

ABSTRACT OF SANITARY REPORTS.

VOL. VIII.

WASHINGTON, D. C., JUNE 2, 1893.

No. 22.

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

UNITED STATES.

SPECIAL REPORTS.

Saloon and second-cabin passengers landed at Philadelphia from the steamship Ohio.—Steerage detained.

[Telegram.]

PHILADELPHIA, *May 25, 1893.*

Visited lazaretto this evening, and we landed the saloon and second-cabin passengers from the steamer *Ohio*, 142 in all. The steamer and steerage passengers we will detain at lazaretto until the 29th.

GEO. PURVIANCE,
Surgeon, M. H. S.

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

Another case of smallpox on steamship Ohio while at the Philadelphia lazaretto.

[Telegram.]

PHILADELPHIA, PA., *May 30, 1893.*

Another case of smallpox discovered on the *Ohio* yesterday. I attended meeting of board of health to-day, and it was decided to land the passengers from one steerage compartment and to detain all that were in the compartment where the case was. The two compartments are entirely separate.

GEO. PURVIANCE,
Surgeon, M. H. S.

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

Smallpox in Pennsylvania.

Under date of May 25, 1893, Dr. Benjamin Lee, secretary State board of health of Pennsylvania, reports as follows:

Six new cases of smallpox are reported from Reading, Berks County, this State. The total number of cases in that city to date have been 97 in 50 houses, with no deaths. This does not include several cases of the disease which have occurred at Hamburg, Leesport, Millmont, Werners-

ville, Mohnsville, Adamstown, Intercourse, Bird in Hand, Gouglersville, and Leaman Place in the immediate vicinity. Two houses are still quarantined at Reading, and 6 cases remain in St. Joseph's Hospital.

Two cases of smallpox have just occurred in Philadelphia, 1 fatal, the other isolated in Municipal Hospital. Origin unknown.

One case of smallpox reported on steamship *Lord Gough*, from Liverpool, just released from quarantine, and 1 case on steamship *Ohio*, from same port, still in quarantine.

Detention of Swedish immigrant at Eagle Pass, Tex.

EAGLE PASS, TEX., May 21, 1893.

DEAR SIR: Since my last report all trains have been inspected, and no one detained until to-day, when a native of Sweden, coming from Central America by way of Vera Cruz, Mexico, was taken from the train and put in quarantine by State quarantine officer and myself. He claims to be in bad health and says he has just left the hospital in Mexico, but does not know the name of the city where the hospital was. * * * He is in the quarters furnished by the State and provided for by the State.

Respectfully,

A. H. EVANS, M. D.,
Sanitary Inspector.

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

Detention of immigrants at Suspension Bridge, N. Y., who arrived without certificates of disinfection from quarantine officials at Quebec.

OFFICE SANITARY INSPECTOR, M. H. S.,
Suspension Bridge, N. Y., May 22, 1893.

SIR: I have the honor to report that I detained the following number of immigrants from Quebec arriving at Niagara Falls, Ontario, by the Grand Trunk Railroad, and about to pass into the United States, since none held certificates of disinfection. May 18: From train No. 6, 8; No. 8, 2. May 19: From train No. 4, 3; No. 6, 1.

Train No. 18 brought 3 immigrants who were taken to Buffalo by Erie train No. 102, the conductor of which mistook other papers for disinfection certificates. There still being but one inspector the night trains are not inspected. Two of these were returned to Suspension Bridge, N. Y., where I found them, and they were then taken back to Niagara Falls, Ontario.

As these immigrants were stopped their names were telegraphed to Quebec with the request that such action be taken by the Grand Trunk agent at that point as would enable the agent at Niagara Falls, Ontario, to present these immigrants to me for my passing.

Certificates of disinfection, signed by Dr. Charles E. Banks, were received by Grand Trunk Agent Deuch and on them I passed immigrants, as follows: By train No. 6: May 20, 11; May 21, 2; May 22, 3; total, 16.

Respectfully,

CHARLES A. RING,
Sanitary Inspector, M. H. S.

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

*Report of immigration at New York for the week ending May 20, 1893.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of New York, May 23, 1893.

Number of immigrants who arrived at this port during the week ending May 20, 1893, also name of vessels and ports from which they arrived.

Date.	Vessel.	Where from—	Total.
1893.			
May 14	Steamship La Champagne.....	Havre	521
14	Steamship Weser.....	Naples.....	961
15	Steamship Aurania.....	Liverpool and Queenstown.....	917
15	Steamship Arizona.....	do.....	629
15	Steamship Bolivia.....	Naples.....	1,250
16	Steamship India.....	do.....	740
16	Steamship Olinda.....	Azores and Lisbon.....	106
16	Steamship Laughton.....	Bremen.....	412
16	Steamship Saale.....	do.....	694
17	Steamship Didam.....	Amsterdam.....	491
17	Steamship Anchoria.....	Glasgow and Merville.....	553
17	Steamship Friesland.....	Antwerp.....	946
17	Steamship Darmstadt.....	Bremen.....	1,394
18	Steamship Veendam.....	Rotterdam and Boulogne.....	591
19	Steamship Alesia.....	Naples.....	983
19	Steamship Spree.....	Bremen.....	392
19	Steamship Britannic.....	Liverpool and Queenstown.....	846
19	Steamship Normannia.....	Hamburg and Southampton.....	323
19	Steamship Venetia.....	Helsingborg, Gothenburg, and Christiansand... ..	576
19	Steamship Dubbeldam.....	Amsterdam.....	463
19	Steamship La Touraine.....	Havre.....	355
19	Steamship Gallia.....	Liverpool and Queenstown.....	950
19	Steamship Peruvian.....	Glasgow and Merville.....	489
	Total.....		15,582

DR. J. H. SENNER,
Commissioner of Immigration.

To the SUPERVISING SURGEON-GENERAL.

Detail of medical officers to serve at foreign ports.

The Supervising Surgeon-General of the U. S. Marine-Hospital Service has detailed Surg. William Martin, U. S. Navy, to assist in the sanitary work in and around Marseilles, France. Passed Assistant Surg. P. M. Carrington, M. H. S., has been relieved from duty at Marseilles, ordered to serve in the office of the United States consul at Bremen, and has reported his arrival at that city.

Promulgation of foreign quarantine regulations—Continued.

Official notification has been received that the quarantine regulations made by the Secretary of the Treasury have been posted in the office of the United States consuls at the following-named ports, for ten days: Baracoa, Cartagena, Ensenada, Iquiqui, Jerusalem, Kanagawa, Lé Paz, Pará, Patras, Puerto Plata, Puerto Rico, San Juan, Santo Domingo, Trinidad, and Turks Island.

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

CAPE CHARLES QUARANTINE.

Week ended May 29, 1893.

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

DELAWARE BREAKWATER QUARANTINE.

Week ended May 20, 1893.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
American steamship Ohio.....	May 21	Liverpool ...	Philadel- phia.	Disinfected.....	May 23

One case of varioloid. Crew and passengers vaccinated.

GULF QUARANTINE.

Week ended May 27, 1893.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Am. sch. Charles Fowler*.....	May 15	Matanzas ...	Chandeleur.	Disinfected.....	May 19
British brig Rozella Smith*.....	May 16	Havana	Ship Island.	.....do.....	May 23
British ship Everest*.....	May 16	Rio.....	.....do.....	Held for disinfection.	
Russian bark Richard*.....	May 17	Santos.....	Mobile.....	Disinfected.....	May 26
British ship Polynesian.....	May 23	Rio de Janeiro.	Ship Island.	Held for disinfection.	
Swedish bark Cometen.....	May 23	Rio de Janeiro.	Mobile.....	.....do.....	
Am. sch. Flora Woodhouse.....	May 26	Tampico	Shieldsboro.	.....do.....	

* Previously reported.

KEY WEST QUARANTINE.

Week ended May 20, 1893.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Am. schooner Geo. G. Green*...	May 9.	Matanzas....	Apalachicola.	Held for disinfection.	May 14

* Previously reported.

PORT TOWNSEND QUARANTINE.

Week ended May 13, 1893.

Three vessels inspected and passed.

SAN DIEGO QUARANTINE.

Week ended May 24, 1893.

Three vessels inspected and passed.

SOUTH ATLANTIC QUARANTINE.

Week ended May 13, 1893.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
American ship Sea King*.....	May 11	Philadel- phia.	Darien.....	Held for disinfection.	May 19

* Previously reported.

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

ALABAMA—*Mobile*.—Month of April, 1893. Population, 31,076. Total deaths, 69, including phthisis pulmonalis, 14; enteric fever, 1, and whooping cough, 1.

MICHIGAN.—Week ended May 20, 1893. Reports to the State board of health from 68 observers indicate that pneumonia increased and that pleuritis decreased in area of prevalence. Scarlet fever was reported present during the week at 45 places, diphtheria at 37, measles at 29, and enteric fever at 13.

RHODE ISLAND.—Month of April, 1893. Reports to the State board of health from 20 cities and towns, having an aggregate population of 327,458, show a total of 535 deaths, including phthisis pulmonalis, 55; enteric fever, 3; scarlet fever, 12; diphtheria, 5; croup, 10; and measles, 13.

Publications received.

Eighth Annual Report of the Kansas State Board of Health, 1892.

Proceedings of the State Sanitary Convention under the Auspices of the California State Board of Health, April 17, 1893.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—										
				Pththisis pulmonalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhusfever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Baltimore, Md.....	May 27.....	434, 439	185	25						1	4	3	1	
Boston, Mass.....	May 27.....	443, 477	209	17						4	11	3		
Cincinnati, Ohio.....	May 26.....	296, 908	106	6						2		3		3
Cleveland, Ohio.....	May 13.....	261, 853	79	9								3		1
Cleveland, Ohio.....	May 20.....	261, 853	99							3		3		
Detroit, Mich.....	May 27.....	205, 876	78							1	2	4		
Erie, Pa.....	May 27.....	40, 634	17	1						1				
Fall River, Mass.....	May 27.....	74, 393	30	3										
Galveston, Tex.....	May 19.....	29, 084	11							1				
Indianapolis, Ind.....	May 27.....	105, 436	28	3										
Kansas City, Mo.....	April 29.....	132, 716	35	5							1			
Manchester, N. H.....	May 20.....	44, 126								1				
Milwaukee, Wis.....	May 27.....	204, 468	80	3							2	6	1	
Minneapolis, Minn.....	May 20.....	164, 738	36	1						3				
Mobile, Ala.....	May 27.....	31, 076	16	2										
Nashville, Tenn.....	May 27.....	76, 306	27	6										1
New Orleans, La.....	May 20.....	242, 039	125	11						1		3		
Pensacola, Fla.....	May 20.....	11, 750	8											
Philadelphia, Pa.....	May 20.....	1, 046, 964	470	63						14	6	13	1	6
Pittsburg, Pa.....	May 20.....	238, 617	126	14						7	4	1	8	
Portland, Me.....	May 20.....	36, 426	15	4										
Portland, Me.....	May 27.....	36, 426	14	1										
Providence, R. I.....	May 27.....	132, 146	67							1	2	1	2	
Richmond, Va.....	May 20.....	81, 388	31	4										1
Rochester, N. Y.....	May 20.....	133, 896	39	5									1	1
Rochester, N. Y.....	May 27.....	133, 896	53	3								1	1	
San Diego, Cal.....	May 20.....	16, 159	1											
Washington, D. C.....	May 20.....	230, 392	109	14						2		2		

Table of temperature and rainfall, week ended May 29, 1893.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.
New England States :						
Eastport, Me.....	50		0	.94		.74
Portland, Me.....	57		3	.77		.77
Northfield, Vt.....	56		2	.70		.20
Manchester, N. H.....	60		0	.76		.36
Boston, Mass.....	59		0	.84		.44
Nantucket, Mass.....	55		3	.69		.49
Block Island, R. I.....	55		1	.84		.64
New London, Conn.....	59		3	.77		.17
Middle Atlantic States :						
Albany, N. Y.....	63		3	.75		.05
New York, N. Y.....	63		1	.70		.50
Philadelphia, Pa.....	66		2	.74		.24
Atlantic City, N. J.....	60		2	.65	.35	
Baltimore, Md.....	67		1	.84		.34
Washington, D. C.....	67		2	.95	.06	
Lynchburg, Va.....	68		0	.84	.06	
Norfolk, Va.....	69	1		.91	2.49	
South Atlantic States :						
Charlotte, N. C.....	71	1		1.05		.05
Raleigh, N. C.....	70	2		1.31	.49	
Wilmington, N. C.....	73	1		1.13		.03
Charleston, S. C.....	75	3		1.01	.39	
Augusta, Ga.....	75	3		.77	.73	
Savannah, Ga.....	75	3		.98	.22	
Jacksonville, Fla.....	77	3		1.13	1.17	
Titusville, Fla.....	77	3		1.45	.55	
Jupiter, Fla.....	77	1		2.08		2.08
Key West, Fla.....	81	1		.90		.70
Gulf States :						
Atlanta, Ga.....	71	1		.91	1.49	
Pensacola, Fla.....	76	2		.96		.46
Mobile, Ala.....	76	2		1.17		1.07
Montgomery, Ala.....	76	2		1.01		.21
Vicksburg, Miss.....	75		0	1.05	1.07	
New Orleans, La.....	77	3		1.31		1.31
Shreveport, La.....	77		1	.98		.58
Fort Smith, Ark.....	72		4	.98	1.72	
Little Rock, Ark.....	73		1	1.21	.29	
Palestine, Tex.....	74	2		1.28		.78
Galveston, Tex.....	78	1		1.08		.78
San Antonio, Tex.....	77	3		.70		.70
Corpus Christi, Tex.....	77	1		.86		.76
Ohio Valley and Tennessee :						
Memphis, Tenn.....	73		3	1.03	6.47	
Nashville, Tenn.....	71		5	.78	1.52	
Chattanooga, Tenn.....	71		1	.98	1.42	
Knoxville, Tenn.....	69		1	.87	.33	
Louisville, Ky.....	69		5	.86		.06
Indianapolis, Ind.....	66		6	1.02		.22
Cincinnati, Ohio.....	68		6	.87		.37
Columbus, Ohio.....	65		3	1.03		.73
Pittsburg, Pa.....	66		4	.77		.47
Lake Region :						
Oswego, N. Y.....	57		3	.67		.37
Rochester, N. Y.....	59		3	.77		.57
Buffalo, N. Y.....	57		3	.77		.47
Erie, Pa.....	59		3	.88		.68
Cleveland, Ohio.....	60		4	.83		.43
Sandusky, Ohio.....	62		4	.89		.49
Toledo, Ohio.....	62		6	.77		.47
Detroit, Mich.....	61		5	.84		.34
Port Huron, Mich.....	56		4	.77		.37
Alpena, Mich.....	52		6	.86	.94	
Marquette, Mich.....	51		5	.71	1.79	
Green Bay, Wis.....	57		5	.71	.89	
Grand Haven, Mich.....	57		7	.84	.66	
Milwaukee, Wis.....	58		6	.81		.21
Chicago, Ill.....	61		8	.91	.10	
Duluth, Minn.....	51		1	1.03		.83

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

Table of temperature and rainfall, week ended May 29, 1893—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.
Upper Mississippi Valley :						
St. Paul, Minn.....	61		9	.85	.25	
La Crosse, Wis.....	61		5	.85		.55
Dubuque, Iowa.....	62		4	.98		.58
Davenport, Iowa.....	64		6	1.05		.25
Des Moines, Iowa.....	64		8	1.25		.75
Keokuk, Iowa.....	65		7	1.03	1.97	
Springfield, Ill.....	65		7	1.29	3.31	
Cairo, Ill.....	70		6	.91	1.49	
St. Louis, Mo.....	69		7	1.03	2.69	
Missouri Valley :						
Springfield, Mo.....	69		5	1.47		1.35
Kansas City, Mo.....	68		8	1.10	1.40	
Concordia, Kans.....	66		8	.98		.48
Omaha, Nebr.....	65		7	1.12		1.02
Yankton, S. Dak.....	62		6	1.05		1.05
Valentine, Nebr.....	60		8	.91		.81
Huron, S. Dak.....	59		7	.78		.58
Pierre, S. Dak.....	61		7	.68		.38
Extreme Northwest :						
Moorehead, Minn.....	57		5	.68		.58
St. Vincent, Minn.....	55		5	.54		.44
Bismarck, N. Dak.....	58		8	.65		.55
Fort Buford, N. Dak.....	58		8	.51		.41
Rocky Mountain Slope :						
Havre, Mont.....	56		4	.47	.23	
Helena, Mont.....	56		8	.39	.11	
Rapid City, S. D.....	56		8	1.13		.33
Spokane, Wash.....	59		5	.29		.19
Walla Walla, Wash.....	64		6	.42		.22
Winnemucca, Nev.....	56		6	.21		.11
Salt Lake City, Utah.....	62		10	.31	.49	
Cheyenne, Wyo.....	54		8	.47	.13	
North Platte, Nebr.....	62		8	.70		.60
Denver, Colo.....	60		8	.51	.49	
Montrose, Colo.....	60		4	.07		.07
Pueblo, Colo.....	64		8	.28		.28
Dodge City, Kans.....	66		6	.80		.60
Abilene, Tex.....	74	2		.90		.90
Santa Fe, N. Mex.....	59	1		.21		.21
El Paso, Tex.....	76		2	.07		.07
Tucson, Ariz.....	77		3	.00		.00
Pacific Coast :						
Olympia, Wash.....	56		2	.49		.30
Portland, Oregon.....	61		5	.49		.39
Roseburg, Oregon.....	59		3	.35		.35
Eureka, Cal.....	54		2	.58		.58
Red Bluff, Cal.....	70		0	.21		
Sacramento, Cal.....	66		0	.09		.09
San Francisco, Cal.....	59		3	.10		.10
Fresno City, Cal.....	71		3	.07		.07
Keeler, Cal.....	70		6	.00		.00
Los Angeles, Cal.....	65		1	.07		.07
San Diego, Cal.....	63		3	.07		.07
Yuma, Ariz.....	80		2	.00		.00

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

FOREIGN.

(Reports received from medical officers of the U. S. Marine-Hospital Service detailed for quarantine service at foreign ports.)

Arrival of immigrants at Quebec.

[Telegram.]

QUEBEC, *May 29, 1893.*

Numidian; Liverpool; 856 steerage. All well except 1 case measles. Mostly Scandinavians and Finns.

BANKS.

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

[Telegram.]

QUEBEC, *May 30, 1893.*

Slavonia; Hamburg and Antwerp; 542 steerage. All well. Mostly Germans, Belgians, and Scandinavians. Destinations, 85 Chicago, 34 Nebraska, 22 Wisconsin, 16 Illinois, 12 Ohio, and few scattering over half dozen States. Many ticketed Montreal will change for States at that point. *Oregon*, Liverpool, held Gross Isle, understood for diphtheria; particulars when official.

BANKS.

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

Report on typhus fever at Liverpool.

UNITED STATES CONSULATE,

Liverpool, May 15, 1893.

SIR: I have the honor to acknowledge the receipt of Department letter of the 1st instant in regard to the existence of typhus fever at this port, and to state that the disease exists to a very limited extent. During the past two weeks 6 cases have occurred, as I am informed by the health officer, and no deaths. Cases have occurred during the past few months in the following streets: Ascot, Collingwood, and Poyntz streets, Garden Lane, and Buckingham Road. I will forward, as soon as it can be obtained from the health office, a map of Liverpool, showing the number and exact locality of every case of typhus fever which has occurred since January 1, 1893. A few cases of typhus fever are almost always to be found in Liverpool, and the method of dealing with them is efficient. As soon as a case is detected it is at once removed to a special hospital, and the house and all that it contains are promptly disinfected and the interior limewashed or painted. Granting the efficiency of this process, the localities in which cases have occurred in the past can not in every case be regarded as at present infected. and, as a rule, after an outbreak in any given locality has been stamped out it seldom recurs in the houses previously infected.

I shall, however, until further orders, inspect the crews of all vessels leaving this port for the United States, and will procure such professional assistance as may be absolutely required to perform this work.

Very respectfully,

L. L. WILLIAMS,

Passed Assistant Surgeon, M. H. S.

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

Cholera at Lorient.

UNITED STATES CONSULATE,
Havre, France, May 17, 1893.

SIR: I have the honor to give the following report of cholera from Lorient: Lorient, town, 1 case, no deaths; Lorient, district, 3 cases, 3 deaths; Vannes district, 10 cases, 4 deaths.

I will make another attempt to-day to get some report of typhus.

Respectfully, yours,

E. R. HOUGHTON,
Assistant Surgeon, M. H. S.

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

Report from Passed Assistant Surg. P. M. Carrington, relative to the sanitary condition of Marseilles.

UNITED STATES CONSULATE,
Marseilles, May 15, 1893.

SIR: Referring to the inclosed consular sanitary report, I have the honor to say that it is based on an official report just received from the prefect, who requested that the report be returned to him with the least possible delay. Cholera is not mentioned, but the figures as given are unsatisfactory; the cause of death is not given in 230 cases, and smallpox caused 22 deaths.

The reports on file in this office show that at no time within the past two or three years has Marseilles been free from smallpox, and while there is no widespread epidemic here, I will insist on the vaccination of crews and passengers bound for the United States in future. I hear rumors of a few cases of sporadic cholera, or cholera nostra, but am unable to verify the cases. To-day I hear in the same manner of several cases of cholera in Toulon, but there is nothing positive on which to base a telegraphic report. All possible vigilance will be exercised, and every precaution taken with ships sailing for the United States.

Very respectfully, your obedient servant,

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

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

NOTE.—The consular sanitary report above referred to gives for the month ended April 30, 1893, 22 deaths from smallpox, and a statement that 8 per cent of all deaths reported were from diarrheal diseases. Cholera was reported present in Marseilles May 27, 1893.

No cholera at Toulon.

UNITED STATES CONSULATE,
Marseilles, May 19, 1893.

SIR: Referring to the rumor of cholera in Toulon, reported in my letter of the 15th instant, I have the honor to report that at my request United States Consul Trail wrote the consular agent of the United States at Toulon asking confirmation or denial of the rumor. I inclose his reply which is self-explanatory.

Very respectfully,

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

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

[Inclosure.]

UNITED STATES CONSULAR AGENCY,
Toulon, May 18, 1893.

SIR: I officially inform you, answering yours of the 17th instant, that the sanitary condition at Toulon is very satisfactory. The diseases registered the last week were less numerous than the previous weeks. No case of cholera has been reported.

I remain, sir, your obedient devoted servant,

L. V. JOUEY.

CH. B. TRAIL, Esq.,
United States Consul, Marseilles.

Cholera in the south of France.

The following cablegrams have been received from Surg. Fairfax Irwin:

MARSEILLES, FRANCE, May 26, 1893.

Cholera has appeared at Cette and Nimes.
To the SUPERVISING SURGEON-GENERAL M. H. S.

—————
MARSEILLES, FRANCE, May 27, 1893.

Cholera in Marseilles.
To the SUPERVISING SURGEON-GENERAL M. H. S.

—————
MARSEILLES, May 31, 1893.

Cholera in Toulouse.
To the SUPERVISING SURGEON-GENERAL M. H. S.

Inspection of emigrants at Antwerp.

UNITED STATES CONSULATE,
Antwerp, Belgium, May 13, 1893.

SIR: I have the honor to report that the work at this port is assuming more satisfactory shape. With each ship the system is improved. There are many details that I am gaining by experience, and the company likewise is getting the work better in hand.

I have made a study of the handling of baggage, and can now satisfy myself that all from infected localities is disinfected.

The isolation and detention of emigrants from infected localities has again been changed and improved.

The arrangements are only temporary, awaiting the construction of barracks, the plans for which are now completed.

Some Russians and Galicians wanting to sail to-day on the steamship *Rhyndland* were detained because the detention in their case was not properly carried out. At my suggestion, the company now has all those detained under observation five days vaccinated on the first day.

The company has constructed a special shelter on the wharf for the object of reviewing the emigrants. On Wednesday two were detained on account of suspicious eruptions. To-day 1 case of smallpox was detained and sent to the hospital.

The crew is examined each voyage. The men are stripped naked, and any deformity or disease is sufficient for rejection. Venereal disease

is a positive objection. As each man is passed he is vaccinated. This is done by the superintending surgeon of the Red Star Line. The crew is examined again by myself at boat muster.

Inclosed is respectfully transmitted a rough sketch of the ground plan of the disinfecting plant. The detailed description will be forwarded when the construction is completed.

Very respectfully, your obedient servant,

M. J. ROSENAU,
Assistant Surgeon, M. H. S.

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

Report of contagious diseases at Antwerp.

UNITED STATES CONSULATE,
Antwerp, Belgium, May 15, 1893.

SIR: I have the honor to communicate that the report received at this office for the week April 30 to May 6, 1893, shows rather a decided increase in the number of smallpox cases at Antwerp. There were under treatment at hôpitaux civils, 84; deaths at hospital, 5; total deaths, 16.

The total deaths indicate that there is an increasing number of cases in the city, not in the hospitals.

The same report shows 5 cases of typhoid fever, with 1 death; 3 cases of diphtheria, with 2 deaths; and 1 death from scarlet fever; and 5 deaths from whooping cough.

The prevailing weather is very hot and unseasonable. Rain is badly needed. The sanitary condition of the city is quite imperfect.

Very respectfully, your obedient servant,

M. J. ROSENAU,
Assistant Surgeon, M. H. S.

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

ANTWERP, BELGIUM, *May 18, 1893.*

SIR: I have the honor to communicate that the Rapport Hebdomadaire, received at this office to day, shows the following number of smallpox cases occurring during the week May 7 to 13, 1893, at Antwerp, Belgium: Under treatment at hôpitaux civils, 93; deaths at hôpitaux civils, 9; total deaths, 11.

The same report gives 6 cases of typhoid fever, with 1 death; 3 cases of diphtheria, with 1 death; and 1 death from whooping cough.

During the same week the number of deaths from all causes was 108. Population of the city, 248,296.

Very respectfully, your obedient servant,

M. J. ROSENAU,
Assistant Surgeon, M. H. S.

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

Smallpox in Belgium since January 1, 1893.

Under date of May 16, 1893, Assistant Surg. M. J. Rosenau transmits the following translation from Veröffentlichungen des Kaiserlichen Gesundheitsamtes of May 3, 1893, No. 18:

Belgium: Since about the first of the year smallpox has noticeably increased and spread. Cases have been reported from 37 of the 123 districts from which regular weekly bulletins are issued.

In Brussels and its suburbs there have been in all 12 deaths from the disease from January 1 to April 15, 1893.

The largest number of cases has been reported from Antwerp, where the number of deaths in the week January 29 to February 4, 1893, amounted to 19; and from February 26 to March 4, 1893, reached the number of 20.

In Borgerhout (Kanton Antwerpen) there were 25 fatal cases between January 1 and April 15, 1893.

At Turnhout, in the province of Antwerp, there were 56 fatal cases in the same time.

A particularly malignant focus of the disease has been breeding in the province of Hennegau. In the hilly district of Charleroi, with the town of Jumet, there have been 39 deaths from January 1 to April 15, 1893. At Charleroi, 21 deaths; at Montigny, 9; Chatelineau, 7; Gilly, 3; Fleurus, 2.

At Ypres, in the province of West Flanders, 46 fatal cases have occurred during the same time. In Poperinghe, near Ypres, there were 7; in Furnes, 24; Bruges and Menin, each 1. In Grammont, in the province of East Flanders, 5; St. Nicholas, 2. In the province of Brabant, Löwen, 2; Vilvoorden, 3; Braine-la-Lende, 2; Hal, 1. In the province of Limbourg, in St. Trond, 1. In the province of Lüttich, in the city of Lüttich, 15; in Herstal, 2; and in Seraing, 1.

Inspection of steamship Illinois at Antwerp and disinfection of emigrants' baggage.

UNITED STATES CONSULATE,
Antwerp, Belgium, May 20, 1893.

SIR: I have the honor to give the following summary of the work done for the steamer *Illinois*, which is transmitted as an illustration of the programme that is carried out for each of the passenger boats leaving this port for the United States:

As each compartment was discharged it was mechanically cleansed, and then disinfected with sulphur. This is done as a precautionary measure by the company. If for any reason the ship is considered infected the disinfection is done by steam under my supervision, as in the case of the *Noordland*, April 22, 1893.

The steerages are freshly whitewashed every trip. The closets are flushed and disinfected.

The ship was inspected and found to have insufficient ventilation. New ventilators were built into the lower steerages to comply with the requirements of the law.

Most of the older ships of the Red Star Line are deficient in this respect. The corrections are being made as each ship comes into port.

The crew is examined physically by the superintending surgeon of the line. Each man is stripped. If passed, he is vaccinated.

The crew was again examined by myself at boat muster, which took place shortly before embarkation.

The bedding and luggage of the crew, in all 29 bags, were disinfected with steam.

The passengers from infected localities were held five days under observation. They are all vaccinated on the first day of detention. They are visited daily by a physician.

The remaining passengers are vaccinated by the ship's surgeon on the voyage.

I made the rounds of the emigrant hotels three times during the week with the superintending surgeon of the line. We found 2 cases of measles, which were sent to the hospital.

The baggage from infected localities, in all 97 pieces, was unpacked, spread out, and steamed in one of the compartments of the ship for one hour.

The baggage from noninfected localities was then inspected, and 13 bags containing dirty linen and looking in an unsanitary condition were also disinfected by steam.

The emigrants, 704 in all, passed the usual inspection, which is now done in a specially constructed shelter on the wharf. There were 58 from Russia, 15 from Galicia, and 197 from Hungary.

A family of 8 were detained on account of varicella in a baby.

There were no cabin passengers.

The manifest of cargo was examined before the ship sailed.

The cargo contained some wood pulp, cow hair, and rabbit skins, which were accompanied by consular certificates of origin and of disinfection.

Very respectfully, your obedient servant,

M. J. ROSENAU,
Assistant Surgeon, M. H. S.

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

Report of Surg. W. A. Wheeler on sanitary measures at the port of Bremen.

HAMBURG, *May 14, 1893.*

SIR: I have the honor to report that upon the receipt of two telegrams from Dr. White, at this port, while I was in Havre, urging my presence at Hamburg at once, I left Havre on the 8th, reaching here the 10th, as I advised you by cable. I shall probably remain here until the 18th, and before leaving will send you a full report of the results of my investigations at Hamburg. Meanwhile I will state the result of my observations at Bremen, where I went on the 12th, as I had learned that some cases of smallpox had broken out on vessels hailing from Bremen while on the voyage to New York. The business of carrying emigrants to the United States via Bremen is done entirely by one company, the North German Lloyd, who dispatch in the busy season (*viz*, the spring of the year) three ships per week to New York, and occasionally, about once, sometimes twice a month a ship is sent to Baltimore. The emigrants are brought by rail from Germany and Austria-Hungary and some parts of Russia, and are housed in Bremen in some forty hotels which are all owned by private parties, but are to a certain extent controlled by the steamship company. The municipality of Bremen does not take any cognizance of the emigrants, and they are handled entirely by the steamship company. All emigrants from Germany and northern Europe, excepting Russia, are allowed to take the steamer next sailing after their arrival in Bremen, while those coming from Austria-Hungary and Russia are at the present time obliged to remain in Bremen in certain houses, which are designated by the steamship company, for a period of five days after arrival, but during those five days they are allowed to roam freely about the city and mingle with the citizens and other emigrants. The vessels of the steamship company do not come up to Bremen, but discharge and take on all their passengers at Bremerhaven or Nordenhamm, directly opposite, on the Weser, about 50 miles below the city of Bremen.

The sailing days are Tuesdays, Thursdays, and Saturdays, in the forenoon. On Monday, Wednesday, and Friday afternoons, at 1 o'clock, in a large building, near the union station in Bremen, built by the steamship company as a baggage room and inspection depot, the emigrants are inspected and vaccinated by two physicians of the city of Bremen named Dr. Von Pelger and Dr. Hahn, employed and paid by the steamship company, and placed under the orders of our consul, Dr. Hugo M. Starkloff. These physicians are assisted in their work by one or more of the company's ship surgeons who may happen to be in port. The vaccination is made hurriedly, and the emigrants are then, while their upper clothing is removed, inspected and passed on to a waiting room where they arrange their clothing, often while so doing wiping off the virus with which they have been vaccinated. I even saw some of them moistening their fingers with saliva and washing it off before putting on their clothes. They are then given an inspection card and dismissed to their hotels. Next morning early, usually about 6 a. m., they reassemble at the railway station, and those having cards of inspection are taken by train to steamship at Bremerhaven. They are there again inspected, this time by the consul, who goes with them for the purpose of issuing the bill of health and the manifest as required by the new immigration law. The baggage of emigrants is placed in the baggage room, referred to previously, in Bremen. I was told that the baggage of all those coming now from southern Europe and Russia was disinfected, and I visited a shed on the company's grounds, near the baggage room, which was used as a sulphur fumigating chamber. I entered this chamber, and the outside of a lot of baggage was being fumigated in an atmosphere which contained some fumes of sulphur. Adjoining this shed were the foundations of a building which will contain three steam-disinfecting chambers, oval in shape, 6 by 8 feet (I saw the chambers on the ground), provided with racks, a front and back door, and rails on which to run the car, and arranged for both steam and hot air. These chambers are being built by the steamship company and could be completed and in running order in twenty days.

I visited the only other steam chamber in the city, that at the poor-house, which consists of a single chamber about the size of those previously described, and I was told that it was used by the steamship company whenever it was desired to steam any baggage of their passengers. It was not in use upon the day of my visit. The immigrants who come to the United States via Bremen are, as a rule, clean, healthy people, because they come largely from Germany, and it is not as favorite a port of departure for the Russians, Bohemians, and Poles as Hamburg is. Moreover, the rates of steerage passage to America are higher by the North German Lloyd Company than by one of the Hamburg lines, the Union. I must say the work of inspection of emigrants as carried on by the physicians under our consul is fairly well done, but I take exception to their methods of vaccination, which, as you are aware, is not generally done before the departure of the ship, but by the ship's surgeon the first day out of port. With regard to the baggage, very little of it at present, in my opinion, needs disinfection, but if it did need steam disinfection, at present it could not be done, at least on any large scale. Consul Starkloff informed me that the houses from which the people who had smallpox on the steamers *Lahn* and *Gera* came had been ordered closed and fumigated. I remarked that as each and every emigrant had been vaccinated in Bremen before his departure I was forced to the conclusion that either vaccination did not protect or the work had not been properly done. I am satisfied the

consul is doing all in his power to comply with the provisions of the new immigration and quarantine laws, and that in a measure his work is fairly successful. I believe, however, there are some objections to be raised against the employment of steamship company's surgeons, men under the authority of United States consuls, to do the work of inspection required under United States quarantine laws.

Very respectfully,

W. A. WHEELER,
Surgeon, M. H. S.

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

One death from cholera at Hamburg.

HAMBURG, GERMANY, *May 29, 1893.*

One fatal case of cholera.

J. H. WHITE,
Passed Assistant Surgeon, M. H. S.

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

Report of Surg. W. A. Wheeler on the inspection of emigrants and disinfection of baggage at Hamburg.

HAMBURG, *May 16, 1893.*

SIR: I have the honor to state that I have now been in Hamburg for nearly a week and have had an opportunity to look the ground over very thoroughly and to give the results of my observations. The bulk of the commerce between Hamburg and the United States is in the hands of the Hamburg-American Packet Company and the Union Line, as it is called, which is owned and controlled by the owners of the Hamburg-American Packet Company. All emigrants, whether going via the Hamburg Packet Company or via the Union Line, are furnished and cared for by the Hamburg-American Packet Company. During the cholera scare of last year the packet company built, at its own expense, a building near their warehouses on the other side of the Elbe, which they call the barracks, capable of accommodating about 800 persons. These barracks are fairly well ventilated and provided with bathrooms (four tubs in each room), a small (8 by 10 feet) steam-disinfecting chamber, fairly good water-closets, kitchen, and dining room.

Upon the completion of this building the city of Hamburg took possession of it, placing it under the charge of the police department, and the city itself undertook the work of detaining all persons coming from Russia, Hungary, Galicia, and Poland, and keeping them at the barracks and steaming their baggage. It was claimed that all the people were given a bath at once, and, while bathing, their clothing was steamed, and afterwards their baggage. In company with Dr. White I visited the barracks on my second day here, and I noticed that many people (there were then some 700 persons detained) had not been bathed and that no baggage just then was being steamed. The women and children were lying on their beds or crowded in their dormitories, and all were mingling freely together, those who arrived that day with those who had been there five days. I then visited the steam-disinfecting lighter, which the packet company has furnished Dr. Nash at Dr. White's suggestion, for the steaming of such baggage as he (Dr. White) requires done. It is an iron boat divided into two compartments, not lined, and the steam is introduced from a boiler on a tug alongside. The chambers not being lined it was not possible the day I visited it to raise the temperature of

the chamber over 150° F. It appears that the city of Hamburg causes all Russians, Poles, Austrians, and Hungarians at present to be switched off just out of the city limits and carried to the barracks, where they are detained in the manner I have described for five days, and then allowed to go aboard the steamers for the United States.

In an interview with the chief director of the packet company it was agreed that if the city were willing all Austrians, Hungarians, and Galicians should come into the city and be kept in a large hotel which Dr. White and I visited, there to be under the care of Dr. White until he should consider them safe to go aboard ship. This house will accommodate some 400 people, and the company has promised to provide six bath tubs and make other slight changes and place the house under charge of Dr. White, who can make a daily inspection of the place and see that his requirements are carried out. That will materially reduce the number of people at the barracks and enable those kept there to receive more attention. I again, to-day, visited the barracks and found a great change. The steam plant was in full blast and a lot of clothing was being subjected to a temperature of 225° F. The bathrooms were in use. One of the dormitories was being cleaned, and many of the people were washing their clothes on benches in the yard. I was asked to make suggestions, and that convinced me that the packet company had more to do with the management of the barracks than they had at first been willing to admit.

I suggested that Dr. White be allowed to make a daily visit to the barracks, and that his suggestions be carried out as far as possible; further that a washhouse be built to encourage the women to wash all their clothing as soon as it had been steamed, and that a pavilion be built to allow the people to get out of their dormitories during the whole day, so they might be thoroughly cleaned and aired for the night. About 550 people were there to-day, of whom about 150 belong to the classes which will be hereafter cared for in the hotel in Hamburg under Dr. White's direct supervision. The inspection of emigrants just previous to sailing is made in the waiting room of the packet company at the landing, and at present is conducted by four physicians: Dr. Nash, who is employed by the packet company as agent of Dr. Jenkins, of New York; Dr. Müller, a Hamburg physician, employed by the packet company to assist Dr. Nash; Dr. Homann, who is employed by the city of Hamburg as police surgeon to protect the people of Hamburg, and lastly by Dr. White, who, after inspection, issues them an individual card. I have inspected three ships with their passengers and crews, and shall inspect two to-morrow, after which, feeling that I have spent as much time as is practicable at Hamburg, I shall start for Genoa. I have instructed Dr. White to retain a copy of his bill of health and his weekly report; to have prepared and use as soon as possible the new inspection cards and baggage tags, at the same time keeping a full journal. There is no cholera in Hamburg at the present time, and I feel sure that as time progresses and the work of inspecting emigrants and baggage becomes more perfected the danger from that source will be reduced to a minimum. With the consent of the steamship company the same inspection will be made by Dr. White of all emigrants sailing on the ships bound for Montreal. If when I reach Liverpool I can induce the lines carrying passengers to Canada to allow us the same privilege I shall be very glad.

Very respectfully,

W. A. WHEELER,
Surgeon, M. H. S.

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

Relative to the sanitary condition of steamers sailing from Naples.

UNITED STATES CONSULATE,
Naples, May 16, 1893.

SIR: In addition to the ships mentioned in my report, 1,098 passengers and 2,000 pieces of baggage for the *Chateau Lafite* were examined, the sailing of which was delayed until yesterday (Monday) by the necessity of complying with the requirements of the Chandler act.

The operations of the Chandler act have so delayed the departure of the ships as to postpone the intended sailing of several. There are at present four ships in port awaiting their turns to sail.

In some cases the ventilation of the ships and their sanitary arrangements are very bad, and although theoretically the medical officer's duty hardly comprises more than indicating what changes will be necessary, still practically, it is necessary to devote a great deal of time and thought to the devising of means by which these requirements can be arranged to conform to the structural conditions present in the ships.

I have preserved on file for future reference plans of all the ships inspected, with notes of changes ordered.

Appreciating the difficulties in suddenly making radical changes in long-established customs without great injury to the large commercial interests involved, I have been slowly but progressively raising the sanitary standard of the steerage accommodations, and although this remains far from perfect there is already a great improvement.

Respectfully,

G. B. YOUNG,
Assistant Surgeon, H. M. S.

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

Disinfection by steam of emigrants' baggage at Rotterdam.

ROTTERDAM, NETHERLANDS, May 15, 1893.

SIR: I have the honor to acknowledge receipt of letter (H. W. A.), dated April 27, 1893, containing general instructions for my guidance.

Disinfection of freight vessels has been discontinued for the present in accordance therewith. Disinfection of the fore-castle and steerage of the passenger vessels I will continue.

Russian emigrants' baggage is all unpacked and disinfected in the following manner: The company passed cross-beams through the disinfecting chamber, and over these passed a series of gas pipes. A bag is untied, all the clothing taken out and strung on a string by the aid of a sail needle. This is now tied to the gas pipe, and hangs loosely, allowing the steam to permeate it thoroughly. A thermometer placed in a door shows the temperature. It takes from twenty to thirty minutes to raise it to 103° C., and the clothing is left thirty minutes after this temperature is reached. The company is considering the advisability of building a larger disinfecting plant. To give you an idea of the amount of work entailed, I will state that it took fifteen of the company's men several hours to disinfect the baggage of merely the Russian emigrants sailing on the *Zaandam*. When it becomes necessary to disinfect all the baggage of from 500 to 900 emigrants, averaging from 800 to 2,000 packages, all of which must be unpacked, kept separate, repacked, and delivered to the proper owner, you can see how much work it will demand.

As directed, I will proceed to Amsterdam to inspect the passenger vessels leaving that port. The company intends hereafter to have

nearly all the vessels of their line run to Rotterdam, so that there will only be one vessel a month from Amsterdam carrying passengers. I know nothing about the freighters from that port, and can therefore not make at present any suggestions regarding a special inspection there. After my first visit to Amsterdam, however, which will probably be on Wednesday, May 24, I will make the matter the subject of another communication.

* * * * *

A large quantity of wine and liquor is shipped from here. Customs officers of this Government are constantly aboard a freighter during the loading of such cargo, and as soon as one hatch is full they seal it with their official seals, and I have no authority to break them. A few days ago I boarded a vessel for inspection, and all the hatches were sealed tight, and the customs officers who had any power to open them gone. They had been sealed the evening before. I learned that there were a few bales of hides aboard which the officer in command could give no history of. I refused to deliver the bill of health, took one of the officers over to the consul's office with me, sent for the agents, and had them produce the certificates regarding the hides. I delivered the bill of health, and the vessel barely got out in time for the tide, but I did not see in the hatches. The officers of the vessel were all gentlemen, and perfectly willing I should inspect everywhere, but they had no power with Government officers.

I beg leave to state that I am endeavoring to follow the regulations as closely as possible, but I have many obstacles to overcome.

Very respectfully,

R. M. WOODWARD,
Passed Assistant Surgeon, M. H. S.

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

(Reports received through the Department of State and other channels.)

Steamship Oregon detained at Gross Isle on account of diphtheria.

MONTREAL, *May 30, 1893.*

Superintendent of Grosse Isle Quarantine wires that steamship *Oregon* has been detained at his station on account of a serious outbreak of diphtheria.

Yours, respectfully,

ELZÉAR PELLETIER,
Secretary Board of Health of the Province of Quebec.

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

The Cholera at Lorient.

The United States consular agent at Lorient reports, for the week ending May 14, 1893, the following cases of cholera: Lorient (town), 1 case, no deaths. Lorient (district), 3 cases, 3 deaths. Vannes (district), 10 cases, 4 deaths.

No cholera in St. Petersburg.

Under date of May 15, the United States consul at St. Petersburg, Russia, reports as follows:

There is no cholera here as yet. Every precaution is taken to prevent a recurrence. The whole city has been thoroughly cleansed, and the

hospital, marine, and local staff are doing everything to keep the epidemic out of this portion of the Empire.

To the Hon. the SECRETARY OF THE TREASURY.

Cholera in Austria-Hungary.

UNITED STATES CONSULATE,
Vienna, Austria, May 5, 1893.

SIR: I have the honor to transmit herewith a translation of the official report on cholera asiatica in Austria Hungary up to April 26, 1893, as published by the I. R. chief sanitary board on April 27, 1893:

“During the course of last week (*i. e.*, from April 19 to April 26) there occurred 4 new cases of cholera in the political district of Borszczow, in the crownland of Galicia, on April 20, 21, and April 24, which were distributed in the various communities, as follows: Kudrynce, 2 cases, 1 death; Podfilipie, 1 case; Slobudka Trylecka, 1 case, 1 death; total, 4 cases, 2 deaths.”

Besides there were afterwards reported 1 death of cholera each in the community of Cygany and Losiacz; 1 of which occurred on April 11 and the other on April 17.

I am, sir, your obedient servant,

JULIUS GOLDSCHMIDT,
United States Consul-General.

To the Hon. JOSIAH QUINCY,
Assistant Secretary of State.

Cholera at Hodeida, Arabia.

Under date of May 26, 1893, the following cablegram, from the chargé d'affaires (*ad interim*) of the United States at Constantinople, was transmitted to this Bureau from the Department of State:

MAY 25, 1893.

Cholera, Hodeida. American firms ship largely hides and skins.

BAHAMAS—*Green Turtle Cay—Abaco.*—Two weeks ended May 10, 1893. Population, 3,286. Total deaths, 1.

CUBA—*Havana.*—Under date of May 20, 1893, the United States sanitary inspector reports as follows:

There were 131 deaths in this city during the week ending May 18, 1893. Five of those deaths were caused by yellow fever, with approximately 14 new cases, 5 were caused by enteric fever, 7 by so-called pernicious fever, 1 by paludal fever, and 4 by diphtheria and croup.

GREAT BRITAIN—*England and Wales.*—The deaths registered in 33 great towns of England and Wales during the week ended May 13 corresponded to an annual rate of 18.6 a thousand of the aggregate population, which is estimated at 10,322,429. The lowest rate was recorded in Burnley, viz, 10.0, and the highest in Plymouth, viz, 27.0 a thousand.

London.—One thousand four hundred and sixty deaths were registered during the week, including smallpox, 13; measles, 20; scarlet

fever, 15; diphtheria, 68; whooping cough, 37; typhus fever, 1; enteric fever, 6; and diarrhea and dysentery, 29. The deaths from all causes corresponded to an annual rate of 19.7 a thousand. Diseases of the respiratory organs caused 304 deaths. In greater London 1,817 deaths were registered, corresponding to an annual rate of 16.2 a thousand of the population. In the "outer ring" the deaths included diphtheria, 7; smallpox, 3.

Ireland.—The average annual death rate represented by the deaths registered during the week ended May 13 in the 16 principal town districts of Ireland was 23.4 a thousand of the population. The lowest rate was recorded in Sligo, viz, 5.1, and the highest in Armagh, viz, 56.1 a thousand. In Dublin and suburbs 175 deaths were registered, including scarlet fever, 2; diphtheria, 1; measles, 4; whooping cough, 8; and enteric fever, 4.

Scotland.—The deaths registered in 8 principal towns during the week ended May 13 corresponded to an annual rate of 20.7 a thousand of the population, which is estimated at 1,447,500. The lowest mortality was recorded in Dundee, viz, 14.9, and the highest in Glasgow, viz, 24.8 a thousand. The aggregate number of deaths registered from all causes was 582, including measles, 47; smallpox, 3; scarlet fever, 5; diphtheria, 7; whooping cough, 28; fever, 6; and diarrhea, 14.

WALES—*Swansea.*—Two weeks ended May 6, 1893. Population, 95,000. Total deaths 66, including enteric fever, 1; and scarlet fever, 3.

MALTA AND GOZO.—Month of February, 1893. Total deaths, 448, including enteric fever, 8; diphtheria, 3; measles, 54; and whooping cough, 4.

RUSSIA—*Riga.*—Month of March, 1893. Population, 215,000. Total deaths, 393, including phthisis pulmonalis, 49; cramps, 28; enteric fever, 6; scarlet fever, 8; smallpox, 69; diphtheria, 13; croup, 2; and whooping cough, 12.

Cholera notes.

[Translated in this Bureau from the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Berlin, May 3 and 10, 1893.]

AUSTRIA-HUNGARY.—From April 19 to noon of April 26, 4 cases of cholera and 2 choleraic deaths were reported from the Borszcz district in Galicia; at Kudrynce, 2 cases, 1 death. Two fatal cases were reported from Cygang and two from Loscacz, under date of April 11 and 17. On April 23 a suspicious case was observed at Smykowce, in Galicia, and on the same day a death from genuine Asiatic cholera occurred in Buczacz.

FRANCE.—Cholera broke out again in Lorient, March 8, with 107 cases and 34 deaths, up to the date of the last report received. From April 14 to 21, 8 cholera cases and 6 deaths were reported from the city and suburbs; for the district, 77 cases and 27 deaths.

RUSSIA.—The following statistics are officially reported:

Place.	Date.	Cases.	Deaths.
Podolia.....	Mar. 13-27.....	460	120
Tula.....	Apr. 1.....	1	.....
Orel, city.....	Apr. 4-8.....	2	1
Orel, government.....	do.....	1	.....
Churkow.....	Mar. 7-23.....	5	2
Don province.....	Apr. 4.....	1	.....
Nishni-Novgorod.....	Mar. 27-30.....	2	1
Kasan.....	Mar. 9.....	1	1
Samara.....	Mar. 15-29.....	.....	1
Ufa.....	Mar. 27-Apr. 13.....	113	35
Tobolsk.....	Mar. 10-23.....	3	1
Orel.....	Apr. 8-15.....	9	3
Don province.....	Apr. 20.....	1	.....
Saratow.....	Mar. 11-Apr. 4.....	2	1
Ufa.....	Apr. 4-20.....	51	21
Jelissowetpol.....	Apr. 12.....	1	1

A report, dated April 15, states that cholera is widespread in the northern portion of Bessarabia, especially in the Chotin district. Two cases have lately been reported in the city of Olvidivpol in the government of Cherson.

Isolated cases occurred in several localities on the Dneister during the winter. With regard to the reported outbreak of cholera in St. Petersburg, the health department of the Government denies the existence of the disease in St. Petersburg since December 18, 1892.

♦ 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.	
Matanzas.....	May 17.....	40,000	18										
Mayence.....	May 6.....	72,281	33										
Montreal.....	May 20.....	231,560	101										
Morresburg.....	May 27.....	2,000	1										
Munich.....	Apr. 29.....	380,000	173					1	2	2			
Naples.....	May 13.....	620,000	282								1		
Newcastle-upon-Tyne.....	May 13.....	197,026	88			1							
Nogales.....	May 20.....	1,200	1							1			
Nuremberg.....	Apr. 29.....	153,015	63										
Piedras Negras.....	May 22.....	10,000	1										
Plymouth.....	May 13.....	85,610	45						1		4		
Prague.....	May 6.....	182,530	81			4		6	2	8			
Prague.....	May 13.....	182,530	18			7		2	5	4			
Prescott.....	May 27.....	2,980	5										
Port Hope.....	May 20.....	5,042	3										
Port Sarnia.....	May 29.....	6,600	2						1				
Port Sarnia.....	May 27.....	6,600	2										
Quebec.....	May 15.....	70,000								1			
Quebec.....	May 22.....	70,000								1			
Rheims.....	May 13.....	110,000	48							1	1		
Rotterdam.....	May 13.....	222,230	94										
Ruatan.....	May 6.....	3,000	5										5
St. John, N. B.....	May 20.....	39,179	12										
St. Johns, Quebec.....	May 20.....	4,772	3										
St. Petersburg.....	May 6.....	1,000,000	561			2		7	16	3	1	4	
Sagua la Grande.....	May 13.....	18,109	10							1			
Santander.....	May 14.....	40,000	25							1			
Schiedam.....	May 13.....	25,533	8										
Sheffield.....	May 13.....	333,922	122					2	1	2	4	2	
Sonneberg.....	May 7.....	12,000	6										
Sonneberg.....	May 14.....	12,000	3										
Southampton.....	May 13.....	61,000	16								1		
Stettin.....	May 6.....	120,000	50					1	1	2			
Stockholm.....	May 6.....	249,249	107						3	5			2
Stockholm.....	May 13.....	249,249	88						1	9			2
Stuttgart.....	May 13.....	139,659	47							7			2
Swansea.....	May 13.....	95,000	39						2		3		1
Tampico.....	May 21.....	7,000	13										
Trieste.....	May 6.....	158,314	80			3			1	5			
Tuxpan.....	May 13.....	10,280	4										
Tuxpan.....	May 20.....	10,280	4										
Venice.....	May 6.....	163,601	104							3	6		
Vera Cruz.....	May 19.....	24,500	28					1					
Victoria.....	May 13.....	16,841	5										
Warsaw.....	May 6.....	500,331	214			4	5		4	5			
Zurich.....	May 6.....	91,323	57							7	17	18	4

By authority of the Secretary of the Treasury :

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