

PUBLIC HEALTH REPORTS.

UNITED STATES.

The report of the French yellow fever commission operating at Rio de Janeiro, Brazil.

[Abstract from report of the commission, as published in the "Annales de l'institut Pasteur," November, 1903.]

In 1901 a commission, composed of Messrs. Marchoux, Salimbeni, and Simond, of the Pasteur Institute, was appointed to conduct investigations in regard to the etiology of yellow fever and of the mosquito (*Stegomyia fasciata*) in the transmission of the disease at Rio de Janeiro. This commission rendered a report, which was published in the annals of the Pasteur Institute in November, 1903. The report has been translated in the Bureau of the Public Health and Marine-Hospital Service, and from this translation the following abstract of salient features has been made:

The Commission concludes that the infecting principle in the blood of yellow-fever patients remains active for five days when kept in defibrinated blood under liquid vaseline, but that at the end of eight days the infectivity of the blood has disappeared. They deduce as a result of their experiments that the blood contains this infecting agent during only the first three days of the disease.

They deduce further from their experiments that the blood serum of a yellow-fever convalescent possesses clearly preventive properties. They further deduce as the result of experiments upon 11 individuals made in hospital that the blood serum of a yellow-fever convalescent possesses therapeutic properties of considerable curative value.

In regard to the mosquito *Stegomyia fasciata*, their work is particularly valuable. They point out that the habits of the *Stegomyia fasciata* differ very much from those of most other mosquitoes. One of the marked peculiarities of the species is its extreme susceptibility to differences of temperature. It manifests its greatest activity when the thermometer stands at 25° C. Beyond 39° C. the insect dies. At 15° C. to 16° C. the insect becomes inert and ceases to bite. At 12° to 14° it is benumbed and flies with great difficulty. All of the acts of its life are much influenced by the temperature of the surrounding atmosphere.

The female *Stegomyia* alone bites. The female is perfectly capable of biting immediately after metamorphosis. Within twenty-four hours she bites readily. Within forty-eight hours of metamorphosis, and at temperatures between 26° and 35° C., she will bite readily at any hour of the day if recently fecundated, but especially beginning

at about 11 o'clock in the morning. If the temperature is between 19° and 25° she bites less readily. At temperatures between 14° and 18° she does not seek to bite at all unless artificially warmed by contact with the skin of the victim. She bites less readily between 22° and 25° , but a temperature of 27° to 30° is that which suits the insect best.

Laying.—After having filled herself with blood, the female seeks water upon which to lay her eggs. Laying is generally effected during the night. The average number of eggs is from 70 to 80. Temperature has an influence upon this act, it taking place most readily at a temperature of 27° to 28° during the night, under which conditions of temperature laying takes place within forty-eight hours after biting. If the night temperature is from 25° to 27° the laying takes place on the fourth or fifth day; if between 20° and 25° it is possible up to the seventh or eighth day, and if below 20° it may be delayed up to 26 or 27 days.

Hatching.—Hatching is best accomplished at a temperature of 28° , at which temperature the eggs hatch on the second or third day. If the temperature is as low as 25° , it takes place on the fourth day. If between 20° to 25° , hatching takes place on the fifth to seventh day, but does not proceed with regularity. The eggs do not seem to hatch at a temperature below 20° , though they may be preserved at much lower temperatures, even as low as zero, but if brought back to favorable conditions of temperature, hatching proceeds with considerable regularity. The eggs may be immersed in water and a considerable proportion of them still hatching. If dried before immersion their preservation is better assured.

Habits.—The *Stegomyia* is a domestic mosquito preferring for laying her eggs deposits of water such as are found in the interior and in the immediate neighborhood of houses. It seems to thrive better in rain than in spring water.

Pupal stage.—With temperatures ranging from 26° to 27° by night and 28° to 31° by day, the larvæ of the *Stegomyia* arrive at the pupal stage seven days after hatching, and at the perfect insect stage on the ninth day. In a majority of instances, however, this latter stage does not occur until the tenth day. At temperatures below 22° larvæ may take 40 to 60 days to be transformed into pupæ, and these pupæ 3 to 5 days to become perfect insects. The ordinary length of the pupal stage is 30 to 50 hours. Larvæ do not perish at a temperature in the neighborhood of zero, but under these conditions they grow very slowly.

Sea water is fatal to the larvæ of the *Stegomyia*, but in a mixture containing one-fifth sea water and four-fifths fresh water, they develop, attaining the pupal stage on the eleventh day and the perfect insect stage on the thirteenth day. In brackish water containing one-third sea water they die in a few hours. Water containing one one-thousandth of its weight of soap kills the larvæ in five minutes. In solutions containing one ten-thousandth they do not develop. In solutions containing one two-hundred-thousandth they developed normally.

Adult conditions.—Blood seems to be necessary to enable the female *Stegomyia* to lay. Human blood appears to be particularly grateful to them. Except in the early days of their existence, when she bites at any time, the female *Stegomyia* prefers to bite by night rather than by day. She may, therefore, be considered as a night mosquito.

Longevity of Stegomyia.—While the *Stegomyia* is very easily reared under proper conditions of temperature and moisture, it dies rapidly when placed in dry air and without blood as food. In captivity they attain the age of two months with comparative ease, but beginning from the fortieth day, mortality among them becomes large, being greater among the males than among females. In the laboratory females have attained the age of 89, 90, 93, 97, 105, and 106 days. It did not seem possible to preserve males more than 50 days. In the free state the insect can not live so long, much of its vigor being lost within a short time after its evolution, and its resistance is much diminished by danger and destruction of its scales. High temperatures from 36° to 39° are unfavorable to the life of a mosquito.

Racial preferences of the Stegomyia.—The *Stegomyia* will bite individuals of any race, but manifests in Brazil a preference for the white over the Indian, and the Indian over the negro. She manifests considerable repugnance to the negro, and bites only after quite prolonged contact. Among the white races she attacks by preference individuals with a thin skin and a fresh color.

Climatic conditions favorable to the Stegomyia.—Every warm and moist climate whose temperature at certain seasons varies between 25° and 30° is peculiarly suited to it. Between 22° and 25° it multiplies, but more feebly. Average night temperatures below 22° are accompanied by a rapid disappearance of the species. The *Stegomyia* resist sudden changes of temperature badly.

Influence of altitude.—In the vicinity of Rio de Janeiro the *Stegomyia* is seldom encountered at an altitude of more than 400 meters. At Petropolis at an altitude of 800 meters it is not found naturally, and perishes when introduced. It appears, however, that this is not due to the altitude itself, but to the lowered nightly average of temperature.

Relation of other mosquitoes to yellow fever.—The Commission concludes that no other mosquito found at Rio de Janeiro, or in the vicinity, has any relation to the transmission of yellow fever. The Commission draws the following deductions in regard to the transmission of yellow fever as a result of their observations:

First. That yellow fever is not transmitted in nature either by direct contact with the patient or by contact with personal effects, or by his excretions.

Second. That the transmission is effected by the biting of mosquitoes, and that the only dangerous species, at least in the region in which our researches have been conducted, is the *Stegomyia fasciata*.

Third. That this transmission never takes place during the day while the sun is above the horizon.

In regard to protection against the infection of yellow fever, the Commission deduces that "the introduction of merchandise is unattended with danger at any time."

In regard to arrivals from a territory infected with yellow fever, at a port or place where the disease does not prevail, the Commission deduces that "it is perfectly useless to inflict a quarantine if *Stegomyia* do not exist in the country at the time of arrival, since transmission can only be effected by this intermediary."

Measures looking to the destruction of Stegomyia.—The observations of the commission present no points of particular interest for us in the United States. It is gratifying to find, however, that they have

arrived at practically the same conclusions as have been arrived at as the result of experiment and observations in the United States.

The general conclusions of the commission may be summed up as follows:

1. The serum of a patient on the third day of the disease is virulent.
2. On the fourth day of the disease yellow fever blood no longer contains any virus, even when the fever is high.
3. One-tenth of a cubic centimeter of virulent serum injected under the skin is sufficient to cause yellow fever.
4. The virus of yellow fever rubbed upon a blister on the skin, made by removing the epidermis, does not give the disease.
5. In the serum of the patient, the virus of yellow fever passes through a filter Chamberland F without dilution.
6. Under the same conditions, it does not appear to pass through filter B.
7. Virulent serum preserved exposed to the air at a temperature of 24° to 30° is inactive at the end of 48 hours.
8. In defibrinated blood, preserved under liquid vaseline at a temperature of 24° to 30°, the microbe of yellow fever remains living for 5 days.
9. At the end of 8 days defibrinated blood, kept under the same conditions, no longer contains active virus.
10. The virulent serum becomes harmless after heating for 5 minutes at 55°.
11. A preventive injection of serum heated for five minutes at 55° confers a relative immunity which, followed by inoculation with a very small quantity of virus, may become complete.
12. The injection of defibrinated blood kept in the laboratory under liquid vaseline for 8 days at least confers a relative immunity.
13. The serum of a convalescent is endowed with clearly preventive properties.
14. The immunity conferred by the serum of the convalescent is still in evidence at the end of 26 days.
15. The serum of a convalescent appears to have therapeutic properties.
16. As has been proved by Reed, Carroll, and Agramonte, yellow fever is produced by the bite of the *Stegomyia fasciata*.
17. To be able to produce the disease in man, this mosquito must be previously infected by absorbing the blood of a patient stricken with yellow fever during the first 3 days of the disease.
18. The infected mosquito is only dangerous after an interval of 12 days from the time when it has ingested virulent blood.
19. The bite of two infected mosquitoes may cause a serious illness.
20. The mosquito appears to be more dangerous in proportion that her bite is delayed after the time when it has become infected.
21. The bite of infected mosquitoes does not invariably give yellow fever.
22. When the bite of infected mosquitoes has been without effect there is no immunity conferred against the injection of virulent serum.
23. In the neighborhood of Rio de Janeiro, as in Cuba, no other mosquito than the *Stegomyia fasciata* is concerned in the transmission of yellow fever.
24. Contact with a patient, his personal effects, or his excretions, is incapable of producing yellow fever.

25. Outside of the bite of the infected *Stegomyia* the only means known of producing the disease is the injection into the tissues of a susceptible individual of blood from a patient collected in the first three days of the disease.

26. Yellow fever can only assume a contagious character in regions where the *Stegomyia fasciata* prevail.

27. The prophylaxis of yellow fever rests entirely upon measures taken to prevent the *Stegomyia fasciata* from biting the individual sick and then a healthy individual.

28. It must be borne in mind that the period of incubation of yellow fever may be prolonged up to 13 days.

29. The *Stegomyia fasciata* is frequently infected by molds, yeasts, and by sporozoa. No parasite of this species recognized up to this time has any causal relation to yellow fever.

30. Neither in the mosquito nor in the blood have we succeeded up to this time in discovering the causal agent of yellow fever.

[Reports to the Surgeon-General, Public Health and Marine-Hospital Service.]

*Summary of work in Chinatown, San Francisco, for the week ended
May 21, 1904.*

The following is received from Passed Assistant Surgeon Blue, under date of May 23:

Week ended May 21.

Buildings reinspected.....	247
Rooms	2, 113
Persons inspected	2, 758
Sick	14
Sick prescribed for at Oriental Dispensary	11
Dead examined	8
Necropsies	2
Rats examined bacteriologically	23
Number showing pest infection	None.
Places limed and disinfected	910
Times streets swept.....	3
Sewers flushed	18
Notices sent to abate plumbing nuisances	11
Abated	5
Undergoing abatement	10
Total number plumbing inspections	119

Smallpox on S. S. Athenian—Request that consul at Vancouver be instructed to issue bills of health to vessels bound for Alaskan and other United States ports.

WASHINGTON, D. C., *May 26, 1904.*

OAKLEY, *Quarantine, Port Townsend, Wash.:*

Consul at Vancouver wires State Department as follows: "Steamship *Athenian* arrived yesterday from Orient. One Chinese sailor died of smallpox while vessel lay at Kobe, Japan. One European passenger having smallpox taken off ship last night and died soon after. Passengers and crew of vessel have scattered about town. Some passengers left for Seattle by train this morning; some left *Athenian* at Victoria and took ship for Seattle and San Francisco." Bureau has

requested State Department to instruct consul at Vancouver to issue bills of health to all vessels leaving for Alaskan and other United States ports until further notice.

WYMAN.

Transactions on account of smallpox in northern Maine, Canadian border.

Reports from Lowelltown, Me.

Acting Assistant Surgeon Boothby reports as follows:

May 5. Persons from Quebec for Maine lumber camps inspected, 109; vaccinated, 22; disinfected clothing of, 9.

May 12. Persons from Quebec for Maine lumber camps inspected, 62; vaccinated, 8; disinfected clothing of, 8.

Smallpox at Jonesport and Columbia Falls, Me.

Acting Assistant Surgeon Small, at Eastport, Me., reports, May 19, as follows:

SIR: On the 16th instant I wrote you relative to an outbreak of smallpox at Jonesport, Me. On the 17th instant I learned of the existence of the disease at Columbia Falls, Me. I have written the secretaries of the board of health of both places, but have received no reply as yet.

Yesterday, the 18th, the schooner *Vineyard* arrived here from Jonesport. I boarded her and interviewed Captain Caylor, who is a very intelligent man. He informed me that there are 75 cases of what Doctor Young (secretary of the State Board of Health) diagnosed as smallpox of a mild type. He says the disease is confined to one locality, and is among the poorer class. Precautions are being taken. Will notify you if any other particulars can be obtained.

The SURGEON-GENERAL.

Transactions on account of yellow fever at Laredo, Tex.

Inspection of Monterey, Villadama, and Lampazos, Mexico—Investigation of sickness reported at Linares.

Acting Assistant Surgeon Purnell reports as follows:

MONTEREY, May 11, 1904.

I reached here yesterday afternoon, Doctor Ferguson accompanying me. I secured a conveyance at Mina yesterday and proceeded overland to Hidalgo, which place is located immediately on the railroad. It has a population of between 2,000 and 3,000, all Mexicans. There has been no unusual sickness at this place lately, and but one death during the past four months. There being no other points demanding an investigation on the railroad, I took passage on a freight train for Monterey, and reported my arrival by wire. Doctor Goldberger came in from Tampico last night.

Investigation of sickness reported at Linares.

MAY 13, 1904.

I visited Linares yesterday, accompanied by Doctor Ferguson, for the purpose of investigating an illness from which a number of persons had suffered within the past few days. Upon reaching our destination, which was 2 miles from the town, we learned that all of the sick except two had recovered. These two were carefully examined, and their malady was found to be intermittent malarial fever. The sick who had recovered suffered from the same trouble. From Linares we returned to Monterey, reaching here after midnight.

VILLADAMA, May 15, 1904.

Villadama is a town of about 7,000 population. The sanitary condition is bad, though it is claimed that some sanitary work has been attempted, and some effort made toward the prevention of mosquito propagation. I could learn of no sickness that could be suspected of being yellow fever.

Within a few miles of the town lives an American physician who is employed at the mines. He has considerable practice in the town, and treated yellow fever here last season. He reports that there has been no cases this year. Bustamente is a village of about 5,000 population, located 8 kilometers north of this, and the physician referred to practices in this place also. He reports the same sanitary conditions prevailing as in Villadama, and no suspicious sickness. He has promised to keep me advised as to the health conditions in both places. From here I go to Lampazos to-morrow.

LAMPAZOS, May 16, 1904.

I inspected Lampazos to-day. The town has a population of about 10,000, all Mexican. It has recently been visited by a representative of the Board of Health at Mexico City, who did some disinfection of houses in which cases of yellow fever occurred last season. Some attention was given to the destruction of mosquitoes, and directions were given as to the prevention of their propagation. I could learn of no disease that could be suspected of being yellow fever. There are no towns which require investigation between here and the border. I will therefore leave for San Antonio.

Inspection of Dilley and Pearsall, Tex.

Acting Assistant Surgeon Cock reports, through Passed Assistant Surgeon Richardson, as follows:

DILLEY, TEX., May 13, 1904.

We have finished our work at this point, having fumigated 22 houses, containing 58 rooms. Twelve underground cisterns, besides all containers, have been oiled. We were obliged to purchase 100 pounds of sulphur to complete the work.

The case I mentioned in my last letter as being under observation, proved to be malaria.

We move from here to Pearsall to-day.

PEARSALL, TEX., *May 19, 1904.*

Our work here has been encouraging and satisfactory, and the people, Mexicans and Americans, promise to keep the work up steadily. The two physicians, Doctors Orr and Redditt, have personally aided me in the work. They promise to organize a Ladies' Civic Improvement club in this town, which has an estimated population of 2,500 and of about equal Mexican and American element. The *Stegomyia* and *Culex* exist in abundance. I have been unable so far to find any *Anopheles*, although malaria exists here.

We have given, to date, about 125 demonstrations. We will finish here on May 21, and move to Devine on that day.

There is some doubt as to infection here last season, although both doctors report suspicious cases and state that there was great mortality among the Mexicans, who employed no physicians.

PEARSALL, TEX., *May 21, 1904.*

We have completed the work at this point, having fumigated 128 houses, containing 296 rooms; barrels oiled, 92; wells oiled, 56; elevated tanks oiled, 53. In a great many of the houses we used only such material as was necessary to demonstrate, while in some we used a good quantity of sulphur.

I am to-day addressing a letter to the commissioners' court of Frio County, advising the employment of a regular inspector to keep up the work, under the direction of the county physician.

We will move to Devine to-morrow.

Inspection of Cannel, Tex.

Acting Assistant Surgeon Sauvignet reports, through Passed Assistant Surgeon Richardson, as follows:

LAREDO, TEX., *May 14, 1904.*

I proceeded to Cannel, Tex., on May 13, for the purpose of vaccinating and reporting to you upon the hygienic conditions at that point.

I vaccinated 160 children in the camp and left 50 virus points with the physician who resides there for the vaccination of the small neighboring settlements.

Regarding the sanitary conditions, the camp is on a hill, affording good drainage, leaving the ground dry very shortly after rain. The arroyos have been cleaned out and drained of all standing water. As usual in these places, barrels are used for the water supply. Examination disclosed no larvæ in these. The camp is free from mosquitoes. Doctor Adams, the local physician, has good hygienic ideas and is putting the place in good condition.

Inspection of Ojuelos, Hebronville, and Realitos, Tex.

Acting Assistant Surgeon McGregor reports, through Passed Assistant Surgeon Richardson, as follows:

OJUELOS, TEX., *May 14, 1904.*

I reached here yesterday morning, having left Aguilares early.

We have inspected 40 houses here and find wrigglers and mosquitoes in abundance. Few barrels are used, but we oiled all used, instructing the people to continue oiling at stated intervals. We have demon-

strated methods, which all seem disposed to observe. There are eight houses for which fumigation is desired that are at present unoccupied, as also others that are occupied where several cases of fever occurred last November, of which three died. There is no sickness here at present.

The people are interested and inclined to assist.

HEBBRONVILLE, TEX., *May 17, 1904.*

I have to report having inspected, so far, 80 houses in Hebronville, Tex., which is a town of about 500 people. I have found no sickness or fever of any kind excepting measles.

Perhaps 40 persons have made a request to have their houses fumigated. There are a few mosquitoes.

This afternoon I intend to have a meeting and give them a talk on the necessity of careful observation of their water containers, and of systematic destruction of the wrigglers and mosquitoes.

So far I have found no evidence of their having had the fever last year. The water supply is from wells and from the railroad company's tank, which is kept covered with oil. The soil is of a light sandy loam, with a substratum of white sand. There is no standing water excepting after recent rains.

This place is the depot which supplies the whole country between here and the Rio Grande and towns along the Mexican border. Something like 10,000,000 or 12,000,000 pounds of freight are transported by ox carts to points on the Rio Grande and northern Mexico; hence there is a constant stream of through travel from these points. A sand belt extends nearly the whole distance, and there is very little standing water along the roadside.

I shall go to Realitos from here, 14 miles east.

Twenty miles south of here is a large ranch called Randado, with a population of about 250, and a few scattering ranches of smaller size between there and Rio Grande City.

I do not consider it necessary to fumigate here at present, from the present situation, and unless you think otherwise I shall not do so until my return.

REALITOS, TEX., *May 20, 1904.*

I have found no cases of sickness here excepting measles, which has been prevalent but is now on the wane.

We held a well-attended meeting in the Catholic Church last night and I gave them a long talk on mosquito destruction.

I shall finish inspecting here to-day and go to Benavides to-morrow. There are a great many water holes about, and barrels that contain wrigglers, but we are oiling waters in the vicinity. The roadmaster on the Texas-Mexican has promised to oil all the water holes along the railroad from Corpus Christi to Laredo.

Investigation for yellow fever at San Antonio—No cases found.

[Telegram.]

WASHINGTON, *May 18, 1904.*

PURNELL, *San Antonio, Tex.:*

Dispatch from Richardson as follows: "Cock wired from Pearsall persistent rumors that yellow fever now present in San Antonio, Tex." Make careful investigation and wire present conditions.

WYMAN.

[Telegram.]

SAN ANTONIO, TEX., *May 19, 1904.*

WYMAN, *Washington:*

Nothing found; search continued. * * *

PURNELL.

Cans and bottles on vacant lots, breeding places for mosquitoes.

The following is received from Passed Assistant Surgeon Richardson:

I have the honor to report that during the latter part of last week this entire section was visited by several heavy rains, and that in consequence empty cans, bottles, and other possible containers in back yards and vacant lots have been filled with water. In order to do away with these breeding places as much as possible, I have addressed a letter to the city authorities, a copy of which I inclose.

[Inclosure.]

LAREDO, TEX., *May 16, 1904.*

SIR: I have the honor to inform you that the recent heavy rains have filled hundreds of tin cans, bottles, and other water containers standing on vacant lots in this city, thereby creating as many breeding places for the dangerous *Stegomyia* mosquito.

If, during the next few days, the entire street-cleaning and other available forces of the city were to collect these various containers and dispose of them by burning or otherwise, much good would be accomplished.

This work is of such importance that I have recently had the fumigating gang, the only force now at my disposal, engaged in it.

Respectfully,

T. F. RICHARDSON,
Passed Assistant Surgeon.

The MAYOR, CITY OF LAREDO,
Laredo, Tex.

City ordinance, Corpus Christi, for prevention of diseases conveyed by mosquitoes.

The following is received from Passed Assistant Surgeon Richardson, under date of May 18:

I transmit herewith clipping from the Corpus Christi (weekly) Caller, edition of May 18, relative to ordinance passed by city council with a view to preventing contagious or infectious diseases.

It is interesting to note that the text and nearly all of the regulations are the same as those embodied in the Laredo city ordinance of the 23d of April, 1904, based upon the memorandum prepared by the Bureau and published in Public Health report, page 516, March 25, 1904.

[Inclosure.]

CORPUS CHRISTI, *May 7, 1904.*

To the Mayor and Aldermen of the City Council of the City of Corpus Christi, Tex.:

GENTLEMEN: In the matter of the ordinance for the prevention of yellow fever and other infectious and contagious diseases, referred to me by you at the last meeting of your body, I have to report that on

account of business in the district court and on account of the short time given me for such report, I have not been able to investigate its legality as thoroughly as I wished. The charter powers of the city, however, under chapter 8 of the Revised Statutes of Texas (civil), entitled, "Sanitary Department," seem to give the city considerable latitude in matters of sanitation and appear to me to embrace the power to pass such ordinances as the one in question; and as it appears to be a good ordinance, and one that is being generally adopted by other cities in Texas, I would recommend that it be tried.

Respectfully,

DELMAS GIVENS,
City Attorney.

Uehlinger moved to adopt the ordinance as read. Henderson moved to amend the ordinance by inserting the words "or properly screened" after the words "kept coated with oil" in section 1, and by inserting the words "or properly screened," after the words "keep the same so covered with oil." The amendment prevailed and the ordinance, as amended, was adopted, as follows:

AN ORDINANCE for the prevention and suppression of yellow fever and other contagious and infectious diseases having the mosquito as one, if not the only, means of transmitting such disease from person to person.

Be it ordained by the city council of the city of Corpus Christi:

SECTION 1. That all wells, cisterns, tanks, reservoirs, barrels, tubs, vats, pools, lakes, ponds, puddles, and other receptacles holding water and containing water, within the incorporated limits of the city of Corpus Christi, other than those in which the water therein is coated and kept coated with oil, or properly screened, is hereby declared a public nuisance.

SEC. 2. Any person, firm, company, or corporation having any of the water receptacles mentioned in section 1 of this ordinance on his, her, their, or its place, premises, or any lot or block of land under his, her, their, or its control within the incorporated limits of said city, which contains water, who shall fail or refuse to cover the surface of such water with oil and keep the same so covered with oil, or properly screened, shall be deemed guilty of a nuisance, and upon conviction shall be fined in any sum not less than \$5 nor more than \$25, and each day's refusal, neglect or failure shall constitute a separate offense.

SEC. 3. It is hereby made the duty of the marshal and the police, and whatever sanitary inspectors may be appointed, to enter the house or premises of any inhabitant of said city, and inspect and disinfect the same, and for this purpose may use all such force as may be necessary to effect such entry, inspection, and disinfection.

SEC. 4. Any person, firm, company, or corporation who shall refuse permission to any of the officers mentioned in section 3 to inspect his, her, their, or its house or premises shall be deemed guilty of an offense, and upon conviction shall be fined in any sum not less than \$5 nor more than \$25.

SEC. 5. All ordinances or parts of ordinances in conflict with the provisions of this ordinance be, and are hereby, repealed.

Passed and approved May 7, 1904.

H. H. SEGREST,
Mayor, City of Corpus Christi.

Attest:

A. A. THOMPSON, *Secretary.*

Sanitary conditions in San Antonio satisfactory—Recommendations relative to certain possible points of infection in Mexico.

Acting Assistant Surgeon Purnell reports as follows:

SAN ANTONIO, TEX., *May 19, 1904.*

I returned to San Antonio on the afternoon of May 16, reporting my arrival by wire. Conditions here are very much as they were when I left. The work in the sanitary field is being prosecuted satisfactorily

and I can hear of no unusual sickness. On the receipt of your telegram I prosecuted the search with renewed vigor, but with negative results. Efforts to establish telephone communication with Doctor Cock at Pearsall, for the purpose of elucidation, were futile.

Referring to the inspection of Mexican territory, I have to say that it was not altogether satisfactory, owing to an imperfect knowledge of the language; but I nevertheless feel confident that there exists no infection in the territory traversed at present. What will occur in a few weeks, after the rainy season prevails, is problematical. Regarding the points of menace to the States, exclusive of the Mexican coast cities, Monterey stands easily at the front, owing to its size and railroad connection and its territorial infection of last year. After Monterey, I think the towns north of it as far as Lampazos should be critically scrutinized. Most of them, if not all, were infected last year, and the sanitary work which has been done amounts to nothing. The places of most importance along the National Railroad are Lampazos, Bustamente, and Villadama. They have a population of from five to ten thousand each. I reported on these places, but mention them again that you may consider the propriety of having them, as well as those between Monterey and Monclova, inspected from time to time.

Summary of work at Laredo for week ended May 21, 1904.

Passed Assistant Surgeon Richardson telegraphs as follows:

MAY 23, 1904.

During week ended May 21 fumigated, Laredo, 60 houses containing 151 rooms; inspected 1,273 premises, and oiled 377 water containers. One sick investigated.

Summary of work for May 22, 24, and 25.

Inspected 3,763 premises, oiled 1,146 water containers, and investigated 4 sick persons.

INSPECTION SERVICE, MEXICAN BORDER.

Inspection at Nogales, Ariz.

Acting Assistant Surgeon Gustetter reports as follows: Week ended May 14, 1904: Passengers inspected, 153; immigrants inspected, 31.

Inspection at El Paso, Tex.

Acting Assistant Surgeon Alexander reports, May 14, as follows: Week ended May 14, 1904:

Mexican Central passengers inspected, 133; Chinaman from Mexico inspected, 1; Syrians from Mexico inspected, 2; Spaniards from Mexico inspected, 2; disinfection soiled linen imported for laundry work, 422 pieces.

Inspection at Laredo, Tex.

Acting Assistant Surgeon Hamilton reports, May 17, through Passed Assistant Surgeon Richardson, as follows:

Week ended May 14, 1904:

Passenger trains from Mexico inspected, 7; persons on trains

inspected, 115; immigrants inspected, 7; Pullman coaches disinfected, 6; persons inspected and entered via international foot and passenger bridge, 3,405.

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

CALIFORNIA—Berkeley.—Two weeks ended May 7, 1904. Estimated population, 20,000. Total number of deaths, 10. No deaths from contagious diseases reported.

Los Angeles.—Month of May, 1904. Estimated population, 160,000. Total number of deaths 261, including diphtheria 3, enteric fever 5, measles 2, scarlet fever 2, whooping cough 1, and 63 from tuberculosis.

Sacramento.—Month of April, 1904. Estimated population, 30,000. Total number of deaths, 34, including 5 from phthisis pulmonalis.

Stockton.—Month of April, 1904. Estimated population, 18,500. Total number of deaths not reported. Six deaths from tuberculosis reported.

FLORIDA—Tampa.—Month of April, 1904. Estimated population, 23,000. Total number of deaths 23, including whooping cough 2, and 2 from tuberculosis.

ILLINOIS—Rockford.—Month of April, 1904. Estimated population, 37,000. Total number of deaths 51, including enteric fever 1, and 7 from phthisis pulmonalis.

INDIANA—Evansville.—Month of April, 1904. Estimated population, 70,000. Total number of deaths, 73, including diphtheria 3, enteric fever 2, measles 1, and 11 from tuberculosis.

IOWA—Dubuque.—Two weeks ended May 7, 1904. Estimated population, 40,000. Total number of deaths, 16, including 3 from tuberculosis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended May 14, 1904, from 84 observers, indicate that neuralgia, bronchitis, influenza, pleuritis, inflammation of bowels, and puerperal fever were more prevalent, and remittent fever, intermittent fever, dysentery, meningitis, cholera morbus, and whooping cough were less prevalent than in the preceding week.

Meningitis was reported present at 1 place, whooping cough at 11, diphtheria at 32, enteric fever at 35, scarlet fever at 56, pneumonia at 63, measles at 94, smallpox at 114, and phthisis pulmonalis at 259 places.

Grand Rapids.—Month of April, 1904. Estimated population, 95,000. Total number of deaths 128, including diphtheria 1, enteric fever 10, scarlet fever 2, and 15 from tuberculosis.

NEW HAMPSHIRE—Concord.—Month of March, 1904. Estimated population, 20,000. Total number of deaths 47, including diphtheria 2, and 4 from tuberculosis.

Month of April, 1904. Total number of deaths 29, including diphtheria 1, and 1 from tuberculosis.

NEW YORK—*Auburn*.—Month of April, 1904. Estimated population, 38,500. Total number of deaths, 47, including diphtheria 2, enteric fever 1, measles 1, and 5 from tuberculosis.

Buffalo.—Month of April, 1904. Estimated population, 380,000. Total number of deaths, 523, including diphtheria 6, enteric fever 2, measles 3, scarlet fever 5, whooping cough 1, and 50 from tuberculosis.

Rochester.—Month of March, 1904. Census population, 162,608. Total number of deaths, 267, including diphtheria 8, enteric fever 2, scarlet fever 6, and 31 from tuberculosis.

Month of April, 1904. Total number of deaths, 268, including diphtheria 6, scarlet fever 6, and 30 from tuberculosis.

OREGON—*Portland*.—Month of April, 1904. Estimated population, 125,000. Total number of deaths 117, including diphtheria 1, enteric fever 1, whooping cough 1, and 16 from tuberculosis.

TENNESSEE—*Chattanooga*.—Month of April, 1904. Estimated population, 40,000—white, 27,000; colored, 13,000. Total number of deaths, 25—white 17, colored 8—including 1 from tuberculosis.

VIRGINIA—*Richmond*.—Month of April, 1904. Estimated population, 100,000—white, 62,250; colored, 37,750. Total number of deaths, 151—white 72, colored 79—including 27 from tuberculosis.

Report of immigration at Baltimore.

OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Baltimore, Md., May 16, 1904.

Number of alien immigrants who arrived at this port during the week ended May 14, 1904; also names of vessels and ports from which they came.

Date of arrival.	Vessel.	Where from.	Number of aliens.
May 6	King Frederick.....	Progreso.....	1
6	Rowanmore.....	Liverpool.....	1
9	Josef Di Giorgio.....	Soma, Cuba.....	1
14	Templemore.....	Liverpool.....	2
14	Koln.....	Bremen.....	1,361
	Total.....		1,366

LOUIS T. WEIS, *Commissioner.*

OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Baltimore, May 21, 1904.

Number of alien immigrants who arrived at this port during the week ended May 21, 1904; also names of vessels and ports from which they came.

Date of arrival.	Vessel.	Where from.	Number of aliens.
May 15	Lord Iveagh.....	Cardiff.....	1
19	Brandenburg.....	Bremen.....	1,726
20	Maine.....	London.....	2
	Total.....		1,729

LOUIS T. WEIS, *Commissioner.*

Report of immigration at Key West, Fla.

OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Key West, Fla., May 16, 1904.

Report of arrivals of alien steerage passengers at Key West during the week ended May 14, 1904.

Date of arrival.	Vessel.	Where from.	Number of aliens.
May 10	Mascotte	Habana, Cuba	22
11	Schr. Attractor	Bonacca, Honduras	2
12	Olivette	Habana, Cuba	19
13	Miami	do	2
14	Schr. Equator	Nassau, N. P.	32
14	Mascotte	Habana, Cuba	51
	Total		128

JULIUS OTTO, *Inspector in Charge.*

Report of immigration at Philadelphia.

OFFICE OF COMMISSIONER OF IMMIGRATION,
Philadelphia, May 21, 1904.

Number of alien immigrants who arrived at this port during the week ended May 21, 1904; also names of vessels and ports from which they came.

Date of arrival.	Vessel.	Where from.	Number of aliens.
May 16	Merion	Liverpool and Queenstown.	388
17	Eagle Point	London	3
19	Corean	Glasgow	3
19	Rhymland	Antwerp	146
21	Crown Point	London	1
	Total		541

JNO. J. S. RODGERS, *Commissioner.*

Inspection of immigrants.

MONTHLY.

Place.	Month.	Number of immigrants passed.	Number of immigrants rejected.
Detroit, Mich.	Mar.	15	1
Honolulu.	Apr.	1,193	8
Iloilo, P. I.	Mar.	29	0
Manila, P. I.	do	1,270	38
New York, N. Y.	Apr.	80,180	361
San Francisco, Cal.	do	1,422	*17

*Held for treatment, 4.

Reports from national quarantine

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure.
UNITED STATES:					
1	Alexandria, Va	May 21			
2	Beaufort, N. C	do			
3	Biscayne Bay, Fla	do			
4	Bocagrande, Fla.—				
5	Punta Gorda	May 14			
6	Puntarasa	do			
7	Brunswick, Ga	do			
	Cape Charles, Va	do			
		May 21	Ger. s. m. s. Veneta	May 20	Port au Prince ...
			Ger. s. m. s. Panther	May 21	do
8	Cape Fear, N. C	May 14			
9	Cedar Key, Fla	May 21			
10	Columbia River, Oreg	May 7			
11	Cumberland Sound, Fla	May 14			
12	Delaware Breakwater	do			
	Quarantine, Lewes, Del.				
13	Dutch Harbor, Alaska	Apr. 30			
14	Eastport, Me	May 19			
15	Eureka, Cal	May 14			
16	Grays Harbor, Wash	do			
17	Gulf Quarantine, Ship Is-	do	Am. schr. Susie B. Dantz-	May 3	Progreso
	land, Miss.		ler. ^a		
			Am. schr. Flora Moranga ^a	May 4	Veracruz
			Am. schr. Millie Wil-	May 6	Campeche
			liams. ^a		
			Swed. ship Zelandia ^a	do	Port Elizabeth
			Am. schr. L. N. Dantzler	May 13	Frontera
18	Key West, Fla	do			
19	Los Angeles, Cal	do			
20	Newbern, N. C	do			
21	Nome, Alaska	May 7			
22	Pascagoula, Miss	May 14			
23	Port Angeles, Wash	Apr. 30			
		May 7			
24	Portland, Me	May 14			
25	Port Townsend, Wash	do			
26	Reedy Island, Del	do	U. S. cruiser Dixie	May 14	Guantanamo
27	St. Georges Sound, Fla.:				
	East Pass	May 21			
28	West Pass	May 14			
29	St. Johns River, Fla	do	Br. schr. Theta	May 7	Acera
30	San Diego, Cal	do	U. S. S. Wyoming	May 14	Panama
			U. S. S. Preble	do	do
			U. S. S. Paul Jones	do	do
31	San Francisco, Cal	do			
32	San Pedro, Cal	do			
33	Santa Barbara, Cal	do			
34	Santa Rosa, Fla	do	Br. ss. Thurlow Castle ^a ..	May 2	London and
			Nor. bk. Rolf ^a	May 4	Cuban and
			Nor. bk. Closeburn ^a	do	Mexican ports.
			It. bk. Vega ^a	May 5	Nantes
			Swed. bk. Antoinette ^a ..	do	Cape Town
					Sarona
					Port Elizabeth

^aPreviously 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				do	
4				do	
5				do	
6				Water emptied from the tank which contained mosquito larvæ on Br. sch. St. Maurice from Habana.	2
7	Newport News	Passed on medical officer's certificate.			7
	do	do			3
8					1
9				No report	
10				No transactions	
11				Four coastwise vessels spoken and passed.	4
12					1
13				No report	
14					24
15				No transactions	
16				do	
17	Pascagoula	Disinfected and held.	May 9		
	do	do	do		
	do	do	May 11		
	Gulfport.	do	May 9		
	Pascagoula	do			
18					14
19				No report	
20				No transactions	
21				No report	
22				3 vessels spoken and passed	1
23				No transactions	
				do	
24					1
25					4
26	Philadelphia	Passed on medical officer's certificate.	May 14	1 case enteric fever, 1 doubtful diagnosis on Nor. ss. Bleidalelin from Sagua de Tanamo via Barnes, 3 cases measles, and 1 case scarlet fever on Br. ss. Nordland from Liverpool.	17
27				No report	
28				No transactions	
29	Jacksonville.	Held to confirm diagnoses.	May 9	4 vessels spoken and passed; 6 steamships passed without inspection.	1
30	San Diego	Passed on certificate of medical officer.	May 14		2
	do	do	do		
	do	do	do		
31				1 vessel boarded and passed. Glandular examination Br. ss. Doric, from Hongkong. Malarial disease and measles on ss. Doric.	10
32				No report	
33				do	
34	Pensacola	Fumigated	May 8		4
	do	Ballast discharged, hold disinfected.	May 14		
	do	Ballast discharged, fumigated.	do	182 rats killed	
	do	Discharging ballast			
	do	Ballast discharged, fumigated.	May 13		

Reports from national quarantine

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure.
34	UNITED STATES—Continued. Santa Rosa, Fla.....	May 14	It. bk. Armonia ^a	May 6	Genoa.....
			It. bk. Antonio Abunda ^a	do.....	Fort de France.....
			Am. schr. Annie Lord ^a	do.....	Vera Cruz.....
35	Savannah, Ga.....	do.....	Br. ss. E. O. Saltmarsh.....	May 14	Tampico.....
			Am. schr. Thos. F. Pollard ^a	May 7	Sagua.....
			Am. bktn. El Miranda.....	May 8	Demerara.....
36	Sitka, Alaska.....	May 7			
37	South Atlantic quarantine, Blackbeard Island, Ga.	May 14			
38	Southbend, Wash.....	do.....			
39	Tampa Bay, Fla.....	do.....			
40	Washington, N. C.....	do.....			
HAWAII:					
41	Hilo.....	Apr. 30			
42	Honolulu.....	May 7			
43	Kahului.....	do.....			
44	Kihei.....	Apr. 30			
45	Koloa.....	do.....			
46	Lahaina.....	May 7			
47	Mahukona.....	Apr. 30			
PHILIPPINE ISLANDS:					
48	Cebu.....	Mar. 26	Am. banca Cardillo.....	Mar. 26	Cortez.....
		Apr. 2	do. ^a	do.....	do.....
		Apr. 9	do. ^a	do.....	do.....
49	Iloilo.....	Mar. 26	Am. ss. Elcano.....	Mar. 21	Manila.....
		Apr. 2			
		Apr. 9			
50	Jolo.....	Mar. 19			
51	Manila.....	Apr. 2	Br. ss. Senekiang.....	Mar. 27	Hongkong and Amoy.
			No-flag steamer Cosmopolita.	Mar. 29	Hongkong.....
		Apr. 9	Br. ss. Chenan.....	Apr. 4	Hongkong and Amoy.
			Br. ss. Kennebec.....	do.....	Yokohama and Hongkong.
			Br. ss. Yuensang.....	Apr. 5	Hongkong and Amoy.
			U. S. A. T. Custer.....	Apr. 7	Manila.....
PORTO RICO:					
52	Ponce.....	May 7			
53	San Juan.....	do.....	Ss. Philadelphia.....	May 4	Puerto Cabello.....

^a Previously reported.

and inspection stations—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
.....	Pensacola	Discharging ballast .....	.....	.....	.....
.....	do	do .....	.....	.....	.....
.....	do	Fumigated	May 11	.....	.....
.....	do	Held .....	.....	.....	.....
35	Savannah	Fumigated and held .....	.....	Ballast discharged	1
.....	do	do .....	.....	No report	2
36	.....	.....	.....	.....	.....
37	.....	.....	.....	No report	6
38	.....	.....	.....	No transactions .....	.....
39	.....	.....	.....	.....	3
40	.....	.....	.....	.....	14
41	.....	.....	.....	No transactions .....	.....
42	.....	.....	.....	No report .....	.....
43	.....	.....	.....	No transactions .....	.....
44	.....	.....	.....	No report .....	.....
45	.....	.....	.....	No transactions .....	.....
46	.....	.....	.....	do .....	.....
47	.....	.....	.....	No report .....	.....
48	Cebu	Disinfected and held .....	.....	1 case smallpox; removed. Crew bathed. Effects disinfected. All vaccinated. 96 bancas inspected and passed.	44
.....	do	do .....	.....	5 bancas inspected and passed.	45
.....	do	do	Apr. 9	65 bancas inspected and passed. 5 vessels fumigated to kill vermin.	21
49	Iloilo	Held for observation	Mar. 22	1 case measles. Personnel vaccinated. Living compartments fumigated and disinfected. 1 vessel fumigated to destroy vermin.	37
.....	.....	.....	.....	1 vessel held for mechanical cleaning.	38
.....	.....	.....	.....	.....	40
50	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	9
51	Manila	Held for disinfection of steerage passengers.	Mar. 27	Steerage passengers and crew bathed and effects disinfected. Personnel inspected.	91
.....	do	Disinfected	Mar. 29	Not disinfected at Hongkong. Crew bathed and effects and baggage disinfected. 4 vessels fumigated to destroy vermin. Crew or members of crew on 39 vessels vaccinated.	.....
.....	Cebu	Held for disinfection of crew and steerage passengers.	Apr. 4	Crew and steerage passengers bathed and effects disinfected.	68
.....	New York	Held for disinfection of Chinese crew and effects.	do	Not disinfected at Hongkong. Remanded to Mariveles. Crew bathed and effects disinfected. All inspected.	.....
.....	Manila	Held for disinfection of crew and steerage passengers.	Apr. 5	Crew and steerage passengers bathed and effects disinfected. All inspected.	.....
.....	do	Held for disinfection of crew and passengers.	Apr. 7	Crew and passengers bathed and effects disinfected. 3 vessels fumigated to destroy vermin. Crew or members of crew on 36 vessels vaccinated. One case of smallpox on U. S. A. T. Custer.	.....
52	.....	.....	.....	.....	4
53	New York	Held	May 4	.....	5

Reports from national quarantine

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure.
	PORTO RICO—Continued				
	Subports—				
54	Aguadilla.....	May 7	.....	.....	.....
55	Arecibo.....	do	.....	.....	.....
56	Arroyo.....	Apr. 30	.....	.....	.....
		May 7	.....	.....	.....
57	Fajardo.....	do	.....	.....	.....
58	Humacao.....	do	.....	.....	.....
59	Mayaguez.....	do	.....	.....	.....

Reports from State and

Number.	Name of station.	Week ending—	Name of vessel.	Date of arrival.	Port of departure.
1	Baltimore, Md.....	May 21	.....	.....	.....
2	Bangor, Me.....	do	.....	.....	.....
3	Boston, Mass.....	do	.....	.....	.....
4	Charleston, S. C.....	May 14	.....	.....	.....
5	Elizabeth River, Va.....	May 21	.....	.....	.....
6	Galveston, Tex.....	May 14	Br. ss. Dunstan.....	May 8	Para.....
			Br. ss. Yucatan.....	May 12	Cartagena.....
7	Gardiner, Oreg.....	do	.....	.....	.....
8	Marcushook, Pa.....	May 21	.....	.....	.....
9	Mobile Bay, Ala.....	Apr. 30	Am. bk. Borghild.....	Apr. 25	Barbadoes.....
			Am. ss. Mercator.....	Apr. 26	Tampico via Ha- bana.
			Ger. ss. Bradford.....	do	Limon via Bocas del Toro.
10	New Bedford, Mass.....	May 21	.....	.....	.....
11	New Orleans, La.....	May 7	Br. ss. Logician ^a	Apr. 29	Mexican ports.....
			Sp. ss. Miguel M. Penellos.....	May 1	Barcelona, via Habana.
			Sp. ss. Gaditano.....	May 3	Cienfuegos.....
			Am.schr. Elverda S. Elzey.....	May 4	Frontera.....
			Nor.ss. Aquila.....	May 5	Cienfuegos.....
			Ger. ss. Baker.....	do	Limon.....
			Nor. ss. Taunton.....	May 6	Bocas del Tora.....
			Sp. ss. Niceto.....	do	Cienfuegos.....
			Br. ss. Garrick.....	May 7	Brazilian ports.....
12	Newport News, Va.....	May 21	.....	.....	.....
13	Newport, R. I.....	do	.....	.....	.....
14	New York, N. Y.....	do	.....	.....	.....
15	Pass Cavallo, Tex.....	do	.....	.....	.....
16	Port Royal, S. C.....	do	.....	.....	.....
17	Providence, R. I.....	May 14	.....	.....	.....
		May 21	.....	.....	.....
18	Quintana, Tex.....	do	.....	.....	.....
19	Sabine Pass, Tex.....	do	.....	.....	.....
20	St. Helena Entrance, S. C.....	do	.....	.....	.....

^a Previously reported.

and inspection stations—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
54				No transactions.....	
55				do.....	
56				do.....	
57				No transactions.....	4
58				do.....	
59					2

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					1
5				No report.....	
6	Galveston.....	Fumigated and held 5 days.	May 14		18
	do.....	Fumigated	May 12		
7				No report.....	
8				do.....	
9	Mobile.....	Disinfected and held.....	May 2		13
	do.....	do.....	May 1		
	do.....	Disinfected.....			
10				No report.....	
11	New Orleans.....	Disinfected and held.....	May 1		
	do.....	Disinfected.....	do.....		
	do.....	do.....	do.....		
	do.....	Disinfected and held.....	do.....		
	do.....	Disinfected.....	May 5		
	do.....	do.....	do.....		
	do.....	do.....	May 6		
	do.....	do.....	do.....		
	do.....	Disinfected and held.....	do.....		
12				No report.....	
13				do.....	
14				do.....	
15				do.....	
16				do.....	
17				No transactions.....	
				do.....	
18				No report.....	
19				do.....	
20				do.....	

Smallpox in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 27, 1904.

For reports received from June 27, 1903, to December 25, 1903, see PUBLIC HEALTH REPORTS for December 25, 1903.

Place.	Date.	Cases.	Deaths.	Remarks.
Arkansas:				
Fort Smith.....	Dec. 13-Feb. 20	6		
Total for State.....		6		
Total for State, same period, 1903.				
California:				
Berkeley.....	Jan. 1-Feb. 29	2		
Escondido.....	Feb. 23.....	1		
Fresno.....	Dec. 1-31.....	1		
Los Angeles.....	Dec. 27-May 14	15		
Oakland.....	Jan. 1-31.....		1	
Sacramento.....	Apr. 1-30.....	1		
San Francisco.....	Dec. 7-May 8	54	4	
Total for State.....		74	5	
Total for State, same period, 1903.		315	3	
Colorado:				
Bent County.....	Feb. 1-29.....	4		
Boulder County.....	Dec. 1-Mar. 31	24		
Chaffee County.....	Feb. 1-Mar. 31	6		
Conejos County.....	Jan. 1-Feb. 29	37		
Denver County (Denver).....	Dec. 1-Mar. 31	44	1	
Douglas County.....	Mar. 1-Mar. 31	1		
Eagle County.....	Mar. 1-Mar. 31	1		
El Paso County (Colorado Springs included).....	Dec. 1-Feb. 29	37		
Huerfano County.....	Dec. 1-Mar. 31	2		
Kit Carson County.....	Dec. 1-Mar. 31	22		
Lake County.....	Dec. 1-Feb. 29	3		
Larimer County.....	Dec. 1-Mar. 31	77		
Las Animas County.....	Dec. 1-Jan. 31	4		
Mesa County.....	Dec. 1-31.....	1		
Otero County.....	Jan. 1-Mar. 31	47		
Pitkin County.....	Dec. 1-Jan. 31	2		
Pueblo County.....	Feb. 1-Mar. 31	4		
Rio Grande County.....	Dec. 1-31.....	11		
Routt County.....	Jan. 1-Feb. 29	14		
Washington County.....	Dec. 1-Jan. 31	3		
Weld County.....	Dec. 1-Mar. 31	109		
Yuma County.....	Dec. 1-31.....	1		
Total for State.....		454	1	
Total for State, same period, 1903.		647		
Delaware:				
Wilmington.....	Feb. 21-May 21	1	3	
Total for State.....		1	3	
Total for State, same period, 1903.			1	
District of Columbia:				
Washington.....	Jan. 10-May 14	41		
Total for District.....		41		
Total for District, same period, 1903.		15	1	
Florida:				
Escambia County (Pensacola).....	Nov. 1-Jan. 16	11		
Dade County (Fort Lauderdale).....	Nov. 1-Dec. 31	1		
Duval County (Jacksonville).....	Nov. 1-May 14	37		
Leon County (Tallahassee).....	Nov. 1-Dec. 31	2		
Polk County (Bartow).....	Nov. 1-Dec. 31	1		
Walton County.....	Jan. 2-16.....	88		
Total for State.....		140		
Total for State, same period, 1903.		313		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Georgia:				
Darien	Jan. 14.....	2		
Liberty County.....	Feb. 12.....		7	
Total for State		2	7	
Total for State, same period, 1903.		125	9	
Illinois:				
Belleville	Dec. 13-Mar. 12	20	2	
Cairo	Jan. 1-Feb. 5	13		
Chicago	Dec. 20-May 21	82	1	
Danville	Dec. 13-May 21	43		
Evanston	Jan. 1-Dec. 31, 1903	3		
Fairport	Jan. 10-16.....	1		
Galesburg.....	Mar. 6-26.....	7		
Peoria	Mar. 1-31.....	10		
Springfield	Feb. 26-Mar. 3	3		
Total for State		182	3	
Total for State, same period, 1903.		357	21	
Indiana:				
Evansville	Dec. 13-Jan. 20	22		
Kokomo	Apr. 17-23.....	1		
South Bend	Mar. 27-May 14	16	1	
Total for State		39	1	
Total for State, same period, 1903.		3,516	137	
Iowa:				
Des Moines	Jan. 23-Apr. 9	2		
Dubuque.....	Dec. 27-Jan. 2	1		
Total for State		3		
Total for State, same period, 1903.		78		
Kentucky:				
Burlington.....	Mar. 1-28.....	16		
Covington	Mar. 13-May 14	21		
Louisville.....	Oct. 1-Apr. 30	66	16	
Springfield	Mar. 22-28.....	6		
Total for State		109	16	
Total for State, same period, 1903.		630	8	
Louisiana:				
New Orleans.....	Dec. 13-May 14	80	5	Thirty-seven imported.
Total for State		80	5	
Total for State, same period, 1903.		75	3	
Maine:				
Athens.....	Dec. 31.....			Present.
Biddeford.....	Dec. 13-19.....	1		
Bradley.....	Mar. 18.....	2		
Brewer.....	Dec. 19.....	1		
Brighton.....	Dec. 31.....			Do.
Calais.....	Feb. 7-18.....	10		
Columbia Falls	May 17.....			Do.
Jonesport.....	May 16.....			Do.
Madawaska region	Dec. 1-Apr. 9	67		
Madison.....	Jan. 28.....	1		
Milford.....	Jan. 7.....	2		
Oldtown.....	To Dec. 24.....	9		
Orono.....	Dec. 19-Jan. 22	3		
Smithfield	Jan. 21.....	1		
Stacyville.....	Jan. 21.....	11		
Van Buren.....	Jan. 1-31.....	7		
Total for State		115		
Total for State, same period, 1903.		314	1	

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Maryland:				
Baltimore	Jan. 17-May 21	47	1	
Cumberland	Feb. 1-Mar. 31	4	.....
Total for State .....	.....	51	1	
Total for State, same period, 1903.	.....	53	1	
Massachusetts:				
Brockton	Dec. 20-26	1	.....
Fall River	Dec. 20-Mar. 19	2	.....
Haverhill	Dec. 20-26	1	.....
Lawrence	Jan. 10-16	1	.....
Lowell	Mar. 13-Apr. 2	2	1	
Total for State .....	.....	7	1	
Total for State, same period, 1903.	.....	183	29	
Michigan:				
Detroit	Dec. 13-May 14	42	1	
Flint	Dec. 13-Feb. 6	5	.....
Grand Rapids	Jan. 2-May 21	20	.....
Port Huron	Dec. 16-23	4	.....
Bay County	Feb. 1-29 .....	.....	1	
Lapeer County	Feb. 1-29 .....	.....	1	
Muskegon	Mar. 1-31 .....	.....	1	
Osceola County	Mar. 1-31 .....	.....	1	
St. Joseph County	Mar. 1-31 .....	.....	1	
Total for State .....	.....	71	6	
Total for State, same period, 1903.	.....	617	15	
Minnesota:				
Aitkin County	Feb. 9-29	6	.....
Anoka County	Apr. 5-May 9	2	.....
Becker County	Mar. 1-May 9	50	.....
Beltrami County	Jan. 5-May 9	51	1	
Benton County	May 3-9	1	.....
Blue Earth County	Apr. 26-May 9	2	.....
Cass County	Jan. 26-Apr. 11	14	.....
Chippewa County	Feb. 9-Apr. 18	26	.....
Chisago County	Jan. 12-Apr. 4	13	.....
Clay County	Dec. 22-Apr. 25	28	.....
Cottonwood County	Feb. 2-15	2	.....
Crow Wing County	Jan. 5-Feb. 8	5	.....
Dakota County	Feb. 2-8	2	.....
Dodge County	Mar. 15-Apr. 18	13	.....
Douglas County	Jan. 26-May 2	26	.....
Fillmore County	Mar. 1-7	2	.....
Freeborn County	Apr. 5-11	1	.....
Grant County	Mar. 22-Apr. 18	7	.....
Goodhue County	Jan. 5-May 9	7	.....
Hennepin County	Dec. 22-May 9	164	13	
Hubbard County	Jan. 19-May 2	15	.....
Isanti County	Dec. 22-May 2	35	.....
Itasca County	Dec. 15-May 9	15	.....
Jackson County	Jan. 5-11	1	.....
Kandiyohi County	Dec. 15-Apr. 11	85	.....
Kittson County	Apr. 5-18	5	.....
Lac qui Parle County	Apr. 26-May 9	3	.....
Lesueur County	Apr. 5-25	8	1	
Meeker County	Feb. 16-Mar. 21	4	.....
Millelaca County	Feb. 16-Apr. 11	5	.....
Morrison County	Dec. 15-Apr. 4	29	.....
Mower County	Feb. 2-8	1	.....
Norman County	Feb. 2-Apr. 11	7	.....
Ottertail County	Dec. 15-May 9	114	.....
Pine County	Feb. 2-May 9	9	.....
Pipestone County	Mar. 15-May 2	22	.....
Polk County	Jan. 5-Apr. 18	6	.....
Pope County	Mar. 15-21	4	.....
Ramsey County	Dec. 29-May 9	41	1	
Redwood County	Jan. 19-May 9	5	.....
Renville County	Jan. 19-Apr. 18	9	.....
Rice County	Jan. 19-May 9	9	.....
Roseau County	Jan. 12-18	10	.....
St. Louis County	Jan. 12-May 9	13	.....
Scott County	Mar. 15-May 9	14	.....
Sherburn County	May 3-9	1	.....
Sibley County	Feb. 9-15	1	.....
Stearns County	Dec. 15-May 9	225	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Minnesota—Continued.				
Steele County	Jan. 5-18	2	.....
Stevens County	Mar. 15-May 9	3	.....
Swift County	Jan. 26-Apr. 25	28	.....
Todd County	Dec. 15-May 9	152	1	
Wabasha County	Jan. 26-Apr. 18	27	.....
Wadena County	Jan. 12-Apr. 25	3	.....
Washington County	Dec. 22-Apr. 11	21	1	
Wilkin County	Jan. 5-Apr. 25	18	.....
Winona County	Apr. 26-May 2	1	.....
Wright County	Mar. 1-May 2	9	.....
Cases not previously reported in Hennepin County.	.....	11	.....
Cases not previously reported in Kandiyohi County.	.....	13	.....
Old cases not reported pre- viously in Stearns County.	.....	11	.....
Total for State .....	.....	1,417	19	
Total for State, same period, 1903.	.....	3,544	24	
Missouri:				
St. Louis	Dec. 20-May 14	193	7	
Total for State .....	.....	193	7	
Total for State, same period, 1903.	.....	252	5	
Montana:				
Butte	Jan. 1-Feb. 29	16	.....
Helena	Jan. 1-31	1	.....
Total for State .....	.....	17	.....
Total for State, same period, 1903.	.....	14	.....
Nebraska:				
Omaha	Dec. 20-May 14	10	.....
Total for State .....	.....	10	.....
Total for State, same period, 1903.	.....	89	.....
New Hampshire:				
Manchester	Dec. 13-May 14	57	1	
Nashua	Jan. 3-23	3	.....
Total for State .....	.....	60	1	
Total for State, same period, 1903.	.....	195	.....
New Jersey:				
Camden	Dec. 27-Apr. 30	28	5	Imported.
Jersey City	Mar. 21-27	1	.....
Newark	Feb. 1-6	1	.....
Plainfield	Jan. 17-23	1	.....	Do.
Trenton	Dec. 27-Apr. 23	43	8	
Total for State .....	.....	74	13	
Total for State, same period, 1903.	.....	101	5	
New York:				
Buffalo	Dec. 20-May 14	45	.....
Elmira	Feb. 7-13	1	.....
New York	Dec. 20-May 17	27	4	
Niagara Falls	Feb. 14-Apr. 12	15	.....
Saratoga Springs	Dec. 1-31	1	.....
Total for State .....	.....	89	4	
Total for State, same period, 1903.	.....	90	9	
North Carolina:				
Alamance County	Jan. 1-31	122	.....	Present.
Anson County	Jan. 1-31 .....	.....	.....
Bladen County	Jan. 1-31	1	.....
Buncombe County	Jan. 1-31	8	.....
Cabarrus County	Jan. 1-31	1	.....
Chowan County	Jan. 1-31	1	.....
Cleveland County	Jan. 1-31	4	.....
Cumberland County	Jan. 1-31	3	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
North Carolina—Continued.				
Davidson County	Jan. 1-31	72		
Davie County	Jan. 1-31	2		
Durham County	Jan. 1-31	10		
Edgecombe County	Jan. 1-31	8	2	
Forsyth County	Jan. 1-31	17		
Gaston County	Jan. 1-31	17		
Guilford County	Jan. 1-31	8		
Harnett County	Jan. 1-31	3		
Henderson County	Jan. 1-31	3		
Iredell County	Jan. 1-31	8		
Jackson County	Jan. 1-31	25		
Johnston County	Jan. 1-31	5		
Macon County	Jan. 1-31			Present.
Madison County	Jan. 1-31			Do.
Mecklenburg County (Charlotte included).	Jan. 1-Apr. 30	7		
New Hanover County (Wilmington included).	Jan. 1-Mar. 8	11		
Orange County	Jan. 1-31	10		
Perquimans County	Jan. 1-31	32		
Pitt County	Jan. 1-31	13		
Richmond County	Jan. 1-31	7		
Robeson County	Jan. 1-31			Do.
Rockingham County	Jan. 1-31	4		
Scotland County	Jan. 1-31	20		
Stanly County	Jan. 1-31	2		
Union County	Jan. 1-31	6		
Vance County	Jan. 1-31	12		
Wake County	Jan. 1-31	1		
Wayne County	Jan. 1-31	10		
Wilkes County	Jan. 1-31	20		
Wilson County	Jan. 1-31	4		
Yancey County	Jan. 1-31	6		
Total for State		483	2	
Total for State, same period, 1903.		2,565	23	
North Dakota:				
Barnes County	Dec. 1-Mar. 31	19		
Cass County	Nov. 1-Mar. 31	13		
Cavalier County	Dec. 1-Feb. 29	16		
Eddy County	Dec. 1-31	1		
Emmons County	Feb. 1-29	2		
Grand Forks County	Nov. 1-Dec. 31	12		
Griggs County	Dec. 1-31	1		
McHenry County	Feb. 1-Mar. 31	8		
McLean County	Jan. 1-Feb. 29	3		
Ransom County	Nov. 1-Feb. 29	64		
Richland County	Feb. 1-Mar. 31	3		
Rolette County	Nov. 1-Mar. 31	10		
Stark County	Feb. 1-29	3		
Stutsman County	Dec. 1-31	1		
Towner County	Nov. 1-Mar. 31	10		
Traill County	Dec. 1-Mar. 31	6		
Walsh County	Dec. 1-Mar. 31	32		
Ward County	Dec. 1-Mar. 31	8		
Wells County	Nov. 1-Feb. 29	20		
Williams County	Dec. 1-Mar. 31	26		
Total for State		258		
Total for State, same period, 1903.		48		
Ohio:				
Allen County	Aug. 8-Apr. 9	30		
Ashland County	Jan. 1-Apr. 9	1		
Ashtabula County	Aug. 8-Apr. 9	12		
Athens County	Aug. 8-Apr. 9	112	1	
Auglaize County	Aug. 8-Apr. 9	40	4	
Belmont County	Aug. 8-Apr. 9	25	8	
Butler County	Aug. 8-Apr. 9	22		
Carroll County	Aug. 8-Apr. 9	34		
Champaign County	Aug. 8-Apr. 9	19		
Clark County	Jan. 1-Apr. 9	4		
Clermont County	Jan. 1-Apr. 9	1		
Columbiana County	Aug. 8-Apr. 9	60	1	
Coshocton County	Aug. 8-Apr. 9	66		
Crawford County	Aug. 8-May 7	72		
Cuyahoga County	Aug. 8-May 13	52	7	
Darke County	Aug. 8-Dec. 26	1		
Delaware County	Aug. 8-Dec. 26	13		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ohio—Continued.				
Erie County	Aug. 8-Apr. 9	17	.....
Fairfield County	Aug. 8-Apr. 9	9	.....
Franklin County	Aug. 8-Apr. 9	174	5	
Gallia County	Aug. 8-Apr. 9	74	5	
Greene County	Jan. 1-Apr. 9	1	.....
Guernsey County	Aug. 8-Apr. 9	132	1	
Hamilton County	Aug. 8-May 20	184	10	
Hancock County	Aug. 8-Apr. 9	31	.....
Hardin County	Jan. 1-Apr. 9	1	.....
Harrison County	Aug. 8-Apr. 9	26	4	
Hocking County	Jan. 1-Apr. 9	81	.....
Holmes County	Jan. 1-Apr. 9	44	.....
Jackson County	Aug. 8-Apr. 9	31	.....
Jefferson County	Aug. 8-Apr. 9	60	.....
Knox County	Aug. 8-Dec. 26	1	.....
Lake County	Aug. 8-Dec. 26	1	.....
Lawrence County	Aug. 8-Apr. 9	242	16	
Licking County	Aug. 8-Apr. 9	49	1	
Lorain County	Aug. 8-Apr. 9	4	1	
Lucas County	Aug. 8-May 7	6	.....
Madison County	Jan. 1-Apr. 9	1	.....
Mahoning County	Aug. 8-Apr. 9	239	5	
Marion County	Aug. 8-Apr. 9	258	1	
Miami County	Aug. 8-Apr. 9	32	2	
Montgomery County	Aug. 8-May 21	212	17	
Morgan County	Jan. 1-Apr. 9	2	.....
Morrow County	Aug. 8-Apr. 9	9	.....
Muskingum County	Aug. 8-Apr. 9	34	.....
Noble County	Jan. 1-Apr. 9	4	.....
Ottawa County	Aug. 8-Apr. 9	15	.....
Paulding County	Aug. 8-Dec. 26	2	.....
Perry County	Aug. 8-Apr. 9	71	.....
Pickaway County	Jan. 1-Apr. 9	1	.....
Portage County	Aug. 8-Apr. 9	6	.....
Preble County	Jan. 1-Apr. 9	4	.....
Putnam County	Aug. 8-Apr. 9	45	.....
Richland County	Aug. 8-Apr. 9	27	1	
Ross County	Jan. 1-Apr. 9	4	.....
Scioto County	Aug. 8-Apr. 9	20	.....
Seneca County	Aug. 8-Dec. 26	1	.....
Stark County	Aug. 8-Apr. 9	144	.....
Summit County	Aug. 8-Apr. 9	41	.....
Trumbull County	Aug. 8-Apr. 9	44	.....
Tuscarawas County	Aug. 8-Apr. 9	35	1	
Union County	Aug. 8-Apr. 9	30	.....
Van Wert County	Jan. 1-Apr. 9	12	1	
Vinton County	Aug. 8-Apr. 9	13	.....
Washington County	Aug. 8-Apr. 9	76	1	
Wayne County	Aug. 8-Apr. 9	9	.....
Williams County	Jan. 1-Apr. 9	30	.....
Wood County	Aug. 8-Dec. 26	31	.....
Wyandot County	Aug. 8-Apr. 9	18	.....
Total for State		3,202	93	
Total for State, same period, 1903.		633	54	
Pennsylvania:				
Allegheny County	Dec. 13-May 14	177	35	Thirteen cases imported at Pittsburg.
Beaver County	Dec. 1-Jan. 31	5	1	
Berks County	Dec. 1-Mar. 4	41	.....
Blair County	Dec. 1-Mar. 12	20	3	One case imported.
Bradford County	Dec. 1-Jan. 31	10	.....
Bucks County	Dec. 1-Jan. 31	4	.....
Butler County	Feb. 1-13	2	.....
Cambria County	Dec. 1-Apr. 30	54	4	Two cases imported.
Clearfield County	Dec. 1-Jan. 31	20	.....
Columbia County	Dec. 1-Jan. 31	8	.....
Center County	Dec. 1-Jan. 31	4	.....
Chester County	Dec. 1-Jan. 31	1	.....
Crawford County	Apr. 17-30	23	.....
Cumberland County	Dec. 1-Jan. 31	2	.....
Dauphin County	Dec. 1-Jan. 31	2	.....
Delaware County	Dec. 1-Jan. 31	8	.....
Erie County	Dec. 1-Apr. 2	111	1	
Fayette County	Dec. 1-Jan. 31	28	1	
Greene County	Dec. 1-Jan. 31	40	.....
Indiana County	Dec. 1-Jan. 31	10	.....
Jefferson County	Dec. 1-Jan. 31	8	3	

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Pennsylvania—Continued.				
Lackawanna County	Dec. 1-Mar. 31	12	.....
Lancaster County	Dec. 1-Jan. 31	1	.....
Lebanon County	Dec. 1-Jan. 31	11	1	
Lehigh County	Dec. 1-Apr. 23	120	.....
Luzerne County	Dec. 1-Jan. 31	4	.....
Lycoming County	Jan. 3-Apr. 23	16	3	
Monroe County	Dec. 1-Jan. 31	5	.....
Montgomery County	Dec. 1-May 14	9	1	
Northampton County	Dec. 1-Jan. 31	235	.....
Northumberland County	Dec. 1-Jan. 31	3	.....
Perry County	Dec. 1-Jan. 31	1	.....
Philadelphia County	Dec. 20-May 21	891	215	
Schuylkill County	Dec. 1-Jan. 31	16	.....
Somerset County	Dec. 1-Jan. 31	9	.....
Susquehanna County	Dec. 1-Jan. 31	2	.....
Warren County	Jan. 1-Jan. 31	10	3	
Washington County	Dec. 1-Jan. 31	18	.....
Wayne County	Dec. 1-Jan. 31	92	.....
Westmoreland County	Dec. 1-Jan. 31	43	.....
Total for State		2,076	271	
Total for State, same period, 1903.		2,902	183	
South Carolina:				
Charleston	Dec. 20-May 14	44	4	Three imported.
Georgetown	Mar. 27	1	.....
Greenville	Feb. 21-May 7	35	.....
Total for State		80	4	
Total for State, same period, 1903.		239	9	
Tennessee:				
Memphis	Dec. 13-May 21	408	8	
Nashville	Dec. 27-May 21	129	.....
Total for State		537	8	
Total for State, same period, 1903.		1,815	32	
Texas:				
San Antonio	Dec. 1-Apr. 30	57	.....
Total for State		57	.....
Total for State, same period, 1903.		11	.....
Utah:				
Ogden	Jan. 1-Mar. 31	3	.....
Salt Lake City	Dec. 27-Feb. 13	14	.....
Total for State		17	.....
Total for State, same period, 1903.		335	2	
Virginia:				
Danville	Feb. 7-13	2	.....
Pocahontas	Jan. 1-Mar. 31	21	5	
Total for State		23	5	
Total for State, same period, 1903.		9	1	
Washington:				
Adams County	Dec. 1-Apr. 30	6	.....
Chehalis County	Dec. 1-31	3	.....
Chelan County	Mar. 1-Apr. 30	9	.....
Clallam County	Mar. 1-31	1	.....
Clarke County	Feb. 1-29	1	.....
Columbia County	Jan. 1-31	1	.....
Franklin County	Mar. 1-31	1	.....
Jefferson County (Port Town- send)	Apr. 12	1	.....
King County (Seattle included)	Dec. 1-Apr. 13	49	.....
Kititas County	Dec. 1-31	1	.....
Klickitat County	Dec. 1-Apr. 30	28	.....
Lewis County	Feb. 1-29	1	.....
Lincoln County	Dec. 1-Apr. 30	3	.....
Mason County	Mar. 1-31	1	.....
Pacific County	Jan. 1-Feb. 29	2	.....
Pierce County (Tacoma in- cluded)	Feb. 1-Mar. 31	7	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Washington—Continued.				
Skagit County.....	Feb. 1-29.....	1	.....
Spokane County (Spokane included).	Dec. 1-Apr. 30	25	3	
Thurston County.....	Feb. 1-29.....	2	.....
Wallawalla County.....	Dec. 1-Jan. 31	9	.....
Whatcom County.....	Dec. 1-Feb. 29	18	.....
Whitman County.....	Dec. 1-Mar. 31	4	.....
Yakima County.....	Jan. 1-Apr. 30	10	.....
Total for State.....		184	3	
Total for State, same period, 1903.		271	.....
Wisconsin:				
Milwaukee.....	Dec. 13-May 14	178	.....
Total for State.....		178	.....
Total for State, same period, 1903.		1,292	6	
Grand total.....		10,337	479	
Grand total, same period, 1903.		21,804	588	

Plague in the United States, as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 27, 1904.

Place.	Number since March, 1900.	Number since January 1, 1904.	Re-ported.	Died.	Bacteriologically con-firmed.	Remarks.
California:						
San Francisco.....	111	1	Jan. 10	Jan. 10	Jan. 25	Recovered.
Do.....	112	2	Jan. 12	Jan. 11	Jan. 27	
Do.....	113	3	Jan. 13	Jan. 13	Jan. 22	
Do.....	114	4	Feb. 7	.....	Feb. 17
Do.....	115	5	Feb. 9	Feb. 8	Feb. 27	
Do.....	116	6	Feb. 12	Feb. 12	Feb. 24	
Do.....	117	7	Feb. 15	Feb. 14	.....do.....
Do.....	118	8	Feb. 17	Feb. 19	Mar. 8	
Concord.....	^a 119	9	Mar. 1	Feb. 29	Mar. 12	

^a Cases 119 and 120 not having been bacteriologically confirmed, case 121 has been numbered 119.

Summary: Calendar year, 1900, 22 cases, 22 deaths; 1901, 30 cases, 25 deaths; 1902, 41 cases, 41 deaths; 1903, 17 cases, 17 deaths.

Yellow fever in the United States, as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 27, 1904.

Place.	Date.	Cases.	Deaths.	Remarks.
Texas:				
Laredo.....	Dec. 26-Mar. 18	6	.....	One case imported from Minera.

[NOTE.—In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

FOREIGN AND INSULAR.

AFRICA.

Report from Cape Colony—Plague—Examination for plague and plague-infected rodents.

Report of the medical officer of health on the state of plague in Cape Colony during week ended April 23, 1904.

Port Elizabeth.—Two cases of plague were discovered during the week, namely: On the 18th instant, a native male, and on the 19th instant, a European male. At the plague hospital, one native male died, five cases remained under treatment. Two hundred and thirty-two rats and 66 mice were bacteriologically examined during the week, of which 82 rats and 7 mice proved to be plague infected.

East London.—No case of plague was discovered during the week. Plague-infected rodents were found in the town.

Other places.—At Uitenhage, Queenstown, King Williams Town, and Knysna no case of plague was discovered in man or animal.

Cape Town and harbor board area.—Three hundred and forty-three rats were examined during the week. None were found affected with plague.

A. JOHN GREGORY,
Medical Officer of Health for the Colony.

AUSTRALIA.

Plague bulletins from Sydney and Brisbane—Examination of rodents for plague infection—Plague in Brisbane.

Consul-General Bray forwards the following:

SYDNEY, *March 28, 1904.*

Plague bulletin No 4, for the week ended March 26, 1904.

	Rats.	Mice.
Rodents destroyed	1,821	1,502
Rodents examined in laboratories	684	894
Rodents plague infected		

Plague in man.—No case or suspicious case of plague in man has occurred since March 10. Cases to date, 1.

APRIL 5, 1904.

Plague bulletin No. 5, for week ended at 1 p. m. on Saturday, April 2, 1904.

	Rats.	Mice.
Rodents destroyed.....	1,730	1,319
Rodents examined in bacteriological laboratory.....	592	768
Rodents found infected with plague.....	0	0

Plague in man.—No case, or suspicious case, of plague in man has occurred since March 10. Cases to date, 1.

APRIL 11, 1904.

Plague bulletin No. 6, week ended at 1 p. m. on Saturday, April 9, 1904.

	Rats.	Mice
Rodents destroyed.....	1,657	996
Rodents examined in bacteriological laboratory.....	603	434
Rodents found infected with plague.....	0	0

G. H. KING, *Secretary.*BRISBANE, *March 26, 1904.**Plague bulletin No. 7, for week ended 12 o'clock noon, Saturday, March 26, 1904.*

BRISBANE.

No case of plague has occurred in Brisbane since February 18, ultimo, thirty-seven days ago.

Examination and destruction of rats, Brisbane.—Report for week ended March 25, 1904.

Rats examined at Bacteriological Institute.....	624
Rats plague infected.....	4
Mice examined at Bacteriological Institute.....	101
Mice plague infected.....	0
Rats destroyed.....	1,143
Mice destroyed.....	1,967
Rodents destroyed during the week.....	3,839

The four infected rats referred to were caught within the "infected area."

CAIRNS.

Schoolboy, 8 years of age, died February 16, ultimo, and a black gin on March 22 instant.

No case of plague reported since.

Sixteen dilapidated humpies at Malaytown, Cairns, destroyed by fire.

With further reference to the four suspicious cases of plague kept under observation at Cairns, which are now convalescent, the departmental health officer, who has been at Cairns since the 15th instant, reports that further crucial microscopical and bacteriological examinations (cultures) made in connection with these cases failed to reveal any evidence of plague.

Examination of rodents continues to be carried out at Cairns, but so far with negative results only.

A special cleansing of the town of Cairns has been ordered.

MARCH 30, 1904.

Plague bulletin No. 8, for period between 12 o'clock noon, Saturday, March 26, instant, and 4 o'clock p. m., Wednesday, 30th idem.

No case of plague has occurred in Brisbane since February 18, ultimo, forty-one days ago.

Examination and destruction of rats, Brisbane.—Report for March 26, 27, and 28.

Rats examined at Bacteriological Institute	206
Rats plague infected	7
Mice examined at Bacteriological Institute	127
Mice plague infected	0
Rats destroyed	962
Mice destroyed	1, 309

CAIRNS.

No further cases have been reported from Cairns.

APRIL 9, 1904.

Plague bulletin No. 9, for period between 4 o'clock p. m., 30th March ultimo, and 12 o'clock noon, 9th April instant.

BRISBANE.

A man, aged 34 years, a resident of Brisbane, a dealer in bags, bales, etc., was yesterday certified to be suffering from plague. He was, with the least possible delay, removed to the plague hospital, and the customary precautions were taken in connection with the case.

The patient's condition has improved since his admission to the hospital.

The previous case of plague occurred in Brisbane on February 18 last, therefore a period of 50 days has elapsed between the 2 cases.

Examination and destruction of rats, Brisbane.—Report from March 30 to April 7, inclusive.

Rats examined at bacteriological institute	354
Rats infected with plague	7
Mice examined at bacteriological institute	269
Mice infected with plague	0
Rats destroyed	755
Mice destroyed	1, 163
Rodents destroyed	2, 548

CAIRNS.

All the patients have been discharged and the plague hospital closed.

APRIL 16, 1904.

Plague bulletin No. 10, for the week ended 12 o'clock noon April 16 instant.

A mild case of plague was discovered in the city on the evening of the 9th instant. The patient, a man aged 32 years, a carter employed

by a firm of produce merchants, whose premises are situated within the "infected area," was removed to the plague hospital on the morning of the 10th instant.

Plague hospital, Brisbane.

Admitted during the week	1
Died during the week	0
Discharged during the week	0
Remaining under treatment	2

RATS.

Report April 8 to 15, inclusive.

Rats examined at bacteriological institute	483
Rats infected ^a	8
Mice examined at bacteriological institute	294
Mice infected	0
Rats destroyed	309
Mice destroyed	767
Total rodents destroyed during the above-mentioned period	1,861

B. BURNETT HAM, M. D.,
Commissioner of Public Health.

AUSTRIA-HUNGARY.

Report from Fiume—Inspection of emigrants.

Consular Agent La Guardia reports, May 4, as follows:

May 3, steamship *Ultonia*: Destination, New York; steerage passengers inspected, 734; rejected, 6; embarked, 728; pieces of baggage inspected and passed, 965; pieces of baggage disinfected, 60 (bedding and unclean baggage).

BRAZIL.

Reports from Bahia—Mortuary statistics—Smallpox.

Consul Furniss reports, April 18 and 25 and May 2, as follows:

During the week ended April 16, 1904, 93 bodies were interred in the Bahia cemeteries. Causes of death: Aneurism 1, arterio-sclerosis 7, beriberi 1, Bright's disease 2, bronchitis 3, cerebral congestion 1, cirrhosis of liver 2, diarrhea and dysentery 7, hepatitis 1, malarial fevers 3, meningitis 5, nephritis 4, organic diseases of heart 6, pulmonary tuberculosis 13, rachitis 1, rheumatism 1, senile debility 2, stillborn 6, syncope 1, syphilis 1, tetanus 1, tetanus neonatorum 2, umbilical hemorrhage 3, uremia 2, whooping cough 2, septic fever 1, other causes 14.

I have also to inform you that during the week there were 5 new cases of smallpox, with no deaths.

Week ended April 23, 1904, 90 bodies.

Causes of death: Arterio-sclerosis 3, bronchitis 3, cerebral congestion 3, cirrhosis of liver 1, diarrhea and dysentery 19, malarial fevers 3, meningitis 1, nephritis 2, pneumonia 1, pulmonary tuberculosis 12, still born 4, intestinal parasites 1, senile debility 4, syncope 2, syphilis 2, tetanus 1, tetanus neonatorum 2, umbilical hemorrhage 1, whooping cough 1, other causes 24.

^a The infected rats were found within or in close proximity to the "infected area."

During the same period there was 1 new case of smallpox, with no deaths.

During the week ended April 30, 1904, 96 bodies were interred in the Bahia cemeteries.

Cause of death: Aneurism 1, arterio-sclerosis 2, asphyxia 1, beri-beri 3, bronchitis 2, cirrhosis of liver 1, death by violence 1, diabetes 2, diarrhea and dysentery 12, elephantiasis 1, hepatitis 1, leprosy 2, malarial fever 3, meningitis 2, peritonitis 1, pneumonia 1, pulmonary tuberculosis 19, rheumatism 1, senile debility 6, septic fever 1, still-born 6, syphilis 1, whooping cough 2, other causes 18.

Reports from Rio de Janeiro—Inspection of vessels—Yellow fever, plague, and smallpox.

Acting Assistant Surgeon Stewart reports, April 20 and 21, as follows:

During the week ended April 16, 1904, I inspected and issued bills of health to the following-named vessels: On April 12, the steamship *Catania*, for New York, with a cargo of coffee, 3 steerage passengers from this port, no change of personnel of crew while here, and no first-cabin passengers from this port; on April 13, the steamship *Garrick*, for New Orleans, with no passengers of any class and no change of crew personnel while here, and with a cargo composed exclusively of coffee; on April 14, the steamship *Virgil*, for New York, with cargo of coffee, 1 first-class passenger from this city, no steerage, and with 3 new members of the crew taken on at this port in order to supply the places of 3 men left in the hospital at Santos. All vessels lay in the open bay while here, and none of the ships had been disinfected at Ilha Grande, as they had left here for Santos after the issuance of the order discontinuing such disinfection of vessels going from this place to other ports of Brazil. No cases of sickness had occurred on any of them on their way here from Santos, and none occurred during their stay in this port.

Case of plague in Nictheroy.

On April 15 there was reported 1 fatal case of bubonic plague in the city of Nictheroy, State of Rio de Janeiro, of which State that city is the capital. It lies directly across the bay from Rio, with which city it is in half-hourly communication by means of ferryboats. This is the first case of which I have heard since my arrival here.

I have received no further reports from Pernambuco in reference to the outbreak of dysentery in that city, nor have there been any press reports on the subject for over a week.

The plague hospital at Jurajuba, Brazil.

On April 17, by the courtesy of the director general of public health of this city, Dr. Oswaldo Cruz, a launch was placed at my disposal for a visit to the plague hospital at Jurajuba, across the bay of Rio de Janeiro, where all patients suffering from plague are taken.

At the date of my visit there were but 5 cases of this disease in the hospital, 1 case moribund and 4 convalescents.

It is not my intention to enter into any particulars of my visit in this report, as I am collecting statistics of the epidemics of plague

here in the last three years, and as soon as I shall have obtained them I will forward them to you, with a complete report on the subject, and on the manner in which the epidemic has lately been handled.

In speaking of the subject now, I will only say that the way in which the disease has been managed since I have had an opportunity to observe it, would reflect great credit on any civilized country in the world, and the health officials here deserve great praise for the rational and scientific and thoroughly modern manner in which they have gone about the matter, and for the success which has so nearly crowned their efforts.

The hospital is up to date in every way, that is, in all matters which really count in handling the disease. It lacks sorely many things which money could supply, but this will soon be remedied, as an appropriation of some \$25,000 has been obtained.

During the year 1903 there were 624 admissions to the hospital, all verified cases of bubonic plague, and during this year up to the date of my visit, there have been 61 admissions. No case of sickness is sent to the hospital except cases of sickness which have been, in their homes, verified as cases of true bubonic plague by bacteriological examination. * * *

Sanitary report for week ended April 17, 1904.

During the week ended April 17 there were in all 290 deaths. Of this number 2 were caused by yellow fever, with a total of 6 new cases reported during the week, while at the close of the week there were still 3 cases under treatment in the Hospital São Sebastião. Of the deaths from yellow fever, 1 occurred in the hospital above named and the other in the Espirito Santo district of the city. Plague caused 4 deaths, with a total of 2 new cases reported, and at the end of the week there were 7 cases under treatment at the Paulo Candido Hospital at Jurajuba.

Variola caused 28 deaths, with 75 new cases reported, and at the end of the week there were 105 cases under treatment in Hospital São Sebastião.

There were no deaths from measles, scarlet fever, or dysentery. Whooping cough caused 1 death; diphtheria, 3; grippe, 3; enteric fever, 2; beriberi, 2; leprosy, 1; malarial fevers, 11, and tuberculosis, 45 deaths.

I omitted to state above that of the 4 deaths from plague, 3 occurred in the plague hospital and 1 in the district Santa Anna, in this city.

The weather has been overcast, with slight showers, during the greater portion of the week, and consequently there has been no excessive heat. The highest range of the thermometer was on April 17, 30.7° C., and the lowest on April 14, 19° C., with an average for the week of 22.6° C.

Plague in Antofogasta—Pasteur Institute of Rio de Janeiro.

Plague in Antofogasta, Chile.

April 21, 1904: A dispatch of date of April 19 states that "There were to-day verified in Antofogasta 9 new cases of bubonic plague."

The dispatch is from Santiago. And, also, another dispatch of the same date states that "Doctor Leon, who has recently returned from

Antofogasta, certifies that the disease which is now prevailing there and of which the effects are so terrible and so much felt throughout the city, is really the true bubonic plague."

Pasteur institute of Rio de Janeiro.

In this institute, during the three months ended March 31, 1904, there were 134 admissions for consultation, 65 for treatment; 69 were not admitted to hospital, as they needed no treatment; 54 concluded the treatment, 9 abandoned it, 1 person died, and at the close of the period 17 remained under treatment. All figures are for treatment for hydrophobia. The patient who died did not present himself for treatment until nine days after the death of the dog by which he was bitten.

Public health, State of São Paulo—Improvements in Rio de Janeiro—Dysentery in Pernambuco—Vaccination.

During the week ended April 24, 1904, I inspected and issued bills of health to the following vessel: Steamship *Merchant Prince*, for New York, with a cargo of coffee; no passengers from here of any class, but six first-class from the Rio Plata, and with no change of personnel of the crew while in this port. This was the only vessel leaving here for the United States during the week.

Public health in the State of São Paulo.

"Both yellow fever and bubonic plague made their appearance in some parts of the State, but owing to the measures promptly taken were quickly got under control and did not spread, a significant testimony to the value of our sanitary service and to the zeal with which scientific observation and teaching that reach us from abroad are here assimilated and utilized. Due to this attitude, as soon as the question of transmission of yellow fever was scientifically discussed the sanitary service was able to put into execution all the precautions prescribed by recent discoveries."

The above is from the message of the President of the State of São Paulo to the State legislature, and refers to the past year 1903. From the same message I also inclose that portion bearing on the drainage and water supply of the city of Santos.

Improvements in Rio de Janeiro.

"The work of demolition for the Avenue (Central), is going rapidly on, and the two extremities of it at Prainha and Adjuda are already in ruins. It is easy enough to pull down and destroy. It is the rebuilding that will be tedious and laborious, and we fear that it will be a long time before, with such ambitious plans, the avenue will be rebuilt.

Things are certainly improving, and, with new streets and new avenues, manners, too, are to be reformed and some respect be shown for common decency. The open, offensive sanitary arrangements that disgraced some of the most central parts of the city are disappearing and being replaced by modern, up-to-date constructions that would be a credit anywhere.

A somewhat novel experiment is being made to exterminate the rats

that infest the surface drainage sewers by closing up all the exits and then filling the sewers with sulphurous acid gas from a Clayton apparatus. Hitherto this apparatus had been used only for disinfecting ships, but should this experiment be successful, a far wider scope will be opened."

Outbreak of dysentery in Pernambuco.

The latest press reports from Recife (Pernambuco) say that during the first two weeks of this month there were 276 deaths from dysentery. The total mortality for this period was 588 (almost, indeed, within a few numbers of the mortality in this city during the same period, although the population of Rio is at least three if not almost four times as much as that of Recife), of which number dysentery caused 276, other diseases of the digestive apparatus 63, tuberculosis 46, small-pox 29, and malaria 25.

A dispatch from Recife, of date of April 23, states that "some of the deaths from dysentery here are distinguished by the incredible rapidity with which a fatal termination follows the inception of the disease."

A dispatch dated April 23, from the same city, states that in Pesqueira, a town of the State of Pernambuco, "the sanitary condition is very bad. Typhoid fever and malaria are present, diminishing the population. In addition to these diseases, at this time, many deaths have been caused by famine, according to reliable information. The Gazette de Pesqueira has suspended its publication. The division of hygiene has sent medical aid to this locality."

Plague in Para.

A dispatch dated April 24 states that "bubonic plague still lingers in Para, where deaths from this cause are frequent."

No plague in Porto Alegre.

A dispatch dated April 22 states that "the epidemic of bubonic plague here is considered now extinct."

Vaccination in and around Rio de Janeiro.

During the month of March the personnel of the Municipal Institute for Vaccination visited 668 houses, 206 lodging houses and hotels and other habitations, including 4 schools.

There were made during the month by the vaccination service 1,198 vaccinations, of which 547 were primary ones.

In the institute itself during the month 416 vaccinations were performed.

Two hundred and thirty-four notifications of variola were received during the month, of which number 144 were verified, and of this number (144) 139 had never been vaccinated and the other 5 had not been revaccinated.

To the federal district—the city of Rio de Janeiro—6,812 tubes of vaccine were sent; 4,295 to the department of the director of public health and the federal services; 1,000 to the director of municipal hygiene, and 1,517 to divers physicians and medical institutions.

To the various States of the Republic were sent as follows: Minas Geraes, 1,786 tubes; Rio de Janeiro, 1,206; Rio Grande do Norte, 500; Goyaz, 270; Amazonas, Para, Maranhao, Piauhy, Ceara, Parahyba, Pernambuco, Alagoas, Sergipe, Bahia, Espirito Santo, Parana, Santa Catharina, Matto Grosso, Rio Grande do Sul—to each of these States 100 tubes; and to Sao Paulo, 20; in all, 5,282 tubes of vaccine.

Altogether 12,094 tubes of virus were distributed, and the product from 30 cows used.

Sanitary report of Rio de Janeiro.

During the week ended April 24 there were, in all, 328 deaths. Of this number 5 were caused by yellow fever, with the same number of new cases. * * *

Plague caused only 1 death, with 2 new cases reported, the death occurring in the Santa Rita district of the city. At the close of the week there were but 4 cases under treatment at Jurajuba.

Variola caused 34 deaths, with 58 new cases reported, and at the close of the week Sao Sebastiao Hospital held 104 cases of this disease under treatment.

No deaths were caused by whooping cough, measles, scarlet fever, or dysentery. Diphtheria caused 1 death, grippe 6, typhoid fever 2, beriberi 3 (none from leprosy), malarial fevers 13, and tuberculosis 55.

The weather has been very cool and pleasant, with a total of 5.31 mm. of rainfall during the week.

The highest range of the thermometer was on April 18, 26.2° C., and the lowest on April 24, 18° C.

The average temperature for the week was 20.82° C.

History and treatment of plague in Rio de Janeiro.

The following is received from Acting Assistant Surgeon Stewart, under date of May 1:

I have the honor herewith to forward a few remarks upon the outbreak of bubonic plague in this city during the past few years and up to the present date.

In the first place, what has differentiated this outbreak of plague here—for it can hardly be said to have been really an epidemic in this city at any time since its appearance—from almost all other outbreaks of infectious disease in most localities is the fact that although pronounced to be true bubonic plague by the health authorities of this city and of Brazil, and although quarantine measures have been in force against this locality by the remainder of Brazil and by almost all foreign countries having communication with Brazil, still many foreigners here and also Portuguese residents of the country, true Brazilians, have maintained from the first, and to-day maintain as vigorously as ever, that there never has been at any moment any disease at all resembling in severity bubonic plague in either this city or for the matter of that, in any city of this country.

This sentiment has largely pervaded all the shipping classes, including the captains of the vessels trading here, as well as the shipping firms in this city. To such an extent has this idea pervaded these classes of persons that they absolutely scoff at the mention of bubonic plague, and although obliged by the Brazilian authorities to submit their ships to quarantine measures against plague, they lose no oppor-

tunity, either at this home port or at their ports of call, or, more important still, at their home ports abroad, to state to anyone interested that the whole matter—the existence of a fearful epidemic disease like plague here—is an absolute fraud and imposition upon all concerned.

This, although only a matter of opinion, still is more or less harmful in its ultimate results. Why this should be so of course needs no explanation.

The reasons put forward by these persons are as follows:

1. If, say they, bubonic plague were truly present here the health authorities would be absolutely incapable of handling it so as to confine it to the bounds within which it has been held. It would become a terrible scourge, sweeping throughout the land, killing all before it.

2. The reason for announcing officially an epidemic of plague here is, say these same persons, to create a need for employment of young physicians and medical students as sanitary inspectors and to call into work a large number of persons as assistants to sanitary inspectors, and to create a large revenue from fees from disinfections and increased inspections, etc.

3. Still more to the point, these persons say that were such a disease as bubonic plague really here they would not believe in its presence, with the small mortality rate attendant upon the present outbreak, upon the affirmation of the sanitary department of this city, as they do not believe in its competency to recognize a disease as unusual as bubonic plague.

The refutation of these statements can be very briefly made.

In the first place, the efficiency of the present sanitary department is not fully recognized by either the foreign element here or the resident population.

That it is just beginning to be so is easily perceived when I state that although the present head of the sanitary department of this country has been in place only eight months he has already made very many bitter and implacable enemies. * * * The inhabitants of this city have been for so many years the victims of sanitary inefficiency that they can not all at once realize the change in these conditions that have occurred in the last few years. The sanitary department of this city is excellent in its conception and very good in its efficiency. It is, of course, capable of improvement (what city can not say the same?), but it is very far superior in all respects to what is generally thought of it.

For example, this city is quite as clean to start with and quite as well cleaned and kept so by the various branches of the sanitary department of the government as the cities of Manila, Yokohama, or Nagasaki. This statement I can personally vouch for as being correct, having seen and studied, to a greater or less degree, the sanitary conditions of the places mentioned. Now, if the sanitary authorities of any of these cities announced the existence of a case, or cases, of bubonic plague, and if such cases continued for a space of over three years, it would certainly be an astonishing thing could critics be found who maintained, in the face of official announcements and of the sickness itself, that the government was accidentally mistaken, or, as in this case, was willfully misstating facts.

In these cities when a case of plague does appear, it does not spread with fearful rapidity until the whole extent of the town is a hotbed of

the disease. In olden times it might be so, but since the adoption of proper sanitary precautions and measures the disease is usually confined to small proportions, and why should not this state of affairs be the case here, as it is in fact.

I believe myself that had the plague made its appearance here ten years ago, as well distributed as regards localities as it is at present, the disease would have assumed very alarming proportions, but under the present efficient health department organization the disease has been kept within reasonable bounds, and I think that in a few months it will be exterminated as regards foci of infection in the city itself.

However, as the disease is seated rather firmly in various ports of this Republic, as well as in ports in adjacent countries of South America, I am afraid that it will be some years before sporadic cases, introduced into this city from outside, cease to make their occasional appearance.

The second reason given by those disbelieving in the existence of plague here I will pass over, as it is really a very poor one, since in a country where yellow fever has been endemic, as well as smallpox, for many years, the endemicity as well as the epidemicity being admitted by all and firmly believed in as regards these two diseases, the number of sanitary inspectors and assistants is already so large, and the inspections and quarantine measures are so many and so well provided for by law and by regulations made thereunder that the advent of a new quarantinable disease does not mean the employment and general expenditure of money, or greatly increased revenue for the State either, that would be the case did such a disease appear in a country where no quarantinable diseases existed and where such sanitary service had to be organized *de novo*.

The last objection of the disbelievers, that the physicians of the health department here can not recognize bubonic plague, is, as I have already said, such an insult to the country at large that it should hardly need any refutation.

When one stops to consider the reputation of the Pasteur Institute in this city, and the fact that a large percentage of the physicians composing the highest health authorities of this country are graduates of the most celebrated universities of Europe, and have therefore been students under world-renowned professors and doctors, as well as the fact that the medical schools of this city stand well up among the best as regards personnel of the faculties and professors and as regards methods of teaching and clinical opportunities for the students themselves, I say when one stops to consider all these things—facts which need no proof because they are facts well known—it can be nothing but an insult to say that the bacteriologists and clinicians of this city, one of the largest cities of the world, can not diagnose correctly a case of plague.

And not one case—perhaps that might be more difficult—but over two thousand, with a mortality exceeding 49 per cent of reported cases.

I have gone into detail more than I had intended in the refutation of the ideas prevailing here among the laity, and among some physicians also, as regards the existence of bubonic plague, but it was unavoidable.

Personally, as I wrote you some days ago, having seen cases of plague in Manila, as well as in Nagasaki, I have no hesitation in affirm-

ing that from the clinical pictures and from the histories presented by the five cases of plague seen by me here on April 17 last, at the plague hospital at Jurajuba, those cases were all true cases of bubonic plague.

All cases of quarantinable disease are obliged to be reported to the director of public health as soon as possible after being diagnosed. Although this has been the law here for a number of years, as the fine for nonnotification was—until the passage of the recent health laws—so very small as to be of no importance it was a law more honored in the breach than in its observance. The recent health laws, a copy of which I recently sent your office, has changed all that. The fine is now so heavy that its nonobservance is hardly to be thought of, and it will be, as it already has been, enforced. Upon the notification being received at the office of the director of public health of the existence of a suspicious case of illness, inspectors are at once sent to the locality, one of the inspectors, sometimes more than one, being a physician.

If the case resemble bubonic plague, the person is at once isolated in his house or apartment, such isolation being really isolation and not a play at it, until further medical assurance is had of the real existence of plague in this case. Meantime by the aid of the Pasteur Institute, bacteriological examination of this case is made, and if it prove to be a case of plague the occupants of the house receive antiplague treatment, the antipest serum used being a product of the Pasteur Institute and said to be of very excellent quality. The case being certainly diagnosed as plague, a full injection of serum treatment is given to the patient, this serum being also a product of the Pasteur Institute, and he is placed in the ambulance, and taken to the dock where the litter is placed on the hospital barge, which is then towed across the bay of Rio de Janeiro to Jurajuba, where he is then taken ashore and placed in the hospital.

I wish to place special emphasis on the fact that no one is removed to the plague hospital in whom diagnosis of plague has not been confirmed bacteriologically. This is most important, since the assertion has been made by enemies of the director of public health and the department that persons suffering from ordinary diseases, such as syphilitic and gonorrhœal buboes, have been taken to the plague hospital and there contracted plague.

The hospital barge is a roomy houseboat, with a bed capacity for some eight or more patients, and being built upon a fairly good-sized hull accomplishes the journey, which is some eight miles, and rather rough in stormy weather, with as little discomfort as possible to the sick person or persons.

The Jurajuba plague hospital.

The hospital is situated across the bay from this city, and is a building which has been used for hospital purposes for very many years. Portions of it are very old, but it has been added to from time to time, so that from a rather small hospital building originally it has come to be a building which can, when pushed, accommodate with comfort over two hundred persons. The lower floors are for charity patients, while the second floor is divided partly into private wards and rooms, for which accommodation a very moderate fee is

charged, amounting in our money to less than one dollar and a quarter per diem for private room, nursing, medicines, etc.

The hospital itself is a quadrangle with the front missing, or the letter E with the middle part wanting. In front of the main building are offices and the dispensary. To the north, and on a slightly lower level, are the laundry, containing a very good-sized American laundry plant, complete, and the disinfecting machinery. This consists of a good-sized steam chamber, which I did not measure, but it can not be less than four feet in diameter. Everything in the way of bedding and clothing used by any patient is here disinfected and cleansed after his departure from the hospital. In this respect the disinfection is most thorough, I believe, and the plant fully capable of all demands which the hospital could make upon it.

The kitchens are in the rear of the hospital, and the connections between the hospital and these places are so arranged that the cooks and bakers do not stand any chance of contact with the sick or hospital attendants while handling food.

The largest number of patients that the hospital has ever had at one time was slightly in excess of 180. This was, so I was informed by the doctor who took me over the hospital, some years ago, and although so many plague patients were there at one time, there was no confusion or mismanagement, but, on the contrary, everything went on very smoothly.

The water supply is excellent in quality, coming from the mountains, at the foot of which the hospital is placed, and is most abundant in quantity, a most important factor of course in the proper sanitary management of the hospital.

The sanitary arrangements, water-closets and baths, are of excellent make, and are more than necessary for the moderate number of patients which have lately been received, although not sufficient in number were the hospital filled with patients.

The treatment of patients—apart from such symptomatic treatment as exists in almost all diseases—is exclusively that of the use of serum. This has—and I saw the histories of many cases—been most efficacious. Indeed, the physician to whose courtesy I owe the pleasant treatment which I received during my visit, told me that, taking away from computation those cases arriving in a virtually moribund condition (and there are many such cases) and those who died during the first twenty-four hours after admission, the mortality of the remainder who received the serum treatment was only 13 per cent. This is certainly an excellent result, and speaks well both for the serum itself, as regards its quality, and for the methods of its employment.

Although not a matter of vital importance, I must state that the records of the hospital, as regards the patient's history previous to admission, the clinical histories of the patients while in the hospital, and, in fact, all the records of the hospital, are kept in a most methodical and precise way, so that any information desired in regard to any person at any time an inmate of this hospital can be found in a few moments.

The clinical histories of those sick with plague would form a first-rate basis for a study of this disease, and would repay well anyone desiring to make a study of plague and the use of serum in its treatment.

Speaking then, in a general way, the hospital is well arranged, well

cared for, and fully competent to meet the demands which have been made upon it since the outbreak of bubonic plague here. The treatment of those ill with the disease is also apparently most satisfactory. It is of course unnecessary to state that the hospital is used for the treatment of plague cases only. The corps of attendant physicians number 8, some one or two of whom are always at the hospital during the day hours. At night the care of the cases devolves upon certain medical students in their last-year course of medicine, several of whom live at the hospital and are at all hours upon duty. When visiting the patients in the hospital wards, the physicians and medical students and attendants wear, of course, linen gowns, which are washed out and disinfected after each visit.

During the year 1903 there were 624 certified cases of bubonic plague admitted to the hospital, which, by the way, is known variously by the name of the Jurajuba Hospital, or the Paulo Candido Hospital, or the Plague Hospital.

During this year up to the date of my visit there had been 61 admissions of certified cases.

Through the courtesy of the director of public health of this city I am enabled to furnish your office for the first time with the true figures of bubonic plague in this city during the years 1900, 1901, 1902, 1903, and up to April 24 of the present year. The figures are most interesting and repay study.

The regularity of the increase of plague each year from the month of April to that of October, followed by as striking a decrease from November to March is, I imagine, more or less due to the cool weather prevailing here during the months of May, June, July, August, and September, and the crowding into miserable houses incident thereto. During the hot weather here the poorer people live and sleep much out of doors, and are therefore healthier and less liable to contract disease. That this regular increase and diminishing of plague was not so well marked during the year 1900 may be due to incomplete returns, or possibly to cooler weather coming here earlier in the year in 1900. For the other years, however, I think that the regularity with which the figures increase and diminish each month is worthy of attention.

It will be noted that the figures for the months of this present year are considerably in excess of the figures for the corresponding months of the other years. This in itself does not bear out my prediction of an early cessation of the bubonic plague here.

What I base my prediction on is, however, the increased sanitary vigilance which is now in force, this much exceeding that of any previous years in the history of the Republic.

In addition to the killing of rats which has been increasing since its inception last fall, the disinfection of all the surface-water sewers, which is being daily done throughout the city, will be productive of very excellent results. The thoroughness with which the disinfection of houses and premises where plague cases have occurred is being done, and the thorough inspection of all exposed to cases of plague, and the increase in the number of those who are allowing themselves to be recipients of the antipest serum treatment after exposure to plague, also the new regulations in regard to the bake shops here compelling these places to be so built that they can be absolutely flushed out with water and disinfecting solutions in case of need (the experience here

so far being that such places are especially apt to become foci of plague infection), all these increased sanitary measures, but above all, the thorough and painstaking manner in which the situation is being handled, will, I think and trust, speedily bring about the destruction of all foci of infection in this city and the consequent freedom of the city from the disease.

Before closing this sketch of the situation here, I find I have neglected to state that the very great majority of the cases of plague have occurred among the lower classes of the population, the percentage of foreigners—i. e., not true Brazilians—being about the same as of Portuguese suffering from the illness in question. There has been quite a number of cases of plague among the well-to-do classes, but the real percentage has been very low; I have been informed from a fairly reliable source as low as 2½ per cent.

Still, even this low percentage shows that the disease is not confined to the lower classes, but that the seeds of plague have been widely spread throughout the population, and that it is owing only to the good, conscientious work of the city health departments that it has not become a true plague in every sense of the word.

I know of no case in which a ship leaving here for any foreign port has developed a case of plague on the outward journey, although I have heard of one case of a vessel leaving this city for New York with a crew every member of which was perfectly well the day of inspection here, having one case of suspicious sickness on the way up to New York. However, as the vessel in question passed the quarantine station in New York Harbor without any trouble, I do not imagine that the disease present was bubonic plague. I know of no other case in which there was the slightest cause for suspicion.

This fact speaks well for the disinfection work done in this harbor by the Brazilian authorities, as well as for the work done at Ilha Grande, although in this latter case I must confess that the disinfection of the steamship *Tennyson* at this station which I witnessed in the month of March last was not in any sense a thorough disinfection of the ship or of the dunnage of its crew.

Notifications and deaths from bubonic plague in Rio de Janeiro, January 1, 1900, to April 24, 1904.

	1900.		1901.		1902.		1903.		1904.	
	Notifi- cations.	Deaths.	Notifi- cations.	Deaths.	Notifi- cations.	Deaths.	Notifi- cations.	Deaths.	Notifi- cations.	Deaths.
January			13	9	39	36	30	16	54	22
February		1	8	4	11	2	11	7	30	10
March				1	3		9	6	24	3
April		2			3	1	5	3	a 15	a 5
May	51	15			2		12	5		
June	137	78			1		13	5		
July	129	76	27	9	8		21	7		
August	88	50	20	14	24	7	64	23		
September	27	19	82	24	67	33	111	50		
October	32	21	91	61	114	51	207	87		
November	26	21	89	47	92	43	210	99		
December	23	12	54	30	97	42	99	52		
Total	513	295	384	199	461	215	792	360	123	40

a To April 24, 1904.

Totals by months for the whole period.

	Notifica- tions.	Deaths.
January.....	136	83
February.....	60	24
March.....	36	10
April.....	23	11
May.....	65	20
June.....	151	83
July.....	185	92
August.....	196	94
September.....	287	126
October.....	444	220
November.....	417	210
December.....	273	136
Total.....	2, 273	1, 109

BRITISH HONDURAS.

Report from Belize, fruit port.

Acting Assistant Surgeon Carson reports as follows: Week ended May 12, 1904: Present officially estimated population, 8,500; number of deaths, 7; prevailing diseases, malarial fever and phthisis pulmonalis; general sanitary condition of this port and the surrounding country during the week, fairly good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage.
May 6	Olympia (Br.).....	41	2	29	4
12	Spero (Nor.).....	14	0	0	0

CANADA.

Inspection of immigrants at St. John, New Brunswick.

Acting Assistant Surgeon Stevenson reports as follows: Week ended May 14, 1904: Number of immigrants inspected, 312; number passed, 312; none detained.

Inspection of immigrants at Vancouver, British Columbia.

Acting Assistant Surgeon Riggs reports as follows: Month of April, 1904: Number of immigrants inspected, 18; number passed, 18; none rejected.

CHILE.

Report from Antofagasta—Epidemic of suspect plague.

Consul C. C. Greene reports, April 13, as follows:

For some time past an epidemic disease has given the board of health uneasiness, as it had some characteristics of plague. They reported it, on April 6, plague, but there was a difference of opinion and the port

has not yet been declared infected and closed. The central government has sent an expert, who commenced his work yesterday, to investigate and define the situation, a work likely to require some days.

Steamers bound for northern ports do not call here, as Peru has advised they will not be received at their ports. Steamers for Chilean ports are supposed to call here or at a cove to the windward, whence there is always a strong southerly wind, as also a current. This will keep up supplies, a most important matter, as the district, an absolute desert, produces only minerals of all sorts, and all and everything for the maintenance of man and beast and human industry must be fetched from abroad.

The noncall of the Panama steamers gives considerable delay in transmission of mail matter, as we must, as far as possible, take advantage of intermediate ports.

Vessels loading here for the United States will have their bills of health properly annotated.

CHINA.

Report from Hongkong—Plague and smallpox.

Passed Assistant Surgeon White reports, April 8, as follows:

During the week ended April 2, 1904, 3 fatal cases of plague and 6 cases of smallpox, with 5 deaths therefrom, were reported. In the city of Victoria 398 rats were caught, 6 being plague infected, and in Kowloon 106 were caught, 1 being infected. Plague and variola are increasing, and the colonial board of health has decided to issue handbills to the public urging vaccination. The diseases are, however, confined to the people living in the Chinese section. The Chinese tomb-worshipping festival is being celebrated, so that there is a large but sanitarily unrestricted exodus of worshippers hence to Canton and other places in the interior.

Emigrants recommended for rejection.

Number of emigrants per steamship *China*, recommended, April 5, for rejection: For Honolulu 14, for San Francisco 26.

Report from Shanghai—Smallpox.

Acting Assistant Surgeon Ramson reports, April 14, as follows:

During the week ended April 9, 1904, one bill of health was issued. There were inspected 41 cabin and 11 steerage passengers, together with 159 pieces of baggage, and 11 pieces of steerage passengers' baggage were disinfected. Manifests were viséed for 1,168 pieces of freight.

There were inspected 13 immigrants with 4 rejections on account of trachoma. The rejections were Chinese students traveling steerage to the United States, and it is somewhat difficult to make the officials who have charge of sending these young men to the United States to be educated understand that the restriction enforced applies to all aliens. They seem to feel that it is aimed at the Chinese only, and hence divert some of the intended American students to Europe. This attitude on their part is unfortunate, because there is undoubtedly a

distinct trade advantage in having the younger generation of educated Chinese brought up in American institutions, as foreign schooling seems to instill into the Chinese, among other things, a distinct preference for the products of the country in which he received his education.

The report of the municipal health officer shows for the week: Small-pox, 4 cases and 8 deaths (4 among foreigners); enteric fever, 1 case; diphtheria, 3 deaths; tuberculosis, 30 deaths. Total mortality, 2 foreigners and 120 natives.

No quarantinable disease was reported from outports.

Emigrants recommended for rejection.

Number of emigrants per steamship *China* for San Francisco recommended, April 9, for rejection, 4.

COSTA RICA.

Report from Limon (fruit port).

Acting Assistant Surgeon Goodman reports as follows: Week ended May 14, 1904: Estimated population, 4,000; number of deaths, 6; prevailing diseases, tuberculosis and malarial fever.

Frequent visits to the 3 hospitals and daily inquiries of the practicing physicians here furnish no evidence of any quarantinable disease in or around this port. General sanitary condition of this port and the surrounding country during the week, fair. The heavy rains of the last week have caused overflow of the many water barrels, tanks, and surface pools of water, besides flushing the sewers, which serve also for surface drainage. This destructive influence on the larvæ of the mosquito therein will prove of benefit to the health condition of the town.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
May 8	Satrustegin.....	105	36	77	0
9	Liberia.....	55	51	20	0
10	Admiral Dewey.....	54	8	0	0
12	Mt. Vernon.....	20	0	0	0
13	Greenbriar.....	46	1	0	0
14	Venus.....	35	0	0	0

CUBA.

Report from Cienfuegos.

Acting Assistant Surgeon McMahon reports, May 11, as follows:

Week ended May 7, 1904: Vessels inspected and bills of health issued, 6; crews inspected, 172; passengers inspected, 1. All vessels in good sanitary condition and no sickness on board. No quarantinable disease has arrived at this port during this week. The mortuary report for the city will be forwarded with the report for next week.

Report from Habana—Suspicious case of fever on steamship Monterey from Mexican ports.

Acting Assistant Surgeon Echemendia reports, May 19, as follows: Week ended May 14, 1904: Vessels inspected and issued bills of health, 32; crew of outgoing vessels inspected, 1,043; passengers of outgoing vessels inspected, 455; pieces of freight passed (salted hides), 1,000; number of certificates issued for Mobile and New Orleans, 72.

On board the steamship *Monterey*, which arrived on May 17 from Mexico, there was a cabin passenger in transit for New York with fever of a very suspicious nature. The Cuban quarantine official transferred him to Las Animas Hospital, to have the nature of the fever diagnosed by the commission. It has not yet been decided upon and the case is still under observation.

Mortuary report of Habana for the week ended May 14, 1904.

Disease.	Number of deaths.
Tuberculosis	24
Enteritis	7
Pneumonia.....	6
Bronchitis.....	3
Tetanus	1
Cancer.....	1
Enteric fever.....	1
Meningitis.....	7
Athrepsia.....	1

Total deaths from all causes, 105.

Personal health certificates to be given at Habana only on request of steamship company.

Referring to the correspondence between this Bureau and Acting Assistant Surgeon Echemendia at Habana, Cuba, relative to the issuance of health certificates to passengers from ports infected with yellow fever via Cuban ports to Gulf ports of the United States, in Public Health Report of April 29, 1904, page 798, it was found to be very detrimental to the interests of the steamship lines plying between Habana and the Gulf ports, since passengers for other Southern ports were not required to have these certificates. For these reasons, and on account of the very excellent Cuban quarantine regulations, explained in the correspondence above referred to, the following telegram was sent to the medical officer at Habana:

WASHINGTON, *May 21, 1904.*

Acting Asst. Surg. D. M. ECHEMENDIA, *Habana, Cuba:*

Cease giving personal health certificates, unless specially requested, for each individual case by steamship company.

WYMAN.

Report from Matanzas—Enteric fever and scarlatina—Quarantine of vessel from Tampico.

Acting Assistant Surgeon Nuñez reports, May 16, as follows:

During the week ended May 14, 1904, bills of health were issued to 9 vessels leaving for United States ports.

The American steamship *Niagara* and the British steamship *Rustington*, which arrived in this port, the former from Tampico, via Habana, and the latter from Veracruz, via Sagua la Grande, were held in quarantine while in this harbor as a precautionary measure against yellow fever. Both vessels have left for New York direct, in good sanitary condition.

There have been but two new cases of scarlet fever and one of enteric fever reported during the past week. The scarlet fever epidemic shows a mild type; no deaths have occurred up to the present time, and the health officer expects to have the epidemic stamped out by the strict measures of isolation that are being carried out. The sporadic cases of enteric fever that have been reported of late in different sections of the city have also been the subject of a careful investigation. Specimens of the water supply have been sent to the National Laboratory in Habana for a qualitative analysis, in view of the occurrence of cases so far apart, having no connection with each other, which would indicate a common source of infection, possibly the main water supply.

Mortuary statistics of the city of Matanzas, May 1 to 10, 1904.

Causes of death.	Number of deaths.	Bertillon number.
Tuberculosis	7	27
Enteritis (under 2 years old)	3	105
Bright's disease	1	120
Hepatitis	1	114
Disease of heart (unqualified)	2	79
Enteric fever	1	1
Athrepsia	2	105
Enteritis (above 2 years of age)	2	106
Arterio-sclerosis	1	81
Total	21	.....

Estimated population, 48,000; annual rate of mortality per 1,000, 15.96.

Reports from Santiago weekly and monthly.

Acting Assistant Surgeon Wilson reports, May 10 and 17, as follows:

During the week ended May 7, 1904, bills of health were issued to 3 vessels bound for the United States.

No quarantinable disease has been reported.

Mortuary statistics for the week ended May 7, 1904.

Causes of death.	Number.	Bertillon number.
Malarial fever	1	4
Pernicious fever	1	4
Tubercle of lungs	1	27
Tubercle of intestines	1	29
Sarcoma	1	45
Anæmia	1	54
Tetanus, puerperal	1	72
Bulbar anæmia	1	74b
Organic heart disease	1	79
Pneumonia	1	93
Gastro-enteritis, over 2 years	1	106
Legal executions	4	176
Total	15	.....

Annual rate of mortality for the week, 17.14 per 1,000. Estimated population, 45,500.

Week ended May 14, 1904. Bill of health issued to 1 vessel bound for the United States. No quarantinable disease has been reported.

Mortuary report for the week ended May 14, 1904.

Causes of death.	Number.	Bertillon number.
Pernicious fever	1	4
Remittent fever	3	4
Grippe-pneumonia	1	10
Tubercule of lungs	2	27
Tubercule of bones	1	33
Cancer of liver	1	40
Myelitis	1	63
Hemorrhage of the bulb	1	64
Organic heart disease	2	79
Broncho-pneumonia	1	92
Pyothorax	1	94
Gastro-enteritis (under 2 years)	1	105
Enteritis, chronic	2	105 a
Gastro-enteritis (2 years and over)	2	106
Peritonitis	1	116
Total	21	

Annual rate of mortality for the week, 24 per 1,000; estimated population, 45,500.

Report for the month of April, 1904.

Bills of health issued	19
Crews	647
Passengers	147
Deaths from yellow fever	0
Deaths from other contagious diseases	0
Deaths from all causes (stillbirths not counted)	71
Cases of quarantinable diseases reported in city	0
Cases of other contagious diseases reported in city (measles, 4; diphtheria, 3) ..	7

ECUADOR.

Report from Guayaquil—Yellow fever—Mortality during April, 1904.

Acting Assistant Surgeon Gruver reports, May 6, as follows:

Week ended May 4, 1904. Present officially estimated population, 60,000. Total deaths from all causes, 56, as follows: Yellow fever, 5; tuberculosis, 7; pernicious fever, 7; enteric diseases, 9; fevers without classification, 6; from all other causes, 22.

During the month of April there were 265 (53 per 1,000) deaths from all causes, of which 32 were from yellow fever and 23 from tuberculosis. For the same month (April), 1903, there were 313 deaths from all causes, of which 4 were from yellow fever and 47 from tuberculosis.

The agent for the steamship lines running to Panama has notified this office that he has received instructions to apply in the future to the United States consul-general for bills of health for all vessels clearing from here for that port.

GERMANY.

Report from Berlin—Plague and cholera in various countries.

Consul-General Mason reports, May 9, as follows:

Plague.

British South Africa.—In Cape Colony no fresh cases of plague had occurred up to April 2, although plague-infected rats continue to

be found in Port Elizabeth and in East London. In Johannesburg, up to the 1st of April, the total number of plague deaths amounted to 58.

Cholera.

Persia.—According to a report dated April 11, the total number of deaths from cholera in Kermanschah since the end of March amounted to 20. Quarantine against the Turkish frontier is now being more strictly enforced.

Death rate of Berlin and other cities.

The death rate of Berlin for the week ended April 23 was lower than that of the preceding week, amounting, calculated on the year, to 14.7 per thousand of the population, thus being also lower than the corresponding week of last year, in which it amounted to 15.8 per thousand. Two-thirds of the large German towns and cities showed less favorable figures than Berlin, the following places having a considerably higher death rate than that of this city, viz: Hamburg, Dresden, Frankfort-on-the-Main, Brunswick, Munich, Nuremberg, Halle, Magdeburg, Breslau, Rixdorf (with 19 per 1,000), as well as London, Paris, and Vienna. On the other hand, the following cities showed more favorable rates, namely: Leipsic, Hanover, Schöneberg (with 13 per 1,000), and Charlottenburg (with 12.7). As compared with the preceding week, there was but a slight difference in the number of deaths among children in the first year of life, but there was a noteworthy decrease in the number of deaths among the higher age classes. The infant death rate, amounting to 4.1 per year and mille, was only half as high as that of Munich, but somewhat higher than the Hamburg figure. There was a slight increase in the number of cases of acute intestinal disease, which caused 41 deaths, while acute diseases of the respiratory organs showed a considerable decrease, claiming 56 victims. Furthermore, there were registered 81 deaths from phthisis pulmonalis, 45 deaths from cancer, 2 deaths from influenza, 6 deaths from diphtheria, 9 deaths from measles, 9 deaths from scarlet fever, 7 deaths from typhus, and, finally, 9 persons died by violence.

GUATEMALA.

Report from Livingston, fruit port.

Acting Assistant Surgeon Peters reports as follows: Week ended May 9, 1904: Present officially estimated population, 3,500; number of deaths, 2; prevailing diseases, malarial; general sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
May 3	Belize	17	.....	2	.....
3	Olympia	40	13	.....	.....

The steamship Olympia cleared from Puerto Barrias.

HONDURAS.

Report from Ceiba, fruit port.

Acting Assistant Surgeon Robertson reports as follows: Week ended May 14, 1904. Present officially estimated population about 4,000; 1 death. Prevailing diseases, malarial, mild type. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage inspected.
May 8	Rosina.....	29	0	0	0
9	Managua.....	16	3	0	20
14	Origen.....	23	1	0	1

Report from Puerto Cortez, fruit port.

Acting Assistant Surgeon Carter reports as follows: Week ended May 10, 1904. Present officially estimated population, 2,125; no deaths; prevailing disease, malarial fever of mild type. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
May 5	Olympia.....	41	16	14	0
5	Manauga.....	16	0	0	0
6	Bratten.....	15	0	0	0
8	Helen.....	21	5	0	0

Number aliens sailing from this port during the week, 10.

INDIA.

Report from Bombay—Plague mortality.

Acting Asst. Surg. Edward H. Hume reports, April 30, as follows: Week ended April 30: The plague mortality has decreased wonderfully.

	Plague attacks.	Plague deaths.	Mortality from plague.
Week of April 5	1,281	1,135	76.05
Week of April 12	945	811	54.34
Week of April 19	728	633	42.41
Week of April 26 .....	.....	532	35.64

During the week ended April 26 there were 23 deaths from small-pox, 1 from cholera, none from typhus or yellow fever. Total mortality, 1,066, with a rate of 71.43 per 1,000 per year.

Report from Calcutta.

Passed Assistant Surgeon Sprague reports, April 28, as follows:

I have the honor to report that during the week ended April 23, 1904, bill of health was issued to steamship *Nuenfels*, bound for Boston and New York, with a total crew of 64. The effects of 38 Lascars were disinfected, and the usual precautions were taken to kill rats and later prevent their entrance into ship.

Decline in plague.

During the week ended April 23, 1904, the number of deaths from plague fell to 440, and the last daily report obtainable showed 35 deaths. The decline is progressing with little, if any, interruption. While the number of deaths from cholera has fallen to 102, the disease is still considered epidemic. It is, however, confined to the native population.

ITALY.

Report from Naples—Inspection of vessels—Bovine plague in Egypt—Plague in the Transvaal.

Passed Assistant Surgeon Eager reports, May 9, as follows: During the week ended May 7, 1904, the following ships were inspected at Naples and Palermo:

NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of large baggage inspected and passed.	Pieces of baggage disinfected.	Number of steerage passengers recommended for rejection.
May 1	Palatia.....	New York.....	1,661	300	1,479	14
2	Il Piemonte.....	do.....	538	45	715	12
4	Citta di Napoli.....	do.....	899	120	1,125	37
5	Patria.....	do.....	555	75	840	9
6	Grosser Kurfurst.....	do.....				
6	König Albert.....	do.....	1,425	200	1,766	11

Bovine plague in Egypt.

In addition to bubonic plague it is reported that bovine plague is very widespread in Egypt. Severe precautionary measures are being taken, but owing to the nomadic character of the population the results, it is said, are unsatisfactory as far as the cattle disease is concerned. According to reports Egypt is also menaced this year with an invasion of locusts. In certain districts the government has ordered the destruction of the eggs left by the clouds of these insects that have already made their visitation. Under the direction of experts sent out by the ministry of the interior almost the entire population of some sections of Egypt is engaged in destroying the eggs.

Bubonic plague in Transvaal.

Telegraphic reports from Johannesburg state that 2 cases of bubonic plague were verified May 5 in the center of the city. The central market of Johannesburg has been quarantined.

JAPAN.

Reports from Yokohama—Inspection of vessels—Smallpox in Japan—Plague in Formosa.

Assistant Surgeon Moore reports, April 16, as follows:

During the week ended April 9, 1904, three steamers, having an aggregate personnel of 302 crew and 461 passengers, were inspected; 18 crew and 329 steerage passengers were bathed and 404 pieces of baggage were disinfected.

For the above period infectious diseases were reported in Yokohama, as follows: Diphtheria, 1 case, no deaths; dysentery, 3 cases, no deaths. No cases of cholera or plague have been reported to me as originating in Japan proper (excluding Formosa) during the present year.

Plague is quite prevalent in Formosa. Since the beginning of the present year to April 10, 1904, 966 cases, with 654 deaths, have been reported, showing a considerable increase as compared with a corresponding period of 1903.

Smallpox is reported from several localities in southern Japan. The disease is said to have attained almost epidemic proportions in Nagasaki, where more than 300 cases have occurred. A few cases of smallpox are reported from Moji, an important coaling port, and Sasebo, the site of a naval station. Doubtless the Japanese sanitary officials will soon be able to check this infection, which was originally imported from Vladivostok.

A severe outbreak of smallpox has occurred in Liao-yang, an important strategic point in China, held by the Russian army. Press reports put the number of new cases at 300 daily, but do not clearly specify whether this includes cases occurring among the civilian population. In any case it seems probable that infectious diseases will play a not unimportant rôle in the present war. It is stated that the Japanese authorities are adopting extraordinary measures for securing the best possible sanitary condition of the troops.

Stress has been laid upon the fact that both Japanese and Russians find in tea their habitual beverage, and that this circumstance should militate against the spread of infections which gain entrance into the human organism through the alimentary tract. Certainly, from an American standpoint, very little plain water is imbibed by the average Japanese.

During the week ended April 16, 1904, 6 vessels were inspected, 367 steerage passengers were bathed, and 514 pieces of baggage were disinfected.

No report of contagious disease has been received for the above period.

Emigrants recommended for rejection.

Number of emigrants per steamship *China* recommended, April 16, for rejection: For Honolulu, 8; for San Francisco, 6.

MEXICO.

Reports from Progreso and Merida—Inspection of vessels—Yellow fever.

Acting Assistant Surgeon Harrison reports as follows: Week ended April 30, 1904. Present officially estimated population, 8,000; 1 case

of yellow fever during the week; no deaths; number of deaths from other causes during the week, 5.

The port and surrounding country show fair sanitary condition. In Merida there are several cases of yellow fever or suspected yellow fever, and there were several deaths from the fever during the past two weeks.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Destination.	Crew.	Passengers from Progreso.	In transit.
Apr. 23	Esperanza	New York via Habana	95	80	74
24	Galveston	Galveston, Tex.	25	3	0
26	Susie B. Dantzier	Pascagoula	7	0	0
30	Horda	Boston	25	0	0

Week ended May 8, 1904. One case of yellow fever; deaths from other causes, 6. General sanitary condition of this port and the surrounding country during the week fairly good. In Merida several cases of yellow fever and 1 death are reported.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Destination.	Crew.	Passengers from Progreso.	In transit.
May 1	Frontera	Mobile	25	.....	.....
2	Vigilancia	New York	79	45	56
4	Telefon	Mobile	23	2	.....
4	Tjomo	New York, via Campeche	17	.....	.....
7	Louisianian ^a	New Orleans	44	.....	2
8	Havana	New York	98	70	67

^aFumigated.

Report from Veracruz—Yellow fever case, imported.

Passed Assistant Surgeon Lumsden reports, May 16, as follows:

During the week ended May 14, 1904, 5 vessels leaving Veracruz for ports in the United States were inspected and given bills of health. During the week there were recorded in the city of Veracruz 33 deaths (52.8 per 1,000 annual death rate) from all causes, including 5 from tuberculosis.

A case of yellow fever was reported on May 8. The case was in the person of an employee of the Vera Cruz and Pacific Railroad, who was brought here from Boca del Rio after his illness had begun. I am informed by the city health officer of Vera Cruz that the man had been living at Boca del Rio continuously for several months prior to the beginning of his illness, and it is thought probable that he became infected while engaged in cleaning railroad cars coming from points south of Boca del Rio.

No other cases have been reported in Boca del Rio by the sanitary officials who a few days ago went from here to investigate the situation at that place.

Boca del Rio has a population of about 800, and is located on the Vera Cruz and Pacific Railroad, about 5 miles south of Vera Cruz.

There have been several fairly heavy rains here during the past week.

Suspect yellow fever in Coatzacoalcos.

MEXICO, May 19, 1904.

WYMAN, Washington:

Four cases suspect yellow fever in Coatzacoalcos.

LICEAGA.

Suspect yellow fever case at De Valles not confirmed.

MEXICO, May 22, 1904.

WYMAN, Washington:

The case at De Valles telegraphed you not confirmed.

LICEAGA.

[See page 1006, P. H. R., May 20, 1904.]

Suspect yellow fever in Yucatan.

MEXICO, May 24, 1904.

WYMAN, Washington:

Eight suspect cases yellow fever present in Yucatan.

LICEAGA.

Yellow fever cases from vicinity of Talleres.

TAMPICO, MEXICO, May 24, 1904.

WYMAN, Washington:

Two more cases yellow fever from vicinity of Talleres in hospital Mexico Central Railroad, and well screened.

McCLINTIC.

NICARAGUA.

Report from Bluefields, fruit port.

Acting Assistant Surgeon Reilley reports as follows: Week ended May 7, 1904. Present officially estimated population, 4,000; 1 death; prevailing diseases, dysentery, malarial fever, and tuberculosis. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
May 3	John Wilson.....	19	6	0	0
6	Banan.....	17	0	0	0
8	Condor.....	15	1	0	0

PANAMA.

Report from Colon—Inspection of vessels.

Surgeon Perry reports, May 9, as follows:

Week ended May 7, 1904: British steamship *Fyan* for New Orleans, May 3, with 44 crew and 41 passengers; United States collier *Lebanon*

for Norfolk, Va., May 4, with 32 crew and 4 passengers; American steamship *Seguranca* for New York, May 4, with 68 crew and 118 passengers.

Report from Panama—Inspection of vessel—Mortality.

Assistant Surgeon Pierce reports, May 10, as follows:

During the week ended May 9, 1904, 2 bills of health were issued to steamers of the Pacific Mail Steamship Company bound for San Francisco. The *City of Peking*, bound direct and without passengers, was not inspected, as the vessel was never at the wharf in Panama and it was not convenient to visit her. The *City of Sydney* carried a crew of 78; cabin passengers, 20; steerage passengers, 8; total, 106; all well. Both bills of health were issued on May 4.

During the week the following deaths were reported from all causes, none of which was from quarantinable disease: Beriberi, 2; colic, 1; drowned, 1; dysentery, 2; entero-colitis, 1; fever, 1; gangrene, 1; hypertrophy of the heart, 1; killed by the train, 1; malarial anæmia, 1; pneumonia, 2; spasm, 1; tuberculosis, 1.

Probable occurrence of plague on steamship Limari.

Assistant Surgeon Pierce forwards the following copy of a letter addressed by him May 7 to the inspector-general of public health, Republic of Panama:

Referring to my letter dated May 6 relative to the case of plague that is said to have occurred on board the steamship *Limari*, I have to supplement the same by quoting as below from a letter received by me this morning from Doctor Lloyd, stationed at Callao, which letter bears the date of April 25, 1904.

I have the honor to inform you that plague is now present in Callao to a slight extent, but is much more prevalent in Lima, 8 miles distant from Callao. There are about 50 cases of plague under treatment in Lima to-day. Perhaps there have been 200 or more cases in Lima since the beginning of this epidemic.

I have further to state that rats were dying on the steamship *Limari* before we reached Callao, and that smears made from the spleens of two of these animals, stained with thyonin, showed organisms morphologically identical with bacillus pestis. It has been reported here that a case of plague occurred on this vessel after her departure for the south, but I do not know if this is true.

As the above proves that the rats aboard undoubtedly had plague, it is not improbable that a case of plague should have occurred, but as it was after the vessel left Callao, Dr. Lloyd had no opportunity of confirming the diagnosis.

Decree relative to regulations established by officers of the Service stationed at certain foreign ports.

Representations having been made to the Panama Government, through the State Department, that to insure the efficiency of the inspection of vessels sailing from infected foreign ports where officers of the Service are stationed, to Panama ports, the certificate and bills of health of the officers of this Service stationed at these ports should be demanded upon arrival of the vessels at the ports of Panama, the

Republic of Panama issued the following decree which was forwarded by Assistant Surgeon Pierce under date of May 4:

DECREE NUMBER 8 OF 1904.

April 30, 1904.

By which is dictated a regulation for the sanitary service.

The President of the Republic, by the power vested in him and in consideration of a request made to him by the national board of health in letter number 532, dated April 22, 1904, hereby decrees:

ARTICLE I.

In order that vessels be received in the port of Panama, coming from Peruvian or intermediate ports, it is required that the bills of health of such vessels shall be viséd by the medical officer of the United States Public Health and Marine-Hospital Service in those ports that have such officers attached to the United States consul's office, as is the case at Guayaquil.

ARTICLE 2.

The agents of the Pacific Steam Navigation Company and of the Company of South American Steamers are obliged to give strict compliance to the regulations dictated or that shall be dictated in the future, by the medical officers of the above-named service, in reference to those steamers of either company that are despatched to Panama.

Communicate and publish this law.

MANUEL AMADOR GUERRA,
M. QUINTERO V.,
Secretary of Public Works.

PANAMA, *April 30, 1904.*

PERU.

Report from Callao—Rat infection on vessels.

Assistant Surgeon Lloyd reports, April 29, as follows:

Accurate information concerning the plague situation in places other than Lima and Callao is somewhat difficult to obtain until after this information has become general. Eight new cases were reported in Antofagasta yesterday. Plague is said to be present in all the districts of Antofagasta. The presence of plague in Iquique has already been reported by Acting Assistant Surgeon Gruver, and I have had no reports since the date of his telegram to the Bureau. In Peru the ports of Mollendo, Pacasmayo, Callao, and the town of San Pedro are officially declared free from plague.

The prevailing belief here is that though Lima, which is seven or eight miles from Callao, is infected, there is no focus of infection in Callao. I can not accept this view of the situation. With regard to Pacasmayo, I am inclined to admit the possibility, and even the probability, of its being free from plague. As I have had no opportunity to visit Mollendo, I can not express a personal opinion, but as this is

a small town we would not expect plague to linger as it does in large cities.

Plague has recently been reported in Chosica, which is 30 miles inland from Callao. Since my arrival in Callao (12 days) we have had new cases of plague in Lima every day except two, generally one or two cases, at the most four. The largest number of cases reported in any one day since the advent of plague in Lima is 12. There have been reported 2 cases in Callao within the last two weeks, one of which is said to have come from Lima, and the other is reported to have been infected on the *Limari*, though the company's agents deny that the man had worked on board this vessel. The man himself, I am informed, stated that he had been working aboard on her recent voyage. The Peruvian authorities are disinfecting all baggage going to the interior or leaving Callao for other ports. This is done in a partial vacuum chamber, with formaldehyde.

Other methods for combating the disease, such as isolation, observation, disinfection, the killing and trapping of rats and mice, the killing of guinea pigs, which many of the poorer classes raise in their houses in considerable quantities, inspection, and general sanitation, are being used. The use of Yersin serum as a curative agent is meeting with gratifying results. Doctor Bifi, the Italian expert, informs me that he has seen pigs (swine) suffering from plague. He has not yet observed the infection in cats or dogs. Nothing is being done by the Peruvian authorities as yet toward the disinfection of the holds of vessels pending the arrival of the Clayton apparatus. A maritime quarantine station is to be erected in Callao. I do not believe that anyone knows just what port on the west coast of South America was first infected, when it was infected, or whence the infection came.

I do believe that the infection has been carried up and down this coast by infected rats on merchant vessels for an indefinite period—certainly for more than one year—and I regard this as the most important statement contained in this report. In nearly all of the South American ports cargo is lightered; the vessel does not lie at a dock. Callao is an exception, and I believe Valparaiso as well. I doubt if there is great danger of rats being lightered aboard in small towns, but it might happen. That they are lightered ashore at such places is a matter of common occurrence.

Vessels lying at dock and handling large cargoes are liable to take rats aboard in the cargo even though her lines are protected with rat guards. The utmost vigilance is required to keep all shore lines guarded. Only yesterday I saw a vessel (destined, I believe, for an Australian port) lying at the dock with rat guards on some of her lines and not on others. Masters of vessels in this port tell me it is impossible to lie 8 feet from the dock, and they prefer disinfection after docking to the alternative of attempting this. Just now this is of no great importance, as I regard all vessels from Chilean ports as liable to be infected, and they are not being disinfected by the local authorities.

Plague at Lima.

The following is received from Minister Dudley under date of April 15:

The epidemic of plague at Lima continues about as heretofore described. On April 10 there were 11 new cases, and the next day 9, but, with the exception of two days, the daily average has been about 3.

The percentage of mortality among those removed to the lazaretto, as all attacked by the disease are intended to be, is undoubtedly high. This is shown by the following figures from the official source, covering the period from the 6th of October last up to this morning:

Number of bubonic patients admitted to Lima lazaretto from October 6, 1903, to 12 p. m. April 14, 1904.....	125
<hr/>	
Of whom there were discharged as cured	33
Died	42
Remain in lazaretto	50
<hr/>	
	125
<hr/>	
Of the last-mentioned there are in extremely critical condition	2
In critical condition	16
Better	17
Convalescent.....	15
<hr/>	
	50

It is observable that very many of the cases do not find their way to the lazaretto or receive proper medical treatment until the patient is almost in extremis. Thus, of the 42 deaths above mentioned, 14 occurred within forty-eight hours after the admission of the patient to the lazaretto. It may be added that those attacked, with few exceptions, are of the lower classes, living, as a rule, in filthy neighborhoods.

It is stated that the number of lazaretto buildings of Lima is to be increased as rapidly as possible from six, the present number, to fourteen.

I believe that still no cases exist at Callao or at any place in Peru other than the capital and its vicinity. There have been instances of persons stricken here with the plague who have fled, impelled by fear of the lazaretto, which, in justice to the municipal authorities, it should be added, appears to be well conducted. Of these fugitives, one was overtaken by death at Matucana, and another met the same fate upon reaching Oroya, both points on the Central (Transcontinental) Railway. Two others died suddenly, soon after reaching Callao, in principal streets of that town.

Notwithstanding the occurrence of sensational episodes of the kind mentioned, the average daily number of new cases being really very small and the community now grown accustomed to the presence of the disease, the situation has ceased to inspire the genuine alarm that was originally prevalent. Some are now heard saying that the visitation is a disguised blessing in view of the cleaning which the ancient city is receiving. It seems to me that so far there has been no sanitary improvement so radical as to be permanent. Houses have been cleaned and accumulations dangerous to health and life removed, but the habitations of poverty in the packed callejones are destitute of the most elemental necessaries for hygienic living. The principal labor in this instance would be to overcome the selfish opposition of the owners, usually men of influence and respectable position, but too blinded by pecuniary interest to recognize their duty to humanity.

PHILIPPINE ISLANDS.

Report from Manila—Quarantinable diseases—Cholera disappearing from the islands.^a

Chief Quarantine Officer Heiser reports, April 8, as follows:

During the week ended April 2, 1904, the quarantinable diseases reported in Manila were as follows:

	Cases.	Deaths.
Cholera.....	0	0
Smallpox.....	1	0
Plague.....	1	0

No report of cholera occurring in the provinces of the Philippines has been received since March 4, 1904. While there may be a few scattered cases of the disease in the island, it is believed that it has almost disappeared.

No vessels cleared for the United States or its dependencies during the week.

Report from Cebu—Quarantinable diseases, March, 1904.

Assistant Surgeon Carroll Fox reports, April 9, through Chief Quarantine Officer Heiser, as follows:

There were reported to the local health authorities during the month of March, 1904, the following cases of quarantinable diseases: Plague, 3, with 3 deaths; smallpox, 1, with 1 death.

PORTO RICO.

Report from San Juan—Quarantine transactions, April, 1904—Vital statistics.

Chief Quarantine Officer King reports, May 12, as follows:

Vessels issued bills of health, 30; vessels inspected, 21; vessels held in quarantine, 3; persons detained in quarantine at Miraflores, 8; pieces of baggage disinfected, 580.

The baggage disinfected was the dunnage of the apprentice boys of the U. S. training ship *Monongahela*, on account of an outbreak of diphtheria among the boys of that ship. This disinfection was done at the request of the naval authorities at this port.

The Red "D" Line steamships *Philadelphia* and *Caracas*, which arrived at this port on April 6 and 20, respectively, were held in quarantine during their stay, and permitted to transact business under guard. Both vessels were from ports of Venezuela. The former brought 5 nonimmune passengers for this port, and they were held under observation at Miraflores, as were also 3 nonimmunes from the Spanish steamship *Leon XIII*, which called at this place on April 3,

^aReceived out of date. For report for week ended April 9, 1904, see Public Health Reports, May 20, 1904.

from Habana, Port Limon, Colon, Barranquilla, Curaçao, Puerto Cabello, La Guayra, and Ponce.

Vital statistics for month of April, 1904, of San Juan.

Tuberculosis	17	Old age	4
Nephritis, chronic.....	1	Cancer	2
Enteritis, chronic.....	2	Pyæmia	1
Asystolia, cardiac.....	2	Softening of brain	1
Pulmonary congestion	1	Sclerosis, spinal	1
Spasm of glottis	1	Apoplexy of brain.....	1
Gastro-enteritis	7	Dilatation of heart.....	1
Syphilis	1	Internal hemorrhage.....	1
Endo-aortitis.....	1	Insufficiency, cardiac.....	3
Anæmia	3	Paralysis, progressive.....	1
Insufficiency, aortic.....	1		
Meningitis	1	Total	73
Athrepsia	2		
Pneumonia	3	Stillborn.....	11
Tetanus.....	4		
Rickets	3	April, 1904:	
Broncho-pneumonia.....	2	Births	72
Gunshot wound	1	Deaths	73
Wound of neck	1	Stillborn.....	11
Cirrhosis of liver.....	1	April, 1903:	
Intestinal obstruction.....	1	Births	75
Aneurism of abdominal organs	1	Deaths	81

During the month of April, 1904, there were under treatment in San Juan 39 cases of smallpox—very mild form. Thirty-three of this number were discharged cured during the month.

Summary of the transactions at the six subports.

Vessels inspected at Mayaguez, 5; Arecibo, 2; Humacao, 4; Fajardo, 3; Aguadilla, 0; and Arroyo, 0.

The vital statistics for the month were as follows: Mayaguez, births 76, deaths 90, 6 of which were from typhoid fever; Arecibo, births 102, deaths 67; Aguadilla, births 25, deaths 40; Fajardo, births 72, deaths 39; Arroyo, births 1, deaths 5; Humacao, births 77, deaths 39.

Report from Ponce—Summary of transactions April, 1904.

Acting Assistant Surgeon Torres reports, May 2 and 12, through chief and acting chief quarantine officer, as follows:

Summary of transactions of Service during the month of April, 1904.

Vessels inspected.....	14
Bills of health issued	24
Passengers inspected (in transit)	498
Passengers inspected (incoming)	67
Crew inspected.....	656
Vessels in quarantine.....	4
Immigrants inspected	40
Rejections	1
Number of passengers detained in quarantine	0
Number of pieces of baggage disinfected	0

Number and causes of deaths in Ponce jurisdiction (city, playa, and surrounding county) during the month of April, 1904.

Diseases of—		Diseases of—	
Digestive system	33	Alcoholism	1
Nervous system	4	Convulsions	5
Circulatory system	6	Syphilis	1
Respiratory system	18	Tuberculosis	9
Malarial fever	10	Without official data.....	10
Hydroemia	3		
Anæmia, inanition.....	13	Total	136
Nephritis	2		
Old age	2	April, 1903:	
Metritis	4	Deaths	136
Rachitis	1	Births	163
Accidents	1	April, 1904:	
Puerperal fever.....	4	Deaths	136
Congenital malformation.....	5	Births	117
Cancer	4		

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

BRAZIL—Pernambuco.—Two weeks ended April 15, 1904. Estimated population, 200,000. Total number of deaths 588, including enteric fever 3, whooping cough 2, smallpox 29, and 46 from tuberculosis.

FORMOSA.—Ten days ended April 9, 1904. Estimated population, 2,797,543. Total number of deaths not reported. One hundred and sixty-seven deaths from plague reported.

FRANCE—Roubaix.—Month of April, 1904. Estimated population, 124,660. Total number of deaths 229, including diphtheria 1, enteric fever 3, measles 23, scarlet fever 1, and 2 from whooping cough.

GREAT BRITAIN—England and Wales.—The deaths registered in 76 great towns in England and Wales during the week ended April 30, 1904, correspond to an annual rate of 16.3 per 1,000 of the aggregate population, which is estimated at 15,271,287.

London.—One thousand three hundred and ninety-two deaths were registered during the week, including measles 66, scarlet fever 10, diphtheria 14, whooping cough 42, enteric fever 3, smallpox 3, and diarrhea 15. The deaths from all causes correspond to an annual rate of 15.6 per 1,000. In Greater London 1,896 deaths were registered. In the "outer ring" the deaths included 4 from diphtheria, 6 from measles, 1 from scarlet fever, and 5 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended April 30, 1904, in the 21 principal town districts of Ireland was 20.1 per 1,000 of the population, which is estimated at 1,093,289. The lowest rate was recorded in Tralee, viz, 5.3, and the highest in Clonmel, viz, 35.9 per 1,000. In Dublin and suburbs 158 deaths were registered, including diphtheria 1, enteric fever 1, measles 2, whooping cough 3, and 33 from tuberculosis.

Scotland.—The deaths registered in 8 principal towns during the week ended April 30, 1904, correspond to an annual rate of 20 per

1,000 of the population, which is estimated at 1,726,236. The lowest rate of mortality was recorded in Greenock, viz, 17.2, and the highest in Dundee, viz, 24.3 per 1,000. The aggregate number of deaths registered from all causes was 663, including diphtheria 7, measles 19, scarlet fever 3, smallpox 3, and 22 from whooping cough.

JAPAN—*Nagasaki*.—Ten days ended April 10, 1904. Estimated population, 148,883. Total number of deaths not reported. Three deaths from smallpox reported.

Ten days ended April 20, 1904. One death from diphtheria and 40 deaths from smallpox reported.

PORTO RICO.—Month of March, 1904. Census population, 953,243. Total number of deaths, 1,852, including diphtheria 1, enteric fever 17, and 167 from tuberculosis.

SPAIN—*Barcelona*.—Ten days ended April 30, 1904. Estimated population, 600,000. Total number of deaths, 240, including diphtheria 2, enteric fever 5, measles 6, whooping cough 1, smallpox 9, and 22 from tuberculosis.

Cholera, yellow fever, plague, and smallpox, December 26, 1903, to May 27, 1904.

[Reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from United States consuls through the Department of State and from other sources.]

[For reports received from June 27, 1903, to December 25, 1903, see PUBLIC HEALTH REPORTS for December 25, 1903.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Afghanistan:				
Herat.....	Dec. 12.....	.....	.....	Present.
China:				
Shanghai.....	Dec. 18.....	1	.....	On Br. ss. Olivebank.
India:				
Bombay.....	Dec. 9-Mar. 26	.....	3	
Calcutta.....	Nov. 15-Apr. 9	.....	449	
Karachi.....	Feb. 22-Mar. 27	3	2	
Madras.....	Nov. 14-Apr. 22	.....	57	
Japan:				
Nagasaki.....	Nov. 21-30.....	.....	1	
Philippine Islands:				
Manila.....	Oct. 31-Mar. 5	51	47	
Provinces.....	Oct. 31-Mar. 12	1,677	1,354	
Straits Settlements:				
Singapore.....	Nov. 8-Dec. 19	.....	12	
Turkey:				
Bagdad—				
Bagdad.....	Mar. 8-Apr. 6	36	23	
Hit.....	Dec. 13-15	8	4	
Kerbela.....	Dec. 12-Jan. 12	.....	463	
Mossul.....	Dec. 21-Jan. 4	1	1	
Musseleb.....	Dec. 17-Jan. 4	48	35	
Bassorah—				
Basra.....	Feb. 6-Apr. 10	150	131	
Beirut—				
Latakieh.....	Dec. 21-Jan. 4	11	7	
Diarbekir—				
Diarbekir.....	Dec. 12-Jan. 9	64	44	
Syria.....	Nov. 29-Dec. 5	.....	.....	Present.

YELLOW FEVER.

Africa:				
Ivory Coast, Grand Bassam	Dec. 12.....	.....	.....	Present.
Brazil:				
Rio de Janeiro.....	Nov. 23-Apr. 17	68	21	
Colombia:				
Barranquilla.....	Mar. 28-Apr. 17	.....	2	
Cartagena.....	Nov. 23-Mar. 20	.....	2	

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

YELLOW FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Costa Rica:				
Alajuela.....	Apr. 19-24.....	11	6	
Cuba:				
Vicinity of Niquero	Feb. 6-13.....	.....	6	From the Nor. bk. Eugen from Cardiff and La Guaira, wrecked on south coast of Cuba.
Sagua	Apr. 9.....	1	.....	From Br. ss. Wildercroft from Vera Cruz.
Ecuador:				
Guayaquil.....	Dec. 6-May 4 .....	.....	52	
Jamaica:				
Kingston.....	Dec. 27-Jan. 9	2	2	
Mexico:				
Ciudad Victoria.....	Dec. 6-19.....	4	2	
Merida.....	Dec. 6-Apr. 30	26	13	
Progreso.....	Apr. 28-May 5	2	.....
Salina Cruz.....	Apr. 3-9.....	1	1	
Talleres.....	May 11.....	1	.....
Tampico.....	May 14.....	1	.....
Tehuantepec.....	Dec. 6-May 11	8	5	
Vera Cruz.....	Dec. 13-May 14	20	6	One case imported from Boca del Rio.
Panama:				
Panama.....	Jan. 4-Jan. 16	4	1	
Venezuela:				
La Guaira.....	Jan. 2-9.....	.....	1	
Maracaibo.....	Oct. 25-Feb. 14	3	3	

PLAGUE.

Australia:				
Brisbane.....	Feb. 12-Apr. 10	7	.....
Cairns.....	Feb. 16-Mar. 22 .....	.....	2	
Sydney.....	Mar. 10-Apr. 14	2	.....
Brazil:				
Niotheroy.....	Apr. 15.....	1	1	
Para.....	Nov. 1-Feb. 22	29	15	
Pernambuco.....	Nov. 16-Jan. 15 .....	.....	18	
Pindamonhangaba.....	Jan. 15.....	.....	.....	Several cases.
Porte Alegre.....	Jan. 1-Feb. 28	50	.....
Rio de Janeiro.....	Nov. 16-Apr. 17	229	134	
British South Africa:				
Cape Colony (East London, King Williams Town, Port Elizabeth, Uitenhage).	Nov. 15-Apr. 19 .....	.....	19	Two new cases.
Natal (Pietermaritzburg)..	Nov. 29-Dec. 5	3	2	
Transvaal (Johannesburg, Pretoria)	Mar. 20-May 5 .....	.....	62	Do.
Chile:				
Antofagasta.....	To Apr. 19.....	59	20	
Iquique.....	Apr. 9.....	.....	.....	Present.
Santiago.....	Apr. 10.....	.....	.....
China:				
Hongkong.....	Nov. 8-Dec. 12	6	6	
Tientsin.....	Nov. 29-Dec. 5 .....	.....	1	
Egypt:				
Abu Homos.....	Apr. 9-16.....	1	.....
Alexandria.....	Nov. 21-Apr. 9	5	2	
Assiout.....	Mar. 19-26.....	1	.....
Baliana district.....	Mar. 13-Apr. 16	69	73	
Beni mazar.....	Mar. 19-Apr. 9	4	2	
Bibeh district.....	Mar. 26-Apr. 16	4	1	
Chibin-el-Kom.....	Apr. 10-16.....	4	1	
Dechneh.....	Mar. 19-Apr. 16	10	7	
Girgeh district.....	Mar. 13-Apr. 16	30	30	
Kueena.....	Mar. 19-Apr. 2	3	1	
Nag-Hamadi district.....	Mar. 13-Apr. 16	44	38	
Samallut district.....	Mar. 13-Apr. 16	54	39	
Sohag.....	Mar. 13-26.....	1	.....
Tahtah district.....	Mar. 13-Apr. 16	28	22	
Suez.....	Feb. 21-Apr. 2	3	1	One from Br. ss. Knight, of the Thistle, from Bombay, and 1 from Br. transport Plaissey from Bombay.
Minieh district.....	Nov. 21-Feb. 3	3	1	
Port Said.....	Mar. 18-Apr. 16	2	1	

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

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Formosa.....	To Dec. 15, 1903.....	869	702	
	Jan. 1-Mar. 6.....	225	145	
Ensuiko.....	Mar. 1-Apr. 9.....	379	191	
Kagi.....	.....do.....	280	184	
Kelung.....	.....do.....	2	1	
Taihoku.....	.....do.....	13	12	
Tainan.....	.....do.....	203	148	
Toroku.....	Mar. 31-Apr. 9.....	1		
Hawaii:				
Hilo.....	Mar. 4.....		1	
Honolulu.....	Jan. 10-May 11.....	2	2	
India:				
Bombay Presidency and Sind.....	Nov. 15-Apr. 9.....	215,904	144,798	
Madras Presidency.....	.....do.....	15,906	12,332	
Bengal.....	Nov. 15-Apr. 9.....	58,637	52,471	
United Provinces.....	.....do.....	111,233	104,137	
Punjab.....	.....do.....	155,529	114,490	
Central Provinces (including Berar).....	.....do.....	50,658	42,422	
Burma.....	Feb. 14-Apr. 9.....	1	1	Imported.
Coorg.....	Nov. 15-Apr. 9.....	16	6	
Mysore State.....	.....do.....	14,073	10,788	
Hyderabad State.....	.....do.....	20,910	17,394	
Central India.....	.....do.....	25,880	23,079	
Rajputana.....	.....do.....	9,244	7,863	
Kashmir.....	.....do.....	5,741	4,836	
N. W. F. Provinces.....	Nov. 21-Apr. 9.....	47	46	Two cases imported.
Baluchistan.....	Nov. 29-Apr. 9.....	21	12	
Grand total.....		683,800	584,675	
Japan:				
Yokohama.....	Nov. 22-Dec. 5.....	2	2	
Mauritius.....	Nov. 13-Mar. 10.....	529	312	
New Zealand:				
Auckland.....	Apr. 29.....	2	1	
Peru:				
Baranco.....	Apr. 14.....		5	
Callao.....	Feb. 24-Apr. 24.....	6	3	One case on ss. Limari Apr. 21.
Chosica.....	Apr. 14.....		2	
Lima.....	Mar. 25-Apr. 15.....	125	42	Remaining in lazaretto, 50 cases.
Matacuna.....	Apr. 14.....	2		
San Pedro vicinity.....	Feb. 20-26.....	10	7	
Persia:				
Kermanschah.....	Mar. 31-Apr. 11.....		20	
Philippine Islands:				
Cebu.....	Jan. 1-Mar. 31.....	5	5	
Manila.....	Nov. 15-Apr. 9.....	33	25	
Russia:				
Cronstadt.....	Jan. 14-20.....		1	At plague laboratory.
Straits Settlements:				
Singapore.....	Feb. 28-Apr. 2.....		3	
Turkey:				
Smyrna.....	Dec. 1-6.....		1	

SMALLPOX.

Africa:				
Cape Town.....	Dec. 1-Mar. 15.....	6		
Green and Sea Point.....	Nov. 29-Dec. 5.....	1		
Argentina:				
Buenos Ayres.....	Oct. 1-Feb. 29.....		187	
Austria-Hungary:				
Prague.....	Nov. 29-Apr. 29.....	163	1	
Trieste.....	Nov. 22-Mar. 5.....	8		
Belgium:				
Antwerp.....	Jan. 11-Apr. 30.....	163	65	
Brussels.....	Jan. 31-Apr. 16.....		8	
Liege.....	Jan. 10-Mar. 19.....	2	2	
Brazil:				
Bahia.....	Feb. 13-Apr. 23.....		10	Six new cases.
Goyaz.....	Feb. 16-22.....	4		
Pernambuco.....	Nov. 1-Apr. 15.....		269	
Rio de Janeiro.....	Nov. 16-Apr. 17.....	1,080	626	
British Guiana:				
Demerara.....	Nov. 1-Dec. 26.....	73		
Canada:				
British Columbia (Tower Hill and Vancouver).....	Dec. 1-Feb. 18.....	14		

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Manitoba (Winnipeg).....	Mar. 27-May 14	7	.....
New Brunswick (McAdam, Newcastle).....	Jan. 9-21.....	2	.....
Nova Scotia (Sydney).....	Apr. 10-May 14	72	1	
Ontario.....	Dec. 1-Jan. 31	116	.....
Quebec.....	Feb. 7-Mar. 19	14	.....
Chile:				
Antofagasta.....	Nov. 1-Dec. 31	.....	18	
Santiago.....	Feb. 1.....	.....	.....	Epidemic.
China:				
Hongkong.....	Dec. 27-Mar. 26	9	4	
Shanghai.....	Nov. 15-Apr. 9	.....	141	Four new cases.
Tientsin.....	Jan. 31-Feb. 6	1	.....
Colombia:				
Barranquilla.....	Dec. 1-Apr. 30	.....	18	
Formosa.....	Jan. 1-Mar. 31	16	.....
France:				
Lyon.....	Feb. 7-Mar. 9	.....	3	
Marseille.....	Dec. 1-Apr. 30	.....	103	
Nantes.....	Jan. 1-31.....	2	.....
Paris.....	Nov. 29-Apr. 30	424	53	
Rheims.....	Feb. 8-May 1	1	1	
Rouen.....	Feb. 1-29.....	.....	4	
Germany:				
Bremen.....	Apr. 23-29.....	4	.....	On ss. Wittikind.
Strasbourg.....	Jan. 1-Dec. 31	.....	2	
Great Britain:				
Birmingham.....	Dec. 6-May 7	6	1	
Bradford.....	Nov. 22-Dec. 5	1	.....
Cardiff.....	Mar. 13-Apr. 9	2	.....
Dundee.....	Mar. 13-Apr. 23	13	.....
Edinburgh.....	Dec. 13-Apr. 23	130	11	
Glasgow.....	Dec. 5-May 13	850	56	
Hull.....	Jan. 17-May 7	51	2	
Leeds.....	Dec. 27-Apr. 30	21	.....
Leith.....	Jan. 10-Apr. 16	25	2	
Liverpool.....	Dec. 13-Apr. 30	12	1	
London.....	Nov. 29-Apr. 30	237	1	
Manchester.....	Mar. 27-Apr. 30	53	6	
Newcastle-on-Tyne.....	Dec. 5-May 7	92	4	
Nottingham.....	Nov. 29-May 7	192	8	
Sheffield.....	Dec. 27-Apr. 30	31	.....
Southampton.....	Dec. 27-Apr. 9	7	1	
South Shields.....	Jan. 3-May 7	38	1	
Sunderland.....	Jan. 3-Feb. 6	17	2	
Hawaii:				
Honolulu.....	Feb. 4.....	1	.....	From U. S. a. t. Logan.
India:				
Bombay.....	Nov. 25-Apr. 26	.....	245	
Calcutta.....	Dec. 27-Apr. 9	.....	18	
Karachi.....	Dec. 21-Apr. 24	94	18	
Italy:				
Catania.....	Dec. 4-May 5	.....	7	
Messina.....	Dec. 12-18.....	.....	1	
Milan.....	Jan. 1-Feb. 29	5	.....
Palermo.....	Jan. 10-Apr. 23	6	.....
Japan:				
Amakusa.....	Feb. 23.....	15	.....
Kobe.....	Apr. 3-16.....	3	.....
Matsu Island.....	Feb. 15.....	3	.....	From Ger. ss. Batavia from Vlad- ivostock. Present.
Mogi.....	Apr. 9.....	.....	.....
Fukuoka Ken.....	To Mar. 14.....	9	.....
Nagasaki Ken.....	Feb. 11-Apr. 20	287	52	One case from Br. ss. Kwang Ping from Ts'in-hwan-tao. Present.
Sasebo.....	Apr. 9.....	2	.....
Yokohama.....	Jan. 1-Dec. 31, 1903	2	.....
Do.....	Feb. 1-27.....	3	.....
Java:				
Batavia.....	Nov. 15-Apr. 9	151	40	
Malta:				
Malta.....	Dec. 6-Apr. 2	25	5	
Mexico:				
La Cananea.....	Mar. 9.....	.....	.....	Present.
Magdalena.....	Mar. 9.....	8	.....
Mexico.....	Dec. 28-May 8	96	53	
Porfirio Diaz.....	Jan. 9.....	1	.....
Tampico.....	Jan. 11-May 14	.....	15	
Torreón.....	Feb. 24-May 14	142	36	
Vera Cruz.....	Dec. 19-Apr. 30	7	1	One case ss. Prince August Wil- helm from Havre.

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Netherlands:				
Amsterdam	Dec. 20-Apr. 23	39	8	
Rotterdam	Dec. 6-May 7	11	1	
Panama, Panama	Jan. 11-17.....	.....	3	
Philippine Islands:				
Cebu	Jan. 1-Mar. 31	6	2	
Manila	Nov. 15-Apr. 9	17	7	
Porto Rico:				
San Juan	Dec. 1-Mar. 8	9	.....
Russia:				
Moscow	Nov. 22-Apr. 30	125	44	
Odessa	Nov. 29-Apr. 30	26	3	
St. Petersburg	Nov. 29-Apr. 30	356	62	
Warsaw	Nov. 8-Feb. 27	.....	33	
Spain:				
Barcelona	Jan. 10-Apr. 30	.....	82	
Madrid	To Dec. 15.....	35,000	.....	Estimated.
Santander	Dec. 9-Apr. 4	51	15	
Straits Settlements:				
Singapore	Feb. 21-Apr. 2	.....	2	
Turkey:				
Alexandretta	Mar. 6-Apr. 16	17	1	
Beirut	Apr. 5-30.....	.....	.....	A few cases.
Constantinople.....	Jan. 18-Apr. 24	.....	77	
Smyrna	Nov. 23-Apr. 3	.....	49	
Uruguay:				
Montevideo	Sept. 6-Feb. 29	12	3	

Weekly mortality table, foreign and insular 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	May 7	6,000	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aix la Chapelle.....	Apr. 16	144,735	50	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alexandretta	Apr. 30	9,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amherstburg	May 14	2,250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amsterdam	May 7	548,276	156	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Antwerp	Apr. 30	294,669	79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bahia	Apr. 16	230,000	93	13	.....	.....	.....	8	1	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 23	230,000	90	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barmen	Apr. 30	150,212	37	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barranquilla.....	do	42,000	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beirut	Apr. 18	80,000	a 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belfast	Apr. 30	358,693	141	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belize	May 12	9,000	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belleville	May 16	8,041	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bergen	Apr. 28	37,000	18	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berlin	Apr. 23	1,962,315	575	81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Birmingham.....	Apr. 30	537,965	193	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	May 7	537,965	168	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bombay	Apr. 19	776,006	1,197	61	633	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bremen	Apr. 23	182,000	72	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 29	182,000	63	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bristol	May 7	343,204	86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick.....	Apr. 30	131,422	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brussels.....	do	575,896	144	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Budapest.....	do	732,322	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Callao.....	Apr. 24	30,000	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Town.....	Apr. 9	83,718	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cardiff	Apr. 23	176,313	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 30	176,313	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Catania	May 5	153,523	61	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Christiania.....	Apr. 30	224,000	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a Estimated.

Weekly mortality table, foreign and insular 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.					
Coatzacoalcas.....	May 7	3,000	2																
Coburg.....	Apr. 30	22,827	11	2						1								1	
Cologne.....	do	409,990	140	33								1		1				1	5
Colombo.....	Apr. 16	155,869	88							1									
Colon.....	May 1	8,000	7																
Corunna.....	Apr. 30	50,000	22	2														1	
Do.....	May 7	50,000	33	7															
Crefeld.....	Apr. 30	110,389	19																
Dublin.....	do	378,994	158	33						1				1			2		2
Edinburg.....	do	331,977	123							1		1		1		1	1		6
Flushing.....	May 7	19,105	4																
Frankfort-on-the-Main	Apr. 30	313,600	110												3				4
Funchal.....	May 1	44,049	19	1											1				
Geneva.....	Apr. 23	111,000	45									2							
Girgenti.....	Apr. 30	25,069	15										2						
Glasgow.....	May 6	798,357	302						3			2		2	5	10			5
Gothenburg.....	Apr. 30	134,300	40	11								1							
Halifax.....	May 14	40,787	10															3	3
Hamburg.....	Apr. 30	751,842	239												2	3			
Hamilton, Bermuda...	May 2	17,535	3																
Havre.....	Apr. 30	130,196	55	19															
Hull.....	do	253,865	83												1	3			1
Iquique.....	Apr. 23	30,000	19																
Karachi.....	Apr. 17	108,644	353		285				3										
Kingston, Canada.....	May 13	19,374	6																
Kobe.....	Apr. 9	287,909	140													1			
Do.....	Apr. 16	287,909	103																
La Rochelle.....	May 1	31,553	15																
Las Palmas.....	Apr. 23	49,500	18																
Lausanne.....	do	50,800	14																
Leeds.....	May 7	140,142	151	14												13			4
Leipzig.....	Apr. 30	496,370	157	25									4	2					
Leith.....	do	80,508	24	3															
Licata.....	do	25,000	70																
Liverpool.....	do	723,430	311							1		1		2	1				11
Do.....	May 7	723,430	262									5		5	3				10
London.....	Apr. 30	6,907,619	1,896						3			5	13	21	87				56
Lyons.....	do	500,000	178	36								2		1	3				
Madras.....	Apr. 15	509,346	407		1	1										3			
Mainz.....	Apr. 30	89,000	31	5												1			2
Manchester.....	do	558,335	218						1			2	3		14				12
Mannheim.....	do	151,517	38													1			
Mazatlan.....	do	20,000	18																
Mexico.....	May 8	368,777	367	19					1	11			1			3			4
Moscow.....	Apr. 23	1,173,427	622	24					4	1	1	3	11	11					5
Newcastle on Tyne.....	Apr. 30	219,021	70						1										
Nottingham.....	do	239,753	75									1		2		1			1
Nuremberg.....	Apr. 23	275,000	137											2					
Odessa.....	Apr. 17	492,000	155	24							1	3	1	1					
Palermo.....	Apr. 30	330,000	97	8															
Panama.....	May 9	20,000	16	1															
Paris.....	Apr. 30	2,660,559	945	246					1					4	13				12
Plymouth.....	May 7	112,000	47							6		2							
Prague.....	Apr. 30	225,816	121	39						1		1							1
Puerto Cortez.....	May 12	2,125	0																
Quebec.....	May 14	70,000																	
Rheims.....	May 1	108,385	45	11					1		1								
Rotterdam.....	May 7	362,799	105						1						2				
St. Georges, Bermuda...	Apr. 16	2,189	0																
Do.....	Apr. 23	2,189	2																
Do.....	Apr. 30	2,189	0																
St. John, N. B.....	May 14	40,711	7	2															
St. Stephen, N. B.....	do	2,840	2																
San Feliu de Guixols...	May 1	11,333	4	1												1			
Do.....	May 8	11,333	4																
Santa Cruz de Tenerife	Apr. 30	40,000	10	1															
Santander.....	May 1	53,576	25																
Do.....	May 8	53,576	30																
Sheffield.....	Apr. 23	430,000	121	15									2	2	2				7
Do.....	Apr. 30	430,000	124	15									2	2	2				4
St. Petersburg.....	Apr. 23	1,450,000	922	130					4	1	17	13	18	20					4
Salford.....	Apr. 30	228,983	79	5									2	4					14

Weekly mortality table, foreign and insular 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.	
Solingen	Apr. 30	15,142	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Southampton	do	112,500	27	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Do	May 7	112,500	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
South Shields	Apr. 30	107,334	39	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Stettin	do	228,095	83	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stockholm	Apr. 23	309,496	88	23	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2
Stuttgart	May 5	195,126	55	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Sydney, N. S.	May 14	10,000	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tangier	Apr. 30	40,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarragona	do	19,300	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trapani	do	61,477	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trieste	Apr. 23	190,166	79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 30	190,166	78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuxpam	May 10	13,000	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Uvilla	Apr. 23	932	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 30	932	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	May 7	932	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vera Cruz	do	32,000	38	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Victoria	Apr. 7	21,000	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 14	21,000	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 21	21,000	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 30	21,000	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vienna	Apr. 23	1,797,992	720	133	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 30	1,797,992	670	134	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg	May 14	70,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yokohama	Apr. 9	313,695	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 16	313,695	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zurich	Apr. 30	158,376	54	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service.