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UNITED STATES.

A CONTRIBUTION TO THE STUDY OF TYPHOID FEVER AND ITS BACILLUS ;
A NEW PROCESS FOR SHOWING THE EBERTH BACILLUS IN STOOLS AND
WATERS.—BY L. RÉMY, M. D., CHIEF OF THE BACTERIOLOGIC SECTION
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[Translated from the "Annals of the Pasteur Institute," August, 1900, by P. A. Surg.
H. D. Geddings, U. S. M. H. S.]

Typhoid fever has formed the subject of a considerable number of researches; Baumgarten mentions 380 of them from 1894 to 1898, inclusive, and since then the number has still further increased.

If we cast our eyes over the literature of this important subject, we can therein distinguish three periods:

In the first, the bacillus found by Eberth in 1880 and critically studied by Gaffky in 1883 was considered as without doubt the specific agent of typhoid fever, and all bacteriologists were unanimous in recognizing the characteristics which Gaffky had given it.

With the discovery of the *B. coli communis* by Escherich is ushered in the second phase. Skepticism was introduced into the minds of some as to the distinction between the bacillus of Eberth and the bacterium *coli commune*. From this attitude to the denial of the specificity of the typhoid bacillus was but a step, which was soon taken. As far back as 1889 Rodet and Roux thought that the bacillus of Eberth "was only a variety of the bacillus *coli communis*, brought about in the economy of the typhoid patient." In 1892 Malvoz defended the same thesis. Rodet continues so to defend it up to the present time.

Elsner's gelatin and the discovery of the agglutinating property of the Eberth bacillus by the specific blood serum mark the beginning of the third period. The specificity of the typhoid bacillus was recognized anew. Full accord in this belief is not yet established, even up to the present time, and the theory of the colon origin of typhoid still has its partisans. They base their opinion: (1) On the rarity of the Eberth bacillus in the stools of those stricken with enteric fever. (2) On the antagonism which exists between the Eberth bacillus and the *B. coli* when they exist along with each other in the same culture media. (3) On the almost constant absence of the typhoid bacillus in waters which have caused typhoid fever, while there are constantly met there the colon bacillus, and transition forms between it and the bacillus of Eberth.

It is in the hope that our contribution will serve to clear up these important questions that we set forth our experiments which have been made with a view of solving them. Our work comprises three parts: (1) Bacteriologic researches upon the dejecta in typhoid fever, and a new process for isolating the typhoid bacillus from stools. (2) Researches into the antagonism between the typhoid bacillus and the *B. coli communis*. (3) Researches upon the typhoid bacillus in waters, and a method for proving the existence of the Eberth bacillus in river and drinking waters.

PART I.

Researches upon the dejecta in typhoid fever—Method for isolating the typhoid bacillus from stools.

The occurrence of the typhoid bacillus in stools is of considerable importance as much from a theoretical as from a diagnostic point of view. Therefore, many bacteriologists have endeavored to show it, but few have succeeded. Gaffky, di Vestea, Pfuhl, Eisenberg, Rodet, and Roux, have sought it in vain. Pfeiffer, Seitz, Merkel, Karlinski, and Chantemesse sometimes found them, but as Sanarelli remarked, they based their conclusions on characteristics which in 1894 had little value. The author used to think that the Eberth bacillus was never isolated from typhoid stools. We admit all the more willingly that ordinary gelatin which was used, scarcely ever permits the isolation of the typhoid bacillus in the presence of the *b. coli communis*. We had established this fact since 1892, and in a work which we published then, in collaboration with Dr. Sugg, under the direction of Professor Van Ermengem, we expressed the wish for a gelatin which would permit the distinction upon plates between the typhoid and colon colonies.

In 1894 Nicolle met the same difficulties as we did. It is not then surprising that Wathelet, who in 1895 was contented with the defective method of ordinary gelatin plates, should have only found 10 true typhoid colonies from over 600 Eberth-like colonies which he had planted and replanted from typhoid stools.

In 1895, Elsner, thanks to his potato gelatin, recovered the typhoid bacillus from feces 15 times out of 17 cases. The search was successful on the seventh day and in the sixth week of the disease. In the same year Brieg found it 10 times in 11 cases. The bacilli were numerous at the *fastigium* of the disease and diminished with the decline of the fever.

In 1896 Chantemesse, with Elsner's gelatin, published 13 cases, where examination practiced at various periods of the disease gave positive results.

In the same year Courmont isolated the bacillus twice in 9 cases and never in other diseases. He concluded: (1) That the Elsner medium easily puts in evidence cultural differences between the Eberth bacillus and the bacillus coli occurring in our cultures. (2) These differences are not absolute, and are effaced in cultures from typhoid stools, where the colon bacillus often takes on an Eberth-like appearance.

In 1896, Pollak, using the same gelatin, isolated the Eberth bacillus in 20 cases.

Van der Velde in turn, in 1898, announced that he had only found the Eberth bacillus in 3 out of 5 cases, and the organisms were in very limited number.

If, therefore, certain bacteriologists succeeded in isolating the Eberth bacillus from stools by the Elsner method, others only obtained constant or negative results. *A priori* it would seem that this must be so. Elsner's gelatin is made with a decoction of potatoes; now the chemical composition of these is excessively variable, differing not only according to the variety, but also with the nature of the soil and fertilizers, and with other conditions, as the period of growth and the age of the tuber when used.

If the Elsner gelatin was very variable from the point of view of its chemical composition, it was no less so from the uncertainty which existed as its method of preparation as detailed by its author. Grimbert in 1896, made gelatin by this method "which should be feebly but still decidedly acid." He proposed, therefore, an acidity such that 10 c. c. were to be neutralized by 4 to 5 c. c. of limewater. He showed that under such conditions he obtained substantially identical results with or without the addition of the potassium iodide solution, and even by replacing the decoction of potatoes by an infusion of meat for four hours. He therefore substituted a gelatin having the following composition:

	Grammes.
Distilled water.....	1,000
Maltose.....	1
Soluble starch.....	2
Asparagine.....	2
Neutral phosphate potassa.....	2
Sulphate potassa.....	2
Sulphate magnesia.....	2
Ammonium bimalate.....	2
Magnesium carbonate.....	1

The liquid containing these salts is used to make a gelatin whose acidity is such that 10 c. c. are neutralized by 5 c. c. of limewater. By the use of his gelatin Grimbert obtained the typhoid bacillus 4 times in 6 cases, and the two negative results corresponded to the period of convalescence. According to the author the colonies do not appear before the third day.

For our part we much fear that the nutritive properties of this gelatin would be too feeble to permit the development of the typhoid bacillus, unless it was endowed with great vitality. This fear appears all the more reasonable because its acidity is very strong, equaling, in fact, 1-1000 of H_2SO_4 .

The tardy appearance of the colonies, as well as the negative results which the author obtained during the period of convalescence, appear amply to justify this view.

The procedures of which we made use to isolate the Eberth bacillus from the stools were too imperfect, therefore, to be of easy clinical application. We must recognize, however, that the presence of the Eberth bacillus in the stools of a person whom we believe to be stricken with enteric fever is the sole one of all the signs which lead to this diagnosis—which, taken by itself, *can* lead to a positive diagnosis. Every one of the symptoms which constitute the classical syndrome of the disease may not only be wanting, but may also be met with in affections which have nothing in common with typhoid fever. Serum diagnosis, which in certain cases permits us to arrive at a rapid judgment of the nature of the disease, furnishes quite often uncertain results, whose cause is independent of the will of the observer. This fact has been amply established by Achard and Bensaude, Van de Velde and Beco, that not only do different specimens of the Eberth bacillus manifest a various aptitude to agglutination by the same serum, but that the same specimen of the Eberth bacillus reacts in a very variable fashion to different serums. Further, Achard and Bensaude, Jez, Beco, and Du Mesnil de Rochemont have noted agglutination in nontyphoid infections, but Biberstein, Busch, Schumacher, Hesse, and Fischer mention authentic cases of typhoid fever in which the serum reaction was wanting. Finally, Ziencke, Stern, Van Ordt, Kuhnau, and Dineur report cases of positive agglutination by normal serum, and in the absence of any previous typhoid infection. It is always well to recognize the fact that serum coming from individuals, healthy, or not suffering with typhoid infections, may agglutinate the typhoid bacillus in dilutions even more feeble than that supplied by typhoid patients.

It is necessary, therefore, to dare to affirm the existence of typhoid fever based on serum diagnosis that the dilution should be 1-50 at least. Now, it is unfortunately so that there are numerous cases of typhoid where the agglutinating power only reaches this high degree late in the disease, or sometimes never attains it. Out of 14 cases cited by Beco, in 6 the serum only agglutinated in dilution of 1-10 to 1-20 from the

twelfth to the twentieth day. Serum diagnosis is not, therefore, rigorously specific, since it may be observed in other infections than typhoid fever, and may be wanting in cases of authentic typhoid, or exist in such a feeble degree that we can not be permitted to draw absolute conclusions as to the presence of enteric fever.

The presence of the typhoid bacillus in the stools, then, is the sole sign, which, taken by itself, suffices for the diagnosis of typhoid fever. It is also the only one in which we can not be mistaken. In consequence the search for this organism in the stools acquires a considerable importance, and it is necessary for one to familiarize himself with it. Now, while the German bacteriologists praise Elsner's gelatin used for this purpose, French microbiologists do not unanimously share this enthusiasm, and the results which have been obtained in Belgium are very variable. This is due, as we have mentioned above, to the great variation in the chemical composition of the potato. To obviate this inconvenience we have, after painstaking and long experimentation, adopted a differential gelatin, with which we have undertaken the researches which form the subject of this memoir.

The chemical composition of this gelatin closely corresponds to that of a potato which has been sent us by Dr. Petermann. Dextrine and glucose have been omitted, and disodic phosphate substituted for dipotassic phosphate. The composition is as follows :

	Grammes.
Distilled water	1,000
Asparagine	6
Acid, oxalic.....	0.5
Acid, lactic.....	0.15
Acid, citric.....	0.15
Disodic phosphate.....	5
Magnesium sulphate	2.50
Potassium sulphate	1.25
Sodium chloride.....	2

All these salts, the magnesia sulphate excepted, are powdered in a mortar and introduced into a flask with a liter of distilled water, and 30 grammes of Witte's or Grubler's peptone. This is heated in the autoclave under pressure for $\frac{1}{4}$ hour. As soon as the flask is taken out, the contents are poured into another flask, into which has been previously placed 120 to 150 grammes of gelatin and the flask shaken to effect solution, and then made slightly alkaline with soda solution. Then cook in the autoclave at 110° C. for $\frac{1}{4}$ hour, and then acidify with a one-half normal solution of H_2SO_4 , so that 10 c. c. have an acidity which is neutralized by the addition of 0.2 c. c. of one-half normal soda solution. This acidity is equivalent to 0.5 H_2SO_4 per liter.

After shaking place in a steam sterilizer for ten minutes and filter. When filtration is completed verify the acidity. For this purpose, by the use of a pipette, put 10 c. c. of the gelatin in a vessel containing 100 c. c. of exactly neutral distilled water, and add 4 to 5 drops of phe-

nolphtalein. Let fall drop by drop, by means of a pipette graduated in one-hundredths, the one-half normal soda solution. The red color should appear as soon as 0.2 c. c. of the soda solution have been added to the 10 c. c. of gelatin. As soon as the desired acidity is obtained, add the magnesium sulphate and tube in tubes containing 10 c. c. each, and sterilize 3 times like ordinary gelatin.

At the moment of using, put into each tube of gelatin 1 c. c. of a 35 per cent solution of lactose and 0.1 c. c. of a 2.5 per cent solution of carbolic acid. When Elsner published his potato gelatin we were already using the medium whose composition we have just described, but we had only studied with it a few of the typhoid and colon bacilli in our laboratory. Its composition has elsewhere been published in 1896, after we had verified the method in which various bacilli which we were able to procure reacted toward it.

Behavior of the colon and typhoid bacilli in the differential gelatin.

A. *Colon bacillus*.—Colonies appear after two days, some deep and some superficial.

I. *Deep colonies*.—Are rounded, ovoid, sometimes fusiform, and of a yellowish-brown color.

Fine bubbles of gas, proceeding from the decomposition of the lactose, sometimes accompany them.

Superficial colonies.—Of these two varieties may be distinguished the one, circumscribed, globular, of a brownish-yellow color, sometimes with vertical prolongations which are raised above the surface of the gelatin; the other, circumscribed, with irregular outline, and opaque. In the beginning they are sometimes bluish and transparent, but rapidly take on opacity.

B. *Eberth bacillus*.—The typhoid colonies likewise show after two days, and are deep or superficial.

I. *Deep colonies*.—Of a bluish white color, smaller than the colon colonies, but perfectly distinct to the naked eye. The typhoid colonies never make gas.

II. *Circumscribed colonies*.—These are not generally well visible until the third day. In the beginning they remind one of the appearance of moulds, but later they become circumscribed and more bluish and may then sometimes reach the size of a half-franc piece. When the typhoid bacillus is endowed with great vitality, as when, for example, it comes from the spleen, its superficial colonies may more closely approach in appearance those of the colon. The deep colonies, however, preserve their typhoid characteristics.

When the colon bacillus is attenuated its deep colonies are less distinct, may lose their brownish tint and may become bluish; in such cases they are not more blue than those of the typhoid bacillus. The deep colonies are best recognized by examining them for transparency behind a black screen which comes as high as the eyes. With a little

manipulation it is easy to find a position in which the colonies may be perfectly distinguished, when they may be marked with a blue pencil for transplantation.

How colon and typhoid bacilli from the stools react in the differential gelatin.

A. *Colon bacillus*.—The colon colonies generally preserve the characteristics which have been generally described for laboratory cultures.

B. *Typhoid colonies*.—The same may be said of the typhoid colonies. Some superficial colonies, however, take on a peculiar appearance, causing them to resemble fine drops of water.

We must remark, however, that colonies, whether colon or typhoid, when replanted from gelatin plates, may or may not produce atypical colonies.

Staphylococci, streptococci, and in general all organisms grow in this gelatin with the characteristics which are peculiar to them. This gelatin is not therefore elective, and various researches which we have made on the stools to eliminate the streptococci and staphylococci have failed.

We have also used without results: (1) Carbolic acid in varying proportions, (2) benzoic acid alone or combined with carbolic acid, and (3) formic acid alone or combined with carbolic or benzoic acids.

The liquefying organisms always grow badly, especially if we raise the proportion of carbolic acid to 0.5 per 1,000.

This gelatin has enabled us to look for the typhoid bacillus in the stools of typhoid patients, and as a control in the stools of those suffering with infections other than typhoid.

Search for the Eberth bacillus in typhoid stools.

Procedure.—Two-tenths cubic centimeter of fecal matter is introduced into 10 c. c. of distilled water.

Second dilution.—One loopful of the first dilution is then added to 10 c. c. of distilled water.

One, two, or three loopsful are then used to make 3 gelatin plates, and these plates are kept as far as possible at a temperature of 20–22° C. As soon as the colonies appear, that is to say, in two or three days according to circumstances, the colonies which it is desired to study further, are marked with a blue pencil. Then by the aid of a simple platinum needle, we separate the colonies by four straight strokes from the rest of the gelatin. The small cube of gelatin thus isolated is then taken up on the platinum needle and put into a tube of bouillon and placed in the incubator at a temperature of 37° C. On the next day we examine the motility of the growth, and plant 2 loopsful in a tube of lactose gelatin, previously liquefied. After thorough mixing by gentle shaking, the tube is placed in cold water to obtain rapid solidification, and then put at a temperature of 20–22° C. Under these conditions the colon bacillus gives abundant gas bubbles in twenty-four hours.

The same bouillon culture is also used for making an agglutination experiment with an artificial antityphoid serum, being agglutinated by a dilution of 1-80000 of the experimental serum.

We have often made use of the agglutination by formalin devised by Malvoz for the differentiation of typhoid and colon bacilli. These characteristics appear sufficient to us at the present time to identify the typhoid bacillus. The studies of Wernicke, Busenius, Van de Velde, Busch, Rodet, and Beco have elsewhere abundantly demonstrated this.

A résumé of cases of typhoid fever in which bacteriological analysis of the stools has been practiced.

Before publishing these observations we think it useful to give certain preliminary points in order the better to set forth the conditions under which we have experimented.

(1) The length of the prodromes being very variable, and the clinical signs of this period being only those of the first week of the disease in a less marked degree, it is difficult to definitely state the beginning of the disease. For ease of comparison, therefore, we have always counted the day of the disease as dating from the time when the patient took to bed.

(2) We have endeavored not only to prove the presence of the typhoid bacillus in the stools, but especially to count the colonies of the Eberth and the colon bacilli. By reason of the inherent difficulties of this count, it must be evident that these figures can be only approximate. To obtain mathematical accuracy it would have been necessary to replant and restudy each and every colony developed on the plates. This would have been a labor for which the results attained would not have compensated. Therefore we have been content, with a few exceptions, to replant and verify 10 colonies of each of the various varieties represented on the plates, and we have drawn conclusions as to the identity of the organisms constituting other colonies of the same variety.

(3) The agglutination by the serum of patients whose stools we have studied has been conducted from an essentially clinical standpoint. The dilution figure 1-50, which we frequently give, does not represent a maximum, but only the dilution necessary to warrant the diagnosis of typhoid fever.

Typhoid fever—Analysis of the stools.

Number.	Date of examination of stools.	Day of disease.	Day of appearance of colonies.	Total number of colonies.	Number of typhoid colonies.	Number of diffuse typhoid colonies.	Number of colon colonies.	Result of serum diagnosis.	Remarks.
	1899.		(b)						
1	Jan. 7	10	2	50	30	0	20	1-50	
2	Jan. 18	9	2	40	30	0	10	1-50	
3a	Jan. 23	14	2	62	60	0	2	1-50	
4b	Feb. 8	9	2	30	11	1	19	1-50	
5c	Feb. 9	16	2	200	30	1	170	1-30	
6b	Feb. 21	16	3	50	22	0	28	1-30	
7	Mar. 4	30	4	105	5	0	100	1-30	Second examination of No. 6, thirtieth day.
8	Mar. 2	17	2	(d)	(d)	(d)	(d)	(d)	Too many colonies on plate.
8'	Mar. 27	42	3	380	40	0	300	1-50	Second examination of No. 8.
9b	Mar. 7	4	2	20	2	0	18	1-50	
10c	Mar. 20	22	2	80	50	3	30	1-50	
11	Apr. 5	9	2	50	20	0	30	1-30	
12	.....do.....	5	2	30	2	0	25	Nil.	
13	Apr. 20	11		(f)	(f)	(f)	(f)	(f)	
13'	Apr. 25	16	5	10	2	1	4	1-10	Second planting of No. 13.
14	May 31	6	2	80	8	0	72	1-40	
15	.....do.....	5	2	100	5	0	95	1-50	
16	June 13	9	2	6	6	3	0	1-50	
17	June 20	16	3	100	20	0	80	1-50	
18	June 13	42	5	173	1	0	172	1-30	
19	June 19	53	4	200	0	0	200	1-30	No. 18 at fifty-eighth day of disease.
20	June 20	13	2	200	100	0	100	1-50	
21	June 23	5	3	100	4	0	96	Nil.	
22	June 28	10	2	100	5	0	95	Nil.	No. 21 at tenth day of disease.
23	Sept. 21	45	4	55	10	0	45	1-50	
24	Oct. 5	5	2	30	2	0	28	1-30	
25	Oct. 10	10	2	40	26	0	14	1-50	No. 24 at tenth day of disease.
26	Oct. 21	21	4	250	2	0	240	1-50	No. 24 at twenty-first day of disease.
27	Oct. 23	45	4	40	12	0	28	1-50	
28	Oct. 26	3	2	6	5	0	1	1-40	
29	Oct. 27	11	2	150	100	0	50	1-30	
					590	9 g			

a Note the considerable number of B. typhoid in intestine; patient died the evening of the examination.

b Certain colon colonies, whiter than usual, give the indol reaction, but did not ferment lactose.

c Comparative plates made with ordinary gelatin did not permit the isolation of the typhoid bacillus from the stools.

d Replanting impossible.

e Even up to the third week the number of typhoid bacilli in the intestine is considerable, though ordinarily at so advanced stage of the disease the number of Eberth bacilli is reduced. The patient died on the day following the examination of the stools.

f Ordinary dilutions give no colonies on plates.

g Among the 590 typhoid colonies which we have examined 5 only were superficially diffuse. This explains the failure of bacteriologists who in investigations prior to ours limited themselves to replanting only diffuse colonies as those of Eberth's bacillus.

Search for the Eberth bacillus in the stools of nontyphoid cases.

Researches have been carried out on the stools of 12 persons suffering from the following diseases: Grippe, nephritis, biliary calculus, tuberculosis, hysteria, gastric catarrh, gastro-intestinal catarrh, pneumonia, and enteritis.

In none of these patients have we found in the stools any bacilli presenting all the characters of the Gaffky bacillus, although we have sometimes replanted and studied as many as 50 colonies.

In a case of grippe we have found in 60 colonies 10 of colon bacillus suggesting typhoid by their appearance, but they did not render turbid the bouillon in which they were replanted.

In a case of gastro-intestinal catarrh and in a case of enteritis we also observe Eberth-like colonies. The organisms which composed them were motile, did not give the indol reaction, did not ferment lactose, but were not agglutinated by the experimental typhoid serum. Now, at the time of our experiments, like Wernicke and Busenius, Van de Velde, Busch, Rodet, and Beco, we attached to the property of being agglutinated by the artificial typhoid serum, a very great importance in differentiation of colon and typhoid bacilli. Therefore we eliminated these bacilli, and considered them as colons. Having thus finished the first part of our investigations, we believe it justifiable to draw the following conclusions:

(1) The differential gelatin whose chemical composition we have given is a practical and certain medium for the isolation of the typhoid bacillus in the presence of colon bacillus, by the plate method.

(2) With this gelatin we have completed the study of the stools 31 times in 23 patients at different periods of the disease. Three times there [have been negative results—once on the seventeenth day of the disease (observation 8) there were too many colonies on the plates; a second time on the eleventh day (observation 13) there were no colonies; the third negative result is from a planting made between the seventh and eighth week (observation 19). For the first 2 negative experiments later examination has given positive results (observations 8' and 13), and in the third unsuccessful experiment a previous planting (observation 18) had enabled us to isolate the typhoid bacillus in the stools of the same patient.

To recapitulate, we have isolated the typhoid bacillus from the stools in the 23 cases which we have studied, and on the following days of the disease.

One time on the third day, observation 28; one time on the fourth day, observation 9; four times on the fifth day, observation 12, 15, 21, and 24; one time on the sixth day, observation 14; four times on the ninth day, observation 2, 4, 11, and 1; three times on the tenth day, observation 1, 22, and 25; one time on the thirteenth day, observation 20; one time on the fourteenth day, observation 3; three times on the sixteenth day, observation 5, 6, and 17; one time on the twenty-first day, observation 26; one time on the twenty-second day, observation 10; one time on the thirtieth day, observation 7; two times on the forty-second day, observation 8 and 18; two times on the forty-fifth day, observation 23 and 28.

Few in the beginning (observation 24) the number of Eberth bacilli increases considerably up to the second week (observation 25) and sometimes even may constitute the entire intestinal flora (observations 3, and 16); thence it diminishes progressively (observation 26) up to the third or fourth week, and ends by disappearing gradually from the intestine, or at least we have not succeeded in finding it later by methods which had been previously successful.

(4) The intestinal flora is sometimes represented by a great number

of species and varieties (observations 5, 8, 8', 20, and 22), while on the contrary there may be few species or varieties of the same species (observations 13', 16, and 18).

(5) The typhoid bacilli isolated from the stools of typhoid patients belong to one and the same type; they do not give indol, do not ferment lactose, and are all agglutinated by a high dilution of the experimental serum.

(6) Formalin exploited by Malvoz for the differentiation of colon and typhoid gives variable results. Consequently we believe it will be best to abandon the process. These results confirm those obtained by Widal, Nobecourt, and Beco.

(7) The typhoid bacilli isolated from the stools in the course of the second week, as well as those isolated from the spleen at necropsy, possess a remarkable vital energy. They give beautiful colonies upon plates at the end of forty-eight hours, and rapidly render bouillon and even solutions of mineral salts turbid.

(8) On the contrary the bacilli which are found in the stools at the end of the disease have only feeble vitality. The colonies appear more slowly upon the plates (observations 7, 18, and 19) and in a series of quite similar colonies replanted upon bouillon, the ones grow abundantly, while on the contrary the others grow wretchedly or not at all.

(9) In three cases (observations 12, 21, and 22) the typhoid bacillus was found in the stools when the signs of typhoid fever, including the serum reaction, were wanting at the time of examination. Consequently the typhoid bacillus, with its attributes as we know it, is the only sign, which taken alone, can justify the clinician in asserting positively the diagnosis of typhoid.

(10) In the stools of persons stricken with infections other than typhoid we have found no genuine typhoid bacilli. We have sometimes isolated (2 cases in 12) a bacillus presenting the characters of the bacillus of Eberth, but which was not sensitive to the action of the serum antityphoid.

(11) The constant presence of the bacillus typhosus in the stools of persons stricken with typhoid fever, its absence in the intestines of patients stricken with other diseases, renders it possible to assert that the bacillus typhosus is in truth the causative agent in typhoid fever.

[Department Circular No. 134.]

Special regulations for the government of vessels plying between infected or suspected fruit ports and ports of the United States.

TREASURY DEPARTMENT,
OFFICE OF SURGEON-GENERAL U. S. M. H. S.,
Washington, D. C., August 31, 1900.

To United States consular officers, masters and owners of vessels, collectors of customs, national, State, and local quarantine officers, and others:

To permit vessels from foreign ports with perishable cargoes of fruit to enter ports of the United States without detention in accordance with

the provisions of the Quarantine Regulations, November 13, 1899, the following special regulations are promulgated, and will be enforced at the ports of departure :

SPECIAL RULES AND REGULATIONS FOR VESSELS ENGAGED IN THE FRUIT TRADE BETWEEN FOREIGN PORTS SUSPECTED OF BEING INFECTED WITH YELLOW FEVER AND PORTS OF THE UNITED STATES.

1. None of the crew shall be allowed to go on land except the captain.

2. No one from the shore shall visit the boat, except the quarantine officers, customs officers, and agent of the company which charters the ship.

3. All laborers who may be taken on the ship for loading purposes must have all their baggage disinfected before boarding the vessel, and must have no intercourse with the shore subsequent to their entry upon the vessel until their final discharge therefrom.

4. No intercourse is to be allowed with persons on shore, except as provided in the preceding paragraphs.

5. No vessel in the harbor shall lie at any wharf, except as provided in special cases; but must be anchored in the river or harbor in mid-stream, and lighters, having been loaded by natives ashore, may be unloaded on to the ship by the laborers whose clothing has been disinfected.

6. The ships, if going up a river or harbor for fruit, shall not be allowed to bring any passengers down the river on their return.

7. All passengers must embark from the regular ports and must have been under the observation of the sanitary inspector of the United States for at least ten days prior to the departure of the ship and be provided with his certificate to that effect. Immediately preceding their embarkation their baggage must be disinfected in accordance with the quarantine regulations of November 13, 1899, the most convenient methods being six hours' exposure to formaldehyd gas or twenty-four hours' exposure to sulphur dioxide gas in a closed chamber, the clothing being hung up on lines for the better penetration of the gas. Under no circumstances shall any passengers be allowed to carry bedding or household effects. Where passengers come from elevated and noninfectible points in the interior to low coast towns for embarkation they should not be required to pass the ten days' period of observation in the latter places because of the danger of developing malarial or other tropical fevers. They should be required to bring a certificate from the United States consul or a reliable physician, stating that they have been under observation at such elevated and noninfectible interior point for ten days immediately preceding their arrival at coast towns. Their baggage should then be disinfected and they should be allowed to proceed without detention. Passengers taking ships bound direct to points north of the southern boundary of Maryland need not be detained.

8. Special attention should be paid to the sanitary condition and history of passengers arriving directly or indirectly from the Pacific coast towns of Central America.

9. All outgoing vessels must be provided with a bill of health in accordance with the law, and, in addition thereto, certificates in duplicate signed by the medical officer attached to the consulate and giving the name of the ship, her master, the number of crew, and a list of passengers, their sanitary condition, and their ultimate destination in the United States, and stating the health conditions of the port and surrounding country, of the ship and her crew, with any other pertinent information. This certificate shall be attached to the bill of health and a duplicate to the duplicate bill of health.

SPECIAL RULES AND REGULATIONS FOR VESSELS ENGAGED IN THE FRUIT TRADE BETWEEN FOREIGN PORTS INFECTED WITH YELLOW FEVER, OR WHERE YELLOW FEVER PREVAILS, AND PORTS OF THE UNITED STATES.

The foregoing rules and regulations shall apply also to vessels engaged in the fruit trade between foreign ports infected with yellow fever, or where yellow fever prevails, and ports of the United States, and are the special regulations provided for in Article II, paragraph 2, D, exception 3, of the Quarantine Regulations for Domestic Ports, November 13, 1899. Attention is called to the further requirement in said Article II, paragraph 2, D, exception 3, that these vessels shall carry no passengers; and also to the regulations to be observed at all foreign ports with regard to vessels leaving for the United States or its dependencies.

WALTER WYMAN,
Supervising Surgeon-General U. S. M. H. S.

Approved:

O. L. SPAULDING,
Assistant Secretary.

Prohibition on figs and raisins from Smyrna raised.

WASHINGTON, D. C., *September 15, 1900.*

SIR: Referring to my letter of August 8, 1900, requesting that the consul at Smyrna be wired that "Shipment of raisins and figs prohibited, also second-hand and used rugs and carpets;" also to my letter of August 31, 1900, referring to a ruling to the effect that these regulations will be waived with regard to figs and raisins after Smyrna has been declared free from bubonic plague for sixty days, I have now to state that I am informed by the Surgeon-General of the Marine-Hospital Service that a careful investigation has just been completed in the laboratory of that Service of the viability of the plague bacillus upon

figs and raisins, and, as a result, he is warranted in preparing the following telegram, which I have to request you will forward:

"Prohibition against importation of figs and raisins from Smyrna now waived."

The Surgeon-General has notified the importers.

Respectfully,

O. L. SPAULDING,

Acting Secretary.

HON. SECRETARY OF STATE.

[Reports to the Surgeon-General United States Marine-Hospital Service.]

Death from bubonic plague on steamship Coptic at Kobe.

SAN FRANCISCO QUARANTINE STATION,
Angel Island, Cal., September 5, 1900.

SIR: Dr. Chapman, the surgeon of the steamer *Doric*, informed me on his arrival at this port on the 3d instant that the steamer *Coptic*, which left San Francisco on July 26, was in quarantine at Kobe on the day of the *Doric's* arrival at that place. The captain of the *Coptic* informed the surgeon of the *Doric* that they were in quarantine on account of a suspicious case of illness of a Chinese, and were then awaiting the arrival of the chief quarantine officer from Yokohama. The local quarantine officer at Kobe suspected it to be a case of bubonic plague.

On the arrival of the *Doric* at Yokohama on the following day the officials of the steamship company informed him that they had just heard from Kobe to the effect that the case had died and was one of bubonic plague. The *Coptic* is quarantined for ten days.

Dr. Chapman believes that the case came from Honolulu, but is not quite certain.

Respectfully,

J. J. KINYOUN,

Surgeon, U. S. M. H. S., Quarantine Officer.

Arrival at Baltimore of vessels from West Indian and South American ports.

BALTIMORE, MD., *September 8, 1900.*

SIR: The following-named vessels entered at this port during the week ended September 8, 1900, from the ports named: September 4, British steamship *Benwick*, from Daiquiri, Cuba, with iron ore; British steamship *Taff*, from Port Antonio, Jamaica, with fruit; Norwegian steamship *Tyr*, from Santiago de Cuba, with iron ore; German steamship *Canadia*, from Barbados, British West Indies, with ballast. September 6, British steamship *Brookline*, from Bocas del Toro, with fruit; Norwegian steamship *Bergenseren*, from Port Antonio, Jamaica, with fruit.

Respectfully,

WM. F. STONE,

Collector.

BALTIMORE, MD., *September 15, 1900.*

SIR: The following-named vessels arrived at this port during the week ended this day from the ports named: September 10, Italian steamship *Alessandro del Buono*, from Guanta, Venezuela, with fruit. September 11, Norwegian steamship *Jamaica*, from Port Antonio, Jamaica, with fruit; British steamship *Ely*, from Port Antonio, Jamaica,

with fruit. September 13, British steamship *Ethelwold*, from Bocas del Toro, Colombia, with fruit.

Respectfully,

WM. F. STONE,
Collector.

Inspection of vessels at Seattle, Wash.

SEATTLE, WASH., August 31, 1900.

SIR: I have the honor to report that the following vessels have been inspected at this station during the two weeks ended August 23, 1900:

Vessels sailing for Nome—August 14, steamer *Chas. D. Lane*, crew, 61; passengers, 14. August 15, steamer *John S. Kimball*, crew, 50; passengers, 20. August 22, steamer *Oregon*, crew, 63; passengers, 17.

Vessels arriving from Nome.—August 11, steamer *Alliance*, crew, 38; passengers, 37.

Respectfully,

D. E. ROBINSON,
Assistant Surgeon, U. S. M. H. S.

Smallpox in Kansas.

TOPEKA, KANS., September 10, 1900.

SIR: In compliance with the resolutions adopted by the national conference of State and provincial boards of health at Toronto, 1886, and Washington, 1887, it becomes my duty to inform you that smallpox has been reported to this office from the following points in the State of Kansas during the month of August, 1900: Sumner County, 11 cases; Olathe, 1 case; Parsons, 1 case; Eureka, 1 case; Cherokee County reported, but number not known; Crawford County, 11 cases; total number of cases, 25. No deaths reported from this disease during the month.

Respectfully,

W. B. SWAN, M. D.,
Secretary State Board of Health.

Smallpox in Minnesota.

ST. PAUL, MINN., September 12, 1900.

SIR: The reports of smallpox in this State for August are as follows:

Browns Valley, village.....	1	Winona, city.....	5
Chaska, city.....	1	Counties—	
Duluth, city.....	9	Carver.....	1
Jordan, city.....	14	Cass.....	14
Le Sueur, borough.....	2	Faribault.....	1
Litchfield, village.....	2	Hubbard.....	16
Little Falls, city.....	26	Le Sueur.....	20
Minneapolis, city.....	14	Lake.....	4
St. Charles, city.....	3	Martin.....	1
St. Paul, city.....	5	Ottertail.....	1
Shakopee, city.....	5	Scott.....	5
Two Harbors, village.....	2	Sherburne.....	7
Utica, village.....	2	Traverse.....	18
Winnebago, village.....	3		

Respectfully,

H. M. BRACKEN,
Secretary State Board of Health.

*Tacoma, Wash., free from smallpox.*TACOMA, WASH., *September 6, 1900.*

SIR: I have the honor to report that this city is now free from smallpox, I, as commissioner of health, having discharged the last case from the city quarantine station this date. There are several cases in Puyallup, this county, which are being taken care of by the county authorities. I inclose you herewith report of cases reported to me by the postmaster of Chehalis, Lewis County, Wash.

There will undoubtedly be many cases of smallpox in this State this winter, especially in the country districts, as the quarantine regulations have been very lax, and a number of physicians still insist that the cases are chicken pox.

Respectfully,

F. J. SCHUG,
Acting Assistant Surgeon, U. S. M. H. S.

[Inclosures.]

CHEHALIS, WASH., *September 4, 1900.*

SIR: I am informed by F. L. Riffe, postmaster at Riffe, Lewis County, that there is smallpox in the home of the postmaster at Swofford, this county. Thos. Faley, a patron of Swofford post-office, and two others, attest to the truth of the report. Smallpox is also reported in the vicinity of Vance post-office.

Respectfully,

DAN W. BUSH,
Postmaster.

CHEHALIS, WASH., *September 4, 1900.*

SIR: Since writing you to-day relative to Swofford post-office I have been assured that they are fumigating the mail, so your correspondence had better be by way of inquiry if you conclude to write them.

Respectfully,

DAN W. BUSH,
Postmaster.

REPORTS FROM THE MEXICAN BORDER.

El Paso, Tex., September 8, 1900—Inspection service.—I have the honor to submit the following summary of work at this station for the week ended September 8, 1900: Inspection of Mexican Central Railroad passenger trains, 120 persons; inspection of Mexican Central Railroad freight crews, 14 men; inspection of Rio Grande and Pacific Railroad passenger trains, 22 persons; inspection of Mexican immigrants, 46; disinfection of baggage, bedding, blankets, etc., 33 pieces; disinfection of soiled linen imported for laundry, 354 pieces. During the past week on various days 3 persons arrived on the Mexican Central Railroad respectively six, eight, and nine days out from Vera Cruz, Mexico. Their pulse being normally right, after disinfecting their baggage I let them pass.

E. ALEXANDER,
Acting Assistant Surgeon, U. S. M. H. S.

Laredo, Tex., September 6, 1900—Inspection service.—I have the honor to submit the following report for week ended September 1, 1900: Persons on Mexican National Railroad inspected and passed, 539; Mexican immigrants inspected and passed, 69; Italian immigrants inspected and passed, 6; immigrants vaccinated, 20.

August 29, 1 person five days out from Tampico; placed in detention camp and baggage disinfected. August 30, 1 person six days out from Tampico, refused entry and baggage disinfected. August 30, 1 person two days out from Tampico, placed in detention camp and baggage

disinfected. August 31, 1 person five days out from Esperanza, Mexico, placed in detention; no baggage. All baggage disinfected during the week was by means of formaldehyd gas.

Laredo, Tex., September 9, 1900—Inspection service.—I have the honor to submit the following report for week ended September 8, 1900: Persons inspected and passed over footbridge, 2,773; 1 Italian immigrant refused entry on three separate occasions; persons on Mexican National Railroad inspected and passed, 430; immigrants inspected and passed, 24; immigrants vaccinated, 7; Italian immigrants inspected and passed, 3.

September 7, 1 person five days out from Tampico detained and baggage disinfected. Person originated from Tuxpan, Mexico.

H. J. HAMILTON,
Acting Assistant Surgeon, U. S. M. H. S.

Statistical reports of States and cities of the United States—Yearly and monthly.

ALABAMA—Mobile.—Month of July, 1900. Estimated population, 37,817. Total number of deaths, 103, including enteric fever, 4; whooping cough, 1, and 19 from tuberculosis.

CALIFORNIA—Los Angeles.—Month of August, 1900. Estimated population, 103,000. Total number of deaths, 131, including diphtheria, 3; enteric fever, 2; measles, 1; whooping cough, 1, and 18 from phthisis pulmonalis.

Oakland.—Month of August, 1900. Estimated population, 75,000. Total number of deaths, 61, including diphtheria, 1, and 13 from phthisis pulmonalis.

Sacramento.—Month of August, 1900. Estimated population, 30,000. Total number of deaths, 24, including enteric fever, 1, and 9 from phthisis pulmonalis.

CONNECTICUT—Hartford.—Month of August, 1900. Estimated population, 80,000. Total number of deaths, 138, including diphtheria, 2; enteric fever, 3; whooping cough, 1, and 16 from tuberculosis.

IOWA—Des Moines.—Month of August, 1900. Estimated population, 80,000. Total number of deaths, 61. No deaths from contagious diseases.

LOUISIANA—New Orleans.—Month of August, 1900. Estimated population, 300,000—white, 210,000; colored, 90,000. Total number of deaths, 485—white, 248; colored, 187—including diphtheria, 1; enteric fever, 5; scarlet fever, 1; whooping cough, 1; smallpox, 13, and 62 from phthisis pulmonalis.

MASSACHUSETTS—Holyoke.—Month of August, 1900. Estimated population, 44,982. Total number of deaths, 95, including diphtheria, 6; measles, 2; whooping cough, 1, and 3 from phthisis pulmonalis.

Lawrence.—Month of August, 1900. Estimated population, 59,072. Total number of deaths, 119, including diphtheria, 3, and 10 from tuberculosis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended September 8, 1900, from 84 observers, indicate that erysip-

elas, inflammation of bowels, and pleuritis were much more prevalent and inflammation of kidney slightly less prevalent than in the preceding week. Phthisis pulmonalis was reported present at 171, enteric fever at 125, scarlet fever at 58, diphtheria at 30, measles at 20, whooping cough at 16, cerebro-spinal meningitis at 6, and smallpox at 3 places.

MINNESOTA—Winona.—Month of August, 1900. Estimated population, 24,000. Total number of deaths, 18, including diphtheria, 1; enteric fever, 1; scarlet fever, 1, and 2 from phthisis pulmonalis.

MISSOURI—St. Louis.—Month of July, 1900. Estimated population, 647,000—white, 610,000; colored, 37,000. Total number of deaths, 903—white, 820; colored, 83—including diphtheria, 21; enteric fever, 15; measles, 6; scarlet fever, 6, and 80 from phthisis pulmonalis.

NEW HAMPSHIRE—Manchester.—Month of August, 1900. Estimated population, 60,000. Total number of deaths, 103, including diphtheria, 1; scarlet fever, 1, and 8 from tuberculosis.

NEW JERSEY—Passaic.—Four weeks ended September 8, 1900. Census population of 1900, 27,777. Total number of deaths, 50, including 3 from enteric fever.

NEW YORK—Auburn.—Month of August, 1900. Estimated population, 35,000. Total number of deaths, 46, including 2 from phthisis pulmonalis.

Kingston.—Month of August, 1900. Estimated population, 26,000. Total number of deaths, 45, including diphtheria, 2; scarlet fever, 1, and 8 from phthisis pulmonalis.

Rochester.—Month of August, 1900. Census population, 162,435. Total number of deaths, 220, including diphtheria, 1; enteric fever, 4; whooping cough, 3, and 17 from phthisis pulmonalis.

NORTH CAROLINA.—Reports to the State board of health for the month of July, 1900, from 20 towns having an aggregate estimated population of 142,050—white, 84,501; colored, 57,549—show a total of 221 deaths, including enteric fever, 9; measles, 2; whooping cough, 1, and 9 from phthisis pulmonalis.

OHIO—Findlay.—Month of August 31, 1900. Estimated population, 20,000. Total number of deaths, 21, including enteric fever, 1; scarlet fever, 1, and 3 from tuberculosis.

Toledo.—Month of July, 1900. Estimated population, 150,000. Total number of deaths, 158, including enteric fever, 3; scarlet fever, 4; whooping cough, 1, and 19 from tuberculosis.

OREGON—Portland.—Month of August, 1900. Estimated population, 96,600. Total number of deaths, 66, including enteric fever, 2; scarlet fever, 1, and 9 from tuberculosis.

PENNSYLVANIA—Oil City.—Month of August, 1900. Estimated population, 17,000. Total number of deaths, 10, including whooping cough, 1, and 1 from tuberculosis.

Scranton.—Month of August, 1900. Estimated population, 105,000. Total number of deaths, 184; including diphtheria, 6; enteric fever, 3; scarlet fever, 2, and 4 from tuberculosis.

York.—Month of August, 1900. Estimated population, 33,654. Total number of deaths, 43, including diphtheria, 3; enteric fever, 2, and 5 from tuberculosis.

TEXAS—*Galveston*.—Month of May, 1900. Estimated population, 60,000. Total number of deaths, 58, including diphtheria, 1, and 5 from tuberculosis.

Month of June, 1900. Total number of deaths, 82, including enteric fever, 1, and 7 from tuberculosis.

Laredo.—Month of August, 1900. Estimated population, 14,000. Total number of deaths, 32, including enteric fever, 1, and 5 from phthisis pulmonalis.

UTAH—*Salt Lake City*.—Month of August, 1900. Estimated population, 70,000. Total number of deaths, 49, including whooping cough, 1, and 2 from tuberculosis.

WISCONSIN—*Milwaukee*.—Month of July, 1900. Census population of 1900, 285,315. Total number of deaths, 325, including diphtheria, 4; enteric fever, 3; scarlet fever, 6; whooping cough, 1, and 37 from phthisis pulmonalis.

REPORTS FROM NATIONAL QUARANTINE

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
UNITED STATES:					
1	Alexandria, Va.....	Sept. 15	.....	.....	.....
2	Beaufort, S. C.....	do.	.....	.....	.....
3	Brunswick, Ga.....	Sept. 8	.....	.....	.....
4	Cape Charles, Va.....	do.	Br. ss. Dunmore.....	Sept. 2	Rio de Janeiro.....
			Nor. ss. Tordenskjold.....	Sept. 3	Progreso via New York.....
			Ger. ss. Holstein.....	Sept. 4	Port Limon.....
			Br. ss. Almora.....	Sept. 7	Glasgow.....
			Br. ss. King Frederick...	Sept. 8	Progreso via Boston.....
5	Cape Fear, N. C.....	Sept. 15	.....	.....	.....
6	Columbia River, Oreg.....	Sept. 8	Br. ss. Monmouthshire.....	Sept. 2	Hongkong.....
7	Delaware Breakwater Quarantine, Lewes, Del.	Sept. 15	.....	.....	.....
8	Dutch Harbor, Alaska.....	Aug. 25	.....	.....	.....
9	Eureka, Cal.....	Sept. 8	.....	.....	.....
10	Grays Harbor, Wash.....	do.	.....	.....	.....
11	Gulf Quarantine, Ship Island, Miss.	do.	Br. sc. Vere B. Roberts (a)	Aug. 26	Vera Cruz.....
			Am. bgtn. S.F. Munson(a)	Aug. 28	Cienfuegos.....
			Nor. ss. Bodo (a).....	Sept. 1	Bocas del Toro.....
12	Los Angeles, Cal.....	Sept. 6	.....	.....	.....
13	Newbern, N. C.....	Sept. 15	.....	.....	.....
14	Nome, Alaska.....	Sept. 1	.....	.....	.....
15	Pascagoula, Miss.....	Sept. 8	.....	.....	.....
		Sept. 15	.....	.....	.....
16	Port Angeles, Wash.....	do.	.....	.....	.....
17	Port Townsend, Wash.....	Sept. 8	Am. ss. Queen.....	Sept. 6	Sitka.....
			Br. ss. Port Albert.....	do.	Manila.....
18	Reedy Island Quarantine, Del.	Sept. 15	.....	.....	.....
19	San Diego, Cal.....	Sept. 8	.....	.....	.....
20	San Francisco, Cal.....	do.	Ger. ss. Nurnberg.....	Sept. 3	Yokohama.....
			Br. ss. Doric.....	do.	Hongkong.....
			Am. ss. Newport.....	Sept. 7	Panama.....
			Ger. ss. Alesia.....	Sept. 8	Yokohama.....
21	San Pedro, Cal.....	do.	.....	.....	.....
22	Savannah, Ga.....	do.	Br. ss. Darlington.....	Sept. 2	Baltimore.....
			Br. bk. Lizzie Curry.....	do.	Guadeloupe.....
			Br. ss. Imaum.....	do.	Cardiff.....
			Aus. bgtn. Zenit.....	Sept. 3	Progreso.....
23	South Atlantic Quarantine, Blackbeard Island, Ga.	do.	.....	.....	.....
24	Tortugas Quarantine, Key West, Fla.	Sept. 1	.....	.....	.....
		Sept. 18	.....	.....	.....
25	Washington, N. C.....	Sept. 15	.....	.....	.....

a Previously reported.

AND INSPECTION STATIONS.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No transactions.....	
2				No report.....	
3					2
4	Norfolk.....	Disinfected.....	Sept. 6		13
	do.....	do.....	Sept. 8		
	Newport News.....	Given limited pratique to discharge fruit in quarantine, with isolation of crew.	Sept. 9	After discharging cargo vessel returned for fumigation prior to coaling at wharf.	
	do.....	Disinfected.....			18
	Norfolk.....	Disinfected effects of crew.....			
5				No report.....	
6	Portland.....	Held for disinfection of baggage and bedding of Chinese immigrants and 7 cases lily bulbs packed in soil.	Sept. 2		1
7					7
8					1
9				No report.....	
10					1
11	Pascagoula.....	Disinfected and held.....	Sept. 2		1
	do.....	do.....	do.....		
	Bocas del Toro.....	do.....	Sept. 11	3 cases yellow fever.....	
12				No transactions.....	
13				do.....	
14				No report.....	
15					2
				No transactions.....	
16				No report.....	
17	Seattle.....	Infected portion of vessel and dunnage disinfected; crew vaccinated.		1 case of smallpox discovered among passengers after disembarkation at Seattle; steward's department held for observation.	14
	do.....	Crew bathed; dunnage and forecabin disinfected.	Sept. 7		
18					16
19				No transactions.....	
20	San Francisco.....	Held for disinfection of baggage.	Sept. 3	Chinese crew bathed and effects disinfected.	16
	do.....	do.....		Oriental crew and steerage passengers bathed and effects disinfected. Effects of 8 European steerage passengers disinfected.	
	do.....	Held in quarantine.....		1 case varioloid removed to quarantine station with 3 additional members of family and isolated. Crew and passengers vaccinated.	
21	San Francisco.....	Held for disinfection of baggage.	Sept. 8	Chinese crew bathed and effects disinfected.	
22	Savannah.....	Disinfected and held.....		No transactions.....	5
	do.....	do.....			
	do.....	Baggage and dunnage disinfected.	Sept. 4		
	do.....	Disinfected and held.....			
23					1
24				No transactions.....	
				do.....	
25				do.....	

REPORTS FROM NATIONAL QUARANTINE

Number	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
26	CUBA: Calbarien.....	Sept. 1			
		Sept. 8			
27	Cardenas.....	Sept. 1			
		Sept. 8			
28	Cienfuegos.....	do.			
29	Daiquiri.....	Sept. 1			
30	Gibara.....	do.			
31	Guantanamo.....	do.			
32	Havana.....	Sept. 8	Am. sc. Wm. J. Lermond.	Sept. 1	Norfolk.....
			Ss. Aransas.....	Sept. 4	Key West.....
			Sc. B. Frank Neally.....	Sept. 5	Tampa.....
			Ss. Morgan.....	do.	New Orleans.....
33	Isabela de Sagua.....	do.	Sc. Lizzie H. Partrick.....	Sept. 7	Mobile.....
34	Mansanillo.....	Sept. 1			
35	Matanzas.....	do.			
		Sept. 8			
36	Nuevitass.....	Sept. 1			
		Sept. 8			
		Sept. 1			
37	Santiago de Cuba.....	Sept. 1			
HAWAII:					
38	Hilo.....	Aug. 14			
		Aug. 28			
39	Honolulu.....	Sept. 1			
40	Kahului.....	Aug. 25			
		Sept. 1			
41	Kihei.....	Aug. 25			
PHILIPPINES:					
42	Cebu.....	July 21			
43	Iloilo.....	July 28			
44	Manila.....	Aug. 5			
PORTO RICO:					
45	Ponce.....	Sept. 1			
		Sept. 8			
46	San Juan.....	do.			
		Do.			
Subports—					
47	Aguadilla.....	Sept. 1			
48	Arecibo.....	do.			
49	Arroyo.....	do.			
50	Fajardo.....	do.			
51	Humacao.....	do.			
52	Mayaguez.....	do.			

AND INSPECTION STATIONS—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
26				3 coastwise vessels passed without inspection.	1
				5 coastwise vessels passed without inspection.	
27				do	5
				10 coastwise vessels passed without inspection.	
28				No report.	10
29				do	
30				do	
31	Pascagoula.	Disinfected.	Sept. 2		
32	New Orleans.	do	Sept. 5	Detained in port by stress of weather.	29
	Tampa	Partially disinfected.	do	do	
	New Orleans.	Disinfected.	Sept. 6		
	Mobile	do			
33				No report.	
34				do	
35				2 coastwise vessels passed without inspection.	8
				do	8
36					6
					7
37				No report.	
38					1
				No transactions.	
39					15
40					1
				No transactions.	
41				do	
42					34
43					12
44				No report.	
45					4
					1
46					6
					4
47				No transactions.	
48					1
49					1
50				No transactions.	
51					1
52					2

REPORTS FROM STATE AND

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
1	Anclote, Fla.....	Sept. 15			
2	Baltimore, Md.....	do.....			
3	Bangor, Me.....	do.....			
4	Boston, Mass.....	do.....			
5	Carrabelle, Fla.....	do.....			
6	Cedar Keys, Fla.....	do.....			
7	Charleston, S. C.....	do.....	U. S. tug Weitzel.....	Sept. 9	Santiago.....
8	Charlotte Harbor, Fla.....				
9	Elizabeth River, Va.....	Sept. 15			
10	Galveston, Tex.....	do.....			
11	Gardiner, Oreg.....	Sept. 1			
12	Key West, Fla.....	Sept. 15			
13	Marcus Hook, Pa.....	do.....			
14	Mayport, Fla.....	do.....			
15	Mobile Bay, Ala.....	Sept. 8	Nor. bk. Guldregn (a).....	Aug. 28	Bahia.....
			Ger. ss. Pionier.....	Sept. 2	Havana and Matanzas.
			Nor. ss. Fulton.....	Aug. 28	Progreso.....
16	New Bedford, Mass.....	Sept. 15			
17	New Orleans, La.....	do.....			
18	Newport News, Va.....	do.....			
19	Newport, R. I.....	do.....			
20	New York, N. Y.....	do.....			
21	Pass Cavallo, Tex.....	do.....			
22	Pensacola, Fla.....	do.....			
23	Port Royal, S. C.....	do.....			
24	Providence, E. I.....	do.....			
25	Quintana, Tex.....	do.....			
26	Sabine Pass, Tex.....	do.....			
27	St. Helena Entrance, S. C.....	do.....			
28	Tampa Bay, Fla.....	do.....			

a Previously reported.

MUNICIPAL QUARANTINE STATIONS.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No report.....	
2				do.....	
3				do.....	
4				do.....	
5				do.....	
6				do.....	
7	New York.....		Sept. 10	Supplied with coal and water at quarantine by lighters.	4
8				No report.....	
9				do.....	
10				do.....	
11					13
12					
13				No report.....	
14				do.....	
15	Mobile.....	Ballast discharged; vessel disinfected and held.	Sept. 8		6
	do.....	Held to complete period.....	Sept. 8		
	do.....	Disinfected and held.....	Sept. 2		
16				No report.....	
17				do.....	
18				do.....	
19				do.....	
20				do.....	
21				do.....	
22				do.....	
23				do.....	
24				No transactions.....	
25				No report.....	
26				do.....	
27				do.....	
28				do.....	

*Report of immigration at Boston for the week ended September 8, 1900.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of Boston, September 8, 1900.**Number of alien immigrants who arrived at this port during the week ended September 8, 1900;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Sept. 2	Steamship Prince Arthur	Yarmouth, Nova Scotia.....	233
Do.....	Steamship Boston.....	do	225
Do.....	Steamship Anglian	London, England.....	4
Sept. 3	Schooner Bessie A	Fire Islands, Nova Scotia.....	3
Do.....	Steamship Halifax	Halifax, Nova Scotia.....	213
Sept. 4	Steamship Cestrian	Liverpool, England.....	8
Do.....	Steamship Admiral Farragut.....	Port Morant, Jamaica.....	9
Do.....	Steamship Yarmouth.....	Yarmouth, Nova Scotia.....	31
Do.....	Steamship Prince George.....	do	58
Sept. 5	Steamship Prince Arthur	do	95
Do.....	Steamship Boston.....	do	69
Do.....	Steamship S. Oteri.....	Puerto Cortes, Honduras.....	6
Sept. 6	Steamship Prince George	Yarmouth, Nova Scotia.....	97
Do.....	Steamship Yarmouth.....	do	110
Sept. 7	Steamship Prince Arthur	do	74
Do.....	Steamship Boston.....	do	42
Do.....	Brig Cleo.....	Turks Island, West Indies.....	1
Do.....	Schooner F. Richards.....	Meteghan, Nova Scotia.....	1
Do.....	Steamship New England.....	Liverpool, England.....	660
Do.....	Steamship Utonia.....	do	296
Sept. 8	Schooner Vesta Pearl.....	Clementsport, Nova Scotia.....	2
Do.....	Steamship Prince George.....	Yarmouth, Nova Scotia.....	52
Do.....	Steamship Yarmouth.....	do	168
Do.....	Steamship Florida.....	Halifax, Nova Scotia.....	68
	Total		2,525

GEO. B. BILLINGS,
*Commissioner.**Report of immigration at New York for the week ended September 8, 1900.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of New York, September 11, 1900.**Number of alien immigrants who arrived at this port during the week ended September 8, 1900
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Sept. 2	Steamship La Touraine.....	Havre	321
Sept. 4	Steamship Maasdam.....	Rotterdam.....	498
Do.....	Steamship State of Nebraska.....	Glasgow.....	40
Do.....	Steamship City of Rome.....	do	250
Sept. 5	Steamship Westernland	Antwerp.....	791
Do.....	Steamship Peninsular	Lisbon and the Azores.....	414
Do.....	Steamship Coleridge.....	Rio de Janeiro.....	35
Sept. 6	Steamship Teutonic.....	Liverpool and Queenstown.....	497
Do.....	Steamship Lahn.....	Bremen.....	477
Sept. 7	Steamship Hekla.....	Copenhagen, etc.....	255
Do.....	Steamship Patricia.....	Hamburg	498
Sept. 8	Steamship St. Louis.....	Southampton	367
Do.....	Steamship Auguste Victoria.....	Hamburg.....	237
	Total		4,675

THOMAS FITCHIE,
Commissioner.

Report of immigrants inspected at the port of San Francisco Quarantine Station, Angel Island, California, during the month of April, 1900.

Total number of immigrants inspected, 1,167; number passed, 1,134; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 33.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, 33; total to be accounted for, 33; number cases deported, 33; number cases admitted, none; number cases pending at close of month, none.

J. J. KINYOUN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of San Francisco Quarantine Station, Angel Island, California, during the month of May, 1900.

Total number of immigrants inspected, 1,068; number passed, 1,055; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 13.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, 13; total to be accounted for, 13; number cases deported, 13; number cases admitted, none; number cases pending at close of month, none.

J. J. KINYOUN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of San Francisco Quarantine Station, Angel Island, Cal., during the month of June, 1900.

Total number of immigrants inspected, 784; number passed, 772; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 12.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, 12; total to be accounted for, 12; number cases deported, 12; number cases admitted, none; number cases pending at close of month, none.

J. J. KINYOUN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of San Francisco Quarantine Station, Angel Island, California, during the month of July, 1900.

Total number of immigrants inspected, 502; number passed, 493; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 9.

Disposition of immigrants certified for deportation.—Number of cases pending at beginning of month, none; number cases certified for deportation during month, 9; total to be accounted for, 9; number cases deported, 9; number cases admitted, none; number cases pending at close of month, none.

J. J. KINYOUN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Boston, Mass., during the month of August, 1900.

Total number of immigrants inspected, 1,807; number passed, 1,800; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 7.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, 2; number cases certified for deportation during month, 7; total to be accounted for, 9; number cases deported, 2; number cases admitted, 3; number cases pending at close of month, 4.

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

Report of immigrants inspected at the port of Portland, Oreg. (from Str. Argyle), during the month of August, 1900.

Total number of immigrants inspected, 5; number passed, 5; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, none; total to be accounted for, 5; number cases deported, 5; number cases admitted, 5; number cases pending at close of month, none.

C. H. WHEELER,
Acting Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Philadelphia, Pa., during the month of August, 1900.

Total number of immigrants inspected, 1,167; number passed, 1,140; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 27.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, 2; number cases certified for deportation during month, 27; total to be accounted for, 29; number cases deported, 4; number cases admitted, 25; number cases pending at close of month, none.

H. W. AUSTIN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the Columbia River Quarantine Station during the month of August, 1900.

Total number of immigrants inspected, 5; number passed, 5; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

HILL HASTINGS,
Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Port Townsend, Wash., during the month of August, 1900.

Total number of immigrants inspected, 86; number passed, 86; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

C. H. GARDNER,
Passed Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Seattle, Wash., during the month of August, 1900.

Total number of immigrants inspected, 142; number passed, 139; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 3.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, 3; total to be accounted for, 3; number cases deported, 3; number cases admitted, none; number cases pending at close of month, none.

Condition which required certificates for deportation.—Tuberculosis, 1 case; trachoma, 1 case; scabies, 1 case.

D. E. ROBINSON,
Assistant Surgeon, U. S. M. H. S.

Smallpox in the United States as reported to the Surgeon-General United States Marine-Hospital Service, June 29, 1900, to September 21, 1900.

[For reports received from December 29, 1899, to June 29, 1900, see PUBLIC HEALTH REPORTS for June 29, 1900.]

Places.	Date.	Cases.	Deaths.	Remarks.
Alaska:				
Cape Nome	June 14-July 10...	22	1	
Dawson	July 20.....	6		
Total for Territory.....		28		
California:				
Oakland.....	July 8-July 14.....	2		
Total for State, same period, 1899.....		4	1	
Colorado:				
Arapahoe County.....	June 13-Aug. 26.....	36		
Boulder County.....	June 16.....	1		
Clear Creek County.....	July 2-Aug. 1.....	6		
Eagle County.....	June 25-July 30.....	3		
El Paso County.....	June 21-July 30.....	3		
Garfield County.....	July 23-Aug. 4.....	20		
Gilpin County.....	Aug. 23.....	1		
Huerfano County.....	July 31-Aug. 23.....	5		
Jefferson County.....	July 27-Aug. 26.....	11		
Lake County.....	July 31-Aug. 23.....	1		
Las Animas County.....	July 5-Aug. 28.....	12		
Otero County.....	Aug. 4.....	3		
Park County.....	July 3.....	2		
Pueblo County.....	July 7-Aug. 21.....	3		
Routt County.....	June 25-July 30.....	2		
Total for State.....		109		
Total for State, same period, 1899.....		2		
Delaware:				
Wilmington.....	July 1-July 7.....	1		
Total for State, same period, 1899.....		0		
District of Columbia:				
Washington.....	June 18-July 23.....	24		
Total for District, same period, 1899.....		0		
Florida:				
Jacksonville.....	July 1-July 7.....	1		
Total for State, same period, 1899.....		74		
Illinois:				
Cairo.....	Nov. 18, 1899-July 21, 1900.....	117	6	
Chicago.....	June 24-July 14.....	4		
Total for State.....		121		
Total for State, same period, 1899.....		3		
Indiana:				
Clarke County.....	June 1-June 30.....	3		
Clay County.....	do.....	1	1	
Clinton County.....	do.....	2		
Evansville.....	July 1-July 7.....	1		
Frankton.....	July 1-July 31.....	4	1	
Gibson County.....	June 1-July 31.....	2		
Green County.....	do.....	14		
Johnson County.....	do.....	1		
Kirklin.....	July 1-July 31.....	2		
Keystone.....	do.....	1		
Hammond.....	do.....	1		
Lawrence County.....	June 1-July 31.....	9	2	
Loogootee.....	July 1-July 31.....	2		
Madison County:				
Alexandria.....	June 1-July 31.....	12	1	
Anderson.....	do.....	23		
Elwood.....	do.....	20		
Frankton.....	do.....	1		
Marion County:				
Indianapolis.....	do.....	3		
Irvington.....	do.....	9		
Michigan City.....	July 15-July 31.....	1		
Perry County.....	do.....	1		

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indiana—Continued.				
Rockfield.....	July 1-July 31..	1		
Monticello.....	.....do.....	1		
Starke County.....	June 1-June 30..	3		
Warren County.....	June 1-June 30..	1		
Wheeling.....	.....do.....	4		
Vandeburg County.....	.....do.....	2		
Total for State.....		130	5	
Total for State, same period, 1899.		2		
Iowa:				
Des Moines.....	June 1-Aug. 31..	18		
Total for State, same period, 1899.		0		
Kansas:				
Sumner County.....	July 1-Aug. 31..	14		
Shawnee County.....	.....do.....	2		
Crawford County.....	.....do.....	11		Smallpox reported.
Wichita.....	June 17-Sept. 8..	28	1	
Total for State.....		55	1	
Total for State, same period, 1899.		2		
Kentucky:				
Covington.....	June 24-July 15..	32		
Total for State, same period, 1899.		120		
Louisiana:				
Caddo.....	June 17-Aug. 4..	11	0	
Caldwell.....	June 17-July 28..	16	2	
New Orleans.....	June 17-Sept. 1..	110	38	
Shreveport.....	June 17-Aug. 4..	11	0	Nov. 23, 1899, to July 31 303 cases, 30 deaths.
Total for State.....		148	40	
Total for State, same period, 1899.		17		
Maryland:				
Baltimore.....	June 24-Sept. 1..	5		
Cumberland.....	June 17-July 7..	8		
Total for State.....		13		
Total for State same period, 1899.		32		
Massachusetts:				
Fall River.....	June 24-July 21..	8		
Lowell.....	July 15-Aug. 18..	13		
Total for State.....		21		
Total for State, same period, 1899.		15	3	
Michigan:				
Houghton County.....	Aug. 12-Aug. 18..	5		
Isabella County.....	July 29-Aug. 18..	5		
Jackson.....	July 1-July 7..	1		
Oscola.....	July 3-July 9..	1		
Wayne County.....	June 1-Aug. 4..	6	1	
Total for State.....		18	1	
Total for State, same period, 1899.		10		
Minnesota:				
Akely.....	June 23-July 31..	17		
Anoka.....	June 16-July 31..	29		
Bertram County.....	June 23-July 31..	6		
Carlton.....	June 16-July 31..	2		
Carver County.....	June 23-Aug. 31..	11		
Cass County.....	July 1-Aug. 31..	21		
Duluth.....	June 16-July 5..	19		
Faribault County.....	Aug. 1-Aug. 31..	1		
Goodhue County.....	July 1-July 31..	4	1	
Hubbard County.....	Aug. 1-Aug. 31..	16		
Lake County.....	.....do.....	4		

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Minnesota—Continued.				
Le Sueur County.....	June 23-Aug. 31...	21		
Lincoln County.....	do	1		
Litchfield County.....	do	1		
Little Falls.....	July 1-July 31...	18		
Martin County.....	Aug. 1-Aug. 31...	1		
Minneapolis.....	June 16-Aug. 25...	64		
Otter Tail County.....	July 1-Aug. 31...	18	2	
Princeton.....	June 16-July 31...	1		
Renville County.....	July 1-July 31...	1		
Scott County.....	June 16-Aug. 31...	44		
St. Paul.....	June 23-July 31...	8		
Sherburne County.....	Aug. 1-Aug. 31...	7		
Two Harbors.....	July 1-July 31...	6		
Traverse County.....	Aug. 1-Aug. 31...	18		
Wabasha.....	do	8		
Winona.....	July 29-Sept. 4...	14		
Winsted.....	July 1-July 31...	6		
Wadena County.....	July 29-Aug. 4...	7		
Wright County.....	June 16-July 5...	2		
Total for State.....		371	3	
Total for State, same period, 1899.....		9		
Mississippi:				
Ocean Springs (vicinity).....	July 19.....	11		
Total for State, same period, 1899.....		22		
Nebraska:				
Omaha.....	June 24-Aug. 4...	6		
Total for State, same period, 1899.....		0		
New Hampshire:				
Manchester.....	June 17-Aug. 4...	12		
Total for State, same period, 1899.....		0		
New Jersey:				
Jersey City.....	June 18-June 24...	1		
Newark.....	June 17-June 23...	4		
Total for State.....		5		
Total for State, same period, 1899.....		0		
New York:				
New York.....	June 17-Aug. 25...	7	2	
Total for State, same period, 1899.....		0		
North Carolina:				
Charlotte.....	June 1-July 31...	11		
Wilmington.....	do	8		
Alamance County.....	May 1-June 30...	2		
Buncombe County.....	do	5		
Burke County.....	do	22		
Cabarrus County.....	do	5		
Caswell County.....	do	19		
Chatham County.....	do	1		
Cleveland County.....	do	5		
Croven County.....	do	10		
Davidson County.....	do	1		
Davie County.....	do	9		
Durham County.....	do	10		
Edgecombe County.....	do	2		
Forsyth County.....	do	8		
Franklin County.....	do		Many.	
Gates County.....	do	1		
Granville County.....	do	25		
Guilford County.....	do	22		
Halifax County.....	do	1		
Harnett County.....	do	8		
Haywood County.....	do	5		
Henderson County.....	do	4		
Hertford County.....	do	2		
Iredell County.....	do	5		
Johnston County.....	do	17		
Mecklenburg County.....	do	35		
Moore County.....	do	14		
Nash County.....	do	5		
New Hanover County.....	do	7		

Smallpox in United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
North Carolina—Continued.				
Orange County.....	May 1-June 30...	7		
Person County.....	do.....	4		
Randolph County.....	do.....	8		
Rockingham County.....	do.....	152		
Kutherford County.....	do.....		A few.	
Total for State.....		440		
Total for State, same period, 1899.....		68		
North Dakota:				
Rolla.....	Aug. 1-Aug. 13...	16	2	
Total for State, same period, 1899.....		0	0	
Ohio:				
Cincinnati.....	June 16-Aug. 17...	30		
Portsmouth.....	June 24-Sept. 1...	11		
Youngstown.....	Jan. 1-June 30...	13		
Allen County—				
Shawnee Township.....	do.....	7		
Ashtabula County.....	do.....	48		
Auglaize County.....	do.....	10		
Brown County.....	do.....	4		
Butler County.....	do.....	4		
Clark County.....	do.....	5		
Clinton County—				
New Vienna.....	do.....	1		
Columbiana County—				
Wellsville.....	do.....	19	2	
Coshocton County—				
Clark Township.....	do.....	2		
Cuyahoga County—				
Berea.....	do.....	5		
Brooklyn Township.....	do.....	2		
Cleveland.....	Jan. 1-Sept. 8...	556	5	
Dover Township.....	Jan. 1-June 30...	1		
East Cleveland.....	do.....	3		
Glenville.....	do.....	4		
Mayfield Township.....	do.....	14		
Newburgh.....	do.....	30		
Lakewood.....	do.....	2		
Rockport.....	do.....	2		
West Park Township.....	do.....	1		
Darke County.....	do.....	12		
Defiance County—				
Highland Township.....	do.....	8		
Delaware County.....	do.....	44		
Franklin County—				
Columbus.....	do.....	39		
Fulton County—				
Wauseon.....	do.....	2		
Geauga County—				
Burton.....	do.....	3		
Greene County—				
Cedarville.....	do.....	20	2	
Hamilton County—				
Cincinnati.....	do.....	99	1	
Hyde Park.....	do.....	1		
Hancock County—				
Findlay.....	do.....	1		
Hardin County—				
McGuffey.....	do.....	3		
Henry County.....	do.....	120	3	
Huron County—				
Bellevue.....	do.....	9		
Lake County.....	do.....	2		
Licking County.....	do.....	2		
Lorain County.....	do.....	98	2	
Lucas County—				
Toledo.....	do.....	3		
Madison County.....	do.....	52		
Medina County—				
Lodi.....	do.....	2		
Mercer County.....	do.....	28		
Montgomery County—				
Dayton.....	Jan. 1-Sept. 8...	9		
Morrow County.....	Jan. 1-June 30...	4		
Pike County—				
Waverly.....	do.....	2		
Portage County—				
Kent.....	do.....	1		
Putnam County.....	do.....	6		
Ross County—				
Kingston.....	do.....	1		

Smallpox in United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ohio—Continued.				
Scioto County—				
Portsmouth	Jan. 1-June 30...	1		
Stark County .....	.....do.....	26	1	
Summit County—				
Akron.....	.....do.....	1		
Trumbull County.....	.....do.....	20	1	
Tuscarawas County—				
Dennison .....	.....do.....	1		
Union County—				
Jerome Township .....	.....do.....	2		
Washington County—				
Marietta .....	.....do.....	1		
Wayne County—				
Salt Creek Township .....	.....do.....	3		
Total for State.....		1,376	17	
Total for State, same period, 1899.		38		
Pennsylvania:				
Philadelphia	June 24-July 7...	5		
Pittsburg.....	June 17-July 7...	5		
Total for State.....		10		
Total for State, same period, 1899.		219		
South Carolina:				
Greenville.....	July 8-July 14...	1		
Total for State, same period, 1899.		0		
Texas:				
Beaumont.....	Feb. 1-June 1...	107	0	
Carrizo.....	July 9.....	1		
Eagle Pass	Sept. 7.....	1		
Fort Bend County.....	Aug. 1, 1899, to Aug. 1, 1900.	156	2	
Robertson County.....	June 16.....	300	2	
San Antonio.....	June 1-June 30...	1		
Total for State.....		566	4	
Total for State, same period, 1899.		158	5	
Utah:				
Ogden.....	June 24-June 30...	6		
Salt Lake City.....	July 1-Sept. 1...	16		Dec. 13, 1899, to Aug. 1, 1900, 106 cases; deaths, 0.
Total for State.....		22		
Total for State, same period, 1899.		0		
Vermont:				
Caledonia County.....	Aug. 7.....	20		
Franklin County.....	.....do.....	2		
Orleans County.....	.....do.....	6		
Total for State.....		28		
Virginia:				
Petersburg	June 1-Aug. 26...	4	0	
Roanoke.....	June 1-June 30...	22	1	
Total for State.....		26	1	
Total for State, same period, 1899.		119		
Washington:				
Lewis County.....	June 26.....	2		
Puyallup County.....	Sept. 6.....			Several cases.
Seattle.....	June 24-July 31...	29		
Tacoma.....	Aug. 5-Aug. 11...	4		
Total for State.....		35		
Total for State, same period, 1899.		27		
Grand total.....		3,647	76	
Grand total, same period, 1899.		966	8	

WEEKLY MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. census of 1890.	Total deaths from all causes.	Deaths from—												
				Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.		
Allegheny, Pa.....	Sept. 15	α 126, 000	38	3						2						
Ashtabula, Ohio.....	do.....	8, 338	6													
Baltimore, Md.....	do.....	434, 439	195	24						5	1	2				1
Bay City, Mich.....	do.....	α 27, 500	7									2				
Biloxi, Miss.....	do.....	3, 234	1													
Binghamton, N. Y.....	do.....	α 39, 647	15									1				
Boston, Mass.....	do.....	α 560, 892	204	17						5	3	8				3
Bristol, R. I.....	Sept. 8	5, 478	4													
Butler, Pa.....	Aug. 18	8, 734	0													
Do.....	Sept. 8	8, 734														
Cambridge, Mass.....	Sept. 15	α 91, 886	26	3						1		3				
Camden, N. J.....	do.....	58, 313	23									2				
Chelsea, Mass.....	Sept. 8	27, 909	17									1				
Chicago, Ill.....	Sept. 15	1, 092, 850	450	40						10	1	7				6
Chicopee, Mass.....	do.....	14, 050	4													
Cleveland, Ohio.....	do.....	α 395, 000	107	1						4						
Cumberland, Md.....	do.....	12, 729	6													
Dayton, Ohio.....	do.....	α 85, 333	19	2												
Detroit, Mich.....	do.....	α 286, 000	88	4							1	1	1			
Evansville, Ind.....	do.....	59, 007	12	1												
Everett, Mass.....	Sept. 8	11, 068	8	1						1						1
Fitchburg, Mass.....	do.....	α 30, 523	13	2						1						
Gloucester, Mass.....	Sept. 15	24, 651	3													1
Grand Rapids, Mich.....	do.....	60, 278	14	1								1				
Jackson, Mich.....	Sept. 8	20, 795	20	1												
Jersey City, N. J.....	Sept. 9	163, 003	71	8						2	1					
Johnstown, Pa.....	Sept. 15	α 32, 479	16	1						2						
Lawrence, Mass.....	Sept. 8	44, 654	30									2				
Los Angeles, Cal.....	do.....	50, 395	24	4						1						
Lowell, Mass.....	Sept. 15	α 94, 969	34	3						1						
McKeesport, Pa.....	Sept. 8	α 21, 700	13	1						1						
Malden, Mass.....	Sept. 15	23, 031														
Medford, Mass.....	do.....	11, 079	2													
Melrose, Mass.....	Sept. 8	8, 519	2													1
Minneapolis, Minn.....	Sept. 1	α 240, 000	40	6						1						
Mobile, Ala.....	Sept. 15	31, 076	24	3							2					
Nashville, Tenn.....	do.....	76, 168	31	2						1						
Newark, N. J.....	do.....	α 250, 000	85	8						3		1				1
New Bedford, Mass.....	do.....	40, 733	20							2						
Newton, Mass.....	do.....	24, 379	12													
New York, N. Y.....	do.....	β 3, 444, 675	1, 319	123						28	3	20	5			9
Norristown, Pa.....	do.....	19, 791	8													
North Adams, Mass.....	do.....	16, 074	3													
Omaha, Nebr.....	Sept. 8	140, 452	29													
Oneonta, N. Y.....	Sept. 15	6, 272	3	1												
Palmer, Mass.....	do.....	6, 520	5													
Pawtucket, R. I.....	do.....	27, 633	15													
Philadelphia, Pa.....	do.....	α 1, 293, 697	420	51						10	1	15	2			1
Pittston, Pa.....	do.....	10, 302	5													
Plainfield, N. J.....	do.....	11, 267	8									1				
Quincy, Mass.....	Sept. 8	16, 723	8	1												
Do.....	Sept. 15	16, 723	8	1												
Rockford, Ill.....	Aug. 25	23, 584	4													
Do.....	Sept. 1	23, 584	9	2												
Do.....	Sept. 8	23, 584	12	2												
Santa Barbara, Cal.....	June 23	5, 864	3													
Do.....	June 30	5, 864	2													
Do.....	July 7	5, 864	1													
Do.....	July 14	5, 864	2													
Do.....	July 21	5, 864	3							1						
Do.....	July 28	5, 864	2													
Do.....	Aug. 4	5, 864	2	1												
Do.....	Aug. 11	5, 864	3													
Do.....	Aug. 18	5, 864	1													
Do.....	Aug. 25	5, 864	1													
Do.....	Sept. 1	5, 864	2	1												
Do.....	Sept. 8	5, 864	1	1												
Scranton, Pa.....	do.....	75, 215	44							2		1				1
Shreveport, La.....	Sept. 15	11, 979	10	2												
Somerville, Mass.....	do.....	40, 152	20	1												
Steilton, Pa.....	do.....	α 12, 000	1													

α United States census of 1900.

β Estimated.

WEEKLY MORTALITY TABLE, CITIES OF THE UNITED STATES—Cont'd.

Cities.	Week ended.	Population U. S. census of 1890.	Total deaths from all causes.	Deaths from—																
				Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.						
Tacoma, Wash	Sept. 8	36,006	7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warren, Ohio.....	Sept. 15	5,973	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington, D. C.....	Sept. 8	^a 278,577	102	14	.....	.....	.....	.....	.....	.....	11	.....	.....	1	.....	.....	.....	.....	.....	.....
Wichita, Kans.....	Sept. 15	23,853	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williamsport, Pa.....	..... Do.....	27,132	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winona, Minn.....	Sept. 8	18,208	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.....	Aug. 31	84,655	60	3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Sept. 7	84,655	61	3	.....	.....	.....	.....	.....	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....
Youngstown, Ohio.....	Sept. 8	33,220	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Sept. 15	33,220	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

^a United States Census of 1900.

FOREIGN AND INSULAR.

AUSTRIA.

Report of sanitary conditions and quarantine requirements in various countries—Two cases of plague reported on shipboard at Constantinople.

VIENNA, AUSTRIA, August 29, 1900.

SIR: I have the honor to transmit under same cover the weekly report of the condition of the plague and measures taken against it in various countries. On the 25th it was reported that 2 cases of plague were found aboard of a ship arriving in Constantinople—1 case in the person of an Armenian en route to Marseilles; the other, 1 of the crew. The ship and personnel were sent to the quarantine station at Clazomene. * * *

The report of the health officer of Vienna for the month of July shows that no case of smallpox was reported; 98 cases of diphtheria; 61 cases of typhoid fever; the total number of deaths for the month was 2,886. * * *

Respectfully,

JOHN F. ANDERSON,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

Condition of the pest and measures against it ended August 23, 1900.

GREECE.—The ten days' effectual quarantine ordered for arrivals from the Syrian ports of Laodicée to Ptolemais, as well as the prohibition of the import of wares from these ports, has been abolished by royal decree of July 21 (August 3), 1900, and, in place of the ten days' quarantine ordered for arrivals from Beirut, a forty-eight hours' observation quarantine and disinfection of passengers' luggage has been appointed. Quarantine and disinfection are to be carried out in the hospital of S. Giorgi in the Bay of Salamis. The import of wares from Beirut continues to be prohibited.

GERMAN EMPIRE.—The steward, who fell ill of plague on board the steamer *Rosario*, in Hamburg, died on August 10 in the Eppendorf Epidemic Hospital. No further suspicious case of illness has occurred.

TURKEY.—In Smyrna no further case of plague has occurred since that reported on August 1. In Alazaret, a village near Tschesne (Vilajet Smyrna), on July 31, a 19-year-old peasant was found ill with symptoms indicative of plague. The bacteriological examination at once initiated yielded a negative result.

EGYPT.—From Alexandria, 2 new cases of plague were again reported on August 12 and 17.

In Port Said no new case has occurred since July 15. The patients still under treatment had recovered by July 27; since then the city is quite free from plague. Since July 25 outgoing vessels are given clear sailing papers. During the eighty-six days that the epidemic lasted (from April 20 to July 15, 1900), 92 persons in all fell sick of plague and 58 died. Mortality percentage, 41.3 per cent.

In consequence of the expiration of the pest in Hedjaz, the permanent commission of the sanitary and quarantine council has resolved to allow free passage to ships coming from Hedjaz without pilgrims, after previous disinfection of soiled linen, of the passengers and crew, and of the sleeping places of the latter, and if the medical inspection yields a favorable result. Traveling physicians must sign a declaration that they carry no living pest cultures with them.

BRITISH INDIA.—In Bombay, during the week from July 24 to July 30, 86 cases of

illness and 56 deaths occurred. In Calcutta, during the two weeks from June 17 to June 30, 1900, there were 67 cases of illness and 67 deaths in the first week, 80 cases of illness and 79 deaths in the second.

HONGKONG.—During the week from July 1 to July 7, 65 cases of illness were ascertained and 68 deaths, including the corpses found of plague-stricken persons.

BRITISH HONDURAS.

Report from Belize—Fruit port.

BELIZE, BRITISH HONDURAS, *September 7, 1900.*

SIR: I have the honor to report that but 1 death has occurred in this town during the past week. It was a native colored child, under 5 years of age, who died of diphtheria. The gravity of the case was not recognized by the family, so the child was almost in articulo mortis when first seen by the physician, and died a few hours later. This is the fifth case of diphtheria reported, with 3 deaths, in the last six weeks.

The London steamer *Severn* cleared from this port via Norfolk, Va., on the 4th instant; master, George Norris; cargo, mahogany and logwood; crew, 32; 7 passengers from this place for Norfolk; 15 pieces of baggage disinfected. The steamer *Stillwater*, Galt, cleared for New Orleans this a. m.; no passengers; cargo, fruit and mail; crew, 32.

Respectfully,

NORWOOD K. VANCE,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

CANADA.

Smallpox reported at Stanbridge.

WASHINGTON, D. C., *September 10, 1900.*

SIR: I have the honor to inclose for your information copy of a dispatch from the commercial agent at Stanbridge, Canada, reporting several cases of smallpox in his district.

Respectfully,

DAVID J. HILL,

Acting Secretary.

HON. SECRETARY OF THE TREASURY.

[Inclosure.]

STANBRIDGE, QUEBEC, CANADA, *September 4, 1900.*

SIR: I have to report the appearance of smallpox in this consular district. There are 3 cases at St. Alexandre and 2 at St. Sebastian. No deaths have thus far occurred.

Respectfully,

FELIX S. S. JOHNSON,

Commercial Agent.

HON. ASSISTANT SECRETARY OF STATE.

Report of immigrants inspected at the port of Quebec, Canada, during the month of August, 1900.

Total number of immigrants inspected, 2,142; number passed, 2,126; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 16.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, 53; number cases certified for deportation during month, 16; total to be accounted for, 69; number cases deported,

none; number cases admitted, 4; number cases pending at close of month, 65.

J. B. STONER,
Passed Assistant Surgeon, U. S. M. H. S.

COLOMBIA.

Report from Bocas del Toro—Fruit port—One death from yellow fever.

BOCAS DEL TORO, *September 4, 1900.*

SIR: I have the honor to submit the report for the week ended September 1, 1900.

The British steamship *Brookline*, List, master, was inspected and cleared August 29, 1900.

This inspection was made by Medical Officer Jumel, of the Louisiana State board of health, acting for Acting Assistant Surgeon Mohr, incapacitated on account of severe injury received while in performance of his duties on board of ship.

There is 1 death to be noted as occurring during the past week (August 25 to September 1), a white male, but I have been so far unable to learn any details or the precise cause of death. I am, however, not inclined to regard the death, from the information secured in a general way, as one resulting from contagion or infection.

The premises occupied by Dr. Paul Osterhaut, in which 1 case of yellow fever occurred, and the disinfection of which, owing to other sickness, had been delayed, were thoroughly disinfected August 26 ultimo, by Medical Officer Jumel.

I have to report 1 death from yellow fever (the third death and fifth case) occurring yesterday, September 3, over a month since the last case was reported. The patient, Carl Monel, German, age 21, three years resident of Bocas del Toro, was taken ill on the night of August 26, 1900, and had all the characteristic symptoms of yellow fever; disturbed correlation of pulse and temperature, albuminuria and black vomit; general and intense icterus followed soon after death. I witnessed the burning of bedding and upholstery of the room occupied by the deceased, as well as the subsequent disinfection of the premises with formalin, the condition of the room not permitting the use of the auto-clave.

The external surface of coffin was washed, and the interior containing the body was saturated with the same disinfectant. The body was soon after transported in a small boat and towed by steam launch to the cemetery on Maceo Hill, some distance from the town.

Respectfully,
WM. H. CARSON,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report from Bocas del Toro—Diagnosis of reported case of yellow fever confirmed.

BOCAS DEL TORO, COLOMBIA,
via Port Limon, Costa Rica, September 5, 1900.

SIR: I have the honor to confirm my cablegram of September 1, 1900: "One yellow fever, Bocas."

I left Bocas del Toro on the night of August 31, leaving Dr. W. H. Carson in charge of that station. The case referred to in my cable

message was reported by the port physician, and the diagnosis confirmed by Dr. Jumel. You will receive further details of the case from Dr. Carson. As the special boat which brought me to Limon carried a cable message from Dr. Jumel to be forwarded to the Louisiana State board of health, I deemed it wise to advise the Bureau without delay. * * *

Respectfully,
 HERMAN B. MOHR,
Acting Assistant Surgeon, U. S. M. H. S.
 The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

COSTA RICA.

Report from Port Limon—Fruit port.

PORT LIMON, COSTA RICA, *September 2, 1900.*

SIR: I have the honor to submit report for week ended September 1. The following vessels have cleared from this port:

Date.	Vessel.	Master.	Crew.	Destination.	Number of passengers.	Number of pieces baggage disinfected.
Aug. 26	Steamship Holstein	Voss	21	Newport News, Va..	0	0
Aug. 27	Steamship Altai	Morris	40	New York	6	13
Aug. 30	Steamship Olympia	Seiders	37	New Orleans.....	0	0
Sept. 1	Steamship Adler	Reid	26	.....do	0	0

The sanitary conditions of this port and surrounding country are good. Six deaths occurred during the week, as follows: August 27, an adult, 36 years old, from rheumatism; an adult, 48 years old, from dysentery. August 29, a child, 18 months old, from enteritis. August 30, an adult, 39 years old, from dysentery. August 31, an adult, 32 years old, from tuberculosis; and September 1, an adult, 36 years old, from heart disease.

Respectfully,
 J. GREY THOMAS,
Acting Assistant Surgeon, U. S. M. H. S.
 The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Arrangements made at Port Limon by local government for disinfection of baggage from Central American ports.

PORT LIMON, COSTA RICA, *September 4, 1900.*

SIR: * * * The local government beginning this week will enforce the following regulations: Disinfection of all baggage from Central American ports by means of formaldehyd. Ships' crews not to be allowed ashore. To-day they are constructing a disinfecting house on the pier. It is to be 18 feet long, 15 feet deep, and 10 feet high. This expense is to be paid by the United Fruit Company. * * *

Respectfully,
 J. GREY THOMAS,
Acting Assistant Surgeon, U. S. M. H. S.
 The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Sanitary resolutions passed for Port Limon—Mail and baggage to be fumigated on the wharf.

PORT LIMON, COSTA RICA, *September 7, 1900.*

SIR: At a meeting composed of Dr. Aguilor, port physician, Dr. Woods, of the Louisiana State board of health, Dr. Steggall, passed assistant surgeon, the governor of Limon, and myself, the following inclosure was suggested:

Inclosed find a copy of the new quarantine regulations. The disinfecting house should be completed in a day or two.

Mr. Jno. M. Keith has offered to fill in all low lots, holes, etc., at the suggestion of Dr. Aguilor and myself. I consider this a good move.

In section 12 of the suggestions made by the physicians of Port Limon, I objected to saying that *we consider* Colon, Panama, Cartagena, Savannah, and Barranquilla infected. I do not know that they are, though I suggested that these were dangerous ports and that they should be treated as infected.

Respectfully,

J. GREY THOMAS,

Acting Assistant Surgeon. U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

[Inclosures.]

As far as we know at present there is no case of yellow fever or other epidemic disease in Limon, yet we do not pledge ourselves to declare the town healthy or not healthy; we wish to discuss measures to clean Limon and to prevent an epidemic of any nature, especially yellow fever.

Resolved. First. Owners of houses to be compelled, at their own cost, to keep their houses inside and outside clean to the strict satisfaction of the health officer.

Second. That water traps (to prevent sewer gas escaping) be put at every corner, since at the present moment at some corners the stench is horrible and dangerous. A separate sewerage and surface-water drainage is recommended, the system at present being worse than the old cess-pit system, although there is only about 1 per cent of houses connected with the drains conduit.

Third. That the present deposit of rubbish (in front of Mr. Copa's house) be changed to beyond Cieniguita Bridge on the way to Banana River.

Fourth. That the cause of all deaths must be certified to, and the officer at the burial ground do not allow any burial without medical certificate with the Government seal, any unknown case of death to have an autopsy performed by order of the governor at a fixed fee.

Fifth. That all stagnant pools be filled up to grade, either in yards, under houses, or in open lots.

Sixth. That in all cases of suspicious cases of infectious disease the premises be thoroughly fumigated and disinfected.

Seventh. That the presence of tramps without occupation or lodging quarters is dangerous to the public health.

Eighth. That the establishment of public "excusados" would be beneficial to the health of Limon.

Ninth. That isolation hospital is urgently needed, the present accommodation on the island being incomplete and not provided with all necessary equipment.

Tenth. That all houses be connected in a sanitary manner with the sewerage (See No. 2).

Eleventh. That quarantine be rigidly enforced. Bills of health to be strict. At present we often receive a clean bill of health from infected ports; witness last case from Colon. This is the most important matter of all, and Costa Rica consuls should be instructed to be thoroughly strict in regard to issuing bills of health.

Twelfth. At the present time we consider, Colon, Panama, Cartagena, Savannah and Barranquilla as infected. With these ports we have frequent communication to our own risk. We therefore recommend disinfection of all baggage and effects from these ports, and that passengers therefrom for Limon be detained five days; crews not to be allowed ashore.

PORT LIMON, COSTA RICA, *September 8, 1900.*

SIR: I beg to inform you that with the approval of the port physician, this authority has decided that all mail as well as baggage arriving at this port on the ships of your line shall be fumigated on the wharf, for which purpose a proper locality will be built.

At the same time we beg you to inform your respective captains not to receive any passengers from infected ports, nor to allow any of the crew to come ashore, exception made of the captains and pursers, and not to receive any visitors on board until further orders.

Respectfully,
The UNITED FRUIT COMPANY.

J. M. SANDOVAL.

CUBA.

*Reports from Cienfuegos, Casilda, and Santa Cruz del Sur—History of the case of yellow fever reported September 8.*CIENFUEGOS, CUBA, *September 10, 1900.*

SIR: I have the honor to report that during the week ended September 8, 1900, 14 deaths have occurred in this city from the following causes: Tuberculosis, 4; paludism, 3; old age, 2; pernicious fever, 1; wounds, 1; enteritis, 1; inflammation of kidneys, 1; inflammation of orbit, 1. Of these, 1 death occurred in the civil hospital. Death rate, 18.32.

I have to submit the following brief report of the case of yellow fever reported by cable on the 8th instant: The patient, a Turkish woman, had been on the island for the past nine months, arriving here from Havana on August 31. She was seen and a diagnosis of yellow fever was made on the 7th instant, and on the following day was removed to the lazaretto. The house in which she lived was disinfected by the municipal authorities, bedding and other clothing burned.

I was informed by the city health officer that, at the time of her removal to the lazaretto, the woman had been sick six or seven days; consequently it can safely be assumed that she received the infection at Havana.

During the week 10 vessels have been inspected at this port. Ten bills of health have been issued to outgoing vessels. The following baggage was disinfected at this station arriving from Batabano: Twenty-two trunks, 34 valises, 10 bundles clothing, and 9 boxes clothing.

Casilda.—Dr. Alejandro Cantero's report not received on account of stormy weather, the vessel plying between this port and Casilda not making the ordinary trip.

Santa Cruz del Sur.—Dr. Juan R. Xiques reports 1 death in that port during the week. No contagious diseases. Health of port good. Inspected 5 vessels during the week.

Respectfully,

F. E. TROTTER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report of immigrants inspected at the port of Cienfuegos, Cuba, during the month of August, 1900.

Total number of immigrants inspected, 4; number passed, 4; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

F. E. TROTTER,
Assistant Surgeon, U. S. M. H. S.

Inspection of immigrants at Cienfuegos, during the week ended September 8, 1900.

CIENFUEGOS, CUBA, *September 10, 1900.*

SIR: I herewith submit a report of alien steerage passengers at this port during the week ended September 8, 1900: September 3, steamship *Puerto Rico*, from Barcelona, with 1 Spanish immigrant.

Respectfully,

F. E. TROTTER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report from Havana—Mortality statistics—Translated inclosure relative to present epidemic of yellow fever.

HAVANA, CUBA, *September 10, 1900.*

SIR: I have the honor to report the transactions of this station for the week ended September 8, 1900, as follows:

There were 12 deaths from yellow fever during the week. The number of cases has slightly decreased.

I inclose for your information a translated extract from *La Habana Medica*, bearing upon the yellow fever situation in Havana, and which is of interest at this time.

The death rate at Las Animas Hospital is not given. This hospital is the best appointed and best organized yellow-fever institution in Havana, with trained female nurses and attendants, and is under the control of the United States Army. The death rate from the disease, I am told, is about 16 per cent.

The shipping is free from yellow fever at present. We have just completed a ship-to-ship inspection of all vessels in the harbor.

The work during the week has been devoted mainly to the inspection of passengers and vessels and the disinfection of vessels and baggage, as will be seen from the inclosed tabulated reports.

I beg to state, referring to my report dated August 13, relative to re-disinfection of passenger baggage at ports of arrival, that upon investigation I find that this is not true as regards Florida, and that baggage disinfected in Havana is passed through all Florida ports.

I inclose the mortuary report for the week ended September 8, 1900.

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S.,
Chief Quarantine Officer for the Island of Cuba.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosures.]

Mortuary report for the week ended September 8, 1900.

Enteritis.....	8	Malaria.....	2
Yellow fever.....	12	Pneumonia.....	3
Typhoid fever.....	2	Arterial sclerosis.....	14
Pernicious malarial fever.....	6	Tuberculosis.....	14
Bilious fever.....	1	Total deaths from all causes.....	122
Meningitis.....	11		

Report for week ended September 8, 1900.

Passengers inspected.....	293	Applications for immune certificates	
Passengers vaccinated.....	21	rejected.....	15
Immune certificates issued.....	78		

OUT-DOOR DEPARTMENT.

Vessels disinfected.....	5	Vessels inspected and cleared.....	20
Pieces of baggage disinfected.....	424	Immigrants inspected.....	430
Vessels inspected and entered.....	29		

La Habana Medica, an important scientific review published in this city, says: "The gravity of the present epidemic of yellow fever is truly alarming. A greater number of invasions probably occurred in 1895, but the general character of the disease was rather benign. In the present year, on the contrary, it assumes the utmost gravity, the mortality exceeding 30 per cent."

Let us see the following data from the principal sanitariums of Havana for the eight months elapsed from January 1 to August 21:

Quinta de Dependientes, cases, 136; deaths, 38; percentage of mortality, 27.94.

Quinta La Covadonga, cases, 51; deaths, 20; percentage, 39.91.

Quinta del Centro Gallego, cases, 38; deaths, 12; percentage, 31.57.

Quinta del Rey, cases, 4; deaths, 3; percentage, 75.

Analyzing these figures those of the Quinta de Dependientes attract attention above all. More patients have been treated there than in the other three sanitariums together, with the fortunate circumstance that the relative mortality has been less than in any other.

As we see, yellow fever still dominates our local pathology while other diseases sensibly diminish, and with them the general mortality.

It does not suffice to combat this infection with the greatest hygiene.

As the principal factor against it a therapeutic agent of sure action is needed, and unfortunately we do not possess it. Serotherapy is the only source to furnish it.

Establishment of barracks for detention of immigrants at Havana.

HAVANA, CUBA, September 10, 1900.

SIR: Referring to my telegram of September 8, 1900, in regard to the establishment of immigrant barracks upon the hills across the bay back of Tricornia, I have the honor to report that the governor-general is taking this action in order to prevent the large number of immigrants expected from Spain and the Canary Islands from entering the city of Havana, thereby contracting yellow fever and distributing it throughout the country districts. After passing through quarantine inspection they will be detained in these barracks until they can be sent out to the plantations where they are to be employed.

General Wood wishes Dr. Menocal, of this Service, to take immediate charge of these barracks. I consider this movement a wise measure, and can spare Dr. Menocal for the Service and request your approval of the same.

I inclose herewith copy of Special Orders No. 155, instituting a board of officers to carry out the project as soon as possible.

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S.,

Chief Quarantine Officer for the Island of Cuba.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

[Special Orders No. 155.]

HEADQUARTERS DIVISION OF CUBA,
Havana, Cuba, September 8, 1900.

3. A board of medical officers, to consist of: Maj. Valery Havard, medical department, chief surgeon of the division; Maj. William C. Gorgas, medical department, chief sanitary officer, city of Havana; Surg. A. H. Glennan, United States Marine-Hospital Service, chief quarantine officer for the island of Cuba; Dr. Augustin Varona; Dr. Vicente Benito Valdes; Acting Asst. Surg. T. C. Lyster, United States Army; will meet at the office of the chief surgeon of the division, at 10 o'clock a. m., September 10, 1900, or as soon thereafter as practicable, to inquire into and report upon the advisa-

bility and feasibility of establishing a detention camp near Tricornia, Cuba, for the detention of immigrants who arrive in this port, in order that the spread of infection in the city of Havana may be prevented.

This board will also consider all particulars, such as erection of frame buildings, including details relating to establishment of immigration bureau, etc., deemed necessary for the establishment of such a camp.

The travel enjoined is necessary for the public service.

By command of Major-General Wood :

H. L. SCOTT, *Adjutant-General.*

Inspection of immigrants at Havana during the week ended September 1, 1900.

HAVANA, CUBA, *September 1, 1900.*

SIR: I herewith submit report of alien steerage passengers at this port during the week ended September 1, 1900:

Date.	Vessel.	Where from.	No. of immigrants.
Aug 26	Steamship Leon XIII	Vera Cruz.....	7
Aug. 27	Steamship Pionier	Mobile, Ala.....	1
Aug. 28	Steamship Algiers	New Orleans and Key West.....	2
Do.....	Steamship Vigilancia.....	Campeche, Progreso, and Vera Cruz.....	20
Aug. 29	Steamship Euskaro.....	Liverpool and Spain.....	68
Do.....	Steamship Mexico.....	New York, N. Y.....	13
Aug. 31	Steamship Miguel Jover.....	Spain, Gibraltar, and Canary Islands.....	327
Sept. 1	Steamship Mascotte.....	Tampa and Key West.....	3
Do.....	Steamship Cataluña.....	Spain, Canary Islands, and Porto Rico.....	207
	Total.....		648

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report of immigration at Havana, Cuba, during the week ended September 8, 1900.

HAVANA, CUBA, *September 8, 1900.*

SIR: I herewith submit report of alien steerage passengers arriving at this port during the week ended September 8, 1900.

Date.	Vessel.	Where from.	No. of immigrants.
Sept. 3	Steamship Schleswig	Vera Cruz.....	3
Do.....	Steamship Yucatan.....	New York, N. Y.....	4
Do.....	Steamship Ciudad de Cadiz	Bilbao, Santander, and Corunna.....	189
Sept. 4	Steamship Orizaba	Campeche, Progreso, and Vera Cruz.....	30
Do.....	Steamship Aransas	New Orleans, La.....	1
Sept. 5	Steamship Havana.....	New York, N. Y.....	12
Do.....	Steamship La Normandie.....	St. Nazaire and Spain.....	128
Sept. 6	Steamship Puerto Rico.....	Spain, Canary Islands, and Porto Rico.....	61
Sept. 8	Steamship Uto.....	Puerto Cabello.....	2
	Total		430

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report of immigrants inspected at the port of Havana, Cuba, during the month of August, 1900.

Total number of immigrants inspected, 1,006; number passed, 1,003; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 3.

Disposition of immigrants certified for deportation.—Number cases pending at beginning of month, none; number cases certified for deportation during month, 3; total to be accounted for, 3; number cases deported, 3; number cases admitted, none; number cases pending at close of month, none.

A. H. GLENNAN,
Surgeon, U. S. M. H. S.

Reports from Matanzas, Cardenas, Isabela de Sagua, and Caibarien.

MATANZAS, CUBA, *September 5, 1900.*

SIR: I have the honor to submit, herewith, the following sanitary report of the quarantine district under my command, for the week ended September 1, 1900.

Matanzas.—Thirteen deaths occurred in the city of Matanzas during the period covered by this report, showing a mortality of 14.97 per 1,000. The principal causes of death were as follows: Heart disease, 4; tuberculosis, 3; bronchitis, 1; atresia, 1; enteritis tuberculous, 1; other causes, 3. The following cases of infectious or contagious character were reported: Yellow fever, 1; diphtheria, 2. Ten vessels arrived during the week; 8 of these were inspected and passed and 2 passed without inspection. Eight bills of health were issued to foreign vessels. The German steamship *Pionier* bound for Mobile, Ala., was disinfected at this port on August 30, 1900.

One hundred and sixteen health certificates were issued to persons leaving the island. Eighteen immune certificates were issued to laborers employed by the Munson boats for discharging cargoes on the north coast of the island. Seventy-four pieces of baggage were inspected and passed and 122 pieces were disinfected; 36 bundles of clothes and bedding of the steamship *Pionier* were also disinfected.

Cardenas.—Acting Asst. Surg. Enrique Saez reports that 7 deaths occurred in Cardenas during the week. The principal causes of death were as follows: Tuberculosis, 1; enteritis, 1; pernicious fever, 1; tetanus infantile, 1; other causes, 3. The death rate during the week was 14.70 per 1,000. No case of infectious or contagious character was reported. Ten vessels arrived during the week; 5 of these were foreign vessels and 5 coasting vessels. Four bills of health were issued to foreign vessels.

Isabela de Sagua.—Acting Asst. Surg. Pedro Garcia Riera reports that the death rate during the week was 16.43 per 1,000. No vessel arrived during the week. One bill of health was issued to foreign vessel and 8 certificates of inspection were issued to coasting vessels.

Caibarien.—Acting Asst. Surg. Leoncio Junco reports that the sanitary condition of the port and town is good, the prevalent disease being malarial fever. Four vessels arrived during the week; 1 of these was inspected and passed and 3 were passed without inspection. Two bills of health were issued to foreign vessels and 2 certificates of inspection to coasting vessels.

The case of yellow fever reported above as occurring in Mantanzas is the same reported by wire under date August 26, 1900.

Respectfully,

G. M. GUITÉRAS,
Passed Assistant Surgeon, U. S. M. H. S.
 The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Two cases of yellow fever at Sagua.

MATANZAS, CUBA, *September 17, 1900.*

Two cases yellow fever reported officially at Sagua.

GUITÉRAS.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Report from Nuevitas, Puerto Padre, Gibara, Banes, Mayari, and Baracoa.

NUEVITAS, CUBA, *September 4, 1900.*

SIR: I have the honor to submit the following report for the week ended September 1, 1900: During this week 6 vessels have arrived, and 10 bills of health have been issued. The sanitary condition has been fair all the time and only 1 death has occurred in the week. The weather has been extremely warm and rather close, but no practical rain has fallen for a considerable time.

Reports of substations.

Puerto Padre.—Arrivals, 4; bills of health, 4; deaths, 2; fair sanitary condition.

Gibara.—Arrivals, 5; bills of health, 7; deaths, 4; no quarantinable diseases.

Banes.—Arrivals, 1; bills of health, 1; deaths, 1; fair.

Mayari.—Arrivals, 2; bills of health, 8; deaths, 4.

Baracoa.—Arrivals, 4; bills of health, 4.

Respectfully,

OWEN W. STONE,
Commanding Officer, Nuevitas Station.

By J. R. ARIZA,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

DENMARK.

Quarantine for Danish West Indies against arrivals from Smyrna.

WASHINGTON, D. C., *September 18, 1900.*

SIR: I have the honor to inclose for your information a copy of a dispatch from the minister of the United States at Copenhagen, stating that he has been informed that, owing to the appearance of the plague, the government of the Danish West Indies has declared a quarantine of two weeks against ships that arrive from Smyrna, or that have communicated with said port, or that on their voyage have come in contact with ships arriving therefrom.

Respectfully,

DAVID J. HILL,
Acting Secretary.

HON. SECRETARY OF THE TREASURY.

[Inclosure.]

COPENHAGEN, DENMARK, *August 29, 1900.*

SIR: In a note verbale, dated the 25th instant, the minister of foreign affairs informs me that owing to the appearance of the plague, the government of the Danish West Indies has declared a quarantine of two weeks against ships that arrive from Smyrna, or that have communicated with said port, or that on their voyage have come in contact with ships arriving therefrom.

The importation from the above port of the following articles is prohibited: Rags, used wadding, crass wool, paper shavings, hair, hides, used bags, carpets, embroideries, fresh offals, hoofs, wool, and raw silk; also used linen, used wearing apparel, and bed clothes, except when these articles constitute personal baggage, in which case they must be disinfected under public supervision.

Respectfully,

LAURITS S. SWENSON,
Envoy Extraordinary and Minister Plenipotentiary.

Hon. SECRETARY OF STATE.

GUATEMALA,

*Report from Livingston—Fruit port.*LIVINGSTON, GUATEMALA, *September 4, 1900.*

SIR: I have the honor to submit my report for the week ended September 4, 1900.

Long-continued heavy night rains have increased the number of malarial-fever cases, particularly among children. Three deaths are reported: Adult, male, native, gunshot wound of chest; adult, male, native, suicide; infant, male, native, acute enteritis.

The following ship was inspected: Steamship *Managua*, Olvik; crew, 16; number of passengers, none; cargo, green fruit; all in good sanitary condition; destination, Mobile, Ala. Proper certificate inclosed.

Respectfully,

SAMUEL HARRIS BACKUS,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

HONDURAS.

*Report from La Ceiba—Fruit port.*LA CEIBA, HONDURAS, *September 4, 1900.*

SIR: I have the honor to make the following report for the week ended September 1, 1900: Four vessels cleared from this port for the United States as follows: August 26, steamship *Suddal*, for New Orleans, La.; August 27, steamship *Nicaragua*, for New Orleans, La.; August 30, steamship *Premier*, for New Orleans, La.; September 1, steamship *Sunnivia*, for New Orleans, La.

The general health of this port and locality is good. One death was reported during the week—a male, phthisis pulmonalis.

Respectfully,

SPENCER FRANKLIN,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

*Reports from Puerto Cortez—Fruit port.*PUERTO CORTEZ, HONDURAS, *August 31, 1900.*

SIR: I have the honor to submit report for week ended August 30, 1900, and inclose list of vessels inspected and cleared during the week.

The health and sanitary conditions of the port and adjacent country continue most satisfactory. Two deaths reported for the week—an adult, female, abortion; a child, premature birth.

Respectfully,

R. H. PETERS,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

List of vessels inspected and cleared during week ended August 30, 1900.

Date.	Vessel.	Master.	Crew.	Destination.	No. of passengers.	No. pieces of baggage.
Aug. 25	Nor. ss. Espana.....	Danielsen	14	Mobile.....	.....	.....
Aug. 26	Br. ss. Uak.....	Hurry.....	18	do.....	.....	.....
Aug. 29	Am. ss. Foxhall.....	Lawson.....	26	do.....	.....	.....
Do...	Am. ss. S. Oteri.....	De Luca.....	29	Boston.....	.....	.....
Do...	Nor. ss. Banas.....	Tronstad..	16	New Orleans.....	.....	.....

PUERTO CORTEZ, HONDURAS, September 8, 1900.

SIR: I have the honor to submit report for the week ended September 6, 1900, and inclose list of vessels inspected and cleared during the week. The health and sanitary conditions of the port and adjacent country continue satisfactory. No death reported for the week.

Respectfully,

R. H. PETERS,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

List of vessels inspected and cleared during week ended September 6, 1900.

Date.	Vessel.	Master.	Number of crew.	Destination.	Number of passengers.	Number of pieces baggage disinfected.
Sept. 1	Ss. Oregon.....	Hegge.....	29	New York, N. Y.....	5	.....
Sept. 2	Ss. Utstein.....	Aarswold....	16	New Orleans, La.....	.....	.....
Sept. 3	Ss. Fulton.....	Pettersen....	14	Mobile, Ala.....	.....	.....
Sept. 5	Ss. Stillwater.....	Galt.....	32	New Orleans, La.....	.....	.....

ITALY.

Reports from Naples.

NAPLES, ITALY, August 29, 1900.

SIR: I have the honor to report that for the week ended August 29, 1900, bills of health were issued to the following ships:

On August 23, the steamship *Spartan Prince*, of the Prince Line, bound with passengers and cargo for New York. There were inspected and passed 16 cabin and 707 steerage passengers and 120 pieces of large and 750 pieces of small baggage. Fifty pieces of baggage were disinfected by steam.

On August 25, the steamship *Bolivia*, of the Anchor Line, bound with passengers and cargo for New York. There were inspected and passed 6 cabin and 464 steerage passengers and 53 pieces of large and

567 pieces of small baggage. Fifteen pieces of baggage were disinfected by steam.

On August 29, the steamship *Hardanger*, bound in ballast for Baltimore, Md.

The emigration has fallen off to a marked degree during the past month. This may be accounted for in several ways, first, the emigration naturally drops during the summer months; second, 2 of the lines have been handicapped for steamers on account of the troubles in China, and another line is unable to run on account of the strike at Marseilles.

Respectfully,

VICTOR G. HEISER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

NAPLES, ITALY, *September 5, 1900.*

SIR: I have the honor to report that for the week ended September 5, 1900, the following ships were inspected:

On August 31, the steamship *Werra*, of the North German Lloyd Company, bound with passengers and cargo for New York. There were inspected and passed 138 cabin and 712 steerage passengers and 202 pieces of large and 841 pieces of small baggage. Twenty-one pieces of baggage were disinfected by steam.

On September 1, the steamship *Archimede*, of the Italian Navigation Company, bound with passengers and cargo for New York. There were inspected and passed 39 cabin and 931 steerage passengers and 387 pieces of large and 954 pieces of small baggage. Sixty-two pieces of baggage were disinfected by steam.

* * * * *

Respectfully,

VICTOR G. HEISER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

MEXICO.

Report from Vera Cruz.

VERA CRUZ, MEXICO, *September 9, 1900.*

SIR: I have the honor to make the following report for the week ended September 8:

There have been 20 cases and 6 deaths from yellow fever and 9 cases and 4 deaths from smallpox. Five vessels have been inspected and health certificates issued to 112 passengers. On account of the prevalence of a strong "norther," the atmospheric conditions have been much improved, with the probability of an early improvement in the fever situation. There does not seem to be any improvement in the smallpox condition and an increase of the disease is looked for with the advent of the cool weather. The health of the shipping continues perfect and the greater part of the outgoing passengers are from the non-infected interior towns and these two conditions render the passenger traffic reasonably safe.

Respectfully,

S. H. HODGSON,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

NICARAGUA.

*Reports from Bluefields—Fruit port.*BLUEFIELDS, NICARAGUA, *September 1, 1900.*

SIR: I have the honor to make the following weekly report: Three steamships have been inspected and cleared for New Orleans, viz, the *Alabama*, *Jno. Wilson*, and *Breifond*, none of which carried passengers; copies of certificates given to masters are inclosed. For the week ended August 25, 3 deaths occurred in Bluefields—1 native adult of abscess and bilious fever; 1 native adult, tuberculosis; 1 native adult, diarrhea and rheumatism. The sanitary condition of this port and adjacent territory continues good.

Respectfully,

D. W. GOODMAN,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

BLUEFIELDS, NICARAGUA, *September 5, 1900.*

SIR: I have the honor to make my weekly report as follows: One steamship, the *Hiram*, has been inspected and cleared for New Orleans. No passengers. Copy of certificate given master inclosed.

There were 3 deaths in Bluefields in the week ended September 2, 1900—1 native child, malarial fever; 1 native infant, convulsions; 1 native adult, tuberculosis. The general health of the town and vicinity continues good.

Respectfully,

D. W. GOODMAN,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

PARAGUAY.

*Plague reported in Asuncion.*ASUNCION, PARAGUAY, *July 24, 1900.*

SIR: I have to report the appearance of the bubonic plague in this consular district, and also to inclose clipping and translation of the decree of the Paraguayan Government declaring officially the existence of the plague in this country.

Respectfully,

W. HARRISON,
United States Vice-Consul.

Hon. ASSISTANT SECRETARY OF STATE.

[Inclosure.]

*Against the enemies of the communities.*ASUNCION, *July 24, 1900.*

The government of the Republic has issued the following decree, taking precautionary measures, and which must be adopted to prevent the development and importation of infectious diseases to which it refers:

Compliant to the note of the 23d instant of the national board of health communicating the existence of some cases of the bubonic pest according to microscopical examination practiced by the bacteriologist Dr. Elmoossian with specimens taken from a sick person suspected of infectious fever, although it has not been possible to make a complete bacteriological examination because the institute with the apparatus lately acquired in Europe has not yet been definitely organized.

That from the investigations practiced it results that the germs of said disease have been imported in some shipment of flour and wheat from Argentine ports.

Considering it necessary to adopt precautionary measures which the circumstances require so as to suffocate the evil after hearing the council of ministers.

DECREES.

ARTICLE 1. *Resolved*, that all vessels, cargoes, baggages, and passengers which leave the port of this capital, for the exterior, or interior of the Republic, shall go through a thoroughly good process of disinfection.

ART. 2. *Resolved*, that the port of this capital is the exclusive point of the sanitary station.

ART. 3. Vessels coming from the Argentine will not have frank entrance without previous disinfection according to the terms of the first article.

ART. 4. The national medical board of health is in charge of the execution of this decree.

ART. 5. Be it communicated, published, and given to the Official Register.

ACEVAL.
 GUILLERMO DE LOS RIOS
 FABIO QUEIROLO.
 FRANCISCO CAMPOS.
 JOSE TOMAS LEGAL.
 J. A. ESCURRA.

PORTO RICO.

Report from Ponce.

PONCE, P. R., *September 3, 1900.*

SIR: I have the honor to transmit herewith the weekly quarantine and bills of health reports for the week ended September 1, 1900. Also the summary of transactions and the monthly report of inspection of immigrants for the month of August, 1900. The past month has been a very quiet one in shipping circles, and scarcely more than routine work has been done at this office. One vessel was held in quarantine, but allowed to take passengers. The enormous death rate has increased considerably during the month, nearly a hundred more deaths being reported. Many of these persons are those that flock from all over the island to this city, which has the unfortunate reputation of being very charitable. Some little effort has been made to check this influx of sick and poverty stricken, but it has availed little. By popular subscription a kind of "soup house" is being carried on, feeding about 1,200 persons daily at an expense of about \$400 weekly. This has relieved the condition of things somewhat.

Respectfully,

W. W. KING,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

Summary of transactions of service during the month of August, 1900.

PONCE, P. R., *September 3, 1900.*

Number of deaths reported during August, 1900 (a).....	681
Number of deaths reported during August, 1899 (a).....	356
Number of births reported during August, 1900 (a).....	107
Number of births reported during August, 1899 (a).....	42
Number of vessels inspected during August, 1900.....	15
Number of vessels inspected during August, 1899.....	22
Number of bills of health issued during August, 1900.....	16
Number of bills of health issued during August, 1899.....	22
Number of vessels in quarantine during August, 1900.....	1
Number of passengers inspected during August, 1900, incoming.....	89
Number of passengers inspected during August, 1900, in transit.....	133
Number of crew inspected during August, 1900.....	436
Number of vaccination certificates stamped during August, 1900.....	3
Number of immigrants inspected during August, 1900.....	10
Rejections.....	0

^a These figures are for the city proper, the playa, and surrounding district of Ponce.

Report of immigrants inspected at Ponce, P. R., during the month of August, 1900.

Total number of immigrants inspected, 10; number passed, 10; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

W. W. KING,
Assistant Surgeon, U. S. M. H. S.

Inspection of immigrants at Ponce during the week ended September 1, 1900.

PONCE, P. R., September 3, 1900.

SIR: I submit herewith report of alien steerage passengers arriving at this port during the week ended September 1, 1900: August 26, Spanish steamship *Puerto Rico*, from Barcelona, Valencia, Malaga, Gibraltar, Cadiz, Canary Islands, San Juan, and Mayaguez, with 2 immigrants.

Respectfully,

W. W. KING,
Assistant Surgeon, U. S. M. H. S.

Report from San Juan and subports.

SAN JUAN, P. R., September 4, 1900.

SIR: I have the honor to make the following report of the transactions of the Service at this port and at the 6 subports of Porto Rico for the month of August:

San Juan.—There were 30 vessels inspected during the month, one of which, Spanish steamer *Isla de Panay*, arrived 18th, from Havana via Central and South American ports, was held as usual and transacted business in quarantine, sailing the 19th. The steamer *Mortera*, provisional flag, from Havana via Santiago and Santo Domingo, which arrived the 30th, had been disinfected, as usual, at Santiago. One of her crew was suffering from a febrile attack, which he had developed en route. It was considered malarious, however, and the vessel was released. The new steam launch which was purchased for this station arrived on the transport *Sedgwick* on the 4th. She was put in commission on the 9th, since which time she has been in constant use, as previously reported.

Fourteen pieces of baggage were disinfected during the month, all from the *Isla de Panay*. No persons were held at the detention station. Steward Herty, replacing Steward Holsendorf, arrived and reported for duty on the 24th. The weather continues very warm and there is a great deal of rain. On the 31st we had a blow of brief duration but of such severity as to cause considerable alarm. No damage was done, however. The health of the city continues as before. Total number of deaths for the month, 106; births, 63. No quarantinable diseases are reported. List of causes of deaths is inclosed.

Subports.—Nothing unusual is reported from the subports. The following is a statement of vessels inspected: Mayaguez, 8; Arecibo, 3; Aguadilla, 2; Fajardo, 3; Arroyo, 1. Mortality reports from the subports are as follows: Mayaguez, 162; Arecibo, 128; Humacao, 41; Aguadilla, 69; Fajardo, 27; Arroyo, 31. No quarantinable diseases reported.

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosure.]

Vital statistics of San Juan, P. R., for August, 1900.

Athrepsia.....	2	Encephalitis.....	2
Anæmia	6	Cancer of the stomach.....	1
Artero-sclerosis	1	Typhoid	1
Bronchitis.....	3	Meningitis.....	1
Cerebral congestion.....	5	Cardiac lesion.....	2
Old age.....	2	Encephaloid of the mesenterium.....	1
Cachexia.....	3	Neoplasma.....	1
Fatty degeneration.....	1	Pneumonia.....	3
Scrofula.....	1	Paralysis.....	5
Endo-carditis.....	3	Rheumatism	2
Enteritis.....	12	Rachitis.....	6
Entero-colitis.....	6	Tetanus.....	2
Gastric fever.....	2	Tuberculosis.....	15
Epilepsy.....	1		
Puerperal fever.....	1	Total.....	106
Hepatitis.....	3		
Mitral insufficiency.....	6	August, 1899—	
Measles.....	2	Births.....	41
Pernicious fever.....	1	Deaths.....	63
Cerebral fever.....	1	August, 1900—	
Inflammation of intestines.....	1	Births.....	63
Apoplectic shock.....	1	Deaths.....	106

Inspection of immigrants at San Juan during the week ended August 18, 1900.

SAN JUAN, P. R., August 20, 1900.

SIR: I submit herewith report of alien steerage passengers arriving at this port during the week ended August 18, 1900: August 18, Spanish steamship *Isla de Panay*, from Havana, Colon, Puerto Cabello, La Guayra, Ponce, with 7 immigrants. French steamship *St. Simon*, from St. Marc, Gonaives, Port au Prince, Cape Haiti, Puerto Plata, Sanchez, with 4 immigrants.

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

Inspection of immigrants at San Juan during the week ended August 25, 1900.

SAN JUAN, P. R., August 28, 1900.

SIR: I submit herewith report of alien steerage passengers arriving at this port during the week ended August 25, 1900:

August 19, provisional flag steamship *Julia*, from Havana, Nuevitas, Gibara, Baracoa, Santiago, St. Domingo, Macoris, and Ponce, with 15 immigrants.

August 24, Spanish steamship *Puerto Rico*, from Barcelona, Valencia, Malaga, Gibraltar, Cadiz, Las Palmas, Tenerife, Santa Cruz de la Palma, with 6 immigrants.

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

Inspection of immigrants at San Juan during the week ended September 1, 1900.

SAN JUAN, P. R., September 4, 1900.

SIR: I submit herewith report of alien steerage passengers arriving at this port during the week ended September 1, 1900:

August 28, Spanish steamship *Cataluna*, from Genoa, Barcelona,

Malaga, Cadiz, Las Palmas, Tenerife, Santa Cruz de la Palma, with 5 immigrants.

August 30, provisional flag steamship *Mortera*, from Havana, Nuevitas, Gibara, Baracoa, Santiago de Cuba, Puerto Plata, Mayaguez, P. R., with 4 immigrants.

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

Inspection of immigrants at subports during the week ended August 18, 1900.

SAN JUAN, P. R., August 21, 1900.

SIR: I submit herewith report of alien steerage passenger arriving at subports of Porto Rico during the week ended August 18, 1900:

Mayaguez.—August 17, German steamship *Constantia*, from St. Thomas, with 1 immigrant. (Other subports, no transactions.)

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the subports of Porto Rico during the month of August, 1900.

Total number of immigrants inspected, 1 (at Mayaguez); number passed, 1; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none. (Other subports, no transactions.)

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

SCOTLAND.

Report of condition of plague in Glasgow.

GLASGOW, SCOTLAND, September 4, 1900.

SIR: I have the honor to make the following report of the plague situation in Glasgow at the present time; there were in hospital this morning 12 cases of plague and 4 under suspicion. One of these was removed there yesterday from the detention house, and the other 3 were a family from Thistle street, in the same quarter as the original case. These 4 cases may prove not to be genuine, however. As I reported in my cablegram of yesterday, there was a suspicious death at Govan, and there is now little doubt that this was genuine plague. It occurred in a young boy, and no connection can so far be traced between this case and the previous ones. Govan is a suburb of Glasgow, two or three miles from the center of town, but not within the city limits, and is much nearer the shipping district than the area previously considered infected. Outside of this case the situation looks very hopeful.

The authorities have defined a wide area about the houses where the original cases have occurred as infected, and special supervision is given to this area in a sanitary way. The infected premises have been very thoroughly cleaned, the apartments fumigated with sulphur, then the wall and floors washed with a carbolic solution, and the area ways, stairs, closets, etc., whitewashed, and all infected clothing and bedding either steamed or destroyed.

There have as yet been no vessels leaving this port for the United States since August 30. I have, however, had interviews with all the steamship companies running vessels in that trade, and have informed

them that a rigid inspection would be made of all vessels, with their passengers and cargos, leaving for the United States or Canada.

I have advised, and I think it will be followed, that no steerage passengers be booked from Glasgow, and the few continental steerage passing through here will either not remain in Glasgow at all, or be kept under strict guard. All cabin passengers are being advised to remain away from Glasgow, and to go direct to Greenock, where they will embark. I have given notice that all passengers will be examined before embarking. Inspection of steerage baggage must of necessity occur here, as the only means of disinfecting is here. It would be very difficult to disinfect large quantities of baggage here, as the steamship companies have no facilities for that work and all goods must be sent either to some laundry or to the fever hospital. The crew will probably be the most dangerous and difficult feature. They come aboard late and very drunk and it will be most difficult to find out their antecedents. However, I think every facility will be given by the officers of the various vessels. I have to report the arrival of Acting Assistant Surgeon Hough, and think with his assistance, I shall be able to inspect all boats.

Respectfully,

A. R. THOMAS,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Vessels from Glasgow bound for New York and Montreal.

[Telegrams.]

GLASGOW, *September 14, 1900.*

Sailed from Glasgow, eleventh, *Indrani*, Baltimore; twelfth, *Carthaginian*, Philadelphia.

THOMAS.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

GLASGOW, *September 15, 1900.*

Sailed to-day from Glasgow, *Furnessia*, New York; *Kastalia* and *Ontarian*, Montreal.

THOMAS.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

GLASGOW, *September 20, 1900.*

Sailed from Glasgow, nineteenth, *Salacia*, Baltimore; *Norwegian*, Boston; *Assyrian*, Halifax.

THOMAS.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

GLASGOW, SCOTLAND, *September 7, 1900.*

SIR: I have the honor to make the following report concerning the situation in Glasgow, in continuation of my report of the 4th instant:

Until to-day, the outlook has been encouraging. One of the suspicious cases in Belvidere Hospital has been diagnosed plague, making a total of 13 to date. The suspicious case in Govan has not yet been decided, and to-day another suspicious case has appeared from Govan,

and while not yet officially announced, is undoubtedly plague. Thus, while the original focus of infection seemed to have been controlled, a fresh, or at least another, focus exists in Govan. And unfortunately Govan is outside the city limits of Glasgow, although quite surrounded by the city.

Yesterday, the 6th, we inspected 3 passenger steamers bound for the United States, and the result will be that some modification in the original plans will probably be necessary. The steamship *Astoria*, although having been at dock in Glasgow, embarked all passengers at Greenock, but the confusion of inspecting passengers coming aboard from barges was unsatisfactory. I think, with the present limited infection, it would be preferable to embark the steerage passengers in Glasgow. Only 1 Glasgow steerage passenger from the infected side of town was taken, and his baggage was disinfected. The crews of all the boats were from Glasgow. The 2 Allan Line steamships, the *Laurentian*, for New York, and *Peruvian*, for Boston, loaded at dock in Glasgow. The pier of this company is on the infected side of the river. The *Peruvian* carried a few steerage passengers, all in transit through here, and the *Laurentian* carried only cabin passengers.

The only questionable cargo was a lot of Scotch wool, shipped by the *Astoria*. I was satisfied that this wool was not infected.

I think it will be impracticable to obtain crews outside Glasgow. Greenock is in such close relation to Glasgow by rail and water that a crew gathered there would probably be as dangerous as one from Glasgow direct.

I would respectfully call attention to the fact that no restrictions are placed on travel out of Glasgow, and to the possibility of passengers from here shipping at other British ports.

Acting Assistant Surgeon Hough and myself have each been inoculated with the Yersin serum. This was done in view of our having seen the plague cases. I shall report later on the clinical aspect of these cases.

Respectfully,

A. R. THOMAS,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON GENERAL,

U. S. Marine-Hospital Service.

TURKEY.

Sanitary report from Turkish Empire—Quarantine against Smyrna abolished.

WASHINGTON, D. C., *September 11, 1900.*

SIR: I have the honor to inclose for your information a copy of Health Report No. 251 of the United States sanitary commissioner at Constantinople, dated August 24 last, which was transmitted by the United States chargé d'affaires at that city on the 27th ultimo.

Respectfully,

DAVID J. HILL,

Acting Secretary.

Hon. SECRETARY OF THE TREASURY.

[Report No. 251—Inclosure.]

CONSTANTINOPLE, *August 23, 1900.*

Bubonic plague in Smyrna.

SIR: I am happy to state that no bubonic plague cases have been registered in Smyrna since the last case which occurred the 27th of last July. Said case proved fatal. As a

consequence of the absence of bubonic plague cases, the quarantine to which the ships and passengers coming from Smyrna were subjected, was abolished at the last sitting of the International Sanitary Commission.

Sanitary news from the other provinces of Turkey.

The sanitary news from the other provinces of Turkey is good. No epidemic disease exists anywhere in the Empire.

Sanitary condition of Constantinople.

There is still in Constantinople a light epidemic of influenza as well as the epidemic of diarrhea in children, which is abating. The number of deaths registered in this town from the 17th of last July to the 20th instant is 635. Of these, 2 are from diphtheria, 3 from measles, 17 from typhoid fever, and 35 from acute inflammation of the respiratory apparatus.

Respectfully,

SPIRIDION C. ZAVITZIANO,
United States Sanitary Commissioner.

[Report No. 252.]

CONSTANTINOPLE, August 24, 1900.

Plague in the harbor of Constantinople.

SIR: The 22d instant the liner steamship *Niger*, of the Messageries Maritimes arrived in Constantinople from Beirut with 2 stations at Cyprus and Samos. She arrived early in the morning having on board 95 men of the crew and 166 passengers; of these, 6 only were going to Marseilles. The 160 were landed in Constantinople. At 1.30 o'clock in the afternoon one among the said 6 passengers, an Armenian boy aged 14, addressed himself to the physician of the steamer and complained of being ill. He embarked at Alexandretta and was coming from Hussinik, a village near Kharput.

The physician of the steamer on examining him found that he was feverish with a temperature of 39.8 C. and presenting the enlargement of the ganglia of the left groin as well as those of the armpit of the same side. The skin was moist and the conjunctivæ injected. Said physician, before expressing his opinion, immediately called on the bacteriological institute to ask the bacteriologists to confirm by microscopical analysis his diagnosis, which was of bubonic plague. The bacilli pestis have been found.

I have the honor to inclose herewith the 2 reports concerning the case. Once the diagnosis of bubonic plague was ascertained he notified the fact to the sanitary board, and as a consequence immediately the steamboat was surrounded by a sanitary cordon. Said notification was given late, at about 7 o'clock, and the following day—the 23d instant—the superior sanitary council was convoked in order to take the necessary steps. At said sitting it was decided to send the ship on board of which was the patient to the lazaretto of Clazomenes, where said patient should be landed and the ship disinfected, after which she could start for Marseilles, where she was bound.

The passengers who had already landed in Constantinople have to be examined every day by the physicians of the local authorities. I am glad to state that public health in Constantinople is perfectly good as concerns bubonic plague.

Respectfully,

SPIRIDION C. ZAVITZIANO,
United States Sanitary Commissioner.

WEST INDIES.

Current quarantine information.

BARBADOS, WEST INDIES, August 18, 1900.

SIR: I am forwarding you herewith copies of an act recently passed by the legislature of this colony to enable the quarantine board to deal more effectively with arrivals from places infected with plague; and also copies of rules and a form made to assist in carrying out the provisions of the act.

My last regular report was made on June 23 last. I have now to report as follows:

Barbados.—Quarantine is in force here against Para, Rio de Janeiro, and Santos for yellow fever and smallpox; and against Bombay, Cal-

cutta, Hongkong, Manila, Mauritius, Oporto, Port Said, Rio de Janeiro, Rosario, and the State of Paraguay for bubonic plague. The health of the colony is excellent.

On the 31st ultimo the Norwegian barque *Stanley* arrived here in eleven days from Para, and her captain reported that while at Para 3 of his men were sent ill with fever to the hospital, where 1 died, 1 was left, and the third returned on board. On the voyage here 5 more men were ill with fever, 1 of whom was sent to the quarantine hospital, and is now well; the others proceeded in the vessel to Haiti.

On the 11th instant the steamship *Grangense* arrived here in four days from Para, having lost her doctor and a seaman on the voyage from yellow fever, and having the third officer, chief steward, a seaman, and a fireman ill with fever. She landed 3 first-class passengers at the quarantine station and proceeded to New York the same afternoon. Her British and American bills of health from Manaos, dated July 31, were clean, while those from Para, dated the 7th instant, were indorsed, the American, "1 case, no death, yellow fever; not a single case has been reported by the official board of health;" the British, "yellow fever exists, but health of shipping is good."

The captain of the Norwegian barkentine *Leidi*, which arrived on the 12th instant in ten days from Para, reported that while the vessel was at that place, 5 of the men were ill with fever, but recovered; a sixth was convalescent when the vessel arrived here.

The Slocan liner *Asti* and the Lamport and Holt liner *Buffon* arrived on the 13th instant in thirteen and eleven days from Rio de Janeiro. Their bills of health, dated July 31, were indorsed, the British, "4 cases, 6 deaths from yellow fever; 24 cases, 16 deaths from smallpox; 75 cases, 24 deaths from plague in fortnight ended July 15;" the American, "no cases, 5 deaths, yellow fever; no cases, 9 deaths, smallpox; 76 cases, 35 deaths, plague, during fortnight ended July 31."

British Guiana.—Quarantine is in force there against Brazil, Cuba, Haiti, and Panama. Arrivals from Portugal, Venezuela, and Calcutta are quarantined for examination by the health officer.

Dutch Guiana.—Her Majesty's consul there on the 11th instant reported the health of the colony to be good, that quarantine was in force against all arrivals from Brazilian ports suspected of being infected with plague, and that a local law had recently come into operation imposing severe quarantine restrictions and increasing the power of the health authorities.

French Guiana.—Her Majesty's vice-consul there on the 31st ultimo reported the health of that colony to be good, and that a quarantine of twelve days was being enforced there against arrivals from Brazilian ports.

Grenada.—Quarantine is in force there against Panama, Para, Pernambuco, Rio de Janeiro, Santos, and Brazilian ports generally.

Guadeloupe.—Quarantine is in force there only against Buenos Ayres, but all vessels arriving with foul bills of health are quarantined.

Jamaica.—Quarantine is in force there against Brazil, Cuba, Venezuela, and the coast of Costa Rica and Panama between and exclusive of Points Carreta and Rincon. Vessels from Key West, India, Alexandria, Hongkong, Oporto, Grand Bassam, French Ivory Coast, Mauritius, Pernambuco, Uruguay, Paraguay, and Spanish ports are treated as "suspect," and dealt with by the quarantine board after considering the health officer's report.

Leeward Islands.—Quarantine is in force there against Alexandria, Bombay, Brisbane, Calcutta, Hongkong, Lisbon, Mauritius, New South

Wales, Oporto, Santos, and Paraguay for plague; and Bahia, Cuba, La Guayra, Manaos, Panama, Para, Pernambuco, Puerto Cabello, Rio de Janeiro, and Valencia for yellow fever and smallpox.

Martinique.—Quarantine is in force there against Australia, Egypt, Hongkong, India, Mauritius, Portugal, Réunion, Sandwich Islands, and Syria, for plague; and against Brazil, Mexico, and the isthmus of Panama for yellow fever.

St. Lucia.—Quarantine is in force there against Para, Paraguay, Rio de Janeiro, Rosario, and Santos.

The reports forwarded by the chairman of the quarantine board give the following information:

Bahia.—For the fourteen days prior to July 13, clean bill of health.

Pernambuco.—For the fourteen days prior to July 16, clean bill of health.

Rio de Janeiro (a).—For the fourteen days prior to August 2, no cases, 6 deaths, yellow fever; no cases, 11 deaths, smallpox; 57 cases, 37 deaths, plague.

Maceio.—For fourteen days prior to June 18, clean bill of health.

Victoria.—For fourteen days prior to July 10, clean bill of health.

Santos.—For fourteen days prior to July 19, 6 cases, no deaths, yellow fever.

St. Thomas.—Quarantine is in force there against Colon, Cuba, Panama, Para, Tampico, and Vera Cruz for yellow fever; against Mexico, Pernambuco, and Santos for smallpox, and against Bombay, Calcutta, Hongkong, Mauritius, Port Said, Rio de Janeiro, and Paraguay for plague.

St. Vincent.—Quarantine is in force there against Bahia, Panama, Para, and Rio de Janeiro.

Trinidad.—Quarantine is not in force there against any place except Brazilian ports.

Respectfully,

JAS. SANDERSON,
Clerk, Quarantine Board.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Foreign statistical reports of countries and cities—Yearly and monthly.

AFRICA—*Sierra Leone.*—Five weeks ended July 27, 1900. Estimated population, 35,000. Total number of deaths, 116. No deaths from contagious diseases reported.

BRITISH COLUMBIA—*Vancouver.*—Month of August, 1900. Estimated population, 13,685. Total number of deaths, 35, including 1 from enteric fever.

CANADA—*Manitoba—Winnipeg.*—Month of August, 1900. Estimated population, 25,642. Number of deaths not reported. Three deaths from enteric fever reported.

CANARY ISLANDS—*Las Palmas.*—Month of July, 1900. Estimated population, 34,972. Total number of deaths, 86. No deaths from contagious diseases reported.

^a In a letter received this morning from Her Majesty's consul at Rio de Janeiro dated on the 2d instant, he states that from April 18 to July 31, 364 cases of, and 174 deaths from, plague were officially reported there, and that a few cases occur daily, but the disease is not known to exist at any other Brazilian city.

CHILE—Antofagasta.—Month of July, 1900. Estimated population, 16,000. Total number of deaths, 49, including 6 from tuberculosis.

FRANCE—Rouen.—Month of July, 1900. Estimated population, 112,657. Total number of deaths, 273, including diphtheria, 2; enteric fever, 6; whooping cough, 1; smallpox, 1, and 43 from tuberculosis.

GERMANY—Hanover.—Month of June, 1900. Estimated population, 250,955. Total number of deaths, 174, including diphtheria, 1; scarlet fever, 2, and 22 from phthisis pulmonalis.

GREAT BRITAIN—England and Wales—Ireland.—The average annual death rate, represented by the deaths registered during the week ended August 18, 1900, in the 22 principal town districts of Ireland was 20.2 a thousand of the population, which is estimated at 1,062,188. The lowest rate was recorded in Carrickfergus, viz, 5.8, and the highest in Wexford, viz, 36.1 a thousand. In Dublin and suburbs 147 deaths were registered, including enteric fever, 1; whooping cough, 1, and 1 from typhus fever.

Scotland.—The deaths registered in 8 principal towns during the week ended August 18, 1900, correspond to an annual rate of 16.9 a thousand of the population, which is estimated at 1,606,935. The lowest mortality was recorded in Dundee, viz, 13.7, and the highest in Perth, viz, 21.9 a thousand. The aggregate number of deaths registered from all causes was 523, including diphtheria, 7; measles, 16; scarlet fever, 6, and 18 from whooping cough.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns in England and Wales during the week ended August 25, 1900, correspond to an annual rate of 19.8 a thousand of the aggregate population, which is estimated at 11,610,296. The highest rate was recorded in Preston, viz, 30.7, and the lowest in Cardiff, viz, 11.3.

Bradford.—Two weeks ended July 28, 1900. Estimated population, 291,535. Total number of deaths, 149, including enteric fever, 2; measles, 3, and 1 from scarlet fever.

Two weeks ended August 11, 1900. Total number of deaths, 138, including diphtheria, 1, and 2 from measles.

Two weeks ended August 25, 1900. Estimated population, 291,535. Total number of deaths, 151, including measles, 2, and 1 from scarlet fever.

London.—One thousand six hundred and ninety one deaths were registered during the week, including measles, 22; scarlet fever, 10; diphtheria, 14; whooping cough, 44; enteric fever, 16, and diarrhea and dysentery, 304. The deaths from all causes correspond to an annual rate of 19.2 a thousand. In Greater London 2,369 deaths were registered, corresponding to an annual rate of 18.6 a thousand of the population. In the "outer ring" the deaths included 7 from diphtheria, 11 from measles, 3 from scarlet fever, and 22 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended August 25, 1900, in the 22 principal

town districts of Ireland was 20.5 a thousand of the population, which is estimated at 1,062,188. The lowest rate was recorded in Newtownards, viz, 0.0, and the highest in Galway, viz, 64.2 a thousand. In Dublin and suburbs 185 deaths were registered, including diphtheria, 1; enteric fever, 2, and 5 from whooping cough.

Scotland.—The deaths registered in 8 principal towns during the week ended August 25, 1900, correspond to an annual rate of 17.9 a thousand of the population, which is estimated at 1,606,935. The lowest mortality was recorded in Perth, viz, 11.8, and the highest in Greenock, viz, 24.9 a thousand. The aggregate number of deaths registered from all causes was 554, including diphtheria, 6; measles, 9; scarlet fever, 5, and 23 from whooping cough.

JAMAICA—Port Antonio.—Month of August, 1900. Estimated population not reported. Number of deaths not reported. No contagious diseases reported.

SAINT HELENA.—Three weeks ended August 11, 1900. Estimated population, 4,270. Total number of deaths, 6. No deaths from contagious diseases.

SPAIN—Cadiz.—Month of July, 1900. Estimated population, 67,987. Total number of deaths, 192, including enteric fever, 3; smallpox, 1, and 24 from measles.

[Reports received from United States consuls through the Department of State and from other sources.]

Cholera, yellow fever, plague, and smallpox as reported to the Surgeon-General United States Marine-Hospital Service from June 29, 1900, to September 21, 1900.

[For reports received from December 29, 1899, to June 29, 1900, see PUBLIC HEALTH REPORTS for June 29, 1900.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong	June 17-June 23...		1	On ss. Petrarch, from Saigon.
India:				
Bombay	May 18-Aug. 14...		2,334	
Caloutta	Apr. 28-Aug. 11...		303	
Karachi	July 2-July 8...		1	
Madras	May 19-Aug. 10...		40	
Japan:				
Osaka	June 24-June 30...	1		
Yokohama	July 8-July 28...	2	2	
Straits Settlement:				
Singapore	June 17-June 23...		1	

YELLOW FEVER.

Brazil:				
Avare	Feb. 1-Feb. 28...		1	
Bahia	June 3-June 9...	2		
Casa Branca	Feb. 1-Mar. 31...		7	
Itu	do.		2	
Pedreiras	do.		1	
Rio de Janeiro	May 12-July 30...		55	
Saboticabal	Mar. 1-Mar. 31...		1	
Sao Paulo	Feb. 1-Mar. 31...		26	
Santos	do.		95	
Sao Bernardo	Mar. 1-Mar. 31...		5	
Sorocaba	do.		623	
Colombia:				
Barranquilla	June 3-Aug. 26...	70	35	
Bocas del Toro	July 25-Sept. 3...	5	2	
Cartagena	June 1-July 14...	28	27	
Panama	June 12-Sept. 1...	25	6	
Costa Rica:				
Port Limon	Aug. 18-Aug. 22...	2	1	On ss. Holstein; 1 on ss. Can- ada.
Cuba:				
Batabano	Aug. 16-Aug. 22...		1	
Cienfuegos	July 21.....	1		Among United States soldiers.
	Aug. 14-Sept. 8...	4	3	
Guanajay	June 30.....		1	
Havana	June 1-June 30...	17	6	
	July 1-Aug. 1...	96	30	
	Aug. 1-Aug. 31...	254	49	
	Aug. 26-Sept. 8...		35	
Matanzas	July 25.....	1		In barracks.
Pinar del Rio	July 24-July 30...		14	
Sagua	Sept. 17.....	2		
Santa Clara	June 20-July 22...	12		
France:				
Havre	Aug. 9.....	1		On ss. Caravallas.
	Aug. 10.....	1		On ss. Santa Fe.
Mexico:				
City of Mexico	May 7-May 13...		1	
Cordova	July 1.....			Yellow fever reported.
Merida	July 21.....	7	4	
Progreso	June 24-July 8...		6	
Tampico	July 23-Aug. 14...		1	
Vera Cruz	Sept. 2-Sept. 8...	20	6	
West Africa:				
Goree-Dakar	Apr. 16-June 30...	15	8	
Rufisque	June 16-June 30...			Several cases

PLAGUE.

Arabia:			
Aden	Feb. 22-July 3...	714	575
Djiddah	Apr. 26-June 28...		78
Yaubo	Apr. 10-June 13...		67
Argentina:			
Buenos Ayres	May 1-May 31...	5	5

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Australia :				
Adelaide.....	July 10-July 31...	3	.....
Sydney.....	Jan. 24-July 28...	302	102	
Brazil :				
Campe Grande.....	June 16.....	2	.....
Nitheroy.....	do.....	2	.....
Rio de Janeiro.....	May 6-July 31...	373	174	
China :				
Amoy.....	May 27-Aug. 4.....	.....	1,345	Estimated.
Hongkong.....	May 20-June 23...	307	278	
Egypt :				
Port Said.....	Apr. 20-Aug. 3...	94	38	
Alexandria.....	July 1.....	1	.....
England :				
London.....	Aug. 3.....	4	2	
Formosa	Apr. 1-May 31...	640	458	
	June 1-July 31...	203	165	
India :				
Bombay Presidency and Sind :				
Ahmedabad City.....	Apr. 29-July 14...	19	19	
Ahmednagar District.....	do.....	1	1	
Belgaum District.....	do.....	39	29	
Bombay City.....	do.....	2,200	1,628	
Nasik District.....	do.....	1	.....
Poona City.....	do.....	2	1	
Poona District.....	do.....	1	1	
Satara District.....	do.....	10	10	
Satara Town.....	do.....	2	2	
Surat District.....	do.....	8	5	
Surat Town.....	do.....	1	1	
Thana District.....	do.....	299	267	
Belgaum Town.....	do.....	31	22	
Kanara District.....	do.....	2	2	
Kolaba District.....	do.....	44	34	
Ratnagiri District.....	do.....	21	17	
Savantvadi State.....	do.....	.....	2	
Hyderabad Town.....	do.....	3	3	
Karachi City.....	do.....	621	472	
Boroda State.....	do.....	1	.....
Cutch State.....	do.....	279	217	
Mandir Town.....	do.....	112	97	
Kathiawar State.....	do.....	78	60	
Bhavnagar Town.....	do.....	4	3	
Kolhapur and Southern Maharatta Country.	do.....	16	11	
Sachin State.....	do.....	2	.....
Janjira State.....	do.....	146	137	
Outside Bombay Presi- dency and Sind :				
Madras City.....	do.....	.....	.....
Salem District.....	do.....	26	19	
Tinnevely District.....	do.....	4	3	
Calcutta.....	do.....	1,470	1,442	
Bankura District.....	do.....	12	11	
Midnapore District.....	do.....	1	1	
Hooghly District.....	do.....	14	12	
Howrah Town.....	do.....	61	54	
24-Parganas District.....	do.....	23	18	
Monghyr District.....	do.....	80	71	
Monghyr Town.....	do.....	45	34	
Saran District.....	do.....	115	89	
Chapra Town.....	do.....	120	104	
Patna District.....	do.....	525	493	
Patna City.....	do.....	6	2	
Dinapur Town.....	do.....	75	69	
Bihar Town.....	do.....	97	97	
Cuttach District.....	do.....	2	2	
Jullundur District.....	do.....	82	48	
Hoshiarpur District.....	do.....	27	9	
Nagpur City.....	do.....	21	20	
Nagpur District.....	do.....	2	.....
Bangalore Civil and Mili- tary Station.....	do.....	26	17	
Mysore City.....	do.....	40	33	
Mysore District.....	do.....	1	1	
Kolar Gold Fields.....	do.....	1	1	
Tumkar District.....	do.....	38	33	
Lingsuagur District.....	do.....	53	53	
Gulburga District.....	do.....	1	1	

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Nagasaki.....	June 6.....	1	1	Taken from a vessel from the Goto Islands.
Osaka.....	Apr. 8-July 16...	47	38	
Sakai.....	June 30.....	1		
Shidzuoka Ken.....	May 6-July 7...	16	13	
Paraguay:				
Asuncion.....	July 24.....			Plague reported.
Philippine Islands:				
Manila.....	Dec., 1899-July 7...	189	182	
Cavite.....	June 17-June 23...	1		
Portugal:				
Oporto.....	June 23.....	1		
Scotland:				
Glasgow.....	Aug. 31-Sept. 7...	13	1	
Turkey:				
Beirut.....	July 20.....	4		On ss. Niger from the Island of Syros.
Constantinople.....	Aug. 27.....	1		
Smyrna.....	June 18-Aug. 6...	22	11	

SMALLPOX.

Arabia:				
Aden.....	May 1-May 31...		3	
Argentina:				
Buenos Ayres.....	Apr. 1-May 31...		7	
Australia:				
Sydney.....	June 2.....	264	92	
Austria:				
Prague.....	June 3-Aug. 25...	49		
Belgium:				
Antwerp.....	June 24-Aug. 25..	11	3	
Brussels.....	July 1-July 7.....		1	
Ghent.....	Aug. 5-Aug. 11...		2	
Brazil:				
Pernambuco.....	July 1-July 15...		1	
Rio de Janeiro.....	May 12-July 30...		53	
China:				
Amoy.....	Apr. 14-May 12...			A few cases.
Hongkong.....	May 20-June 9...	2		
Cos.....	Apr. 1.....		235	
Colombia:				
Barranquilla.....	June 24-June 30...		1	
Costa Rica:				
Port Limon.....	Aug. 8.....	1		
Cuba:				
Manzanillo.....	July 29-Aug. 6...	2		
Egypt:				
Cairo.....	May 21-June 29...		13	
England:				
Liverpool.....	June 10-Sept. 1...	32	6	
London.....	.....do.....	81		
Manchester.....	.....do.....	1		
Southampton.....	.....do.....	1		
Formosa.....	Apr. 1-June 30...	233	123	
France:				
Bordeaux.....	May 1-June 30...		4	
Lyons.....	June 3-Aug. 4.....		13	
Marseilles.....	July 1-July 31...		7	
Nice.....	June 6-June 30...	1		
Paris.....	June 17-Sept. 1...		19	
St. Etienne.....	June 1-July 31...	23	6	
Germany:				
Berlin.....	Aug. 10.....	3		
Frankfort-on-the-Main.....	June 10-July 20...		4	
Königsberg.....	July 1-July 7.....		1	
Gibraltar.....	July 2-Aug. 12...		4	
Greece:				
Athens.....	June 10-July 14...	19	14	
India:				
Bombay.....	May 18-Aug. 14...		92	
Calcutta.....	Apr. 19-May 5.....		40	
	June 24-Aug. 11...		78	
Karachi.....	May 10-Aug. 12...		46	
Madras.....	May 26-July 6...		3	
Italy:				
Genoa.....	June 10-June 16...	3		

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Nagasaki	May 21-June 20...	3		
Osaka and Hiogo.....	June 3-June 9...	1		
Korea:				
Seoul	May 20-May 26...			Endemic.
Malta:				
Valetta	May 1-July 15...	24	3	
Mexico:				
Chihuahua	May 27-July 7...		6	
City of Mexico.....	May 6-Sept. 1...	227	165	Smallpox reported.
Merida	July 21.....			
Vera Cruz.....	June 17-Sept. 8...		52	
Netherlands:				
Rotterdam	July 22-July 28...	1		
Ontario:				
Port Arthur.....	June 1-June 27...	2	1	
Philippine Islands:				
Manila	May 6-June 16...	2		
Quebec:				
Compton County	May 12-June 23...	1		
Gaspé County.....	May 20-June 23...	1		
Hochelaga County.....	May 6-Aug. 15...	2	1	
Iberville County.....	July 26-Aug. 27...	2		
Montreal County.....	Apr. 22-Aug. 31...	28	10	
Quebec County	Apr. 15-June 23...	8		
Rimouski County.....	Feb. 8-July 31...	129		
Russia:				
Moscow	May 27-Aug. 18...	88	27	
Odessa	June 3-Aug. 25...	42	11	
Riga	Apr. 1-May 31...		26	
St. Petersburg.....	June 10-Aug. 25...	556	147	
Vladivostock.....	Apr. 1-Apr. 30...	9		
Warsaw	May 27-Aug. 18...		44	
Scotland:				
Dundee.....	Aug. 25-Sept. 1...	2		
Glasgow.....	June 16-July 6...	83	2	
Spain:				
Corunna.....	July 15-Aug. 13...		2	
Madrid.....	May 20-July 23...		146	
Straits Settlements:				
Singapore.....	May 11-July 7...		10	
Switzerland:				
Geneva.....	June 10-July 14...	9		
Zurich.....	June 24-Aug. 11...	2		
Uruguay:				
Montevideo.....	May 20-May 26...	1		

WEEKLY MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—																
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.						
Acapulco.....	Sept. 1	6,000	7																	
Aix la Chapelle.....	do.....	134,196	68																	
Alexandrette.....	Aug. 14	8,000	2																	
Amherstburg.....	Sept. 8	2,300	1																	
Amoy.....	Aug. 4	350,000	.....		100															
Amsterdam.....	Sept. 1	521,747	140								1						2			2
Antofagasta.....	July 31	16,000	13														1			
Antwerp.....	Aug. 25	293,111	83		6															
Asuncion.....	July 22	70,000	12		5													1		
Barmen.....	Aug. 25	141,000	61							3										
Barranquilla.....	Aug. 26	40,000	29		1					2									1	1
Belfast.....	Aug. 25	359,000	124				1													
Belize.....	Sept. 6	13,000	1								7									2
Bergen.....	Aug. 22	68,000	29																	
Berlin.....	Aug. 18	1,860,923	809									3	17	3	10					
Bluefields.....	Aug. 25	4,000	3																	
Do.....	Sept. 2	4,000	3																	
Bombay.....	Aug. 7	821,764	1,499	164	51	354			5										1	
Do.....	Aug. 14	821,764	1,582	161	54	339			1										5	
Bremen.....	Aug. 25	145,000	65										2							
Breslau.....	do.....	300,000	321	31															1	6
Brussels.....	do.....	600,000	205								2							3		3
Calcutta.....	Aug. 11	681,560	535		52	35			7											
Callao.....	Aug. 12	30,000	14	5																
Cartagena.....	Aug. 24	25,000	11																	
Catania.....	Aug. 30	124,000	61	6																
Christiania.....	Aug. 25	230,000	56								5									
Do.....	Sept. 1	230,000	64								1								3	3
Coburg.....	Aug. 25	20,500	8		3															
Cognac.....	Aug. 18	20,400	8									1								
Do.....	Aug. 25	20,400	7																	
Cologne.....	do.....	366,927	185	12								3							2	3
Colon.....	Sept. 4	8,000	12																	
Corunna.....	Aug. 25	40,500	16																	
Crefeld.....	Aug. 26	108,183	45																	
Curaçoa.....	Aug. 25	30,303	8																	
Do.....	Sept. 1	30,303	11																	
Dresden.....	Aug. 18	408,500	167										1							
Do.....	Aug. 25	408,500	229									1								
Dublin.....	do.....	349,594	185									2								5
Dusseldorf.....	do.....	207,932	96																1	
Edinburgh.....	Aug. 18	302,262	83																2	1
Do.....	Aug. 25	302,262	97									1	1						4	
Flushing.....	Sept. 1	19,054	9																	
Frankfort-on-the-Main.....	Aug. 25	278,000	78																	2
Ghent.....	do.....	163,030	82																	
Gibraltar.....	Aug. 26	25,900	12																	
Girgenti.....	Aug. 25	24,428	6																	
Glasgow.....	Aug. 31	743,969	251		1															
Gothenburg.....	Aug. 25	128,849	27									4		3	4					15
Halifax.....	Sept. 1	45,000	15																	
Do.....	Sept. 8	45,000	12																	
Hamburg.....	Aug. 25	691,349	275											2	2		1			3
Hamilton, Bermuda.....	do.....	15,013	1																	
Do.....	Sept. 4	15,013	1																	
Havre.....	Aug. 25	119,470	81	9								13							1	
Karachi.....	Aug. 12	98,198	60																	
Kingston.....	Sept. 7	18,300	12							1										
Königsberg.....	Aug. 25	183,273	.....																
Leeds.....	Sept. 1	431,287	177									2	4	2						
Leghorn.....	Aug. 25	104,705	36	1																
Leipzig.....	do.....	436,200	248										1	1	1					
Leith.....	Aug. 18	78,509	21																1	
Do.....	Aug. 25	78,509	25																1	1
Licata.....	do.....	17,899	25									1	4							
Liverpool.....	do.....	668,645	277									1	2			1	4			8
Livingston, Guatemala.....	Aug. 14	10,000	3																	
London.....	Aug. 25	6,662,145	2,369										22	13	21	33				66
Madras.....	Aug. 10	492,518	497					26											3	
Magdeburg.....	Aug. 11	231,454	147	3																3
Do.....	Aug. 18	231,454	133	7																3
Mainz.....	Aug. 25	84,000	33	5													1		1	
Do.....	Sept. 1	84,000	28	5															4	
Manchester.....	Aug. 25	550,864	225										1	3	1		5			6

WEEKLY MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—												
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.		
Mannheim	Aug. 25	135,547	45							2						
Maracaibo	do.	50,000	28													
Monterey	Aug. 29	16,000	63													
Melbourne	July 28	477,000														
Do	Aug. 4	477,000														
Messina	Aug. 5	107,000	37							2				3		
Mexico	Sept. 2	844,377	361	32				5	9					2		
Moscow	Aug. 18	1,000,000	631							3	6	3	14			2
Newcastle-upon-Tyne	Aug. 25	224,389	85							1						4
Nottingham	do.	250,000	41							3	1					7
Nuremberg	Aug. 18	244,406	159	16												
Odessa	Aug. 25	484,600	211							1						
Palermo	do.	300,000	110						1	3	7		3			
Panama	Sept. 1	16,000														
Paris	Aug. 25	2,511,629	901							31	1	3	7			6
Plymouth	Sept. 1	101,848	51	3												
Port au Prince	Aug. 20	60,000	14													
Do	Aug. 27	60,000	25													
Do	Sept. 3	60,000	17													
Prague	Aug. 25	198,468	95	19						1		1				
Puerto Cortez	Sept. 5	2,000	0													
Quebec	Sept. 8	73,000														
Rheims	Aug. 18	107,963	36												1	
Rio de Janeiro	July 20	779,000	261	56	18		4	1		5					1	
Do	July 27	779,000	290	66	18		5	5		3		1				
Do	July 30	779,000	163	45	10		1	4		3						
Rome	July 7	518,333	188							5					1	
Do	July 14	518,333	163							3			2			
Do	July 21	518,333	182							2						
Do	July 28	518,333	149							9			1			
Rotterdam	Sept. 1	325,556	105							1						
St. John, New Brunswick	Sept. 8	45,000	24													
St. Petersburg	Aug. 18	2,267,063	709					10	1	30	15	15	16			6
Do	Aug. 25	2,267,063	760					11		26	12	25	15			7
St. Stephen, New Brunswick	Sept. 8	3,000	1													
Sheffield	Aug. 25	366,132	184							2		3	2			8
Solingen	Aug. 18	16,000	11													1
Do	Aug. 25	16,000	12													
South Shields	do.	105,677	26													3
Stettin	do.	153,000	137							3	2	1				
Stuttgart	Aug. 30	162,934	79													
Sunderland	Aug. 25	147,398	56							1						
Tampico	Sept. 2	18,000	19													
Trapani	Aug. 25	48,743	23													
Tuxpam	Sept. 3	10,000	6													
Uvilla	Aug. 25	800	0													
Do	Sept. 1	800	0													
Victoria B. C.	Aug. 11	25,000	8	3												
Do	Aug. 18	25,000	5													
Do	Aug. 25	25,000	3													
Do	Aug. 31	25,000	0													
Vienna	Aug. 25	1,655,662	690							7	1	3	8			4
Warsaw	Aug. 18	645,348	317	21				10	2		7	3	7			2
Windsor, Nova Scotia	Sept. 8	3,000	0													
Winnipeg	do.	24,642								1						
Zurich	Aug. 25	164,149	67													

By authority of the Secretary of the Treasury :

WALTER WYMAN,
Surgeon-General U. S. Marine-Hospital Service.