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No. 29.

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

UNITED STATES.

SPECIAL REPORTS.

Another case of yellow fever at Cape Charles Quarantine.

[Telegram.]

FORT MONROE, VA., July 15, 1893.

The steward of the brig *Darpa* became ill yesterday and was removed to hospital, making the third case of yellow fever from that vessel now quarantined. A preliminary disinfection was given the *Darpa* yesterday. Laborers were put on island yesterday and will discharge *Darpa's* ballast to-day.

T. B. PERRY,

Passed Assistant Surgeon, M. H. S.

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

[Telegram.]

FORT MONROE, VA., July 17, 1893.

No new cases of fever at quarantine since last report. All patients improving. Ballast discharged from *Darpa* yesterday; disinfected with sulphur dioxide to-day. All compartments of the *Darpa* will remain closed until to-day, when acid solution of bichloride of mercury will be used freely throughout that vessel.

T. B. PERRY,

Passed Assistant Surgeon, M. H. S.

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

Yellow fever near Brunswick, Ga.—Report of Surg. H. R. Carter, M. H. S.

WASHINGTON, D. C., July 18, 1893.

SIR: In pursuance of Bureau orders (H. W. A.) of June 28, 1893, directing me to proceed to a point on the Satilla River near Brunswick, Ga., and take all necessary precautions to prevent the spread of yellow fever, I reached Brunswick, Ga., June 29, 1893, in company with Dr. Brunner, of Savannah, who joined me at Savannah.

There I found that Dr. Dunwoody, health officer of Brunswick, had the laborers who had been employed aboard the *Anita Berwind*, as far as they could be collected, aboard the steamer *Passport* coming down the

Satilla River en route to South Atlantic Quarantine. Chartering a steamer we proceeded to Owens Ferry, the nearest landing to Conquest's Camp, where the yellow fever case lay sick and died, and about three-quarters of a mile from Conquest's Wharf, where the *Berwind* lay.

At Owens Ferry I learned that 8 of the laborers taken to South Atlantic Quarantine lived in small villages on and near the Satilla, the remainder in Brunswick, and that their families, with whom they had been in communication, were without means of support on account of the absence of their working members. I authorized the issue of rations to these families pending the return of these men from quarantine, (1) because it seemed a matter of equity and common humanity, and (2) it was advisable to keep them under surveillance. For this last reason a ninth family, with which certain of the stevedores had boarded, was furnished rations and placed under surveillance.

Locket Davis, a laborer aboard the *Berwind*, but who had not gone to the South Atlantic Quarantine, was also placed under surveillance and given rations.

Another laborer, a Brunswick man, did not go to quarantine, and is supposed to have gone back to Brunswick, but could not be found there by the police.

Dr. McKinnon was engaged to inspect these people daily, by a list reporting every case of sickness among them to myself for investigation. Among these people and those at the Ferry there occurred 2 cases of malarial fever and 1 miscarriage.

At Conquest's Camp, reached 11 a. m., June 30, we found 77 people, all colored, in log cabins, most of which were sound, some rotten towards the ground, closely collected in an old field partly grown up in second-growth pines and water oaks near the edge of a hammock.

Three white men had run off to avoid quarantine, as had one negro, the latter to a large camp of railroad constructors about 16 miles off in Middleton's Neck, a low, flat, swampy place. Nine, including two of the whites and this negro, had been directly exposed to infection, granting that the premises, bedding, etc., of the sick man were infected. The whites went to Richmond, Va., and Thomasville, Ga., the health authorities of which places were immediately notified by telegraph.

There was also another camp about a quarter of a mile off, of about the same size or smaller. The surrounding country is well settled on the ridge and sparsely on the flat woods. It seemed to me extremely important to prevent the development of yellow fever at the large camp at the railroad, as every condition favored its propagation there and spread therefrom. I therefore requested the constable to bring back the man, Ed. Simmons, who had gone there. This he failed to do as quickly as I thought necessary, so I went after him and brought him back on the night of July 1 and isolated him with the others specially exposed.

No efficient disinfection had been done prior to our arrival save burning the bedding of the dead man. Some articles, bedding, etc., had been carried out to another house, and the rest left in the house were scattered around everywhere, the occupants having been somewhat precipitate in their departure. The rain, too, had come in, and some of these clothes and the floors of the house were wet. The house was a frame house, ceiled about 18 inches from the ground and, save the ends of the wooden blocks on which it rests, I believe sound.

The excreta, feces, urine, sputa, and vomit had been emptied in many scattered places, mainly under a large water oak on ground covered with decaying leaves, chips, etc., and close to side of the stable. There was a rain every afternoon of my stay, save July 3, followed and preceded

by a scalding sun, conditions well adapted for the spread of yellow fever.

The women, a quadroon and a mulatto, who had nursed the sick man and who were directed to stay in the house, were going about the house and returning to their own families as they chose. Each was entertaining a half dozen others when I arrived.

There was no white man on the premises nor any representative of Conquest & Co., in whose house the sick man died. A colored man was, to some extent, in charge of the interest of a subcontractor, and had the keys of a grocery from which the hands fed themselves, they doing piece-work. This was nearly empty, and the scarcity of provisions added no small difficulty to the control of the camp.

Those directly exposed to infection, after change to clean or boiled clothing, were isolated in three cabins and one shack, which stood well apart to themselves and not close to each other. These I inspected twice a day, and, indeed, saw about ten times per day, not entirely trusting my guards.

Had any of these developed yellow fever, and it seemed improbable in any of the others, it had been a matter of no sanitary moment and no single item of administration altered, as each was already isolated with a companion for nurse, and the burning of the cabins would have sufficiently disinfected the locality.

Guards and laborers to clean up were employed (the isolated men, as having been already somewhat exposed, were employed on this latter duty), cook engaged, and provisions bought for those in quarantine.

All others in camp and a family outside which had been exposed to possible infection were inspected by myself twice daily, night and morning, and checked off on a roll, otherwise they were allowed to go into the woods and cut crossties as usual, but, save one boy sent (with a pass) for mail and provisions, not allowed to go to any place away from camp. I can certify that none of them did. The condition of the work and country rendered this safe. After my getting provisions in camp, and their finding out (1) that their work and provisions would be in nowise interfered with, and (2) that they would be refused work and provisions everywhere else and also be brought back, and especially after the first payment of my guards and laborers, which was promptly done on Saturday night, the camp was perfectly tractable and contented and the difficulty was over. The first few days it was very different.

Dr. Brunner left at daybreak July 2, having stayed one and a half days, and I know of no other man who would have rendered the same assistance.

All fabrics in any way exposed to possible infection were boiled, and the pillows and mattresses burned, as were a few other articles. Dr. Brunner and I handled all of these and such like articles, so as to prevent exposure of the others. This was done immediately on our arrival. Other articles immersed in 1 to 500 sol. of HgCl_2 for thirty to forty minutes. I calked the house from the inside as tightly as possible; no one save Dr. Brunner and myself going inside until after disinfection, and burnt 100 pounds of sulphur in it. The house was too open for this to be satisfactory, and yet, as it was of about 7,500 cubic feet capacity, the amount is so much in excess of the ordinary requirement that it may have been efficient. It was washed out the next day with 1 to 500 bichloride solution, which was lavishly used over everything and around and under the house. The liquid stood nearly an inch on the floor of the sick room after washing before it dripped through, which the excreta and water contaminated by excreta may also have done.

The environs of the house wherever it showed trash, decaying leaves, chips, etc., especially where the excreta of the sick man was known or suspected of being emptied, was covered with dry brush, fat pine, and pine straw, etc.—26 loads—and burnt down to the sand. It burned about six hours by adding fresh fuel as needed. At the place similarly contaminated close to the stables—the excreta had been poured in a shallow hole 14 by 12 inches—I poured 40 gallons of boiling 3 per cent carbolic solution.

How deeply either of these methods efficiently sterilized I am unable to say. Obviously to no great depth. There were a few cases of malarial fever in camp, and one, complicated with hysteria, in the quad-room nurse, on the evening of July 2, at its incipency was decidedly suspicious in its symptoms.

All save the two women, and a man who had been about the house, were released on July 7, and these were to have been released July 10, but a case of fever occurring on the afternoon of the 9th, it was judged best to wait until its nature was beyond dispute, which was afternoon of July 11, when the quarantine was lifted, not less than ten days from last exposure in every case. There was no serious doubt entertained of the nature of this case, it being almost certainly malarial fever; yet it seemed best to be sure.

I have made arrangements with Dr. Atkinson, a local practitioner of excellent standing and abilities, to keep a general supervision over the community this summer and advise you of any facts of sanitary interest by mail or telegraph, as may be necessary.

Respectfully, yours,

H. R. CARTER,
Surgeon, M. H. S.

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

Three cases of typhus fever in Philadelphia.

PHILADELPHIA, PA., July 15, 1893.

SIR: In reply to Bureau letter of the 13th instant, relative to the typhus fever in this city, I have the honor to report that as the immigrants can not tell the name of the vessel or the date of their arrival it is impossible to give these facts. The following information was obtained from the city health officer. A Mrs. Pressman arrived in Philadelphia from Russia via New York City, some weeks ago, and became ill soon after arriving here. Her case not having been properly diagnosed by her attending physician, the board of health had no knowledge of the fact that she had been afflicted with typhus fever until she had recovered. Very recently there arrived in this city Herman Pressman, male, age 13 years, and Olga Pressman, female, age 20 years, both children of the woman who had recovered from typhus fever.

They arrived in this country from Russia, at the port of New York, and came thence to this city, where they contracted typhus fever from their mother. They are now inmates of the Municipal Hospital in this city.

Patrick McCollum, age 22 years, a native of Ireland, arrived in this country at the port of New York, he was reported to have typhus fever, but it has proved to be a case of typhoid fever.

He also is now an inmate of the Municipal Hospital in this city.

Respectfully, yours,

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

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

Arrival at Delaware Breakwater of steamer Alleghany from Cette, France.

[Telegram.]

DELAWARE BREAKWATER, *July 14, 1893.*

British tanker *Alleghany* arrived yesterday evening, Cette, eighteen days; 1 case noncontagious sickness; ordered to sea to pump out tanks; on return to be disinfected and detained at least five days. Pilot undergoes detention.

H. D. GEDDINGS,

Passed Assistant Surgeon, M. H. S.

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

Detention of bark Alice Reed at Delaware Breakwater Quarantine.

American bark *Alice Reed* arrived on 18th, eighteen days from Cienfuegos; 2 cases of yellow fever; 1 death. Held for disinfection.

H. D. GEDDINGS,

Passed Assistant Surgeon, M. H. S.

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

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 consul at the following named port for ten days: Ilo Ilo, Philippine Islands, Port Stanley, Tahiti, and Tiensin.

Report of immigration at New York for the week ended July 15, 1893.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,

Port of New York, July 17, 1893.

Number of alien immigrants who arrived at this port during the week ended July 15, 1893, also names of vessels and ports from which arrived.

Date.	Vessel.	Where from—	Total.
1893.			
July 9	Steamship Fulda	Genoa.....	803
9	Steamship La Champagne.....	Havre	308
9	Steamship Furnessia.....	Glasgow and Moville.....	240
10	Steamship Arizona	Liverpool and Queenstown.....	261
10	Steamship Aurania.....	do.....	331
11	Steamship Weimar.....	Bremen	983
11	Steamship Grecian	Glasgow.....	404
11	Steamship Saale.....	Bremen and Southampton.....	427
12	Steamship Noordland.....	Antwerp.....	886
13	Steamship Spree.....	Bremen and Southampton.....	449
13	Steamship Zaandam.....	Amsterdam.....	85
14	Steamship Wieland.....	Hamburg.....	205
14	Steamship Normania.....	Hamburg and Southampton.....	202
14	Steamship Venetia.....	Helsingborg, Gothenberg, and Christiansand.....	277
14	Steamship Rotterdam.....	Rotterdam.....	387
15	Steamship Red Sea	Bremen.....	795
15	Steamship Amalfia.....	Hamburg.....	73
15	Steamship Adriatic.....	Liverpool and Queenstown.....	331
	Total.....		7,447

DR. J. H. SENNER,

Commissioner of Immigration.

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

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

CAPE CHARLES QUARANTINE.

Week ended July 15, 1893.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
British s. s. Montezuma*.....	July 8	London	Newport News.	Disinfected.....	July 10
British brig Darpat.....	July 13	Havana	Cape Breton.	Held for disinfection.	

* Previously reported.

† Captain died of yellow fever July 12, 1893. Two of crew ill upon arrival; diagnosis, yellow fever. One new case developed July 14.

Four vessels spoken and passed.

DELAWARE BREAKWATER QUARANTINE.

Week ended July 15, 1893.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
British schr. Mystery.....	July 10	Natal.....	Waiting orders.	Disinfected.....	July 16
British s. s. Alleghany.....	July 14	Cette .....	.....do	Held for disinfection.	

Thirty-six vessels inspected and passed.

DELAWARE BREAKWATER QUARANTINE, REEDY ISLAND STATION.

Week ended July 9, 1893.

Twelve vessels inspected and passed.

GULF QUARANTINE.

Week ended July 13, 1893.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
Americanschr. Jno. C. Smith*..	July 7	Havana	Unknown....	Held for disinfection.	

* One case of yellow fever developed three days after arrival.

KEY WEST QUARANTINE.

Week ended July 8, 1893.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
British s. s. Maroon.....	June 29	Jamaica.....	Port Tampa	Disinfected.....	July 2
American bark Onaway	July 5	Havana	Charlotte Harbor.	Held for disinfection.	

PORT TOWNSEND QUARANTINE.

Week ended July 8, 1893.

Two vessels inspected and passed.

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

SAN DIEGO QUARANTINE.

Week ended July 12, 1893.

Two vessels inspected and passed.

SOUTH ATLANTIC QUARANTINE.

Week ended July 15, 1893.

Name of vessel.	Date of arrival.	Where from.	Destination.	Treatment of vessel and cargo.	Date of dep'ture.
Norwegian bark Sunbeam*.....	July 7	Bilboa.....	Sapelo.....	Disinfected.....	July 10
American bark H. L. Routh.....	July 13	Santos.....	Brunswick..	Held for disinfection.	

* Previously reported.

Reports of States and yearly and monthly reports of cities.

CALIFORNIA—*San Francisco*.—Month of June, 1893. Estimated population, 330,000. Total deaths, 452, including phthisis pulmonalis, 61; enteric fever, 15; scarlet fever, 4; diphtheria, 4; croup, 3; and whooping cough, 2.

CONNECTICUT.—Month of June, 1893. Reports to the State board of health from 168 towns, having an aggregate population of 797,995, show a total of 982 deaths, including phthisis pulmonalis, 105; enteric fever, 9; scarlet fever, 13; diphtheria and croup, 13; measles, 6; and whooping cough, 11.

IOWA.—*Davenport*.—Month of June, 1893. Estimated population, 35,500. Total deaths, 33, including phthisis pulmonalis, 2, and diphtheria, 2.

Dubuque.—Month of June, 1893. Population, 40,000. Total deaths, 29, including 3 from phthisis pulmonalis.

Keokuk.—Month of June, 1893. Estimated population, 20,000. Total deaths, 14, including 1 from diphtheria.

KENTUCKY—*Louisville*.—Month of June, 1893. Population, 161,129. Deaths, white, 179; colored, 65; total, 244, including phthisis pulmonalis, 25; enteric fever, 4; diphtheria, 2; croup, 1; and measles, 2.

MASSACHUSETTS—*Northampton*.—Month of June, 1893. Population, 16,400. Total deaths, 18, including phthisis pulmonalis, 2, and scarlet fever, 1.

Worcester.—Month of June, 1893. Estimated population, 93,000. Total deaths, 149, including phthisis pulmonalis, 13; enteric fever, 2; measles, 2; croup, 1; and whooping cough, 6.

MICHIGAN.—Week ended July 8, 1893. Reports to the State board of health, Lansing, from 73 observers, indicate that remittent fever and rheumatism increased and that inflammation of bowels decreased in area of prevalence. Diphtheria was reported present during the week

at 34 places, scarlet fever at 33, measles at 24, and typhoid fever at 16 places.

MINNESOTA—*Minneapolis*.—Month of June, 1893. Estimated population, 209,000. Total deaths, 166, including phthisis pulmonalis, 12; enteric fever, 4; diphtheria, 2; measles, 2; and whooping cough, 3.

MISSOURI—*Kansas City*.—Month of June, 1893. Estimated population, 150,000. Total deaths, 132, including phthisis pulmonalis, 10, and enteric fever, 2.

OHIO—*Cleveland*.—Month of June, 1893. Estimated population, 290,000. Total deaths, 414, including phthisis pulmonalis, 44; enteric fever, 15; scarlet fever, 6; diphtheria, 8; croup, 6; measles, 3; and whooping cough, 1.

OHIO—*Dayton*.—Population, 63,000. Total deaths, 92, including phthisis pulmonalis, 15; enteric fever, 1; scarlet fever, 1; and whooping cough, 1.

PENNSYLVANIA—*Williamsport*.—Month of June, 1893. Population, 27,132. Total deaths, 24, including 1 from enteric fever.

RHODE ISLAND—*Newport*.—Month of June, 1893. Estimated population, 20,000. Total deaths, 18, including phthisis pulmonalis, 2, and croup, 1.

TENNESSEE—*Chattanooga*.—Month of June, 1893. Population, white, 27,000; colored, 13,000; total, 40,000. Total deaths, 46, including phthisis pulmonalis, 10; and enteric fever, 1.

WISCONSIN—*Milwaukee*.—Month of June, 1893. Estimated population, 250,000. Total deaths, 296, including phthisis pulmonalis, 17; enteric fever, 8; scarlet fever, 13; diphtheria, 19; croup, 6; measles, 1; and whooping cough, 2.

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.	Variceloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Auburn, N. Y.	July 15.	25,858	10	12										
Baltimore, Md.	July 15.	434,439	256	12						5	1	2		4
Binghamton, N. Y.	July 15.	35,005	12	1										
Boston, Mass.	July 15.	448,477	195	28						2	2	7		1
Brooklyn, N. Y.	July 8.	806,343	476	44						1	4	12	6	4
Chicago, Ill.	July 8.	1,099,850	437	48						7	5	11	1	3
Cincinnati, Ohio.	July 14.	296,908	143	21						3		1	1	
Fall River, Mass.	July 14.	74,398	50	3										
Galveston, Tex.	July 7.	29,084	8	1								1		
Indianapolis, Ind.	July 15.	105,436	70	5						2		1		
Louisville, Ky.	July 15.	161,129	91	4						2			1	1
Milwaukee, Wis.	July 15.	204,468	79	5						3	4	4		
Minneapolis, Minn.	July 15.	164,738	72	3						3	1	1		
Mobile, Ala.	July 15.	31,076	10	2						1				1
Nashville, Tenn.	July 15.	76,306	29	4										3
New Orleans, La.	June 24.	242,039	152	20						2	1			
New Orleans, La.	July 1.	242,039	145	14								1		
New Orleans, La.	July 8.	242,039	120	11						1		1		
New York, N. Y.	July 15.	1,515,301	1,096	80					3	5	7	32	6	10
Omaha, Nebr.	July 8.	140,452	25											
Pensacola, Fla.	July 8.	11,750	4	1						1				
Philadelphia, Pa.	July 8.	1,046,964	464	18						3	1	4	2	4
Pittsburg, Pa.	July 8.	238,617	168	11						7	4	4	8	3
Portland, Me.	July 15.	36,426	10										1	
Providence, R. I.	July 15.	148,944	69							2	1		3	
Richmond, Va.	July 8.	81,388	51	4						2				1
Rochester, N. Y.	July 15.	133,896	42	5								1		
San Diego, Cal.	July 8.	16,153	3											
San Francisco, Cal.	July 8.	298,997	116	13						2				
Toledo, Ohio.	July 14.	81,434	28											
Washington, D. C.	July 8.	230,392	145	14						2		2		

Table of temperature and rainfall, week ended July 17, 1893.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Deficiency.	Normal.	Excess.	Deficiency.
New England States :						
Eastport, Me.....	60	4	.....	.98	.....	.78
Portland, Me.....	70	.....	2	.84	.....	.84
Northfield, Vt.....	67	.....	1	.77	.....	.27
Manchester, N. H.....	72	.....	2	.77	.....	.67
Boston, Mass.....	73	.....	1	.77	.....	.77
Nantucket, Mass.....	67	.....	1	.63	.....	.33
Block Island, R. I.....	68	2	.....	.70	.....	.70
New London, Conn.....	72	.....	2	.98	.....	.88
Middle Atlantic States :						
Albany, N. Y.....	74	.....	2	.91	.....	.71
New York, N. Y.....	75	1	.....	1.05	.....	.85
Philadelphia, Pa.....	77	1	.....	1.03	.....	.33
Atlantic City, N. J.....	73	1	.....	.77	.....	.37
Baltimore, Md.....	81	.....	2	1.14	.....	1.04
Washington, D. C.....	80	.....	1	1.05	.....	.48
Lynchburg, Va.....	79	1	.....	.84	.....	.64
Norfolk, Va.....	81	.....	1	1.26	.04	.....
South Atlantic States :						
Charlotte, N. C.....	81	1	.....	1.40	.....	1.40
Raleigh, N. C.....	79	1	.....	1.76	.....	1.16
Wilmington, N. C.....	81	.....	1	1.66	.34	.....
Charleston, S. C.....	84	0	.....	1.69	.....	1.59
Augusta, Ga.....	83	1	.....	1.19	.....	.79
Savannah, Ga.....	85	.....	3	1.06	1.54	.....
Jacksonville, Fla.....	83	.....	1	1.54	.....	1.44
Titusville, Fla.....	83	.....	3	1.61	.....	1.61
Jupiter, Fla.....	82	.....	2	1.40	.....	1.40
Key West, Fla.....	84	0	.....	.98	.....	.18
Gulf States :						
Atlanta, Ga.....	81	1	.....	1.05	.....	.25
Pensacola, Fla.....	83	.....	3	1.47	.....	.37
Mobile, Ala.....	83	.....	1	1.47	.....	1.07
Montgomery, Ala.....	83	1	.....	.95	.....	.95
Vicksburg, Miss.....	82	.....	2	.91	.79	.....
New Orleans, La.....	83	.....	1	1.47	.43	.....
Shreveport, La.....	84	.....	2	.97	.....	.17
Fort Smith, Ark.....	82	.....	2	.84	.....	.64
Little Rock, Ark.....	82	0	.....	.71	.....	.21
Palestine, Tex.....	83	1	.....	.63	.....	.53
Galveston, Tex.....	85	.....	3	.51	1.19	.....
San Antonio, Tex.....	84	2	.....	.63	.....	.63
Corpus Christi, Tex.....	83	.....	1	.49	.....	.09
Ohio Valley and Tennessee :						
Memphis, Tenn.....	82	0	.....	.59	.....	.49
Nashville, Tenn.....	81	.....	1	.98	.....	.68
Chattanooga, Tenn.....	79	1	.....	.84	.....	.74
Knoxville, Tenn.....	77	3	.....	.98	.32	.....
Louisville, Ky.....	79	3	.....	.87	.....	.67
Indianapolis, Ind.....	78	4	.....	1.12	.....	.92
Cincinnati, Ohio.....	79	1	.....	.58	.....	.18
Columbus, Ohio.....	78	2	.....	.77	.23	.....
Pittsburg, Pa.....	76	0	.....	1.16	1.14	.....
Lake Region :						
Oswego, N. Y.....	71	.....	1	.76	.....	.66
Rochester, N. Y.....	72	2	.....	.69	.21	.....
Buffalo, N. Y.....	71	1	.....	.77	.....	.37
Erie, Pa.....	73	1	.....	.64	.....	.44
Cleveland, Ohio.....	73	3	.....	.91	.....	.31
Sandusky, Ohio.....	75	3	.....	.70	1.70	.....
Toledo, Ohio.....	76	3	.....	.70	.10	.....
Detroit, Mich.....	73	3	.....	.81	.09	.....
Port Huron, Mich.....	71	5	.....	.56	.24	.....
Alpena, Mich.....	67	3	.....	.70	.10	.....
Marquette, Mich.....	69	1	.....	.70	.60	.....
Green Bay, Wis.....	71	3	.....	.77	.....	.27
Grand Haven, Mich.....	72	0	.....	.65	1.15	.....
Milwaukee, Wis.....	70	4	.....	.77	.43	.....
Chicago, Ill.....	73	5	.....	.90	.50	.....
Duluth, Minn.....	69	.....	4	.91	.49	.....

*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 July 17, 1893—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	*Excess.	*Deficiency.	Normal.	Excess.	Deficiency.
Upper Mississippi Valley :						
St. Paul, Minn.....	73	3	.....	.71	.....	.61
La Crosse, Wis.....	75	3	.....	1.05	.....	.55
Dubuque, Iowa.....	77	3	.....	1.03	.....	.03
Davenport, Iowa.....	77	3	.....	.85	.....	.85
Des Moines, Iowa.....	76	2	.....	.71	.09	.....
Keokuk, Iowa.....	80	0	.....	.98	.....	.38
Springfield, Ill.....	79	1	.....	.49	.....	.39
Cairo, Ill.....	80	0	.....	.85	.....	.85
St. Louis, Mo.....	81	1	.....	.80	.40	.....
Missouri Valley :						
Springfield, Mo.....	79	.....	3	1.05	.25	.....
Kansas City, Mo.....	80	.....	1	.80	.40	.....
Concordia, Kans.....	78	4	.....	.77	.73	.....
Omaha, Nebr.....	79	1	.....	1.24	.....	1.04
Yankton, S. Dak.....	74	4	.....	.90	.10	.....
Valentine, Nebr.....	75	1	.....	.70	.....	.60
Huron, S. Dak.....	72	2	.....	.91	.....	.81
Pierre, S. Dak.....	76	0	.....	.57	.....	.37
Extreme Northwest :						
Moorehead, Minn.....	68	2	.....	1.05	.65	.....
St. Vincent, Minn.....	66	4	.....	.63	.....	.33
Bismarck, N. Dak.....	70	0	.....	.52	.....	.12
Fort Buford, N. Dak.....	70	.....	2	.44	.96	.....
Rocky Mountain Slope :						
Havre, Mont.....	68	.....	2	.49	.91	.....
Helena, Mont.....	67	.....	3	.21	.....	.01
Rapid City, S. D.....	71	3	.....	.45	.....	.25
Spokane, Wash.....	69	.....	3	.14	.....	.14
Walla Walla, Wash.....	75	.....	5	.09	.....	.09
Winnemucca, Nev.....	72	.....	6	.03	.....	.03
Salt Lake City, Utah.....	76	.....	4	.14	.....	.14
Cheyenne, Wyo.....	71	.....	3	.42	.....	.32
North Platte, Nebr.....	75	.....	1	.63	.....	.43
Denver, Colo.....	74	0	.....	.37	.....	.37
Montrose, Colo.....	69	3	.....	.14	.16	.....
Pueblo, Colo.....	75	1	.....	.42	.....	.32
Dodge City, Kans.....	80	2	.....	.69	.11	.....
Abilene, Tex.....	85	3	.....	.25	.....	.25
Santa Fe, N. Mex.....	70	0	.....	.66	.04	.....
El Paso, Tex.....	84	.....	2	.61	.....	.11
Tucson, Ariz.....	87	.....	3	.77	.73	.....
Pacific Coast :						
Port Angeles, Wash.....	56	.....	.....	.07	.....	.....
Olympia, Wash.....	62	.....	2	.17	.....	.17
Portland, Oregon.....	68	.....	6	.14	.....	.14
Roseburg, Oregon.....	67	.....	3	.10	.....	.10
Eureka, Cal.....	56	0	.....	.03	.....	.03
Red Bluff, Cal.....	81	.....	1	.00	.....	.00
Sacramento, Cal.....	74	0	.....	.00	.....	.00
San Francisco, Cal.....	60	.....	2	.00	.....	.00
Fresno City, Cal.....	83	.....	5	.00	.....	.00
Keeler, Cal.....	81	.....	3	.03	.....	.03
Los Angeles, Cal.....	71	.....	3	.00	.....	.00
San Diego, Cal.....	68	0	.....	.00	.....	.00
Yuma, Ariz.....	92	.....	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 the medical officers of the U. S. Marine-Hospital Service stationed at foreign ports; from the United States consuls through the Department of State, and from other sources.]

BELGIUM.

Varioloid at one of the emigrant hotels at Antwerp.

UNITED STATES CONSULATE,
Antwerp, Belgium, July 1, 1893.

SIR: I have the honor to state that we have to-day met with the first practical experience concerning the value of separating emigrants in various hotels.

At Hotel Esperance a case of varioloid came to light in one of the Hungarians detained there under observation.

The house was at once quarantined, the patient sent to hospital, and the 38 emigrants occupying the hotel at the time vaccinated.

Those in whom the vaccination proves successful will be allowed to sail on next Saturday's boat, being seven days' detention. They will first be bathed and their clothing disinfected at the Asile de Nuit.

The remainder will be kept awaiting developments the full fifteen days of incubation of the disease.

I have taken a list of the names of the 38 emigrants, so that I have a good check that they will actually serve out their time.

The hotel is being cleansed, aired, and disinfected by the authorities.

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, July 6, 1893.

SIR: I have the honor to communicate that there has again been a diminution in the smallpox figures for the week ending July 1, 1893.

The weekly bulletin shows 45 cases under treatment at Hôpitaux Civils, with 3 deaths—a total of 6 deaths.

The usual number of children's diseases are reported.

There has been, for the same week, a total of 78 deaths from all causes in a population of 248,296.

Very respectfully, your obedient servant,

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

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

CANADA.

Inspection of immigrants at Quebec.

[Telegram.]

QUEBEC, July 15, 1893.

Labrador, Liverpool, arrived; 339 steerage; and Mongolian, Liverpool, 441 steerage. All well.

CHAS. E. BANKS,
Passed Assistant Surgeon, M. H. S.

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

[Telegram.]

QUEBEC, *July 17, 1893.*

Baumwell, Hamburg and Antwerp, arrived ; 344 steerage. All well.

CHAS. E. BANKS,

Passed Assistant Surgeon, M. H. S.

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

[Telegram.]

QUEBEC, *July 18, 1893.*

Lake Superior, Liverpool, arrived ; 111 steerage. All well.

CHAS. E. BANKS,

Passed Assistant Surgeon, M. H. S.

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

[Telegram.]

QUEBEC, *July 19, 1893.*

Siberian, Glasgow, arrived ; 28 passengers. All well.

CHAS. E. BANKS,

Passed Assistant Surgeon, M. H. S.

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

Further report on the Grosse Isle Quarantine Station.

QUEBEC, CANADA, *July 10, 1893.*

SIR : I have the honor to report the result of observations made upon the improvements in progress at Grosse Isle which were unfinished during my previous visit (see ABSTRACT OF SANITARY REPORTS, May 19, 1893). For all practical purposes the work on the "healthy division" is completed. The hotel for cabin passengers is receiving the finish interiorly; the barracks, for intermediate and steerage, are fitted up as described in my letter, and the water tanks are now in use, insuring that necessary feature of the division.

I send by this mail an official plan of the island and its buildings, forty in number.

Respectfully, yours,

CHAS. E. BANKS,

Passed Assistant Surgeon, M. H. S.

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

FRANCE.

Cholera in southern France.

UNITED STATES CONSULATE,

Marseilles, July 1, 1893.

SIR : There have been 11 deaths from cholera at Sorgues during the last three days. Sorgues is a small town near Avignon.

TOULON, *June 30.*

Yesterday 1 fatal case at Cuers ; 1 new case at Cadière, and 2 new cases at Toulon. On Wednesday, June 28, there were in this city 5 new cases and 2 deaths.

At Alais the disease has almost disappeared.

In Marseilles the disease makes little, if any, progress.

Respectfully, yours,

FAIRFAX IRWIN,

Surgeon, M. H. S.

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

Report of the French consulting committee on hygiene.

The following extract from *La Sémaphore* of July 5 has been transmitted to this office by Surg. Fairfax Irwin, M. H. S.

PARIS, *July 4, 1893.*

The consulting committee on hygiene met to-day. At the beginning of the session M. Henri Monod made the following report to the committee:

Inasmuch as absolutely exaggerated and unjustifiable measures have been taken by certain countries against goods from Marseilles, the sanitary administration has been advised they would be modified if precautions were taken at the port of departure. It was accordingly determined by the prefect of the Bouches du Rhones and the president of the chamber of commerce of Marseilles to take these precautions and to insert the following on the "bills of health:" "No epidemic exists at Marseilles. On account of isolated cases which have awakened apprehensions, this vessel has been inspected; no case of illness has been embarked; soiled linen has been washed and disinfected." Prof. Proust, inspector-general, made the following report on the sanitary condition of the exterior: "Cholera, Mesopotamia. The cholera continues to exist as an epidemic in Bassorah where it has spread. It has evaded the surveillance of the Turkish Government and appeared among several Arabian tribes. Between the 17th of March and 19th of June there have been at least 2,500 deaths at Chatra, Amara, Aboufassié, Zolen, and at Bassorah. It is claimed that inundation has interrupted land travel, and that Bassorah communicates with Bagdad by means of the Tigris, which is now closed to travelers. It is believed that the latter city will soon be invaded, and as a consequence cholera will follow the same course as four years ago—towards Upper Mesopotamia, towards Syria, and even to the southern part of Asia Minor."

Red Sea.—At Hedjaz 972 deaths from cholera were reported between June 8 and 19. At Mecca these figures were doubled or tripled. The maximum of deaths is increasing. From June 18 to 20 2,857 deaths were officially reported. The fête of Courban Bairam commenced June 24.

It is feared that the Hadjis prior to leaving Hedjaz left 15,000 to 20,000 of their pilgrims. It seems established that the cholera at Mecca was imported by pilgrims coming from Hodeidah, principal port of Yemen, landing at Djeddah without having passed the lazaretto at the island of Camaran. When the pilgrimage was over those coming northward by the Red Sea and the Mediterranean submitted to a 15 days' quarantine at Djebel-Tar; those for Egypt, a 3 days' observation at Ras Mallap.

Russia.—No more cholera exists in the Trans-Caucasus, and only exceptional cases in certain parts of southern Russia.

Italy.—A case of cholera was reported at Pavia June 20—one of the custom-house employés. This case seems to remain sterile, notwithstanding the bacillus of Koch was found.

Yellow fever, Brazil.—The yellow fever continues at Pernambuco. Notwithstanding the season, a number of cases prevail at Santos, Bahia, and vicinity.

SMYRNA, *July 4.*

Three deaths from cholera occurred at the lazaretto of Clazomeme from an English ship which arrived from Marseilles.

Inspection of emigrants at Boulogne.

UNITED STATES CONSULATE,
Boulogne-sur-Mer, July 7, 1893.

SIR: I have made strenuous efforts to comply with the requests of the Department for weekly health reports, but without great success. The application has been made to the authorities of Boulogne-sur-Mer, Calais, and Dieppe, as well as at Rouen, where is the chief office.

I had the form translated into French, so that any employé of their bureaux might readily fill it in.

My consular agent at this port being unavoidably absent, I have personally inspected the fumigation of luggage and examination of emigrants by Netherlands American Line.

The disinfection of luggage is so complete that I venture to describe it, that you may rank this port among the category of those in which contagious disease could have no foothold. The process is expensive, but this company has as great a dread of infectious disease entering their ships as our Government has of its entering our country.

The medical examination is thorough and conducted under the supervision of skillful practitioners. All luggage of emigrants arriving at the station is directed to a special storehouse, and from there to the municipal hospital for disinfection. All trunks, etc., are placed on a long table and unpacked by owners. All linen and other goods liable to infection are packed in loose parcels and put into the disinfecting steam boiler, where they remain for an hour and a half under steam pressure in a heat of 140C. Meanwhile the trunks are disinfected by sublimate and remain for a time. Afterwards they are repacked. The disinfection is supervised by the city pharmacist and chemist and the hospital inspector in presence of the consular agent, who stamps the labels for disinfection.

I inclose weekly report from my consular agent at Dieppe, which, if not full, is satisfactory on the main point.

There is no cholera or other infectious diseases in this consular district.

Always at your service, I am sir, your obedient servant.

CHAS. P. WILLIAMS,
United States Consul.

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

GERMANY.

Vaccination as a protection against smallpox.

The following translation from the Hanover Courier of June 18 has been transmitted to the Bureau by the United States consul-general at Berlin:

In order to rightly understand the influence of vaccination upon smallpox, one must remember that in the eighteenth century this disease was one of the greatest plagues to which mankind was subject. So widely spread was the disease that experts acknowledged that every child must have the smallpox. The epidemics which followed each other at very short intervals carried off thousands, disturbed trade and traffic thoroughly, and left behind them throngs of unhappy persons blinded by the disease, so that at one time one-third of all the blind had lost their eyesight through smallpox.

To-day the terrors of smallpox are almost forgotten; only occasionally the disease attacks a population unprotected by vaccination. In 1884

in San Salvador smallpox carried off nearly one-fiftieth part of the population. The influence of vaccination can best be seen by considering the smallpox cases and deaths in the European states which since the beginning of this century have been more or less protected by vaccination.

The European states, in regard to their position in connection with the question of vaccination, may be divided into three categories :

(1) Those—and these are the majority—which have only the facultative vaccination, but which warmly recommend and urge it : France, Austria, Russia, Belgium, Spain, etc.

(2) States with obligatory vaccination, but without obligatory revaccination, as England, Sweden, Denmark.

In the third category stands Germany, which is the only state in which—since the imperial vaccination law of 1875 went into operation—vaccination and revaccination are obligatory.

Picking out a state from the second category, we can clearly see the blessing of vaccination in the case of Sweden. There died there of smallpox annually from every 100,000 inhabitants—

- (a) Before the introduction of vaccination, from 1774–1800..... 165. 82
 (b) After the introduction of facultative vaccination, from 1801–1815..... 55. 60
 (c) After the introduction of obligatory vaccination, from 1816–1883..... 18. 20

The result in Prussia has been far more favorable since the introduction of the imperial vaccination law. In the decade 1875–1885 there died of smallpox annually in Prussia from every 100,000 inhabitants 2.23; in England, with obligatory vaccination, three times as many; in Austria, where there is no compulsion, twenty-seven times as many, while before 1875 there were as many smallpox deaths in Prussia as in Austria.

In France, with facultative vaccination there died in 1886 and 1887 in Paris alone more persons from smallpox than in all Germany, namely : 1886, 218 in Paris, 193 in Germany; 1887, 389 in Paris, 108 (less than one-third as many) in Germany.

The following figures speak for other years. From 100,000 inhabitants there died of smallpox in—

Year.	Germany.	England.	Belgium.	Austria.
1886	0.4	1.0	20.5	38.1
1887	0.35	1.8	10.2	41.2
1888	0.2	3.6	14.3	.....

In Spain, with 12,000,000 inhabitants, in 1888 there were 14,378 smallpox deaths, or 120 in 100,000; in 1889, 8,472 smallpox deaths, or 70 in 100,000.

The difference is shown still more clearly and conclusively by comparing districts bordering upon one another. In 1889, of smallpox deaths there were, in Bohemia, 3,329, or 60 in 100,000; in Moravia, 1,100, or about 52 in 100,000; while in the adjacent parts of Germany the numbers were :

Prussian Silesia.....	35=0.85	} 100,000.
Kingdom of Saxony	7=0.29	
The Bavarian frontier districts.....	22=0.79	

Independent of the imperial vaccination law are the vaccination regulations in the German army. In Prussia, ever since 1834 recruit vac-

cination has been the general practice. The result is clearly to be seen. From 1825 to 1834, that is, before the introduction of recruit vaccination, the average smallpox death rate was 364 in 100,000. It was greater than that of the civil population, which on the average was 268 in 100,000.

With the introduction of recruit vaccination the smallpox death rate at once decreased considerably and permanently. Leaving out of consideration the war years, it has only once since reached the height of 65 in 100,000, being much lower than the death rate of the civil population, which, up to the time of the introduction of the imperial vaccination law, remained unchanged—about 268 in 100,000.

The vaccination regulations worked admirably in the war of 1870-'71. In spite of the very great danger of contagion, in an army averaging 600,000 men there were :

Smallpox cases.....	2,746 = 465	} 100,000.
Smallpox deaths.....	146 = 24.7	

For the entire German army this rate was more unfavorable, owing to the fact that individual contingents had new and therefore not fully perfect vaccination regulations. In the entire army of 788,200 men there were :

4,835 smallpox cases = 613.4	} to 100,000.
278 smallpox deaths = 35.3	

On the other hand, the losses in the French army from smallpox were much greater. It is impossible to fix exactly the number of deaths, but it is supposed that 23,469 is the correct number. The figures given for single corps do not contradict this estimate.

For the garrison of Paris (170,000 men) the number of cases from October, 1870, to March, 1871, was reported at 11,500, the deaths at 1,600. The small garrison of Langres (14,629 men) lost more from smallpox between September, 1870, and March, 1871, than the entire German army (788,213 men) in twelve months, namely : 334 against 278.

Likewise in times of peace the advantage over the French and Austrian armies, due to protective vaccination, which is enjoyed by the Prussian army (inclusive of the 12th Royal Saxon and 13th Royal Wurtemberg army corps) is apparent. In the fifteen years 1873-1888 there were in the Prussian army only 300 cases of smallpox (including doubtful cases) and 3 deaths, while in the French army there were 7,807 cases and 698 deaths and in the Austrian army 16,974 cases and 1,034 deaths. These two armies, therefore, had respectively two and three and one-half times as many smallpox deaths as there were cases of smallpox in the German army. In 1887 Austria introduced recruit vaccination, and at once the number of smallpox cases and deaths became smaller than ever before.

The following figures are, moreover, interesting and instructive, and throw light upon the relation existing between unvaccinated, vaccinated, and revaccinated persons becoming sick or dying of smallpox. According to the memoranda of certain hospitals, among those who died of smallpox during the years 1870 and 1871 were—

	Unvaccinated.	Vaccinated.	Revaccinated.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
In Muenster.....	80	13	0
In Posen	70	12	2
	54	13	0
	70	16	4
In four hospitals of Berlin	66	15	4
	81	14	9

In Chemnitz, in 1871, among 249 deaths from smallpox were only 7 vaccinated persons.

According to Buchanan, in 1881, in England, there was only 1 victim who had been vaccinated, while there were 200 deaths among unvaccinated children from 1 to 2 years old.

In Bavaria, in 1882, among the smallpox cases were counted 14.6 per cent vaccinated, 5.8 revaccinated, 45.5 unvaccinated.

Many similar examples could be given, but these are sufficient to prove that vaccination is a remarkable, if not an absolute, protection against smallpox. It is further worthy of note that, thanks to the united efforts of the governments and the physicians, the number of vaccinations with animal lymph is continually increasing, and the use of human lymph will probably very soon be entirely superseded. With this advance the vaccination danger is constantly diminishing. In 1890, in the German Empire, 92.96 per cent of the vaccinations were effected with animal lymph.

GREAT BRITAIN.

Report of Surg. W. A. Wheeler, M. H. S., on emigrant inspection at Liverpool, England.

LIVERPOOL, ENGLAND, July 2, 1893.

SIR: The emigrant intending to go to the United States from this port has the choice of eight lines of steamers—three to Quebec, one to Boston, three to New York, and one to Philadelphia. The lines to Quebec are the Allan, Dominion, and Beaver, and for the present season the baggage of all their steerage passengers is, under requirement of the Dominion Government, disinfected at Quebec or Point Levis, no matter whether the passenger be from the British Isles or from the Continent. The lines carrying passengers to the United States direct are the Cunard, one ship per week to Boston and one to New York; the White Star, one ship per week to New York; the Guion, one ship every fortnight to New York, and the American Line, one ship per week to Philadelphia. These lines carried last year over 50,000 steerage passengers, but as they all call at Queenstown a considerable percentage of this number embarked there. As a rule, these ships carry people from the British Isles and Norway and Sweden, but through an agreement with the Continental steamship lines they also carry many emigrants from the Continent.

These latter reach Liverpool via Rotterdam and Hull or Grimsby as a rule, though there are many other routes. The various boarding houses in the city harbor all emigrants until sailing day, when they are obliged to present themselves for examination at one of the companies' sheds some hours before the sailing of the ship. Their baggage is brought with them and they have previously been furnished with a card by the steamship company giving their name and last residence. In these sheds the people and their baggage are inspected, and as fast as passed by the inspector their cards and their baggage labels are stamped. The steamship's people are warned by the inspector of those districts upon the Continent from which emigrants will not be received except after detention and disinfection of their effects, and they are trusted to notify the inspector when they have people from such districts. This seems at present to be the only feasible plan for obtaining this information, though it must be confessed it is open to objections. It is simply impossible to see many of these people or to learn anything

about them before they present themselves for examination except through the steamship agents themselves. There are so many companies competing for the business, and there are so many lodging houses, and they are so scattered in various parts of the city, that no concentration of the people is practicable. For the limited amount of baggage at present requiring disinfection, facilities are furnished by two small steam chambers connected with the hospital here. The steamship people have provided nothing, and the requirement by our inspector of any great amount of work of that kind would lead to a suspension of steerage business at this point. Emigration is falling off rapidly since the middle of June, and the class of people going out by the five ships of this last week has been excellent. The Canadian lines, I am told, are carrying more than their ordinary number, perhaps because the impression has prevailed that immigrants via Quebec were not detained at the United States border by immigration officials, as is the case at New York. I inclose a circular issued by one of the Canadian lines, which will show you that they rather encourage that belief. The vessels engaged in the passenger traffic between Liverpool and the United States are of the best in all their appointments, with most excellent steerage accommodations.

Respectfully, yours,

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

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

Report of Surg. W. A. Wheeler on inspection of emigrants at Glasgow, Scotland.

GLASGOW, July 7, 1893.

SIR: Two steamship lines compete for the emigrant-passenger business between Glasgow and the United States, and their American ports are Quebec, Boston, and New York. These lines are the Anchor, which has a weekly ship to New York, and the Allan State Line, which also has a weekly sailing to New York and a fortnightly ship to Boston and a fortnightly (sometimes weekly) ship to Quebec. When business will warrant it the Boston service is weekly also. These vessels, all of them, touch at Londonderry, in Ireland, and take on any passengers offering there, furnishing the most convenient route for emigrants from the northern half of Ireland, as does Queenstown for those from the southern half. The Glasgow lines carry many people from the British Isles, and also large numbers from the Continent, booking them to Glasgow via Hull and Leith. The inspection of these emigrants is made by a local physician in the employ of the United States consul at this port, and as there is work enough to demand the undivided attention of one man, I strongly urge that a regular medical officer be detailed for this inspection work. No facilities at present exist for the steaming of emigrants' baggage at Glasgow, but I believe, if it were necessary, suitable arrangements could be made, as both steamship companies have very extensive properties along the river front on which chambers for steaming baggage could be readily placed. The emigrant hotels are widely scattered, but under the control of the companies.

Respectfully, yours,

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

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

GIBRALTAR.

Quarantine notice issued at Gibraltar.

(NOTICE.)

GIBRALTAR, *July 1, 1893.*

The board of health has decided that arrivals from suspected ports, including Cette, Marseilles, and all ports in the Gulf of Lyons, shall not be admitted to pratique unless they are seven days out from those ports, and then only after medical inspection and provided they have good health on board and carry bills of health indorsed by the competent authority that the port is free from epidemic disease. Rags and dirty linen will not be admitted. Cargo can be landed on the port surgeon's certificate that such landing is not dangerous to health.

Vessels less than seven days out, seeking to communicate, must undergo such quarantine as will complete seven clear days from the date of departure from any such ports. Passengers and their baggage must undergo this quarantine on the ship or on hulks to be specially set apart for the purpose. Vessels arriving from these ports will, however, be allowed to coal and take in stores in quarantine.

By order :

JOHN C. KING,
Secretary to the Board.

HOLLAND.

*Inspection of emigrants at Amsterdam and Rotterdam.*ROTTERDAM, NETHERLANDS, *July 3, 1893.*

SIR: I have the honor to report that on Wednesday, June 28, 1893, one of the Netherlands-American ships sailed from here and one from Amsterdam within an hour of one another. Fortunately all the emigrants intended for the *Zoondam* at Amsterdam, 85 in number, were in the emigrant hotel here. I examined them on Monday, disinfected all their baggage Monday night, and then stamped their inspection cards Tuesday morning and started them in a body for Amsterdam by train. I then examined those for the *Moosdam*, leaving Rotterdam, and caught a 1 o'clock train for Amsterdam, arriving there at 2:15 p. m. I hurriedly drove to the consul's office, then to the docks, inspected the ship and crew and the freight manifest, delivered the bill of health, and returned to Rotterdam by 6 p. m. That night I inspected and disinfected baggage for the *Moosdam* and the next morning examined the ship and crew and embarked the passengers. If the people for the Amsterdam ship had not been in Rotterdam, which allowed of all examination and disinfection here, I hardly see how both ships could have been cared for by one man.

My new cards, reported on in my last letter, are in daily use, and are proving a great success. I may make some changes in them as I learn their necessity from experience. They have met with the hearty approval of the surgeon who lately inspected our stations.

I do not like the new disinfecting kettles for treating clothing while the wearers are bathing. They were purchased and erected without consulting me, and will not properly disinfect without injuring the clothes. I am endeavoring to draw up plans for a better arrangement, to be submitted to the company.

I recognize that it is right to reject favus, and will follow the rule strictly as has been done before ; but I would like to be informed whether all cases who have had favus and have recovered, with bald spots remaining, will be rejected at New York. If so, I will reject them here while they yet have sufficient money to return home or to live on while hunting work.

Then there are cases which place us in doubt as to whether they are favus, eczema, or the result of the irritation of lice and scratching. Such cases I am at present ordering under observation and treatment. If after several days the condition has nearly disappeared I take it that the case was not favus and pass it.

I rejected 10 cases of favus this morning, who, with their families, made 25. On Saturday I rejected 10 cases of favus, who, with their families, made a total of about 24. The order will be strictly followed at this port. I will call the attention of the ship's surgeon to any doubtful cases.

Very respectfully,

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

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

ITALY.

Detention at Genoa of all passengers from infected districts.

UNITED STATES CONSULATE,
Genoa, July 1, 1893.

SIR : I have the honor to make the following report in regard to my work at this station : After consulting with the steamship companies I have decided to require all passengers, first, second, and third class, coming from France or Austria or any other infected localities, to be in Genoa four days before the sailing of vessel ; and they must apply to me for inspection card, which I will fill out and stamp. This is the only sure way to guard against cholera. To inquire of a passenger as to his previous travel the day of sailing will do no good, for many will deceive the inspector, and as their baggage is already on the vessel it would delay the sailing of the latter. I examine the passenger list the day before the vessel leaves, and all persons from suspicious localities are carefully examined, in addition to my final inspection. My only trustworthy guide as to the spread of cholera is the London Lancet, which gives each week a short account of it. I am glad to say the steamship companies fully realize the importance of the United States inspection work and are doing all they can to aid me.

Very respectfully,

B. W. BROWN,
Assistant Surgeon, M. H. S.

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

Cholera at Naples.

NAPLES, *July 19, 1893.*

Four cases of cholera on Monday. Bacillus found. All fatal. Widely scattered. Origin untraced. Nothing since.

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

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

SWEDEN.

The smallpox epidemic at Gothenburg.

UNITED STATES CONSULATE,
Gothenburg, June 7, 1893.

SIR: The continuance and late rapid increase of smallpox in Gothenburg and its suburbs and the extensive emigration and the measures of defence against contagion sought to be enforced by our Government, and to some extent by the steamship companies, have produced a condition with which I find myself unable to deal satisfactorily, single-handed, and I must say that reliable aid can not be obtained here. I therefore cabled the Department last evening requesting the immediate services of a medical officer, and I very much hope it may be agreeable and possible to the Government to order such service from some point on this side of the ocean, if only temporarily.

To-day the papers report a total number of 78 cases of smallpox in this city and on the island just across the river since the appearance of the disease here about one month ago. So far as can be learned there have been only four deaths. And while this is the case the volume of emigration continues undiminished. I have kept the consul at Liverpool informed of the conditions, and on Monday the steamship company here was instructed by its English agents to have all emigrants vaccinated and to have the baggage of those from infected districts disinfected.

I do not understand that a consul here has any command or authority over emigration to the United States via England, but I sat over two hours on Tuesday in a crowded, hot, and most offensively smelling room to watch the vaccination of 260 emigrants, who departed on that day on the steamer *Cameo* for Grimsby, England, to leave for America from Liverpool.

On Monday I was employed six hours with the vaccination and certification of over 400 emigrants, who left here that night for New York by the Scandia Line steamer *Italia*, having to go 4 miles down the harbor on a tug to where the vessels of that line receive their passengers, and having standing room only among a hundred prospective American citizens, men, women, and children, and their carpetbags and boxes.

On Friday six or seven hundred other emigrants will depart on the steamer *Romeo* for Hull and Liverpool, and all will probably be vaccinated, but their baggage can not be disinfected. I shall watch them and others as carefully as possible, but you can easily estimate what one person can do among hundreds of adversely interested people in such a matter.

From one of the inclosed clippings from newspapers I learn for the first time of a new channel for emigrant escape, and that via Fredriksham, Denmark, and the Thingvalla Line. It is probable that those who went that way yesterday are the first shipment, and they, no doubt, have gone without even being vaccinated. And on that supposition I have to-day telegraphed the consul at Christiania, where Thingvalla steamer will call, of the facts in the case.

* * * * *

I am, sir, your obedient servant,

CHARLES H. SHEPARD,
United States Consul.

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

[Inclosure No. 1.—From Gothenburg Aftonblad, June 6, 1893.]

The smallpox epidemic continues to extend in different districts within the city.

Nineteen persons were taken to the epidemic hospital last week, and of them 3 for observation. The total number of persons taken to the hospital up to this date is 59, of which 3 have died.

Yesterday afternoon a sailor by name of Bernhard Olsen, from Christiania, was taken from a lodging house in Sillgatan to the epidemic hospital, because Dr. J. Nilsson had issued a request that the sailor might be taken there for observation. Olsen had come here the day before yesterday on the steamer *Konung Oscar*.

The emigrants who have not been revaccinated are now subjected to new vaccination here.

From Lindholmen (on the island Hisingen) it is reported to us that the smallpox epidemic is increasing. The schools have therefore been closed, and the district physician has made provisions for general vaccination.

THE EMIGRATION.

Seventy-six emigrants went to Fredriksham (Denmark) on the steamer *Blenda*, which left here yesterday evening, and they are to continue the voyage to America by the Thingvalla Line steamer.

The steamer *Cameo* left this place to-day at noon with 260 persons, who intend to go to America via England.

[Inclosure No. 2.—From Gothenburg Handels-Tidning, June 7, 1893.]

THE SMALLPOX EPIDEMIC.

New cases are reported daily here. Sixty-two persons have up to this date been taken sick.

At Lindholmen during the last few days 5 new cases have appeared. Sixteen cases have occurred in all. Vaccinations and revaccinations are now performed there; only yesterday between two and three hundred persons were vaccinated. The schools have partly been closed.

TURKEY IN ASIA.

Cholera in Turkey in Asia, in and around Bassorah.

BAGDAD, June 15, 1893.

In my hurried translation of a letter from the sanitary inspector, Dr. Lubitz, which I forwarded last week together with my own report, I made a mistake. I said, or made the letter say, that the disease had abated among certain Arab tribes, the Abdullah-Ben-Aly and Ben-Malech, and afterward among those of Hafireh and Keshreh. For "abated" read "is raging."

Since my last week's report the following bulletins have been issued:

Bassorah (deserted), June 8, at 9 a. m., 30 new attacks known and 19 deaths. Cholera appeared at Mohammerah.

Bassorah (deserted), June 9, morning, 31 new attacks known, of which 14 have died. Tan, June 8, 1 attack. Chatra, June 7, 7 attacks, 4 deaths, and among the neighboring Arab tribes, Keshreh, Hafireh, Dinochi, El-Bon-Aly, Ketonsse, and Nazire, 15 deaths in all, and June 8, 6 deaths only.

Bassorah (deserted), June 10. morning, 15 new attacks known and 16 deaths.

Bassorah (deserted), June 11. morning, 30 new attacks known, of which 20 died. Abu-el-Hassib, June 10, 4 deaths. Chatra and environs, June 9, 8 deaths.

Bassorah (deserted), June 12. morning, 24 deaths. Zubeir, near Bassorah from June 6 (date of appearance of epidemic) up to June 9, 15 attacks known and 6 deaths. Chatra and vicinity, June 11, 5 deaths.

Bassorah (deserted), June 13. morning, 33 deaths. Abu-el-Hassib, June 11, 12 deaths; attacks unknown.

Bassorah, June 14. morning, 18 deaths. Around Chatra, June 12, 5 deaths, and June 13, 6 deaths.

A quarantine of ten days has now been declared against all arrivals overland from the infected district.

There must be cholera also in the Hedjaz and Yemen, as all Turkish ports quarantine arrivals therefrom.

The Euphrates having this year broken its banks, a great portion of the Mesopotamian desert is 12 feet under water. I went out some ten days ago to the tomb of Sit Zobeida (wife of Haroun-al-Rashid), and facing the setting sun, as far as the eye could reach, there was no land discernible, while to the left were a few islands, marking ancient mounds. When the flood subsides we shall have considerable malaria here.

Respectfully, yours,

JOHN C. SUNDBERG.

To the SUPERVISING SURGEON GENERAL M. H. S.

STATISTICAL REPORTS.

AUSTRALIA—*Brisbane*.—Month of March, 1893. Population, 93,647; Total deaths, 120, including phthisis pulmonalis, 12; enteric fever, 2; diphtheria, 3; and whooping cough, 7.

Melbourne and suburbs.—Month of April, 1893. Population, 474,810. Total deaths, 632, including phthisis pulmonalis, 73; enteric fever, 21; scarlet fever, 1; diphtheria, 3; and whooping cough, 1.

BRAZIL—*Ceara*.—Month of May, 1893. Population, 40,379. Total deaths, 129, including 2 from beriberi.

•CUBA—*Havana*.—Under date of July 15, 1893, the United States sanitary inspector reports as follows:

There were 157 deaths in this city during the week ending July 13, 1893.

Twenty-five of those deaths were caused by yellow fever, with approximately 110 new cases; 3 were caused by enteric fever, 6 by so-called pernicious fever, 3 by paludal fever, and 1 by la grippe.

Nuevitas.—Month of June, 1893. Population, 4,017. Total deaths, 9, including 1 from enteric fever.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 33 great towns of England and Wales during the week ended July 1 corresponded to an annual rate of 22.7 a thousand of the aggregate population, which is estimated at 10,322,429. The lowest rate was recorded in Brighton, viz, 10.3, and the highest in Preston, viz, 41.6 a thousand.

London.—One thousand eight hundred and thirty-one deaths were registered during the week, including smallpox, 3; measles, 41; scarlet fever, 38; diphtheria, 64; whooping cough, 56; enteric fever, 17; and diarrhea and dysentery, 219. The deaths from all causes corresponded to an annual rate of 22.2 a thousand. Diseases of the respiratory organs caused 250 deaths. In greater London 2,342 deaths were registered, corresponding to an annual rate of 20.9 a thousand of the population. In the "outer ring" the deaths included diphtheria, 21, and smallpox, 2.

Ireland.—The average annual death rate represented by the deaths registered during the week ended July 1 in the 16 principal town districts of Ireland was 24.9 a thousand of the population. The lowest rate was recorded in Sligo, viz, 0.0, and the highest in Drogheda, viz, 43.9 a thousand. In Dublin and suburbs 206 deaths were registered, including diphtheria, 1; enteric fever, 4; and whooping cough, 7.

Scotland.—The deaths registered in 8 principal towns during the week ended July 1 corresponded to an annual rate of 21.5 a thousand of the population, which is estimated at 1,447,500. The lowest mortality was recorded in Leith, viz, 14.7, and the highest in Greenock, viz, 34.0 a thousand. The aggregate number of deaths registered from all causes was 607, including measles, 44; scarlet fever, 5; diphtheria, 8; whooping cough, 17; and diarrhea, 56.

JAMAICA—Kingston.—Month of June, 1893. Total deaths, 91, including 6 from phthisis pulmonalis.

NEW ZEALAND—Christchurch.—Population, 47,864. Total deaths, 19. No deaths reported from contagious diseases.

RUSSIA—Riga.—Month of April, 1893. Population, 215,000. Total deaths, 396, including smallpox, 71: "cramps," 27; enteric fever, 4; scarlet fever, 12; diphtheria, 7; measles, 3; croup, 1; and whooping cough, 4.

ST. HELENA.—Five weeks ended June 15, 1893. Population, 3,877. Total deaths, 5. No deaths from contagious diseases.

Cholera notes.

[Translated from the Deutsche Medicinische Wochenschrift, Berlin, June 22, 1893.]

FRANCE.—British consular reports give 500 cholera cases and 178 deaths from cholera at Lorient during the past season. Two cases have been reported within the last few days from Morbihan. The French press reports 2 deaths from cholera at Montpellier on June 11 and 12, respectively, and 3 on June 17. At Cette, June 13, 3; June 14, 4; June 15, 6; on June 17 and 18, 2 each. At Alais, June 11, 9; June 12, 7, June 13, 2.

RUSSIA.—The St. Petersburg medical journals report 6 cases and 5 deaths in the government of Kursk from April 12 to May 12; from May 13 to May 19, in the city of Orel, 1 case and 1 death; in the government of Saratow, 1; in the government of Tambow, 1; in the government of Podolia, from April 27 to May 13, 36 cases and 13 deaths were reported. These figures show a considerable decrease of the epidemic.

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Glasgow.....	June 24.....	677,883	309					3	3	4		
Glasgow.....	July 1.....	677,883	297					2	4	4	21	9
Gothenburg.....	June 24.....	105,800	29									
Guadeloupe.....	June 11.....	18,000	11									
Guadeloupe.....	June 18.....	18,000	10									
Guadeloupe.....	June 25.....	18,000	9									
Halifax.....	July 8.....	38,700	1							1		
Hamburg.....	June 24.....	620,000	228					2	6	6	3	2
Hamilton.....	July 1.....	15,013	1									
Hamilton.....	July 8.....	15,013	1									
Hanover.....	June 24.....	191,400	96							5		
Havana.....	July 8.....	200,448	166		30			3				
Havre.....	June 24.....	116,369	97					5		1	4	
Hioogo.....	June 24.....	148,118	35					4		1		
Huddersfield.....	July 1.....	97,552	32									
Kanagawa.....	June 12.....	126,685						1				
Kehl.....	June 24.....	129,556	80						4	4		
Konigsberg.....	July 1.....	167,000							1	3		
La Guayra.....	June 24.....	15,000	10									
La Guayra.....	July 1.....	15,000	11									
Leeds.....	July 1.....	382,094	160					1	1	1	3	2
Leghorn.....	July 2.....	103,265	29									
Leith.....	June 24.....	70,972	16							1		
Leith.....	July 1.....	70,972	20								1	
Licata.....	June 1.....	20,000	14						2	1	4	
Liege.....	July 1.....	155,888	71			1		1				1
Liverpool.....	June 24.....	517,980	322					2	1	1	10	5
Liverpool.....	July 1.....	517,980	362					3	4	2	8	3
London.....	July 8.....	35,000	8									
London.....	June 24.....	5,849,104	2,293			13		16	34	90	54	64
Lyons.....	June 24.....	438,000	228					3	2	11		
Madrid.....	June 24.....	482,816	305			3		2		4	14	
Magdeburg.....	June 17.....	215,339	69							5		1
Magdeburg.....	June 24.....	215,339	111							1	7	2
Malaga.....	June 30.....	130,000	137			7		6	1	1		
Manchester.....	June 24.....	517,760	259			1		1	4	3	15	6
Manchester.....	July 1.....	517,760	285			1		3	1	4	12	3
Mannheim.....	July 1.....	80,000	59							1		
Marsala.....	June 24.....	40,131	17									
Matamoros.....	July 7.....	8,000	11									
Mayence.....	July 1.....	72,281	30									
Moscow.....	June 24.....	800,000	541			3	2	6	8	18	10	2
Munich.....	July 1.....	345,000	192					3	2	3	1	
Newcastle-on-Tyne.....	July 1.....	197,026	66							1	2	
Nuremberg.....	June 17.....	153,015	71					1		4		1
Odessa.....	June 24.....	315,900	136							2	1	
Palermo.....	June 24.....	250,000	134							5	2	
Pará.....	June 18.....	100,000	50		3			3				
Pará.....	June 25.....	100,000	41		2			3				
Pernambuco.....	June 11.....	200,000	114		2			6	6		1	
Pernambuco.....	June 18.....	200,000	106		2			5	4			
Plymouth.....	July 1.....	86,772	48								1	1
Port Hope.....	July 15.....	5,042	2									
Port Sarnia.....	July 15.....	6,600	1									
Prague.....	July 1.....	186,315	12			4		3	3		2	
Rheims.....	July 1.....	110,000	86					2				
Rome.....	May 13.....	448,495	209					2	1	4		2
Rotterdam.....	July 1.....	222,230	102						1			
Sagua la Grande.....	July 1.....	17,536	10									
Sagua la Grande.....	July 8.....	17,536	15		1			1	1		3	
St. Georges.....	July 3.....	15,013	3									
St. Georges.....	July 10.....	15,013	2									
St. John, N. B.....	July 8.....	39,179	17							4		
St. Johns, P. D.....	July 8.....	4,772	1									
St. Petersburg.....	June 21.....	1,000,000	558			2	3	5	9	3	5	2
St. Pierre.....	June 17.....	35,000	11									
St. Pierre.....	June 24.....	35,000	11									
St. Pierre.....	July 1.....	35,000	12									
St. Thomas, W. I.....	June 9.....	12,019	29									
St. Thomas, W. I.....	June 16.....	12,019	22									
St. Thomas, W. I.....	June 23.....	12,019	25									
St. Thomas, W. I.....	June 30.....	12,019	23									
San Juan del Norte.....	July 1.....	500	1									
San Salvador.....	June 6.....	35,000	15									
San Salvador.....	June 12.....	35,000	12		1							

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.
San Salvador	June 18.....	35,000	14			2						
San Salvador	June 26.....	35,000	20			4						
Santander	June 26.....	45,500	24									
Santander	July 2.....	45,500	29									
Santiago de Cuba	June 30.....	40,000								2		
Schiedam	July 1.....	25,280	12									
Sheffield	July 1.....	334,486	140						3	1	6	1
Sonneberg	July 2.....	12,000	4									
Southampton	July 2.....	65,621	23									
Stettin	June 24.....	120,000	90					3			1	
Stockholm	June 24.....	249,246	100						7	4		1
Stuttgart	July 1.....	139,659	55							2		
Sunderland	July 1.....	134,394	47						1		1	
Tampico	July 9.....	7,000	11									
Tegucigalpa	June 24.....	12,000	8			3						
Trapani	June 24.....	43,095	10									
Trieste	June 24.....	158,314	49			4		1		3		
Tuxpan	July 8.....	10,280	6									
Victoria	June 17.....	16,841	4									
Victoria	June 24.....	16,841	4									
Venice	June 24.....	163,601	36					3			1	
Vera Cruz.....	July 6.....	25,500	22		6							
Warsaw	June 17.....	500,931	195			7	1	1	4	5		
Warsaw	June 24.....	500,931	182			3	1	4	2	7	2	3
Zurich.....	June 24.....	104,406	212									

By authority of the Secretary of the Treasury :

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

