. Warrack, R.A.M.C., T.D., M.A., M.D., C.M. Aberdeen, D.P.H.Camb., Barrister-at-Law.	February, 1916 -	O.H.M.S.
ASSISTANT MEDICAL OFFICERS—			
	W.D. Betenson, M.R.C.S., L.R.C.P., Lond., D.P.H. Lond. (Acting Deputy M.O.H. and M.O., Denton Hospital).	July, 1907 -	O.
GRAVESEND - - - - -	A. Kidd, M.R.C.S., L.R.C.P., Lond., D.P.H.	1909 - - -	O.
SHEERNESS - - - - -	E. V. Legge, M.A., M.D., B.C., B.A.O., L.M.Dublin.	1909 - - -	O.
GREENWICH OFFICES—			
Clerk - - - - -	W. J. Albrow - - - - -	March, 1890 -	O.
1st Assistant - - - - -	E. A. Sorrell - - - - -	October, 1894 -	O. (V.T.C.).
2nd ditto - - - - -	W. C. Barham - - - - -	June, 1903 -	A.
Junior ditto - - - - -	T. J. S. Cotterell - - - - -	July, 1910 -	O.H.M.S.
Ditto - - - - -	J. A. Gillis - - - - -	April, 1914 -	O.H.M.S.
Caretaker - - - - -	F. Hudgell - - - - -	November, 1906 -	O.
FOOD INSPECTORS - - - - -	*W. Anderson, Cert.R.San.Inst. - *T. W. Bailey, Cert.R.San.Inst. - *A. Garland, Cert.R.San.Inst. -	July, 1898 - July, 1901 - December, 1917 -	O. O. O.
SANITARY INSPECTORS - - - - -	*W. G. Wetjen, Cert.R.San.Inst. - *W. W. Burr, Cert.R.San.Inst. - *H. R. Hopkins, Cert.R.San.Inst. - *P. R. Lambe, Cert.R.San.Inst. - *J. H. Rolfe, Cert.R.San.Inst. - *W. Elward, Cert.R.San.Inst. - *F. J. Massie, Cert.R.San.Inst. - C. A. Shepherd, Cert.R.San.Inst. - *W. J. Berry, Cert.R.San.Inst. -	August, 1898 - August, 1898 - February, 1899 - January, 1900 - September, 1901 - March, 1909 - March, 1909 - January, 1909 - February, 1914 -	O. O. O. (R.N.A.S.) O. O. O. A. O.H.M.S. A.
DENTON HOSPITAL—			
Medical Officer - - - - -	Lieut.-Col. J. S. Warrack, R.A.M.C., T.D., M.A., M.D., C.M. Aberdeen, D.P.H.Camb., Barrister-at Law.	1916 - - -	O.H.M.S.
Matron - - - - -	J. Jackson - - - - -	February, 1918 -	F.
Assistant Nurse (Temporary) - - - - -	R. Burston - - - - -	1918 - - -	F.
Ditto ( Do. ) - - - - -	A. Foggo - - - - -	1918 - - -	F.
Ditto ( Do. ) - - - - -	L. Gould - - - - -	1918 - - -	F.
Cook, General ( Do. ) - - - - -	M. Moxford - - - - -	1918 - - -	F.
Porter, &c. ( Do. ) - - - - -	J. H. Robinson - - - - -	- - - - -	O.
STEAM LAUNCHES—			
"LADY TRAUSCOTT"—			
Master - - - - -	W. Jarvis - - - - -	April, 1911 -	O.
Engineer - - - - -	J. A. Hardman - - - - -	December, 1911 -	O.
Mate - - - - -	A. F. Rough - - - - -	November, 1914 -	A.
Stoker - - - - -	A. E. Howard - - - - - W. Thomas (Temporary).	February, 1912 -	O.H.M.S.
"DAVID BURNETT"—			
Master - - - - -	C. H. Price - - - - -	October, 1913 -	O.H.M.S.
Engineer - - - - -	J. Steen (see "George Briggs") -	September, 1914 -	A.
Deckhand - - - - -	Vacant - - - - -	- - - - -	-
Stoker - - - - -	Do. - - - - -	- - - - -	-
"GEORGE BRIGGS"—Motor Launch—			
Master - - - - -	C. Strange - - - - -	October, 1913 -	A.
Engineer - - - - -	J. Steen - - - - -	- - - - -	A.
GREENWICH MOORINGS—			
FUMIGATING BARGE "THOMAS"—			
Stoker, &c. - - - - -	Vacant - - - - -	- - - - -	-
BARGE "ELLA VICARS"—			
Watchmen - - - - -	H. A. Clarkson - - - - - E. Ditch - - - - - H. E. Martin (Temporary) -	May, 1912 - December, 1914 - July, 1914 -	O.H.M.S. A. O.
GRAVESEND—			
HULK "HYGEIA"—			
Shipkeeper - - - - -	A. Salter - - - - -	July, 1898 -	O.

\* These Inspectors possess the Special Certificate of the Royal Sanitary Institute for Inspectors of Food.

NOTE.—O.H.M.S. Active Service. A. Attested. O. Over age. F. Female.

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 Annual Report for the year 1918, with details of the work done by your Medical Officers and Inspectors.

The total number of vessels medically inspected was 409, marking low ebb in the numbers of arrivals of large vessels during the last phase of the War and the immediately ensuing period.

Transport of troops on cargo vessels is accountable for the report of a large amount of sickness on incoming ships. Most of the cases among troops, however, were landed in other ports.

Amongst seamen, eight cases of Plague and four suspected-cases were landed to Denton Hospital, from two ships; the total number of cases of infectious disease treated in Denton Hospital being 57. \*

Disinfections were carried out on 54 vessels.

Contacts and possible contacts of disease were notified to their Authorities for "surveillance" to the number of 575.

36,342 rats were reported destroyed on ships and in the docks.

Upwards of 1,000,000 rats have now been accounted for since 1901, when rat control began.

Of 2,315 rats examined for Plague from the docks four were found to be infected.

The aggregate weight of food condemned was 1,200 tons, of which 331 tons were meat. Wherever practicable this material was disposed of in ways which preserved whatever value or utility remained after its condemnation as human food.

The sanitary inspection of vessels showed a total number of 28,752 visits against a ten-year annual average of 35,968; the average per Inspector employed showed no reduction.



The Clayton apparatus was used in the disinfection of 16 vessels. The time and labour involved in transport of the barge from dock to dock added to that of disinfection, and the uncertainty which existed as to the availability of vessels for disinfection under the crowded circumstances of the year, was found to leave insufficient margin for exigencies in the normal work of launches and their crews. If this mechanical system were to be used, and especially in case disinfection became as general as is desirable, a staff entirely devoted to this work would become necessary.

The report on Canal Boats included, shows the consistent reduction in work under the Acts over the past eight years, and the marked diminution since 1914.

The reopening of the Port to general traffic and the withdrawal of various factors in control of the many branches of the work of the Authority, which though necessary were nevertheless hampering, bring home in a gratifying way the fact of the close of the War.

TABLE I.

MEDICAL INSPECTION—GRAVESEND. From 1st January to 31st December, 1918.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number medically inspected	40	33	19	30	62	51	41	47	26	45	37	58	489
Number of passengers ...	354	475	287	478	933	371	430	402	390	99	£86	996	5,901
Number of crew ...	3,120	2,539	2,916	2,896	4,111	3,557	2,822	3,023	1,649	2,892	3,134	3,361	36,020



TABLE II.—INFECTIOUS DISEASE.

DISEASE.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	Mean annual number for 10 years ending 31st December, 1918.	1918.
<b>(a) CASES REPORTED :</b>											
Cholera (including suspected cases)	3	5	9	2	19	...	2	5	2	4.7	...
Yellow Fever (ditto)	...	...	...	...	4	...	...	...	...	0.4	...
Plague (ditto)	...	4	6	...	9	4	4	...	18	6.1	12
Small-pox ...	27	8	13	34	19	9	47	15	2	19.0	16
Scarlet Fever ...	16	21	11	10	40	30	18	5	...	15.9	8
Diphtheria ...	11	11	18	37	16	10	18	7	9	16.0	23
Enteric Fever ...	36	39	70	61	65	67	64	61	43	53.2	26
Measles ...	19	23	175	61	64	228	337	836	168	216.7	256
German Measles ...	...	...	...	3	4	...	10	8	33	6.2	4
Erysipelas ...	5	5	11	3	3	3	9	1	...	4.0	...
Typhus Fever ...	...	...	...	1	...	...	...	...	1	0.2	...
Continued Fever ...	10	1	5	9	13	2	7	5	2	5.6	2
Relapsing Fever ...	1	...	...	...	...	...	...	...	...	2.0	19
Tuberculosis :—											
Pulmonary ...	...	...	...	71	151	127	96	53	45	58.1	38
Miners' Phthisis ...	...	...	...	...	...	...	...	...	23	4.2	19
Other kinds ...	...	...	...	...	7	45	6	19	3	8.1	1
Other diseases (including Chicken-pox).	57	25	38	42	38	50	48	44	166	306.0	2,552
TOTAL...	189	144	350	343	447	575	666	1,059	515	726.4	2,976
<b>(b) TREATED IN PORT SANITARY HOSPITAL :</b>											
Cholera (including suspected cases)	1	2	...	...	...	...	...	...	...	0.3	...
Yellow Fever (ditto)	...	...	...	...	...	...	...	...	...	...	...
Plague (ditto)	1	2	...	1	2	1	...	...	9	2.8	12
Small-pox ...	4	2	6	2	9	2	10	2	...	3.8	1
Scarlet Fever ...	14	...	6	...	3	8	10	2	...	4.8	5
Diphtheria ...	1	4	3	...	7	1	3	1	1	2.1	...
Enteric Fever ...	11	17	22	35	29	30	17	34	15	21.7	7
Measles ...	5	2	7	27	18	9	33	4	3	11.0	2
Erysipelas ...	1	...	...	1	...	...	1	...	1	0.4	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	10	1	4	7	9	1	5	4	8	5.5	6
Other diseases (including Chicken-pox).	10	7	8	7	14	9	11	6	24	12.0	24
TOTAL...	58	37	56	80	91	61	90	53	61	64.4	57

TABLE III.

Return of the Number of Cases of Infectious Disease Notified to the Local Government Board during the Year 1918, and of Deaths from the Diseases Notified.

This Table includes all cases actually introduced or occurring within the Port, but does not include cases reported as having occurred on vessels during the voyage, but which had either recovered or been removed from the vessel before arrival at Gravesend.

					<i>Notified.</i>	<i>Deaths.</i>
Plague (including Suspected)-	-	-	-	-	12	1
Small-pox	-	-	-	-	1	...
Scarlet Fever	-	-	-	-	8	...
Diphtheria (including Membranous Croup)	-	-	-	-	20	...
Enteric (Typhoid) Fever	-	-	-	-	15	1
Puerperal Fever	-	-	-	-	...	...
Typhus Fever	-	-	-	-	...	...
Cholera	-	-	-	-	...	...
Relapsing Fever	-	-	-	-	...	...
Continued Fever	-	-	-	-	2	...
Cerebro-spinal Fever	-	-	-	-	...	...
Acute Poliomyelitis	-	-	-	-	...	...
Erysipelas	-	-	-	-	...	...
Ophthalmia Neonatorum	-	-	-	-	...	...
Tuberculosis: Pulmonary	-	-	-	-	31	...
Other kinds	-	-	-	-	18	...
Chicken-pox	-	-	-	-	15	...
Whooping Cough	-	-	-	-	...	...
Measles	-	-	-	-	126	...
German Measles	-	-	-	-	3	...
Other Diseases	-	-	-	-	154	3
					<u>405</u>	<u>5</u>

#### NUMBER OF NOTIFICATIONS (SURVEILLANCE) DURING 1918.

Plague :—Passengers	-	-	-	-	-	230
Crew	-	-	-	-	-	35
Stevedores, &c.	-	-	-	-	-	310
						<u>TOTAL - 575</u>
Number of Notifications received from Practitioners	-	-	-	-	-	<u>41</u>



TABLE IV.

PLAGUE (including suspected cases).

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918. May-June	s.s. "Somali," of Greenock, 114,056	Bombay	6	5 cases removed to Port Sanitary Hospital. 1 case Rochester (fatal).
Aug. 8	s.s. "Hector," of Liverpool, 102,991	Calcutta	6	Removed to Port Sanitary Hospital.
			— 12	

## PLAGUE.

The s.s. "Somali" arrived from Bombay on the 19th May. Two cases of Bubonic Plague were removed to Denton Hospital, and a third occurred forthwith. The crew consisted of 35 Europeans and 321 natives of India, and there were 113 passengers.

The history of the attack is the usual one of a rat infection existing on board. The European storekeeper found several dead rats in the store-room, which communicated directly with the hold; he was taken ill on the 9th May and recovered in Denton Hospital. A native belonging to a supernumerary crew was taken ill on the 18th and another two days after the arrival of the vessel in port.

The diagnosis was confirmed microscopically at Denton Hospital on material from the third case, which proved fatal.

The names of passengers, crew and men employed in discharging the vessel were notified to the Medical Officers of Health of the districts of destination to the number of:—

Passengers	-	-	-	-	113
Crew	-	-	-	-	35
Men working on board	-	-	-	-	155
Total	-	-	-	-	<u>303</u>

on the principle of "surveillance."

Precautionary fumigation of crew's quarters and disinfection of all native clothing and bedding were carried out forthwith on arrival.

On completion of cargo discharge the ship was fumigated for the destruction of rats and fleas before moving from the quarantine grounds.

The details of fumigation and disinfection were more than usually onerous by reason of the large native supernumerary crew to be dealt with.



Three cases and some suspected cases came under treatment in Denton Hospital ; of the latter only one was a case of serious illness and suspicion. Of the three cases of Plague one died and two recovered.

One member of the crew under surveillance outside the Port Sanitary District was taken ill after leaving the ship, on the 29th May, and died of Plague on 2nd June.

A total of 172 rats were found dead on the ship at Gravesend before and after fumigation ; the death of 103 of these is ascribable to the rat plague existing on board.

One of the ship's cats was found to have been affected by Plague and was recovering at the time it was caught and killed.

Ninety-seven rats were trapped or found dead on the voyage.

The ship was completely fumigated, after discharge of cargo on the 2nd June, by means of the Clayton apparatus.

The circumstances of the outbreak of Plague on the s.s. "Somali" were communicated in a technical report to the Local Government Board on the 28th June.

s.s. "Hector," crew 59, arrived at Gravesend on August 8th from Calcutta via Suez.

Four cases of Plague was removed to Denton Hospital on the 8th, having been first taken ill on July 27th and 31st, August the 3rd and 5th, respectively. A fifth case was taken ill on the 15th on board and was removed to Denton Hospital.

All five cases ended in recovery.

At Port Said about the 12th July some dozen dead rats were thrown out from the poop space and food store. No significance was attached to the finding of dead rats.

The cargo was not attractive to rats and the holds were correspondingly free, the store-room in the poop was the focus of infection.

The steward, steward's boy, and three inhabitants of the poop were the only persons affected.

One half the crew was paid off and put under "surveillance" : direct contacts and the remainder of the crew were retained on board under "observation."

The total notifications, inclusive of shipworkers, were 173 in number.

Very few rats were found after fumigation ; the total found dead on discharge of cargo was sixteen.

The facts were fully and technically reported to the Local Government Board.

TABLE V.

## SMALL-POX.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Feb. 15	s.s. "Atreus," of Liverpool, 131,322	Shanghai	- 1	Landed at Manila.
April 9	s.s. "Culna," of Glasgow, 124,164	Karachi	- 2	1 landed at Karachi. 1 removed to Port Sanitary Hospital.
May 7	s.s. "City of Glasgow," of Glasgow, 121,304	Calcutta	- 6	Removed at Rangoon and Suez.
" 7	s.s. "Nevasa," of Glasgow	Bombay	- 2	Landed at Aden.
" 7	s.s. "Katuna," of London	Rangoon	- 1	Landed at Colombo.
" 9	s.s. "Delta," of Belfast	Bombay	- 1	Landed at Suez.
" 10	s.s. "Cawdor Castle," of London, 114,823	Bombay	- 2	Landed at Bombay.
" 19	s.s. "Somali," of Greenock, 114,056	Bombay	- 1	Landed at Suez.
			16	

s.s. "Culna" arrived on 4th April. It was declared that all on board were well and that no sickness had occurred during the voyage. On the 6th April a case of Varioloid Small-pox was found on board, and it transpired that the man had been suffering from a "cold" when the ship passed Gravesend.

It was also ascertained that a native suffering from Small-pox had been landed at Karachi on 22nd February, Karachi being the port of lading.

The duty of declaring every case of illness, however mild in appearance, on entering the River Thames was represented by your Medical Officer to the Company concerned.

The incident, however, suggests that reasonable vigilance in the completest of systems cannot prevent the introduction of Small-pox in its incubatory or in its early stages before the appearance of a rash.

The incidence of Small-pox on six ships arriving in the month of May, in conjunction with the case of s.s. "Culna," suggested possible danger to Customs officers who come into early and close contact with native crews on arriving ships. The question of advisability of re-vaccination of these officers was accordingly brought to the notice of the Inspector-General of the Waterguard.



TABLE VI.

## ENTERIC FEVER.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Feb. 14	s.s. "Eden Hall," of Liverpool, 87,841.	Alexandria -	1	Landed at Oran.
" 16	s.s. "Knight of the Garter," of Liverpool, 115,346.	Calcutta -	1	Landed at Kantara.
" 25	s.s. "Ingleside," of Whitby, 131,832.	East London -	1	Died, and body buried at sea.
March 14	s.s. "Kia Ora," of Southampton, 124,487.	Wellington -	1	Landed at Panama.
May 9	s.s. "Hova" - - - -	Karachi -	1	Landed at Gibraltar.
" 12	s.s. "Commonwealth" - -	Sydney - -	1	Removed to Port Sanitary Hospital.
" 13	s.s. "San Ricardo," of London, 135,233.	Puerto Mexico	1	Ditto.
June 21	s.s. "Columbella" - - -	Halifax - -	1	Ditto.
" 19	s.s. "Cluny Castle" - -	Mombasa -	1	Died, and body buried at sea.
July 2	s.s. "Ayrshire" - - -	Wellington -	1	Treated on board.
" 7	s.s. "Ganges" - - -	Bassein - -	2	Landed at Suez.
" 8	s.s. "Kazembe," of North Shields, 123,820.	Beira - -	2	Removed to Port Sanitary Hospital.
" 10	s.s. "Holtby," of West Hartlepool, 127,446.	Sfax - -	1	Ditto.
Aug. 8	s.s. "Hild" - - - -	Rouen - -	1	Ditto.
" 9	s.s. "Glendene," of Whitby -	Cuba - -	2	Died on board.
" 18	s.s. "Chignecto," of Southampton, 98,870.	Halifax - -	1	Removed to Port Sanitary Hospital.
Oct. 11	s.s. "Tatsuma Maru" - -	—	1	Removed to Seamen's Hospital, Greenwich.
" 13	s.s. "Suevic," of Liverpool, 113,456.	Sydney - -	3	Removed to Port Sanitary Hospital.
" 28	s.s. "Tunisian," of Glasgow, 111,248.	Montreal -	1	Removed to Stockwell Hospital.
Nov. 13	s.s. "Kawachi Maru" - -	Yokohama -	1	Removed to Port Sanitary Hospital.
Dec. 24	s.s. "Fanad Head" - -	Montreal -	1	Removed to Seamen's Hospital, Greenwich.
			26	



TABLE VII.

## DIPHTHERIA.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 30	Training Ship "Exmouth," Grays	- - -	1	Removed to Eastern Hospital (M.A.B.).
April 8	Ditto ditto	- - -	1	Ditto.
" 9	H.M.S. "President," Victoria	Embankment -	1	Removed to Stockwell Hospital (M.A.B.).
May 8	Dockmaster's House, Shadwell	Pier Head -	1	Removed to Eastern Hospital (M.A.B.).
" 23	s.s. "Terresias" - - -	St. John's -	2	Military cases.
June 6	s.s. "City of Marseilles," of Liverpool, 135,436	Montreal -	1	Ditto.
" 6	Training Ship "Arethusa," Purfleet	- - -	1	Removed to Eastern Hospital (M.A.B.).
" 19	Dockmaster's House, Surrey Commercial Dock		1	Removed to South-Eastern Hospital (M.A.B.).
" 24	s.s. "Cassandra," of Glasgow -	Montreal -	1	Military case.
" 29	s.s. "Bolton Castle" - - -	Baltimore -	1	Removed to South-Eastern Hospital (M.A.B.).
Sept. 10	s.s. "H. C. Folger" - - -	Philadelphia -	1	Transferred to U.S. "Minneapolis."
Oct. 5	Royal Albert Dock - - -	—	1	Removed to Seamen's Hospital, Greenwich.
" 5	Training Ship "Exmouth," Grays - - -		1	Removed to Eastern Hospital (M.A.B.).
" 28 to Nov. 15	Ditto ditto		7	Ditto.
Nov. 25	Training Ship "Arethusa," Greenhithe - - -		1	Ditto.
Dec. 9	Ditto ditto		1	Ditto.
			23	

TABLE VIII.

## SCARLET FEVER.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 23	Training Ship "Arethusa," Greenhithe - - -		1	Removed to Port Sanitary Hospital.
March 26	s.s. "Knight Templar," of Liverpool, 120,900.	New York -	1	Removed to Military Hospital.
May 27	s.s. "Rhesus," of Liverpool, 131,363.	Philadelphia -	1	Ditto.
" 27	s.s. "Waitemata" - - -	Galveston -	1	Removed to Port Sanitary Hospital.
June 15	s.s. "Themistocles," of Aberdeen, 129,349.	New York -	1	Military case.
July 4	s.s. "Cassandra," of Glasgow, 124,130.	Montreal -	1	Removed to Port Sanitary Hospital.
Dec. 6	H.M.S. "Ebro" - - -	—	1	Ditto.
" 17	s.s. "Conway" - - -	Barcelona -	1	Ditto.
			8	

TABLE IX.  
MEASLES AND GERMAN MEASLES.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 4	s.s. "Llanstephan Castle" -	Durban -	14	Landed at Devonport.
" 18	Training Ship "Arethusa," Greenhithe -	-	1	Removed to Isolation shelter on shore.
" 25	Ditto	Ditto -	2	1 case removed to Port Sanitary Hospital, 1 to Isolation Hospital on shore—Ship's.
March 22	s.s. "Beltana," of Greenock, 131,853.	Melbourne -	1	Military case.
May 23	s.s. "Teiresias" - - -	St. John's -	1	Ditto.
June 6	s.s. "Northland" - -	Philadelphia -	4	Ditto.
" 6	s.s. "Winifredian" - -	Boston -	1	Ditto.
" 6	s.s. "Morvada" - - -	New York -	3	Ditto.
" 21	s.s. "Atreus," of Liverpool, 131,322.	Montreal -	1	Ditto.
" 24	s.s. "Ascanus," of Liverpool -	Ditto -	15	Ditto.
" 24	s.s. "Berrima," of Glasgow -	New York -	3	Ditto.
" 24	s.s. "Cassandra" - - -	Montreal -	15	Ditto.
" 24	s.s. "Belle Rothan" - -	—	2	Removed to Eastern Hospital (M.A.B.)
July 7	H.M.S. "Gloucestershire" -	Halifax -	2	Military Cases.
" 9	s.s. "Waimana," of Southamp- ton, 131,795.	Montreal -	10	Ditto.
" 22	s.s. "Benalda" - - -	New York -	6	Ditto.
" 22	s.s. "Thongwa" - - -	Halifax -	9	Ditto.
" 22	s.s. "Ajax" - - -	Boston -	1	Ditto.
" 22	s.s. "Saturnia" - - -	Montreal -	11	Ditto.
" 23	Royal Albert Dock, South Side	—	1	Removed to South Eastern Hospital (M.A.B.)
Aug. 8	s.s. "Tydeus" - - -	—	5	Ditto.
" 8	s.s. "Beltana" - - -	Boston -	1	Landed at Halifax.
" 18	s.s. "Galway Castle" - -	Durban -	37	25 Military cases—11 proceeded home, 1 to Port Sanitary Hospital.
" 26	s.s. "City of Bombay" - -	Philadelphia -	1	Military case.
" 26	s.s. "Kia Ora" - - -	Montreal -	2	Ditto.
" 26	Training Ship "Arethusa," Greenhithe -	-	2	Removed to Knockhall Grove Hospital.
" 27	s.s. "Field Marshal" - -	Sydney -	3	Military cases.
" 27	s.s. "Laomedon," of Liverpool, 131,442.	New York -	2	Ditto.
" 28	s.s. "Berrima" - - -	Boston -	4	Ditto.
	Carried forward -	-	160	



## MEASLES AND GERMAN MEASLES—continued.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.		Brought forward	- 161	
Sept. 10	s.s. "Khvber," of Liverpool, 135,564.	New York	- 1	Military case.
" 10	s.s. "Titan" - - -	Baltimore	- 10	Ditto.
" 10	s.s. "Cardiganshire" - -	Boston	- 28	Ditto.
" 10	Royal Albert Dock - -	—	5	Removed to South Eastern Hospital (M.A.B.)
Nov. 15	s.s. "Bakara" - - -	Sydney	- 15	Military cases.
Dec. 2	s.s. "Tyndareus," of Liverpool, 137,527.	Hong Kong	- 1	Isolated on board.
6	s.s. "Zealandic" - - -	Melbourne	- 40	Military cases.
			260	
		Measles - - -	256	
		German Measles - -	4	
		Total - - -	260	

TABLE X.  
CHICKEN-POX.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Feb. 28	s.s. "Nagoya," of Greenock, 135,323.	Bombay	- 2	Landed at Port Said.
April 2	Training Ship "Worcester," Greenhithe	- -	5	Removed to Ship's Hospital on shore.
" 3	s.s. "Woolwich Belle," of London, 98,936.	Laid up in West India Dock.	5	Isolated on board.
May 10	s.s. "Agamemnon," of Liverpool	Lisbon - -	1	Removed to Port Sanitary Hospital.
June 7	s.s. "Nagoya," of Greenock, 135,323.	Bombay	- 2	Isolated on board.
July 9	s.s. "Waimana," of Southampton, 131,795.	Montreal	- 4	Removed to Military Hospital.
Aug. 24	s.s. "Stockport," of Grimsby, 132,111.	Boulogne	- 1	Removed to South Eastern Hospital (M.A.B.).
			20	

TABLE XI.  
CEREBRO-SPINAL MENINGITIS.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Oct. 8	s.s. "Marathon," of Aberdeen, 118,184.	Melbourne	- 3	Removed to Military Hospital.
Dec. 6	s.s. "Zealandic" - - -	Ditto	- 1	Ditto.
			4	

TABLE XII.  
CONTINUED FEVER.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
May 28	s.s. "Fermia" (Swedish)	Rouen - -	1	Removed to Port Hospital. Ditto.
June 23	s.s. "Queensland Transport"	Gulf Ports -	1	
			2	

TABLE XIII.  
MALARIA.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Feb. 10	s.s. "Venetian" - - -	Alexandria -	1	Remained at work.
" 16	s.s. "Kenilworth Castle" - -	Natal - -	23	Removed to Military Hospital.
March 7	s.s. "Santa Theresa" - - -	Sapele - -	10	Remained on board.
" 22	s.s. "Ellaline" - - -	Mauritius -	2	Ditto.
April 5	s.s. "Mentor" - - -	Yokohama -	2	Ditto.
" 15	s.s. "Prometheus" - - -	Sourabaya -	1	Ditto.
May 12	s.s. "Commonwealth" - - -	—	2	Removed to Port Sanitary Hospital.
" 12	s.s. "San Ricardo" - - -	—	1	Ditto.
June 5	s.s. "Durham Castle" - - -	Durban -	2	Remained on board.
" 27	s.s. "Gambia" - - -	Opobo - -	2	Died on board.
July 7	s.s. "Kazembe" - - -	Beira - -	4	2 cases removed to Port Sanitary Hospital. 2 cases treated on board.
" 29	s.s. "Black Prince" - - -	Buenos Ayres	2	Treated on board.
Aug. 8	s.s. "Huntscliff" - - -	Calcutta -	1	Ditto.
" 17	s.s. "Clan Macrae" - - -	Tamatave -	2	Ditto.
" 25	s.s. "Patarri" - - -	Forcados -	2	Ditto.
" 25	s.s. "North Pacific" - - -	Bathurst -	2	Ditto.
" 26	s.s. "Sunray" - - -	Cardenas -	1	Ditto.
Sept. 7	s.s. "Clan Maclaren" - - -	Sekondi -	6	Ditto.
Oct. 11	s.s. "Professor" - - -	Bahia Blanca	1	Ditto.
" 30	s.s. "Eastwood" - - -	Morandavo -	2	Ditto.
" 30	s.s. "Antilochus" - - -	Yokohama -	1	Died on board.
Nov. 3	s.s. "Roumelian" - - -	Port Sudan -	4	Treated on board.
	Carried forward	-	74	



## MALARIA—continued.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.		Brought forward -	74	
Nov. 3	s.s. "Kwarra" - - -	Durban - -	4	{ 3 treated on board. 1 removed to Denton Hospital.
" 3	s.s. "War Daffodil" - -	Mombasa - -	18	7 cases removed to Port Sanitary Hospital. Remainder treated on board.
" 3	s.s. "Griqua" - - -	East London -	7	Treated on board.
" 7	s.s. "Suevic" - - -	Sydney - -	1	Removed to Port Sanitary Hospital.
" 10	s.s. "Swainby" - - -	Tanga - -	3	Treated on board.
" 26	s.s. "Deucalion" - - -	Java - -	2	Ditto.
Dec. 15	s.s. "Arden Hall" - - -	Sapele - -	1	Ditto.
" 16	s.s. "Gaboos" - - -	Burutu - -	16	Ditto.
			126	

## BLACKWATER FEVER.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
May 28	s.s. "Dunvegan Castle" - -	Sierra Leone -	1	Removed to Seamen's Hospital, Royal Albert Dock.

As anticipated in my Report on Malaria for 1917, the free supply and use of quinine on vessels trading to West Coast Ports and the increased knowledge among shipmasters of the danger of those ports has resulted in much betterment as regards Malaria.

The "War Daffodil" presented a series of cases which were all infected in the port of Dakar. This port was the one of especially evil repute in 1917. The ship lay there from the 2nd to the 15th October; cases began to appear from the 17th October onward. The condition of the crew would have been very serious in the absence of quinine treatment during the voyage; but the majority had recovered, by the time Gravesend was reached on 3rd November, under quinine. Seven cases were admitted to Denton Hospital for a course of treatment.

s.s. "Roumelian," s.s. "Kwarra" and s.s. "Griqua" presented similar histories to that of s.s. "War Daffodil," and Dakar was the infecting port.

It was usually found that prophylaxis and treatment had both been practised on ships using West African Ports.

The following Letter was received from the Local Government Board:—

12th March, 1918.

SIR,

MALARIA.

I am directed by the President of the Local Government Board to inform the London Port Sanitary Authority that in consequence of the occurrence last

year of cases of malignant Malaria on ships from the West Coast of Africa, notably the ports of Dakar and Freetown, a Committee representing the Admiralty, the Board, and other Departments concerned, are now considering the precautions against the infection of passengers and crews of ships when calling at these ports with a view to making them more efficient.

In connexion with this matter it is important that the Board should obtain information as to cases of Malaria on ships arriving from ports on the West African Coast, and that certain precautionary measures should be taken, and I am to request the Port Sanitary Authority to be good enough to authorise their Medical Officer of Health in connexion with vessels arriving from West African Ports this year to

(1) inquire as to the dates on which the vessel was in the port in question, and as to the occurrence of cases of Malaria among the passengers or crew after the vessels left the ports ;

(2) provide or assist in securing hospital treatment for severe cases of Malaria brought into the Port Sanitary District.

Where cases of Malaria have occurred which apparently have contracted the disease during the stay of the vessel in ports on the West African Coast, or where there is special reason to suspect that passengers or crew may be incubating Malaria as a result of the circumstances in which the vessel stayed in these ports, it is very desirable that the Medical Officer of Health should

(a) take the names and addresses of the destinations of passengers and forward them to the Medical Officer of Health of the district concerned asking to be informed if Malaria develops in any case ;

(b) keep the crew under observation and secure quinine treatment, and if necessary hospital treatment, of any case of Malaria among them whilst the vessel is in port, and also, if required, inform the Medical Officer of Health of any other British port to which the vessel proceeds ;

(c) report the facts to the Board.

I am, SIR,

Your obedient Servant,

(Signed) H. O. STUTCHBURY,  
for Assistant Secretary.

The Clerk to the  
London Port Sanitary Authority.

The measures suggested fitted into the system at present at work under your Worshipful Committee, by which serious ship-borne infections are dealt with, with such modifications as are suitable to the peculiar cause and cure of Malaria.

Provision of hospital treatment at Denton was during 1917 approved by your Worshipful Committee.

No legal compulsion for the patient is implied.



TABLE XIV.

## PULMONARY TUBERCULOSIS.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 8	s.s. "Mandingo," of Liverpool	Sierra Leone -	1	Proceeded home.
" 24	s.s. "Novara" - - -	Calcutta -	2	Ditto.
Feb. 11	s.s. "Kenilworth Castle" -	Durban -	2	Ditto.
April 6	s.s. "Lycaon," of Liverpool, 135,467.	Yokohama -	3	Ditto.
" 6	s.s. "Mahratta," of Liverpool, 140,545.	Calcutta -	1	Landed at Colombo.
" 15	s.s. "Gaika" - - -	Beira -	1	Died, and body buried at sea.
May 19	s.s. "Clan Macfadyen" - -	Alexandria -	1	Sent to hospital in London.
June 5	s.s. "Seangbee" - - -	Bombay -	1	Proceeded home.
" 6	Training Ship "Cornwall," Purfleet	- -	1	Isolated in tent ashore.
" 7	s.s. "Nagoya," of Greenock, 135,323.	Bombay -	1	Isolated on board.
July 5	s.s. "Umtali," of London, 105,810.	Freetown -	1	Proceeded home.
" 10	s.s. "Clan Mackinnon," of Glas- gow, 115,746.	Calcutta -	1	Landed at Colombo.
" 17	H.M.S. "Wyncote" - -	Philadelphia -	1	Removed to Naval Hospital.
Aug. 2	s.s. "City of Karachi" - -	Cape Town -	1	Proceeded home.
" 8	s.s. "Merkara" - - -	Calcutta -	1	Died on board.
" 27	s.s. "Highland Loch," of London, 129,182.	Buenos Ayres	1	Removed to hospital at Leytonstone.
" 27	s.s. "Campos" - - -	—	1	Remained on board.
Sept. 4	s.s. "Highland Piper" - -	Buenos Ayres	1	Died, and body buried at sea.
" 10	s.s. "Titan" - - -	Baltimore -	1	Military case.
" 26	s.s. "Seangbee" - - -	—	1	Removed to Seamen's Hospital, Greenwich.
" 27	Barge "Good Templar" -	Rochester -	1	Remained on board.
" 27	s.s. "Michigan" - - -	Montreal -	1	Died on board.
Oct. 4	s.s. "Ulimaroa" - - -	Wellington -	4	Military cases.
" 23	s.s. "Junin," of Liverpool -	Bahia Blanca-	1	Removed to Seamen's Hospital, Greenwich.
" 28	s.s. "Dunbridge" - - -	Montreal -	1	Died on board.
" 31	s.s. "Glenavy," of Glasgow -	Shanghai -	1	Proceeded home.
Dec. 2	s.s. "Manhattan" - - -	Baltimore -	1	Ditto.
" 5	s.s. "Highland Loch" - -	Buenos Ayres	4	Ditto.
			38	

TABLE XV.  
TUBERCULOSIS (Other kinds, including Miners' Phthisis).

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 24	s.s. "Novara" - - -	Calcutta -	1	Proceeded home.
Feb. 18	s.s. "Kenilworth Castle," of London, 118,433.	Durban -	2	Ditto.
April 16	s.s. "Gaika" - - -	Beira - -	3	Ditto.
May 2	s.s. "Galway Castle" - -	Cape Town -	2	Ditto.
" 13	s.s. "Benalla" - - -	Ditto -	2	Ditto.
" 14	s.s. "Norman" - - -	Ditto -	1	Ditto.
June 10	s.s. "Kenilworth Castle" -	Durban -	3	Ditto.
" 19	s.s. "Cluny Castle" - -	Mombasa -	4	Ditto.
Aug. 8	s.s. "Hector" - - -	Calcutta -	1	Ditto.
Dec. 4	s.s. "Highland Loch" - -	Buenos Ayres	1	Ditto.
			20	

Miners' Phthisis - - 17 cases.

Tuberculosis, Other - - 3 "

20 cases.

TABLE XVI.  
INFLUENZA AND PNEUMONIA.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
April 28	s.s. "Santeramo" - - -	St. John's -	1	Isolated on board.
June 19	s.s. "Takada" - - -	Bombay -	3	Ditto.
July 5	s.s. "Sardinia" - - -	Ditto -	1	Ditto.
" 22	s.s. "Thongwa" - - -	Halifax -	1	Military case.
" 29	s.s. "Kenora" - - -	Christiania -	1	Isolated on board.
Sept. 11	s.s. "Tajima Maru" - -	Yokohama -	13	Ditto.
" 14	s.s. "Chepstow Castle" - -	Durban -	600	Military cases (39 deaths).
Oct. 1	s.s. "Skipton Castle" - -	Calcutta -	3	Isolated on board.
" 14	s.s. "Irishman" - - -	Newport News	4	Military cases.
" 14	s.s. "City of Cairo" - -	Montreal -	30	Military cases (fatal).
" 19	s.s. "River Lagan" - -	Jersey -	7	Isolated on board.
" 25	s.s. "Highland Heather" -	Buenos Ayres	4	Removed to Port Sanitary Hospital.
" 25	s.s. "Ninian" - - -	Boston -	6	Removed at Boston.
	Carried forward -		674	



INFLUENZA AND PNEUMONIA—*continued.*

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.	Brought forward	-	674	
Oct. 26	s.s. "Cufic" - - -	Buenos Ayres	1	Died on board.
" 27	s.s. "Jason" - - -	Montreal	5	Treated on board.
" 29	s.s. "Ruahine" - - -	Wellington	252	Military cases (1 death).
" 30	s.s. "British Ensign" - -	Thameshaven	1	Died on board.
" 30	s.s. "Orita" - - -	Quebec	1	Removed to Port Sanitary Hospital.
" 30	s.s. "Japan" - - -	Bombay	1	Died on board.
Nov. 2	s.s. "Fanad Head" - -	Montreal	1	Removed to Seamen's Hospital, Greenwich.
" 7	s.s. "Corinthian" - - -	Ditto	14	Treated on board (3 deaths).
" 14	s.s. "Barambah" - - -	Melbourne	1,062	Military cases (16 deaths).
" 25	s.s. "Dunedin" - - -	Lavrion Bay	25	Treated on board (3 deaths).
Dec. 11	s.s. "Clan Macdonald" - -	Montreal	71	Treated on board (31 deaths).
			2,108	

Influenza - - 2,096 cases.  
Pneumonia - - 12 "  
2,108 cases.

## INFLUENZA.

Influenza on inward bound vessels was at no time a marked feature of the Influenza epidemic in the Thames. From the middle of the year, the customary history of Influenza outbreaks among crews on ships was an epidemic after arrival, and infection was brought to the ships from the shore. The conditions in a ship's fore-castle are just such as would quickly cause the illness, once introduced, to become epidemic, and the natives of India suffered severely.

A few cases were admitted to Denton Hospital from inward bound ships, but more were received into Gravesend Military Hospital by arrangement with the War Office through the Local Government Board.

Transports—or rather the cargo ships which had brought troops and had landed them elsewhere—came on to London to discharge cargo, and are responsible for the large numbers (mostly military cases already landed) appearing in the Table. Large numbers of cases, of which there is no record, occurred in the Port under circumstances stated above, with which the organisation of the Port Sanitary Authority could not deal in any way.

The Seamen's Hospital, Greenwich, did very great service in dealing with bad cases, and the Gravesend Military Hospital relieved difficult shipping situations on many occasions. Major Skinner, R.A.M.C., of the Army Medical Transport Service at Gravesend, gave most cordial and effective help in this.

TABLE XVII.

## MUMPS.

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 1	s.s. "Aeneas" - - -	Sydney - -	39	Military cases.
" 4	s.s. "Llanstephan Castle" -	Durban -	12	Landed at Plymouth.
May 23	s.s. "City of Brisbane" - -	New York -	1	Landed at Halifax.
" 27	s.s. "Rhesus" - - -	Philadelphia -	5	Military cases.
" 27	s.s. "Teiresias" - - -	St. John's -	7	Ditto.
June 4	s.s. "Corinthic" - - -	Sydney -	4	Ditto.
" 4	s.s. "Saxonia" - - -	New York -	6	Landed at Halifax.
" 6	s.s. "Winifredian" - - -	Boston - -	1	Military case.
" 15	s.s. "Themistocles" - - -	New York -	1	Ditto.
" 24	s.s. "Berrima" - - -	Ditto - -	9	Ditto.
" 24	s.s. "Cassandra" - - -	Montreal -	29	Ditto.
July 7	s.s. "Gloucestershire" - - -	Halifax -	1	Ditto.
" 22	s.s. "Thongwa" - - -	Ditto - -	4	Ditto.
Aug. 26	H.M.S. "Hearty" - - -	—	1	Removed to South Eastern Hospital (M.A.B.).
Sept. 10	s.s. "Titan" - - -	Baltimore -	6	Military cases.
" 10	s.s. "Cardiganshire" - - -	Boston - -	2	Ditto.
" 10	Royal Albert Dock Shore Quarters - - -	- - -	16	Removed to South Eastern Hospital (M.A.B.).
Nov. 14	s.s. "Barambah" - - -	Melbourne -	29	Military cases.
Dec. 5	s.s. "Zealandic" - - -	Wellington -	40	Ditto.
			213	



TABLE XVIII.

VENEREAL DISEASE (cases on vessels arriving at Gravesend).

Date.	Case.	No. of Cases	Rating.	Advice Given.
1918.				
Jan. 4	Syphilis - - - -	1	Fireman -	To attend Seamen's Hospital.
" 4	Ditto - - - -	1	D.B. Seaman -	Ditto
April 5	Chancre - - - -	1	Chinese -	Ditto
" 5	Bubo Soft Sore - - -	1	Seaman -	Ditto
" 26	Soft Sores - - - -	1	Fireman -	Ditto
May 24	Secondary Syphilis - -	1	A.B. - -	Ditto
" 24	Syphilis - - - -	1	Do. - -	Ditto
June 15	Chancres - - - -	2	Firemen -	To attend a hospital in London.
July 7	Gleet. Right Inguinal Bubo -	1	Fireman -	To attend Gravesend Hospital.
" 7	Soft Chancre and Bubo - -	1	Seaman -	To attend Seamen's Hospital.
" 7	Syphilis - - - -	2	Lascars - -	To attend Gravesend Hospital.
" 21	Gonorrhœa - - - -	1	Lascar - -	Ditto
" 21	Ditto - - - -	2	Seamen -	Ditto
" 21	Gleet - - - -	1	Fireman -	To attend a hospital until cured.
Aug. 7	Syphilitic Bubo - - -	1	A.B. - -	To attend Seamen's Hospital.
" 8	Syphilis - - - -	2	Firemen -	To attend Gravesend Hospital.
Sept. 27	Gonorrhœa - - - -	3	Passengers -	To consult Specialist.
Nov. 3	Syphilis - - - -	1	Gunner -	To attend a hospital in London.
" 3	Ditto - - - -	1	Seaman -	Ditto
" 25	Ditto - - - -	2	Seamen -	Landed at Malta.
" 30	Sores, Hard Chancre - -	1	Fireman -	To attend Seamen's Hospital.
Dec. 2	Syphilis - - - -	2	Seamen -	Ditto
" 17	Venereal Sore - - - -	1	Lascar - -	Treated by Ship's Surgeon
	Total -	31		

In every case which came under the notice of the Medical Officers or Inspectors, the patient was advised to attend at one of the Treatment Centres for Venereal Diseases.

TABLE XIX.

## BERI-BERI.

Date.	Name of Vessel, Port of Registry, and Official No.	Where from.	No. of Cases.	How dealt with.
1918.				
Jan. 15	s.s. "War Wolf" - - -	Java - - -	41	Sixteen removed to Seamen's Hospital, Greenwich. Others remained on board.
" 15	s.s. "War Hero" - - -	Mediterranean	9	Eight removed to Seamen's Hospital, Greenwich. One landed at Colombo.
" 15	s.s. "War Tiger" - - -	Ditto -	1	Remained on board.
" 21	s.s. "Clan Macfadyen" - -	Ditto -	6	Three landed at Malta. Three removed to Seamen's Hospital, Greenwich.
Mar. 30	s.s. "War Dame" - - -	Java - - -	5	Remained on board.
			62	

## BERI-BERI.

In January of 1918, four ships arrived in the Port of London presenting Beri-Beri. The number of the cases suggested that this was an opportunity for inquiry into those conditions which might produce the disease on shipboard.

Beri-Beri is stated to be a "deficiency" disease akin to Scurvy. Much research has been made in attempts to connect the disease with certain foods. This first threw suspicion on rice, and secondly on a deficiency of a certain kind inherent in rice which has been highly polished—*i.e.*, a rice which has been stripped of its germ and aleurone layer, as the causal factor. This deficiency could only have its effect in those who use rice as the staple food, and it is amongst natives of the East that the disease is most commonly though not exclusively found. Experiment, sometimes on a large scale, has shown that a varied diet containing much fresh food—meat, potatoes and vegetables—is both preventative and curative of the beri-beri condition. Unintentional experiment has shown that the disease can appear amongst Europeans whose food lacks the quality of freshness, apart from rice as a staple cereal in the diet; therefore a deficiency akin to that to which the aleurone layer and germ of rice are said to be complementary can exist in rice free diets.

One of the difficulties that confront every medical officer of health in dealing with food stuffs is want of proof that this or that departure from the natural or normal will produce a lowering of the public health. There is practical certainty that such conditions as rancidity, staleness, wholesale sterilisation of food, preservatives, and unnatural refinement (as in the rice in question) insidiously produce a lower state of vitality than is compatible with full health in the nation, though this might never become sufficiently marked to impress the sufferers at large and lead to effective disclosure of the devitalising factors and the share of each in the evil.

The inquiry on these ships was especially interesting, as three of them were exactly comparable vessels—From Japan, with 40 to 42 Japanese crew each, of similar build and with crews shipped under similar conditions, *viz.*, that they received money in lieu of food.



All three ships called at many ports on the way to England, two of them ran neck and neck. Of these two ships one had nine pronounced cases of Beri-Beri and many slight cases, and the other one case only. On the third ship, which used the Cape route and was four months on the voyage, as against three months for the two ships which used the Mediterranean route, every member of the crew was more or less affected.

"War Wolf"	-	-	Crew 41	-	Kobe and Batavia	-	-	41 cases
					via Cape			
"War Hero"	-	-	„ 42	-	via Mediterranean	-	-	9 „
					(other slight cases)			
"War Tiger"	-	-	„ 42	-	-	Ditto	-	1 „

All three crews laid in stocks of Japanese food at Moji, in Japan, and polished rice was the staple cereal. Sea-weed, pickled fish, dried fish, tinned fish and shell-fish, tinned vegetables, soya paste, dykoon and sliced bean were amongst the Japanese foods found.

An important point of difference in catering was disclosed as between the "War Hero" and "War Tiger." The notes made were as follows :—

"War Hero."—Japanese crew would not ship under other conditions than that of cash payment in lieu of rations. Provisioned itself at Kobi and Moji. No fresh meat bought on voyage, and practically no fresh vegetables. Never more than one day's rations of vegetables bought at a time in ports of call. Limejuice was procured by the master at Port Said, and had since been served out regularly.

"War Tiger."—Japanese crew found its own provisions, bought fresh provisions extensively at each port of call—vegetables, meat and fish. Took large quantities of meat to form a supply between ports of call. Fresh meat for at least one meal a day was used throughout the whole voyage. More than 2*l.* per man was drawn at Port Said for purposes of catering. 300 rupees in all was drawn at Colombo and expended on meat, carrots, cabbage and turnips. The crew pooled resources and appointed a caterer.

The difference in true economy in catering on the two ships is paralleled by the difference in the state of health of the crews. At Port Said the Beri-Beri on the "War Hero" was pronounced, while on the "War Tiger" one case only had occurred.

On inspection of the food stores on the "War Tiger" an ample stock of some crushed cereal was discovered; each grain was whole, but flattened. Information volunteered by an intelligent member of the crew showed that this was Muji (barley) and was "Beri-Beri medicine." This crushed "whole-meal" barley was used in the proportions of one to four of rice.

It was found that the "Beri-Beri medicine" had not been used on board the "War Hero" since Gibraltar, the supply having given out at that point in the voyage. The evidence left a question as to the extent of the use of barley up to Gibraltar; too much conflicting interest had been aroused on the ship for satisfactory elucidation.

The conditions on the "War Wolf" were such that around the Cape and up to Dakar there was a daily meat ration which failed at the latter port. Plenty of fresh vegetables and fish had been bought by the crew. The use or absence of Muji (barley) was not specially noted; the samples of the food obtained included none of this "Beri-Beri medicine."

On all three ships Beri-Beri was present from Batavia homewards, but did not develop seriously on the "War Tiger." On the "War Hero" the condition is said to have been at its worst before Port Said and again just before arrival in England. On the "War Wolf" there appears to have been a progressive incapacity amongst the crew, which became very acute after leaving the coast of East Africa.

From amid the broken English of a "War Wolf" boatswain who on a Japanese sailing ship had been one of the four survivors of an epidemic of Beri-Beri, it was gathered that on a line of steamers carrying Japanese crews and sailing to England, and utilising English food, there was no Beri-Beri during his three years' experience, and that on the "War Wolf" Japanese food was considered to be the cause of the condition.

If any weight is to be given to the striking alternative name for the whole-meal Muji volunteered on the "War Tiger"—namely, Beri-Beri medicine—it is a matter for congratulation that the aleurone layer in wheat comparable to that on the Muji, and on rice before polishing, was during the War finding its natural place in bread in Britain.

The salient points elucidated in connection with the inquiry are (1) the use of Muji; (2) the conditions of catering under which the crews shipped. These appear to me to be determinants of the comparative health conditions found.

In especial the catering for long voyages should not be at the indiscretion of the crew.

TABLE XX.

## MISCELLANEOUS DISEASES, &amp;c., 1918.

<i>Disease.</i>	<i>No. of Cases.</i>	<i>Disease.</i>	<i>No. of Cases.</i>
Adenitis - - - - -	1	Brought forward - - - - -	22
Aortic Aneurism - - - - -	1	Hepatitis - - - - -	1
Apoplexy - - - - -	1	Inguinal Bubo - - - - -	1
Appendicitis - - - - -	1	Injury, accidental - - - - -	3
Carcinoma of Stomach - - - - -	1	Nephritis - - - - -	1
Congestion of Lungs - - - - -	1	Pleurisy - - - - -	1
Diphtheritic Tonsillitis - - - - -	2	Rheumatism - - - - -	1
Enteritis - - - - -	1	Scabies - - - - -	11
Epilepsy - - - - -	1	Scurvy - - - - -	1
Gastric Ulcer - - - - -	1	Senile Decay - - - - -	1
Gastritis - - - - -	2	Suffocation - - - - -	1
Hæmorrhage - - - - -	1	Trachoma - - - - -	3
Heart Failure - - - - -	6	Twisted Colon - - - - -	1
Hemiplegia - - - - -	1	Vincent's Angina - - - - -	1
Hepatic Abscess - - - - -	1		
Carried forward - - - - -	22	Total - - - - -	49



TABLE XXI.

VESSELS AND PREMISES DISINFECTED, FROM 1ST JANUARY TO 31ST DECEMBER, 1918.

Month.		Reason for Disinfection.																Total number of Disinfections.
		Cerebro-spinal Meningitis.	Chicken-pox.	Cholera.	Continued Fever.	Diphtheria.	Enteric Fever.	Krysipelas.	Malaria.	Measles.	Influenza.	Plague.	Remittent Fever.	Scarlet Fever.	Small-pox.	Pulmonary Tuberculosis, &c.	Precautionary Measure.	
January	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	8
March	-	...	...	...	...	1	...	...	1	...	...	...	1	...	1	...	...	4
April -	-	...	2	...	2	...	...	...	...	...	...	...	...	1	1	...	...	6
May -	-	...	1	...	1	1	...	...	...	...	...	...	1	...	...	...	...	5
June -	-	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	1	4
July -	-	...	...	...	...	2	...	...	1	...	...	...	...	...	1	...	...	4
August	-	...	...	...	...	3	...	...	4	...	1	...	...	...	1	...	2	11
September	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
October	-	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	3
November	-	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	1	4
December	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Totals	-	...	3	...	2	4	9	...	1	6	3	2	...	2	1	4	...	54

TABLE XXII.

NUMBER OF DISINFECTIONS OF EFFECTS, BEDDING, &amp;C., FROM 1ST JANUARY TO 31ST DECEMBER, 1918.

Month.	Reason for Disinfection.														Hospital Bedding, &c.	Total Effects.	Number of times Steam Disinfectant was used.	Disinfected by Fumigation.
	Cholera.	Chicken-pox.	Cerebro-spinal Meningitis.	Continued Fever.	Diphtheria.	Enteric Fever.	Malaria.	Measles.	Pulmonary Tuberculosis, &c.	Plague.	Influenza.	Scarlet Fever.	Small-pox.	Precautionary Measure.				
January	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
February	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March -	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
April -	-	...	1	...	...	...	...	...	...	...	...	...	1	...	...	2	3	...
May -	-	...	1	...	1	2	...	...	...	1	...	...	...	...	...	6	5	...
June -	-	...	...	...	1	1	...	...	...	...	...	...	...	...	1	4	5	1
July -	-	...	...	...	...	2	...	1	...	...	...	1	...	...	...	4	3	...
August	-	...	1	...	...	3	...	1	...	1	...	...	...	...	3	9	5	1
September	-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	-	...	...	...	...	2	...	...	...	...	3	...	...	...	...	5	3	2
November	-	...	...	...	...	2	...	...	...	...	1	...	...	...	...	3	2	1
December	-	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...
Totals -	-	...	3	...	2	12	...	2	...	2	4	1	1	...	5	34	30	6

TABLE XXIII.

## RETURN OF RATS CAUGHT AND DESTROYED DURING 1918.

The entire cost of destroying these rats has been borne by the Shipowners and Port of London Authority.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS.
Millwall Dock—													
Warehouses - -	146	152	143	151	162	221	126	157	80	67	358	261	2,024
Vessels during voyage	15	50	—	10	—	40	—	—	20	20	45	—	200
„ while in dock -	217	64	8	240	122	190	56	151	201	44	108	94	1,495
Surrey Commercial Dk.—													
Warehouses - -	76	91	76	62	111	149	78	75	131	172	161	91	1,273
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	23	—	97	—	11	—	34	81	—	—	22	—	268
Regent's Canal Dock—													
Warehouses - -	—	—	—	—	—	—	—	—	—	—	—	—	—
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Katharine's Dock—													
Warehouses - -	50	56	70	55	55	76	52	93	73	71	71	47	769
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
London Dock—													
Warehouses - -	289	275	237	209	315	363	222	293	283	280	414	292	3,472
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
Albert and Victoria Dks.—													
Warehouses - -	272	295	325	320	297	337	322	417	287	422	485	282	4,061
Vessels during voyage	13	6	309	70	41	110	6	175	199	100	271	—	1,300
„ while in dock -	554	345	589	1,510	448	527	425	595	525	490	550	574	7,132
West India Dock—													
Warehouses - -	122	183	217	131	167	156	148	209	193	72	157	104	1,859
Vessels during voyage	130	130	30	148	55	20	65	20	25	27	20	45	715
„ while in dock -	377	236	344	134	316	482	173	389	90	284	406	249	3,480
East India Dock—													
Warehouses - -	17	23	5	4	—	7	32	7	39	8	117	20	279
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	80	127	49	34	6	29	61	73	144	12	38	53	706
Tilbury Dock—													
Warehouses - -	214	210	297	264	302	277	191	210	265	266	377	285	3,158
Vessels during voyage	—	—	264	—	—	590	225	—	—	—	—	—	1,079
„ while in dock -	303	206	440	51	263	335	289	301	151	124	249	360	3,072
River—													
During voyage - -	—	—	—	—	—	—	—	—	—	—	—	—	—
While in river - -	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS - -	2,898	2,449	3,500	3,393	2,671	3,909	2,505	3,246	2,696	2,469	3,849	2,757	36,342

Total from February, 1901, to 31st December, 1917 - 976,263

Total from 1st January to 31st December, 1918 :—

In Dock Warehouses - - - -	16,895	}	36,342
On Vessels during voyage - - -	3,294		
On Vessels while in Dock and River -	16,153		

TOTAL - - 1,012,605



TABLE XXIV.

## RETURN OF RATS EXAMINED BACTERIOLOGICALLY—YEAR ENDED 31st DECEMBER, 1918.

DOCK.	Number from each Dock.	Found Dead.	Trapped.	Found Dead.				Trapped.				Infected.	Non- Infected.	Infected.				Non-Infected.				Infected.		Non-Infected.			
				*M.D. M.R. M.A. M.M.				*M.D. M.R. M.A. M.M.						*M.D. M.R. M.A. M.M.				*M.D. M.R. M.A. M.M.				Found Dead.	Trapped.	Found Dead.	Trapped.		
Royal Victoria Dock -	358	1	357	1 ... ..	252	86	17	2	...	358	...	...	...	253	86	17	2	...	...	...	...	...	...	1	357		
Royal Albert Dock -	1,330	12	1,318	10 2 ... ..	1,025	229	63	1	2	1,328	1	1	...	1,034	230	63	1	...	2	12	1,316						
St. Katharine's Dock -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
London Dock - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Millwall Dock - -	326	10	316	10 ... ..	232	69	15	...	1	325	1	...	...	241	69	15	...	...	1	10	315						
East India Dock - -	13	...	13	...	8	5	...	...	...	13	...	...	...	8	5	...	...	...	...	...	...	...	...	...	13		
West India Dock - -	24	1	23	1 ... ..	18	4	1	...	...	24	...	...	...	19	4	1	...	...	...	1	23						
Surrey Commercial Dock	10	1	9	1 ... ..	4	1	4	...	...	10	...	...	...	5	1	4	...	...	...	1	9						
Tilbury Dock - -	184	...	184	...	142	35	7	...	1	183	1	...	...	141	35	7	...	...	1	...	183						
Unknown Dock - -	70	...	70	...	52	14	4	...	...	70	...	...	...	52	14	4	...	...	...	...	70						
	2,315	25	2,286	23 2 ... ..	1,733	443	111	3	4	2,311	3	1	...	1,753	444	111	3	...	4	25	2,286						
		2,315		2,315				2,315				2,315				2,315				2,315							

## SUMMARY—

Total Rats examined - - - - - 2,315  
 " " infected - - - - - 4

## \*SPECIES—

M.A.=Mus alexandrinus - - - - - 111  
 M.D.=Mus decumanus (Norvegicus) - - - - - 1,756  
 M.R.=Mus rattus - - - - - 443  
 M.M.=Mus musculus - - - - - 3

Total - - - - - 2,315

## MINISTRY OF FOOD.

## RAT ORDER, 1918.

The Ministry of Food Rat Order, 1918, was reported to your Worshipful Committee in the following terms :—

“ This Order confers power on ‘ Local Authorities ’ to take any measures thought proper for the destruction of rats where these are causing preventable damage or destruction to foodstuffs.

“ Under the Order the owner or occupier of neglected lands or buildings infested with rats, or the owner or occupier on whose lands rubbish attractive to rats accumulates by neglect of removal, is responsible for the infestation and for its abatement.

“ On failure of the owners or occupiers to comply with reasonable directions of the Local Authority, the Authority may enter and take measures, and may recover expenses incurred under the failure of the owner or occupier to carry out his obligations and attributable to this.

“ In the exercise of its powers, the Local Authority has regard to recommendations made by the Board of Agriculture and Fisheries or a War Executive Committee in the area.

“ The Local Authority may prosecute for breaches of the Order, and failure of the owner or occupier to comply with directions is a summary offence.

“ The constituted Local Authorities are County Councils and County Borough Councils.

“ In view of the valuable powers given by the Rat Order and the impetus, where necessary, to the campaign against rats which would accrue, I would recommend to your Worshipful Committee that the Ministry of Food be requested to forthwith constitute the Port of London Sanitary Authority a ‘ Local Authority ’ for their district for the purposes of the Rat Order, 1918.

“ The recommendation is made on the following grounds :—

“ 1. The Port Sanitary Authority already exercises powers in destroying rats throughout the Port Sanitary District for the prevention of plague infection.

“ 2. These powers are not in themselves sufficient to secure similar action in the case of foodstuffs ; though food is stored in, or is in transit through the district in immense quantity.

“ 3. A County Council does not otherwise] than by the Order exercise jurisdiction in the Port Sanitary District.

“ 4. Three County and County Borough Councils under the present Order would exercise jurisdiction in one dock, and four in the whole district of the Authority.”

It was further recommended that your Worshipful Committee should request the following extension of the Order be made :—

“ For the purpose of this Order any vessel lying in any water within the district of the Port Sanitary Authority shall be subject to the jurisdiction of the Authority as if it were a ‘ building ’, on the grounds that—

“ 1. The ship is a perennial source of rat supply to docks and wharves.



"2. Powers similar to those exercised on plague-infected ships are needed in dealing with rat-ridden ships in general, to bring about reduction or extermination of rats thereon.

"3. The ship is eminently a 'building' from which rats can by suitable measures be exterminated rather than driven off to other quarters.

"4. Food damage and destruction on ships is in the total very large."

Representation was made accordingly.

An amending Order, dated March 26th, 1919, constitutes the Port Sanitary Authority the "Local Authority" for the Port Sanitary District ashore, and extends the provisions of the Order to any ship within the limits of the Port in like manner as nearly as may be as if it were a building.

TABLE XXV.

## HOSPITAL.

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

Patients remaining in Hospital on 31st December, 1917				-	-	-	1
				Admitted.	Discharged,	Died.	Remaining under treatment.
Cholera	-	-	-	0	0	0	0
Cholera (suspected)	-	-	-	0	0	0	0
Plague	-	-	-	8	7	1	0
Plague (suspected)	-	-	-	4	4	0	0
Small-pox	-	-	-	1	1	0	0
Scarlet Fever	-	-	-	5	3	0	2
Enteric Fever	-	-	-	7	7	1	0
Continued Fever	-	-	-	6	6	0	0
Diphtheria	-	-	-	0	0	0	0
Measles	-	-	-	2	2	0	0
Erysipelas	-	-	-	0	0	0	0
Chicken-pox	-	-	-	1	1	0	0
Cerebro-spinal Fever	-	-	-	0	0	0	0
Other Diseases	-	-	-	22	20	1	1
Totals	-	-	-	56	51	3	3
Remaining in Hospital on 31st December, 1918	-	-	-	-	-	-	3
Total number of days treatment during the year	-	-	-	-	-	-	1,074
Average number of days treatment for each case	-	-	-	-	-	-	18·84
Average daily number of patients in Hospital	-	-	-	-	-	-	6·40
Average daily cost of maintenance per patient	-	-	-	-	-	-	2s. 1·6d.
Average total cost of maintenance per patient	-	-	-	-	-	-	£1 18s. 10d.

TABLE XXVI.

QUANTITY AND DESCRIPTION OF UNSOUND FOOD SEIZED AND DISPOSED OF AS UNFIT FOR  
HUMAN FOOD FOR THE YEAR ENDED 31ST DECEMBER, 1918.

	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.
<b>MEAT—</b>												
Fresh and Frozen—												
Beef - - - -	2914	quarters, &c.	...	...	...	...	417	pieces, &c.	274	15	0	2
Mutton and Lamb - -	185	carcases	...	6	3	4	107	pieces	5	5	1	20
Veal, Pork and Offal -	286	bags, &c.	3	1	1	11	407	various	19	16	0	3
Preserved—												
Tinned - - - -	949	cases	...	...	...	...	103	tins	30	14	0	12
Smoked and Salted -	...	...	...	...	...	...	91	hams, &c.	...	10	2	16
Sundry - - - -	...	...	...	...	...	...	...	...	...	...	...	...
<b>RABBITS—</b>												
Frozen - - - -	147	crates, &c.	...	...	...	...	14	rabbits	4	5	2	24
Tinned - - - -	...	...	...	...	...	...	...	...	...	...	...	...
<b>POULTRY and GAME—</b>												
Frozen - - - -	...	...	...	...	...	...	...	...	...	...	...	...
<b>FISH—</b>												
Preserved, Dried - -	3	bags	...	...	...	...	...	...	...	3	0	0
" Tinned and Bottled -	78	cases	...	...	...	...	314	tins	1	16	1	8
Shell - - - -	...	...	...	...	...	...	...	...	...	...	...	...
Wet - - - -	47	boxes, &c.	...	...	...	...	...	...	...	14	0	6
<b>FRUIT—</b>												
Fresh - - - -	100	various	3	0	0	0	...	...	6	0	0	0
Preserved, Dried - -	467	various	...	4	1	7	...	...	11	0	2	15
" Tinned and Bottled -	61	cases, &c.	...	...	...	...	...	...	...	17	2	16
" Jam and Marmalade -	28	cases	...	...	...	...	86	tins	...	17	1	14
<b>VEGETABLES—</b>												
Fresh - - - -	444	various	32	0	0	0	...	...	54	2	0	0
Preserved, Dried - -	54	various	3	16	2	0	...	...	6	17	0	0
" Tinned - - - -	9	cases	...	...	...	...	19	tins	...	5	3	9
<b>NUTS—</b>												
Whole - - - -	20	bags	...	...	...	...	...	...	1	9	2	12
Desiccated and Shelled -	...	...	...	...	...	...	...	...	...	...	...	...
<b>PROVISIONS—</b>												
Tea - - - -	1	chest	...	...	...	...	13	tins	...	2	0	18
Coffee - - - -	...	...	...	4	2	16	...	...	...	4	2	16
Cocoa - - - -	...	...	...	...	...	...	...	...	...	...	...	...
Butter, Cheese, Lard, Margarine	90	boxes, &c.	...	...	...	...	...	...	4	17	2	2
Condensed Milk - -	3,522	casks, &c.	...	...	...	...	103	tins	261	4	0	27
Prepared Foods - -	193	cases	3	16	1	21	...	...	10	11	2	0
Biscuits and Confectionery -	518	barrels, &c.	...	...	...	...	469	tins	38	15	2	5
Sugar - - - -	4	cases, &c.	...	...	...	...	...	...	...	2	2	0
Sundry - - - -	...	...	...	...	...	...	...	...	...	...	...	...
<b>GRAIN—</b>												
Wheat, Maize, Barley, Rice, &c.	...	...	385	8	0	3	...	...	385	8	0	3
<b>MEAL and FLOUR -</b>												
CONDIMENTS and SPICES -	...	...	27	7	2	11	...	...	27	7	2	11
EGGS - - - -	...	...	...	...	...	...	...	...	...	...	...	...
EGG YOLK - - - -	...	...	...	...	...	...	...	...	...	...	...	...
DRUGS - - - -	8	bags, &c.	...	...	...	...	...	...	...	12	3	21
SUNDRIES - - - -	614	bags	...	...	...	...	...	...	51	10	0	19
<b>TOTAL - - - -</b>	...	...	...	...	...	...	...	...	1,200	7	0	27

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
"	1917	-	-	-	4,847	8	1	5
"	1918	-	-	-	1,200	7	0	27

Average for 9 years, 1909 to 1917 :—2,326 tons 9 cwts. 0 qrs. 7 lbs.



TABLE XXVII.  
DESCRIPTION OF MEAT DESTROYED.

YEAR.	BEEF.	MUTTON.	VEAL, PORK, OFFAL.	TINNED.	SMOKED AND SALTED, &c.	TOTAL.
	<i>Tons cwt. qrs. lbs.</i>	<i>Tons cwt. qrs. lbs.</i>	<i>Tons cwt. qrs. lbs.</i>	<i>Tons cwt. qrs. lbs.</i>	<i>Tons cwt. qrs. lbs.</i>	<i>Tons cwt. qrs. lbs.</i>
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
1917 ... ..	227 11 1 18	44 10 2 19	Pork and Veal— 0 9 2 15 Offal— 8 13 0 27	1 10 0 18	78 17 3 16	361 13 0 1
1918 ... ..	274 15 0 2	5 5 1 20	Pork and Veal— 0 16 3 1 Offal— 18 19 1 2	30 14 0 12	0 10 2 6	331 1 0 25
Total for ten years ...	2,592 17 3 3	531 12 2 27	513 17 1 10	68 5 2 9	846 8 1 12	4,553 1 3 5

## FOOD INSPECTION.

The Regulations issued by the Local Government Board, under the Public Health (Regulations as to Food) Act, 1907, were carried out in the Port of London, and resulted in 1,200 tons 7 cwts. 0 qrs. 27 lbs. of Unsound Food being destroyed or disposed of in such a manner as to prevent its being used for human consumption.

An exception is shown in the disposal of a quantity for the "manufacture of biscuits and confectionery." This was entirely a question of a yeast fermentation of condensed milk, in which the deleterious qualities were entirely removed by the process of re-manufacture, and thus the use of a considerable quantity of valuable food material was retained.

The goods were disposed of as follows, only those which could not be used for some useful purpose being actually destroyed :—

			Tons.	cwts.	qrs.	lbs.
Boiled down (recovery of fat, &c.)	-	-	335	10	1	15
Cattle and poultry food	-	-	550	15	3	24
Manufacture of biscuits and confectionery	-	-	234	1	0	8
Ditto	dog biscuits	-	17	16	0	0
Ditto	adhesive ("gum")	-	10	1	1	2
Ditto	glucose	-	8	10	0	6
Ditto	ink	-	0	1	0	0
Destroyed	{ Buried	-	40	13	3	14
	{ Burned	-	2	17	2	14
Total			1,200	7	0	27

The total shows a reduction of 75·25 per cent. compared with the year 1917.

A summary of the Unsound Food disposed of is shown in Table XXVI.

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

A list of the Notices served under Articles III (5), IV. (1) and VI. of the Public Health (Foreign Meat) Regulations, 1908, requiring the exportation of foreign meat imported contrary to the Regulations, is shown on page 42.

## BEEF.

The total quantity of beef seized and disposed of as unfit for human consumption was 2,684 quarters, 1 crop, 417 pieces, 229 bags and a quantity of trimmings, weighing 274 tons 15 cwts. 0 qrs. 2 lbs. against 227 tons 11 cwts. 1 qr. 18 lbs. in 1917.

The largest quantity seized on any vessel was 950 quarters, &c., weighing 66 tons 7 cwts. 0 qrs. 6 lbs.

## MUTTON AND LAMB.

The mutton and lamb seized and disposed of totalled 185 carcasses, 106 part carcasses, and 6 cwts. 3 qrs. 4 lbs. of trimmings, weighing in all 5 tons 5 cwts. 1 qr. 20 lbs., against 44 tons 10 cwts. 2 qrs. 19 lbs. in 1917.

The largest seizure on any vessel was 153 carcasses, weighing 2 tons, 10 cwts. 3 qrs. 25 lbs.



## 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.

Most of the ox-tongues which arrived in the Port of London were, at the request of the consignees, removed from the district of the Port Sanitary Authority (without inspection) to cold stores within the City of London and the Metropolitan Boroughs of Bermondsey and Finsbury, to be examined there under the supervision of the Medical Officers of Health of those districts.

The following shows the results of the examination of some of the consignments carried out in the Port of London by your Inspectors :—

500 tongues examined.		14 found diseased.	
252	" "	1	" "
250	" "	1	" "
228	" "	Nil	" "
144	" "	1	" "
252	" "	1	" "

## PORK.

During the year detailed examination was made of 5,300 carcasses and 200 sides, with the result that 9 carcasses, 3 sides, and 3 heads were found to be affected with tuberculosis.

The pork seized and destroyed during the year was as follows :—

From.	TUBERCULOUS.		
	Carcasses.	Sides.	Heads.
United States - - - -	2	...	...
Argentina - - - -	7	3	2
Ship's Stores - - - -	...	...	1
TOTAL - - - -	9	3	3

During December three consignments, comprising 296 sides of pork, arrived in the Port of London. This meat came within the definition of "Foreign Meat Class 1," the importation of which is prohibited.

The matter was brought to the notice of the Importers, who stated that :—

"In October last we received several consignments of heavy pigs which showed signs of bone-taint resulting from the difficulty in freeing such heavy carcasses from natural heat before freezing. To obviate a recurrence, thereby wasting valuable food and refrigerating space on steamers, the method of 'siding' was adopted.

"As this appears to be contrary to import regulations we have cabled to-day stopping further shipments."

The sides were admitted after thorough examination, on the understanding that in future shipments the regulations were to be adhered to.

#### OFFAL.

The offal seized as unfit for human consumption was 17 tons 15 cwts. 0 qrs. 7 lbs., more than double the quantity in the previous year, and comprised :—

					Tons.	Cwts.	Qrs.	Lbs.
Livers, Ox—2 bags, 329 loose	-	-	-	-	2	14	0	1
„ Sheep—1 crate, 5 bags	-	-	-	-	0	4	3	11
„ Pig—13 lbs.	-	-	-	-	0	0	0	13
Sweetbreads—2 bags	-	-	-	-	0	1	0	0
Kidneys—17 bags, 3 part bags	-	-	-	-	1	6	1	25
Hearts—47 bags, 6 boxes, 47 loose	-	-	-	-	2	8	0	19
Tongues—6 cases, 32 bags, 13 loose	-	-	-	-	2	0	2	12
Cheeks—17 bags, 12 loose	-	-	-	-	0	19	3	21
Tripe—44 bags, 4 cases	-	-	-	-	1	12	2	21
Tails—15 bags	-	-	-	-	0	17	0	4
Skirts—18 bags	-	-	-	-	1	9	1	26
Sundries	-	-	-	-	4	0	2	22
Total weight	-	-	-	-	17	15	0	7

#### MEATS—CANNED.

The tinned meats seized and disposed of comprised :—

949 cases and 103 tins, weighing 30 tons 14 cwts. 2 qrs. 21 lbs.

#### MEAT—SMOKED AND SALTED.

					Tons.	Cwts.	Qrs.	Lbs.
Bacon—6 pieces	-	-	-	-	0	0	1	3
Hams—85 loose	-	-	-	-	0	10	1	13
Total weight	-	-	-	-	0	10	2	16

#### SUNDRY MEAT.

Meat coming under this heading, seized, consisted of 1 ton 4 cwts. 0 qrs. 23 lbs. of sausage meat, contained in 24 bags.

#### RABBITS (FROZEN).

Only 139 crates, 8 bags and 14 loose rabbits, weighing 4 tons 5 cwts. 2 qrs. 24 lbs. were seized during the year.



## RABBITS (TINNED), POULTRY AND GAME.

No goods of these kinds were seized.

## FISH.

Goods of this description seized and destroyed included :—

	Tons.	Cwts.	Qrs.	Lbs.
WET—30 boxes, 15 bags, 2 casks - -	0	14	0	6
DRIED—3 bags - - - - -	0	3	0	0
TINNED—Lobster, 2 cases, 54 tins - -	0	1	1	26
„ Sardines, 76 cases, 260 tins -	1	14	3	10
Total weight	2	13	1	14

## FRUIT (GREEN).

Only 6 tons of this class of goods were destroyed, compared with 132 tons in the preceding year :—

	Tons.	Cwts.	Qrs.	Lbs.
Apples—66 boxes - - - - -	1	16	0	0
Bananas—33 crates - - - - -	1	3	2	0
Oranges—Loose - - - - -	1	10	0	0
Lemons—Loose - - - - -	1	10	0	0
Quinces—1 basket - - - - -	0	0	2	0
Total weight	6	0	0	0

## FRUIT (DRIED).

Most of the goods included under this heading were old stock which had been lying at the Docks for some considerable time :—

	Tons.	Cwts.	Qrs.	Lbs.
Dates—3 boxes - - - - -	0	1	3	14
Apricots—1 box - - - - -	0	0	0	14
Figs—4 barrels, 232 boxes, 131 bags - -	8	16	1	25
Peaches—5 boxes - - - - -	0	1	3	0
Plums—50 boxes - - - - -	0	13	0	12
Raisins—7 cases - - - - -	0	2	2	0
Prunes—18 boxes - - - - -	0	2	1	27
Sultanas—Loose - - - - -	0	2	0	8
Currants—3 cases, 5 qr.-cases - - -	0	2	0	0
Sundries—16 barrels - - - - -	0	18	0	27
Total weight	11	0	2	15

## FRUIT (TINNED AND BOTTLED).

Only 17 cwts. 2 qrs. 16 lbs. of goods of this class were seized and destroyed, compared with upwards of 92 tons in the preceding year :—

	Tons.	Cwts.	Qrs.	Lbs.
Fruit pulp—52 cases - - - -	0	5	2	0
Tomato puree—8 cases - - - -	0	7	0	16
Cherries—1 barrel - - - -	0	5	0	0
Total weight	0	17	2	16

## JAM AND MARMALADE.

Twenty-eight cases and 86 tins, weighing 17 cwts. 1 qr. 14 lbs., were seized and destroyed :—

## VEGETABLES.

FRESH—	Tons.	Cwts.	Qrs.	Lbs.
Potatoes—392 bags - - - -	19	12	0	0
Swedes—37 bags - - - -	1	15	0	0
Parsnips—1 bag - - - -	0	1	0	0
Carrots—8 bags - - - -	0	8	0	0
Beetroots—1 bag - - - -	0	1	0	0
Onions—5 boxes, 32 tons loose - - -	32	5	0	0
DRIED—				
Beans— $\frac{1}{2}$ barrel - - - -	0	1	0	0
Peas—52 bags, 23 $\frac{1}{2}$ cwts. loose - - -	4	2	1	16
Split Peas—1 bag - - - -	0	0	2	12
Sundries - - - -	2	13	0	0
TINNED—				
Beans—9 cases, 19 tins - - - -	0	5	3	9
Total weight	61	4	3	9

## NUTS.

The only goods of this class consisted of :—

	Tons.	Cwts.	Qrs.	Lbs.
Walnuts—9 bags - - - -	0	9	2	12
Peanuts—11 bags - - - -	1	0	0	0
Total weight	1	9	2	12



## PROVISIONS.

The total quantity of this class of goods disposed of as unfit for human consumption shows an increase of about 170 tons compared with the previous year, and was due to several consignments of condensed milk which arrived in very bad condition :—

	Tons.	Cwts.	Qrs.	Lbs.
Tea—1 chest, 13 tins - - - - -	0	2	0	18
Coffee—128 tins and a quantity loose - -	0	4	2	16
Cocoa—Nil - - - - -	0	0	0	0
Cheese—15 casks, 66 boxes, 9 bags - -	4	17	2	12
Margarine—Nil - - - - -	0	0	0	0
Butter—Nil - - - - -	0	0	0	0
Sugar—1 bag, 3 cases - - - - -	0	2	2	0
Condensed Milk—1,199 cases, 2,323 casks, 103 tins - - - - -	261	4	0	27
Total weight	266	11	0	17

## PREPARED FOODS.

	Tons.	Cwts.	Qrs.	Lbs.
Macaroni—193 cases - - - - -	7	7	3	24
Rolled Oats—Loose - - - - -	3	3	0	4
Total weight	10	11	0	0

## BISCUITS AND CONFECTIONERY.

Practically the whole of these goods came from a vessel which had been damaged by fire :—

	Tons.	Cwts.	Qrs.	Lbs.
Biscuits—17 cases, 19 barrels, 59 tins - -	1	3	2	25
Confectionery—482 cases, 410 tins - -	37	11	3	8
Total weight	38	15	2	5

## GRAIN.

	Tons.	Cwts.	Qrs.	Lbs.
Wheat - - - - -	303	6	1	18
Maize - - - - -	29	17	2	9
Oats - - - - -	26	7	1	16
Barley - - - - -	12	17	3	18
Rye - - - - -	8	4	3	6
Rice - - - - -	4	13	3	20
Total weight	385	8	0	3

## MEAL AND FLOUR.

	Tons.	Cwts.	Qrs.	Lbs.
Meal—2 barrels, 2 bags - - - -	0	5	0	6
Flour—443 bags - - - -	27	2	2	5
Total weight	27	7	2	11

## DRUGS.

	Tons.	Cwts.	Qrs.	Lbs.
5 bags, 1 bale, 2 cases - - - Weight	0	12	3	21

## SUNDRIES.

	Tons.	Cwts.	Qrs.	Lbs.
Sago flour—614 bags - - - Weight	51	10	0	19

## TABLE XXVIII.

## PUBLIC HEALTH (FOREIGN MEAT) REGULATIONS, 1908.

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

Date of Arrival.	Name of Vessel.	Where from.	Where lying.	Description and quantity of meat in respect of which Notices were served.
1918.				
Aug. 25	*s.s. "Highland Loch" -	Argentina -	Royal Albert Dock	110 bags pork loins, 5 bags hog livers, 5 bags hams, 5 bags butts.
Dec. 4	s.s. "Highland Loch" -	Do. -	Do. -	40 pig-sides.
" 7	s.s. "Duquesa" -	Do. -	Royal Victoria Dock	200 pig-sides.
" 7	s.s. "Highland Piper" -	Do. -	Royal Albert Dock	56 pig-sides.

In the case of the vessel marked \* the consignees were called upon for an explanation in respect of the importation of the meat, and they reported that the meat came from a new meat works at Montevideo, the proprietors of which were entirely ignorant of the existing Regulations regarding the importation of pork products into England.

The matter was brought to the notice of the Local Government Board.

On an examination of the livers, 10 per cent. were found to be diseased and unfit for human consumption.

During the year applications were received from Importers to be allowed to remove various foodstuffs from the district of the Port of London without examination by your Officers, on the understanding that the goods would be examined and dealt with under the supervision of the Medical Officer of Health of the district to which the goods were removed.



The permission asked for was given in respect of the following foodstuffs :—

For removal to the City of London—

20,272 bags of ox-tongues.  
266 pig-carcases.  
3,296 boxes of boneless beef.  
97 cases of damaged macaroni.  
478 crates of ox-kidneys.

For removal to the Metropolitan Borough of Bermondsey—

6,140 bags of ox-tongues.  
429 bags of damaged peas.  
1,000 bags of damaged sago flour.  
170 cases of damaged macaroni.  
9,000 bags of damaged flour.  
123 cwts. 2 qrs. 20 lbs. damaged wheat.

For removal to the Metropolitan Borough of Finsbury—

29,757 bags and cases of ox-tongues.

For removal to the Metropolitan Borough of Lambeth—


2,900 boxes of damaged butter.


For removal to the Metropolitan Borough of Stepney—


17,419 cases of tinned sardines.  
414 cases of tinned crayfish.  
443 bags of damaged flour.

#### ACAJOU ("CASHEW") NUTS.

In July last the undermentioned goods arrived in the Port of London from Bombay :—

100	cases of "Cashew" nuts,	mark J K.
100	" " " " "	" S D.
100	" " " " "	" 

The importers gave instructions for the goods marked J K and S D to be sampled and tared, but no such instructions were given in respect of the 100 cases marked  as these had been already sold to a margarine factor.

Fifteen cases of each mark J K and S D were sampled and found to contain "cashew" nuts, but the 100 cases marked  were, on examination, found to contain an admixture of nux vomica beans.

The cases found to contain the nux vomica beans were dealt with by being sifted to remove all dust and refuse, and the material garbled in such a way that only recognisable portions of "cashew" nuts were retained for human consumption.

As a result of the sifting and garbling, 42 lbs. of nux vomica beans and 3 bags of siftings were removed from the cases as unfit for human consumption.

The matter was reported to the Local Government Board.

I have to acknowledge the assistance rendered to this Authority by the Surveyor of His Majesty's Customs and Excise at London Dock, who brought the goods to the notice of one of your Food Inspectors.

## SHELL-FISH.

I record below the confirmation of the Orders which were recommended by your Worshipful Committee and made by the Port Sanitary Authority on November 16th, 1916, and were the subject of appeal to and enquiry by the Local Government Board.

The chief points in the appeal concerned the time over which oysters from a foul laying were to be submitted to cleansing, and the question as to whether winkles from such a laying might not be boiled by the salesman rather than by the distributor, without any relaying and with safety to the public.

Shortly, your requirements demanded that oysters and other shell-fish, including winkles, should be relaid in pure water for one month, with the proviso that winkles and cockles, if boiled for fifteen minutes before distribution for sale, need not be subject to relaying.

## PUBLIC HEALTH (SHELL-FISH) REGULATIONS, 1915.

DECISION OF APPEAL AGAINST PROHIBITION ORDERS. PORT OF LONDON.

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

To the Kent and Essex Sea Fisheries Committee.

And to all others whom it may concern.

WHEREAS the Mayor, Aldermen and Commons of the City of London, in Common Council assembled being the Port Sanitary Authority for the Port of London, duly made, on the 16th day of November, 1916, two Orders (hereinafter referred to as "the Prohibitory Orders") under the Public Health (Shell-Fish) Regulations, 1915 (hereinafter referred to as "the Regulations"), prohibiting, subject as therein mentioned, the distribution for sale for human consumption of shell-fish brought from certain layings (specified in the Prohibitory Orders) in the estuary of the River Thames, within the area of jurisdiction of the said Port Sanitary Authority ;

And whereas the Kent and Essex Sea Fisheries Committee, being interested in the layings referred to in the Prohibitory Orders, appealed to Us, the Local Government Board, against the Prohibitory Orders by giving notice of Appeal to Us in accordance with Article XI. of the Regulations ; and We appointed an Officer to hear the Appeal, and Report has been made to Us thereon :

NOW THEREFORE, in pursuance of Our powers in that behalf, We hereby Confirm the Prohibitory Orders.

Given under the Seal of Office of the Local Government Board this fifth day of March, in the year One thousand nine hundred and eighteen.

W. HAYES FISHER,  
*President.*

WALTER T. JERRED,  
*Assistant Secretary.*



It is noticeable that these are referred to as "Prohibitory Orders," but they do not in fact prevent the sale of shell-fish taken from polluted foreshores if the food be properly dealt with and rendered harmless.

Pending appeal and the confirmation the Orders were operative.

An Order was issued in Liverpool, dated 9th January, 1918, in which the terms and proviso were closely in accordance with those put forward in 1916 by the Port Sanitary Authority and recently confirmed by the Local Government Board, except that the relaying period is fixed at "at least two weeks" instead of one month.

The lesser period of two weeks would appear to be of acceptable duration for the relaying of shell-fish brought from a polluted area.

The Local Government Board have issued special regulations with regard to certain shell-fish layings, of which I bring the following chief requirements to the notice of your Worshipful Committee for comparison with Orders issued in the district of the Port of London Sanitary Authority :—

OYSTERS.—To remain in the place of cleansing for at least fifteen days.

COCKLES, MUSSELS and BUTTERFISH.—All distribution for sale prohibited unless and until they have been subjected to a process of sterilisation by steaming under pressure in a suitable apparatus for at least six minutes.

BUTTERFISH is an eel of salt or brackish water habitat.

Your Worshipful Committee will remember that in drawing up Orders comparable to these special regulations, objection was taken to the separation of shell-fish into categories as unprovided for in the 1915 regulations, and conformably the Order was made to include all kinds of shell-fish. A proviso was, however, added that sterilised cockles and winkles were outside the Order as to relaying.

It will be noted that the special regulations referred to above separate the categories of shell-fish and provide differing treatment, and include fish which, like shell-fish, is dangerous if taken from a polluted area; and that the more ready cleansing of oysters than other shell-fish by relaying, is recognised in the minimum relaying time required, namely, fifteen days.

TABLE XXIX.

GENERAL SUMMARY, and Analysis, of the Sanitary Inspections of Vessels, &c., in the Port of London, for the year ended 31st December, 1918.

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.	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 and seaworthy, 31st December, 1918.	New Barges condemned.	Use discontinued.	No. in District 31st December, 1918.			
7281	45	733	1081	14	52	947	8	108	359	7	12	738	145	8126	41	399	4425	4	143	205	26	4	5590	21	518	—	—	—	—	—				
Total Inspections to 31st December, 1917 -															1,194,663																			
Total Inspections from 1st January to 31st December, 1918 —																																		
Foreign - - -															8,362																			
Coastwise - - -															1,306																			
Inland Navigation -															13,494																			
Premises on shore -															5,590																			
															<u>28,752</u>																			
Total - - -															<u>1,223,415</u>																			
Cleansing of Crew's Quarters, &c. :—																																		
Total to 31st December, 1917 - -															78,387																			
Total No. of Vessels from 1st January to 31st December, 1918 - -															1,496																			
Total - - -															<u>79,883</u>																			
Number of vessels inspected :—																																		
In the Launches—																																		
“ Lady Truscott ” - - -															3,491																			
“ David Burnett ” - - -																																		
“ George Briggs ” - - -															4,141																			
Total - - -															7,632																			
In the Docks, &c. - -															15,530																			
Total - - -															<u>23,162</u>																			
															Docks and River.										No.									
															St. Katharine's - - - - -										1,172									
															London - - - - -										1,771									
															Regent's Canal - - - - -										996									
															Millwall - - - - -										1,256									
															West India - - - - -										1,699									
															Poplar - - - - -										384									
															East India - - - - -										1,226									
															Victoria - - - - -										2,397									
															Royal Albert - - - - -										1,858									
															Commercial - - - - -										1,628									
															Tilbury - - - - -										1,143									
															Gravesend District - - - - -										—									
															River—*Upper District - - - - -										3,066									
															*Middle „ - - - - -										1,075									
															*Lower „ - - - - -										3,491									
															Total vessels - - - - -										23,162									
															Shore premises - - - - -										5,590									
															Total - - - - -										<u>28,752</u>									
*Upper District extends from Greenwich to Teddington.																																		
*Middle „ „ „ Greenwich to Erith.																																		
*Lower „ „ „ Erith to outer limits of the Port of London.																																		

\*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—	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	Yearly average for the 10 years ending 31st December, 1918.
“Foreign” - - -	14,887	13,710	14,015	15,177	14,425	13,539	12,472	10,244	8,365	8,362	12,519.6
“Coastwise,” “Inland Navigation,” and other Inspections -	25,469	24,857	24,009	28,035	24,501	24,475	22,237	19,634	20,881	20,390	23,448.8
Total - - -	40,356	38,567	38,024	43,212	38,926	38,014	34,709	29,878	29,246	28,752	35,968.4



TABLE XXX.

NUMBER OF NUISANCES ON **VESSELS** REPORTED AND DEALT WITH during the year ended 31st December, 1918.

DESCRIPTION OF NUISANCES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
<b>SMOKE NUISANCES :—</b>													
Number of complaints received ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of recurrences reported ...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>OFFENSIVE CARGOES (Bye-laws) :—</b>													
Number of Infringements reported ...	...	1	...	3	1	2	...	...	...	...	...	...	7
<b>STRUCTURAL AND OTHER DEFECTS :—</b>													
Ventilation ...	4	5	3	5	4	1	1	5	5	11	4	11	59
Lighting ...	7	3	1	3	3	...	1	5	7	6	2	10	48
Heating ...	3	1	1	1	...	...	1	...	1	2	...	2	12
Bare iron in crew's quarters ...	1	...	...	1	...	...	...	...	1	2	...	2	7
Leaky decks, hawse-pipes, cable casings, &c. ...	6	2	2	3	1	2	5	2	3	7	3	8	44
Defective bulkheads and floors ...	...	...	...	...	...	3	2	...	3	...	2	1	1
Sanitary conveniences ...	...	1	...	1	2	2	3	...	...	5	...	...	14
Ship's gear or stores stowed in crew's quarters ...	2	2	...	...	...	1	...	...	1	1	...	...	7
Foul bilges and peaks ...	...	...	...	...	...	2	2	...	1	...	...	2	7
Storage of drinking water (dirty or defective tanks) ...	...	1	...	...	...	...	1	1	...	...	...	2	5
Dirty quarters ...	123	140	134	154	119	116	97	88	119	140	112	154	1,496
Accumulation of offensive matter ...	...	...	...	...	...	2	...	...	...	...	...	...	2
Miscellaneous Nuisances ...	5	3	1	4	3	2	6	1	2	3	3	3	36
Totals ...	151	159	142	175	133	133	119	102	143	177	126	195	1,755
<b>Total number of vessels on which structural alterations were ordered</b>													
	11	8	4	5	7	5	9	6	9	15	7	13	99
<b>Total number of vessels on which structural alterations were reported as carried out</b>													
	7	5	2	...	4	3	3	3	1	4	8	...	40

NUMBER OF NUISANCES IN THE RIVER REPORTED AND DEALT WITH during  
the year ended 31st December, 1918.

[illegible]

TABLE XXXI.

NUMBER OF NUISANCES ON **SHORE PREMISES** REPORTED AND DEALT WITH  
during the year ended 31st December, 1918.

DESCRIPTION OF NUISANCES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
<b>SMOKE NUISANCES:—</b>													
Number of complaints received ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of recurrences reported ...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>STRUCTURAL AND OTHER DEFECTS:—</b>													
Ventilation ...	2	...	...	1	1	...	1	...	...	...	...	...	5
Lighting ...	1	...	...	...	...	...	1	...	...	...	...	...	2
Heating ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dilapidations ...	1	2	...	1	1	...	1	1	...	...	...	...	7
Sanitary conveniences ...	2	2	...	...	1	1	1	...	...	...	1	3	11
Water supply ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dirty premises ...	43	49	37	38	38	29	30	35	55	69	45	50	518
Accumulation of offensive matter...	...	2	...	...	...	...	1	...	...	1	...	...	4
Drainage ...	1	...	...	3	...	...	...	...	...	...	...	1	5
Foul cesspits, latrines, &c. ...	...	2	...	...	...	...	...	...	...	...	...	...	2
Miscellaneous nuisances ...	1	1	...	2	1	1	2	2	3	...	1	1	15
Totals ...	51	58	37	45	42	31	37	38	58	70	47	55	569
Number of shore premises on which structural alterations were ordered ...	3	2	...	2	2	...	2	1	...	...	1	4	17
Number of shore premises on which structural alterations were reported as carried out... ..	1	2	2	1	1	...	1	...	...	1	...	1	10

## SUMMARY.

	Smoke.	Structural.	Offensive Cargoes.	Drainage, Sewage, &c.	Miscellaneous.	Totals.
<b>Number of Nuisances reported—</b>						
(a) On vessels ...	...	207	7	...	1,541	1,755
(b) On shore ...	...	25	...	7	537	569
(c) On the River ...	...	...	...	...	...	...
Totals ...	...	232	7	7	2,078	2,324
<b>Number of written Intimations—</b>						
(a) On vessels ...	...	76	7	...	15	98
(b) On shore ...	...	9	...	1	10	20
(c) On the River ...	...	...	...	...	...	...
Totals ...	...	85	7	1	25	118
<b>Number of Statutory Notices—</b>						
(a) On vessels ...	...	...	...	...	...	...
(b) On shore ...	...	...	...	...	...	...
(c) On the River ...	...	...	...	...	...	...
Totals ...	...	...	...	...	...	...



TABLE XXXII.  
SANITARY WORKS.

PART I.

Date completed.	Works.
1918.	
April 4	Millwall Dock, B2 Shed—Provision of sanitary conveniences at Military Sack Store.
May 11	Ditto—Construction of drainage, &c., for M2 Shed.
„ 18	Ditto—Construction of drainage for new Railway and Grain Offices.
July 15	Surrey Commercial Dock—Construction of drainage for Centre Pond Cottage.
„ 16	Regent's Canal Dock—Construction of drainage for new Offices, North Quay.
„ 16	Ditto—New closets, &c., for W.D. Salvage Depot.

PART II.

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

Date Plan submitted.	Works.
1918.	
April 27	London Dock—Proposed drainage for West Quay Show Floor.
May 10	Royal Albert Dock—Proposed latrine at the rear of Messrs. Scrutton's Offices.
Aug. 28	Ditto—Proposed drainage, &c., for Messrs. Lester and Perkins' new Offices.
Nov. 14	Ditto—Proposed removal of latrines, Dry Dock Equipment.*

\* Temporary measure only.

NUISANCES.

A complaint was received on the 2nd March from the Port of London Authority, supported by reports from the Authority's Police Officer, of a nuisance involving damage to some foodstuffs by the use of a closet on a vessel lying in the Surrey Commercial Dock, the closet being cleansed while a barge laden with flour was lying alongside.

With the question of damage to the flour the Port Sanitary Authority had naturally nothing to do, but on the question of the use of closets on vessels while lying in the Docks this is a matter which has the constant attention of your Officers, and is prohibited when accommodation is available on shore within a convenient distance from the vessel.

In the present case appropriate action was taken to prevent any recurrence of the nuisance.

TABLE XXXIII.

## BYE-LAWS—OFFENSIVE CARGOES.

Seven 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.
1918.		
Feb. 22	Lighter "Pansy" -	Loaded with an offensive cargo not properly and securely covered so as to prevent any nuisance arising therefrom and also loaded above the coamings.
April 4	Lighter "C.I.V." -	Ditto Ditto.
" 4	Lighter "Hettie" -	Ditto Ditto.
" 25	Lighter "Taw" -	Ditto Ditto.
May 10	Lighter "Albion" -	Ditto Ditto.
June 14	Lighter "C.I.V." -	Ditto Ditto.
" 28	Lighter "Fred" -	Not thoroughly cleansed and deodorised within six hours after the discharge therefrom of an offensive cargo.

## FUMIGATING APPARATUS, BARGE "THOMAS."

The fumigating plant was used on 16 occasions during the year.

TABLE XXXIV.

Date.	No. of Vessels.	Capacity in Cubic Feet of Space Fumigated.
1918.		
February - - -	1	418,100
" - - -	1	424,200
" - - -	1	90,000
" - - -	1	152,060
" - - -	1	540,730
" - - -	1	328,000
" - - -	1	463,130
" - - -	1	401,840
June - - -	1	617,500
August - - -	1	458,758
September - - -	1	611,720
" - - -	1	161,500
" - - -	1	470,915
November - - -	1	599,715
December - - -	1	805,470
" - - -	1	196,486
Totals - - -	16	6,740,124

The largest capacity fumigated on any one ship was 805,470 cubic feet.



## HULK "HYGEIA."

The hulk "Hygeia" was docked at Messrs. Mills and Knight's slipway on May 16th and undocked on May 30th after extensive repair.

The thorough examination of the whole bottom entailed in the light caulking of every seam below the water line and the affixing of battens over felt to these and the butts, showed several places which required graving, and treenails which required boring out and renewal. There were also many minor repairs needed in the upperworks.

The result has hitherto proved satisfactory. After the seams had taken up, on refloating, the leakage was found to be reduced to a regular and negligible amount.

The time at which the hulk gave out was one of the greatest difficulty for getting the necessary work done or attempted, and on the other hand her replacement was found to be impossible. She is now, as far as can be foreseen, good for some years of useful work.

## CANAL BOATS ACTS.

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 ended 31st December, 1918.

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).

Hay's Dock.

St. Saviour's Dock.

Part of the Grand Surrey Canal within the Surrey Commercial Docks.

Deadman's Dock.

Deptford Creek (River Ravensbourne).

Dartford Creek (Rivers Cray and Darent).

The entrance to the Gravesend Canal.

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.  
 Bow Creek (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	-	-	-	230 <i>l.</i> per annum.
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##### MIDDLE DISTRICT.

Greenwich to Erith.

Inspector Lambe	-	-	-	230 <i>l.</i> per annum.
-----------------	---	---	---	--------------------------

##### LOWER DISTRICT.

Erith to seaward limits of the Port of London  
 (including part of the River Medway).

Inspector Berry	-	-	-	169 <i>l.</i> per annum.
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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	-	-	-	250 <i>l.</i> per annum.
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##### EASTERN DISTRICT.

Royal Victoria Dock.  
 East India Dock.

Inspector Burr	-	-	-	250 <i>l.</i> per annum.
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Royal Albert Dock.

Inspector Wetjen	-	-	-	250 <i>l.</i> per annum.
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##### WESTERN DISTRICT.

London Dock.  
 St. Katharine Dock.  
 Regent's Dock.

Inspector Hopkins	-	-	-	250 <i>l.</i> per annum
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Surrey Commercial Dock.

Inspector Elward	-	-	-	208 <i>l.</i> per annum.
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## GRAVESEND DISTRICT.

Tilbury Dock.

Left Shore, from Purfleet down.

Right Shore, from Erith down.

Inspector Massie - - 201/. 10s. per annum.

(2) The total number of inspections for the year was 188, representing a net number of 109 boats. The remainder, 79, represents repeated visits by Inspectors of this Authority.

The number of boats not conforming to the Acts and Regulations was 39 (inspected on 48 occasions, or 21·27 per cent. of the total inspections, the percentage for the previous five years being 14·70 per cent.).

In addition to the above, 17 boats were at the time of visit found with the cabin doors locked, there being no persons 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 :—

1918.

Feb.	15	-	-	" Whitehaven."
March	22	-	-	" Ready " (New boat, registered Port of London).
April	18	-	-	" Richard."
"	27	-	-	" Wandle."
Sept.	30	-	-	" Constant."
Nov.	26	-	-	" Darnley."

## NOTIFICATION OF CHANGE OF MASTER.

Nil.

## CERTIFICATES.

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

1918.

Jan.	21	* " Nellie "	-	-	-	Registered Brierley Hill, No. 220.
"	21	* " Nora "	-	-	-	" " " No. 239.
April	10	" Avon "	-	-	-	" Brentford, No. 341.
"	17	" Emily "	-	-	-	" Berkhamsted, No. 319.
June	12	" Searchlight "	-	-	-	" Port of London, No. 432.
July	1	" Emily "	-	-	-	" Berkhamsted, No. 319.
"	18	* " Kuroki "	-	-	-	" Port of London, No. 428.
"	18	" Colne "	-	-	-	" Berkhamsted, No. 333.
"	30	" Emily "	-	-	-	" Berkhamsted, No. 319.
Aug.	26	* " Providence "	-	-	-	" Brentford, No. 282.
Oct.	7	" Northern "	-	-	-	" Paddington, No. 245.
Nov.	21	* " Sunbeam "	-	-	-	" Brentford, No. 348.

# CERTIFICATE NOT IDENTIFYING OWNER WITH BOAT.

1918.

Aug.	21	"Reliance"	-	-	Registered Guildford, No. 1.
Nov.	12	"	-	-	" " "

## MARKING, &c.

1918.

Feb.	27	* "Betsy"	-	-	Registered Brentford, No. 340.
April	10	"	-	-	" " "
July	23	* "Humber"	-	-	Registered Berkhamsted, No. 334.
Nov.	21	* "Sunbeam"	-	-	" Brentford, No. 348.

## OVERCROWDING.

1918.

Sept.	6	"Rose"	-	-	Registered Brentford, No. 367.
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## SEPARATION OF THE SEXES.

Nil.

## CLEANLINESS.

1918.

April	10	"Avon"	-	-	Registered Brentford, No. 341.
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## PAINTING.

Nil.

## VENTILATION.

1918.

Sept.	19	"Mole"	-	-	Registered Berkhamsted, No. 334.
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## DILAPIDATION.

1918.

Jan.	26	"Sarah"	-	-	Registered Berkhamsted, No. 408.
Feb.	27	* "Betsy"	-	-	" Brentford, No. 340.
April	10	"Avon"	-	-	" Brentford, No. 341.
"	10	* "Betsy"	-	-	" Brentford, No. 340.
May	14	"Leeds"	-	-	" Berkhamsted, No. 273.
June	5	"Sarah Ann"	-	-	" Port of London, No. 480.
"	25	* "Betsy"	-	-	" Brentford, No. 340.
July	17	"Medway"	-	-	" Brentford, No. 347.
"	24	"Reliance"	-	-	" Berkhamsted, No. 441.
"	20	"Windsor"	-	-	" Uxbridge, No. 448.
Aug.	16	"Eric"	-	-	" Brierley Hill, No. 231.
"	16	"Vera"	-	-	" " " No. 236.
"	31	"Sarah Ann"	-	-	" Port of London, No. 480.
Sept.	6	"Richard"	-	-	" Reading, No. 49.
"	6	"Rose"	-	-	" Brentford, No. 367.
"	28	"Trent"	-	-	" Uxbridge, No. 392.
"	30	"Prudence"	-	-	" Ware, No. 38.
"	30	"Constant"	-	-	Unregistered.
Nov.	21	"Sunbeam"	-	-	Registered Brentford, No. 348.

## REMOVAL OF BILGE WATER.

Nil.

## PROVISION OF WATER CASK.

1918.

April	10	"Avon"	-	-	Registered Brentford, No. 341.
July	18	"Colne"	-	-	" Berkhamsted, No. 333.



## 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 48 on 39 boats, inspected on 48 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 36, and the number which has been certified as attended to was 9.

## 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, 1918, there were 270 boats on the Register :—

Propelled by Tug and Oars	-	-	-	252
„ „ Steam	-	-	-	15
„ „ Motors	-	-	-	3
Total	-	-	-	<u>270</u>

(9) One boat was registered in 1918. This was a new boat.

## 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
1917	-	118	41	134	3·26	34·74
1918	-	109	22	74	3·36	20·18

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 ENDED 31ST DECEMBER, 1918.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	TOTAL FOR THE YEAR				
														1913.	1914.	1915.	1916.	1917.
New boats registered ... ..	...	...	...	1	...	...	...	...	...	...	...	...	1	3	3	7	4	2
Registration owing to structural alterations ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Registration for other purposes ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1	2	...
No. of Visits of Inspection ...	16	21	11	21	12	16	22	20	18	8	16	7	188	576	571	413	280	280
Conforming to Acts and Regulations ... ..	13	19	10	16	11	12	14	15	12	7	13	7	149	506	473	328	228	225
Infringements in respect to:—																		
Registration ... ..	...	1	1	2	...	...	...	...	1	...	1	...	6	4	20	23	9	8
Notification of change of master ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Absence of certificate ... ..	2	...	...	2	...	1	4	1	...	1	1	...	12	17	18	19	10	19
Certificate not identifying owner with boat ... ..	...	...	...	...	...	...	...	1	...	...	1	...	2	4	4	1	2	1
Marking, &c. ... ..	...	1	...	1	...	...	1	...	...	...	1	...	4	7	14	6	9	6
Overcrowding ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	1	...	1
Partition separating sexes ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Males over age ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Females over age ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cleanliness ... ..	...	...	...	1	...	...	...	...	...	...	...	...	1	11	14	10	4	...
Painting... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	17	23	12	14	...
Ventilation ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	6	6	7	3	2
Dilapidation ... ..	1	1	...	2	1	2	3	3	5	...	1	...	19	39	52	37	22	25
Removal of bilge water ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	...	2	...
Without pump ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Refusal to admit Inspector ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No proper water vessel ... ..	...	...	...	1	...	...	1	...	...	...	...	...	2	8	7	8	7	2
Without double bulkhead ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Notification of infectious disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Detained for cleansing ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Proceedings taken... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...
Cautions given ... ..	2	2	1	5	1	4	7	5	6	1	2	...	36	59	79	69	39	34
" attended to ... ..	...	2	...	...	...	...	1	2	...	...	...	4	9	55	81	54	38	21
Total registered by Port Sanitary Authority since 1887 ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancelled ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Actual number on the Register, 31st December, 1918 ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Registered for 676 persons.  
Carrying males 241.  
females 70.  
children 74.



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

Dr.

REVENUE ACCOUNT for the Year ended 31st March, 1919.

Cr.

	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
To Salaries of Medical Officers and Clerk ... ..	3,016	2	1				By Proceeds of Sale of Unsound Food (for amounts paid to Consignees see contra) ... ..	2,846	1	9			
„ Payments to Locum Tenens ... ..	2	2	0				„ Sundry Fees ... ..	704	6	0			
„ Wages ... ..	6,174	14	4				„ Refund of proportion of Medical Officer's Salary, &c., by Rochester Port Sanitary Authority ... ..	100	0	0			
„ Contributions to Officers' Pension Funds... ..	338	10	1								3,650	7	9
„ Ditto for Pensions ... ..	128	9	11				„ Balance to General Revenue Account ... ..	13,164	3	6			
„ Pensions ... ..	476	13	4										
„ Fidelity Guarantee ... ..	1	16	0										
„ Employers' Liability under Workmen's Compensation Acts ... ..	27	12	6										
„ National Health Insurance ... ..	13	12	7										
„ Officers' Uniforms ... ..	170	14	5										
„ Expenses of Steam Launches and Hulk ... ..	2,234	11	4										
„ Expenses of Offices at Greenwich, including Rent, Rates, Taxes, Lighting, Heating and Repairs ... ..	139	7	5										
„ Expenses of Medical Officer, including Office Expenses, Postage and Petty Cash Charges ... ..	403	18	3	13,128	4	3							
„ Hospital at Denton, viz. :—													
Expenses of Nursing Staff ... ..	184	3	2										
Rent, Rates, Taxes and Insurance ... ..	99	5	1										
Maintenance and Repairs ... ..	39	7	4										
Maintenance of Patients, &c. ... ..	120	6	10										
Miscellaneous Expenses, including Coal, Stores, and Telephone ... ..	228	14	0	671	16	5							
„ Printing and Stationery ... ..				36	4	6							
„ Expenses re Epidemic precautions, Examination of Rats, and Analysis of Food Samples ... ..				549	5	7							
„ Proceeds of Unsound Food paid to Consignees (for amounts received see contra) ... ..				2,168	7	5							
„ Expenses of Inspection of River and Canvey Island ... ..				75	0	0							
„ Disinfectants ... ..				92	3	4							
„ Committee Allowance ... ..				75	0	0							
„ Miscellaneous Expenses ... ..				18	9	9							
				£16,814	11	3					£16,814	11	3

CHAMBER OF LONDON,  
28th June, 1919.

Charles Skipper and East, Printers, 49, Great Tower Street, E.C.3.

