LIVERPOOL

PORT HEALTH AUTHORITY ANNUAL REPORT 1967

PROFESSOR ANDREW B. SEMPLE, C.B.E., V.R.D., M.D., D.P.H.,
MEDICAL OFFICER OF HEALTH,
CITY AND PORT OF LIVERPOOL.

PORT HEALTH AUTHORITY

OF

LIVERPOOL

REPORT FOR THE YEAR 1967

BY THE

MEDICAL OFFICER OF HEALTH

This is the 95th Annual Report upon the work of the Liverpool Port Health Authority.

The Permanent Constitution of the Liverpool Port Health Authority defines the limits of the Port for health purposes, as coincident with the limits laid down by H.M. Customs. The boundaries of the Port of Liverpool are laid down in "The Appointment of the Port of Liverpool Order, 1956".

SECTION I STAFF

There have been several changes of staff during the year.

Dr. J. C. Udechuku left on 28th February, 1967, and Dr. R. S. E. Cutcliffe, M.R.C.S., L.R.C.P., D.P.H., on 1st June joined the staff of the Public Health Department as Principal Medical Officer for Medical Examinations.

He was introduced to the Port as a Boarding Medical Officer and has fulfilled all these port duties rather well.

The amalgamation of the two sections of the Inspectorate which commenced in August has proved an outstanding success, indeed, there has not been an occasion when this integration has been adversely criticised. All the inspectors are working with a great deal of camaraderie and this, of course, is helped by the fact that the Authority for the first time for many years is at full strength again. Only one of our older inspectors, Mr. E. Moore, has had the misfortune to fall ill this year, but we are happy to report that he is now recovered and is back at work.

SECTION II

TABLE B

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1967

Ships from	Number	Tonnage	Number Inspected		Number of ships reported as having, or having had during the voyage, infectious disease on board
			By Medical Officers	By Port Health Inspectors	
Foreign Ports...	7,049	19,574,485	332	5,110	102
Coastwise ...	4,145	3,793,147	—	412	—
Total ...	11,194	23,367,632	332	5,522	102

SECTION III

TABLE C

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

PASSENGER TRAFFIC

No. of passengers INWARDS	No. of passengers OUTWARDS
139,062	143,433

(These figures do not include traffic between Liverpool and Northern Ireland.)

CARGO TRAFFIC

Principal Imports	Principal Exports
Flour, grain, etc., sugar, molasses, etc., wood, fruit and vegetables, cotton, ores and scraps, meat, feeding stuffs for animals, tea, butter, cheese, eggs, etc., cocoa, seeds or nuts for expressing oils, copper, coal, oils, fats, resins and gums, hemp, jute, sisal, etc., hides and skins, tobacco, rubber.	Iron and steel manufactures, chemicals and sodas, salt, machinery, pottery, glass and glassware, sugar, molasses, etc., flour, grain, etc., copper, brass, tin, etc., soap and oils, etc., ale, beer, wine, spirits, etc., cement, electrical goods, etc., paper, cardboard, etc., vehicles, aircraft, motor cars, locomotives, etc., bricks, cutlery, hardware, etc., fine goods.

Ships arrive in Liverpool from ports all over the world.

SECTION IV

INLAND BARGE TRAFFIC

The number of barges plying in and about the Port of Liverpool is approximately 100 or more representing an estimated total of 12,000 tons.

CANAL BOATS (Public Health Act, 1936, Part X)

As that part of the above Act dealing with registration of Canal Boats has been repealed by the Local Government Act, 1966, Schedule 6, Canal Boats are no longer measured for registration.

Number of boats inspected	30
Number of boats with contraventions	2
Number of contraventions	2
Number of contraventions corrected...	2

Only a few of these boats are used as dwellings, the majority being used as " Day Boats " where the crew do not sleep on board.

SECTION V

WATER SUPPLY

There has been no change in the source of water supply for either the seaport or the airport.

A constant check is kept by the port health inspectors on the cleanliness and condition of ships' drinking water, and in the case of British ships, close and friendly co-operation is maintained with officials of the Board of Trade.

Periodic routine samples of water are taken from ships entering the port and samples are also taken on request, or where there is any suspicion of contamination.

During the year 292 samples of water were taken from 45 vessels, and submitted for bacteriological examination: 58 samples were considered to be unsatisfactory, and steps were taken to ensure a clean water supply.

There are no water boats in use on the River Mersey, but several tug boats are equipped to carry water, from which 99 of the above samples were taken.

A sample of water was also taken from a mid-river mooring barge, submitted for bacteriological examination and found to be satisfactory.

SECTION VI
PUBLIC HEALTH (SHIPS) REGULATIONS, 1966

Under the above Regulations which were discussed last year in the Annual Report, it was then stated that a new style of Declaration of Health had been introduced. In that Report was given a new list of infected areas and also advice was offered to masters as to the form their radio signal to Port Health might take.

We have found that most of the radio signals have been adequate but we still find some do not give all the information that is required for clearance to be granted and letters have been sent to the masters of the vessels concerned.

THE PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1966

A new list of infected areas was sent to H.M. Customs and to the Director of the Airport in compliance with the above Regulations, and on account of the Foot and Mouth Disease outbreak near the end of the year, we were required by the Ministry of Agriculture, Fisheries and Food, of the Isle of Man, and by the Authorities in Ireland, to disinfect all aircraft cargo spaces, as well as the cargo itself which would leave Speke Airport for destination in these places. A total of 668 Cambrian and 334 Aer Lingus aircraft have been treated since 22nd November, 1967, and pads provided over which all passengers were required to pass before boarding the aeroplane, in order to disinfect their footwear.

A test pilot let his big four-engined transport aircraft land itself on Liverpool's new £3,000,000 runway on 27th April. It was the first automatic landing to be carried out at the Airport and was performed by a turbo-jet Short Belfast Strategic freighter built for the Royal Air Force.

Several "hands-off" landings were carried out that day, and on no occasion was it found necessary to switch to manual control and at no time was any difficulty encountered.

The Airport's Instruments Landing System sends out a radio beam to the aircraft on which it can " home " and we understand that during the tests the aircraft touched down at almost exactly the same spot on the runway.

SECTION VII
SMALLPOX

During the past year no cases of smallpox were landed at Liverpool and no report was received from any ship coming to this Port of having landed a case elsewhere.

This is the disease which is regarded by all port medical officers as the most dangerous, because its presence can be mistaken for so many other diseases.

It is the intention of this Authority to hold a smallpox exercise early in 1968 when everyone who in any way would be involved if a case had to be landed at the Port, will take part. This exercise will be watched by a class of Diploma in Public Health (D.P.H.) students who are studying at Liverpool.

Smallpox consultants available are:—

Professor Andrew B. Semple, Health Department, Hatton Garden, Liverpool, 3.

Dr. T. L. Hobday, 43 Ullet Road, Liverpool, 17.

Professor A. W. Downie, Department of Bacteriology, The University, Liverpool, 3.

Dr. A. B. Christie, Fazakerley Hospital, Longmoor Lane, Liverpool, 9.

Facilities for laboratory diagnosis of smallpox are available in the Liverpool University Bacteriological Department.

VACCINATION
Vaccination

All ships arriving from infected ports or ports in Africa, Asia and the Americas excluding the United States and Canada, were asked to submit a list of all persons on board the ships with vaccination certificates.

SECTION VIII
VENEREAL DISEASE

59 cases of Venereal Disease in 33 ships were reported during the year and all of them were referred for clinical treatment.

It is rather disturbing that the number of cases of Venereal Disease has shown an increase this year among the crews of foreign-going ships and of these cases the large majority are young men in the engineering departments or deck officers on these ships. There is no doubt in our minds that some sort of instruction, rather in the form of the advice given to soldiers should be instituted.

A lot of these men were first trippers and it is a very sad state of affairs to find a young lad, perhaps not yet 21, affected by syphilis.

SECTION IX
CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES IN SHIPS
Typhoid Fever

The m.v. *Argy* arrived from Mediterranean ports on 10th February, and a lady passenger was removed to Fazakerley Hospital suffering from persistent headaches and muscular cramp, which had started on 5th February. The patient had joined the vessel at Piraeus on 16th January, accompanied by her four-year-old daughter. She was examined by a doctor at Qatar, Morocco, who diagnosed " influenza ".

The patient was examined on board on the vessel's arrival at Liverpool and removed to hospital by ambulance with a tentative diagnosis of paratyphoid fever. Disinfection of the passenger's bedding was carried out. Investigation showed that no sea stores remained on board and no samples of food were obtained. Samples of water were taken and submitted for bacteriological examination and found satisfactory. An inspection of the ship disclosed no evidence of rodent or vermin infestation.

Thorough cleansing of the meat room and handling room was carried out while the remainder of the storerooms, galley, pantry and accommodation were found to be clean.

On 14th February the diagnosis of the patient was altered to typhoid fever. The vessel sailed to Glasgow on the same day, and the Medical Officer of Health of that city was informed of the action taken.

A report from Fazakerley Hospital on 24th February stated that salmonella typhimurium had been isolated from the patient and was of phage type 38.

The vessel m.v. *Velarde* arrived from Valencia on 24th February. The master of the ship was removed to Fazakerley Hospital on arrival, thought to be suffering from typhoid fever. Disinfection was carried out, samples of water and food, and specimens of faeces were submitted for examination and all proved negative, but as some of the water samples showed a very small coliform count, the ship's fresh water system was cleansed and chlorinated. No further sickness was reported.

Diarrhoea on Ships

The m.v. *Hornby Grange* came from Hobart on 8th June. During the voyage an outbreak of severe diarrhoea had occurred and one case was still ill on arrival, but was allowed to proceed. Disinfection was carried out and samples of water and food, specimens of faeces, and swabs from the food preparation surfaces were submitted for bacteriological examination.

Three samples of water were considered to be unsatisfactory and the fresh water tanks, pipelines and taps were super-chlorinated for twelve hours, emptied out and refilled with clean water. The taps were sterilised. A heavy growth of coliform organisms was reported in the galley and messroom sink units, and these, along with table tops, had to be cleansed and sterilised. Samples of food and specimens of faeces proved negative for salmonella or dysentery organisms. The vessel sailed on 13th June for Dublin, Glasgow, London and Falmouth.

TABLE D

The number of cases of infectious disease landed from vessels arriving at Liverpool and those occurring in Liverpool-bound ships which were disposed of before arrival, are shown in the following tables:

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS DURING 1967

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
Relapsing Fever	—	—	—
Other Infectious Diseases			
Chickenpox	1	2	3
Dysentery	1	—	1
Enteric Fever	1	—	1
Gastro-enteritis	3	—	3
German Measles	2	—	2
Infective Hepatitis	1	—	1
Influenza	—	4	4
Measles...	1	—	1
Meningitis	—	1	1
Mumps	1	—	1
Pneumonia	—	1	1
Pyrexia...	1	2	3
Tuberculosis	—	5	5
Totals	12	15	27

CASES OF INFECTIOUS SICKNESS OCCURRING IN VESSELS DURING THE VOYAGE BUT DISPOSED OF PRIOR TO ARRIVAL. YEAR 1967

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever...	—	—	—
Yellow Fever	—	—	—
Relapsing Fever	—	—	—
Other Infectious Diseases			
Chickenpox	3	4	6
Dysentery	—	1	1
German Measles	3	—	2
Malaria	—	1	1
Measles	4	—	3
Mumps	—	1	1
Pneumonia	—	2	2
Pyrexia	—	2	2
Totals	10	11	18

CASES LANDED FROM COASTWISE VESSELS

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
	—	—	—

DISINFECTION

During the year 27 disinfections after infectious sickness were carried out by officers of this Authority. Infected bed and bedding was removed by the City staff for steam treatment.

SECTION X
OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

Six cases of malaria or suspected malarial fever in six ships were reported, but none was required to be hospitalised.

SECTION XI
MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

No rodent plague was discovered either in ships or ashore. One suspected rat proved on examination to be negative.

SECTION XII
MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN SHIPS

The Port is divided into districts and a port health inspector, a rat-searcher and a rat-catcher are allotted to each district. The rat-searcher looks for evidence of rats and detects rat harbourages and the rat-catcher deals with any infestation found, and in addition obtains samples of the rat population for bacteriological examination. Special precautions are taken in or near ships trading with plague-infected ports. Each rodent operative is given specific tasks daily to be carried out at set times, and the work is checked by a senior inspector.

RATGUARDS

Foreign-going ships, whether arriving from abroad, or proceeding coastwise are visited as soon as possible after arrival by a port health inspector, and advised to fit ratguards on all moorings.

1. Procedure for Inspection of Ships for Rats

(*a*) Enquiries and inspection by port health inspectors.

(*b*) Routine searching by rat-searchers who search ships on arrival,

and also make periodic revisits during the discharge of cargo. Coastal shipping and harbour craft are searched periodically.

(*c*) When application is made for a deratting or deratting exemption certificate the ship, when empty, is searched throughout.

(*d*) Immediate investigation is undertaken when reports of infestation are received from shipowners, agents, ship masters and officers, dock-workers or privately employed rat-catchers.

2. Arrangements for the bacteriological or pathological examination of rodents with special reference to rodent plague

Any rats suspected of being plague infected, or any rats found dead without visible marks of violence are dipped in paraffin, labelled and taken immediately for bacteriological examination.

Foreign-going ships entering the port are visited by a port health inspector and a rodent operative as soon as possible after docking. Traps are set in all ships from plague-infected ports and also in other foreign-going ships where rat evidence is detected or reported.

3. Arrangements in the districts for deratting ships, the methods used, and if done by a commercial contract, the name of the contractor

Agents or owners of ships found to be infested with rats are, in their own interests, advised to take appropriate action, even if the ship holds a valid international deratting or deratting exemption certificate, or rodent control certificate.

Many of the larger shipping companies employ rodent operatives under private contract, whilst others employ rodent exterminators as required.

Deratting in ships

(*a*) Routine trapping by port health rodent operatives.

(*b*) Trapping and/or poisoning by rodent operatives, employed by shipowners or agents.

(*c*) Fumigation with hydro-cyanic acid gas or sulphur dioxide.

Principal Contractors

The principal contractors carrying our rodent exterminations and fumigations in the port, approved by the Port Health Authority are:

(*a*) Rat-catching	Rentokil Laboratories Limited. Hivey Fumigation Company. A. Sewell.
(*b*) Fumigations	Rentokil Laboratories Limited. Hivey Fumigation Company.

Deratting on dock premises

(*a*) Routine trapping and poisoning by port health rodent operatives.

(*b*) Routine trapping and poisoning by rodent operatives employed by the Mersey Docks and Harbour Board.

(*c*) Trapping and poisoning by private contractors employed by shipping companies and warehouse owners.

4. Rat Proofing

When temporary or permanent harbourage is discovered in ships, the master and the owners (or agents), are informed and advised how to eliminate it. Before a deratting or deratting exemption certificate is issued an effort is made to ensure that a ship is made reasonably rat proof. Any rat harbourage present is entered on the certificate. Temporary harbourage consisting of accumulations of dunnage, wood, cargo mats and stores of all kinds, is very prevalent and receives constant attention.

TABLE E

RATS DESTROYED

Rodents Destroyed During the Year 1967 in Ships from Foreign Ports

Category	Number
Black Rats	162
Brown Rats	13
Species not known	—
Sent for examination	49
Infected with plague	—

Rodents Destroyed During the Year 1967 in Docks, Quays, Wharves and Warehouses

Category	Number
Black Rats	777
Brown Rats	520
Species not known	—
Sent for examination	173
Infected with plague	—

Number of mice destroyed in vessels	43
Number of mice destroyed on quays	736
Number of mice examined from vessels and quays	60

In addition to the above, 1,863 rats and 175 mice were caught and destroyed by the Dock Board rat-catchers and private agencies.

Number of Visits to Vessels by Rat-Catchers	4,457
Number of Visits to Vessels by Rat-Searchers	5,606
Number of Visits to Quays, Sheds, etc., by Inspectors ...	2,002
Number of Visits to Quays, Sheds, etc., by Rat-Searchers ...	3,068
Number of Visits to Quays, Sheds, etc., by Rat-Catchers ...	19,596

TABLE F

DERATTING CERTIFICATES ISSUED

Deratting Certificates and Deratting Exemption Certificates Issued During the Year 1967

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	Total	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
7	5	—	—	12	578	590

During the year 22 Rodent Control Certificates were issued to coastwise vessels.

INSPECTION OF SHIPS FOR NUISANCES

Careful attention has been paid to the inspection of ships for nuisances.

Improvement in crew accommodation and catering facilities continues, especially in newer vessels of all nationalities.

In general the sanitary conditions have been found to be good.

Although few ships were found to have dirty quarters, a great many were found to be untidy and cockroach infestation of galleys, pantries or provision storerooms was not unusual.

SECTION XIII
INSPECTION OF SHIPS FOR NUISANCES

TABLE G

INSPECTIONS AND NOTICES

Year 1967

Nature and Number of Inspections		Notices Served		Result of Serving Notices	
		Statutory	Other Notices		
Nature of Inspection					Nuisances
Dirty Crew Quarters	—	none	120	117	Remedied
Verminous Quarters...	—	,,	681	643	,,
Dirty Washhouses or W.C.'s ...	—	,,	18	18	,,
Foul Water Tanks	—	,,	2	2	,,
Foul Bilges	—	,,	—	—	,,
Foul or Choked W.C.'s	—	,,	19	16	,,
Accumulations of offensive refuse ...	—	,,	12	12	,,
Dirty Pantries and Galleys	—	,,	110	110	,,
Dirty Storerooms	—	,,	100	90	,,
Leaky Deckheads	—	,,	2	1	,,
Defective Heating System	—	,,	—	—	,,
Defective Bulkheads...	—	,,	11	8	,,
Defective Portlights, Skylights, etc.	—	,,	6	6	,,
Defective or Inadequate Ventilation	—	,,	—	—	,,
Defective Deck Covering	—	,,	16	5	,,
Gear Stowed in Crew's Quarters ...	—	,,	—	—	,,
Damp Quarters	—	,,	—	—	,,
Rat Harbourage	—	,,	1	—	,,
Defective W.C. Fittings	—	,,	29	21	,,
Defective Soil Pipes	—	,,	—	—	,,
Defective Waste Pipes or Scuppers	—	,,	14	8	,,
Defective Washing Facilities ...	—	,,	32	9	,,
Inadequate Lighting	—	,,	5	2	,,
Smoke Nuisances	—	,,	121	121	,,
W.C.'s discharging on Quay ...	—	,,	40	39	,,
Miscellaneous...	—	,,	29	25	,,
Number of Inspections	5,522				
Total	5,522	—	1.368	1,253	—

NATIONALITY OF SHIPS VISITED
YEAR 1967

Nationality	Visits	Re-visits	Total
British	2,667	129	2,796
Dutch	448	6	454
German	447	14	461
Norwegian	371	14	385
Danish	218	3	221
Spanish	137	4	141
Greek	131	14	145
Russian	126	3	129
Liberian	125	10	135
Swedish	106	4	110
American	79	3	82
Irish Republic	63	—	63
Indian	58	18	76
Polish	57	1	58
Finnish	39	1	40
French	36	—	36
Japanese	34	—	34
Yugoslav	32	—	32
South African	25	1	26
Panamanian	22	4	26
Pakistani	20	6	26
Nigerian	20	5	25
Italian	20	4	24
Turkish	17	3	20
Sudanese	16	3	19
Argentine	15	2	17
Israeli	15	—	15
Ghanaian	14	2	16
Belgian	14	1	15
United Arab Republic	13	9	22
Rumanian	13	—	13
Brazilian	10	1	11
Bulgarian	10	1	11
Kuwaiti	10	3	13
Egyptian	9	3	12
Philippine	9	—	9
Swiss	9	—	9
Chinese	7	2	9
Portuguese	7	1	8
Iranian	6	3	9
Chilean	6	—	6
Icelandic	6	—	6
Saudi Arabian	4	1	5
Burmese	4	—	4
Cypriot	4	—	4
Moroccan	3	2	5
Lebanese	3	1	4
East German	3	—	3
Faroese	3	—	3
Uruguayan	2	1	3
Canadian	2	—	2
Indonesian	2	—	2
Kenyan	2	—	2
Cuban	1	—	1
Iraqi	1	—	1
Singapore	1	—	1
Totals	5,522	283	5,805

INSPECTION OF DOCK PREMISES

Rebuilding and modernisation of premises in the port area is still continuing, and there has been considerable re-development of large areas of the docks and the adoption of a number of innovations in methods and facilities in addition to those mentioned in previous reports.

Modernisation of dock latrines continues, some of the older type being demolished and new conveniences being installed.

The permanent washplaces described in earlier reports continue to be used and appreciated, although unfortunately there has been a certain amount of vandalism consisting usually of missing soap dispensers, broken towel holders, or defective drinking water fountains.

Reconstruction of the dock sheds at South Vittoria, North end of East Queens Dock, the South and West end of Princes Dock and North King's No. 2 Dock, is now complete, and reconstruction has commenced at North Gladstone Graving Dock, North Vittoria Dock and Wharf, North West Hornby Dock and Herculaneum Docks.

The following defects and nuisances were dealt with on dock premises:—

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harbourage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	1	—	20	57	38	—	22	—	—	—	—
Quays ...	—	—	—	—	—	—	10	2	123	—	10	—	—	—	—
Roadways ...	—	—	—	—	12	—	6	2	116	1	14	—	—	—	—
Canteens ...	—	—	—	1	17	14	5	16	11	1	82	—	—	4	62
Factories ...	—	—	—	—	—	1	1	6	—	—	1	—	—	—	—
Warehouses	—	—	—	—	—	—	—	11	—	—	1	—	—	—	—
Latrines ...	1	—	—	17	3	—	1	—	2	—	46	—	—	7	74
Airport ...	—	—	—	—	—	—	7	12	3	—	1	—	—	—	—
Offices ...	—	—	—	—	2	—	—	1	—	—	—	—	—	—	—
Total ...	1	—	—	18	35	15	50	107	293	2	177	—	—	11	136

THE FOOD HYGIENE (DOCKS, CARRIERS, ETC.), REGULATIONS, 1960

During the year 148 ships arrived in the port carrying consignments of " open " food.

In each case the berth was inspected by a port health inspector prior to discharge and in no less than 64 cases the berth required cleaning and/or the moving or covering of the cargo.

In three cases the proposed berths were found to be unsuitable.

Certain berths, namely South East and South West Huskisson 3 Dock, South West Canada Dock and North East Alexandra 2 Dock, are priority berths for meat cargoes.

Suitable washing facilities with liquid soap and hot and cold water are provided, and employers provide protective clothing for all dock and transport workers handling meat.

The new shed at No. 2 Alexandra Dock contains a conveyor belt system by which meat or dairy produce can be transferred from a ship to road transport or to the adjacent cold store. In a centrally raised position in this shed there is an examination room complete with sterilising equipment and washing facilities and also an office for the convenience of the port health inspectors engaged in the examination of meat or other imported foods. See further details accompanying photographs on centre spread.

SECTION XIV

PUBLIC HEALTH (SHELLFISH) REGULATIONS 1934-48

Warning notices that " Shellfish taken from this area are likely to be polluted and could cause serious illness to those consuming them ", are erected at suitable sites on the Lancashire and Cheshire approaches to the shore on each side of the River Mersey.

During the year these notices were replaced or renewed where necessary.

No cases of food poisoning or other sickness resulting from the consumption of shellfish were reported. No prosecutions were instituted.

SMOKE CONTROL

Clean Air Act 1956. The Dark Smoke (Permitted Periods) (Vessels) Regulations 1958

During 1967 the attention of the Masterand/or Chief Engineer of 121 vessels had to be drawn to the above Regulations. In every case the nuisance was abated and no proceedings were instituted.

DOCK CANTEENS

Four of the older type canteens at North Gladstone, North West Langton Docks and West Float (2) have been closed and three new modern canteens constructed at North West Langton, North West Kings 2 and West Float (1).

The existing canteen at South East Hornby Dock is being closed for modernisation.

In addition to the existing canteens it is proposed to erect 75 tea-rooms situated throughout the port area, of which 50 have been constructed and were in use at the end of the year.

The tearooms are of two types: one type built to accommodate 60 dock workers, and the other a smaller portable type to accommodate 27 dock workers. They are sited with the approval of the Port Health Authority, within easy access of lavatory and washing facilities. Each consists of two rooms, one room containing automatic vending machines and washing facilities, and the other a comfortably furnished room for dock workers.

The vending machines are cleaned and serviced by the caterers daily, maintained by the makers, and a cleaner for the premises is supplied by the owners.

During the year 942 separate inspections of dock canteens and tearooms were made and 213 defects noted and corrected.

RADIOACTIVE MATERIALS

All vessels entering the port and carrying this type of cargo were visited by a port health inspector. Information is received from the Mersey Docks and Harbour Board concerning ships entering or leaving the port with this type of cargo, and also giving the amount to be loaded or discharged.

During the year 102 ships were visited, of these 69 were loading and 33 discharging radioactive cargo.

At midnight on 28th February the m.v. *American Press* arrived from New York with four packages containing radioactive material, Caesium 137 Group I. The four metals containers which had been stowed on the deck adjacent to No. 5 hold had broken loose during the voyage. They had become damaged, and the contents of one package lost overboard. On arrival, an official of the Radiological Protection Service was called to attend and took safety readings from the damaged packages, which were then loaded on to a road vehicle and removed from the dock premises.

The ship including the ship's deck was then checked for radioactivity by this official, and no readings except background radiation were noted.

The s.s. *King Charles* arrived on 8th July from Beira. Included in the cargo were 287 drums of radioactive ore concentrates. During discharge one of these drums was damaged.

The area was roped off, and decontamination and safety monitoring carried out by the Bootle Fire Brigade.

SECTION XV
MEDICAL INSPECTION OF ALIENS AND COMMONWEALTH IMMIGRANTS

Medical Officers holding Warrants of Appointment as medical inspectors of Aliens and Commonwealth Immigrants are:—

Professor Andrew B. Semple
Dr. J. B. Meredith Davies
Dr. A. J. Graham
Dr. T. A. Conroy
Dr. C. F. W. Fairfax
Dr. R. S. E. Cutcliffe
Dr. D. Lowry

No other staff are regularly engaged on this work, though the medical officers may be assisted by health visitors from the City staff when necessary. Normally, immigration officers refer to the medical officers any passengers who they have reason to believe may require examination under the Aliens Order or the Commonwealth Immigrants Act; a medical officer is therefore always present during the disembarkation of passengers.

Details of Aliens and Commonwealth Immigrants during 1967:

Aliens

Total number of vessels carrying alien passengers	3,621
Number of vessels dealt with by the Medical Inspectors	78
Number cf aircraft dealt with by the Medical Inspectors	—
Total number of aliens landed in the port	6,014
Number subjected to detailed examination by Medical Inspectors ...	2
Certificates issued by Medical Inspectors	2

Commonwealth Immigrants

Total number of Commonwealth Immigrants landed in the port ...	4,141
Number medically examined	182
Certificates issued by Medical Inspectors	2

Medical inspection of alien and Commonwealth immigrant passengers is normally conducted either in the ship itself, or, in relation to aircraft, in the examination room at Liverpool Airport.

SECTION XVI
MISCELLANEOUS

Plastic Water-Filled Teething Rings from the United States of America

A consignment of 4,800 plastic water-filled teething rings arrived in the vessel *Montevideo* from the United States of America. Each of these rings consisted of nine plastic segments and each segment contained water in which a small coloured plastic animal was suspended. It was suggested in the directions that after being cooled in a domestic refrigerator the ring should be given to the teething infant to chew on.

Two questions were raised about these rings:—

(1) Was the water sterile, and

(2) Was the little plastic animal a risk to an infant.

The water was sampled and found satisfactory. The little plastic animals were found to contain no poisonous metals, so the consignment was released.

The question of the danger to an infant if an older child removed the plastic toy was raised with a society for the prevention of accidents, but it was not considered necessary to take any action.

This Authority has with regret to report the death of Dr. Lee on 28th January. He was taken ill during the voyage of the vessel *Apapa* to this port, and taken off the ship on 14th January on her arrival, to Sefton General Hospital where he died.

Dr. Lee was for many years a ship's surgeon with Messrs. Alfred Holt, and then finally with Elder Dempster Lines, and we would like to record our sympathies to his wife.

SPECIAL VISITORS

On 25th January, Mr. J. Boyle and Mr. White of the Ministry of Agriculture, Fisheries and Food, came to Liverpool to discuss with Dr. Graham the Principal Medical Officer (Port), a senior inspector, and members of Messrs. Bibby's organisation, the problems of transporting lard in bulk both from America and Europe. They had both done a great deal of investigation in these countries but were unable to make any real criticisms until they had reported to the Minister.

In February, Dr. C. D. Herat, the Chief Medical Officer of Health of Kurunegala, in Ceylon, situated a little north of Kandy, arrived here. He came under the auspices of the Government of Ceylon and after the work of this Authority had been described and explained to him he was taken to the inspectors' offices on the dock estate and for the three weeks he worked along with the inspectors and saw all the different aspects of port work.

We were very pleased to have met Dr. Herat, especially since he was able to form a personal link with many of our friends in Ceylon to whom we have been writing letters relating to desiccated coconut for many years, but whom we have never met.

On 8th February we had a visit from Mr. Matthews from the Ministry of Agriculture, Fisheries and Food, in Washington. He was accompanied by Mr. White whom we had previously met in January. They were both very interested in the contraventions of the Official Certificate Procedure which were explained to them.

Dr. Choe, from South Korea, and Dr. Bandhari from India, paid a one-day visit on 27th June to the Port. Both were interested in port work and were sent to us by Dr. Christie, Medical Superintendent of Fazakerley Hospital.

Dr. Anis from Sudan spent a few days in Liverpool seeing the duties of the City Public Health Department, and on 7th June was able to see a little of the Port Health Authority.

MID STREAM OIL BARGE

On Thursday, 14th September, the Principal Medical Officer (Port) and the Deputy Chief Port Health Inspector, boarded the new oil barge at the tanker moorings in the River off the Dingle Oil Jetty.

The barge is permanently attached to the submarine pipelines and care must be exercised by masters of vessels passing the moorings to prevent damage to the barge when lying alongside the tankers.

The barge is floodlit, and its position can be recognised at night by a green group of lights flashing every ten seconds.

The reason for the visit was warranted by the fact that since men will be eating and sleeping on this barge it must be controlled under the Public Health Act of 1936 as a dwelling in the Port Health Area.

A sample of the fresh water was submitted to the bacteriologist and was found satisfactory as were all the other facilities provided.

ASBESTOS CARGO

The vessel *City of New York* arrived in Liverpool from South Africa on 9th April and discharge of this cargo was started on Monday, 10th April. Four holds were involved and after partial discharge of the cargo, it was learned by the dockers here that the ship had come from London where the dockers had refused to handle this cargo because in a B.B.C. television programme " blue " asbestos was said to contain " proxilolite " which can cause cancer if inhaled.

The cargo on this ship was not really known to be of the " blue " variety and could only be distinguished from the grey asbestos by microscopic examination.

Since there was a question of an industrial hazard H.M. Inspector of Factories was informed and he with a colleague and Dr. Watt, H.M. Adviser, visited the ship. They advised the men to wear special masks and overalls before working this cargo and this was considered by the dockers.

The cargo was in bags, many of which had burst and scattered their contents in the shed, and this space therefore required special attention from port health inspectors before it could be used for food stowage.

GUARD DOGS

Recently it was decided to introduce guard dogs into the Dock Estate to combat pilferage, but this was agreed only after deliberation and discussion with the company owning the dogs.

It had to be remembered that around any dock area there are always packages in the sheds which are handled by the dock workers to be stowed on pallets ready for lifting, or to be put in slings for loading on to ships. Again, in many sheds there are always to be found cartons, packages or crates of foodstuffs, either as fruit, meat, dairy produce or vegetables, and it is only a very well trained dog which can be relied upon to urinate and defaecate in the proper place, namely the gutter.

The question of having dogs inside the sheds on certain occasions had to be answered, and it was agreed, and a " code of practice " was drawn up concerning the protection of cargo in the sheds, and the procedure to be adopted if and when the guard dog soiled cargo in these sheds (in any way) when allowed to be there, and off the lead during its tour of duty. It was agreed that dogs under normal circumstances should not be permitted access into any shed which contained " open food " unless a necessity arose for this to be permitted. This procedure is working very well and there was only one occasion last year when, to our knowledge, a carton of tinned fruit had to be replaced by a clean carton.

MECHANISED DISCHARGING BERTH

The new mechanised discharging berth at No. 2 North East Alexandra Branch Dock already mentioned earlier was opened on Tuesday, 14th February this year. A major increase in imports of meat and refrigerated produce through this port, for distribution throughout the Midlands and the North of England, was forecast by Mr. Ronald Vesty, Chairman of Blue Star Line, when this new £250,000 mechanised meat handling berth was officially commissioned with the unloading of the *Sydney Star*.

The new berth has a capacity of 3,000 carcases or 100 tons of dairy produce an hour, and handling equipment is electronically controlled.

It is in direct communication with an area given over to port meat inspectors and from this area there runs a conveyor straight to the Cold Stores across the avenue, should further inspection or stowage be required.

The design of the berth also allows for the discharge of wool or any other cargo into a section isolated from the main meat discharging area. Once the cargo has been transferred to the shed it is taken by the conveyor belts either to the road or rail transport.

FOOD INSPECTION
GROUNDNUTS IN SHELL

19 consignments of this commodity comprised of 28,485 bags were imported during the year.

In conformity with the system which was first put into operation during the year 1964, and which has been continued since then, all these consignments were detained upon arrival and appropriate numbers of the bags were sampled.

The samples were submitted to the City Analyst, with the request that they be examined for the presence of the toxic substance known as Aflatoxin.

Only when the samples submitted were reported to contain this substance in amounts less than the limit of tolerance, namely 0.05 parts per million, agreed with the Ministry of Health in October 1964, were the various consignments released for sale.

Consignments related to samples which were reported to contain Aflatoxin in excess of this criterion were rejected.

The table which follows shows the details of this work in relation to the various countries of origin, and also sets out the manner of disposal of each of the rejected consignments.

Country of Origin	Quantity	Over or under tolerance limit	Action Taken
Sudan	900 × 112-lb bags 4,040 × 28-lb. bags 780 × 28-lb. bags	Under Under Over	Released Released Exported to Holland
Gabon via Rotterdam	1,600 × 28-lb. bags	Over	Returned to Rotterdam
South Africa	580 × 28-lb. bags 2,000 × 28-lb. bags 1,750 × 28-lb. bags 869 × 28-lb. bags 400 × 28-lb. bags	Under Under Under Over Over	Released Released Released Returned to South Africa
Syria	262 × 80-lb. bags	Under	Released
Brazil	800 × 56-lb. bags 787 × 28-lb. bags	Under Under	Released Released
Turkey	1,230 × 65-lb. bags	Under	Released
Madagascar via Rotterdam	3,325 × 20-kilo bags 2,100 × 50-kilo bags 2,400 × 50-kilo bags 2,490 × 30 kilo bags 1,969 × 12½-kilo bags	Under Under Under Under Under	Released Released Released Released Released
From Belfast (origin unknown)	153 × 28-lb. bags	Over	Released for wild bird bird food only—under guarantee and local supervision by Medical Officer of Health's Department, Cleethorpes
	14 consignments = 24,633 bags	Under	Released
	5 consignments = 3,802 bags	Over	Rejected
	19 consignments = 28,435 bags	Total imports through Liverpool during the year 1967	

GROUNDNUT KERNELS

During the year seven consignments of these kernels came to the Port and the disposal of these was interesting and one or two will be dealt with individually.

Firstly one consignment of 1,280 bags weighing 103,016 kilos and the other two of 1,891 bags weighing 153,183 kilos; unfortunately these came in September during a period of unrest in the Port and the result was that delay occurred in their discharge.

When they were taken out of the ship massive infestation was found to have occurred by the Indian Meal Moth (Plodia Interpunctella) and the kernels were so badly damaged and contaminated by the products of infestation (webbing, eggs, larvae, excreta, etc.) as to be unfit for human consumption, and they had to be rejected.

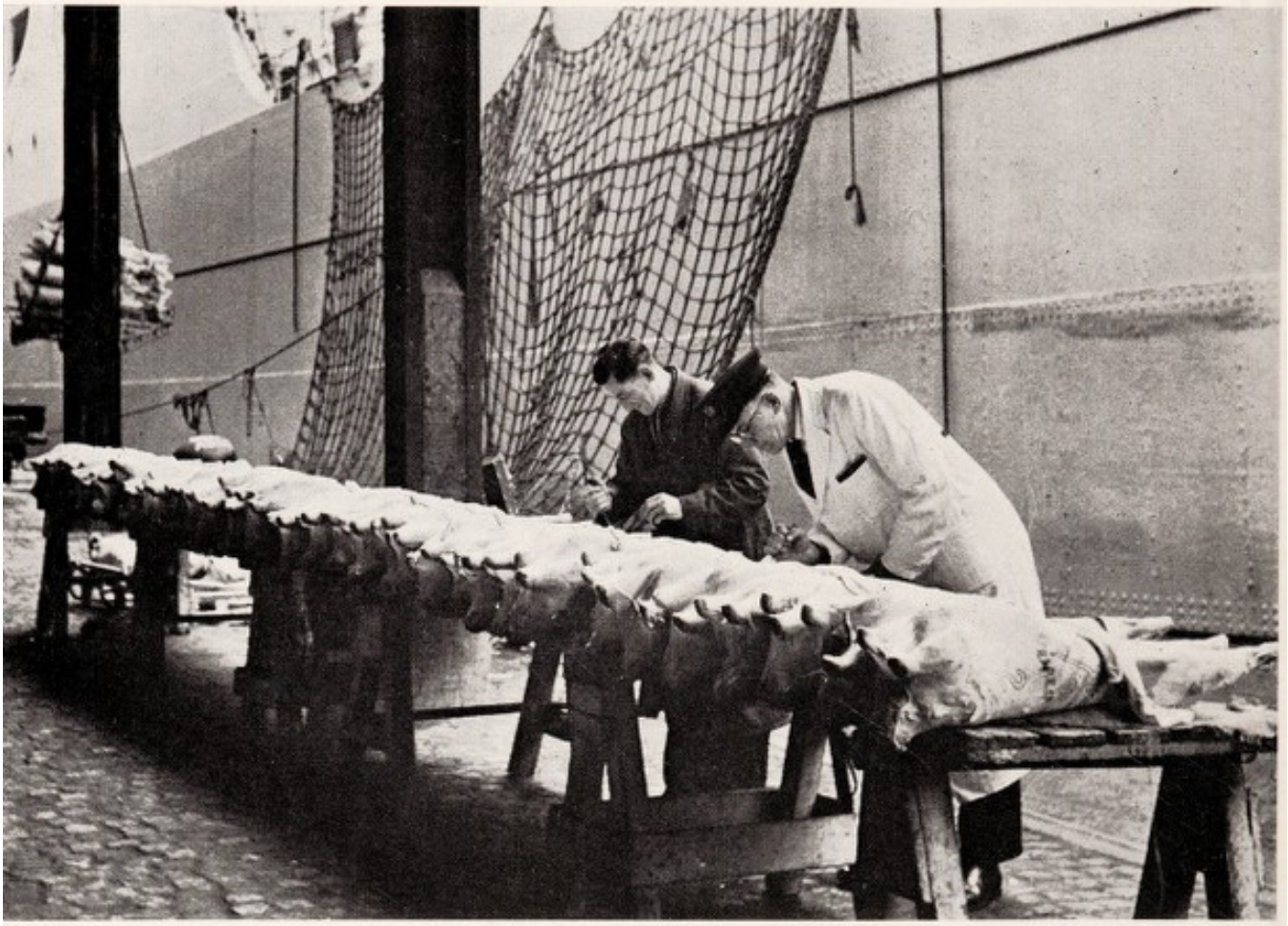
There is no doubt that the degree of severity of infestation of these kernels and the amount of damage done by the moth were increased by the delay in discharging between 18th September and 30th October, which was due to the dock strike.

Fumigation and cleaning was attempted as an experiment with some of the bags by the underwriters but it proved impossible to make an effective separation of any sound kernels from the damaged ones and both consignments were rejected and some were sent to Rotterdam and others were converted in this country for animal feeding.

Two other consignments totalling 998 bags were fumigated in sheets on the quay and then released to warehouse under detention pending cleaning. From these bags, 16 cwts. 1 qr. 12 lbs. of rubbish was removed and the clean consignments sent back to warehouse. This was a great mistake since the warehouse which carried large cases of ground nuts and cocoa which had become infested, and three weeks later the clean consignments were infested once again. Eventually the whole premises and contents were fumigated again and consignments released.

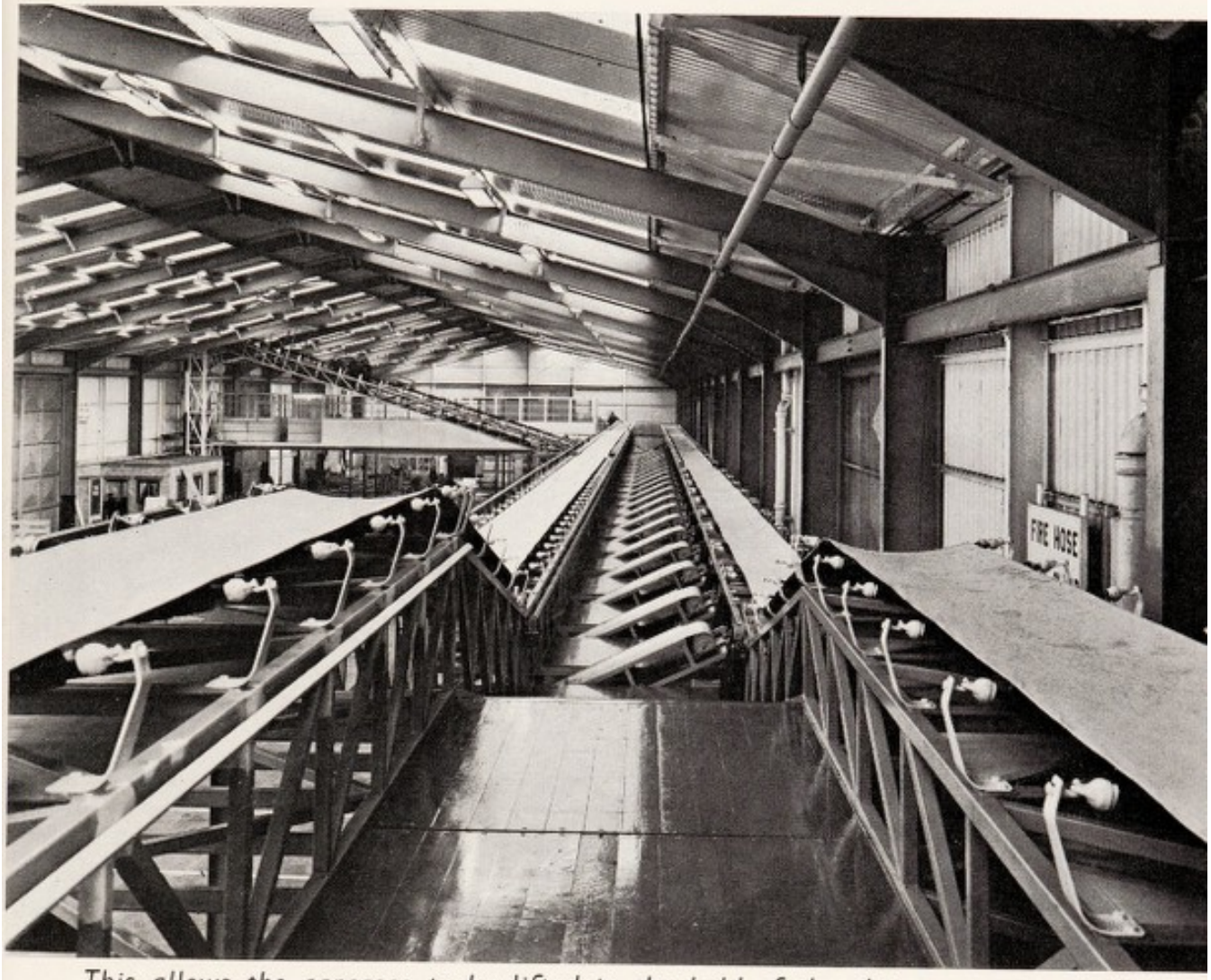
The remaining two consignments were contaminated, this time by weevils and other insect excreta, webbing, etc., and 936 bags equal to 164,736 lbs. of these were sent to Rotterdam after we had communicated with the Public Health Inspector there and agreed to release them to him, for his control of their disposal. The Infestation Division of the Ministry of Agriculture, Fisheries and Food were kept informed of the details of

THE OLD METHOD OF DISCHARGING AND SAMPLING MUTTON CARCASES



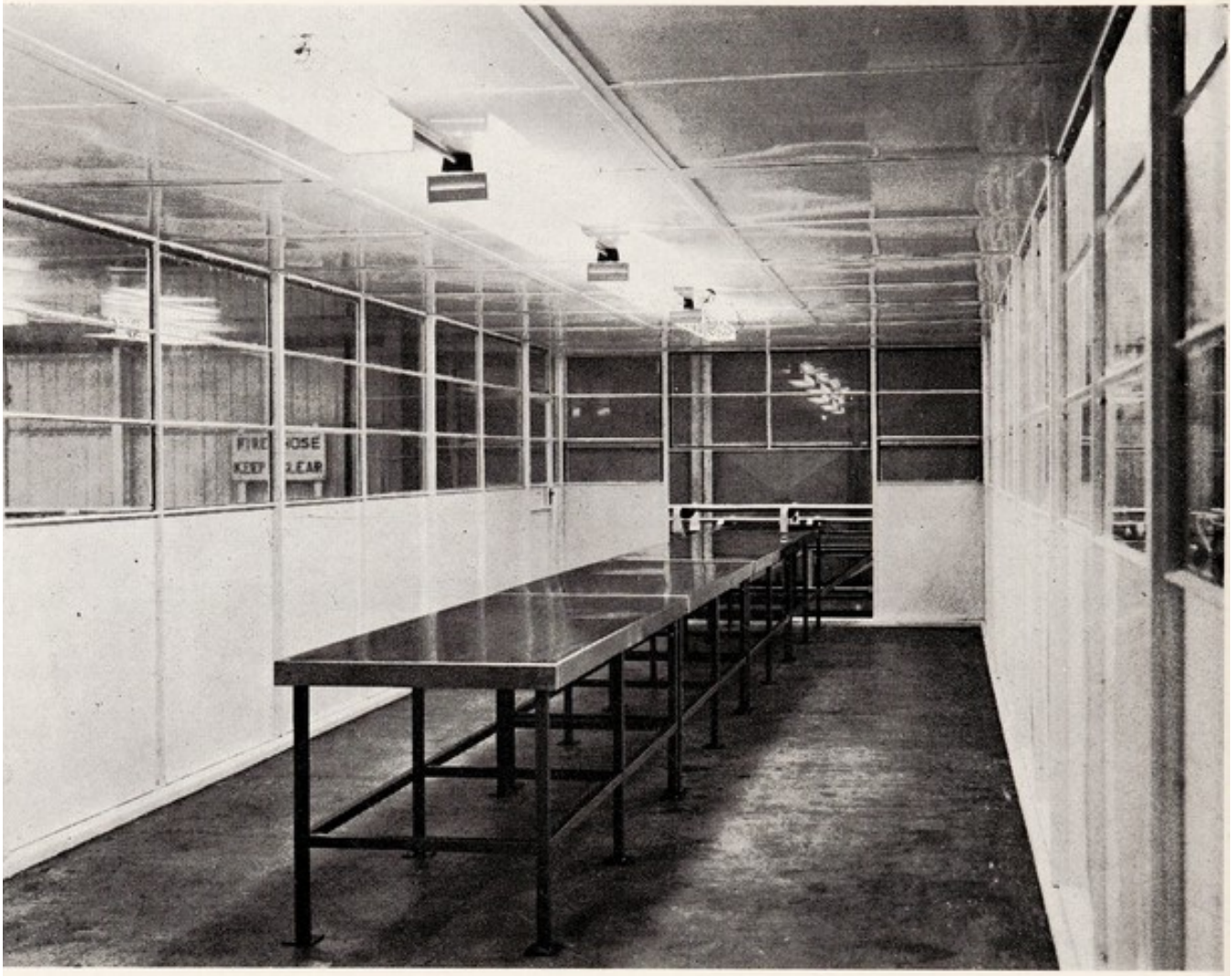
Note the first small improvement in equipment using metal sled-type slings instead of rope. Inspection is shown in this picture of some carcases drawn as samples of the cargo. The butcher, in dark overalls, is assisting the inspector to cut open the frozen inguinal glands in case these are affected with caseous lymphadenitis. This work was often done in an open shed with a cobbled floor alongside the ship. If caseous lymphadenitis or any other disease was found then the whole cargo, often many thousands of carcases, had to be loaded again into refrigerated containers and taken to the cold stores where every carcase would have to be defrosted and examined.

THE NEW METHOD OF DISCHARGING AT THE MECHANISED DISCHARGING BERTH



This allows the carcases to be lifted in the hold of the ship on to a central-pocketed conveyor belt and from there transported, after inspection of samples has been found satisfactory, either direct to lorries, rail wagons or other vehicles. If a fault is found in a number of samples all the carcases can be taken direct to the cold stores, by means of the conveyor belt seen going through the roof and across the avenue to this establishment, for further examination. In this picture at the far end of the shed can also be seen the new Port Health premises specially constructed for food inspection and examination.

THE NEW INSPECTION ROOM



This picture when compared with the first picture shows the improvement now in the area given over to the inspection and examination of certain meat and other foods. There are stainless steel tables, instead of the wooden benches covered with paper in the open shed, in a large glass lined structure with special day-light lighting. The tables and floors can easily be cleaned and sterilising equipment is provided. An opening at the far end can be seen from which carcases can be picked directly from the conveyor belt and placed on the examination tables.

this incident so that their inspectors could take appropriate action under the provisions of the Prevention of Damage by Pests Act 1949.

The other consignment of 407 bags was later released under guarantee to Hull for bird feeding and the Medical Officer of Health of that city was informed so that he could arrange for the supervision of its disposal.

BRAZIL NUTS IN SHELL—BULK CARGO

Only a very small amount of this type of cargo was imported into Liverpool during the year 1967. The reasons for this as explained by representatives of the trade were—

(*a*) the partial failure of the crop in South America, and

(*b*) the diversion of some of the importations from Liverpool to other ports in order to avoid congestion on the quay.

Ten samples were taken and submitted to the City Analyst for examination for the presence of aflatoxin.

In none of them was this toxic substance present in amounts in excess of the recommended tolerance limit of 0.05 parts per million.

Contaminated loose-collected Groundnut Kernels for the Confectionery Trade

During the course of the year 26,353 lbs. of these kernels, contaminated by contact with quays, etc., as a result of their being spilled from torn bags, were rejected as being unfit for sale for human consumption, and were diverted for use as animal food.

This represents an increase of 2,884 lbs. on the quantity rejected during the year 1966.

DESICCATED COCONUT FROM CEYLON

Year	Samples Taken	Salmonella found in	Salmonella not found in	Infection Rate
1965 ...	604	2	602	0·331%
1966 ...	600	1	599	0·166%
1967 ...	600	3	597	0·500%

The above table shows an increase in the Salmonella infection rate for the year 1967.

The three positive samples were all taken during the second quarter of the year, and the type of Salmonella identified was Sal. Seftenberg in each case.

A letter was sent to the authorities responsible for the bacteriological standard of desiccated coconut in Ceylon, to say that it was hoped that the source of infection would soon be traced and eliminated. This in fact did occur and no further positive samples were found in the remainder of the year.

It is considered that should this record of negative sampling be maintained next year, this Authority may not find it necessary to continue sending reports on such samples to the Ceylon authorities, and only when a positive finding is recorded here will it be reported and then be necessary for us to communicate with them.

40 bags of "edible copra" were brought to Liverpool on the *Herefordshire* from Ceylon late in the year.

On inspection after the consignment had been landed, the contents of the bags were found to be dirty. and mouldy, and to be infested by mites, beetles, and larvae.

Products of the infestation were also present (quantities of webbing, etc.) and in the opinion of the inspector the consignment was not fit for sale for human food.

He took a sample which was submitted to the City Analyst whose report confirmed his findings. The consignment was then rejected.

The rejected copra was released under guarantee for conversion into cattle food.

MEAT AND MEAT PRODUCTS

Meat from Argentina

The vessel *Dunelmia* arrived in March having on board a consignment of 5,000 cartons each containing 6 × 6-lb. cans corned beef. It was found that the tins had been sealed with lead solder and as a result the meat contained lead in excess of the permitted amount. The whole consignment was rejected and arrangements to ship it back to Argentina were made.

The *Rio Dulce* came here in July having on board a consignment of 644 frozen lamb carcases. Twenty carcases were found to be affected by

caseous lymphadenitis. The rejected pieces consisted of three forequarters and seven legs, totalling 139 lbs.

Another consignment of 597 heavy lamb carcases which arrived in the same ship was found to have 19 carcases affected by the same condition, and one carcase and 18 portions, totalling 182 lbs., were rejected.

Meat from Australia

The vessel *Port St. Lawrence* arrived in March with 168 cartons of frozen beef livers. The lymphatic glands had been removed from 44% of the livers and 4·5% of these were found to contain multiple cyst. 240 livers, totalling 2,793 lbs., were rejected.

The vessel *Townsville Star* arrived from Australia in October having on board a consignment of 394 cartons of frozen beefburgers. It was decided that the commodity could not be referred to as "scrapmeat" but was either a prepared or a manufactured article of food, as defined by the Public Health (Imported Food) Regulations 1957. Bacteriological examination, however, showed that the beefburgers could have been prepared more hygienically, and the consignment was released and the attention of the importers was drawn to the bacteriological situation.

Meat from Chile

The vessel *Cotopaxi* came in September with a consignment of 725 frozen mutton carcases. Examination showed this consignment to be affected by caseous lymphadenitis or to have had multiple removal of lymphatic glands. The carcases were mutilated and the wrappers were torn and dirty. In addition some carcases did not bear the Official Certificate. The whole consignment was thus rejected and is awaiting disposal for purposes other than human consumption.

Meat from New Zealand

The *Tasmania Star* arrived in March with a consignment of 373 mutton carcases, some of which were affected by caseous lymphadenitis. Nine pieces of mutton totalling 141 lbs. were rejected.

The vessel *Medic* came in April and had on board 256 cartons of frozen beef livers, but the lymphatic glands had been removed from 61% of these livers, and some of these had multiple cysts. A total of 478 livers were rejected equal to 5,998 lbs.

Lastly, the *Townsville Star* arrived in April with 263 carcases of ewe mutton. Nine of these were found to be affected by the same condition as that in the *Tasmania Star*, and the affected parts were rejected and totalled 88 lbs.

Meat from U.S.A.

The vessel *Scythia* arrived in June with 22 cartons of frozen beef livers. The contents of eleven of these cartons were found to be affected by decomposition and so were rejected as unfit for human food. In all 663 lbs. were rejected.

Another consignment of 24 cartons of frozen lamb tongues which arrived in the *Samoa* in June was also found to be affected by decomposition, and from this consignment, 8 cartons totalling 883 lbs. were rejected.

Twelve cartons totalling 720 lbs. from a consignment of 38 cartons of frozen beef kidneys from the vessel *Fenefjell* in June were found to be affected by decomposition and were rejected.

In the above three cases there was no evidence that the decomposition had taken place during the course of transit from the United States to Liverpool.

PASTEURISED CANNED HAM

As in previous years pasteurised canned meat continued to arrive in Liverpool having been conveyed and stored under non-refrigerated conditions, in spite of advice on the label to store properly in refrigerated spaces. The following cases were found unfit for human food and rejected:

From Belgium
31 tins, totalling 307 lbs.

From Holland
48 tins, totalling 516½ lbs.

From Czechoslovakia
6 tins, totalling 60 lbs.

From Yugoslavia
266 tins, totalling 1,537 lbs.

OFFICIAL CERTIFICATE PROCEDURE

As in previous years there were several breaches of the Official Certificate procedure. In some cases the fault was entirely that of the exporter, but the consignee in this country was the person who suffered financial loss. As mentioned in the Annual Report for 1965, new legislation controlling this procedure has been introduced. Under the new Regulations, which

come into operation on 1st August, 1968, the importer, in cases where meat is unaccompanied by the appropriate Official Certificate has the right to appeal to the Minister of Agriculture, Fisheries and Food.

The following are details of breaches of the Regulations during 1967:—

Meat Products from Australia

A consignment of 240 tons of oleo beef stearine in bulk arrived in October in the vessel *Australian Star* and was not accompanied by a recognised Official Certificate. It was released for purposes other than for human consumption.

A consignment of 100 tons of similar material arrived in the vessel *Cymric* in November, and again had no Certificate, and this was also rejected.

Meat from Canada

A consignment of 112 drums of oleo oil from Canada had an incorrect Certificate affixed to the drums, but was released on advice from the Ministry of Agriculture, Fisheries and Food, that the establishment number had been omitted in error from the approved list.

Meat from Chile

725 frozen mutton carcases from Chile arrived in the vessel *Cotopaxi* in September. Only one carcase of this consignment bore an Official Certificate. The consignment was rejected and is still awaiting disposal.

Meat and Meat Products from China

During the year five consignments of meat and meat products arrived from China via Hong Kong. None of these was accompanied by the proper Certificate, and three were re-exported, the other two being destroyed. The meat and meat products included 10 casks of salted hog casings, 144 cartons of Chinese Foods, containing pork, and 13 cartons of canned pork. The consignments which were destroyed consisted of 119 cases of Chinese Food including canned pork.

Meat Products from India

A parcel of one bale of dried beef casings from India had to be re-exported to Bombay as no Official Certificate is recognised in respect of meat or meat products from India.

Meat Products from Nigeria

This is another country for which there is no recognised Official Certificate and so a parcel of seven cartons of dried meat was released only for conversion to fertiliser. This meat was also heavily infested by insects and larvae and would have been refused for this reason alone.

Meat from Spain

A consignment of 14 tins of Spanish sausages which arrived at Liverpool was re-exported. Eleven tins had incorrect certificates and three did not bear any whatsoever.

Meat Products from Sweden

A consignment of 114 drums of lard from Sweden was re-exported as no Official Certificates were affixed to the drums.

Meat and Meat Products from U.S.A.

Ten consignments of meat and meat products from this country were concerned in breaches of the Official Certificate Procedure during 1967, in spite of repeated assurances in the past that such incidents would not recur. In all ten cases the certificates accompanying the consignments were in a form which was recognised up to 31st March, 1967, and were invalid on arrival here even allowing for time on the water. Five of these consignments were released on receipt of evidence that certificates had been affixed to the drums prior to 31st March. These consisted of drums of oleo oil, 168 in all (two consignments), 635 cartons of frozen beef tongues (two consignments), and two barrels of pickled boneless beef. Of the remaining five, two consignments, one of 2,000 × 28-lb. cartons of lard and one of 50 cartons of frozen beef tongues were released on receipt of information that the error in certification was the fault of the United States authorities.

In one consignment, consisting of 56 drums of oleo oil, two drums had the correct certificate, but the remaining 54 drums were re-exported to New York. The remaining two consignments arrived in November and December long after the old Certificate was withdrawn. One of these, consisting of 39 cartons of frozen beef kidneys, was released for conversion into pet food. The other, consisting of 698 cartons of frozen beef kidneys, was detained and only later released for conversion into pet food.

EDIBLE ANIMAL FAT CONVEYED IN BULK

It is impossible to account for the fluctuations which have occurred and which we show in the accompanying table in the number of consignments of lard in bulk both from the United States of America and Europe in the past few years.

It can be seen from the table that a total of 44 consignments came to the port this year and most if not all, were released without any detention. One or two were held up for different reasons.

Origin	U.S.A.			Europe		
Year	1965	1966	1967	1965	1966	1967
Number of Ships ...	43	11	15	39	54	37
Number of Consignments	132	73	30	75	104	44
Tonnage	72,883	38,035	31,738	30,412	41,940	26,448

Two ships which arrived from Australia each carried a consignment of oleo beef stearine amounting to 340 tons as bulk cargo. Neither of these consignments were accompanied by a recognised Official Certificate. They were released only after a written undertaking had been given by a processor to the effect that the stearine would be used only for purposes other than human consumption.

The m.v. *Patrae* from Bulgaria brought 56,000 boxes with 56 lbs. of lard per box, in August. This cargo was carried in a non-refrigerated ship and, on discharge, it was noted that most of the lard was in a very soft condition and the boxes were externally mouldy.

Examination of the contents showed green and black mould on the lard itself and after discussions with importers, salvage and insurance representatives, it was agreed that all the boxes be sent to four cold stores, where the lard would be hardened and a proper examination could be made.

In the meantime the boxes were breaking and lard was oozing out on to the pallets and quay floor. This lard was gathered up into drums and

barrels and was allowed to go to Widnes under a guarantee that it would be processed for industrial purposes only and not used for human consumption.

Subsequent examinations of the boxes at the Cold Stores showed that all the lard would have to go through the full re-refining process and this was agreed by all parties. The actual loss amounted to 226 drums weighing 733,726 lbs.

The quay was very successfully cleaned with a mechanical brush, detergents and hosepipes.

The vessel *Serifos* from Roumania brought 57,882 cases and cartons of lard in August. At the time of the discharge of this cargo it was noticed that a large number of the packages were crushed and broken.

The contents of these damaged packages were exposed and had been subjected to gross contamination.

These packages were segregated under the supervision of the inspector who later rejected their contents as being unfit for human consumption.

Rejections—

323 × 28-lb. cartons of lard	...	9,044 lbs.
46 × 56-lb. cases of lard	...	2,576 lbs.
369 packages		11,620 lbs.

The rejected packages were delivered to a firm in Liverpool who undertook to use it for purposes other than human consumption.

The vessel *Jupiter* arrived from Antwerp in September with a consignment of 640 tons of French lard conveyed in bulk in the ship's tanks.

In addition to the French certificates which arrived with the ship and which identified the lard as the propuce of different establishments, a global certificate, and Belgian Official Certificates had been provided and signed by the Government Veterinary Surgeon of Antwerp.

No fault was found with the lard discharged from the ship's tanks other than number 3 port.

The contents of this tank on inspection were found to be contaminated with material which was black in colour. The 43¾ tons of lard contained by this tank were put under detention. At the same time an average sample was taken from the middle level of the tank, and a further sample was taken near to the bottom of the tank.

These samples were submitted to the City Analyst who reported as follows:—

1. *Average sample taken at mid level of tank*
   Contained 0·04% of dirt and 1·1% of water.
2. *Sample taken from a point near to the tank bottom*
   Contained 0·19% of dirt and approximately 20·0% of water.

No ship's fault was discovered to account for the contamination.

On enquiry the inspector was informed that this tank had received the " bottoms " of a shore tank or tanks at Antwerp.

A certificate signed by a director of a firm of independent cargo surveyors in Antwerp certified that the 640 tons of lard had been stored under permanent supervision in five shore tanks at that port, and further certified that these tanks had been inspected by them prior to storage and were found to be empty, clean, dry and in appropriate condition for the storage of lard.

A further certificate from the same source certified in similar terms that the ship's tanks, pumps and pipe lines had been inspected and found to be in a satisfactory condition for the handling and conveyance of lard.

43 tons 14 cwt. 1 qr. of contaminated lard which had been discharged from the ship's No. 3 port tank into four rail car tankers were rejected as being unfit for human food.

A guarantee was later received from the importer to the effect that this rejected lard would not be used for human consumption, and would be utilised by them in the manufacture of soap.

DISCHARGE OF BULK LARD

As the level of the liquid lard falls during the pumping operation in the course of discharging a ship, a quantity of the lard solidifies on the cool sides of the tanks.

It is necessary for a man to enter the tanks as the pumping operation nears completion in order to remove this lard by spraying it with a jet of steam, with lard at a higher temperature, or by the use of squeegees. A combination of these methods is sometimes used. The operators who carry out these duties are equipped with clean boiler suits and footwear.

Whilst lard taken from the lowest levels of the tanks is usually shown on sampling to contain a greater amount of sediment than the lard derived from the middle and upper levels, this is thought to be caused by the effect of gravity rather than by the effect of carrying out any of the above operations.

The lard taken from the lowest level of each tank is pumped into a road or rail tanker reserved for that purpose and is subjected to special processing by firms of repute who are competent to carry out such work, and most of whom check the resultant product in their own laboratories.

It may be that the Ministries concerned with these matters should consider whether it would be desirable to introduce regulations to control the conveyance, handling, and storage of edible oils and fats, or as an alternative to deal with the matter by publishing a " code of practice " for the purpose of giving advice and guidance to those engaged in the work of handling this commodity.

In doing so it should be remembered that the matters with which they would be concerned would extend also to shore based storage tanks or quays, etc., and on manufacterers' premises, as well as to road and rail tankers.

IMPORTED EGG AND EGG PRODUCTS

All consignments of frozen liquid whole egg are sampled and submitted to the alpha-amylase test which proves that the egg has been satisfactorily pasteurised. This does not mean however that infection by salmonellae has not occurred after pasteurisation and this Authority has shown, on several occasions, that this has indeed occurred.

It should be noted too that often products which contain egg as an ingredient are also examined in case infection is carried by the egg into the mixture.

IMPORTED EGG AND EGG PRODUCTS

Consignment	Country of Origin	Date of Arrival	Vessel	Findings	Result
18 = 640 packages of egg products	U.S.A.	1967	Various	Of 48 samples one showed a growth of Sal. cerro.	30 × 50-lbs. were rejected and returned to U.S.A.
1 × 15 × 150-lbs. spray dried egg albumen	U.S.A.	May	*American Forester*	Contained Sodium Lauryl Sulphate, a non-permitted preservative	Re-exported to Rotterdam
11 consignments = 771 packages dried whole egg	China	1967	Various	All samples negative for for Salmonella	All released for human use
1 consignment Fung Wong Roll with egg and coconut juice as ingredients	Hong Kong ...	April	*Peleus*	No Salmonella found	Consignment release d
1 consignment 50 × 8-lb. packages of egg macaroni = 320 packages	Italy	May	*Malatian*	3 samples were negative	Released
3 consignments 9,200 × 28-lb. tins pasteurised frozen whole egg	New Zealand ...	1967	Various	52 samples negative for Salmonella and satisfied apha-amylase test	All consignments were released for human food

Importations of egg and egg products from Australia have slowly decreased in numbers over the past few years, and none at all, as shown below, came here this year. We have tried to explain this and several reasons immediately leap to mind, for example, strikes and other unrest in the docks, and it is understandable that importers would rather bring their cargoes through another Port and incur extra expense in carriage than have their consignments delayed, but this is only conjecture. No positive proof is available. Again we have been told by importers that here in Liverpool we are too strict in our examinations, but that we cannot agree to, and we show below some figures which make interesting reading and from these some conclusions can perhaps be drawn:—

Australian Frozen Liquid Egg

Date		*No. of Consignments*	*Consisting of*
1961	...	20	52,798 × 28-lb. tins
			900 × 42-lb. tins
			1,000 × 14-lb. tins
1962	...	12	30,314 × 28-lb. tins
1963	...	—	—
1964	...	2	10,140 × 28-lb. tins
1965	...	2	8,000 × 28-lb. tins
1966	...	1	4,000 × 28-lb. tins
1967	...	—	—

In 1961 and 1962 great numbers of positive samples were found and therefore there were many rejects and orders to re-pasteurise.

CRUSTACEA

A total of 72 consignments of frozen prawns in cartons, and 2 consignments of canned shrimps came to Liverpool during the year.

The canned shrimps from Pakistan, in all 6,257 tins, had to be rejected. Another consgnment of 50 cartons of frozen prawns from the same country was re-exported to France.

A large package of 200 cartons from Taiwan was rejected when found to be unsound and was re-exported to Brussels.

Ten ships brought 12 consignments from Chile and all were acceptable as were consignments from China (1), New York (1), Bahrain (2), U.S.A. (3) and Japan (48), and one consignment from India, one from Taiwan, and one from Formosa, failed to satisfy the required standards.

Forty-four consignments, mostly from Japan, came through the Port in 1967, and since this country has continued to maintain a good quality product, none was rejected.

A note in the table below gives details of rejected consignments of crustacea.

Nature of Consignment	Country of Origin	Date of Arrival	Vessel	Findings	Result
1 × 50 cartons frozen prawns	Pakistan ...	April	*Safa Rafigi* ...	Large colony count B. coli cl. welchii	Re-exported to France
2 consignments of canned shrimps	Pakistan ...	February	*Maulabakash* ...	Tins blown and burst	6,257 tins rejected
1 × 200 cartons frozen prawns	Taiwan ...	January	*Antenor*	Bacteriologically unsound	Re-exported to Brussels via Grimsby
14 cartons of eja dudu and 7 cartons of eja shawa	Nigeria ...	October	*Accra*	Gross infestation and mites	Conversion into fertiliser
6 cases of kano fish and 5 cases of crayfish	Takoradi ...	December	*Aureol*	Infestation by hive beetles and larvae	Destroyed at a local tip

FRUIT AND VEGETABLES

Sultanas from Turkey

A consignment of 7,300 cartons of sultanas from Turkey arrived in the vessel *Anatolian* in February. On inspection a large quantity of the fruit was found to be crushed and broken. The fruit concerned was contaminated by dirt, loose cotton and wood dust, and was rejected as unfit for human consumption, but was released for conversion into animal food. In all about 4½ tons were rejected.

Vegetables from Israel

A consignment of 300 cartons of lettuce and 241 cartons of aubergines arrived from Israel in December in the vessel *Kantara*. On inspection they were found to be in an advanced stage of decomposition and the whole consignment was rejected as unfit for human consumption. On enquiry it was discovered that delay associated with the dock strike in Liverpool was a factor in the incident. The consignment was delivered to a local tip.

Carrots from Cyprus

A consignment of 24,272 nets of carrots arrived from Cyprus in the vessel *Sifnos* in June. On inspection after landing many of the nets of carrots were mouldy and decomposing and unfit for human consumption. The total amount rejected was 3,829 nets (193,080 lbs.). These were delivered to a local tip.

Another consignment of carrots from Cyprus arrived in the vessel *Hastings* and again showed decomposition. In this case 8,003 nets of carrots, from a total of 70,993 were rejected, and similarly disposed of.

Grapefruit from Mocambique

A consignment of grapefruit arrived in the vessel *Clan Ross* from Mocambique. Some of these were the produce of South Africa. Inspection after discharge showed that a high proportion of the fruit was infected by a condition known as stem-rot, which rapidly renders the fruit unfit for human consumption. The South African fruit was unaffected. It was found necessary to reject 6,366 packages (approximately 17% of the Mocambique fruit).

Another consignment of grapefruit from Mocambique arrived in the vessel *Rustenberg Castle*. This consisted of 6,851 cartons. In this consignment also stem-rot was present and 636 cartons were rejected as unfit for human consumption.

Canned Apples from New Zealand

The vessel *Townsville Star* arrived in May from New Zealand having on board a consignment of 400 cartons of canned solid-pack apples. A large number of cartons were found to contain blown, burst and rusty tins. 129 cartons were rejected as unfit for human consumption.

Canned gooseberries from Czechoslovakia

A consignment of 100 cartons of canned Czechoslovakian gooseberries arrived from Holland in the vessel *Comtesse*. Many of the tins were blown and burst, and they were rejected and delivered to a local tip.

Canned Apricots from Spain

The vessel *Hoop* came to the Port in February from Spain having on board a consignment of canned apricots. Many of the cartons were stained by their own contents and on examination many tins were found blown and burst. The total rejected as unfit for human food was 438 cans, 4,818 lbs. These were delivered to a local tip.

Canned Tomato Puree from Roumania

A consignment of canned tomato puree from Roumania arrived in the vessel *Merchant Prince* in March. Some of the tins were leaking. Samples were taken and sent to the Bacteriologist and the City Analyst. The Bacteriologist reported that the samples showed profuse growth of spore-bearing organisms. The City Analyst reported that the samples showed no metallic contamination and no artificial colouring matter. From a total of 1,667 cases examined, 544 were rejected as unfit for human consumption.

Canned Tomatoes from Italy

A high percentage of blown and puffy tins were found in a consignment of canned tomatoes from Italy which came to Liverpool in August in the vessel *Agnes*. Two-thirds of the consignment were rejected as unfit and delivered to Sefton Tip where they were destroyed.

Edible Copra from Ceylon

The vessel *Herefordshire* arrived from Ceylon in November, having on board a consignment of 40 bags of edible copra. On inspection the contents of the bags were found to be dirty and mouldy and infested by mites, beetles and larvae. Part of the consignment was unfit for human consumption, and the rejected copra totalling 4,480 lbs. was released under guarantee for conversion into cattle food.

Wheat Flour from the Federal Republic of Germany

The vessel *Ava* arrived in December from Massawa, in Ethiopia, having on board a consignment of 15,410 × 100-kilo bags of wheat flour from the Federal Republic of Germany. On inspection it was found that the contents of the bags were severely infested by nine varieties of insects and their larvae. It was thus unfit for human consumption. On enquiry it was found that the flour was loaded into the vessel in Germany in May, 1967, for discharge in Massawa, but as a result of the closure of the Suez Canal during the Israeli-Arab War, there was a prolonged delay which resulted in the conditions described above. The whole consignment was fumigated and released for animal feeding purposes.

COLOURING MATTER IN FOOD REGULATIONS 1957

The vessel *Azizbhatti* arrived in January having on board a consignment of 20 cases of mango pickles in oil. Some of the tins were leaking and unfit for human consumption. Samples taken from the remainder showed the presence of an added non-permitted colouring matter, as well as lead in excess of the permitted amount. A total of 20 cases, each 2 × 40-lbs. was rejected and disposed of at Sefton Tip.

A consignment of 170 cases of jars of pickles arrived in February from Pakistan in the vessel *Maulabakash*. Samples were taken and sent to the City Analytst who reported the presence of an oil soluble Sudan 3 type non-permitted dyestuff and oil orange E. The consignment was rejected but was released for delivery to the Port of Manchester for export to Saudi Arabia.

THE PRESERVATIVES IN FOOD REGULATIONS 1962

The vessel *Beaverelm* arrived from Canada in February, 1966, having on board a consignment of 2,500 × 28-lb. tins of frozen cherries. The label

stated that a trace of erythorbic acid had been added as a preservative. Samples were taken by the Salford Food and Drugs Inspector and the Analyst in that area had reported the presence of 200 parts per million of iso-ascorbic acid. This substance is a non-permitted preservative. The consignee however was informed by the packer in the United States of America that this preservative was not applied to all the cherries but was sprayed on top to preserve the appearance. A further sample was taken on the bulked cherries but the consignment was released after an undertaking had been received from the consignee that he would not import such consignments in the future.

CONTRAVENTION OF THE LEAD IN FOOD REGULATIONS 1961

A consignment of canned corned beef arrived from Argentina in March, in the vessel *Dunelmia*. Six sample cans were taken from the consignment and examined by the City Analyst for evidence of metallic contamination. His report showed that the meat contained lead in excess of the five parts per million permitted under the provisions of the above Regulations. The consignment was therefore rejected as unfit for human consumption and was returned to Argentina.

DAMAGED CARGOES

The vessel *Sue Lykes* arrived from the U.S.A. in December, 1966, having on board a consignment of rice, which was found on being discharged from the ship to be affected by a taint of unknown origin. After prolonged enquiry it was found that this taint was associated with bituminous oil, and the rice was therefore declared unfit for human consumption. The total involved was 565 bags of rice, totalling 56,500 lbs., and it was released to a firm of industrial paste manufacturers.

The vessel *Texelstroom* arrived from Holland in January with a consignment of 149 cartons of pasteurised canned hams, and it was found that a high percentage of the cans were crushed and burst. The consignee communicated with his shipper in Holland and he agreed that the whole consignment should be returned to him.

The vessel *Kastor* arrived from Israel in May having on board a consignment of 744,288 boxes of oranges. It was found that some of the fruit had become contaminated with fuel oil while it was being pumped into the

ship's tanks at the same time as the cargo was being loaded. In all 121 boxes, totalling 9,680 lbs. of oranges, were found to be unfit for human consumption and were buried at a local tip.

A fire on the quay in February, at Kings Dock, resulted in damage due to fire, smoke and water to 42 bags of almonds, totalling 1,176 lbs., and 41 tins of canned apricots totalling 481 lbs. These had arrived in the vessel *Maarsbergen* from Spain. As a result of the damage the goods were unfit for human consumption, and were delivered to a local tip. It was also necessary to wash and repack a large number of crates of oranges which had been damaged by smoke and water.

The vessel *Annemarie Kruger* arrived from Canada in December, having on board bags of wheat flour, as well as wheat in bulk. On being discharged from the ship it was found that contamination of the cargo had occurred, due to a consignment of bagged titanium oxide which had been stored and carried in the same space and which had burst during rough weather. A total of 112,000 lbs. of wheat flour was rejected and 1,162 lbs. of contaminated wheat were also rejected as unfit for human consumption. The flour was released for industrial use and the wheat for animal feeding.

Two consignments of yams, one from the vessel *Basil* from Brazil, and the other from the vessel *Boniface* from Brazil, were found on inspection to be damaged, a large quantity of the yams being found crushed, broken, mouldy and decomposing. The rejected yams, totalling 127,722 lbs., were buried at a local tip.

In September a container of 80 quarters of beef was lost overboard in the Mersey Estuary, during a storm, from the vessel *Friede Graebe*, from Ireland. After several days adrift it was located and towed to the Port by a Mersey Docks and Harbour Board vessel. The contents of the container were waterlogged and decomposing and unfit for human consumption. The rejected beef was released for conversion into fertilizer.

The vessel *Marizell* arrived from Dublin in August having on board a consignment of 200 boxes of dehydrated peas. On inspection after discharge a number of the boxes were wet and stained and the contents contaminated and damaged. On investigation it was found that a number of drums carried in the ship and supposed to be empty, contained in fact,

residues of their previous content, which was sodium hypochloride and hydrogen peroxide. A total of 20 boxes, totalling 1,120 lbs., was rejected and delivered to a local tip.

The vessel *Port Sydney* from Australia, arrived in August having on board a consignment of 36,215 cartons of raisins. A few days after the consignment was landed some cartons were found to be wet and stained and as soon as the cartons started to dry out a white crystalline deposit was visible. The consignment was detained. On investigation it was found that salted wet hides had been stored on the floor above and the brine had seeped through the ceiling. Owing to the risk of anthrax it was decided that it would be inadvisable to attempt reconditioning. The damaged cartons, totalling 291, weighing 8,730 lbs., were therefore rejected and destroyed.

A consignment of lard, comprising 640 tons, arrived in the vessel *Jupiter* in September from France via Antwerp. This lard was from seven recognised establishments. One tank was found to be contaminated by black smoky matter and dirty water. The total affected was just over 43 tons, and this was rejected as unfit for human consumption and later released for industrial purposes.

IMPORTATIONS OF FOOD OTHER THAN FOR HUMAN CONSUMPTION

637 consignments comprising 657,586 packages of frozen raw material (meat and offal) were imported during 1967, and were delivered to approved processors to be sterilized prior to sale as pet food.

These figures include 1,130 packages of frozen horsemeat, and 12,395 packages of frozen whale meat.

None of the consignments presented any outstanding difficulty during the course of the year.

No legislation, the need for which was the subject of comment in the annual reports for 1965 and 1966, was introduced during the year 1967.

" Ready for sale " canned meat and fish for the pet food trade packed in cans which had not been embossed with the words " pet food ", continued to be imported during the year 1967.

EXCHANGE OF INFORMATION

Information concerning positive findings, following examination of imported food, was circulated to other seaports and copies sent to the Ministry of Health and the Ministry of Agriculture, Fisheries and Food.

Quarterly returns are made to the Ministry of Agriculture, Fisheries and Food giving full details of unsound meat and meat products and also of contraventions of the Official Certificate procedure. Copies of any details relating to unsound Australian meat or meat products are sent to the Commonwealth Veterinary Officer, Australia House, London.

The following table shows the total quantities of unsound foodstuffs either destroyed or utilised under supervision during the year 1967:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal	49	17	1	23
Canned Goods	323	8	—	13
Fruit and Vegetables	1,106	15	1	22
Cereals	1,554	11	2	24
General (Lard, Coconut, Butter, etc.) ...	1,189	14	2	—
Total	4,224	7	—	26

No unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year 1967.

ISRAELI-ARAB WAR—(CLOSURE OF THE SUEZ CANAL) AND THE DOCK STRIKE—SEPTEMBER-OCTOBER, 1967

The Israeli-Arab war involving the closure of the Suez Canal, together with the prolonged dock strike which took place during part of the months of September and October, were two factors which had a notable effect upon the tonnage of food which it was necessary to examine in detail, to sort, to recondition, or to subject to fumigation during the period following those events.

Considerable quantities of food were diverted from Liverpool to ports lying on the continent of Europe, there to be discharged, and to lie until it was possible to load them into other vessels for ultimate discharge at Liverpool at the end of the strike.

Consignments of food were known, during this period, to have made several crossings of the Atlantic without it being possible to discharge them at Liverpool.

As a consequence of these occurrences there was, in the period that followed, a marked deterioration in the quality of much of the food landed, and an increase in the amount which had to be rejected as being unfit for sale for human consumption.

Little or no effect was noticed upon frozen meat cargoes because of the efficiency of the ships' refrigeration plants, but a serious deterioration in the condition of cargoes of fresh fruit and vegetables took place with consequent rejections.

There was also a noticeable increase in the degree of damage arising from mite and insect infestations in such consignments as bags of wheat flour, bags of groundnut kernels, packages of dried fish, etc.

Quantities of tins of canned foods in a crushed and burst condition, others in a rusty and perforated condition, the former due to double handling in continental ports, and the latter due to unsatisfactory emergency storage in those ports, were found to be unfit for sale for human consumption, and had to be rejected on inspection.

Several large food-carrying ships were still lying trapped in the Suez Canal at the end of the year with cargoes destined for the Port of Liverpool.

It is to be expected that the ultimate discharging of these vessels after their release from the canal will, if the cargoes are landed at Liverpool, have an effect upon the food rejections, which will be the subject of the annual report in respect of the year 1968.

The following tables show the variety and numbers of samples submitted to the Public Health Laboratory Service and the City Analyst during the year 1967.

Samples relating to imported food

Submitted to Public Health Laboratory Service

Beefburgers	1
Copra, edible...	1
Crustacea, frozen:	
Langostinos	4
Prawns, uncooked	119
Shrimps	64
Desiccated Coconut	600
Egg, dried, albumen	27
Egg, dried, whole	77
Egg, frozen liquid whole	52
Egg and Macaroni mixture	3
Pancake mix (containing dried egg yolks)	6
Rolls, Fung Wong (containing egg, milk, coconut)	1
Ground nut kernels	2
Kewra Water	2
Scallops	6
Shrimps, canned	9
Teething rings	6
Tomato puree	7
Tongue, canned, ox	12

Submitted to the City Analyst

Apples, dried	1
Apricots, dried	1
Beef, canned, corned	16
Brazil nuts in shell	10
Cabbage, dehydrated	1
Carrot fingers, dehydrated	1
Cherries, canned, red	1
Chilli powder	9
Copra, edible...	1
Curry Powder	1
Fresh fruit:	
Apples	9
Grapefruit	2
Lemons	1
Oranges	6
Gelatine, edible	1
Grapefruit, canned	2
Green beans, canned	2
Groundnut kernels	1

Groundnuts in shell	32
Lard	3
Mango chutney	1
Onions, dehydrated	7
Pancake mix (containing dried egg yolks)	1
Pickles	35
Pie filling, canned	1
Pineapple crush, canned	3
Potatoes, dehydrated	1
Prawns, frozen	1
Prunes, dried	1
Raspberries, canned	1
Sardines in tomato sauce, canned	1
Sauce, Baba Ghannouj, canned	1
Sweet Bon-Bons	1
Teething Rings	1
Tomatoes, dehydrated	2
Tomato puree	10
Turmeric powder	1
Vegetable powder, dehydrated	1
Wheat flour	1

Samples relating to investigations following food-poisoning and other illness within the port

Submitted to the Public Health Laboratory Service

Ships' drinking water	292
Food, various	13

In addition to the above, the following samples were submitted for bacteriological examination

Faeces	94
Surface swabs (equipment)	14

ACKNOWLEDGEMENTS

I desire again to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, Board of Trade, the Mersey Docks and Harbour Board and their officers, river pilots, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

ANDREW B. SEMPLE,
Medical Officer of Health,
Liverpool Port Health Authority.

Printed by C. TINLING & CO. LTD., LIVERPOOL.