

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

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69.

PORT OF LONDON SANITARY COMMITTEE.

ANNUAL REPORT

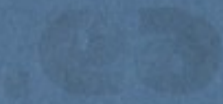
OF THE

MEDICAL OFFICER OF HEALTH,

To 31st DECEMBER, 1913.



Presented 7th May, 1914.



REPORT OF THE BOARD OF HEALTH

ANNEX

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1907

NEW YORK: 1908

REPORT,

FOR THE YEAR ENDED 31ST DECEMBER, 1913,

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

PORT OF LONDON.

BY

HERBERT WILLIAMS, M.D., M.D. (State Medicine), London
University, M.R.C.S.Eng., L.R.C.P.Lond., D.P.H.Camb.,

MEDICAL OFFICER OF HEALTH, PORT OF LONDON,
MEDICAL INSPECTOR FOR PURPOSES OF THE ALIENS ACT, 1905, PORT OF LONDON,
LECTURER ON PORT HYGIENE, LONDON SCHOOL OF TROPICAL MEDICINE,
FELLOW AND MEMBER OF COUNCIL, ROYAL SANITARY INSTITUTE,
FELLOW OF THE INCORPORATED SOCIETY OF MEDICAL OFFICERS OF HEALTH,
FELLOW OF THE ROYAL GEOGRAPHICAL SOCIETY.



LONDON :

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

1914.

REPORT

on the

REPORT OF THE

COMMISSION

...

...

...



BOWATER, *Mayor.*

A Common Council holden in the Chamber of
the Guildhall of the City of *London*, on
Thursday, the *7th* day of *May*, 1914.

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, 1913; which was read.

And a Motion being made and Question put, That this Court doth agree with the Committee in their said Report, the same was resolved in the Affirmative.

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. Herbert Williams, the Medical Officer of Health for the Port of London, for the year ended the 31st December, 1913, which Report contains a full and detailed account of the work done in the Port during that period by the Medical Officers and Inspectors.

Your Committee have had under consideration the subject of existing safeguards for the protection of this country from the introduction of Small-pox. It is a fact that there is in this country a large and increasing number of persons unprotected by vaccination, or revaccination, and in the view of your Committee, powers should be given to the Port Sanitary Authorities to visit and inspect all persons on board ships arriving from ports at which Small-pox is known or suspected to exist, and situated within 14 days steaming of ports in this country—with powers and penalties similar to those at present in existence under the Orders of the Local Government Board, relating to Plague, Yellow Fever and Cholera.

Your Committee made representations accordingly to the Local Government Board, but the Board did not consider, on the evidence adduced, that the suggested course would be justified. This is a matter for regret, as at present a loophole undoubtedly exists by which Small-pox may be introduced into this country. During the year, 19 cases were reported on vessels arriving, and 9 cases were removed to and treated in the Port Sanitary Hospital.

The question of Plague amongst rats in the docks has continued to receive the serious attention of your Committee, and a conference took place at the Local Government Board between the representatives of the Board, the Port of London Authority, and the Port Sanitary Authority, when suggestions were made for the better protection of premises in the docks from invasion by rats, and for other precautionary measures in connection therewith. Some interesting particulars were given of the measures taken in San Francisco, with the cost of the same in dealing with an epidemic of Plague, and the Medical Officer of Health pointed out the serious interference with the trade of London should human Plague cases occur in London.

During the year, no less than 4,125 rats were examined on behalf of your Committee, for evidence of plague bacillus, and 7 rats were found to be "infected."

The total number of cases of infectious disease reported and dealt with during the year is much larger than usual, due to the notification of cases of tuberculosis under the new Regulations—no less than 158 cases of tuberculosis of all kinds having been notified during the year.

An outbreak of scarlet fever occurred on one of the Training Ships in the River in September. Although 27 cases of the disease occurred, the outbreak did not assume the character of an epidemic.

The sanitary condition of the crews' quarters on ships continues to receive careful attention, and in the Medical Officer's Report comparisons have been drawn between the existing provisions of the Merchant Shipping Act and projected regulations on this subject by the Commonwealth Government of Australia and by the Norwegian Government.

The subject of deaths of seamen from disease as shown by returns furnished by the Registrar-General of Shipping and Seamen to the Board of Trade, is also dealt with, and attention is drawn to the large proportion of deaths from diseases of the respiratory system among this class of men.

The inspection of food is imposing upon your officers an increasing amount of work and responsibility, the substance of which is set out in various tables attached to this Report. The total approximate weight of goods destroyed during the year was not less than 2,458 tons. In connection with this subject, the examination of various animal carcasses and parts, from abroad, for the detection of the presence of lesions due to disease or parasites, has occupied a great deal of attention, and actinomycosis in ox-tongues has been the subject of careful consideration, and has been jointly reported upon by the Medical Officers of Health of the City and of the Port, to your Honourable Court. A fresh duty has arisen by the examination and certification of meat exported to certain foreign countries.

Information is also given in the Report on the subject of the night population in the Port of London as shown by the Census of 1911.

Of the steam launches, the two larger ones are continuing to work satisfactorily. The "Denton" has been disposed of, and a motor launch has been built for work in the upper reaches of the river where the shallow draught and increased speed of this type of vessel makes for greater efficiency.

Your Committee have to report with regret the loss by death in November, after a long illness, of Inspector W. G. Romeril, who at the time of his death occupied the position of senior Sanitary Inspector.

The Annual Report on Canal Boats required by the Canal Boats Act is appended to this Report.

In accordance with the Order of your Honourable Court, an account of Receipts and Expenditure in connection with the Port of London Sanitary Authority for the year ended the 31st December last, is appended for the information of the Court.

All which we submit to the judgment of this Honourable Court. Dated this fifth day of May, 1914.

EDWARD HUGHES.

T. ROBINSON.

WALTER H. KEY.

S. DAVID COATES.

F. M. STAFFORD.

STEPHEN H. M. KILLIK.

A. JERROLD-NATHAN.

GEORGE BRIGGS.

H. PERCY MONCKTON.

H. M. GAYDON.

JAMES WANN.

A. C. STANLEY STONE.

J. W. BENINGFIELD.

EDWARD ANSTED.

W. FORTESCUE.

OFFICES

OF THE

Port of London Sanitary Authority

AND

Medical Officer of Health

AT

51, KING WILLIAM STREET,

GREENWICH, S.E.

TELEGRAPHIC ADDRESS - "MEDOFF, GREEN," LONDON.

TELEPHONE No. - - - NEW CROSS 36.

BOARDING STATIONS.

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

RIVER MEDWAY - - - GARRISON POINT, SHEERNESS.

HOSPITAL FOR INFECTIOUS DISEASES

AT

DENTON, NEAR GRAVESEND.

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

Ditto (MEDICAL OFFICER IN CHARGE) " 86

PORT OF LONDON SANITARY COMMITTEE.

GEORGE BRIGGS, Esq. (*Chairman*), Cripplegate Within.

ALDERMEN.

Sir WALTER WILKIN, K.C.M.G.	Sir T. VANSITTART BOWATER, Knt.
Sir JOHN POUND, Bart.	Sir CHARLES CHEERS WAKEFIELD, Knt.
Sir WILLIAM PURDIE TRELOAR, Bart.	Sir WILLIAM HENRY DUNN, Knt.

COMMONERS.

RICHARD GREEN, Esq., J.P.	Aldersgate.
Mr. FREDERICK GEORGE MELLOWS	Aldgate.
Mr. CLARENCE HAYDEN	Bassishaw.
Mr. EDWARD ANSTED	Billingsgate.
Mr. THOMAS ROBINSON	} Bishopsgate.
Mr. ARTHUR CARLYON STANLEY STONE	
Major CHARLES CLEMENT HODGES	Bread Street.
Mr. SAMUEL BEAL	Bridge.
Mr. STEPHEN HENRY MOLYNEUX KILLIK	Broad Street.
Mr. GEORGE EVEREST ELLIS	Candlewick.
Mr. JAMES WANN	Castle Baynard.
Col. JOHN WILLIAM BENINGFIELD	Cheap.
FRANK BRINSLEY-HARPER, Esq., J.P.	Coleman Street.
Mr. EDWARD HUGHES	Cordwainer.
Mr. THOMAS GOLDNEY	Cornhill.
Mr. GEORGE THOMAS SIRRELL TRANTER	Cripplegate Without.
Mr. ALBION THOMAS SNELL... ..	Dowgate.
Mr. JOHN BRRAR WILD	N.S. Farringdon Within.
WALTER FORTESCUE, Esq., J.P.	S.S. Farringdon Within.
Mr. GEORGE LAVINGTON	N.S. Farringdon Without.
Mr. ALFRED JERROLD-NATHAN	S.S. Farringdon Without.
Mr. HENRY MARTIN GAYDON	Langbourn.
Mr. HERBERT ROPER BARRETT	Lime Street.
LEWIS MICHAEL MYERS, Esq., Deputy	Portsoken.
Mr. EDGAR EDWIN BOND	Queenhithe.
WILLIAM WALTER GREEN Esq., J.P.	Tower.
Col. VICKERS DUNFEE	Vintry.
Mr. H. PERCY MONCKTON	Walbrook.

Corporation Representatives on the Port of London Authority and Thames Conservancy Board (*ex-officio* Members of the Committee) :—

Mr. JOHN ROBERT PAKEMAN (late Chairman).
 Mr. JAMES WILLIAM DOMONEY, L.C.C.
 SPENCER WILLIAM MORRIS, Esq.
 Mr. HORACE SPENCER DOVE.

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STAFF.

LIST OF OFFICERS FORMING THE STAFF OF THE PORT OF LONDON
SANITARY AUTHORITY, 31ST DECEMBER, 1913.

Office.	Name of Officer.	Date of Appointment
MEDICAL OFFICER OF HEALTH	Herbert Williams, M.D.Lond., M.R.C.S., L.R.C.P., D.P.H. Camb.	June, 1901.
ASSISTANT MEDICAL OFFICERS—		
GRAVESEND	W. M. Willoughby, B.A., M.D., B.C., D.P.H.Camb.	May, 1901.
	J. S. Warrack, M.A., M.D., C.M. Aberdeen, D.P.H.Camb.	April, 1903.
	W. R. Betenson, M.R.C.S., L.R.C.P., Lond., D.P.H. Lond.	July, 1907
	A. Kidd, M.R.C.S., L.R.C.P., Lond., D.P.H.	1909.
SHEERNESS	E. V. Legge, M.A., M.D., B.C., B.A.O., L.M. Dublin.	1909.
GREENWICH OFFICES—		
Clerk	W. J. Albrow	March, 1890.
1st Assistant	E. A. Sorrell	October, 1894.
2nd ditto	W. C. Barham	June, 1903.
Junior ditto	J. G. Godden	July, 1910.
Ditto	T. J. S. Cotterell	July, 1910.
Caretaker	F. Hudgell	November, 1906.
FOOD INSPECTORS	*H. Spadaccini, Cert.R.San.Inst.	July, 1898.
	*W. Anderson, Cert.R.San.Inst.	July, 1898.
	*T. W. Bailey, Cert.R.San.Inst.	July, 1901.
SANITARY INSPECTORS	*A. Garland, Cert.R.San.Inst.	May, 1894.
	*W. G. Wetjen, Cert.R.San.Inst.	August, 1898.
	*W. W. Burr, Cert.R.San.Inst.	August, 1898.
	*H. R. Hopkins, Cert.R.San.Inst.	February, 1899.
	*P. R. Lambe, Cert.R.San.Inst.	January, 1900.
	*J. H. Rolfe, Cert.R.San.Inst.	September, 1901.
	*W. Elward, Cert.R.San.Inst.	March, 1909.
	*F. J. Massie, Cert.R.San.Inst.	March, 1909.
	C. A. Shepherd, Cert.R.San.Inst.	January, 1909.
	(Vacant)	
DENTON HOSPITAL—		
Medical Officer	W. M. Willoughby, B.A., M.D., B.C., D.P.H.Camb.	November, 1908.
Nurse Matron	J. Jackson	February, 1910.
Assistant Nurse	A. A. Foggo	September, 1912.
Ditto	L. Harding	September, 1911.
Ditto	A. Densham	November, 1913.
Cook	E. Hutson	October, 1913.
Maid-servant	F. Ambrose	October, 1913.
Caretakers	W. J. Wragg	November, 1908.
	M. E. Wragg	November, 1908.
STEAM LAUNCHES—		
"LADY TRUSCOTT"—		
Master	W. Jarvis	April, 1911.
Engineer	J. A. Hardman	December, 1911.
Mate	C. Boyd	July, 1902.
Stoker	A. E. Howard	February, 1912.
"DAVID BURNETT"—		
Master	C. H. Price	October, 1913.
Engineer	G. H. Bagshaw	July, 1893.
Deckhand	J. Baulsom	March, 1913.
Stoker	C. Wilcox	December, 1911.
"CLOTRO" (Reserve).		
"GEORGE BRIGGS"—Motor Launch—		
Master	C. Strange	October, 1913.
Engineer	J. Steen	Ditto.
GREENWICH MOORINGS—		
FUMIGATING BARGE "THOMAS"—		
Stoker, &c.	W. H. Buzzel	February, 1912.
BARGE "COLLINGWOOD"—		
Watchmen	W. H. Buzzel	February, 1912.
	H. A. Clarkson	May, 1912.
GRAVESEND—		
HULK "HYGEIA"—		
Shipkeeper	I. Rogers	April, 1893.
Ditto	A. Salter	July, 1898.

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

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

TO THE WORSHIPFUL THE PORT OF LONDON
SANITARY COMMITTEE.

GENTLEMEN,

I have the honour to present herewith my Annual Report for the year 1913, being the twelfth of the series.

The total number of vessels arriving in the Port of London, from "foreign" during the year, was 9,727 at Gravesend, and 324 at Sheerness, the average for the past ten years being 9,679·2 at Gravesend, and 331·9 at Sheerness.

It is the largest number so arriving at Gravesend since the year 1906.

Of the total arrivals, 1,948 were medically inspected at Gravesend, and 268 at Sheerness.

The details of these figures are given in Tables I and II.

In Tables III and IV will be found some figures relative to Alien Immigration^r but these figures are subject to revision on publication of the complete official returns by the Home Office.

Infectious Disease is dealt with in Tables V to XXV, with details of the cases which exhibited points of public interest.

Food Inspection is now well established as an important section of the work, and in the section of this Report in which this is specially dealt with, full particulars will be found of the work done and the quantities of material dealt with.

The details of sanitary inspection are summarised in Tables XXXIV to XXXVII, and this section of the work has been well and efficiently maintained, notwithstanding the strain at times put upon these officers by the exigencies of food inspection.

The working of the Canal Boats Acts is dealt with in the usual special annual report on this subject, which is appended to this Report.

In relation to the Census of 1911, I have been able to extract some figures dealing with the population of the Port as expressed by the number of persons enumerated as residing within the Port on vessels, &c., at the time of taking the Census. Although, this population is personally a changing one, it is shown to be remarkably constant as to numbers.

A few general remarks on the Staff will be found on page 82.

The Authority has suffered the loss, by death, during the year, of their senior Sanitary Inspector, W. G. Romeril. His loss is a matter for regret, as he was an intelligent, loyal, reliable and capable officer, and had been in the service since 1892.

MEDICAL INSPECTION.

The total number of vessels arriving at Gravesend from foreign ports was 9,727, the greatest number since 1906, the average for the past ten years being 9,679. Of these 1,948, an average of 5·6 per day, required medical inspection as coming from "infected" ports. At Sheerness, of 324 arrivals from foreign, 268 were medically inspected. The total number of cases of infectious disease reported on vessels was 447, including 151 cases of pulmonary tuberculosis. Of the cases reported, 91 or 20·3 per cent. were removed to the Port Sanitary Hospital for treatment. Short notes of these cases appear under the headings of infectious disease.

SHEERNESS BOARDING STATION.

Dr. Legge is the only officer of the Authority residing at Sheerness, and was originally appointed for the duty of boarding and inspecting vessels arriving from foreign. The majority of these vessels are bound for the port of Rochester, but as the entrance to that port is through the Port of London, the onus of such inspection rests upon the Port of London Sanitary Authority, and the Port of Rochester Authority contributes annually a sum of 100*l.* towards the expenses of such inspection and the maintenance and treatment in hospital of any persons found on vessels bound for the Port of Rochester suffering from a dangerous infectious disorder, who would be removed at Sheerness and conveyed to the Port of London Sanitary Hospital at Denton. Dr. Legge is therefore constantly on duty, and no arrangements have been made for his occasional relief; he is liable to be called out at any hour of the day or night on week days, Sundays, and on holidays, whilst he has had to be in attendance at Queenborough on at least four nights a week from 6-10 p.m. examining meat. As it was found necessary to make arrangements for the examination of meat on every night in the week, and it was not possible to ask for this service from Dr. Legge, arrangements have been made for him to be relieved on two nights during the week by one of the assistant Medical Officers from Gravesend, whilst Dr. Legge is responsible for the examination on the other five nights.

Under the heading of Food Inspection, some details are given of the results of this work at Sheerness. (Page 44.)

It is now in contemplation to put into force at Queenborough, the examination of Alien Immigrants, which will mean additional work for Dr. Legge and the Assistant Medical Officers.

TABLE I.

MEDICAL INSPECTION—GRAVESEND. From 1st January to 31st December, 1913.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of foreign arrivals...	774	694	800	794	827	879	856	813	809	866	805	810	9,727
Number medically inspected	159	155	180	169	172	181	159	164	153	151	152	153	1,948
Number of passengers ...	1,588	791	2,183	1,817	1,763	1,460	1,059	822	856	289	376	352	13,356
Number of crew ...	3,379	3,569	4,561	4,889	3,792	4,143	3,416	3,776	4,019	2,825	3,764	3,886	46,019

COMPARATIVE TABLE.

GRAVESEND.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	Mean annual number for the 10 years ending 31st December, 1913.	1913.
Number of foreign arrivals...	10,030	9,962	9,955	9,639	9,559	9,571	9,699	9,543	9,107	9,679.2	9,727
Number of vessels medically inspected ...	2,559	2,813	2,853	2,700	2,840	2,248	2,756	2,744	2,366	2,582.7	1,948

Total number medically inspected at Gravesend—

From August, 1892, to December, 1912 ... 45,412

,, 1st January to 31st December, 1913 ... 9,727

Total ... 55,139

TABLE II.

MEDICAL INSPECTION—SHEERNESS. From 1st January to 31st December, 1913.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of foreign arrivals...	12	14	21	28	28	50	40	23	33	26	26	23	324
Number medically inspected	10	14	16	18	21	45	37	21	27	22	21	16	268
Number of passengers ...	—	—	—	5	5	10	20	6	5	—	3	—	54
Number of crew ...	145	197	208	312	327	636	530	299	488	334	376	239	4,091

COMPARATIVE TABLE.

SHEERNESS.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	Mean annual number for the 10 years ending 31st December, 1913.	1913.
Number of arrivals ...	344	349	375	376	319	337	337	292	266	331.9	324
Number of vessels medically inspected ...	308	292	320	325	279	285	284	259	237	285.7	268

Total number medically inspected at Sheerness—

From 1st September, 1894, to 31st December, 1912 ... 5,304

,, 1st January to 31st December, 1913 ... 324

Total ... 5,628

ALIENS ACT, 1905.

The following figures are extracted from the quarterly Parliamentary returns, and are subject to correction when the complete returns are published :—

TABLE III.
ALIEN PASSENGERS.

		LONDON.											
		Total.	Cabin.	Exempt 2nd Class Passengers.	Trans- migrants.	Other alien pas- sengers.	Proceeding to destinations out- side the United Kingdom.	Holiday return tickets.	Seamen.	Refused leave to land.	Residents returning.	Balance.	Totals.
January	-	2,726	1,080	485	457	704	64	46	149	15	88	342	704
February	-	2,337	810	377	513	637	27	30	116	8	48	408	637
March	-	3,734	1,272	628	984	850	60	84	160	20	64	462	850
April	-	4,063	1,527	650	1,230	656	74	49	112	9	38	374	656
May	-	3,874	1,672	658	748	796	101	38	99	40	97	421	796
June	-	4,866	2,087	765	1,132	882	126	61	115	38	64	478	882
July	-	6,152	3,074	1,125	753	1,200	273	152	55	32	134	554	1,200
August	-	6,417	3,063	1,217	721	1,416	204	229	144	50	334	455	1,416
September	-	5,166	2,158	1,000	748	1,260	103	97	116	79	192	673	1,260
October	-	3,289	1,544	675	390	680	71	39	80	7	83	400	680
November	-	2,910	1,069	493	601	747	48	15	152	8	49	475	747
December	-	2,480	937	441	463	639	50	49	70	15	47	408	639
		48,014	20,293	8,514	8,740	10,467	1,201	889	1,368	321	1,238	5,450	10,467

ALL PORTS.

12 months	546,452	217,445	111,186	153,634	64,187	8,010	11,135	12,630	1,317	8,313	22,782	64,187
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TABLE IV.

ARRIVALS IN THE PORT OF LONDON.

	SHIPS.			ALIEN PASSENGERS ON			
	Non-Immigrant.	Immigrant	Total.	Non-Immigrant Ships.	Immigrant Ships.	Total.	
January	-	138	18	156	1,863	863	2,726
February	-	122	14	136	1,543	794	2,337
March	-	125	30	155	1,684	2,050	3,734
April	-	134	29	163	1,792	2,271	4,063
May	-	143	28	171	1,869	2,005	3,874
June	-	155	35	190	1,878	2,988	4,866
July	-	166	55	221	1,909	4,243	6,152
August	-	165	61	226	1,470	4,947	6,417
September	-	130	56	186	1,153	4,013	5,166
October	-	180	20	200	2,010	1,279	3,289
November	-	160	13	173	2,028	882	2,910
December	-	133	12	145	1,734	746	2,480
		1,751	371	2,122	20,933	27,081	48,014
Other Ports		7,865	3,862	11,727	131,663	366,775	498,438
Total		9,616	4,233	13,849	152,596	393,856	546,452

LONDON.

Percentage of Total	1913	18·20	8·76	15·32	13·69	6·90	8·96
Do.	1912	17·90	8·10	14·98	13·44	6·67	8·80

TABLE V.—INFECTIOUS DISEASE.

INFECTIOUS DISEASE.

In Tables V. to XXV. will be found the history of the various cases of Infectious Disease reported and dealt with during the year. It will be noticed that the total—447, is largely in excess of the average for the past 10 years, and it will also be seen that this is due to the notification of cases of Tuberculosis under the new Regulations. A larger number than is usual of cases of Cholera and Yellow Fever in homeward bound ships was reported, but no case of these diseases was present in any vessel on arrival. Of 19 cases of Small-pox reported, nine were removed to the Port Sanitary Hospital, and of the 65 cases of Enteric Fever notified, 29 were removed to the same hospital.

The total number of notifications made of the addresses of passengers and crews having arrived on vessels having had cases of certain Infectious Diseases, including Small-pox on board, was 439, while the number of vessels, &c., disinfected was 131. and 74 lots of personal and other effects were disinfected by the steam apparatus.

Disease	Number of cases										Total
	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	
Cholera	17	18	20	22	24	26	28	30	32	34	253
Enteric Fever	11	12	13	14	15	16	17	18	19	20	165
Small-pox	1	2	3	4	5	6	7	8	9	10	65
Other diseases (including Cholera)	1	2	3	4	5	6	7	8	9	10	74
Total	20	22	23	24	25	26	27	28	29	30	447

TABLE V.—INFECTIOUS DISEASE.

DISEASE.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	Mean annual number for 10 years ending 31st December, 1913.	1913.
<i>(a) CASES REPORTED :</i>											
Cholera (including suspected cases)	4	6	3	9	5	3	5	9	2	6.5	19
Yellow Fever (ditto) ...	...	1	2	...	2	...	...	...	...	0.9	4
Plague (ditto) ...	6	9	9	4	1	4	6	...	9	5.4	4
Small-pox	11	24	31	27	16	27	8	13	34	21.0	19
Scarlet Fever	11	26	82	44	23	16	21	11	10	28.4	40
Diphtheria	3	8	7	7	18	11	11	18	37	13.6	16
Enteric Fever	50	65	81	55	90	36	39	70	61	61.2	65
Measles	38	36	68	51	86	19	23	175	61	62.1	64
German Measles ... ..	...	...	...	...	...	...	...	...	3	0.7	4
Erysipelas	1	9	7	2	7	5	5	11	3	5.3	3
Typhus Fever ... ..	...	...	...	...	...	...	...	...	1	0.1	...
Continued Fever	12	11	11	11	19	10	1	5	9	10.2	13
Relapsing Fever ... ..	...	...	...	...	..	1	...	...	...	0.1	...
Tuberculosis :—											
Pulmonary ... ..	...	...	...	...	...	...	...	...	71	222	151
Other kinds ... ..	...	...	...	...	...	...	...	...	...	0.7	7
Other diseases (including Chicken-pox).	17	16	35	42	41	57	25	38	42	35.1	38
TOTAL... ..	153	211	336	252	308	189	144	350	343	273.5	447
<i>(b) TREATED IN PORT SANITARY HOSPITAL :</i>											
Cholera (including suspected cases)	...	...	...	1	...	1	2	...	...	0.4	...
Yellow Fever (ditto) ...	...	...	...	...	...	...	...	...	...	...	...
Plague (ditto) ...	4	3	1	3	...	1	2	...	1	1.7	2
Small-pox	5	4	...	8	...	4	2	6	2	4.0	9
Scarlet Fever	7	3	28	4	6	14	...	6	...	7.1	3
Diphtheria ... ..	...	2	1	3	5	1	4	3	...	2.6	7
Enteric Fever	33	23	26	27	42	11	17	22	35	26.5	29
Measles	8	13	3	14	13	5	2	7	27	11.0	18
Erysipelas ... ..	...	2	1	...	1	1	...	...	1	0.6	...
Typhus Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	12	9	7	10	6	10	1	4	7	7.5	9
Other diseases (including Chicken-pox).	4	1	24	5	15	10	7	8	7	9.4	14
TOTAL... ..	73	60	91	75	88	58	37	56	80	70.8	91

TABLE VII.

VESSELS AND PREMISES DISINFECTED, FROM 1ST JANUARY TO 31ST DECEMBER, 1913.

Month.	Reason for Disinfection.													Total Number of Disinfections.	
	Cerebro-Spinal Meningitis.	Chicken-pox.	Cholera.	Continued Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Plague	Scarlet Fever.	Small-pox.	Tuberculosis.	Precautionary Measure.		Fumigation
January -	2	...	2
February -	2	...	2	...	...	...	...	...	...	3	...	7
March -	...	1	...	...	...	2	...	...	...	1	2	...	2	...	8
April -	1	...	1	...	1	1	...	4
May -	...	2	...	...	1	3	...	2	...	3	...	2	2	2	17
June -	...	1	...	3	1	3	...	4	1	...	...	1	4	2	20
July -	...	1	...	1	...	4	...	1	...	...	...	1	4	...	12
August -	2	...	1	1	1	2	1	3	2	13
September	...	2	...	1	...	2	...	1	...	...	1	3	2	...	12
October -	4	1	3	...	...	1	4	2	...	15
November	3	...	...	...	...	...	5	2	...	10
December-	...	1	...	...	2	3	...	1	...	...	...	2	2	...	11
Totals -	...	8	...	7	4	28	1	14	2	6	6	20	29	6	131

TABLE VIII.

NUMBER OF DISINFECTIONS OF EFFECTS, BEDDING, &c., FROM 1ST JANUARY TO 31ST DECEMBER, 1913.

Month.	Reason for Disinfection.												Hospital Bedding, &c.	Total Effects.	Number of times Steam Disinfectant was used.	Disinfected by Fumigation.
	Cholera.	Chicken-pox.	Continued Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Plague.	Scarlet Fever.	Small-pox.	Tuberculosis.	Precautionary measure.				
January -	1	1	1	...
February -	2	...	2	...	...	...	...	...	...	...	...	4	3	...
March -	...	2	...	...	2	...	1	...	1	1	...	...	...	7	7	...
April -	1	...	2	...	1	...	...	...	...	4	2	...
May -	...	2	...	1	3	...	2	...	3	...	1	...	...	12	5	...
June -	3	2	2	...	4	1	...	...	...	...	...	12	5	...
July -	...	1	1	...	3	...	...	...	...	...	...	...	...	5	2	...
August -	3	...	1	1	1	2	...	...	...	8	2	...
September	3	...	1	...	...	...	...	...	...	4	3	...
October -	...	1	...	...	4	...	1	...	...	1	...	1	...	8	5	...
November -	2	...	...	...	...	...	1	...	...	3	2	...
December -	2	3	...	...	...	...	...	1	...	...	6	...	...
Totals -	...	6	6	5	28	...	12	2	6	4	2	2	1	74	37	...

The following circular letter was sent to the owners of ships coming from ports infected with Plague, Yellow Fever and Cholera :—

PORT OF LONDON SANITARY AUTHORITY,
51, KING WILLIAM STREET, GREENWICH,
LONDON, S.E.,
23rd April, 1913.

GENTLEMEN,

As you are aware, vessels arriving from or calling at ports infected with Plague, Yellow Fever and Cholera, are required to stop on arrival at Gravesend for the purpose of Medical inspection.

In the case of vessels carrying a Surgeon, a medical certificate is furnished by him stating whether any sickness has occurred during the voyage. He usually signs a certificate similar to that enclosed herewith, and if this be satisfactory, the Medical Officer of this Authority *may, at his discretion*, forego the detailed examination of all persons on board, the necessity for turning round and mooring the ship when arriving at Gravesend on a flood tide is thus, in the majority of instances, obviated.

It has been found that the Surgeons of ships, in some instances, have signed these certificates indicating that there had been "no sickness during the voyage," and that he had "examined all persons on board within twelve hours of arrival, and found them all in good health," but the Medical Officer of this Authority has subsequently found persons on board suffering with Small-pox and other infectious diseases.

I regret to find that the importance and value of these certificates, from the shipowners' point of view, have not been appreciated, and it will, therefore, be necessary in future to accept such certificates only from the Surgeons of ships belonging to owners who can ensure that the answers given by their Masters and Surgeons can be relied upon.

I would point out that under the Regulations of the Local Government Board relating to Plague, Yellow Fever and Cholera, any Master or other person is required to answer truly all such questions put to him and give all such information in pursuance of such order, and that the Master and Surgeon is required to state whether there is or has been on board during the voyage any case or suspected case of Plague, Yellow Fever or Cholera or *any other fever or sickness*.

Neglect to comply with these Regulations entails, on conviction, a penalty not exceeding 100*l.*

I am aware of the possible loss which may result from detaining ships for the purpose of examining all persons on board in the interest of Public Health, and before I issue instructions accordingly, I desire to know whether it will be possible for you to take such measures and give such instructions as will ensure that all cases of illness of any nature whatsoever on board on arrival or that may have occurred during the voyage, will be reported on the arrival of the vessel at Gravesend, to the Medical Officer of this Authority who accompanies the Officers of His Majesty's Customs to every vessel arriving from foreign whether by night or day.

Your obedient Servant,

(Sgd.) HERBERT WILLIAMS, M.D.,
Medical Officer of Health, Port of London.

The replies received have been most satisfactory, the owners in practically every case having been most willing to co-operate with the Port Sanitary Authority.

(Enclosure to Circular Letter of 23rd April, 1913.)

Port of London  Sanitary Authority.

Ship _____

at Gravesend _____ 19

To
The Medical Officer of Health,
PORT OF LONDON.

Offices: KING WILLIAM STREET,
GREENWICH, S.E.



TELEGRAPHIC ADDRESS:
"MEDOFF, GREEN, LONDON."
TELEPHONE NO.
NEW CROSS 36.

I hereby certify that there has been:—

- (a) No case of Infectious or Contagious Disease.
- (b) No illness exhibiting Feverish Symptoms or Diarrhœa, on board this Vessel while lying in the Port of _____ or during the voyage here (except as stated on the back hereof).

I have inspected every person on board within 12 hours of arrival, and find all in good health and free from symptoms of Cholera, Yellow Fever and Plague.

Signature of }
Ship's Surgeon. }

[PLEASE TURN OVER.]

CASES OF ILLNESS WITH FEVERISH SYMPTOMS OR DIARRHŒA.

CASES OF INFECTIOUS OR CONTAGIOUS DISEASE.

DEATHS.

[PLEASE TURN OVER.]

TABLE IX.

(CHOLERA.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No of Cases.	How dealt with.
1913.				
Jan. 20	s.s. "Malta," of Greenock, 102,398	Calcutta	3	Landed at Calcutta.
Nov. 5	s.s. "Euphorbia," of N. Shields, 117,972	Braila	14	Landed at Braila. Six cases fatal.
" 15	s.s. "Faraday," of London, 68,535	Batavia	1	Died, and body buried at Batavia.
" 20	s.s. "Statesman," of Liverpool, 105,319	Calcutta	1	Died, and body buried at sea.
		Total	19	

CHOLERA.

The s.s. "Malta," of Greenock, 102,398, arrived at Gravesend on the 20th January, 1913, from Calcutta, having landed three cases of Cholera (one of which proved fatal) and three cases of acute Diarrhœa there on the 16th December, 1912. The cases had been ashore daily at Calcutta, and infection had been contracted there. Complete disinfection was carried out at Calcutta, and the water tanks were emptied and cleansed with Condy's fluid, and subsequently refilled. No other cases occurred, and on arrival at Gravesend all on board were found to be well.

On the 10th October I received information that an outbreak of Asiatic Cholera had occurred on board the s.s. "Euphorbia" at Braila. The vessel left there on the 3rd October for London.

The vessel arrived on the 2nd November, from Braila, having had 14 cases of Asiatic Cholera on board, 6 of which proved fatal. The vessel and effects were disinfected at that port. I am informed that one drinking water tank was filled with river water from alongside the ship at Braila, for the use of the Native crew. This was discontinued after sickness broke out among the Natives, and the tank was emptied and cleaned, fresh water then being taken from on shore. A sample of drinking water was taken from this vessel, and examined bacteriologically, but the result proved "negative" as regards the presence of bacilli.

The vessel was carefully inspected on arrival at Gravesend, and all on board were found to be well.

The cable ship "Faraday," of London, 68,536, arrived at Gravesend on the 15th November, from Batavia. On the 6th July a fireman was taken ill, and died on the 8th July, the body being landed at Batavia. The vessel and effects were disinfected at that port. No further cases occurred, and on arrival at Gravesend all on board were found to be well.

The s.s. "Statesman," of Liverpool, 105,319, arrived on the 20th November from Calcutta. On the 30th October a native trimmer was taken ill. He gradually became worse, and died on the 2nd November, the body being buried at sea. The water tanks were disinfected at Suez on the 7th November, and a fresh supply taken in. The quarters were disinfected, together with effects. No fresh cases occurred, and on arrival at Gravesend all on board were found to be well.

TABLE X.
(YELLOW FEVER.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where From.	No. of cases.	How dealt with.
1913.				
Aug. 18	s.s. "Hydra," of Glasgow, 115,131	Manaos	4	3 died and were landed at Manaos, and 1 recovered.

TABLE XI.
PLAGUE (SUSPECTED).

Date.	Name of Vessel, Port of Registry and Official No.	Where from.	No. of Cases.	How dealt with.
1913.				
May 19	s.s. "Mongolia," of Greenock, 117,383.	Sydney	1	Died and body buried at sea.
June 14	s.s. "Gloucestershire," of Liverpool, 131,296.	Rangoon	1	Removed to Port Sanitary Hospital.
July 19	s.s. "India," of Greenock, 105,572.	Bombay	1	Landed at Marseilles.
Aug. 12	s.s. "Derbyshire," of Liverpool, 106,876.	Rangoon	1	Removed to Port Sanitary Hospital.
			4	

PLAGUE.

On arrival of the s.s. "Mongolia," of Greenock, 117,383, at Gravesend on the 17th May, it was ascertained that a case of Plague had occurred on board. The patient, a Genoese baker, was taken ill on the 1st May with rigors, and a bubo appeared in the neck. A second bubo appeared in left armpit. The patient died on the 4th May, and the body was buried at sea the same day. The hospital where patient was isolated from the start of his disease was thoroughly disinfected, and also the native crew and effects at Suez and Marseilles. Medical inspection was done at Plymouth, and also on board before arrival in London. No further cases occurred. No disease or mortality amongst the rats on board was observed. On arrival at Gravesend all on board were found to be in good health, and the vessel was allowed to proceed to Tilbury Dock, where the ship was fumigated with Sulphur Di-oxide gas to destroy all the rats and insects on board. The patient embarked on the s.s. "Salzette" at Bombay, was transferred to the s.s. "Mongolia" at Aden, and developed the disease within 24 hours of his transferment.

In my opinion he contracted the disease at Bombay before sailing thence.

The s.s. "Gloucestershire," of Liverpool, 131,296, arrived at Gravesend on the 14th June from Rangoon.

A native fireman was found suffering with enlarged glands in the neck—temperature 101 degrees—and was removed to Denton Hospital with all effects.

The vessel and effects were thoroughly disinfected, and the names and addresses of all passengers and persons leaving the vessel were notified to the respective Medical Officers of Health.

The result of bacteriological examination of fluid from enlarged gland proved to be "negative" as regards Plague.

The s.s. "India," of Greenock, 105,572, arrived on the 19th July from Bombay.

On the 10th June one of the crew (fireman) was taken ill with fever, and an enlarged and inflamed gland in the left groin. He was landed at Marseilles on the 13th June.

All necessary disinfection was carried out at Marseilles.

No dead rats were seen, and no unusual mortality among rats.

On arrival at Gravesend, all on board were found to be well. The vessel was allowed to dock, and kept under observation, after being fumigated thoroughly for the destruction of rats.

The s.s. "Derbyshire," of Liverpool, 106,876, arrived on the 12th August from Rangoon.

A European steward was landed therefrom at Denton Hospital, with an enlarged and painful gland in the left inguinal region. There was some history of fever during the voyage, but none on admission.

The gland was punctured and a specimen of the fluid sent for bacteriological examination, the result of which proved to be "negative" as regards Plague.

RETURN OF RATS EXAMINED BACTERIOLOGICALLY, 1913.

Dock.	No. Trapped.	Found Dead.	Infected Rats:	
			Trapped.	Found Dead.
Royal Albert - -	657	32	...	3
Royal Victoria - -	1,430	176	3	1
East India - - -	99	...	...	...
Millwall - - -	245	...	...	...
West India - - -	153	6	...	...
Tilbury - - -	239	6	...	...
London - - -	543	6	...	...
Surrey Commercial -	162	5	...	...
St. Katharine - -	582	...	...	...
Dock Unknown - -	15	3	...	...
	4,125	234	3	4

Summary—Total rats examined - - 4,359
 „ „ infected - - 7

During the year 7 rats were found on bacteriological examination to have been suffering with plague.

They were as follows:—

Royal Albert Dock - - -	3
Royal Victoria Dock - - -	4
Total - - -	<u>7</u>

TABLE XII.

RETURN OF RATS CAUGHT AND DESTROYED DURING 1913.

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

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS.
Millwall Dock—													
Warehouses - -	164	231	203	137	237	160	191	213	228	274	221	182	2,441
Vessels during voyage	26	20	68	214	20	120	40	12	—	50	52	6	628
„ while in dock -	267	257	127	172	280	200	168	211	232	253	225	205	2,597
Surrey Commercial Dk.—													
Warehouses - -	14	15	13	15	11	80	2	51	24	19	44	33	321
Vessels during voyage	—	—	—	—	—	—	—	20	—	—	—	—	20
„ while in dock -	43	168	159	—	145	71	153	96	128	—	6	—	969
Regent's Canal Dock—													
Warehouses - -	—	—	—	—	—	—	—	—	—	—	—	—	—
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Katharine's Dock—													
Warehouses - -	58	63	66	52	68	43	52	66	47	57	73	54	699
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	—	—	—	—	—
London Dock—													
Warehouses - -	38	54	87	68	73	45	52	107	139	102	117	91	973
Vessels during voyage	—	—	—	—	—	—	—	—	—	—	—	—	—
„ while in dock -	—	—	—	—	—	—	—	—	5	—	—	—	5
Albert and Victoria Dks.—													
Warehouses - -	411	684	732	587	846	648	647	887	668	556	681	469	7,816
Vessels during voyage	51	320	378	703	56	88	404	373	44	148	120	1,087	3,772
„ while in dock -	642	1,039	1,057	643	552	854	700	910	483	473	624	407	8,384
West India Dock—													
Warehouses - -	64	85	125	74	199	251	236	249	164	169	162	186	1,964
Vessels during voyage	62	27	120	203	134	144	86	94	34	110	292	84	1,390
„ while in dock -	170	196	369	126	341	195	158	307	268	385	442	164	3,121
East India Dock—													
Warehouses - -	47	23	33	36	42	53	48	52	54	42	49	26	505
Vessels during voyage	—	—	—	—	—	20	—	—	—	—	—	—	20
„ while in dock -	148	154	62	11	41	33	85	113	64	84	105	191	1,091
Tilbury Dock—													
Warehouses - -	58	149	129	98	289	76	90	174	160	207	311	200	1,941
Vessels during voyage	468	572	872	460	353	700	6	169	804	405	350	159	5,318
„ while in dock -	234	256	343	136	235	465	280	531	209	231	226	319	3,465
River—													
During voyage - -	—	—	—	340	312	235	126	50	20	6	12	6	1,107
While in river - -	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS - -	2,965	4,313	4,943	4,075	4,234	4,481	3,524	4,685	3,775	3,571	4,112	3,869	48,547

Total from February, 1901, to 31st December, 1912 - 745,634

Total from 1st January to 31st December, 1913 :—

In Dock Warehouses - - - -	16,660	}	48,547
On Vessels during voyage - - -	12,255		
On Vessels while in Dock and River -	19,632		

TOTAL - - - 794,181

RAT PLAGUE.

In previous Annual Reports, I have reported the existence of Plague amongst the rats in the Port of London and have printed the correspondence which I have had with the Port of London Authority with a view to preventing the recurrence of this danger.

The Local Government Board arranged for an interview between the Port of London Sanitary Authority and the Port of London Authority at the Local Government Board on 26th September, 1913, with the idea of discussing the question.

The risk of human infection arising in London owing to the existence of rat plague in London and in its docks and warehouses was mentioned. It was pointed out that if more than two cases of human plague were reported in the Port of London, it would have to be declared an infected port, and in consequence the financial loss to the shipping trade would be very large.

Four sets of measures were indicated as being desirable to be carried out.

First, that all the warehouses in which food is placed or stored should be made ratproof.

Secondly, all refuse and waste matter that forms harbourage for rats should not be disposed of around the warehouses.

Thirdly, that the present type of sanitary conveniences should be replaced by water closets with modern arrangements inaccessible to rats.

Fourthly, that not only should the warehouses be made ratproof, but also the dwelling houses and offices within the dock area should be treated in a similar way.

The following extracts from a Report of the Citizens' Health Committee on eradicating rats from San Francisco are interesting as showing the sort of work which might have to be done should Plague be introduced into London.

The epidemic broke out in 1906, and only Chinatown where proper ratproofing measures had been taken during a previous outbreak in 1900 was exempt from Plague. The first case occurred in March, 1907, and between August, 1907, and January 31st, 1908, 159 cases occurred with 77 deaths. In the course of the epidemic, some 154,000 rats were bacteriologically examined. 400 paid Inspectors and labourers were kept at work for several months, in addition to the force maintained by the Board of Health and the Federal Government, together with a large force of voluntary Inspectors. 3,000*l.* was spent in rat traps and poisons alone; cheese for bait being purchased in lots of a ton at a time. In November, 1907, the expense of anti-plague operations in San Francisco alone were 10,000*l.*, and between August, 1907, and June, 1908, no less than 84,400*l.* were spent in these operations.

The measures which proved successful were :—

1. The destruction of rat-harbours.
2. Careful search for rat corpses.
3. The ratproofing of buildings.
4. Rat-trapping and poisoning.
5. The removal as far as possible of the rats' food supply.

All freights leaving the City by water were inspected, and such products as grain, dried fruits, flour, hides, &c., were not allowed to be shipped unless certified as having previously been stored in rat-proof warehouses, and as having been found on examination to be free from rat infestation.

Should Plague break out in London, and if foreign countries should decide to inflict similar restrictions on all food stuffs leaving the Port of London under the conditions existing at the present time, such exports would be practically prohibited.

TABLE XIII.

(SMALL-POX.)

Date.	Name of Vessel, Port of Registry and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
March 8	s.s. "Gloucestershire," of Liverpool, 131,296.	Rangoon -	7	One removed to Grays Hospital, Port Sanitary Hospital, and 2 at Liverpool.
" 17	s.s. "Egypt," of Greenock, 105,581.	Bombay -	1	Landed at Aden.
" 25	s.s. "Gaea," of Christiania.	Candia -	1	Removed to Port Sanitary Hospital.
April 12	s.s. "Bright Wings," of London, 125,786.	Busreh -	1	Landed at Busreh.
" 28	s.s. "Comrie Castle," of London, 118,342.	Mauritius -	1	Landed at East London.
May 18	s.s. "Den of Crombie," of Dundee, 123,322.	Yokohama -	1	Landed at Sabang.
June 4	s.s. "Ancona," of London, 95,205.	Gibraltar -	1	Landed at Lisbon.
Aug. 7	s.s. "Batavier II.," of Rotterdam.	Rotterdam -	1	Removed to Port Sanitary Hospital.
" 28	s.s. "Dolfyn," of Groningen.	Cologne -	1	Doitto.
Sep. 22	s.s. "Mongolia" of Greenock, 117,383.	Sydney -	1	Landed at Sydney.
Oct. 18	s.s. "Manora," of Glasgow, 133,129.	Calcutta -	2	Removed to Port Sanitary Hospital.
Dec. 31	s.s. "Nevassa," of Glasgow, 133,102.	Calcutta -	1	Landed at Colombo.
		Total -	19	

SMALL-POX.

The s.s. "Egypt," of Greenock, 105,581, arrived on the 14th March, from Bombay, having landed a case suspicious of Small pox at Aden on the 26th February. The Native quarters were disinfected, and the crew were reported to have been vaccinated at Bombay. No further cases occurred, and on arrival at Gravesend all on board were found to be well.

The s.s. "Gloucestershire," of Liverpool, 131,296, arrived at Gravesend at 3.10 a.m. on March 8th. She sailed from Rangoon on the 5th February, calling at Colombo, February 11th, Suez, February 22nd, Port Said, February 23rd, Marseilles, February 28th, and Portland, Dorset, March 7th.

The vessel was boarded at Gravesend by the Assistant Medical Officer of this Authority, in company with the Customs Preventive Officer. They were received by the Captain and the Surgeon of the vessel at the top of the ladder, and, in reply to their questions, each stated that there had been no sickness on board save that a member of the Native crew had fallen from the bridge, injuring his leg. The Assistant Medical Officer, accompanied by the Captain, inspected the Native members of the crew, looking especially for signs of Plague as the vessel had come from, and had touched at, ports where that disease existed. It was dark at the time, and artificial light had to be used for the purpose of examination.

The Surgeon subsequently filled in a certificate, stating that there had been no contagious or infectious disease, or any illness exhibiting feverish symptoms or diarrhoea while lying in the Port of Rangoon or on the voyage to London. This certificate also stated that he had examined the crew within twelve hours of arrival, and found all in good health and free from symptoms of Cholera, Yellow Fever, and Plague.

The vessel was in a hurry to save her tide for docking, and the vessel entered Tilbury Dock, where the passengers landed, their names and addresses having been previously furnished to the Medical Officer. In the course of the day various members of the crew departed for their homes. At 10 p.m. I received a telephone message that one of the crew, who had gone to his home at Grays, had developed Small-pox. I telephoned Dr. Willoughby, communicated the facts to him, and he proceeded at 11.30 p.m. to Tilbury Dock, and visited the vessel. The donkeyman was found to be ill, and Dr. Willoughby, on examining him, found that he was in the very earliest stage of the eruptive condition of the disease. On March 9th at 8 a.m. the launch entered Tilbury Dock, and the donkeyman and three members of the Native crew were removed to Denton Hospital suffering from Small-pox. The remainder of the Native crew with their effects were also taken to Denton Hospital, thoroughly disinfected, and returned to the vessel by 7 o'clock on the morning of the 10th, whilst the effects of the white crew were fumigated with sulphur to render them safe for handling. The members of the white crew with their effects were then removed to the Hospital and treated in a similar manner. Dr. Willoughby also vaccinated 128 members of the crew, only the chief engineer declining, as he had been successfully vaccinated by Dr. Willoughby about three years ago. I was subsequently informed that two members of the crew, who had gone to Liverpool, had developed the rash of the disease, and had been isolated in hospital.

I received a call from the Surgeon of the vessel on March 10th, and he furnished the following information :—

It appears that the Native crew joined the ship at Rangoon, and were signed on at Calcutta, having been previously examined for disease, and vaccinated by the Medical Officer at that port. (This vaccination was apparently done very perfunctorily) in the majority of cases only one mark being found, and all of which had been unsuccessful.

At Colombo the crew were mustered and examined by the port doctor.

Soon after leaving Colombo, about February 12th, he was called in to see a native fireman who had a rash on his face and body, with a few spots on wrists and hands. As he was uncertain of the diagnosis, he took the precaution of isolating the man in the ship's hospital on deck, and all the crew's belongings were brought upon deck, and the crew's quarters thoroughly disinfected.

The same afternoon he found two other men who had spots on the forehead and a few on the body. In his opinion this was due to "acne"—temperatures normal, and the men were sent back to work.

On arrival at Suez, the man in hospital was shown to two medical officers who boarded the ship there, and they decided that the disease was not small-pox, or anything infectious.

On leaving Port Said on the 23rd February, another man developed spots on his face and body, precisely similar to the man who was isolated. He also was put into hospital with the other man, and on arrival at Marseilles the whole of the crew were mustered and examined one by one, and passed by the port doctor.

The first man went back to work as he was perfectly well, the other remaining in hospital until within three days of London.

On March 5th, the doctor was called in to see the carpenter who complained of pains in the groin. He had an enlarged gland. Next day he had pains in his back—temperature being quite normal, and on March 7th got up and went about his work as usual. There was no sign of a rash at that time.

The same day the doctor saw the donkeyman, who complained of feeling sick, with pains in the chest. There was no rash.

The entire crew having been inspected at Colombo, Suez and Marseilles, and on each occasion were passed free from infectious disease of any kind.

Since leaving Marseilles there was no further case of "rash," so that on arriving at Tilbury he had no hesitation in declaring that there had been no infectious disease on board.

It would appear from the facts that the first man developed the disease on February 12th, and that he infected the man on February 23rd, who in turn infected the donkeyman and the others. Thus there were three generations of this disease on the vessel between Rangoon and her arrival in Tilbury Dock.

The Master of the ship and the ship's Surgeon did not answer truthfully the questions which were put to them when they stated that there had been no sickness during the voyage, in view of the subsequent admission that two men had been isolated for some days during the voyage.

The facts were laid before Mr. Solicitor for such action as he deemed necessary. He did not advise a prosecution.

The s.s. "Comrie Castle," of London, 118,342, arrived on the 24th April, 1913, from Mauritius. The carpenter was taken ill on March 24th, and landed at East London suffering with Small-pox. All the crew were vaccinated at the time, and the cabin was disinfected with Sulphur Di-oxide gas. No further cases occurred, and all were well on arrival at Gravesend.

The s.s. "Den of Crombie," of Dundee, 123,322, arrived at Gravesend on the 18th May, having landed a case of Small-pox at Sabang on the 13th April last. The patient was a native fireman. The vessel and effects were thoroughly disinfected at Sabang.

No further cases occurred, and on arrival at Gravesend all on board were found to be in good health.

The s.s. "Gaea" (Norwegian) arrived on the 24th March from Gandia, when it was found that one of the crew was suffering from fever and headache. Although no rash was present the symptoms were so suspicious of Small-pox that the patient was landed at Denton Hospital. On the 25th the eruption came out, and the case was definitely diagnosed as one of Small-pox. The ship was fumigated and disinfected, and the names and addresses of all possible contacts were notified to the respective Medical Officers of Health. The ship left for Swansea on the 26th, and the Medical Officer of Health for that port was notified accordingly.

The s.s. "Brightwings," of London, 125,786, arrived on 12th April from Busreh, having landed a case of Small-pox at that place on the 25th February. The quarters were disinfected there, and the crew vaccinated. No other cases occurred, and all were in good health on arrival at Gravesend.

The s.s. "Ancona," of London, 95,205, arrived from Gibraltar on the 4th June, when it was ascertained that a man had been landed at Lisbon with a rash on face and body. The diagnosis was unknown, but was said to have been suspicious of Small-pox.

All on board appeared to be well on arrival, and the vessel has been kept under daily observation during her stay in port.

The names and addresses of all persons leaving the ship were notified to the respective Medical Officers of Health.

The vessel left for Lisbon on the 14th June.

The s.s. "Batavia II., of Rotterdam, arrived on the 7th August, from Rotterdam.

In the course of examination of the alien passengers on board, it was noticed that a 2nd class passenger had spots on her face, which was very suspicious of her having suffered recently with Small-pox.

The history of the case was that—

She was taken ill four weeks previously with pains "all over her body," accompanied with shivering and vomiting. Four days later spots came out (chiefly on the face, hands and arms). She had been "out and about" in Holland for the past fourteen days, and the nature of the disease had not been diagnosed.

The case was removed to Denton Hospital, and there was no doubt that she had had Small-pox recently. After thorough disinfection, together with all clothes, she was released.

The ladies' cabins were thoroughly disinfected, and all infected bedding, &c., similarly treated.

The patient was only discovered at the last moment, after the majority of the passengers were on the tender on their way to the shore, but no powers are possessed to delay the ship or even to take the names and addresses of the passengers in the case of small-pox.

Upon the subject of providing safeguards for the protection of this country from the introduction of Small-pox your Committee, on the 15th May last, addressed the following letter to the Local Government Board :—

“GUILDHALL, E.C.,

“15th May, 1913.

“SIR,

“The Port of London Sanitary Committee have had presented to them reports from the Medical Officer of Health dealing with cases of Small-pox on the s.s. “Gaea” and s.s. “Gloucestershire,” and I am directed to enclose copies of the same.

“The Committee note that there are many vessels arriving in the Port of London within 14 days of their departure from ports at which Small-pox is known to exist.

“It is possible that, as in the case of the s.s. “Gaea,” there may be persons on board who are incubating the disease, but who have as yet shown no signs or symptoms of Small-pox. Such persons, if members of the crew, usually are paid off and land in London, where they are lost trace of, and should they develop this disease, would form foci which might constitute the starting points of a serious epidemic of Small-pox.

“The Committee are informed by the Medical Officer of Health that he has no powers to deal with these vessels should they arrive with no sickness on board, unless they have come from, or touched at ports infected with Plague, Yellow Fever or Cholera.

“Having regard to the fact that there is a large and increasing number of persons in this country unprotected by vaccination or re-vaccination, they think that powers should be given to Port Sanitary Authorities to visit and inspect all persons on board ships arriving from ports at which Small-pox is known or suspected to exist and situated within 14 days steaming of ports in this country ; that all persons on these vessels should be required to give their names and addresses ; that they should be detained on board in cases where the addresses given are unsatisfactory ; and that a penalty should be imposed on such persons similar to that contained in the Local Government Board Order relating to Plague, Yellow Fever and Cholera.

“I am,

“SIR,

“Your obedient Servant,

(Signed) “JAMES BELL.

“To the Secretary,

“LOCAL GOVERNMENT BOARD,

“WHITEHALL,

“S.W.”

To this communication the following reply was received :—

“ LOCAL GOVERNMENT BOARD,

“ WHITEHALL, S.W.,

“ 29th August, 1913.

“ SIR,

“ I am directed by the Local Government Board to advert to your letter of the 15th May last, suggesting that certain powers should be conferred on Port Sanitary Authorities in the matter of the visitation and inspection of persons on board ships arriving from ports at which Small-pox is known or suspected to exist, and situate within 14 days' steaming of ports in this country.

“ In reply, I am to state that the Board have carefully considered this proposal both in regard to the administrative measures which would be needed to give effect to them, and to the question of international arrangements which would be involved, but that they do not consider, on the evidence before them that they would be justified in adopting the course suggested.

“ I am, SIR,

“ Your obedient Servant,

(Signed) “ THOS. PITTS,

“ Assistant Secretary.

“ THE TOWN CLERK,

“ GUILDHALL.”

The decision of the Local Government Board is to be regretted, as a serious loop-hole exists by which it is possible for Small-pox to be introduced into this country.

The s.s. “ Mongolia,” of Greenock, 117,383, arrived at Gravesend on the 21st September, from Sydney, having landed a European steward there with a disease suspicious of Small-pox. It was stated that he had been successfully vaccinated three weeks previously.

All Europeans and native crew had been recently vaccinated. Necessary disinfection was carried out at Sydney. No further cases occurred, and all were found to be well on arrival at Gravesend.

The s.s. “ Manora ” of Glasgow, 133,129, arrived from Calcutta on the 17th October, 1913, when a case of Small-pox was removed therefrom to Denton Hospital. All necessary disinfection was carried out—the natives were vaccinated, and vaccination was carried out in the case of all others who wished it. The names and addresses of all the persons leaving the ship were taken and notified to the respective Medical Officers of Health. The vessel was kept under strict observation, and on the 18th October another case of Small-pox was found, and removed to Denton Hospital.

The s.s. "Nevassa," of Glasgow, 133,102, arrived from Calcutta on the 29th December, having landed a case of Small-pox at Colombo on the 30th November last. No further cases occurred.

All disinfection was carried out at Colombo, and on arrival at Gravesend all on board were found to be well.

TABLE XIV.

(SCARLET FEVER.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	Number of Cases.	How dealt with.
1913.				
January 24	Training Ship "Exmouth," lying off	Grays -	2	Removed to Hospital at Homerton.
Feb. 17	s.s. "Johannesburg," of North Shields, 104,829.	East London	1	Landed at East London.
March 18	s.s. "Omrah," of Glasgow, 108,783 -	Brisbane -	1	Left vessel in London, convalescent.
" 29	s.s. "Orvieto," of Belfast, 129,628 -	Do.	1	Isolated on board.
April 10	s.s. "Arcadia," of Belfast, 93,172 -	Bombay -	1	Removed to Port Sanitary Hospital.
May 8	s.s. "Guildford Castle," of London, 132,611.	Delagoa Bay	1	Landed at Southampton.
" 9	s.s. "Hamlet," of Hull, 123,228 -	North Sea	2	1 removed to Guy's Hospital, and 1 to Port Sanitary.
" 30	s.s. "Highland Glen," of London, 129,139.	Buenos Ayres	2	Convalescent on arrival in London.
August 27	Barge "Gog and Magog" (watch barge),	lying at Woolwich.	2	1 removed to hospital at Leyton, and 1 to Port Sanitary hospital.
Sept. 4/12	Training Ship "Exmouth," lying off	Grays -	13	Removed to Ship's Hospital on shore.
Sept. 29, Oct. 3, 14 and 17	Ditto	- Do.	4	Ditto.
Oct. 27	Ditto	- Do.	1	Removed to North Eastern Isolation Hospital.
Nov. 6	Ditto	- Do.	1	Ditto.
" 14	Ditto	- Do.	3	Removed to Homerton Hospital.
" 19	Ditto	- Do.	1	Ditto.
" 21	Ditto	- Do.	1	Removed to Brook Hospital, Woolwich.
" 26	Ditto	- Do.	1	Ditto.
" 28	Ditto	- Do.	1	Removed to North Eastern Isolation Hospital.
Dec. 10	Ditto	- Do.	1	Ditto.
		Total	40	

As will be seen from the preceding table, there was in September an outbreak of Scarlet Fever on the training ship "Exmouth" belonging to the Metropolitan Asylums Board. The outbreak did not attain the proportions of an epidemic, but was passed on from case to case until December—the total number of cases reported to me being 27. All the cases were removed to the Board's Hospitals for treatment.

TABLE XV.
(DIPHTHERIA.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	Number of cases.	How dealt with.
1913.				
Feb. 28	Training Ship "Arethusa," lying off	Greenhithe	1	Removal to ship's Hospital on shore.
April 5	s.s. "Perm," of Copenhagen - -	Libau -	1	Removed to Seamen's Hospital, Greenwich.
May 14	s.s. "Suevic," of Liverpool, 113,456.	Sydney -	2	1 removed to Port Sanitary Hospital; 1 recovered.
June 7	s.s. "City of Paris," of Glasgow, 124,223	Calcutta -	1	Landed at Marseilles.
" 9	s.s. "Montreal," of Liverpool, 113,373	Montreal -	1	Removed to Port Sanitary Hospital.
" 18	s.s. "Macedonia," of Belfast, 116,012	Bombay -	1	Died, and body buried at sea.
Aug. 5	Training Ship "Exmouth," lying off	Grays -	1	Removed to Eastern Isolation Hospital.
Sept. 25	s.s. "Kaga Maru, of Tokio - -	Yokohama	1	Removed to Port Sanitary Hospital.
Oct. 22	s.s. "Andania," of Liverpool, 135,481	Montreal -	1	Landed at Plymouth.
Nov. 19	Training Ship "Arethusa," lying off	Greenhithe	1	Removed to Bow Arrow Lane Hospital.
Dec. 8	s.s. "Lake Michigan," of Liverpool, 115,252.	Montreal -	4	3 removed to Port Sanitary Hospital; 1 recovered—left vessel in London.
" 19	s.s. "Mantua," of Greenock, 127,544	Bombay -	1	Ditto.
		Total	16	

TABLE XVI.
ENTERIC FEVER.

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
Jan. 9	s.s. "Tainui," of Southampton, 124,507	Wellington -	1	Left vessel in London, convalescent.
Feb. 8	s.s. "Alnwick Castle," of London, 114,784.	Mauritius -	1	Landed at Durban.
" 10	s.s. "Runic," of Liverpool, 113,441 -	Sydney -	1	Ditto.
March 3	s.s. "Paparoo," of Plymouth, 111,346-	Wellington -	1	Landed at Monte Video.
" 12	s.s. "Montfort," of Liverpool, 110,568	St. John's -	1	Removed to Port Sanitary Hospital.
" 21	s.s. "Hurunui," of Plymouth, 132,751-	Wellington -	1	Ditto.
" 22	s.s. "Morea," of Glasgow, 128,235 -	Sydney -	1	Landed at Marseilles.
" 26	s.s. "Dover Castle," of London, 118,409.	Delagoa Bay -	1	Left vessel in London, convalescent.
" 27	s.s. "Morea," of Glasgow, 128,235 -	Sydney -	1	Landed at Marseilles.
April 4	s.s. "Somerset," of London, 118,292 -	Brisbane -	1	Isolated on board.
" 9	Training Ship "Arethusa," lying off	Greenhithe-	1	Removed to Ship's Hospital on shore.
" 18	Ditto ditto	-	1	Ditto.
" 28	s.s. "Inkosi," of Aberdeen, 115,582 -	Beira -	1	Died, and body buried at sea.
" 29	s.s. "Argyllshire, of Glasgow, 129,581-	Adelaide -	1	Landed to Colombo.
May 5	s.s. "Esmeraldas," of Liverpool, 123,985	Areca -	1	Removed to Port Sanitary Hospital.
		Forward -	15	

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.	Brought forward -	-	15	
May 10	s.s. "Maloja," of Belfast, 132,012	Bombay	1	Landed at Port Said.
" 14	s.s. "Phoebe," of Cardiff, 98,449	Santa Fé	1	Left vessel in London, convalescent.
" 15	s.s. "Galway Castle," of London, 132,616.	East London	1	Landed at Southampton.
" 22	s.s. "Cluny Castle," of London, 118,323	Mauritius	2	Removed to Port Sanitary Hospital.
June 4	s.s. "Themistocles," of Aberdeen, 129,349.	Brisbane	1	Removed to Hospital at East Ham.
" 7	s.s. "Morayshire," of Glasgow, 108,778	Rockhampton	1	Removed to Port Sanitary Hospital.
" 16	s.s. "Highland Scot," of London, 129,130.	Buenos Ayres	1	Left vessel in London, convalescent.
" 30	s.s. "Pomeranian," of Glasgow, 85,913	Montreal	2	Removed to Port Sanitary Hospital.
July 5	Barge "Loo," of London, 87,057	Northfleet	1	Patient died at home.
" 12	s.s. "Nore," of Greenock, 123,531	Antwerp	1	Removed to Branch Seamen's Hospital.
" 14	s.s. "Worcestershire," of Liverpool, 118,126.	Rangoon	1	Landed at Port Said.
" 20	s.s. "Balaclava," of London, 123,654	Antwerp	3	2 removed to Port Sanitary Hospital and 1 at Woolwich.
" 25	Training Ship "Arethusa," lying off Greenhithe		1	Removed to Ship's Hospital on shore.
" 26	s.s. "Athenic," of Liverpool, 115,239	Wellington	1	Removed to Port Sanitary Hospital.
" 28	s.s. "Mountain Laurel," of Sandefjord	Unea	1	Ditto.
Aug. 6	s.s. "Stat," of Aalsund	Stettin	1	Ditto.
" 14	s.s. "Corinthian," of Glasgow, 11,257	Montreal	1	Ditto.
" 26	s.s. "Torrington," of Cardiff, 119,962	Bahia Blanca	1	Landed in London, convalescent.
" 29	s.s. "Brodvale," of London, 110,136	Hankow	1	Landed at Aden.
Sept. 4	s.s. "South Point," of West Hartlepool, 132,814.	Philadelphia	2	Removed to Port Sanitary Hospital.
" 6	s.s. "Ivanoe," of Trondhjem	Archangel	1	Removed to Seamen's Hospital, Greenwich.
" 15	s.s. "Atsuta Maru," of Yokohama	Yokohama	1	Landed at Suez.
" 29	s.s. "Dicky," of Liverpool, 113,939	Goole	1	Removed to Seamen's Hospital, Greenwich.
" 29	s.s. "Hitachi Maru," of Tokio	Yokohama	4	Ditto.
Oct. 3	s.s. "Albatross," of London, 89,541	Genoa	1	Removed to Port Sanitary Hospital.
" 9	s.s. "German," of Southampton, 109,290.	Cape Town	1	Convalescent on arrival in London.
" 18	s.s. "Scotian," of Glasgow, 129,547	Montreal	7	Removed to Port Sanitary Hospital.
" 20	s.s. "Hitachi Maru," of Tokio	Yokohama	1	Landed at Middlesboro'.
Nov. 15	s.s. "Ionic," of Liverpool, 115,337	Wellington	1	Removed to Port Sanitary Hospital.
" 15	s.s. "Mount Temple," of Liverpool, 113,496.	Montreal	1	Removed to Hospital at Sheerness.
" 18	s.s. "Suffolk," of London, 115,859	Sydney	1	Removed to Port Sanitary Hospital.
Dec. 6	s.s. "Tynningame," of Cardiff, 128,490	Buenos Ayres	2	Landed at Rio.
" 10	s.s. "Kabinga," of London, 125,599	Hamburg	1	Removed to Port Sanitary Hospital.
" 13	s.s. "Highland Brae," of London, 129,153.	La Plata	1	Ditto.
" 29	s.s. "Highland Glen," of London, 129,130.	Buenos Ayres	1	Ditto.
			65	

ENTERIC FEVER.

The s.s. "Stat," of Aalsund, arrived on 3rd August, 1913, from Stettin. The master, in reply to questions put to him, stated that all were well on board, and that there had been no sickness on board during the voyage.

On 6th August, one of the crew was removed from the vessel at Church Hole Tier to Denton Hospital, suffering from Enteric Fever, and it would appear from the state of the man's illness that he must have been ill on the arrival of the vessel at Gravesend.

I communicated with the master asking for an explanation why the case was not reported, and he stated that when the vessel passed Gravesend "none of the crew as far as he knew, were ill, the patient was on deck and performing his work."

The s.s. "Scotian," of Glasgow, 129,547, arrived on the 16th October, from Montreal, and landed seven cases of Enteric Fever at Denton Hospital.

The vessel left London on September 18th, arrived at Havre on the 19th. On the 20th there was an outbreak of illness among the stewards with vomiting and diarrhœa, in all—19 being affected. They all resumed duty at the end of about three or four days.

The first case of Enteric Fever ailed on October 1st, and by the 8th, 7 cases (stewards) were laid up with Enteric Fever.

Among the seven cases were three of the men who had suffered previously with vomiting and diarrhœa on the 20th September.

The stewards had eaten food as supplied to the saloon, but none of the passengers were affected at the same time, although it is stated that some "complained" a few days later.

TABLE XVII.

(MEASLES.)

Date.	Name of Vessel, Port of Registry and Official Number.	Where from.	No. of Cases.	How dealt with.
1913				
January 13	s.s. "Crane," of London, 118,457 -	North Shields	1	Isolated at home.
" 25	s.s. "City of Poona," of Liverpool, 131,423.	Calcutta -	1	Left vessel in London, convalescent.
" 29	Training Ship "Exmouth" lying off	Grays -	1	Removed to North East Hospital.
February 1	s.s. "Orama," of Glasgow, 132,989	Brisbane -	1	Landed at Adelaide.
" 10	s.s. "Runic," of Liverpool, 113,441	Sydney -	1	Landed at Durban.
March 15	s.s. "Gloucester Castle," of London, 132,592.	Cape Town -	1	Landed at Southampton.
" 29	s.s. "Orvieto," of Belfast, 129,628 -	Brisbane -	2	Isolated on board.
April 14	s.s. "Beltana," of Greenock, 131,853	Sydney -	6	2 removed to Port Sanitary Hospital, 4 isolated on board.
" 28	s.s. "Arabia," of Greenock, 105,587	Bombay -	1	Left vessel in London, convalescent.
May 7	s.s. "Matiana," of Glasgow, 104,588	Calcutta -	1	Removed to Port Sanitary Hospital.
" 14	s.s. "Himalaya," of Greenock, 99,776	Ditto -	1	Landed at Colombo.
" 24	s.s. "Sir Francis," of London, 129,102	Tyne -	2	Landed at Tyne.
		Forward -	19	

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.		Brought forward -	19	
May 26	s.s. "Kasan," of Copenhagen -	Libau -	2	Removed to Port Sanitary Hospital.
June 4	s.s. "Ascania," of Liverpool, 131,342	Montreal -	2	1 removed to Port Sanitary Hospital, and 1 landed at Plymouth
" 9	s.s. "Montreal," of Liverpool, 113,373	Ditto -	2	Removed to Port Sanitary Hospital.
" 14	s.s. "Kasan," of Copenhagen -	Libau -	2	Ditto.
" 18	s.s. "Mount Royal," of Liverpool, 104,498	Montreal -	1	Ditto.
July 15	s.s. "Shropshire," of London, 32,607	Brisbane -	1	Left vessel in London, convalescent.
" 20	s.s. "Orvieto," of Belfast, 129,628	Ditto -	1	Ditto.
August 5	s.s. "Himalaya," of Greenock, 99,776	Bombay -	1	Landed at Aden.
" 11	s.s. "Geelong," of London, 118,426	Sydney -	1	Left vessel in London, convalescent.
" 12	s.s. "Andania," of Liverpool -	Montreal -	1	Removed to Port Sanitary Hospital.
" 18	s.s. "Kasan," of Copenhagen -	Libau -	1	Ditto
September 15	s.s. "Perm," of Copenhagen -	Ditto -	4	Ditto
October 15	s.s. "Galician," of Southampton, 113,334.	Cape Town -	2	Landed at Southampton.
" 18	s.s. "Scotian," of Glasgow, 129,547	Montreal -	1	Removed to Port Sanitary Hospital.
" 22	s.s. "Guildford Castle," of London, 132,611.	Delagoa Bay	18	17 allowed to leave vessel, convalescent. 1 died on board.
December 9	s.s. "Dungeness," of Glasgow, 99,829,	Belfast	1	Landed at Belfast.
" 12	s.s. "Grantully Castle," of London, 129,058.	East London	3	Landed at Southampton.
" 19	s.s. "Otranto," of Belfast, 124,075 -	Brisbane -	1	Left vessel in London, convalescent.
		Total -	64	

MEASLES.

The s.s. "Guildford Castle," of London, 132,611, arrived at midnight on the 22nd October, from South Africa. There had been 18 cases of measles during the voyage, with one death; 16 of them were convalescent on arrival, and were allowed to land after disinfection. One child, a girl aged five years, was so ill that it was deemed desirable to keep her on the vessel for two days, when the mother found lodgings, and the child's temperature then being normal, she was allowed to leave the ship.

TABLE XVIII.

(GERMAN MEASLES.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
March 19	s.s. "Neuralia," of Glasgow, 133,081	Calcutta -	1	Left vessel in London, convalescent.
" 28	s.s. "Persia," of Greenock, 109,258	Bombay -	1	ditto
June 11	s.s. "Sicilia," of Glasgow, 113,933	Calcutta -	2	Allowed to proceed home.
		Total -	4	

TABLE XIX.

(ERYSIPELAS.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
June 14	s.s. "Thursby," of Liverpool, 73,751 -	(?)	1	Removed to West Ham Infirmary.
Aug. 5	s.s. "Minnewaska," of Belfast, 124,674.	New York	1	Left vessel in London.
Oct. 10	s.s. "Holywood," of London, 132,732.	Tyne -	1	Removed to Poplar Hospital.
		Total -	3	

TABLE XX.

(CONTINUED FEVER.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
Feb. 15	s.s. "Arabia," of Greenock, 105,587 -	Bombay -	1	Removed to Port Sanitary Hospital.
" 18	s.s. "Queen Eleanor," of Glasgow, 106,019.	La Plata -	1	Removed to Port Sanitary Hospital.
" 19	s.s. Worsley Hall," of Liverpool, 913,694.	Beira -	1	Ditto.
May 28	s.s. "Clan Matheson," of Glasgow, 121,305.	Vizagapatam -	1	Removed to hospital at Tilbury.
June 6	s.s. "King Howel," of London, 123,701.	Buenos Ayres -	1	Removed to Port Sanitary Hospital.
" 20	s.s. "Ellik," of Bergen - - -	Stettin -	1	Ditto.
" 30	s.s. "Pomeranian," of Glasgow, 85,913	Montreal -	1	Ditto.
" 30	s.s. "Nore" of Greenock, 123,531 -	Antwerp -	1	Ditto.
July 14	s.s. "Crown of Granada," of Glasgow, 115,724.	Demerara -	1	Ditto.
" 18	s.s. "Arabia," of Greenock, 105,587 -	Bombay -	1	Removed to Branch Seamen's Hospital.
Sep. 1	s.s. "Mantua," of Greenock, 127,544 -	Cronstadt -	1	Removed to Port Sanitary Hospital.
" 17	s.s. "Inventor," of Liverpool, 131,287 -	Calcutta -	1	Landed at Colombo.
Oct. 20	s.s. "Argyllshire," of Glasgow, 129,581	Brisbane -	1	Removed to Port Sanitary Hospital.
		Total -	13	

TABLE XXI.
(PULMONARY TUBERCULOSIS.)

Date.	Name of Vessel, Port of Registry and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.				
Jan. 5	(?)	(?)	1	Removed to Seamen's Hospital, Greenwich.
" 9	s.s. "Nore," of Greenock, 123,531 -	Yokohama -	1	Left vessel in London.
" 25	s.s. "Mantua," of Greenock, 127,544	Sydney - -	1	Ditto.
Feb. 1	s.s. "Dunluce Castle," of London, 118,490.	Cape Town -	1	Ditto.
" 10	s.s. "Sicilia," of Glasgow, 113,933 -	Yokohama -	1	Ditto.
" 10	s.s. "Malwa," of Greenock, 127,543 -	Sydney - -	2	1 removed at Marseilles; 1 died, and body buried at sea.
" 12	s.s. "Geelong," of London, 118,426 -	Do. - -	4	Left vessel in London.
" 18	s.s. "Keemung," of Liverpool, 115,327	Vancouver -	1	Landed at Hong Kong.
March 9	s.s. "Garth Castle," of London, 129,078	Cape Town -	2	1 left vessel in London; 1 died, and body buried at sea.
" 17	s.s. "Highland Rover," of London, 129,067.	Buenos Ayres	1	Left vessel in London.
" 20	s.s. "Galway Castle," of London, 132,616.	Cape Town -	1	Landed at London.
" 23	s.s. "Montezuma," of Liverpool, 110,604	St. Johns -	1	Left vessel in London.
" 24	s.s. "Demosthenes," of Aberdeen, 129,362.	Brisbane -	1	Removed to Seamen's Hospital, Greenwich.
April 4	s.s. "Grantully Castle," of London, 129,058.	Cape Town -	1	Landed at Southampton.
" 5	s.s. "Marmora," of Belfast, 116,011 -	Auckland -	2	Landed at Colombo.
" 11	s.s. "Thomas," of Copenhagen - -	St. Thomas -	1	Landed at Havre.
" 12	s.s. "Orari," of Plymouth, 119,350 -	Auckland -	1	Left vessel in London.
" 12	s.s. "Highland Corrie," of London, 129,117.	Buenos Ayres	1	Ditto.
" 16	s.s. "Caledonia," of Greenock, 102,390	Calcutta -	1	Died, and body buried at sea.
" 18	s.s. "German," of Southampton, 109,290.	Cape Town -	1	Landed at Southampton.
" 28	s.s. "Guelph," of Southampton, 104,040	Durban - -	1	Ditto.
May 5	s.s. "Highland Warrior," of London, 132,595.	Buenos Ayres	1	Left vessel in London.
" 7	s.s. "Cyclops," of Liverpool, 123,978 -	Vancouver -	1	Died, and body landed at Hong Kong.
" 8	s.s. "Guildford Castle," of London, 132,616.	Delagoa Bay -	2	Left vessel in London.
" 11	s.s. "Mountford," of Liverpool, 110,568	St. Johns -	1	Ditto.
" 11	s.s. "Ning Chow," of Liverpool, 115,326	Yokohama -	1	Died, and body buried at sea.
" 15	s.s. "Galway Castle," of London, 132,616.	East London -	2	1 landed at Southampton; 1 left vessel in London.
" 22	s.s. "Cluny Castle," of London, 118,323	Mauritius -	2	1 case removed to Chatham Hospital; 1 left vessel in London.
" 27	s.s. "Limerick," of London, 109,983 -	Sydney - -	1	Died, and body buried at sea.
" 29	s.s. "Waimate," of Plymouth, 105,276	Wellington -	1	Left vessel in London.
" 29	s.s. "Garth Castle," of London, 129,078	East London -	1	Ditto.
" 30	s.s. "Leicestershire," of Liverpool, 127,995.	Rangoon -	1	Ditto.
		Forward -	41	

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.		Brought forward - -	41	
June 9	s.s. "Persia," of Greenock, 109,258 -	Bombay - -	1	Left vessel in London.
" 9	s.s. "Persic," of Liverpool, 110,620 -	Sydney - -	1	Died, and body buried at sea.
" 12	s.s. "Nore," of Greenock, 123,531 -	Yokohama - -	1	Removed to Branch Seamen's Hospital.
" 14	s.s. "Malwa," of Greenock, 127,543 -	Sydney - -	1	Landed at Colombo.
" 18	s.s. "Alwick Castle," of London, 114,784.	Mauritius - -	14	Removed to Herbert Hospital, Woolwich.
" 21	s.s. "Mantua," of Greenock, 127,544 -	Bombay - -	1	Remained on board the vessel.
" 21	s.s. "Merton Hall," of Liverpool, 96,342	Calcutta - -	1	Left vessel in London.
" 23	s.s. "Wilcannia," of London, 110,154	Sydney - -	1	Ditto.
" 28	s.s. "Grantully Castle," of London, 129,058.	Cape Town - -	2	Landed at Southampton.
" 30	s.s. "Georgian," of Liverpool, 97,816	Baltimore - -	1	Left vessel in London.
" 30	s.s. "Nile," of Greenock, 123,527 -	Yokohama - -	1	Ditto.
July 1	s.s. "Mooltan," of Greenock, 115,397 -	Sydney - -	1	Ditto.
" 3	s.s. "Braemar Castle," of London 108,381.	Delagoa Bay - -	1	Landed at Southampton.
" 5	" s.s. "Omrah," of Glasgow, 108,782 -	Brisbane - -	2	1 landed at Naples, 1 left vessel in London.
" 8	s.s. "Cayo Romano," of London, 132,614.	Cuba - -	1	Removed to Seamen's Hospital, Greenwich.
" 8	s.s. "Scotian," of Glasgow, 129,547 -	Montreal - -	1	Landed at Havre.
" 9	s.s. "Demodocus," of Liverpool, 131,435.	Yokohama - -	1	Left vessel in London.
" 9	s.s. "Arabia," of Greenock, 105,587	Bombay - -	1	Ditto.
" 9	s.s. "Ixion," of Liverpool, 135,431 -	Vancouver - -	2	Died, and bodies buried at sea.
" 9	s.s. "Carmarthenshire," of Southampton, 98,863.	Mazagan - -	1	Patient remained on board the vessel.
" 9	s.s. "German," of Southampton, 109,290.	Cape Town - -	1	Landed at Southampton.
" 10	s.s. "Kasan," of Libau - - -	Libau - -	1	Left vessel in London.
" 15	s.s. "Palawan," of Greenock, 102,400 -	Yokohama - -	1	Removed to Haslar Hospital.
" 16	s.s. "Shropshire," of London, 32,607 -	Brisbane - -	3	Left vessel in London.
" 30	s.s. Minnehaha," of Belfast, 110,520 -	New York - -	1	Ditto.
August 1	s.s. "Demosthenes," of Aberdeen, 129,362.	Brisbane - -	1	Ditto.
" 5	s.s. "Anchoria," of Glasgow, 129,598 -	Calcutta - -	1	Ditto.
" 5	s.s. "Otway," of Glasgow, 128,282 -	Brisbane - -	1	Ditto.
" 5	s.s. "Nagoya," of Greenock, 135,323 -	Calcutta - -	2	Removed to Royal Herbert Hospital, Woolwich.
" 7	s.s. "Galway Castle," of London, 132,616.	Cape Town - -	1	Landed at Plymouth.
" 11	s.s. "Medic," of Liverpool, 110,573 -	Sydney - -	1	Left vessel in London.
" 14	s.s. "Nubia," of Greenock, 102,394 -	Yokohama - -	1	Died, and body buried at sea.
Aug. 16	s.s. "Otranto," of Belfast 124,675	Brisbane - -	1	Left vessel in London.
" 18	s.s. "Arzila," of Liverpool, 124,097 -	Tangier - -	1	Landed at Casa Blanca.
" 19	s.s. "Garth Castle," of London, 129,078.	East London - -	2	Left vessel in London.
		Forward - -	96	

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1918.	Brought forward - -		96	
Aug. 23	s.s. "Corinthic," of Liverpool, 115,296	Wellington -	1	Removed to Branch Seamen's Hospital.
" 30	s.s. "Benalla," of Greenock, 135,322 -	Sydney -	2	1 died, and body buried at sea. 1 left vessel in London.
" 31	s.s. "Persia," of Greenock, 109,258	Bombay -	1	Left vessel in London.
Sept. 1	s.s. "Benalla," of Glasgow, 135,322	Sydney -	2	1 died at sea. 1 left vessel in London.
" 1	s.s. "Mantua," of Greenock, 127,544	Cronstadt -	2	Isolated on board.
" 9	s.s. "Maloja," of Belfast, 132,012	Sydney -	1	Landed at Bombay.
" 13	s.s. "Orama," of Glasgow, 132,989	Brisbane -	3	1 died and body buried at sea. 2 left vessel in London.
" 14	s.s. "Scotian," of Glasgow, 129,547	Montreal -	1	Landed at Havre.
" 15	s.s. "City of Marseilles," of Liverpool, 135,436.	Calcutta -	1	Left vessel in London.
" 16	s.s. "Beltana," of Greenock, 131,853	Sydney -	1	ditto
" 25	s.s. "Braemar Castle," of London, 108,381.	Delagoa Bay -	1	Landed at Delagoa Bay.
" 29	s.s. "Ophir," of Glasgow, 98,673 -	Brisbane -	1	Died and body buried at sea.
" 30	s.s. "Arabia," of Greenock, 105,587	Bombay -	1	Landed at Marseilles.
Oct. 4	s.s. "Flintshire," of London, 105,833	Portland (Oregon)	3	Landed at Colombo.
" 7	s.s. "Oxfordshire," of Liverpool, 131,454	Rangoon -	1	Landed at Port Said.
" 10	s.s. "Borneo," of Newcastle, 104,287	Calcutta -	1	Allowed to proceed home.
" 11	s.s. "Ballarat," of Greenock, 131,851	Sydney -	1	Died, and body buried at sea.
Oct. 15	s.s. "Galician," of Southampton, 113,334.	Cape Town -	1	Left vessel in London.
" 18	s.s. "Nankin," of Greenock, 131,857	Yokohama -	1	Landed at Colombo.
" 18	s.s. "Manora," of Glasgow, 133,129	Calcutta -	1	Landed at Calcutta.
" 22	s.s. "Tenasserim," of Glasgow, 121,262.	Rangoon -	1	Landed at Port Said.
" 22	s.s. "Persic," of Liverpool, 110,620 -	Sydney -	1	Died, and body buried at sea.
" 25	s.s. "San Miguel" (Norwegian) -	Las Palmas -	1	Left vessel in London.
Nov. 1	s.s. "Sicilian," of Glasgow, 111,225	Montreal -	2	1 case landed at Havre, 1 left vessel in London.
" 2	s.s. "Nellore," of Greenock, 135,325	Calcutta -	1	Died on board.
" 8	s.s. "Montreal," of Liverpool, 113,373.	Montreal -	1	Left vessel in London.
" 9	s.s. "Eden Hall," of Liverpool, 87,841.	Smyrna -	1	ditto
" 13	s.s. "Ausonia," of Liverpool, 129,735 -	Montreal -	2	1 case landed at Plymouth, 1 left vessel in London.
" 13	s.s. "Nore," of Greenock, 123,531 -	Yokohama -	3	Removed to Chatham Royal Naval Hospital.
" 15	s.s. "Wiltshire," of London, 132,675 -	Sydney -	1	Left vessel in London.
" 16	s.s. "China," of Belfast, 104,467 -	Shanghai -	1	Removed to Devonport Royal Naval Hospital.
" 24	s.s. "Omrah," of Glasgow, 108,782 -	Brisbane -	3	Left vessel in London.
" 25	s.s. "Montrose," of London, 108,351 -	Montreal -	3	Re-shipped to Austria.
		Forward -	144	

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	No. of Cases.	How dealt with.
1913.		Brought forward - -	144	
Dec. 3	s.s. "Marmora," of Belfast, 116,011 -	Sydney -	1	Died, and body buried at sea.
" 9	s.s. "Syria," of Glasgow, 113,959 -	Yokohama -	2	1 case landed at Port Said, 1 left vessel in London.
" 13	s.s. "Cyclops," of Liverpool, 123,978 -	Vancouver -	1	Left vessel in London.
" 24	s.s. "Ausonia," of Liverpool, 129,735 -	Portland (Maine).	1	ditto.
" 27	s.s. "Medina," of Greenock, 131,849 -	Sydney -	1	ditto.
" 29	s.s. "German," of Southampton, 109,290.	Cape Town -	1	Proceeded to Germany.
		Total -	151	

TABLE XXII.

TUBERCULOSIS (other than Pulmonary).

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	Number of Cases.	How dealt with.
1913				
March 18	s.s. "Talthybius," of Liverpool, 131,411.	Vancouver -	1 Tubercular Peritonitis.	Removed to Branch Seamen's Hospital, Royal Albert Dock.
July 22	Training Ship "Warspite," Greenhithe.	lying off	1 Tubercular Meningitis.	Removed to Ship's Hospital on shore.
August 26	s.s. "Moldavia," of Greenock, 117,382.	Sydney -	1 Tubercular Adenitis.	Remained on board the vessel.
" 29	s.s. "Clan Macintyre," of Glasgow, 115,775.	Madras -	1 Tubercular Peritonitis.	Ditto.
Sept. 2	s.s. "Persia," of Greenock, 109,528.	Bombay -	1 Tuberculous elbow	Left vessel in London.
Nov. 16	s.s. "China," of Belfast, 104,467.	Shanghai -	1 Tubercle of kidney	Removed to Devonport Royal Naval Hospital.
Dec. 1	s.s. "Nile," of Greenock, 123,527.	Yokohama -	1 Tuberculous knee -	Left vessel in London.
			7	

TUBERCULOSIS.

The Local Government Board have revoked the Regulations issued in 1908 and 1911 relating to Tuberculosis, and have issued a General Order dated December 19th, 1912, which came into force on the 1st February, 1913. In this General Order no specific mention is made applying it to Port Sanitary Authorities, but it is obvious that in the interests of the public health the districts of Port Sanitary Authorities should not be exempt from the provisions of this Order.

Every Medical Practitioner, unless acting as a School Medical Inspector, attending on or called in to visit any person, shall within 48 hours after first becoming aware

that such person is suffering from Tuberculosis, send a notification to the Medical Officer of Health for the district within which the place of residence of the person is situate at the date of notification.

Such notification is to apply to all cases of Tuberculosis, and not merely to those of Pulmonary Tuberculosis. This information will be supplied chiefly by the Assistant Medical Officers of this Authority, who visit incoming vessels on their arrival from "foreign." Persons from vessels, landing and coming to an Institution for treatment will be notified by the Medical Officer of such Institution, so that enquiries may be made in each case and such steps taken as are necessary or desirable for investigating the source of infection or preventing the spread of infection and for removing conditions favourable to infection. The names and addresses of persons arriving in the Port of London will be taken whenever they can be obtained, and they will be notified to Medical Officers of Health of the districts to which such persons are proceeding. No legal power is possessed under this Order to compel the supplying of correct information as to names and addresses, but it is not anticipated that much difficulty will be met with in obtaining this information.

In each case steps will be taken to disinfect the quarters occupied and their contents, and to isolate whenever practicable any person remaining on the ship and suffering from this disease.

PULMONARY TUBERCULOSIS.

The s.s. "Montezuma," of Liverpool, 110,604, arrived on the 21st February from St. Johns. One of the stewards was landed in a moribund condition from advanced pulmonary tuberculosis.

It appeared from the history that symptoms of this disease developed two years ago, and, acting on medical advice, he went to sea for the benefit of his health.

He had been on various ships, and had always been under treatment by the surgeon.

It used to be a not uncommon practice when a young man developed symptoms of pulmonary tuberculosis, to advise him to go to sea, generally as a steward. The steward spends most of his time below decks, sleeping in the "Glory Hole," where the ventilation and other sanitary conditions are most unsuitable for anyone suffering from this disease, and the result can only be to hasten the progress of the disease. Apart from this, there is the obvious danger of infecting his fellow-stewards, and it is desirable that such advice should no longer be given.

The following figures show the difference produced by the application of the Order to Port Sanitary Authorities in the number of notifications received before and after the issue of the Order :

No. of cases reported 1912	...	...	...	71	
"	"	1913	...	...	...
					151 Pulmonary.
					7 Other kinds.
					<hr/> 158 <hr/>

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

Chicken-pox, also Cerebral-Spinal Meningitis, commonly known as Spotted Fever, were notifiable diseases until the 31st December, 1913.

TABLE XXIII.

(CHICKEN-POX.)

Date.	Name of Vessel, Port of Registry, and Official Number.	Where from.	Number of Cases.	How dealt with.
1913.				
Jan. 6	s.s. "Egypt," of Greenock, 105,581	Bombay	1	Landed at Marseilles.
March 5	s.s. "China," of Belfast, 104,467	Do.	1	Removed to Port Sanitary Hospital.
" 8	s.s. "Palawan," of Greenock, 102,400	Antwerp	1	Isolated on board.
" 19	s.s. "Neuralia," of Glasgow, 133,081	Calcutta	1	Landed at Aden.
" 22	s.s. "Morea," of Glasgow, 128,235	Sydney	1	Isolated on board.
" 27	s.s. "Morea," of Glasgow, 128,235	Do.	1	Landed at Marseilles.
" 28	s.s. "Persia," of Greenock, 109,258	Bombay	2	Removed to Port Sanitary Hospital.
April 5	P. and O. "Go Down," Royal Albert Dock.		1	Isolated in adjoining premises.
" 10	s.s. "Arcadia," of Belfast, 93,172	Bombay	1	Landed at Bombay.
May 8	s.s. "Galician," of Southampton, 113,334	East London.	1	Landed at Southampton.
" 14	s.s. "Himalaya," of Greenock, 99,776	Calcutta	2	1 removed to Port Sanitary Hospital, 1 isolated on board.
" 26	s.s. "Mombassa," of Glasgow, 96,082	Do.	2	Removed to Port Sanitary Hospital.
June 20	s.s. "Nyanza," of Greenock, 123,529	Antwerp	1	Convalescent on arrival in London.
" 21	s.s. "Borneo," of Newcastle, 104,287	Calcutta	3	Ditto.
" 27	s.s. "Nyanza," of Greenock, 123,529	Antwerp	6	Removed to Port Sanitary Hospital.
July 15	s.s. "Inanda," of Aberdeen, 118,187	Beira	1	Isolated on board the vessel.
Aug. 5	s.s. "Otway," of Glasgow, 128,282	Brisbane	1	Left vessel in London, convalescent.
" 28	s.s. "City of Lucknow," of Glasgow, 106,040.	Antwerp	1	Isolated on board the vessel.
" 30	s.s. "City of Lucknow," of Glasgow, 106,040.	Hamburg	1	Patient recovered.
Sept. 1	s.s. "Mantua," of Greenock, 127,544	Cronstadt	1	Left vessel in London, convalescent.
" 6	s.s. "Mowe, of Bremen	Bremen	1	Removed to Port Sanitary Hospital.
" 16	s.s. "Beltana," of Greenock, 131,853	Sydney	3	Left vessel in London, convalescent.
Oct. 15	Training ship "Cornwall, lying off Purfleet		1	Removed to Wennington Hospital.
" 31	s.s. "Maidan," of Liverpool, 131,241	Calcutta	1	Removed to Tilbury Hospital.
Nov. 8	s.s. "Orrieto," of Belfast, 129,628	Brisbane	1	Left vessel in London, convalescent.
Dec. 19	s.s. "Otranto," of Belfast, 124,075	Do.	1	Ditto.
		Total	38	

TABLE XXIV.

(BERI-BERI.)

I herewith give a record of the cases of this disease met with. Seven vessels have reported 27 cases during the voyage :—

Date of Arrival.	Name of Vessel, Port of Registry, and Official Number.	Where from.	Number of Cases.
1913.			
January 24	s.s. "Nyanza," of Greenock, 123,529	Yokohama -	4
March 17	s.s. "India," of Liverpool, 106,839	San Francisco - - -	6
April 4	"Stromsbo" (Norwegian) - - -	Peru - - - -	10
June 7	"Alice A. Leigh," of Liverpool, 96,349	Iquique - - - -	2
August 5	s.s. "Jason," of Liverpool, 115,297	Hankow - - - -	3 (1 fatal)
September 16	s.s. "Perseus," of Liverpool, 127,924	Yokohama - - -	1
" 28	s.s. "Arabia," of Greenock, 105,587	Bombay - - - -	1
			27

ANTHRAX.

On 1st May, I received information respecting a case of Anthrax. The patient was reported to have been at work on the s.s. "Mantua" in Tilbury Docks. On enquiries being made it was ascertained that three days before being taken ill the patient had handled skins.

On the 10th May another case of Anthrax was notified. The patient was at work in the Millwall Dock, engaged in unloading the s.s. "Perm." On or about the 26th April the patient scratched his finger, and on the 7th May became ill and was diagnosed as suffering with Anthrax.

He had handled bales of horse-hair, and the ship carried horses, but no information is available that he had handled hides.

Both of these cases subsequently recovered.

LONDON (NOTIFICATION OF GLANDERS) ORDER, 1907.

On the 28th November, I received information respecting a case of glanders in a horse at the London Dock.

All necessary measures of disinfection were carried out.

TABLE XXV.

HOSPITAL.

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

Patients remaining in Hospital on 31st December, 1912 - - - 8

	Admitted.	Discharged.	Died.	Remaining under treatment
Cholera - - - - -	0	0	0	0
Cholera (suspected) - - - - -	0	0	0	0
Bubonic Plague - - - - -	0	0	0	0
Ditto (suspected) - - - - -	2	2	0	0
Small-pox - - - - -	9	8	1	0
Scarlet Fever - - - - -	3	3	0	0
Enteric Fever - - - - -	29	31	1	5
Continued Fever - - - - -	9	8	1	0
Diphtheria - - - - -	7	6	0	1
Measles - - - - -	18	18	0	0
Erysipelas - - - - -	0	0	0	0
Chicken-pox - - - - -	13	13	0	0
Other Diseases - - - - -	1	1	0	0
	—	—	—	—
Totals - - - - -	91	90	3	6
	—	—	—	—

Remaining in Hospital on 31st December, 1913 - - - 6

Total number of days treatment during the year - - - 1,624

Average number of days treatment for each case - - - 17·84

Average daily number of patients in Hospital - - - 4·01

Average daily cost of maintenance per patient - - - 1s. 5·7d.

Average total cost of maintenance per patient - - - £1 6s. 4·5d.

The outdoor lamps at the Hospital have been replaced by new incandescent gas lamps, at a cost of 10/.

FOOD INSPECTION.

The work of Food Inspection in the Port of London has been carried out in accordance with the Regulations made by the Local Government Board, under the Public Health (Regulations as to Food) Act, 1907.

The Public Health (Unsound Food) Regulations, 1908, came into force on the 1st October, 1908, and the Public Health (Foreign Meat) Regulations, 1908, became operative on the 1st January, 1909, and have, therefore, been in force for a period of five years.

The extended powers conferred by these Regulations upon Port Sanitary Authorities have enabled your officers to perform the duties of Food Inspection in a more thorough manner, and the results have proved the necessity for the additional powers under the Regulations and the importance of this branch of the work of the Port Sanitary Authority.

Prior to the year 1909 the only powers of food inspection possessed by this Authority were under Section 47 of the Public Health (London) Act, 1891, and the work was carried out entirely by three Food Inspectors, who devoted the whole of their time to this work.

This staff was found inadequate to carry out the provisions of the Regulations made by the Local Government Board, therefore three additional Sanitary Inspectors were appointed, and the duties of assisting with Food Inspection were added to the duties hitherto performed by the Sanitary Inspectors.

The organisation for the performance of food inspection for the Port of London is as follows :

The district is divided into three, to each of which a Food Inspector is allotted, and he is responsible to me for the inspection of all food stuffs within his district.

The districts are as follows :—

DISTRICT "A" (INSPECTOR SPADACCINI).

- Sub-District 1. Royal Victoria Dock.
- „ 2. Royal Albert Dock.
- „ 3. East India Dock.

DISTRICT "B" (INSPECTOR ANDERSON).

- Sub-District 1. London, St. Katharine's and Regent's Docks.
- „ 2. West India and Millwall Docks.

DISTRICT "C" (INSPECTOR BAILEY).

- Sub-District 1. Surrey Commercial Docks.
- „ 2. Vessels discharging in the district of the Port Sanitary Authority not within a dock.
- „ 3. Tilbury Dock.

Each district is divided up into sub-districts which is in charge of a Sanitary Inspector whose duties are to inspect all vessels within their districts as well as all buildings, dwellings, &c., situated on the land within their district. In addition they perform routine work of food inspection under the direction of the Food Inspector.

At times of pressure, the Sanitary Inspectors are engaged for portions of the day in examining food stuffs only, and during the past year it has been necessary even to utilise the services of the Assistant Medical Officers in their spare time for this purpose.

The five Assistant Medical Officers have been appointed by the Corporation, with the consent of the Local Government Board, to act in the execution of these regulations, either in the place of, or as Assistants to the Medical Officer of Health ; whilst the Food and Sanitary Inspectors have been similarly appointed to act under my direction in the exercise of any such powers, or in the discharge of any such duties as I may direct in the performance of these regulations.

Therefore, instead of the food inspection being carried out by three Food Inspectors, as heretofore, the staff engaged upon the work now consists of—

Three Food Inspectors,
Ten Sanitary Inspectors,
Five Assistant Medical Officers.

And in spite of the increased staff engaged it is only by temporarily transferring Inspectors from one district to another that foodstuffs can be inspected so as to avoid delay in their delivery to the importers.

The following figures will serve to illustrate some of the additional work carried out as regards Food inspection.

During the quinquennium preceding the introduction of the before-mentioned Regulations, the annual numbers of seizures of unsound food were :—

<i>Year.</i>				<i>Number of seizures.</i>
1904	-	-	-	559
1905	-	-	-	469
1906	-	-	-	450
1907	-	-	-	455
1908	-	-	-	434
				Annual average 473·4.

Whereas during the succeeding quinquennium the annual numbers were :—

<i>Year.</i>				<i>Number of seizures.</i>
1909	-	-	-	599
1910	-	-	-	827
1911	-	-	-	750
1912	-	-	-	705
1913	-	-	-	780
				Annual average 732·2.

Further the weight of food stuffs seized and destroyed as unfit for human food in the year preceding the introduction of the Regulations, namely 1908, was 992 tons, whereas in the year 1912 it totalled 3,758 tons, and in 1913, 2,845 tons.

These figures, however, do not express the additional work performed by your officers, but simply the increase in the amount of Unsound Food seized and destroyed.

Additional work by way of inspection naturally results in a corresponding increase of office work.

It has become necessary to redistribute the duties in the office in order that the First Assistant Clerk may devote his whole time to the clerical work arising from Food Inspection.

FOOD INSPECTION AT QUEENBOROUGH.

The inspection of food at Queenborough, under the Unsound Food and Foreign Meat Regulations, during the first ten months of the year was carried out by Dr. E. V. Legge, the Assistant Medical Officer stationed at Sheerness, with the occasional assistance of an Inspector. During the last two months one of the Assistant Medical Officers attended on two nights a week.

Large quantities of fresh meat from Flushing arrive at Queenborough daily, at about 6 p.m., and in order to avoid delay in forwarding same to its destination it is necessary that the inspection should be carried out immediately on arrival.

The meat seized and destroyed on this station during the year was:—

Pig-carcases	-	-	-	-	-	1
Pig-livers	-	-	-	-	-	610
Pig-lungs	-	-	-	-	-	4
Pig-spleens	-	-	-	-	-	1
Pig-plucks	-	-	-	-	-	16
Sheep-livers	-	-	-	-	-	363
Sheep-lungs	-	-	-	-	-	2
Sheep-plucks	-	-	-	-	-	5
Calf-livers	-	-	-	-	-	1

The total weight being 1 ton 0 cwts. 3 qrs. 25 lbs., all of which bore the Official Certificate of the Netherlands Government, as approved by the Local Government Board.

A parcel consisting of "scrap meat" imported in contravention of the Regulations was re-exported. (See page 55.)

TABLE XXVI.

QUANTITY AND DESCRIPTION OF UNSOUND FOOD SEIZED AND DESTROYED FOR THE
YEAR ENDING 31ST DECEMBER, 1913.

	Original packages.		Sundry quantities by weight.				Loose Articles.		Approximate Total weight of Goods destroyed.							
	No.	Description.	Tons.	cwts.	qrs.	lbs.	No.	Description.	Tons.	cwts.	qrs.	lbs.				
MEAT—																
Fresh and Frozen—																
Beef - - - -	223	{ quarters and crops }	...	...	...	...	530	pieces	31	13	0	18
Mutton and Lamb - - -	6,807	carcasses	...	...	...	...	227	"	134	5	3	14
Veal, Pork and Offal - -	2,883	various	...	...	...	...	10,033	various	69	19	2	16
Preserved—																
Tinned - - - -	41	cases	...	...	...	...	113	tins	1	14	3	22
Smoked and Salted - - -	65	casks, &c.	...	1	3	4	12	hams	14	0	0	21				
Sundry - - - -	30	various	...	...	...	...	...	...	0	14	2	13
RABBITS—																
Frozen - - - -	80	crates	...	...	...	...	86	rabbits	2	1	0	14
Tinned - - - -	...	...	...	...	...	...	1,029	tins	0	18	1	14
POULTRY and GAME—																
Frozen - - - -	6	cases	...	...	...	...	10	various	0	2	2	26
FISH—																
Preserved, Dried - - -	115	various	...	...	...	...	...	...	1	17	0	0
" Tinned and Bottled - -	2	cases	...	...	...	...	913	tins, &c.	0	7	2	2
" Frozen - - - -	1	case	...	...	...	...	...	...	0	3	0	12
Wet - - - -	2,228	boxes	...	...	...	...	...	...	260	14	1	12
FRUIT—																
Fresh - - - -	2,874	various	...	12	2	24	...	...	93	18	3	19		
Preserved, Dried - - -	12,085	various	...	...	...	...	...	...	449	10	0	16
" Tinned and Bottled - -	49	cases, &c.	12	0	0	0	416	tins	15	11	1	16				
" Jam and Marmalade - -	2	cases	...	...	...	...	68	tins	0	2	2	25
VEGETABLES—																
Fresh - - - -	215	bags, &c.	...	...	...	...	...	...	9	0	0	0
Preserved, Dried - - -	...	...	...	6	1	23	166	tins	0	9	1	19	
NUTS—																
Whole - - - -	11,380	bags	...	...	...	...	...	...	571	17	2	0
Sundry - - - -	1	case	...	...	...	...	...	...	0	1	2	0
PROVISIONS—																
Tea - - - -	93	cases	...	...	...	...	...	...	5	5	1	11
Coffee - - - -	34	bags	...	...	...	...	...	...	2	15	0	0
Cocoa - - - -	...	...	...	...	...	...	...	...	...	...	...	...
Butter, Cheese, Lard, Margarine	3	cases	1	1	0	19	17,753	cheese	553	11	2	26				
Condensed Milk - - -	1,979	cases	...	...	...	...	...	...	40	0	3	6
Prepared Foods - - -	100	cases	...	...	...	...	...	...	4	7	2	0
Biscuits and Confectionery -	1,423	cases	...	...	...	...	...	...	27	15	1	17
Sugar - - - -	...	...	...	...	...	...	...	...	...	...	...	...
GRAIN—																
Wheat, Maize, Barley, Rice, &c.	...	...	161	5	1	19	...	...	161	5	1	9
MEAL and FLOUR - - -																
	...	...	1	7	1	17	...	...	1	7	1	17
CONDIMENTS and SPICES - - -																
				
EGGS - - - -																
	4½	cases	...	...	...	...	...	...	0	7	0	0
DRUGS - - - -																
				
SUNDRIES - - - -																
	50	cases, &c.	...	...	...	...	228	bottles	2	0	3	10
TOTAL - - - -																
	42,673	various	176	14	3	22	31,584	various	2,458	0	2	21				
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	1½
"									1912	-	-	-	3,758	7	1	2
"									1913	-	-	-	2,458	0	2	21

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>			
1905	335	16	0	27	361	14	1	5	8	17	3	24	2	0	0	12	0	4	1	4	708	12	3	16
1906	136	5	3	24	94	15	0	8	22	7	0	10	9	0	0	26	0	0	3	14	262	0	0	26
1907	47	5	2	16	63	6	2	24	8	11	1	6	2	14	4	5	63	8	0	22	185	6	3	17
1908	47	14	2	6	22	12	2	10	1	3	0	8	3	12	2	8	2	19	1	13	78	2	0	17
1909	19	11	3	7	21	3	1	17	Pork and Veal— 4 14 7 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												
Total for nine years ...	2,117	17	2	6	787	19	0	16	341				9	2	16	37	2	2	4	121	4	3	19	3,405	13	3	5

TABLE XXVIII.

The following Table* shows the number of carcasses of Frozen Mutton and Lamb imported into the Port of London from Australia, New Zealand and South America since the commencement of the trade in the year 1880.

<i>Year.</i>	<i>Australia.</i>	<i>New Zealand.</i>	<i>South America.</i>	<i>Total No. of carcasses.</i>
1880	400	—	—	400
1881	7,275	—	—	7,275
1882	57,256	8,839	—	66,095
1883	63,733	120,893	17,165	201,791
1884	111,745	412,349	108,823	632,917
1885	95,051	492,269	190,571	777,891
1886	66,960	655,888	331,245	1,054,093
1887	88,811	766,417	242,903	1,098,131
1888	112,214	939,231	169,282	1,220,727
1889	86,547	1,068,286	167,936	1,322,769
1890	207,984	1,533,393	124,413	1,865,890
1891	334,684	1,894,105	160,340	2,389,129
1892	449,488	1,505,377	166,508	2,121,373
1893	636,917	1,821,595	109,808	2,567,820
1894	939,360	1,947,609	171,802	3,058,771
1895	969,943	2,412,331	142,038	3,542,312
1896	1,565,360	2,211,895	245,573	4,022,828
1897	1,338,964	2,703,845	161,744	4,204,553
1898	1,238,653	2,784,101	201,895	4,224,649
1899	1,189,563	3,250,100	239,703	4,679,366
1900	906,766	3,157,060	271,432	4,335,258
1901	1,194,157	3,334,119	342,525	4,770,801
1902	649,929	3,668,061	411,913	4,729,903
1903	449,090	4,566,257	650,004	5,665,351
1904	413,322	3,695,088	746,096	4,854,506
1905	1,190,584	3,479,757	1,102,282	5,772,623
1906	1,339,677	3,818,506	932,986	6,091,169
1907	1,762,047	4,353,088	1,002,403	7,117,538
1908	1,214,753	3,833,012	1,435,137	6,482,902
1909	1,583,928	4,587,217	1,258,007	7,429,152
1910	2,684,274	4,842,959	1,095,555	8,572,788
1911	2,380,572	4,513,457	1,126,303	7,970,332
1912	1,545,917	4,339,401	1,305,419	7,690,737
1913	2,381,357	5,092,054	865,703	8,339,114

BEEF.

1,996,105 quarters of beef from Australia, New Zealand and South America were imported into the Port of London during the year, compared with 2,028,497 in the year 1912, and represented 35·6 per cent. of the total quantity imported into the United Kingdom from those countries.

Of the total quantity landed in the Port of London 31 tons 13 cwts. 0 qrs. 18 lbs., were seized by your officers as unfit for human food, and comprised 233 quarters and crops and 53 pieces.

8 tons 10 cwts. was the largest quantity seized on any ship.

* Extracted with other particulars of Colonial Imports from Meat Trade Returns published by W. Weidell and Co., Ltd., 17, St. Helen's Place, E.C.

MUTTON AND LAMB.

The carcasses of frozen mutton and lamb from Australia, New Zealand and South America, landed in the Port of London during the year, totalled 8,339,114, against 7,690,737 in 1912, and represented 64·38 per cent. of the whole quantity landed in the United Kingdom from those countries.

134 tons 5 cwts. 3 qrs. 14 lbs., comprising 6,807 carcasses and 227 pieces, were seized as unfit for human food, being upwards of 120 tons in excess of the previous year's seizures.

The largest quantity seized on any vessel was 102 tons 9 cwts. 1 qr. 14 lbs., representing 5,295 carcasses, and sundry pieces which arrived in bad condition on a vessel which had been in collision off the coast of Spain.

The s.s. "Tainui," from New Zealand, arrived in the Port of London on the 5th June, having been in collision off the coast of Spain.

The contents of No. 1 Hold, which contained 22,000 carcasses of mutton, were thrown overboard in the Bay of Biscay.

Some water had got into No. 2 Hold, and on discharging the vessel in the Royal Albert Dock, 5,289 carcasses and 36 cwts. of pieces of mutton, 94 crates of kidneys, and 6 crates of sweetbreads were found unfit for human food, and were seized and destroyed.

Considerable quantities of fresh mutton and lamb also arrived from the Continent, but in no instance was it found necessary for your officers to seize any.

PORK.

On the whole the pork imported was found to be in good condition. Although large quantities were imported, only four carcasses were seized, and they were found to be affected with tuberculosis.

Particulars of these appear in Table XXXIII.

In addition to the above, 6 pieces, forming part of a ship's stores, and 85 pieces on a vessel which returned to the port in a damaged condition, were seized as unfit for human food and destroyed.

The total weight was 16 cwts. 0 qrs. 26 lbs.

PIG-CARCASSES FROM CHINA.

The s.s. "Brodstone," from Hankow, arrived on the 21st March with 880 pig-carcasses for delivery in London.

The importers decided ultimately to take the carcasses to Liverpool for which port the vessel sailed, with the carcasses on board, on the 2nd April, the Medical Officer of Health for Liverpool being notified of the fact.

OFFAL.

This class of meat imports makes great inroads upon the time of your officers.

The goods arrive in considerable quantities, are usually packed in boxes, crates or bags, and much arrives in a frozen condition, which necessitates the thawing out of the meat before a thorough examination can be made.

The total quantity seized amounted to 69 tons 3 cwts. 0 qrs. 14 lbs., being nearly 50 tons in excess of the quantity seized the previous year, and was made up as follows :—

		Tons.	Cwts.	Qrs.	Lbs.
Livers,	Ox—24 boxes, 21 crates, 8 bags, 222 loose - - -	2	5	2	15
„	Calf—1 bag, 12 loose - - -	0	1	0	6
„	Sheep—1 crate, 19 boxes, 4,495 loose	2	5	0	8
„	Pig—610 loose - - -	0	15	1	26
Kidneys	—290 crates, 28 cases, 23 bags, 984 boxes - - -	11	0	1	13
Sweetbreads	—26 crates, 7 boxes, 1 bag -	1	7	0	13
Hearts,	Ox—292 cases, 10 bags, 59 loose -	7	9	1	5
„	Sheep—15 bags - - -	0	7	3	1
Plucks,	Ox—2 „ - - -	0	1	0	14
„	Sheep—626 - - -	0	17	0	4
„	Pig—16 - - -	0	0	1	20
Lungs, Sheep—	11 - - -	0	0	0	12
„	Pig—4 - - -	0	0	0	9
Tongues, Ox and Calf—	178 crates, 9 bags, 3,853 loose - -	18	11	3	0
Cheeks,	Ox—509 cases, 2 baskets, 48 bags, 3 loose - - -	14	14	2	17
Tripe	—31 bags, 7 boxes - - -	1	0	0	1
Tails,	Ox—184 cases, 143 crates, 9 bags, 19 loose - - -	8	0	2	7
Calves' Heads—	5 - - -	0	0	1	23
Weasands	—9 bags - - -	0	4	2	5
Sundries	—4 „ - - -	0	0	2	1
Total weight -		69	3	0	14

The following table shows the result of the examination of some consignments of Livers.

TABLE XXIX.

Date.	Name of Vessel.	Where from.	Where lying.	No. of diseased or unsound livers seized.	Percentage of whole consignment.
1913.					
OX-LIVERS.					
Feb. 26	s.s. "Highland Pride" ...	Argentina ...	Royal Albert Dock ...	38	47.5
March 11	s.s. "Highland Warrior" ...	Ditto ...	Ditto ...	58	72.5
" 24	s.s. "Niwaru" ...	Australia ...	Ditto ...	19	63.3
July 21	s.s. "Gulf of Venice" ...	Argentina ...	Ditto ...	29 boxes	18.23
Nov. 8	s.s. "Rotorua" ...	New Zealand...	Ditto ...	8	40
SHEEP-LIVERS.					
March 11	s.s. "Anglian" ...	Boston ...	Royal Albert Dock ...	587	52
" 24	s.s. "Cambrian" ...	Ditto ...	Ditto ...	1,007	84.62
April 29	s.s. "Kingstonian" ...	Ditto ...	Ditto ...	16 boxes	32
" 29	s.s. "Star of Scotland" ...	Australia ...	Ditto ...	208	
" 29	s.s. "Suffolk" ...	Ditto ...	Ditto ...	175	28
May 9	s.s. "Argyllshire" ...	Ditto ...	Ditto ...	360	60
Oct. 21	s.s. "Argyllshire" ...	Ditto ...	Ditto ...	818	30
Nov. 18	s.s. "Pera" ...	Ditto ...	Ditto ...	517	22.4
Dec. 2	s.s. "Suffolk" ...	Ditto ...	Ditto ...	403	

VEAL.

Only one piece of veal, weighing 4 lbs., was seized as unfit for food.

On the 23rd October, 2 calf-carcases, forming part of a consignment which arrived at Queenborough from Flushing, were found to fall below the minimum weight, namely $47\frac{1}{2}$ lbs., fixed by the Netherlands Government, for carcasses of calves without the head, skin and abdominal intestines, intended for export in Great Britain and Ireland.

A Notice was therefore served upon the importers, under Art. III (5) of the Public Health (Foreign Meat) Regulations, 1908, forbidding the removal of the meat for any purpose other than exportation.

The meat was returned to the port of shipment.

TINNED MEATS.

The tinned meats seized and destroyed comprised:—

	Weight.	Tons.	Cwts.	Qrs.	Lbs.
Beef—85 tins	-	"	0	3	19
Sausages—24 cases	-	"	0	12	8
Galantines—4 cases	-	"	0	3	4
Sundry—13 cases and 28 tins	"	"	0	18	0
Total	-	"	1	14	3
					22

SMOKED AND SALTED.

This class of meat, destroyed as unsound, consisted of:—

	Weight.	Tons.	Cwts.	Qrs.	Lbs.
Salt beef—78 casks and sundry pieces	- ,	13	10	1	23
Hams—4 boxes and 12 loose	- ,	0	4	0	19
Bacon—3 boxes	- ,	0	5	2	7
Sundries—27 bags and 3 cases	- ,	0	14	2	13
Total	- ,	14	14	3	6

RABBITS (FROZEN).

The condition in which frozen rabbits arrive in this country has shown a marked improvement in recent years.

Only 80 crates and cases and 86 loose rabbits, weighing 2 tons 1 cwt. 0 qrs. 14 lbs., were seized during the year under review.

RABBITS (TINNED).

Seizures of tinned rabbits was limited to two consignments, and resulted in 1,029 tins being found as unfit for food, and destroyed, the total weight being 18 cwts. 1 qr. 14 lbs.

POULTRY AND GAME.

Almost the whole of the goods seized under this heading were seized on vessels "outward bound," which had returned to the port in a damaged condition. The goods were contaminated with sea water, &c., and putrid. The weight amounted to 2 cwts. 2 qrs. 26 lbs.

FISH.

The considerable increase shown under this heading is due to a cargo of herrings in boxes, which arrived in bad condition.

The total quantity seized and destroyed included:—

	Tons.	Cwts.	Qrs.	Lbs.
WET—2,228 boxes herrings	260	14	1	12
„ 1 cask salted salmon	0	3	0	12
DRIED—79 boxes, 22 baskets, 12 bags, 11 parcels	1	17	0	1
TINNED—Lobster 304 tins	0	2	2	0
„ Salmon 387 „	0	3	1	23
„ Herrings 19 „	0	0	0	19
„ Sardines 187 „	0	1	0	0
„ Sea-ears 16 „	0	0	0	16
„ Sundries 2 cases	0	0	1	0
Total	263	1	3	27

FRUIT (GREEN).

There has been a slight falling off of goods seized under this heading, which were as follows :—

	Tons.	Cwts.	Qrs.	Lbs.
Apples—160 barrels, 42 boxes, 12 cwts.				
loose - - - - -	11	17	0	12
Bananas—1,819 crates - - - - -	63	7	3	0
Grapes—134 barrels, 25 boxes - - - - -	4	7	3	7
Lemons—3 boxes - - - - -	0	3	0	0
Mangoes—4 cases - - - - -	0	1	1	0
Melons—3 casks - - - - -	0	2	4	0
Oranges—7 boxes, 1 case and some loose	0	7	2	24
Peaches—4 cases - - - - -	0	1	0	0
Pears—14 barrels, 609 boxes and 11 trays	12	3	3	18
Plums—14 baskets, 4 cases - - - - -	0	4	3	0
Tomatoes—17 crates - - - - -	0	12	3	0
Sundries—2 boxes - - - - -	0	1	0	0
Total weight	93	18	3	19

FRUIT (DRIED).

Although the quantity of these goods condemned as unfit for human food was more than three times that of the previous year, it will be of interest to know that a large proportion proved to be of some commercial value, as in the case of the dates, the greater portion were allowed to leave the district under a suitable guarantee for the manufacture of vinegar, and the Medical Officers of Health of the districts to which the goods were proceeding were duly informed of the facts.

The quantities of goods condemned were :—

	Tons.	Cwts.	Qrs.	Lbs.
Currants—2 boxes - - - - -	0	1	0	0
Dates—104 cases, 4,017 mats, 9 bags, 7,380 boxes - - - - -	432	15	3	7
Figs—112 cases, 150 bags, 115 boxes - - - - -	12	18	2	9
Plums—50 boxes - - - - -	0	12	0	0
Raisins—10 bags, 11 boxes - - - - -	0	18	2	0
Sultanas—85 boxes - - - - -	1	14	1	0
Sundry—40 boxes - - - - -	0	10	0	0
Total weight	449	10	0	16

FRUIT (TINNED AND BOTTLED).

Within the last few years the condition in which this class of goods has arrived has greatly improved, and of the total quantity condemned about 12 tons were rejected by the owners and seized by Officers of the Port Sanitary Authorities to prevent sale to small buyers.

The goods seized and destroyed included :—

	Tons.	Cwts.	Qrs.	Lbs.
Apple pulp—3 kegs - - - -				
Apricot pulp—12 cases and 171 tins -	1	5	3	10
Black-currant pulp—118 tins - - -	0	10	1	22
Orange pulp—17 cases - - - -	0	15	1	0
Strawberry pulp—41 tins - - - -	0	3	2	18
Tomatoes—14 cases and 8 tins - -	0	7	2	24
Sundries - - - - -	12	7	0	8
Total weight	15	11	1	26

FRUIT, PRESERVED (JAM AND MARMALADE).

Only two cases and 68 jars of jam, weighing 2 cwts. 2 qrs. 35 lbs., were destroyed as unfit for food.

VEGETABLES.

	Tons.	Cwts.	Qrs.	Lbs.
FRESH—				
Onions—23 bags, 14 boxes - - - -	1	17	0	0
Potatoes—108 bags, 70 boxes- - -	7	3	0	0
DRIED—				
Beans, peas, &c. - - - - -	0	6	1	23
TINNED—				
Spinach—166 tins - - - - -	0	2	3	24
Total weight	9	9	1	19

NUTS.

As was the case in the previous year, the only goods appearing under this heading are :

	Tons.	Cwts.	Qrs.	Lbs.
Chestnuts—1,138 bags - - - - -	571	17	2	0
Desiccated cocoanut—1 case - - -	0	1	2	0
Total weight	571	19	0	0

PROVISIONS.

The tea, coffee, cheese and chocolate, included in the following list were mostly rendered unfit for food owing to damage received as a result of accidents to the vessel in which they were carried.

The tea was subsequently used for the extraction of caffeine.

With regard to the condensed milk, 1,219 cases, weighing 23 tons 10 cwts. 1 qr., 18 lbs., were destroyed, 399 cases, weighing 8 tons 15 cwts. 1 qr. 16 lbs., were used for pig or poultry food, and 361 cases, weighing 7 tons 15 cwts. were released for confectionery purposes.

The milk used for pig or poultry food and confectionery purposes was only allowed to leave the district of the Port Sanitary Authority after your Medical Officer of Health had received a satisfactory guarantee respecting the same, and the Medical Officers of Health of the districts to which the goods were proceeding were furnished with full particulars :—

	Tons.	Cwts.	Qrs.	Lbs.
Tea—93 packages - - - - -	5	5	0	11
Coffee—34 bags - - - - -	2	15	0	0
Cheese—3 cases, 18,113 loose, and a quantity of trimmings - - - - -	554	3	2	5
Milk, Condensed—1,979 cases - - - - -	40	0	3	6
Milk, Concentrated—100 cases - - - - -	4	7	2	0
Chocolate—1,423 cases - - - - -	27	15	1	17
Total weight	634	7	1	11

GRAIN.

The greater portion of the grain seized as unfit for human food was subsequently released under a guarantee for poultry or animal food, and notifications were sent to the Medical Officers of Health of the districts to which it was being taken. The total quantity dealt with during the year was :—

	Tons.	Cwts.	Qrs.	Lbs.
Wheat - - - - -	119	12	1	1
Maize - - - - -	7	14	1	14
Barley - - - - -	2	4	1	8
Rice - - - - -	17	14	0	12
Oats - - - - -	3	17	0	25
Sundries - - - - -	7	13	2	15
Total weight	158	15	3	19

MEAL AND FLOUR.

The quantity seized was 1 ton 7 cwts. 1 qr. 17 lbs. and this was dealt with in the same way as the grain.

EGGS.

6,480 eggs, contained in 4½ cases, were destroyed, the weight being about 7 cwts.

SUNDRIES.

Included under this heading are :—

	Tons.	cwts.	qrs.	lbs.
Anchovy Sauce—8 cases - - - - -	0	5	0	0
Gelatine—1 case - - - - -	0	1	2	0
Macaroni—5 boxes - - - - -	0	1	1	0
Pickles—22 cases and 228 bottles - - - - -	0	8	1	24
Tapioca—1 case - - - - -	1	2	0	0
Various—3 cases - - - - -	0	2	2	14
Total weight -	2	0	3	10

SCRAP MEAT.

On the arrival of the s.s. "Koningin Regentes" at Queenborough on the 17th June, the meat cargo was inspected in the usual way, when it was found that one basket (part of a consignment of 58 baskets, manifested as offal) contained scrap meat.

Although scrap meat is an illegal importation, the package bore the official certificate of the Government of the Netherlands.

A notice, as required by Article III. (5) of the Public Health (Foreign Meat) Regulations, 1908, was served upon the importer, and the meat was returned to the port of shipment.

The facts were brought to the notice of the Consul-General to the Netherlands.

TABLE XXX.

PUBLIC HEALTH (FOREIGN MEAT) REGULATIONS, 1908.

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

Date of Arrival.	Name of Vessel.	Where from.	Where lying.	Description and quantity of foreign meat in respect of which Notices were served.
1913.				
Jan. 15	s.s. "Anglian" - - -	Boston - - -	Royal Albert Dock.	2 pig carcasses.
June 17	s.s. "Koningin Regentes"	Flushing - - -	Queenborough -	1 basket scrap meat.
Oct. 23	s.s. "Koningin Wilhelmina"	Do. - - -	Do. -	2 calf carcasses.

The s.s. "Turakina," from New Zealand, arrived in the Port of London on the 14th May, 1913. The vessel caught fire at Rio de Janeiro, and was beached and flooded with water. The cargo comprised, *inter alia*, 50,000 carcasses of mutton, about 900 tons of butter, and about 14,000 crates of cheese. Most of this cargo was under water.

The carcasses of mutton were removed from the vessel at Rio de Janeiro, taken to sea and thrown overboard. The butter and the cheese were brought to London in the vessel.

Much of the butter had been melted, and had to be dug out of the ship's hold. The Port of London Authority could not take it into their warehouse, so it was allowed to proceed to two riverside wharves to be dealt with under the supervision of the Medical Officers of Health in whose districts the wharves are situated.

About 5,000 crates of the cheese (3,000 of which were brought to London in the s.s. "Catalina") were sorted under the supervision of your officers, with the result that 552 tons were destroyed as unfit for human food.

TABLE XXXI.

PUBLIC HEALTH (FOREIGN MEAT) REGULATIONS, 1908.

During the year Certificates were issued under Article III. (5) of the above-mentioned Regulations in respect of the undermentioned meat :—

Date.	Name of Vessel.	Where from.	Where lying.	Description and quantity of foreign meat in respect of which Certificates were issued.
1913.				
Jan. 4	s.s. "Pataro"	Campana	Royal Victoria Dock.	180 bags ox-cheeks.
" 8	s.s. "Rubis"	Ostend	Tilbury Dock ...	2 bales bacon.
" 13	s.s. "Lancastrian"	Boston	Royal Albert Dock.	300 pig-carcases.
" 14	s.s. "Highland Glen"	Argentina	Ditto	100 bags ox-cheeks.
" 18	s.s. "Anglian"	Boston	Ditto	297 pig carcases.
" 22	s.s. "Highland Piper"	Argentina	Ditto	300 bags ox-cheeks.
" 29	s.s. "Pardo"	Ditto	Royal Victoria Dock.	200 bags ox-cheeks.
" 31	s.s. "Nerehana"	Australia	Ditto	132 pig-carcases.
Feb. 3	s.s. "Cambrian"	Boston	Royal Albert Dock.	297 pig-carcases.
" 5	s.s. "Marere"	New Zealand	Royal Victoria Dock.	15 crates ox-cheeks.
" 12	s.s. "Highland Loch"	Argentina	Royal Albert Dock.	240 bags ox-cheeks.
" 13	s.s. "Topaze"	Ostend	Tilbury Dock ...	1 bale bacon.
" 18	s.s. "Highland Pride"	Argentina	Royal Albert Dock.	40 cases ox-cheeks.
" 26	s.s. "Highland Warrior"	Ditto	Ditto	120 bags and 40 cases ox-cheeks.
" 26	s.s. "Otaki"	New Zealand	Royal Victoria Dock.	5 crates ox-cheeks.
Mar. 3	s.s. "Highland Brae"	Argentina	Royal Albert Dock.	202 cases ox-cheeks.
" 5	s.s. "Rubis"	Ostend	Tilbury Dock ...	1 bale bacon.
" 10	s.s. "Paparoa"	New Zealand	Royal Victoria Dock.	4 crates ox-cheeks.
" 12	s.s. "Saphir"	Ostend	Tilbury Dock ...	2 packages bacon.
" 13	s.s. "Waiwera"	New Zealand	Royal Albert Dock.	23 pig-carcases.
" 15	s.s. "Highland Rover"	Argentina	Ditto	50 cases ox-cheeks.
" 27	s.s. "Highland Glen"	Ditto	Ditto	274 bags ox-cheeks.
" 27	s.s. "Highland Laddie"	Ditto	Ditto	80 crates ox-cheeks.
" 31	s.s. "Parana"	Ditto	Royal Victoria Dock.	180 bags ox-cheeks.
April 1	s.s. "Parana"	Ditto	Ditto	200 bags ox-cheeks.
" 2	s.s. "Highland Piper"	Ditto	Royal Albert Dock.	427 bags and 20 cases ox-cheeks.
" 8	s.s. "Highland Scot"	Ditto	Ditto	360 bags ox-cheeks.
" 9	s.s. "Topaze"	Ostend	Tilbury Dock ...	1 bale bacon.
" 12	s.s. "Anglian"	Boston	Royal Albert Dock.	400 pig-carcases.

Date.	Name of Vessel.	Where from.	Where lying.	Description and quantity of foreign meat in respect of which Certificates were issued.
1913.				
April 15	s.s. "Highland Corrie" ...	Argentina ...	Royal Albert Dock.	50 cases and 200 bags ox-cheeks.
" 16	s.s. "Rubis" ...	Ostend ...	Tilbury Dock ...	2 bales bacon.
" 22	s.s. "Highland Loch" ...	Argentina ...	Royal Albert Dock.	50 cases ox-cheeks.
" 27	s.s. "Kaikoura" ...	New Zealand ...	Royal Victoria Dock.	11 crates ox-cheeks.
" 29	s.s. "Highland Pride" ...	Argentina ...	Royal Albert Dock.	440 bags and 50 cases ox-cheeks.
" 30	s.s. "Topaze" ...	Ostend ...	Tilbury Dock ...	2 bales bacon.
May 7	s.s. "Rubis" ...	Ditto ...	Ditto ...	1 package bacon.
" 11	s.s. "Highland Brae" ...	Argentina ...	Royal Albert Dock.	500 bags ox-cheeks.
" 24	s.s. "Highland Rover" ...	Ditto ...	Ditto ...	10 crates and 120 bags ox-cheeks.
" 28	s.s. "Limerick" ...	Australia ...	Royal Victoria Dock.	84 bags ox-cheeks.
June 4	s.s. "Highland Glen" ...	Argentina ...	Royal Albert Dock.	100 bags and 183 cases ox-cheeks.
" 9	s.s. "Highland Piper" ...	Ditto ...	Ditto	50 crates and 800 bags ox-cheeks.
" 13	s.s. "Pardo" ...	Ditto ...	Royal Victoria Dock.	120 bags ox-cheeks.
" 16	s.s. "Highland Scot" ...	Ditto ...	Royal Albert Dock.	50 crates and 300 bags ox-cheeks.
" 18	s.s. "Koningin Regentes" ...	Flushing ...	Queenborough ...	57 packages offal.
" 21	s.s. "Highland Laddie" ...	Argentina ...	Royal Albert Dock.	500 bags ox-cheeks.
" 25	s.s. "Saphir" ...	Ostend ...	Tilbury Dock ...	2 bales bacon.
" 28	s.s. "Highland Corrie" ...	Argentina ...	Royal Albert Dock.	300 bags ox-cheeks.
July 16	s.s. "Rubis" ...	Ostend ...	Tilbury Dock ...	1 bale bacon.
" 23	s.s. "Highland Warrior" ...	Argentina ...	Royal Albert Dock.	100 bags ox-cheeks.
" 24	s.s. "Highland Pride" ...	Ditto ...	Ditto ...	50 cases and 395 bags ox-cheeks.
" 28	s.s. "Dorset" ...	Australia ...	Royal Victoria Dock.	84 bags ox-cheeks.
Aug. 6	s.s. "Rubis" ...	Ostend ...	Tilbury Dock ...	1 package bacon.
" 13	s.s. "Rubis" ...	Ditto ...	Ditto ...	1 package bacon.
" 18	s.s. "Shropshire" ...	Australia ...	Ditto ...	116 bags ox-cheeks.
" 19	s.s. "Durham" ...	Ditto ...	Royal Victoria Dock.	202 packages ox-cheeks.
" 21	s.s. "Paparoa" ...	New Zealand ...	Ditto ...	588 pig-carcases.
Sept. 3	s.s. "Sussex" ...	Australia ...	Ditto ...	214 bags ox-cheeks.
" 17	s.s. "Topaze" ...	Ostend ...	Tilbury Dock ...	2 bales bacon.
" 18	s.s. "Marmari" ...	New Zealand ...	Royal Albert Dock.	1,225 bags boned beef.
Oct. 8	s.s. "Topaze" ...	Ostend ...	Tilbury Dock ...	3 packages bacon.
" 22	s.s. "Rubis" ...	Ditto ...	Ditto ...	3 bales bacon.
" 23	s.s. "Koningin Wilhelmina" ...	Flushing ...	Queenborough ...	21 carcasses veal.
" 27	s.s. "Kumara" ...	New Zealand ...	Royal Albert Dock.	16 pig-carcases.

Date.	Name of Vessel.	Where from.	Where lying	Description and quantity of foreign meat in respect of which Certificates were issued.
1913.				
Oct. 28	s.s. "Saphir"	Ostend	Tilbury Dock ...	2 bales bacon.
Nov. 5	s.s. "Pera"	Australia	Royal Albert Dock.	112 bags boned beef.
Dec. 1	s.s. "Cambrian"	Boston	Ditto	200 pig-carcases.
" 4	s.s. "Rubis"	Ostend	Tilbury Dock ...	3 bales bacon.
" 10	s.s. "Rubis"	Ditto	Ditto	1 basket ox-checks, 1 basket ox - hearts, 2 baskets sheep-plucks.
" 12	s.s. "Kingstonian"	Boston	Royal Albert Dock.	499 pig-carcases.
" 17	s.s. "Topaze"	Ostend	Tilbury Dock ...	2 baskets ox-hearts, 1 basket sheep-plucks.
" 18	s.s. "Saphir"	Ditto	Ditto	1 bale bacon.
" 24	s.s. "Anglian"	Boston	Royal Albert Dock.	500 pig-carcases.]

Special attention was also given to ox-tongues which arrived from Australia, and the following table shows the results of the examinations of various consignments :—

TABLE XXXII.

Date of arrival.	Name of Vessel.	NUMBER OF TONGUES.		Percentage of Consignment.
		Examined.	Found Diseased.	
1913.				
Nov. 15	s.s. "Kent" - - - -	60	Nil.	—
" 16	s.s. "Waimana" - - -	662	32	4·8
" 16	s.s. "Suffolk" - - -	58	5	31
Dec. 7	s.s. "Demosthenes" - - -	72	1	1·38
" 14	s.s. "Rangatira" - - -	120	Nil.	—
" 14	Ditto - - - -	1,247	71	5·69
" 15	s.s. "Palermo" - - -	313	Nil.	—
" 15	s.s. "Roscommon" - - -	60	Nil.	—
" 15	Ditto - - - -	120	Nil.	—
" 19	s.s. "Otranto" - - -	120	Nil.	—
" 28	s.s. "Westmeath" - - -	120	Nil.	—

Where two entries appear under the name of the above vessels the figures relate to consignments of different marks.

ACTINOMYCOSIS IN OX-TONGUES IMPORTED FROM THE ARGENTINE.

At the end of July, I received information from the Local Government Board that certain tongues which had been imported from the Argentine Republic had been found to contain lesions of Tuberculosis and Actinomycosis.

A preliminary examination of some imported tongues, disclosed evidence of disease which resembled Tuberculosis and Antinomycosis; this was chiefly situated in the lymphatic glands, but in some cases the blades of the tongues were found to be infected.

Microscopic examination showed that the lesions were those of Antinomycosis, though they presented to the naked eye appearance similar to those of Tuberculosis. An examination was made of a number of tongues in order to ascertain whether they were infected with Tuberculosis, but in no instance could the tubercle bacillus be detected.

The following tables show the number of tongues examined each month, and at the end of the year the percentage of tongues rejected :—

Month.	Number of Ox-Tongues Examined.	Number rejected as Diseased.
1913.		
August - - - - -	15,250	688
September - - - - -	32,045	1,961
October - - - - -	11,482	768
November - - - - -	4,098	186
December - - - - -	12,987	681
TOTALS - - - - -	75,862	4,284
Percentage found diseased - - - - -		5.64

EXAMINATION OF OX-TONGUES FROM ARGENTINA.

The following table gives details of the examination by Officers of the Port Sanitary Authority of the various consignments of ox-tongues :—

Date of Arrival.	Name of Vessel.	Number of Tongues.		Percentage of Consignment.
		Examined.	Found Diseased.	
1913.				
Aug. 2	"Highland Rover" - - - - -	2,004	102	5.08
	Ditto - - - - -	2,112	116	5.48
	Ditto - - - - -	7,180	212	2.95
" 8	"Highland Glen" - - - - -	3,000	240	8.0
	Ditto - - - - -	804	75	9.32
	Ditto - - - - -	6,000	367	6.11
" 16	"Highland Piper" - - - - -	3,599	128	3.55
	Ditto - - - - -	876	87	9.93
	Ditto - - - - -	5,966	375	6.28
	Carried forward - - - - -	31,541	1,702	

Date of Arrival.	Name of Vessel.	Number of Tongues.		Percentage of Consignment.
		Examined.	Found Diseased.	
1913.	Brought forward - - -	31,541	1,702	
Aug. 22	"Highland Scot" - - - -	2,832	171	6.03
	Ditto - - - -	876	67	7.64
	Ditto - - - -	8,000	436	5.45
" 29	"Highland Laddie" - - - -	2,400	150	6.25
	Ditto - - - -	468	72	13.24
	Ditto - - - -	6,500	420	6.46
Sept. 6	"Highland Corrie" - - - -	936	43	4.59
" 21	"Highland Pride" - - - -	1,812	143	7.89
	Ditto - - - -	720	43	5.97
" 26	"Highland Warrior" - - - -	144	13	9.02
	Ditto - - - -	624	22	3.52
Oct. 11	"Highland Rover" - - - -	1,092	92	8.4
" 25	"Highland Piper" - - - -	832	43	5.16
Nov. 1	Per rail from Liverpool - - -	9,200	545	5.92
" 14	"Highland Corrie" - - - -	3,698	82	2.37
" 30	"Highland Pride" - - - -	3,011	197	6.54
Dec. 13	"Highland Brae" - - - -	1,176	53	4.5
		75,862	4,284	5.64

More than one entry against various vessels refer to separate consignments of different marks.

This formed the subject of a conjoint report by the Medical Officer of Health for the City of London and myself, dated October 28th, 1913, and the following information was embodied in the Report, which was forwarded to the Local Government Board :—

1. The number of instances in which evidence of disease was observed among Tongues received at the Port and City of London.

2. The conclusion therefrom, viz., that the condition chiefly observed is obviously widespread in South America, and that the supervision exercised to prevent the exportation of such affected organs is inadequate in respect of this particular matter.

3. The necessity which exists, in the interests of meat inspection work coming within your jurisdiction, that these matters should receive attention with as little delay as possible. So long as the present condition exists the time of your staff will be unduly taken up by this work to the possible detriment of inspection work in other directions. Although we have always been prepared to assist to the utmost of our powers in elucidating any new problems which

come under observation, we are of opinion that when once the position has been clearly defined, the work of sorting and of preventing unsound food reaching this country should be the primary duty of the exporting firms. The responsibilities of your own staff should be restored as soon as possible to normal conditions, which are to ensure that all food stuffs on arrival are sound, free from disease, and fit for human consumption.

4. The observation that a large percentage of the tongues are affected with Actinomyces in the glands alone, and unless these glands remain attached to the roots of the tongues, it will be impossible in such cases to state whether the tongues have come from animals infected with Actinomyces.

We, therefore, feel strongly that regulations should be framed rendering the importation of tongues without the roots and glands attached liable to re-exportation.

5. The question of Actinomyces as affecting cattle, and even the prevalence of the disease in general, does not appear to us, after a review of the literature on the subject, to have been adequately investigated, and we beg respectfully to suggest that it is a matter on which further research work might be undertaken with advantage.

The tongues arrived in boxes containing 12 in each, these were frozen hard, and it was necessary to defrost them until they were soft enough. This was done by laying them out 24 to 48 hours previously. The work was extremely monotonous, and during the winter months was performed in a store, the temperature of which was about the freezing point, and the handling of the cold tongues was positively painful. Nevertheless, the examination was performed by the Inspectors and Assistant Medical Officer, loyally and willingly, and I desire to express my appreciation of the valuable services rendered by them under conditions involving, to say the least, extreme personal discomfort.

TABLE XXXIII.

The following is a list of pig-carcases found during the year to be affected with Tuberculosis. They were seized as unfit for food and destroyed :—

Date.	Name of Vessel.	Where from.	Where lying.	Number of Carcases.
1913.				
Feb. 6	s.s. "Cambrian" - - -	Boston - -	Royal Albert Dock	3
Dec. 11	s.s. "Prins Hendrik" - -	Flushing -	Queenborough -	1

The United States Department of Agriculture have issued the following instructions with regard to meat imported into the United States of America after transshipment in a foreign country :—

— "Referring to the foreign inspection certificates which are required to accompany meat and meat food products imported into the United States; instructions are issued as follows :—

"In the case of shipment through another foreign country, with the meat or meat food product thus transhipped there shall be presented to the Bureau inspector the original certificate from the country of origin, or a certified copy

“ thereof, together with a transhipment certificate signed by an authorised
 “ official of the Government of the foreign country through which the produce
 “ is transhipped. The transhipment certificate shall show the identity of such
 “ meat or meat food product, and that the same has been examined and inspected
 “ and not found to be unsound, unhealthful, unwholesome, or unfit for human
 “ food, and that at the time of exportation from the country through which the
 “ product was transhipped, the same contained no dye, chemical, preservative, or
 “ other ingredient not permitted by the regulations governing the meat inspection
 “ of the United States Department of Agriculture.”

During the year three consignments of foreign meat, intended for shipment to the United States of America, were examined by your Officers, namely—

12th June	...	...	40 hind-quarters of beef.
12th June	...	...	200 “ “ “ “
13th December...	...	...	1,486 quarters “ “

My practice on receiving a request to examine meat destined for exportation is, if possible, to see the original certificate from the country of origin, or a certified copy thereof, and to have each piece of meat examined carefully for evidence of unsoundness, disease, or other unhealthful condition.

Each piece, after examination, has a piece of wire passed through it, and is clamped with an official seal, and the following is a specimen of the certificate used in respect of such consignments :—

(1) FOR MEAT INTENDED FOR SHIPMENT TO THE UNITED STATES OF AMERICA.

Date

To

I, DOCTOR HERBERT WILLIAMS, Medical Officer of Health for the Port of London, hereby certify that _____ quarters of beef, marked _____, out of the s.s. _____ from _____, which arrived in the Port of London on the _____ have been this day examined and found in sound condition, and free from any appearance of disease.

An official seal has been affixed to each quarter so examined, and each quarter bears the official certificate of the Government of the Argentine Republic.

(Signed)

Medical Officer of Health, Port of London.

Four consignments were also examined for shipment to Switzerland, namely :—

29th October	...	...	150 carcasses of mutton
30th	“	...	150 “ “ “
4th November	...	...	100 “ “ “
9th December	...	...	20 fore-quarters of beef

and certificates issued in respect of same by your Medical Officer as follows :—

(2) FOR MEAT INTENDED FOR SHIPMENT TO SWITZERLAND.

CERTIFICATE OF ORIGIN AND STATEMENT OF INSPECTION OF MEAT FOR TRANSHIPMENT OF
FRESH AND PACKED MEAT DESTINED FOR IMPORT INTO SWITZERLAND.

Country of Origin

Place

Name of Sender

Designation of Goods

Place of Destination

Name of Consignee

Signed for

The Officer of Health charged officially with the examination of the meat in the Port of London, where the above designed goods are sent from, certifies that the

are of sound condition and fit for consumption, and that this meat is of animals of the ovine or bovine species, sound and free from contagious and infectious diseases.

The present truthful statement is made in London on the

*The Medical Officer Charged Officially with the
Examination of Meat in the Port of London.*

(Signed),

Medical Officer of Health, Port of London.

SANITARY INSPECTION.

The inspection of vessels and other premises by your Staff of Sanitary Inspectors has been well maintained at the customary standard. The total visits of inspection of all classes was 38,926, the average annual total for the past ten years being 37,672.9. Of the total 14,425 were of vessels from foreign ports, 20,681 of vessels coastwise, barges, &c., while 3,820 were of premises on shore within the docks. The Launches were employed on 12,939 inspections. Of the nationality of vessels inspected 56.67 per cent. of foreign arrivals were British, 14.05 per cent. Swedish and Norwegian, 10.87 per cent. German, and others in smaller proportion. (See Table XXXIV.) The total number of nuisances reported and dealt with was 3,719, involving 460 written intimations and 21 statutory notices; in 2 cases legal proceedings were taken.

The largest number of complaints was in respect of dirty crew's quarters, next in order of number being smoke nuisances. Foul bilges and peaks, defects of ventilation, lighting and heating, leaks, and insanitary conveniences form the bulk of the remainder. (See Table XXXV.)

New sanitary works constructed under the supervision of your Officers is set out on Table XXXVII.)

These works are carried out in accordance with plans previously deposited for the information of your Committee.

There were 15 infringements of the Bye-laws reported in relation to offensive cargoes. In all cases a warning was given to the persons concerned, and in no case was any recurrence reported. (See Table XXXVIII.)

TABLE XXXIV.

GENERAL SUMMARY, and Analysis, of the Sanitary Inspections of Vessels, &c., in the Port of London, for the year ended 31st December, 1913.

FOREIGN.			COASTWISE.			INLAND NAVIGATION.							Shore Premises.	WATER BARGES.																		
Steam.	Sail.		Steam.	Sail.		Steam.	Sail.		Lighters (uninhabited).	Canal Boats.		Inspected.		Defective.	To be Cleaned.	No. in District in 31st December, 1913.	New Boats.	Condensed.	Use Discontinued.	No. in District in 31st December, 1913.												
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.									
13426	138	1394	999	1	81	3418	26	222	1343	13	78	800	2	35	12026	63	345	2491	16	187	602	52	18	3820	33	400	-	18	1	1	1	18
Total Inspections to 31st December, 1912 - - -			1,023,890			Docks and River		No.	Nationality.	Arrived from Foreign Ports.	No. of inspections	Arrivals Per cent. of Total.																				
Total Inspections from 1st January to 31st December, 1913 -						St. Katharine's	-	-	1,227	American	-	1	2	.01																		
"Foreign" - 14,425						London	-	-	2,085	Argentine	-	-	-	-																		
"Coastwise" - 4,762						Regent's Canal	-	-	567	Austrian	-	25	47	.25																		
"Inland Navigation" - 15,919						Millwall	-	-	2,218	Belgian	-	352	375	3.61																		
Premises on shore - 3,820						West India	-	-	1,381	Brazilian	-	-	-	-																		
Total - - -			38,926			Poplar	-	-	115	British†	-	5,512	8,496	56.67																		
Total - - -			1,062,816			East India	-	-	674	Chilian	-	-	1	-																		
Cleansing of Crew's Quarters, &c. :-						Victoria	-	-	2,697	Danish	-	303	455	3.11																		
Total to 31st December, 1912			67,542			Royal Albert	-	-	2,252	Dutch	-	603	745	6.20																		
Total No. of Vessels from 1st January to 31st December, 1913 - - -			2,360			Commercial	-	-	2,664	Finnish	-	15	79	.15																		
Total - - -			69,902			Tilbury	-	-	1,884	French	-	163	228	1.67																		
Number of vessels inspected :-						Gravesend District	-	-	2,286	German	-	1,058	1,472	10.87																		
In the Launches -						River—*Upper District	-	-	6,380	Greek	-	3	12	.03																		
"Lady Truscott" - 2,791						*Middle "	-	-	4,761	Italian	-	3	6	.03																		
"David Burnett" - 2,637						*Lower "	-	-	3,915	Japanese	-	58	107	.59																		
"Clotho" - 3,904						Medway - - -	-	-	Nil.	Roumanian	-	-	6	-																		
"Denton" - 2,682						Total vessels -	-	-	35,106	Russian	-	208	293	2.13																		
"George Briggs" - 925						Shore premises - - -	-	-	3,820	Siamese	-	5	7	.05																		
Total - - -			12,939			Total - - -	-	-	38,926	Spanish	-	49	63	.50																		
In the Docks, &c. - - -			22,167			Total vessels -	-	-	9,725	Swedish & Norwegian } 1,367	-	2,031	14.05																			
Total - - -			35,106			Shore premises - - -	-	-	3,820	Mexican	-	-	-	-																		
						Total - - -	-	-	38,926	Portuguese	-	-	-	-																		
						Total - - -	-	-	38,926	Uruguayan	-	-	-	-																		
						Total - - -	-	-	38,926	Total vessels -	-	9,725	14,425																			
						Total - - -	-	-	38,926	† Coastwise and Inland navigation	-	20,681	20,681																			
						Total - - -	-	-	38,926	Shore premises -	-	3,820	3,820																			
						Total - - -	-	-	38,926	Total -	-	38,926	99.92																			

*Upper District extends from Greenwich to Todington.
 *Middle " " " Greenwich to Erith.
 *Lower " " " Erith to outer limits of the Port of London.

COMPARATIVE TABLE.

Total number of Inspections of vessels from—	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	Yearly average for the 10 years ending 31st December, 1913.
"Foreign" - - -	15,685	14,279	13,013	17,971	15,258	14,887	13,710	14,015	15,177	14,425	14,842.0
"Coastwise," "Inland Navigation," and other Inspections -	19,700	19,975	22,335	19,414	20,014	25,469	24,857	24,009	28,035	24,501	22,830.9
Total - - -	35,385	34,254	35,348	37,385	35,272	40,356	38,567	38,024	43,212	38,926	37,672.9

TABLE XXXV.

NUMBER OF NUISANCES ON **VESSELS** REPORTED AND DEALT WITH during the year ending 31st December, 1913.

DESCRIPTION OF NUISANCES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
SMOKE NUISANCES :—													
Number of complaints received ...	31	16	23	14	25	48	54	4	10	22	25	32	304
Number of recurrences reported ...	...	...	...	...	...	1	...	...	...	...	...	...	1
OFFENSIVE CARGOES (Bye-laws) :—													
Number of Infringements reported	3	1	...	1	1	...	1	1	1	2	...	..	11
STRUCTURAL AND OTHER DEFECTS :—													
Ventilation	3	9	8	7	7	8	6	3	9	13	5	6	84
Lighting	9	16	8	4	6	3	4	3	6	6	3	3	61
Heating	8	10	8	4	2	...	2	1	1	6	5	6	53
Bare iron in crew's quarters ...	1	3	...	3	1	...	...	1	...	...	1	1	11
Leaky decks, hawse-pipes, cable casings, &c.	11	4	8	11	5	2	8	5	2	4	4	5	69
Defective bulkheads and floors ...	3	4	1	1	2	3	1	1	5	...	...	...	21
Sanitary conveniences	6	13	9	1	5	4	2	3	...	7	4	5	59
Ship's gear or stores stowed in crew's quarters ... ..	...	1	...	1	1	1	...	1	...	...	...	...	5
Foul bilges and peaks	35	6	14	7	3	8	6	...	1	6	3	1	90
Storage of drinking water (dirty or defective tanks)	1	3	...	1	1	...	...	...	2	1	2	1	13
Dirty quarters	272	213	200	230	187	211	216	124	152	199	190	178	2,372
Accumulation of offensive matter ...	1	...	...	...	...	1	...	...	...	...	1	1	4
Miscellaneous Nuisances	3	10	4	1	4	3	2	3	5	12	10	9	66
Totals	387	299	283	286	250	293	302	150	194	278	253	248	3,223
Total number of vessels on which structural alterations were ordered	36	36	25	15	18	13	13	9	14	29	22	18	248
Total number of vessels on which structural alterations were reported as carried out	33	26	20	33	14	9	20	9	17	15	27	33	256

NUMBER OF NUISANCES IN **THE RIVER** REPORTED AND DEALT WITH during the year ending 31st December, 1913.

From discharge of foul liquid, sewage, &c., into the River ... ..	...	...	...	...	2	...	1	1	...	...	1	1	6
Offensive condition of River water ... ..	..	..	...	...	...	...	...	...	...	...	...	...	...
Totals ... ..	...	...	...	...	2	...	1	1	...	...	1	1	6

TABLE XXXVII.

PART I.

Date completed.	Works.
1913.	
Jan. 16	St. Katharine's Dock—Erection of water closets, &c., on Top Floor "C" Warehouse.
April 24	East India Dock (Import)—Erection of water closet and urinal in South-East corner of No. 5 Warehouse, South Quay.
May 6	West India Dock—Erection of new Labourers' Shelter and "Calling On" place, with sanitary conveniences in connection therewith.
" 10	Royal Albert Dock—Erection of water closets for Messrs. H. Green, Siley, Weir and Co., Ltd.
" 23	Poplar Dock—Construction of new drain from capstan pit, and roof rain water to existing main water drainage.
June 25	St. Katharine's Dock—Alterations to convenience at No. 4A Yard.
Oct. 23	Surrey Commercial Dock—Erection of additional sanitary accommodation in Steel Yard.
Nov. 28	Surrey Commercial Dock—Erection of additional closets, &c., at Principal Office.

PART II.

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

Date Plan submitted.	Works.
1913.	
Jan. 3	London Dock—Proposed new conveniences at Western Dock, North Quay.
" 24	Regent's Canal Dock—Proposed rain-water arrangements for Weighbridge Office at Lion Wharf.
Feb. 21	Royal Albert Dock—Proposed erection of sanitary conveniences at the rear of Dockmaster's Office.
April 4	Surrey Commercial Dock—Proposed conveniences at Swedish Yard.
July 2	Surrey Commercial Dock (New Shed, Swedish Yard)—Proposed connection of rain-water drains with existing 18-inch brick drain, and ventilation of drain.
" 30	Millwall Dock—Proposed drain and latrine, North side of Boilerhouse.
Aug. 2	St. Katharine's Dock (No. 2 Yard)—Proposed re-arrangement of sanitary conveniences.
Sept. 2	Royal Albert Dock (Basin, North)—Proposed construction of two private closets, and seven closets for Lascars.
" 2	London Dock—Proposed construction of sanitary conveniences and drainage at New Jetty, Western Dock.
" 20	Royal Albert Dock—Proposed sanitary accommodation for women.
Nov. 19	Royal Victoria Dock—Proposed sanitary conveniences at Messrs. Cory's New Offices, Pier Head.
" 21	Surrey Commercial Dock—Proposed drainage in connection with Railway Yard.
Dec. 23	Royal Albert Dock—Proposed alteration to latrines at Albert Dock Engine Works, Ltd.
" 30	Royal Albert Dock—Proposed erection of earth closets at the New Zealand Shipping Co.'s Boat Shed.

NUISANCES.

On the 18th November, 1913, I received from the River Department, Port of London Authority, a report which had reached them from the Metropolitan Police, Thames Division, of the discharge of oil into the river from a vessel lying in the vicinity of Woolwich Reach.

There seems to have been no doubt as to the facts. Section 92 of the Thames Conservancy Act, 1894, Sub-Section 4, forbids any person without lawful excuse to "wilfully cause or suffer any offensive matter, whether solid or fluid, to flow or pass into the Thames or into any tributary," but the final paragraph of the same section is as follows :—

"Provided always that the Sub-Section (4) of this Section shall not extend or apply to any vessel within the limits of the Port of London and under the jurisdiction of the Port Sanitary Authority thereof."

This was the reason for passing the report of the police on to your Medical Officer, but it does not appear that the discharge of oil from vessels lying in the river, in the manner described in the report, would or could constitute a nuisance which should be dealt with by your Committee under the Public Health Act.

In view, however, of the probability, in the near future, of an increased number of vessels using or importing liquid fuel coming into the river, the question generally was referred to Mr. Solicitor for his views upon the point raised.

TABLE XXXVIII.
BYE-LAWS—OFFENSIVE CARGOES.

Fifteen 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.
1913.		
Jan. 1	Dumb barge "Petunia"	Laden with a cargo of refuse matter which was not properly and securely covered so as to prevent any nuisance arising therefrom.
" 24	Barge "Hawthorn" -	Permitting the barge laden with an offensive cargo to remain within the district for a longer period than 48 hours.
" 29	Lighter "Robert" -	Laden with a cargo of fish offal which was not properly and securely covered so as to prevent any nuisance arising therefrom.
Feb. 7/8	Dumb barge "Daffodil"	Laden with a cargo of dung which was not properly and securely covered so as to prevent any nuisance arising therefrom, and also remained within the district for a longer period than 48 hours.
April 18	Lighter "Extension" -	Laden with a cargo of road sweepings, &c., which was not properly and securely covered so as to prevent any nuisance arising therefrom.
May 9	Lighter "Emma" -	Laden with a cargo of house refuse, road sweepings and dung, which was not properly and securely covered so as to prevent any nuisance arising therefrom.
" 9	Lighter "Walter" -	Ditto Ditto.
" 31	Lighter "Exe" - -	Ditto Ditto.
July 24	Lighters "George" and "Wandsworth."	Ditto Ditto.
Aug. 15	Lighters "John and Sarah" and "Harry."	Loaded with a cargo of sewage screenings which was not properly and securely covered so as to prevent any nuisance arising therefrom.
Sept. 11	Lighter "John and Sarah."	Ditto Ditto.
Oct. 17	Lighter "Beaconsfield"	Failing to have the lighter thoroughly cleansed and deodorized within 6 hours after the discharge therefrom of an offensive cargo.
" 21	Lighter "Sloop" -	Laden with a cargo of refuse matter which was not properly and securely covered as to prevent any nuisance arising therefrom.

OFFENSIVE CARGOES.

On the 7th May I received information that the master of the barge "Agreement," of Rochester, official number 78,529, on the 23rd April last, went into the fore cabin to defæcate. The mate, becoming alarmed at his long absence, went down into the cabin and found that the master had fallen from the bucket, face downwards, and was black in the face—apparently dead.

He was taken to St. Thomas' Hospital and found to be dead.

The man's father is of opinion that he was overcome by foul gases from a cargo of manure, which had been in the barge for two days.

An inquest was held at Lambeth Mortuary on the 26th April, and a verdict was returned to the effect that he had either been asphyxiated or choked. Such cargoes occasionally generate a lethal gas which passes into the cabin, and several deaths have occurred from this cause.

The barge was inspected on May 13th. The bilges were in a muddy condition, and smelling, but there was no cargo on board.

On the 15th December I received a complaint from a resident of Greenhithe respecting the offensive condition of a barge named "Kingcup," lying off Greenhithe, and loaded with dung.

The Inspector for the Gravesend District was immediately notified, and a written notice was sent to the owners of the barge, the result being that the unloading of the cargo was hastened, and the barge was removed on the 17th December.

In November, two ships arrived in the Port laden with cargoes of cotton seeds. Four men employed in unloading these vessels experienced, a few hours after they had commenced working, symptoms of severe itching all over their bodies. They attended at the London School of Tropical Medicine, where they were found to be suffering with a papular eruption over the whole body except the face and hands. There was no danger to life, but the symptoms were extremely disagreeable and irritating.

On examination of the cotton seed it was found to be heavily infested with a maggot, or caterpillar, which appeared to be the larva of a small moth named *Gelechia Gossypiella*, that has been found very destructive in granaries.

On the maggots, mites were found in great numbers. These were identified as *Pediculoides Ventricosus*. The creature is like a louse but much smaller, and has long hair-like bristles attached to the legs. It has been known to attack man in the tropics and in America.

It is supposed that these mites had been introduced into the country of origin with a view to its attacking the caterpillar and moth described above, and so preventing them from doing damage to the cotton seed.

I am indebted to Col. A. Alcock, I.M.S., F.R.S., LL.D., &c., and Dr. F. W. O'Connor, of the London School of Tropical Medicine, for particulars of the cases and for the identification of the caterpillars and mites.

CREW SPACES.

It is gratifying to note that this subject is receiving more favourable consideration in responsible quarters, and it may be assumed therefore that the reiterated comments by, amongst others, Port Sanitary Authorities on the inadequate provisions of existing legislation, relating to the hygiene of vessels from the point of view as dwellings, is beginning to take effect, and there are at least signs of some attempt at an international levelling up of standards in this respect.

The Commonwealth of Australia in the Navigation Bill of 1912 deals with the subject in much greater detail than the British Merchant Shipping Act, in reference to vessels (a) Registered in Australia (b) engaged in the Coast trade.

I have also been privileged to peruse certain Regulations drafted by the Director of Shipping for the Government of Norway on the same subject.

The Board of Trade have also revised and re-issued the Instructions to their Surveyors, which will take effect in February, 1914. These instructions do not, of course, enlarge any provisions of the Merchant Shipping Act, but merely instruct Surveyors as to the terms in which, in the opinion of the Board, those provisions should be translated in practice.

In all legislation dealing with the accommodation on vessels for seamen, the first question that presents any difficulty is the minimum of space to be afforded each man. It must be expressed in two dimensions, (a) cubic or general breathing space, and (b) floor area.

It has been pointed out by all who have handled the subject with a view to reform, that the legal minimum does usually in practice become the *maximum*. This should not be so, but it is of course only natural that builders should consider the official minimum as *sufficient*.

The British Merchant Shipping Act offers, by way of inducement to the shipowners, to deduct from the tonnage of the ship, upon which he pays dues, the tonnage expressed by the space devoted entirely to the use of the crew.

This Act also regulates the measurement of vessels for the purposes of the Australian Navigation Bill.

It is therefore interesting to note that the Commonwealth Government by the Bill do not regard the minimum space provided by the Imperial Act as being adequate, and a similar view would appear to be taken by the Norwegian Government, thus :—

	Merchant Shipping Act.	Australia.	Norway.
Cubic space (in feet) - -	120	140	140
Floor area (in square feet) -	15	18	18

It is a peculiarity of the Merchant Shipping Act that the allowance of space mentioned may be taken to include any special accommodation provided, such as separate mess rooms, &c., save that the space allotted for sleeping must not be less than

72 cubic feet, and 12 square feet of floor space respectively. In the Colonial and Swedish regulations the minimum of 140 and 18 is for the space set apart for berthing or sleeping, and space appropriated for messing, washing, &c., would appear to be additional. Such a step would be a great advance on existing conditions. In the Colonial regulations certain local trade vessels, and in the Swedish vessels of less than 200 tons register, are exempt from those provisions.

The Colonial regulations make a departure in legislating specially for officers, allotting in ships of 300 tons and upwards to each officer up to at least four, a separate room with not less than 180 cubic feet of space, and in the case of a limited class of vessels of less than 300 tons gross register for each two officers a separate room with a content of not less than 350 cubic feet.

Another striking provision is found in the Norwegian regulations where in vessels of 800 tons and upwards two bunk cabins and separate mess rooms shall be provided for the crew. But on passenger vessels of 3,000 tons and upwards (where the crew would of course run to large numbers) this arrangement may be modified, subject to the preliminary deposit and approval by the appointed officers, of a plan of the proposed cabin arrangement.

The Australian regulations prohibit crew's quarters below the winter load line, and the Swedish, below the main deck unless the ports are $2\frac{1}{2}$ feet above winter load line.

VENTILATION.—With reference to this much discussed, and in regard to crew's quarters, admittedly difficult question—the Australian Regulations alone adopt a volumetric standard.

They provide that “Every place in a ship . . . appropriated to the berthing accommodation of seamen or apprentices shall . . . be ventilated in such a manner as to ensure a flow of not less than 3,000 cubic feet of fresh air every hour for each seaman or apprentice, evenly diffused by means approved by a qualified medical inspector . . . with an intake and outtake of such size and so arranged as to prevent such draught as would in the opinion of the medical inspector be likely to be prejudicial to the health of the seamen or apprentices.”

The Norwegian Regulations follow the broader lines of the British, except that favour seems to be given to doors, skylights, and the like as primary means of ventilation; whereas a secondary position is given to this by our Merchant Shipping Act, which recognises such means only as auxiliaries—ventilation to be as effective as possible independently of doors, &c. But the two countries appear to agree on this point that each case should be decided on its merits by competent authority.

They further agree in stipulating that deck ventilators must not have their termination immediately over or near a bunk. The British Regulations add, in view of the fact that the deck site of the ventilators is often arbitrarily defined by the position of other gear, &c., that in that case, a trunk way should be fitted below in the cabin or berth to direct the inflowing air away from the occupants of the bunk.

HEAD ROOM.—Under the British Merchant Shipping Act, 5 ft. 6 in. is regarded as a practical minimum, permitting a man to get about without serious inconvenience. It probably requires practice to achieve this.

The Swedish Regulations require on vessels of 200 tons and upwards a minimum of 6 ft. 3 in. and on vessels of 300 tons and upwards 6 ft. 9 in., a very different thing, and an immense improvement.

MESS ROOMS.—Australia requires separate mess rooms where practicable, if not, then tables must be of a folding or sliding type. Norway requires separate mess rooms in vessels of 800 tons upwards.

FOOD LOCKERS.—The storage of food in lockers in the crew's quarters is not absolutely prohibited on British ships, but is discouraged, and can generally be dealt with as a nuisance.

The Norwegian Regulations, however, absolutely prohibit the keeping of food, damp clothes, and other things likely to become offensive in sleeping compartments. This is a most excellent provision.

BATHS AND LAVATORIES.—These are of course found nowadays provided for crews on many British vessels of the best class, but the custom is not general. The Australian Government require such to be provided to the satisfaction of their Medical Inspector. Norway requires on steam vessels of 1,500 tons and upwards in addition to lavatories a bath for the crew with warm water supply when required. On smaller vessels the bath only is dispensed with, separate washing accommodation, one washing apparatus to every two men in one watch is required.

WATER CLOSETS.—The standard of one closet for each ten men of the ship's company, recognised by the Board of Trade, is also accepted by the Norwegian Government, while the Australian regulations leave the extent of accommodation to be decided or approved by the Medical Inspector.

HOSPITAL (SICK BERTH) ACCOMMODATION.—This on British ships may be provided, and if so, and there is compliance with the regulation, it "should" be certified as "Crews' Hospital" and be included with the deductions made on account of Crews' space from the tonnage of the vessel.

The Commonwealth Regulations require :—

"(271) HOSPITAL ACCOMMODATION.

1. Every
 - (a) Foreign-going ship trading regularly with the Commonwealth, or
 - (b) Australian-trade ship on a voyage between consecutive ports which exceeds a prescribed distance

and having 100 persons or more on board, shall be provided with hospital accommodation of such a character and so placed and arranged as to afford proper means of isolation for cases of communicable disease which may arise during the voyage, and for any persons attending to such cases.

2. The accommodation shall include the necessary lavatory and sanitary accommodation and such other accommodation as is prescribed.

3. The hospital shall, wherever practicable, be placed on the top deck aft or on the boat deck as far aft as practicable.

4. The master of a vessel who fails to comply with this Section and who suffers his vessel to enter any port or place in Australia shall be guilty of an offence.

Penalty (on master or owner) 100*l.*"

The Norwegian regulations provide that in vessels with a crew of 12 men and upwards there shall be a "special sick ward," properly lighted and ventilated, and with bunks as follows:—

Crews 12-17 men	...	...	...	1 bunk
„ 18-30 „	...	...	...	2 bunks
„ 31-45 „	...	...	...	3 „
„ 46 and upwards	....	...	...	4 „

but this regulation does not apply to fishing, whaling and sealing vessels below 200 tons register nor to the Coasting and European short sea routes.

Other minor requirements by way of improvement on existing standards may be mentioned as:—

Metal bunks	-	-	-	-	-	-	-	-	Australia.
Bunks not to be against ship side	-	-	-	-	-	-	-	-	Norway.
Separate lockers outside sleeping berth for oilskins, boots, &c.	-	-	-	-	-	-	-	-	do.
Galley not in crew's quarters (except in Arctic vessels)	-	-	-	-	-	-	-	-	do.
Daily cleaning and ventilating of quarters, by watch on duty	-	-	-	-	-	-	-	-	do.

In this review—necessarily condensed and abbreviated—it is merely sought to show that a decidedly active movement is taking place in the right direction as regards the seaman.

The difference is that the two Governments quoted are seeking powers to make these various sanitary improvements compulsory in their vessels, while the British Merchant Shipping Act does nothing of the kind except to a very limited degree.

The method adopted by other authorities of classifying vessels by their tonnage is good. It gives some idea, in the first place, of the probable amount of space at disposal. The placing of vessels engaged on short sea routes and coasting trades as a separate class is also wise, as conditions here often differ widely from vessels in the overseas trade.

Progress on similar lines should certainly be made with British shipping. It would not be difficult to transform or modify the existing "Instructions" into definite Regulations to be enforced under penalty and by summary proceedings.

Under existing circumstances, a nuisance may exist during a whole voyage, and, only be abated when in a port in this country after inspection and an intimation had been served on the owners: *e.g.*, overcrowding may have existed for a long period and the nuisance abated by forthwith discharging the crew after the vessel's arrival.

It would appear that Proceedings under the Merchant Shipping Act can only be taken by the Board of Trade for this, but I do not know of any instance in which such proceedings have been instituted.

This question partakes of an international character, and, in my opinion, it is worthy of consideration by an Official International Convention at which all the nations interested in maritime commerce should be represented. Regulations, based upon the decision of the Convention should then be issued, and they should be enforced summarily by the Port Sanitary Authorities of the United Kingdom.

CREW SPACES.

Comparison of Regulations, &c., by the Governments of the Commonwealth of Australia, Norway (in draft), and the United Kingdom.

	AUSTRALIA.	NORWAY.	UNITED KINGDOM.
Officers, per head—			
Cubic space - -	180 cub. feet Under 300 tons gr. 175 cub. feet	140 cub. feet	120 c. ft. } For all purposes
Floor area - -	...			15 sq. ft. }
Seamen and Apprentices, per head—			
Cubic space - -	140 cub. feet	18 sq. feet	72 c. ft. } Minimum for sleeping
Floor area - -	18 sq. feet			12 sq. ft. }
Ventilation - - -	3,000 cub. feet per hour per head	No standard	No standard
Head room - - -	...	Under 200 tons gross 6 feet 3 inches, Above 200 tons 6 feet 9 inches	5 feet 6 inches minimum
Mess room - - -	Separate, or folding, or sliding tables in quarters	Separate for 800 tons up	...
Food lockers, &c. -	...	Not in sleeping quarters	Not in sleeping quarters
Bathrooms and lavatories, h. & c. water.	q. s.	Over 800 tons, separate washing for each two men of watch Over 400 tons, ditto for long voyages and to tropics 1,500 tons and up, add bath	Optional
Hospital - - -	Minimum 100 persons carried	On vessels above 200 tons and carrying crew of 12 persons and up- wards.	Optional.
W.C's, &c. - - -	q. s.	1 to every 10 persons	1 to every 10 persons
Position - - -	Not below winter load line	Not below main deck unless ports 2½ feet above winter load line	Optional

SLEEPING ACCOMMODATION ON BOARD SHIP.

The following Table gives particulars of the sleeping accommodation in the crew's quarters found on certain vessels inspected by your Officers.

Date.	Quarters (Native).	Occupied by	Sleeping accommodation provided.		Number of men for whom no sleeping accommodation is provided.	
			Bunks.	Cots, Gunny Bags and Hammocks.		
1913.						
September	29	Firemen - -	101 men	29	27	45
October	3	Firemen - -	101 ..	20	40	41
		Seamen - -	48 ..	18	13	17
"	7	Firemen - -	55 ..	29	17	9
		Seamen - -	42 ..	17	11	14
"	29	Firemen - -	101 ..	23	16	62
		Seamen - -	51 ..	21	7	23
November	3	Firemen - -	101 ..	30	32	39
		Seamen - -	50 ..	24	16	10
"	11	Firemen - -	81 ..	17	20	44
		Seamen - -	45 ..	14	3	28
"	19	Firemen - -	101 ..	44	20	37
		Seamen - -	47 ..	22	11	14
"	20	Firemen - -	87 ..	11	24	52
		Seamen - -	42 ..	11	12	19
"	25	Firemen - -	101 ..	52	7	42
		Seamen - -	47 ..	33	10	4
December	4	Firemen - -	101 ..	30	26	45
		Seamen - -	47 ..	21	10	16
"	8	Firemen - -	80 ..	17	18	45
		Seamen - -	41 ..	14	10	17
"	16	Firemen - -	101 ..	19	29	53
		Seamen - -	47 ..	20	16	11
"	30	Firemen - -	101 ..	30	36	35
		Seamen - -	47 ..	28	5	14
		TOTALS -	1,766 men	594	436	736

This Table shows that the crew's quarters were occupied by 1,766 seamen, for whom only 594 bunks were provided, and a few cots and hammocks.

Many of the hammocks were improvised out of gunny bags, the remainder of the occupants had to sleep on the floor or on their boxes.

The facts were reported in the first instance to the Board of Trade, and representations were made to the owners, and hammocks sufficient in number have been supplied to each vessel, but as they are only issued to the men on request, the deficiency of sleeping accommodation continues.

The crews in these vessels are natives of India, whose standard of comfort is usually lower than that possessed by Europeans, but the fact that rough wooden cots were erected in some of the vessels by the crew, and also that gunny bags had been improvised as hammocks, would indicate that if the proper number of hammocks were hung in the quarters, the crew would make use of them.

DEATHS OF SEAMEN FROM DISEASE.

I have extracted the following information from the official returns issued by the Board of Trade, of the deaths from all causes of seamen belonging to merchant vessels registered in the United Kingdom, which were reported to the Board of Trade during the year ended the 30th June, 1913.

As to the sources of information, the Report states that:—

The particulars relating to deaths of seamen are obtained from depositions and formal inquiries in respect of wrecks and casualties, inquiries held by Superintendents of Mercantile Marine Offices, Consuls and Colonial Officers, entries in official log books, &c. . . . , but the classification of deaths from disease necessarily depends in some cases on opinions and inferences of persons who have had no special medical training. It is not, therefore, proposed that the figures relating to deaths from disease should be accepted as exact statistics, but it is considered that they are sufficiently accurate to be of use when questions arise relating to the origin or prevalence amongst seamen of particular maladies.

TABLE XXXIX.

<i>Causes of Deaths.</i>	<i>Total Deaths of all Seamen, British and Foreign, on Sailing and Steam Vessels.</i>	<i>Deaths after Discharge.</i>	<i>Grand Total.</i>
ZYMOTIC—			
Enteric Fever...	45	18	63
Small-pox ...	3	1	4
Yellow Fever...	1	—	1
Cholera ...	17	5	22
Plague ...	5	—	5
Plague (bubonic) ...	2	—	2
Other Zymotic Diseases ...	10	4	14
Simple and Ill-defined Fevers ...	10	2	12
Remittent and Intermittent Fevers ...	3	—	3
Malarial Fever and Malaria ...	51	5	56
Blood Poisoning ...	11	5	16
Beri-Beri ...	25	2	27
Venereal Diseases ...	10	3	13
CONSTITUTIONAL DISEASES—			
Tuberculosis (General)...	22	12	34
Rheumatism and Rheumatic Fever ...	3	—	3
Cancer ...	12	5	17
Forward ...	230	62	292

<i>Causes of Deaths.</i>	<i>Total Deaths of all Seamen, British and Foreign, on Sailing and Steam Vessels.</i>		<i>Deaths after Discharge.</i>	<i>Grand Total.</i>
Brought forward	...	230	62	292
DISEASES OF THE NERVOUS SYSTEM—				
Apoplexy	...	29	1	30
Inflammation of the Brain	...	11	1	12
Heat Apoplexy and Heat Stroke	...	20	1	21
Sunstroke	...	1	1	2
Other Diseases of the Brain	...	5	3	8
Paralysis	...	4	1	5
Other Diseases of the Nervous System	...	6	2	8
Lunacy and Insanity	...	8	4	12
Alcoholism	...	6	—	6
Opium	...	8	—	8
DISEASES OF THE CIRCULATORY SYSTEM—				
Diseases of the Heart	...	142	20	162
Other Diseases of the Circulatory System	...	5	2	7
DISEASES OF THE RESPIRATORY SYSTEM—				
Phthisis	...	79	18	97
Pneumonia	...	92	21	113
Bronchitis	...	14	2	16
Pleurisy	...	10	2	12
Other Diseases of the Respiratory System	...	21	6	27
DISEASES OF THE DIGESTIVE SYSTEM—				
Diseases of the Stomach (Gastritis, &c.)	...	24	2	26
Diseases of the Intestines (Enteritis, Peritonitis, Appendicitis, &c.)	...	56	10	66
Diseases of the Liver (Jaundice, Hepatitis, Cirrhosis, &c.)	...	17	6	23
Diarrhoea and Dysentery	...	29	5	34
Other Diseases of the Digestive System	...	1	1	2
DISEASES OF THE URINARY SYSTEM—				
Diseases of the Kidneys (Nephritis, Uræmia, &c.)	...	23	4	27
Bright's Disease	...	4	1	5
Other Diseases of the Urinary System	...	5	1	6
Dropsy	...	7	—	7
DEBILITY, OTHER ILL-DEFINED AND UNKNOWN DISEASES—				
Debility	...	22	2	24
Other and Ill-defined Diseases	...	37	1	38
Unknown Diseases	...	4	3	7
		<u>920</u>	<u>183</u>	<u>1,103</u>

From the above figures it will be seen that the causes accounting for the largest number of deaths from disease, are as follows :—

	<i>Per cent. of Total Deaths from Disease.</i>
Diseases of the Heart	14·6
Pneumonia	10·2
Tuberculosis and Phthisis	11·8
Total from Diseases of the Respiratory System	24·0
Total from Diseases of the Digestive System	13·6
Total from Zymotic Diseases	21·5

Excluding diseases of the heart, it will be seen that the number of deaths attributed to tuberculosis and phthisis, is larger than that of any other disease—pneumonia coming next with 113, while the total deaths from diseases of the respiratory system were 265, or 24 per cent. of total deaths from disease. This proportion of deaths in a class of men which are leading an open-air life is striking, and the prevalence of such diseases amongst them is no doubt largely encouraged by the want of ventilation in the quarters in which many of them are compelled to sleep and live, when not actually on deck.

The total number of deaths from "zymotic diseases," under which heading is included the generally known infectious fevers, &c., is 238, or 21·5 per cent. of the total. Of these diseases, enteric fever accounts for 63 deaths, and malaria for 56. The number of deaths from venereal disease is only 13, as men rarely die from this disease on board ship, and the figure gives no indication as to the number of cases which have occurred amongst seamen during the year.

Diseases of the digestive system which account for a total of 151 deaths, or 13·6 per cent., include all the well-known diseases of the digestive tract, a discussion of which would be beyond the limits of space in this Report.

PORT OF LONDON.

The limits of the Port of London as at present defined commence at High Water Mark in the River Thames at Teddington Lock, in the County of Surrey, and extend down both sides of the River Thames to an imaginary straight line drawn from the Pilot Mark at the entrance of Havengore Creek, in the County of Essex, to the Lands End at Warden Point, in the Isle of Sheppey, in the County of Kent, such point being the North-Western limit of the Port of Faversham, and shall extend up and include both sides of the River Medway to an imaginary straight line drawn from the South-East point of land Westward of Coalmouth Creek, thence across the said River Medway to the Westernmost point of the piece of land which forms the Eastern side of the Stangate Creek, or, in other words, the North-West point of Fleet Marsh, and from thence in a Southerly direction to Iwade Church, in the said County of Kent, and thence in a North-easterly direction to Elmley Chapel, in the said Isle of Sheppey, a supposed direct line from Elmley Chapel, to Iwade Church, being the Western limit of the Port of Faversham, and the said Port of London shall include the Islands of Havengore Creek aforesaid, called Potton and Rushley 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. (See page 83.)

POPULATION OF THE PORT.

The number of persons actually living within the Port, on vessels, is always of interest, and the opportunity afforded by the Census 1911 has been taken, with a view to furnishing your Committee with some information as to the resident population of the Port, as distinct from the larger working population which flows and ebbs daily.

According to the Census returns, the number of persons enumerated on board sea-going and coasting merchant vessels, and on inland barges and boats, in the counties of London, Middlesex, Surrey, Essex and Kent, but within the district of the Port of London Sanitary Authority, was 9,710 on 1,296 vessels.

At the previous Census in 1901, the numbers were 9,166 persons on 1,299 vessels

The close comparison, not only with regard to the number of vessels, but the number of persons in occupation, is interesting, and as I pointed out in discussing the Census of 1901, that in 1874 soon after the Authority was constituted, the then Medical Officer of Health (Dr. Leach) estimated that the average number of vessels in Port at any one time was 1,000, and the population probably 9,000—a very close estimate.

The figures tend to show that the number has not fluctuated very greatly during the past fifty years, either in the number of vessels in the Port at any one time, or of the number of persons resident on the same.

On the last occasion I was able to give some information of the proportion of British, Foreign, Colonial and other classes of vessels, and of the number of females living on board vessels, but on this occasion the method of tabulation adopted does not furnish these particulars.

I append a list showing the counties, parishes and administrative areas abutting upon the district of the Port of London Sanitary Authority, and the number of vessels and persons enumerated in each.

The figures quoted here do not include any persons on His Majesty's ships.

The Port, like the City of London, represents a huge day working area, and a day Census, showing the number of persons employed would, if practicable, be of interest and value.

TABLE XL.

PORT OF LONDON POPULATION.

Number of persons enumerated on Vessels within the limit of the Port of London.
Extracted from Census Returns, 1911.

<i>County.</i>	<i>Parish.</i>	<i>Vessels.</i>	<i>Persons.</i>
Middlesex -	Brentford U.D.—		
	New Brentford - - - -	34	150
	Old Brentford - - - -	2	4
	Chiswick U.D. and C.P. - - - -	4	8
	Heston and Isleworth U.D.—Isleworth - - - -	24	81
	Twickenham U.D. and C.P. - - - -	1	2
Surrey -	Ham U.D. and C.P. - - - -	1	3
	Richmond M.D.—Kew - - - -	2	2
	Barnes U.D.—Mortlake - - - -	2	4
London -	Left Bank—		
	Hammersmith - - - -	1	3
	Fulham - - - -	5	8
	Chelsea - - - -	3	7
	Carried forward - - - -	79	272

<i>County.</i>	<i>Parish.</i>	<i>Vessels.</i>	<i>Persons.</i>	
	Brought forward -	-	79	272
London (<i>continued</i>)	Westminster—			
	St. George's, Hanover Square	-	6	11
	St. Margaret and St. John	-	8	13
	City of London	-	20	190
	Stepney—			
	St. George in the East	-	22	168
	St. Botolph (Without), Aldgate	-	26	321
	Shadwell	-	17	141
	Wapping	-	22	310
	Ratcliff	-	14	122
	Limehouse	-	30	157
	Poplar M.B.	-	149	1,005
	Right Bank—			
	Wandsworth	-	7	13
	Battersea	-	15	32
	Lambeth	-	15	30
	Southwark M.B.—			
	Christchurch	-	11	19
	St. Saviour's	-	6	11
	Bermondsey	-	105	692
	Camberwell	-	8	16
	Deptford	-	1	2
	Greenwich M.B.—			
	Charlton and Kidbrooke	-	19	163
	Greenwich	-	42	140
	St. Nicholas, Deptford	-	12	57
	Woolwich M.B.—			
	Woolwich	-	67	363
	Plumstead	-	7	45
Essex	West Ham	-	69	711
	East Ham	-	43	438
	Romford R.D.—			
	Dagenham	-	8	81
	Rainham	-	4	10
	Barking	-	20	51
	Grays Thurrock	-	25 ^a	732 ^a
	Orsett R.D.—			
	Chadwell	-	21	579
	Corringham	-	12	22
	East Tilbury	-	6	21
	Fobbing	-	2	3
	Little Thurrock	-	2	96
	Mucking	-	1	2
	Stanford-le-Hope	-	4	12
	Stifford	-	3	14
	West Thurrock	-	16 ^b	433 ^b
	Billericay R.D.—Pitsea	-	2	3
	Rochford R.D.—			
	Canvey Island	-	7	40
	Great Stambridge	-	1	1
	Great Wakering	-	2	4
	Hadleigh	-	2	2
	Carried forward	-	978	6,548

(a) Includes Training Ship "Exmouth," 663 persons.

(b) Includes Reformatory School Ship "Cornwall," 295 persons.

<i>County.</i>	<i>Parish.</i>	<i>Vessels.</i>	<i>Persons.</i>
	Brought forward - - -	978	6,548
Essex (<i>continued</i>)	Rochford R.D. (<i>continued</i>)—		
	Little Stambridge - - -	3	6
	Paglesham - - -	4	4
	South Benfleet - - -	5	10
	South Fambridge - - -	1	1
	Sutton - - -	1	2
	Leigh - - -	10	23
	Southend-on-Sea M.B.—		
	Prittlewell - - -	40	127
	Southchurch - - -	2	4
	South Shoeburyness - - -	3	6
Kent	Dartford R.D.—		
	Dartford - - -	1	1
	Crayford - - -	2	4
	Stone - - -	19 ^c	299 ^c
	Swanscombe - - -	33 ^d	483 ^d
	Erith - - -	30	153
	Northfleet - - -	21	96
	Gravesend M.B.—		
	Gravesend - - -	25	184
	Milton - - -	27	78
	Strood R.D.—		
	Chalk - - -	4	9
	Cliffe - - -	10	27
	Denton - - -	6	27
	Frindsbury Extra - - -	14	75
	Halling - - -	5	8
	Higham - - -	3	3
	Hoo R.D.—		
	Allhallows - - -	2	4
	Hoo - - -	4	8
	Isle of Grain - - -	7	14
	Stoke - - -	1	1
	Sheppey R.D.—		
	Emley - - -	3	6
	Minster in Sheppey - - -	3	4
	Queenborough - - -	17	408
	Sheerness - - -	32	87
	CENSUS 1901 - - -	1,299	9,166

LAUNCHES.

The new motor launch "George Briggs" was delivered in October, and has done good work since in inspection of vessels lying in the Upper District. The launch fulfils all requirements in that district, is easily handled and speedy. Being of shallow draught the advantages in this respect over the old steam launches have already been proved. Creeks can now be visited, also vessels lying in shallow water during the ebb tide.

The steam launch "Denton" has been sold, and the "Clotho" is at present, pending sale, being used as a reserve. For this the old launch is very useful, being a good sea-boat, can be used even in bad weather on the Gravesend Station when the larger launches have to lay-by for overhaul.

(c) Includes Training Ship "Warspite," 209 persons.

(d) Includes Training Ships "Arethusa" and "Chichester," 240 persons.

BARGE "THOMAS."

FUMIGATING APPARATUS.

The fumigating plant was used on eight occasions during the year, the largest ship fumigated being one of 10,750 tons, with a cubic capacity of 652,000 cubic feet.

Date.	Name of Vessel.	Capacity in Cubic Feet.
1913.		
April 19th	s.s. "Themistocles" - - - - -	551,573
May 27th	s.s. "Mongolia" - - - - -	186,688
" 29th	s.s. "Ixia" - - - - -	128,000
June 14th	s.s. "Norseman" - - - - -	652,800
" 17th	s.s. "Persia" - - - - -	154,730
Aug. 2nd	s.s. "India" - - - - -	126,620
" 14th	s.s. "Stag" - - - - -	121,370
Sept. 4th	s.s. "Paris" - - - - -	43,500

I have received a letter from the Port of London Authority, dated 30th July, 1913, in which it is stated that the Dock and Warehouse Committee have authorised that, until further notice, the fumigating craft of the Port of London Sanitary Authority shall be exempt from dock dues when entering the docks for the sole purpose of fumigating vessels.

STAFF.

The following short remarks deal with the principal changes and modifications that have occurred in the Staff during the year.

MEDICAL OFFICERS.—Dr. Legge, Sheerness, who had been ill and off duty, was able to resume duty in April, and has since continued to perform the usual duties carried out by him, some special remarks on which will be found in that section of the Report dealing with medical inspection at Sheerness.

INSPECTORS.—I have to report with regret the loss in November, by death, after a long illness, of Inspector W. G. Romeril. He was the senior Sanitary Inspector, and had been in the service of the Corporation since 1892, being 54 years of age at the time of his death. He was an exceptionally intelligent, capable, loyal and industrious officer, and took an active interest in all matters appertaining to his duties—and was a contributor to current literature on the subject of sanitation on board ships. Some years ago he published a work entitled "Sanitation in the Mercantile Marine," which was a useful addition to literature on this subject.

OFFICE.—James G. Godden, Junior Clerk, resigned his position in December in order to take up an appointment abroad. He had been in the service three years, having joined in 1910.

LAUNCHES.—A. E. Topping, deckhand of the "Denton," resigned his position in March, and the vacancy was filled by J. Baulsom at commencing wages of 16s. per week.

Owing to the acquisition of a motor launch, the services of W. Shaw, deckhand, were dispensed with in November.

HOSPITAL.—Miss Hoare, Senior Assistant Nurse, resigned her position in March, and Miss G. G. Jones was appointed to fill the vacancy. Miss Jones resigned in September, and Miss A. A. Foggo was appointed to the vacancy.

Miss F. Cork, Junior Assistant Nurse, who contracted Enteric Fever in November, 1912, returned to duty in February. She resigned her position in November, and Miss A. Densham was appointed to fill the vacancy.

Emma Accleton and Ethel Harling were appointed in January, as Cook and Housemaid respectively. They resigned their positions in October, and the vacancies were filled by Ellen Hutson and Florence Ambrose.

CANAL BOATS ACTS.

In accordance with Section 3 of the Canal Boats Act, 1884, I beg to present herewith my Annual Report on the working of the Canal Boats Acts and Regulations within the district of the Port of London Sanitary Authority, during the year ending 31st December, 1913.

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

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

On the right bank from Teddington downwards :—

- Wandsworth Creek (River Wandle).
- Part of the Grand Surrey Canal within the Surrey Commercial Docks.
- Hay's Dock.
- St. Saviour's Dock.
- Deadman's Dock.
- River Ravensbourne (Deptford Creek).
- Rivers Cray and Darent (Dartford Creek).
- 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.
 Part of the River Lea.
 Barking Creek.
 Rainham Creek.
 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 Burr - - - 208*l.* per annum.

MIDDLE DISTRICT.

Greenwich to Erith.

Inspector Elward - - - 175*l.* 10*s.* per annum.

LOWER DISTRICT.

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

Inspector Shepherd - - - 148*l.* 4*s.* per annum.

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

It has been found advisable to sub-divide these districts, and instead of one Inspector to each, two have been appointed to the Western, and two to the Eastern district, as follows :—

CENTRAL DISTRICT.

West India Dock.
 South West India Dock.
 Poplar Dock.
 Millwall Dock.

Inspector Lambe - - - 201*l.* 10*s.* per annum.

EASTERN DISTRICT.

Royal Victoria Dock.
 East India Dock.

Inspector Garland - - - 208*l.* per annum.

Royal Albert Dock.

Inspector Wetjen - - - 208*l.* per annum.

WESTERN DISTRICT.

London Dock.

St. Katherine's Dock.

Regent's Dock.

Inspector Hopkins - - - 20*l.* per annum.

Surrey Commercial Dock.

Inspector Rolfe - - - 20*l.* 10*s.* per annum.

GRAVESEND DISTRICT.

Tilbury Dock.

Left Shore, from Purfleet down.

Right Shore, from Erith down.

Inspector Massie - - - 169*l.* per annum.

(2) The total number of inspections for the year was 576, representing a net number of 451 boats. The remainder, 125, represents repeated visits by Inspectors of this Authority.

The number of the boats not conforming to the Acts and Regulations was 53, or 9·20 per cent. of the total, the percentage for the previous five years being 6·96 per cent.

In addition to the above, 26 boats were at the time of visit found with the cabin doors locked, there being no person on board. Inspection was therefore impossible, and these visits are not included in the number of boats inspected.

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

(a) UNREGISTERED BOATS.

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

Date.	Name of Boat.	Registration Authority.	Reason for Registration or Re-registration.
1913.			
Jan. - -	"William" - - -	- - -	- - -
June - -	"William" - - -	- - -	- - -
March - -	"John" - - -	Birmingham - -	New Boat.
Aug. - -	"Industry" - - -	Port of London - -	Ditto.

The "Industry" was registered with this Authority, and the "John" is under registration by the Birmingham Registration Authority.

In the case of the "William," the boat has not been met with since June. The owner states that it is not used as a residence. An opportunity will be taken of inspecting the boat when next in the port and ascertaining whether there is any evidence of occupation.

(b) NOTIFICATION OF CHANGE OF MASTER.

None.

(c) CERTIFICATES.

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

1913.					
Jan.	5	* "Mole"	- - -	registered	Berkhamsted, No. 334.
"	11	* "Crawford"	- - -	"	Uxbridge, No. 412.
"	30	* "Grace"	- - -	"	Brentford, No. 315.
April	17	* "Franklin"	- - -	"	Berkhamsted, No. 338.
May	2	* "Stanley"	- - -	"	Port of London, No. 271.
"	20	* "Henley"	- - -	"	Uxbridge, No. 458.
"	22	* "Don"	- - -	"	Port of London, No. 357.
June	23	† "Caledonia"	- - -	"	" " No. 420.
"	23	† "Britannia"	- - -	"	" " No. 418.
"	23	† "Wales"	- - -	"	" " No. 410.
"	25	* "Henley"	- - -	"	Uxbridge, No. 458.
July	14	* "Grantham"	- - -	"	Birmingham, No. 1259.
"	30	* "Sarah"	- - -	"	Berkhamsted, No. 408.
Oct.	16	* "Sarah"	- - -	"	" No. 408.
"	30	* "Sarah and Eliza"	- - -	"	Uxbridge, No. 382.
Nov.	22	* "Henley"	- - -	"	" No. 458.
Dec.	6	"Wandle"	- - -	"	Berkhamsted.

† Under re-registration by this Authority.

In the following cases, the Certificates produced did not identify the owner with the boat :—

Jan.	31	‡ "John"	- - -	registered	Brentford, No. 59.
June	23	§ "England"	- - -	"	Port of London, No. 409.
Sept.	2	‡ "Jane"	- - -	"	Reading, No. 41.
Dec.	1	"Brimo"	- - -	"	" No. 20.

‡ Remedied.

§ Under re-registration by this Authority.

(d) MARKING.

The following boats were found infringing in this respect :—

March	10	‡‡ "James"	- - -	registered	Brentford, No. 322.
April	26	"Joseph"	- - -	"	" No. 363.
June	23	§§ "Caledonia"	- - -	"	Port of London, No. 420.
Sept.	2	"Jane"	- - -	"	Reading, No. 41.
Oct.	14	"Sarah"	- - -	"	Stepney, No. 4.
Nov.	14	"Sarah"	- - -	"	Berkhamsted, No. 408.
Dec.	6	"Wandle"	- - -	"	Berkhamsted.

‡‡ Remedied subsequently.

§§ Under re-registration by this Authority.

(e) OVERCROWDING.

This was found in the case of one boat, as follows :—

The canal boat "Samuel," registered Brierley Hill, No. 190, was inspected on the 21st October. The fore cabin, which is registered for two persons, was in a very leaky condition and quite unfit for habitation. The after cabin, registered for two adults, was occupied by two adults and three children. A complaint was sent to the owners.

The boat has since been met with, but I have received a letter from the owners stating that the boat is "laid up" and uninhabited. The complaint with regard to overcrowding is thus remedied.

(f) SEPARATION OF SEXES.

The following case was met with :—

The canal boat "Albert," registered Berkhamsted, No. 314, was inspected on the 27th October, when the after cabin was found to be occupied by a man and his wife, and a female person over the age of 12 years. A complaint was sent to the owners on the 1st November, and on the 17th December I received information that the infringement had been duly remedied.

(g) CLEANLINESS.

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

Jan.	5	"Mole"	-	-	-	registered Berkhamsted, No. 334.
"	30	"Sarah and Eliza"	-	-	"	Uxbridge, No. 382.
"	31	"John"	-	-	"	Brentford, No. 59.
April	22	"Warwick"	-	-	"	Wolverhampton, No. 917.
May	1	"Mary Ann"	-	-	"	Port of London, No. 458.
"	2	"Stanley"	-	-	"	" No. 271.
"	9	"Twaddell"	-	-	"	Brentford, No. 227.
July	31	"Hilton"	-	-	"	Ware, No. 53.
Sep.	30	"Livingstone"	-	-	"	Berkhamsted, No. 325.
Oct.	27	"Albert"	-	-	"	" No. 314.
Dec.	8	"Humber"	-	-	"	" No. 433.

(h) VENTILATION.

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

1913.						
Jan.	27	"Joseph"	-	-	-	registered Berkhamsted, No. 363.
"	28	"Nellie"	-	-	-	" Brentford, No. 192.
"	30	"William"	-	-	-	(unregistered).
Feb.	6	"Cicero"	-	-	-	registered Reading, No. 21.
"	25	"Warwick"	-	-	-	" Wolverhampton, No. 917.
March	18	"Colne"	-	-	-	" Berkhamsted, No. 333.
"	18	"Rose"	-	-	-	" Wolverhampton, No. 966.
April	22	"Warwick"	-	-	-	" " No. 917.
"	28	"Andree"	-	-	-	" Berkhamsted, No. 255.
May	2	"Stanley"	-	-	-	" Port of London, No. 271.
"	2	"Rhodes"	-	-	-	" " No. 203.
"	9	"Twaddell"	-	-	-	" Brentford, No. 227.
"	14	"Albert"	-	-	-	" Berkhamsted, No. 314.
"	16	"Alice"	-	-	-	" Port of London, No. 5.
"	16	"Humber"	-	-	-	" Berkhamsted, No. 433.
"	28	"Wales"	-	-	-	" Port of London, No. 410.
June	5	"George and James"	-	-	-	" Brentford, No. 42.
"	6	"Andree"	-	-	-	" Berkhamsted, No. 255.
"	9	"Rhodes"	-	-	-	" Port of London, No. 320.
"	9	"Brimo"	-	-	-	" Reading, No. 20.
"	16	"Rebecca"	-	-	-	" Brentford, No. 66.
"	23	"Britannia"	-	-	-	" Port of London, No. 408.
"	23	"Wales"	-	-	-	" " No. 410.
"	25	"Henley"	-	-	-	" Uxbridge, No. 458.

1913.						
July	8	"Diligent"	-	-	registered	Brentford, No. 65.
"	10	"Glendower"	-	-	"	Port of London, No. 457.
Sept.	2	*"Jane"	-	-	"	Reading, No. 41.
"	30	"Livingstone"	-	-	"	Berkhamsted, No. 325.
Oct.	3	*"Prudence"	-	-	"	Ware, No. 38.
"	7	*"Eric"	-	-	"	Brierley Hill, No. 231.
"	14	"Sarah"	-	-	"	Stepney, No. 4.
"	21	"Samuel"	-	-	"	Brierley Hill, No. 190.
"	22	*"Providence"	-	-	"	Ware, No. 46.
"	27	"Diligent"	-	-	"	Brentford, No. 65.
Oct.	27	*"Albert"	-	-	"	Berkhamsted, No. 314.
"	29	*"Dufferin"	-	-	"	" No. 347.
"	31	*"King"	-	-	"	Reading, No. 39.
Nov.	6	*"Sarah"	-	-	"	Berkhamsted, No. 408.
"	14	*"Sarah"	-	-	"	" No. 408.
"	24	"Alice"	-	-	"	Brentford, No. 305.
Dec.	1	"Brimo"	-	-	"	Reading, No. 20.
"	3	"Livingstone"	-	-	"	Berkhamsted, No. 325.
"	17	"Kuroki"	-	-	"	Port of London, No. 428.

(i) PAINTING.

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

1913.						
Jan.	27	"Joseph"	-	-	registered	Berkhamsted, No. 363.
April	22	"Warwick"	-	-	"	Wolverhampton, No. 917.
"	26	"Joseph"	-	-	"	Berkhamsted, No. 363.
May	2	*"Stanley"	-	-	"	Port of London, No. 271.
"	9	*"Twaddell"	-	-	"	Brentford, No. 227.
June	5	"George and James"	-	-	"	" No. 42.
"	16	"Rebecca"	-	-	"	" No. 66.
July	31	*"Hilton"	-	-	"	Ware, No. 53.
Sept.	2	*"Jane"	-	-	"	Reading, No. 41.
"	30	"Livingstone"	-	-	"	Berkhamsted, No. 325.
Oct.	3	*"Prudence"	-	-	"	Ware, No. 38.
"	14	"Sarah"	-	-	"	Stepney, No. 4.
"	21	"Samuel"	-	-	"	Brierley Hill, No. 190.
Nov.	6	*"Sarah"	-	-	"	Berkhamsted, No. 408.
"	24	"Alice"	-	-	"	Brentford, No. 305.
Dec.	3	"Livingstone"	-	-	"	Berkhamsted, No. 325.
"	12	"Leslie"	-	-	"	Brierley Hill, No. 229.

(j) PROVISION OF WATER CASK.

The following boats were not provided with proper water vessel for containing water for drinking. In 4 cases I received information that this has been done :—

1912.						
Jan.	5	*"Mole"	-	-	registered	Berkhamsted, No. 334.
March	18	*"Colne"	-	-	"	" No. 333.
April	15	*"Walter"	-	-	"	Daventry, No. 296.
"	15	*"Friendship"	-	-	"	Birmingham, No. 1,280
May	16	"Humber"	-	-	"	Berkhamsted, No. 433.
Sept.	30	"Livingstone"	-	-	"	" No. 325
Dec.	6	"Wandle"	-	-	"	" No. 327
"	12	"Leslie"	-	-	"	Brierley Hill, No. 229

(k) REMOVAL OF BILGE WATER.

In the following 4 cases, the bilges were found to be in a filthy condition.

* Reported to be remedied :—

1913.					
Jan.	5	*" Mole "	-	-	registered Berkhamsted, No. 334.
March	18	*" Colne "	-	-	" " No. 333.
May	28	*" Wales "	-	-	" Port of London, No. 410.
June	5	" George and James "	-	-	" Brentford, No. 42.

(l) NOTIFICATION OF INFECTIOUS DISEASE.

No case of infectious disease was notified to me during the year, on board any canal boat.

(m) ADMITTANCE OF INSPECTOR.

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

(4) No legal proceedings were necessary during the year.

(5) The total number of infringements found was 119 on 53 boats. Formal notice of each infringement was at once given to the owners, and in many cases were remedied without further complaint.

The number of written notices was 59, and the number which has been certified as attended to was 55. This number includes 19 orders made in 1912 and reported remedied in 1913. Of the complaints issued in the year now under review, 61·00 per cent. were remedied.

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

(7) No boats have been detained for cleansing.

(8) On December 31st, 1913, there were 254 boats on the Register :—

Propelled by Tug and Oars	-	-	-	237
" " Steam	-	-	-	15
" " Motors	-	-	-	2
				<u>254</u>

(9) Three boats were registered in 1913. These were new boats.

TABLE OF CANAL BOATS CARRYING CHILDREN ON BOARD.

Year.	No. of boats.	No. of boats with children.	No. of children.	Average No. of children per boat.	Average No. of boats with children.	
1908	-	1,168	206	459	2·18	17·63
1909	-	1,432	219	495	2·26	15·29
1910	-	908	172	354	2·05	18·94
1911	-	926	173	400	2·31	18·03
1912	-	841	197	409	2·07	23·42
1913	-	451	61	196	3·21	13·52

I have the honour to be, GENTLEMEN,

Your obedient Servant,

Herbert Williams.

Medical Officer of Health, Port of London.

TABLE XLI.
SUMMARY OF CANAL BOATS FOR THE YEAR ENDING 31ST DECEMBER, 1913.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	TOTAL FOR THE YEAR				
														1908.	1909.	1910.	1911.	1912.
New boats registered ... ..	...	1	...	...	1	...	...	...	1	...	...	...	3	...	...	2	6	2
Registration owing to structural alterations ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Registration for other purposes ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...
Inspected	51	44	53	55	56	57	70	12	25	66	48	39	576	1,110	1,379	878	889	817
Conforming to Acts and Regulations	43	42	49	49	46	46	65	11	23	55	44	33	506	1,066	1,289	807	800	692
Infringements in respect to:—																		
Registration	1	...	1	...	...	1	...	1	...	...	...	...	4	2	...	4	8	9
Notification of change of master ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
Absence of certificate	3	...	...	1	3	4	2	...	...	2	1	1	17	22	9	20	44	34
Certificate not identifying owner with boat	1	...	...	...	...	1	...	...	1	...	...	1	4	13	5	...	2	5
Marking, &c. ... ..	...	...	1	1	...	1	...	...	1	1	1	1	7	14	20	9	18	11
Overcrowding ... ..	...	...	...	...	...	...	...	...	...	1	...	...	1	5	3	2	5	5
Partition separating sexes ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2
Males over age ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2
Females over age ... ..	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Cleanliness	3	...	...	1	3	...	1	...	1	1	...	1	11	30	20	14	12	23
Painting... ..	1	...	...	2	2	2	1	...	2	3	2	2	17	2	...	9	19	17
Ventilation	1	...	...	...	1	3	1	...	...	...	...	...	6	1	2	3	5	8
Dilapidation	2	2	2	2	6	7	1	...	2	9	3	3	39	31	46	27	33	68
Removal of bilge water	1	...	1	...	1	1	...	...	...	...	...	...	4	...	...	...	1	3
Without pump ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Refusal to admit Inspector ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No proper water vessel	1	...	1	2	1	...	...	...	1	...	...	2	8	10	6	5	9	9
Without double bulkhead ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Notification of infectious disease ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Detained for cleansing ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Proceedings taken... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Cautions given	6	2	3	5	8	9	4	1	2	9	4	6	59	76	80	33	70	97
„ attended to	4	4	9	7	4	5	3	3	1	5	5	5	55	71	80	46	49	74

Total registered by Port Sanitary Authority since 1887 461
Cancelled 207

Actual number on the Register, 31st December, 1913 254

Registered for 2,154 persons.
Carrying 926 men.
205 women.
196 children.

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

Dr.

REVENUE ACCOUNT for the Year ended 31st December, 1913.

Cr.

	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
To Salaries, viz. :-												
Dr. H. Williams, Medical Officer of Health ...	1,000	0	0									
Assistant Medical Officers :-												
Dr. W. M. Willoughby ...	£400	0	0									
" J. S. Warrack ...	400	0	0									
" W. M. Willoughby ...	109	4	0									
" W. D. Betenson ...	400	0	0									
" E. V. Legge ...	350	0	0									
" A. Kidd ...	370	0	0									
Locum Tenens ...	133	17	6									
				2,163	1	6						
W. J. Albrow, Clerk ...				295	0	0						
							3,458	1	6			
" Uniforms ...							128	13	8			
" Fidelity Guarantees ...							1	16	0			
" National Health Insurance ...							18	11	3			
" Wages, per Dr. Williams, viz. :-												
Offices ...	478	10	0									
Inspectors ...	2,795	15	10									
Launch Crews ...	1,377	0	9									
Hospital Staff ...	289	6	9									
							4,940	13	4			
" Workmen's Compensation ...							15	8	4			
" Contributions to Officers' Pension Fund No. 1 £ 94 17 1												
" Ditto No. 2 233 3 8												
				328	0	9						
" Contributions to Officers' Pension Fund re Pensions ...	169	8	8									
" Pensions ...	52	0	0									
							549	9	5			
" Disbursements, per Dr. Williams, viz. :-												
Petty Cash Expenses, Inspectors and others ...	336	10	8									
Postage Stamps ...	54	0	0									
Sundry Office Expenses ...	35	11	8									
							426	2	4			
" Offices at Greenwich, viz. :-												
Rent ...	55	0	0									
Rates and Taxes ...	19	11	0									
Fire and Boiler Insurance ...	1	0	2									
Telephone Rent ...	20	10	0									
Gas ...	8	6	6									
Furniture ...	11	2	3									
Coal ...	7	13	3									
Water ...	2	6	0									
							125	9	2			
" Expenses of Steam Launches, Hulk, &c., viz. :-												
Insurance ...	152	0	0									
Coal and Coke ...	432	14	1									
Repairs... £200 16 2												
Less Reimbursements for Damage ... 92 4 2												
				108	12	0						
Skiff and Moorings ...	7	12	6									
Stores ...	220	4	1									
Petrol ...	41	16	8									
Purchase of new Launch ... £837 17 6												
Less Sale of old one ... 135 0 0												
				702	17	6						
							1,665	16	10			
" Hospital at Denton, viz. :-												
Expenses of extra Nurses ...	170	14	4									
Rent of Causeway, &c. ...	18	5	0									
Rates and Taxes ...	77	10	5									
Fire and Boiler Insurance ...	11	8	6									
Telephone Rent ...	13	5	0									
Gas ...	51	7	8									
Coal ...	54	4	1									
Stores ...	69	5	2									
General Repairs ...	183	9	6									
Maintenance of Patients ...	134	17	8									
							784	7	4			
" Printing and Stationery ...							68	0	6			
" Telegrams and Maintenance of Private Wire ...							21	18	7			
" Examination of Rats, &c. ...							884	3	0			
" Condemning Unsound Food, Expenses ...							24	14	10			
" Proceeds of sale of Unsound Food returned to Consignees (see contra) ...	2,071	12	4									
" Disinfectants ...							31	11	10			
" Subscriptions ...							10	16	0			
" Advertisements ...							9	19	9			
" Medical Examinations re new Appointments ...							2	2	0			
" Miscellaneous ...							15	3	0			
" Law Charges, viz. :-												
Mr. Comptroller ...	1	0	10									
Mr. Solicitor ...	3	16	0									
										4	16	10
" Parliamentary Expenses ...							190	11	7			
" Mr. Hallkeeper, Disbursements ...							0	2	4			
" Delegation Expenses ...							74	5	0			
" Committee's Allowance ...	150	0	0									
" Ditto re Inspection of River ...	150	0	0									
							300	0	0			
				£15,324	6	9						
										£15,324	6	9

