

# ABSTRACT OF SANITARY REPORTS.

VOL. IX.

WASHINGTON, D. C., MAY 25, 1894.

No. 21.

TREASURY DEPARTMENT, *U. S. Marine-Hospital Service.*—Published in accordance with act of Congress approved February 15, 1893.

## UNITED STATES.

### UNITED STATES QUARANTINE LAWS AND REGULATIONS.

(Published in accordance with the following circular.)

TREASURY DEPARTMENT,  
OFFICE OF THE SECRETARY,  
*April 26, 1894.*

*To Officers of the Treasury Department,  
Consular Officers, and others concerned:*

Pursuant to the act of Congress approved February 15, 1893, entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," and other quarantine laws herewith published, the following regulations have been made and are hereby promulgated. The regulations to be observed at foreign ports shall take effect in said ports ten days after they have been posted in the office of the United States consul according to law, and all previous quarantine regulations to be observed in foreign ports will then cease to be operative. All previous United States quarantine regulations for domestic ports are hereby revoked.

J. G. CARLISLE,  
*Secretary.*

### QUARANTINE LAWS OF THE UNITED STATES.

AN ACT granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service.

[Approved, February 15, 1893.]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That it shall be unlawful 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 the provisions of this act and with such rules and regulations of State and municipal health authorities as may be made in pursuance of, or consistent with, this act; and any such vessel which shall enter, or attempt to enter, a port of the United States in violation thereof shall forfeit to the United States a sum, to be awarded in the discretion of

the court, not exceeding five thousand dollars, which shall be a lie upon said vessel, to be recovered by proceedings in the proper district court of the United States. In all such proceedings the 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 consul, vice-consul, or other consular officer of the United States at the port 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 vessel, its cargo, passengers, and crew; and said consular or medical officer is required, before granting such duplicate bill of health, to 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 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 bill of health, and entering any port of the United States, shall forfeit to the United States not more than five thousand dollars, the amount to be determined by the court, which shall be a lien on the same, to be recovered by proceedings in the proper district court of the United States. In all such proceedings the 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. 3. That the Supervising Surgeon-General of the Marine-Hospital Service shall, immediately after this act takes effect, examine the quarantine regulations of all State and municipal 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 such 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 Secretary of the Treasury, necessary to prevent the introduction of contagious or infectious 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 at such ports and places within the United States

where quarantine regulations exist under the authority of the State or municipality which, in the opinion of the Secretary of the Treasury, are not sufficient to prevent the introduction of such diseases into the United States, or into one 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 introduction 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 rules and regulations have been made they shall be promulgated by the 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 competent evidence of such posting in any court of the United States.

SEC. 4. That it shall be the duty of the Supervising Surgeon-General of the Marine Hospital Service, under the direction of the Secretary of the Treasury, to perform all the duties in respect to quarantine and quarantine regulations which are provided for by this act, and to obtain information of the sanitary condition of foreign ports and places from which contagious and infectious diseases 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 prescribe; and the Secretary of the Treasury shall also obtain, through all sources accessible, including State and municipal sanitary authorities 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 coöperation 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 Congress, with such recommendations as he may 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 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 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 infectious or contagious diseases in a foreign country there is serious danger 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.

SEC. 8. That whenever the proper authorities of a State shall surrender 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.

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 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-laws may require.

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 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 inclosures.

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 vary 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 inconvenient for the officers of the revenue employed therein to continue 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 any 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.]

SEC. 4799. Whenever, in the opinion of the Chief Justice, or, in case of his death, or inability, of the senior associate justice of the Supreme Court, a contagious or epidemic sickness shall render it hazardous 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 convenient. 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 several circuit and district judges shall, respectively, under the same circumstances, have the same power, by the same means, to direct adjournments of the several circuit and district courts to some convenient place within their districts respectively. [See § 1776.]

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 expense of the United States.

SEC. 4263. The master of any vessel employed in transporting passengers 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; and to that end he shall cause such regulations as he may adopt for 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 posted 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 cleansed; and also to provide a safe, convenient privy or water-closet for the exclusive use of every one hundred such passengers. The master shall also, when the weather is such that the passengers cannot be mustered on deck with their 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 circuit or district court within the jurisdiction of which such vessel may arrive or from which she is about to depart, or at any place where the owner or master may be found.

[Extract from act 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 imprisonment for a period of not more than thirty days, or shall be punished by both fine and imprisonment, at the discretion of the court. And it shall be the duty of the United States attorney in the district where the misdemeanor shall have been committed to take immediate cognizance of the offense, upon report made to him by any medical officer of the Marine-Hospital Service, or by any officer of the customs service, or by any State officer acting under authority of section five of said act.

[Act March 27, 1890.]

AN ACT to prevent the introduction of contagious diseases from one State to another and for the punishment of certain offenses.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That whenever it shall be made to appear to the satisfaction of the President that cholera, yellow fever, smallpox or plague exists in any State or Territory, or in the district of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, he is hereby authorized to cause the Secretary of the Treasury to promulgate such rules and regulations as in his judgment may be necessary to prevent the spread of such disease from one State or Territory into another, or from any State or Territory into the District of 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 shall willfully violate any rule or regulation so made and promulgated shall be deemed guilty of a misdemeanor, and upon conviction shall 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.

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.

QUARANTINE REGULATIONS TO BE OBSERVED AT FOREIGN PORTS AND AT SEA.

ARTICLE I.—BILLS OF HEALTH.

PAR. 1. Masters of vessels departing from any foreign port for a port in the United States must obtain a bill of health in duplicate signed by the proper officer or officers of the United States as provided for by law.

The following form is prescribed :

PAR. 2.—Bill of health :

Form No. 1931 a.

UNITED STATES BILL OF HEALTH.

Name of vessel, \_\_\_\_\_. Nationality, \_\_\_\_\_. Rig, \_\_\_\_\_. Master, \_\_\_\_\_. Tonnage, gross, \_\_\_\_\_; net, \_\_\_\_\_. Iron or wood. Number of compartments for cargo, \_\_\_\_\_; for steerage passengers, \_\_\_\_\_; for crew, \_\_\_\_\_

Name of medical officer, \_\_\_\_\_.

Number of officers, \_\_\_\_\_.

Number of crew, including petty officers. \_\_\_\_\_.

Number of passengers, cabin, \_\_\_\_\_.

Number of passengers, steerage, \_\_\_\_\_.

Number of persons on board all told, \_\_\_\_\_.

Port of departure, \_\_\_\_\_.

Where last from, \_\_\_\_\_.

Number of cases of sickness and character, during last voyage, \_\_\_\_\_.

Vessel engaged in \_\_\_\_\_ trade, and plies between \_\_\_\_\_ and \_\_\_\_\_.

Sanitary condition of vessel, \_\_\_\_\_.

Nature, sanitary history, and condition of cargo, \_\_\_\_\_.

Source and wholesomeness of water supply, \_\_\_\_\_.

Source and wholesomeness of food supply, \_\_\_\_\_.

Sanitary history and health of officers and crew, \_\_\_\_\_.

Sanitary history and health of passengers, cabin, \_\_\_\_\_.

Sanitary history and health of passengers, steerage, \_\_\_\_\_.

Sanitary history and condition of their effects, \_\_\_\_\_.

Prevailing diseases at port and vicinity, \_\_\_\_\_.

Number of cases and deaths from the following named diseases during the past two weeks :

Diseases.	No. of cases.	No. of deaths.
Yellow fever.....	_____	_____
Asiatic cholera.....	_____	_____
Cholera nostras or cholérine.....	_____	_____
Smallpox .....	_____	_____
Typhus.....	_____	_____

Any conditions affecting the public health existing in the port of departure, or vicinity, to be here stated, \_\_\_\_\_.

I certify that the vessel has complied with the rules and regulations made under the act of February 15, 1893, and that the vessel leaves this port bound \_\_\_\_\_ for \_\_\_\_\_ U. S. of America, via \_\_\_\_\_.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 189 .

(Signature of consular officer : ) \_\_\_\_\_

\_\_\_\_\_



PAR. 3. Vessels clearing from a foreign port for any port in the United States, and entering or calling at intermediate ports, must procure at all said ports a supplemental bill of health signed as provided in Article I. If a quarantinable disease has appeared on board the vessel after leaving the original port of departure, or other circumstances presumably render the vessel infected, the supplemental bill of health should be withheld until such sanitary measures have been taken as are necessary.

The following form is prescribed:

PAR. 4.—

SUPPLEMENTAL BILL OF HEALTH.

Port of \_\_\_\_\_.

Vessel \_\_\_\_\_, bound from \_\_\_\_\_ to \_\_\_\_\_, U. S. A.

Sanitary condition of port: \_\_\_\_\_.

State diseases prevailing at port and in surrounding country — \_\_\_\_\_.

Number of cases and the deaths from the following named diseases during the past two weeks:

Diseases.	No. cases.	No. Deaths.	Remarks. (Any condition affecting the public health existing in the port, to be stated here.)
Yellow fever.....	.....	.....	.....
Asiatic cholera or cholerae.....	.....	.....	.....
Smallpox.....	.....	.....	.....
Typhus.....	.....	.....	.....

*Number and sanitary condition of passengers taken on at this port, and sanitary condition of effects.*

Cabin, No. \_\_\_\_\_. Sanitary condition and history \_\_\_\_\_.

Steerage, No. \_\_\_\_\_. Sanitary condition and history \_\_\_\_\_.

(Cancel Form A, B, or C, as the case requires.)

Form.

A.—To the best of my knowledge and belief—

(Form A will be used at intermediate ports where the vessel does not enter and clear.)

B.—I have satisfied myself that—

(Form B will be used at intermediate ports where the vessel enters and clears.)

} no quarantinable disease has appeared aboard since leaving \_\_\_\_\_.

C.—Since leaving \_\_\_\_\_ the following quarantinable disease has appeared on board \_\_\_\_\_, and I certify that the necessary sanitary measures have been taken.

I certify also that with reference to the passengers, effects, and cargo, taken on at this port, the vessel has complied with the rules and regulations made under the act of February 15, 1893.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 189 \_\_\_\_\_.

(Signature of consular officer:) \_\_\_\_\_, \_\_\_\_\_.

ARTICLE II.—INSPECTION.

PAR. 1. The officer issuing the bill of health will satisfy himself, by inspection if necessary, that the conditions certified to therein are true.

PAR. 2. Inspection is required of—

(a) All vessels from ports at which cholera prevails, or at which yellow fever, smallpox, or typhus fever prevails in epidemic form.

(b) All vessels carrying steerage passengers.

But the inspection of this class may be limited to said passengers and their living apartments, if from a healthy port.

PAR. 3. Inspection of the vessel is such an examination of the vessel, cargo, passengers, crew, personal effects of same, and including examination of manifests and other papers, food, and water supply, as will enable him to determine if these regulations have been complied with.

PAR. 4. 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 aboard, the passengers just before embarkation, and the crew on deck; and no cargo or person should be allowed to come aboard after such inspection except by permission of the officer issuing the bill of health.

### ARTICLE III.—REQUIREMENTS WITH REGARD TO VESSELS.

PAR. 1. Vessels, prior to stowing cargo or receiving passengers, shall be mechanically clean in all parts, especially the hold, fore-castle, and steerage; the bilges and limbers free from odor and deposit. The air streaks should be sufficient in number and open for ventilation. Disinfection of the vessel may be required by the medical officer of the United States.

PAR. 2. If any infectious disease has occurred during the last voyage, the portions of the vessel liable to have been infected should be disinfected. When required, this should be done by one of the methods hereinafter described.

PAR. 3. The air space and ventilation must conform to the provisions of the act of Congress approved August 2, 1882, entitled "An act to regulate the carriage of passengers by sea."\*

PAR. 4. The food and water supply should be sufficient, and water for drinking purposes, free from possibility of pollution, should be easily accessible.

PAR. 5. Vessels departing from a port where cholera prevails should have two medical officers if more than 250 steerage passengers are carried.

PAR. 6. All bedding provided for steerage passengers must be destroyed or disinfected before being again used or landed, and mattresses and pillows used by steerage passengers shall not be landed.

PAR. 7. The hospitals of vessels carrying steerage passengers should be located on the upper or second deck and not in direct communication with any steerage compartment.

PAR. 8. Excepting when absolutely required, no solid partitions should be placed in any steerage compartment, obstructing light and air.

### ARTICLE IV.—CARGO.

PAR. 1. At ports infected with cholera, earth, sand, loam, soft or porous rock should not be taken as ballast. Nor at ports infected with yellow fever, should such ballast be allowed on board vessels clearing for ports south of the southern boundary of Maryland, when better material, such as hard rock, is obtainable, or when it is possible to use water ballast.

---

\* Computation of air space in any steerage compartment must not include the space taken up by bunks, mattresses, life-preservers, or personal effects.

PAR. 2. Certain food products, viz, unsalted meats, sausages, dressed poultry, dried and smoked meats, rennets, fresh butter, fresh milk (unsterilized), fresh cheese, fresh bread, fresh vegetables, coming from cholera infected localities, or through such localities, if exposed to infection therein, should not be shipped.

PAR. 3. Fresh fruits from districts where cholera prevails shall be shipped only under such sanitary supervision as will enable the inspector to certify that they have not been exposed to infection.

PAR. 4. Articles of merchandise, personal effects, and bedding, coming from a district known to be infected, or as to the origin of which no positive evidence can be obtained, and which the consular or medical officer has reason to believe are infected, should be subjected to disinfection prior to shipment by processes prescribed for articles according to their class.

PAR. 5. New merchandise in general may be accepted for shipment without question; and articles of new merchandise, textile fabrics, and the like, which have been packed or prepared for shipment in an infected port or place, with a special view to protect the same from moisture incident to the voyage, may be accepted and exempted from disinfection.

PAR. 6. All rags and all textile fabrics used in the manufacture of paper, collected or packed in any foreign port or place, must, prior to shipment to the United States, be subjected to disinfection by one of the prescribed methods:

(Old jute bags, old cotton bags, old rope, new cotton and linen cuttings from factories, not included.)

PAR. 7. Rags, old jute, old gunny, old rope, and similar articles, gathered or packed or handled in any port or place where cholera or yellow fever prevails, or smallpox or typhus fever prevails in epidemic form, should not be shipped until the officer issuing the bill of health shall be satisfied that the port or place has been for thirty days free from such infection, and after the disinfection of the articles.

PAR. 8. New feathers for bedding; human and other hair, unmanufactured; bristles; wool; hides not chemically cured, coming from a district where cholera prevails, shall be refused shipment until thirty days have elapsed since last exposure, unless unpacked and disinfected as hereinafter provided.

Feathers which have been used should be disinfected, and invariably by steam.

PAR. 9. The articles enumerated in the preceding paragraph coming from a district where yellow fever prevails, destined for ports or places south of the southern boundary of Maryland during the quarantine season, or where smallpox or typhus fever prevails in epidemic form, should be refused shipment unless disinfected, as hereinafter provided.

PAR. 10. Articles such as gelatin, glue, glue-stock, fish glue, fish bladders, fish skins, sausage casings, bladders, dried blood, having been in any way liable to infection in the process of preparation, gathering, or shipment, should be disinfected.

PAR. 11. Any covering, shipped from or through an infected port or place, and which the consul or medical officer has reason to believe infected, should be disinfected.

PAR. 12. Any article presumably infected, which can not be disinfected, should not be shipped.\*

---

\* Upholstered furniture, sheepskins used as wearing apparel, bedding, bones, horns and hoofs.

## ARTICLE V.—PASSENGERS AND CREW.

PAR. 1. Passengers, for the purposes of these regulations, are divided into two classes, cabin and steerage.

PAR. 2. No person suffering from a quarantinable disease, or scarlet fever, measles, or diphtheria, should be allowed to ship.

PAR. 3. Steerage passengers and crew, coming from districts where smallpox prevails in epidemic form, or who have been exposed to smallpox, shall be vaccinated before embarkation, unless they show evidence of immunity to smallpox by previous attack or recent successful vaccination.

PAR. 4. Steerage passengers and crew who, in the opinion of the inspecting officer, have been exposed to the infection of typhus fever, should not be allowed to embark for a period of at least fourteen days after such exposure and the disinfection of their baggage.

PAR. 5. When practicable, passengers should not ship from an infected port. Steerage passengers coming from cholera infected districts must be detained five days in suitable houses or barracks located where there is no danger from infection, and all baggage disinfected as hereinafter provided; the said period of five days to begin only after the bathing of the passengers, disinfection of all their baggage and apparel, removal of all food brought with them, and isolation from others not so treated.

PAR. 6. Steerage passengers from districts not infected with cholera, shipping at a port infected with cholera, unless passed through without danger of infection and no communication allowed between passengers and the infected locality, should be treated as those in the last paragraph.

PAR. 7. Prior to sailing from ports infected with cholera, each passenger of the cabin class should produce satisfactory evidence as to his exact place of abode during the five days immediately preceding embarkation, and if it appears that he or his baggage has been exposed to contagion, such passenger should be detained such length of time as shall be deemed necessary by the inspecting officer, and the baggage should be disinfected.

PAR. 8. The rules prescribed for the disinfection of the baggage and personal effects of passengers and crew coming from cholera-infected ports should also be observed with regard to passengers and crew coming from ports and places where plague, yellow fever, typhus fever, or smallpox is prevailing in an epidemic form.

PAR. 9. Should cholera break out in the barracks or houses in which the passengers are undergoing the five days' observation, no passenger from said house or barracks should embark until five days' isolation from the last case and a repetition of the sanitary measures previously taken.

PAR. 10. All baggage of steerage passengers destined for the United States shall be labeled. If the baggage has been inspected and passed, the label shall be a red label bearing the name of the port, the steamship on which the baggage is to be carried, the word "*inspected*" in large type, the date of inspection, and the seal or stamp of the consular or medical officer of the United States. All baggage that has been disinfected shall bear a yellow label, upon which shall be printed the name of the port, the steamship upon which the baggage is to be carried, the word "*disinfected*" in large type, the date of disinfection, and the seal or stamp of the consular or medical officer of the United States. It is understood, and it will be so printed on the blank, that the label is not valid unless bearing the consular or medical officer's stamp or seal.

PAR. 11. Each steerage passenger should be furnished with an inspection card (see form below). This card, stamped by the consular or medical officer, is to be issued to every member of a family as well as to the head thereof.

# INSPECTION CARD.

(Immigrants and Steerage Passengers.)

Port of departure, ..... Date of departure,  
 Name of ship, .....  
 Name of Immigrant, ..... Last permanent residence, .....

Inspected and passed at  <div style="text-align: center; border: 2px solid black; border-radius: 50%; padding: 10px; width: fit-content; margin: 0 auto;">                     Seal or Stamp of Consular or Med- ical Officer.                 </div>	Passed at quarantine, port of  U. S.  port of  Passed by Immigration Bureau,  (Date.) (Date.)	(The following to be filled in by ship's surgeon or agent prior to or after embarkation.)  Ship's list or manifest, ..... No. on ship's list or manifest, .....  Berth No. ..... Steamship Inspection. .... 1st day. .... 2 ..... 3 ..... 4 ..... 5 ..... 6 ..... 7 ..... 8 ..... 9 ..... 10 ..... 11 ..... 12 ..... 13 ..... 14 ..... To be punched by ship's surgeon at daily inspection.
---	---	---

# Vaccinated

(Signature or Stamp.)

(REVERSE SIDE.)

Keep this Card to avoid detention at Quarantine and on Railroads in the United States.

Diese Karte muss aufbewahrt werden, um Aufenthalt an der Quarantäne, sowie auf den Eisenbahnen der Vereinigten Staaten zu vermeiden.

Cette carte doit être conservée pour éviter une détention à la Quarantaine, ainsi que sur les chemins de fer des États-Unis.

Deze kaart moet bewaard worden, ten einde oponthoud aan de Quarantijn, alsook op de lijzen wegen der Vereenigde Staten te vermijden.

Conservate questo biglietto onde evitare detenzione alla Quarantina e sulle Ferrovie degli Stati Uniti.

Tento lístek musíte uschovati, nechtec-li ukarantény (zastavení ohledně zjištění zdraví) neb na dráze ve spojených státech zdržení býti.

Tuto kartočku treba trítmat' u sebe aby sa predeslo zdržovánu v karantene aj na železnici ve Spojených Státoch.

PAR. 13. Cabin passengers from cholera-infected ports or places should be given a special inspection card, on which shall be printed the port of departure, name of passenger, name of ship, date of departure, and an indicated space for the seal or stamp of the consular or medical officer.

PAR. 14. The baggage of such cabin passengers shall be labeled in the same manner as steerage baggage.

PAR. 15. In a port where cholera prevails, or where yellow fever prevails in epidemic form, the crews of passenger ships should remain on board during their stay. Should additional men be shipped, the same precautions should be observed with them as in the case of steerage passengers. If it is considered necessary, the crews of freight ships may be similarly treated at the discretion of the medical officer.

PAR. 16. Passengers and crews, merchandise and baggage prior to shipment at a noninfected port, but coming from an infected locality, should be subject to the same restrictions as are imposed in an infected port.

#### ARTICLE VI.—REQUIREMENTS AT SEA.

PAR. 1. The master of the vessel should cause the following rules (which comprise those recommended by the International Conference of Rome, 1885) to be observed during the voyage.

(a) The soiled body linen of passengers and crew suffering from infectious disease should be at once immersed in boiling water or in a disinfecting solution.

(b) The water-closets should be washed and disinfected twice a day.

(c) Rigorous cleanliness and free ventilation should be maintained during the voyage on board all ships.

PAR. 2. An inspection of the vessel, including the steerage, should be made by the ship's physician once each day.

PAR. 3. Should cholera (or cholerae), yellow fever, typhus fever, or smallpox appear on board a ship while at sea, those who first show symptoms of these diseases will be immediately sent to the hospital; the ship's physician will then immediately notify the captain, and all of the effects liable to convey infection, which have been in use, will be destroyed or disinfected.

PAR. 4. The compartments occupied by those who fall sick with infectious disease should be disinfected, and, as far as possible, the compartments thus disinfected should be freely exposed to the air. If the vessel is an iron steamer and the compartments suitable, the entire compartment should be disinfected by steam. The articles liable to convey infection should remain in the compartments during the disinfection. After disinfection of the compartments the bedding and clothing may be removed and dried.

PAR. 5. Patients with infectious disease should be isolated.

PAR. 6. The hospital should be disinfected as soon as it becomes vacant.

PAR. 7. The dead should be enveloped in a sheet saturated with one of the strong disinfecting solutions, without previous washing of the body, and at once placed in a coffin hermetically sealed, or buried at sea.

PAR. 8. A clinical record should be kept on the prescribed form, by the ship's surgeon, of all cases of sickness on board, and delivered to the quarantine officer at the port of arrival.

PAR. 9. Under the foregoing paragraphs disinfecting solutions are limited to the following—Strong: acid solution of bichloride of mercury (1 to 500); a 1 to 20 solution of pure carbolic acid. Weak: acid solution of bichloride of mercury (1 to 1,000); pure carbolic acid, 1 to 40.

PAR. 10. (Form for clinical report:)\*

Name.	Age.	Sex.	Last permanent residence.	Date of admission.	Disease.	Discharged.	Result.
Clinical history.							
Clinical history.							
Clinical history.							
Clinical history.							

PAR. 11. Sailing vessels leaving ports infected with yellow fever, and destined for any port in the United States south of the southern boundary of Maryland, which is not provided with proper facilities for treatment, shall, during the quarantine period, be directed by the consular or medical officer to proceed for disinfection and treatment to some quarantine station in the United States provided with the required facilities.

ARTICLE VII.—DISINFECTION.

PAR. 1. The disinfection of iron vessels shall be as follows:

(a) *Holds*.—After mechanical cleansing, the hold to be thoroughly washed with an acid solution of bichloride of mercury, 1 to 800 (mercury 1 part, hydrochloric acid 2 parts, water 800 parts), applied under pressure to all surfaces by means of a hose.

IN CASE THE DISINFECTION IS REQUIRED FOR YELLOW FEVER.

If the cargo is so stowed as to admit of disinfection, the hold and cargo may be disinfected without breaking bulk, by sulphur dioxide, 10 per cent per volume strength, forty-eight hours' exposure for iron, and seventy-two hours for wooden vessels.

(b) *Steerage and fore-castle*.—The same treatment should be given the steerage and fore-castle as the hold, but when practicable steam disinfection of these compartments should be practiced. The temperature in all parts of the compartments is to be not less than 100° C.

(c) *Cabins, officers' quarters, staterooms, etc.*—The bedding, fabrics, and carpets should be removed and disinfected by steam. After thorough

\* Temperature to be recorded.



mechanical cleansing, the exposed surfaces of fabrics, which can not be removed, should be washed with a solution of bichloride of mercury,\* 1 to 1,000, or 3 per cent solution of carbolic acid, both of which should be removed but not under two hours. Afterwards the apartments should be thoroughly dried and aired.

PAR. 2. The disinfection of wooden vessels is to be accomplished as follows: After mechanical cleansing, washing out the bilges until clean, etc., (first), by fumigation by sulphur dioxide, 10 per cent strength, twenty-four hours in the cabin and fore-castle and forty-eight hours in the hold; and (second) flushing or washing with acid solution of bichloride of mercury in large quantity (1 to 800). The bilges to be first flushed with sea water, pumped out, and then treated with the acid solution of bichloride of mercury in large quantity, allowed to remain in long contact. In addition to the sulphur fumigation of such apartments, the cabins, fore-castle, and other apartments, and their contents, to be treated as those on iron vessels.

#### CARGO.

PAR. 3. Disinfection of rags and old jute, etc., shall be by one of the following methods:

(a) By boiling in water for not less than thirty minutes.

(b) By steam at the temperature of 100° C. for not less than thirty minutes after such temperature is reached.

(c) By exposure for not less than six hours in a closed compartment to a 4 per cent strength (per volume) of sulphur dioxide gas—made by burning roll sulphur or by the liberation of liquefied sulphur dioxide—allowance to be made for leakage by increasing the amount of sulphur.

PAR. 4. In all of the above methods, the rags, old jute, etc., must be unbaled, and in the disinfection by steam or sulphur the rags must be loosely spread on racks (preferably wire netting) in layers of not more than 6 inches in depth, and in such a manner as to insure the diffusion of the gas to all parts alike.

The articles must not at any time occupy more than 50 per cent of the total cubic space, and the exposure to date from the complete combustion of the sulphur.

PAR. 5. New feathers for bedding shall be disinfected by one of the following methods:

(a) By steam at a temperature of 100° C. for a period of thirty minutes after such temperature has been reached.

(b) By exposure to sulphur dioxide, 4 per cent strength per volume, for not less than six hours.

PAR. 6. Human hair or other hair, unmanufactured, and bristles, to be disinfected by sulphur dioxide, 4 per cent strength per volume, six hours, or, if not clean, by a solution of pure carbolic acid 4 per cent strength, the articles to be thoroughly saturated.

PAR. 7. Wool to be disinfected by sulphur dioxide, 4 per cent strength per volume, for not less than twenty hours, the wool to be unbaled and loosely spread on racks, as in the manner provided for the disinfection of rags.

PAR. 8. Hides to be disinfected by sulphur dioxide, 4 per cent strength per volume, for not less than twenty hours, or by thorough saturation with a solution of pure carbolic acid, 4 per cent strength; hides to be invariably unbaled for the purpose.

\* Polished metal is injured by mercury, and leather by steam.

PAR. 9. Articles mentioned in paragraph 10, Article IV, should be disinfected by being spread on racks and exposed to sulphur dioxide, 4 per cent per volume, twenty hours.

PAR. 10. Coverings should be disinfected :

(a) In the hold, by exposure to sulphur dioxide, 10 per cent strength per volume, for twelve hours; the cargo being so stowed as to allow access to all parts of such surfaces.

(b) By breaking bulk and exposure to sulphur dioxide, 4 per cent strength per volume, for twenty-four hours.

(c) By wetting thoroughly with solution of bichloride of mercury, 1 to 800.

PAR. 11. The disinfection of personal effects, prescribed by these regulations, should be as follows :

(A) Clothing and bedding should be disinfected by—(1) Exposure to steam from 100° to 102° C. for thirty minutes after such temperature is reached, or by boiling for thirty minutes. (2) Immersion in bichloride solution, 1 to 800, or solution of pure carbolic acid, 3 per cent, until thoroughly wetted, and allowed to dry before washing.

This last process (2) to be used only for articles that will be injured by steam or boiling.\*

(B) Cooking and eating utensils should be immersed in boiling water.

NOTE.—A 4 per cent per volume strength of sulphur dioxide can be obtained by burning not less than 4 pounds 2 ounces of sulphur to each 1,000 cubic feet of space ; the compartment to be air-tight.

A 10 per cent per volume strength can only be obtained by one of the following methods: By the use of a special furnace, or by liquefied sulphur dioxide gas.

#### ARTICLE VIII.—RECORDS, REPORTS, ETC.

The officer making the inspection will preserve in his office, a record of each inspection made. A copy of said record will be forwarded weekly to the Supervising Surgeon-General of the Marine-Hospital Service, at Washington, D. C.

In addition to the duties already prescribed, the medical officer, when detailed in accordance with the act of Congress approved February 15, 1893, shall furnish such reports to the Supervising Surgeon-General Marine-Hospital Service as may be required by the latter.

#### NOTES FOR THE INFORMATION OF MASTERS OF VESSELS AND OTHERS.

##### FORMULÆ FOR STRONG DISINFECTING SOLUTIONS.

*Bichloride of mercury.* (1:500.)

Bichloride of mercury.....	1 part.
Hydrochloric acid.....	2 parts.
Water .....	500 parts.
Mix.	

*Carbolic acid.*

Carbolic acid (pure).....	50 parts.
Warm water.....	1,000 parts.

\* Articles of rubber, leather, celluloid, gutta-percha, hats, furs, skins, and similar articles, are injured by steam or boiling.

## FORMULÆ FOR WEAK SOLUTIONS.

*Bichloride of mercury. (1 : 1,000.)*

Bichloride of mercury.....	1 part.
Hydrochloric acid.....	2 parts.
Water.....	1,000 parts.

*Carbolic acid.*

Carbolic acid (pure).....	25 parts.
Warm water.....	1,000 parts.

## DISINFECTION OF HOSPITALS, INFECTED COMPARTMENTS, ETC.

(a) By steam as provided in Article VII, paragraph (c); or, when steam is not available—

(b) By methods prescribed in Article VII, paragraphs (a) and (c).

*Water-closets, etc.*, should be disinfected by strong solution of bichloride of mercury or carbolic acid.\*

It is suggested that a vessel should carry for every 100 passengers : Bichloride of mercury, 5 pounds ; hydrochloric acid, 10 pounds ; carbolic acid, 10 pounds.

## QUARANTINE REGULATIONS TO BE OBSERVED AT PORTS AND ON THE FRONTIERS OF THE UNITED STATES.

## PREAMBLE.

1. At or convenient to the principal ports of the United States, quarantine stations should be equipped with all appliances for the inspection and treatment of vessels, their passengers, crews, and cargoes.

2. At all other ports where such provisions have not been made inspection stations should be maintained.

3. An inspection service should be maintained at every port throughout the year.

4. At a fully equipped quarantine station there should be adequate provision for boarding and inspection, apparatus for mechanical cleaning of vessels, apparatus for steam disinfection, apparatus for disinfection with sulphur dioxide, apparatus for disinfecting solutions, hospitals for contagious and doubtful cases, detention barracks for suspects, bathing facilities, crematory, and sufficient supply of good water.

5. The personnel of quarantine stations in the yellow fever zone and on frontiers bound for Southern ports should be immune against yellow fever.

6. At quarantine stations all articles liable to convey infection should be handled only by the employes of said station, unless the services of the crew are indispensable.

7. Vessels having been treated at national quarantine stations that are located a considerable distance from the ports of entry of said vessels may be inspected by the local quarantine officer, and, if for any sanitary reason it is considered inadvisable to admit the vessel, he should

\* The use of these disinfecting solutions does not preclude the additional use of hypochlorite of lime.

report the facts immediately, by telegraph, when possible, to the Supervising Surgeon-General M. H. S., detaining the vessel pending his action.

8. The following regulations are the required minimum standard and do not prevent the addition of such other rules as, for special reasons, may be legally made by State or local authorities.

#### ARTICLE I.—INSPECTION.

1. Vessels arriving at ports of the United States under the following conditions shall be inspected by a quarantine officer prior to entry.

A. Any vessel with sickness on board.

B. All vessels from foreign ports.

C. Vessels from domestic ports where cholera or yellow fever prevails or where smallpox or typhus fever prevails in epidemic form.

EXCEPTIONS.—Vessels not carrying passengers on inland waters of the United States. Vessels from the Pacific and Atlantic coast of British America, provided they do not carry persons or effects of persons nonresident in America for the sixty days next preceding arrival, and provided always that the port of departure be free from quarantinable disease. Vessels from other foreign ports via these excepted ports shall be inspected.

D. Vessels from foreign ports carrying passengers having entered a port of the United States without complete discharge of passengers and cargo. Such vessels shall be subject to a second inspection before entering any other port. Vessels from ports suspected of infection with yellow fever, having entered a port north of the southern boundary of Maryland without disinfection, shall be subjected to a second inspection before entering any port south of said latitude during the quarantine season of such port.

2. The inspections of vessels required by these regulations shall be made by daylight, except in case of vessels in distress.

3. 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.

4. No person except the quarantine officer, his employés, United States customs officers, or agents of the vessel, shall be permitted to board any vessel subject to quarantine inspection, until after the vessel has been inspected by the quarantine officer and given its discharge.

#### ARTICLE II—QUARANTINE.

1. For the purpose of these regulations, the quarantinable diseases are cholera (cholerae), yellow fever, smallpox, typhus fever, and leprosy.

2. Vessels arriving under the following conditions shall be placed in quarantine:

A. With quarantinable disease on board.

B. Having had such on board during the voyage or within thirty days next preceding arrival; or, if arriving in the quarantine season, having had yellow fever on board after March 1 of the current year, unless satisfactorily disinfected thereafter.

C. From ports infected with cholera, or where typhus fever prevails in epidemic form, coming directly or via another foreign port, or via

United States ports, unless they have complied with the United States quarantine regulations for foreign ports, also vessels from noninfected ports but bringing persons or cargo from places infected with cholera, yellow fever, or where typhus fever prevails in epidemic form, except as subsequently noted.

D. From ports where yellow fever prevails, unless disinfected in accordance with these regulations, and not less than five days have elapsed since such disinfection.

EXCEPTIONS.—The following exceptions may be made to Rules C and D with regard to vessels from ports quarantined against on account of yellow fever:

(1) Vessels arriving during certain seasons of the year, to wit, from November 1 to May 1, may be admitted to entry.

(2) Vessels bound for ports in the United States north of the southern boundary of Maryland, with good sanitary condition and history, having had no sickness on board at ports of departure en route or on arrival, provided they have been five days from last infected or suspected port, may be allowed entry at port of destination. But if said vessels carry passengers destined for places south of this latitude the baggage of said passengers shall be disinfected.

In making an inspection of a vessel, if from a port where yellow fever prevails, and between May 1 and November 1 of any year, the inspector shall ascertain the destination of each passenger thereon, and if bound for places south of the southern boundary of Maryland, the baggage of such passenger shall be disinfected according to the rules for such articles infected with yellow fever. Such baggage shall be labeled.

(3) Vessels engaged in the fruit trade from ports declared safe for this purpose by the Supervising Surgeon-General M. H. S., may be admitted to entry without detention, provided that they carry no passengers and have carried no passengers from one port to another and have no household effects or personal baggage in cargo, and have complied with the special rules and regulations made by the Secretary of the Treasury with regard to vessels engaged in said trade.

3. All persons arriving on vessels having had smallpox on board, must be vaccinated or show satisfactory evidence of recent vaccination or of having had smallpox, or be detained in quarantine for not less than fourteen days, and all effects and compartments liable to convey infection disinfected.

4. All passengers occupying apartments other than first or second cabin shall be vaccinated prior to entry, unless they can show that they have smallpox, or have been recently successfully vaccinated, or be detained in quarantine fourteen days.

5. Vessels arriving at quarantine with leprosy on board shall not be granted pratique until the leper with his or her baggage has been removed from the vessel to the quarantine station.

No case of leprosy will be landed.

If the leper is an alien passenger and the vessel is from a foreign port, action will be taken as provided by the immigration laws and regulations of the United States.

If the leper is an alien and a member of the crew and the vessel is from a foreign port, said leper shall be detained at the quarantine at the vessel's expense, until taken aboard by the same vessel when outward bound.

## ARTICLE III.—GENERAL REQUIREMENTS AT QUARANTINES.

1. Pilots bringing infected vessels will be detained in quarantine a sufficient time to cover 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 disinfected when necessary.

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

3. No ballast shall be allowed to leave the quarantine station, unless disinfected.

4. Where it is impossible to disinfect cargo *in situ*, it shall be removed and disinfected in the manner provided for articles of their class in these regulations; such articles to be unpacked and so arranged as to allow the disinfectant used to reach every part of all surfaces of said articles.

5. Vessels arriving at any port of the United States, having cholera or yellow fever aboard during the quarantine season, shall be remanded to an anchorage set apart for infected vessels, and there to remain until after the discharge of the passengers and purification of the vessel.

6. All passenger baggage disinfected under the requirements of these regulations shall be labeled.

## ARTICLE IV.—TREATMENT IN QUARANTINE OF CHOLERA-INFECTED VESSELS.

1.\* Remove all passengers from the vessel and all of the crew (if cholera has occurred on board) save those necessary to care for her. Place the sick in hospital and carefully isolate those specially suspected. Segregate the remainder in small groups. No communication shall be held between these groups. Those believed to be especially capable of conveying infection must not enter the barracks until they are bathed and furnished with sterile clothing; nor shall any material capable of conveying infection be taken into the barracks, especially food.

2. If cholera has occurred in the steerage, all occupants thereof must be bathed and their clothing disinfected.

3. At once proceed with the disinfection of the hand baggage.

4. All baggage and effects accompanying steerage passengers, and any other baggage or effects that may have been exposed to infection, must be disinfected.

5. Such articles of cargo as are liable to convey infection must be disinfected.

6. All living apartments and furniture and such other portions of a vessel as are liable to convey infection shall be disinfected.

7. On cholera-infected vessels the water supply must be changed without delay, the casks or tanks disinfected by steam or 10 per cent solution of potassium permanganate, and after thorough rinsing refilled from a source of undoubted purity, or the water supplied must have been recently boiled.

8. Nothing shall be thrown overboard from a cholera-infected vessel, not even deck sweepings. Such things shall be burned in the furnace or in a place specially designated, but not in the galley.

---

\* It is required only if cholera has occurred on board.

## ARTICLE V.—DISINFECTION, ETC.

1. *Holds*.—The disinfection of iron vessels shall be as follows :

(a) With cargo: If cargo is so stowed as to admit of disinfection, it and the hold may be disinfected without breaking bulk, except to such a degree as to make disinfection practicable, by sulphur dioxide, 10 per cent per volume strength, for not less than twenty-four hours' exposure.

(b) Without cargo: After mechanical cleansing the hold (1) to be thoroughly washed with an acid solution of bichloride of mercury, 1 to 800 (mercury 1 part, hydrochloric acid 2 parts, water 800 parts), applied under pressure to all surfaces by means of a hose; (2) by sulphur dioxide, 10 per cent per volume strength, for twenty-four hours.

2. *Steerage and fore-castle*.—When possible to obtain it,

(a) The steerage and fore-castle shall be disinfected by steam; the temperature in all parts of these compartments to be not less than 100° C. for not less than thirty minutes after such temperature has been reached.

(b) When steam can not be obtained these compartments shall be treated in the same manner as required in the disinfection of the empty hold.

3. All beddings and furnishings of the steerage and fore-castle to be left in place during the disinfection by steam.

If steam disinfection of steerage is not used, such articles must be removed under the strictest sanitary precautions for disinfection by steam or burning.

4. The bedding, fabrics, and carpets should be removed and disinfected by steam or by boiling. After thorough mechanical cleansing the woodwork and all other exposed surfaces shall be washed with an acid solution of bichloride of mercury, 1 to 1,000, or a 3 per cent solution of pure carbolic acid. Fabrics which can not be removed shall be thoroughly saturated with a solution of bichloride of mercury, 1 to 1,000, or a 3 per cent solution of pure carbolic acid.

5. The water ballast of a vessel coming from a cholera-infected port should be discharged at sea, or, if discharged in fresh or brackish water, must be previously disinfected. The tanks to be flushed and refilled with sea water or disinfected.

6. For a wooden vessel the treatment is as above, except that exposure of the hold and living apartments to sulphur dioxide, 10 per cent volume, must precede the other treatment. This exposure must be, for the hold, forty-eight hours, and for living apartments twelve hours.

7. All solid ballast to be discharged or disinfected previous to disinfection of hold. All ballast discharged in fresh water to be disinfected by saturation with, or immersion in, an acid solution of bichloride of mercury, 1 to 800. Clear, hard, close-grained rock may be permitted to remain on board, but only after disinfection by immersion in an acid solution, 1 to 800, of bichloride of mercury. Ballast removed from vessels must not be taken from the quarantine station.

## ARTICLE VI.—DETENTION OF PASSENGERS ON ACCOUNT OF CHOLERA.

1. The people 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.

2. No direct communication shall be allowed between any person detained in quarantine and anyone not in quarantine, except through the quarantine officer or, by his order, through his agents.

3. The water and food supply will be strictly guarded to prevent contamination, and issued to each group separately.

4. Food of a simple character sufficient in quantity, thoroughly cooked, shall be issued to those detained in quarantine. No fruit shall be permitted.

5. Cleanliness of quarters and of person shall be enjoined and enforced daily. Disinfection shall be used where there is any possibility of infection.

6. Water-closets, urinals, privies, or troughs shall be provided, and their contents disinfected before they are discharged.

7. In any group in which cholera appears, the sick will be immediately isolated in hospital, and the remaining persons in the group shall be bathed and their effects be disinfected, then removed to other quarters, if possible, and the compartment disinfected.

8. No direct communication shall be allowed between the physician and attendants of the hospital and those detained in quarantine.

No persons shall be discharged from quarantine until five days have elapsed since the last exposure to infection and a final disinfection of such effects as were taken to barracks.

No convalescent from cholera shall be discharged from quarantine until after a sufficient time has elapsed to insure his freedom from infection.\*

9. The body of no person dead of cholera shall be allowed to pass through quarantine. The body should be cremated if practicable. If not, it should be wrapped without preliminary washing in a sheet saturated with a solution of bichloride of mercury, 1 to 500, and buried, surrounded by caustic lime.

#### ARTICLE VII.—DISINFECTION OF PERSONAL EFFECTS OF PASSENGERS AND CREW AND CARGO.

1. Clothing, bedding and articles not injured by steam shall be disinfected—

(a) By exposure to steam at a temperature of 100° to 102° C. for thirty minutes after such temperature has been reached.

(b) By boiling for fifteen minutes; all articles to be submerged.

(c) By a thorough saturation in a solution of bichloride of mercury, 1 to 1000, and allowed to dry before washing.

2. Articles injured by steam (rubber, leather, etc.) and containers, to the disinfection of which steam is inapplicable, shall be disinfected by thoroughly wetting all surfaces with a solution of bichloride of mercury, 1 to 800, or a 5 per cent solution of carbolic acid, and allowed to dry in open air.

3. Cooking and eating utensils, by immersing in boiling water or steam.

4. All rags and old textile fabrics used in the manufacture of paper, and all old gunny, old jute, etc., fit only for remanufacture, gathered, collected, packed, or handled in any port or place where cholera (cholera) or yellow fever exists, or where smallpox or typhus fever prevails in epidemic form, and for thirty days after the port or place shall be officially declared free from such diseases or epidemic, shall be denied entry into any port of the United States.

5. No rags or old textile fabrics used in the manufacture of paper, or articles enumerated in the preceding paragraph, which have not been disinfected in accordance with Article VII, paragraph 3, of the United States Quarantine Regulations for foreign ports, shall be admitted into the United States.

\*To be determined by bacteriological examination.



(Old jute bags; old cotton bags; old rope; new cotton and linen cuttings from factories, not included.)

ARTICLE VIII.—TREATMENT OF VESSELS INFECTED OR SUSPECTED OF BEING INFECTED WITH YELLOW FEVER.

1. Where practicable, at once remove the sick to hospital; remove and isolate all persons not required for the care of the vessel.

2. If the hold is deemed infected, there shall be a preliminary disinfection as hereinafter provided.

3. The bilge should be cleansed with sea water, if possible, before disinfection, and the hold rendered mechanically clean.

4. All ballast, except close-grained, hard rock, must be discharged. This may be retained aboard if disinfected by immersion in an acid solution of bichloride of mercury, 1 to 800.

5. After discharge or disinfection of ballast the vessel should be disinfected.

6. If it is so stowed as to admit of disinfection, the cargo and the hold may be disinfected without breaking bulk, except to such a degree as to render disinfection practicable.

It shall be as follows:

Holds to be treated with sulphur dioxide, 10 per cent strength per volume, forty-eight hours' exposure for iron vessels, seventy-two hours' exposure for wooden vessels.

7. Empty holds to be disinfected as follows:

(a) If of iron, by sulphur dioxide gas, 10 per cent strength per volume, for twelve hours' exposure, followed by washing with an acid solution of bichloride of mercury, 1 to 800, applied under pressure to all surfaces by means of a hose.

(b) If of wood, by the same methods as the preceding, save that the exposure to sulphur dioxide gas shall be for forty-eight hours; air streaks to be open.

8. Cabin, fore-castle, etc., after mechanical cleansing, to be first treated with sulphur dioxide, not less than 6 per cent strength per volume, twenty-four hours' exposure. Then (after cleansing with water, if desired) wash all exposed surfaces with a solution of bichloride of mercury, 1 to 800, or pure carbolic acid, 3 per cent.

9. Clothing, bedding, and all fabrics which can be removed, not injured by steam, shall be disinfected.

(a) By exposure to steam at a temperature of 100° to 102° C. for thirty minutes after such temperature has been reached.

(b) By boiling for fifteen minutes; all articles to be submerged.

(c) By a thorough saturation in a solution of bichloride of mercury, 1 to 1000, and allowed to dry before washing.

10. Articles injured by steam (rubber, leather, etc.), and containers, to the disinfection of which steam is inapplicable, shall be disinfected by (a) thoroughly wetting all surfaces with a solution of bichloride of mercury, 1 to 800, or a 5 per cent solution of pure carbolic acid, and allowed to dry in open air; or (b) by exposure to the sulphur fumigation, in cabin, fore-castle, or hold.

11. The personnel of the vessel shall be detained five days from completion of the disinfection.

12. If the vessel has been disinfected under the supervision of an accredited medical officer of the United States at the port of departure, the period of quarantine may date from completion of such disinfection, and shall not be less than five days.

ARTICLE IX.

Passenger traffic may be allowed during the quarantine season from any port infected with yellow fever to any port of the United States south of the southern boundary of Maryland, under the following conditions:

(a) Vessels to be of iron and clean immediately prior to taking on passengers.

(b) The vessel must lie at moorings in the open harbor and not approach the wharves, nor must the crew be allowed ashore at the port of departure.

(c) All passengers and crew must be immune to yellow fever and so certified by the United States medical officer.\*

(d) All baggage which has not been disinfected at the port of departure by the United States medical officer, or which is not in bond for points north of the southern boundary of Maryland, shall be disinfected at the quarantine at the port of arrival; no bedding or household effects to be allowed to enter.

ARTICLE X.—MISCELLANEOUS.

1. The treatment of vessels infected with typhus fever shall be the same as that prescribed for yellow fever.

2. The detention of passengers and crew for smallpox and typhus fever shall cover the period of incubation of the disease, the time of detention to commence from the date of last exposure; typhus fever, not less than twenty days; smallpox, not less than fourteen days.

3. 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 Supervising Surgeon-General.

4. The following is the form of certificate which shall be issued to the vessel by the health officer when she is released from quarantine.

\_\_\_\_\_, \_\_\_\_\_, 189—.

I CERTIFY that \_\_\_\_\_, of \_\_\_\_\_, from \_\_\_\_\_, has in all respects complied with the quarantine regulations prescribed by the Secretary of the Treasury, and that in my opinion she will not convey quarantinable disease. Said vessel is this day granted free pratique.

\_\_\_\_\_, \_\_\_\_\_,  
Health (Quarantine) Officer,  
Port of \_\_\_\_\_.

ARTICLE XI.—INSPECTION OF STATE AND LOCAL QUARANTINES.

In the performance of the duties imposed upon him by the act of February 15, 1893, the Supervising Surgeon-General of the Marine Hospital Service shall, from time to time, personally or through a duly detailed officer of the Marine-Hospital 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 Supervising 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 purpose and with a view to certifying, if need be, that the regulations have been, or are, being enforced.

\*The evidence of immunity which may be accepted by the sanitary inspector is:  
First. Proof of continued residence in an endemic focus of yellow fever for ten years.  
Second. Proof of previous attack of yellow fever.

## ARTICLE XII.—CANADIAN AND MEXICAN FRONTIERS.

1. When practicable, alien immigrants arriving at Canadian and Mexican ports, destined for the United States, shall be inspected at the port of arrival by the United States consular or medical officer, and be subjected to the same sanitary restrictions as are called for by the rules and regulations governing United States ports.

2. Inspection cards will be issued by the consular or United States medical officer at the port of arrival to all such alien immigrants, and labels affixed to their baggage, as is required in the case of those coming direct from foreign ports to any port of the United States.

3. Whenever alien immigrants are not inspected at the port of arrival by the United States consular or medical officer, they shall enter the United States through certain designated places on the frontier, where they shall be inspected for the purpose of preventing the introduction of quarantinable disease. This inspection shall be held by daylight.

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

5. Any baggage or other effects believed to be infected shall be refused entry until made safe by a proper disinfection.

6. Persons coming from localities where smallpox is prevailing in epidemic form, shall not be allowed entry without vaccination, unless they are protected by a previous attack of the disease or a recent successful vaccination.

7. Persons coming from localities where typhus fever prevails in epidemic form, shall not be allowed entry until they have been away from such locality fourteen days and their baggage disinfected.

8. During the quarantine season persons coming from places where yellow fever prevails will not be permitted to enter until they have been away from such locality five days and their baggage has been disinfected. But persons immune to yellow fever will not be detained.

9. 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.

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

11. The methods of disinfection shall be those prescribed in the Rules and Regulations made for the maritime quarantines of the United States.

Immigrants who, with their baggage, have been inspected at a port of the United States by a quarantine officer upon landing, will be exempt from further quarantine inspection when reentering the United States from Canada, unless there is reason to believe that disease has developed among such immigrants since such landing and inspection.

---

[Reports to the Supervising Surgeon-General M. H. S.]

*Smallpox in Boston.*

BOSTON, MASS., May 19, 1894.—I have the honor to advise you that there are 2 cases of smallpox in Chelsea and 2 in Boston.—HENRY W. SAWTELLE, *Surgeon, M. H. S.*

*Smallpox in Michigan.*

LANSING, MICH., May 17, 1894.—It becomes my duty to inform you that 1 case of smallpox exists at Grand Rapids, in the county of Kent; 1 case at Sturgis, St. Joseph County; 1 case in Napoleon, Jackson County; and 1 supposed case in Summit, Jackson County, in this State. The person sick is Silas White, colored, a traveler. The origin of the disease is probably Chicago.—HENRY B. BAKER, *Secretary State Board of Health.*

*Smallpox in Pennsylvania.—Typhus fever in Philadelphia.*

PHILADELPHIA, May 5, 1894.—I beg to inform you that since my last report of April 11 the following number of cases of smallpox have occurred in Pennsylvania, the number of cases at each place being noted: Danville, Montour County, 6 cases, 1 death having taken place; Lee, Luzerne County, 16 cases, origin, Danville; Shickshinny, Luzerne County, 7 cases, origin, Danville; Muncy, Lycoming County, 1 fatal case; Lewistown, Mifflin County, 1 fatal case, origin, Danville; Jerseytown, Columbia County, 1 fatal case, origin, Danville; Harrisburg, Dauphin County, 1 case; Reading, Berks County, 4 cases; Lewisburg, Union County, 1 case in suburbs; Philadelphia, 4 cases, two of which were traced to Danville, or neighborhood.—BENJAMIN LEE, *Secretary State Board of Health.*

PHILADELPHIA, May 17, 1894.—Since my last report of May 5 the following cases of smallpox have occurred in the State of Pennsylvania, the number of cases at each place being noted: Philadelphia, 1 case; Harrisburg, Dauphin County, 1 case; Blandon, Berks County, 4 cases; Walnuttown, Berks County, 1 case; Liedels Crossing, Berks County, 1 case; Hyde Park, a suburb of Reading, Berks County, 2 cases; West Hempfield, Lancaster County, 1 case; Derry Township, Mifflin County, 3 cases; Lewistown, Mifflin County, 2 cases; Dorranceton, Luzerne County, 1 case, origin, Danville. Three cases of typhus fever are isolated in the municipal hospital, Philadelphia; probably imported via New York.—BENJAMIN LEE, *Secretary State Board Health.*

• *Smallpox at Texarkana.*

SHREVEPORT, LA., May 15, 1894.—The following tabulation of cases in Texarkana, Ark., was handed me by Dr. Webster, comprising the period from April 25 to May 14:

Number of cases to date, white, 6; colored, 62; total, 68. Number of deaths, white, 2; colored, 5; total, 7. Number discharged, colored, 13; total, 13. Number of convalescents, white, 1; colored, 22; total, 23. Remaining under treatment, white, 3; colored, 22; total, 25; grand total, 68. Suspects: Number received, 58; number developing smallpox, 7; number discharged, 10; number remaining under observation, 41; total, 58.—A. R. BOOTH, *Acting Assistant Surgeon, M. H. S.*

SHREVEPORT, LA., May 20, 1894.—I have the honor to report: Letter from Dr. Webster this evening says: "Number of cases moved from detention station to pesthouse, 10, whites, 2; colored, 8." Previously reported, 68; total to date, 78. I am not surprised at this, because of the direct communication between detention station and the pesthouse, as observed and reported.—A. R. BOOTH, *Acting Assistant Surgeon, M. H. S.*

*Report of immigration at Boston for the week ended May 19, 1894.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
Port of Boston, May 21, 1894.

Number of alien immigrants who arrived at this port during the week ended May 19, 1894;  
also the names of vessels and the ports from which they arrived.

Date.	Name of vessel.	Where from.	No. of im- migrants.
1894.			
May 13	Steamship Gallia .....	Liverpool via Queenstown.....	275
13	Schr. William H. Davenport.....	Hamilton, Bermuda.....	8
	Total.....		283

S. C. WRIGHTINGTON,  
Commissioner of Immigration.

*Report of immigration at New York for the week ended May 19, 1894.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
Port of New York, May 21, 1894.

Number of alien immigrants who arrived at this port during the week ended May 19, 1894;  
also names of vessels and ports from which they arrived.

Date.	Vessel.	Where from.	No. of im- migrants.
1894.			
May 13	Steamship Kronprinz Fr. Wil- helm.....	Naples.....	760
14	Steamship La Bretagne.....	Havre.....	209
15	Steamship Hindoustan .....	Marseilles and Napies.....	549
15	Steamship Russia.....	Hamburg.....	329
15	Steamship Obdam.....	Rotterdam.....	85
15	Steamship Aller.....	Bremen.....	258
15	Steamship Friesland.....	Antwerp.....	292
16	Steamship Maasdam.....	Rotterdam and Boulogne.....	100
16	Steamship Circassia.....	Glasgow.....	324
16	Steamship Endeavour.....	Palermo.....	81
17	Steamship Lahn.....	Bremen.....	247
19	Steamship Columbia.....	Hamburg.....	239
19	Steamship Donna Maria.....	Lisbon and The Azores.....	74
19	Steamship Gellert.....	Naples.....	749
19	Steamship Plata.....	Palermo and Naples.....	292
19	Steamship Venetia.....	Stettin, etc.....	508
19	Steamship Germanic.....	Liverpool and Queenstown.....	390
19	Steamship Crown Prince.....	Jamaica, W. I.....	9
	Total.....		5,315

\* Stowaway.

EWD. F. MCSWEENEY,  
Acting Commissioner of Immigration.

*Report of immigration at Philadelphia for the week ended May 19, 1894.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
Port of Philadelphia, May 19, 1894.

Number of alien immigrants who arrived at this port during the week ended May 19, 1894;  
also name of vessel and port from which it arrived.

Date.	Vessel.	Where from.	No. of im- migrants.
1894.			
May 13	Steamship Southwark.....	Liverpool.....	278

JNO. J. S. RODGERS,  
Commissioner of Immigration.

*Report of immigration at San Francisco for the week ended May 12, 1894.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
*Port of San Francisco, May 12, 1894.*

*Number of alien immigrants who arrived at this port during the week ended May 12, 1894; also names of vessels and ports from which they arrived.*

Date.	Vessel.	Where from.	No. of immigrants.
1894.			
May 6	Steamship Rio.....	Hongkong and Yokohama .....	40
10	Steamship Alameda.....	Honolulu, H. I.....	44
11	Steamship Queen.....	Victoria, B. C.....	56
	Total.....		140

WALTER P. STRADLEY,  
*Commissioner of Immigration.*

VESSELS REMAINING, ARRIVING AT, AND DEPARTING FROM UNITED STATES QUARANTINE STATIONS.

BRUNSWICK QUARANTINE.

*Week ended May 19, 1894.*

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Spanish bark Maria Luisa.....	May 2	Havana .....	Brunswick..	Disinfected.....	May 14
Spanish brig Maria Orera .....	May 5	.....do.....	.....do.....	.....do .....	May 16
Norwegian bark Marie.....	May 10	Santiago.....	.....do.....	.....do .....	May 18
Norwegian bark Marie.....	May 10	.....do.....	.....do.....	Held for disinfection.	.....
Am. schr. A. V. M. Carlisle.....	May 14	Havana .....	.....do.....	.....do .....	.....
Am. bkn. Geo. W. Sweeney.....	May 14	Cardenas.....	.....do.....	.....do .....	.....
Am. schr. May McFarland.....	May 18	Demerara .....	.....do.....	.....do .....	.....

Two vessels inspected and passed.

CAPE CHARLES QUARANTINE.

*Week ended May 19, 1894.*

Eleven vessels inspected and passed.

GULF QUARANTINE.

*Week ended May 14, 1894.*

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Amer. schr. Flora Woodhouse.	May 10	Progreso ...	Pascagoula..	Disinfected .....	May 13

One vessel inspected and passed.

KEY WEST QUARANTINE.

*Week ended May 12, 1894.*

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Amer. schr. M. V. B. Chase.....	May 11	Cardenas.....	Apalachicola	Held for disinfection.	.....

VESSELS REMAINING, ARRIVING AT, AND DEPARTING FROM UNITED STATES QUARANTINE STATIONS—*Continued.*

## PORT TOWNSEND QUARANTINE.

*Week ended May 12, 1894.*

Three vessels inspected and passed.

## SAN DIEGO QUARANTINE.

*Week ended May 16, 1894.*

Two vessels inspected and passed.

## SOUTH ATLANTIC QUARANTINE.

*Week ended May 12, 1894.*

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of departure.
Russian sc. Jonatan .....	May 3	Dover .....	Doboy.....	Disinfected.....	May 7

*Week ended May 19, 1894.*

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of departure.
Spanish brig San Salvador .....	May 14	Cienfuegos..	Brunswick..	Held for disinfection.	.....
American sc. Eliza A. Scribner.	May 15	Havana .....	Havana .....	.....do.....	.....

Two vessels inspected and passed.

*Reports of States and yearly and monthly reports of cities.*

CALIFORNIA.—Month of April, 1894. Reports to the State board of health from 86 cities, towns, villages, and sanitary districts, having an aggregate population of 893,453, show a total of 1,118 deaths, including phthisis pulmonalis, 210; enteric fever, 8; scarlet fever, 3; diphtheria, 17; croup, 6; measles, 2; and whooping cough, 7.

IOWA.—*Davenport.*—Month of April, 1894. Estimated population, 35,500. Total deaths, 34, including phthisis pulmonalis, 7; scarlet fever, 1; and croup, 1.

*Dubuque.*—Month of April, 1894. Population, 40,000. Total deaths, 40, including phthisis pulmonalis, 4; enteric fever, 1; and diphtheria, 1.

MICHIGAN.—Week ended May 12, 1894. Reports to the State board of health from 74 observers indicate that erysipelas increased, and that influenza, pneumonia, and remittent fever decreased in area of prevalence. Phthisis pulmonalis was reported present at 213 places, scarlet fever at 50, diphtheria at 25, enteric fever at 15, and smallpox at 4 places.

MINNESOTA—*Minneapolis.*—Month of April, 1894. Estimated population, 223,700. Total deaths, 161, including phthisis pulmonalis, 18; enteric fever, 3; scarlet fever, 4; diphtheria, 2; and whooping cough, 2.





Table of temperature and rainfall, week ended May 14, 1894.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.
<b>New England States:</b>						
Eastport, Me.....	48		0	.98		.48
Portland, Me.....	55		7	.77	1.13	
Northfield, Vt.....	54		2	.65		.15
Boston, Mass.....	57		3	.83		.07
Block Island, R. I.....	53		0	.88		.38
New London, Conn.....	57		1	.79		.19
<b>Middle Atlantic States:</b>						
Albany, N. Y.....	61		1	.70		.30
New York, N. Y.....	61		1	.66	.14	
Philadelphia, Pa.....	63	1		.65	4.75	
Atlantic City, N. J.....	58		0	.57	1.93	
Baltimore, Md.....	65	1		.81	1.89	
Washington, D. C.....	65	3		.86	1.08	
Lynchburg, Va.....	66	2		.84	1.76	
Norfolk, Va.....	67	3		.91		.41
<b>South Atlantic States:</b>						
Charlotte, N. C.....	69		1	.99		.99
Wilmington, N. C.....	70		0	1.01	1.29	
Charleston, S. C.....	73		3	.91	.69	
Augusta, Ga.....	74		6	.77		.27
Savannah, Ga.....	74		4	.54	1.66	
Jacksonville, Fla.....	76		2	1.01		.51
Titusville, Fla.....	76		4	1.26		.76
Jupiter, Fla.....	72		2	2.02		1.42
Key West, Fla.....	80		4	.84		.54
<b>Gulf States:</b>						
Atlanta, Ga.....	68		6	1.09		.09
Mobile, Ala.....	75		3	1.00		.90
Montgomery, Ala.....	74		4	.91		.61
Vicksburg, Miss.....	73		3	1.05		.75
New Orleans, La.....	76		4	1.18		.88
Shreveport, La.....	75		5	.98		.88
Fort Smith, Ark.....	70		4	.98		.98
Little Rock, Ark.....	71		3	1.26		1.26
Palestine, Tex.....	72		0	1.55		1.55
Galveston, Tex.....	76		0	.98		.98
San Antonio, Tex.....	75		0	.77		.77
Corpus Christi, Tex.....	76		2	.82		.82
<b>Ohio Valley and Tennessee:</b>						
Memphis, Tenn.....	71		5	.84		.64
Nashville, Tenn.....	69		7	.77		.57
Knoxville, Tenn.....	66		4	.84	1.66	
Louisville, Ky.....	67		5	.84	.56	
Indianapolis, Ind.....	64		4	.93	.97	
Cincinnati, Ohio.....	66		6	.78	.42	
Columbus, Ohio.....	63		5	1.12		.72
Parkersburg, W. Va.....	65		3	.91	.59	
Pittsburg, Pa.....	64		2	.77	2.03	
<b>Lake Region:</b>						
Oswego, N. Y.....	55		1	.57	.23	
Buffalo, N. Y.....	55		1	.70	3.60	
Erie, Pa.....	57		1	.80	2.30	
Cleveland, Ohio.....	58		2	.77	1.53	
Toledo, Ohio.....	60		6	.77	.73	
Detroit, Mich.....	59		7	.80	.60	
Port Huron, Mich.....	53		3	.77	3.23	
Alpena.....	50		8	.84	2.86	
Marquette, Mich.....	49		7	.59	2.71	
Grand Haven, Mich.....	55		3	.78	2.42	
Milwaukee, Wis.....	55		7	.77	1.83	
Chicago, Ill.....	57		3	.84	.26	
Duluth, Minn.....	49		7	.84	.76	
<b>Upper Mississippi Valley:</b>						
St. Paul, Minn.....	58	0		.72	2.58	
La Crosse, Wis.....	59	1		.72	.58	
Dubuque, Iowa.....	60	2		.92		.62
Davenport, Iowa.....	61	1		1.05		.75
Des Moines, Iowa.....	62	0		1.14		1.02
Keokuk, Iowa.....	63		1	.91		.81
Springfield, Ill.....	63		3	1.17		.77
Cairo, Ill.....	68		6	.85		.85
St. Louis, Mo.....	67		5	.91	.49	

\*The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multiplied by seven.

Table of temperature and rainfall, week ended May 14, 1894—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.
<b>Missouri Valley :</b>						
Springfield, Mo.....	68		6	1.47		1.47
Kansas City, Mo.....	65		1	.93		.83
Concordia, Kans.....	63	1		.98		.98
Omaha, Nebr.....	63		1	1.05		1.05
Valentine, Nebr.....	58	0		.88		.78
Huron, S. Dak.....	56	2		.77		.47
Pierre, S. Dak.....	58	2		.51		.21
Moorehead, Minn.....	54	2		.56		.06
St. Vincent, Minn.....	52	2		.42	.68	
Bismarck, N. Dak.....	55	0		.56	.14	
Williston, N. Dak.....	55	1		.42		.02
<b>Rocky Mountain Slope :</b>						
Havre, Mont.....	54	0		.30	1.80	
Helena, Mont.....	54		2	.32	.58	
Spokane, Wash.....	57		1	.28	.12	
Wallawalla, Wash.....	63		7	.43	.57	
Winnemucca, Nev.....	54		4	.20	.80	
Salt Lake City, Utah.....	60		2	.39		.09
Cheyenne, Wyo.....	52	2		.49		.49
North Platte, Nebr.....	59	1		.69		.69
Denver, Colo.....	57	2		.65		.65
Pueblo, Colo.....	60	2		.28		.28
Dodge City, Kans.....	64		2	.87		.87
Abilene, Tex.....	72	2		.98		.98
Santa Fe, N. Mex.....	57	3		.21		.21
El Paso, Tex.....	74	0		.01		.01
Tucson, Ariz.....	75		5	.06		.06
<b>Pacific Coast :</b>						
Port Angeles, Wash.....	51		1	.21	.99	
Olympia, Wash.....	55	0		.49	.11	
Portland, Oreg.....	60		6	.56		.16
Roseburg, Oreg.....	58		4	.35		.15
Red Bluff, Cal.....	69		7	.22		.02
Sacramento, Cal.....	65		7	.14	.46	
San Francisco, Cal.....	58		4	.14		.04
Los Angeles, Cal.....	64		6	.07	.03	
San Diego, Cal.....	62		4	.07	.03	
Yuma, Ariz.....	79		5			

\* The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multiplied by seven.

## FOREIGN.

[Reports received from the U. S. consuls through the Department of State and from other sources.]

## AUSTRIA-HUNGARY.

*Cholera in Galicia.*

U. S. CONSULATE-GENERAL,  
*Vienna, Austria, April 28, 1894.*

SIR: I have the honor to report that since my cablegram to the Department of April 24, there have been 3 more cases of cholera in the Gemeinde of Siekierzynce. There were 16 cases previously in this Gemeinde, of which 7 proved fatal, the first case taking place on the 12th of April. In the Gemeinde of Skala, from the 7th to the 18th of April, there were 9 cases and 4 deaths. Since the 18th no new cases have been reported. There can be no doubt that these cases were genuine Asiatic cholera, as it was fully determined by bacteriological investigation. The Austrian authorities receive full official information regarding the progress of the epidemic in Russia, and if the Department so desires the Vienna consulate could furnish weekly reports concerning the progress of the epidemic both in Austria and Russia.

I have the honor to be, sir, your obedient servant,

DEAN B. MASON,  
*Vice-Consul-General.*

To the Hon. ASSISTANT SECRETARY OF STATE.

U. S. CONSULATE-GENERAL,  
*Vienna, Austria, May 5, 1894.*

SIR: I have just sent you the following cable message: "Galicia, 9 new cases and 2 deaths. France, 1 case, Nimes." The slight epidemic in Galicia seems to diminish rapidly, both in number of cases and mortality, while the constantly increasing number of cases reported in France and Belgium satisfy me that there is more cholera in the north of Europe than is generally known. Brussels is an excellent point from which to observe the march of cholera, and I now believe that Marseilles should be inspected as well. I inclose the last official report of cholera in Galicia.

Respectfully, yours,

FAIRFAX IRWIN,  
*Surgeon, M. H. S.*

To the SUPERVISING SURGEON-GENERAL M. H. S.

## CHINA.

*Report on causation and treatment of cholera in Bangkok.*

DEPARTMENT OF STATE,  
*Washington, May 18, 1894.*

SIR: I have the honor to transmit, for the information of the Supervising Surgeon-General of the Marine Hospital Service, the inclosed report on Asiatic cholera, prepared by the vice-consul-general at Bangkok, and forwarded with his dispatch, No. 78, of the 30th of March last.

I have the honor to be, sir, your obedient servant,

EDWIN F. UHL,  
*Acting Secretary.*

The Hon. SECRETARY OF THE TREASURY.

[Inclosure.]

Asiatic cholera, which makes its appearance in Bangkok more or less every year, did not do so in 1893 with its usual severity. This can be accounted for by the fact that the annual rains which usually begin about April 1 (and continue about three months), commenced somewhat earlier and continued longer than is generally the case. Why this has such an effect upon the severity of cholera can be readily seen, when we consider that the native population of this city and its surroundings drink, the year round, the water of the river Menam, which runs through this city.

Now the Menam is a beautiful river, but the water, especially after it reaches this city, is for several reasons not as wholesome as it might be—among these may be mentioned that it is the common sewer of the city, and one can see anything from a good sized cow to an oriental dog, with toes turned up, floating in it at almost any time.

Again, the city of Bangkok is only 25 miles from the mouth of the Menam, where it empties into the Gulf of Siam. Being so close to the gulf we have two tides in twenty-four hours, and although in a season of drought the brackish water from the gulf backs up to the city and even beyond it, still the native drinks from the same fountain and cholera is the result. Another provoking cause of this dread disease is the mango. This delicious fruit becomes ripe about the first of May, and when ripe it is far from being injurious to the most delicate constitutions. But here again the native Asiatic pays no attention to the laws of nature, and anticipates things by helping himself to the fruit before it is matured.

Many other predisposing causes might be mentioned, such as the too free imbibation of Scotch whisky, cold drinks, and exposure to the sun, to which far too many of the European residents in Asia subject themselves, and fatal results are the consequences. Indeed, when one is attacked with cholera who is exposed to these excesses it generally proves fatal.

During a season of drought, and especially after the water becomes brackish, the Siamese Government undertake to supply water for drinking purposes. This is taken from the river some 40 miles above the city, where the quality is good. The quantity brought down by boats, however, is not sufficient to supply, to any considerable degree, the demand, hence the trouble is only to a small extent aborted.

As no statistics are kept showing the death rate from this or any other disease, I am unable to give figures in regard to it. Some years the percentage must be very high, while in others, such as 1893, it is small. The native is attacked more frequently than the European, since the latter naturally takes better care of himself, and is consequently less prone to such attacks.

A treatment of cholera in Asia, as in all other parts of the world where the disease has appeared, that is at all satisfactory, is still an unknown quantity. When a native is attacked, probably suddenly, there seems to be a general alarm given, and in the course of a very short time quite a crowd, principally from curiosity, collects around the sufferer and remains until death, which usually occurs within two or three hours, comes to his relief. During this time no particular effort is made to relieve the patient. In fact, they look upon any treatment as useless, and nothing further than applying some hot application to the abdomen is ever done.

The European physicians are almost as helpless as the most ignorant native when battling with this awful malady. Indeed, relieving the pain

of the sufferer is about the limit of their power. They follow the old opium plan of treatment, which has forever been invoked, and which has always been known to be a failure, yet they adhere to it with a forlorn persistency, and make no particular effort to discover a new mode of treatment which might be better, and which certainly could not be worse than the one they so steadfastly cling to.

The amount of depression to the vitality of the patient brought on by cholera is something remarkable; indeed, one may be seemingly in a perfect state of health, and in half an hour be taken suddenly ill with this terrible malady and pass away in an extraordinarily short length of time.

During a residence of nearly three years in Siam, I have had the opportunity to see some 10 or 12 cases of the most pronounced type of cholera treated on an entirely different basis than that of the opium plan; and it was not only successful in relieving the suffering, but produced a cure in every case.

The following prescription is practically the same as that used in the above cases:

R Pulv. Zingiberis Off.  
 Capici Ann. āā gr. v.  
 Pulv. Valerianis Off.  
 Pulv. Scutellarizæ Lat. āā gr. x.  
 ℞.

Take such a dose every 10, 20, or 30 minutes or every hour in 2 ounces of hot water according to the severity of symptoms. Enemas of the same character may also be administered to advantage.

This treatment, with friction over the entire body, is carried out through the whole course of the disease, and a full dose of castor oil is given when convalescence sets in.

Under this plan of treatment the depression (to the already depressed condition of the patient) caused by the administration of opium is done away with, and at the same time the severe suffering is relieved without benumbing the sensibilities of the patient.

I have not had the opportunity to see this treatment tested further than in the cases above referred to. I feel sure, however, it is well worth a thorough investigation.

With a good system of waterworks in Bangkok and good sanitary regulations, both of which are sadly lacking, cholera could, in my opinion, be almost entirely done away with in the capital of the land of the white elephant.

#### INDIA.

#### *No epidemic of cholera at Nasik.*

U. S. CONSULATE,  
 Bombay, April 21, 1894.

SIR: In my dispatch No. 16, dated April 6, I had the honor to report that cholera was epidemic in Nasik, a town about 90 miles from Bombay. I now have the honor to state that the report was false, and that there were only a few isolated cases reported. My returns were not from official sources, but from a friend of mine who had gone to Nasik.

I have the honor to be, sir, your obedient servant,

H. J. SOMER, Jr.,  
 U. S. Consul.

To the Hon. ASSISTANT SECRETARY OF STATE.

## PORTUGAL.

*Status of cholera at Lisbon.*

U. S. CONSULATE,  
*Lisbon, April 30, 1894.*

SIR: Referring to my No. 11, April 23, 1894, I have to report that the epidemic therein characterized as cholera has sensibly diminished.

I herein inclose translation of the first sanitary report issued by authority, dated April 26, and translation of that, dated to-day. Assuming the entire accuracy of both, a palpable improvement is visible throughout the report. The medical body are not in accord as regards the character of the prevailing epidemic, and several members of the Scientific Medical Society who on the 25th instant classed the malady as cholera morbus have to-day modified their opinion and declared it to be cholera morbus form of cholera.

Yesterday a general meeting of the board of health was held at which the most prominent physicians were present, and the result arrived at by the Government is as follows: That in view of the opinion expressed by the board of health the Government will not declare the port of Lisbon "suspected or infected with cholera."

No bill of health has been granted by me since the 16th instant.

I have the honor to be, sir, your obedient servant,

J. B. WILBOR,  
*Vice-Consul.*

To the Hon. ASSISTANT SECRETARY OF STATE.

NOTE.—The reports referred to are briefly as follows: On April 26, total new cases, 78; total cured, 142; no deaths; total under treatment, 378. On April 30, total new cases, 26; total cured, 118; no deaths; total under treatment, 262.

The consul also sends reports for May 3 and 4 as follows: May 3, total new cases, 9; total cured, 46; no deaths; total under treatment, 119. May 4, total new cases, 32; total cured, 38; no deaths; total under treatment, 125. The increase in new cases of the 4th instant over the 3d is explained on the sanitary report in the following way:

The slight increase in the malady observable to-day may be explained by the special circumstances of yesterday, a holiday, and given up to many diversions, resulting in some acts of imprudence and abuses tending to develop the malady, concerning which patients slightly attacked deferred consulting the doctors until to-day.

U. S. CONSULATE,  
*Lisbon, May 5, 1894.*

SIR: I forward, under separate cover, six weekly bulletins on the health of Lisbon, i. e., from the 11th of February to the 10th of March, 1894. These reports were sent to me to-day only, from the hygienic service of the city of Lisbon, and are the latest procurable. From the bulletin for the week ending March 10, 1894, I compile the consular sanitary report, which I inclose, up to that date. In response to personal application made to-day at the bureau of the hygienic service for later bulletins or information, the reply was made that nothing later was ready for publication.

The health of the city of Lisbon may be considered as normal, with the exception of a prevailing epidemic classed by the authorities as cholera morbus. Some of the medical profession consider it as cholera morbus of a very mild form. It has existed for weeks in Lisbon and vicinity, but not a case of it terminating fatally has been reported. I inclose a copy of the last sanitary bulletin referring to this epidemic, dated yesterday. It is rapidly and sensibly diminishing.

Your obedient servant,

J. B. WILBOR,  
*U. S. Vice-Consul.*

To the Hon. SECRETARY OF THE TREASURY.

LEGATION OF THE UNITED STATES,  
*Lisbon, May 8, 1894.*

SIR: I have the honor to herein inclose copy and translation of a note received last night, dated May 7, from the minister of foreign affairs, declaring that His Majesty's Government absolutely maintains for the port of Lisbon the denomination of a clean port. \* \* \*

I have the honor to be, sir, your obedient servant,

J. B. WILBOR,  
*In charge of the Legation.*

[Inclosure.]

FOREIGN OFFICE,  
POLITICAL AND DIPLOMATIC DIVISION,  
*Lisbon, May 7, 1894.*

SIR: I have the honor to communicate to your excellency, for the information of your Government, the conclusion arrived at and stated in the report of this date delivered to my colleague, the minister of the interior, by Dr. Camara Pestana, director of the Lisbon Bacteriological Institute, viz:

1. There exists in the excreta of all the patients we have observed a microbe in all respects identical with another we meet with in the waters with which Lisbon is supplied.
2. This microbe is not that which was pointed out first by Dr. Koch and afterwards by various bacteriologists as the cause of Asiatic cholera.
3. The microbe in the Lisbon water is the specific agent in the malady which prevails in the capital.

In view of these conclusions, His Majesty's Government absolutely maintains for the port of Lisbon the denomination of a clean port, which insures for all passengers and goods leaving the capital free pratique at all Portuguese ports.

I avail myself, etc.,

HINTYE RIBERSO.

TURKEY.

*Cholera at Sivas.*

The U. S. consul at Sivas, under date of April 21, 1894, writes that during the week ended on that date there were 120 deaths from cholera in that city, estimated population, 40,000, and adds:

Cholera broke out here on the 15th of April. There are no official statistics of any value. The number of cases is not known. The most reliable estimates give about 120 deaths from cholera for the week.

## STATISTICAL REPORTS.

**AUSTRALIA**—*Melbourne and suburbs*.—Month of February, 1894. Population, 444,832. Total deaths, 599, including enteric fever, 22; scarlet fever, 2; diphtheria, 5; measles, 1; and whooping cough, 9.

**BAHAMAS**—*Dunmore Town*.—Two weeks ended May 11, 1894. Population, 1,472. Total deaths, 2. No deaths from contagious diseases.

**CUBA**—*Havana*.—Under date of May 12, 1894, the U. S. sanitary inspector reports as follows:

There were 130 deaths in this city during the week ended May 10, 1894. Five of those deaths were caused by yellow fever, with approximately 16 new cases; 7 were caused by smallpox, with 56 new cases approximately; 2 were caused by enteric fever, 2 by so-called pernicious fever, 4 by diphtheria, 7 by chronic enterocolitis, 2 by dysentery, 2 by cholera infantum, 1 by enteritis-cholericiforme, and 4 by pneumonia. All of the 5 deaths from yellow fever occurred in the military hospital.

**FRANCE**—*Roubaix*.—Month of April, 1894. Population, 120,000. Total deaths, 181, including enteric fever, 3; diphtheria, 4; measles, 2; and whooping cough, 3.

*St. Etienne*.—Two weeks ended May 5, 1894. Population, 133,443. Total deaths, 105, including enteric fever, 1; diphtheria, 2; measles, 3; and whooping cough, 1.

**GREAT BRITAIN**—*England and Wales*.—The deaths registered in 33 great towns of England and Wales during the week ended May 5 corresponded to an annual rate of 17·2 a thousand of the aggregate population, which is estimated at 10,458,442. The lowest rate was recorded in Derby, viz, 11·1, and the highest in Wolverhampton, viz, 31·3 a thousand.

*London*.—One thousand four hundred and thirty-four deaths were registered during the week, including smallpox, 6; measles, 125; scarlet fever, 30; diphtheria, 58; whooping cough, 59; enteric fever, 8; and diarrhea and dysentery, 11. The deaths from all causes corresponded to an annual rate of 17·2 a thousand. In greater London 1,785 deaths were registered, corresponding to an annual rate of 15·6 a thousand of the population. In the "outer ring" the deaths included diphtheria, 14; whooping cough, 20; and measles, 11.

*Hull*.—Two weeks ended April 21, 1894. Population, 212,679. Total deaths, 141, including scarlet fever, 2; and whooping cough, 6.

*Ireland*.—The average annual death rate represented by the deaths registered during the week ended May 5 in the 16 principal town districts of Ireland was 24·5 a thousand of the population. The lowest rate was recorded in Armagh, viz, 0·0, and the highest in Drogheda, viz, 35·1 a thousand. In Dublin and suburbs 165 deaths were registered, including enteric fever, 3; whooping cough, 3; and measles, 3.

*Scotland*.—The deaths registered in 8 principal towns during the week ended May 5 corresponded to an annual rate of 20·1 a thousand of the population, which is estimated at 1,447,500. The lowest mortality



was recorded in Aberdeen and Leith, viz, 16.6, and the highest in Glasgow, viz, 22.0 a thousand. The aggregate number of deaths registered from all causes was 573, including smallpox, 3; measles, 4; scarlet fever, 7; diphtheria, 10; whooping cough, 40; and "fever," 6.

GUIANA—*Paramaribo*.—Month of February, 1894. Population, 29,231. Total deaths, 78, including 1 from leprosy.

JAMAICA.—Two weeks ended April 28, 1894. Population, 580,804. Total number of deaths not reported. One death from enteric fever.

MALTA AND GOZO.—Two weeks ended March 15, 1894. Estimated population, 168,736. Total deaths, 179, including 4 from diphtheria.

SWITZERLAND—*Lucerne*.—Month of April, 1894. Population, 21,778. Total deaths, 31, including 1 from diphtheria.

WEST INDIES—*Martinique—St. Pierre*.—Three weeks ended April 29, 1894. Population, 41,100. Total deaths, 41. No deaths from contagious diseases.

*Turks Islands*.—Two weeks ended April 28, 1894. Population, 4,744. Total deaths, 7. No deaths from contagious diseases.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Acapulco .....	May 2.....	4,000	9										
Aix la Chapelle.....	Apr. 28.....	108,581	44							3	4		
Alexandria .....	Apr. 19.....	231,396	169					11					
Amsterdam .....	May 5.....	447,293	173			1					5	3	
Antigua .....	Mar. 24.....	16,664	13										
Antigua .....	Mar. 31.....	16,664	13										
Antigua .....	Apr. 7.....	16,664	15										
Antigua .....	Apr. 14.....	16,664	16										
Antigua .....	Apr. 21.....	16,664	16										
Antigua .....	Apr. 28.....	16,664	22										
Antigua .....	May 5.....	16,664	18		1								
Barmen .....	Apr. 28.....	122,000	51							3			
Basle .....	Apr. 28.....	80,000	33					1					1
Batoum .....	May 1.....	28,000	7				2						
Belfast .....	May 5.....	269,200	143					3				18	2
Belleville .....	May 12.....	10,201	1										
Birmingham.....	May 5.....	492,301	177					4				24	5
Bologna .....	May 5.....	146,068	86							3			
Bordeaux .....	Apr. 28.....	252,415	94					1		1			1
Bordeaux .....	May 5.....	252,415	73						1				
Bradford .....	May 5.....	221,610	65									1	2
Bremen .....	Apr. 28.....	127,000	55							2			
Bristol .....	May 5.....	226,578	78									2	5
Brunswick .....	Apr. 28.....	111,500	32										
Brunswick .....	May 5.....	111,500	33										
Brussels .....	Apr. 28.....	483,081	163							1			3
Cairo .....	Apr. 19.....	374,838	359					11					
Cardenas .....	May 12.....	23,517	13										
Cardiff .....	Apr. 28.....	148,890	42										1
Cardiff .....	May 5.....	148,890	47						1	3			2
Ceara .....	Mar. 31.....	42,000	142										
Chemnitz .....	Apr. 28.....	150,000	82							2			
Christiania .....	Apr. 28.....	167,145	91						1	4	6	4	
Christiania .....	May 5.....	167,145	86							1	9	1	
Cienfuegos.....	May 12.....	23,000	15					2					
Cognac .....	May 6.....	17,500	5										
Cologne .....	Apr. 28.....	307,865	139							1	13	5	5
Colombo .....	Apr. 7.....	130,000	73										
Copenhagen.....	Apr. 28.....	341,000	128							10	5		
Curacao .....	May 5.....	27,493	5										

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.		
Denia.....	May 7....	14, 000	3											
Dresden.....	Apr. 21....	312, 770	135					1			8			1
Dresden.....	Apr. 28....	312, 770	139					4	1	6				
Dublin.....	May 5.....	350, 000	165					1						
Dundee.....	May 5.....	158, 719	66					1			1		1	
Dusseldorf.....	Apr. 28....	164, 997	51								2			
Edinburgh.....	May 5.....	270, 588	89			2		1	2	2				3
Flushing.....	May 5.....	15, 250	5											
Frankport on the Main.....	Apr. 28....	196, 000	65					1			3	1	1	
Frankfort on the Main.....	May 5.....	196, 000	79											2
Funchal.....	Apr. 28....	35, 665	23					1						
Funchal.....	May 5.....	35, 665	24					3			2			
Genoa.....	Apr. 28....	182, 029	93								6			
Genoa.....	May 5.....	182, 029	87								3			
Ghent.....	May 5.....	153, 803	60							1				1
Gibraltar.....	May 6.....	25, 755	6			1		1						
Girgenti.....	Apr. 28....	23, 847	10											
Girgenti.....	May 5.....	23, 847	8											
Glasgow.....	May 5.....	686, 820	290					3		2	6	1	26	
Gothenborg.....	Apr. 28....	108, 000	30						1	2				
Guadeloupe.....	May 6.....	18, 000	6											
Guelpf.....	May 12....	10, 689	3											
Halifax.....	May 12....	38, 700	11											
Hamburg.....	May 5.....	647, 479	201					1			9	10	1	
Hamilton.....	May 11....	15, 013	3											
Havana.....	May 10....	200, 048	130		5	7		2			4			
Kingston.....	May 18....	17, 348	4											
Königsberg.....	May 5.....	167, 000									3			
Leeds.....	May 5.....	388, 761	121					1	2		1			
Leith.....	May 5.....	73, 003	23			1								2
Leghorn.....	May 5.....	103, 230	40											
Licata.....	Apr. 28....	20, 000						1						
Licata.....	May 5.....	20, 000	7					1						
Liege.....	May 1.....	158, 898	61									1		
Lisbon.....	Mch. 16....	280, 000	156											
Liverpool.....	May 5.....	507, 230	207				2	5	3	1	6	12		
London, Can.....	May 12....	35, 000	12											
London, Eng.....	May 5.....	5, 948, 300	1, 785			6		8	31	72	136	79		
Madrid.....	Apr. 27....	482, 816	264			4			1		1			
Madrid.....	May 4.....	482, 816	258			3		1			1			1
Magdeburg.....	Apr. 28....	219, 294	88						1	7			1	
Manchester.....	May 5.....	522, 365	183					2	1	2	4		9	
Maracaibo.....	Apr. 28....	40, 000	18											
Maracaibo.....	May 5.....	40, 000	18											
Marsala.....	Apr. 28....	40, 131	16											1
Marsala.....	May 5.....	40, 131	15											
Matamoros.....	May 11....	8, 000	8											
Matanzas.....	May 9.....	40, 000	23											
Mayence.....	May 5.....	72, 281	27								2			
Melbourne.....	Mch. 17....	1, 140, 405						7						2
Munich.....	Apr. 28....	390, 000	195					2	1	1				
Newcastle on Tyne.....	May 5.....	201, 947	72									1	6	
Nuremberg.....	Apr. 21....	156, 311	88						4	1	9			
Odessa.....	Apr. 28....	324, 500	143			2	1		4	4				2
Palermo.....	Apr. 28....	273, 000	119						1					
Palermo.....	May 5.....	273, 000	95					4				1		
Paso del Norte.....	May 12....	7, 000	6											
Plymouth.....	May 5.....	86, 781	28											
Prague.....	Apr. 28....	190, 135	125						3	1	1	5	1	
Puerto Cabello.....	Apr. 28....	10, 500	10											
Puerto Cabello.....	May 5.....	10, 500	13											
Queenstown.....	May 5.....	15, 000	3											
Rheims.....	May 5.....	105, 408	63					1		2	3			
Rotterdam.....	May 5.....	228, 596	126			13								
Sagua la Grande.....	May 12....	18, 109	12											
Schiedam.....	May 5.....	25, 580	9											
Sheffield.....	May 5.....	337, 964	100					2	1	1				4
Sivas.....	Apr. 21....	40, 000												
Southampton.....	May 5.....	66, 774	20											3
Stockholm.....	Apr. 28....	249, 246	74						2	2				
Stettin.....	Apr. 28....	125, 000	60					2	1					
Stuttgart.....	May 3.....	139, 659	52								4			
Sunderland.....	May 5.....	136, 101	45											
Swansea.....	Apr. 28....	95, 330									1			1

## MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Trapani .....	Apr. 28....	43,095	12					1	2		3	
Trapani .....	May 5.....	43,095	11					2	1		2	
Trieste.....	Apr. 28....	158,314	81			1		1	3	8	2	
Tuxpan.....	May 5.....	10,280	7									
Venice.....	Apr. 28....	160,282	57					1				
Vera Cruz.....	May 10....	25,500	32		3	2						
Victoria.....	May 5.....	16,841	5									
Victoria.....	May 12....	16,841	7									
Vienna.....	Apr. 14....	1,465,537	777					1	12	52	16	4
Warsaw.....	Apr. 21....	515,654	230			5	1	3	2	12		
Warsaw.....	Apr. 28....	515,654	227	6		6	2	1	2	5		2
Winnipeg.....	May 14....	35,500	4									
Zurich.....	Apr. 21....	120,000	54						1	1	1	4

By authority of the Secretary of the Treasury :

WALTER WYMAN,  
*Supervising Surgeon-General Marine-Hospital Service.*