

館事領總本日ラニマ在

米團領事,東書引 作件 見衛心居ラガルラ以テ之引有勢下 領事り裏書かキモノニテハ 元名二付前記顧書 記載方法二体り尚易取极方 應當地族疫官二交涉引試 如十八届地二於方消毒也元 本都般主側,蒙山 能又此消毒證明書力同地 何等力商易方法 有スルモノニ於テハ之引合象剛 ,錦雪一通り高館:頭 合家國族疫法規,必要 認以難す旨

后黎國族疫法規事励行之而之前

館事領總本日ラニマ在

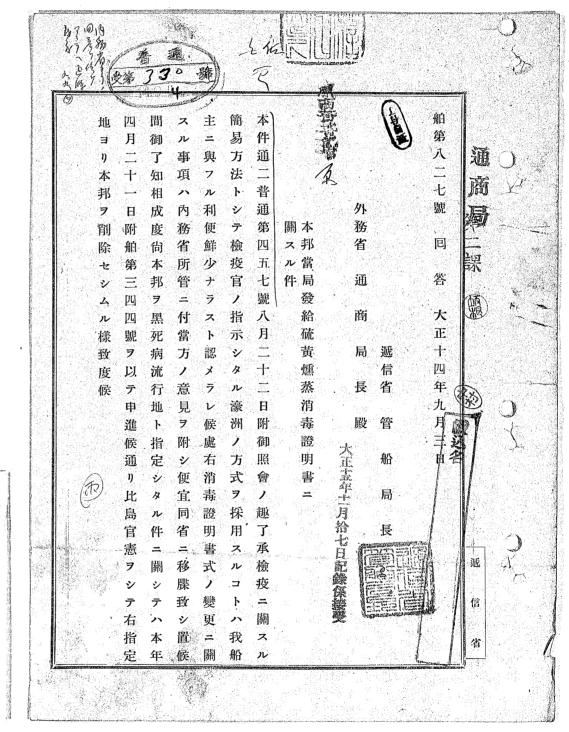
聚國医務官 山庆船与主人布望二十五十月 三井物產格式會社當地支店長協田級三八本 在八七該医務官駐在心居力如為火縱令三十 ラ得ルコトまず実上不可能ナルラ以テ里二本部族変 内二橋海以外ノ本那諸港二於ラ消毒ヲ行フ 戶毛所要,合家國医務官,発給也以消毒 證明書 再口該消毒法习强制也己居儿次常十九處今回 官飛給り證明書,之引推乃帶心于比島二入 朝鮮臺灣及関東洲諸港二八米國領事 從戶前記梅疫法規二準據之戶比島入港後 駐在セル 八軍一横演港 一等船主側

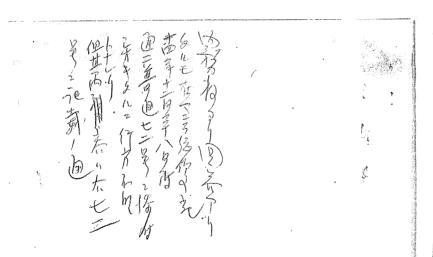
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館事領總本日ラニマ在 官意見ヲ微レタル處目下源洲二於戸実行セラレ 於戸発給又心清毒證明書式习米國校疫传規 要セス軍二同地駐在米國領事,查證セル張洲 之二裏書也以得以禄特二米源两國政府同 剪い間易ナルモノニシテ合家國医務官ノ - 消毒證明書式引米國族

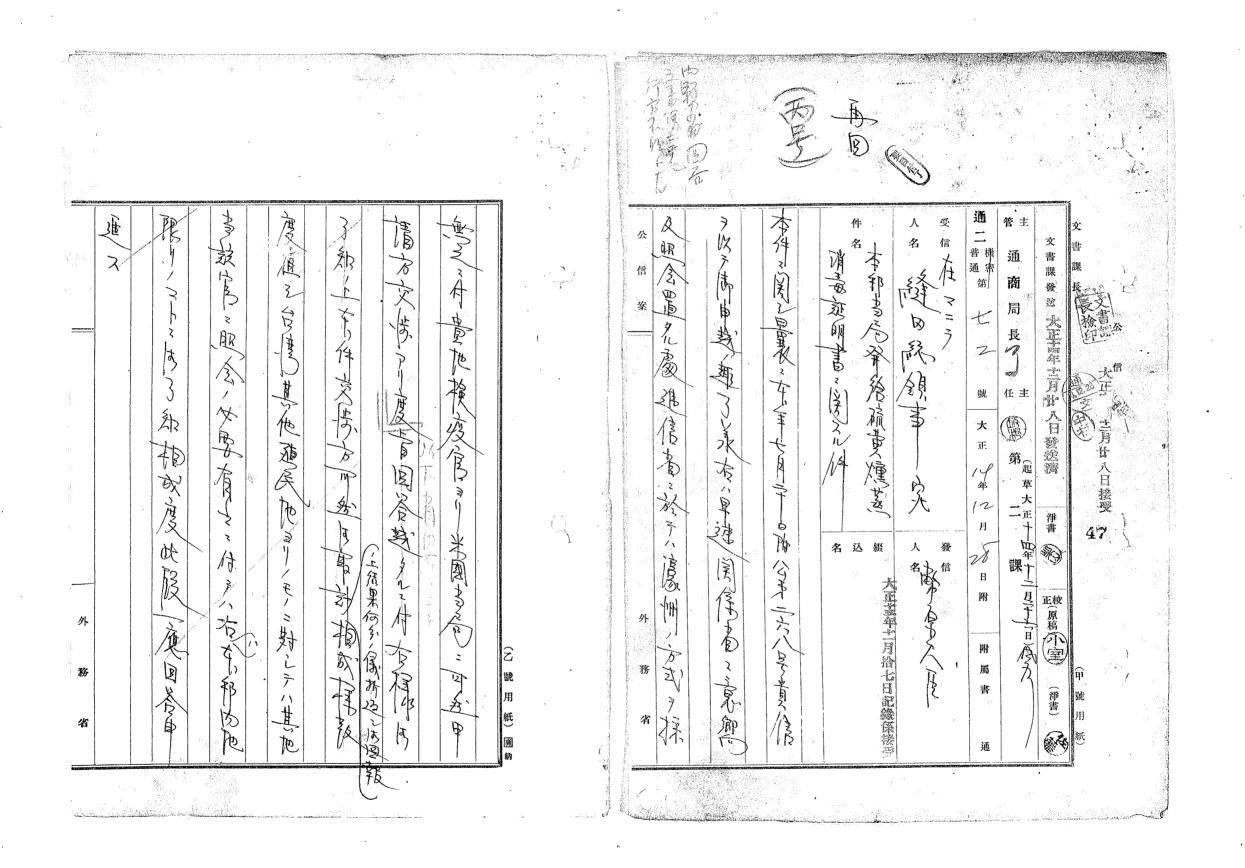
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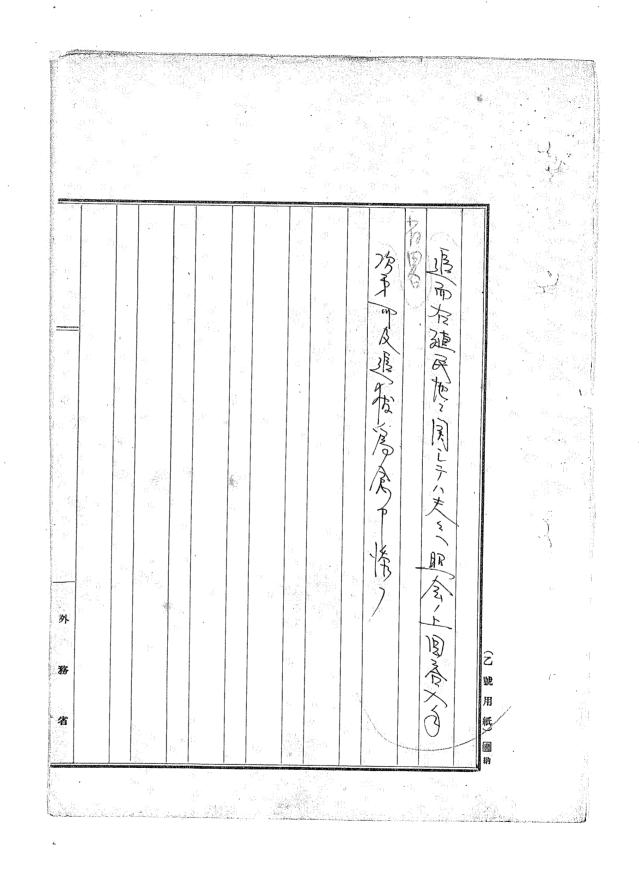
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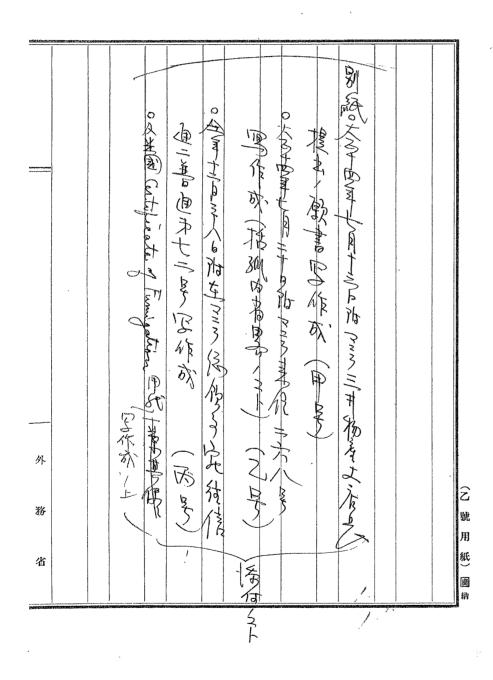


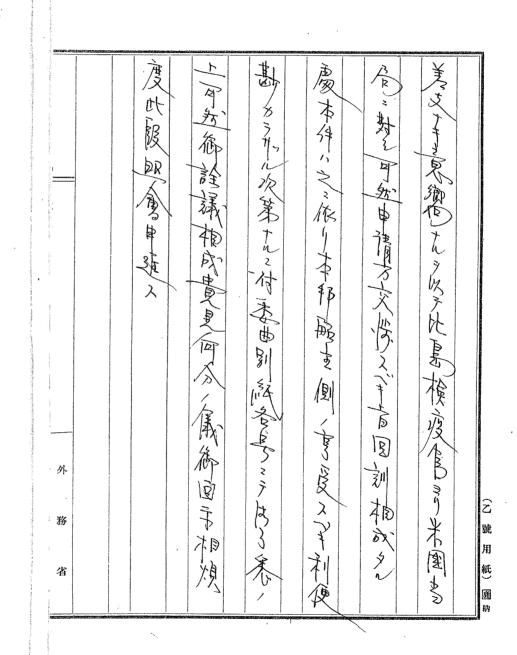


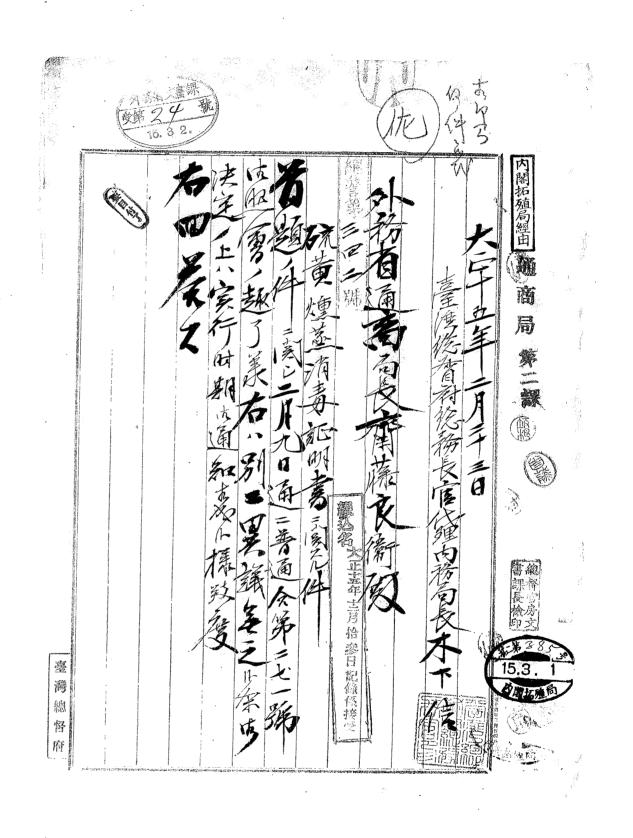
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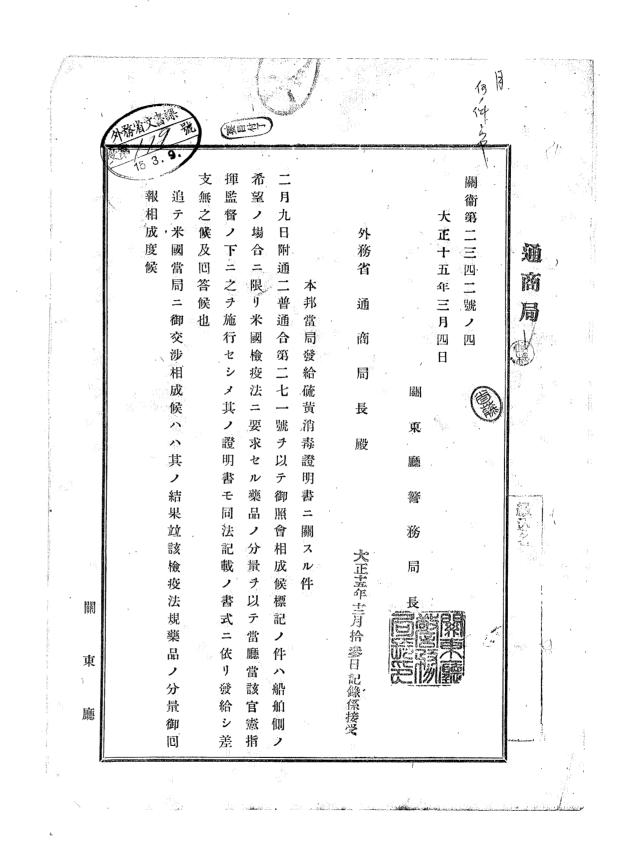
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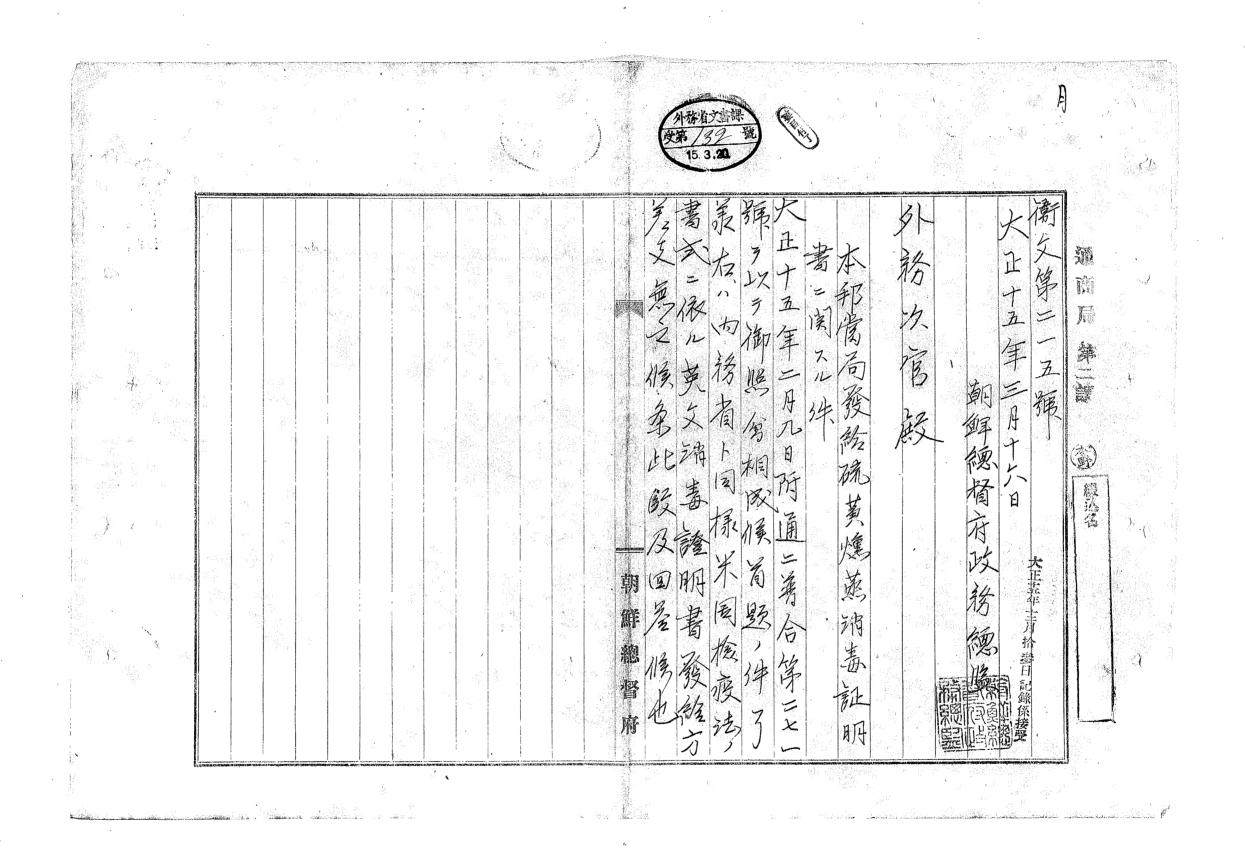
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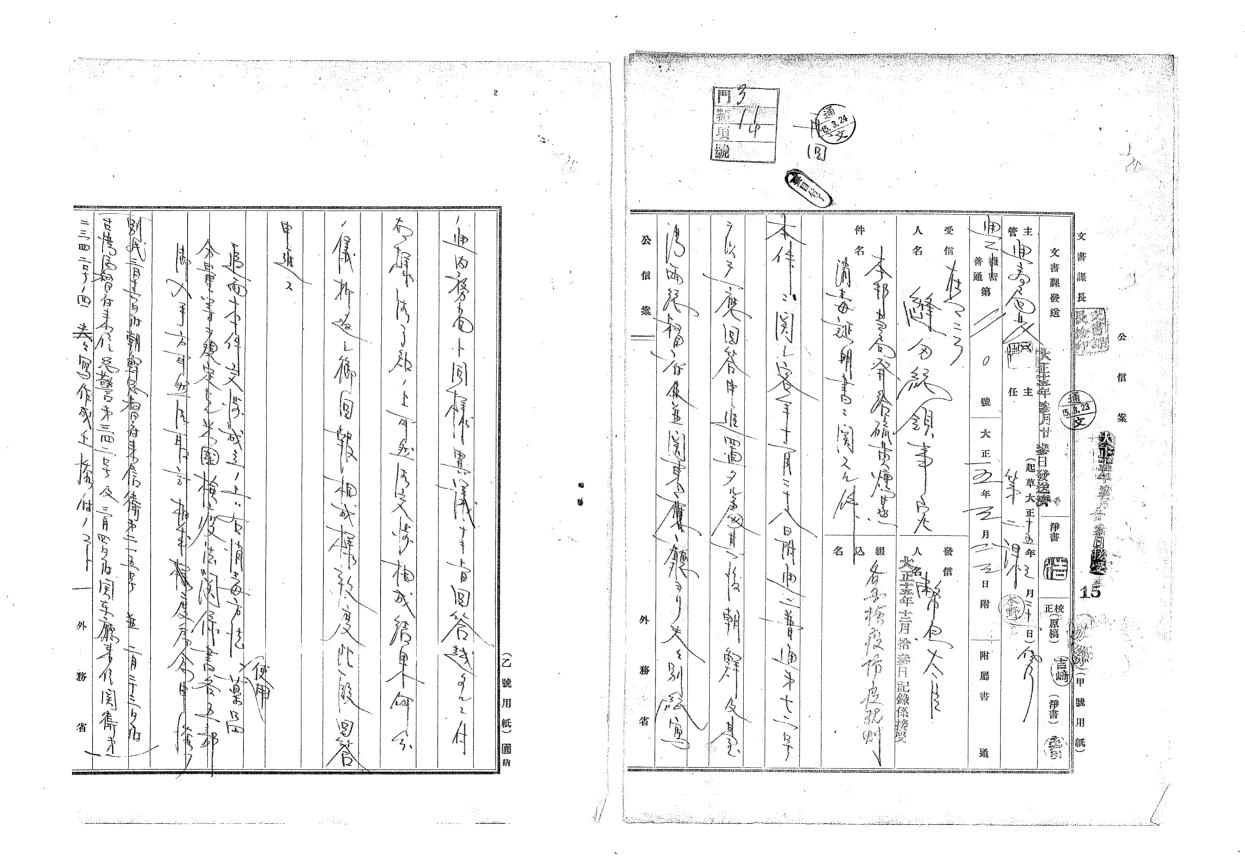




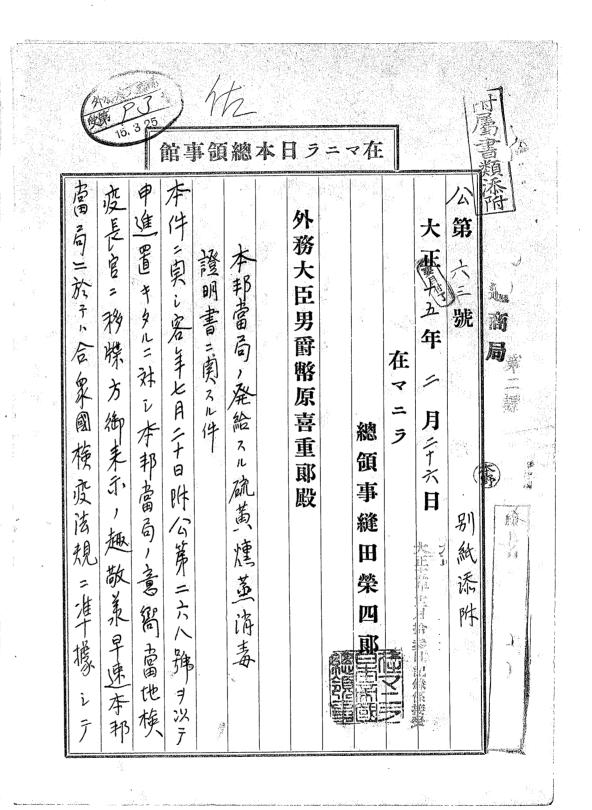








館事領總本日ラニマ在 次テ



Bureau of Quarantine Service, Manila, P. I.

U. S. TREASURY DEPARTMENT
Public Health Service
Office of the
Chief Quarantine Officer for the Philippine Islands

Manila, P. I. February 13,1926.

Hon. Eishiro Nuida, Consul General for Japan, Manila.

My dear Sir :

Referring to the Consul-General's communication of January 19, 1926, relative to the fumigation of vessels in Japanese ports, I have the honor to advise that the Consul General's letter has been forwarded to the Surgeon General, United States Public Health Service, Washington, D. C., for such action as may be deemed necessary by the U. S. Public Health Service.

Respectfully,

H. F. SMITH
Surgeon, U. S. P. H. S.
Chief Quarantine Officer for the
Philippine Islands.

JAPANESE CONSULATE GENERAL MANILA, PHILIPPINE ISLANDS

禅

Manila, January 19, 1926.

Sir:

Adverting to the conversation which we had in regard to the practice of fumigation on vessels coming from Japanese ports to the Philippine Islands and to the form of certificate of fumigation issued by the Japanese authorities. I have the honor to inform you that the matter has been referred to the appropriate authorities of the Imperial Japanese Government, and that I am now in receipt of a communication purporting that the Japanese authorities concerned are ready to agree to adopting a system of fumigation with the issuance of a certificate in such a form as filling up the requirement of the United States Public Health Service. When desired by shipping interests, the competent authorities will see a way to carrying out fumigation with a fixed quantity of disinfectant prescribed by the quarantine law of the United States under their direction and supervision and a certificate will be issued in the aforesaid form good for visaing by American Consuls.

I have therefore the honor to request you to kindly

Dr. H. F. Smith, Chief Quarentine Officer for the Philippine Islands, Menila, P. T.

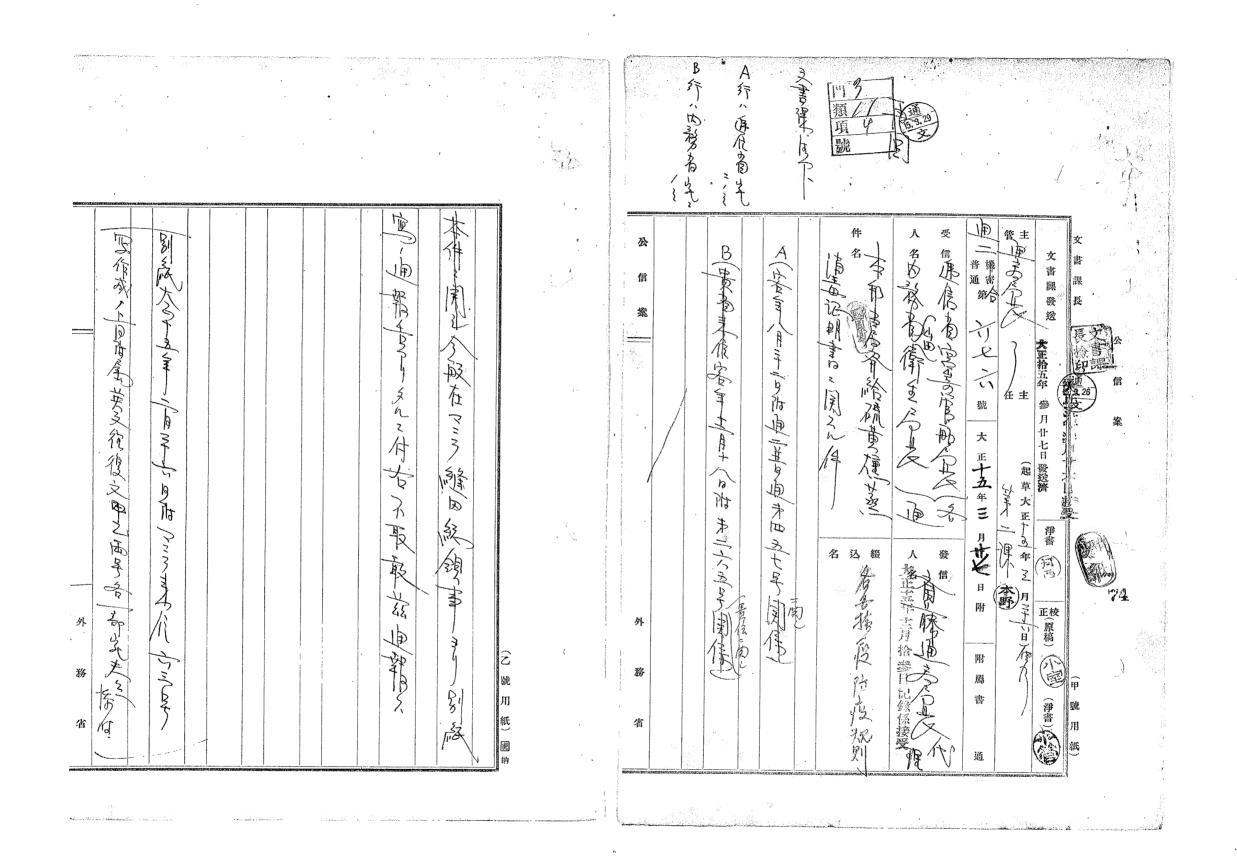
JAPANESE CONSULATE GENERAL MANILA, PHILIPPINE ISLANDS

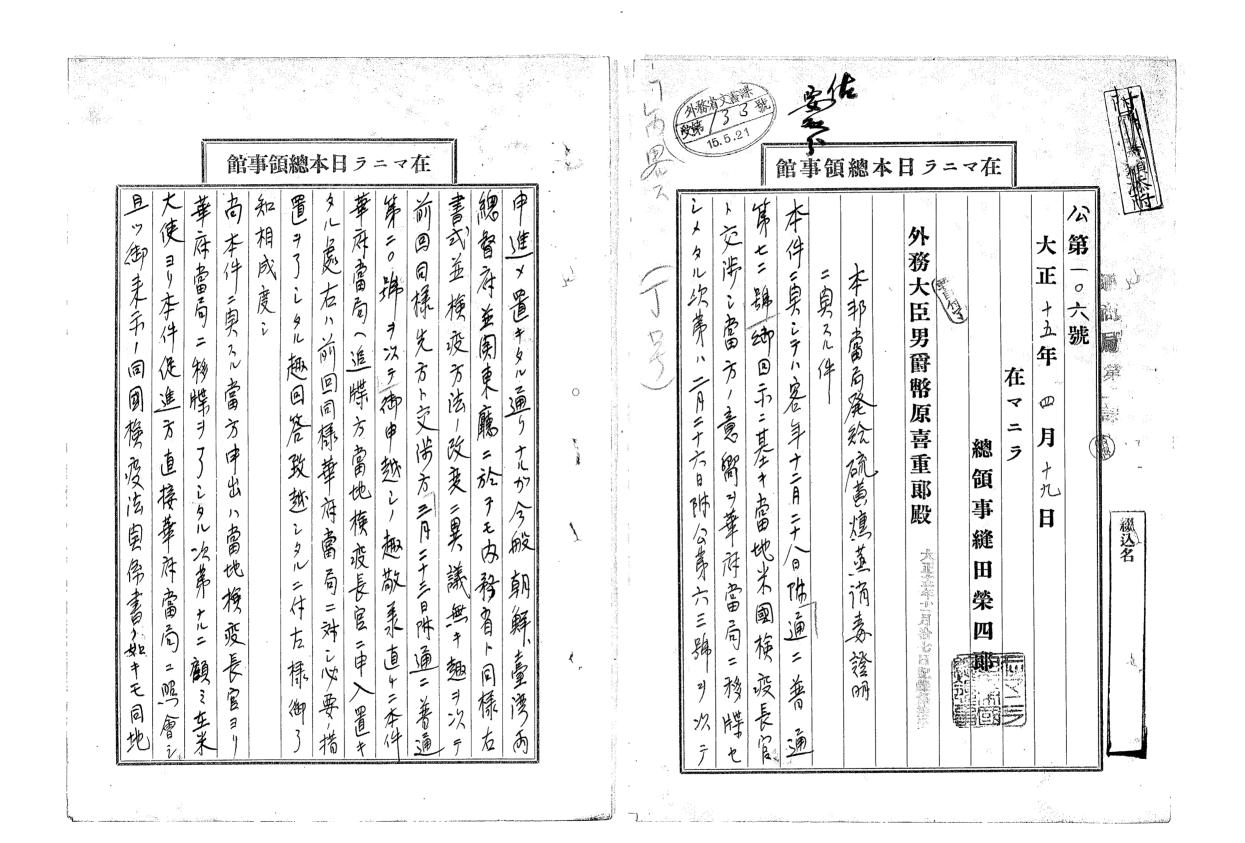
kindly make arrangement with the government authorities in Washington for the facilitation of quarantine enforced in the Philippine ports with a view to making practicable the plan tentatively discussed in the conversation referred to.

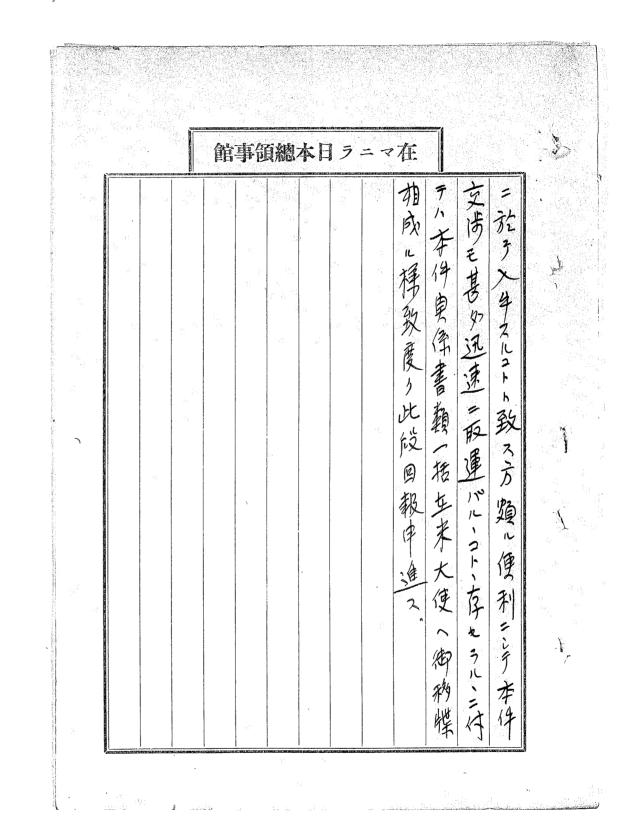
In this connection, I beg to state for your information that the Foreign Office in Tokio is still in communication with the Government General of Formosa and other colonial governments authorities in this matter and therefore the proposed arrangement given above will relate to the vessels from Japan proper only for the present. Upon receipt of information from the colonial authorities as to their intention, I shall take pleasure in communicating with you.

I have the honor to be, Sir,
Your obedient servant,

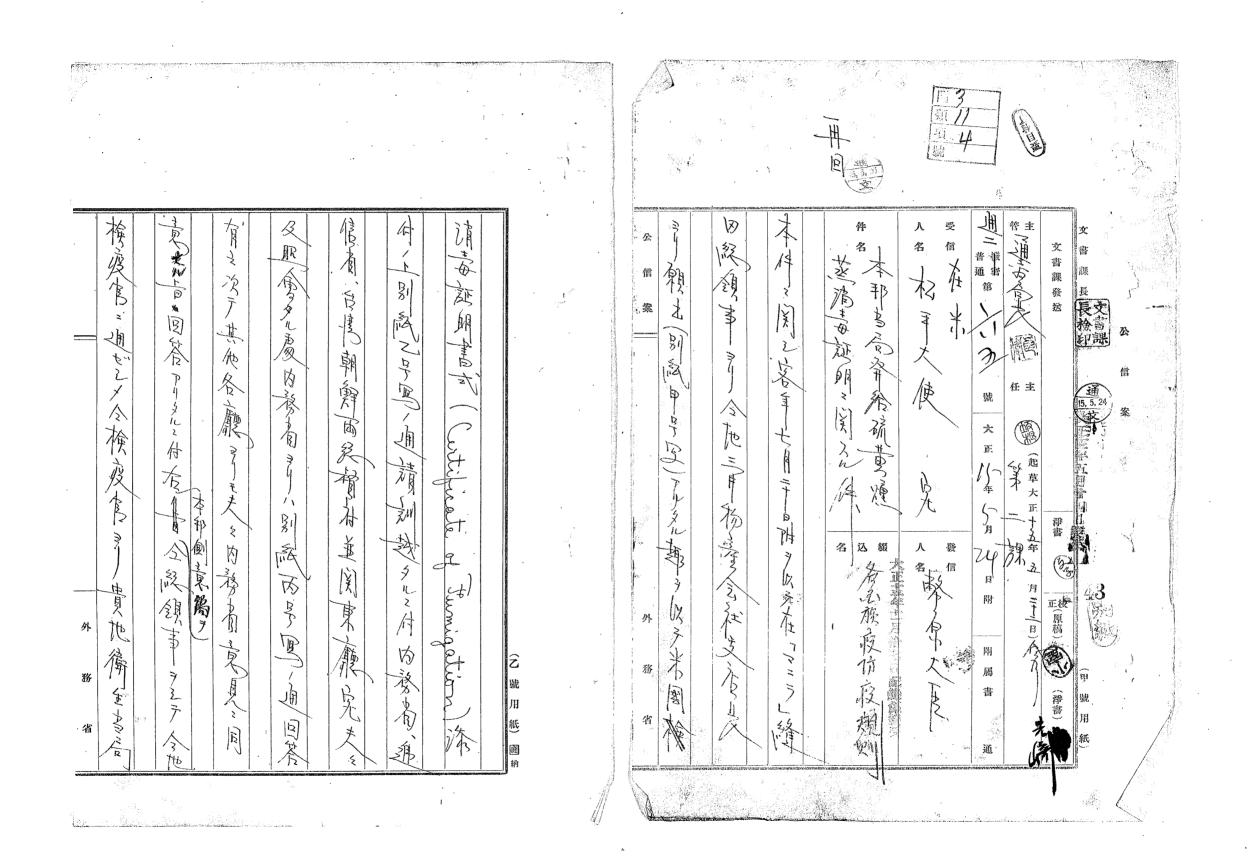
EISHIRO NUIDA Consul-General for Japan.

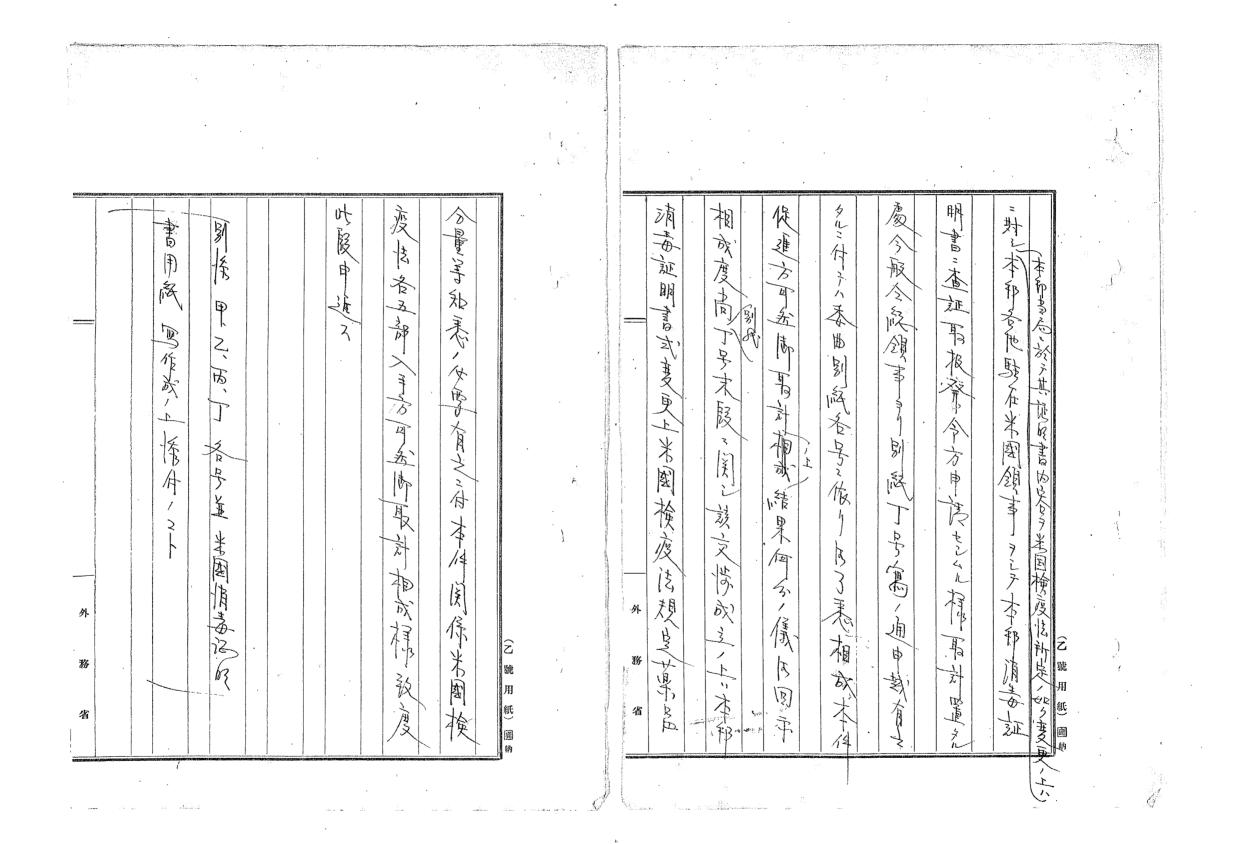


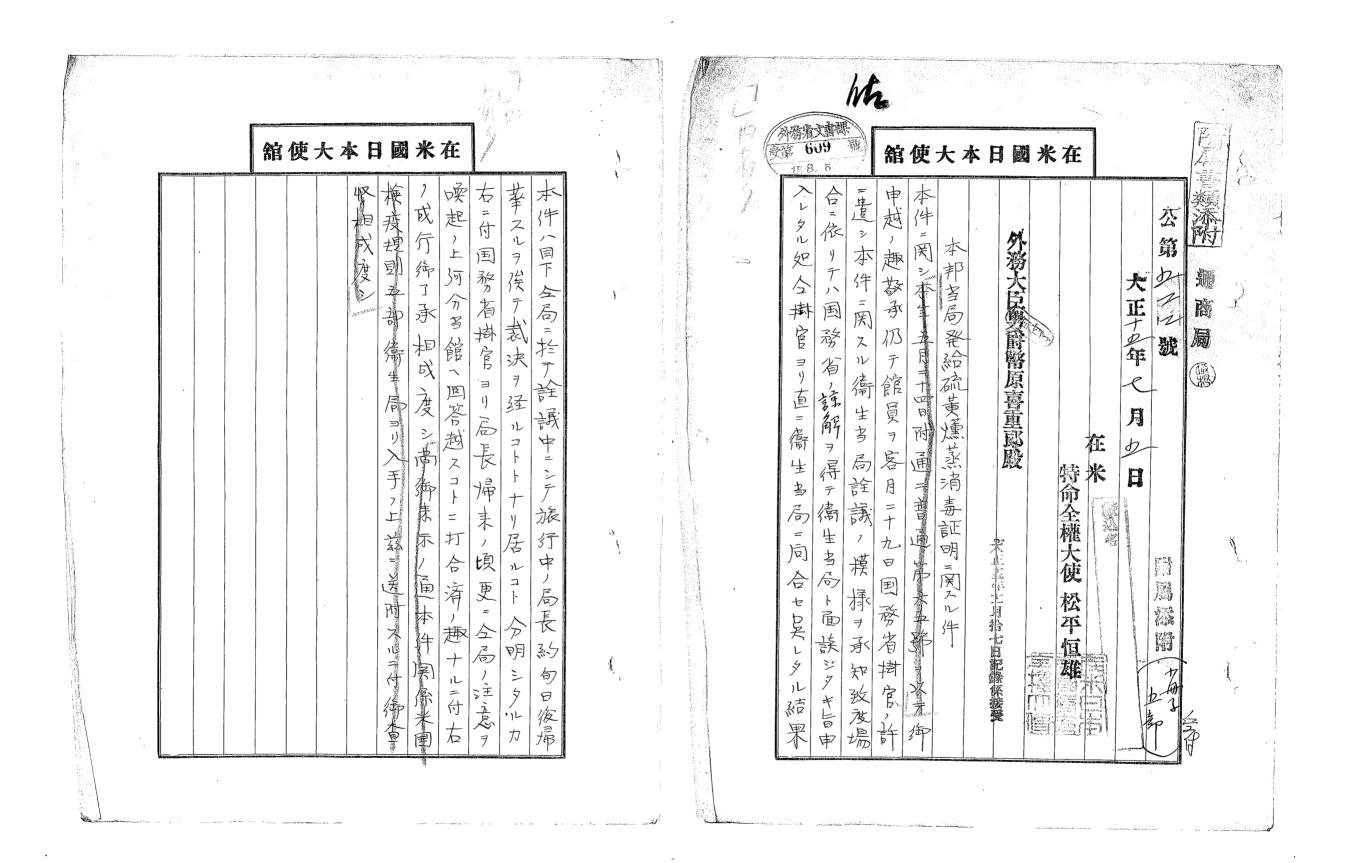




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				Tay of the state o
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This is to certify that the				
				MALE TO THE TOTAL THE TOTAL TO THE TOTAL TOT
from				has been fumigated at this station for the
destruction of		4		, as follows:
	CUBIC CAPACITY	Pounds	Ounces	
		SULPHUR	CYANIDE	
Holds	1			Date
레이탈 하고 그렇게 그렇게 그래?	2			Duration of exposure
되면 가는 바로 사람들이다.	8			
	4			Evidence of rats before fumigation
	5			***************************************
Engine-room and shaft alley	1			Rats after fumigation, living, dead
Bunkers	i			
Forepeak	i			Inspection made by
Forecastle				
Steerage				Opened by
Dining saloon (first cabin)		1		Dunnage or other protection to rats; how treate
Pantry (first cabin)	** **			prior to fumigation
GalleySecond cabin				
Second cabin pantry				i
Provision storeroom		1987		
Living quarters	S1 1 1 1 1 1 1 1 1 1			
Staterooms	1 1			
Smoking room		1		47
TOTAL	14		2	
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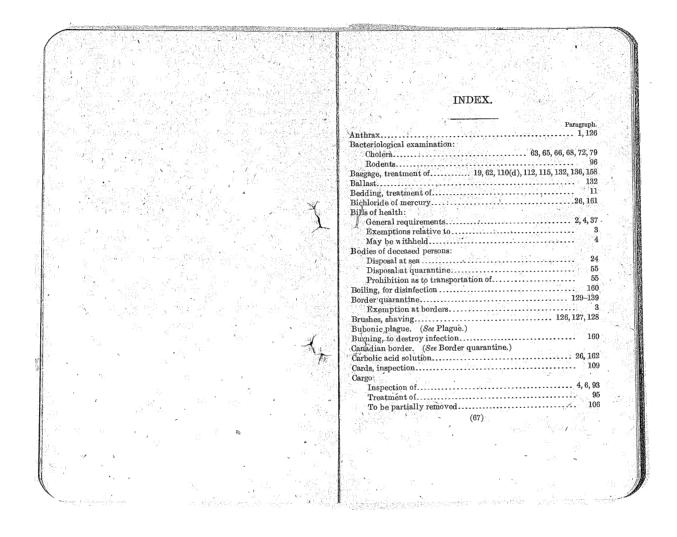
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Common carriers on the border	전 전투 연극 이 가면서 보는 10mm는 1984년 12일 다시아보고 100 등 1925년 2일 시간 그리고 사용하는 그를 하는 사용이 보다면서 100명 (100명 100명 100명 100명 100
Communicable diseases40	Fruit vessels
Communication with vessels in quarantine prohibited 39,44	이 지금하다 그 회사님들은 그리는 열면 중에 그들이 내려왔다. 이 상품들은 경험이 되었다. 그는 아이는 사람이 되는 사람이 되었다.
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crews of vessels going to such quarantine stations and anchorages, and provide for the separation of those among their passengers and crews who are suffering from yellow fever from those who are in good health, and shall further provide for doing all things necessary to eradicate such disease from such vessels, their cargoes, passengers, and crews.

SEC. 4. That any vessel, or any officer of any vessel, or other person other than State health or quarantine officers, entering within the limits of any quarantine grounds and anchorage, or any quarantine station and anchorage, or departing therefrom, in disregard of the quarantine rules and regulations or without the permission of the officer in charge of such quarantine ground and anchorage, or of such quarantine station and anchorage, shall be deemed guilty of a frisde-meanor, and upon conviction thereof shall be punished by a fine of not more than three hundred dollars or by imprisonment for not more than one year, or both, in the discretion of the court. That any master or owner of any vessel violating any provision of this Act, or any provision of an Act entitled "An Act granting additional powers and imposing additional duties on the Marine-Hospital Service," approved February fifteenth, eighteen hundred and ninety-three, or violating any rule or regulation made in accordance with this Act or said Act of February fifteenth, eighteen hundred and ninety-three, relating to the inspection of vessels, or to the prevention of the introduction of contagious or infectious diseases into the United States, or any master, owner, or agent of any vessel making a false statement relative to the sanitary condition of such vessel or its contents, or as to the health of any passenger or person thereon shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than one year, or both, in the discretion of the court.

SEC. 5. That in any place where a quarantine station and plant is already established by State or local authorities it shall be the duty of the Secretary of the Treasury, before selecting and designating a quarantine station and grounds and anchorage for vessels, to examine such established stations and plants, with a view of obtaining a transfer of

the site and plants to the United States, and whenever the proper authorities shall be ready to transfer the same or surrender the use thereof to the United States, the Secretary of the Treasury is authorized tō obtain title thereto or possession and use thereof; and to pay a reasonable compensation therefor, if, in his opinion, such purchase or use will be necessary to the United States for quarantine purposes and the quarantine stations established by authority of this Act shall, when so established, be used to prevent the introduction of all quarantine stations.

antinable diseases.

SEC. 6. That whenever any established station, or any land or water, or any part thereof, shall be acquired by the United States under the provisions of this Act, jurisdiction over the same shall be ceded to the United States by any State in which the same is situated before any compensation therefor shall be paid.

SEC. 7. That the sum of five hundred thousand dollars, or so much thereof as may be necessary, is hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of carrying into effect the provisions of this Act, as well as for the purpose generally of preventing the importation of yellow fever and other quarantinable diseases into the United States, and for the further purposes, in cooperation with State or municipal health authorities, of eradicating them should they be imported, of preventing their spread from one State into another State, and of destroying their causes.

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matters pertaining to the administration of the quarantine laws and regulations of the United States."

[Public-No. 243.]

An Act To further protect the public health and make more effective the national quarantine.

[Approved, June 19, 1906.]

Best enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury shall have the control, direction, and management of all quarantine stations, grounds, and anchorages established by authority of the United States, and as soon as practicable after the approval of this Actishall select and designate such suitable places for them and establish the same at such points on or near the coast line of the United States or the border of the United States and a foreign country as in his judgment are best suited for the same and necessary to prevent the introduction of yellow fever into the United States, and, in his discretion, he may also establish at the group of islands known as the Dry Tortugas, at the western end of the Florida reef, and at such other point or points on or near the coast line of the United States (not to exceed four in the aggregate) as he deems necessary, quarantine grounds, stations, and anchorages, whereat or whereto infected vessels bound for any port in the United States may be detained or sent for the purpose of being disinfected, having their cargoes disinfected and discharged, if necessary, and their sick treated in hospitals until all danger of infection or contagion from such vessels, their cargoes, passengers, or crews has been removed.

SEC. 2. That in cases in which the title to the land and ware so selected and designated is in the United States it shall be the duty of the department, bureau, or official of the United States having custody or possession of such land and water, or any part thereof, not used by the Government for other purposes designated by law, or possession of said Dry Tortugas Islands, on demand of the Secretary of the Treasury, to deliver the same into his custody and possession for the use of the Public Health and Marine Hospital Service, evidencing

such delivery by a suitable instrument in writing to be delivered to the Secretary of the Treasury. That in cases in which the title to such land and water, or any part thereof, is in any other owner than the United States it shall be the duty of the Secretary of the Treasury to secure the title and possession of the same to the United States for the use of the Public Health and Marine-Hospital Service of the United States, by purchase at a reasonable price, if possible, but if, in his judgment, the price demanded for such property be excessive, he is hereby authorized to apply to the Attorney General of the United States to cause to be instituted, in the proper tribunal, condemnation proceedings in the name of the United States for the purpose of acquiring for the United States the title and possession of such land and water, and said Attorney General shall, as soon as possible after such application by the Secretary of the Treasury, cause such probledings to be instituted and conducted to a conclusion, and the custody and possession of such land and water, when duly acquired in accordance with the award made in such condemnation proceedings, shall be delivered to the Secretary of the Treasury for the use of the Public Health and Marine-Hospital Service.

Public Heath and Marine-Hospital service.

SEC, 3. That on acquiring possession of any land and water in accordance with the provisions of this Act for the purpose of establishing thereat a quarantine station and anchorage, the Secretary of the Treasury shall cause to be published in such newspapers as he may think proper, once a week for four successive weeks, a notice of the selection and designation of such places for quarantine stations and anchorages, with a description of the boundaries of such quarantine stations and anchorages, and such rules and regulations as he shall adopt and promulgate, requiring vessels with yellow fever among their passengers or crews to go to specified quarantine stations and anchorages, to be dealt with there before visiting any port of the United States. He shall establish at such quarantine stations and anchorages all necessary instrumentalities for disinfecting vessels and their cargoes, and where the same shall be required shall erect the necessary hospital buildings and install the necessary furniture and fittings for receiving and treating the sick among the passengers and

SEC. 2. That any officer, or person acting as an officer, or agent of SEC. 2. That any officer, or person acting as an officer, or agent of the United States at any quarantine station, or other person employed to aid in preventing the spread of such disease, who shall willfully violate any of the quarantine laws of the United States, or any of the rules and regulations made and promulgated by the Secretary of the Treasury as provided for in Section 1 of this act, or any lawful order of his superior officer or officers, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than three hundred dollars or imprisonment for not more than one year, or both, in the discretion of the court

SEC. 3. That when any common carrier or officer, agent, or employé of any common carrier shall willfully violate any of the quarantine laws of the United States, or the rules and regulations made and promulgated as provided for in Section 1 of this act, such common carrier, officer, agent, or employé shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished by a fine of not more than five hundred dollars, or imprisonment for not more than two years, or both, in the discretion of the court.

[Act March 2, 1901.]

An Act To amend "An Act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," approved February fifteenth eighteen hundred and ninety-three.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That an Act granting addi-tional quarantine powers and imposing additional duties upon the Marine-Hospital Service, approved February fifteenth, eighteen hundred and ninety-three, be amended by addition of the following sections:
"Sec. 10. That the Supervising Surgeon-General, with the ap-

proval of the Secretary of the Treasury, is authorized to designate

and mark the boundaries of the quarantine grounds and quarantine anchorages for vessels which are reserved for use at each United States quarantine station; and any vessel or officer of any vessel or other person, other than State or municipal health or quarantine officers, trespassing or otherwise entering upon such grounds or anchorages in disregard of the quarantine rules and regulations, or without permission of the officer in charge of such station, shall be deemed guilty of a misdemeanor and subject to arrest, and upon conviction thereof be punished by a fine of not more than three hundred dollars or imprisonment for not more than one year, or both, in the discretion of the court. Any master or owner of any vessel, or any person vio-lating any provision of this Act or any rule or regulation made in accordance with this Act, relating to inspection of vessels or relating to the prevention of the introduction of contagious or infectious discases, or any master, owner, or agent of any vessel making a false statement relative to the sanitary condition of said vessel or its contents or as to the health of any passenger or person thereon, shall be deemed guilty of a misdemeanor and subject to arrest, and upon conviction thereof be punished by a fine of not more than five hun-

"Sec. 11. That any vessel sailing from any foreign port without the bill of health required by section two of this Act, and arriving within the limits of any collection district of the United States, and not entering or attempting to enter any port of the United States, shall be subject to such quarantine measures as shall be prescribed by regulations of the Secretary of the Treasury, and the cost of such measures shall be a lien on said vessel, to be recovered by proceedings in the proper district court of the United States and in the manner set forth above as regards vessels from foreign ports without bills of health and entering any port of the United States.

"SEO. 12. That the medical officers of the United States, duly

dred dollars or imprisonment for not more than one year, or both, in

the discretion of the court.

clothed with authority to act as quarantine officers at any port or place within the United States, and when performing the said duties, are hereby authorized to take declarations and administer oaths in

several circuit and district judges shall, respectively, under the circuit or district court within the jurisdiction of which such vessel same circumstances, have the same power, by the same means, to may arrive or from which she is about to depart, or at any place direct adjournments of the several circuit and district courts to where the owner or master may be found. some convenient place within their districts, respectively. [See §

passengers as will tend to the preservation and promotion of health, An Act To prevent the introduction of contagious diseases from one State to another and to that end he shall cause such regulations as he may adopt for and for the punishment of certain offenses. this purpose to be posted up, before sailing, on board such vessel, in a place accessible to such passengers, and shall keep the same so States of America in Congress assembled, That whenever it shall be posted up during the voyage. Such master shall cause the apart-made to appear to the satisfaction of the President that cholera, yelposted up during the voyage. Such master shall cause the apartments occupied by such passengers to be kept at all times in a clean, healthy state; and the owners of every such vessel so employed are required to construct the decks and all parts of the apartments so that they can be thoroughly cleaned, and also to provide a safe, convenient privy or water-closet for the exclusive use of every one thing decks and all parts of the weather is such that the passengers. The master shall also, when the weather is such that the passengers can not be mustered on deck with their badding and at such other states, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, and that there is danger of the States, Territories, or the District of Columbia, and that there is danger of the District of Columbia, and that there is danger of the States, Territories, or the District of Columbia, and that there is danger of the States, Territories, or the District of Columbia, and the District of bedding, and at such other times as he may deem necessary, cause the deck occupied by such passengers to be cleansed with chloride of lime or some other equally efficient disinfecting agent. And for each neglect or violation of any of the provisions of this section the master and owner of any such vessel shall be severally liable to the United States in a penalty of fifty dollars, to be recovered in any

SEC. 4800. The judge of any district court within whose district any contagious or epidemic disease shall at any time prevail, so as, in his opinion, to endanger the lives of persons confined in the prison of such district, in pursuance of any law of the United States, may direct the marshal to cause the persons so confined to be removed to the next adjacent prison where such disease does not prevail, there to be confined until they may safely be removed back to the place of their first confinement. Such removals shall be at the expenses of the United States.

SEC. 4263. The master of any vessel employed in transporting basesengers between the United States and Europe is authorized to maintain good discipline and such habits of cleanliness among the passengers as will tend to the preservation and promotion of health, an Act To prevent the introduction of contaging diseases from an August 1, 1888.]

Whenever any person shall trespass upon the grounds belonging to any quarantine reservation, * * * such person, trespassing, * * shall, upon conviction thereof, pay a fine of not more than three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and three hundred dollars, or be sentenced to imprisoment for a period of not more than thirty days, or shall be punished by both fine and

Be it enacted by the Senate and House of Representatives of the United Columbia, or from the District of Columbia into any State or Territory, and to employ such inspectors and other persons as may be necessary to execute such regulations to prevent the spread of such disease. The said rules and regulations shall be prepared by the Supervising Surgeon-General of the Marine-Hospital Service under the direction of the Secretary of the Treasury. And any person who

entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," is hereby amended by adding to the end of said section the following:

"The provisions of this section shall not apply to vessels plying between foreign ports on or near the frontiers of the United States and ports of the United States and ports of the United States and ports of the Freasury is hereby authorized, when, in his discretion, it is expedient for the preservation of the public health to establish reguladient for the preservation of the public health, to establish regula-

REVISED STATUTES. .

Sec. 4794. There shall be purchased or erected, under the orders of the President, suitable warehouses, with wharves and inclosures, where merchandise may be unladen and deposited, from any vessel where merchantuse may be unracen and deposited, nom any vesser which shall be subject to a quarantine or other restraint, pursuant to the health laws of any State, at such convenient places therein as the safety of the public revenue and the observance of such health

SEC. 4795. Whenever the cargo of a vessel is unladen at some other place than the port of entry or delivery under the foregoing provisions, all the articles of such cargo shall be deposited, at the risk of the parties concerned therein, in such public or other warehouses or inclosures as the collector shall designate, there to remain under the joint custody of such collector and of the owner, or master, or other person having charge of such vessel, until the same are entirely unladen or discharged, and until the articles so deposited entirely unladen or discharged, and until the articles so deposited may be safely removed without contravening such health laws. And when such removal is allowed, the collector having charge of such articles may grant permits to the respective owners or consignees, their factors or agents, to receive all merchandise which has been entered, and the duties accruing upon which have been paid, upon the payment by them of a reasonable rate of storage; which shall be fixed by the Secretary of the Treasury for all public warehouses and

SEC. 4796. The Secretary of the Treasury is authorized, whenever a conformity to such quarantines and health laws requires it, and in respect to vessels subject thereto, to prolong the terms limited for the entry of the same and the report or entry of their cargoes, and to wary or dispense with any other regulations applicable to such reports or entries. No part of the cargo of any vessel shall, however, in any case, be taken out or unladen therefrom otherwise than is allowed by law, or according to the regulations hereinafter established.

SEC. 4797. Whenever, by the prevalence of any contagious or epidemic disease in or near the place by law established as the port of entry for any collection district, it becomes dangerous or inconenient for the officers of the revenue employed therein to connue the discharge of their respective offices at such port, the Secretary of the Treasury, or, in his absence, the First Comptroller, may direct the removal of the officers of the revenue from such port to my other more convenient place within or as near as may be to such collection district. And at such place such officers may exercise the same powers and shall be liable to the same duties, according to existing circumstances, as in the port or district established by law. Public notice of any such removal shall be given as soon as may be. [See § 1776.]

SEC. 4798. In case of the prevalence of a contagious or epidemic disease at the seat of Government, the President may permit and direct the removal of any or all the public offices to such other place or places as he shall deem most safe and convenient for conducting the public business. [See § 1776.]

Sic. 4799. Whenever, in the opinion of the Chief Justice, or, in case of his death or inability, of the senior associate justice, of the Supplime Court, a contagious or epidemic sickness shall render it has ardous to hold the next stated session of the court at the seat of Government, the chief or such associate justice may issue his order to the marshal of the Supreme Court directing him to adjourn the next session of the court to such other place as such justice deems onvenient. The marshal shall thereupon adjourn the court by making publication thereof in one or more public papers printed at the seat of Government from the time he shall receive such order until the time by law prescribed for commencing the session. The

in the course of the voyage; and all such other rules and regulations as shall be observed in the inspection of the same on the arrival thereof at any quarantine station at the port of destination, and for the disinfection and isolation of the same, and the treatment of cargo and persons on board, so as to prevent the introduction of cholera, yellow fever, or other contagious or infectious diseases; and it shall not be lawful for any vessel to enter said port to discharge its cargo, or land its passengers, except upon a certificate of the health officer at such quarantine station certifying that said rules and regulations have in all respects been observed and complied with, as well on his part as on the part of the said vessel and its master, in respect to the same and to its cargo, passengers, and crew; and the master of every such vessel shall produce and deliver to the collector of customs at said port of entry; together with the other papers of the vessel; the said bills of health required to be obtained at the port of departure and the certificate herein required to be obtained from the health officer at the port of entry; and that the bills of health herein prescribed shall be considered as part of the ship's papers, and when duly certified to by the proper consular officer or other officer of the United States, over his official signature and seal, shall be accepted as evidence of the statements therein contained in any court of the United States.

SEC. 6. That on the arrival of an infected vessel at any port not provided with proper facilities for treatment of the same, the Secretary of the Treasury may remand said vessel, at its own expense, to the nearest national or other quarantine station, where accommodations and appliances are provided for the necessary disinfection and treatment of the vessel, passengers, and cargo; and after treatment of any infected vessel at a national quarantine station, and after certificate shall have been given by the United States quarantine officer at said station that the vessel; cargo, and passengers are each and all free from infectious disease, or danger of conveying the same, said vessel shall be admitted to entry to any port of the United States named within the certificant. But any port of the United States named within the certificate. But at any ports where sufficient quarantine provision has been made by State or local authorities the Secretary of the Treasury may direct vessels bound for said ports to undergo quarantine at said State or local station.

SEC. 7. That whenever it shall be shown to the satisfaction of the President that by reason of the existence of cholera or other infecger of the introduction of the same into the United States, and that notwithstanding the quarantine defense this danger is so increased by the introduction of persons or property from such country that a suspension of the right to introduce the same is demanded in the interest of the public health, the President shall have power to prohibit, in whole or in part, the introduction of persons and property from such countries or places as he shall designate and for such period of time as he may deem necessary.

period of time as he may deem mecessary.

SEC. 8. That whenever the proper authorities of a State shall surreducer to the United States the use of the buildings and disinfecting apparatus at a State quarantine station the Secretary of the Treasury shall be authorized to receive them and to pay a reasonable compensation to the State for their use, if, in his opinion, they are necessary to the United States.

SEC. 9. That the act entitled "An act to prevent the introduction of infectious or contagious diseases into the United States, and to establish a national board of health," approved March 3, 1879, be, and the same is hereby, repealed. And the Secretary of the Treasury is directed to obtain possession of any property, furniture, books, paper, or records belonging to the United States which are not in the possession of an officer of the United States under the Treasury Department which were formerly in the use of the National Board of Health or any officer or employé thereof.

[Act of Congress approved August 18, 1894.]

An Act To amend section two of the act approved February fifteenth, eighteen hundred and ninety-three, entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section two of the act approved February fifteenth, eighteen hundred and ninety-three,

tary of the Treasury, necessary to prevent the introduction of contagious or infectious diseases into the United States from foreign cound tent evidence of such posting in any court of the United States. tries, or into one State or Territory or the District of Columbia from SEC. 4. That it shall be the duty of the Supervising Surgeo another State or Territory or the District of Columbia, and at such ports. General of the Marine-Hospital Service, under the direction of the and places within the United States where quarantine regulations. Secretary of the Treasury, to perform all the duties in respect to exist under the authority of the State or municipality which, in the quarantine and quarantine regulations which are provided for by opinion of the Secretary of the Treasury, are not sufficient to prevent, this act, and to obtain information of the sanitary condition of the introduction of such diseases into the United States, or into one, foreign ports and places from which contagious and infectious dis-State or Territory or the District of Columbia from another State or Territory or the District of Columbia, the Secretary of the Treasury shall, if in his judgment it is necessary and proper, make such additional rules and regulations as are necessary to prevent the introduc-tion of such diseases into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, and when said release State or Territory or the District of Columbia, and when said relies, acribe; and the Secretary of the Treasury shall also obtain, through and regulations have been made they shall be promulgated by the all sources accessible, including State and municipal sanitary au-Secretary of the Treasury and enforced by the sanitary authorities of the States and municipalities, where the State or municipal health authorities will undertake to execute and enforce them; but if the State or municipal authorities shall fail or refuse to enforce said rules and regulations the President shall execute and enforce the same and adopt such measures as in his judgment shall be necessary to prevent the introduction or spread of such diseases, and may detail or appoint officers for that purpose. The Secretary of the Treasury shall make such rules and regulations as are necessary to be observed by vessels at the port of departure and on the voyage, where such vessels, sail from any foreign port or place to any port or place in the United States, to secure the best sanitary condition of such vessel, her cargo, passengers, and crew; which shall be published and communicated to and enforced by the consular officers of the United States. None of the penalties herein imposed shall attach to any vessel or owner or officer thereof until a copy of this act, with the rules and regulations made in pursuance thereof, has been posted up in the office of the consul or other consular officer of the United States for ten days, in the port from which said vessel sailed; and the certificate of such

consul or consular officer over his official signature shall be compe-

SEC. 4. That it shall be the duty of the Supervising Surgeoneases are or may be imported into the United States, and to this end the consular officer of the United States at such ports and places as shall be designated by the Secretary of the Treasury shall make to the Secretary of the Treasury weekly reports of the sanitary condition of the ports and places at which they are respectively stationed, according to such forms as the Secretary of the Treasury shall prethorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States, and shall prepare, publish, and transmit to collectors of customs and to State and municipal health officers and other sanitarians weekly abstracts of the consular sanitary reports and other pertinent information received by him, and shall also, as far as he may be able, by means of the voluntary cooperation of State and municipal authorities, of public associations, and private persons, procure information relating to the climatic and other conditions affecting the public health, and shall make an annual report of his operations to to to many deem important to the public interests.

SEC. 5. That the Secretary of the Treasury shall from time to time issue to the consular officers of the United States and to the medical officers serving at any foreign port, and otherwise make publicly known, the rules and regulations made by him, to be used and complied with by vessels in foreign ports, for securing the best sanitary condition of such vessels, their cargoes, passengers, and crew, before their departure for any port in the United States, and

is generally badly rat infested. In general, the engine room and vessel, its cargo, passengers, and crew; and said consular or medical fireroom do not harbor rats, but in the treatment of a plague-infested officer is required, before granting such duplicate bill of health, to

State and municipal health authorities as may be made in pursuance trict attorney for such district shall appear on behalf of the United of, or consistent with, this act; and any such vessel which shall enter, States, and all such proceedings shall be conducted in accordance State and municipal health authorities as may be made in pursuance trict attorney for such district shall appear on behalf of the United of, or consistent with, this act; and any such vessel which shall enter, a states; and all such proceedings shall be conducted in accordance or attempt to enter, a port of the United States in violation thereof with the rules and laws governing cases of science of shall forfeit to the United States a sum, to be awarded in the discretive violation of the revenue laws of the United States.

Sec. 3. That the Supervising Surgeon-General of the Marine-

United States district attorney for such district shall appear on behalf of the United States; and all such proceedings shall be conducted in accordance with the rules and laws governing cases of seizure of vessels for violation of the revenue laws of the United States.

SEC. 2. That any vessel at any foreign port clearing for any port or place in the United States shall be required to obtain from the consult, vice-consult, or either consults of foreign ports. of departure, or from the medical officer where such officer has been detailed by the President for that purpose, a bill of health, in duplicate, in the form prescribed by the Secretary of the Treasury, setting forth the sanitary history and condition of said vessel, and that it has in all respects complied with the rules and regulations in such cases prescribed for securing the best sanitary condition of the said

be satisfied that the matters and things therein stated are true; and for his services in that behalf he shall be entitled to demand and QUARANTINE LAWS OF THE UNITED STATES. receive such fees as shall by lawful regulation be allowed, to be accounted for as is required in other cases.

The President, in his discretion, is authorized to detail any medical officer of the Government to serve in the office of the consul at any foreign port for the purpose of furnishing information and making the inspection and giving the bills of health hereinbefore mentioned.

Any vessel clearing and sailing from any such port without such Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That it shall be unlayful for any merchant ship or other vessel from any foreign port or place of [to] enter any port of the United States except in accordance with saide, to be recovered by proceedings in the proper district court of the provisions of this act and with such rules and regulations of the United States. In all such proceedings the United States disstate and municipal health authorities as may be made in pursuance traits extract for such district shall appear on helalf of the United States.

SEC. 3. That the Supervising Surgeon-General of the Marinea lien upon said vessel, to be recovered by proceedings in the proper Sec. 3. That the Supervising Surgeon-General of the Marine-district court of the United States. In all such proceedings the examine the quarantine regulations of all State and municipal United States district attorney for such district shall appear on behalf a boards of health, and shall, under the direction of the Secretary of boards of health, and shall, under the direction of the Secretary of the Treasury, cooperate with and aid State and municipal boards of health in the execution and enforcement of the rules and regulations of sixth boards and in the execution and enforcement of the rules and regulations made by the Secretary of the Treasury, to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, and into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia; and all rules and regulations made by the Secretary of the Treasury shall operate uniformly and in no manner discriminate against any port or place; and at such ports and places within the United States as have no quarantine regulations under State or municipal authority, where such regulations are, in the opinion of the Secre-

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180. The strength of cyanide gas and the duration of exposure

anide per thousand cubic feet of space, exposure one-half hour.

(b) For destruction of fleas: Two and one-half ounces of sodium (b) For destitions of destitions of the control of gated for flea destruction only, but always with the idea of rate for each individual compartment. destruction as well as flea destruction.

(c) For destruction of rodents (rats and mice): Five ounges

(d) For destruction of lice: Ten ounces of sodium cyanide per thousand cubic feet of space, exposure for two hours.

per thousand cubic feet of space, exposure for one hour.

The above standards apply to empty holds and superstructure. except storerooms that have a large quantity of stores. In cargo should be arranged in compact order and placed on elevated platladen holds or in well-packed storerooms the length of exposur shall be doubled.

181. The standard for sulphur dioxide as to strength and exposur is as follows:

(a) For mosquito destruction: Two pounds of sulphur per thousar cubic feet of space, exposure for one hour.

cuoic teet of space, exposure for one hour.

(b) For destruction of lice: Four pounds of sulphur per thousand the fort of the sulphur per thousand the sulphur per the sulphur per thousand the sulp cubic feet of space, exposure for six hours.

time of exposure should be doubled.

varies with the object sought. The service standards in this respect be estimated as containing 100 cubic feet. A vessel of 1,000 net tonare as follows: holds alone, since net tonnage indicates the cargo carrying capacity in contradistinction to the gross tonnage which indicates the ship's total cubic capacity.

184. The various details in connection with the fumigation of vessels are of almost equal importance as the nature of the fumigant sodium cyanide per thousand cubic feet of space, exposure for two used, and the observation of these details to a large extent determines the effectiveness or the inefficiency of the fumigation. All possible care should be observed by the quarantine officer to see that dead thousand cubic feet of space, exposure for two hours. I space in the vessel is opened up and all practical measures should (e) For destruction of bedbugs: Five ounces of sodium cyanides be taken to aid in the diffusion of the fumigating gas, and this is especially important when sulphur dioxide is used. All dunnage and loose material from the holds of a vessel that is not cargo laden forms to avoid rat harborage. If sulphur dioxide is generated in a furnace and lead into the vessel, it should be introduced at the lowest point and the hatches left open for a short while so as to permit of the escape of air and hasten diffusion of the sulphur fumes. Pipe casing should be opened up and from one end of the vessel to the as tespermit of penetration of the gas into the bilges. Any planked whic feet of space, exposure for six hours.

(c) For destruction of rats (fleas): Three pounds of sulphur pen should also be freely opened, and wherever there is dead space thousand cubic feet of space, exposure for six hours.

The above standard is for superstructure, partially filled store; Careful attention should be given to lifeboats, which are often incrooms, and empty holds. For cargo-laden holds and well-filled fested by rats which resort to these places for water. Preferably, storerooms, or in compartments that are packed with materials, the lifeboats should be cleaned and flooded by water prior to fumigation. Very close attention should be given to the poop deck, which is a space frequently containing a heterogeneous collection of litter and

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To each ounce of potassium cyanide 1 fluid ounce of commercial sumigation. Sulphuric acid 66B and 2½ fluid ounces of water shall be used.

each fumigation. All parts of the vessel shall be placed under fumigation simul. To the officer in charge. taneously except such compartments as may not require fumigation. If artificial means for ventilation, such as blower or fan, are not in the opinion of a representative of the United States Public Health available, windsails shipped into place should be utilized for aera-

mixed after all openings have been sealed except the exit for the quantity.

operator. Finally the operator drops the cyanide into the acid. After measures have been taken to free compartments of cyanide being quickly sealed.

acid gas, specific arrangements should be made for the disposition seators or by the officer himself. This shall be done as a final step of the crew during the fumigation process, especially if one or two must be obtained from the captain or first officer of the vessel that the officer in charge of the funigation and on board the vessel concrew has been accounted for, as not being in the vessel or else kot cosped; but during the interval between the sealing of compartments of the gas. Persons in one compartment have ments undergoing funigation and the time appointed for determinant or the vessel or else kot cosped; but during the interval between the sealing of compartments of the funes of the gas.

² Commercial cyanide of potash not infrequently has a fused chloride blended with the prevention of any persons entering compartments before perit. Such preparations should not be used as the chloride affects the generation of mission of the officer in charge.

This gas is generated by the mixture of water, sulphuric acid and a cyanide salt, either potassium 2 or sodium in the following promitted to enter the various compartments of the ship until entry to
portions: such space is declared safe by the medical officer in charge of the

sulphuric acid 66B and 2½ fluid ounces of water shall be used.

Subsequent to opening hatches, companionways, and ports, not To each ounce of sodium cyanide 1½ ounces of commercial sulfess than 15 minutes shall elapse before any one shall enter the phuric acid 66B and 2 fluid ounces of water shall be used. All ingredients shall be weighed and mixed immediately prior to and not less than one hour before entering the holds. This is the minimum, and the time will be prolonged according to the discretion

Service.

The paraphernalia required includes a tight wooden barrel (pref. Ber land) for use in holds; earthenware crocks or jars for smaller pig. Leat, etc.) shall be lowered and exposed to the aerial concompartments, and earthenware jugs or carboys as acid containers. Lent of such compartments, and the effects produced, if any, shall.

In the fumigation of superstructures, the acid and water are be a guide in estimating the amount of gas present in dangerous and the effects produced and exposed to the aerial concentration.

water by hand and hastily leaves the apartment, the door of exit tumes, and the application of test by captive animal indicates sufficient dissipation of the gas to make entering the compartments a safe On account of the great danger to human life from hydrocyanic procedure, they shall be entered in all parts by one of the furni-

been killed by fumes escaping from another compartment under ing the safety of entering, the officer may designate a trustworthy going fumigation. Compartments above deck should have danger employees, or employees, to attend to the opening up of compartlabels pasted on doorways after fumigation has commenced.

At 43.5° F. very little formaldehyde is liberated, the formaldehyde

being polymerized on the sheets.

175. Formaldehyde with dry heat in partial vacuum.—This method has superior penetrating powers and is especially applicable to has superior penetrating powers and is especially applicable to clothing and baggage. The requirements of this method are (1) dry neat of 60° C. sustained for one hour; (2) a vacuum of 15 inches; (3) foke, or charcoal, in special apparatus, and the gas as produced formaldehyde evolved from a mixture of formalin with a neutral consists of about 5 per cent carbon monoxide; 18 per cent carbon salt, in an autoclave under pressure, using not less than 30 ounces of formalin (40 per cent) for 1,000 cubic feet; and (4) a total exposure, under these combined conditions, of one hour.

176. Chemical, as—

(1) Formalin permanganate, method.—When formalin is poured over crystals of permanganate of potash a vigorous reaction takes place and a large quantity of formaldehyde gas is liberated. Reaction is over in a short time, five minutes, and if a proper proportion of substance is used, the residue is almost dry. The proportion is 2 pints of formalin to 1 pound of permanante of potash. One pint of formalin for 1,000 cubic feet of space should be used if the temperature is 60° F. or less; a less amount may be used for higher temperatures, but not less than 10 ounces per 1,000 cubic feet. This method is extremely efficient on account of the rapidity with which the gas is liberated, but the danger of fire should be guarded against, as the formaldehyde gas, being in a comparatively dry state, is inflammable in the presence of a light, such as lighted matches,

(2) Formalin-aluminum sulphate-lime method. -Add 1 part sul-(2) Formalin-aluminum sulphate-lime method.—Add 1 part sulphate of aluminum to 2 parts of hot water. One part of this solution is added to 2 parts of formalin (both by volume). One part of this second solution is poured on 2 parts of unslaked lime (quicklime), broken into small particles. The process of liberation of formaldehyde gas is completed in about 20 minutes. This method is not as efficient as the previous one, as less than half the amount of formal dehyde gas is yielded from the same amount of formalin. Two pints of formalin part 1000 cubic feet of space should be used if the transfer. of formalin per 1,000 cubic feet of space should be used if the tem-

It should be noted that formaldehyde disinfection is more efficient in warm, moist, or still weather than in cold, dry, or windy weather.

GENTS FOR THE DESTRUCTION OF YERMIN, I. E., RATS, FLEAS,

dioxide, and 77 per cent nitrogen. Twenty kilos of carbon, coke, or charcoal are used for every 1,000 meters of space. The gas is allowed to remain in the ship for two hours, and from seven to eight hours are allowed for it to leave. This is about equivalent to be supported the support of depended on for complete work, where there is evidence of plague among rats on the vessel, as the infected fleas would infect the rats coming aboard after the deratization.

178. The fumes of burning pyrethrum may be used to destroy mosquitoes when other fumigants are not available or where they can not be used. Four pounds per 1,000 cubic feet of space for two hours' exposure will practically destroy all mosquitoes, but precautions should be taken to sweep up and destroy any that may have examine taken to sweep up and destroy any that may have examined. Pyrethrum stains walls and paper, and is the least reliable of the culecides.

HYDROCYANIC-ACID GAS.

179. Hydrocyanic-acid gas is the most penetrating and the most toxic of all fumigants. It is easily and quickly generated, requires very little apparatus, is not destructive to inanimate objects, and in the hands of experienced operators and safeguarded by certain precautionary measures its use is not attended by unusual

dioxide bleaches fabrics or materials dyed with vegetable or aniline dyes. It destroys linen or cotton goods by rotting the fiber through the agency of the acids formed. It injures most metals.

168. FORMALDEHYDE GAS.—Formaldehyde gas is effective if applied by one of the methods given below. Formaldehyde gas has the advantage as a disinfectant that it does not injure fabrics or most colors. It is not poisonous to the higher forms of animal life. It fails to kill vermin, such as rats, mice, roaches, bedbugs, etc. The method is not applicable to the holds of large vessels. Formal-The method is not applicable to the holds of large vessels. Formal-dehyde is applicable to the disinfection of rooms, clothing, and fabrics, but should not be depended upon for bedding, upholstyred furniture, and the like, when deep penetration is required.

169. Many formaldehyde solutions do not contain 40 per cent of formaldehyde, and all are apt to deteriorate with time. It is therefore necessary to use a quantity in excess of the amount prescribed in these required in the completions and the second contains the con

in these regulations unless the solution has been recently analyzed.

170. The following methods of evolving the gas may be used:

(a) Autoclave under pressure, 3 to 12 hours' exposure.

(b) Lamp generator, 6 to 18 hours' exposure.

- (c) Spraying, 12 to 24 hours' exposure. (d) Formaldehyde and dry heat in partial vacuum, 1 hour's ex-
- (e) Chemical, as formalin-permanganate method of Russel (see par. 166); formalin-aluminum sulphate-lime of Walker (see par. 166).
- 171. The minimum number of hours' exposure as given above applies to empty rooms of tight construction containing smooth, hard surfaces; the maximum number of hours' exposure applying in all cases to textile and other articles of a similar kind requiring more or less penetration.

 172. Autoclave under pressure.—This method has considerable

penetrating power when applied as detailed below. Rooms or apartments need no special preparation beyond the ordinary closing of doors and windows. Pasting, calking, or chinking of ordinary

cracks and crevices is not necessary. The doors of lockers and closets and the drawers of bureaus should be opened. In this apparatus use formalin (40 per cent), with the addition of a neutral salt, such as calcium chloride (20 per cent). The gas must be evolved under a pressure not less than 45 pounds. After the gas is separated from its watery solution the pressure may be allowed to fall and steam projected into the compartment to supply the necessary moisture. Use not less than 10 ounces of formalin per 1,000 cubic feet, and keep the room closed for 3 to 12 hours after the completion of the process. For large rooms the gas must be introduced at several points as far apart as possible. It is applicable to the disinfection of clothing and fabrics suspended loosely in such a manner that every article is freely accessible to the gas from all directions

173. Lamp generator.—This method requires an apparatus producing formaldehyde by a partial oxidation of wood alcohol, and in using it the room or apartment should be rendered tight as practicable. Oxidize 24 ounces of wood alcohol per 1,000 cubic feet and keep the room closed for 6 to 18 hours, in accordance with the provisions of paragraph 160. This method leaves little or no odor When applied to clothing and textiles, the articles should be suspended in a tight room and so disposed as to permit free access of the gas. (See also par. 171.) The wood alcohol should be of 95 per cent strength, and should not contain more than 5 per cent of

174. Spraying.—The formalin (40 per cent) should be sprayed on sheets suspended in the room in such a manner that the solution emains in small drops on the sheet. Spray not less than 10 ounces of formalin (40 per cent) for each 1,000 cubic feet. Used in this way a sheet will hold about 5 ounces without dripping or the drops running together. The room must be very tightly sealed in disinfecting with this process, and kept closed not less than 12 hours. The method is limited to rooms or apartments not exceeding 2,000 cubic feet. The formalin may also be sprayed upon the walls, floors, and objects in the room. This method is markedly interfered with by, and is not to be relied on at, low temperatures, say below 72° F.

STEAM .- (a) Flowing steam (not under pressure): Flowing steam when applied under suitable conditions is an efficient disinfecting agent. The exposure must be continued 30 minutes after the temperature has reached 100° C.

(b) Steam under pressure without vacuum: Steam under pressure will sterilize, provided that the process is continued 20 minutes after the pressure reaches 15 pounds per square inch. The air must be expelled from the apparatus at the beginning of the process. If impracticable to obtain the designated pressure, a longer exposure will accomplish the same result.

(c) Steam under pressure with vacuum: Steam in a special apparatus with vacuum attachment is the best method of applying steam under pressure, the object of the vacuum apparatus being to expel the air and to promote the penetration of the steam. The process is to be continued for 20 minutes after the pressure reaches 10 pounds to the square inch.

CHEMICAL SOLUTIONS.

161. BICHLORIDE OF MERCURY.—Bichloride of mercury is a disinfectant of undoubted potency and wide range of applicability. It can not be depended upon to penetrate substances in the presence of albuminous matter. It should be used in solutions of 1 to 1,000. The solubility of bichloride of mercury may be increased by using sea water for the solution, or by adding 2 parts per 1,000 of sodium or ammonium chloride to the water employed.

162. CARBOLIC ACID.—Carbolic acid in the strength of 5 per centres (see paragraph 27) may be substituted for the bichloride of mercury. and should be employed in the disinfection of the cabins and living apartments of ships to obviate injurious action on polished metals,

163. FORMALIN.-Formalin containing 40 per cent of formaldehyde may be used in a 5 per cent solution as a substitute for bichloride of mercury or carbolic acid, and is useful for the disinfec-

tion of surfaces, dejecta, fabrics, and a great variety of objects, owing to its noninjurious character,

GASEOUS AGENTS

164. Sulphur dioxide is efficient, but requires the presence of moisture. It is only a surface disinfectant, and is lacking in penetrating properties. An atmosphere containing 4.5 per cent can be obtained by burning 5 pounds of sulphur per 1,000 cubic feet of space. This amount would require the evaporation or volatilization of about 1 pint of water. In the above proportion it may be used as a disinfectant for some quarantinable diseases, as smallpox, cholera. Its principal use in maritime quarantine is in the destruction of disease-carrying vermin, rats, fleas, lice, mosquitoes, etc. For this it is a very efficient agent, ranking next to hydrocyanic acid gas.

165. The sulphur may be burned in shallow iron ovens (Dutch ovens) containing not more than 30 pounds of sulphur for each pot, and the pots should stand in vessels of water. Quicker and better results can be obtained from burning the same total amount of sulphur in a number of small shallow ovens (Dutch ovens), 5 to 10 pounds in each, than in a few large ovens. The sulphur ovens should be elevated from the bottom of the compartment to be disinfected in order to obtain the maximum possible percentage of combustion of sulphur. The sulphur should be in a state of fine division, and ignition is best accomplished by alcohol; special care division, and ignition is best accomplished by alcohol; special care to be taken with this method to prevent damage to cargo of vessel to be taken with this method to prevent damage to cargo of vessel with the cargo in a special furnace, the symbin dioxide being distributed by a power fan. This method is peculiarly applicable to cargo vessels.

166. Liquefied sulphur dioxide may be used for disinfection in place of sulphur dioxide generated as above, it being borne in mind that this process will require 2 pounds of the liquefied eas for each

that this process will require 2 pounds of the liquefied gas for each pound of sulphur, as indicated in the above paragraphs.

167. Sulphur dioxide is especially applicable to the holds of

vessels, or to freight cars and apartments that may be tightly closed and which do not contain objects injured by the gas. Sulphur

Disinfection for the purpose of destroying bacteria for the pre-

vention of bubonic plague is irrational and unnecessary.

156. The only procedure that is called for in preventing the spread of yellow fever (aside from the control of the human host) is that for the destruction of mosquitoes, and this is best accomplished by fumigation with sulphur dioxide or hydrocyanic acid gas. Bactericidal measures have no place in the prevention or destruction of yellow fever infection.

157. In cholera the control of the human host and the safe disposal of the excreta therefrom, the destruction of contaminated food or water, or their sterilization (cooking, boiling, etc.), are the essential features in preventive measures. Funigation or place disinfection is not called for in cholera preventive measures. Where a case of cholera has resulted in soiling the bedding, as an added precaution such effects should be sterilized and the floors and walls of the compartment washed down with bichloride solution. The cholera vibrio has practically no resistance to drying, however, and under natural conditions it is improbable that soiled linen or an infected place will result in the spread of the disease. While bathing and personal cleanliness is to be encouraged at the quarantine station, it is not to be assumed that disinfection of wearing apparel and personal effects of the contacts, or the disinfection of the body has any material effect in preventing the spread of the infection. The confrol of the personnel and the assured safe disposal of body discharges and protection of food and water supply are the important features. to be observed in the prevention of cholers

158. The important feature in typhus preventive measures is the assured destruction of all vermin on the person, clothing, and personal effects of those actually sick with typhus and those who have been in contact with typhus infected persons. In this latter group are to be included those persons from a known typhus-infected area. The destruction of lice on clothing is best effected by heat, steam under

pressure by preference, but flowing steam without pressure will suffice, provided the articles to be disinfected are not closely packed. Dry heat is likewise effective. Body lice and head lice can very well be destroyed by mechanical cleaning—soap and hot water—but the application of a solution of equal parts of vinegar and kerosene to hairy parts will greatly assist in the removal of nits and lice. This solution should be allowed to remain 15 minutes or half an hour before bathing. The treatment of personal effects and baggage of verminous persons is necessary, but in the case of those individuals who are passed as free of vermin, and not requiring disinfection, their baggage likewise should be passed without treatment. Bactericidal measures are not called for in typhus prevention. The question is solely that of the destruction of lice and the detention in quarantine for a period of 12 days of those persons who have been intimately exposed to typhus infection and who presumably may develop the disease, as well as those actually sick.

159. For the prevention of the spread of leprosy, the chief and practically the only measure called for is the isolation of the patient, either in a National or State leprosarium. When in temporary confinement at the quarantine stations, when traveling, or under other conditions that would entail contact with the public, especial precautions would include the sterilization of eating utensils used by the leper and the disinfection of bed clothes. As a measure of added precaution, the compartment in which the leper has lived or been confined should, after his removal, be sterilized by mechanical cleaning and fumigation by formaldehyde gas.

DISINFECTANTS AUTHORIZED BY THE UNITED STATES QUARANTINE REGULATIONS AND THE PROPER METHODS OF GENERATING AND USING SAME.

PHYSICAL DISINFECTANTS.

BURNING.—Of unquestioned efficiency, but seldom required. Boiling.—Very efficient and of wide range of applicability. The articles must be wholly immersed for not less than 10 minutes in water actually boiling (100° C.). The addition of 1 per cent of disease of rodents. It is only accidently transmitted to the human by means of the fleas which have fed on an infected rodent host and which, having become dislodged and finding no other preferred host available, perforce turn to the human as the only source of blood supply. It is alleged that the bedbug may transmit the disease. As it is not a parasite of the rat, it probably would never attack the rat under natural conditions. The only means of its transmitting the disease would be through the ingestion of blood from the human host during the infectious stage. This would be possible only in cases of septicemic plague. Under such conditions it is not improbable that the bedbug may be infectious for any subsequent human host which it might attack. Such a combination of circumstances is a rate occurrence. In any event, the bedbug would cause only individual cases of the disease and would not be productive of an epidemic or operate to the widespread dissemination of the

. 149. PNEUMONIC PLAGUE: From an epidemiological standpoint and as to the application of preventive measures, pneumonic plague are to be considered as wholly separate diseases. Pneumonic plague is transmitted solely through personal contact in the same fashion as pneumonia or other respiratory diseases. Neither the flea nor other insects are concerned in the direct transmission of pneumonic plague.

150. Yellow PEYER: The organism causing this disease remains

150. Yellow Fever: The organism causing this disease remains unknown, but the virus is inert except it be transmitted by a species of mosquito, i. e., Aedes calopus (stegomyia), and this only after an intrinsic cycle of development in the body of such mosquito.

151. TYPHUS FEVER: The causative organism of this disease has not as yet been definitely isolated and accepted as such. The transmitting agent of typhus, however, is the louse, both the body louse and the head louse, but chiefly the former. No natural means of transmission of typhus infection other than the louse has been accepted.

152. CHOLERA: This disease is caused by the cholera vibrio when introduced into the gastro-intestinal tract. Food or water indirectly contaminated is the chief means by which the disease is con-

veyed, but on board ship, direct contact or the immediate pollution of alimentary substances by "carriers" or acute cases are to be considered the more common means by which the cholera infection is transmitted. The possibility of water ballast being infected or constituting a probable source of spreading the disease is so remote as to be negligible, and the same applies in a general way to cargo and ship supplies. Accurate knowledge that none of the personnel is harboring the cholera organisms in their gastro-intestinal tract is the most important feature in the treatment of cholera-infected

153. SMALLPOX: The causative agent of this disease has not been identified, but for all practical purposes it may be considered that more or less intimacy of contact is essential for the spread of the disease. It should also be borne in mind that immune contacts or convalescents may transmit the virus in either their clothing, their personal effects, or possibly in the body secretions.

154. Leprosy: The causative agent of this disease is believed to be B. leprae, which is an "acid-fast" bacillus found in the tissues of persons having the disease. Nothing definite has been worked out as to the manner in which the infection is transmitted and preventive measures are practically confined solely to the isolation and segregation of the leprous persons.

and segregation of the leprous persons.

155. From the foregoing, therefore, it is evident that the treatment of plague-infected yessels calls for the definite destruction of all rodents and their parasites and bedbugs where there has been typiticemic types of the disease. While fleas normally have their grassites may occasionally be dislodged and temporarily be found in the environment. When rodent infection has actually been demonstrated on board a vessel, consideration should be given to the destruction of rats, mice, and fleas in all parts of the vessel by some disinfecting agent which will penetrate to all parts of the vessel and will be toxic both to animal and insect life. Sulphur dioxide and hydrocyanic acid gas are best adapted for this purpose. When human cases are found on vessels that have acquired their infection en route, indicating the dispersal of infected fleas, it may be advis-

138. Articles of merchandise, personal effects, etc., which are presumably infected, shall not be allowed entry into the United States until after disinfection.

139. Persons shall not enter the United States from countries where any of the quarantinable diseases are reported excepting at ports of entry, and after inspection by a quarantine officer and such necessary treatment as indicated in the foregoing paragraphs.

CHAPTER XIX.

SPECIAL REGULATIONS RELATING TO NAVAL VESSELS.

140. Vessels of the United States Navy entering ports of the United States, its possessions or dependencies, are exempt from inspection if there be a medical officer aboard, provided such vessel has not sailed from a foreign port known to be or suspected of being infected with typhus, cholera, yellow fever, plague, or smallpox.

141. Vessels of the United States Navy are subject to quarantine inspection upon arrival at ports of the United States, its possessions or dependencies, when from a foreign port known or suspected to be

or dependencies, when from a loreign port known or suspected to be infected with yellow fever, bubonic plague, typhus, cholera, and such subsequent detention for disinfection as may be required by reason of disease aboard or exposure to such disease in foreign ports.

142. The certificate of the medical officer of the United States Navy as to the sanitary history of the vessel and its personnel may be accepted for naval vessels by the quarantine officer boarding the vessel in lieu of actual inspection.

143. Vessels of the United States Navy having entered the harbors of infected ports but having held no communication which is liable to convey infection may be exempted from the disinfection and detention imposed on merchant vessels from such ports.

144. Vessels of the United States Navy not carrying a medical officer shall, upon arrival at ports of the United States from foreign ports, be subject to the same provisions of these regulations as apply

CHAPTER XX.

INSPECTION OF STATE AND LOCAL QUARANTINES.

145. In the per ormance of the duties imposed upon him by the act of February 15, 1893, the Surgeon General of the Public Health Service shall, from time to time, personally or through a duly detailed officer of the Public Health Service, inspect the maritime quarantines of the United States, State and local, as well as national, for the purpose of ascertaining whether the quarantine regulations prescribed by the Secretary of the Treasury have been or are being complied with. The Surgeon General, or the officer detailed by him as inspector, shall, at his discretion, visit any incoming vessel or any vessel detained in quarantine, and all portions of the quarantine establishment, for the above-named purposes, and with a view to certifying it reads to the them. to certifying, if need be, that the regulations have been or are being

146. The Surgeon General of the Public Health Service is authorized, when in his discretion such action is necessary in the interest of the public health, to remand, by direction of the Secretary of the Treasury, any vessel to the nearest national, State, or local quarantine station provided with proper facilities for handling infected

APPENDIX.

147. For the proper appreciation of the logical and effective method of destroying all sources of the infection of the quarantinable diseases, consideration should be given to the various ways in which such infectious agents may, under natural conditions, survive or operate toward dissemination.

148. Bubonic placue: This disease is caused by the bacillus pestis, which is transmitted to man through the agency of rats and mice and their ecto-parasites, i. e., fleas. It is primarily and essentially a

ANTHRAX.1

CHAPTER XVII.

the United States shall be made only from hair or bristles, known to be free from anthrax spores.

127. Unless known to be free from anthrax spores such hair or bristles, before being made into shaving or lather brushes, shall be disinfected by one of the following methods: (a) By boiling for not less than 3 hours; (b) by exposure to steam under not less than 15 pounds gauge for not less than 30 minutes with a preliminary vacuum of at least 10 inches; (c) by exposure to streaming steam for

not less than 6 hours.

128. Consignments of shaving brushes of foreign manufacture shall be accompanied by a consular certificate containing a statement as to the prevalence or nonprevalence of anthrax in the territory from which the brushes emanate and also to the effect that the materials entering into the manufacture of the brushes have or have not complied with the requirements of these regulations.

BORDER QUARANTINE.

CHAPTER XVIII.

129. When necessary, travelers arriving at Canadian or Mexican ports, destined for the United States, shall be inspected; at the Canadian or Mexican port of arrival by the United States consular

1 These regulations contemplate that anthrax is primarily a disease of animals that the infection in man is comparatively rare and under such circumstances is not transmitted from man to man. Insamuch as the infection tends to spread only as an epizooid disease, the responsibility for its exclusion primarily pertains to the United States Bureau of Animal Industry. The rules and regulations of that Government agency appear to be sufficient for their purpose, and the requirements contained herein are merely for the additional protection of persons against possible infection from any animal product in such widespread and everyday use as the shaving brush.

or medical officer, and be subjected to the same sanitary restrictions as are called for by the rules and regulations applicable at foreign

130. Where not otherwise specifically stated, the rules and regulations for maritime quarantine shall be applied at stations on the Canadian and Mexican frontiers; and the methods of disinfection shall be those prescribed in these regulations.

131. If any person be found suffering from a quarantinable disease, or be presumably infected, he shall be denied entry or shall be kept under quarantine observation so long as danger of conveying the infection exists.

ing the infection exists,

132. Any baggage or other effects believed to be infected shall
be refused entry unless disinfected in accordance with these
regulations.

133. Persons coming from localities where cholera is prevailing

shall not be allowed entry until they have been proven to be free of cholera vibrios, by laboratory examination, or otherwise detained five days.

134. During the active quarantine season persons not positively identified as immune to yellow fever, coming from places where yel-low fever prevails, will not be permitted to enter until they have been away from said locality six full days, or otherwise held in quarantine to complete six days.

135. Persons coming from localities where smallpox is prevailing shall not be allowed entry without vaccination, unless they are

shall not be allowed entry without vaccination, liness they are projected by a previous attack of the disease or a recent successful vaccination.

136. Persons coming from localities where typhus fever prevails shall not be allowed entry unless demonstrably free from vermin or otherwise disinfected for the destruction of vermin. Disinfection of wearing apparel, baggage, and personal effects for the destruction

of vermin shall be practiced when necessary.

137. No common carrier which is infected, or suspected of being infected, shall be allowed to enter the United States until after such measures have been taken as will render it safe.

(c) Those persons that have not been exposed to the infection may

(d) All personal effects of passengers and crew that have been exposed to infections shall be disinfected. All compartments that have been exposed to the liability of infection shall be disinfected.

TYPHUS.

CHAPTER XIV.

SPECIAL MEASURES AGAINST TYPHUS AT FOREIGN AND INSULAR PORTS,

111. For the purpose of these regulations 12 days shall be sidered as the period of incubation for typhus fever.

112. Passengers and crew from ports infected with typhus shall not be allowed to embark unless demonstrably free from vermin, or otherwise treated for the destruction of vermin. The personal effects, wearing apparel, and baggage of those infested with vermin shall be disinfected.

113. Passengers from localities where typhus prevails embarking at a port not infected with typhus shall be treated as in the preceding

paragraph.

114. Passengers and crew who, in the opinion of the inspecting officer, have been definitely exposed to infection (from a house, barracks, or other building in which has occurred a case of typhus) shall not be allowed to embark until 12 days after removal from the infected environment.

CHAPTER XV.

SPECIAL MEASURES AGAINST TYPHUS AT PORTS OF ARRIVAL.

115. Vessels on which typhus infection has occurred shall be detained in quarantine and the sick, if any, removed and isolated.

vaccination, detained in quarantine for 14 days after last exposure to The clothing, personal effects, and baggage of those infected and of lose not demonstrably vermin free shall be treated for the destruction of vermin.

116. All persons found to be vermin (louse) infested shall be treated for destruction of lice.

117. All passengers and crew that have been exposed to the infec-tion shall be detained under observation for a period of 12 days from ast exposure to infection.

118. Those of the personnel that are demonstrably free from vermin, and have not been exposed to the infection, may be released without detention or disinfection of baggage:

119. Vessels on which typhus has appeared shall be detained and

unilisated for destruction of vermin.

120, Cargo compartments of typhus infected vessels need not be undistated, unless there be exceptional conditions that may render vermin infested.

121. Sulphur dioxide and hydrocyanic acid gas are effective agents or the destruction of lice when used in proper strength and exposure.

LEPROSY.

CHAPTER XVI.

122. Alien lepers should not be permitted to embark at a foreign port for a port of the United States, its possessions or dependencies, either as a passenger or as a member of the crew.

123. Vessels arriving in quarantine with leprosy on board shall not be trained pratique until the leper and his baggage has been removed from the vessel to the quarantine station.

124. No alien leper shall be permitted to land, and to this end the

sioner of immigration.
125. If the leper be a citizen of the United States, the case shall promptly be reported to the Surgeon General for further action.

109. Each steerage passenger shall be furnished with an inspection card as follows. This card, stamped by the consular or medical officer, is to be sincised to every member of a family as well as to the head thereof.

| INSPECTION CARD. | IDMINISTRATE | IDMINIS

98. If pneumonic plague has occurred on board ship during the voyage, the sick shall be removed and isolated, and all crew and passengers that have been exposed to the infection shall be detained in quarantine for a period of 7 days, or, at the discretion of the quarantine officer, until their secretions shall be proven to be free from B. pestis.

99. The quarantine officer, before granting pratique to a vessel that has been detained in quarantine on account of plague infection, shall assure himself that the vessel is free from rats and vermin.

100. The personal effects in use, and the belongings of crew and passengers, which in the opinion of the quarantine officer are considered as infected, shall be disinfected and rendered free from vermin.

101. Vessels from foreign ports or ports in the possessions of the United States, or domestic ports that are knot in or suspected of being infected with plague, may, when loaded with cargo, the nature of which or manner of storage precludes effective fumigation, be permitted to enter subject to the terms of a provisional pratique. When lying alongside wharf or dock at United States ports such vessels shall take proper precautions to prevent the passage of rodents. The vessel shall be fended off from wharf or dock not less than 4 feet, and on all connecting lines shall be fixed rat-guards of sheet metal of an approved design, not less than 3 fest in diameter. All cargo nets and similar devices extending between the vessel and shore structures shall be removed at night unless in actual use, as likewise gangways and ladders unless guarded. Any vessel so entering and neglecting to effectively apply such measures may, at the discretion of the Surgeon General, be remanded to the quarantine station for discharge of cargo, or required to discharge cargo at anchor well removed from the wharf.

102. Vessels from ports known to be infected with plague, in man or rodents, which have docked or which have not taken precautions necessary to prevent the ingress of rats, and on which effective measures have not been taken to destroy the same under the supervision of an accredited medical officer of the United States Govern-

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ment, shall, upon arrival at a port in the United States, be fumigated for the destruction of rats.

103: All vessels engaged in trade with foreign ports shall be fumigated not less than once every 6 months for the purpose of destroying rats. This is best done when the vessel is empty.

rats. This is best done when the vessel is empty.

104. A fumigation certificate signed by an accredited medical officer of the United States Government will be the evidence accepted by the quarantine officer in considering the enforcement of paragraph 103.

105. In applying plague preventive measures, vessels without cargo shall be furnigated simultaneously in all parts with sulphur dioxide gas, not less then 3 pounds per 1,000 cubic feet for 6 hours' exposure; or by hydrocyanic acid gas in the proportion of 5 ounces of sadium cyanide per 1,000 cubic feet of space (or equivalent amount of potassium-cyanide) for 2 hours. If the vessel be loaded, the time of exposure shall be doubled.

106. When necessary in the treatment of infected vessels, the quarantine officer may require the master to partially discharge cargo for the purpose of effective performance of fumigation.

SMALLPOX.

CHAPTER XII.

SPECIAL MEASURES AGAINST SMALLPOX AT FOREIGN AND INSULAR PORTS.

107. For the purpose of these regulations 14 days shall be considered as the incubation period of smallpox.

108. Passengers and crew coming from districts where smallpox prevails in epidemic form, or who have been exposed to smallpox, should be vaccinated before embarkation, unless they show satisfactory evidence of having acquired immunity to smallpox by previous attack, or successful vaccination within one year, and their baggage inspected and, if necessary, disinfected.

possible precaution must be taken to prevent the ingress of stegomyia mosquitoes and their access to the crew.

(b) The officer who must go ashore to enter his vessel must be immune to yellow fever. Passengers, unless immune to yellow fever, must have been free from possible exposure to yellow fever

for six days immediately prior to embarking.

(c) All the above conditions to be certified to specifically by an accredited medical officer of the United States.

88. All persons who can prove their immunity to yellow fever or who have not been exposed to possible infection of yellow fever, may be permitted to land at once.

89. For the destruction of mosquitoes there shall be a complete and simultaneous furnigation of all parts of the vessel by sulphur dio the gas, 2 per cent volume gas, two hours, exposure, or by cyanide garristength of 1 ounce of cyanide per 1,000 cubic feet of space, one last hour exposure.

PLAGUE.

CHAPTER X.

SPECIAL MEASURES AT FOREIGN OR INSULAR PORTS.

90. At ports or places suspected of plague infection in rodents 1 every precaution shall be taken to prevent rats, (mice) and fleas from getting aboard.

91. Vessels sailing from such ports shall be simultaneously fumigated in all parts, preferably when empty, for the destruction of rats.
Lighters should be free of rats, and this is best accomplished by peri

odic fumigation.

92. If the vessel lies at a dock all connecting lines should be guarded by inverted cones or disks not less than 3 feet in diameter and so fixed as to be always at a right angle to the line to which it is

1 Human cases shall be considered as proof of an existent rodent infection.

93. Articles which harbor or are liable to harbor rats or rat fleas should not be shipped until freed of such vermin, either by the use of chemicals, fumigation, or by preventing the access of rats. The nature of the merchandise and the place and method of stowing prior to shipment must be considered in determining its liability to be a rat or vermin carrier, thus: crated cargo; bags of grain, etc., so stowed as to be used as nesting places for rats would be fiea, and might be rat, carriers, and cargo should preferably have been previously stored in rat-proof warehouses. Articles of cargo in open crates should be carefully inspected to determine freedom from rats and, at the discretion of the inspector, may be rejected for shipment if considered as rodent infected. When the cargo of a vessel consists of grain or other rat food, extra precautions should be taken to prevent rats from going aboard.

CHAPTER XI.

SPECIAL MEASURES AGAINST PLAGUE AT PORT OF ARRIVAL.

94. Ships on which plague has occurred in men or rodents shall be detained in quarantine, the sick, if any, shall be removed and isolated, and the destruction of rats shall be effected as soon as prac-

95. A plague-infected ship shall be fumigated simultaneously in 95. A plague-injected simp shall be furnigated simultaneously in all payts for the destruction of rats, including those that may be with injurities of cargo, and other precautions shall in the meantime be observed to prevent the escape of rats from the ship. 96. All rodents destroyed on vessels at quarantine shall, when

practicable, be bacteriologically examined.

97. All persons sick of plague shall be detained in quarantine until well, but no detention of healthy contacts is contemplated (except in the pneumonic type of the disease) other than is incidental to the reatment of vessels or cargo.

CHAPTER IX.

SPECIAL MEASURES AT PORTS OF ARRIVAL (DOMESTIC AND INSULAR).

83. A vessel aboard which a case of yellow fever has occurred at

any time during the voyage shall be treated as follows:

(a) Careful visual and thermometric inspection of all persons (b) The sick are to be immediately disembarked, protected by netting against the access of stegomyia mosquitoes, and transferred to a place of isolation.

(c) Other persons should be disembarked, if possible, and detained under observation for six days, dating from the day of last possible

(d) Persons under observation presenting an elevation of temperature above 37.6° C. shall be isolated in a screened apartment. (e) The ship shall be moored if possible at least 200 meters from the inhabited shore.

(f) The ship shall be furnigated for the destruction of mosquitoes before the discharge of cargo, if possible. If a fumigation be not possible before the discharge of the cargo, the discharge of cargo shall be under the supervision of the quarantine officer, and may be permitted as follows: By (1) the employment of immune persons for discharging the cargo; or (2) if nonimmunes be employed, they shall be kept under observation during the discharging of cargo and for six days, to date from the last day of exposure on board.

84. A vessel which has lain in such proximity to the shore of a port known to be infected as to render it liable to the access of

stegomyia mosquitoes shall be furnigated and the personnel held in detention under observation for six days.

85. A vessel arriving at a southern port (either direct or by way of a northern port of the United States), which, although coming from an infected port or suspected port, has had neither death nor case of yellow fever on board, either before departure, during the voyage, or at the time of arrival, and which the quarantine officer is satisfied has not lain in such proximity to the shore as to render is satisfied has not tain in such proximity to the safet as to rainer it liable to the access of stegomyla mosquitoes, or which has been furnigated under the supervision of an accredited medical officer of the United States immediately before sailing, may, upon arrival at a port of destination in the United States with good sanitary history and in good condition (including the absence of any exposed collection of water in which A. calopus might breed) be subjected to the following treatment:

(a) If arriving in six days or less, she may be admitted to pratique, with or without furnigation, in the discretion of the quarantine officer, and without further detention than is necessary to complete the six days.

(b) If arriving after six days she shall be immediately fumigated (unless previously fumigated at a northern port) and may be admitted without detention.

86. Vessels from ports infected or suspected of infection with yellow fever, calling at southern ports for bunker coal or supplies during the active quarantine season may be allowed to take on such cargo after fumigation, provided the vessel be anchored in a place inaccessible to stegomyia and the crew or passengers be detained on

87. Traffic without detention may be allowed during the active quarantine season, from ports infected or suspected of infection with yellow fever, to ports in the United States south of the southern

boundary of Maryland under the following conditions:

(a) The vessel must lie at approved moorings in the open harbor; the crew must not be allowed ashore at the port of departure. Every

CHAPTER VII.

SPECIAL MEASURES AGAINST CHOLERA AT DOMESTIC PORTS.

67. Special measures shall be employed against vessels and per sons from a cholera infected place, as likewise when cholera has appeared on board during the voyage.

68. All steerage passengers arriving at ports in the United States, its possessions or dependencies, from ports or places where cholera prevails, shall be subjected to bacteriological examination and shall not be admitted to entry until it has been determined by said examination that they are free from cholera vibrios.

69. All persons on vessels upon which cholera has appeared thing the voyage shall upon arrival at quarantine be detained until bas been determined by bacteriological examination that they are from cholera vibrios.

70. Persons in detention who are proven by bacteriological examination (performed not less than 24 hours after removal from exposure to infection in cholera case or carrier) to be free from cholera organisms may be discharged from quarantine without further

71. In lieu of bacteriological examination (and then only when it is impracticable) persons exposed to infection in cholera case or carrier shall be detained in quarantine five days after being isolated from such case or carrier.

72. If a case clinically diagnosed as cholera has occurred on voyage, or if bacteriological examination should reveal the presence of infection in any person on board, such infected person or persons should be removed and isolated. All contacts should be segregated in small groups, and no material capable of conveying infection shall be removed from the ship.

73. Fruits and vegetables from an infected ship, that are ordinarily consumed in an uncooked state, shall be destroyed or ren-

74. The food served to persons in quarantine, unless from a source known to be free from cholera infection, shall be cooked.

75. The water supply of a vessel detained in quarantine on account of cholera infection, unless determined by bacteriological examination to be free from cholera organisms or b. Coli, shall be sterilized.

Otherwise it shall be discharged after disinfection.

76. The dejects of all persons in quarantine on account of cholera shall be disinfected before final disposition, and special precautions shall be exercised in order to prevent the contamination of food or water supply or the spread of the infection through the agency of flies or other insects

77. Personal effects contaminated by dejecta from a cholera case

78. Any part of the ship that has been contaminated by dejecta from a cholera case or carrier shall be disinfected.
78. Any part of the ship that has been contaminated by dejecta from a cholera case or carrier shall be washed down with a solution of bichloride or carbolic acid.
79. Carriers or recovered cases shall not be released from quaran-

tine detention until three bacteriological tests performed on consecutive days shall have been proven to be negative.

YELLOW FEVER.

CHAPTER VIII,

SPECIAL MEASURES AT FOREIGN AND INSULAR PORTS.

80. For the purpose of these regulations six days shall be consid-

ered as the period of incubation of yellow fever.

(SI) It is advisable that at ports where yellow fever prevails, prepositions should be taken to prevent the introduction of mosquitoes, aedes (stegomyia) calopus on board the vessel. Water tanks, water buckets, and other collections of water about the vessel should be guarded in such a manner that they shall not become breeding places for mosquitoes. Where the vessel has lain in such proximity to the shore at such places as to render it liable, in the opinion of the inspecting officer, to the access of aedes (stegomyia) calopus, measures should be taken to destroy mosquitoes that may have 53. No convalescent shall be discharged from quarantine until after a sufficient time has elapsed to insure his freedom from infection, and this is to be determined by bacteriological examination

when necessary and possible.

54. Passengers and crew from vessels in quarantine shall be subsisted at the vessels' expense. Rations and service may be provided at national quarantine stations at rates to be fixed by the Secretary of the Treasury.

Secretary of the Pressury.

55. The body of a person dead from cholera or smallpox shall not be allowed to pass through quarantine until one year has elapsed since death. The body of a person dead from typhus or plague may since death. The body of a person dead from typins or plague may be permitted to pass through quarantine if free from vermin; if dead from yellow fever, no precautions are required. Bodies of persons dying at quarantine stations from quarantinable disease should regardly be cremated or buried at station. erably be cremated or buried at station.

erapty be cremated or buried at station.

56. The quarantine officer shall report to the Secretary of the Treasury, through the Surgeon General of the United States Public Health Service, all violations of the quarantine laws.

57. The quarantine officer shall report to the collector of customs any vessel which arrives without the bill of health hereinbefore.

58. All vessels requiring inspection under these regulations must present to the collector of customs at the port of entry the quarantine certificate above prescribed.

SPECIAL REGULATIONS.

CHAPTER VI.

SPECIAL MEASURES AGAINST CHOLERA AT FOREIGN AND INSULAR PORTS.

59. At ports where cholera prevails special care should be taken to prevent the water and the food supply from being infected. The

drinking water, unless of known purity, should be boiled and the food thoroughly cooked and protected against contamination by

60. The latrines of vessels must be so arranged that they, including

their discharge pipes, can be made and kept mechanically clean.

61. Certain food products that are ordinarily consumed in an uncooked state coming from cholera-infected localities or through such localities, if exposed to infection therein, should not be shipped. Vegetables ordinarily eaten in an uncooked state when grown in dis-

Vegetables ordinarily eater in an uncooked state when grown in districts where cholera prevails, shall not be shipped. Fruits grown on trees or on shrubs may be shipped.

62. The baggage of steerage passengers shall be inspected and no food shall be taken aboard in such baggage.

63. Steerage passengers and crew coming from cholera-infected districts should be subjected to bacteriological examination, or otherwise detained five days in an environment known to be free from any source of infection.

from any source of infection.

64. Steerage passengers and crew from districts not infected with cholera, shipping at a port infected with cholera, unless passed through without danger of infection, should be treated as those in the last paragraph.

65. Cabin passengers coming from cholera-infected districts should produce satisfactory evidence as to their exact place of abode during the five days immediately preceding embarkation. If it appears that they have been exposed to infection, they shall be detained under medical supervision a sufficient time to cover the period of interesting the cover the period of the control of the cover the period of the cover the cover the period of the cover the period incubation since last exposure, or otherwise be subjected to bacterio-

incupation since last exposure, or otherwise be subjected to bactero-logical examination.

6. Should cholers appear in the barracks or house in which pas-sengers are undegroing detention, no passengers from said houses or barracks who have been previously exposed to this new infection should embark until they have been determined free of the infection by bacteriological examination, or otherwise isolated for a period of five days. of five days.

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QUARANTINE DETENTION.

41. Vessels arriving under the following conditions shall be placed

(a) With quarantinable disease on board or having had sucl ease on board during the voyage (b) Any vessel which the quarantine officer considers infected with

(c) A vessel arriving at a port south of the southern boundary of Virginia in the season of active quarantine, April 1 to November 1,

from a port infected or suspected of infection with yellow fever.

(d) Vessels arriving at ports north of this line and south of the

(d) vessels arriving at ports norm of this line and south of the southern boundary of Maryland between May 15 and October 1, if from a port infected or suspected of infection with yellow fever.

(e) In the case of vessels arriving at a northern port without change in the case of vessels arriving at a northern port without change in the personnel shall be detained under observation at quarantine to complete six

days from the port of departure. (f) Towboats and other vessels having had communication with vessels subjected to quarantine shall themselves be quarantined if

they have been exposed to infection.

42. The duration of detention of vessels or personnel herein con templated will depend upon the quarantinable disease involved and will hereinafter be specifically provided for.

CHAPTER V.

GENERAL REQUIREMENTS AT QUARANTINE STATIONS.

43 Pilots will be detained in quarantine a sufficient time to cove the period of incubation of the disease for which the vessel is quarantined, if, in the opinion of the quarantine officer, such pilots have been exposed to infection. The dunnage of pilots shall be dis-

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44. No direct communication shall be allowed between any vessel in quarantine and any person or place outside, and no com-munication whatever between quarantine or any vessel in quarantine and any person or place outside except under the supervision of the quarantine officer.

45. After a vessel has been rendered free from infection, it may be furnished with a fresh crew and released from quarantine, while

all or part of the personnel are detained.

46. Vessels detained at any national quarantine will be subject to such additional rules and regulations as may be promulgated from

time to time by the Surgeon General.

47. The form of certificate which shall be issued to a vessel when released from quarantine shall be prescribed by the Surgeon General of the Public Health Service, and shall embody, the statement that the vessel has in all respects complied with the quarantine regulations prescribed by the Secretary of the Treasury, and that in the opinion of the quarantine officer it will not convey quarantinable disease, and that said vessel is granted free or provisional pratique to enter her port of destination, the name of which is to be embodied in the blank.

48. The persons detained shall be inspected by the physician twice daily, and be under his constant surveillance, and no intercourse will be allowed between different groups while in quarantine.

49. No presumably infected articles from an infected vessel shall

be carried into the place of detention until disinfected.

(56): Cleanliness of quarters and of person will be enjoined and daily enfyred. Disinfection shall be practiced where there is any possibility of infection.
 (51): In any group in which communicable disease appears, the sick will be immediately isolated in hospital, and the remaining persons in the group and their effects appreciately the state of a single persons.

in the group and their effects appropriately treated and then removed to other quarters, if possible, and the compartments disinfected.

52. Communication between the physician and attendants of the hospital and those detained in other parts of the quarantine station shall be reduced to a minimum.

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INSPECTION.

34. Every vessel subject to quarantine inspection, entering a port of the United States, its possessions or dependencies, shall be considered in quarantine until given free pratique. Such vessel shall fly a yellow flag at the foremast head and shall observe all the other requirements of vessels actually quarantined.
35. Vessels arriving at ports of the United States under the follow-

ing conditions shall be inspected by a quarantine officer prior to,

(a) All vessels from foreign ports except those covered by partiagraph 3. Vessels from a foreign port shall be inspected only at first port of call in the United States, except vessels from ports suspected of yellow fever arriving during the active quarantine season at southern, via northern, ports.

(b) Any vessel with sickness on board.
(c) Vessels from domestic ports where cholera, plague, or yellow fever prevails, or where smallpox or typhus fever prevails in epidemic form.

36. The inspection of vessels required by these regulations shall be made between stirrise and sunset, except in case of vessels in distress. Exception may also be made in the case of vessels carrying perishable cargoes, and regular line vessels under regulations

approved by the Secretary of the Treasury.

37. In making the inspection of a vessel the bill of health and clinical record of all cases treated during the voyage, crew and passengers' lists and manifests, and, when necessary, the ship's log shall be examined. The crew and passengers shall be mustered and examined and compared with the lists and manifests and any discrepancies investigated. The clinical thermometer should be

1 Penalties for violation of these regulations are provided in sec. 10, act of Mar. 2, 1901, and in sec. 4, act of June 19, 1906.

When a freight manifest shows that articles requiring disinfection under these regulations are carried by the vessel, a certificate of disinfection, signed by a United States consul or a medical officer of the United States, shall be exhibited and compared with same. If no certificate of disinfection is produced, the collector of customs at the port of entry shall be notified of same by the quarantine officer. The collector of customs shall then hold such consignment in a designated place, separate from other freight, pending the arrival of the certificate of disinfection; and in the event of its nonarrival the articles shall be disinfected as hereinbefore prescribed, or shall be returned by the common carrier conveying same.

38/ Medical officers of the United States duly clothed with authority to act as quarantine officers at any port or place within the United States, when performing the said duties, are hereby authorized to take declarations and administer oaths in matters pertaining to the administration of the quarantine laws and regulations of the United States. (Act of Mar. 2, 1901, sec. 12.)

39. No person, except the quarantine officer, his employees, or pilots, shall be permitted to board any vessel subject to quarantine inspection until after the yessel, has been inspected by the quarantine officer and granted pratique, and all such persons so boarding such vessel shall, in the discretion of the quarantine officer, be subject to the same restrictions as the personnel of the vessel, or otherwise, action may be taken as provided for in section 10, act of March 2, 1901: Provided, however, That the United States customs officials may be permitted to board a vessel that has been inspected and held in quarantine for detention or treatment, they being subject

to the same restrictions as the personnel of the vessel.

40. When a vessel arriving at quarantine has on board any of the communicable but nonquarantinable diseases, the quarantine officer shall promptly inform the local health authorities of the existence of such disease aboard and shall make every effort to furnish such notification in ample time, if possible, to permit of the case being seen by the local authorities before discharged from the vessel.

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ately isolated in a proper place; the ship's physician should then immediately notify the captain, who should note same in his log, and all of the effects liable to convey infection which have been exposed to infection should be destroyed or disinfected. In the case of smallpox, the entire personnel should be vaccinated.

23. The hospital should be cleaned as soon as it becomes vacant.

24. The dead, except those dead of yellow fever, should be enveloped in a sheet saturated with one of the strong disinfecting solutions, without previous washing of the body, and at once buried

at sea or placed in a coffin hermetically sealed.

25. A complete clinical record shall be kept by the ship's surgeon of all cases of sickness on board, and the record delivered to the

quarantine officer at the port of arrival.

26. The following disinfecting solutions are recommended for

Formulæ for strong disinfecting solutions. BICHLORIDE OF MERCURY (1:500).	
Bichloride of mercury	Parts.
Sea water	500
CARBOLIC ACID (5 PER CENT),	
Alcohol	50
Alcohol. Carbolic acid, pure. Mix.	50
Then add fresh water	900
Formulæ for weak solutions.	
BICHLORIDE OF MERCURY (1:1,000).	
Bichloride of mercury	1
	1,000
CARBOLIC ACID (22 PER CENT).	V
Carbolic acid, pure	25
	1,000
FORMALIN (5 PER CENT).	
Formalin (or formal)	50

It is suggested that a vessel should carry for every 100 passengers: Bichloride of mercury, 5 pounds; carbolic acid, 10 pounds; alcohol, 10 pounds; formalin, 10 pounds; 100 pounds of sulphur and 12 Dutch ovens, about 12 inches diameter, and an adequate supply

CHAPTER IV.

GENERAL REQUIREMENTS AT DOMESTIC PORTS.

27. At or convenient to the principal ports, quarantine stations should be equipped with all appliances for the inspection and treat-

ment of vessels, their passengers, crews, and cargoes. where quarantine inspection is required, inspection stations should be maintained.

29. At a fully equipped maritime quarantine station there should be adequate provision for boarding and inspection, apparatus for mechanical cleansing of vessels, apparatus for disinfection by steam, by sulphur, by formaldehyde, by disinfecting solutions, or any other methods prescribed in these regulations; also a clinical laboratory, hospitals for contagious and doubtful cases, a steam laundry, detention barracks for suspects, bathing facilities, a crematory, a sufficient supply of good water, and a proper system for the disposal of sewage.

30. The personnel of quarantine stations in the yellow fever zone should be immune to yellow fever, and at all stations the personnel shall be vaccinated against smallpox. Officers when entering upon tour of duty at a quarantine station should be vaccinated against smallpox, and the same shall apply to all subordinates and their

families on the station.

31. At quarantine stations south of the southern boundary of Maryland the reservation shall be free of Aedes (stegomyia) calopus, and general antimosquito measures shall be enforced on the reservation and environment.

32. At quarantine stations, all articles liable to convey infection should be handled only by the employees of said station, unless

15. Any article presumably infected which can not be disinfected should not be shipped.

16. Passengers, for the purpose of those regulations, are divided

into two classes, cabin and steerage.

17. So far as possible passengers should avoid embarking at a port where quarantinable disease prevails, and communication be-tween the vessel and the shore should be reduced to a minimum. In such a port the personnel of the vessel should remain on board

during their stay.

18. No person suffering from a quarantinable disease, or scarlet fever, measles, diphtheria, poliomyelitis (infantile paralysis), influenza, chicken pox, or cerebrospinal meningitis should be

19. Passengers and crews, merchandise, and baggage, prior to ship-ment at a noninfected port but coming from an infected locality. should be subject to the same restrictions as are imposed at an infected port.

CHAPTER III.

GENERAL REQUIREMENTS AT SEA.2

on board his vessel:

(a) The water-closets, forecastle, bilges, and similar portions of the vessel liable to harbor infection should be frequently cleansed and disinfected.

(b) Free ventilation and rigorous cleanliness should be maintain in all portions of the ship during the voyage and measures taken to destroy rats, mice, fleas, flies, mosquitoes, and all vermin.

1 The sanitary measures applicable to second-cabin passengers will be those designated for first-cabin passengers or for steerage passengers, according as the arrangements of their quarters and accommodations aboard, both sanitary and for association, class them in the opinion of the inspecting officer with the first cabin or steerage.

2 These requirements at sea are largely advisory in character, but it is nevertheless true that a careful compliance with them should tend, at the port of arrival, to largely relieve the stringency of quarantine measures.

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(c) A patient sick of a communicable disease should be isolated and one member of the crew detailed for his care and comfort, who, if practicable, should be immune to the disease.

(d) Communication between the patient or his nurse and other persons on board should be reduced to a minimum.

(e) Used clothing, body linen, and bedding of the patient and nurse should be immersed at once in boiling water, or in a disinfecting solution.

(f) The compartment from which the patient was removed should be disinfected and thoroughly cleansed. Articles liable to convey infection should remain in the compartments during the disinfection when gaseous disinfection is used.

(g) Any person suffering from malaria or yellow fever should be kept under mosquito bars and the apartment in which he is con-fined closely screened with mosquito netting. All mosquitoes on board should be destroyed by fumigation. Mosquito larvæ (wigglers or wiggle-tails) should be destroyed in water barrels, casks, and other collections of water about the vessel by the use of petroleum (kerosene); where this is not practicable, the receptacle should be covered by mosquito netting to prevent the exit of mosquitoes from

such breeding places.

(h) In the case of bubonic plague, special measures must be taken (n) In the case of phononer plagate, specimen on board, and in case of 'pneumonic plague, the patient should be isolated, the body discharges disinfected, especially sputum, and the attendant should

(2) In the case of typhus, special measures should be taken to destroy vermin.

(j) In the case of cholera, typhoid fever, or dysentery, the drinking water should be boiled and the food thoroughly cooked. The discharges from the patient should be immediately disinfected and thrown overboard.

21. An inspection of the vessel, including the steerage, should be made by the ship's physician once each day.

22. Should cholera, yellow fever, smallpox, typhus fever, plague,

or any other communicable disease appear on board a ship while at sea, those who show symptoms of these diseases should be immediated.

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the provisions of section 2, of the act approved February 15, 1893. During the prevalence of any of the quarantinable diseases at the foreign port of departure, vessels above referred to are hereby required to obtain from the consular officer of the United States, or from the medical officer of the United States, when such officer has been detailed by the President, a bill of health, in duplicate, in the form prescribed by the Secretary of the Treasury.

CHAPTER II.

GENERAL REQUIREMENTS AT FOREIGN AND INSULAR PORTS.

4. The officer issuing the bill of health to vessels leaving foreign ports and ports in the possessions or other dependencies of the United States for ports in the United States or its possessions or other dependencies shall satisfy himself, by inspection if necessary, that the conditions certified to therein are true. He is authorized, in accordance with law, to withhold the bill of health until he is satisfied that the vessel, the passengers, the crew, and the cargo have complied with all the quarantine laws and regulations of the United States.

5. Inspection is required of—
(a) All vessels from ports at which cholera, yellow fever, or plague
in men or rodents prevail, or at which smallpox or typhus fever
prevails in epidemic form, and at which a medical officer is detailed.

(b) All vessels carrying steerage passengers; but need only Anclude the inspection of such passengers and their living apartments if sailing from a healthful port.

6. Inspection of the vessel is such an examination of the vessel, cargo, passengers, crew, personal effects of same, including examination of manifests and other papers, food and water supply, the ascertainment of its relations with the shore, the manner of loading and possibilities of invasion by rats and insects as will enable the inspecting officer to determine if these regulations have been com-

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7. When an inspection is required, it should be made by daylight, as late as practicable before sailing. The vessel should be inspected before the passengers go abroad, the passengers just before embarkation, and the crew on deck, and no communication should be had with the vessel after such inspection except by permission of the officer issuing the bill of health.

8. Vessels, prior to stowing cargo or receiving passengers, should be mechanically clean in all parts, especially in the hold, forecastle, and steerage and loose dunnage in unladened compartments shall be so arranged as to prevent harborage of rodents.

be so arranged as to prevent harborage of rodents.

9. Any portions of the vessel liable to have been infected by any communicable disease should be disinfected before the issuance of the being the beatth.

10. The air space, ventilation, food and water supply, hospital accommodations, and all other matters mentioned therein promotive of the health and comfort of the passengers must be in accordance with the provisions of the act of Congress approved August 2, 1882, entitled "An act to regulate the carriage of passengers by sea."

entitled "An act to regulate the carriage of passengers by sea."

11. Bedding, upholstered furniture, soiled wearing apparel, personal effects, and second-hand articles of a similar nature coming from a district known to be infected with smallpox or as to the origin of which no positive evidence can be obtained, and which the consular or medical officer has reason to believe is infected, should be disinfected prior to shipment. Articles similar to the above mentioned, if from a district infected by plague or typhus,

above mentioned, if from a district infected by plague or typhus, should be inspected, and, if necessary, treated to destroy vermin.

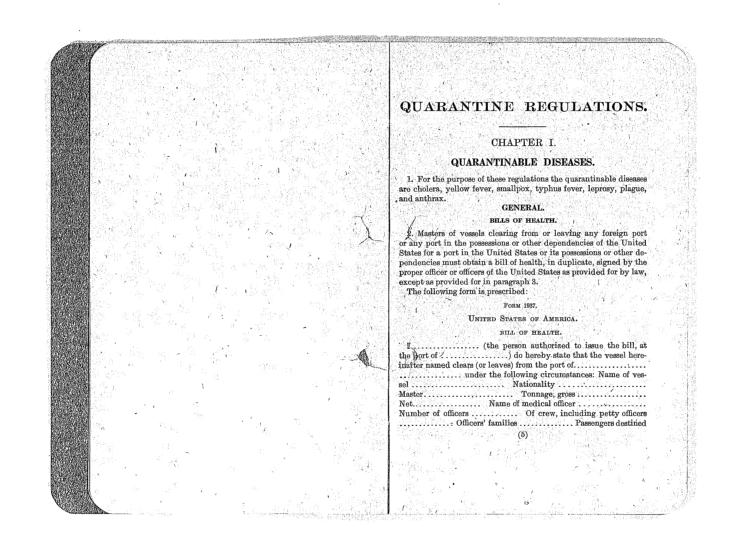
12. Articles from an uninfected district shipped through an infected port may be accepted without restriction if not exposed to infection in transit.

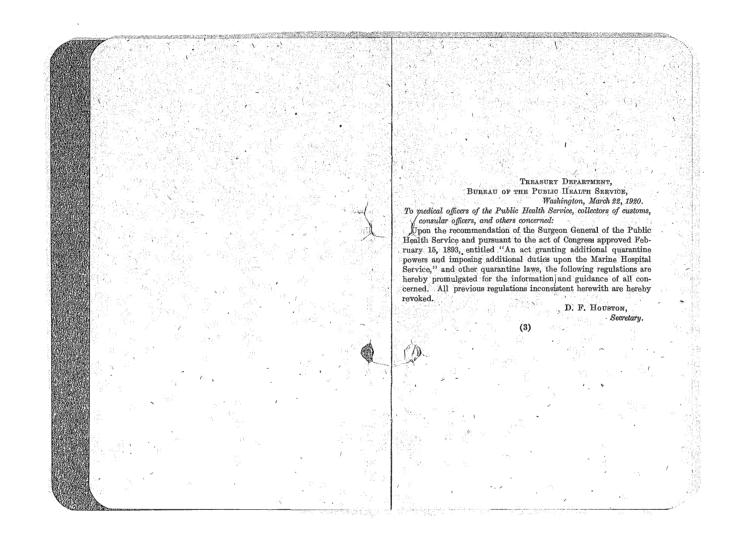
13. Nothing in these regulations shall be construed to modify or nullify in any way existing restrictions promulgated by the Secretary of the Treasury at the instance of the Secretary of Agriculture for the prevention of the introduction of diseases of animals.

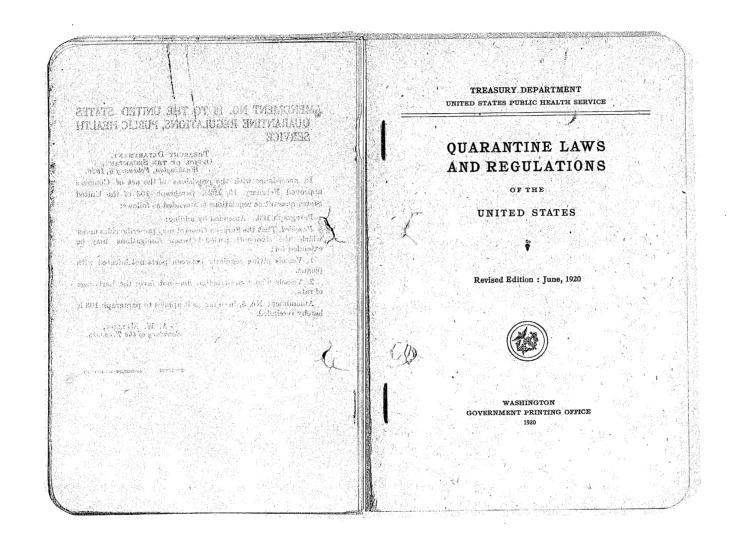
14. Any article shipped from or through an infected port or place which the consul or medical officer has reason to believe infected, should be disinfected.

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for the United States			7
			I certify that the vessel has complied with the Quarantine Rules and Regulations made under the act of February 15, 1893, and that the vessel leaves this port bound for
Sanitary conditions Sanitary measures Sanitary conditions Prevailing disease Number of Cases	n of vessel	while in port	Medical Officer, U. S. Public Health Service. 3. In accordance with the provisions of the act of Congress approved August 18, 1894, vessels hereinafter named are exemption the provisions of section 2 of the act granting additional quarantine powers and imposing additional duties upon the Marine Hospita Service, approved February 15, 1893, which requires vessels clearing from a foreign port for a port in the United States to obtain from the consular or medical officer a bill of health. Vessels so exempt are those plying between Canadian ports on the St. Croix River, the
Yellow fever Asiatic cholera Cholera nostras or choler Smallpox Typhus fever Leprosy	ine.	vicinity to be nere season.	St. Lawrence River, the Niagara River, the Detroit River, the St. Clair River, and the St. Marya River, and adjacent ports of the United States on 'the same waters; also vessels plying between Canadian ports on the following-named lakes, viz, Ontario, Erie St. Clair, Huron, Superior, Rainy Lake, Lake of the Woods, Lak Champlain, and ports of the United States; also vessels plying between ports in British Columbia and ports on the Pacific coas
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AMENDMENT NO. 9. TO THE UNITED STATES

SERVICE

SHOULD THE REQUESTIONS, PUBLIC HEALTH

SHOULD THE DESTRUCT THE CONTROL OF THE SECRETARY SECRETARY THE SECRETARY SE

AMENDMENT NO. 10 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY, Washington, February 8, 1926.

In accordance with the provisions of the act of Congress approved February 15, 1928, paragraph 103 of the United States quarantine regulations is amended as follows:

- Paragraph 103. Amended by adding:

Provided, That the Surgeon General may prescribe rules under which the six-month period between fumigations may be extended for:

1. Vessels plying regularly between ports not infected with plague.

2. Vessels whose construction does not favor the harborage of rats.

Amendment No. 5, in so far as it applies to paragraph 103 is hereby rescinded.

A. W. MELLON, Secretary of the Treasury.

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eases at the Canadian port of departure, such vessels shall obtain from the consular officer of the United States, or from the medical officer of the United States, when such officer has been defailed by the President, a bill of health, in duplicate, in the form prescribed by the Secretary of the Treasury and such vessels shall be subject to quarantine inspection upon arrival at any port in the United States."

A. W. MELLON,

Best of the Treasury. OFFICE OF THE SECUREMENT.

Problemston, Friendry 27, 1931.

Life accordance with the provisions of the set of Conves appropried Promisey 1, 1925, as hillows:

" that sectors 2 or the net approved Penergy 15; table endited to as exacting additional quarantum powers and indexing abbitional duties upon the Marine Heiphile Service. at the bod of the first private thereof a true paragraph as

where the light property property of the shall not apply to vessels operating exclusively in france between Invelopments on near the northern freedom of the United States and paris In the fighted relates, but the Secretary of the Trestury is Ferrity outbooked, when in its discretion, it is expedient the in preservation of the public mouth, to centural regulations

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WASHINGTON : GOVERNMENT PRINTING OFFICE : 1925

AMENDMENT NO. 9 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE

TREASURY DEPARTMENT, Office of the Secretary, Washington, March 21, 1925.

Since there has been some recent confusion in interpreting paragraph 101 of the Quarantine Regulations, Revised Edition, June, 1920, in order to make its meaning clear, the said paragraph is hereby amended to read as follows:

graph is hereby amended to read as follows:

"Vessels from ports (foreign, insular, or domestic) that are known or suspected of being infected with plague may, when loaded with cargo, the nature of which or manner of storage precludes effective fumigation, be permitted to enter subject to the terms of a provisional pratique. When lying alongside wharf or dock at United States ports such vessels shall take proper precautions to prevent the passage of rodents. The vessel shall be fended off from wharf or dock not less than 4 feet, and on all connecting lines shall be fixed rat guards of sheet metal of an approved design, not less than 3 feet in diameter. All cargo nets and similar devices extending between the vessel and shore structures shall be removed at night unless in actual use, as likewise gangways and ladders unless guarded. Any vessel so entering and neglecting to effectively apply such measures, may, at the discretion of the Surgeon General, be remanded to the quarantine station for discharge of cargo, or required to discharge cargo at anchor well removed from the wharf."

A. W. Mellon,

AMENDMENT NO. 7 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH

(Telasticy Department,
Oreick of the Stockersty,
The ecordance with the provisions of the not of Congress of proved February 16, 1863, the United States Omermaline Regulations are amended by adding the following:

Parterpola 181-A. In order to improve finaligation procedure.
The Surgicon General may from time to time, in his discretion, another or change the familiarion similaries as set forth in paragraph 181, inclusive, relative to the socious, the fine of exposure, and the character and quentity of chemicals or materials used.

A. W. Menton, Secretary of the Treasury.

AMENDMENT NO. 8 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH

reported to the Treasury Department,

Office of the Secretary,

Washington, February 27, 1925.

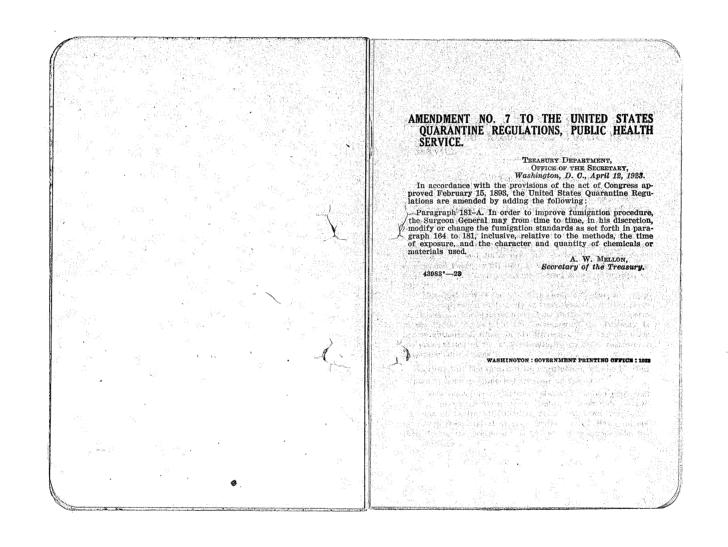
In accordance with the provisions of the act of Congress approved February 7, 1925, as follows:

"That section 2 of the act approved February 15, 1893, entitled 'An 'act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service,' as amended February 27, 1921, is hereby amended by inserting at the end of the first paragraph thereof a new paragraph as

"'The provisions of the preceding paragraph shall not apply to vessels operating exclusively in trade between foreign ports on or near the northern frontier of the United States and ports in the United States; but the Secretary of the Treasury is hereby authorized, when, in his discretion, it is expedient for the preservation of the public health, to establish regulations governing such vessels."

Section 3 of the quarantine regulations of the United States is hereby amended to read as follows:

"Vessels operating exclusively between Canadian ports and ports in the United States are exempted from obtaining consular bills of health at Canadian ports and from quarantine inspection upon arrival at ports in the United States, except that, during the prevalence of any of the quarantinable dis-36697—25



the holds may be made by the fumigator in charge, accompanied by a trained employee, each of whom shall personally enter the holds and report their freedom from dangerous quantities of the gas before release. Decision as to safety of the vessel for entry shall be made only by the medical officer in charge of fumigation, who shall so certify in writing over his signature.

The word "compartment" in the preceding paragraph shall be used, to include all superstructures, closets baths, storerooms, holds, or other closed spaces, and such compartments shall not be declared safe until the absence of the lachrymatory effect of the gas has been positively determined.

Officers and other personnel when engaged on inspection duty shall at all times be equipped with a gas mask ready for immediate use should such be necessary. All tumigating personel engaged in the generation of gas shall be required to use gas masks when removing and emptying the same.

All employees of the Public Health Service engaged in the fumigation of vessels with cyanogen chloride gas shall be required to undergo a course of instruction as to the proper use and care of gas masks and sliall be required to engage in the actual fumigation of vessels with cyanogen chloride gas of ability to use the mask properly before being permitted to engage in the actual fumigation of vessels with cyanogen chloride gas. Whenever practicable, natural ventilation shall be expedited by the use of such artificial means as windsails, ship ventilators, properly placed tarpaulins, fans, etc., and such mechanical devices as the serothrust, blowers, and other available apparatus.

Paragraph 180 A.—The strength of the cyanogen chloride gas mixture and the duration of exposure varies with the object sought. The service standards in this respect are as follows.

(A) For the destruction of mosquitoes:

(D) For destruction of lice, bed bugs; and roaches:
8 oz. sodium cyanide.
6 oz. sodium chlorate;
4 oz. talc.
34 oz. hydrochloric acid.

34 oz. water. Exposure 2 hours. Per thousand (1,000) cubic feet.

The above standards apply to empty holds and superstructures except storerooms that have large quantities of stores. In cargo holds or well-filled staterooms, the length of exposure shall be doubled.

STANDARD UNIT FOR FUNIGATION CREWS.

At all quarantine stations where the cyanogen chloride gas mixture is used as the regular gas for furnigation purposes the minimum rumigation crew shall consist of 8 persons, as follows:

1 chief fumigator. 2 assistant chief fumigators. 5 laborers (including 1 truck driver when necessary).

Where the number or size of the vessels requiring funigation is such as to require additional employees, the medical officer in charge may recommend their employment in the manner prescribed for obtaining new employees.

the heat generated by the water and acid mixture. The standard quantity of gas as referred to in these regulations is the quantity which will give sufficient concentration in any given space to produce death in an average weight adult rat in not more than 10 minutes. Such concentration requires approximately 0.941 ounce of cyanogen chloride gas and 0.327 ounce of bydrocyanic acid gas per thousand (1,000) cubic feet of air space, and is produced by the following quantities of materials:

water. 17 fluid oz. Per thousand (1,000) cubic feet.

Water.

Per thousand (1,000) cubic feet.

The length of exposure is dependent on the result desired, i. e., the object of the fumigation, with a varying time for mosquitoes, fleas, bedbugs, lice, roaches, and rodents. All parts of the vessel should be placed under fumigation simultaneously, but until further instructions are received, on account of the slightly tarnishing effect on highly polished metals, the chart room and wireless room should be omitted from fumigation. The parapheinalia required consists of tight wooden barrels, half barrels or tube, preferably of oak with wooden horps for use in holds. Earthenware crocks or wooden buckets, preferably of oak for smaller compartments or wooden buckets, preferably of oak for smaller compartments or wooden buckets, preferably of oak for smaller compartments or wooden buckets, preferably of oak for smaller compartments or wooden buckets, and talc; scales or scoops for weighing or measuring same, and bags for holding the ingredients prior to placing them in the acid.

In fumigation of superstructures, the acid and water mixture shall be placed in crocks and buckets, and these placed in, position, with the exceesary quantity of sodium cyanide, sodium chlorate, and talc mixture, in bags placed beside the vessel containing the acid before the generation of gas has started. All doors, port holes, etc., with the exception of those needed for the egress of the operator shall be closed and sealed before the actual fumigation has begun. After all ingredients have been put in place, but prior to the placing of the chemicals in the acid, the medical officer or fumigation inspector, accompanied by the master or his representative, shall personally inspect each compartment in order to establish the fact that no person other than those authorized by the medical officer or fumigator in charge remains on board. Prior to the beginning of this inspection, a guard shall be placed at the gangway to prevent any unauthorized person returning to the vessel, and when practicable, guard

This personnel shall be equipped with, and shall have ready for immediate use, gas masks of an approved design and each equipped with canister, properly charged for protection against cyanogen chloride gas and hydrocyanic acid gas. The failure of the operator to be equipped with such a mask when engaged on such duty shall be deemed sufficient cause for disciplinary measures and immediate dismissal from the service. When both the holds and superstructures are to be furnigated, the hold shall be prepared for funigation, the acid and water mixture mixed in containers, the sodium cyanide, sodium chlorate, and tale mixture placed in bags alongside of the container and attached by rope to the main deck. The hatch covers, with the exception of one section necessary for handling of the rope referred to above, shall be in place and covered with tarpaulin Stagering of hatch covers is strictly prohibited. Upon the completion of the operation of placing chemicals and the acid in the superstructures, the generation of the gas in the holds shall be begun by lifting the chemicals in the container and quickly replacing the remaining hatch coverings and tarpaulin.

The furnigation of crews quarters, storerooms, and other compartments below the main deck shall be started when possible before the larger volume of gas required in the hold is generated. All persons engaged in opening up after funigation and who are in any manner exposed to the gas shall under all circumstances wear gas masks during this procedure. On account of the danger to human life from the cyanogen chloride gas mixture, specific arrangements should be made for debarkation or other safe disposition of the crew during the funigation process, especially if one or two compartments of the vessel are to be funigated. A written statement must be obtained, from the master of the vessel or his representative that the vessel is ready for funigation, and that all of the crew, personnel, passengers, or others have been accounted for as not being in or on the vessel are to

AMERICATIVE No. 3 TO THE UNITED STATES OUTRANTING REGULATIONS, PURILC HEALTH

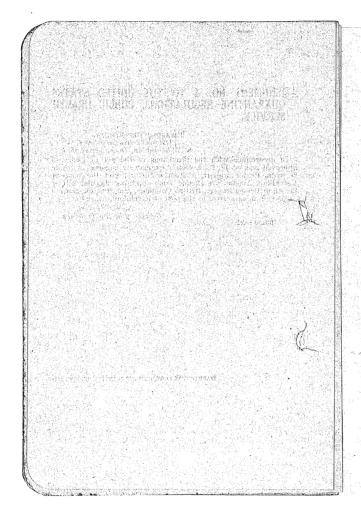
AMENDMENT NO. 6 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH

TREASURY DEPARTMENT,
OPPICE OF THE SECRETARY,
Washington, January 16, 1923.
In accordance with the provisions of the act of Congress approved
February 15, 1893, the United States quarantine regulations are
amended by adding the following:

OYANOGEN CHLORIDE GAS MIXTURE.

Paragraph 1794.—Cyanogen chloride gas mixture is one of the most penetrating and toxic of all fumigants, though cyanogen chloride gas in pure form is only approximately half as lethal as hydrocyanic acid gas. However, when generated by the procedure prescribed by these regulations, an amount of hydrocyanic acid gas equal to approximately 30 per cent of the mixture is simultaneously generated, thus inaking the mixture more toxic than the pure cyanogen chloride gas. Gyanogen chloride is highly lachrymatory, even in nonlethal quantities. Due to the warning thus given, its advantages over hydrocyanic acid gas are obvious, and the hazard as compared to hydrocyanic acid gas is greatly reduced. The generation of cyanogen chloride gas mixture, when produced by the method described below, is somewhat slower than the generation of hydrocyanic acid gas is produced by the method prescribed in the regulations, therefore more time is allowed the operator to reach safety.

Cyanogen chloride mixture when used in the concentrations, for the length of exposure recommended in these regulations and by experienced operators who avail themselves of the safeguards furnished, is not believed to be attended with any greater hazard than the use of sulphur dioxide. Gyanogen chloride for fumigation purposes is generated by a mixture of hydrochloric acid, water, sedium cyanide, sodium chlorate, and talc. The sodium chlorate and talc may be mixed in the proper proportions and kept in bulk. The sodium cyanide is to be kept, in so far as practicable, in the original artight packages. When the cyanide is used in the form of eyanege it should be roughly crushed in pieces approximately. ½-inch in diameter, but in no instance should it be powdered. The sodium cyanide should not be added to the sodium chlorate talc mixture until when preparing the proper quantity for each fumigation. The dilution of the hydrochloric acid, with equal parts of water, may be done at any convenient time, as the process is not dependent upon



AMENDMENT No. 5 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, January 16, 1923.

In accordance with the provisions of the act of Congress approved
February 15, 1893, the United States quarantine regulations are
amended as follows:
Paragraph 103. Amended by adding:
Provided, That the Surgeon General may, in his discretion, extend
the six-month period when all of the following conditions are shown
to exist:

Provided, That the Surgeon General may, in his discretion, extend the six-month period when all of the following conditions are shown to exist:

1. Vessel constructed so as not to favor or encourage the harborage rats.

2. Vessel plying regularly between ports not infected with plague.

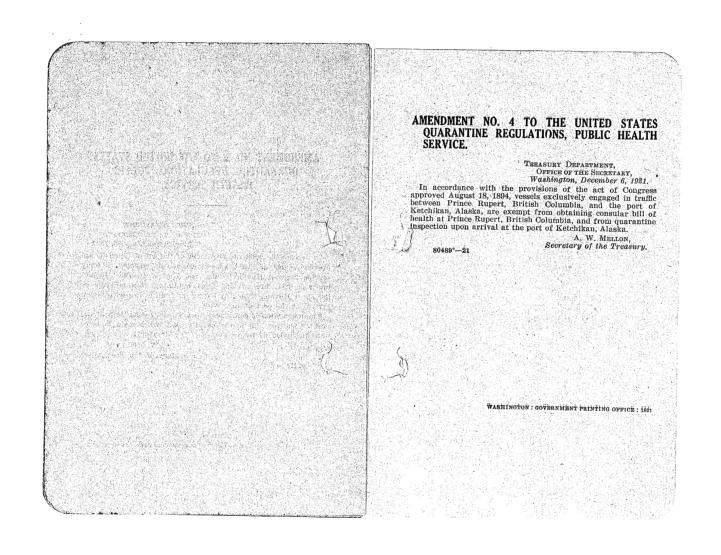
3. Vessel regularly carrying no cargo or cargo of such nature or so packed or stowed that it can not serve as rat lood or rat refuge.

4. Vessel has been regularly certified as loading in istream from rat-free lighters or as complying with the regulations relative to fending off from docks, proper use of guards on lines and hawsers, raising or guarding of gangways and ladders, and docking at rat-free docks or wharves.

Paragraph 104. Amended by substitution of the following:

104. A certificate signed or viséed by an accredited medical officer or a consular officer of the United States may be accepted by the quarantine officer as competent evidence in considering the enforcement of paragraph 103, except when otherwise directed by the Surgeon General. Funngation certificates to be acceptable must contain the same, or substantially as complete, information as confining in "Certificates of Funnigation, U. S. Public Health Serving."

A. W. MELLON, Secretary of the Treasury.



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AMENDMENT NO. 3 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE.

Office of the Secretary,
Washington, July 30, 1921.

In accordance with the provisions of the act of Congress approved August 18, 1894, vessels exclusively engaged in ferry service between Havana, Cuba, and Key West, Fla. (including aircraft), are exempt from obtaining consular bill of health at Havana, Cuba, and from quarantine inspection upon arrival at the port of Key West.

This exemption is contingent upon sanitary conditions at the port of Havana and in the vicinity, and will remain in force until rescinded by the Secretary of the Treasury.

A. W. MELLON,

AMENDMENT NO. 2 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE.

Treasury Department,
Office of the Secretary,
Washington, March 29, 1921.

To national, State, and local quarantine officers, collectors of customs, ship owners and agents, and others concerned:

Section 3 of the United States quarantine regulations is amended as follows:

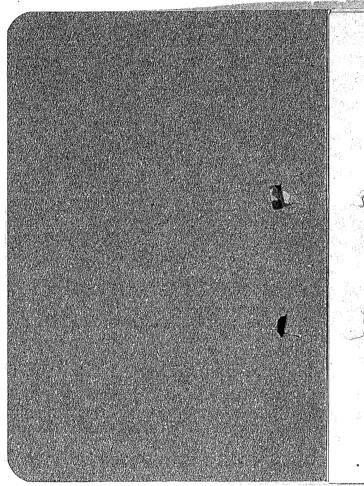
amended as follows:

The clause "also vessels plying between Canadian ports on the following-named lakes, viz., Ontario, Brie, St. Clair, Huron, Superior, Rainy Lake, Lake of the Woods, Lake Champlain, and ports of the United States," shall have added thereto the qualifying expression "on the same waters."

A. W. MELLON, Secretary of the Treasury.

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WASHINGTON: GOVERNMENT PRINTING OFFICE: 1921



AMENDMENT NO. 1 TO THE UNITED STATES QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE.

TREASURY DEPARTMENT, Office of the Secretary,
Washington, October 22, 1920.

In accordance with the provisions of the act of Congress approved February 15, 1893, the United States quarantine regulations are amended, as follows:

Paragraph 2 is amended to read as follows:

2. Masters of vessels or aircraft clearing from or leaving any creign port or any port in the possessions or other dependencies of the United States for a port in the United States or its possessions or other dependencies must obtain a bill of health, in duplicate, signed by the proper officer or officers of the United States as provided for by law, except as provided for in paragraph 3.

Paragraph 47 shall be amended to read as follows:

Paragraph 47 shall be amended to read as follows:

47. The form of certificate which shall be issued to a vessel or aircraft when released from quarantine shall be prescribed by the Surgeon General of the Public Health Service, and shall embody the statement that the vessel or aircraft has in all respects compiled with the quarantine regulations prescribed by the Secretary of the Treasury, and that in the opinion of the warantine officer it will not convey quarantinable disease, and that said vessel or aircraft is granted free or provisional Yatique to enter her port of destination, the name of which is to be embodied in the blank,

D. F. HOUSTON, Secretary of the Treasury.

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