

ABSTRACT OF SANITARY REPORTS.

VOL. VI.

WASHINGTON, D. C., MARCH 20, 1891.

No. 12.

[Published at the Marine-Hospital Bureau in accordance with act of Congress of April 29, 1878.]

UNITED STATES.

Report of official experiments with the Koch lymph in progress.

WASHINGTON, D. C., March 17, 1891.

SIR: I have the honor to submit the following report upon the progress of the experiments with tuberculine at this hospital:

Since my last report, cases 4, 5, and 11 have declined further treatment, and have left the hospital. Case 4 is improved so far as his pulmonary tuberculosis is concerned, but there is no change for the better in his laryngeal symptoms. Case No. 5, while presenting no change in the physical signs, is in worse condition than upon admission. He has lost weight, and the hectic symptoms are much more pronounced. In case No. 11, the laryngeal symptoms assumed a degree of severity that seemed to demand a cessation of the treatment.

Cases 1, 3, and 6 continue to show a favorable progress, there being noted in each a continued absence of tubercle bacilli in the sputum, diminishing areas of dullness upon percussion, improved breathing sounds, and increase of body weight, with general condition much improved.

In the treatment of the case of lupus, the injections have reached .010, with no general "reaction" beyond 37.6° C. The local manifestations, increased redness and swelling of the diseased area, the glazed appearance, and increased exudation still occur after each injection. The whole ulcer to-day presents a healthy granulating appearance, and upon the margin there are several points where the formation of new skin has commenced. The general appearance is now very favorable.

Very respectfully, your obedient servant,

H. D. GEDDINGS,

Assistant Surgeon, M.-H. S.

To the SUPERVISING SURGEON-GENERAL.

Smallpox—United States quarantine, Cape Charles, Va.

Assistant Surgeon J. F. Groenevelt, Marine-Hospital Service, reports that four more cases of smallpox developed, March 9 and 10, among the crew of the steamship *Helmsley*, now undergoing quarantine restraint. The patients were removed to Fisherman's Island, and the vessel sub-

jected to a second disinfection. A sailor, taken aboard at Gibraltar, while the vessel was *en route* to Philadelphia from Elba and Genoa, seems to have been the source of infection.

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

ALABAMA—*Mobile*.—Month of February, 1891. Population, 40,000. Total deaths, 47, including phthisis pulmonalis, 10; diphtheria, 1; and croup, 1.

CALIFORNIA—*Oakland*.—Month of February, 1891. Population, 60,000. Total deaths, 66, including phthisis pulmonalis, 7; diphtheria, 2; and whooping cough, 2.

San Francisco.—Month of February, 1891. Population, 298,997. Total deaths, 574, including phthisis pulmonalis, 88; enteric fever, 6; diphtheria, 38; and whooping cough, 1.

COLORADO—*Denver*.—Month of February, 1891. Population, 106,670. Total deaths, 231, including phthisis pulmonalis, 35; enteric fever, 7; scarlet fever, 4; diphtheria, 14; and croup, 5.

FLORIDA—*Pensacola*.—Month of February, 1891. Population, 11,751. Total deaths, 22, including phthisis pulmonalis 3 and enteric fever 5.

ILLINOIS—*Chicago*.—Month of February, 1891. Population, 1,099,133. Total deaths, 1,924, including phthisis pulmonalis, 173; enteric fever, 61; scarlet fever, 58; diphtheria, 88; measles, 30; croup, 29; and whooping cough, 24.

IOWA—*Davenport*.—Month of February, 1891. Population, 28,500. Total deaths, 27, including phthisis pulmonalis 1 and diphtheria 5.

Dubuque.—Month of February, 1891. Population, 35,000. Total deaths, 47, including phthisis pulmonalis, 5; enteric fever, 2; croup, 3; scarlet fever, 1; and measles, 1.

KENTUCKY—*Louisville*.—Month of February, 1891. Population, 181,518. Total deaths, 239, including phthisis pulmonalis, 27; enteric fever, 6; scarlet fever, 3; diphtheria, 7; and croup, 2.

Wyckliffe—*Cerebro-spinal meningitis*.—Under date of March 10, 1891, Assistant Surgeon Woodward, M.-H. S., Cairo, Ill., writes as follows:

I have the honor to state that a letter of inquiry addressed to Dr. J. L. Hale, of Wyckliffe, Ky., regarding the recent cases of cerebro-spinal meningitis at that place, elicits the following information, under date of March 7, 1891:

Five cases occurred in all. Three were in the family of Thomas Doughdy; three girls, aged respectively three months, three years, and seven years. All of these cases died at periods ranging from five hours to twenty-three days from the date of onset.

A son of Oscar Shelborn, aged three years, was taken sick January 27, 1891, and was still living at the date of the letter, but little hope was entertained of his recovery.

A daughter of John Nance, aged twenty-three months, was taken ill February 1, 1891, and was reported to have prospects of recovery.

No more cases had occurred up to date.

MARYLAND—*Baltimore*.—Month of February, 1891. Population, 434,439. Total deaths, 702, including phthisis pulmonalis, 102; enteric fever, 7; scarlet fever, 1; diphtheria, 27; croup, 4; and whooping cough, 12.

MASSACHUSETTS—*Springfield*.—Month of January, 1891. Population, 44,164. Total deaths, 89, including phthisis pulmonalis, 5; enteric fever, 1; scarlet fever, 1; diphtheria, 2; croup, 3; and whooping cough, 1.

Month of February, 1891. Total deaths, 67, including phthisis pulmonalis, 2; scarlet fever, 3; measles, 1; and whooping cough, 2.

MICHIGAN.—Week ended February 28, 1891. Reports to the State board of health, Lansing, from 59 observers, indicate that whooping cough, diphtheria, cholera morbus, and measles increased, and that cerebro-spinal meningitis, puerperal fever, typho-malarial fever, typhoid fever, membranous croup, inflammation of bowels, and cholera infantum decreased in area of prevalence.

Diphtheria was reported present during the week at 29 places, scarlet fever at 46 places, enteric fever at 15 places, and measles at 35 places.

Week ended March 7, 1891. Reports to the State board of health, Lansing, from 60 observers, indicate that whooping cough, puerperal fever, cerebro-spinal meningitis, measles, and inflammation of brain increased, and that dysentery, cholera infantum, diphtheria, and tonsilitis decreased in area of prevalence.

Diphtheria was reported present during the week at 24 places, scarlet fever at 41 places, enteric fever at 13 places, and measles at 38 places.

MISSOURI—*Kansas City*.—Month of January, 1891. Population, 132,416. Total deaths, 117, including phthisis pulmonalis, 6; enteric fever, 1; diphtheria, 1; and measles, 1.

MONTANA—*Butte City*.—Month of February, 1891. Population, 30,000. Total deaths, 2; enteric fever, 1; and croup, 1.

NEW HAMPSHIRE—*Manchester*.—Month of February, 1891. Population, 44,800. Total deaths, 51, including phthisis pulmonalis, 8; enteric fever, 2; diphtheria, 1; and whooping cough, 1.

NEW YORK—*Rochester*.—Month of February, 1891. Population, 138,327. Total deaths, 206, including phthisis pulmonalis, 17; enteric fever, 3; diphtheria, 1; croup, 5; and whooping cough, 2.

TENNESSEE—*Chattanooga*.—Month of February, 1891. Population, 36,000. Total deaths, 60, including phthisis pulmonalis, 8; enteric fever, 6; and croup, 1.

Table of temperature and rainfall, week ended March 13, 1891.

[Received from War Department, Signal Office.]

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
New England States:						
Eastport, Me.....	27	56		1.24	.10	
Portland, Me.....	29	42		.80	2.80	
Boston, Mass.....	33	42		1.00	.00	.00
Block Island, R. I.....	34	42		.92	.30	
Middle Atlantic States:						
Albany, N. Y.....	31	14		.70	.90	
New York, N. Y.....	35	42		.92	1.10	
Philadelphia, Pa.....	38	28		.70	1.10	
Atlantic City, N. J.....	36	28		.92	.40	
Baltimore, Md.....	40	0		.98	1.00	
Washington, D. C.....	39	8		.97	1.24	
Lynchburg, Va.....	44		14	.92	1.40	
Norfolk, Va.....	46	14		1.04	.20	
South Atlantic States:						
Charlotte, N. C.....	49	14		1.12	4.20	
Wilmington, N. C.....	53	14		.96	1.25	
Charleston, S. C.....	56	14		.92	.00	.00
Augusta, Ga.....	55		14	1.22	3.20	
Savannah, Ga.....	58	0	0	.83	.90	
Jacksonville, Fla.....	61	28		.77	.30	
Key West, Fla.....	72		28	.28		.10
Gulf States:						
Atlanta, Ga.....	51		42	1.51	3.70	
Pensacola, Fla.....	59		28	1.26	3.00	
Mobile, Ala.....	58		28	1.62	1.10	
Montgomery, Ala.....	56	28		1.40	4.50	
Vicksburg, Miss.....	58		56	1.43	5.60	
New Orleans, La.....	61		42	1.26		.60
Shreveport, La.....	57		70	1.05	.00	.00
Fort Smith, Ark.....	50		84	.54		.50
Little Rock, Ark.....	52		84	1.14	1.60	
Palestine, Tex.....	58		98	.98		.20
Galveston, Tex.....	61		14	.74		.20
San Antonio, Tex.....	61		70	.42		.40
Corpus Christi, Tex.....	63		56	.42		.40
Brownsville, Tex.....	64			.35		
Rio Grande City, Tex.....	69			.28		
Ohio Valley and Tennessee:						
Memphis, Tenn.....	51	14		1.24	2.20	
Nashville, Tenn.....	47		28	1.19	3.90	
Chattanooga, Tenn.....	49			1.51		
Knoxville, Tenn.....	47		14	1.28	1.80	
Louisville, Ky.....	44		14	.91	.50	
Indianapolis, Ind.....	38		14	.91		.20
Cincinnati, Ohio.....	41		17	.79	.00	.00
Columbus, Ohio.....	37		7	.77		.10
Pittsburgh, Pa.....	37	28		.63	.60	
Lake Region:						
Oswego, N. Y.....	28	42		.63	1.40	
Rochester, N. Y.....	28	56		.63	1.00	
Buffalo, N. Y.....	28	42		.63	.10	
Erie, Pa.....	31	27		.70		.02
Cleveland, Ohio.....	31	28		.68	.20	
Sandusky, Ohio.....	32	14		.62	.00	.00
Toledo, Ohio.....	33	0	0	.49	.00	.00
Detroit, Mich.....	32	0	0	.56	.00	.00
Port Huron, Mich.....	27	28		.70	.10	
Alpena, Mich.....	21	56		.46	.19	
Marquette, Mich.....	20	0	0	.34	.90	
Grand Haven, Mich.....	29	0	0	.49	.00	.00
Milwaukee, Wis.....	27		28	.56		.10
Chicago, Ill.....	33		14	.56		.22
Duluth, Minn.....	21		28	.32	.90	
Upper Mississippi Valley:						
St. Paul, Minn.....	25		70	.28	.00	.00
La Crosse, Wis.....	28		47	.35	.90	
Dubuque, Iowa.....	30		70	.49	.40	
Davenport, Iowa.....	32		70	.49		.10
Des Moines, Iowa.....	32		65	.28	.30	
Keokuk, Iowa.....	35		70	.49	.00	.00
Springfield, Ill.....	38		56	.61		.20
Cairo, Ill.....	45		42	.88	1.10	
St. Louis, Mo.....	42		56	.70		.30

Table of temperature and rainfall, week ended March 13, 1891—Continued.

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Missouri Valley:						
Springfield, Mo.....	43			.77		
Kansas City, Mo.....	40		70	.42		.50
Concordia, Kans.....	37		98	.40	.30	
Omaha, Nebr.....	34		84	.27	.84	
Valentine, Nebr.....	31		97	.21	.60	
Huron, Dak.....	25		126	.14	.00	.00
Sully, Fort, Dak.....	27		10	.14		.98
Extreme Northwest:						
Moorhead, Minn.....	18		98	.14		.10
Bismarck, Dak.....	21		112	.21	.00	.00
Buford, Fort, Dak.....	21		112	.07	.00	.00
Rocky Mountain Slope:						
Assiniboine, Fort, Mont.....	27		126	.14		.10
Helena, Mont.....	32		112	.14		.10
Custer, Fort, Mont.....	32		98	.14		.14
Rapid City, Dak.....			56			.20
Salt Lake City, Utah.....	40		42	.42	.20	
Cheyenne, Wyo.....	33		98	.14	.10	
North Platte, Nebr.....	35		98	.14	.20	
Denver, Colo.....	39		84	.14	.00	.00
Montrose, Colo.....	39		56	.07	.00	.00
Pueblo, Colo.....	40		84	.07	.20	
Dodge City, Kans.....	41		28	.15	.50	
Sill, Fort, Ind. T.....	49		84	.17		.10
Santa Fé, N. Mex.....	38		70	.09	.10	
Pacific Coast:						
Olympia, Wash.....	44		42	1.28		1.00
Portland, Oreg.....	47		28	1.53		.90
Roseburg, Oreg.....	47	0	0	.75	.30	
Red Bluff, Cal.....	54		28	.77	3.20	
Sacramento, Cal.....	55	0	0	.77		.50
San Francisco, Cal.....	54	0	0	.77		.70
Los Angeles, Cal.....	57	0	0	.70		.60
San Diego, Cal.....	57		14	.37		.30
Yuma, Ariz.....	64		28	.07		.10

FOREIGN.

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

SPECIAL REPORTS.

Report from Berlin upon the action of the Koch lymph.

P. A. Surgeon J. J. Kinyoun, under detail from this Bureau to study the methods of Professor Koch in the Hygienic Institute of the Berlin University, transmits the following from Berlin, dated February 28:

I herewith transmit a brief synopsis of two cases of tubercle of lung, which have been under treatment for several months by the Koch method. One of the cases (Hausler, history I) has, in my opinion, recovered, and to all appearances is a healthy man. The second case (Lange, II) has made such a great improvement while under treatment that I have deemed it advisable to include it with the first. These cases were among the first that received the injections in Gerhardt's wards. I have carefully followed them with several others since January 3, and the majority have made rapid improvement, but none have fully recovered. A great many patients as soon as they feel better, leave off the treatment and return to their usual avocations; others do not fare so well. When there is any sign of a cavity forming in the lung, and then the injections are given, fatal results usually follow.

I am more convinced that the remedy has but a limited range of usefulness, and should only be administered in the first stage of the disease. Liebreich has made a communication to the Berlin Medical Society, in which he states that he has had remarkable results to follow the administration of potassium cantharidate in minute doses. Fränkel showed several cases of laryngeal tuberculosis which had apparently improved within ten days treatment. What the ultimate result will be is hard to say.

Sanitary measures in regard to the Red Sea.

The following has been received from the Secretary of State:

ROYAL LEGATION OF ITALY,
Washington, March 3, 1891.

MR. SECRETARY OF STATE: As I had the honor to inform your excellency in my letter of 29th of October last, I hastened to acquaint the Government of His Majesty that the Federal Government had decided to be represented at the conference proposed for the object of establishing an international sanitary service in regard to the Red Sea. In instructing me to express to your excellency the thanks of the Royal Government for the kind reception given to the proposition in question, the Marquis de Rudin has just informed me that the question of sanitary reform as regards the Red Sea has not ceased to be the subject of study on the part of the Royal Government, and that a very lively exchange of ideas is taking place in this respect between the powers immediately interested. The minister of the king for foreign affairs is pleased to hope that they will soon arrive at finding terms of an agree-

ment which will be submitted to the different powers, in order to protect the public health of Europe and America from the invasion of diseases proceeding from Asia.

I have the honor to communicate the foregoing to your excellency, and I avail myself of this occasion to renew to you, Mr. Secretary of State, the assurances of my highest consideration.

FAVA.

His Excellency JAMES G. BLAINE,
Secretary of State.

CANADA—*Nova Scotia—Halifax—Quarantine regulations.*—The following has been received, addressed to the Assistant Secretary of State:

U. S. CONSULATE-GENERAL,
Halifax, February 3, 1891.

SIR: In compliance with the request contained in Dispatch No. 63, dated January 23, from the Department of State, relating to the local or government restrictions imposed with a view to prevent the introduction of disease, I have to report that the matter is under the control and direction of the Dominion Government. The quarantine regulations, which I think are reasonably enforced, provide that every steamship and sailing vessel from any foreign port shall be inspected by a quarantine medical officer before making customs entry. All persons on board who may be ill with any contagious disease are sent to the quarantine hospital, if necessary, and the vessel disinfected and detained.

Every emigrant on board a ship bound to a Canadian port is required to be vaccinated by the ship's medical officer, unless there is satisfactory evidence that he has been vaccinated within a reasonable time, and he may be refused permission to land until he is vaccinated.

At Halifax a quarantine hospital is located on Larder's Island, in the harbor about 3 miles below the city, where a steward and keeper is in constant attendance, prepared to receive patients at all times.

Emigrants or other passengers becoming ill with dangerous contagious diseases after landing are taken in charge by the local health authorities and suitably provided for.

Inclosed herewith I transmit a copy of the December regulations relating to quarantine.

I am, sir, your obedient servant,

WAKEFIELD G. FRYE,
Consul-General.

Inclosure: Copy of Quarantine Regulations.

CEYLON—*Colombo—Smallpox.*—Under dates of January 17 and 26, and February 9, 1891, the United States consul reports as follows:

	Cases.	Deaths.
Week ended January 17.....	62	20
Week ended January 24.....	98	17
Week ended February 9.....	68	23

Galle—Cholera.—The United States consul at Colombo, under date of February 9, 1891, also reports 26 cases of cholera and 16 deaths therefrom in the seaport town of Galle for the week ended February 7, 1891.

CUBA—*Havana*.—The United States sanitary inspector sends the following mortality report for the month of February, 1891:

I have the honor to inform you that during the twenty-eight days of February there were 517 deaths in this city. Of that number of decedents 4 were by yellow fever, 11 by enteric fever, 7 by so-called pernicious fever, 2 by paludal fever, 1 by bilious fever, 2 by smallpox, 7 by diphtheria and croup, 5 by measles, 2 by glanders, and 1 by hydrophobia.

EGYPT.—Week ended February 12, 1891. The towns in upper and lower Egypt, including Gizeh and the Suez Canal, show a total of 838 deaths, including phthisis pulmonalis, 59; enteric fever, 24; smallpox, 2; diphtheria and croup, 2; measles, 3; and whooping-cough, 8.

FRANCE—*Rheims*.—Month of January, 1891. Population, 97,903. Total deaths, 207, including phthisis pulmonalis, 17; enteric fever, 1; diphtheria and croup, 1.

GERMANY—*Brunswick*.—Month of January, 1891. Population, 100,883. Total deaths, 205, including scarlet fever 1 and diphtheria 8.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 28 great towns of England and Wales during the week ended February 28 corresponded to an annual rate of 24.1 a thousand of the aggregate population, which is estimated at 10,010,426. The lowest rate was recorded in Derby, viz, 14.6, and the highest in Blackburn, viz, 38.5 a thousand. Diphtheria caused 4 deaths in Birmingham, 4 in Manchester, 3 in Sheffield, and 3 in Liverpool.

London.—Two thousand and forty-two deaths were registered during the week, including measles, 24; scarlet fever, 11; diphtheria, 32; whooping cough, 62; enteric fever, 6; and diarrhoea and dysentery, 19. The deaths from all causes corresponded to an annual rate of 23.7 a thousand. Diseases of the respiratory organs caused 484 deaths. In greater London 2,503 deaths were registered, corresponding to an annual rate of 22.2 a thousand of the population. In the "outer ring" the deaths included measles 10 and whooping cough 20.

Newcastle-upon-Tyne.—Two weeks ended February 21, 1891. Population, 163,000. Total deaths from all causes not reported. Enteric fever caused 4 deaths.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended February 28, in the 16 principal town districts of Ireland, was 26.7 a thousand of the population. The lowest rate was recorded in Sligo, viz, 9.6, and the highest in Lurgan, viz, 46.2 a thousand. In Dublin and suburbs 199 deaths were registered, including enteric fever, 3; diphtheria, 1; and whooping cough, 1.

Scotland.—The deaths registered in eight principal towns during the

week ended February 28 corresponded to an annual rate of 23.8 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Perth, viz, 17.0, and the highest in Glasgow, viz, 29.8 a thousand. The aggregate number of deaths registered from all causes was 620, including measles, 18; scarlet fever, 7; diphtheria, 7; whooping cough, 27; fever, 11; and diarrhœa, 10.

Dundee.—Month of January, 1891. During the month there were 273 deaths registered, representing an annual death rate of 19.05 per 1,000, and including phthisis, pulmonalis, .19; enteric fever, 3; diphtheria, 2; croup, 1; and whooping cough, 6.

INDIA—*Calcutta*—*Cholera*.—The United States consul-general sends the following weekly reports, dated February 11, 1891:

	Cases.	Deaths.
Cholera, week ended January 10, 1891.....	...	20
Cholera, week ended January 17, 1891.....	...	30

ITALY—*Milan*.—Month of January, 1891. Population, 399,081. Total deaths, 1,169, including smallpox, 1; enteric fever, 13; scarlet fever, 1; and diphtheria, 34.

MEXICO—*Guaymas*.—Month of February, 1891. Population, 6,600. Total deaths, 15. No deaths from contagious diseases.

SPAIN—*Barcelona*.—Month of January, 1891. Population, 272,000. Total deaths, 1,096, including smallpox, 18; leprosy, 1; enteric fever, 39; and measles, 51.

SWITZERLAND—*Zurich*.—Month of January, 1891. Total deaths, 146, including phthisis pulmonalis, 31; diphtheria and croup, 6; and measles, 2.

TURKEY IN ASIA—*Tripoli*—*Cholera*.—The United States consul at Beirut, Syria, sends the following report with regard to the progress of cholera in Tripoli:

	Cases.	Deaths.
Week ended February 3, 1891.....	...	1
Week ended February 10, 1891.....	Several	...
Week ended February 17, 1891.....

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.
London.....	Feb. 14.....	5,877,399	2,089					7	10	40	24	48
London.....	Feb. 21.....	5,877,399	2,180					6	13	39	27	56
Paris.....	Feb. 21.....	2,260,945	1,200			2		14	8	51	18	7
Paris.....	Feb. 28.....	2,260,945	1,190			3		10	5	47	11	12
Vienna.....	Feb. 14.....	840,000	418			3		4		9	8	
Vienna.....	Feb. 21.....	840,000	402					2	4	7	9	1
Liverpool.....	Feb. 21.....	620,443	270				1	2	2	1		
Liverpool.....	Feb. 28.....	620,443	270					2	5	3		
Hamburg.....	Feb. 14.....	570,534	269					1		8		
Glasgow.....	Feb. 21.....	545,678	293					1	5	3		
Glasgow.....	Mar. 4.....	545,678	285					3	4	2		
Buda Pesth.....	Feb. 19.....	507,000					3		1	10		
Buda Pesth.....	Feb. 26.....	507,000						1		2	10	
Brussels.....	Feb. 21.....	469,459	224		11			4				
Warsaw.....	Feb. 14.....	455,852	200		1			2	3	9		
Warsaw.....	Feb. 21.....	455,852	245		3			3	7	12		
Amsterdam.....	Feb. 7.....	417,542	213					2		3		
Amsterdam.....	Feb. 14.....	417,542	225				1		1	5		
Amsterdam.....	Feb. 21.....	417,542	211					3	1	5	2	
Rome.....	Jan. 10.....	417,392	208					1		5	2	1
Rome.....	Jan. 17.....	417,392	198					3		6	2	1
Rome.....	Jan. 24.....	417,392	243					2		9	3	1
Lyons.....	Feb. 14.....	401,930	243									
Lyons.....	Feb. 21.....	401,930	232					2				
Leipzig.....	Feb. 7.....	360,671	118					2	1	3		
Leipzig.....	Feb. 14.....	360,671	108					1	1	3		
Leipzig.....	Feb. 21.....	360,671	120					2	1	4		
Munich.....	Feb. 7.....	348,000	167					1	1	8		
Munich.....	Feb. 14.....	348,000	186						1	12		
Munich.....	Feb. 21.....	348,000	178							2	9	
Copenhagen.....	Feb. 14.....	312,387	134			3			5	4		
Copenhagen.....	Feb. 21.....	312,387	147			1			2	8		
Odessa.....	Jan. 31.....	295,000	135					1	4	5	1	
Odessa.....	Feb. 7.....	295,000	133						3	3	2	
Cologne.....	Feb. 14.....	281,112	137						1	9	1	4
Cologne.....	Feb. 21.....	281,112	142							6	2	5
Dresden.....	Feb. 14.....	276,085	92							8		
Dresden.....	Feb. 21.....	276,085	109							3		
Edinburgh.....	Feb. 21.....	275,436	87					2	4			
Edinburgh.....	Feb. 28.....	275,436	130					3	1	1		
Barcelona.....	Feb. 20.....	272,000	241			5		4		17		
Barcelona.....	Feb. 27.....	272,000	221			5		3		8		
Palermo.....	Feb. 21.....	250,000	163									
Antwerp.....	Feb. 21.....	238,788	109					2				
Bristol.....	Feb. 21.....	23										

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.
Stettin.....	Feb. 14.....	116,000	47					1		4		
Stettin.....	Feb. 21.....	116,000	49					1		1		
Havre.....	Feb. 21.....	112,074	61							1		
Aix-la-Chapelle.....	Feb. 22.....	111,893	45									
Catania.....	Feb. 22.....	110,000	57					1	1			
Catania.....	Mar. 1.....	110,000	71						1			
Crefeld.....	Feb. 16.....	108,000	83									
Crefeld.....	Feb. 23.....	108,000	72									
Gothenburg.....	Feb. 14.....	106,246	41						2			
Gothenburg.....	Feb. 21.....	106,246	33									
Leghorn.....	Feb. 22.....	104,021	83									
Leghorn.....	Mar. 1.....	104,021	78									
Rheims.....	Feb. 28.....	97,903	61									
Zurich.....	Feb. 21.....	91,323	28						2	11		4
Hiogo.....	Dec. 20.....	89,363	71					2				
Hiogo.....	Dec. 27.....	89,363	92				1					
Hiogo.....	Jan. 3.....	89,363	85				2					
Leith.....	Feb. 21.....	80,736	25							2		
Leith.....	Feb. 28.....	80,736	29					2				
Mannheim.....	Feb. 21.....	80,000	34									
Messina.....	Feb. 22.....	79,971	46							4		
Messina.....	Feb. 28.....	79,971	45							5		
Mayence.....	Feb. 14.....	73,271	24							2		
Mayence.....	Feb. 21.....	70,000	26									
Jerez de la Frontera.....	Feb. 7.....	61,708	54			3						
Jerez de la Frontera.....	Feb. 14.....	61,708	59			1						
Cadiz.....	Feb. 7.....	57,157	71					1		1	1	
Cadiz.....	Feb. 14.....	57,157	59					1				
Trapani.....	Feb. 21.....	43,095	9									
Marsala.....	Feb. 21.....	40,131	17									
Schiedam.....	Feb. 25.....	25,400	10									
Curacao.....	Feb. 28.....	25,000	5									
Gibraltar.....	Feb. 22.....	23,981	16									
Vera Cruz.....	Feb. 26.....	23,800	12									
Vera Cruz.....	Mar. 5.....	23,800	13		1							
Girgenti.....	Feb. 21.....	23,547	14				1					
Guayaquil.....	Jan. 31.....	22,000	52			15		7			1	
Guayaquil.....	Feb. 7.....	22,000	33			5		10				
Guayaquil.....	Feb. 21.....	22,000	35			4		12				
Licata.....	Feb. 21.....	19,000	11					1				
Kingston, Can.....	Mar. 6.....	18,172	3									
Cartagena, Col.....	Feb. 28.....	16,000	6									
Matamoras.....	Feb. 28.....	16,000	11									
Rio Grande do Sul.....	Jan. 3.....	16,000	27									
Rio Grande do Sul.....	Jan. 10.....	16,000	23									
Rio Grande do Sul.....	Jan. 17.....	16,000	18									
Rio Grande do Sul.....	Jan. 24.....	16,000	26									
Cartagena.....	Feb. 14.....	16,000	13									
St. John's, Antigua.....	Feb. 28.....	15,847	6									
Sagua la Grande.....	Mar. 7.....	15,605	8									
St. Thomas, W. I.....	Jan. 30.....	12,019	56									
St. Thomas, W. I.....	Feb. 6.....	12,019	53									
St. Thomas, W. I.....	Feb. 13.....	12,019	60									
St. Thomas, W. I.....	Feb. 20.....	12,019	52									
Sonneberg.....	Jan. 3.....	11,600	4									
Sonneberg.....	Jan. 10.....	11,600	7									
Sonneberg.....	Jan. 17.....	11,600	5									
Sonneberg.....	Jan. 24.....	11,600	8									
Queenstown.....	Feb. 14.....	10,340	5									
Queenstown.....	Feb. 28.....	10,340	6									
Queenstown.....	Mar. 7.....	10,340	4									
Guelph.....	Mar. 7.....	10,173	2									
Tuxpan.....	Feb. 21.....	9,000	11									

Cholera, yellow fever, and smallpox in 1890.

The following tables, showing the distribution of cholera, yellow fever, and smallpox, are consolidated from reports received by the Marine-Hospital Bureau :

Cholera in 1890.

Countries and localities.	Deaths.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Africa:												
Natala												
Corea:												
Fusan ^b								71				
India:												
Calcutta	120	236	115	95	41	42	45	22	10	10	69	54
Singapore					26							
Japan:												
Hio-go									321	299	7	
Nagasaki-Ken ^d						48	589	997	547	315	11	
Osaka ^e									4,384	1,458		
Yokohama and adjacent districts							90	456	808	144	20	
Spain: ^f												
City and province of Valencia					40	104	327	758	558	354	3	
Barcelona									6	14		
Madrid							1					
Turkey in Asia: ^g												
Adana												
Aleppo									72	533	31	110
Alexandretta										1		
Beirut												50
Erbil							108					
Hamah										242	434	
Homs											273	49
Mersine											2	
Orfa										4		
Tripoli												24

FRANCE.—Two cases reported during the year in Paris and 3 in Toulon, the latter among soldiers returned from Tonquin.

PERSIA.—Cholera was nearly extinct in Persia in January, 1890, only a few cases having been reported since December, 1889.

^a Cases brought from emigrant ship *Congella*.

^b Epidemic began August 5, 1890.

^c Epidemic began September 10, 1890.

^d Epidemic began June 27, 1890.

^e One thousand three hundred and sixty-five cases reported for August, but number of deaths not reported.

^f Epidemic began May 13, 1890; 5,493 cases of cholera and 2,827 deaths therefrom were reported in all Spain during the epidemic.

^g One hundred cases and 70 deaths reported in Adana from November 21 to December 2, 1890; Hedjaz, 4,171 deaths from the beginning of epidemic to October 19; Province of Mossoul, from June 22 to July 17, 191 cases and 120 deaths; Province of Diarbekir, from June 17 to July 17, 143 cases and 114 deaths.

Yellow fever in 1890.

United States:												
Gulf Quarantine ^a					1			1				
Key West	1											
New York quarantine ^b												
Foreign:												
Brazil:												
Ceara	2	2	4	6	3		3					
Para	1		2	3	1		6	6			1	
Pernambuco			1		3		1					
Rio de Janeiro ^c	37	65	187	156	71	38	28	29	11			5

^a Six cases treated—May, 1; June, 1; July, 2; August, 2.

^b Case taken to hospital from steamship *Santiago*, October 9, 1890.

^c Reports for several weeks not received.

Yellow fever in 1890—Continued.

Countries and localities.	Deaths.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Foreign—Continued.												
Costa Rica:												
Limon <i>d</i>												
Cuba:												
Cardenas.....						4	14					
Cienfuegos.....						1	11					
Havana.....	12	4	4	12	26	45	67	8	14	13	9	3
Santiago de Cuba <i>e</i>		2						2		4	5	7
Mexico:												
Merida.....			2			6	22	6	1			
Vera Cruz <i>e</i>						1	1	3	1	4	9	19
Spain:												
Malaga <i>f</i>												
United States of Colombia:												
Colon.....										1		

d Nine cases occurred in hospital from January to May, 1890.*e* Reports irregular.*f* Two cases reported in June.

Smallpox in 1890.

United States:												
Boston quarantine <i>a</i>				9								
Chelsea, Mass.....						1						
Connecticut.....		3	2									
Laredo, Tex. <i>b</i>												
Michigan.....			4									
New York.....			2	1		1						
Redfield, Ark. <i>c</i>												
San Francisco, Cal.....											1	3
Savannah, Ga. <i>d</i>												
Searsport, Me. <i>e</i>						1						
Foreign:												
Africa:												
Loanda.....			4	1		1						
Austria:												
Trieste.....					1							
Vienna.....										1	4	9
Azores:												
Fayal <i>f</i>												
Brazil:												
Bahia <i>g</i>												
Jerez de la Frontera.....							2	3	10	1	12	18
Pernambuco.....	2	4	23	25	54	140	285	446	261	227	94	38
Rio de Janeiro.....	39	19	20	13	10		12	12	12			27
Rio Grande do Sul.....									4	6		
Belgium:												
Antwerp.....								1	1			
Brussels.....						1	3	3	3	4		18
Ghent.....											1	1
Ceylon <i>h</i>												
Chili:												
Iquique.....										1	1	
Costa Rica:												
Guatemala <i>i</i>												
Cuba:												
Havana.....	1			1	2	2			2		3	1
Ecuador:												
Guayaquil.....										59	40	42
Egypt:												
Alexandria.....							1					

a Cases on barque *Sarah* from Azore Islands.*b* Ten cases reported on November 27, 1890.*c* Two cases reported in November.*d* Two cases reported in December.*e* Case brought from Boston.*f* Smallpox broke out January 30, 1890.*g* A few isolated cases reported in June.*h* Twenty-two deaths reported for quarter ended March 31, 1890.*i* January 1, 1890, to September 30, 1890, 22,789 deaths reported.

Smallpox in 1890—Continued.

Countries and localities.	Deaths.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Foreign—Continued.												
France:												
Bordeaux <i>j</i>					1							
Havre.....									1			
Lyons.....												
Marseilles.....			40	58	35	32	37	43	55	22	62	
Nantes.....							1					
Nice.....						2	4	5	5		2	10
Paris.....	12	9	6	11	9		1					
Rheims.....												
Rouen.....								1				
Funchal.....							19	11	6	2	7	3
Germany:												
Bremen.....												2
Dresden.....									1			
Frankfort-on-the-Main.....										1		
Königsberg.....								2				
Prague.....											6	4
Stettin.....									2			
Gibraltar.....		2						2				
Greece:												
Piræus.....							13					
Holland:												
Amsterdam.....							1					
India:												
Calcutta.....	42	144	275	162	13	17	8	7				
Singapore.....	3	2		3	1			1		7		
Italy:												
Genoa.....	1	9	14	9	21	5	14	8	10	1	1	2
Leghorn.....							2					
Milan.....											1	
Naples.....						5						
Palermo.....				4	2							
Rome.....		1	2									
Turin.....						1	1	1	1			
Venice.....						5	18	36	16	21	28	36
England:												
London.....		1			2							
Mexico:												
Matamoras.....							5	4	1	3	4	4
Piedras Negras <i>k</i>												
Portugal:												
Lisbon.....					8			4	10	40	2	
Russia:												
Odesa.....							4	1				
Warsaw.....	60	42	58	74	57	28	45	26	22	31	26	22
Scotland.....	1		1			1		3				
Spain:												
Barcelona.....							4	4	4		4	11
Cadiz.....	24						13					8
Cogollos <i>l</i>												
Lisbon.....											13	
Madrid <i>m</i>												
Valencia.....						2						
Switzerland:												
Zurich.....								1	3	4		
Turkey:												
Constantinople.....							16	17	10		37	63
West Indies:												
Martinique <i>n</i>												

Houston, Tex.—In December, 1890, there were 18 cases reported.

j Seven months ended July 31, 1890, 1 death.

k July 12, 1890, 29 cases reported; August 12, 14 cases.

l Fifty cases reported August 4, 1890.

m Two hundred and fifty cases reported in letter of August 26, 1890, and 2,500 cases reported in city on October 11, with 50 to 60 new cases each day.

n Smallpox on board steamship *Alliance*.

OFFICIAL:

JOHN B. HAMILTON,

Supervising Surgeon-General, Marine-Hospital Service.