

# ABSTRACT OF SANITARY REPORTS.

VOL. X.

WASHINGTON, D. C., JUNE 14, 1895.

No. 24.

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

## UNITED STATES.

*Precautions against the Entry of Yellow Fever into the United States—Infected Vessels, or Vessels Suspected of being Infected, to Stop at National Quarantine Stations.*

TREASURY DEPARTMENT,  
*Washington, D. C., June 11, 1895.*

SIR: I have the honor to request that the United States consuls stationed in the Atlantic seaports of South America, Central America, and Mexico, and in all West Indian ports, particularly ports in Cuba, be instructed to notify masters of vessels leaving said ports for any port in the United States between the southern boundary of Virginia and the western extremity of the Mississippi coast, to the following effect, namely: That if yellow fever, or fever that is suspected of being yellow fever, appears on board any such vessel during the voyage, or if the master has any reason to believe during the voyage that the vessel is infected with yellow fever, said vessel, en route to her port of destination, should repair to the United States quarantine station at Dry Tortugas, Fla., Blackbeard Island (Sapelo Sound), Ga., or Ship Island, Miss., as may be most convenient, for inspection or treatment. This procedure will be likely to save the vessel both time and expense. No quarantine fees are charged at the national quarantine stations.

I have further to request that the following additional instructions be transmitted to the United States consuls in all Cuban and other West Indian ports, namely: Masters of sailing vessels from Cuban ports in which yellow fever prevails, and from other West Indian ports in which yellow fever may prevail, bound for any port in the United States south of the southern boundary of Virginia, should be advised during the quarantine season—between May 1 and November 15—to proceed via the United States quarantine station at Dry Tortugas, Fla., Ship Island, Miss., or at Blackbeard Island, Sapelo Sound, Ga., for inspection or treatment, as may be most convenient.

Respectfully, yours,

S. WIKE,  
*Acting Secretary.*

The Hon. SECRETARY OF STATE.

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

*Arrival of Infected Bark Agra at Pensacola Quarantine.*

PENSACOLA, FLA., *June 3, 1895.*

SIR: I have the honor to inform you that the Norwegian bark *Agra* arrived at the Pensacola Quarantine on the 26th ultimo. The captain reports that on the 11th and 12th of February and 9th and 20th of March he sent to the hospital at Santos 4 seamen sick with yellow fever; 3 of them died, but he did not learn the result of the other case. On the 24th of March another seaman was taken sick on the voyage here and died on the 29th; since that date there has been no sickness on board.

Respectfully, yours,

J. WHITING HARGIS,  
*Acting Assistant Surgeon, M. H. S.*

*One Case of Smallpox in Henderson, Ky.*

HENDERSON, KY., *June 5, 1895.*

SIR: I have the honor to report 1 case of confluent smallpox in a negro girl 9 years of age.

Respectfully, yours,

A. J. LIEBER, M. D.,  
*Health Officer.*

*Vaccination of River Boatmen at New Orleans.*

NEW ORLEANS, LA., *June 7, 1895.*

SIR: Referring to my report of May 9, 1895, informing you that, in accordance with your instructions, a system of vaccination of the crews and passengers of Mississippi River steamboats had been inaugurated at this port, I have the honor to advise you that the work of inspection and vaccination has been in progress day and night, and that it is still continued. During the month of May 2,460 persons were vaccinated, nearly all of whom were furnished with certificates of vaccination. Besides, upon inspection, several hundred were found to be protected by recent vaccinations made by the health officials of this and other cities, and they also were furnished with certificates to that effect. This additional work was necessary from the fact that all roustabouts are debarred at present from shipping on any steamboat from this port unless they produce a certificate showing that they have been vaccinated or that they are otherwise protected. One steamboat has been disinfected by thorough washing down with a solution of bichloride of mercury, 1:1000, she having had several cases of smallpox on board.

The local health authorities have established vaccination stations throughout the city, and physicians have been employed to vaccinate all applicants free of charge. The number of cases of smallpox in the city is gradually diminishing. A few cases have been reported from surrounding parishes.

Very respectfully,

HENRY W. SAWTELLE,  
*Surgeon, M. H. S.*

*Smallpox at Staunton.*

STAUNTON, VA., *June 7, 1895.*

SIR: Since Friday last I have had 1 death at the hospital and 3 new cases, 1 of which was in a quarantined house and the other 2 in same

neighborhood. The cases as a rule are doing well, although I have several pretty sick men. There are 8 cases remaining in town, none very ill, and 5 will be removed to hospital in a few days.

Very respectfully,

J. B. CATLETT.

*Typhoid Fever Epidemic in Evansville, Ind.*

EVANSVILLE, IND., June 4, 1895.

SIR: Referring to letter from this office dated April 30, 1895, relative to the prevalence of enteric fever in this city, I have the honor to report the following statistics, which were furnished by the local health office:

January, 1895, 15 cases, 2 deaths; February, 1895, 8 cases, 3 deaths; March, 1895, 14 cases, 4 deaths; April, 1895, 176 cases, 23 deaths; May, 1895, 258 cases, 26 deaths, up to and including May 28.

Very respectfully,

P. M. CARRINGTON,  
Passed Assistant Surgeon, M. H. S.

*Disinfection of Steamship Ferndene.*

REEDY ISLAND, June 9, 1895.

SIR: I have the honor to report the disinfection of the British steamer *Ferndene*, outward bound from Philadelphia, and departed from this station to-day with water ballast for Tampa, Fla., to load phosphate rock.

This vessel arrived May 29 from Cuba with a cargo of sugar, no sickness, and I disinfected her at the request of the agents and owners, who hope in this way to avoid the five days' detention and fumigation at the next loading port.

Respectfully, yours,

A. H. GLENNAN,  
Passed Assistant Surgeon, M. H. S.

*Relative to Report of Yellow Fever at Mazatlan, Mexico.*

SAN DIEGO, CAL., June 5, 1895.

SIR: In regard to the report of yellow fever at Mazatlan, Mexico, I have to say that steamers receive passengers at Ensenada who may be bound from Mazatlan to San Diego, and who have been landed at Ensenada from the Pacific Coast Steamship Company's steamer *St. Paul*, which runs from Mazatlan via Ensenada to San Francisco.

If yellow fever is epidemic at Mazatlan this early in the season, when the heated term has but just fairly set in, it is easy to surmise what may be the results later on; and judging from the experience of the cases of the United States steamships *Ranger* and *Bennington* last season at Mexican and Central American Pacific coast ports, it would seem that the utmost vigilance would be necessary at all Pacific coast national quarantine stations during the coming season.

W. W. MCKAY,  
Acting Assistant Surgeon, M. H. S.

NOTE.—The report of existence of yellow fever was denied by Sanitary Inspector W. F. Chenoweth, M. H. S., on May 20, 1895. (See ABSTRACT OF SANITARY REPORTS, Vol. X, No. 22, p. 437.)

*Smallpox in the United States as reported to the Supervising Surgeon-General Marine-Hospital Service, April 1 to June 11, 1895.*

Places.	Date.	Cases.	Deaths.	Remarks.
Arizona:				
Nogales.....	Apr. 25-May 2.....	39	2	
	May 22.....	1		
Arkansas:				
Clay County.....	June 3.....	4	2	
Garland County (Hot Springs).	Feb. 1-April 20...	192	44	
California:				
Angel Island Quarantine, San Francisco.	Apr. 20.....	2		Taken from steamship Coptic.
Connecticut:				
New Haven.....	Apr. 3.....	1		
Florida:				
Key West.....	May 4.....	1		
Indiana:				
Evansville.....	Apr. 30-May 28....	9		
Indianspolis.....	May 6.....	1		
Jeffersonville.....	Apr. 24.....	1	1	
Clark County.....	.....do.....	3	1	
Tell City.....	.....do.....	3		
Roby.....	May 6.....	1		
Terre Haute.....	Apr. 24.....	1		
	May 6.....	1	1	
Iowa:				
Muscatine.....	Apr. 17.....	1		
Kentucky:				
Ashland.....	Apr. 1-May 8.....	6		
Henderson.....	Apr. 27-June 5....	1		
Lexington.....	.....do.....	25	3	
Paducah.....	Apr. 1-May 8.....	30		
Princeton.....	.....do.....	10		
Union Junction.....	.....do.....	3		
Winchester.....	.....do.....	1		
Williamstown.....	.....do.....	1		
High Bridge.....	.....do.....	2		
Maysville.....	.....do.....	1		
Henderson.....	.....do.....	1		
Louisville.....	.....do.....	5	1	
	Apr. 1-Apr. 30.....		1	
Louisiana:				
New Orleans.....	Mar. 9-Apr. 6.....	6	1	
	Apr. 13-Apr. 20....	1		
	Apr. 26-May 4.....	28	2	
	May 11-May 18.....		8	
Maryland:				
Charles County.....	Apr. 10.....	23	3	
	Apr. 27.....	2		
Michigan:				
Battle Creek.....	May 9.....	1		
Brownstown Township.....	Apr. 13-May 4.....			Smallpox reported.
Detroit.....	May 25-June 1.....			Do.
Olivet.....	.....do.....			Do.
Mississippi:				
Vicksburg.....	May 1.....	2		
Missouri:				
St. Louis.....	Mar. 28-Apr. 6.....	17	4	
	Apr. 13-Apr. 27....	53	5	
	May 4-May 18.....	14	4	
	May 25-June 1.....	10		
Lincoln County.....	Mar. 1-Apr. 1.....	20		
Nodaway County.....	Apr. 6.....	1		
New Hampshire:				
Claremont.....	Apr. 20-May 3.....	11		
Croydon.....	Apr. 20-May 4.....	7		
Newport.....	Apr. 24.....	1		
New Jersey:				
Hoboken.....	Apr. 20-Apr. 27....	2		
	May 4-May 11.....	1		
Union Township.....	Apr. 20.....	1		
Harrison.....	.....do.....	1		
New York:				
New York.....	May 25-June 1.....	1		
Ohio:				
Cincinnati.....	Feb. 20-June 7.....	110	24	
Cleveland.....	May 7-May 28.....	15		
	May 25-June 1.....	4		
Coal City.....	Mar. 28-Apr. 18..	2		
Columbus.....	Mar. 9-May 4.....	2		
Gallipolis.....	May 7-May 28.....	1		
Wellington.....	Mch. 28-Apr. 18..	3		

*Smallpox in the United States as reported to the Supervising Surgeon-General Marine-Hospital Service, April 1 to June 11, 1895—Continued.*

Places.	Date.	Cases.	Deaths.	Remarks.
Oklahoma:				
Cleveland County.....	Mar. 1-May 25.....	7		
Pennsylvania:				
Philadelphia.....	Apr. 1-May 28.....	55	8	
	May 25-June 1.....	6	1	
Tennessee:				
Memphis.....	May 9-May 10.....	2		
Texas:				
Fort Worth.....	Mar. 30-Apr. 6.....	2		
Virginia:				
Staunton and Augusta Co.....	Apr. 28-May 28.....	74	4	
	May 28-June 7.....	3	1	
Charlottesville.....	May 10.....	1		
West Virginia:				
Thacker.....	Apr. 6.....	3		
Wheeling.....	Mar. 18-May 3.....	12	1	
Wisconsin:				
Cedarburg.....	Apr. 22-May 20.....	5		
De Pere Township.....	Mar. 23-May 6.....	8	2	
Granville.....	Apr. 8-Apr. 22.....	1		
Greenfield.....	Apr. 22-May 6.....	2	2	
Lawrence Township.....	Apr. 8-May 6.....	9	1	
Milwaukee.....	Mar. 23-June 3.....	61	10	
	June 1-June 8.....	1		
Menasha.....	May 20-June 3.....	5		
Oshkosh.....	May 6-June 3.....	2		
Plover.....	Apr. 20-May 6.....	2		
Rockland Township.....	Apr. 20-May 6.....	1		
Springville.....	Apr. 8-Apr. 22.....	1		

*Report of Immigration at New York for the Week ended June 8, 1895.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
*Port of New York, June 10, 1895.*

*Number of Alien Immigrants who Arrived at this Port during the Week ended June 8, 1895; also Names of Vessels and Ports from which they Arrived.*

Date.	Vessel.	Where from.	No. of immigrants from Russia.	No. of immigrants.
1895.				
June 2	Steamship Umbria.....	Liverpool and Queenstown.	3	278
Do...	Steamship Maasdam.....	Rotterdam and Boulogne.....	77	486
Do...	Steamship La Bourgogne.....	Havre.....	1	339
June 3	Steamship State of California.....	Glasgow.....	4	128
Do...	Steamship Taormina.....	Hamburg.....	204	529
June 4	Steamship Berlin.....	Southampton.....	20	491
Do...	Steamship Weimar.....	Bremen.....	363	674
Do...	Steamship Furnessia.....	Glasgow.....	38	327
June 5	Steamship Italia.....	Naples.....	3	363
June 6	Steamship Augusta Victoria.....	Hamburg.....	8	86
Do...	Steamship Noordland.....	Antwerp.....	51	229
Do...	Steamship Saale.....	Bremen.....	18	358
June 7	Steamship Britannic.....	Liverpool and Queenstown.....		848
Do...	Steamship California.....	Hamburg.....	446	611
Do...	Steamship New York.....	Southampton.....	6	461
Do...	Steamship Lucania.....	Liverpool and Queenstown.....	4	452
	Total.....		1,246	6,660

EDW. F. MCSWEENEY,  
*Acting Commissioner of Immigration.*

*Report of Immigration at Philadelphia for the Week ended June 8, 1895.*

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,  
*Port of Philadelphia, June 8, 1895.*

*Number of Alien Immigrants who Arrived at this Port during the Week ended June 8, 1895; also Name of Vessel and Port from which it Arrived.*

Date.	Vessel.	Where from.	No. of immigrants from Russia.	No. of immigrants.
1895. June 6	Steamship Indiana.....	Liverpool and Queenstown....	17	532

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

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

BRUNSWICK QUARANTINE.

*Week ended June 8, 1895.*

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
Spanish bark Galofré*.....	May 26	Havana .....	Brunswick..	Disinfected .....	June 6
Norwegian bark Vasco de Gama.*	June 1	Per n a m- buco.	.....do .....	Ordered to South Atlantic Quarantine for disinfection.	June 2
Am. schr. Amelia P. Schmidt....	June 4	Matanzas.....	.....do .....	Disinfected and held for observation.	.....
Span. bk. Angeles.....	June 8	Havana.....	.....do .....	Held for disinfection.	.....
Span. bk. Progreso.....	June 8	.....do .....	.....do .....	.....do.....	.....

\* Previously reported.

Two vessels inspected and passed.

CAPE CHARLES QUARANTINE.

*Week ended June 8, 1895.*

Two vessels inspected and passed.

DELAWARE BREAKWATER QUARANTINE.

*Week ended June 8, 1895.*

Ten vessels inspected and passed.

GULF QUARANTINE.

*Week ended June 3, 1895.*

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
Am. sch. Robert Ruff*.....	May 24	Colon.....	Pascagoula..	Disinfected .....	May 31
Am. sch. Millie Williams*.....	May 27	Vera Cruz.....	.....do .....	.....do.....	June 1
Am. sch. L. A. Edwards*.....	.....do .....	.....do .....	.....do .....	.....do.....	Do.
Nor. bk. Isabella*.....	.....do .....	Para.....	.....do .....	.....do.....	Do.
Am. sch. Crisis*.....	.....do .....	Laguna.....	.....do .....	.....do.....	Do.
Am. sch. L. V. Hall.....	May 28	Matanzas .....	Moss Point..	.....do.....	June 2
Br. ship Monrovia.....	.....do .....	Rio de Ja- neiro.	Mobile.....	Held for disinfection.	.....
Br. ss. Schiehallion.....	June 2	Havana.....	Pascagoula..	.....do.....	.....
Mex. sch. Tres Hermanos.....	June 3	Campeche....	.....do .....	.....do.....	.....

\* Previously reported.

Two vessels inspected and passed.

## KEY WEST QUARANTINE.

Week ended June 4, 1895.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
Am. sch. Stephen Bennett*.....	May 24	Cardenas.....	Pascagoula..	Disinfected.....	May 31
Am. sch. John H. Platt.....	May 31	Bay Francis	Port Tampa	Disinfected and held for observation.	.....

\* Previously reported.

Two vessels inspected and passed.

## PORT TOWNSEND QUARANTINE.

Week ended June 1, 1895.

Four vessels inspected and passed.

## REEDY ISLAND QUARANTINE.

Week ended June 9, 1895.

Twenty vessels inspected and passed. One vessel spoken and passed.

## SAN DIEGO QUARANTINE.

Week ended June 5, 1895.

Two vessels inspected and passed.

*Reports of States and Yearly and Monthly Reports of Cities.*

CALIFORNIA.—*Sacramento*.—Month of May, 1895. Estimated population, 30,000. Total deaths, 38, including phthisis pulmonalis, 8; diphtheria, 1; croup, 1; and measles, 1.

CONNECTICUT—*Bridgeport*.—Month of May, 1895. Estimated population, 58,860. Total deaths, 84, including phthisis pulmonalis, 12; scarlet fever, 2; and diphtheria and croup, 2.

*Hartford*.—Month of May, 1895. Estimated population, 60,000. Total deaths, 79, including phthisis pulmonalis, 8; enteric fever, 2; diphtheria, 1; and croup, 2.

*Meriden*.—Month of May, 1895. Estimated population, 28,500. Total deaths, 34, including phthisis pulmonalis, 3; and scarlet fever, 1.

KENTUCKY—*Louisville*.—Month of May, 1895. Estimated population, 200,000. Total deaths, 227, including phthisis pulmonalis, 34; enteric fever, 7; scarlet fever, 1; diphtheria, 1; measles, 1; and whooping cough, 2.

MASSACHUSETTS—*Northampton*.—Month of May, 1895. Estimated population, 16,400. Total deaths, 24. No deaths from contagious diseases.

MICHIGAN.—Week ended June 1, 1895. Reports to the State board of health from 50 observers indicate that diarrhea and scarlet fever increased and influenza and tonsilitis decreased in area of prevalence. Phthisis pulmonalis was reported present during the week at 154 places, scarlet fever at 38, diphtheria at 18, measles at 13, enteric fever at 11, and smallpox at 3 places—Battle Creek, Detroit, and Olivet.

*Grand Rapids*.—Month of May, 1895. Population, 80,000. Total deaths, 92, including phthisis pulmonalis, 18; diphtheria, 3; and croup, 1.

MINNESOTA—*Winona*.—Month of May, 1895. Estimated population, 22,000. Total deaths, 28, including phthisis pulmonalis, 4; enteric fever, 1; and diphtheria, 1.

NEW JERSEY—*Hudson County*.—Month of April, 1895. Estimated population, 318,746. Total deaths, 508, including phthisis pulmonalis, 62; enteric fever, 22; scarlet fever, 5; diphtheria, 12; measles, 1; and whooping cough, 7.

NORTH CAROLINA.—Month of April, 1895. Reports to the State board of health from 29 towns, having an aggregate population of 147,854 (white 86,800, colored 61,054), show a total of 179 deaths (white 85, colored 94), including phthisis pulmonalis, 24; enteric fever, 2; measles, 1; and whooping cough, 2.

OHIO—*Cleveland*.—Month of May, 1895. Estimated population, 325,000. Total deaths, 371, including phthisis pulmonalis, 49; enteric fever, 11; scarlet fever, 5; diphtheria, 4; croup, 2; and measles, 2.

*Dayton*.—Month of May, 1895. Estimated population, 85,000. Total deaths, 101, including phthisis pulmonalis, 15.

*Toledo*.—Month of May, 1895. Estimated population, 120,000. Total deaths, 143, including phthisis pulmonalis, 9; enteric fever, 1; diphtheria, 1.

TENNESSEE—*Chattanooga*.—Month of May, 1895. Estimated population, white, 27,000; colored, 13,000; total, 40,000. Deaths, white, 13; colored, 24; total, 37, including phthisis pulmonalis, 8; and enteric fever, 1.

*Memphis*.—Month of May, 1895. Estimated population, white, 28,064; colored, 27,859; total, 55,923. Deaths, white, 37; colored, 61; total, 98, including phthisis pulmonalis, 16; and enteric fever, 2.

*Nashville*.—Month of May, 1895. Estimated population, white 54,595; colored, 33,159; total, 87,754. Total deaths, white, 57; colored, 81; total, 138, including phthisis pulmonalis, 29; enteric fever, 2; scarlet fever, 1; and croup, 1.

TEXAS—*Laredo*.—Month of May, 1895. Estimated population, 12,000. Total deaths, 26, including phthisis pulmonalis, 4; and whooping cough, 1.

VIRGINIA—*Lynchburg*.—Month of May, 1895. Estimated population, 30,000. Deaths, white, 11; colored, 16; total, 27, including phthisis pulmonalis, 8; and enteric fever, 2.

WASHINGTON—*Spokane*.—Two weeks ended June 1, 1895. Population, 19,922. Total deaths, 5, including phthisis pulmonalis, 1; and enteric fever, 1.

#### PUBLICATIONS RECEIVED.

Annual Report of the Board of Health and Health Officer's Report of the City of Allentown, Pa., 1895.

Sixteenth Annual Report of the Board of Health, City and Quarantine Physician of the City of New Bedford to the City Council, 1894.



Annual Report of the Board of Health of the City of Worcester,  
Mass., year ended November 30, 1895.

Report of the Board of Health of the City of Everett, Mass., 1894.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—										
				Phthisis pulmonalis.	Yellow fever.	Smallpox.	Varicoid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Allegheny, Pa.....	June 8.....	105,287	42	1						1	1	3		
Altoona, Pa.....	May 25.....	30,337	13											
Do.....	June 1.....	30,337	14	1										
Ashtabula, Ohio.....	June 8.....	8,338	4											
Auburn, N. Y.....	do.....	25,858	5											
Augusta, Ga.....	May 31.....	33,300	15	2										
Baltimore, Md.....	June 8.....	434,439	314	30						2	3	5	4	1
Battle Creek, Mich.....	do.....	13,197	2											
Belleville, Ill.....	June 1.....	15,361	3	2										
Beverly, Mass.....	May 25.....	10,821	3											
Do.....	June 1.....	10,821	4											
Do.....	June 8.....	10,821	2	2										
Binghamton, N. Y.....	do.....	35,005	9	2										
Boston, Mass.....	do.....	448,477	225	51						4	2	13	2	
Braddock, Pa.....	do.....	8,561	5											
Bristol, Conn.....	do.....	7,382	2											
Bristol, R. I.....	June 1.....	5,478	3										1	
Brockton, Mass.....	do.....	27,294	2											
Brookline, Mass.....	do.....	12,103	1											
Brooklyn, N. Y.....	June 8.....	806,343	463	36							1	23	9	5
Bucyrus, Ohio.....	do.....	5,974	4	1										
Butler, Pa.....	do.....	8,734	3								1			
Cambridge, Mass.....	do.....	70,028	25	2								2		1
Charleston, S. C.....	June 1.....	* 54,955	† 43											
Chester, Pa.....	do.....	20,226	7											
Cincinnati, Ohio.....	June 7.....	296,908	151	17		2				3			7	†
Cleveland, Ohio.....	June 1.....	261,353	82	14						2	2	1		
Do.....	June 8.....	261,353	80	11						3	3	2		
Columbus, Ind.....	June 1.....	6,719	2											
Do.....	June 8.....	6,719	4	1										
Columbus, Ohio.....	do.....	88,150	29	2							1			
Council Bluffs, Iowa.....	June 1.....	21,474	6											
Crawfordsville, Ind.....	do.....	6,089	2											
Do.....	June 8.....	6,089	1											
Dayton, Ohio.....	June 6.....	61,220	34	6										F
Dedham, Mass.....	June 1.....	7,123	4									1		
Everett, Mass.....	June 8.....	11,068	2											
Fall River, Mass.....	do.....	74,398	28								1			
Fitchburg, Mass.....	June 1.....	22,037	11	3										
Do.....	June 8.....	22,037	4	1										
Flint, Mich.....	do.....	9,803	2	1										
Fort Smith, Ark.....	May 25.....	11,311	3											
Do.....	June 1.....	11,311	3											
Fort Worth, Tex.....	do.....	23,076	12							1				
Grand Rapids, Mich.....	June 8.....	60,278	23	2								1		
Haverhill, Mass.....	do.....	27,412	10	3										
Hoboken, N. J.....	May 25.....	43,648	19								2	1		1
Do.....	June 1.....	43,648	17	1								1		
Iron Mountain, Mich.....	do.....	8,599	1											
Ironton, Ohio.....	June 8.....	10,939	4								1			
Jamestown, N. Y.....	June 1.....	16,038	3											
Jersey City, N. J.....	June 2.....	163,003	78	10						1		1		
Johnstown, Pa.....	June 8.....	21,805	9	1							1			
Kalamazoo, Mich.....	June 1.....	17,853	8											
Lowell, Mass.....	June 8.....	77,696	26	3						1				
Ludington, Mich.....	do.....	7,517	2											
Lynchburg, Va.....	do.....	19,709	9	1										
McKeesport, Pa.....	June 1.....	20,741	9											
Manchester, N. H.....	do.....	44,126	13										1	
Do.....	June 8.....	44,126	8											
Marinette, Wis.....	June 1.....	11,523	8	1							1			
Marlboro, Mass.....	do.....	13,805	13	1										
Massillon, Ohio.....	do.....	10,092	4											
Medford, Mass.....	June 8.....	11,079	5											
Memphis, Tenn.....	do.....	64,495	26	2										

Estimated population, white, 28,870; colored, 36,295. Total, 65,165. † White, 9; colored, 34.

\*

MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—																
				Phthisis pulmonalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.						
Michigan City, Ind.....	June 8.....	10,776	5																	
Middletown, Ohio.....	June 1.....	11,977	2																	
Milford, Mass.....	June 3.....	8,780	7																	
Do.....	June 10.....	8,780	1																	
Milwaukee, Wis.....	June 8.....	204,468	80	6							2									
Minneapolis, Minn.....	do.....	164,738	37	4											3					1
Mount Vernon, N. Y.....	June 1.....	10,830	7	2																
Nashville, Tenn.....	June 8.....	76,168	28	4																
New Bedford, Mass.....	do.....	40,733	21	5																
New Brunswick, N. J.....	do.....	18,603	14	1																
New Haven, Conn.....	June 6.....	81,298	22	5																
Newport, R. I.....	June 9.....	19,457	6	2																
Newton, Mass.....	June 8.....	24,379	9																	
New York, N. Y.....	do.....	1,515,301	935	96							5	17	42	49						8
Norristown, Pa.....	do.....	19,791	4																	
North Adams, Mass.....	June 1.....	16,074	9								2									
Do.....	June 8.....	16,074	6								2									
Northampton, Mass.....	June 1.....	14,990	5																	
Olean, N. Y.....	do.....	7,358	2																	
Omaha, Nebr.....	June 8.....	140,452	11	1																
Oneonta, N. Y.....	do.....	6,272	1																	
Ottumwa, Iowa.....	June 1.....	14,001	6																	
Passaic, N. J.....	June 8.....	13,028	7																	
Pensacola, Fla.....	June 1.....	11,750	6																	
Philadelphia, Pa.....	do.....	1,046,964	405	62		1					8	2	17	2						1
Pittsfield, Mass.....	June 8.....	17,281	9	3							1									
Portage, Wis.....	May 4.....	5,143	1																	
Do.....	May 11.....	5,143	1																	
Do.....	May 18.....	5,143	1																	
Do.....	May 25.....	5,143	1																	
Do.....	June 1.....	5,143	2																	
Portland, Me.....	do.....	36,425	14	1																
Do.....	June 8.....	36,425	9	2							1									
Poughkeepsie, N. Y.....	June 2.....	22,206	6																	
Do.....	June 10.....	22,206	2																	
Providence, R. I.....	June 8.....	132,146	52	6											1					
Pueblo, Colo.....	June 1.....	24,558	7	2																
Richmond, Va.....	June 8.....	81,388	59	5																
Rye, N. Y.....	June 1.....	9,680	7												1					
St. Louis, Mo.....	do.....	451,770	172	19										2	7	2				
San Diego, Cal.....	do.....	16,159	4																	
San Francisco, Cal.....	do.....	298,997	91	22							2									
Santa Barbara, Cal.....	do.....	5,864	3	1																
Scranton, Pa.....	June 8.....	75,215	25	2							1	1								
Seattle, Wash.....	June 1.....	42,837	8	1																
Seneca Falls, N. Y.....	do.....	6,116	0																	
Shreveport, La.....	do.....	11,979	6	2																
Do.....	June 8.....	11,979	5								1									
Sioux Falls, S. Dak.....	June 1.....	10,177	1																	
Somerville, Mass.....	June 8.....	40,152	17										2	2						
South Bethlehem, Pa.....	June 9.....	10,302	1																	
Springfield, Ill.....	June 8.....	44,179	15	2														2		
Sterling, Ill.....	June 1.....	5,824	2																	
Superior, Wis.....	do.....	11,983	6										2							
Taunton, Mass.....	June 8.....	25,448	17												4					
Tiffin, Ohio.....	do.....	10,801	3								1									
Utica, N. Y.....	do.....	44,007	15	2																
Virginia City, Nev.....	June 1.....	8,511	2																	
Waltham, Mass.....	June 8.....	18,707	6												1					
West Bay City, Mich.....	do.....	12,981	5	1																
Wilmington, Del.....	do.....	61,431	26	3								1								
Winona, Minn.....	June 1.....	18,208	3								1									
Woburn, Mass.....	do.....	13,499	4																	
Worcester, Mass.....	May 31.....	84,655	23	1														3		
Yonkers, N. Y.....	June 7.....	32,033	7															1		
Youngstown, Ohio.....	June 8.....	33,220	7	2										1						

Table of Temperature and Rainfall, Week ended June 10, 1895.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Deficiency.	Normal.	Excess.	Deficiency.
<b>Atlantic Coast:</b>						
Eastport, Me.....	53		1	.90		.60
Portland, Me.....	60	0		.77		.37
Northfield, Vt.....	60	2		.86		.36
Boston, Mass.....	63		1	.77		.57
Vineyard Haven, Mass.....	64		2	.58		.08
Nantucket, Mass.....	58	0		.63		.43
Woods Hole, Mass.....	60		2	.63		.33
Block Island, R. I.....	59		1	.77		.57
New Haven, Conn.....	63	1		.66		.36
New London, Conn.....	63		1	.77		.87
Albany, N. Y.....	66	2		.89		.49
New York, N. Y.....	66		2	.72		1.02
Harrisburg, Pa.....	69		1	1.12		.12
Philadelphia, Pa.....	70		2	.77	13	
Atlantic City, N. J.....	64		2	.70		.60
Baltimore, Md.....	70		2	.91		.21
Washington, D. C.....	70	1		.98		.21
Lynchburg, Va.....	70	0		.84		.24
Cape Henry, Va.....	71		1	.99		.99
Norfolk, Va.....	72	0		.98		.78
Charlotte, N. C.....	74	0		1.05		.95
Raleigh, N. C.....	73	1		1.10		.60
Kittyhawk, N. C.....	73		3	1.05		.85
Hatteras, N. C.....	72	2		1.12		.72
Wilmington, N. C.....	75	1		1.33		.33
Columbia, S. C.....	77	0		.86		.56
Charleston, S. C.....	77	1		1.12		1.02
Augusta, Ga.....	77	1		.94		.84
Savannah, Ga.....	77	1		1.63		1.63
Jacksonville, Fla.....	79		1	1.26		.36
Titusville, Fla.....	79	2		1.74		1.74
Jupiter, Fla.....	79	2		1.49		1.39
Key West, Fla.....	82		2	.93	27	
<b>Gulf States:</b>						
Atlanta, Ga.....	74	2		1.06		.06
Tampa, Fla.....	79	1		1.26		.76
Pensacola, Fla.....	78	0		1.42		1.32
Mobile, Ala.....	78	0		1.35		.05
Montgomery, Ala.....	78	0		1.10		.90
Meridian, Miss.....	78		2	1.07	.33	
Vicksburg, Miss.....	78		2	1.05	1.45	
New Orleans, La.....	79	0		1.54	1.16	
Shreveport, La.....	79		3	.90	.10	
Fort Smith, Ark.....	75		3	1.05	.45	
Little Rock, Ark.....	76		2	1.12		.42
Palestine, Tex.....	77	0		.93	1.17	
Galveston, Tex.....	80	0		1.19		.89
San Antonio, Tex.....	79		1	.63		.33
Corpus Christi, Tex.....	79	0		.74		.54
<b>Ohio Valley and Tennessee:</b>						
Memphis, Tenn.....	76	2		1.24		1.14
Nashville, Tenn.....	74	2		.96		.56
Chattanooga, Tenn.....	74	0		1.05	.35	
Knoxville, Tenn.....	72	0		.98		.18
Louisville, Ky.....	72	2		1.04	.96	
Indianapolis, Ind.....	69	3		1.17		.97
Cincinnati, Ohio.....	71	1		1.09	.11	
Columbus, Ohio.....	68	2		.89		.59
Parkersburg, W. Va.....	70		1	.98	.22	
Pittsburg, Pa.....	69	1		.77		.27
<b>Lake Region:</b>						
Oswego, N. Y.....	61		1	.77		.37
Rochester, N. Y.....	62	4		.82		.52
Buffalo, N. Y.....	63	5		.82		.52
Erie, Pa.....	64	1		1.05		.75
Cleveland, Ohio.....	66	0		.92		.52
Sandusky, Ohio.....	66	0		1.05		.25
Toledo, Ohio.....	64	0		1.05		.44
Detroit, Mich.....	65	4		.90		.70
Lansing, Mich.....	65	3		.93		.93
Port Huron, Mich.....	60	4		.87		.57
Alpena, Mich.....	57	3		.87		.77
Sault Ste. Marie, Mich.....	58	2		.68		.48
Marquette, Mich.....	55	5		.90		.20

\* The figures in these columns represent the average daily departure.

Table of Temperature and Rainfall, Week ended June 10, 1895—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.
<b>Lake Region—Continued.</b>						
Green Bay, Wis.....	63	5		.62		.52
Grand Haven, Mich.....	60	4		.97		.87
Milwaukee, Wis.....	59	5		.92		.92
Chicago, Ill.....	63	5		.90		.90
Duluth, Minn.....	55	1		1.23	.07	
<b>Upper Mississippi Valley:</b>						
St. Paul, Minn.....	65	1		1.40	.10	
La Crosse, Wis.....	65	3		1.05	.05	
Dubuque, Iowa.....	66	6		1.13		.83
Davenport, Iowa.....	68	4		1.05		.75
Des Moines, Iowa.....	68	2		1.51	1.09	
Keokuk, Iowa.....	69	3		1.19		.39
Springfield, Ill.....	69	3		1.40		1.10
Cairo, Ill.....	73	3		1.09		.69
St. Louis, Mo.....	72	4		1.22		1.22
<b>Missouri Valley:</b>						
Columbia, Mo.....	74		2	1.07		.59
Springfield, Mo.....	71		1	1.42		1.42
Kansas City, Mo.....	72	0		1.26	.34	
Wichita, Kans.....	72	2		1.22	.58	
Concordia, Kans.....	70	2		.98	.42	
Omaha, Nebr.....	69	1		1.30		.90
Yankton, S. Dak.....	67			1.03		
Valentine, Nebr.....	65		5	.81		.11
Huron, S. Dak.....	64		2	.84		.14
Pierre, S. Dak.....	66		4	.89		.09
Moorehead, Minn.....	62		2	.95	1.45	
St. Vincent, Minn.....	59		3	.74	.16	
Bismarck, N. Dak.....	62		8	.88	1.12	
Williston, N. Dak.....	62		6	.75	.35	
<b>Rocky Mountain Region:</b>						
Havre, Mont.....	60		8	.69	2.21	
Helena, Mont.....	59		11	.60		.00
Miles City, Mont.....	65		9	.80	.90	
Rapid City, S. Dak.....	61		5	1.01	.19	
Spokane, Wash.....	61		1	.43		.33
Walla Walla, Wash.....	65		1	.35		.35
Baker City, Oreg.....	55		1	.42		.32
Winnemucca, Nev.....	60		2	.21		.21
Salt Lake City, Utah.....	66		6	.21		.21
Lander, Wyo.....	59		3	.30	.10	
Cheyenne, Wyo.....	59		3	.42		.12
North Platte, Nebr.....	66		2	.77		.27
Denver, Colo.....	64		4	.34	.26	
Pueblo, Colo.....	69		5	.28	.62	
Dodge City, Kans.....	70	0		.77		.77
Oklahoma, Okla.....	75	1		.90		.70
Abilene, Tex.....	76		2	.72		.52
Santa Fe, N. Mex.....	63		1	.21		.11
El Paso, Tex.....	80		4	.07		.07
Tucson, Ariz.....	80	2		.00		.00
<b>Pacific Coast:</b>						
Tatoosh Island, Wash.....	52			.91		
Port Angeles, Wash.....	53	3		.37		.37
Olympia, Wash.....	58			.40		
Fort Canby, Wash.....	56			.70		
Astoria, Oreg.....	60			.70		
Portland, Oreg.....	62	0		.49		.49
Roseburg, Oreg.....	61	1		.35		.35
Eureka, Cal.....	55	0		.53		.53
Red Bluff, Cal.....	72	6		.14		.14
Carson City, Nev.....	59		1	.09		.09
Sacramento, Cal.....	68	10		.07		.07
San Francisco, Cal.....	59	1		.07		.07
Fresno, Cal.....	73	5		.07		.07
Independence, Cal.....	72		2	.00		.00
Los Angeles, Cal.....	66	0		.07		.07
San Diego, Cal.....	64		2	.03		.03
Yuma, Ariz.....	83	1		.00		.00

\* The figures in these columns represent the average daily departure.

## FOREIGN.

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

*Cholera and Yellow Fever as reported to the Supervising Surgeon-General M. H. S., January 4 to June 11, 1895.*

## CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Camaran Quarantine Station.....	Mar. 23-Apr. 24.....	85	173	
Mecca.....	Apr. 22-May 6.....		213	
Jeddah.....	May 1.....		28	
Argentina:				
Buenos Ayres.....	To Jan. 10.....	125	59	
	Jan. 1-Jan. 31.....	87	27	
	Feb. 1-Feb. 28.....		45	
	Mar. 13.....	8		
	Mar. 21.....	5	3	
Montevideo.....	Mar. 13.....		3	
	Mar. 16.....	16		
	Mar. 18.....	5		
	Mar. 21.....	2	1	
Rosario.....	Mar. 21.....	8	2	
San Nicholas.....	Mar. 29.....	7	3	
Asia Minor:				
Tarsus.....	June 1.....			Cholera reported.
Brazil:				* Cholera reported.
Alegre.....	Dec. 11-Feb. 4.....			
Bahia.....	Apr. 3.....	1		
Cachoeira.....	Apr. 3.....			Cholera reported.
Desergano.....	Feb. 24-Mar. 3.....	40	21	
Itapemerim.....	March 20.....	11		
Porto Novo.....	do.....	50	2	
Rio de Janeiro.....	Apr. 3.....			Do.
	Dec. 1-Dec. 31.....	6	5	
	Jan. 1-Jan. 31.....		45	
	Feb. 1-Feb. 23.....		105	
	Mar. 1-Mar. 28.....	93	31	
	Mar. 29-Apr. 20.....		8	
Santo Antonio de Muriatre.....	Apr. 3.....	18	15	
Volto Redondo.....	Apr. 3.....	1		
Ceylon:				
Colombo.....	Jan. 26-Feb. 2.....	8	8	
India:				
Bombay.....	Dec. 11-Jan. 8.....		4	
	Mar. 5-Mar. 12.....		1	
Calcutta.....	Nov. 17-Feb. 13.....		431	
	Mar. 2-Mar. 20.....		303	
	Mar. 31-May 4.....		442	
Madras.....	Dec. 7-Feb. 22.....		68	
	Mar. 2-Mar. 8.....		2	
	Mar. 16-Mar. 30.....		2	
Japan:				
Hiogo.....	Apr. 13-Apr. 20.....	1		
	May 4-May 11.....	1		
Hiroshima.....	Mar. 29.....	1		
Moji.....	Mar. 19.....	18	10	
	Mar. 22.....		1	
Russia (governments):				
Kurland.....	Jan. 20-Jan. 21.....	1	1	
	Dec. 23-Feb. 2.....	44	21	
Kursk.....	Jan. 6-Jan. 19.....	4	3	
Minsk.....	Jan. 6-Jan. 12.....	5	3	
Petrokov.....	Jan. 4-Jan. 19.....	6	1	
Podolia.....	Nov. 11-Apr. 13.....	2,102	907	
Podolsk.....	Mar. 24-Apr. 27.....	28	17	
Radom.....	Jan. 1-Jan. 26.....	20	9	
Saratov.....	Jan. 6-Jan. 12.....	3	1	
Sawalki.....	Jan. 18-Jan. 26.....	25	10	
Taurien.....	Dec. 30-Jan. 26.....	35	23	
Tchernigov.....	Jan. 13-Feb. 16.....	8	5	
Volhynia.....	Nov. 4-Apr. 30.....	586	230	
Witebst.....	Jan. 6-Jan. 12.....	5	2	
Turkey:				
Adalia.....	Dec. 11-Feb. 18.....	230	127	
Bitlis.....	Jan. 3.....			Cholera reported.
Constantinople.....	Nov. 14-May 6.....	382	212	
Pera.....	Feb. 21.....			Do.
Siverek.....	Jan. 8-Jan. 21.....	48	31	

\* Towns Cachocira, Cruzeiro; Campo Bello, Barra; Reyende Quelens, and Volta Redondo.

*Cholera and Yellow Fever, etc.—Continued.*

## YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Brazil:</b>				
Rio de Janeiro .....	Dec. 1-Mar. 30.....		164	
	Apr. 1-May 11.....		190	
Santos.....	Nov. 23-Jan. 5.....		6	
	Jan. 26-Mar. 2.....	123	104	
	Mar. 9-Mar. 16.....	50	48	
	Mar. 23-Mar. 30.....	108	87	
	Apr. 17-Apr. 27.....	181	135	
	Apr. 27-May 3.....	105	96	
<b>Cuba:</b>				
Havana.....	Dec. 20-Apr. 4.....	85	30	
	Apr. 4-May 30.....	37	16	
	June 1-June 8.....	5		
Santiago de Cuba.....	Mar. 1-Mar. 31.....		8	
	Apr. 1-Apr. 23.....		11	
	May 1-May 15.....		4	
<b>Ecuador:</b>				
Guayaquil.....	Jan. 24-Feb. 22.....	14	8	
<b>Mexico:</b>				
Vera Cruz.....	Dec. 27-Jan. 24.....		5	
	Feb. 21-Feb. 23.....		1	
	Mar. 4-Mar. 21.....		1	
	Apr. 4-Apr. 18.....		2	
	May 2-May 30.....		11	
Salvador .....	Dec. 9-Jan. 15.....		12	
Puerto Rico .....	Nov. 21-Jan. 9.....		4	
	Feb. 28-Mar. 6.....	2	1	
	Apr. 17-Apr. 24.....	1		
<b>Venezuela:</b>				
Maracaibo.....	Feb. 2-Feb. 9.....		1	
<b>West Indies:</b>				
Curacoa.....	Dec. 28-Jan. 5.....	3	3	

*Current Quarantine Measures.*

[Translated from the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes," Berlin, May 15, 1895.]

**TURKEY.**—By order of the Sultan provision is to be immediately made for correcting all sanitary and other abuses at the quarantine stations of Camaran, El Wasta, and Abu-Saad, and for erecting barracks for the pilgrims.

**EGYPT.**—By order of the International Sanitary Council quarantine against Constantinople is suspended.

The standing commission of the International Sanitary Council for Alexandria has directed that the regulations to prevent the introduction of cholera be put in force against arrivals from the seaports of the Hedjaz. Vessels not carrying pilgrims or other aggregations of passengers and not suspected of being cholera infected shall not be admitted to free pratique in Egyptian ports until fully five days shall have elapsed since their departure. Vessels carrying pilgrims or other aggregation of passengers shall not be admitted to Egyptian ports until they have passed fifteen full days at the quarantine of El Tor.

**JAPAN.**—By official order the regulations of July 9, 1880, in regard to arrivals from infected ports, are to be enforced against vessels from the upper or lower Mojoy.

[Translated from the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes," Berlin, May 22, 1895.]

**SPAIN.**—By royal order of May 9, vessels arriving from San Nicolas, San Pedro, Concordia, and Gualaguaychu (Argentina), from Kinchon,

the Pescadores Islands and Formosa (China), and from Djeddah and the Hedjaz, (Arabia), shall be quarantined. Ports within a radius of 165 kilos from the above-named localities shall be declared suspect.

**EAST INDIES.**—The government at Bombay, by enactment of April 29, requires, all vessels arriving at the Hedjaz from Red Sea ports, on and after April 24, to undergo quarantine of detention at Aden, Perim, or some port on the Somali coast.

*Cholera in the German Empire in 1892 and 1893.*

[From the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes," Berlin, April 18, April 25, and May 1, 1895.]

The following statement of cholera in the German Empire in 1892 and 1893 is taken from the latest complete official reports. It includes the history of cholera outbreaks in Hamburg and the Elbe districts, in the Rhine provinces, and in the provinces of the Oder and Vistula

*Cholera in Hamburg, 1892.*—The cholera outbreak in Hamburg in 1892 occurred about the middle of August. The date of the first case was August 16. The person attacked was a journeyman mason employed on a small vessel named *The Grasbrook*. On the same date a vessel left Hamburg bound for Scotland. On her arrival at her port of destination a cholera case occurred on board in the person of a fireman or stoker.

This was the first instance of the outbreak of cholera on a vessel leaving the port or Hamburg.

The evidence with regard to the first cases of cholera shows conclusively that the point of infection was the harbor of Hamburg. This was further proved by the fact that of the 53 verified cholera cases reported up to August 19, 20 were traced directly to the harbor. The germ of infection existed undoubtedly in the vicinity of the harbor, certainly on the 15th and 16th of August, and presumably on August 13. Suspicion that it was an importation was directed to the Russian immigrants, of whom no less than 5,514 passed through the district of Hamburg during the month of August. Although there is no proof of an undoubted cholera case occurring among these immigrants before the outbreak of the epidemic, it is extremely probable that they were responsible for the infection of the harbor.

The waste water from the barracks occupied by the immigrants emptied into the basin of the harbor, and the clothing of the immigrants was washed, without being thoroughly disinfected, at the barracks. It is, however, possible that cholera was introduced by the route of maritime commercial intercourse with France or Russia. The tendency of the epidemic to increase with alarming rapidity was evident from the moment of outbreak. On August 27 the number of cases reached its maximum with 1,024, and from that date the epidemic rapidly and steadily declined. By the end of October only isolated cases occurred. The principal epidemic was, however, followed on December 8 by a slight secondary epidemic, which persisted during the winter of 1892-93.

The total number of cases reported from August 16 to November 12 was 16,956; deaths, 8,605, or a mortality of 50.7 per 100 cases. The proportion per 1,000 of the population reported from the 36 infected districts ranged between 10.11 and 120.7. In the greater number of the districts covered by this report the proportion exceeded 20 per 1,000 of the population. In 11 districts it exceeded 40 per 1,000. In the least thickly populated portions of the city the proportion of choleraic cases and deaths was lowest. The highest rate of mortality was found among persons living in cellars. The explanation of this fact is to be found rather in the extreme poverty of living among persons occupying this class of lodging than in the location of the lodging. The same explanation applies to the statistics of cases and deaths compared with the land levels of the city. The classes of the population living on the higher levels and under good sanitary conditions suffered less than those occupying the lower levels under conditions of poverty and overcrowding. The occurrence of several cases in the same household was frequently observed. The greatest number in any one household was 9.

Suspicion fell upon the drinking-water supply as the medium of communication of the disease. This suspicion was favored by the explosive character of the epidemic and the difference in the manifestations of the disease in Hamburg and in the Prussian town of Altona. The few cases that occurred at Altona were undoubtedly derived from Hamburg. The source of the water supply of Altona and Hamburg is the river Elbe. Altona receives her supply from a point below that at which the sewage of Hamburg is dis-

charged into the river, but at Altona the water is filtered and at Hamburg it is served unfiltered.

In the winter of 1892-93 the secondary epidemic began with the case of a servant girl, who was attacked with cholera December 8, 1892. The point of origin of this outbreak can not be ascertained, nor can any connection be traced between this first case and the cases that succeeded it.

It is a fact, however, that after the cessation of the general epidemic early in November the population of Hamburg returned to the use of unfiltered water. During the prevalence of the epidemic the authorities had enjoined the use of boiled water, and had required street sprinkling to be done with water from artesian wells. The bath houses on the banks of the Elbe had been closed and disinfectants had been distributed in large quantities; hospital facilities were increased, the service for the transportation of the sick was thoroughly organized, the sewers were disinfected, and every provision was made for house disinfection. Ships and small river craft were carefully watched and inspected by medical officers and a daily report taken of the health of their crews. The total number of such inspections from October, 1892, to April, 1893, was 95,726. After the cessation of the general epidemic the sanitary precautions were relaxed, and the result was, undoubtedly, reinfection of the water of the Elbe.

The outbreak of cholera in Hamburg was closely followed by cholera outbreaks, originating in new foci, in other localities. Many cases were imported from countries where cholera existed in epidemic form. The following-named provinces of the Elbe and its tributaries were infected with cholera:

(1) The Prussian districts of Schleswig, Stade, Lüneburg, Magdeburg, Erfurt, and Potsdam; (2) the Kingdom of Saxony; (3) Mecklenburg-Schwerin; (4) the Archduchy of Saxony; (5) Saxe-Altenburg; (6) Anhalt. The number of cities and towns infected in the Elbe districts was 160. The total number of cases was 757. The period of prevalence of cholera in the Elbe provinces corresponded almost exactly with that of the epidemic in Hamburg.

The origin of the first cases was ascertained in 145 localities. In 115 of these cholera was undoubtedly communicated by personal contact. In 85 places the first cases were imported by arrivals from Hamburg. In 13 other cases communication with persons lately arrived from Hamburg was proven. In 32 places the arrivals who imported the disease came by boat. In 7 cases importation was traced to wayfarers, artisans, laborers, or tramps. In all other cases the disease was communicated by railway travel, except in 4 localities, where the existence of cholera was accounted for by the fact of close proximity to Hamburg. In 2 cases the medium of infection was food supply. In 5 other cases importation of cholera was traced to the clothing and linen of arrivals from Hamburg.

In 68 localities the disease propagated itself; that is to say, the first cases were followed by others which were not due to further importation. In 33 cases the spread of the disease was traced to the transference of infected objects from one person to another; in 25 to the use of contaminated water.

Immediately on the outbreak of cholera in Hamburg instructions were issued by the ministry of the interior for preventing unnecessary restrictions on traffic. Mail matter, luggage, and freight generally were allowed free passage. Greater importance was attached to hygienic than to restrictive measures. The authorities of the localities threatened with cholera invasion were enjoined to take strict oversight of the food and water supply, to provide for the disposal of sewage, the care of the sick and the burial of the dead, and to report by telegraph all cases of cholera occurring within their jurisdiction.

As these instructions applied to the several states of the Empire it was found expedient to institute a cholera commission. River inspection was also provided for. The vessels plying on the Elbe were placed under police control. On September 11 it was resolved to create a commission, assisted by a medical staff, to take oversight of the Elbe and its tributaries. Its province was to make daily medical inspection of the crews of vessels and barges in order to detect suspicious cases and prevent their landing. This inspection service was continued up to the end of November. During this period 57,108 vessels and barges and 205,954 persons were inspected, 32,851 vessels and barges disinfected, and 108 cholera cases and 11 suspicious cases verified.

A few days after the outbreak at Hamburg cholera was reported present at Bremen. The disease was verified by bacteriological experiment in 7 cases. The first case was traced to Hamburg.

Some isolated cases from Hamburg, which were not followed by a spread of the disease, were observed at Minden, Oldenburg, and Brunswick.

*Rhine provinces.*—Among the cases observed in the Rhine provinces were several importations from Hamburg. The first case occurred August 29, at Coblenz, and from it a group of cases formed at Dusseldorf. Another group formed from an importation



from the Netherlands, where cholera made its appearance during the third week in August. A choleraic death occurred at St. Goar September 27 and 1 at Bingen October 7. Both these cases stand in close relation to the cholera focus formed from the Netherlands. This seems to be true, also, of a fatal case which occurred at Leopoldshafen, and 1 in the vicinity of Kostheim on the Main.

A small epidemic, which had no connection with the cases already described, appeared in the district of Mayen about the beginning of October. The first case occurred at Miesenheim, where 9 persons were attacked, 7 of whom died. At Wesel 6 cases, presumably cholera, were noted. These were not absolutely verified. The sanitary measures adopted in the Rhine provinces were at first confined to precautions against communication of cholera by the cholera patients. Later a sanitary police service for river inspection was formed which, at first, had oversight of certain districts, but after October 1 was enlarged by the creation of an Imperial commission for the protection of the entire extent of the Rhine provinces.

*Cholera in the German Empire, 1893.*—During the first quarter of the year 1893 cholera cases were observed in comparatively few localities. In Hamburg, as already stated, a secondary epidemic originated in December, 1892. This slight epidemic persisted during the winter of 1892-93. Up to March 3, 1893, 65 cases and 17 deaths were reported. In Altona cholera reappeared after a longer period of cessation on December 23, 1892. Up to February 11, 1893, 44 cases and 25 deaths were reported. These were apparently due to an interruption in the working of the water-supply system, which caused a contamination of the water. At Mitleben a very restricted epidemic made its appearance at the provincial insane asylum. From January 14 to February 15, 112 cases and 52 deaths were reported from the asylum, and 13 cases, 4 deaths, in 4 localities situated lower down the Saale. With these exceptions, and a few scattered cases in the Elbe provinces and 1 at Schwerin, in Mecklenburg, about the beginning of January, the German Empire remained free from cholera.

During the period from the 1st of March to the latter part of May no cholera cases were observed in Germany. On May 27, 1893, cholera was again declared present in Hamburg. The first case was that of a countinghouse messenger. This man, living under good sanitary conditions, was attacked with a violent form of cholera and died within a few hours. No cause for the outbreak was discovered. On June 20 and 23 2 seamen on board a seagoing vessel were attacked with choleraic symptoms. One had drunk unboiled Elbe water, the other had wandered several days about the streets of Hamburg without shelter. During the next few days many cases of choleraic affection were observed, chiefly among dock hands who had drunk unboiled river water. In one of these cases and in a case that occurred in the town the comma bacillus was found. The bacillus, it must be noted, exhibited some properties in relation to light which had not been previously observed in cholera vibrio.

From August 15 to September 15, 9 cases presenting choleraic symptoms, 2 of which were fatal, occurred in the city. On September 16 the disease began to gain ground. From that date to September 22 there were 93 cases and 33 deaths; from September 22 to 29, 52 cases, 13 deaths. After this date the cases reported were few. The last case was reported November 16. The total number of cases from August 25 to November 16 was 204; deaths, 60. Of these cases, 102 were males of over 15 years of age, 5 were nurses, and 23 were seamen. Five persons who had had cholera in 1892 were attacked. It should be observed that in 76 cases the comma bacillus was identified, but the persons themselves were apparently not ill.

The origin of the recurrence of cholera in Hamburg has not been ascertained. A stoppage in the new waterworks was responsible for the increase of the epidemic in September. Location of dwellings and occupation and condition of persons occupying them did not enter as factors into this second outbreak.

Of the other places in the Elbe provinces, Berlin was the first to be affected by cholera in 1893. On July 31 a Polish workman was attacked, and during the next succeeding day a man and woman who had attended him during his illness. All 3 cases were fatal. From August 22 to 28, 9 cases and 3 deaths occurred. Of these, 2 occurred on vessels lying in the north port, 1 in the person of a boy who had fallen overboard into the water of the north port and 1 a man who had bathed in the Spree and swallowed the river water. After three weeks' immunity from cholera the disease broke out again, with 3 cases and 1 death occurring on a small wooden vessel lying in the harbor. All the persons attacked had drunk freely of the Spree water. Isolated cholera cases occurred in October and November.

The disease found greater expansion in Havelburg, where, from October 12 to 27, 34 cases and 17 deaths occurred; at Zerpenschleuse, on the Finistow canal, from October 18 to 28, there were 11 cases and 2 deaths. At Niederfinow, from October 27 to November 18, 9 cases, 2 deaths. Isolated cases occurred in other localities, generally in those places lying along the water courses. The extension of the epidemic in Havelburg is

probably explained by the fact that the cholera vibrio was found to be present in the Elbe water served by the water-supply system of the city. The report covering the total extension of the epidemic in the Elbe provinces gives 110 cholera cases, of which 63 were traced to the use of infected water and 43 to contact with infected persons. In 4 cases the source of infection was undiscoverable. Of 44 men attacked, 29 were connected by their calling (as seamen, bargees, fishermen, etc.) with the river and canal waterways. The remainder, with the exception of one, a school headmaster, belonged to the class of artisans.

*Rhine provinces.*—Simultaneously with its appearance in Berlin cholera showed itself in the Rhine provinces. In the harbor of Ruhrort, from August 20 to September 2, 8 cholera cases occurred among seamen and dock hands. By August 23, cholera had been observed at several other localities on the Rhine, in all, 23 cases, 20 deaths, of which 21 were among seamen and persons employed on vessels. The last case occurred September 22. In 8 cases infection was evidently communicated by personal contact, the remainder through the use of Rhine water. In Dusseldorf, on the frontier of the Netherlands, 16 cases were officially reported; at Cologne 3 and Coblenz 5, and in the province of Hesse Nassau and the Archduchy of Baden each 1. The outbreak in the Rhine province occasioned an increase of the epidemic in Holland, where in July cholera had been reported present. During August and September 146 cases and 46 deaths were officially reported. An isolated choleraic death occurred August 15 in the person of a schoolboy arrived by railway from Marseilles. In 4 cases the infection was proved to have originated in the Netherlands. A great part of the remainder were traced to the harbor of Rubort, in the waters of which cholera vibrios were found.

The figures quoted show that no general epidemic developed in the Rhine provinces. During the first half of September, however, an outbreak of cholera occurred in a locality in the vicinity of the Rhine. This was the paper factory and workmen's village of Paper Mill, near Solingen, on the Wüpper. Here 24 cases and 6 deaths occurred. Most of these were identified by bacteriological tests. The last case occurred September 14. The origin of the infection at Paper Mill has not been determined. Its spread is attributed to contamination of the river from the house in which the first case occurred, or else to personal contact. The fact that the first house infected was a beer saloon favored the spread of the contagion.

*Provinces of the Oder.*—During the second half of September cholera made its appearance in the provinces along the Oder. During September a sailor employed on a vessel lying in the harbor of Stettin was attacked with choleraic symptoms. It is probable that in this case infection was derived from Hamburg, as the man had been engaged there, September 15, in unloading a steamer. His case doubtless conveyed the disease to the four other persons, a sailor and three workmen, who were attacked with cholera between September 21 and 24. In two examinations of river water made in the latter part of September the cholera vibrio was found.

After October 4 cases of cholera began to be observed in the city of Stettin itself. From that date to the middle of November 87 cases and 43 deaths were reported. In 16 cases the persons attacked were employed about the docks and shipping. In 30 cases the infection was undoubtedly conveyed by personal contact. The remaining 41 cases were scattered throughout the city and had no connection with each other. In these cases the source of infection was probably contamination of the water supply. After October 18 cholera vibrios ceased to be found in the water-supply pipes. The cases observed after that date must have been due to use of harbor water or to personal contact. From October 5 to November 5, 21 cholera cases and 16 choleraic deaths were reported in 6 suburbs of Stettin.

*Provinces of the Vistula.*—In 1893 the provinces of the Vistula remained almost completely immune. Of the 5 cases and 3 deaths reported, 3 occurred on August 26, September 7, and October 20, in the persons of a lumber man, a bargee, and a sailor employed on the Vistula. The fourth case was in the person of a volunteer physician at Danzig, who had no doubt come into personal contact with infection; the fifth was a young girl arrived from Warsaw.

*East Prussia.*—In East Prussia cholera attained no extensive prevalence. From October 17 to November 15, 29 cases and 15 deaths in all were reported. Of these, 17 cases and 8 deaths belonged to a house epidemic in Tilsit; the remaining cases were distributed among eight localities. The origin of the epidemic can not be determined, but it is probable that the disease was imported from neighboring provinces in Russia.

The remaining cases observed throughout the German Empire were 10 light cases, which occurred on the steamer *Helix* from St. Petersburg, which arrived at Travemünde September 25, and 4 cases and 2 deaths on the steamer *Hjalmar*, from the same port of departure, which arrived at Kiel October 6. A few more cases and some fatalities occurred during the latter half of October in the persons of the captain of a tug plying on the Eider and several workmen engaged in the construction of the Baltic Sea

canal. They were probably due to the use of canal water in which were found cholera vibriones. The isolated cases that occurred at Geestemünde and Bodenwerder, near Hameln, in the latter part of September, were probably due to infection from Hamburg, and a fatal case in Middelstenborgum (district of Wenner) was an importation from the Netherlands.

Between the end of October and the close of the year a number of cases occurred in the manufacturing districts of Upper Silesia, on the Russian frontier. These were undoubtedly directly connected with the epidemic then prevailing in Russia.

The total number of cholera cases throughout the German Empire from May 27, 1893, to January, 1894, was 567, of which 298 resulted fatally. Beside these, cholera vibriones were found in the cases of 115 persons who were apparently not ill.

The measures for preventing the spread of the epidemic were formulated by the cholera commission during the latter part of May. With some exceptions they were identical with the measures which were found efficacious in 1892. A regularly organized inspection service was instituted for the Rhine, Elbe, Vistula, Menul, and Pregel provinces, and cholera commissioners were sent to Solingen, Stettin, Havelberg, and other places in which the epidemic declared itself.

#### BRAZIL.

#### *Sanitary Report from Rio de Janeiro.*

RIO DE JANEIRO, *May 14, 1895.*

SIR: I have the honor to transmit report for the week ended May 11, 1895. As compared with the foregoing weeks, there was a decrease of 4 deaths from *accessio pernicioso*; an increase of 14 from yellow fever; a decrease of 6 from smallpox; an increase of 2 from beriberi; from enteric fever there were 4 deaths, the same as in the foregoing week; 1 from influenza and diphtheria each, the same; 1 from measles; none from typhus fever; and 1 from choleraic diarrhea, against 2 from choleraic diseases in the previous week. From all causes there were 326 deaths, a decrease of 20.

*Yellow fever.*—In spite of the lower temperature, the number of deaths from this cause have increased. This is accounted for by the sanitary authorities by the fact that many houses in which the disease appeared last year were not properly disinfected by the amateurs who undertook the duty, and now, under favorable circumstances, the disease seizes on all unprotected persons exposed in said houses. With due deference, I believe a great element in the cause of the disease becoming more fatal at this season every year lies in the imprudence of recent arrivals and the too early return of many who fly the town for the whole summer, and become too impatient to await the extinction of the disease, before which they can not return safely. The English consul-general died of the disease this morning in Petropolis, but he came to this town every day, and caught the disease here.

*Cholera.*—No more complaints of cholera come from the interior, which is a sure sign of its extinction, or quasi-extinction, for, on the appearance of any choleraic symptom at any point, loud demands are at once made on the government for assistance.

Since last report the following-named ships have been inspected or received bills of health from this office: May 9, American bark *Cora*, for Barbadoes, West Indies; May 10, British steamship *Grecian Prince*, for New York.

Respectfully, yours,

R. CLEARY, M. D.,  
*Sanitary Inspector, M. H. S.*

#### STATISTICAL REPORTS.

BRAZIL—*Ceara.*—Month of April, 1895. Estimated population, 42,000. Total deaths, 178, including 2 from whooping cough.

CUBA—*Havana*.—Under date of June 8, 1895, the United States assistant sanitary inspector reports as follows:

There were 128 deaths in this city during the week ending June 6, 1895. No deaths were caused by yellow fever; there were approximately 5 new cases. Three deaths were caused by enteric fever, 1 by so-called pernicious fever, 13 by enteritis, 5 by dysentery, 5 by small-pox, and 2 by pneumonia.

FRANCE—*St. Etienne*.—Two weeks ended May 5, 1895. Estimated population, 133,443. Total deaths, 122, including enteric fever, 1; and diphtheria, 3.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 33 great towns of England and Wales during the week ended May 25 corresponded to an annual rate of 17.4 a thousand of the aggregate population, which is estimated at 10,591,530. The lowest rate was recorded in Croydon, viz, 9.5, and the highest in Liverpool, viz, 27.3 a thousand.

*London*.—One thousand three hundred and seventy-one deaths were registered during the week, including measles, 32; scarlet fever, 10; diphtheria, 37; whooping cough, 39; enteric fever, 9; and diarrhea and dysentery, 14. The deaths from all causes corresponded to an annual rate of 16.3 a thousand. In greater London, 1,751 deaths were registered, corresponding to an annual rate of 15.1 a thousand of the population. In the "outer ring" the deaths included 23 from measles, 9 from diphtheria, and 7 from whooping cough.

*Ireland*.—The average annual death rate represented by the deaths registered during the week ended May 25 in the 16 principal town districts of Ireland was 24.3 a thousand of the population. The lowest rate was recorded in Lisburn, viz, 8.5, and the highest in Kilkenny, viz, 56.6 a thousand. In Dublin and suburbs 191 deaths were registered, including smallpox, 2; enteric fever, 1; and whooping cough, 3.

*Scotland*.—The deaths registered in 8 principal towns during the week ended May 25 corresponded to an annual rate of 20.2 a thousand of the population, which is estimated at 1,500,435. The lowest mortality was recorded in Leith, viz, 13.5, and the highest in Aberdeen, viz, 23.3 a thousand. The aggregate number of deaths registered from all causes was 584, including scarlet fever, 4; measles, 18; diphtheria, 3; and whooping cough, 17.

JAPAN—*Yokohama*.—April 27 to May 17, 1895. Estimated population, 126,685. Total deaths not reported. One death from enteric fever and 1 from diphtheria.

RUSSIA—*Riga*.—Month of February, 1895. Estimated population, 215,000. Total deaths, 295, including phthisis pulmonalis, 38; enteric fever, 2; diphtheria, 3; croup, 5; measles, 2; and whooping cough, 6.

SPAIN—*Barcelona*.—Month of March, 1895. Estimated population, 318,000. Total deaths, 822, including smallpox, 6; phthisis pulmonalis, 111; enteric fever, 17; diphtheria, 27; and measles, 63.

SWITZERLAND—*Lucerne*.—Month of April, 1895. Estimated population, 22,000. Total deaths, 42. No deaths from contagious diseases.

## MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated popula- tion.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Aix la Chapelle	May 4	110,261	42							1			
Do.	May 18	110,261	47							1			
Alexandria	May 6	231,396	148					2		1			
Amherstburg	June 1	2,300	2							1			
Amsterdam	May 25	451,735	131					1	1	1			2
Barmen	May 4	125,000	43				1			1			
Do.	May 18	125,000	37										1
Batoum	May 21	28,000	11		1								
Belfast	May 25	273,277	131				2	1					2
Belleville	June 3	10,318	1										
Birmingham	May 25	496,751	141					1		3			4
Bologna	do.	142,810	75										
Bradford	May 18	221,610	76										
Do.	May 25	221,610	75						1	1			
Bristol	May 11	228,139	72					1					2
Do.	May 18	228,139	61										1
Do.	May 25	228,139	60							2			1
Brussels	May 18	507,985	179			1		3	2	1			1
Cairo	May 6	374,838	330			2	1	2	2	2			1
Cardiff	May 4	155,637	44							1	2		
Do.	May 11	155,637	43							1	3		2
Do.	May 18	155,637	45							1	3		
Catania	May 21	120,000	79								21		
Chatham	June 1	10,000	2										
Chemnitz	May 18	160,800	80							1	1		
Christiania	May 25	175,000	73						1				1
Cienfuegos	May 26	23,000	24					1					
Do.	June 2	23,000	17										
Coaticook	June 1	2,500	0										
Cognac	May 25	17,500	8										
Cologne	May 18	314,834	111						1	4			1
Colombo	Apr. 27	130,000	85					2					
Do.	May 4	130,000	86					4					
Copenhagen	May 18	341,000	126				1			1	2		5
Crefeld	May 25	106,394	33										
Dresden	May 11	320,600	152								2		2
Dublin	May 18	350,000	186					1					
Do.	May 25	350,000	191			3							
Dundee	do.	160,163	61								2		1
Dusseldorf	May 18	163,702	83						2		4		
Edinburgh	do.	273,535	109					3		1	5		
Do.	May 25	273,535	75					1	2		2		1
Flushing	do.	15,584	5										
Frankfort	do.	226,000	71							3			
Funchal	do.	35,665	18										
Genoa	do.	182,345	86							1	3		
Ghent	do.	155,746	70					1	1		1		1
Girgenti	May 18	23,847	3										
Glasgow	do.	695,876	301			1		1	1	1	7		11
Do.	May 25	695,876	309					1	1	2	3		12
Gothenburg	May 4	110,400	38						2	1			
Do.	May 11	110,400	39						2	2			
Do.	May 18	110,400	44							3			
Guelph	June 1	10,689	1								1		
Halifax	do.	38,700	18										
Hamburg	May 18	610,000	244					1	4	2	1		1
Do.	May 25	610,000	191						2	1	1		1
Hanover	Apr. 27	205,000	74						1				
Do.	May 4	205,000	80										
Do.	May 11	205,000	66						1				
Havana	May 30	198,620	164					6					
Hioogo	May 11	158,693	87	1	4	14		1		1			
Honolulu	do.	23,000	14										
Kehl	do.	129,556	67									8	
Kingston	June 7	17,808	9										
Königsberg	May 25	169,200						1		1			
Leeds	do.	395,546	133						1				1
Leghorn	do.	103,277	39								1		
Leith	May 18	73,048	31						1			3	
Do.	May 25	73,048	19									3	
Licata	May 18	20,000	9										
Liege	May 25	160,848	36							1			
Liverpool	May 18	503,967	217			1		1		1	3		5
Do.	May 25	503,967	252					7	5	3	3		11



## MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated popula- tion.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Vera Cruz.....	May 30.....	25,500	30	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
Warsaw.....	May 4.....	515,654	209	.....	.....	1	1	.....	1	1	.....	.....	1
Do.....	May 11.....	515,654	209	.....	.....	.....	1	.....	3	3	.....	.....	1
Do.....	May 18.....	515,654	166	.....	.....	.....	.....	.....	1	2	1	.....	4
Yokohama.....	Apr. 26.....	126,685	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Zurich.....	May 18.....	127,000	43	.....	.....	.....	.....	.....	.....	1	.....	.....	1

By authority of the Secretary of the Treasury :

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