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

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REPORT,

FOR THE YEAR ENDED 31ST DECEMBER, 1903,

OF THE

MEDICAL OFFICER OF HEALTH

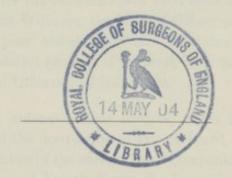
FOR THE

PORT OF LONDON.

BY

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

MEDICAL OFFICER OF HEALTH, PORT OF LONDON,
FELLOW OF THE 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.

1904.

REPORT.

FOR THE YEAR ENDED STET DECEMBER, 1905,

THE NO

MEDICAL OFFICER OF HEALTH

THE BOY

PORT OF LONDON.

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

DESCRIPTION OF THE PARTY OF THE



20000003

NAME OF STREET, STREET



A Common Council holden in the Chamber of the Guildhall of the City of *London*, on *Thursday*, the 14th day of *April*, 1904.

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 to the 31st December last; which was read.

RESOLVED, That the consideration thereof be adjourned, and it is 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, 1903, which Report contains a full and detailed account of the work done in the Port during that period by the Medical Officers and Inspectors.

The Report gives, amongst other matters, much interesting information respecting Plague and the destruction of rats on board ships coming into the Port, and on the premises of the various Dock Companies, and also with regard to Cholera, Small-pox and Enteric Fever, the Inspection of Canal Boats, and Food Inspection.

The Report also deals at considerable length with the question of Alien Immigration, and the Report of the Royal Commission appointed to investigate the same. In accordance with the instructions of your Honourable Court, on our recommendation, a communication was addressed to the Board of Trade, urging that steps should be taken at the earliest possible date to carry into effect the recommendations of the Royal Commission, and at the same time expressing the opinion that the medical examination of alien immigrants and the duty of regulating the accommodation upon immigrant vessels should be entrusted to the Port Sanitary Authority.

It is satisfactory to note that, notwithstanding the difficulties attending the medical inspection of vessels at Sheerness, the Report of the Medical Officer shows that the proportion of Foreign vessels visited has been larger than in previous years, and that the inspection is now carried out by Dr. Legge with a degree of efficiency not attained under any previous arrangement.

An important decision has recently been given in the Court of Appeal arising out of proceedings taken by order of your Committee against the owner of the steam tug "Richmond," for smoke nuisance, which will have an important bearing upon the work of the Port of London Sanitary Authority in their efforts to abate this evil.

The Judgment of the High Court is set out in the Medical Officer's 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.

All which we submit to the judgment of your Honourable Court. Dated this twelfth day of April, 1904.

Horace S. Dove.
Robt. Gresley Hall.
Rob. B. Warrick.
Edward Ardley.
Walter Dennis.
T. Howard Deighton.

James Lake.
Geo. Taylor.
J. Cloudsley.
N. Fortescue.
David Haydon.
E. Constantine.
S. Spencer.



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STAFF.

LIST OF OFFICERS AT PRESENT FORMING THE STAFF OF THE PORT OF LONDON SANITARY AUTHORITY.

Each of the Inspectors holds the Certificate of the Sanitary Institute, and those marked thus * hold in addition the Special Certificate for Inspectors of Food.

	Office.					Name of Officer. Date of Appointment
MEDICAL OFFICE					- NG	Herbert Williams, M.D., M.R.C.S., June, 1901. L.R.C.P., D.P.H.
PURPOSES-					(G.C.Hancock, M.R.C.S., L.R.C.P., October, 1897.
Geavesend)	W. M. Willoughby, B.A., M.B., May, 1901.
GRAVESESD				-101)	B.C., D.P.H. J. S. Warrack, M.A., M.D., M.B., April, 1903.
Sheeuness -	-	-	-	-	-	C.M., D.P.H. E. V. Legge, M.A., M.D., M.B., September, 1902.
GREENWICH OF	ICES-					B.C.,B.A.O.,L.M.(Temporary).
Clerk	-	-	-	-	-	W. J. Albrow March, 1890.
1st Assistant - 2nd ditto -	-			-	-	E. A. Sorrell October, 1894. W. C. Barham June, 1903.
Junior ditto -	-	10-	-	-		W. C. Barham June, 1903. H. N. Jones June, 1903.
FOOD INSPECTO	RS -	-	-	_	-	*H. Spadaccini July, 1898.
						*W. Anderson July, 1898. *T. W. Bailey July, 1901.
						*T. W. Bailey July, 1901.
SANITARY INSPI	CTOR	S -	-		-	*W. G. Romeril August, 1892.
						*A. Garland May, 1894. *W. G. Wetjen August, 1898.
						*W. W. Burr August, 1898.
						*H. R. Hopkins February, 1899.
						P. R. Lambe January, 1900.
DENTON HOSPIT						J. H. Rolfe September, 1901. G.C.Hancock, M.R.C.S., L.R.C.P., October, 1897.
Medical Officer		-	-	-	-	D.P.H.
Nurse Matron		- 5	-	-	-	L. Muir July, 1903.
Assistant Nur Junior Nurse -			-	-	-	A. M. Rowland December, 1903. M. Slack September, 1903.
Maidservant -	-		-		-	E. Clewlaw January, 1904.
Caretakers -					1	G. Sillett June, 1898.
Caretakers -			-	-	. {	A. Sillett June, 1899.
STEAM LAUNCH: " David Burnett						
Master	-	-	-	-	-	J. G. True July, 1893.
Engineer - Deckhand -	150	-	-	-		G. H. Bagshaw July, 1893. C. Boyd July, 1902.
Stoker	-	-	-	-		E. Coppin July, 1903.
" Сьотно "—						
Master		-	_	-	-	W. Jarvis June, 1902.
Engineer -		-	-	1	-	W. J. Hardman July, 1901.
Deckhand -	-	-	-	+	-	E. Patrick July, 1903.
" DENTON "-						
Master			-	-	-	C. Strange June, 1902.
Engineer - Deckhand -	-	-	-	-	-	G. Lane July, 1901. S. Bromley July, 1903.
						ouj, 1000.
GREENWICH MC		GS-				T TT 11
Watchmen -	-	-	-	-		J. Howell April, 1897. H. Carter February, 1900.
HULK "HYGEIA	"					21. Onto
Shipkeeper -		-	-	1	-	I. Rogers April, 1893.
Ditto -						A. Salter July, 1898.

PORT OF LONDON SANITARY OFFICES, GREENWICH, S.E.

April, 1904.

TO THE WORSHIPFUL THE PORT OF LONDON SANITARY COMMITTEE.

GENTLEMEN,

I have the honour to present herewith my Annual Report on the work of your Officers, and the general conditions affecting the public health in the Port of London, for the year ending 31st December, 1903.

The general increase in the work done, to which I called attention in my last Annual Report, has been maintained throughout the past year, and the record appears to be one of steady progression.

Thus, as shown on a reference to Table I., the total number of visits of inspection made by your Sanitary Inspectors, for the year 1903, was 35,485, an advance on the preceding year of nearly 2,000 inspections, and upwards of 3,000 above the average for the preceding five years.

I last year drew attention to the important question of sailing barges and other vessels engaged in navigation entirely within the limits of the Ports of London, Rochester, Faversham and Colchester. I have this year classed all such vessels under the heading "Inland Navigation," from which it will be seen that a considerable amount of attention is given to this class of vessels.

I have also shown separately the figures referring to inspections of premises other than vessels, which form an important and increasing part of the duties of your Inspectors.

Of the total of 35,485 visits of inspection, 14,552 were to vessels lying in various parts of the River. 20,831 Inspections were made in the docks and in the Gravesend District, while 102 vessels were inspected in that portion of the River Medway which is within the jurisdiction of the Port Sanitary Authority.

Of the total number, 3,133, or 9 per cent., required cleansing, this cleansing being of the general kind, which is carried out on verbal representations being made by your Inspectors.

Of the total number of vessels inspected, 15,989 were from Foreign ports, 5,338 arrived coastwise, and 13,294 vessels came within the description of "Inland Navigation," while 864 inspections were made of premises on shore.

Of the nationality of vessels inspected, 29,444 were British, equal to 82.97 per cent. of the total, Swedish and Norwegian totalled 1,743, or 4.91 per cent. and German 1,063, or 2.99 per cent.

The number of seamen found by your Inspectors on their visits suffering from sickness of a non-infectious character, and referred to the Seamen's Hospital, Greenwich, amounted to 40.

The work done by the Steam Launches is also shown. The "David Burnett" being used in visiting 4,265, the "Clotho" 4,120, and the "Denton" 3,447 vessels during the year.

In illustration of the large area traversed by the Port of London, a list is given in Appendix J of the Cities, Boroughs, Urban and Rural Districts abutting upon the Port.

TABLE I.

General Summary, and Analysis, of the Sanitary Inspection of Vessels, &c., in the Port of London, for the year ending 31st December, 1903.

London,	for the year	ar endir	ng 31st	De	ecember	, 1903.				
Foreign. Coastw	ISE.	3 Th	Inland	NA	VIGATION		Shore Premises	Hospital.	WA' BARG	
Steam. Sail. Steam.	Sail. S	Steam.	Sail.		Lighters (uninhabite			erred to		1
Inspected. Defective. To be Cleaned. Defective. To be Cleaned. Inspected. To be Cleaned. To be Cleaned.	Defective. To be Cleaned. Inspected.	Defective. To be Cleaned.	Inspected. Defective.	To be Cleaned.	Inspected. Defective.	To be Cleaned. Inspected. Defective.	Inspected.	To be Cleaned.	No. in District in good condition, that December, 1992. New Barges,	No. in District, 31st Dec., 1903.
14102 166 1512 1887 51 203 3170 46 340 2	68 92 333 65	8 1 34 10	0485 161	587	1012 3	54 1139 68 2	8864 26 9	240	23 1	1 23
Total Inspections to 31st		ocks and R	iver.		No.	Nation	ality.		No.	Per cent. of Total,
December, 1902 650,60 Total Inspections from 1st	St. Katl		65 800	-	749	American	ME SUC	9	20	·05
January to 31st December, 1903 —	London		00 10 3		1,436 787	Austrian Belgian -	named	-	55 315	-88
"Foreign" - 15,989 "Coastwise" - 5,338	Regent's Millwall				2,318	British -	THE STATE OF	-		82-97
"Inland Navi-	West Ir		-261	-	2,006	Danish -		-	444	1.25
gation" - 13,294 Premises on	Poplar	mingle	12.ba	-	183	Dutch -	off_gree	-	634	1.78
shore 864 35,48	5 East In	dia -	-	-	905	Egyptian	-	-	1	-
Total 686,08	-		10 To old	-	1,290	Finnish -	alice and	-	98	-27
Total to be cleaned to 31st December, 1902 36,63	Royal A		-	-	2,484	French -		5	287 1,063	·80 2·99
December, 1902 36,65 Total to be cleaned from 1st	5 Comme Tilbury				1,965 2,583	German - Greek -		-	35	-09
January to 31st December, 1903 3,13	III DESIGNATION	end Dist	rict	-	3,261	Italian -	-	-	27	-07
Total 39,78	8 River—	-*Upper	Distric	t	5,289	Japanese		-	110	-30
Number of vessels inspected in the Launches—		"Middl	е "		4,408	Russian -	-	-	202	-56
"David Burnett" - 4,2	55	*Lower	,,		4,855	Spanish -	-	-	143	-40
"Clotho" 4,1		Medwa		-	102	Swedish &			1,743	4.91
"Denton" 3,4 Total 11,8	-	Total eremises	vessels	-	34,621 864	Shore pre	otal vess	els	864	2.43
Total 11,8 In the Docks, &c 23,6	S Comment	Total		-	35,485		otal		35,485	
Total 35,4	-		r District	_	ends from	Limehouse to Limehouse to Erith to outer	Teddington Erith.			1.
	OMPA		-	- 2						
and the Company	mand to	189	98. 1	899.	1900	. 1901.	1902.	6000	ly average the 5 years ling 31st mber, 1903-	1903.
Total number of Inspections of vessels	from-									
"Foreign"	č. ***	- 14,2	299 14	,564	14,960	6 16,844	16,336	15	,401.8	15,989
"Coastwise," "Inland Nav other Inspections -	gation," a	nd - 17,8	359 19	,052	15,839	15,231	17,270	16	,950-2	19,496
Total	Delivery.	- 31,6	33	,616	30,803	32,075	33,606	32	2,352.0	35,485

TABLE II.

MEDICAL INSPECTION-GRAVESEND. From 1st January to 31st December, 1903.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of foreign arrivals	789	690	855	894	965	934	995	938	935	907	948	861	10,711
Number medically inspected	191	172	316	216	218	188	183	205	221	204	225	213	2,552
Number of passengers	185	17	58	294	291	96	133	229	87	. 38	20	3	1,451
Number of crew	6,222	4,291	6,104	5,183	6,311	4,439	4,328	1,727	5,083	5,196	6,454	6,859	62,197

COMPARATIVE TABLE.

GRAVESEND.	1898.	1899.	1900.	1901.	1902.	Mean annual number for the 5 years.	1903.
Number of vessels medically inspected	1,096	1,276	1,256	1,080	1,668	1,275.2	2,522

Total number medically inspected at Gravesend—

From August, 1892, to December, 1902	 		***		18,291
" 1st January to 31st December, 1903	 				2,552
		Total		1	20,843

TABLE III.

MEDICAL INSPECTION—SHEERNESS. From 1st January to 31st December, 1903.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of foreign arrivals	19	19	29	28	39	42	40	47	58	26	25	30	402
Number medically inspected	17	17	26	25	37	38	38	39	51	18	20	16	342
Number of passengers	1	2	9	3	10	9	28	11	12	1		2	88
Number of crew	153	179	235	220	364	346	402	408	503	190	170	257	3,427

COMPARATIVE TABLE.

SHEERNESS.	1898.	1899.	1900.	1901.	1902,	Mean annual number for the 5 years.	1903.
Number of vessels medically inspected	265	263	243	212	244	245.4	342

Total number medically inspected at Sheerness-

From	1st September, 1894, to 31st December	, 1902	 * ***	 	2,373
22	1st January to 31st December, 1903		 	 	342

Total ... 2,715

MEDICAL INSPECTION.

The total number of vessels medically inspected at Gravesend during the year was 2,552.

This number is higher than any total for the preceding five years, and considerably above the mean for that period (Table II.).

This means, of course, that increased vigilance has been necessary on the part of your Medical Officers in dealing with the possible introduction of cases of Plague, as well as other infectious diseases, into the country. The results of this inspection are set out by me under the various headings in relation to Infectious Diseases.

I have much pleasure in recording the courtesy and co-operation of the Officers of H.M. Customs in carrying out this important duty, and especially would I mention the Inspector of the Waterguard, J. C. Elliott, Esq., I.S.O.

I would like to take the opportunity here of pointing out that the Return of Medical Inspections at Sheerness of vessels arriving in the Medway (Table III.) shows that a larger proportion of foreign arrivals are visited than was at one time the case, and it is probable that the medical inspection there on behalf of the Port Sanitary Authority is now carried out with a degree of efficiency not attained under any previous arrangement, a circumstance which reflects great credit on Dr. E. V. Legge, the Boarding Medical Officer stationed there.

The following Memoranda were, with the approval of your Worshipful Committee, sent to the Brethren of the Trinity House for distribution to Pilots and other persons concerned:—

INSTRUCTIONS FOR THE GUIDANCE OF PILOTS ENTERING THE PORT OF LONDON.

GRAVESEND DISTRICT.

The Upper limit of the Boarding Station at Gravesend is situated at the Customs House, and vessels should on no account proceed up River beyond that point until visited by the Officers of H.M. Customs, with the Port Medical Officer, and all requirements of these Officers complied with. A Medical Officer of the Port Sanitary Authority is always on duty at Gravesend, and accompanies the Officers of H.M. Customs to every vessel coming "from foreign." Every endeavour is made that these vessels shall be visited in the lower part of Gravesend Reach. I therefore suggest for the guidance of Pilots that every vessel "from foreign" shall slow down in the Lower Hope. That the Master be reminded to report on arrival to the Customs Officer every case of illness existing, or that has existed, on board during the voyage from the first port of

departure, including the stay of vessel in such port of departure. The Medical Officer of this Authority will then relieve the Master of the responsibility of deciding whether the case is of an infectious nature. Vessels from Infected Ports must bring to at the Boarding Station, and no person allowed to land pending the visit of the Medical Officer of Health, who, at his discretion, will have every person on board mustered for inspection. This applies, without exception, to Asiatic crews and passengers on such vessels, and all persons on such vessels not carrying a Surgeon. The Master should be instructed to have a list containing the names and addresses of all persons leaving such ship in the Port of London; this must be handed to the visiting Medical Officer on board the vessel. Should there be a case of infectious disease on board, the vessel must anchor opposite the Hospital of the Port Sanitary Authority at Denton. Vessels are cleared in the order of their arrival as far as practicable, and much inconvenience is often caused by vessels astern passing those ahead in the hope of being cleared first. Such action should be discountenanced.

If Pilots will be good enough to see that the above instructions are observed, and, in the case of infected or suspected vessels, have the crew and passengers (if any) mustered on the deck of the vessel, much valuable time will be saved, and the vessel enabled to proceed without appreciable delay.

SHEERNESS DISTRICT.

A Medical Officer is stationed at Sheerness for the purpose of visiting, with H.M. Coastguard, all vessels coming "from foreign." As the Medical Officer requires at least ten minutes' notice so as to get to the Boarding Station in time to accompany the Officers of H.M. Coastguard, the Pilots should be instructed to hoist the National Ensign by day and at night a White Light on Port bow on entering the Port of London, which is represented by a line drawn from Havengore Creek in Essex to Warden Point in the Isle of Sheppey.

INFECTIOUS DISEASE.

Table IV. shows (a) the total number of cases of Infectious Disease reported during the year, and (b) the total number treated in the Port Sanitary Hospital, for each of the five years ending the 31st December, 1902, with the mean annual number for that period, and the total number of cases for the year ending 31st December, 1903.

TABLE IV.

INFECTIOUS DISEASE.

DISEASE.	1898.	1899.	1900.	1901.	1902.	Mean Annual number for the 5 years.	1903
a) Cases reported: Cholera (including suspected cases)	1		1		20	4:5	9
	3	4	6	19	10	9.0	6
Plague (ditto)	11	12	15	13	93	28.8	13
Small-pox	100	- Alle	10000	27	13	14.8	11
Scarlet Fever	15	5	14			Section 1	
Diphtheria	5	7	20	28	26	17.2	7
Enteric Fever	53	66	126	78	66	77-8	88
Measles	18	38	67	83	36	48.4	14
Erysipelas	3	10	2	5	2	4.4	4
Typhus Fever	***						1
Continued Fever	1	1	2	5	2	2.2	13
Other diseases (including Chicken- pox)	1	17	12	9	14	12.6	9
TOTAL	111	160	265	267	282	219.7	175
Cholera (including suspected cases)			200				
Plague (ditto)	1	1	3	13	4	4.4	3
Small-pox	8	8	9	7	29	12.2	11
Scarlet Fever	2	1	2	. 5	2	2.4	
Diphtheria	2		1	5	2	2.0	4
Enteric Fever	27	23	55	37	27	33.8	58
Measles	10	7	4	5	11	7.4	7
Erysipelas	1	3		1	1	1.2	1
Typhus Fever	N IS TO						
	1	1	2	5	4	2.6	13
Continued Fever				1 3	All control of	1	
Other diseases (including Chickenpox)	6	6	8	1	8	5.8	

PLAGUE.

There has been no diminution in the distribution of Plague throughout the world during 1903, it has instead become more generally diffused.

During the year Plague has existed in :-

Europe -	in fall of	1/2 1	Marseilles.
Asia -	radiolas Inicolas		Japan, China, India, Philippine Islands, Malay Peninsula, Arabia and the Persian Gulf.
Africa -			Egypt, Algiers and South Africa.
North America	-		Mexico and San Francisco.
South America	in intel	-	Brazil, Argentine Republic, Peru and Chili.
Australasia -	-		Australia and New Caledonia.
Hawaiian Islands.			
Mauritius.			

This wide distribution has necessarily caused a considerable increase in the number of vessels requiring medical inspection on arrival at Gravesend.

A small outbreak of Plague occurred in September at Marseilles, at a paper factory. About fifteen persons appear to have been attacked, of whom at least six died. The outbreak was quickly stamped out, and no extension into other localities seems to have occurred.

Six cases in all were reported by vessels on arrival; of these, three were admitted to the Port Sanitary Hospital, but neither of these proved to be really Plague.

On Saturday, the 10th January, the s.s. "Oroya," of Liverpool, arrived at Gravesend. After leaving Port Said, a native fireman complained to the surgeon of a pain in his left groin. On examination he was found to have a tender and painful bubo in that situation, accompanied by fever.

On arrival at Naples no person was allowed to land, and the vessel sailed for Marseilles in strict quarantine. At Marseilles several passengers were landed in the ship's boats, but were placed under supervision in quarantine.

On arrival at Gravesend it was deemed advisable as a precautionary measure to take the man to the Port Sanitary Hospital for observation and bacteriological examination. Some fluid from the bubo was submitted to Dr. Klein, who reported that the results were entirely negative as regards pestis. It is interesting here to contrast the treatment of the vessel by the Italian and French Governments, with that adopted in English ports, since it is generally accepted that the English method gives ample security from danger to the public health.

The s.s. "Omrah" arrived on the 28th March from Sydney. On the 13th March a lascar complained of painful swellings under the armpits, with buboes in each groin. The patient was feverish. The surgeon regarded the case as suspicious, and at once isolated the patient in a special hospital which was erected. The patient was landed at Suez, where all effects were disinfected by the medical authorities. I received information from the British Consul at Suez that the case was found, on bacteriological examination not to be Plague. All being well on arrival, the vessel was allowed to proceed to dock in the usual way.

On April 28th, at 11 a.m., the s.s. "Orizaba," of Liverpool, 93,688, from Sydney, arrived at Gravesend.

A patient suffering from symptoms suspiciously like those of Plague had been landed at Suez on the 13th April, and measures of disinfection were carried out by the Sanitary Authorities there.

On arriving at Naples the vessel was again disinfected, and the vessel proceeded to London viâ Plymouth.

On arrival at Gravesend the vessel was boarded by the Medical Officer on duty, and in view of the suspected case of Plague landed at Suez, a thorough examination was made of persons on board, including one patient who was ill suffering from Pneumonia. All on board were found free from symptoms of Plague, and were allowed to land after furnishing their names and addresses.

The remaining cases present no points of special interest.

SUSPECTED PLAGUE IN LONDON.

On the evening of the 24th December last, information was received from the Seamen's Hospital, Greenwich, that two Chinese natives had died there from a form of Septic or Broncho-Pneumonia.

These men had been admitted from a Chinese lodging-house in Stepney. The medical men in attendance were suspicious, having regard to the rapidly fatal character of the cases, and from the fact that they had occurred in two persons from the same house, and closely followed one another, that the cases might on further investigation prove to be Plague. Before the men died, one was understood to say he came from the s.s. "Dundas," and the other from the s.s. "Hasleden." Neither of the men could speak English.

Enquiry showed that no vessels of these or any similar names had been in the Port of London for at least three months.

Information of the cases was forwarded the same evening from the Office to the Medical Officer of Health for Stepney, and to the Local Government Board.

A post-mortem examination was held next morning (the 25th), which was attended on behalf of the Port Sanitary Authority. Specimens of material were obtained and forwarded at once by special messenger to the Local Government Board for bacterioscopic examination.

The following day (26th) additional specimens were obtained and forwarded for further investigation.

The bacterioscopic examination failed to establish a diagnosis of Plague, but that death in each case was due to acute Broncho-Pneumonia following Influenza.

The cases were of considerable clinical interest, and the prompt action taken by your Officers on receipt of the information was fully justified.

The International Sanitary Conference was held in Paris from October to December last on the subject of Plague, Yellow Fever and Cholera.

No official account of the proceedings has yet been obtainable, but from accounts appearing in the Press it appears that two important questions discussed were: (1) the reduction of the period for detention of infected vessels from twelve to seven days, and (2) the recognition of the fact that rats played an important part in the diffusion of Plague, and that certain measures should be taken for the destruction of these rodents.

The destruction of rats on board ships and ashore on the premises of the various Dock Companies has continued. The work is carried on by professional ratcatchers, who are paid by the Dock Companies and Shipowners, and over whom your Officers have no control.

In certain of the docks, the dead rats have to be produced to some responsible person, who keeps the record, but this is not done everywhere.

Although the number of rats destroyed during the year is considerable, it is doubtful if this represents even the natural increase of births over deaths.

A large amount of money is expended annually by the Dock Companies in the destruction of rats, but I am sure they do not get complete value for the money spent, and I feel confident if the same amount were expended by this Authority the number destroyed would be considerably increased, as it would then be possible to directly control the work of the professional ratcatcher.

The French Government has decreed that all vessels coming from or touching at a plague infected port must be fumigated, with a view to the killing of all rats on board, before any cargo is allowed to be landed in a French port, and the cost of this has to be borne by the shipowners.

This rigorous procedure is in strong contrast with the practice in the Port of London, where shipowners are only invited to co-operate with this Authority in preventing, as far as possible, rats from going on shore, and to capture as many rats as possible during the stay of the vessel in the Port.

It should be clearly understood that all rats captured are destroyed, and are not allowed to leave the jurisdiction of this Authority.

Details of the number of rats destroyed during the year are set out in Table V.

TABLE V.

RETURN OF RATS CAUGHT AND DESTROYED DURING 1903.

	Jan.	Feb.	Mar.	April.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTAL
fillwall Dock—			The second					100		1			
Warehouses	139										248		
Vessels during voyage	132						18		272				
" in dock	-	176	70	44	16		-	23	118	50	80	62	63
urrey Commercial Dk.— Warehouses	5	24	28	31	49	40	34	33	20	100	07	20	=0
Vessels during voyage			12		40	35			36	105	67	56 12	
" in dock	_	_	5		18		_			5	23		1
egent's Dock—	la ales	- 1110	- 12/3/2			The state of					20		
Warehouses	24	12	18	12	16	6	8	9	3	7	7	8	15
Vessels during voyage	-	-		-	-	-	-	-	_	-	-	-	_
" in dock	-	-	-	-	-	-	-	-	-	-	-	-	-
t. Katharine's Dock—		-						223					
Warehouses	4	1	4	8	2	1	16	171	53	68	62	62	43
Vessels during voyage ,, in dock			370			-	100		1		-	-	-
" in dock						-	_	-	_	_	-	-	-
Warehouses	99	101	101	70	165	105	159	132	89	92	57	49	1 91
Vessels during voyage	-		70		50				20			12	
" in dock	46	3	11	8	100				16			14	
lbert and Victoria Dk								-	-			4.2	***
Warehouses	396		268	204	281	183	233	258	227	234	190	170	2,9
Vessels during voyage	542		1,098		841	920			428			893	8,8
" in dock	2,098	2,410	1,746	1,424	1,409	1,501	1,646	1,342	854	480	765		16,40
est India Dock—	3 5 5	7.40	100	7.00	202	4	***						
Warehouses	157	146	185	168	226	176	193		181	249		192	2,29
Vessels during voyage ,, in dock	220 696		1,018	97	349	442			50	334			2,56
ast India Dock—	050	024	1,010	749	972	508	380	281	584	1,298	707	497	8,21
Warehouses	36	40	44	38	36	36	42	60	41	27	42	35	47
Vessels during voyage		_	30	167	_	_	70	50		21	+2	99	47 31
" in dock	242	280	230	124	165	60	185	250	42	44	142	29	1,79
lbury Dock—											-	20	2,11
Warehouses	638	504	481	570	560	292	323	425	332	584	426	374	5,50
Vessels during voyage	534	402	947	454		992	647	969	995	1,006			
" in dock	533	423	583	360	633	689	737	874	819	846	590	577	7,66
oplar and Midland Dks.	-	-	-		-	-	-	-		-	-		_
ver	-					100.00			10000	91	400		
										31	438	-	46
Totals						7							
	6 541	6.740	7,390	5,433	7,376	6,312	5.703	7.054	5.365	7.014	5,983	5 889	76 80

YELLOW FEVER.

There has been a severe outbreak of this disease in Mexico—at Linares, Monterey and Vera Cruz, where two British ships became infected.

Other outbreaks have occurred in Brazil, Panama, Costa Rica, Venezuela, and Ecuador.

Only three cases are reported during the year from the West Coast of Africa.

No cases have been reported on any vessel arriving in the Port of London.

CHOLERA.

There has been no outbreak of Cholera in Europe during the past year. The disease has, however, existed in Syria and Palestine.

It is possible that the extension of the disease to Europe has been prevented by adverse climatic conditions.

It must, however, be recognised that with Cholera lying dormant in the Eastern Levant, a danger threatens Europe, and therefore during the ensuing summer months every precaution will be necessary in the direction of medical inspection of vessels on arrival in this country.

The following is a brief summary of the cases reported during 1903 :-

The s.s. "Royal" arrived on the 30th January, and reported five cases of Cholera during the voyage, between Alexandria and Malta.

On arrival at Malta the forecastle and all living rooms were disinfected, and all infected beds, bedding and clothing destroyed by burning.

After leaving Malta all on board enjoyed good health. A medical man was shipped there and brought to London.

On arrival at Gravesend all were found well on inspection; their names and addresses were taken and notified in the usual manner. The vessel laid at Gravesend for 24 hours, and then proceeded to dock, all being well. She was kept under observation during her stay in London, and no further sickness occurred.

After discharging her cargo in London the vessel sailed for Barry, the Medical Officer of Health there being notified of the departure from London.

All the facts were reported to the Local Government Board, in accordance with the Regulations relating to Cholera.

The s.s. "Wakasa Maru" arrived at Gravesend on the 16th December. The vessel left Yokohama on the 17th October last on a voyage to London, calling at several ports.

Four cases of Cholera occurred between Yokohama and Singapore, and the vessel therefore came within the provisions of the Regulations of the Local Government Board relating to Cholera, Yellow Fever and Plague as a vessel infected with Cholera.

It appears, however, that adequate measures of disinfection had been adopted on the arrival of the vessel at Singapore, and that no further cases of Cholera, or of any disease or sickness resembling Cholera, had occurred from the time the vessel left Singapore until her arrival at Gravesend.

A detailed examination was made by your Medical Officer, who boarded the vessel at Gravesend, with the result that all persons on board were found in good health. The vessel was therefore allowed to proceed to dock, and arrangements were made for a daily visit to the vessel for the purposes of inspection, and medical examination of all persons on board.

This was carried out during the whole time that the vessel remained in the Port, a certificate of the medical examination being furnished to your Medical Officer daily.

The vessel sailed from the Port of London for Middlesbrough on the 22nd December, and the circumstances were duly reported to the Medical Officer of Health of the latter Port for his information and guidance.

HEALTH CERTIFICATES.

There has been a considerable increase in the number of applications for Certificates of Health in respect of vessels that have come from "infected" ports. These vessels frequently bring cargo for transhipment to other countries, and in order that these goods may be landed at foreign ports, the owners have been asked to produce a Certificate, signed by your Medical Officer, that there has been no case of infectious disease on the vessel during the voyage to London.

Several foreign countries also require that vessels coming from London, which have previously arrived from an "infected" port, should be disinfected by the Port Sanitary Authority, and produce a Certificate to that effect. This has been done in a large number of instances. A fee is charged both for the Health Certificate and for the Disinfection Certificate, the amount thus collected being duly credited to the Port Sanitary Account in the Chamber.

BERI-BERI.

The recent Norwegian Commission inquiring into this somewhat mysterious disease has defined it as the Oriental name for an inflammation of the nerves, due to toxin poisoning by tainted vegetable or animal food-stuffs.

The inquiries of the Royal Commission on Arsenical Poisoning, into the relation between Beri-beri and poisoning by arsenic, found the evidence insufficient to establish any connection, although in some instances traces of arsenic were found in preserved fish and food supplied to vessels making long voyages.

It is probable that true Beri-beri is quite distinct from the symptoms produced by arsenical poisoning.

During the course of the inquiry, the Commissioners were supplied through your Medical Officer with information of cases of Beri-beri on vessels arriving in the Port of London, with, when possible, samples of the food-stuffs used, or in use, by the persons affected.

At the termination of the inquiry, the following letter was sent by the Secretary to the Royal Commission to the Town Clerk:—

ROYAL COMMISSION ON ARSENICAL POISONING,

"8, DELAHAY STREET, WESTMINSTER, S.W.

" 25th June, 1903.

" SIR,

- "I am directed by Lord Kelvin to inform you that, as the Commission are now terminating their inquiry, it will no longer be necessary to ask that information and samples in the case of ships arriving at the Port of London with cases of Beri-beri on board should in future be sent to them.
- "I am to add at the same time that the Commission have greatly "appreciated the assistance which has been given them in their inquiry "by the Port Medical Officer of Health and his Staff, and I am directed "to express their thanks to the Port of London Sanitary Authority for "the various data and material which have kindly been supplied to "them during the past year.

"I am, Sir,
"Your obedient Servant,

"THE TOWN CLERK, "(Signed) G. J. BUCHANAN.
"(Port of London Sanitary Authority,)
"GUILDHALL, E.C."

SMALL-POX.

There has been no epidemic of this disease in London during 1903. The total number of cases reported on vessels was thirteen. Eleven of these were admitted to the Port Sanitary Hospital at Denton.

On 13th January a notification was received that there was a case of Small-pox on board the s.s. "Lady Martin," which was on the point of sailing for Dublin. The vessel was visited by your Medical Officer, who confirmed the diagnosis, and the vessel was stopped at Gravesend on the way down.

The patient was landed with his effects, and the crew's effects and quarters were thoroughly disinfected.

Vaccination was offered to every person on board, but only accepted in the case of three persons. The vaccination was carried out by your Medical Officer. As the vessel was to call at several ports along the coast on her way to Dublin, the facts were notified at once to the various Medical Officers of Health at the ports to be touched at by the vessel on her way to Dublin.

The s.s. "Beatrice" arrived at Gravesend on the 12th March, having left Bombay on the 6th February. A case of suspected Small-pox was landed at Port Said on the 22nd February, and on arrival at Gravesend three cases were reported, and in the course of medical inspection one of the stewards was found suffering from a very mild attack of the complaint. All these men were removed to the Hospital, where one man has since died.

The s.s. "Caledonia," of Greenock, arrived at Gravesend from Bombay on the 27th March, and landed a case of Small-pox at the Hospital. The patient, a native, was taken ill on the 21st March. The vessel and effects were thoroughly disinfected by your Officers.

The remainder of the cases will be found in Appendix A.

ENTERIC FEVER.

In all, 88 cases of this disease have been reported during the year, whilst 55 cases have been treated in the Port Sanitary Hospital at Denton. The remarkable incident of the conveyance of this disease from the field of military operations in South Africa to a training ship in the Port of London, and generally to the country, is of such interest that I relate the circumstances here at length.

On April 5th I received a notification that two cases of Enteric Fever had occurred on the training ship "Cornwall," and on April 9th a further two cases were notified.

The vessel is situated off Purfleet, and about five miles below the main sewage outfall of the London County Council at Crossness.

It would appear from the stage of the illness, that these four boys were infected at, or about, the same time.

No cases had occurred in the village of Purfleet.

Enquiries were made on the vessel with a view to discovering the cause of the outbreak of this disease. It was found that the sanitary arrangements were somewhat imperfect, and that the water supply was obtained from the shore by means of a hose which was defective. Consequently, the water supplied to the vessel was probably slightly polluted with river water. On board, the water was filtered through charcoal and stored in tanks.

Condensed milk was used on board, there were no shellfish layings in the vicinity of the vessel, and no history of the boys who were attacked having obtained or eaten any shellfish.

Up to this point there appeared no cause for the outbreak.

On my recommendation, new closets were at once supplied, a new hose obtained, and the use of the charcoal filters was discontinued.

Your Medical Officer of Health being away on leave, Mr. G. C. Hancock, who was at the time Acting Medical Officer of Health for the Port, visited the vessel and obtained samples of the drinking water, one from the standpipe on the shore, and one from the water as stored on board.

The chemical examination showed that the waters were good, so far as organic impurities were concerned, but both samples contained much common salt, and were also very hard.

Bacterioscopic examination revealed that the water taken from the standpipe on shore contained no bacillus coli or coli-like microbes, although it contained a larger number of bacteria generally.

The water taken from the tank on board was distinctly polluted with comparatively numerous bacillus coli and coli-like microbes.

During this time it was ascertained by Inspector Rolfe, who was conducting a personal sanitary inspection of the vessel, that there were some blankets on board which were reported to have come from South Africa. On enquiring into this it was ascertained that about 400 blankets were, on the 7th February, purchased from A. and B. These were Government blankets which had been returned from South Africa. It was also discovered that 28 of the blankets were distributed to the boys on the vessel on the 15th March, and an additional 29 were sent to the ship's hospital on shore. It was necessary that the blankets should be examined, with a view to ascertaining their precise

condition. As a precautionary measure, all the Government blankets on board were removed to the Port Sanitary Hospital for disinfection, and a bale of 25 blankets was sent to Dr. Klein. The inspection of the blankets at the Port Sanitary Disinfecting Station, and Dr. Klein's report on his examination of the same, revealed a very serious and dangerous condition of affairs.

One hundred blankets were examined, and 98 of these were found to be soiled, in many cases with what appeared to be fæcal matter, blood, and urine. In addition, lumps of dirt of various kinds and sizes were adherent to the blankets. Moreover, from their condition, it was obvious that the blankets had never been submitted to any process of cleansing or disinfection, and this surmise was fully confirmed by Dr. Klein's subsequent report.

Dr. Klein's report with reference to blankets is as follows:-

" St. Bartholomew's Hospital,

" May 18th, 1903.

"THE MEDICAL OFFICER OF HEALTH.

- "Blankets were delivered here on May 13th. Of these blankets fully
 "75 per cent. showed some kind of patches of dirt and large and
 "small discoloured stains.
 - "A bacterioscopic analysis was made of some of the dirt, as also of some of the stains, with the following result:—
 - " (a.) Some of the dirt was paint.
 - " (b.) Some of it was dried farinaceous material, probably arrowroot.
 - "(c.) Some of it was distinctly fæcal matter, since in culture it "yielded abundance of bacillus coli and bacillus enteritidis "sporogenes.
 - "(d.) Some of the stains looked like old stains of urine. Chemical "test for chlorides and for ammonia fully confirmed the "surmise. Bacterioscopic analysis of such stain, with the view "of discovering the presence of the bacillus typhosus (knowing "that the urine of typhoid patients in the later stages contains "this microbe, sometimes in great numbers), yielded highly "important results, viz., the cultures contained great abundance of colonies, which in aspect and constitution corresponded to "the colonies of bacillus typhosus.
 - "Agglutination test was made, subjecting an emulsion of some of the above suspected colonies to the influence of blood serum of a typhoid immunised rabbit. One part of this blood serum added to forty parts of the emulsion of the suspected bacilli caused striking and complete agglutination in ten to twenty minutes.
 - "I have made all necessary sub-cultures in order to definitely decide

 "the nature of the above colonies, but from the strikingly charac
 "teristic aspect of the colonies, and from the decided nature of

 "the agglutination, I think it extremely probable that we are

 "dealing with the real bacillus typhosus.

 "E. KLEIN."

" St. Bartholomew's Hospital and College,

" May 19th, 1903.

"In continuation of yesterday's report I have to state that all further tests made with the bacillus, which was considered yesterday as highly probable to be bacillus typhosus, proved the microbe to be the true bacillus typhosus. I do not remember whether I mentioned it, but I do so now, viz., that two to three drops of the fluid emulsion of the stain on the blanket that we examined yielded innumerable colonies of the bacillus typhosus.

"E. KLEIN."

A letter, mentioning all the facts relating to the purchase of the blankets, and containing Dr. Klein's report, in full, on the bacterioscopic examination of the blankets, was sent to the Secretary of State for War. It was urged that the issue of blankets returned from South Africa should cease immediately, and that any blankets already issued should be recovered with a view to the disinfection of the same.

The Under-Secretary of State for War stated that steps would be taken to prevent any further issue of the blankets, and he would ascertain as far as possible where those already issued had been sent.

The blankets on the training ship "Cornwall" were purchased from Messrs. A. and B., who had obtained them from Messrs. C. and D.

As it was extremely probable that these firms had large quantities of these blankets in store, and their premises being within the jurisdiction of the City of London, the facts were communicated to the Medical Officer of Health for the City, and as a result of the information supplied by your Medical Officer, large numbers of the blankets were traced to various parts of the kingdom, and were disinfected by the local authorities concerned.

Enquiries were made on the other training ships lying in the River Thames, and it was ascertained that no blankets from South Africa had been purchased on their behalf.

Further enquiries discovered bales of returned army blankets lying in the Docks. These were found to be in a more or less filthy condition, and were disinfected under the supervision of an officer of this Authority.

The total number of cases of Enteric Fever which occurred on the training ship "Cornwall" was 15, extending over a period of 51 days.

It will thus be seen that, although the bacterioscopic examination of the water supply indicated evidence of slight sewage contamination, yet had the infection been introduced by this source, it is more than probable that out of the 230 boys on board the vessel, a larger number than 15 would have been

infected, and they, moreover, would probably have been taken ill within a short period of one another.

The patients ailed as follows :-

```
No. of Case.
1 to 4.
           30th March, 1903.
                                  4 cases.
   5
            5th April,
                                  1 case.
6 and 7.
            9th
                                  2 cases.
                           22
   8
            21st
                                  1 case.
9 and 10.
           29th
                                  2 cases.
   11.
           30th May
                                  1 case.
   12.
             1st June
                                  1 case.
                           22
   13.
                                  1 case (fell in river 31/5/03).
            4th
   14.
           13th
                                  1 case.
   15.
           27th
                                  1 case.
```

The blankets were issued on March 15th, and it will be noted that four boys ailed 16 days later; and that cases occurred at intervals until June 27th. The blankets were removed from the vessel on May 13th, and it is reasonable to infer that the cases, 9, 10, 11, 12, and 13, were infected about the same time. Some of these boys were engaged in the collection of the blankets, and possibly infected thereby. It must be borne in mind that at that time the blankets were not known to be capable of conveying infection, or the boys would not have been so employed.

From a careful examination of the facts, I think there is little or no doubt that the infection of Enteric Fever was conveyed to the boys on the training ship by means of these blankets from South Africa, and an interesting addition to our knowledge of the epidemiology of this disease is supplied, fortunately without loss of life, so far as the boys on the training ship "Cornwall" were concerned.

In connection with this subject it may be of interest to quote from my Report presented to the Port Sanitary Committee for the period ending 21st September, 1901:—

"A case of Enteric Fever has recently been reported upon by the "Medical Officer of Health for Southwark, the patient being the son of a soldier who died in South Africa from Enteric Fever. This soldier's kit was sent home to his family, and the patient on unpacking it found the linen soiled and apparently just as it had been taken from his father's body. He wore some of the articles, and in a little more than a week began to feel ill, and was discovered to be suffering from Enteric Fever. Whether the assumption in this case be correct or not, it is very important that articles of clothing sent home from persons who have died in South Africa should be disinfected before being despatched, and as many transports arrive in the Port of London.

"instructions have been given to your Inspectors to make careful "enquiries in every case as to the presence of deceased persons' effects "on board.

"Your Worshipful Committee, at my suggestion, sent a communica-"tion to the War Office Authorities pointing out this possible danger, "and urging that no effects from deceased persons should be allowed "to leave South Africa until they had been thoroughly disinfected."

Had the representation of your Worshipful Committee received the careful consideration of the War Office Authorities, it is probable that this outbreak of Enteric Fever, and a great menace to the health of the country, would not have occurred.

In all, seven of the boys from the training ship "Cornwall" were treated in the Port Sanitary Hospital. This was done at the request of the ship's authorities, and the expense of maintenance and treatment were borne by them.

THE RELATION OF OUTBREAKS OF ENTERIC FEVER TO THE CONSUMPTION OF SHELLFISH POLLUTED WITH SEWAGE.

This question has formed the subject of important discussions during the past year, with the result that in all probability legislation will, in the near future, be extended with a view to the protection of the public health from the danger arising out of the deposit or storage of edible shellfish in sewage-polluted waters.

A prominent part in the investigation of the question has been taken by your Worshipful Committee, for the Port of London Sanitary Authority has within its jurisdiction a number of important shellfish layings and fisheries. These may be enumerated as follows:—

On the Essex shore-

Leigh Creek - - - Cockles.

Hadleigh Ray - - Oysters, Mussels, Periwinkles.

River Roach - - Oysters.

Maplin Sands - - Cockles.

On the Kent shore-

The Swale - - Oysters.
Blythe Sands - - Cockles.

At the beginning of the year I received from the Medical Officer of Health for Wandsworth, through the Medical Officer of Health for the City of London, information that several cases of Enteric Fever which had occurred within his district were, in his opinion, traceable to the consumption of cockles from Leigh in Essex.

In consequence of this information your Medical Officer visited Leigh-on-Sea on the 3rd January last, and in company with the Medical Officer of Health for that place made an investigation upon the spot.

Leigh-on-Sea is situated on the shore of the Thames Estuary about $1\frac{1}{2}$ miles to the westward of Southend-on-Sea, the western boundary of the Borough of Southend and the eastern boundary of the Urban District of Leigh being contiguous.

Leigh has a population of nearly 4,000 persons (which is, of course, largely augmented during the summer season).

During 1902, 43 cases of Enteric Fever occurred.

The sewage of Leigh is filtered through coke breeze filter beds, the resultant effluent being discharged into Leigh Creek, about half-a-mile westward of Leigh Railway Station.

Cockles are gathered from the Maplin and Blythe Sands, brought by boat to Leigh, where the practice is to place them in the Creek for a variable period in order to "purge themselves of the sand."

Assuming the original gathering ground to be free from sewage pollution, storage of the cockles in Leigh Creek points to an obvious result, namely, while purging themselves of the sand of the gathering ground, they fill themselves with the sewage polluted mud and water of the Creek.

Your Medical Officer collected samples of the cockles direct from the Creek, also samples of the mud and water. These were examined by Dr. Klein. His report is interesting and instructive; it was as follows:—

St. Bartholomew's Hospital and College, January 7th, 1903.

- "1. One sample of water, labelled 'Water taken from Leigh Creek, low "tide, 11.30 a.m., 3rd December, 1902."
- " 2. One sample of mud and cockles from Leigh Creek, low tide, taken by "Medical Officer of Health, 3rd January, 1903.
- "These samples will be nominated :-
 - " Water from Leigh Creek,
 - " Mud from Leigh Creek, and
 - " Cockles, No. 10, respectively.
- "A. Water.—This water contained at least \(\frac{1}{4} \) million microbes per 1 cc. The "water contained abundance of bacillus coli communis and spores of bacillus "enteritidis sporogenes, of the latter at least 10 spores per 1 cc., of the former at "least 100 per 1 cc.
 - " From this it follows that this water is practically dilute sewage.
- "B. Mud.—1 gramme of mud was distributed in 10 cc. of sterile water; after allowing the mineral matter to settle, of the slightly turbid fluid, \(\frac{1}{10} \) cc., \(\frac{1}{4} \) cc., \(\frac{1}{4} \) cc., \(\frac{1}{4} \) cc. were used for demonstrating the presence of bacillus coli communis and

- "the spores of the bacillus enteritidis sporogenes, and the result was practically the same as stated of the water, viz., abundance of bacillus coli communis and of spores of bacillus enteritidis in $\frac{1}{10}$ cc.
- "C. Cockles, No. 10.—Twelve of the cockles were used, only the exterior being employed. The result was this:—All cockles contained the bacillus coli communis and the spores of bacillus enteritidis. In one (possibly two) cockle, we isolated, besides, a microbe, which, so far as was possible in the two days, answers to the tests of typhoid bacillus, but, of course, this time is not sufficient to make a definite statement on the subject. I may, however, add that typhoid blood agglutinates the emulsion of the bacillus in question as 1 in 100, better, of course, as 1 in 50.

"E. KLEIN."

Subsequently Dr. Klein reported that the typhoid bacillus, or, at any rate, a bacillus corresponding to it and answering all tests of the bacilli typhosus, was discovered in these cockles.

These investigations were contemporary with others carried out on behalf of the Public Health Department of the City and the Fishmongers' Company.

The results which have been published in every case pointed to the same danger, and while immediate steps were taken to prohibit the sale in London of shellfish from this source, your Committee proceeded to personally inspect the various sewage outfalls in the Thames Estuary within your jurisdiction.

The first inspection of this kind took place on the 25th February, and comprised the oyster layings in Stangate Creek, the sewage outfalls of Sheerness at West Minster, the Naval Hospital, School of Gunnery, and Garrison Point Fort, also an outfall from the Royal Dockyard at Rats Bay.

Your Committee observed the pollution in the immediate neighbourhood of some of these outfalls, and witnessed the collection of shellfish from the foreshore within a quarter of a mile of the outfall of a sewer.

The importance of the subject at once became manifest.

On the 10th March your Committee proceeded to the Barrow Deeps and witnessed the operation of discharging sludge from the vessels of the London County Council.

On the 29th April your Committee proceeded to Leigh-on-Sea and received a deputation of Cocklers and Fishermen. Subsequently an inspection was made of the cockle layings and the preparation of the cockles for market, previously described.

As a result of these investigations, it was recommended to and approved by the Court of Common Council that the Corporation as the Port Sanitary Authority should offer to give evidence before the Royal Commission on Sewage Disposal. This was done, your Medical Officer giving evidence before the Commission in July at considerable length.

The evidence was directed to exhibit certain defects in existing legislation and control in the matter of the cultivation and sale of edible shellfish. For instance, your Medical Officer pointed out that the Sections of the Public Health Act relating to unsound food could not be made applicable to shellfish inasmuch as action could only be taken on the results of a bacterioscopic examination.

That the Port Sanitary Authority should be granted powers to enter upon and inspect shellfish grounds, and if polluted, to prohibit further laying of shellfish there.

That the discharge of sewage into the waters of the Estuary in proximity to shellfish grounds is dangerous to the public health, and that crude sewage should be so treated that this danger would be minimised or abolished altogether.

That the Corporation as the Port Sanitary Authority was the proper body to exercise the powers required, it possessed the requisite machinery, and from its constitution was entitled to the confidence of the shellfish trade. At the present time the only powers possessed by the Port Sanitary Authority were under the Public Health (London) Act, 1891-99, the Nuisance Clauses and those relating to unsound food.

On the question as to the extent of pollution caused by London sewage, your Medical Officer expressed his opinion that on the practical question of danger to the public health the outfall at Barking was in no way comparable with the local pollution in the vicinity of Southend; that, in fact, sewage acts prejudicially in proportion to the vicinity of the outfall to the shellfish beds.

That the proper treatment of sewage would tend to greatly minimise the danger, and that if a sewage effluent were produced chemically pure and bacteriologically freer from organisms generally than crude sewage, the danger would be diminished proportionately.

On the subject of the constitution of dangerous pollution, although this might be defined as the extent to which it was shown bacteriologically that pollution existed, yet the actual extent of pollution taking place by personal observation must also at the same time be considered.

That, eliminating local pollution, it was probable that no material danger would accrue to shellfish at Southend from the effluent at Barking.

That the Corporation would be the best Authority to control the pollution of the Estuary of the Thames, and that it would fulfil all the requirements considered necessary in the case of a Rivers Board. Except as to the constitution of the proposed Authority for the control of shell fisheries, the recommendations of the Royal Commission embodied in their Report followed closely the suggestions put forward in evidence by your Medical Officer, as the following extracts will show:—

The law on the subject may be summed up thus: "generally speaking, "the statute law does not prohibit the discharge of filthy liquids into tidal "waters," but the Local Government Board may make an Order extending the provisions of the Rivers Pollution Act, 1876, to tidal water, or the Sea Fisheries Committee may make bye-laws for "prohibiting or regulating the deposit or discharge of any substance detrimental to sea-fish or sea-fishing," subject to the approval of the Board of Trade.

The Commission are satisfied that injuries to health and to fisheries may be caused by the discharge of unpurified sewage in tidal waters, and that some alteration of the law is required.

They also have no doubt that shellfish which have become contaminated by sewage may convey Enteric Fever and other illness to human beings if eaten either raw or in an imperfectly cooked condition, and that there can be no doubt that the evil is sufficiently grave to demand a remedy.

The remedies suggested may be divided into three general classes :-

(1) Purification of the sewage before its discharge into tidal waters.

In the interim Report dated July, 1901, the Commission pointed out that effluents from sewage farms, as well as effluents from artificial purifying processes, must be regarded as potentially dangerous, inasmuch as they may still contain disease organisms, and that in such cases, either the sewage outfall must be removed or the layings closed.

(2) Seizure and destruction of unwholesome shellfish exposed for sale.

They think that the provisions of the Public Health Act are practically useless for preventing the sale of contaminated shellfish.

In paragraph 38, the opinion is expressed that no general enactment as to treatment of sewage, or as to seizure of unwholesome food, would meet the necessities of the case.

The remedy must be sought in connection with the waters, foreshores, pits, ponds and layings themselves.

(3) The setting up of a competent Authority to deal with all tidal waters, with power to control foreshores, and to close dangerous beds, pits, ponds and layings, and in certain circumstances to require treatment of sewage.

They are strongly of opinion that the only way in which this evil can be effectively dealt with is by placing tidal waters in the jurisdiction of some competent authority, and conferring upon that authority power to prevent the taking of shellfish for human consumption from any position where liable to risk of dangerous contamination, and to enforce restrictions as regards pollution, and as regards waters, foreshores, beds, pits, ponds and layings in which shellfish are fattened or stored.

The case of each river and estuary is a problem by itself.

They also accept the view that at present the results of bacteriological examinations must be interpreted in the light of topographical observations.

The question which I have submitted for the consideration of your Worshipful Committee is, as to who should be the controlling authority for the shellfish layings situated in the Thames and Thames Estuary.

The Commission state that the case of each river and estuary is a problem by itself, and in connection with this I would point out that the Port of London Sanitary Committee have been interesting themselves in this question since the year 1897, when this question first came into prominence, and was the subject of investigation and report by Dr. Bulstrode, an Inspector of the Local Government Board.

The Chairman of the Committee and Medical Officer gave evidence in 1899 before the Committee of the House of Lords considering the Oyster Bill brought out in that year, and urging that the controlling body should be the Port of London Sanitary Authority.

The Authority possesses the necessary Staff, with Launches. It is a body sufficiently large to be impartial, and not to be influenced by personal or local conditions. It is not the Authority for the disposal of London sewage, and it has since the year 1872 (on the constitution of this Authority) carried out its work at its own expense.

In order to deal satisfactorily with the subject, it would be necessary for the jurisdiction of the Port of London Sanitary Authority to be considerably extended, and in connection with this, I would point out that in 1872 the limits of the Port of London extended as far Eastward as a line drawn from the North Foreland in Kent to the Naze in Essex. This would include all estuaries in which the most famous oyster layings of the United Kingdom are situated.

TYPHUS FEVER.

One case of this comparatively rare disease was reported during the year as follows:—

The s.s. "Hibernian," of Glasgow, from Buenos Ayres, arrived at Gravesend on the 29th May viâ Dunkirk. One of the crew who had been ashore in

Dunkirk, where the vessel lay from the 24th to the 28th May, left the vessel in London on the 30th and proceeded to his home at Govan, where he arrived on the 31st May.

He was taken ill the same day, and was seen by the Medical Officer of Health for Govan. On the 10th June he was found to be suffering from Typhus Fever and removed to hospital.

On receipt of this information I had the crew's quarters of the vessel thoroughly fumigated and disinfected. After this had been done, the quarters were painted out with two coats of paint.

No further cases of illness have been reported.

TRAINING SHIPS.

With the exception of the epidemic of Enteric Fever on the "Cornwall," referred to in my notes under the heading of Infectious Disease, the year has been a healthy one so far as these ships are concerned.

For years past there has been an epidemic of Diphtheria on the Training Ship "Warspite." It is interesting, therefore, to observe from the subjoined Table that during 1903 there has been, with the exception of one solitary case, an entire absence of this disease from the vessel.

This fact, in my opinion, in itself amply justifies and confirms the action of your Committee in urging the removal of the vessel from its old berth at Woolwich to the lower reaches of the River.

The following cases of Infectious Disease were reported during the year :-

TABLE VI.

Name of Vessel,		Diphtheria.	Enteric Fever.	Scarlet Fever.	Erysipelas.	Total.	
"Arethusa."			1	2		3	
"Cornwall"		1	17			18	
"Exmouth"							
"Shaftesbury"				***			
" Warspite"		1	3		1	5	
"Worcester"							
Totals		2	21	2	1	26	

ALIEN IMMIGRATION.

The Report of the Royal Commission appointed to investigate the import of Alien Immigration has been issued during the year.

Your Medical Officer gave evidence before the Commission on the following points:—

- "(1) The methods employed in respect of Aliens on arrival in the Port of "London.
- "Under this heading it was shown that the majority of Alien Immigrants arrived in London from four ports, namely, those of Rotterdam, Bremen, Hamburg and Libau.
- "The vessels from Libau sail under the Danish flag, and on these vessels the accommodation provided for emigrants was grossly deficient as regards ventilation, lighting and cleanliness, and there was no provision for separating the sexes, and lavatories, water-closets, &c., were used in common.
- "Four steamers sail each week from Hamburg, three from Rotterdam and "one from Libau.
- "That the Alien Immigrant was subjected, on arrival, to a modified medical examination by one of the Medical Officers appointed by the Corporation of the City of London, and stationed at Gravesend, who visits the vessel and ascertains whether any sickness is, or has been, on board. If any sickness is reported, the Medical Officer proceeds on board and examines the patients, and if a case of infectious disease is discovered, the vessel is moored, and the patient detained and landed at Denton Hospital. The remaining passengers are examined, and if there is no risk of their spreading disease, are allowed to land on giving their names and addresses of destination.
- "Under certain circumstances special medical examination takes place, as, for instance, if vessels arrive from ports at which the exotic diseases of Plague, Yellow Fever or Cholera are known or suspected to exist, they are boarded and the passengers medically examined.
- "The Medical Officer does not at the present time inspect or deal with passengers on the sole ground that they are in a dirty condition in respect of their persons or clothing.

"(2) The condition of Aliens on arrival.

"That it was important to consider the personal condition of the Alien "Immigrants on their arrival, of (a) health, (b) cleanliness, (c) means of "subsistence.

- "The general health of Alien Immigrants was shown to be fairly good, and the number of cases of infectious disease introduced by them were not numerous.
- "It would be incorrect to say that much infectious disease had come into the country by these people.
- "In many cases the condition of the passengers, on arrival, with regard to cleanliness, was very deficient; they were more or less dirty and generally verminous both in their bodies and clothing.

"The Commissioners recommended :-

- "(1) That the immigration of certain classes of Aliens into this country be subjected to State control and regulation to the extent hereinafter mentioned.
- "(2) That a Department of Immigration be established, either in con-"nection with the Board of Trade and Local Government Board or of "an independent character.
- "(3) That improved methods be employed to secure correct statistical returns relating to Alien Immigration. That for this purpose the Act of William IV., cap. 11, be repealed, and power given by statute to the Board of Trade to make provision by regulations for obtaining from shipowners returns of the numbers and nationalities of all Aliens entering or departing from the United Kingdom, and such further information as may be thought desirable. These regulations to apply to all or any specified ports, and to be subject to such conditions or modifications as may appear expedient.
- "(4) That legislative power be obtained for the purpose of carrying "out the following suggestions:—
 - "(a) The Immigration Department to have the power of making and enforcing orders and regulations which may be made applicable to immigration generally, or to vessels arriving at or from certain ports, or to certain classes of immigrants.
 - "(b) That a sufficient staff of officers be appointed by the Immigration Department to carry into effect the provisions of this Act,
 and the orders and regulations made under it.
 - "(c) Power shall be conferred upon such officers to make such inquiry as may be possible from the immigrants upon their arrival as to their character and condition, and if such officer shall have reason to think that any immigrant comes within any of the classes mentioned as 'undesirables,' viz., criminals, idiots, lunatics, prostitutes, persons of notoriously bad character, or likely to become a charge upon the public funds, he shall report the case, with such particulars as he can give, to the Immigration Department.

- "(g) Such orders and regulations to include provision for medical examination of Alien Immigrants at the port of arrival. In cases where an immigrant is found to be suffering from infectious or loathsome disease, or mental incapacity, the Medical Officer to have power to debar such immigrant from landing, and the shipowner to be compelled to re-convey the emigrant to the port of embarkation.
- "(h) Immigrants on arrival to give the information demanded from them, refusal, or the giving of false information, to be an offence under the Act, with penalty and discretionary power of repatriation at expense of Shipping Company.
- "It seems not improbable that the publication of this Report, and the prospect of restrictive legislation, may cause those who intend to emigrate to anticipate the proposed restrictions, and thus lead to an immediate and immoderate increase of immigration.
- "We are impressed with the necessity of avoiding, as far as possible, such a result of our labours; and we would venture to submit the immediate adoption of such of our recommendations as can be introduced without recourse to Parliament. At the same time we clearly recognise that the complete enforcement of the system we propose is only possible by legislation."

It will be noticed that among the recommendations are two which are intimately connected with the work of this Authority.

The first recommends that such Orders and Regulations should include provision for medical examination of Alien Immigrants at the port of arrival.

When the epidemic of Cholera broke out at Hamburg in 1892, cases of Cholera were detected on board ships arriving in London amongst immigrants who had come from Hamburg.

In accordance with the Local Government Board Order all such vessels were carefully inspected, and this system of inspection was continued until the summer of 1895. All Jewish immigrants coming into the Port of London were kept under control by the Officers of the Port Sanitary Authority. They were first inspected at Gravesend; a notice was served on the master of the vessel requiring him to keep them on board until they were liberated by an Officer of this Authority.

By an arrangement made with the Committee of the Jewish Shelter, a responsible official of that Committee visited the ship on arrival, and personally conducted these immigrants to the Jewish Shelter. Thence they were conducted to various addresses in London; the date of departure from the shelter, together with the names and addresses of those leaving it,

were forwarded to your Medical Officer each day. Thus it was found practicable to keep these immigrants under observation on their arrival in London. Your Officers have therefore had much experience in dealing with such immigrants, the machinery exists, and can be put in action immediately if required.

I therefore recommend that, should an Alien Immigration Bill be introduced into Parliament, steps be taken to ensure that this Authority should be responsible for the medical examination of immigrants, and for this purpose, that powers to enter vessels on arrival at Gravesend, and also to detain vessels for such reasonable time as may be required for the medical examination, should be obtained.

The Immigration Officer of the Board of Trade, who enquires into the immigrant's social and financial position, can at the same time carry out his duties.

Statutory powers should be obtained for regulating the accommodation upon, and condition of, various immigrant passenger ships. Notwithstanding the fact that the present statutory powers are very insufficient for dealing with this question, yet your Committee have made strong representations to the Consuls-General of Denmark and Russia, with the result that many of these vessels have undergone structural alterations in the way of lighting, ventilation, and improved bunks; but the fact remains that these vessels were never constructed for the purpose of carrying immigrants, and although, as the result of your Committee's representations, considerable improvement has been made, these vessels are still kept under close observation with a view to the improvement being maintained.

The obligations under the Merchant Shipping Act only apply to vessels under the British Flag. Foreign vessels trading to ports in this country should conform to the requirements of this Act, and not be treated preferentially, to the prejudice of British Shipping.

CONDITION OF THE WATER IN THE RIVER AND DOCKS.

The condition of the water of the River and of the Docks has remained satisfactory throughout the year. Low temperatures and abundant rainfall have no doubt been largely responsible for this. On this subject I cannot do better than quote from the Report of the Royal Commission on Sewage Disposal relative to the biological composition of the water of the river as investigated for the purposes of their Inquiry:—

[&]quot; As a result of these investigations, we find that, as judged by the bacillus coli test, the River Thames at Mucking, about 20 miles below

[&]quot;the Barking and Crossness Outfall Works, is at times as pure as the

[&]quot; River Thames in the region of Sunbury and Hampton, above the intakes

[&]quot; of some of the London waterworks companies.

"As regards change in the biological composition of the water in the River Thames from Barking and Crossness downwards towards the open waters of the estuary, all that need be said is, that whereas at Barking and Crossness the number of bacillus coli per c.c. of water varied usually from 100 to 1,000, no appreciable improvement was noticeable at Purfleet (about 5 miles below Crossness), but slight improvement at Grays (about ten miles below Crossness), and that it is not until Mucking (20 miles below Crossness) is reached that the quality of the water is so far improved as to vie with the water in the Upper Thames at Sunbury and Hampton. At Mucking the number of bacillus coli per c.c. varies usually from 1 to 10, and about five miles lower down (at the Chapman Light) it is so far improved that about one-half of the samples contained only one-tenth of this amount.

"It will be seen that, notwithstanding the daily discharge in dry weather into the Thames at Barking and Crossness of 230,000,000 gallons of treated sewage, each cubic centimetre of which contains about 100,000 bacillus coli, and the daily discharge of 7,000 tons of sludge into the Barrow Deep, each gramme of which may contain over a million bacillus coli, one-half of the samples of water at Chapman Light (about 25 miles below Crossness) and in Barrow Deep were not found to contain one bacillus coli per cubic centimetre."

FOOD INSPECTION.

Table VII. is a summary of the quantities of unsound food destroyed or otherwise disposed of in order to prevent the sale or use of the same for the food of man.

No large seizures of unsound meat have been made. This, of course, means that cargoes of frozen meat have on the whole arrived and been landed in good condition.

The quantity of frozen meat imported during the year was reduced as from Australia, but largely increased imports were received from New Zealand and the Argentine Republic. According to returns issued by the Meat Trade, the import of frozen mutton and lamb into the United Kingdom from all sources during 1903 showed an increase of 960,380 carcasses over the aggregate of the previous year. "This marks the greatest expansion which has taken place in any one year since the trade commenced."

The increased import of frozen mutton and lamb into the Port of London during 1903 amounted to 936,448 carcasses, or 97.5 per cent. of the total increase of trade.

TABLE VII.

					iginal kages.	Su	ndry q	uantit	ies	Loose Articles.		
urm a m				No.	Description.	Tons.	cwts.	qrs.	lbs.	No.	Description	
MEAT-	sh and Frozen—						- 4					
FIG	Beef	_	-	2	quarters	0	11	1	17	40	pieces	
	Mutton and Lamb	-	-	4,465	carcasses					901	"	
	Veal, Pork and Offal	-	-	269	,,	0	9	0	6		cases	
Pre	served—								0		pieces	
	Tinned	-	-	***	***	0	0	3	0 22	1,563	tins	
	Smoked and Salted	-	-	***	***	0	13	0	22			
RABBI										co	loose	
	Frozen	-	-	57	crates	7	18	0	4		tins	
	Tinned	-	-			'	10	U	12	110	tills	
OULT	RY and GAME-											
	Frozen	-	-			0	5	0	0	109	sundry	
ISH-				194.		14.50	-	1357	10	Million Mil		
	Wet	-	-	20	packages		12	1	0	10.054		
	Preserved, Tinned	-	-	31	55	13	13	3	6	10,854	tins	
	" Dried -	-	-			0	0	1	0			
RUIT-				0.71		0.0	1		10			
	Fresh	-	-	3,690	packages		10	2	18			
	Preserved, Dried -		-	280	33	45	12	0	12	1 000	45	
	" Tinned and E		-	33	cases	6	18	0	22	1,222	tins	
	" Jam and Mar	malade	-	***		2	0	1	1	***		
EGET	ABLES-						-					
	Fresh	-	-	194	packages	16	17	0	13	***	7*	
	Preserved, Dried -	-	-	. 9	17			***		250	tins	
UTS-										* 000		
	Cocoanuts, whole -	-	-	25	bags				***	5,000		
	desiccated	-	-	50	cases			***	***			
	Chestnuts	-	-	7	bags	***			***			
	SIONS—			THE REAL PROPERTY.						-		
	Tea	-	-		chests				0			
	Coffee	-	-	35	bags	50	11	0	4	***		
	Cocoa	-	-	773	packages		7	0	11	1 100	water	
	Butter, Cheese, Lard, M	argarine	-	82	22	3	5	1	13		pots	
	Condensed Milk -	-	-	589	cases	0	17	3 0	24	1,003	tins	
	Prepared Foods - Biscuits and Confection	-	-	271	packages	0	19	0	8		"	
	Sugar	ery	-			7	4	2	0			
	Apple Puddings -	-	-	***						6,074	tins	
RAIN												
TOMIN.	Wheat, Maize, Rice, Ba	rley, &c.	-	8	bags	667	0	1	26			
IEAL :	and FLOUR -	-	-	4,693	,,	10	19	2	3			
CONDI	MENTS and SPICES	-	-	12	cases	16	0	0	0	24	bottles	
	LULIU and DI TOITO				-							
EGGS			-	***						64,800		
SUNDE	IES	-	43	7	cases	0	0	2	0	184		
	TOTAL			15,504	-	955	0	2	16	93,435	river D	

The following Table shows the growth of this trade in the Port of London from its commencement in 1880 to the end of 1903:—

TABLE VIII.

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE PORT OF LONDON.

YEAR.	AUSTRALIA.	NEW ZEALAND.	RIVER PLATE.	TOTAL.
1880	Number of Carcasses. 400	Number of Carcasses.	Number of Carcasses.	Number of Carcasses
1881	17,275			17,275
1882	57,256	8,839		66,095
1883	63,733	120,893	17,165	201,791
1884	111,745	412,349	108,823	532,917
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	1,865,790
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	1,821,505	109,808	2,568,320
1894	939,360	1,947,609	171,802	3,058,771
1895	969,943	2,412,331	142,038	3,524,312
1896	1,565,360	2,211,895	245,573	4,022,838
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	3,234,119	342,525	4,770,801
1902	648,929	3,668,061	411,913	4,728,903
1903	440,090	4,566,257	650,004	5,665,351
COTAL	12,769,850	41,154,020	4,727,623	58,651,493

The above figures illustrate the importance of the work of your Inspectors, the inspection of frozen meat forming only a part, and that not the largest, of their duties.

The following is a list of the Refrigerating Stores within the District of the Port Sanitary Authority, with the capacity of each expressed in terms of the number of carcasses of sheep:—

London and India Docks Company	:		Cap	pacity.
Victoria Dock -	-		315,000	carcasses.
" (Extension)	-		180,000	"
West India Dock -	-	-	90,000	"
South West India Dock	-	-	13,000	,,
London Central Markets:—				
Poplar Riverside Store		- 10	200,000	"

On the 24th April last an Inquiry was opened at the Old Council Chamber, Guildhall, by an Inspector of the Local Government Board, for the purpose of receiving evidence on the question of the proposed extension of the jurisdiction of the Corporation as the Port of London Sanitary Authority in the matter of unsound food, by the inclusion of wharves forming part of, or abutting on, the Port.

As is now well known, this Inquiry was the outcome of a movement on the part of the Dock Companies in order to ensure, as they alleged, uniformity of inspection of unsound food in the Port of London.

It was alleged by the Dock Company that the inspection of food in the docks was, very properly, minute and strict, but, that at the riverside wharves within the districts of the various Metropolitan District Councils, articles of food were not subjected to so close an inspection, and that as a result they had suffered loss of trade by the removal of some of their business from the docks to riverside wharves.

A list of the wharves abutting on the River within the jurisdiction of the Authority at which food stuffs can be landed is appended. (Appendix E.)

It was pointed out to the Inspector, on behalf of the Corporation, that there was no desire on their part to extend their present jurisdiction, but that if this were done, it would, of course, be undertaken and carried out in an efficient manner.

The Inquiry was attended by representatives of all the Metropolitan District Councils possessed of foreshore in the Port of London, most of whom gave evidence.

The result of the Inquiry was, that it was not shown to be desirable at the present time to make any alteration in the existing limits of jurisdiction.

The provisions of the Public Health (London) Act, 1891, relating to unsound food, have been found inadequate in many respects by your Officers. When this Act was drafted, it was not contemplated that seizures would be made on a large and wholesale scale.

I note the Public Health Acts are likely to be amended, and I recommend that the Committee should bring to the notice of the Local Government Board these defects, with a view to the Public Health Act being amended as may be considered necessary.

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TABLE IX.

NUISANCES REPORTED AND DEALT WITH during the year ending 31st December, 1903.

DESCRIPTION OF NUISANCE.	January	February	March	April	May	June	July	August	September	October	November	December	Tota
Smoke Nuisances :— Number of complaints received	20	14	40	25	21	22	43	21	14	23	17	6	266
Number of written intimations*	11	14	42	21	13	20	33	19	15	17	16	5	220
Number of Statutory Notices served		12	10	11	11	12	34	4	24	14	19	7	15
Number of recurrences reported	3	4	1	1	4	2	5	7	4	4	5		4
Number of Police Court cases								2	3			***	
Dilapidations and Structural Defects:— Ventilation	13	18	14	14	15	10	8	9	9	13	8	9	14
Lighting, Heating, &c	55	49	40	43	32	32	31	31	27	46	55	41	48
Water supply	4	3	3	6	3	4	2	1	3	4	2	1	3
Drainage	2	2	4	3	2	1	2	1		2	1	1	2
Total number of defects reported	74	72	61	66	52	47	43	42	39	65	66	52	62
Total repairs and alterations re- ported as carried out.	33	27	61	18	81	35	61	15	41	36	47	55	510
Number of vessels, &c., on which structural alterations were ordered.	61	51	52	49	39	39	33	34	33	53	56	41	54
arges (Insanitary Cabins), Foul Bilges, &c.:— Number reported	7	10	. 7	5	9	5	13	8	5	3	1	2	7.
Number of written intimations*	7	10	7	5	9	5	13	8	5	3	1	2	7
Number of Statutory Notices served		10	7	5	2	12	4		8	5	1	3	5
Number of recurrences reported	2	1	1						1	1		3	
ffensive Cargoes (Bye-laws) :— Number of Infringements reported	2	3		1	6	3	6	1				7	2
Number of Notices given	2	3		1	6	3	6	1				7	2
Number of Police Court cases						1					***		
oul Lighters	2				3	4		1				1	1
oul Closets and Urinals	1	1	1	1			***						
ocumulations of offensive matter	- 2	3	3	2	2	4	8	7	8	8	5	2	5-
iscellaneous Nuisances	1	2	2	3	1		4			2	1	1	10
otal number of Nuisances reported	100	89	107	87	85		112	79	65	94	85	63	1,043
tal number of Notices and written intimations given.	64		110	90	75		113	62	80	74	76	47	959

*Refers to primary warning only.

NUISANCES.

In Table IX. is shown the total number of nuisances reported and dealt with during the year, with an analysis of the same.

From this Table it will be seen that the total number of nuisances of all kinds reported during the year was 1,045. Of this number 266 were smoke nuisances, 629 had reference to dilapidations or structural defects, 75 were in respect of insanitary barges, 54 were accumulations of offensive matter, and 29 were infringements of the Bye-laws of the Port Sanitary Authority relating to Offensive Cargoes. In addition there were complaints of certain foul and offensive lighters, public conveniences, and miscellaneous nuisances.

SMOKE NUISANCES.

Close attention has been given to this class of nuisance, and, as stated, 266 complaints have been dealt with during the year.

Legal proceedings were taken in five cases, which are detailed in Appendix H. Convictions were obtained in four cases, the defendant in one case, namely, that of the steam tug "Richmond," gave notice of appeal, and the fifth case was adjourned pending the result of the appeal.

The case of the "Richmond" is important, and raised the whole question of the power of the Port Sanitary Authority to take action against the owners of steam vessels, under Section 24 of the Public Health (London) Act, 1891.

The case was heard by the Lord Mayor, sitting at the Mansion House Justice Room, on 24th September. The owners of the tug being summoned for that on the 24th August, 1903, between Custom House and Southwark Bridge, on the North side of the River Thames in the said City and within the Port of London, upon a certain vessel, to wit, the s.s. "Richmond," of London, 95,485, the following nuisance existed, namely, a chimney (not being the chimney of a private dwelling-house) sending forth black smoke in such a quantity as to be a nuisance, and that the defendant being the Owner of the said vessel had made default in complying with the requisitions of a Notice, dated 25th day of April, 1903, served upon him under Section 24 of the Public Health (London) Act, 1891, requiring him to abate the nuisance and to execute such works and to do such things as might be necessary for that purpose, contrary to the Statute.

It was contended by the defendant-

(1) That Section 24 of the said Public Health (London) Act, 1891, was inapplicable to a steam tug such as the "Richmond," while plying to and fro on the River Thames.

- (2) That the "Richmond," on the said 24th August, was not a vessel lying within the district of the said Port Sanitary Authority within the meaning of Article III. of an Order of the Local Government Board dated 25th March, 1892, and made under Section 112 of the said Public Health (London) Act, 1891.
- (3) That if, by reason of such Order of the Local Government Board, the said Section 24 of the Public Health (London) Act, 1891, was applicable to a vessel used as the said steam tug was being used on the said 24th August, 1903, then the proceedings under such section should have been taken against the master of the said vessel, and not against the Appellant.
- (4) That proceedings in respect to smoke from vessels plying on the River Thames can only be taken under the provisions of Section 23 of the Public Health (London) Act, 1891.

The case was adjourned until the 9th October last, when the Lord Mayor convicted the defendant and fined him One Pound and One Guinea costs.

From this conviction he appealed, the Lord Mayor stating a case for the decision of the High Court.

The Appellant further contended that the funnel of a steam tug was not a chimney within the meaning of Section 24; and further, that he required the Magistrate to specify the works to be executed to prevent any recurrence of the nuisance, which the Lord Mayor was of opinion he was not bound so to specify. Judgment in the appeal was given while this Report was in the press, and is appended.*

The Lord Chief Justice, in giving judgment, said that the Magistrate's decision was right, though the point had admitted of argument. On first reading the section one might think that it was intended to apply to chimneys on land. But when one looked at the object of the legislation and at certain expressions in Section 24 of the Act, he thought that any such construction would be too narrow. So far as the first part of the section was concerned, it was essentially a "black smoke" section. Section 23 (3) dealt specifically with steam engines and furnaces on steamers, and provided that they should be constructed so as to consume the smoke. These sections showed that there were special provisions with regard to the construction of furnaces and engines on steamers, and the non-negligent user of them. But it was to be observed that there was a corresponding provision in regard to furnaces on land, namely, Section 23 (1), and there was a corresponding provision in regard to non-negligent user. Section 24 was a "nuisance" section, and it was not without importance that it immediately followed Section 23. If the words could be fairly applied to a chimney on board a steamship, there was no reason why they should not be so applied; for unless the words "any chimney (not being the chimney of a private dwelling-house)" showed that a steamship could not be included, the object of the legislation would be avoided by not so applying them. There might be cases where the black smoke would come from a chimney which would, in ordinary language, be called a funnel. But he did not think that any argument could be based on the fact that the word "chimney" was used, for "funnel" was only the technical name for a particular kind of chimney. He did not see why the emission of black smoke from the funnels of vessels on the Thames should not be prevented as well as from chimneys on land, Section 24 was not sufficient to enable the Court to hold that the funnel of a steamship was not a chimney. As to the other point, the order was not bad

Mr. Justice Kennedy, in agreeing, said that the question was whether Section 24 (b) included the funnel of a tug. Usually "chimney" was a word applicable to the passage through which smoke passed from a fire in a building, and technically it was not a proper term to describe those passages on a steamboat which were used to convey the smoke from the furnaces to the outer air. But he saw nothing to prevent "chimney" being used in what he might call its natural sense, namely, a passage by which smoke from a fire was carried away upwards. Otherwise there would be no "black smoke" section with regard to a description of thing that might send out smoke in quantities enough to create a nuisance.

Mr. Justice Channell delivered judgment to the same effect.

The appeal was accordingly dismissed.

NUISANCES (GENERAL).

The total number of dilapidations and structural defects reported was 629, this number involving structural alterations and repairs on 541 vessels, &c., while the total number of structural alterations and repairs known to have been carried out was 510, or 81.08 per cent. of the total number ordered.

In the case of insanitary barges, 75 nuisances were reported. In 57 cases Statutory Notice was given, and only nine recurrences were reported. Police Court proceedings were taken in five cases of smoke nuisances, and in one case of infringement of the Bye-laws of the Port Sanitary Authority relating to Offensive Cargoes (see Appendix H).

It will be seen that these nuisances necessitated the issue and service of 959 written intimations, and Statutory Notices. It should be noted with regard to "written intimations," that the primary warning only is referred to.

Table IX., which is now presented for the first time, forms an interesting and improved abstract of the work of the Authority in the abatement of nuisances.

BARGES WITH OFFENSIVE CARGOES.

The question of the welfare of persons employed on barges engaged in carrying offensive cargoes has received, during the past year, considerable attention at the hands of your Officers.

In my last Annual Report I referred to this subject, and recommended strongly that barges should be brought within the scope of operation of the Canal Boats Act. If this were done they would have to comply with the requirements of the Canal Boats Acts and the Regulations made thereunder, the most important of which would be compulsory registration and the provision of a double water-tight bulkhead in those barges carrying offensive cargoes, e.g., house refuse, stable manure, and road sweepings.

The construction of these barges usually is as follows: Each barge consists of a fore-cabin, hold, and an after-cabin. The fore-cabin is generally used for stores, and is only occasionally used. The after-cabin, which is approached by a companion ladder, is occupied by the master and crew, which usually consists of one person besides himself. It is frequently the practice of the master during the summer months to be accompanied by his wife and children, and then it is assumed that the other member of the crew sleeps in the fore-cabin. These cabins are separated from the hold by a single bulkhead, which only extends as far as the inner skin of the vessel at the side and to the floor of the cabin, so that it is possible for offensive liquids, gases, &c., to pass from the hold through the space between the two skins of the vessel and under the cabin floor into the cabin, and it is usually found that the space under the cabin floor contains a variable quantity of more or less filthy and offensive liquid.

It has frequently been observed when carrying house refuse, especially in the summer time, the stench in the cabin is unbearable, whilst maggots and insects crawl from the cargo into the cabin and into the bunks there. The bulkhead is also frequently defective, and occasionally also a doorway exists, more or less ill-fitting, which allows offensive liquid and gases to pass into the cabin from the hold.

It is thus clear that in the majority of vessels carrying these offensive cargoes there exists conditions constituting a serious nuisance, not only injurious to health, but even dangerous to life.

The following deaths from suffocation, on barges carrying offensive cargoes, have come under the notice of your Officers during the last four years:—

On the 30th January, 1900, the ketch "Susie," of Littlehampton, 75,233, lying off Silvertown, laden with a cargo of "saccharine scum," was boarded by one of your Inspectors, who, on opening the companion, found the dead bodies of the Master of the vessel and his wife. At a coroner's inquest, held at Woolwich on the 2nd February, 1900, it was proved that the couple had been suffocated in their sleep by the fumes from the cargo entering the cabin.

On the 29th July, 1900, two men were found dead in the after-cabin of the barge "Webster," of Rochester, 47,949, lying at Wakeley's Wharf, Southwark, laden with dung and vegetable refuse. At the coroner's inquest, held at Southwark on the 1st August, the jury found that the men came by their deaths in the cabin of the barge by "accidental suffocation due to impure air," and made the following rider: "That, in the opinion of the jury, barges "conveying manure and other impure cargoes should be specially constructed."

On the 27th September, 1901, the Master of the barge "Herbert Tomkins," off Blackfriars, was found dead in the after-cabin, having been, as the evidence at the subsequent inquest clearly showed, suffocated by the carbonic acid gas evolved from the cargo, which consisted of refuse from streets, stables, vegetable markets and breweries.

The cabin of the barge was inspected by your Medical Officer. The air was so impure that a match would not burn in any situation lower than three feet from the cabin floor.

On the 1st July, 1903, in the West India Dock, the insensible body of the Master of the barge "William Hordle," of Rochester, was found in the forecabin of the barge. Assistance being obtained, he was with difficulty, owing to the foul condition of the air in the cabin, taken out, and on medical assistance being obtained, the man was found to be dead.

At the subsequent inquest, the verdict was given as one of death from natural causes.

The opinion of your Inspector, together with the evidence of the men who went into the cabin, and who were nearly overcome by the foul gases, shows 'that if the Master was not actually suffocated, yet the air in the cabin was in such a condition that it was impossible for anyone to have lived in it for even a short time.

On the 8th July, 1903, the Master of the barge "Alert," lying in the Mill-wall Dock, laden with manure, was found dead in the fore-cabin of the barge, under precisely similar conditions as obtained in the case of the "William Hordle." The verdict of the coroner's jury was also one of death from natural causes.

These facts were reported to the Board of Trade, and they were asked to co-operate with your Worshipful Committee in this important matter, whilst in the meantime action was taken under the Public Health (London) Act, 1891.

Your Committee have during the past year served upon various owners of this class of barge 57 Statutory Notices requiring not only the abatement of the nuisances, but the prevention of the recurrence thereof.

The legal position has been tested in the Courts of Summary Jurisdiction, and a conviction has been obtained in each of the cases taken there.

The alterations ordered are reported to have been carried out on a total of 112 barges during a period of about three years, and, except in two cases where the work had been carried out in an imperfect and unsatisfactory manner, the nuisance has been abated and has not recurred.

When a Statutory Notice under the Public Health (London) Act, 1891, has been served by order of your Worshipful Committee, proceedings can only be taken should the nuisance not be abated within the prescribed period allowed, or, when abated, it has been allowed to recur. This constitutes the offence, and legal proceedings must be taken within a period of six months following the time specified in the Statutory Notice for the abatement or prevention of recurrence of the nuisance.

A barge so offending may not be seen for six months by your Inspectors; may have been laid up; may not have been engaged in carrying cargoes of an offensive nature; or, when seen, the nuisance may have been abated by clearing out the space under the cabin floor.

It should be borne in mind that the nuisance and danger to health exist chiefly during the time the cargo is carried. These barges trade to various places in the Thames Estuary, and get "under weigh" as soon as possible after being loaded, and unless anchored, it is not practically possible for your Officers to get on board and inspect the conditions on board.

Thus much of the work of your Officers is rendered inoperative, and the serving of repeated Notices only, without summoning the offenders, leads to no practical result in improving the conditions under which the crews on barges carrying offensive cargoes have to live.

The Public Health (London) Act, 1891, seems to me to provide a remedy for this difficulty. Section 5 (b) states that if the nuisance, although abated since the service of the Notice, is, in the opinion of the Sanitary Authority, likely to recur on the same premises, the Sanitary Authority shall make a complaint, and the Petty Sessional Court hearing the complaint may make on such person a summary order. It will, I think, be admitted that barges carrying offensive cargoes in which the crew's quarters are not absolutely cut off from the hold so as to effectually prevent the discharge of filthy liquids or effluvium or gases, the nuisance is not only likely, but certain to recur whenever such offensive cargoes are carried. I therefore recommend that the opinion of Mr. Solicitor be taken on this point, and that, if he approves, legal proceedings should be taken in future against the owners of the barges carrying offensive cargoes in those cases where they do not carry out the necessary works to prevent a recurrence of the nuisance within a reasonable time.

There is a similar class of vessel engaged in the carrying of dangerous and explosive cargoes from the Port of London, which, I think, might fairly be brought within the scope of the Public Health (London) Act, 1891.

I quote extracts from the Reports of H.M. Inspector of Explosives. In his report of an explosion on a ketch which sailed from the Thames for the port of Kingston-on-Hull, and in which latter port the explosion occurred, resulting in the loss of the ketch and considerable damage to surrounding property, from which it will be seen that the hold was not effectually cut off from the crew's quarters:—

"From the commencement of the voyage the leakage from the barrels appears to have been considerable, and petroleum vapour was passing in considerable quantities into all parts of the vessel, so much was this the case that the crew were unable at any time to sleep below decks, and were obliged to make use of the boat for the purpose. It is also a significant fact that the ship's cat was found suffocated in the forecastle on the second day of the voyage."

In another case in which the explosion at sea resulted in loss of life, the same Inspector reports: "That the vapour had penetrated into the forecastle to "such an extent as to prevent its use."

The two deaths which occurred in the West India and Millwall Docks were brought to the notice of your Worshipful Committee in my monthly Reports, and on the recommendation of your Medical Officer the facts were reported to the Board of Trade, and they were asked to co-operate with this Authority in dealing with this question.

At the request of the Board of Trade, your Medical Officer had a conference with the Principal Officer of the Board of Trade in December last on this subject, and explained that the position of the Port Sanitary Authority was that of dealing with a nuisance on the barges, arising from filthy liquid and foul gases passing from the holds of the barges into the crew space; that the Port Sanitary Authority required the nuisance abated and its recurrence prevented by the carrying out of the alterations suggested by this Authority.

Your Medical Officer explained that on re-inspection of barges on which such alterations had been carried out efficiently, no nuisance had been found to exist.

The Principal Officer explained that the three Surveyors working under him had each advised a different method of preventing a nuisance on the barges, and, as far as I was able to judge the different methods, all seemed likely to prove satisfactory.

I pointed out that I did not think it would be advisable for the Board of Trade to lay down details, as if the work was carried out in an imperfect manner the nuisance would recur, and the barge owners would shelter themselves behind the Board of Trade specifications, although the Port Sanitary Committee would not accept that as a legal defence, but would be compelled to take legal proceedings for non-compliance with the terms of the Statutory Notice, inasmuch as the nuisance had recurred.

I ascertained from the Principal Officer that the suggested requirements would only apply to barges carrying offensive cargoes and coming up for registration or re-registration, which latter would only become necessary owing to damage, which would alter the conditions under which the barge was originally registered.

It will therefore be seen that if anything is to be done with regard to improving the sanitary conditions under which the crews of these barges have to spend their lives, that your Committee must persevere in the action which it has already taken under the nuisance clauses of the Public Health (London) Act, 1891, and that it must be left to the owners of the barges to take whatever steps they may consider advisable in the way of structural alterations to prevent a recurrence of the nuisance.

Subsequent to my interview with the Principal Officer, the Board of Trade issued instructions to their Officers, of which the following is a copy:—

- "Board of Trade M. 17721/1903 Continued (Marine Department).
- " The Surveyors,
 - " London District,
- " are informed that the Board of Trade have had under consideration
- " the desirability of affording additional protection from effluvium in the
- " case of the crew spaces of barges carrying offensive cargoes.

- "The majority of the barges referred to are registered under the "Merchant Shipping Act, 1894, and the Board of Trade have decided "that the following requirements shall be made as to the construction of "the crew space whenever such a vessel is inspected by a Surveyor, either "upon registry or re-registry, or upon a complaint being made.
- "The bulkhead between the crew space and cargo space should be a single water-tight bulkhead of two thicknesses of wood, tongued and grooved, with a layer of felt and coal tar between, and with angle strips of lead on both sides of the bulkhead all round its boundary, to prevent loss of tightness due to working.
- "Any case in which it appears that the crew space is not sufficiently protected from the danger of effluvium arising from an offensive cargo, and that additional measures should be taken to prevent such danger, should be reported to the Board of Trade for instruction.
- "The Surveyors are informed that the Port of London Sanitary "Authority will co-operate with the Board of Trade in requiring the "crew spaces of the barges referred to to be protected in the manner "described.

"WALTER J. HOWELL.

" 5th January, 1904."

In forwarding a copy of the instructions to your Worshipful Committee, it was hoped that the Port of London Sanitary Authority would be so good as to co-operate with the Officers of the Board of Trade in giving effect thereto.

With regard to the instructions referred to, I have to make the following remarks:—

That I am of the opinion that if the bulkheads of the barges as described are constructed in an efficient manner, the nuisance should not only be abated, but the recurrence of the same prevented.

It should, however, I think, be definitely expressed that this bulkhead must be water-tight, and must extend from the level of the deck to the skin, that is, the outer planking of the vessel at the sides and bottom, so as to effectually and permanently cut off the hold from the cabin, so as not to allow any liquid or effluvium from the cargo to enter the cabin space.

I also note that the requirements will only apply whenever a barge carrying or about to carry an offensive cargo is inspected for registration or re-registration.

As the barges are already registered and would only come up for re-registration owing to damage which would alter the conditions under which the barge was originally registered (and I note the instructions to Surveyors puts the alternative 'or on a complaint being made,') these shortcomings have been pointed out to the Board of Trade, and the Board were requested to inform this Authority whether they would cause the bulkheads as described to be placed in each barge carrying or about to carry an offensive cargo, on complaint from this Authority, and if so, this Authority would be pleased to co-operate with the Board not only by complaining, but also by directing the service of Statutory Notices under the Public Health (London) Act, 1891, requiring not only the abatement of the nuisance, but the prevention of the recurrence thereof."

The Board has replied, stating that "any case in which a complaint is made "by the Port Sanitary Authority will receive the Board's careful "consideration."

MERCANTILE MARINE.

The result of this Inquiry is most disappointing. It is admitted that the main cause of the diminution in the numbers of British seamen is the superior attractiveness of shore employment, with its greater comforts, and an increase in the numbers may be looked for rather in the improvement of their conditions.

The result of the Inquiry may be summed up as consisting in the provision of a certificated cook on every foreign-going vessel of and above 1,000 tons and also the inspection by the Board of Trade of the provisions of any vessel whose probable voyage exceeds 21 days.

The conditions under which sailors have to live on board vessels is one that has been brought to the notice of your Committee on many occasions. It is true that the instructions issued by the Board of Trade to their surveyors are good as far as they go, but they do not go far enough, and many of the improvements appear to have been made in comparatively recent years.

These instructions do not appear to be applicable to older vessels, and, indeed, it is the experience of your Inspectors that vessels which have been recently built, even when going on their first voyage, do not always comply with the conditions required by the Board of Trade.

Each seaman is entitled to receive 72 cubic feet of space, whereas the minimum requirements were he living on shore under similar conditions would be at least 400 cubic feet.

It is quite the exception for a vessel to have a separate mess-room in which the crew can take their meals, so that seamen have to sleep, to take their meals, and to spend their spare time in the small space allotted to them.

This space is in the majority of instances insufficiently lighted, the ventilation is bad, the ventilator, if provided, being placed in many instances immediately over a bunk, it is then generally stopped up by the occupant of the bunk, or else in other instances the ventilators are in the way on deck or are liable to be carried away at sea; they are then removed and carefully covered over with canvas, which is tied on and painted.

I am treating such instances as forecastles devoid of ventilation. It is no excuse for a shipowner to say it is useless to fit ventilators as they would be carried away by the first sea coming on board. Obviously, if from this cause the forecastle cannot be efficiently ventilated, the crew must be accommodated in some other part of the ship where ventilators can be fitted without risk of being carried away.

The Board of Trade requirements as to lighting state :-

"Every space appropriated as crew space should be properly lighted.

" To ensure that such will be the case under the ordinary conditions of a

"vessel's employment, it will generally be necessary to have so much

"provision for light when the ship is new and the paint clean, that if

"one-third of it be closed it will be possible to read the print of an

" ordinary newspaper in any part of the space."

From my experience I should say that it is quite the exception to find any forecastle in which these requirements are complied with.

I regard light as a most necessary means of preserving health; it is one of the most efficient purifiers; a dark forecastle is invariably a dirty forecastle, whilst a forecastle which is not properly ventilated is generally a damp forecastle, for moisture condenses on the exposed iron parts of the roof and drips into the bunks or on the floor.

The conditions under which seamen have to live on board ships are such as would not be tolerated for an instant on shore, and I am bringing to the notice of the shipowners every instance where I think improvement is required and can be obtained.

The remarks made with regard to seamen should also apply to the quarters inhabited by apprentices, although, as a rule, they are provided with a separate deck-house, and are a little better off. A few examples of the minimum space per head in cubic feet for comparison with that allowed to seamen will be interesting:—

			0			Cubic feet. per head.
Seamen's quarters	No.	1	1000	1.		72
Common lodging-ho	ouses,	sleeping	rooms	-		300
Rooms occupied by	night	only	-	-	-	300
Registered lodging-	houses	, rooms	occupied	by day	and	
night -	2000		10.76	re.huh	-	400
Non-textile work-ro	oms, d	luring w	ork-time	-		400
Army barracks	-	-	-	-	-	600
Cows in cow-sheds	-	-	-		-	800

To improve the condition of seamen's accommodation on board vessels the following requirements are necessary:—

- 1. An increase in the available cubic space.
- 2. An increase in the available floor space.
- 3. More efficient ventilation.
- 4. Sufficient light, natural and artificial.
- 5. Thorough insulation of bare iron.
- 6. A separate room for meals and recreation.
- 7. A wash-house,

The instructions issued by the Board of Trade to their Surveyors with reference to masters and crew spaces, would, if strictly carried out, materially improve the conditions under which many seamen have to live.

I would, however, take this opportunity of pointing out one or two weak places.

It appears that any barge employed on a river can be either registered or re-registered in the United Kingdom, without any inspection of the crew spaces on behalf of the Board of Trade, thus evading the provisions of the Canal Boats Acts and Regulations.

Further, that any vessel of whatever class or kind may, provided the owner is willing to forego any allowance from the registered tonnage on account of crew spaces, be registered under the Merchant Shipping Act, provided the Surveyor gives a certificate that he has inspected the crew spaces, notwithstanding the result of such inspection might not be satisfactory.

The expression of pious opinions by a Departmental Committee of the Board of Trade will not improve the conditions of life on board ships, the Board of Trade do not possess the necessary staff to supervise these conditions, and there is no doubt that all questions relating to health on ships should be dealt with by the various Sanitary Authorities acting under the Local Government Board, whilst those appertaining to safety of the ship should be left in the hands of the Board of Trade.

POLICE COURT PROCEEDINGS.

In Appendix H is given particulars of the cases in which Police Court proceedings have been taken. These will be seen to number nine, and to include offences against the nuisance clauses of the Public Health Acts, the Canal Boats Acts, and Bye-laws of the Port Sanitary Authority relating to Offensive Cargoes.

In only one case did the Authority fail to obtain a conviction, this being a prosecution under the Canal Boats Acts. Full particulars will be found in the special report on the working of these Acts.

SANITARY WORKS AND ALTERATIONS.

In Appendix F is shown a list of Sanitary Works and Alterations in connection with buildings, premises and vessels in the Docks, &c., which have been completed during the year, while in Appendix G will be found a list of those works which were in hand at the end of the year.

Owing to the increase in building and drainage construction within the Docks, this class of work has for some time past formed an important part of the duties of your Inspectors. The number of inspections of this kind carried out during the year will be found in Table A under "Shore Premises."

WATER BARGES.

The Water Barges in the Port have been kept under regular supervision, and, as shown in Table I., the number at work at the present time is 23.

One was condemned, and one new barge put into commission.

HOSPITAL.

TABLE X.

Number of Cases admitted, Cost of Maintenance, &c.

Remaining in Hospital on 31st December, 1902-1.

						Admitted.	Discharged.	Died.
	Bubonic Plagu	ie.		-		0	0	0
	Suspected dit	to		-	-	3	3	0
	Small-pox					11	11	1
	Scarlet Fever		-	-		5	5	0
	Enteric Fever		-	-	-	55	43	8
	Continued Fev	er'		-	-	13	13	0
	Erysipelas		10	-	-	1	1	0
	Measles -	-	-	-	-	7	7	0
	Diphtheria			-	-	4	4	0
	Chicken-pox		-	-	-	3	3	0
	Tonsillitis	-	-	-	-	1	1	0
						-	-	_
	Totals	-		-	-	103	91	9
						_	-	
	maining in Hosp						-	4
То	tal number of da	ys'	treatm	ent d	luring	the year		2,155
Av	erage number of	da	ys' trea	tmer	nt for e	each case		20.72
Th	e average daily	cost	of mai	nten	ance p	er head wa	s - 1s.	10.6d.

As is shown in Table X., 103 cases of Infectious Disease were admitted to the Port Sanitary Hospital during the year.

Amongst these cases were but 9 deaths, 8 deaths being due to Enteric Fever, this representing 14.54 per cent. of the total number of cases of this disease admitted to hospital. The remaining death was that of a Small-pox patient, this being the only fatal case out of the 11 admitted.

There remained in hospital on the 31st December, 1903, 4 patients.

The total number of days treatment during the year was 2,115, the average number of days treatment for each patient was 24.72, while the average daily cost per head for maintenance amounted to 1s. 10.6d., which is a reduction of the average for the preceding year.

The disinfecting apparatus has been in regular use, the total number of disinfections during the year being 102. (Appendix C.)

During the year the Thames Conservancy called the attention of your Worshipful Committee to the discharge into the River of slop water from the Hospital at Denton.

All fæcal excrement from patients at the Hospital is burned. That from the household is buried in the garden, so that only laundry water and slop water was allowed to pass into the Thames.

With a view to doing all that was required, your Committee sanctioned the construction of two bacteria beds. These were constructed by the City Surveyor after consulting with Mr. Dibden.

The question of dealing with this waste water is not an easy one. It must either be discharged on to the land, pass through some form of filter bed, or discharge direct into the River.

The land, on which the hospital is erected, being below the level of highwater mark, is, during the Winter, generally in a waterlogged condition. This has been especially the case during the past wet season.

It is obvious, therefore, that this method of disposal could not be approved.

The action of a filter bed consists in the breaking up of any organic matter which may be contained in the fluids, and the conversion thereof into harmless soluble nitrates.

This is done through the agency of certain forms of bacteria.

In dealing with infectious diseases, the use of a certain quantity of disinfectants is unavoidable, and it will be easily understood that the liquid going into the bacteria beds contains a certain proportion of disinfectant, which, if it does not destroy some of the bacteria, yet it is antagonistic to their growth and development, and, as a consequence, the beds are no longer working with the same degree of satisfaction.

It will probably be necessary during the coming year to renew the coke breeze as the beds show signs of failing in their action.

NEW BLOCK.

The number of patients treated in the Hospital has been more than in any previous year.

The new Block answers its purpose admirably, and has relieved your Medical Officer there of much anxiety in isolating the different forms of infectious disease.

LAUNCHES.

The Launches have done satisfactory work during the year, as will be seen from Table I., and the amount expended on repairs, &c., has not been above the average.

"DAVID BURNETT."—This is the largest launch at present in the service of your Worshipful Committee, and was built and purchased by the Corporation in 1893 and has, therefore, been running continuously for ten years.

A recent survey has shown that considerable repairs are required, also that the boiler should be lifted and carefully examined.

This launch is used almost entirely for inspection in the lower part of the River, and for the removal of infectious disease to the hospital.

"Clotho."—This is the second largest launch, and was built and purchased by the Corporation in 1885; the launch has, therefore, been in continuous work for 19 years, and has proved a cheap boat in regard to working expenses.

On survey, the launch was found to require extensive renewal amounting to partial reconstruction of the hull, together with other repairs.

"Denton."—This is the smallest launch, and was built and purchased in 1896. This launch is in fair condition, but certain repairs, due principally to wear and tear, are required to put same in good condition.

Detailed specifications, with estimates for all repairs to the launches, are being prepared, and will be laid before your Worshipful Committee in due course.

CANAL BOATS ACTS AND REGULATIONS.

In accordance with the requirements of Section 3 of the Canal Boats Act, 1884, I have to report upon the execution of the Canal Boats Acts, 1887 and 1884, and the Regulations made thereunder, and as to the steps taken during the year ending the 31st December, 1903, to give effect to the provisions of the said Acts and Regulations in the District within the jurisdiction of the Port Sanitary Authority of the Port of London.

(1.) The present arrangements for the inspection of canal boats are the same as those which have been in force during the past.

There are no Inspectors appointed solely for the work of inspecting canal boats, but the Port Sanitary Inspectors, of which there are seven, have each a district of the Port allotted to them, as follows :-

Inspector Romeril - - 182/. per annum.

CENTRAL DISTRICT.

West India Dock.

South West India Dock.

Poplar Dock.

Millwall Dock.

Inspector Garland

182l. per annum.

WESTERN DISTRICT.

London Dock.

St. Katharine's Dock.

Regent's Dock.

Surrey Commercial Dock.

Inspector Wetjen -

156l. per annum.

EASTERN DISTRICT.

East India Dock.

Royal Albert Dock.

Royal Victoria Dock.

Inspector Lambe

123l. per annum.

GRAVESEND DISTRICT.

Tilbury Dock.

N. Shore-from Purfleet down.

S. Shore-from Erith down.

RIVER.

Inspector Hopkins

- - 156l. per annum

UPPER DISTRICT.

Teddington to Limehouse.

Inspector Burr

156l. per annum.

MIDDLE DISTRICT.

Limehouse to Erith.

Inspector Rolfe

117l. per annum.

LOWER DISTRICT.

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

These Inspectors visit Canal Boats where they are found in the course of their daily work, and the results are set out in the Table appended.

(2.) The appended Table shows that the number of boats inspected during the year 1903 was 1,139, the first time since the formation of this Authority that the number has exceeded 1,000.

Of this number, 989, or 86.8 per cent., were found to be conforming with the Acts and Regulations. Except in regard to the cases hereinafter mentioned, no general complaint has to be made with regard to the condition of the boats and their occupants.

- (3.) On the remaining 150 boats were found 196 infringements of the Acts and Regulations. 126 written cautions were given; and of these, 119 are known to have been effective in remedying the defects complained of.
- (4) Legal proceedings were recommended by your Medical Officer in three cases, and on the advice of Mr. Solicitor summonses were issued in two, the cases being as follows:—

CANAL BOAT "VIOLET," REGISTERED BERKHAMPSTEAD 322.

This boat was inspected on the 13th March last, when it was found that the boat wat not lettered, marked or numbered as required by Section 3 of the Canal Boats Act, 1877, and by the Canal Boats Regulations of the Local Government Board, 2, 7.

An intimation was forwarded to the owner on the 16th March, calling his attention to the infringement of the Act and Regulations, and requiring that the lettering, marking and numbering of the boat should be carried out within seven days. Of this no notice appears to have been taken, and as the boat was again seen on the 28th April, and was still in the same state, a further intimation was sent to the owner on the 1st May, followed by a letter of inquiry on the 25th May. No reply was made to either of these communications. The boat was again inspected on the 20th June, and it was found nothing whatever had been done in the matter of complaint, and that the boat was still found to be not lettered, marked or numbered.

On the 29th July, the owner of the canal boat "Violet" appeared at the Thames Police Court in answer to a summons issued by instruction of your Committee, for unlawfully using the said canal boat as a dwelling, and not having the same lettered, marked and numbered, in contravention of the Canal Boats Act. The case was supported by the Assistant Solicitor, and the defendant pleaded guilty, being fined 11. and 23s. costs.

CANAL BOAT "PRINCE ALBERT."

This is a case of an unregistered vessel, which was being unlawfully used as a canal boat as defined by the Act and Regulations. The Canal Boat Act, 1877, Section 14, states that the expression "canal boat" means any vessel, however propelled, which is used for the conveyance of goods along a canal

as defined, and which is not a ship duly registered under the Merchant Shipping Act, 1854, and the Acts amending the same. The definition "canal" includes any river, inland navigation, lake or water within the body of a county, whether it is or not within the ebb or flow of the tide. The vessel is of the kind propelled by oars or towed, and is employed in the conveyance of goods between the mills and docks, is not registered under the Merchant Shipping Act, and at the time of inspection on the 16th June was in charge of one man. In answer to the questions put to him by your Inspector, it would appear that this man had been in charge of the vessel for 18 months past, and did nothing else.

That the cabin was supplied with bedding and fitted with a stove, the cupboards contained food.

There were cooking utensils about, and a receptacle for drinking water; in fact the whole arrangements indicated that the cabin was in regular occupation as a dwelling, and was not used as an occasional shelter only. The vessel was again inspected on the 17th, and found in the same place and in the same occupation.

It will thus be seen that according to the definition of the Canal Boats Act this barge is a canal boat, used as a dwelling and unregistered.

The owners of this vessel were summoned to appear at the Thames Police Court on the 29th July.

After hearing evidence, the Magistrate remarked that the Canal Boats Acts were never intended to apply to such craft as the one under consideration. It was intended to apply to canal boats for the protection of women and children, and that in this instance a man working in such a craft could very well take care of himself, and it was expected that he should take some risk.

He thereupon dismissed the summons with costs against this Authority.

(5.) The remaining case was that of the canal boat "Mary Ann," of Towcester, No. 140.

This boat was referred to in my last Annual Report, but at the time, although legal proceedings were authorised, it was impossible to subsequently trace the boat. Since then it appears that the Master, who was also the owner of the boat, has died, and the boat was met with in this Port again on 26th and 27th October, when the cabin was found to be occupied by an adult daughter, who formerly travelled with her father, and whose occupation of the cabin was then the ground of complaint, and with her on the boat were a younger sister and two adult brothers, all apparently occupying the one cabin.

There was considerable doubt as to who was the legal Master or owner of the boat. A statement made to the Inspector was that the boat had been left to the elder daughter, who was working it with the assistance of her grown-up brothers, but there was no evidence of this, and the boat had not been re-registered in the name of either party. It was therefore considered that in all probability a conviction would not follow proceedings.

In the meantime the boat had left the Port, and her whereabouts again became unknown. The boat appears to visit this Port about twice a year.

- (6) and (7.) No cases of infectious disease have been met with on any canal boats during the year, and it has not been necessary to detain any boat for cleansing or disinfection.
- (8.) The total number of boats registered by this Authority since 1887 is 414. Of these, 136 registrations have been cancelled. The actual number remaining on the Register to the 31st December, 1903, being 278.
- (9.) No new boats have been registered during the year, but eight have been re-registered—three for structural alterations, and five for other reasons.

I am, GENTLEMEN,

Your obedient Servant,

HERBERT WILLIAMS,

Medical Officer of Health, Port of London.

TABLE XI.

SUMMARY OF CANAL BOATS FOR THE YEAR ENDING 31st DECEMBER, 1903.

	1	February.	March.	April.	Hav.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	1	TOTAL I	FOR THE	YEAR.	****
	January.	rentuary.	marcu.	Арпь	nay.	4600.	aury.	Transar.	cepicineer	- October	1101(010(1)	Peterment	101111	1898.	1899.	1900.	1901.	1902.
New boats registered Registration owing to structural							***							5	8	4		
alterations Registration for other purposes	1		2	:::		ï			 1	1	1		3 5	16	6	14	1 23	1 11
Inspected	94	115	149	107	92	84	91	55	90	101	89	72	1,139	595	781	655	530	894
Conforming to Acts and Regulations	80	97	124	91	81	71	82	48	79	90	79	65	989	471	683	601	465	748
Infringements to :	0				3	,		2	4	3	3		21	27	14	12	12	22
Registration	2	***	3	***	0												***	
Notification of change of master Absence of certificate	4	1	6	1	3	4	2	2		1	2	2	28	27	16	14	11	38
Certificate not identifying owner	1					153												
with boat	1	4	1	***		***	1			2	1 2	***	10	1	1	7	19	18 24
Marking, &c	2	2	2	4	***	1	1	1	1	1	2	2	19	7	10 2	6	8	3
Overcrowding	2	1	***	1	1	***		***	***	***	***	***		1	2		0	7.77
Partition separating sexes	***	***	***	***		***	***	***	***	***	***	***	1		**	***	1	.: 61
Males over age		1		***	,	***	***	***	***			***	1		***	***	1	2
Females over age	1	***	1		***				***	2	3	2	28	17	6	6	10	88
Cleanliness	3	8	7	2	1	3	2	1	***	1			20	77.05	0	0	1	1
Painting	***	***		1	***	***	***	***	***		8		11	10	8	2	6	8
Ventilation	***	***	1	1	1	***	1	***	1	3	3		47	12 20	18	17	16	47
Dilapidation	5	4	9	5	2	3	4	3	4	2	3	3	47	20	18	17	10	41
Removal of bilge water		***	***			***		***	***	***	***	***	***		***	***	***	
Without pump	***		***				***	***	***	***		***	***	***	***	1		***
Refusal to admit Inspector	***	***		***			***	***	***		***	***	***	222	***	***		***
No proper water vessel	1	4	2	1		2	1	2	3	1	4	***	21	15	13	6	6	23
Without double bulkhead					***	***	***	***			***	***	***	4	***	***	***	***
Notification of infectious disease															***	***		
Detained for cleansing		***		***									***				***	
Proceedings taken		***			***		2			***	***	***	2		***	***	***	***
Cautions given	15	12	20	14	10	9	10	5	11	9	5	6	126	76	60	54	55	138
attended to	13	11	20	6	6	16	10	5	8	8	14	2	119	70	54	42	55	114
,, attended to					1						1							

 Total registered by Port Sanitary Authority since 1887
 ...
 414

 Cancelled
 ...
 ...
 ...
 ...
 136

 Actual number on Register, 31st December, 1903
 ...
 278

Registered for 4,036 persons.

Carrying 2,232 persons.

PORT OF LONDON SANITARY AUTHORITY.

RECEIPTS and EXPENDITURE under the Public Health (London) Act, 1891, for the Year ending 31st December, 1903.

RECEIPTS.	£ s. d.	PAYMENTS. £ s. d. £ s. d.	
To Fees in respect of Health Certificates	48 1 0	By Salaries, Wages and Disbursements, viz.:—	
" Ditto in respect of disinfection of Vessels	80 17 6	Dr. H. Williams, Medical Officer of Health, 1 year 650 0 0	
" Fees, &c., in respect of the utilisation of Condemned Meat, &c.	230 12 6	W. J. Albrow, Clerk, Salary, 1 year 200 0 0	
", Ditto in respect of Breaches of Bye-Laws re Offensive		Dr. H. Williams, for Wages£3,200 0 0	
Cargoes, &c	15 1 4	Ditto, for Disbursements 900 0 0	
" Metropolitan Asylums Board, Fees under 1891 Act	2 1 0		
" Rochester Port Sanitary Authority, Reimbursement of proportion of		Assistant Medical Officers' Salaries 1,289 8 0	
Salary of Medical Officer at Gravesend, 1 year £100 0 0		Medical Officer at Gravesend Hospital, Salary, 1 year 109 8 0	
Ditto, for forwarding Telegrams 0 18 8		Guarantee Premium, re Dr. H. Williams 1 10 0	
,, Ditto, for forwarding Telegrams 0 18 8	100 18 8	6,350 6 0	
" Charges for Maintenance of Patients from "Warspite" Training Ship	100 10 0	Officers' Pension Funds 172 17	5
", Charges for Maintenance of Patients from " warspite Training Ship	57 15 0	193 14 (0
at Denton Hospital	7 7 6	Offices at Greenwich, viz. :-	
" Fees in respect of Canal Boat Registration	1 11 8	Rent 50 0 0	
" Sundry and Miscellaneous Reimbursements	1 11 0	Fire Insurance 0 8 0	
	539 6 2	Telephone Rent 14 0 0	
	000 0 2	Rates and Taxes 12 1 0	
		Gas 10 2 5	
		Water 2 10 0	
		Coals 4 1 0	
		Repairs, &c 12 0 6	
		,, Hospital at Denton, viz.:— 105 2 1	1
		Rent of Causeway 2 5 0	
		Fire Insurance 3 4 9	
		Rates and Tayes 55 17 11	-
Deficit defrayed out of the "City's Cash"	9,249 11 5	Telephone Rent 12 10 0	Ň
		Coals 56 5 7	
		Repairs, &c 168 10 4	
		Stores, Equipment, &c 92 13 0	
		Nurses' Uniforms 21 16 6	
		Temporary Nurses, &c 48 5 7	
		461 8	8
		" Erection of Additional Block at Hospital (balance, less 50l. retained in hand) 344 9	0
		, Fire Appliances at Hospital 497 17	0
		, Erection of Hospital Store 85 0	0
		" Repairs to Hospital Causeway 86 0	0
		" Erection of Mortuary 62 7	6
		" Maintenance of Patients 14 3	9
		" Epidemic Precautions, &c 255 10	5
		, Disinfectants 7 15	4
		Telegrams and Maintenance of Private Wire 24 11	
		" Printing, Stationery and Advertisements 82 11 10	0
		" Expenses of Launches, Hulk, &c., viz.:—	
		Insurance 119 13 11	
		Coals and Coke 255 8 11	
		Repairs &c 237 16 5	
		612 19	3
		" Committee's Allowance 150 0 0	
		Ditto, Inspection of River 90 0 0	
		Ditto, Discharge of Sewage Enquiry, &c 120 0 0	
		Law Charges, viz. :- 360 0	0
		Mr. Comptroller 1 13 0	
		Mr. Solicitor 78 3 1	
			1
		., Sundries and Incidentals 62 6	9
			-
CHAMBER OF LONDON,	£9,788 17 7	£9,788 17	7
26th February, 1904, }			=

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APPENDIX A.

CASES OF INFECTIOUS DISEASE DEALT WITH DURING THE YEAR.

Date	3.	Name of Vessel. Port of Registry and Official Number.	Where from.	Disease.	Hospital to which cases removed.
1908	2				
Jan.	2	s.s. "Argo," Haugesund	Nykobing -	Enteric Fever	Port Sanitary Hospital.
22	6	s.s. " Princess "	Calais -	Ditto	Seamen's Hospital.
33	8	s.s. "Constantin," Aarhus.	Libau -	Diphtheria -	Port Sanitary Hospital.
33	9	s.s. "Caledonia," Green- ock, 102,390.	Bombay -	Chicken-pox	Ditto.
17	9	s.s. "Erasmus Wilson," London, 73,653.	Hartlepool -	Measles -	Seamen's Hospital.
"	10	Brunswick House, Black East India Dock.	wall Pier,	Diphtheria -	Isolated at own residence.
"	11	s.s. "Oroya," Liverpool, 93,712.	Sydney -	Suspected Plague	Port Sanitary Hospital.
,,	14	s.s. "Lady Martin," Dublin.	Dublin -	Small-pox -	Port Sanitary Hospital. Va cination offered to passe gers and crew, and accept by two passengers and o of the crew only.
22	17	s.s. "Egypt," Greenock, 105,581.	Bombay -	Chicken-pox	Convalescent on arrival as proceeded in the vessel.
"	27	s.s. "Umtali," London, 105,810.	Natal -	Enteric Fever	Port Sanitary Hospital.
"	30	s.s. "Royal," Liverpool, 115,259.	Alexandria -	Cholera - (5 cases)	Malta.
22	30	s.s. "China," Belfast, 104,467.	Bombay -	Enteric Fever	Port Sanitary Hospital.
Feb.	3	s.s. "Blonde," Dantzic- "Warspite" Training Sh	Dantzie -	Erysipelas - Diphtheria -	German Hospital at Dalst on 30th January. Ship's hospital on shore.
"	13	Greenhithe. s.s. "Pondo," London,	Karrachi -	Continued	Port Sanitary Hospital.
"	27	101,923. s.s. "Irene," Elsfleth -	Outward	Fever Tonsillitis	Ditto.
			bound	Continued Fever	
Mar.	1	s.s. "Morayshire," Glasgow, 108,778.	Sydney -	Continued Fever	Ditto.
"	4	s.s. "Tactician," Liver- pool, 113,398.	Calcutta -	Chicken-pox	Isolated on board. Co valescent on arrival vessel at Gravesend.
,,	5	"Warspite" Training Sh Greenhithe.	ip, lying off	Erysipelas -	Ship's hospital on shore.
"	6	s.s. "Monterey," Liver- pool, 109,427.	St. John's, N.B.	Enteric Fever	Inmates of Seamen's Hospit (See special note.)
"	7	s.s. "Oceano," Rochester, 106,521.		Continued Fever	Port Sanitary Hospital.
"	7	s.s. "Clan Farquhar," Glasgow, 111,209.	Calcutta -	Adenitis -	Port Sanitary Hospital for observation.
"	8	s.s. "Heron," London, 96,678.	Oporto -	Small-pox -	Port Sanitary Hospital. Vacination offered to crew, a only accepted by Ch Engineer and Chief a Second Mates.

APPENDIX A-continued.

Date		Name of Vessel, Port of Registry and Official Number.	Where from.	Disease.	Hospital to which cases removed.
190	2				
Mar.		s.s. "Beatrice," London, 109,972.	Bombay -	Small-pox -	Port Sanitary Hospital. The whole crew, with one ex- ception, were re-vaccinated.
23	14	s.s. Uganda," Glasgow, 108,721.	Calcutta -	Ditto -	Port Sanitary Hospital.
**	16	"Arethusa" Training Sh Greenhithe.	ip, lying off	Scarlet Fever	Temporary hospital on shore. Hospital cabin disinfected by ship's attendant.
,,	23	No. 3 Cottage, Mary London Dock.	Ann Place,	Ditto	Isolated at own residence.
31	24	s.s. "Italian Prince," Newcastle, 101,836.	Buenos Ayres	Enteric Fever	Inmate of London Hospital. Vessel sailed for Dunkirk before receipt of notifica- tion.
99	26	s.s. "Thule," Gothen- burg.	Gothenburg	Diphtheria -	Port Sanitary Hospital.
37	26	s.s. "Anglian," West Hartlepool, 107,840.	Boston -	Enteric Fever	Ditto.
31	27	s.s. "Caledonia," Greenock, 102,390.	Bombay -	Small-pox -	Ditto.
, ,,	28]	s.s. "Omrah," Glasgow, 108,782.	Sydney -	Suspected Plague	Suez.
April	3	s.s. "Heron," London, 96.678.	Oporto -	Small-pox -	Hospital at Hamburg on 28th March.
,,	5	s.s. "India," Greenock, 105,572.	Australia -	Measles -	Convalescent on arrival.
"	8	"Cornwall" Training S Purfleet.		Enteric Fever (5)	Hospital on shore at Purfleet.
"	14	Ditto	ditto	Ditto (2)	Ditto.
,,	21	Ditto	ditto	Ditto	Ditto.
27	28	Ditto	ditto	Ditto	Ditto.
,,	9	s.s. "Saba," London, 105.713.	Trinidad -	Small-pox -	Removed at Falmouth 6th April.
, ,,	11	s.s. "Myrmidon," Amsterdam.	Batavia -	Enteric Fever	Port Sanitary Hospital.
**	20	s.s. "Inkonka," Aber- deen, 109,650.	Natal -	Ditto	Ditto.
"	20	s.s. "Suevic," Liverpool, 113,456.	Sydney -	Small-pox -	Ditto.
"	22	s.s. "Arundel Castle," London, 104,827.	Cape Town-	Enteric Fever	Ditto.
"	22	"Oxygen," Barge, Rochester, 104,329.	London -	Measles -	Ditto.
,,	28	s.s. "Orizaba," Liver- pool, 93,688.	Sydney -	Suspected Plague	Landed at Suez on 13th April. Vessel disinfected by Sani- tary Authority there.
May	1	s.s. "Australia," Greenock, 99,786.	Ditto -	Enteric Fever	Port Sanitary Hospital.
"	5	"Cornwall" Training Sh Purfleet.	ip, lying off	Ditto (3)	One removed to ship's hospital on shore. Two removed to Port Sanitary Hospital.
"	5	s.s. "Yola," Liverpool, 109,432.	Portland (Maine)	Ditto	Inmate of Seamen's Hospital, Greenwich.
33	5	s.s. "Lackawanna," London, 102,836.	New York -	Ditto	Seamen's Hospital, Green- wich, 29th April.
,,	6	s.s. "Corinithic," Liver- pool, 115,296.	Wellington, N.Z.	Ditto	Port Sanitary Hospital.

APPENDIX A-continued.

Date.		Name of Vessel, Port of Registry and Official Number.	Where from.	Disease.	Hospital to which cases removed.
1903					
May	19	s.s. "Barbadian," Liver-	New Orleans	Enteric Fever	Port Sanitary Hospital.
,,	21	pool, 102,072. "Arethusa" Training Sh	ip, lying off	Scarlatina -	Ship's hospital on shore.
,,	22	Purfleet. s.s. "Devonshire,"	Buenos	Enteric Fever	Port Sanitary Hospital.
,,,	23	Glasgow, 106,063. s.s. "Inyati," Aber-	Ayres Port Natal -	Ditto	Ditto.
,,	23	deen, 106,542. s.s. "Mississippi," American.	Baltimore -	Ditto	Branch Seamen's Hospital, 8th May. Vessel had sailed for
"	31	s.s. "Guelph," London,	Cape Town -	Ditto	Baltimore on the 21st May. Port Sanitary Hospital.
June	1	104,040. s.s. "Gregynog," Sun- derland, 109,700.	Sunderland	Small-pox -	Patient left vessel at Sunder- land on 19th May, ap- parently in good health. Vaccination offered to crew but only accepted by Master
"	2	s.s. "Victoria,"	Sydney -	Ditto	Port Sanitary Hospital.
**	3	Greenock, 93,192. s.s. "Monarch," Liver-	Montreal -	Erysipelas -	Orsett Isolation Hospital, 29th May.
33	3	pool, 106,880. s.s. "European," Liver-	Quebec -	Enteric	Port Sanitary Hospital.
"	4	pool, 106,828. "Cornwall" Training Sh	ip, lying off	Fever Ditto	Ditto.
"	6	Purfleet. Ditto	ditto	Ditto	Ditto.
"	15	Ditto	ditto	Ditto	Ditto.
"	12	Ditto	ditto	Diphtheria	Wennington Hospital.
	7	s.s. "Eastwood," Hull,	London -	Erysipelas -	Port Sanitary Hospital.
"	9	82,515. s.s. "Syria," Glasgow,	Cape Town -	Chicken-pox	Removed at Southampton
"	14	113,959. "Warspite" Training Sl	ip, lying off	Enteric	where vessel was disinfected Ship's hospital on shore.
"	15	Greenhithe. s.s. "Hibernian," Glas- gow, 115,317.	Buenos Ayres	Fever Typhus Fever	Left vessel on 30th May. He arrived at Govan on the following day, and wa
					admitted to hospital ther on 10th June.
"	19	s.s. "Gaika," Southamp- ton, 106,908.	Algoa Bay -	Continued Fever	Port Sanitary Hospital.
,,	23	s.s. "Minnehaha," Bel- fast, 110,520.	New York -	Measles -	Isolated at own residence.
,,	23	s.s. "Doune Castle,	Cape Town -	Enteric Fever	Port Sanitary Hospital.
,,	24	London, 98,174. s.s. "Gaika," Southamp-	Algoa Bay -	Scarlet Fever	Royal Herbert Hospital.
"	26	ton, 106,908. s.s. "Chesapeake," Lon-	Philadelphia	Enteric	Port Sanitary Hospital,
**	28	don, 105,720. s.s. "North Point,"	Ditto	Fever Ditto	Ditto.
77	29	Liverpool, 113,478. s.s. "Oriental," Greenock, 93,210.	Sydney -	Measles -	Convalescent on arrival, and allowed to proceed in vessel.

Date.		Name of Vessel, Port of Registry and Official Number,	Where from,	Disease.	Hospital to which cases removed.
1903					
June	29	"Cornwall" Training Sh	ip, lying off	Enteric Fever	Port Sanitary Hospital.
July	8	Purfleet. s.s. "Galeka," South-	Cape Town-	Scarlet Fever	Ditto.
,,	10	ampton, 110,265. s.s. "Senator Hollisen,"	Archangel -	Continued	Ditto.
. ,,	13	Rendsburg. s.s. "Iona," Dundee,	Montreal -	Enteric	Branch Seamen's Hospital.
,,	14	99,216. s.s. "Star of England,"	Buenos	Fever Ditto	Seamen's Hospital.
33	15	Belfast, 93,180. s.s. "Monte Videan,"	Ayres Montreal -	Ditto	Port Sanitary Hospital.
31	17	Glasgow, 95,021. s.s. "Egypt," Greenock,	Bombay -	Bubonie	Landed at Suez, where vesse
39	21	105,581. s.s. "Australasian,"	Outward	Plague Chicken-pox	was disinfected. Port Sanitary Hospital.
"	28	Aberdeen, 88,589. s.s. "Inkosi," Aberdeen,	Bound Port Natal -	Enteric	Ditto.
"	28	115,582. s.s. "Syria," Glasgow,	Cape Town-	Fever Ditto	Branch Seamen's Hospital.
,,	31	113,959. s.s. "Arracan," Glasgow,	Rangoon -	(?) Plague -	Landed at Suez.
Aug.	6	113,924. s.s. "Hibernia," Whitby,	Montreal -	Enteric	Branch Seamen's Hospital.
"	8	96,544. s.s. "Lizard," Glasgow,	Glasgow -	Fever Scarlet	Charing Cross Hospital.
**	13	104,647. s.s. "Clematis,"	Fernandina	Fever Continued	Port Sanitary Hospital.
**	14	Antwerp. s.s. "Hurona," Dundee,	Montreal -	Fever Enteric	Branch Seamen's Hospital.
99	14	99,214. s.s. "Afric," Liverpool,	Sydney -	Fever Chicken-pox	Convalescent on arrival an
,,	15	110,537. s.s. "Euphrates,"	Busreh -	Continued	Port Sanitary Hospital.
"	16	London, 114,805. s.s. "Nordbaen,"	Three Rivers	Fever Enteric	Ditto.
33	17	Copenhagen. "Cornwall" Training Sh	ip, lying off	Fever Ditto	Ship's Hospital on shore
"	18	Purfleet. s.s. "Orita," Liverpool,	Sydney -	Ditto	Purfleet. Port Sanitary Hospital.
27	19	118,010. s.s." Manhattan," Belfast,	Quebec -	Ditto	London Hospital.
22	19	108,630. "Warspite" Training Sh		Ditto	Ship's Hospital on shore
	25	Greenhithe. s.s. "Kurgan," Windau.	St. Peters-	Ditto	Greenhithe. Seamen's Hospital.
37	26	s.s. "Alleghany," West	burg Newport	Ditto	Port Sanitary Hospital.
"	30	Hartlepool, 112,435. s.s. "Brantingham,"	News Quebec -	Ditto	Ditto.
"	31	Goole, 104,218. s.s. "Gascon," South-	Cape Town-	Ditto	Seamen's Hospital.
Sept		ampton, 106,907. s.s. "Hurona," Dundee,	Montreal -	Ditto	Port Sanitary Hospital.
	. 4	99,214. s.s. "Swan," London,"	Genoa -	Ditto	Seamen's Hospital.
"		82,344. "Warspite" Training St		Ditto	Ship's Hospital on shore.
"	8	Greenhithe.	Bombay -	Ditto	Port Sanitary Hospital.
,,	14	s.s. "Massilia," Greenock, 87,404.	Domoay -	Ditto	2 of Cantary 220spital.

Date	e.	Name of Vessel, Port of Registry and Official Number.	Where from.	Disease.	Hospital to which cases removed.
190	3.	Manual Control of the			Variation of the later of
Sept.		s.s. "George Fleming,"	Galveston -	Enteric	Port Sanitary Hospital.
"	25	London, 108,234. s.s. "Egypt," Greenock, 105,581.	Bombay -	Fever Scarlet Fever & Enteric Fever	Ditto.
"	25	s.s. "Tynesider," Newcastle, 95,240.	Newcastle- on-Tyne Drontheim	Scarlet Fever	Patient evaded the Health Authorities at Newcastle and came to London as a passenger with her mother and was not traced.
27	27	s.s. "Castor," Bergen.		Ditto	Port Sanitary Hospital.
22	27	s.s. "Zweena," Liver- pool, 113,366.	Mazagan -	Enteric Fever	Ditto.
,,	29	s.s. "Minnetonka," Belfast, 113,520.	New York -	Ditto	Ditto.
Oct.	3	s.s. "Clan Shaw," Glasgow, 115,691.	Vizagapatam	Continued Fever	Ditto.
		Glasgon, 110,001.		Suspected Plague	Landed at Suez.
"	8	s.s. " Clematis," Antwerp	Fernandina	Enteric Fever	Port Sanitary Hospital.
"	8	Dredger "Perseverance"	Working on River Thames in Lower Hope	Ditto	Gravesend Sanatorium.
33	9	s.s. "Arabia," Greenock,	Bombay -	Continued	Port Sanitary Hospital.
"	13	s.s. "Widgeon," London,	Rotterdam -	Fever Enteric	Seamen's Hospital.
"	17	73,657. s.s. "Cheshire," Liver-	Rangoon -	Fever Small-pox -	Port Sanitary Hospital.
"	19	pool, 99,310. s.s. "Arundel Castle," London, 104,827.	Cape Town -	Diphtheria Measles -	Ditto. Convalescent on arrival and
33	20	s.s. "Palermo," Glas-	Calcutta -	Enteric	proceeded in vessel. Port Sanitary Hospital.
22	20	gow, 115,774. s.s. "Paparoa," Ply-	Lyttelton -	Fever Measles -	Convalescent on arrival and
"	23	mouth, 111,346. s.s. "Silvia," Hamburg	Hamburg -	Small-pox -	proceeded in vessel. Metropolitan Asylums Board'
"	23	"Cornwall" Training Sh	ip, lying off	Enteric	Hospital. Port Sanitary Hospital.
33	31	Purfleet. s.s. "Linnea," Borgvik	Cardiff -	Fever Ditto	Ditto.
,,	31	Vm. s.s. "Moravian," Aber-	Sydney -	Ditto	Ditto.
Nov.	2	deen, 108,662. s.s. "Minneapolis," Bel-	New York -	Ditto	Ditto.
,,	14	fast, 110,515. s.s. "Alala," Liverpool,	Alexandria -	Ditto	Ditto.
"	15	109,454. s.s. "Runic," Liver-	Sydney -	Measles -	Ditto.
33	18	pool, 113,441. s.s. "Balder," Gefle -	Stoka -	Enteric	Ditto.
,,	19	Barge "Gertie," Lon-	Gravesend -	Fever Ditto	Metropolitan Asylums Board's
"	24	don, 91,884. "Sibens," Riga	Riga	Ditto	Hospital. Port Sanitary Hospital.
22	26	s.s. "Haddon Hall," W.	Bussorah -	Ditto	Seamen's Hospital, Greenwich.
Dec.	3	Hartlepool, 106,979. "Sibens," Riga	Riga	Ditto	Ditto.
22	16	s.s. "Wakasa Maru,"	Yokohama -	Cholera -	Singapore.
**	17	Tokio, 1,688. s.s. "Jeranos," Hull, 79,020.	Catania -	(4 cases) Enteric Fever	Port Sanitary Hospital.

APPENDIX B.

Vessels and Premises Disinfected, from 1st January to 31st December, 1903.

								Reason	a for I	Disinfe	ction.				r of
	Month.			Chieken-pox.	Continued Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Mumps.	Precautionary Measure.	Scarlet Fever.	Small-pox.	Typhus Fever.	Total Number of Disinfections.
January	-	-	-	2		1	4				2	1	2		12
February	-	-	-		2	1		1			2				6
March	-		-	1	1	1	2				3	1	4		13
April	-	-	-				3		1		2		2		8
May -	-	-	-				7				5				12
June-	-	-	-		1		5	2	1				2	1	12
July -	-		-				3			1	3	1			8
August	-	-	-	1	2		7		1		5	1			17
Septemb	er-	-	-				5				4	2			11
October	-	-	-		1	1	6				5		2		15
Novemb	er -	-	-				6		1		4				11
Decemb	er -	-	-				2				3				5
	Tota	als -	-	4	7	4	50	3	4	1	38	6	12	1	130

APPENDIX C.

Effects Disinfected, from 1st January to 31st December, 1903.

						Re	ason fo	r Disi	nfectio	n.				r of
Month	1.		Chieken-pox.	Continued Fever,	Diphtheria.	Enteric Fever,	Erysipelas.	Measles,	Mumps.	Precautionary Measure,	Scarlet Fever,	Small-pox.	Typius Fever,	Total Number of Disinfections.
January -	-	-	2		2	4		1		2		1		12
February -	-	-		1			1			2				4
March -	-	-	1	2	1	3				1	2	4		14
April -	-	70				4		1				3		8
May	-	-				8					2			10
June	-	-				8	1	2			1	2		14
July	-	-		1		2					1			4
August -	-	-	1	1		7		1						10
September	-	-				5					1			6
October -	-	-	1	1	1	7						2		12
November -	-	-				5		1						6
December -	-	-				2								2
Tot	als -	-	5	6	4	55	2	6		5	7	12		102

APPENDIX D.

UNSOUND FOOD.

Goods marked thus (*) were rejected by the owners and seized by the Port Sanitary Authority to prevent sale to small buyers.

Da	ite.	Where seized				Description of Goods,
19	03.	ROYAL ALBERT	Doc	K.		Med and add a state of the state of
Jan.	9	ex "Virginian"		-	-	5 cases pears.
"	10	ex "Oceana" -	-	-	-	37 crates oranges.
29	16	ex "Karamea"-	-	-	-	86 crates bananas, 32 cases raspberry
22	30	ex "Columbian"	-	-	-	pulp. 6 galls. tinned apples.
12	30	ex "Karamea"-	-	-	-	96 crates bananas.
39	30	ex " Duke of Westmi	nster	, 33	-	12 lbs. tinned mutton.
Feb.	6	ex " Australasian "	-	-	-	20 carcasses lamb.
22	6	ex "Columbian"	-	-	-	2 barrels apples.
22	6	ex "Athenic" -	-	-	-	1 cwt. 1 qr. 25 lbs. cheese.
29	11	ex " Warrigal"	-	-		15 carcasses and 3 pieces mutton, 9 pieces beef, 37 ducks and chickens, 4 hares and 15 oxtails.
33	14	ex "Athenic" -	-	-	-	1 cwt. 2 qrs. 24 lbs. cheese.
>>	18	ex " Candia " -	-	-	-	Between 4,000 and 5,000 cokernuts.
77	23	ex "Duke of Norfolk	22	-	-	78 tins herrings and tomato sauce.
,	28	ex "Sophocles"	-	-	-	2 carcasses and 1 piece mutton.
Marc	h 4	ex "Gothic" -	-	-	-	3 cwts. 3 qrs. 5 lbs. cheese.
33	4	ex " Cambrian "	-	-	-	1 barrel apples.
33	17	ex "Rome" -	-	-	-	3 carcasses mutton, 125 carcasses and 2
37	17	ex " Matatua " -	-	-	-	pieces lamb, 7 crates rabbits. 1 cwt. and 6 lbs. kidneys.
,,	17	ex " Kumara" -	-	-	-	6 cases kidneys.
23	21	ex " Matatua " -	-	-	1020	1 carcass mutton.
33	23	ex "Salamis" -	-	-	-	1 crate rabbits.
33	26	ex "Philadelphian"	-	-	-	19 barrels apples.

Date	е.	Where seized.	Description of Goods.
190	3.	ROYAL ALBERT DOCK—continued.	
April	4	ex "Anglian"	2 qrs. wheat, 1 barrel apples.
"	11	ex " Pakeha"	2 carcasses mutton.
,,	15	ex "Wilcannia"	69 carcasses lamb.
,,	16	ex "Commonwealth"	8 carcasses lamb.
"	17	ex "Shanghai"	80 tins pineapple.
"	18	ex "Arcadia"	2 cwts. 2 qrs. tinned fruit pulp.
1)	18	ex "Cambrian"	3 barrels apples.
"	18	ex "Mesaba"	5 barrels apples.
33	22	ex "Orestes"	51 cases pears.
,,	22	ex "Jumna"	2 cases potted bloaters.
,,	22	ex "Orestes"	7 tons 18 cwts. 4 lbs. tinned rabbits.
22	24	ex " Duke of Norfolk "	22 boxes raisins and currants, 1 box tes
May	21	ex "Machaon"	and 2 boxes prunes. 1 case sardines.
"	21	ex "Hector"	4 cases pears.
"	21	ex " Duke of Devonshire " -	16 crates rabbits.
"	21	ex "Jumna"	135 cases condensed milk.
,,	30	ex "Duke of Portland" (Ship's Stores)	4 cases currants, 3 cases raisins, 2 cases sultanas.
22	30	ex "Formosa"	50 chests desiccated cokernuts.
June	5	ex " Duke of Devonshire" - (Ship's Stores)	6 boxes currants, 4 boxes prunes, 2 box sultanas, 10 boxes Valencia, 1 bo muscatels.
,,	8	ex " Manhattan "	3 tons 6 cwts. 1 qr. wheat.
33	8	ex " Sarpedon "	1 case apples.
22	10	ex " Corinthic "	2 cases tomatoes.
17	10	ex "Moravian"	26 trays pears.
,,	25	ex " Karamea"	2 cwts. 16 lbs. cheese.
,,	29	ex " Manora"	3 cases artichokes.
July	9	ex "Jason"	32 tins pines.
77	10	ex "Michigan"	8 cwts. 2 qrs. 12 lbs. wheat.
"	10	ex "Manhattan"	7 cwts. 11 lbs. maize.

Date		Where seized.	Description of Goods.
1903		ROYAL ALBERT DOCK—continued.	
July	14	ex "Jumna"	2 casks macaroni paste.
"	24	ex "Rangatira"	1 crate rabbits.
Aug.	21	ex "Karamea"	21 cases Mellin's Food and bags Coriandar seed.
"	21	Floating in Dock	1 quarter beef.
,,	28	ex "Jason"	1 cask preserved ginger.
Sept.	7	ex " Ülysses"	3 cases potted anchovies.
,,	23	ex "Wilcannia" (Ship's Stores)-	14 tins cream, half-box raisins, 1 box evaporated apples.
"	25	Per Land Carriage, Stores for s.s. "Aberdeen"	1 barrel herrings.
31	28	ex " Alcinous "	40 tins pineapples.
,,	28	ex "Aberdeen" (Ship's Stores) -	3 boxes currants.
Oct.	1	ex "Antillian"	10 cwts, wheat.
- ",	3	ex "Cambrian"	2 tons 16 cwts, 8 lbs, wheat.
33	8	ex "Cuban"	10 cwts. 3 qrs. 18 lbs. wheat.
,,	22	ex " Nineveh"	2 cwts. 1 lb. tinned meat essence.
,,	30	Ditto	16 cases tinned sprats.
Nov.	6	ex " Cambrian"	1 barrel apples.
***	25	ex "Australasian"	1 crate bananas.
Dec.	-5	ex "Anglian"	27 cwts. damaged wheat.
,,	8	ex "Alexandrian"	1 barrel apples.
,,	11	ex "Manora"	100 lbs. tinned apricot pulp.
		VICTORIA DOCK.	
Jan.	9	ex "Devona"	1 barrel apples.
,,	9	ex "Loyalist"	- 1 barrel apples.
77	16	ex "Bungaree"	- 41 crates bananas.
"	28	ex "Hurona"	- 1 barrel apples.
Feb.	. (ex "Evangeline"	- 2 cwts. 2 qrs. 18 lbs. apples.
,,	1	Ditto	- 2 barrels apples.
"	2:	a ex "Indradevi"	- 25 pieces mutton.

Da	te.	Where seized.		Description of Goods.
190)3.	VICTORIA DOCK—continued.		- Charles and the Charles and
March	4	ex "Hurona"	-	1,130 pots cream cheese.
22	4	ex "Devona"	-	6 barrels apples.
37	4	ex Sundry Ships	-	4 boxes butter and 6 pails lard.
,,	6	ex " Cervona"	-	21 barrels apples.
33	6	ex "Amiral Baudin"	-	4 cascasses and 11 pieces mutton.
,,	7	ex "Gulf of Venice" -	-	1 barrel apples.
,,	18	ex " Morayshire "	-	198 carcasses lamb.
**	21	ex "Indradelma"	-	2 hind halves and 1 leg mutton.
1)	25	ex "Perthshire"	-	7 tins rabbits.
April	3	ex "Beatrice"	-	8 cases extract of meat.
"	11	ex "Aberdeen"	-	625 and 44 pieces lamb.
22	11	ex "Arcadia"	-	3 tons 7 cwts. 2 qrs. raspberry pulp.
22	15	ex "Morayshire"	-	5 carcasses lamb.
19	20	ex " Dee "	-	12 tons 3 cwts. 3 qrs. coffee.
>>	20	ex "Gulf of Genoa"	-	6 cases potatoes.
,,	22	ex "Cervona"	-	15 barrels apples.
,,	22	ex "Whakatane"	-	2 cases potted meat, tinned fish and squares of jelly.
,,	23	At Refrigerator— ex "Sophocles"	-	269 carcasses veal.
"	24	ex "Beatrice"	-	2 cases cocoa.
May	6	ex "Rakaia" (Ship's Stores)		3 pieces lamb.
12	6	ex " Douro "	-	2 cases oranges.
33	13	ex "Rimutaka"	-	2 pieces mutton.
33	14	ex "Fifeshire"	_	5 carcasses and 7 pieces mutton.
,,	14	ex "Yarrawonga"	-	2 cases milk.
"	30	ex " Mamari "		2 legs mutton.
June	2	ex " Mimiro"	-	1 piece lamb.
33	6	At Silos	-	2 tons 6 cwts. 2 qrs, wheat.
"	17	ex " Minnehaha "	-	8 cwts, 23 lbs, wheat,
	19	ex "Buteshire"	-	Half-carcass mutton.

Date		Where seized.	Description of Goods.
190	3.	VIOTORIA DOCK—continued.	1908. Victoria Dien-continu
June	29	ex "Manffshire" (Ship's Stores)-	6 pieces mutton.
11	29	ex "Rappahannock"	7 bags flour.
July	17	ex "America"	4 cwts. 3 qrs. wheat.
,,	24	ex "Highland Lassie"	1 crate bananas.
***	24	ex "Tongariro"	74 tins rabbits.
,,	24	ex " Tamar "	2 crates bananas.
,,	31	ex "Wakanui"	3 carcasses and one piece mutton and
"	31	ex "Perthshire"	2 carcasses and 1 piece lamb. 26 carcasses and 2 part carcasses mutton
"	31	Various Ships	and 61 carcasses and 21 pieces lamb. 140 lbs. cheese.
Aug.	11	Ditto	4 bags peas.
,,	14	Ditto	1 bag flour scrapings and 1 bag tapioca
"	14	Ditto	and sago flour. 1 carcass mutton.
,,	14	ex " Papanui"	9 carcasses mutton and 1 carcass lamb.
"	21	ex " Hibernia"	11 cwts. 1 qr. 4 lbs. wheat.
	21	ex "Manhattan"	
**			3 qrs. 12 lbs. oats, and 1 ton 16 cwts. maize.
22	21	ex " Livonian "	1 cwt. 3 qrs. 11 lbs. cheese.
"	25	ex "Indradevi"	7 carcasses and 4 pieces mutton and 52 carcasses and 18 pieces lamb.
19	28	Various Ships	4 bags wheat, 4 bags wheat sweepings, 1 bag flour, and 1 barrel honey.
Sept.	7	ex " Nairnshire "	2 carcasses and 1 piece lamb, and 1 car- cass and 10 pieces mutton.
"	12	At Cold Air Stores— ex "Amiral Baudin" -	7 carcasses mutton.
	10	ex "Ruapehu" ex "Colonian"	1 carcass mutton. 1 ton 9 cwts. 3 qrs. 16 lbs. damaged
"	16	The state of the s	wheat. 15 tins cherries.
"	29	ex "Medoc"	4 boxes dates.
Oct.	2		Tel man Vermina
13	10		- 585 tins lobsters.
"	15		- 1,593 carcasses mutton.
33	16	and the same of th	- 1 carcass mutton.
"	19		- 100 boxes pears.
,,,	22	ex "Norfolk"	- 11 pieces mutton.

Dat	e.	Where seized.		Description of Goods.
190	3.	VICTORIA DOCK—continued.	-	gedt. Victoria Dock-confiden
et.	22	ex "Hurona" -	-	2 barrels pears:
33	22	ex "Gulf of Toronto" -	-	1 fore quarter and 1 piece beef.
33	24	ex "Anglian"	-	25 cwts. 9 lbs. wheat.
"	24	ex "Gulf of Venice"	-	2 half-barrels pears.
,,	24	ex "Loyalist"	-	1 barrel pears.
,,	24	ex "Mimiro"	-	2 carcasses and 3 pieces mutton.
22	26	ex "Norfolk"	-	1 piece beef,
37	31	ex " Mesaba "	-	6 cwts. 1 qr. 27 lbs, damaged wheat.
33	31	ex "Columbian"	-	15 cwts. 2 qrs. 5 lbs. damaged wheat.
Nov.	3	ex "Exe"	-	8 tons damaged wheat.
"	6	ex "Star of New Zealand"	-	1 crate bananas.
,,	7	ex "Rakaia"	-	6 carcasses and 10 pieces lamb and 1 bag kidneys.
77	10	ex "Star of New Zealand"	-	18 tins rabbits.
**	10	ex "Evangeline"	-	3 barrels and 5 half-barrels pears.
"	10	ex " Iona"	-	1 barrel apples.
77	11	ex "Minnetonka"	-	11 cwts. 1 qr. damaged wheat.
"	11	ex "Narrung"	-	190 crates bananas.
,,	13	ex "American"	-	1 ton 2 qrs. 3 lbs. damaged wheat.
,,	13	ex " European "	-	19 cwts. 1 qr. 20 lbs. damaged wheat.
**	16	ex "Bagdad"	-	7 cases condensed milk.
"	21	ex "Colonian"	-	16 cwts. 2 qrs. 14 lbs. damaged wheat.
53	21	ex " Lancastrian "	-	18 cwts, 16 lbs, damaged wheat,
**	21	ex "Philadelphian" -	-	18 cwts. 1 qr. damaged wheat.
,,	23	ex "Surrey" (Ship's Stores)	-	21 pieces beef, 3 pieces veal, 6 carcasse lamb.
22	23	ex "Perthshire"	-	1 sevence mutton
,,	24	ex "Potomac"	10	3 barrels apples.
33	27	ex "Cervona"	-	1 barrel apples.
"	28	ex "Gulf of Venice"		2 half-barrels pears and 6 barrels apple
Dec	. 7	ex "Indralema"		4 crates bananas.

Date		Where seized.	Description of Goods.
1903		VICTORIA DOCK—continued.	
Dec.	8	ex "Cervona"	1 barrel apples.
33	18	ex " Indraghira " (Ship's Stores)-	1 side mutton.
77	18	ex "Kildona"	127 crates apples and 1 case pears.
"	28	ex " Devona"	1 barrel apples.
"	28	ex "Iona"	634 crates apples.
"	30	ex "Loyalist"	4 tons apples.
		East India Dock.	
Jan.	9	ex "Berwick Castle"	7 crates bananas.
22	10	ex "Benmohr" (Salvage)	1 case condensed milk.
>>	28	ex "Gaika"	337 cases condensed milk.
Feb.	28	ex " Gcorkha"	1 crate bananas.
March	9	ex "Galician"	2 ewts. bacon and 5 ducks.
,,	11	ex "Doune Castle" (Ship's Stores)	3 ducks.
**	16	ex " German"	158 cases jam.
29	16	ex "Goth" (Ship's Stores) -	1 quarter venison.
33	25	ex " Guelph "	2 crates tomatoes.
April	4	ex " German "	7 crates bananas.
,,	7	Ditto	5 crates bananas.
"	11	ex "Pembroke Castle"	1 crate bananas.
"	11	ex " Umtata"	2 cases pineapples.
"	21	ex " Umvolosi"	7 cases Gorgonzola cheese, in jars.
37	21	ex "Alnwick Castle" (Ship's Stores)	
25	22	ex "Tintagel Castle"	goose. 234 crates bananas.
June	2	ex "Gaul" (Ship's Stores) -	1 carcass mutton.
,,	10	ex " Goth "	1 crate bananas.
"	24	ex "Doune Castle" (Ship's Stores)	11 chickens and 6 ducks.
July 18	% 4	ex "Avondale Castle"	11 crates bananas.
,, 18	£3	ex " Umvolosi "	20 crates bananas.
11	14	ex "Cawdor Castle"	8 crates bananas.

Da	te.	Where seized.	Description of Goods.
190	3.	East India Dock—continued.	mitme-soull stock ou ff. 1848L
July	25	ex " Umtali "	2 crates bananas.
,,	25	ex " Akaroa"	6 cases chutney.
*,	29	ex "Pembroke Castle"	3 crates bananas.
33	29	ex "Lismore Castle"	1 crate bananas.
Aug.	4	ex "Berwick Castle"	8 crates bananas.
"	8	ex "Braemar Castle "	2 crates bananas.
31	21	ex "Galician" (Ship's Stores) -	52 rabbits.
***	21	ex "Greek"	50 lbs. bacon (Ship's Stores) and 10
"	21	ex "Gascon" (Ship's Stores) -	crates bananas. 7 fowls.
"	21	ex "Raglan Castle" (Ship's Stores)	20 ducks, 2 turkeys and 2 fowls.
37	28	ex "Lismore Castle"	5,097 tins apple puddings.
22	28	ex "Harlech Castle"	971 tins apple puddings.
"	28	ex "Braemar Castle"	6 tins apple puddings.
Sept.	8	ex "Umsinga"	1 crate bananas.
19	16	ex " Greek "	111 tinned pork pies and 54 tinned veal
"	16	ex "Tintagel Castle"	and ham pies. 1 crate bananas.
**	19	ex "Doune Castle" (Ship's Stores)	6 rabbits.
"	19	ex "Tintagel Castle"	224 tins sardines.
"	23	ex "Avondale Castle "	6 crates bananas.
>>	26	ex "German" (Ship's Stores) -	3 chickens and 2 ducks.
27	28	Ditto	1 crate bananas.
**	30	ex "Newark Castle"	25 crates bananas.
Oct.	1	Ditto	11 crates bananas.
33	2	ex "Avondale Castle"	29 tins whitebait.
33	3	ex "Newark Castle"	35 crates bananas.
"	6	ex "Galeka"	4 crates bananas.
"	7	ex " Dunolly Castle "	12 crates bananas.
"	7	ex " Galeka "	1 cwt. grapes.
"	7	ex "Gaika" (Ship's Stores) -	1 quarter mutton.

Date	e.	Where seized.	1	Description of Goods.	.elail
190	3.	East India Dock—continued.		Harr Tonas Done-cutting	
Oct.	9	ex "Dunolly Castle"	-	15 crates bananas.	
**	10	ex " Avondale Castle " -	-	13 tins whitebait.	
,,	20	ex "Greek" (Ship's Stores)	-	9 geese.	
**	21	ex "Arundel Castle" -	-	10 crates bananas.	
"	21	ex "Greek"	-	2 crates bananas.	
"	21	ex "Braemar Castle" -	-	1 crate bananas.	
,,	26	ex "Cawdor Castle"	-	2 crates bananas.	
,, 01	30	ex "Umtali"	-	24 cases condensed milk.	In the
Nov.	2	ex "Umvoti"		1 crate bananas.	
17	3	ex "Gascon"	-	1 crate bananas.	
"	10	Ditto	-	1 crate bananas.	
"	12	ex " Umgeni "	-	500 tins meat.	
22	16	ex " Lismore Castle "	-	21 crates bananas and 1 bund	lle tomatoes.
,,	24	ex "Berwick Castle" -		2 crates bananas.	
Lygy I	27	ex "Galician"	-	54 crates bananas.	
Dec.	1	ex "Berwick Castle" -		3 bunches bananas.	
"	1	ex "German"		221 crates bananas.	
31	1	ex "Umsinga"	-	45 crates bananas.	
"	18	ex "Umvolosi"	-	9 cases oranges.	
31	28	ex " Peri "	-	768 packets cocoa.	
,,	28	ex "Braemar Castle" -	-	7½ cases oranges.	
22	28	ex "Raglan Castle"	- 4	6 crates bananas.	
,,	30	ex "Umtali"	-	24 boxes tomatoes.	
		THE RESERVE TO SERVE THE PARTY OF THE PARTY		- and the same of	
		WEST INDIA DOCK.		anno lateral sand la de	
Jan.	8	ex "Ingeli"	-	5 crates bananas.	
"	15	ex "Hawkes Bay" - ,-	-	113 bags sheep's kidneys kidneys, 11 bags shee bag ox hearts, 21 bale	p's hearts, .
Feb.	6	ex "Ifafa"		and 15 parts ox cheeks. 1 crate bananas.	o va chicera

Date.	Where seized.	Description of Goods.
1903.	West India Dock—continued.	1907, Wind Print Hook-outle
Feb. 10	ex "Amiral Aube"	6 carcasses and 1 piece lamb, 10 car- casses and 56 pieces mutton, and 1
" 12	Ditto	piece beef. 3 carcasses and 2 pieces mutton.
" 18	At No. 1 Warehouse	19 cwts. 1 qr. tinned apples.
,, 28	ex "Amiral Baudin"	352 carcasses, 158 pieces, 54 legs mutton, 2 hind quarters, 7 fore quar- ters and 6 pieces beef.
March 7	ex "Star of England"	8 cwt. sheep's kidneys and hearts.
April 4	ex "Amiral Courbet"	136 carcasses, 55 pieces, 164 legs, and 57 haunches mutton, 5 carcasses and 1 piece lamb.
,, 16	ex "Hawkes Bay"	1 bag hearts, 1 bale skirts, 1 bale ox cheeks.
" 27	ex "Inchanga"	4 crates bananas.
May 16	ex "Inkosi"	5 crates bananas.
June 8	ex "Inyati"	40 crates bananas.
,, 12 ,, 27	ex "Amiral Baudin" At No. 1 Warehouse	4 carcasses and 22 pieces mutton and 1 carcass lamb. 3 cwts. 6 lbs. tinned apples.
July 4	ex "Amiral Courbet"	1 carcass and 3 pieces mutton and 1
,, 6	ex "Star of England"	piece beef. 1 hind half mutton.
,, 16	ex "Crown Point"	3,089 bags flour.
" 23	Ditto	1,514 bags flour.
,, 24	ex "Ingeli"	4 tons 4 cwts. 3 qrs. 12 lbs. lobsters.
,, 31	ex "Inyoni"	1 case tinned preserves.
Aug. 6	At No. 2 Warehouse	16 cwts. maize meal and flour scrapings.
,, 7	ex "Urmston Grange" -	13 carcasses and 40 pieces mutton.
,, 8	ex "Inkosi"	-1 crate bananas.
,, 8	At No. 4 Warehouse	5 tons sugar scrapings.
,, 13	ex "Illovo"	1 crate bananas.
,, 22	ex "Inyati"	-7 crates bananas.
Sept. 9	ex "Amiral Baudin"	1 hind quarter mutton.
,, 22	ex "Inkosi"	4 tons 6 cwts. 18 lbs. tinned fruits.
Oct. 1	ex "Kelvindale"	11 cwts. 1 qr. 17 lbs. chilled beef.
,, 3	ex "Amiral Courbet"	6 pieces mutton.

Dat	e.	Where seized.	Description of Goods.
190	3.	West India Dock—continued.	Westerna Dominion
Oct.	15	ex "Inchanga"	2 crates bananas.
,,	28	Ditto	3 cwts. pears.
Nov.	17	ex "Inyati"	6 crates bananas.
***	23	At No. 3 Warehouse	40 bags flour.
Dec.	10	ex "Ingeli"	1 crate bananas.
		SOUTH WEST INDIA DOCK.	
Aug.	28	ex "Inyati"	887 tins meat, 6,386 tins fish.
22	28	ex "Inkosi"	219 tins vegetables and 942 tins sundry
Sept.	8	At "G" Warehouse	foods. *20 tins tongues, *6 tins salmon and *8
Oct.	9	ex "Insizwa"	tins fruit. 157 tins blueberries, 96 tins Lawton berries, 136 tins strawberries, 7 tins blackberries, 11 tins ducks and 48
,,	12	At "G" Warehouse	tins beef. 2,592 tins lobsters.
		London Dock.	
Jan.	2	At East Quay, ex "Orianda"	2 cwts. 1 qr. currants.
,,	17	ex "Campinas"	9 part carcasses mutton.
,,	26	At South Quay— ex "North Point"	1½ cwts. tinned apples.
		ex "Minneapolis"	90 lbs. tinned apples.
33	27	At South Quay '-	30 lbs. tinned apples and 36 lbs. tinned
19	29	Ditto, ex "Ulysses" -	pines. 14 lbs. tinned pines.
17	31		14 cwts. jam and 1 cwt. tinned peas.
,,	31	raltar." ex "Cadiz"	3 cwts. salt beef, 2 cwts. sweets and 2 cwts. pickles.
Feb.	14	At No. 3 Warehouse	4 cwts. sweets, milk, &c.
**	28	At West Quay	1 box oranges.
**	28	ex "Ceres"	3 crates bananas.
Mar	ch 25	At No. 3 Warehouse, ex "Cadiz" and "Malaga."	8 tons 14 cwts. 12 lbs. tinned fruit pulp.
,,	27	1	*52 tins tomatoes, 2 tins rabbit, 1 tin corned beef, 8 tins mutton and 2 tins apples.
,,	28	At East Quay, ex "Siva" -	1 box oranges.

Da	ite.	Where seized.	Description of Goods.
190	3.	LONDON DOCK—continued.	new torrest over
Marc	h 28	At South Quay	*2 tins tomatoes, 2 tins corned beef and
April	6	ex "Ceres"	97 tins pines. 335 crates bananas.
33.	7	At East Quay	14 cases dates.
"	16	At West Quay—	The second secon
		ex "Sirius"	7 crates tomatoes.
		ex " Vesta"	1 crate tomatoes and 1 crate bananas.
"	17	At No. 3 Warehouse, ex "City	6 cwts. 1 qr. 20 lbs. tinned cherries.
"	22	of Cork." ex "Sultana"	1 box oranges.
33	27	At No. 11 Warehouse, ex "Obi"	6 boxes oranges.
May	6	At South Quay, ex Various Vessels	*8 tins pines, 1 tin beef, 1 tin soup, 372
"	9	Ditto	tins salmon and 42 tins fruit. 4 tins cherries and 98 tins pines.
"	11	At No. 3 Warehouse	*31 tins sardines and 13 tins peas.
23	14	At No. 10 Warehouse, ex "Dee"	35 bags coffee.
"	14	At West Quay	3 bags cocoa.
11	16	At East Quay—	addition on should examine the pile
,,	19	ex "Siva" ex "Etna"	1 box oranges. 2 boxes oranges.
,,	19	ex "Vesta"	10 crates bananas.
,,	23	ex "Tern"	5 boxes peas.
June	3	ex "Clapton"	3 tons 7 cwts. raisins.
11	3	At No. 11 Warehouse	82 boxes oranges.
"	3	Ditto ex "Lusitania"	2 boxes oranges.
22	12	Ditto ex "Orissa "	9 boxes currants.
"	15	At South Quay, ex "Luis de Cua-	7 bags chestnuts.
13	18	dra." ex "Lisbon"	6 boxes apricots.
,,	18	At South Quay	*1 cwt. 1 qr. 8 lbs. tinned pines.
	19	Ditto	*14 tins salmon and *38 lbs. tinned
July	9	ex "Cordilleras"	pines. 3 half carcasses and 1 leg mutton.
	20	ex "Killarney"	15 cwts. 1 qr. 20 lbs. condensed milk.
33	27	At East Quay	
"	21	It inst duty	2 cwts. 3 qrs. raisins, 1 ton 5 cwt. dates and 3 cwts. 2 qrs. currants.

Date.		Where seized,	Description of Goods.
190	3.	LONDON DOCK—continued.	District Door - according
July	28	At South Quay	*2 qrs. tinned pines, 24 lbs. tinned peaches 1 cwt. 1 qr. tinned salmon.
Aug.	1	At Eastern Dock, ex "Blarney"-	36 cases condensed milk.
"	15	At No. 11 Warehouse, ex "Obi"	1 cwt. 3 qrs. 4 lbs. tinned apricot pulp.
21	27	At Eastern Dock—	2 -4 6-241-
		ex "Lady H. Kinahan" - ex "Lady Wolseley" -	3 cwts. fruit pulp. 3 cwts. fruit pulp.
"	28	At No. 3 Warehouse, ex "Cadiz"	2 cwts. 3 qrs. 20 lbs. tinned greengage
Sept.	11	At South Quay	pulp. *5 cases tinned lobsters and 3 cases tinned salmon.
"	16	Ditto	37 tins salmon and 6 tins apricots.
23	22	At No. 5 Warehouse, ex " Douro"	3 cwts. pears.
23	28	At No. 11 Warehouse, ex "Szyed"	3 boxes oranges.
,,	29	ex "Malaga"	72 pineapples.
Oct.	13	At South Quay	*137 tins salmon.
"	14	At No. 3 Warehouse	*133 tins sardines.
"	19	At Eastern Dock, ex "Orissa" -	11 boxes currants.
21	27	At No. 3 Warehouse	7 tins apricot pulp.
99	28	At South Quay	*35 tins fruit.
Nov.	11	Ditto	*96 lbs. tinned pineapples.
"	13	Ditto	*50 tins fruits.
13	13	ex "Britannia"	1 box pears.
"	24	At South Quay	*35 tins salmon.
"	26	Ditto	*40 tins apples.
17	27	Ditto	*38 tins fruit.
"	30	At No. 3 Warehouse	9 tons 3 qrs. 6 lbs. figs.
Dec.	9	Ditto	*2 cwts. 2 qrs. 20 lbs, tinned fig pulp.
2)	16	At Eastern Dock, ex "Orissa" -	180 boxes currants.
22	16	At No. 3 Warehouse	18 tons 2 cwts. 16 lbs. figs.
,,	17	At No. 1 Warehouse, ex "Alice	21 boxes oranges.
"	23	Otto." At No. 3 Shed, ex "Crown Point"	40 bags flour.
**	31	At South Quay	*50 tins fish and *85 tins fruits.

Date.	Where seized.	Description of Goods.
1903.	St. Katharine's Dock.	
Feb. 28	At "C" Warehouse	3 cwts. raisins.
March 17	Ditto, ex "Minnetonka"	12 cwts. 3 qrs. 12 lbs. tinned lobsters.
,, 17	ex "Marquette"	110 lbs. tinned lobsters.
,, 17	At "A" Warehouse ex	$1\frac{1}{2}$ cwts. tea.
April 17	"Britannia." At "B" Quay, ex "Silvia" -	118 bags onions.
" 27	At "A" Warehouse ex "Massa-	1 chest tea.
May 12	chusetts." At "A" Quay, ex Various Vessels	4 tons 5 cwts. onions.
July 18	At "C" Warehouse	2 cwts. 2 qrs. 4 lbs. condensed milk.
Aug. 10	At "D" Warehouse	3 cwts. 2 qrs. 3 lbs. flour scrapings.
Sept. 7	ex "Viola"	10 tons potatoes.
,, 7	ex " Silvia "	354 baskets plums.
,, 8	ex " Schwalbe"	31 sieves and 1 flat of plums.
Oct. 23	At "C" Warehouse	2 cases condensed milk.
	adjustalent i	"I be talk to be
	MILLWALL DOCK.	and the second second second
Jan. 13		80 packages and 60 tins prepared food
" 21	"Cedardene." ex "Berlin"	2 cases and 1 part case eggs.
Feb. 19	ex " Kursk "	*6 bags potatoes.
,, 19	ex " Perim"	11 cases eggs.
,, 23	ex "Powderham"	3 cwts. 3 qrs. salt beef.
,, 25	ex "Bolivia"	5 cases eggs.
March 10	ex "Monterey"	18 barrels apples.
,, 12	Ditto	1 barrel apples.
,, 14	ex "Johanna"	28 lbs. wet fish.
May 2	generally offered to	4 casks herrings.
,, (and on the second secon	1 ton 7 cwts. 11 lbs. cocoa and 1 qr.
,, 16	ex "Kursk"	4 lbs. coffee. 3 baskets eggs.
,, 25		10 cwts. onions.
	Ditto	6 cwts, onions.

Date.		Where seized.	Description of Goods.
19	03.	MILLWALL DOCK—continued.	1803. Sr. Karmanna's Bour
July	17	ex "Mary"	89 cases eggs.
97	22	At No. 4 Warehouse, ex "Ras	5 bags onions.
"	30	Bera." ex "Jaffa"	8 cases eggs.
Aug.	26	ex "Hispania"	3 cases eggs.
Sept.	2	ex "Christian IX"	1 bag parsnips and 1 bag beans.
33	3	ex "Nautilus"	72 lbs. tinned beef.
1)	11	ex "Cameo"	12 cwts. wet fish and 1 cwt. game.
33	26	ex "Shule"	1 cwt. cranberries.
Oct.	15	ex "Svea "	4 cases eggs.
19	21	At "G" Warehouse	7 barrels apples.
1)	26	Per Land Carriage	1 box and 1 basket wet fish.
	28	ex " Mount Royal"	19 barrels apples.
Nov.	6	At Nao Food Co.'s Works -	31 tins pineapples.
"	13	ex " Montreal "	2 barrels apples.
"	13	ex " Calderon "	1 ton 11 cwts. 2 lbs. figs.
33	19	ex " Milo "	1 case condensed milk.
"	20 20	ex Various Vessels at "F" Ware- house. ex Various Vessels at "A" Ware-	 2 tons 1 cwt. qrs. 21 lbs. damaged wheat and maize. 10 cwts. potatoes.
"	25	house. ex "Milwaukee"	8 cwts. 2 qrs. 7 lbs. damaged wheat.
"	25	ex "Montezuma"	2 cwts. 11 lbs. damaged wheat.
"	30	ex Various Vessels	2 tins beef, 16 tins apples, 16 tins sardines, 3 tins fruit pulp, and 4 tins
Dec.	3	ex "Montezuma"	mutton. 1 cwt. damaged wheat.
22	3	ex "Montreal"	2 cases and 1 barrel apples.
"	11	ex Various Vessels	5 cwts. potatoes.
"	15	ex "Monmouth"	1 ton apples.
"	16	ex "Mount Temple" and "Mount Royal."	83 tons apples.
"	21	ex "Mount Temple"	2 quarters maize.
,,	31	ex Various Vessels	10 tins fruits, 2 tins beef and 50 eggs.

D	ate.	. Where seized.			Description of Goods.
190	03.	TILBURY DOCK.			Marchine Source Property
Jan.	15	ex "Banter"	+	-	3 crates bananas and 2 boxes tomatoes.
27	20	ex "City of Oxford"-	-	-	1 box oranges.
Feb.	4	ex "Orontes"	-	-	28 crates rabbits.
"	5	ex "Manitou"	-	-	5 barrels apples.
91	27	ex " Minnehaha " -	-	-	*3 cases tinned lobsters.
"	27	ex " Minnetonka" -	-	-	1 barrel apples.
March	1 3	ex "Mesaba"	-	-	*10 barrels apples.
,,	11	ex "Sorato"	-	-	5 boxes tomatoes.
"	20	In lighter "Pewna," ex "	· Oph	ir"	1,049 carcasses mutton.
,,	31	ex " Minnetonka" -	-	-	42 cases and 36 tins condensed milk.
April	16	Ditto -	_	-	9 barrels apples.
,,	27	ex "Ormuz"	-	-	5 cases pears and 1 case apples.
,,	27	ex " Menominee " -	-	-	14 barrels apples.
33	29	ex "Suevic"		-	13 cases pears and 4 cases apples.
Iay	13	ex "Orizaba"	-	_	40 cases apples.
"	19	At "C" Shed	-	-	2 boxes tomatoes.
,,	21	ex "Minnetonka" -	-	-	1 case pineapples.
"	23	ex "Orizaba"	-	-	4 cases pears.
22	26	ex "Orontes"	_	-	2 cases apples.
une	9	ex "Runie"	-	-	1 crate rabbits.
23	10	ex "China"	-	-	2 cases apples.
uly	15	At Baggage Warehouse	-	-	6 tins fruit.
ug.	26	At "C" Warehouse -	-	-	20 tons rice sweepings and 10 tons rice
ept.	7	ex "Jessica"	-	-	meal. 120 baskets plums.
"	23	ex "Minnetonka" -	-	-	115 tins raspberry syrup.
"	29	ex "Oruba"	-	-	3 crates rabbits.
ct.	14	ex "Orizaba"	-	-	5 tins rabbits.
ov.	10	ex "Orontes"	-	_	56 lbs. sausages and 28 lbs. dried fish.
"	13	ex "Minnehaha" -		2.50	6 barrels apples and 2 boxes pears.

Date.		Where seized.	Description of Goods.
190	3.	TILBURY DOCK—continued.	1903. Transact Dodg.
Nov.	14	ex "Buluwayo"	167 crates and 1 bunch bananas and 7 cases and 20 bundles tomatoes.
37	30	ex Various Vessels	13 tins beef, 2 tins mutton, 8 tins rabbit, 9 tins apples, 5 tins apricots, 8 tins
Dec.	4	ex "Minneapolis"	fruit pulp. 33 tins beef.
22	7	At Transhipment Shed	10 cwts. potatoes.
"	22	Ditto	5 cwts. potatoes.
,,	31	ex Various Vessels	41 tins fruits, 6 tins rabbit, 3 tins mutton and 5 tins soup.
		RIVER.	La company of the
Marc	h 20	In lighter "Frank," ex Gordon's	38 tons damaged barley.
22	20	Wharf. In lighter "Cambria," ditto	57 tons damaged barley.
,,	20	In lighter " Caroline," ditto	34 tons damaged barley.
"	20	In lighter "Rescue," ditto	38 tons damaged mixed grain.
>>	20	In lighter " Queen," ditto	41 tons damaged mixed grain.
33	31	In lighter "Rescue," ditto	28 tons damaged barley.
Apri	1 1	In lighter "Rescue," ditto	39½ tons damaged rice.
,,	3	In lighter "Rescue," ditto	38 tons damaged barley and maize.
,,	7	In lighter "Ganges," ditto	39 tons damaged rice.
"	7	ex "Zweena," lying at Morocco	8 crates bananas.
"	8	Wharf. ex "Bonnie Lass," lying at Top-	½ ton potatoes.
"	14		38 tons damaged rice.
,,	17	Wharf. In lighter "Rescue," ditto	60 tons damaged mixed grain.
May	6		30 crates bananas.
,,	6		14 crates bananas.
"	14		35 tons damaged mixed grain.
Sept	. 23		115½ tons damaged wheat.
Oct.	19		20 crates bananas.
"	19	Wharf. ex "Capulet," lying in Deptford Creek.	qrs. jam, 4 cwts. 3 qrs. 1 lb. marma lade, 2 cwts. 3 qrs. 4 lbs. candiec peel, 2 tons 1 cwt. 1 qr. cheese, 8 cwts 1 qr. 16 lbs. dried fruit, 10 cwts. 1 qr
		and sould be formulated about 2	4 lbs. biscuits, 30 tins meats, 18 tin salmon, and 24 bottles pickles.

Date. 1903.		Where seized.	Description of Goods.	
		RIVER—continued.		
Nov.	24	ex "Capulet," lying in Deptford Creek.	75 pails lard.	
Dec.	3	ex "Albatross," lying at British and Foreign Wharf.	2 cwts. gherkins.	
,,	8	ex "Telde," lying at Morocco Wharf.	7,200 eggs.	
"	15	ex " Orotava," ditto	2,800 eggs.	
"	30	At Millwall Wharf, ex "Batavier I."	38 tons 7 cwts. coffee, 11 tons 12 cwts. 2 qrs. tea, 21 tons 10 cwts. raisins, 2 cwts. 16 lbs. margarine, 7 tons 4 cwts. 2 qrs. sugar, 16 tons pepper, 26 cases oranges. 25 bags cocoanuts, 24 barrels apples, 3 boxes pines, 6 crates bananas, 2 packages tomatoes, 3 packages pears, and 17 barrels sprats.	

APPENDIX E.

A LIST of Riverside Wharves and Quays on the River Thames between Westminster Pier and Greenwich, at which Food Stuffs are or may be landed.

WESTMINSTER BRIDGE. SOUTH SIDE.

Soho Wharf India Stores Wharf Sufferance Wharf Lion Brewery Wharf Darfield Wharf Grellier's Wharf Canterbury Wharf

CHARING CROSS BRIDGE.

South Eastern Railway Arches

WATERLOO BRIDGE.

Grierson's Wharf
Waterloo Mills
Old Shot Tower (Lower)
Princes Wharf
Nelson's Wharf
Old Bridge House Wharf
Old Jamaica Wharf
Hope Wharf
Thames Wharf
Vestey's Wharf

BLACKFRIARS BRIDGE.

Jeen's Wharf Crown Wharf Travers Wharf Wharf Rebuilding Windsor Wharf Universal Wharf Bear Garden Wharf Universal (Lower) Wharf

SOUTHWARK BRIDGE.

Anglo-Swiss Wharf
Smith, Paterson and Co.'s Wharf
Travers Wharf
Southwark Wharf
Ceylon Wharf
Barclay and Perkins' Wharf
South Eastern Wharf
Do.
Lampson and Co.'s Wharf
Clink Wharf
New British Wharf
Winchester Wharf
Horseshoe Wharf
Pickford's Wharf
St. Mary's Overy Wharf
West Kent Wharf

New Hibernia Wharf

Old Hibernia Wharf

LONDON BRIDGE.

London Bridge Arches
Fennings and Humphreys
Sun Wharf
Topping's Wharf
Chamberlain's Wharf
Cotton's and Hay's Wharf
Wilson's Wharf
South Thames Wharf
Gun and Shot Wharf
Symons' Wharf
Stanton's Wharf
St. Olave's Wharf
Pickle Herring Wharf
Pickle Herring Wharf
Mark Brown's Wharf
Davis Wharf
Tower Bridge Wharf

TOWER BRIDGE.

Courage and Co.'s Wharf
Butler's Wharf
Horselydown and Coventry's
Cole's (Upper) Wharf
Newell's Wharf
Cole's (Lower) Wharf
Landell's Wharf
West Wharf
Mesnard Wharf

Upper side of St. Saviour's Dock.

Kitchen's Wharf
Dudins Wharf
St. Olave's Board of Works
Java Wharf
St. Andrew's Wharf
Tower Bridge Wharf
St. George's Wharf
Dockhead Wharf
Scott's Wharf

Lower side of St. Saviour's Dock.

Lloyd and Son's Wharf Unity Wharf Mill Wharf St. Saviour's Wharf Meriton's Wharf Seth Taylor's Wharf Reed's Wharf Weeson's Wharf Deverell's Wharf Reed's (Lower) Wharf Southwell's Wharf Bermondsey Wharves Lower East Lane Wharf Porter's Wharf Sunderland Wharf Sunderland Sufferance Wharf Montreal Wharf Bond's Wharf

FOUNTAIN DRY DOCK.

Darnell's Wharf Fisher's Wharf Powell's Wharf Farren's Wharf

CHERRY GARDEN PIER.

Lucas and Spencer's Wharf Corbett's Wharf Weaver's Wharf Platform Sufferance Wharf Yardley's Wharf Mathew's Wharf Fountain Wharf Rotherhithe Wharf Cannon Wharf Gordon's Wharf Princes Wharf East India Wharf Hope Wharf Thames Tunnel Wharf Grice's Wharf Tunnel Wharf Brandram's Wharf Fisher's Sufferance Wharves Cumberland Wharf Norway Wharf

ENTRANCE TO SURREY COMMERCIAL DOCK.

Surrey Commercial Wharf Bermondsey Borough Council Bellamy's Wharf

PRINCE'S DRY DOCK.

Upper Globe Wharf Globe Wharf

GLOBE PIER.

Globe Pier Wharf

McDOWELL'S DRY DOCK.

Grand Surrey Wharf

LAVENDER ENTRANCE TO SURREY COMMERCIAL DOCK.

Canada Wharf

NELSON DRY DOCK.

Dantzie Wharf Lawrence's Wharf

COMMERCIAL DOCK PIER.

H.M. Customs Wharf Odessa Wharf

COMMERCIAL DOCK ENTRANCE.

London, Brighton and South Coast Railway H.M. Victualling Yard Foreign Cattle Market

DEPTFORD DRY DOCK.

General Steam Navigation Co. Spice Works Ferry Wharf

NORTH SIDE BLACKFRIARS BRIDGE.

Bridge Wharf
Railway Arches Wharf
Purfleet Wharf
Victoria Wharf
City Mills Wharf
Wheatsheaf Wharf
Rutland Wharf
Horseshoe Wharf
Faul's Pier Wharf
Trig Wharf
Broken Wharf
Lyon's Wharf
Brooks' (Upper) Wharf
Brooks' Lower) Wharf
Abbey Wharf
Smith's Wharf
Bull Wharf
Kennet Wharf
Hambro' Wharf

SOUTHWARK BRIDGE.

Three Cranes Wharf Red Lion Wharf Dowgate Wharf and Dock

CANNON STREET RAILWAY BRIDGE.

Railway Arches
City of London Brewery Wharf
All Hallows' Wharf
Red Bull Wharf
Dyers' Hall Wharf
Commercial Wharf
Tennant's Wharf
Old Swan Wharf
Fishmongers' Hall Wharf

LONDON BRIDGE.

Fresh Wharf
Cox's Quay
Hammond's Wharf
Botolph and Nicholson's Wharf
Billingsgate Market Wharf
Wool Quay
Custom House Quay
Galley Wharf
Chester's Wharf
Brewer's Wharf

TOWER BRIDGE.

Irongate Wharf

ENTRANCE TO ST. KATHARINE'S DOCK.

Harrison's Wharf South Devon Wharf British and Foreign Wharf Miller's Wharf Carron Wharf

HERMITAGE ENTRANCE TO LONDON DOCK.

Hermitage Wharf
Upper Gun Wharf
Granite Wharf
Colonial Wharf
Globe Wharf
Tidman's Wharf
Seaward's (Lower) Wharf
Standard Wharf
Black Eagle Wharf
Albion and Brewer's Wharf
Hasties' Wharf
St. Helen's Wharf

WAPPING ENTRANCE TO LONDON DOCKS.

Oliver's Wharf
Gun Wharf
St. John's Wharf
Morocco Wharf
Eagle Sufferance Wharf
Eagle Wharf
Baltic Wharf
Old Aberdeen Wharf
St. John's (F. & G.) Wharf
Swan Wharf
St. John's (Lower) Wharf
Sharp's Wharf
Do.

Do.
Do.
Middleton's & McBride's Wharf
Do.
New Crane Wharf

Andrew Lusk's Wharf Jubilee Wharf Metropolitan Wharf Thorpe's Wharf

SHADWELL ENTRANCE TO LONDON DOCK.

New Star Wharf
Linde Wharf
Shadwell Market
Free Trade Wharf
Holt's Wharf
Phœnix (Upper) Wharf
Phœnix (Lower) Wharf
Ratcliff Cross Wharf
Globe Wharf
London Wharf
Crown Mill Wharf
Eagle Wharf
New Sun and Vine's Wharf
Oporto Wharf
Old Sun Wharf
Chinnock's Wharf
Victoria Wharf

BRIDGE DRY DOCK.

Dover Wharf
Blythe's Wharf
Broadway Wharf
Barnett's Wharf
Moline Wharf
Essex Wharf
Anchor Wharf
Lower Brewery Wharf
Brewery Wharf
Dunbar Wharf
Luton Wharf
Limehouse Wharf
Passmore Wharf
Dundee Wharf
Pier Wharf

LIMEHOUSE PIER.

Aberdeen Wharf

UNION DRY DOCKS. C. & E. Morton's Wharf

REGENT'S DRY DOCKS. Hutching's Wharf

GLENGALL DRY DOCK.

Timothy's Wharf Crosse & Blackwell's Wharf

BRITANNIA DRY
DOCKS.
Maconochie's Wharf.

APPENDIX F.

Sanitary Works and Alterations in connection with Buildings, Premises, and Vessels within the Docks, &c., completed during the year:—

Date completed.	Works,
1903. Jan. 12	Millwall Dock Company. Reconstruction of closets and urinals at General Office, Millwall Dock.
Feb. 19	London and India Docks Company, South West India Dock. Construction of sanitary conveniences for H.M.S. "President."
March 9	Millwall Dock Company—Grain Office. Alteration to lavatory drains
April 7	London and India Docks Company—Victoria Dock. Construction of a new W.C. at General Office, for use of females.
,, 20	London and India Docks Company—Royal Albert Dock. Construction of a new W.C. at General Office, for use of females.
May 7	London Keg and Drum Company. Alterations to drains and closets and also ventilation of a workshop in Millwall Dock.
" 22	London and India Docks Company — South West India Dock Re-construction of drain, closet, pan-trap and lavatory fittings a Deputy-Dockmaster's Office.
July 9	The Temperance Catering Co., Ltd. Drainage for new kitchen a coffee shop, South side Royal Albert Dock.
Sept. 18	London and India Docks Company. Drain to carry waste from sink a the Restaurant for use of Dock Company's Staff at Custom House Victoria Dock.
,, 26	London and India Docks Company. Construction of urinal and drainage between Nos. 10 and 12 Sheds, Royal Albert Dock.
Oct. 15	London and India Docks Company. New sewer between the Exporand South West India Docks.
Nov. 23	Messrs. A. W. Robertson and Co.'s Engine Works—Royal Alber Dock. Drain pipes from W.C's, roofs, &c., connected with main sewers.

APPENDIX G.

Plans for the following Works have been submitted and approved, and the work is in hand:—

Date Plan submitted.	Works.	Date Plans approved.
1903.		
May 29	Surrey Commercial Dock—Proposed rain-water drains connected with new Workshops in Finland Yard.	
October 12	London and India Docks Company—Reconstruction of about 800 feet of drain which receives drainage from premises occupied by Messrs. Rait and Gardiner and Messrs. A. and W. Robertson respectively, and situated at South Quay, Royal Albert Dock.	
November 6	Messrs. Lester and Perkins—Reconstruction of drains from stables, manure bin, and urinal in Royal Albert Dock.	
,, 21	Messrs. A. W. Robertson and Co.'s Engine Works, Royal Albert Dock—Plan of drain pipes from W.C's, roofs, &c., and showing connections to main sewers.	
December 22	London and India Docks Company—Reconstruction of about 280 feet of drain at rear of Messrs. A. W. Robertson and Co.'s and Messrs. Lester and Perkins' premises, Royal Albert Dock.	

APPENDIX H.

POLICE COURT PROCEEDINGS.

Date,	Name of Vessel.	Offence.	Police Court.	Result.
1903. June 25	"Nore" Lighter	(1) 28th May, lighter lying in the Millwall Dock with a cargo of cattle dung which was	Thames -	Fined 5l.—Costs and Expenses 2l. 10s.
		totally uncovered. (2) 4th, 5th and 6th June, lighter allowed to lie in the Millwall Dock with a cargo of cattle dung which was not properly and securely covered so as to prevent any nuisance arising there-	Do	Fined 5l.—Costs and Expenses 2l. 10s.
		from.		
July 29	Canal Boat "Violet," Berkhampstead, No. 322.	Using the canal boat as a dwelling while the boat was not lettered, marked and numbered, as required by the Canal Boats Acts and Regulations.	Do	Fined 1l. and 1l. 3s. Costs— Total 2l. 3s.
,, 29	Barge "Prince Albert."	Barge used as a resident canal boat, the same not being registered as a dwelling as required by the Canal Boats Acts and Regulations.	Do	Summons dismissed with 3l. 3s. Costs.
Aug. 5	s.s. "Fusilier," of Manchester, 110,367.	Smoke nuisance	Do	Fined 2l. and 1l. 3s. Costs— Total 3l. 3s.
" 5	s.s. "Trooper," of Manchester, 113,114.	Ditto	Do	Fined 2l. and 1l. 3s. Costs—Total 3l. 3s.
Sept. 24	s.s. "Richmond," of London, 95,485.	Failure to comply with a Statutory Notice dated 25th April, 1903, served upon the owners of the vessel to abate a smoke nuisance and to prevent the recur- rence of the same.	Mansion House	The Lord Mayor reserved his decision until the 5th October 1903, on which date he fined the defendant 14 and 14. 1s. Costs. The defendant gave notice of appeal, and the Lord Mayor said he would state a case a the matter was one o
,, 24	s.s. "Swift," of Hull, 108,526.	Ditto, Notice dated 22nd July, 1903.	Do	Adjourned pending de cision of above case
" 24	s.s. "Starling," of London, 94,307.	Ditto, Notice dated 22nd July, 1903.	Do	Adjourned until the 5t October, on which date the defendant were fined 5t. and 1t. 9s. 6d, costs.

APPENDIX J.

List of Cities, Boroughs, Urban and Rural Districts, with the Parishes in each Rural District, abutting upon the district of the Port of London Sanitary Authority.

RIVER THAMES.—LEFT BANK.

${\it Cities \ and \ Boroughs.}$	Urban Districts.	Rural Districts.	Parishes.
Hammersmith	Teddington	Romford	Dagenham
Fulham	Twickenham	,,	Hornehurch
Chelsea	Heston and Isleworth	**	Rainham
City of Westminster	Brentford	"	Wennington
City of London	Chiswick	Orsett	Aveley
Stepney	East Ham	,,	West Thurrock
Poplar	Barking Town	,,	Stifford
West Ham	Grays Thurrock	,,	Little Thurrock
Southend-on-Sea	Leigh-on-Sea	"	Chadwell
	Shoebury	,,	West Tilbury
		**	East Tilbury
	-	1)	Mucking
distributed in		"	Stanford-le-Hope
		,,	Corringham
		39 -	Fobbing
		,,	Vange
		Rochford	Pitsea
		**	Bowers Gifford
		,,	Canvey Island
		,,	South Benfleet
		"	Hadleigh
		**	North Shoebury
		**	Great Wakering
		"	Little Wakering
		"	Barling
		"	Shopland
		"	Sutton
		,,	Eastwood
		"	Rochford
		11	Little Stambridge
		39	Great Stambridge
		**	Paglesham
		11	Hockley
		33	Danewood
		33	Havengore

RIVER THAMES.—RIGHT BANK, WITH MOUTH OF MEDWAY AND WESTERN SWALE.

Boroughs.	Urban Districts.	Rural Districts.	Parishes.
Richmond	Ham	Dartford	Crayford
Wandsworth	Barnes	,,	Stone
Battersea	Erith	27	Swanscombe
Lambeth	Dartford	Strood	Denton
Southwark	Northfleet	,,	Chalk
Bermondsey	Sheerness	17	Shorne
Deptford ·	Milton	,,	Higham
Greenwich		Hoo	Cliffe
Woolwich		23	Cliffe
Gravesend		,,	High Halstow
Queenborough		,,	St. Mary
	and the state of	"	All Hallows
100000000000000000000000000000000000000		,,	Stoke
		Sheppey	Isle of Grain
		"	Minster in Sheppey
		"	Eastehurch
		The state of the s	Warden
		"	Elmley
	16	Milton	Iwade
		"	Upchurch