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No. 1

NOTE ON PLAGUE INFECTION IN A WOOD RAT (*NEOTOMA FUSCIPES ANECTENS*, ELLIOT.)

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The discovery of a wood rat (*N. fuscipes anectens*, Elliot),¹ secured from Alameda County on October 17, 1909, infected with bubonic plague, adds a new link to the chain of plague.^a This species is described under the name *Neotoma fuscipes*, Baird, by Frank Stephens (California Mammals, West Coast Publishing Company, San Diego, Cal., 1906), as follows:

Neotoma fuscipes, Baird (dusky foot), dusky-footed brush rat. Large; tail long; ears large; above bistre or sepia darkened by black tips of the hairs, base of hairs slaty; sides varying from grayish tawny olive to grayish brown, shading into the color of the back, distinctly outlined against the grayish-white or buffy-white belly and throat, the hairs of the lower parts plumbeous at base except on throat, breast, and anal region; fore feet and toes of hind feet white, the upper surface of the hind feet dusky or spotted with dusky; ankles blackish; tail blackish, scarcely lighter beneath; hairs of tail short but hiding the skin. Young; gray, with very little tawny or reddish tinge.

Length about 407 mm. (16 inches); tail vertebra 205 (8.10); hind foot 40 (1.60); ear from crown 35 (1.40).

It should be noted that the *Neotoma* are distinctly a New World production and not an importation, as are the true rats, e. g., the *Mus norvegicus*. "The Neotomas are very different from real rats." In California this species occupies the upper and lower Sonoran belts, i. e., the "Pacific coast region of central California from Monterey County north to Lake County." Their distribution is continuous on the north with the *Neotoma fuscipes monochrourea*, Rhoads (northern dusky-footed brush rat), which occupies the "Pacific coast region from Mendocino County, Cal., north to the mouth of the Columbia River, east to the base of Mount Shasta," while on the south is a species, the *Neotoma fuscipes marcotis*, Thomas, "whose habits in general are the same as those of the species elsewhere." The *Neotoma fuscipes simplex* is found in the "foothills and mountains bordering the southern part of the San Joaquin Valley and the extreme western part of the Mojave Desert." To the east of this we have two species, the *Neotoma fuscipes streatorii*, Merriam, found on the "western slope of the Sierra Nevada and northeastern California," and the *Neotoma fuscipes dispar*, Merriam, inhabiting the "eastern foothills of the Sierra Nevada from Owen Valley southward to the Mojave Desert." In the "Mojave Desert, southern Nevada

^a See also under "Plague-prevention work," on p. 4.

and southwestern Utah," is the desert brush rat, *Neotoma desertorum*, Merriam, while at the "head of the San Joaquin Valley, California," the *Neotoma desertorum sola*, Merriam, is found. Three other varieties are described as occurring in California, the *Neotoma intermedia*, Rhoads, in the "coast region of southern California north nearly to Monterey," the *Neotoma intermedia gilva*, Rhoads, found in the "San Gorgonio Pass and the Colorado Desert," and the *Neotoma abigula venusta*, which lives in the foothills of the Colorado Desert.

Wood rats are nocturnal in their habits and are seldom seen in the light of open day except when it is very cloudy. For the most part, they are found along small wooded arroyos, in which they build their nests, often of the most elaborate design. Those which the writer has had the opportunity of dissecting consist of pieces of driftwood arranged in a pile, sometimes 6 or 7 feet in diameter and 3 feet high. There is usually only one entrance to the nest and this is lined with sharp sticks. It is said that where cactus is plentiful the tunnel is lined with cactus spines as a protective measure against other mammals. The interior of the nest is frequently arranged in three stories, and contains storehouses and living rooms. Usually there is an exit which is frequently found near the base of a tree. This is utilized as a means of escape when the ordinary entrance is blocked and some enemy begins to tear the nest apart. The storehouses in several instances contained large quantities of the corms of a plant growing in the immediate neighborhood. Although wheat was growing but a few hundred yards away, none of this was found in these nests. In certain regions the *Neotoma* store up large quantities of mesquite beans, and these caches are raided annually by the Indians, who use them for food. They also store up mushrooms, certain varieties of puffballs, and acorns. Wood rats are not considered an economic menace. They will enter deserted houses, but they are easily trapped out, and are always driven out by the Old World rat whenever they come in contact.

It is impossible to make deductions from the discovery of a single infected animal of a given species, but it is interesting to note that we are gradually finding that many different species may be infected in nature. It is believed that this is the first plague-infected wood rat ever discovered, the infection in this instance having been found by Passed Asst. Surg. G. W. McCoy, in charge of the laboratory of the service in San Francisco, Cal. It may be that the wood rat may act as an intermediary in the transmission of disease to other mammals. It is impossible to state in what manner this particular one was infected, and as wood rats do not ordinarily come in contact with squirrels, it may be that some other animal with which they are more closely associated is also infected. For the present, the entire question must be considered undecided until additional evidence can be secured.

UNITED STATES.

ESTABLISHMENTS LICENSED FOR THE PROPAGATION AND SALE OF VIRUSES, SERUMS, TOXINS, AND ANALOGOUS PRODUCTS.

The following table contains a list of the establishments holding licenses January 1, 1910, issued by the Treasury Department in accordance with the act of Congress approved July 1, 1902, entitled "An act to regulate the sale of viruses, serums, toxins, and analogous products in the District of Columbia, to regulate interstate traffic in said articles, and for other purposes."

The number of the license of each firm is also given, together with the names of the several products for which licenses have been granted.

No. of license.	Establishment.	Products.
1	Parke, Davis & Co., Detroit, Mich.	Antidiphtheric serum, antitetanic serum, antistreptococ- cic serum, antigonococic serum, antitubercle serum, ery- sipelas and prodigiosus toxins (Coley), tuberculins, bacte- rial vaccines, and vaccine virus.
2	H. K. Mulford Co., Philadelphia, Pa.	Antidiphtheric serum, antitetanic serum, antistreptococ- cic serum, antipneumonic serum, antigonococic serum, antidysenteric serum, antimeningococic serum, tubercu- lins, bacterial vaccines, and vaccine virus.
3	Dr. H. M. Alexander & Co., Mari- etta, Pa.	Antidiphtheric serum, antirabic virus, vaccine virus, and tuberculins.
5	Fluid Vaccine Co., Milwaukee, Wis.	Vaccine virus.
8	The Cutter Laboratory, Berkeley, Cal.	Antidiphtheric serum, antistreptococic serum, tuberculin, bacterial vaccines, and vaccine virus.
9	Frederick Stearns & Co., Detroit, Mich.	Antidiphtheric serum, streptolytic serum, pneumolytic se- rum.
11	Pasteur Institute of Paris, Paris, France.	Antidiphtheric serum, antistreptococic serum, antiplague serum, antidysenteric serum, antimeningococic serum, and serum antivenimeux.
12	Chemische Fabrik auf Actien (vorm. E. Schering), Berlin, Ger- many.	Antidiphtheric serum and antistreptococic serum.
14	Health Department of the City of New York.	Antidiphtheric serum and antitetanic serum.
15	Dr. W. R. Hubbert Serum Labora- tory, Detroit, Mich.	Antidiphtheric serum.
16	National Vaccine and Antitoxin In- stitute, Washington, D. C.	Antidiphtheric serum, antigonococic vaccine, vaccine virus, and normal horse serum.
17	Lederle Antitoxin Laboratories, New York City.	Antidiphtheric serum, antitetanic serum, antistreptococic serum, suspension of lactic acid bacilli, and vaccine virus.
18	Burroughs, Wellcome & Co., Lon- don, England.	Antidiphtheric serum, antigonococic serum, antistrepto- cocic serum, antistaphylococic serum, antityphoid serum, antistreptococic vaccine, antistaphylococic vac- cine, antityphoid vaccine, and antigonococic vaccine.
19	Memorial Institute for Infectious Diseases, Chicago, Ill.	Antidiphtheric serum.
21	Swiss Serum and Vaccine Institute, Berne, Switzerland.	Antidysenteric serum, antipneumococic serum, antimen- ingococic serum, antidiphtheric serum, anticholera vaccine, antiplague serum, antistreptococic serum, anti- plague vaccine, antityphoid vaccine, and tuberculins.
22	Institut Bacteriologique de Lyon, Lyons, France.	Antidiphtheric serum and normal goat serum.
23	Bacterio-Therapeutic Laboratory, Asheville, N. C.	Tuberculin.
24	Farbwerke, vormals Meister Lu- cius & Bruning, Hoechst-on-Main, Germany.	Antidiphtheric serum, antistreptococic serum, antidysen- teric serum, antitetanic serum, antimeningococic serum, and tuberculins.
25	Tuberculin Society of St. Peters- burg, St. Petersburg, Russia.	Tuberculinum purum.
27	Institut Pasteur de Lille, Lille, France.	Serum antivenimeux.
28	Bacteriologisches Institut Lingner, Dresden, Germany.	Pyocyanase.
29	Behringwerk, Marburg, Germany.	Tuberculin.
30	Dr. G. H. Sherman, Detroit, Mich.	Bacterial vaccines.

PLAGUE-PREVENTION WORK.

Surgeon Blue reports relative to plague-infected wood rat:

Referring to the weekly report of antiplague operations in Alameda County, dated November 17, 1909, I have to submit additional data as follows:

A plague-infected brush rat was found by the field force on October 17, 1909, in Murray Township, Alameda County, Cal. The specimen has been identified as belonging to the *Neotoma fuscipes* (Baird).^a

There is no reliable information at hand as to the prevalence of these rodents in the State. So far, some 70 or 80 specimens have been sent in from the field. An epizootic has been reported as prevailing among the "wood rats" of San Benito County near the town of Hollister. The field force has been instructed to investigate and report on the prevalence of these rodents in the counties now under our observation.

Doctor Blue further reports:

SAN FRANCISCO, CAL.

Last case of human plague sickened January 30, 1908. Last plague-infected rat was trapped October 23, 1908. Total number of plague-infected rats found to date, 398.

Week ended December 18, 1909. Premises inspected, 445. Houses destroyed, 14. Buildings condemned, 9. Nuisances abated, 67. Poisons placed, 8,205. Rats trapped, 1,808. Rats found dead, 29. Rats identified, 1,837, as follows: *Mus norvegicus*, 1,294; *Mus rattus*, 78; *Mus musculus*, 398; *Mus alexandrinus*, 67. Rats examined bacteriologically, 1,074. No plague-infected rats found.

OAKLAND, CAL.

Last case of human plague sickened October 26, 1909. Last plague-infected rat was found December 1, 1908.

Week ended December 18, 1909. Rats found dead, 26. Rats trapped, 545. Rats identified, 571, as follows: *Mus norvegicus*, 494; *Mus musculus*, 77. Rats examined bacteriologically, 494. No plague-infected rats found.

FRESNO COUNTY, CAL.

There is no record of human or rodent plague in Fresno County.

Week ended December 18. Ranches inspected, 18. Ground squirrels shot, 381. Ground squirrels examined bacteriologically, 375. No plague-infected squirrels found.

KERN COUNTY, CAL.

There is no record of human or rodent plague in Kern County.

Week ended December 18. Ranches inspected, 8. Ground squirrels shot, 35. Ground squirrels examined bacteriologically, 34. No plague-infected squirrels found.

^aSee also on p. 1 Note on plague infection in a wood rat.

MERCED COUNTY, CAL.

There is no record of human or rodent plague in Merced County.

Week ended December 18. Ranches inspected, 41. Ground squirrels shot, 392. Ground squirrels examined bacteriologically, 287. No plague-infected squirrels found.

MONTEREY COUNTY, CAL.

There is no record of human or rodent plague in Monterey County.

Week ended December 18. Ranches inspected, 35. Ground squirrels shot, 204. Ground squirrels examined bacteriologically, 199. No plague-infected squirrels found.

SAN JOAQUIN COUNTY, CAL.

There is no record of human or rodent plague in San Joaquin County.

Week ended December 18. Ranches inspected, 15. Ground squirrels shot, 49. Ground squirrels examined bacteriologically, 47. No plague-infected squirrels found.

SAN LUIS OBISPO COUNTY, CAL.

There is no record of human or rodent plague in San Luis Obispo County.

Week ended December 18. Ranches inspected, 46. Ground squirrels shot, 324. Ground squirrels examined bacteriologically, 320. No plague-infected squirrels found.

SAN MATEO COUNTY, CAL.

There is no record of human or rodent plague in San Mateo County.

Week ended December 18. Ranches inspected, 14. Ground squirrels shot, 52. Ground squirrels examined bacteriologically, 51. No plague-infected squirrels found.

SANTA BARBARA COUNTY, CAL.

There is no record of human or rodent plague in Santa Barbara County.

Week ended December 18. Ranches inspected, 29. Ground squirrels shot, 209. Ground squirrels examined bacteriologically, 200. No plague-infected squirrels found.

SANTA CRUZ COUNTY, CAL.

There is no record of human plague in Santa Cruz County. Last plague-infected rodent was found November 6, 1909. Total number of plague-infected rodents found to date, 1.

Week ended December 18. Ranches inspected, 14. Ground squirrels shot, 46. Ground squirrels examined bacteriologically, 44. No plague-infected squirrels found.

TULARE COUNTY, CAL.

No record of human or rodent plague in Tulare County.

Week ended December 18. Ranches inspected, 22. Ground squirrels shot, 147. Ground squirrels examined bacteriologically, 144. No plague-infected squirrels found.

VENTURA COUNTY, CAL.

There is no record of human or rodent plague in Ventura County. Week ended December 18. Ranches inspected, 15. Ground squirrels shot, 41. Ground squirrels trapped alive, 3. Ground squirrels examined bacteriologically, 42. No plague-infected squirrels found.

SEATTLE, WASH.

Passed Assistant Surgeon Glover reports: No case of human plague since October 30, 1907. The last plague-infected rat was found September 26, 1908. Total plague-infected rats found to date 21.

Week ended December 18, 1909. Rats received, 1,193. Rats necropsied, 692. No plague-infected rats found.

SMALLPOX IN THE UNITED STATES.

Reports Received During Week ended January 7, 1910.

[For reports received from June 25, 1909, to December 31, 1909, see Public Health Reports for December 31, 1909. In accordance with custom the tables of epidemic diseases are terminated semiannually and new tables begun.]

Place.	Date.	Cases.	Deaths.	Remarks.
Alabama:				
Montgomery.....	Dec. 19-25.....	26		
Total for State.....		26		
California:				
Sacramento.....	Dec. 12-18.....	2		
Total for State.....		2		
Illinois:				
Chicago.....	Dec. 19-25.....	2		
Total for State.....		2		
Indiana:				
Indianapolis.....	Dec. 12-18.....	1		
Total for State.....		1		
Kansas:				
Montgomery County— Independence.....	Dec. 19-25.....	5		
Wyandotte County— Kansas City.....	Dec. 19-25.....	1		
Total for State.....		6		
Kentucky:				
Hartford.....	Dec. 12-18.....	2		
Lexington.....	Dec. 12-18.....	1		
Total for State.....		3		
Michigan:				
Bay County— Bay City.....	Dec. 5-11.....	15		
Total for State.....		15		
Mississippi:				
Clalbourne County— Port Gibsod.....	Dec. 19-25.....	1		
Total for State.....		1		
New York, general.....	Sept. 1-Oct. 31....	6	1	
Lockport.....	Dec. 5-11.....	1		
Total for State.....		7	1	

SMALLPOX IN THE UNITED STATES—Continued
Reports Received During Week ended January 7, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
North Carolina:				
Charlotte.....	Dec. 19-25.....	1		
Total for State.....		1		
North Dakota:				
Bottineau County.....	Oct. 1-31.....	1		
Total for State.....		1		
Ohio:				
Cleveland.....	Dec. 19-26.....	1		
Stryker.....	Dec. 19-25.....	1		
Total for State.....		2		
Tennessee:				
Dowelltown.....	Dec. 12-18.....	5		
Total for State.....		5		
Texas:				
El Paso.....	Nov. 1-30.....	1		
Fort Worth.....	Nov. 1-30.....	2		
Total for State.....		3		
Wisconsin:				
La Crosse.....	Dec. 19-26.....	1		
Superior.....	Dec. 19-25.....	1		
Total for State.....		2		
Grand total for the United States.....		77	1	

MORBIDITY AND MORTALITY.

WEEKLY MORBIDITY AND MOTALITY TABLE, CITIES OF THE UNITED STATES.

[For smallpox and plague see special tables.]

Cities.	Week ended—	Estimated population, 1909.	Total deaths from all causes.	Cases and deaths.													
				Tuberculosis.		Enteric fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough.			
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Altoona, Pa.....	Dec. 25	50,814	9	2	1												
Ashtabula, Ohio.....	Dec. 18	16,648	3					1									
Do.....	Dec. 25		8					1									
Auburn, N. Y.....	Dec. 4	34,272	9	1	1					3	1	2					
Do.....	Dec. 11		17	2	2	1		6									
Do.....	Dec. 18		10			1		1		2						1	
Baltimore, Md.....	Dec. 25	576,023	224	17	31	15	3	20	1	12		5			22		4
Bayonne, N. J.....	do	49,894						7									
Beaver Falls, Pa.....	do	10,341										6					
Bennington, Vt.....	Dec. 18	9,510						2		1						12	
Do.....	Dec. 25		3									1				20	
Berkeley, Cal.....	Dec. 11	α 19,700	10			3		1								1	
Biddeford, Me.....	Dec. 25	17,676	9														
Binghamton, N. Y.....	Dec. 18	45,855	18		2			1				5					
Do.....	do	21,000	6		1			6	1	2		3				1	
Do.....	Dec. 25		11		2			1		1	1	1					
Bridgeport, Conn.....	Dec. 18	90,913	35	1	2			16	1	5	1	1			1		

α Estimated population 1906. No estimate 1909.

MORBIDITY AND MORTALITY—Continued.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Estimated population, 1909.	Total deaths from all causes.	Cases and deaths.																
				Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.						
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.					
Butler, Pa.	Dec. 4	12,760	8			2		8	2											
Do.	Dec. 11		8	3	1			2	3											
Do.	Dec. 18		3					4												
Butte, Mont.	Nov. 4	49,892	10		2			3		4	1									
Do.	Dec. 11		12							3	1									
Do.	Dec. 18		10								1									
Camden, N. J.	Dec. 25	89,305	26		4			2		10	1									
Charlotte, N. C.	Nov. 6	35,101	15		1	2	1			1				14						
Do.	Dec. 18		7	2						1				19	1					
Chattanooga Tenn.	do.	34,654				1				2										
Chelsea, Mass.	Dec. 25	39,862	11		1			3		1	1									
Chicago, Ill.	Dec. 18	2,224,491	615	78	72	12	6	143	8	128	11	131	3	38					2	
Do.	Dec. 25		628	80	67	14		144	11	115	12	112	14	33					4	
Covington, Ky.	do.	51,715	16		1															
Danville, Ill.	do.	27,387	8		2	2														
Dayton, Ohio.	Dec. 18	108,688	30		1	1		5		5				1						
Detroit, Mich.	do.	384,855	148					41	3	19	1									
Dunkirk, N. Y.	Dec. 25	18,061	4	3				1		1		2								
Elmira, N. Y.	Dec. 18	35,765	7					1		1										
El Paso, Tex.	Dec. 11	22,911	25	2	6	2		1		1		1								
Do.	Dec. 18		14	2	2	6		2		1								4	1	
Everett, Wash.	Dec. 11		10			1				1										
Freeport, Ill.	Dec. 18	19,200	5	1	1	2		2					100							
Greensboro, N. C.	Nov. 13	16,081	4			2	1			1										
Do.	Dec. 25		5		1															
Hartford, Conn.	Dec. 18	103,808	28	4	3		1	6		6	1									
Hyde Park, Mass.	Dec. 25	15,522	2					5		1	1									
Indianapolis, Ind.	Dec. 18	241,826	49	3	3	5	1	7	1	16	2	83								
Jacksonville, Fla.	do.	40,798	33			1		2		2										
Jersey City, N. J.	Dec. 19	253,711	86	1	6	1		12	2	23	3	5								
Johnstown, Pa.	Dec. 25	46,520	16		1			5	1	2								2		
La Crosse, Wis.	Dec. 18	29,224	10		1			2		2		27								
Lancaster, Pa.	Dec. 25	49,962	8	2		1		2		1		19								
Lawrence, Mass.	Dec. 18	76,042	21	1	3	2		6		4	1	28								
Lebanon, Pa.	Dec. 25	20,295	7			3				1										
Lexington, Ky.	Dec. 18	30,690	21		2					1		1								
Los Angeles, Cal.	do.	103,000	78			1	1	6		5		73								
Lowell, Mass.	Dec. 25	95,125	35	1		4		4		5		36			2					
Lynchburg, Va.	Dec. 18	29,457																3		
Do.	Dec. 25									2										
Lynn, Mass.	Dec. 18	83,865			4			5		14	1	2						1		
Malden, Mass.	do.	41,535	8	2				7												
Mansfield, Ohio.	Dec. 25	21,390				1														
Marinette, Wis.	do.	14,682	4					1												
Medford, Mass.	do.	20,839	7	1				2		1										
Melrose, Mass.	Dec. 11	15,361	1	1				2		1										
Do.	Dec. 18		2			1				1										
Moline, Ill.	do.	23,081	1			1				1										
Montclair, N. J.	do.	18,296	7	2	1	1		6		2										
Montgomery, Ala.	Dec. 17	43,927	20	2		1	1			2		1								
Morristown, N. J.	Dec. 18	12,849	2					1												
Mount Vernon, N. Y.	Dec. 25	27,891	9											2						
Muncie, Ind.	do.	30,266	1							1										
Nanticoke, Pa.	Dec. 26		4					2		2		1								
Nashville, Tenn.	Dec. 25	106,476	39	2	3	2		1		2										
Newburyport, Mass.	do.	14,832	2		1			6		2	1									
New Orleans, La.	Dec. 18	327,662	153	22	12	17	4	13		6		12		1						
Newport, Ky.	Dec. 25	31,345	8																	
New York, N. Y.	do.	4,450,963	1,562	328	187	25	8	351	1	22	341	44	475	13	27					4
Niagara Falls, N. Y.	do.	32,012	12		1	11	1						30	1						
Norristown, Pa.	do.	24,491	12																	
North Adams, Mass.	Dec. 11	20,510	6	1	1			1												
Do.	Dec. 25		4	3	2															
Northampton, Mass.	do.	21,008	5	1	1					1										
Oakland, Cal.	Dec. 18	73,812	33	3	2	1		5				1							1	
Orange, N. J.	Dec. 25	27,669	10	1	1	1		6		2		5								
Philadelphia, Pa.	do.	1,491,082	53	50	21	8	56	10	109	21	11	9	1							

^a Population 1900. No estimate.

^b Estimated population 1906. No estimate 1909.

MORBIDITY AND MORTALITY—Continued.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Estimated population, 1909.	Total deaths from all causes.	Cases and deaths.												
				Tuberculosis.		Enteric fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough.		
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Plainfield, N. J.....	Dec. 25	20,947	5	2				1		1	1	2				
Pittsburg, Pa.....	Dec. 18	558,123	194	32	10	25	2	33	3	21	4	95	1	5	3	
Portsmouth, N. H....	Dec. 25	11,336						3		2						
Portsmouth, Va.....	Dec. 21	19,225	10					12								
Providence, R. I.....	Dec. 25	217,065	66	10	3	1		2		11	2	16	3	1		
Reading, Pa.....	Dec. 27	97,231	29			1		1		4	1	17				
Rock Island, Ill.....	Dec. 18	24,766	6					2								
Sacramento, Cal.....	do	31,889	20			2				1		13				
St. Louis, Mo.....	do	686,369	203	44	18	11	1	26	1	48	2	15	2	13		
San Antonio, Tex.....	do	67,404		1		9										
San Francisco, Cal...	Dec. 4	α 342,782	120	31	15	9		8		6		21		12	1	
Do.....	Dec. 18		129	35	15	5		12		19		15		7	1	
San Jose, Cal.....	do	24,596	5													
Saratoga Springs, N. Y.....	Dec. 11	13,471	6							2		1				
Schenectady, N. Y.....	Dec. 18	73,037	20	3	2	1						56		5		
Seattle, Wash.....	do	α 80,671	44	7	6	4	3	20		8	1	16		2		
Somerville, Mass.....	Dec. 25	75,375	19	1	2			6		2	2	1				
South Bend, Ind.....	Dec. 18	49,321	19	5	3	3		3		1						
South Bethlehem, Pa	Dec. 25	15,886	4							2						
Springfield, Ohio.....	Dec. 18	43,975	9	4				2		3						
Steelton, Pa.....	Dec. 25	14,769	4							4		14				
Tacoma, Wash.....	Dec. 18	α 37,714	14		1	7										
Titusville, Pa.....	Dec. 25	8,397	4			1										
Topeka, Kans.....	Dec. 18	44,757								3						
Waltham, Mass.....	Dec. 25	28,522	6							5						
Washington, D. C.....	Dec. 18	322,212	128	18	11	10		43		23		4		5		
Weymouth, Mass.....	Dec. 25	11,793	1							3						
Wheeling, W. Va.....	Dec. 18	42,799	15	2			1	2		2						
Wichita, Kans.....	do	39,612	14				2			1						
Wilkinsburg, Pa.....	Dec. 25	19,999	5			1										
Williamsport, Pa.....	Dec. 18	30,220	10	3		1		9				1				
Wilmington, Del.....	Dec. 25	88,980	36		3											
Winona, Minn.....	Dec. 18	20,830	9													
Woburn, Mass.....	Dec. 11	14,520	5					5								
Do.....	Dec. 25		3	1		1				2						
Worcester, Mass.....	Dec. 18	135,906	39	5	7			3		4		5		2		
Zanesville, Ohio.....	Dec. 25	25,614	7		1											

α Estimated population 1906. No estimate 1909.

STATISTICAL REPORTS OF MORBIDITY AND MORTALITY, STATES AND CITIES OF THE UNITED STATES (untabulated).

CALIFORNIA—*Los Angeles*.—Month of November, 1909. Estimated population, 300,000. Total number of deaths 313, including diphtheria 2, measles 3, scarlet fever 1, tuberculosis 68, typhoid fever 4. Cases reported: Diphtheria 23, measles 126, scarlet fever 59, tuberculosis 62, typhoid fever 19.

Stockton.—Month of November, 1909. Estimated population, 25,000. Total number of deaths 20, including tuberculosis 3. Cases reported: Diphtheria 1, tuberculosis 3.

CONNECTICUT—*Bridgeport*.—Month of November, 1909. Estimated population, 100,000. Total number of deaths 108, including diphtheria 3, measles 1, scarlet fever 2, tuberculosis 8, typhoid fever 1. Cases reported: Diphtheria 11, measles 1, scarlet fever 39, tuberculosis 11, whooping cough 2.

KANSAS—*Saline*.—Month of November, 1909. Estimated population, 21,837. Total number of deaths 9. Cases of infectious disease reported: Typhoid fever 1.

MINNESOTA.—Month of September, 1909. Population, 1,751,395. Reports received from the state board of health, from 72 cities and towns, state institutions, and other parts of the State show a total of 1,767 deaths, including diphtheria 47, scarlet fever 3, tuberculosis 159, typhoid fever 50.

NEW YORK.—Month of October, 1909. Estimated population, 8,699,643. Total number of deaths 11,428, including diphtheria 127, measles 36, pellagra 1, scarlet fever 44, smallpox 1, tuberculosis 1,237, typhoid fever 183, whooping cough 59. Cases reported: Diphtheria 1,421, measles 1,160, scarlet fever 1,150, smallpox 7, tuberculosis 2,276, typhoid fever 1,120.

NORTH DAKOTA.—Month of October, 1909. Population, 182,719. Total number of deaths 219, including diphtheria 2, typhoid fever 12. Cases reported: Diphtheria 34, measles 9, scarlet fever 23, smallpox 1, tuberculosis 6.

TEXAS.—Month of October, 1909. Population, 3,048,710. Total number of deaths, 1,022, including diphtheria 19, smallpox 1, tuberculosis 148, typhoid fever 87.

El Paso.—Month of November, 1909. Estimated population, 50,000. Total number of deaths 91, including diphtheria 1, tuberculosis 24, typhoid fever 2, whooping cough 3. Cases reported: Diphtheria 6, scarlet fever 5, smallpox 1, typhoid fever 96, whooping cough 5.

Fort Worth.—Month of November, 1909. Estimated population, 60,000. Total number of deaths 79. Cases of infectious disease reported: Diphtheria 9, scarlet fever 3, smallpox 2, tuberculosis 1, typhoid fever 5.

Waco.—Month of October, 1909. Estimated population, 30,000. Total number of deaths 30, including tuberculosis 3, typhoid fever 1. Cases reported: Diphtheria 2, scarlet fever 3, tuberculosis 3, typhoid fever 1. Month of November, 1909. Total number of deaths 29, including diphtheria 1, tuberculosis 5, typhoid fever 1. Cases reported: Diphtheria 9, scarlet fever 1, tuberculosis 5, typhoid fever 1.

VIRGINIA—*Richmond*.—Month of November, 1909. Estimated population, 115,701; white 73,204, colored 42,497. Total number of deaths 198; white 100, colored 98, including diphtheria 3, pellagra 1, scarlet fever 1, tuberculosis 27 (white 9, colored 18), typhoid fever 3.

WISCONSIN—*Milwaukee*.—Month of October, 1909. Estimated population, 370,000. Total number of deaths 399, including diphtheria 14, scarlet fever 21, tuberculosis 31, typhoid fever 4. Cases reported: Diphtheria 67, scarlet fever 115, smallpox 2, tuberculosis 33.

FOREIGN AND INSULAR.

AUSTRALIA.

SYDNEY—Examination of Rodents for Plague Infection.

The following information is taken from plague bulletins issued by the department of public health of New South Wales, October 25:

Week ended October 23. Rodents destroyed, 1,258; examined, 364; found infected, 0. Week ended October 30. Rodents destroyed, 1,302; examined, 418; found infected, 0. Week ended November 6. Rodents destroyed, 1,383; examined, 505; found infected, 0. Week ended November 13. Rodents destroyed, 1,433; examined, 141; found infected, 0. Week ended November 20. Rodents destroyed, 1,090; examined, 306; found infected, 0.

Last case of human plague reported May 29, 1909.

Last plague-infected rodent found June 15, 1909.

BRAZIL.

RIO DE JANEIRO—Inspection of Vessels—Plague and Smallpox.

Acting Assistant Surgeon Stewart reports, November 27:

Two weeks ended November 21. Vessels inspected: November 7, the British steamship *Ferndene* for New York in coffee cargo, with no passengers, and with 1 new member of crew signed on in this port; November 9, the British steamship *Ocean Prince* for New Orleans, with coffee cargo, no passengers, and no change in crew personnel; November 11, the British steamship *Milton*, for New Orleans, with coffee cargo, no passengers and no change in the crew personnel; November 12, the British steamship *South Wales*, for Mobile, with water ballast, no passengers and no change in crew personnel; November 13, the British steamship *Portreath*, for New York, with coffee cargo, no passengers and no change in the crew personnel; November 16, the British steamship *Tudor Prince*, for New York, with coffee cargo, no passengers and no change in the crew personnel; November 17, the British steamship *Lord Ormonde*, for Baltimore, with cargo of manganese ore, no passengers and no change in the crew personnel; November 18, the French steamship *Evesham*, for New Orleans, in coffee cargo, with no passengers and no change in the crew personnel; the British steamship *Voltaire*, for New York, with 10 cabin and 7 steerage passengers and no change in the crew, and with a cargo of coffee; and the British steamship *Lord Downshire*, for Galveston, in water ballast, with no passengers and no change in the crew personnel; November 19, the German bark *Anna*, for Pensacola, in stone and sand ballast, with no passengers and no change in the crew; the German steamship *Santa Fé*, for New York, with coffee, no passengers and no change in the crew personnel; and the British steamship *Houth Head*, for New Orleans, in water ballast, with no passengers and no change in the crew; and, November 20, the British steam-

ship *Breconshire*, for New York, in water ballast, with no passengers and no change in the crew personnel. No other vessels left this port for United States ports during the weeks under report.

Mortality—Plague and smallpox.—Week ended November 6. No deaths from plague, smallpox, or yellow fever. One case of plague and 3 cases of smallpox were reported. At the close of the week there were in São Sebastião Hospital 3 cases of smallpox and 2 of plague under treatment.

Week ended November 14. Total deaths, 21. No deaths from plague, smallpox, or yellow fever. Two cases of plague and 1 case of smallpox were reported. In hospital São Sebastião, at close of week, 2 cases of plague and 3 of smallpox were under treatment.

Week ended November 21. Total deaths, 20. One death from plague. No deaths from smallpox or yellow fever. No cases of yellow fever reported; 4 cases of plague and 4 of smallpox reported. In hospital São Sebastião at close of week, 3 cases of smallpox and 2 of plague were under treatment.

CHINA.

AMOY—Inspection of Vessels—Cholera and Plague—Beriberi.

Passed Assistant Surgeon Foster reports, November 11, 16, and 22:

Week ended November 6. One bill of health issued. November 5 the British steamship *Taisang*, with 63 in the crew and 65 cabin and 192 steerage passengers for Manila, was granted an original bill of health. Two passengers were rejected for trachoma. The crew and steerage passengers were bathed and their clothing was disinfected by steam. All on board were inspected at the time of sailing. Vessel anchored in the stream while in port. Manifests were viséed for 2,518 pieces of freight.

During the week ended November 6 there were 43 deaths from plague and 30 from cholera in Amoy. One death from beriberi was reported in the international settlement of Kulangsu.

Week ended November 13. No bills of health issued.

Cholera and plague appear to have entirely disappeared from this locality, and reports received from Chang Poo and Chin Chiu, in both of which places plague was epidemic during the summer, state that the disease is no longer present in those cities or the surrounding country.

Week ended November 20. Two bills of health issued. November 15 the British steamship *Kaifong*, with 59 in the crew and 51 cabin passengers, for Manila, Iloilo, and Cebu was granted a supplemental bill of health. Vessel anchored in the stream while in port. All on board were inspected at the time of sailing. Two passengers were rejected for favus and 2 for trachoma. Manifests were viséed for 312 pieces of freight.

November 20 the British steamship *Taisang*, with 64 in the crew and 51 cabin and 196 steerage passengers, for Manila was granted an original bill of health. One passenger was rejected for favus and 4 passengers for trachoma. The crew and steerage passengers were bathed and their clothing was disinfected by steam. All on board were inspected at the time of sailing. Vessel anchored in the stream while in port. Manifests were viséed for 2,535 pieces of freight.

HONGKONG—Examination of Emigrants.

Acting Assistant Surgeon Hough reports, November 16:

Week ended November 13. Quarantine restrictions enforced by and against Hongkong remain as reported November 6.

Aliens for Honolulu and Pacific coast ports.—Examined 336, rejected 62.

Aliens for Philippine Islands.—Examined 18, rejected 7.

INSPECTION AND DISINFECTION OF VESSELS.

Week ended November 13.

Vessels granted bills of health.....	7
Total members of crews.....	690
Total cabin passengers.....	376
Total steerage passengers.....	339
Members of crew bathed.....	501
Steerage passengers bathed.....	335
Pieces of baggage disinfected.....	826
Vessels disinfected to kill rats.....	0
Crews' quarters disinfected:	
By formaldehyde.....	5
By sulphur.....	0

SHANGHAI—Inspection of Vessels—Smallpox.

Acting Assistant Surgeon Ransom reports, November 9:

Week ended November 6. Supplemental bills of health issued to 3 steamships having an aggregate personnel of 390. There were inspected 2 vessels, 110 members of crews, and 1 steerage passenger, and 41 members of crews and 1 steerage passenger were bathed and their effects disinfected by steam. Manifests were viséed for 838 pieces of freight. There were examined 6 alien steerage passengers for San Francisco by steamship *Asia*, of whom 1 was passed and 5 were recommended for rejection on account of trachoma. The weekly report of the municipal health officer shows 1 death from smallpox among natives.

CUBA.**CIENFUEGOS—Inspection of Vessels.**

Acting Assistant Surgeon Suarez reports, December 20:

Week ended December 18.

Vessels inspected.....	3
Bills of health issued.....	3
Members of crews of outgoing vessels inspected.....	71

No quarantinable disease reported.

The department of sanitation reports for the period from December 1 to 10, 2,592 houses inspected.

HABANA—Inspection of Vessels—Smallpox.

Acting Assistant Surgeon Villoldo reports, December 22:

Week ended December 18.

Bills of health issued.....	28
Vessels inspected.....	25
Members of crews of outgoing vessels inspected.....	926
Passengers of outgoing vessels inspected.....	762
Certificates of inspection of hides issued.....	7

The national sanitary department reports for the period from December 11 to 20, 23,757 houses inspected and 10,522 water deposits of all kinds petroliized.

On December 9 a boy aged 16 applied for treatment at one of the private hospitals in this city. The case proved to be smallpox, and was transferred to Las Animas Hospital December 15. This boy was traced as one of the passengers who arrived at Habana December 4 on the French steamship *La Navarre* from Coruna, Spain. The patient had been in town 4 days previous to the invasion. As soon as the case was diagnosed as smallpox, the house where the boy had stopped was disinfected and 15 medical inspectors were appointed to vaccinate, giving special attention to those quarters of the town which the patient was known to have visited after his arrival.

MATANZAS—Inspection of Vessels.

Acting Assistant Surgeon Nuñez reports, December 20:
Week ended December 18. Bills of health issued to 2 vessels bound for ports in the United States. No quarantinable disease reported.

SANTIAGO—Inspection of Vessels.

Acting Assistant Surgeon Wilson reports, December 22:
Week ended December 18. Bills of health issued to 6 vessels bound for the United States. No quarantinable disease reported.
The sanitary department reports that 3,112 houses were inspected.

GERMANY.

BERLIN—Status of Cholera in East Prussia.

The following was received from the Department of State under date of December 22:

The American chargé d'affaires ad interim at Berlin reports, under date of November 24, that 2 cases of cholera have appeared in the districts of Heydekrug and Niederung, respectively (government district of Gumbinnen), East Prussia, since November 12.

INDIA.

CALCUTTA—Cholera, Plague, and Smallpox.

Acting Assistant Surgeon Allan reports, December 2:
Week ended November 20. At Calcutta there were 26 deaths from cholera, 6 from plague, and 1 from smallpox; in all Bengal, 237 cases of plague with 199 deaths; in all India, 5,719 cases of plague with 4,711 deaths.

Week ended November 27. Bill of health issued to the steamship *Stolzenfels* bound for Boston and New York with a total crew of 70. The usual precautions were taken, holds fumigated, rat guards placed on wharf lines, and effects of Asiatics disinfected.

ITALY.

NAPLES—Examination of Emigrants—Smallpox.

Surgeon Geddings reports, December 13:

Vessels inspected at Naples week ended December 11.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
Dec. 5	Principe di Piemonte.....	New York.....	341	45	380
7	Venezia.....	do.....	381	65	370
8	Duca degli Abruzzi.....	do.....	596	130	980
9	Prinzess Irene.....	do.....	445	95	620
9	Hamburg.....	do.....	307	66	450
11	Taormina.....	Philadelphia.....	424	115	670
	Total.....		2,494	516	3,470

REJECTIONS RECOMMENDED.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Suspected favus.	Small-pox.	Other causes.	Total.
Dec. 5	Principe di Piemonte..	6	1	3			3	13
7	Venezia.....	11	3	3	1		1	19
8	Duca degli Abruzzi.....	14	2	6			7	29
9	Prinzess Irene.....	8	2	3			3	16
9	Hamburg.....	7	1	7			7	22
11	Taormina.....	15		3		1	6	25
	Total.....	61	9	25	1	1	27	124

Vessels inspected at Palermo, week ended December 11.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
Dec. 6	Principe di Piemonte.....	New York.....	155	300	100

REJECTIONS RECOMMENDED.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Suspected favus.	Small-pox.	Other causes.	Total.
Dec. 6	Principe di Piemonte..	21		23			2	46

Smallpox in Naples.—During the week ended December 12, 10 cases of smallpox with 2 deaths were reported at the health office of the city of Naples.

A case of smallpox was discovered at the examination of the steerage passengers for the steamship *Taormina* December 11. The patient was sent to the Cotugno hospital for contagious diseases. The contacts, 2 in number, were returned to their boarding house and placed under observation; they were also revaccinated and their quarters disinfected.

JAPAN.

YOKOHAMA—Inspection of Vessels—Plague Rats on Vessel.

Passed Assistant Surgeon Cumming reports, December 10:

Week ended December 4. Vessels inspected: Steamships *Tenyo Maru* for San Francisco and *Kumeric* for Seattle, and schooner *Musashi Maru* for Agana, Guam.

Plague-infected rats were found during the week on the steamship *Chikuzen Maru* at dock from Shanghai via Kobe. The vessel was remanded to quarantine.

KOBE—Inspection of Vessels—Plague.

Acting Assistant Surgeon Knight reports, November 24 and December 2 and 8:

Week ended November 20. Supplemental bills of health granted to 4 steamships. There were inspected 256 members of crews and 79 steerage passengers, and 10 members of crews and 12 steerage passengers were bathed and their effects were disinfected. The number of pieces of baggage steamed was 67 and bedding 24. Manifests were viséed for 22,862 pieces of freight amounting to 2,428 tons. Thirty-one cases of human hair were disinfected with formalin. Twelve emigrants by steamship *Kaga Maru* were passed and 25 recommended for rejection. The emigrants were in quarantine detention at Ono for 7 days. The official returns of infectious diseases for the week show 16 cases of plague with 11 deaths at Kobe.

Week ended November 27. Supplemental bills of health granted to 3 steamships. There were inspected 292 members of crews and 487 steerage passengers; 79 steerage passengers were bathed, and their effects were disinfected by steam. The number of pieces of baggage steamed was 254 and bedding 158. Manifests were viséed for 113,959 pieces of freight, amounting to 8,811 tons.

Emigrants examined: By steamship *Mongolia*, for Honolulu; passed 40, recommended for rejection 52; for San Francisco, passed 2, recommended for rejection 4. By steamship *Tenyo Maru* for Honolulu; passed 31, recommended for rejection 36; for San Francisco, passed 6, recommended for rejection 5.

The emigrants passed to Honolulu by the steamship *Mongolia* include 11 Russians who were inspected and bathed; their effects were disinfected. The emigrants were 7 days in quarantine detention at Ono before embarkation.

The official returns of infectious diseases for the week show 12 cases of plague with 12 deaths in Kobe.

Week ended December 4. Supplemental bills of health granted to 2 steamships and original bill of health granted to 1 steamship.

There were inspected 185 members of crews and 15 steerage passengers; 46 members of crews were bathed and their effects were disinfected by steam. The number of pieces of baggage steamed was 111. Manifests were viséed for 54,744 pieces of freight, amounting to 3,245 tons. During the week 531 packages of old rubber overshoes were disinfected by steam and 31 cases of human hair were disinfected with formalin. One vessel was fumigated with sulphur to kill vermin, and her forecandle washed down with antiseptic solution.

The official returns of infectious diseases for the week show 6 cases of plague with 5 deaths in Kobe.

Plague rats on a vessel.—The steamship *Chikuzen Maru*, plying between Shanghai and Yokohama, en route to Yokohama, while stopping at this port was discovered to be infected with plague rats. The vessel proceeded to Yokohama, where she was detained 10 days in quarantine and thoroughly fumigated according to the Japanese quarantine laws.

MEXICO.

COATZACOALCOS—Inspection of Vessels.

Acting Assistant Surgeon Thompson reports, December 16:

Vessels inspected: December 14, steamship *American*, with 45 in crew, for New York; December 15, steamship *San Cristobal*, with 30 in crew, for Port Arthur, Tex., and steamship *City of Mexico*, with 25 in crew and 8 passengers, for New Orleans. No quarantinable disease present.

SALINA CRUZ—Fumigation of Vessel.

Acting Assistant Surgeon Gochicoa reports, December 16:

Two weeks ended December 15. Steamship *Mexican*, for San Francisco, fumigated December 7.

PHILIPPINE ISLANDS.

Cholera in Cebu.

Chief Quarantine Officer Heiser reports, November 24:

During the past few weeks there has been a constant decline in the number of cases of cholera reported in the city of Manila and in the provinces, but the number of infected towns has remained about the same. The danger which this disease is to a community, even though present in sporadic form, is well shown by the experience of Cebu during the past week. The last known case of cholera in Cebu occurred more than a week prior to November 12. On November 13 there were 10 cases reported; the succeeding day 43 cases; the next day 44 cases, and the following day 73 cases. The victims practically all lived in one section of the city, and the water supply of this section at once came under suspicion. The trouble was soon located in several wells in which, no doubt, material from a cholera stool had found its way. Most energetic measures were taken; the water in the wells of the infected district was made into a 3 per cent solution of carbolic acid, and this solution was then pumped out and distributed over as large a section of the ground in the neighborhood of the wells as possible. After this the wells were closed; the sick were isolated in rapidly-improvised hospitals, public closets were constructed, and these, as well as private closets, were regularly disinfected; a house-to-house inspection was made; distilled water distributed, and thorough disinfection of all houses in the infected district carried out. An immediate decline took place in the number of cases, until on November 21 the number had fallen to 5 cases per day.

The foregoing experience again demonstrates in a most effective manner the value of a properly organized health force available on the ground to combat outbreaks of this kind. It is not inconceivable

that, unless prompt measures had been taken, a pandemic of cholera would have taken place among the residents of the island of Cebu, which consists of a population of over 800,000 people, and is one of the most thickly settled provinces in the Philippines. An outgoing maritime quarantine was immediately imposed. One case of cholera developed on the steamship *M. Yaptico*. The vessel and personnel were disinfected and no further cases occurred.

Cholera and Smallpox—Inspection of Vessels.

Doctor Heiser further reports, November 17 and 24:

Week ended November 13. Eleven cases of cholera with 11 deaths occurred in the city of Manila. Week ended November 20. Eight cases of cholera with 9 deaths and 2 cases of smallpox occurred in the city of Manila.

Cholera in the provinces.

WEEK ENDED NOVEMBER 13.

Province.	Cases.	Deaths.
Albay.....	4	4
Bataan.....	83	51
Bohol.....	16	10
Bulacan.....	12	12
Camarines.....	1	1
Cavite.....	41	32
Cebu.....	17	15
Oriental Negros.....	1	1
Pampanga.....	2	2
Rizal.....	4	3
Tarlac.....	9	5
Total.....	190	136

WEEK ENDED NOVEMBER 20.

Albay.....	2	2
Bataan.....	32	22
Bohol.....	9	4
Bulacan.....	12	7
Camarines.....	4	4
Cavite.....	20	16
Cebu.....	190	141
Pampanga.....	6	3
Oriental Negros.....	9	4
Total.....	284	203

Inspection of vessels at Manila.—November 8, the British steamship *Indrasamha*, with 63 in crew, en route from Kobe to Boston and New York, was granted a supplemental bill of health. Cargo inspected during loading and personnel inspected at hour of sailing. November 8, the British steamship *Kumeric*, with 76 in crew and 2 cabin passengers, was granted a bill of health for Seattle. Cargo inspected before loading. Entire personnel inspected prior to sailing. November 9, the British steamship *Changsha*, with 74 in crew and 25 cabin and 45 steerage passengers, en route from Hongkong to Zamboanga, granted a supplemental bill of health.

November 14, the U. S. Army transport *Thomas*, with 189 in crew and 155 cabin and 306 steerage passengers, was granted a bill of health to San Francisco via Nagasaki and Honolulu. Vessel partially dis-

infected. Crew and steerage passengers bathed, and their effects and baggage disinfected. Cargo and baggage inspected and either disinfected or passed. All persons on board inspected at the Mariveles quarantine station prior to sailing. November 19, the British steamship *Kaifong*, with 65 in crew and 44 passengers, en route from Hongkong to Cebu and Iloilo, was granted a supplemental bill of health. November 19, the British steamship *Cranley*, with 34 in crew, en route from Norfolk, Va., to Cebu, was granted a supplemental bill of health. November 26, the American steamship *Korea*, with 277 in crew and 536 passengers, was granted a bill of health for San Francisco via Hongkong, Japan ports, and Honolulu. Cargo inspected prior to loading. Passengers embarked at this port were inspected prior to sailing.

RUSSIA.

ST. PETERSBURG—Status of Cholera.

The following information, dated December 7, was received from Chargé d'Affaires Schuyler, through the Department of State, December 28:

A communication from the minister of foreign affairs states that during the period from November 21 to 27, there were 81 cases of cholera, with 35 deaths, in Russia, occurring as follows:

Cities and governments.	Cases.	Deaths.
St. Petersburg.....	14	6
Baku.....	10	7
Governments:		
St. Petersburg.....	9	6
Vitebsk.....	2	.....
Kovno.....	8	3
Jaroslav.....	.....	1
Kostroma.....	3	4
Baku.....	4	3
Pskov.....	10	.....
Kursk.....	3	.....
Ekatherinoslav.....	4	1
Taurida.....	14	4
	81	35

LIBAU—Examination of Emigrants—Plague.

Acting Assistant Surgeon De Forest reports, December 12:

Week ended December 9. For the steamship *Russia*, sailing December 14, 52 emigrants have been examined and 130 pieces of baggage disinfected.

One fatal case of plague has occurred in Libau.

TURKEY.

SMYRNA—Smallpox Mortality.

The following was received from Consul-General Harris, under date of December 4:

The number of deaths from smallpox now being reported has decreased from a maximum of 20 a day, 2 months ago, to 5 or 7 a week.

VENEZUELA.

LA GUAIRA—Inspection of Vessels.

Acting Assistant Surgeon Kellogg reports, December 12:

Vessels inspected, week ended December 11.

Date.	Vessel.	Destination.	Crew.	Passengers in transit.	Passengers taken.
Dec. 7	Wanderer.....	Galveston.....		0	0
9	Prins Maurits.....	New York.....	70	17	6
11	Perou.....	Colon.....	165	266	8

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received during Week Ended January 7, 1910.

[These tables include cases and deaths recorded in reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from American consuls through the Department of State and from other sources. For reports received from June 25, 1909, to December 31, 1909, see PUBLIC HEALTH REPORTS for December 31, 1909. In accordance with custom, the tables of epidemic diseases are terminated semi-annually and new tables begun.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany:				
Niederung.....	Nov. 16-22.....	1		
India:				
Bombay.....	Nov. 24-30.....		5	
Calcutta.....	Nov. 14-20.....		26	
Rangoon.....	Nov. 14-20.....		5	
Philippine Islands:				
Manila.....	Nov. 7-20.....	19	20	
Provinces—				
Albay.....	Nov. 7-20.....	6	6	
Bataan.....	Nov. 7-20.....	115	73	
Bohol.....	Nov. 7-20.....	25	14	
Bulacan.....	Nov. 7-20.....	24	19	
Camarines.....	Nov. 7-20.....	5	5	
Cavite.....	Nov. 7-20.....	61	48	
Cebu.....	Nov. 7-20.....	207	156	Nov. 20, 1 case on s. s. Yaptico.
Oriental Negros.....	Nov. 7-20.....	10	5	
Pampanga.....	Nov. 7-20.....	8	5	
Rizal.....	Nov. 7-13.....	4	3	
Tarlac.....	Nov. 7-13.....	9	5	
Russia, general.....	Nov. 21-27.....	81	35	
Baku, government.....	Aug. 21-27.....	4	3	
Baku.....	Nov. 21-27.....	10	7	
Ekaterinislav.....	Nov. 21-27.....	4	1	
Jaroslav.....	Nov. 21-27.....	1	1	
Kostroma.....	Nov. 21-27.....	3	4	
Koursk.....	Nov. 21-27.....	3		
Kovna.....	Nov. 21-27.....	8	3	
Pskov.....	Nov. 21-27.....	10		
St. Petersburg, government.....	Nov. 21-27.....	9	6	
St. Petersburg.....	Nov. 21-27.....	14	6	
Taurida.....	Nov. 21-27.....	14	4	
Vitebsk.....	Nov. 21-27.....	2		

YELLOW FEVER.

Brazil:			
Manaos.....	Nov. 21-Dec. 4.....		2
Para.....	Nov. 28-Dec. 11.....	4	4

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received during Week ended January 7, 1910.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Para.....	Nov. 28-Dec. 11....	7	5	
Pernambuco.....	Oct. 15-31.....		3	
Río de Janeiro.....	Nov. 2-21.....	7	1	
China:				
Hongkong.....	Nov. 21-27.....	1	1	
Egypt:				
Alexandria.....	Nov. 19-29.....	4	4	
Provinces—				
Assiout.....	Sept. 29-Dec. 7....	7	2	
Menouf.....	Nov. 28-Dec. 5....	14	4	
India:				
Bombay Presidency and Sind.....	Nov. 7-13.....	993	647	
Madras Presidency.....	Nov. 7-13.....	112	91	
Bengal.....	Nov. 7-13.....	282	202	
United provinces.....	Nov. 7-13.....	1,323	1,122	
Punjab.....	Nov. 7-13.....	633	460	
Burma.....	Nov. 7-13.....	26	22	
Central provinces, including Berar.....	Nov. 7-13.....	789	677	
Mysore State.....	Nov. 7-13.....	199	145	
Hyderabad State.....	Nov. 7-13.....	27	21	
Central India.....	Nov. 7-13.....	177	141	
Rajputana and Ajmer-Merwara.....	Nov. 7-13.....	429	362	
Kashmir.....	Nov. 7-13.....	12	11	
Grand total.....		5,002	3,901	
Japan:				
Kobe.....	Nov. 28-Dec. 4....	6	5	
Russia:				
Libau.....	Dec. 3-9.....	1	1	
Turkey:				
Alexandretta.....	Dec. 1.....		3	
Beirut.....	Nov. 27-28.....	2		

SMALLPOX.

Algeria:				
Algiers.....	Nov. 1-30.....		1	
Brazil:				
Pernambuco.....	Oct. 16-30.....		32	
Río de Janeiro.....	Nov. 2-21.....	8		
China:				
Shanghai.....	Nov. 1-6.....		1	
Cuba:				
Baracoa.....	Dec. 5-11.....	1		
Habana.....	Dec. 3-9.....	1		
Egypt, general.....	Nov. 5-18.....	66	29	From s. s. La Navarre.
Cairo.....	Nov. 26-Dec. 2....	3	1	
Germany, general.....	Dec. 5-11.....	1		
Great Britain:				
London.....	Nov. 28-Dec. 13....	4		
France:				
Paris.....	Dec. 5-11.....	5		
India:				
Bombay.....	Nov. 24-30.....		3	
Calcutta.....	Nov. 14-20.....		1	
Italy, general.....	Nov. 29-Dec. 12....	67		
Naples.....	Dec. 6-12.....	10	2	
Mexico:				
Chihuahua.....	Dec. 13-19.....		1	
Mexico.....	Nov. 14-27.....		6	
Monterey.....	Dec. 13-19.....		1	
Netherlands:				
Rotterdam.....	Dec. 5-11.....	7		
Philippine Islands:				
Manila.....	Nov. 14-20.....	2		
Portugal:				
Lisbon.....	Dec. 5-11.....	15		
Russia:				
Moscow.....	Nov. 21-27.....	3		
Odessa.....	Nov. 21-Dec. 4....	22	10	
St. Petersburg.....	Nov. 28-Dec. 4....	41	12	

MORTALITY.

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.			
Aberdeen	Dec. 11	181,918	58														2
Aden	Nov. 29	43,974	12	1													
Aix-la-Chapelle	Nov. 27	160,341	51	6													
Alexandria	Nov. 11	391,121	54	21													
Do	Nov. 18		66	16													
Amsterdam	Dec. 11	566,665	148	25					5	1							
Antwerp	Dec. 4	323,921	72	3													
Athens	Nov. 20	241,058	84	14						4				1			
Baracoa	Dec. 4	27,000	4	1													
Do	Dec. 11		6	1													
Barcelona	Dec. 11	591,272	370	35				2			12						
Do	Dec. 13		310	31							15						
Barmen	Nov. 20	163,100	32	3													
Barranquilla	Nov. 27	40,000	20	3													
Do	Dec. 4		22	1													
Do	Dec. 11		26	1													
Belfast	do	386,576	218	37													15
Belize	Dec. 16	9,113	4														
Bergen	Nov. 27	87,749	19														1
Do	Dec. 4		20	4													
Berlin	Nov. 27	2,110,112	568	84							1	11					5
Birmingham	Dec. 11	558,336	189							1	1						
Bombay	Nov. 20	977,822	638	56	7	3		3		1							
Bordeaux	Dec. 4	253,000	123	10													
Do	Dec. 11		97	10													
Bradford	do	293,983	100	5						1							1
Bremen	Dec. 4	235,648	63	7													1
Do	Dec. 11		63	13							1	1		1	2		5
Breslau	Dec. 4	335,186	199	21						2	1						
Bristol	Dec. 11	377,642	108	6													
Brussels	Dec. 4	704,975	149	25													
Budapest	Nov. 27	804,200															
Do	Dec. 4									4	9	7					1
Cairo	Dec. 2	704,836	394	29				1	4								
Calcutta	Nov. 20	847,796	532	38		2		1									
Canton	Nov. 13	1,000,500	200	20													
Do	Nov. 20		175	20													
Do	Nov. 27		200	25													
Cardiff	Oct. 2	195,303	44	3													
Do	Oct. 9		50	3													
Do	Oct. 16		32	3													
Do	Oct. 23		28	3													
Do	Oct. 30		25	3						1							
Do	Nov. 6		42	3													
Do	Nov. 13		41	5													1
Do	Nov. 20		51	6													
Do	Nov. 27		58	4													
Cartagena	Dec. 5	30,000	9	2													
Do	Dec. 12		17	1													
Chemnitz	Nov. 27	280,675	78	5						1							
Do	Dec. 4		86	7													
Chihuahua	Dec. 19	37,000	21	1				1									1
Christiania	Dec. 11	236,000	73	4													
Cienfuegos	do	30,038	17														
Do	Dec. 18		24	1													
Coburg	Nov. 27	23,445	5														1
Do	Dec. 4		6														
Cologne	do	473,091	119	15							3						2
Colon	Dec. 11	15,000	13	1													
Copenhagen	Nov. 27	450,000	120	20										1			1
Curacao	Dec. 10	30,000	11														
Do	Dec. 17		6														
Dalny	Nov. 27	38,789	19	1													
Do	Dec. 4		19	1													
Dresden	do	551,000	162	23						3							
Dundee	Dec. 11	161,173	59	5										5			3
Durban	Nov. 20	60,244	12	1													
Edinburgh	Dec. 11	355,366	119	11										4	1	5	3

MORTALITY—Continued.

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.			
Erfurt.....	Nov. 20	108,449	26	1													1
Do.....	Nov. 27	.....	30									1					1
Frankfort-on-the-Main.....	Do.....	368,890	88										2				
Do.....	Dec. 4	.....	83										2				1
Flushing.....	Nov. 11	21,208	4														
Georgetown.....	Nov. 27	56,000	64	8							1						
Do.....	Dec. 4	.....	58	5													
Ghent.....	Do.....	164,579	58	10								2					
Glasgow.....	Dec. 17	872,021	529								7		8		60		7
Gothenburg.....	Dec. 4	162,400	42	6							1		4		2		
Greenock.....	Dec. 11	72,300	17	2													1
Guayaquil.....	Dec. 20	75,000	84	7	21												4
Do.....	Nov. 27	.....	85	12	18												3
Halifax.....	Dec. 18	50,000	13	3													
Havre.....	Dec. 4	132,430	54	7													
Hilo.....	Do.....	.....	6								1						
Hongkong.....	Nov. 13	366,488	.....								1						
Hull.....	Dec. 11	275,552	93											1			4
Kobe.....	Nov. 20	380,717	180		11						2						
Konigsberg.....	Nov. 27	240,000	81	10									1	2	4		4
Do.....	Dec. 4	.....	92	5										1	4		1
La Paz.....	Nov. 27	5,000	3														
Leeds.....	Dec. 11	484,012	152	3													3
Leith.....	Do.....	85,721	25	3													
Liege.....	Dec. 4	175,968	56														
Liverpool.....	Dec. 11	760,357	322	24							1		2	1	2		5
London.....	Do.....	7,429,740	2,114								3		5	24	21		24
Londonderry.....	Nov. 27	43,158	11	1													
Do.....	Dec. 4	.....	20	4													
Lubeck.....	Dec. 4	97,500	33								1						
Managua.....	Dec. 8	22,278	16	1							1						
Manaos.....	Nov. 27	52,000	30	2													
Do.....	Dec. 4	.....	39				1				1						
Manchester.....	Dec. 11	543,968	219	20										1	2	5	1
Mannheim.....	Nov. 27	184,992	42	6										1			
Mexico.....	Nov. 20	400,000	315	34				3	8								
Do.....	Nov. 27	.....	360	31							1		2		1		4
Moncton.....	Dec. 25	13,500	4														
Monterey.....	Dec. 19	100,000	52	4				1			2						
Montreal.....	Dec. 25	289,387	150	11							10	3		1			2
Moscow.....	Nov. 27	1,500,000	694	84						3	6	51	32		19		7
Munich.....	Do.....	566,000	207	27										3	4		3
Do.....	Dec. 4	.....	192	24									1	6			
Nagasaki.....	Nov. 21	175,936	45	4								1					
Do.....	Nov. 28	.....	36	8													
Do.....	Dec. 5	.....	42	5													
Nantes.....	Dec. 12	161,908	58	10							1						
Naples.....	Dec. 11	593,729	302						2					1			
Newcastle-on-Tyne.....	Do.....	281,584	111	11							1			1			1
Nottingham.....	Dec. 4	260,000	83										1	1			2
Nuremberg.....	Nov. 13	316,180	97	16										1			2
Do.....	Nov. 20	.....	100	12							1	2					
Do.....	Nov. 27	.....	66	6								3			1		2
Odessa.....	Do.....	520,000	216	28						4		7	19	10	6		
Do.....	Dec. 4	.....	231	15								11	25	8	4		2
Para.....	Do.....	185,000	87	10						5							
Do.....	Dec. 11	.....	64	1							1						
Penang.....	Nov. 20	102,520	58	13													
Paris.....	Dec. 11	2,776,394	908	166								4	1	9	11		4
Plymouth.....	Nov. 11	124,180	31									1					1
Port Elizabeth.....	Nov. 27	32,959	11	3													
Prague.....	Nov. 27	233,649	120	26										2	3		
Do.....	Dec. 4	.....	129	24										3	7		
Rangoon.....	Nov. 13	252,155	203	8										3			
Do.....	Nov. 20	.....	198	5			1	10								1	
Rio de Janeiro.....	Nov. 6	811,443	222	59								2			2		
Do.....	Nov. 14	.....	210	62													
Do.....	Nov. 20	.....	208	39													
Rotterdam.....	Dec. 11	416,910	100							1							

MORTALITY—Continued.

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.			
Salgon	Oct. 31	206,000															
St. Petersburg	Dec. 4	1,678,000	734	105		1		12	2	8	37	27	35	10			
Salaverry	Dec. 1	1,750								1							
Santa Cruz de Teneriffe	Dec. 4	46,000	15	2													
Santiago	Dec. 18	53,614	20	3													
Scheidam	Dec. 4	31,863	10	2													
Sheffield	do	472,000	135	10						5		6	1				
Do	Dec. 11		116	7						5		1					
Singapore	Nov. 20	271,060	250	27						2							
Southampton	Dec. 11	124,667	45	1								1					
Stettin	Dec. 4	239,000	93	10						3		1	2				
South Shields	Dec. 11	117,627	40	8													
Stockholm	Nov. 27	339,582	78	14								1	2	1	1		
Sunderland	Dec. 11	159,137	72	4							1						4
Tarragona	do	20,400	7	1													
Trieste	Nov. 20	219,777	97							1							
Do	Nov. 27		101								3						
Do	Dec. 4		109							2							
Valetta	do	212,888	92	4													
Veracruz	Dec. 18	32,000	26	6						4							
Victoria	do	35,000	8														
Vienna	Dec. 4	2,085,888	609	95								10	1	2			
West Hartlepool	Dec. 11	66,750	23														
Winnipeg	Dec. 18	122,000	25	3													
Do	Dec. 25		12							1							
Yarmouth	do	6,700										2					
Yokohama	Nov. 29	392,870	23									1					
Zanzibar	Nov. 14	75,000	23	4													
Do	Nov. 21		19														

MORTALITY—FOREIGN AND INSULAR—COUNTRIES AND CITIES (untabulated).

ARGENTINA—*Rosario de Santa Fé*.—Month of October, 1909. Population, 174,617. Total number of deaths 350, including diphtheria 3, measles 5, tuberculosis 37, typhoid fever 2.

AUSTRALIA—*Fremantle*.—Month of September, 1909. Estimated population, 194,109. Total number of deaths 18, including diphtheria 1.

New South Wales—New Castle.—Month of October, 1909. Estimated population, 53,250. Total number of deaths 50, including tuberculosis 8, typhoid fever 1.

BRAZIL—*Pernambuco*.—Two weeks ended October 31, 1909. Estimated population, 210,000. Total number of deaths 323, including measles 4, plague 3, smallpox 32, tuberculosis 38, typhoid fever 2, whooping cough 1.

São Paulo, Santos, and Campinas.—Two weeks ended October 31, 1909. Population, 300,000. Total number of deaths 336, including diphtheria 1, measles 12, tuberculosis 18.

CHILE—*Punta Arenas*.—Month of October, 1909. Estimated population, 12,000. Total number of deaths 40, including tuberculosis 4.

CUBA—*Matanzas*.—Ten days ended December 10, 1909. Population, 36,009. Total number of deaths 29, including tuberculosis 4.

GERMANY—*Bavaria—Munich*.—Month of September, 1909. Estimated population, 566,000. Total number of deaths 711, including diphtheria 2, measles 3, scarlet fever 7, tuberculosis 104, typhoid fever 1, whooping cough 12.

GREAT BRITAIN AND IRELAND.—Week ended December 4, 1909.

England and Wales.—The deaths registered in 76 great towns correspond to an annual rate of 16.5 per 1,000 of the population, which is estimated at 16,445,281.

Ireland.—The deaths registered in 21 principal town districts having an aggregate estimated population of 1,142,830 correspond to an annual rate of 20.1 per 1,000 of the population. The lowest rate was recorded at Portadown, viz, 5.2, and the highest at Tralee, viz, 31.7 per 1,000 of the population.

Scotland.—The deaths registered in 8 principal towns having an aggregate estimated population of 1,865,571 show a total of 797, including diphtheria 4, measles 43, scarlet fever 9, typhoid fever 3, whooping cough 17.

GREECE—*Patras*.—Two weeks ended November 30, 1909. Estimated population, 40,000. Total number of deaths 12, including diphtheria 1, tuberculosis 1.

INDIA—*Rangoon*.—Month of October, 1909. Estimated population, 295,803. Total number of deaths 854, including plague 11, smallpox 5, tuberculosis 26.

TURKS ISLANDS.—Seven weeks ended December 11, 1909. Estimated population, 1,700. Total number of deaths 6. No contagious diseases.

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service.