## ABSTRACT OF SANITARY REPORTS.

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No. 50.

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#### UNITED STATES.

#### SPECIAL REPORTS.

Disinfectants for quarantine and hospital purposes.

In accordance with the recommendation of a board of medical officers appointed to consider the question, the following memorandum is issued:

A disinfectant for quarantine and hospital purposes should be capable of destroying the various forms of germ life which are productive of disease, arresting decomposition and various odors emanating there-

The following are considered standard germicides:

- 1. Steam heat (100° C.).
- 2. Mercuric chloride.
- 3. Sulphur dioxide.

Potass, permanganate, chlorine, bromine iodine, peroxide of hydrogen and lime, in addition to their germicidal powers, are reliable as deodorizers.

In the use of the above-mentioned agents in the disinfection of ves-

sels in quarantine, the following rules are applicable:

1. Disinfection by steam heat at 100° C. should be applied when practicable to all clothing, bedding, and textile fabrics, and should be applied in such a manner as to cause a current of steam to pass through the several articles under treatment, so that the same temperature is maintained at all parts for a period of not less than 2 hours.

2. Solutions of mercuric chloride are to be used in the strength of (1-500) and (1-1000). To these solutions should be added sufficient hydrochloric acid to maintain its strength unimpaired when brought

in contact with organic matter.

The formula for a solution of (1-500) strength should be:

Mercuric chloride	1 gram.
Hydrochloric acid	15 grams.
Water	500 с. с.

This diluted to one-half its strength suffices for the weaker solution. The strong solution of mercuric chloride is to be used principally in the treatment of the holds, decks, and water-closets of vessels.

The weaker solution (1-1000) is used for the disinfection of those articles of clothing and other fabrics which can not be subjected to steam heat.

79 (579) 3. Sulphur dioxide should be used as an auxiliary in the disinfection of the hold, cargo, and cabins, and in other places where mercuric chloride is not applicable. The strength of sulphur dioxide requisite for the hold and cargo should be not less than 10 per cent. at  $20^{\circ}$  C.

This strength can only be obtained by burning sulphur in a furnace of special construction, or by the use of liquified sulphur dioxide gas. The length of exposure should in no case be less than 36 hours.

The general principles of disinfection as applied to vessels are applicable to hospitals. All bedding and clothing, with the exception of boots and shoes, are best disinfected by steam (100° C.). Floors, walls, ceilings, and articles of ward furniture after thorough cleaning, by water when possible, to be treated by sulphur dioxide followed by washing with mercuric chloride solution (1 to 1000).

For disinfection of water-closets, sewers, cess-pools, and receptacles

for excreta the following plan should be followed out:

1. Deodorizing by agents that have the power of dehydrating or deoxydizing organic matter, such as are herein previously mentioned as reliable deodorizers.

2. Washing with a solution of 1-500 mercuric chloride.

Notes.—a. Super-heated steam is not necessary for thorough disinfection. It has been found that all germ life is destroyed at a temperature of steam at 100° C. much sooner than at any higher temperature.

b. Sulphur dioxide, to be in any way efficient, must be delivered into the holds of vessels in at least a 10 per cent. strength in order to overcome the resistance offered by the moisture in the wood, and to insure its diffusion to all parts in sufficient strength to be germicidal to the non-spore bearing micro-organisms.

Prevention of the spread of scarlet fever and diphtheria in the District of Columbia.

The following act has been passed by Congress. It was originally recommended to the committees of the House and Senate on the District of Columbia by the Medical Society of this District. It is believed to be a model bill for municipalities:

AN ACT to prevent the spread of scarlet fever and diphtheria in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act it shall be the duty of every registered practicing physician or other person prescribing for the sick in the District of Columbia to make a report to the health officer, on forms to be furnished by that officer, immediately after such practitioner becomes aware of the existence of any case of scarlet fever or diphtheria in his charge; and in case such person shall fail to so report within twenty-four hours he shall be subject to a penalty of not less than five nor more than fifty dollars, and in case of a second offense the penalty shall not be less than ten nor more than one hundred dollars. In case no physician shall be in charge of such patient the householder where such case occurred, or person in charge thereof, the parent, guardian, nurse, or other person in attendance upon the sick person knowing the character of the disease

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shall make the report above mentioned, and in case of failure to report shall suffer the same penalties as provided for physicians in this act.

SEC. 2. That it shall be the duty of the health officer co-operating with the attending physician to cause a suitable placard, flag, or warning sign to be displayed from the front of the premises or apartment where any one case of scarlet fever or diphtheria is present. be unlawful for any person to remove such placard, sign, or warning flag, when so placed, without permission of the health officer, and it shall be the duty of the said health officer, in conjunction with the attending physician, to cause the premises to be properly disinfected, and to issue the necessary instructions for the isolation of the patient.

SEC. 3. That no person shall visit or attend any public or private school, or place of public assemblage, or appear on the public streets or in the parks while affected with scarlet fever or diphtheria, and any adult person, parent, or guardian of a minor convicted of having knowingly violated the provisions of this act, shall, upon conviction, forfeit and pay a sum not less than five nor more than fifty dollars; and it shall be the duty of physicians while in attendance upon cases of scarlet fever or diphtheria to exercise such reasonable precautions to prevent the spread of the said diseases as may be prescribed by the health officer of the District of Columbia in regulations.

SEC. 4. That no person who has convalesced from diphtheria or scarlet fever shall be allowed to attend any public or private school, seminary, or college until the attending physician shall have furnished a certificate that said patient has completely recovered, and that there is no danger of infection to other persons. All persons who shall, after convalescing from diphtheria or scarlet fever, visit schools, seminaries, or colleges, without providing themselves with such certificates, shall suffer the penalties provided for in section one of this act.

SEC. 5. That the provisions of this act shall apply to every ship, vessel, steamer, boat, or craft lying or being in the rivers, harbors, or other waters within the jurisdiction of said District, and to every tent, van, shed, hovel, barn, out-house, cabin, or other like place, as if the

same were an ordinary dwelling.

SEC. 6. That the word "regulations," as herein used, shall be held to mean also rules, orders, and amendments. The words "person in charge thereof" shall be held to mean the owner, his agent, or factor; the tenant, his clerk, or representative; the nurse, or any one or more persons who by reason of their position are charged with the management or care of the premises, or interested in the person afflicted. words "practitioner of medicine," or "practitioner," shall be held to include all persons who undertake to treat persons afflicted, either gratuitously or for pay.

SEC. 7. That any person who shall knowingly make, sign, or deliver any false report or certificate herein provided for, upon conviction thereof in the police court of said District, shall be fined not less than five nor more than fifty dollars, and, in default of payment thereof, be committed to jail for not less than one nor more than twenty days.

SEC. 8. That the expenses necessarily incurred in the execution of the provisions of this act shall be borne from the general appropriation for the maintenance of the health department of the District of Columbia, and the jurisdiction of civil and criminal procedure in the enforcement of this act is hereby vested in the police court of the said District, with the same right of appeal as in other civil and criminal trials in said District.

December 12, 1890.

Vessels from Marseilles for New York and New Orleans, without bills of health.—The United States consul at Marseilles sends the following:

I have to report the departure of two foreign sailing-vessels from this port for the States without bills of health.

1. Sérésina (Italian) left about October 1 for New Orleans. 2. San Leonardo (Italian) left about November 1 for New York.

Article XXI, paragraph 336, has always been construed at this con-

sulate to refer to foreign as well as to American vessels.

The ship-broker informs me the above-named vessels sailed without applying for bills of health, because there was not time to send for them. This is absurd, as they were loading for weeks before they sailed. What penalty do these vessels incur, arriving at United States ports without bills of health?

Twice as many vessels have left this port for the States this year as left for the corresponding period the preceding year. Only one American among the number this year.

#### Glanders in Georgia.

The State board of health of Florida has issued the following:

Jacksonville, December 3, 1890.

To all county boards of health, health officers, municipal authorities and others interested: In accordance with query made to the commissioner of agriculture of Georgia, and the following reply: "Yours of November 28 to hand, and contents noted. In reply, I will say that the clipping quoted referring to glanders in lower Georgia is substantially correct. Its prevalence in some counties is alarming." (Signed, R. T. Nesbit, Commissioner.)—the importation of horses into the State of Florida from the State of Georgia is hereby forbidden until such time as the commissioner of agriculture of Georgia shall have notified this board that such disease has ceased to exist in that State.

JOSEPH Y. PORTER, State Health Officer of Florida.

California—San Diego.—The United States sanitary inspector writes as follows:

The Mexican steamer Alejandro was in port ten days, during which time she was thoroughly overhauled and cleaned, having come here for the purpose of going on the marine ways for repairs. Were she to make regular trips to this port I should insist on her being thoroughly fumigated and kept cleaned. The Mexican vessels are proverbially filthy, and when coming regularly to any port require close inspection.

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

FLORIDA.—Month of October, 1890. Reports from 20 counties show a total of 219 deaths, including phthisis pulmonalis 26 and enteric fever 11.

Pensacola.—Month of November, 1890. Population, 15,000. Total deaths, 21, including phthisis pulmonalis 3 and enteric fever 2.

Indiana—Evansville.—Month of November, 1890. Population, 50,600. Total deaths, 61, including phthisis pulmonalis, 9; diphtheria, 5; enteric fever, 4; and croup, 1.

Iowa—Keokuk.--Month of November, 1890. Population, 18,589. Total deaths, 15, including phthisis pulmonalis, 1; diphtheria, 2; croup, 2; and scarlet fever, 1.

MASSACHUSETTS—Fall River.—Month of November, 1890. Population, 75,000. Total deaths, 109, including phthisis pulmonalis, 11; enteric fever, 9; diphtheria, 2; and croup, 2.

MICHIGAN.—Week ended November 29, 1890. Reports to the State board of health, Lansing, from 72 observers, indicate that measles, whooping-cough, cholera morbus, erysipelas, remittent fever, diphtheria and inflammation of bowels increased, and that cholera infantum, cerebro-spinal meningitis and membranous croup decreased in area of prevalence.

Diphtheria was reported present during the week at 29 places, scarlet fever at 36 places, enteric fever at 26 places, and measles at 9 places.

Grand Rapids.—Month of November, 1890. Population, 75,000. Total deaths, 70, including phthisis pulmonalis, 6; enteric fever, 5; scarlet fever, 1; diphtheria, 7; and membranous croup, 3.

MINNESOTA.—Month of November, 1890. Total deaths, 812, including enteric fever, 36; scarlet fever, 6; diphtheria, 78; and measles, 3.

NEW YORK—Rochester.—Month of November, 1890. Population, 138,327. Total deaths, 146, including phthisis pulmonalis, 18; enteric fever, 3; scarlet fever, 3; diphtheria, 6; croup, 4; and whooping-cough, 1.

NORTH CAROLINA.—Month of July, 1890. Reports to the State board of health from 19 cities and towns, having an aggregate population of 119,806, show a total of 113 deaths, including phthisis pulmonalis, 15; enteric fever, 4; and diphtheria, 7.

OHIO—Cincinnati.—Month of November, 1890. Population, 325,000. Total deaths, 467, including phthisis pulmonalis, 74; enteric fever, 24; diphtheria, 55; and croup, 10.

RHODE ISLAND--Newport.—Month of November, 1890. Population, 20,000. Total deaths, 20, including phthisis 3.

TENNESSEE—Memphis.—Month of November, 1890. Population, 62,000. Total deaths, 39, including enteric fever 1 and diphtheria 2.

TEXAS—San Antonio.—Month of November, 1890. Population, 50,000. Total deaths, 102, including phthisis pulmonalis, 14; enteric fever, 3; diphtheria, 1; and croup, 3.

#### MORTALITY TABLE, CITIES OF THE UNITED STATES.

		pula-	Lom .				I	Deat	hs fi	гош-	_			
Cities.	Week ended.	Estimated popula- tion.	Total deaths from all causes.	Cholera.	Yellow fever.	Small-pox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping- cough.
New York, N. Y. Chicago, Ill	Dec. 6 Dec. 6 Dec. 6 Dec. 6 Dec. 6 Dec. 6 Dec. 5 Nov. 29 Nov. 29 Nov. 29 Nov. 29 Dec. 6	1, 652, 748 1, 100, 000 1, 064, 277 466, 000 455, 427 446, 55, 427 446, 500 251, 000 250, 000 250, 000 240, 000 250, 000 240, 000 240, 000 82, 652 76, 399 75, 000 40, 000 40, 000 40, 000 35, 000 25, 887 24, 375 20, 000 17, 000	672 258 385 385 385 385 385 385 385 385 385 3							8 5 15 1 1 4 2 1 1	1	31 15 11 6 4 7 7 1 1 10 3 2 12 12 1 5 4 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 5 1 2	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
San Diego, Cal Pensacola, Fla	Nov. 29 Nov. 29	16,000 15,000	3 6											

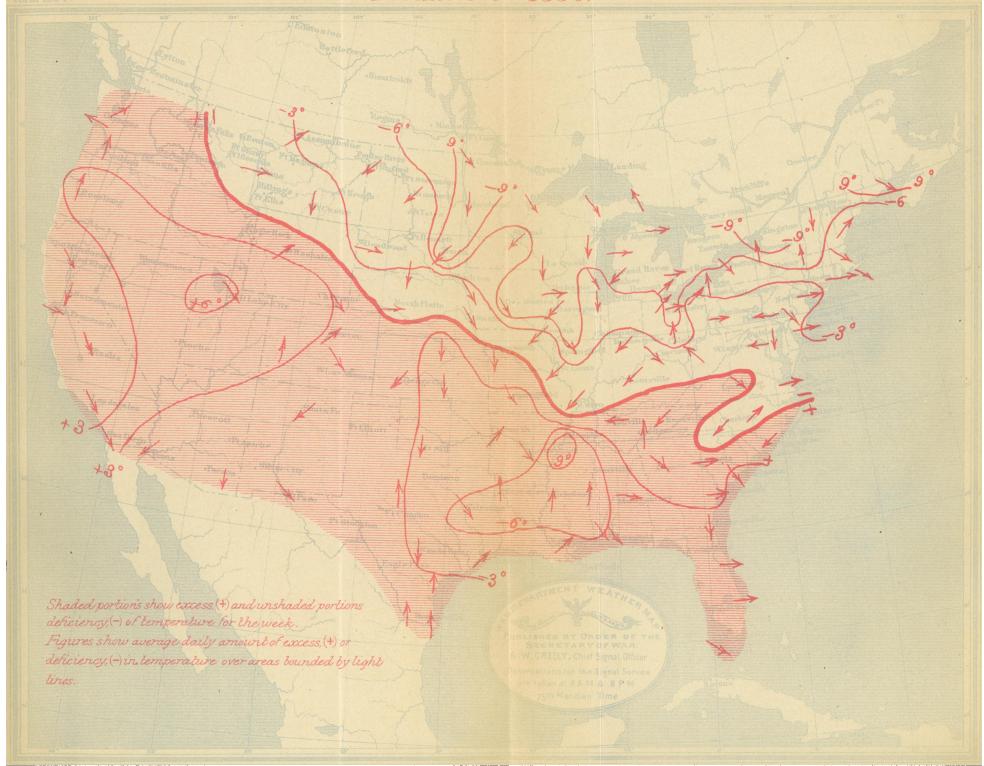
Table of temperature and rain-fall, week ended December 5, 1890.

#### [Received from War Department, Signal Office.]

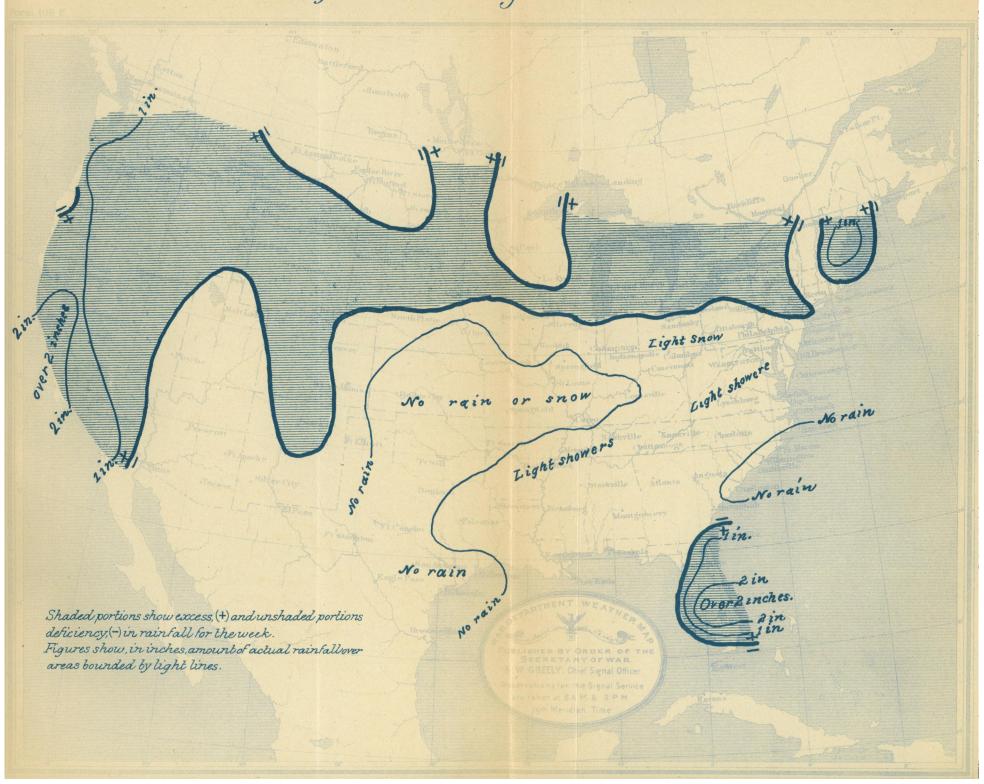
Locality.	Mean ter	nperature Fahrenhe	in degrees it.	Rain-fall in inches and hundredths.					
Locality.	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.			
New England States:									
Eastport, Me	28		68	.98	l	.27			
Eastport, Me Portland, Me	26		33	. 77	.79				
Boston, Mass	33		26	. 91	. 01				
Block Ísland, R. I	35		26	. 93		.71			
Middle Atlantic States:	31		47	61		0.4			
New York N V	35	•••••	8	. 61 . 76	.20	. 34			
Philadelphia Pa	36	•••••	ııı	.63	.20	.12			
Albany, N. Y	39		28	.93		.33			
Baltimore, Md	39		15	.71		.54			
Washington, D. C. Lynchburg, Va. Norfolk, Va.	37		6	. 69		. 58			
Lynchburg, Va	40	2		. 84		.77			
Noriolk, Va	43		. 2	.87		.78			
South Atlantic States:	46		14	1 10	1	1.01			
Charlotte, N. C	48	12	14	1.12 .78	•••••	1.01 .78			
	51	23		.79		.79			
Augusta, Ga	48	17		. 88		. 66			
Savannah (ła	52	17		.72		. 56			
Jacksonville, Fla	56	22		.72	. 33				
Jacksonville, Fla	70	8		. 44		. 03			
Gun States:	40	_		7.10					
Atlanta, Ga	48 53	5 45	•••••	1.16 1.07		.90 .95			
Mobile, Ala	50	30		1.07		1.08			
Montgomery, AlaVicksburg, Miss	51	49		1.24		1.00			
New Orleans, La	56	34		1.13		1.11			
Shreveport La	50	41		1.14		.99			
Fort Smith, Ark	44	37		. 60		. 60			
Little Rock, Ark	47	31		1.03		. 95			
Palestine, Tex	51	47		.80		. 42			
Galveston, Tex	58 55	35 24		1.07		1.07			
Cornus Christi Tov	59	12		. 40 . 70		. 40 . 70			
Brownsville, Tex	62	33		.47		. 47			
Rio Grande City, Tex	63	16		.24		.24			
Ohio Valley and Tennessee:	1								
Memphis, Tenn	44	69	. <b></b>	.95	]	. 88			
Nashville, Tenn	43	10		.86		.73			
Chattanooga, Tenn	46	6		1.18	•••••	1.14			
Knoxville, Tenn	40 39	19		1.02 .96	•••••	.38			
Indianapolis Ind	35		8	.79		.96			
Knoxville, Tenn Louisville, Ky Indianapolis, Ind Cincinnati, Ohio	39		17	.82		. 78 . 75			
Columbus, Ohio	38		40	.80		.57			
Pittsburgh, Pa	36		12	.63					
Lake Region						1			
Oswego, N. Y	32		63	.79	. 02				
Rochester, N. Y	30		36	. 66	.38				
Buffalo, N. Y	32		41	.78	. 05				
Erie, Pa Cleveland, Ohio	34 33		32 19	. 86 . 62	.02	. 05			
Sandusky, Ohio	37		54	.67	.02	. 29			
Toledo, Ohio	34		36	.61	.04	. 20			
Toledo, Ohio Detroit, Mich	33		46	.61	. 22				
Port Huron, Mich	30		38	. 55	. 23				
Marquette Mich	26		53	. 51	. 41				
Grand Haven, Mich	33		43	.63		.02			
Grand Haven, Mich	29		32	.43	.07				
Chicago, Ill	33 23		33 53	. 55	.13	.10			
Upper Mississippi Valley:	43		J. 35			. 10			
St. Paul. Minn	23	l	30	. 31	l	.23			
La Crosse, Wis	28		52	.32		.14			
La Crosse, Wis Davenport, Iowa	32		47	. 39		.24			
Des Moines, Iowa	34		51	.40		.30			
		1	52	.44	. 27	1			
Dubuque, Iowa	30								
Dubuque, Iowa Keokuk, Iowa	33		20	. 48		. 46			
Dubuque, Iowa						. 46 . 68 . 84			

 ${\it Table\ of\ timperature\ and\ rain-fall,\ week\ ended\ December\ 5,\ 1890--Continued.}$ 

Locality.	Mean ter	nperature Fahrenhe	in degrees it.	Rain-fall in inches and hundredths.					
Documey.	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency			
Missouri Valley:					i <del></del>				
Kansas City, Mo	35	. 0	. 0	. 41		.4			
Springfield, Mo	38	28	•	. 39					
Concordia, Kan	32	31		.16					
Omaha, Nebr		01	4	. 26					
Yankton, Dak				.15	.09	. 2			
Valantina Naha			13	.09	.13				
Valentine, Nebr			70	.09	. 13				
Huron, Dak	28		70	.09	. 59				
Extreme Northwest:		i			1				
Moorhead, Minn				.16		.1			
Saint Vincent, Minn	11			.14					
Bismarck, Dak	22			.18					
Buford, Fort, Dak	22		2	. 16		.1			
Rocky Mountain Slope:				1					
Assinniboine, Fort, Mont	29		21	.16		.0			
Helena, Mont	28		13	. 24	. 31				
Custer, Fort, Mont	31		4	.18	.08				
Rapid City, Dak	33		32	.04	.09				
Salt Lake City, Utah		42		.34		. 1			
Cheyenne, Wyo				.06	.01				
North Platte, Nebr		24		.15	.01	.1			
		5		.16					
Dodge City, Kans Santa Fé. N. Mex		18		.18	. 25				
Pacific Coast:	39	10		.10	. 20				
	40	1-			.84				
Olympia, Wash	43	17		. 20					
Portland, Oreg	44	2		.18	. 46				
Roseburg, Oreg	43	26		1.29		.0			
Red Bluff, Cal		11		1.05	.23				
San Francisco, Cal		7		. 96	1.06				
Los Angeles, Cal		19		.63	1.25				
San Diego, Cal	58	26		.38	1.10	l. <b></b>			
Yuma, Ariz		14		.08		.0			



# Rainfall, week ending December 5th 1890.



#### FOREIGN.

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

GREAT BRITAIN—England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended November 22 corresponded to an annual rate of 21.3 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded in Brighton, viz, 15.2, and the highest in Manchester, viz, 33.4 a thousand. Diphtheria caused 3 deaths in Salford, 2 in Manchester, 3 in Birmingham, 3 in Portsmouth, and 2 each in Liverpool, Leicester, and Sheffield.

London.—One thousand seven hundred and sixteen deaths were registered during the week, including measles, 76; scarlet fever, 26; diphtheria, 39; whooping-cough, 33; enteric fever, 23; and diarrhœa and dysentery, 11. The deaths from all causes corresponded to an annual rate of 20.2 a thousand. Diseases of the respiratory organs caused 459 deaths. In greater London 2,134 deaths were registered, corresponding to an annual rate of 19.3 a thousand of the population. In the "outer ring" the deaths included measles, 40; diphtheria, 10; scarlet fever, 5; and whooping-cough, 7.

Newcastle-upon-Tyne.—Two weeks ended November 15, 1890. Population, 163,000. Total deaths, 152, including enteric fever 1 and diphtheria 5.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended November 22, in the 16 principal town districts of Ireland, was 22.5 a thousand of the population. The lowest rate was recorded in Sligo, viz, 0.0, and the highest in Lurgan, viz, 46.2 a thousand. In Dublin and suburbs 157 deaths were registered, including scarlet fever, 1; enteric fever, 4; whooping-cough, 4; diphtheria, 2; and influenza, 1.

Scotland.—The deaths registered in eight principal towns during the week ended November 22 corresponded to an annual rate of 21.3 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Perth, viz, 14.1, and the highest in Greenock, viz, 28.9 a thousand. The aggregate number of deaths registered from all causes was 551, including measles, 16; scarlet fever, 3; diphtheria, 15; whooping-cough, 12; fever, 11; diarrhea, 8; and croup and laryngitis, 9.

France—Rouen.—Month of October, 1890. Population, 106,496. Total deaths, 275, including phthisis pulmonalis, 37; typhus fever, 23; influenza, 3; measles, 27; croup, 6; and whooping-cough, 7.

Spain—Decrease of Cholera.—The following report has been received from the United States consul at Barcelona:

Week ended November 21, 1890. Population of the city of Barcelona, 272,000. Total deaths, 203, including enteric fever 23 and diphtheria 12.

The consul also writes that the medical director informed him that there were no new cases of cholera here, and that he did not expect any more through the winter.

Since the 8th of November no more cases of cholera have appeared either in the city or province of Valencia. The disease appeared altogether in 147 different villages. Corrected returns show that in the province there were 2,943 cases, and 1,493 deaths, while in the city there were 1,128 cases and 651 deaths, making a total of 4,071 cases and 2,144 deaths.

CUBA—Havana.—The United States sanitary inspector sends the following report, dated December 2, 1890:

There were 537 deaths in this city during the month of November.

It is certified that 23 of those deaths were caused by yellow fever, 21 by enteric fever, 15 by so-called pernicious fever, 1 by bilious fever, 4 by paludal fever, 3 by small-pox, 8 by croup and diphtheria, 1 by measles, 1 by hydrophobia, and 1 by la grippe.

Seven of the deaths from yellow fever were among members of the Army and Navy in the military hospital, while the remaining 16 occurred in civil hospitals and different insalutary parts of the city. The cases of small-pox were brought here in the Spanish mail steamers from Spain, which, apparently, are rarely, if ever, subject to quarantine detention at this place.

The weather which is prevailing here now is clear, cool, and delightful.

MEXICO—Guaymas.—Month of October, 1890. Population, 6,600. Total deaths, 19. No deaths were reported from contagious or infectious diseases. Sanitary condition of city is reported as good.

Vera Cruz—Yellow fever.—Week ended November 27, 1890. Population, 23,800. Total deaths, 29, including 5 from yellow fever, concerning which the United States consul writes as follows: "There is no quarantine here against yellow fever, consequently 3 of the above cases were imported, 2 in vessels and 1 from the country."

BRAZIL—Ceara. — Month of October, 1890. Population, 33,000. Total deaths, 97, including 1 from beri-beri.

SWITZERLAND—Lucerne.—Month of October, 1890. Population, 20,500. Total deaths, 29, including 1 from diphtheria. The prevailing diseases during the month have been those of the respiratory system.

ITALY—Milan. — Month of October, 1890. Population, 399,081.

Total deaths, 68, including small-pox, 1; enteric fever, 37; scarlet fever, 1; and diphtheria, 29.

TURKEY—Constantinople.—Month of September, 1890. Total deaths, 762, including 10 from small-pox.

TURKEY IN ASIA—Cholera.—Under date of November 8, 1890, the United States consul reports as follows:

	Cases.	Deaths.
Aleppo, Syria.—Week ended October 30, 1890	40	43
Hamath, Syria.—Week ended November 1, 1890	. —	283
Hamath, Syria.—Week ended November 8, 1890	. , <del></del>	150
Homs, Syria. —Week ended November 8, 1890	101	16

EGYPT.—Week ended November 6, 1890. Total deaths, 690, in cluding phthisis pulmonalis, 50; enteric fever, 7; diphtheria and croup, 7; and whooping-cough, 8.

Japan—Cholera.—The following statistics have been received from the United States consuls at the several places mentioned below:

	Cases.	Deaths.
Hiogo.—Week ended October 18, 1890	101	45
25, 1890	34	13
November 1, 1890	11	-

Nagasaki-Ken.—October 13 to October 24, 1890, there were 104 new cases and 125 deaths. From the outbreak of the epidemic until October 24, 1890, 3,637 cases were reported and 2,452 deaths.

	Cases.	Deaths.
Osaka.—Week ended October 20, 1890	232	232
27, 1890	111	128

Yokohama and adjacent districts.—The United States consul at Kanagawa reports, for the period from October 7 to November 3, 1890, 33 new cases of cholera and 52 deaths in the town of Yokohama, and in the adjacent districts, 64 new cases and 112 deaths.

FIJI ISLANDS—Levuka—Leprosy.—Under date of October 1, 1890, the United States commercial agent writes as follows:

For the information of the Surgeon-General of the Marine-Hospital Service I will say that to my knowledge there is neither an epidemic, contagious, or infectious disease prevailing (or existing) at present in this colony, except a kind of leprosy, which is entirely among the natives.

No white person has been known to contract the disease in Fiji.

Dysentery is the most prevalent and fatal disease among the people here, but that does not prevail to any great extent.

NEW ZEALAND.—Month of August, 1890. Reports to the registrargeneral from 18 cities and towns, having an aggregate population of 178,368, show a total of 169 deaths, including scarlet fever, 2; enteric fever, 2; and whooping-cough, 2.

### MORTALITY TABLE, FOREIGN CITIES.

		g l	from .			1	Deat	hs fr	om-	-		
Cities.	Week ended.	Estimated population.	Total deaths fall causes.	Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-
ondon	Nov. 15	5, 758, 500	2, 154					24	18	<b>52</b>	103	ļ
ParisLiverpool	Nov. 15 Nov. 15	2, 260, 945	979 256			1		18	$\frac{3}{23}$	24	12	
asgow	Nov. 15	613, 463 545, 678	232					4	1	1		
Brussels	Nov. 15	469, 459	173			5		2	ĩ			
Vorcow	Nov. 8	469, 459 455, 852	234			5		1	8	9		ļ
lamburg	Nov. 8	455,000	234					5	1	6		
alcutta	Oct. 25	433, 219	225 38	3			1	•••••	9	1 21		
Buda PesthBuda Pesth	Nov. 12 Nov. 19	422,377 $422,377$	42						11	17		
msterdam	Nov. 8	406, 402	163					1		9		
msterdam	Nov 15	406, 402	168		<i></i>		1		1	8		٠.
yons	Nov. 15	401, 930	179					3		7		į
lonen hagen	Nov. 15	312, 387 298, 000	123 135					1	3 2	4 2		١
Aunich	Oct. 4 Oct. 11	298,000	147					1	1	4		i
lunich	Oct. 18	298,000	124					î	î	5		
Aunich	Oct. 25	298,000 298,000	148					2	3	9		١.,
ologne	Nov. 8	285, 403	119			ļ	1		٠٠:::٠٠	2	4	ì
)dessa	Nov. 8	276, 300	167		·····			7	15	2 4	i	
Odessa Edinburgh		276, 300 271, 135	120 96			•••••		11	8	5	1	1
Oresden	Nov. 8 Nov. 8	269,000	90									1
alermo	Nov. 15	250,000	70				l					
ntwern	Nov. 15	232, 418 232, 248	148			ļ		2	2	1	ļ	.
Bristol	NOV. 15	232, 248	83						1		ļ	
Bristol	Nov. 22	232, 248	87 86		· · · · · ·			1	3	•••••	·····	· ··
Selfast Prague	Nov. 15	232, 222 188, 992	104			•••••		1	2	5		١
rague	Nov. 8 Nov. 15	188, 992	97			1		1	ĩ	2		1.
enoa	Nov. 15	180.600	86			ī	3		ļ	1		
<del>l</del> enoa	Nov. 22	180, 616 170, 733 160, 600	91			.	2		····	1	ļ	١.
Frankfort-on-the-Main Konigsberg	Nov. 8	170, 733	36		·	·			1	3		.
Conigsberg	Nov. 9	160,600	12	·	•	·	·····			3		١.
Conigsperg	Nov. 16 Nov. 8	160,600 158,054	80		• • • • • • • • • • • • • • • • • • • •	······	1			3	1	١
Konigsberg Frieste Venice	Oct. 11	156,800	75			12	1	2	4			.]:
lanover	Nov. 8	155,000	50							3		٠,
Ianover	Nov. 15	155,000	44					1		. 3		٠.
hent	Nov. 15	152, 395 143, 300 133, 250	58 51			•		2	2	1	· ·· ···	• •
Christiania Funchal		193,300	30		- {	2		·····	_	-		1.
Vurembero	Nov. 15 Oct. 11	131, 161	20 56 36								1	
tuttgart	Nov. 15		36							6		. .
Bremen	Nov. 8	124,000	37				. 3				.	
Nuremberg	Nov. 8	123,000	49		•	•	. 1			$\begin{array}{cc} & 1 \\ & 2 \end{array}$	1	1
Danzig Danzig	NOV. 8	115, 140	45 47		• • • • • • • • • • • • • • • • • • • •	-	· ·····			1		: :
Barmen	Nov. 8	115, 140 113, 000	41									.]
Havre	Nov. 15	113,000 112,074	43					1				
Aix-la-Chapelle	Nov. 16	110,693	37								.	٠.
Catania	Nov. 16	109,000	49		• • • • • • • • • • • • • • • • • • • •	•	· ·····	. 1	1	2	.	·
Crefeld	Nov. 15 Nov. 22	108,000 108,000	72		•			•		. 3	1	
Stettin	Nov. 8	105,000	71 51				1	2	4			1:
Stettin	Nov. 15	105, 122 102, 782 91, 323	54							. 5		١.
inthem huro	NOV 15	102, 782	47					.	5			. .
Zurich	Nov. 15	91, 323	11			· · · · · ·	. 1		. 1		· ····	·
Messina	Nov. 15	79,971	36 40		• • • • • • • • • • • • • • • • • • • •		1	1 1	ï	. 4		1
Edinburgh Mannheim	Nov. 8 Nov. 15	78, 538 70, 000	22			: :::::			11			1:
M avence	NOV. S	65, 802	16							.	.	.[.
Cadiz	Nov. 8	57, 157	32				.[			3		٠.
Cadiz Trapani Marsala	Nov. 15	43,095	7				· ····					-
Marsala	Nov. 15	40, 131	13		• • • • • • • • • • • • • • • • • • • •	•	-	. 1			1	•
Reichenberg	Nov. 15		21 11				1		1		1	
Cardenas	Nov. 23 Nov. 22	25,000	16				]					
CuraçoaVera Cruz	Nov. 20	23, 800	29		. 2	1	.		.			
Gibraltar	Nov. 16	23,681	8									
Girgenti Iquique		23,547	11									- 1

## MORTALITY TABLE, FOREIGN CITIES—CONTINUED.

		rals.	from			1	Deat	hs fr	om-	-		
Cities.	Week ended.	Estimated population.	Total deaths fall causes.	Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-
Iquique	Oct. 18	20,000	20			 			3	<b></b>		
Iquique		20,000	22			1		1				1
Iquique		20,000	19					-	2			
Iduique	Nov. 8	20,000	24			1		1	ī		,	
Licata	Nov. 15	19,000	15		•••••	1		1 -	i	2		
Victoria, B. C	Nov. 22	18,500	8						•	-		
		18, 172	3								******	
Kingston, Can								•••••			•••••	
Matamoras	Nov. 22	16,000	. 8	•••••		1				•••••	•••••	ļ
Matamoras	Nov. 29	16,000	10	•••••				·····	1			
Rio Grande do Sul		16,000	13			2						
Antigua	Oct. 11	15, 847	11								•••••	ļ
Antigua		15, 847	14							· · · · · ·		
Antigua	Oct. 25	15, 847	12									
Antigua	Nov. 1	15,847	9									·
Sagua	Nov. 22	15,605	8		ļ							
Port Stanley and St. Thomas	Nov. 15	11,000	2		l							
Port Stanley and St. Thomas	Nov. 22	11,000	2		l							
Queenstown	Nov. 22	10, 340	6	1								
Guelph	Nov. 30	10, 173	3									1
Puerto Cabello		10,000	6	1								1
Puerto Cabello	Nov. 15	10,000	6							1		
Tampico		9,000	11							1		
Tuxpan	Nov. 15	9,000	18									
Chatham, Ont	Nov. 29	8, 730	4									
La Guayra	Nov. 15	7, 428	9									
	Nov. 22		8									• • • • • • • • • • • • • • • • • • • •
La Guayra		7, 428			1	• • • • • • • • • • • • • • • • • • • •		1	,	1	·····	•
Santiago	Oct. 7	4, 300	5			• • • • • • • •						
Santiago	Oct. 14	4,300	5									• ••••
Santiago	Oct. 21	4,300	5			• • • • • • • • • • • • • • • • • • • •						•   • • • •
Santiago	Oct. 28	4, 300	4			.,						• • • • • •
Coaticook	Nov. 22	3,800	3									
Coaticook	Nov. 29	3, 800	2					. 1	1	1		

OFFICIAL:

JOHN B. HAMILTON,

Supervising Surgeon-General, Marine-Hospital Service.