

ABSTRACT OF SANITARY REPORTS.

VOL. VI. WASHINGTON, D. C., JANUARY 23, 1891. No. 4.

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

UNITED STATES.

Official experiments with the Koch "lymph."

The President has presented to this Bureau two vials of the Koch "lymph" with instructions to make a careful test of its merits.

The instructions have been prepared and will be published in next week's issue.

SPECIAL REPORTS.

FLORIDA—*Removal of restrictions upon the importation of stock from Georgia.*—The following has been received from the State health officer, dated January 15, 1891:

All restrictions placed by the State board of health of Florida upon the importation of stock from the State of Georgia into the State of Florida because of the existence of glanders in certain parts of that State (Georgia) are hereby removed.

GEORGIA—*Savannah—Smallpox.*—P. A. Surgeon Carrington, under date of January 12, 1891, reports 2 additional cases of smallpox, making a total of 5 cases since December 28, 1890. These 2 cases are in the family in which the first case occurred, and were probably contracted from that case.

ILLINOIS—*Cairo—Scarlet fever.*—Asst. Surgeon R. M. Woodward, under date of January 18, 1891, writes as follows:

I have the honor to report epidemic scarlet fever at this place. There are probably a dozen cases under treatment at present.

Infected houses are placarded, isolation of the sick practiced, and fumigation of the premises conducted after recovery.

No deaths reported yet.

WASHINGTON—*Port Townsend—Smallpox-infected vessel in quarantine.*—Under date of January 3, 1891, Acting Assistant Surgeon Conover reports the arrival of the vessel *Primrose Hill*, ninety-eight days from Rio de Janeiro. When three days out, smallpox appeared, of which there were 10 cases and 2 deaths. The captain stated that he had burned all the affected clothing and fumigated the ship, and that no case of sickness

had occurred within the forty days immediately preceding the arrival of the vessel at Port Townsend.

The ship was fumigated at Port Townsend and allowed to proceed to Tacoma, where she is undergoing ten days' quarantine with guard on board to prevent the crew going ashore.

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

CALIFORNIA—*Sacramento*.—Month of December, 1890. Population, 30,000. Total deaths, 39, including phthisis pulmonalis, 5; diphtheria, 1; and scarlet fever, 1.

San Francisco.—Month of December, 1890. Population, 300,000. Total deaths, 580, including phthisis pulmonalis, 79; enteric fever, 10; smallpox, 3; diphtheria, 33; croup, 20; and whooping cough, 1.

CONNECTICUT.—Month of December, 1890. Reports to the State board of health from 168 cities and towns, having an aggregate population of 744,278, show a total of 999 deaths, including phthisis pulmonalis, 111; enteric fever, 21; scarlet fever, 5; diphtheria and croup, 43; measles, 2; and whooping cough, 6.

New Haven.—Month of December, 1890. Population, 86,000. Total deaths, 148, including phthisis pulmonalis, 25; enteric fever, 1; scarlet fever, 3; and diphtheria and membranous croup, 15.

ILLINOIS—*Chicago*.—Month of December, 1890. Population, 1,100,000. Total deaths, 1,700, including phthisis pulmonalis, 150; enteric fever, 47; scarlet fever, 23; diphtheria, 90; croup, 49; measles, 20; and whooping-cough, 19.

IOWA—*Keokuk*.—Month of December, 1890. Population, 18,589. Total deaths, 18, including phthisis pulmonalis, 1; enteric fever, 1; and diphtheria, 3.

Month of November, 1890. The following mortuary report is taken from the *Monthly Bulletin* for December:

COUNCIL BLUFFS.—November. Consumption, 1; pneumonia, 2; diphtheria, 9; croup, 2. Total deaths, 26. Population, 28,000. Death rate per 1,000, 0.92.

BURLINGTON.—November. Consumption, 2; diphtheria, 3; typhoid fever, 1. Total deaths, 21. Population, 22,528. Death rate, 0.95.

DAVENPORT.—November. Diphtheria, 2; membranous croup, 2; typhoid fever, 1; consumption, 3; pneumonia, 1. Total deaths, 34. Population, 33,715. Death rate, 1.8.

DES MOINES.—November. Diphtheria, 18; membranous croup, 3; consumption, 4; pneumonia, 2; typhoid fever, 1; meningitis, 1. Total deaths, 74. Population, 53,000. Death rate per 1,000, 1.2.

DUBUQUE.—November. Diphtheria, 3; consumption, 1; pneumonia, 1; typhoid fever, 1. Total deaths, 24. Population, 30,147. Death rate per 1,000, 0.71.

KEOKUK.—November. Diphtheria, 6; meningitis, 1; consumption, 1. Total deaths, 15. Population, 14,500. Death rate per 1,000, 1.5.

MUSCATINE.—November. Diphtheria, 3; pneumonia, 1. Total deaths, 10. Population, 11,432. Death rate per 1,000, 0.9.

SIoux CITY.—October. Consumption, 3; pneumonia, 1; diphtheria, 8; scarlet fever, 1; typhoid fever, 6. Total deaths, 38. Population, 37,862. Death rate per 1,000, 1.13.

Diphtheria is reported as having become widely prevalent over the State, and in several localities epidemic. Two instances have been reported where the disease could be traced to no other source than to cats. The family was so situated that infection was deemed impossible by exposure from other persons. A distant neighbor's cat and the family cat were sick about the premises with all the symptoms of diphtheria, and finally died. Soon after, the children had the disease. In another case, three dead cats were found under the floor. The premises were isolated. It was remembered that prior to the disappearance of the cats they were sick several days. They were removed, and the disease subsided. The sanitary surroundings and water supply of the premises were unusually good, thus fixing the cats as undoubtedly the source of the disease.

The cat will be found a source of this disease to a much greater extent than has been hitherto supposed.

The record of investigation shows that not only cats, but chickens, are peculiarly susceptible of this disease.

KENTUCKY—*Louisville*.—Month ending January 3, 1891. Population, 227,000. Total deaths, 273, including phthisis pulmonalis, 30; enteric fever, 13; scarlet fever, 2; and diphtheria, 13.

MASSACHUSETTS—*Worcester*.—Month of December, 1890. Population, 85,000. Total deaths, 124, including phthisis pulmonalis, 23; scarlet fever, 1; diphtheria, 3; and membranous croup, 1.

MICHIGAN.—Week ended January 10, 1890. Reports to the State board of health, Lansing, from 54 observers, indicate that inflammation of kidney and whooping cough increased, and that typho-malarial fever, inflammation of bowels, inflammation of brain, cholera infantum, diphtheria, membranous croup, erysipelas, measles, cerebro-spinal meningitis, scarlet fever, and typhoid fever decreased in area of prevalence.

Diphtheria was reported present, during the week, at 30 places, scarlet fever at 42, enteric fever at 19, and measles at 32.

MINNESOTA—*Minneapolis*.—Month of December, 1890. Population, 164,738. Total deaths, 209, including phthisis pulmonalis, 14; scarlet fever, 1; diphtheria, 17; and whooping cough, 2.

Winona.—Month of December, 1890. Population, 19,000. Total deaths, 25, including diphtheria 6 and whooping cough 1.

OHIO.—Month of November, 1890. Reports to the State board of health from 63 cities and towns, having an aggregate population of

Table of temperature and rainfall, week ended January 9, 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.....	22		7	.91		.13
Portland, Me.....	22		14	.77		.20
Boston, Mass.....	28		28	.94		.25
Block Island, R. I.....	33		25	.98		.02
Middle Atlantic States:						
Albany, N. Y.....	25		68	.63	.19	
New York, N. Y.....	32		43	.84		.70
Philadelphia, Pa.....	32		33	.75		.75
Atlantic City, N. J.....	32		42	.90		.90
Baltimore, Md.....	34		33	.70		.70
Washington, D. C.....	33		25	.74		.74
Lynchburg, Va.....	35		21	.92		.92
Norfolk, Va.....	40		42	.84		.84
South Atlantic States:						
Charlotte, N. C.....	39		13	1.19		1.09
Hatteras, N. C.....	44		38	1.40		1.40
Wilmington, N. C.....	45		43	.88		.88
Charleston, S. C.....	48		33	.91		.90
Augusta, Ga.....	46		34	.96		.96
Savannah, Ga.....	49		40	.84		.84
Jacksonville, Fla.....	53		20	.77		.77
Key West, Fla.....	69		28	.38		.38
Gulf States:						
Pensacola, Fla.....	51		5	1.12		.65
Mobile, Ala.....	49	1		1.12		.33
Montgomery, Ala.....	46		27	1.12		.39
Vicksburg, Miss.....	43	31		1.19	.94	
New Orleans, La.....	52	20		1.23		.49
Shreveport, La.....	42	35		1.12	.95	
Fort Smith, Ark.....	35	32		.50	.61	
Little Rock, Ark.....	39	20		1.05	1.05	
Palestine, Tex.....	40	0	0	.95	4.53	
Galveston, Tex.....	51	56		.91	.91	
San Antonio, Tex.....	50	42		.35	.60	
Corpus Christi, Tex.....	51	73		.85		.85
Brownsville, Tex.....	55	98		.42		.10
Rio Grande City, Tex.....	53	98		.28	.30	
Ohio Valley and Tennessee:						
Memphis, Tenn.....	35	39		1.21		.76
Nashville, Tenn.....	35	3		1.14		.37
Chattanooga, Tenn.....	39		14	1.49		.82
Knoxville, Tenn.....	36		22	1.27		.69
Louisville, Ky.....	31	16		.91		.57
Indianapolis, Ind.....	27	15		.70		.46
Cincinnati, Ohio.....	31		8	.77		.52
Columbus, Ohio.....	27		7	.77		.68
Pittsburgh, Pa.....	29		15	.70		.65
Lake Region:						
Oswego, N. Y.....	25		51	.70		.64
Rochester, N. Y.....	25		48	.70		.14
Buffalo, N. Y.....	28		54	.67		.59
Erie, Pa.....	28		30	.77		.63
Cleveland, Ohio.....	25		7	.56		.49
Sandusky, Ohio.....	26		21	.49		.45
Toledo, Ohio.....	26		12	.49		.43
Detroit, Mich.....	26		28	.49		.47
Port Huron, Mich.....	22	1		.49		.35
Alpena, Mich.....	19		8	.56		.56
Marquette, Mich.....	17	49		.39	.07	
Grand Haven, Mich.....	25		13	.56		.54
Milwaukee, Wis.....	20	42		.49		.48
Chicago, Ill.....	24	27		.49		.47
Duluth, Minn.....	11	85		.28		.28
Upper Mississippi Valley:						
St. Paul, Minn.....	11	51		.25		.25
La Crosse, Wis.....	15	32		.30		.30
Dubuque, Iowa.....	18	27		.42		.42
Davenport, Iowa.....	18	29		.35		.21
Des Moines, Iowa.....	18	43		.35		.35
Keokuk, Iowa.....	20	53		.42		.24
Springfield, Ill.....	25	28		.50	.10	
Cairo, Ill.....	31	25		.89		.53
St. Louis, Mo.....	27	40		.49		.11
Missouri Valley:						
Springfield, Mo.....	30	34		.51		.27

Table of temperature and rainfall, week ended January 9, 1891—Continued.

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Missouri Valley—Continued.						
Kansas City, Mo.....	27	34		.27		.05
Leavenworth, Kans.....	25	38		.29	.04	
Concordia, Kans.....	24	55		.21	.63	
Omaha, Nebr.....	19	68		.18	.17	
Valentine, Nebr.....	16	69		.14	.02	
Huron, Dak.....	8	123		.14		.14
Sully, Fort, Dak.....	10					
Extreme Northwest:						
Moorhead, Minn.....	2	114		.14		.05
Bismarck, Dak.....	5	122		.14		.14
Buford, Fort, Dak.....	3	110		.14		.14
Rocky Mountain Slope:						
Assiniboine, Fort, Mont.....	4	126		.21		.20
Helena, Mont.....	17	56		.28		.20
Custer, Fort, Mont.....	13	56		.21		.20
Salt Lake City, Utah.....	29	36		.35		.27
Cheyenne, Wyo.....	25	0	0	.07	.76	
North Platte, Nebr.....	20	61		.14		
Denver, Colo.....	28		5	.14	.73	
Montrose.....	23		42	.14	2.60	
Dodge City, Kans.....	25	54		.14	.56	
Aberlona.....	38	60		.21	.55	
Sill, Fort, Ind. T.....	30	84		.26	1.60	
El Paso, Tex.....	41	14		.14	.10	
Santa Fé, N. Mex.....	27		21	.07	.50	
Pacific Coast:						
Olympia, Wash.....	38	0	0	1.99		1.00
Portland, Ore.....	39	14		1.72		.30
Roseburg, Ore.....	41	0	0	1.54	0	
Red Bluff, Cal.....	45		14	1.12		1.00
Sacramento, Cal.....	46	0	0	1.19		.50
San Francisco, Cal.....	50	0	0	1.19		.40
Los Angeles, Cal.....	53		1	.68		.44
San Diego, Cal.....	54		14	.45		.30
Yuma, Ariz.....	53		28	.07		.07

Table of temperature and rainfall, week ended January 16, 1891.

New England States:						
Eastport, Me.....	20	8		.91		.10
Portland, Me.....	21	5		.77	1.65	
Boston, Mass.....	26	35		.98		.34
Block Island, R. I.....	30	21		.98		.31
Middle Atlantic States:						
Albany, N. Y.....	24		2	.66	.98	
New York City.....	30	37		.86	.32	
Philadelphia, Pa.....	31	46		.77		.02
Atlantic City, N. J.....	31	28		.84		.26
Baltimore, Md.....	33	31		.70	.74	
Washington City.....	31	46		.77	.71	
Lynchburg, Va.....	37	12		.98	.80	
Norfolk, Va.....	40	27		.86		.17
South Atlantic States:						
Charlotte, N. C.....	41		1	1.26	.53	
Wilmington, N. C.....	47		5	.91	2.71	
Charleston, S. C.....	50		3	.93	.34	
Augusta, Ga.....	46		1	1.02	1.00	
Savannah, Ga.....	51		20	.78		.02
Jacksonville, Fla.....	55		15	.77	.08	
Key West, Fla.....	70		28	.49		.25
Gulf States:						
Atlanta, Ga.....	42		23	1.46	.57	
Pensacola, Fla.....	52		30	1.12	.28	
Mobile, Ala.....	50		35	1.12		.20
Montgomery, Ala.....	47		28	1.12		.40
Vicksburg, Miss.....	43		20	1.24	.03	
New Orleans, La.....	53		40	1.26		.53
Shreveport, La.....	42		19	1.12		.38
Fort Smith, Ark.....	39	10		.49	.28	
Little Rock, Ark.....	34		11	1.07		.43
Palestine, Tex.....	41		14	1.03		
Galveston, Tex.....	50		32	.91	1.12	
San Antonio, Tex.....	50			.35	1.40	
Corpus Christi, Tex.....	53		37	.91		.26

Table of temperature and rainfall, week ended January 16, 1891—Continued.

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Gulf States—Continued.						
Brownsville, Tex.....	56	.....	0	.47	.....	.40
Rio Grande City, Tex.....	55	.....	28	.28	1.70	.....
Ohio Valley and Tennessee:						
Memphis, Tenn.....	35	18	.....	1.30	.....	.59
Nashville, Tenn.....	35	29	.....	1.22	.....	.42
Chattanooga, Tenn.....	40	3	.....	1.65	.....	.25
Knoxville, Tenn.....	37	16	.....	1.33	.....	.34
Louisville, Ky.....	31	41	.....	.91	.13	.....
Indianapolis, Ind.....	26	33	.....	.70	.....	.27
Cincinnati, Ohio.....	31	18	.....	.77	.....	.07
Columbus, Ohio.....	26	33	.....	.77	.25	.....
Pittsburgh, Pa.....	27	48	.....	.77	.....	.03
Lake Region:						
Oswego, N. Y.....	23	.....	25	.70	.58	.....
Rochester, N. Y.....	24	.....	1	.76	1.13	.....
Buffalo, N. Y.....	24	11	.....	.63	.26	.....
Erie, Pa.....	25	20	.....	.77	.04	.....
Cleveland, Ohio.....	24	13	.....	.56	.25	.....
Sandusky, Ohio.....	24	31	.....	.49	.04	.....
Toledo, Ohio.....	24	29	.....	.49	.....	.29
Detroit, Mich.....	24	14	.....	.42	.....	.38
Port Huron, Mich.....	20	23	.....	.46	.....	.28
Alpena, Mich.....	17	16	.....	.62	.....	.24
Marquette, Mich.....	14	6	.....	.35	.56	.....
Grand Haven, Mich.....	23	22	.....	.56	.....	.34
Milwaukee, Wis.....	17	47	.....	.53	.....	.52
Chicago, Ill.....	22	45	.....	.49	.....	.47
Duluth, Minn.....	9	22	.....	.28	.02	.....
Upper Mississippi Valley:						
St. Paul, Minn.....	8	42	.....	.21	.....	.21
La Crosse, Wis.....	11	59	.....	.28	.....	.26
Dubuque, Iowa.....	14	56	.....	.42	.....	.42
Davenport, Iowa.....	18	53	.....	.36	.....	.34
Des Moines, Iowa.....	15	81	.....	.32	.....	.32
Keokuk, Iowa.....	19	55	.....	.40	.....	.39
Springfield, Ill.....	24	33	.....	.49	.....	.48
Cairo, Ill.....	31	30	.....	.91	.....	.28
St. Louis, Mo.....	27	40	.....	.54	.....	.46
Missouri Valley:						
Springfield, Mo.....	27	28	.....	.49	.28	.....
Kansas City, Mo.....	24	30	.....	.23	.....	.23
Leavenworth, Kans.....	22	50	.....	.28	.....	.28
Concordia, Kans.....	19	49	.....	.27	.....	.27
Omaha, Nebr.....	15	73	.....	.14	.....	.14
Valentine, Nebr.....	12	100	.....	.14	.....	.12
Huron, Dak.....	3	110	.....	.12	.....	.11
Extreme Northwest:						
Moorhead, Minn.....	2	78	.....	.19	.08	.....
Bismarck, Dak.....	1	130	.....	.13	.....	.13
Buford, Fort, Dak.....	1	117	.....	.14	.....	.14
Rocky Mountain Slope:						
Assinniboine, Fort, Mont.....	2	196	.....	.21	.....	.21
Helena, Mont.....	13	42	.....	.35	.....	.30
Custer, Fort, Mont.....	7	126	.....	.21	.....	.20
Salt Lake City, Utah.....	26	.....	11	.35	.....	.11
Cheyenne, Wyo.....	23	8	.....	.04	.....	.02
North Platte, Nebr.....	15	56	.....	.14	.....	.13
Denver, Colo.....	24	.....	26	.14	.....	.14
Pueblo, Colo.....	26	.....	58	.07	.....	.07
Montrose, Colo.....	24	.....	112	.14	.....	.14
Sill, Fort, Ind. T.....	30	0	0	.21	.10	.....
Abilene, Tex.....	39	.....	45	.21	.71	.....
El Paso, Tex.....	43	.....	70	.14	.....	.10
Santa Fé, N. Mex.....	27	.....	73	.11	0	.02
Fort Grant, Tex.....	42	.....	56	.19	.....	.10
Pacific Coast:						
Spokane Falls, Wash.....	79	70	.....	.63	.....	.50
Olympia, Wash.....	38	.....	3	1.91	.....	.....
Portland, Oreg.....	37	14	.....	1.68	.....	1.40
Roseburg, Oreg.....	40	.....	28	1.54	.....	1.10
Red Bluff, Cal.....	44	0	0	1.06	.....	1.00
Sacramento, Cal.....	44	.....	14	.91	.....	.91
San Francisco, Cal.....	49	0	0	1.14	.....	1.10
Los Angeles, Cal.....	52	0	0	.63	.....	.60
San Diego, Cal.....	53	.....	14	.42	.....	.40
Yuma, Ariz.....	52	.....	28	.07	.....	.07

FOREIGN.

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

SPECIAL REPORTS.

Sanitary Commission at Constantinople—Report of U. S. commissioner.

CONSTANTINOPLE, December 26, 1890.

SIR: I beg to inclose Report No. 13 of Doctor Zavitziano, representative of this legation on the Sanitary Commission of Constantinople.

I have the honor, etc.,

SOLOMON HIRSCH.

To the Hon. JAMES G. BLAINE,
Secretary of State, Washington, D. C.

[Inclosure.]

Sanitary Report No. 13.

Cholera is continually spreading beyond the already mentioned localities. On the north we see it making its appearance at Marash, Keulek, and Yershin. We heard once that some deaths of cholera occurred at Malattia and Kharpaot, but this news has been contradicted. At Orfa on the northeast of Aleppo, cholera is continually raging, and the mortality by cholera is high for a place of 40,000 inhabitants. It is feared that cholera will again make its appearance at Diarbekir, where they have established a cordon against the travelers coming from Orfa.

Near Nezhne, at Yershin 5 deaths from cholera occurred. At Adana there is an average of 4 deaths per day.

The climate of that country is mild, even the winter being hot. Since the 21st of November, 62 deaths occurred at Adana and 68 between Marash and Keulek.

From the first appearance of the epidemic in the vilayet of Aleppo the official number of deaths is 2,113.

At Hama and Homs there are no fresh attacks since the 8th of December, but an outbreak of the epidemic occurred at Tripoli on the 11th instant, followed by 1 death, and since that day 44 deaths have occurred. Besides the 11 deaths at Clemesse, near Lataquie, no new cases have been noticed in that locality.

In my report, No. 9, I have written about a sickness which was raging at Benis-sheir in the Yemen. The board of health has received notice that that illness was cholera. But I can state nothing further regarding it, having no details.

The health of the capital has nothing peculiar in its state except the scarlet fever, which is, as I have written in my last report, rather sporadic than epidemic. Small-pox and a few cases of typhoid fever are a daily occurrence. Several cases of congestion of the lungs, owing to the cold dampness of the season, exist.

SP. C. ZAVITZIANO.

TURKEY IN ASIA—*Vessel sailing from cholera-infected district bound for the United States.*—The United States consular agent at Aleppo, Syria, reports that the Italian bark *Simpatia* sailed on December 7, 1890, from Alexandretta, Syria, where cholera still prevails, bound for the port of New York.

BRAZIL—Para—Yellow fever, leprosy, and statement of mortality for December, 1890.—The United States consul, under date of January 3, 1891, transmits the following:

Para is the last port of call in Brazil for vessels bound for New York, and thus becomes most important as regards sanitary relations between the two countries.

American vessels call at Barbadoes en route for New York, and as that port is a health resort, the authorities there are rigidly exemplary in the enforcement of quarantine regulations; but a clean bill of health from that port should not in any way neutralize the force of the bill of health from Para.

As it is now midwinter in New York, the fear of contagion from Para yellow fever is diminished; however, the rules for issuing consular bills of health are supposed to remain the same the year round.

As already stated in previous health reports, the only statistics obtainable at this port, with regard to the state of the public health, are gathered from the list of burial permits in the public cemetery. That embraces only deaths occurring within the city limits. Of the number of cases that recover nothing is known.

Statement of mortality in Para for the month of December, 1890.—Still-born, or dying at birth, 23; pulmonary tuberculosis, 20; yellow fever, 7; pernicious fever, 6; American typhus, 6; remittent bilious fever, 1; intermittent fever, 8; malarial fever, 2; remittent fever, 2; fevers (unspecified), 10; malarial cachexy, 10; hepatitis, 8; convulsions, 11; enteritis, 10; beri-beri, 9; leprosy, 1; other diseases, 59. Total, 193.

It is stated by some of the physicians in Para that yellow fever, American typhus, pernicious fever, and remittent bilious fever are one and the same thing, and in the diagnosis of yellow fever they use these different names in order to not let the people become alarmed by the thought that the disease is becoming epidemic.

I have grouped these four diseases together, and they give a total of twenty (20) deaths from yellow fever this month of December in this city, being just twice as many as occurred during the previous month of November, and 10½ per cent. of the entire mortality.

But the actual number of cases of yellow fever has been much greater; for with my comparatively limited opportunities for getting into sick-rooms, I have met several cases of yellow fever this month who are now convalescent.

The total of deaths from fevers and other diseases of malarial or kindred origin is 60, or about 31 per cent. of the mortality all told.

Beri-beri, which last January commenced the year with only 4 deaths in the month, and gradually increased its monthly rate, until in July alone it counted 25, has gradually fallen back until this month records only 9 deaths from beri-beri.

Leprosy scores one death this month. The total for the year is 21, or about 1¼ per cent. of the entire mortality. When a leper dies of any other disease, to which they frequently succumb, because of their debilitated physical condition, the matter of their leprosy is not mentioned in the statistics.

Consequently, as leprosy is a life-long disease, or approximately so, it may be calculated that at least 1¼ per cent. of the population are lepers.

These mingle freely with the rest of the population, while numbers of

lepers are found in business houses, various trades, and among the better classes of society.

* * * * *

There is not enough public sentiment in favor of the segregation of the lepers to make it possible for the Government to take any radical steps in the matter. Public men here acknowledge the necessity of such segregation, but are powerless to act in the case, for the opposition party, whichever party it might be, would certainly stir up public sympathy for the respectable people thus excluded from society, and against the party in power.

CANADA—*Three Rivers*.—Month of December, 1890. Population, 8,284. Total deaths, 12. No deaths from contagious diseases were reported.

CHINA—*Hong-Kong*.—Month of October, 1890. Total deaths, 467, including phthisis 29 and beri-beri 15.

CUBA—*Havana*.—Week ended January 8, 1891. The United States sanitary inspector reports 131 deaths, including 3 from yellow fever (12 new cases), 2 from enteric fever, 1 from so-called pernicious fever, 1 from croup, and 2 from glanders.

Eight of the 12 new cases of yellow fever occurred at the military hospital.

ECUADOR—*Guayaquil*—*Smallpox*.—The United States consul-general reports 30 deaths from smallpox during the week ended November 28, 1890, and 28 deaths during the week ended December 5, 1890.

EGYPT.—Week ended December 4, 1890. The towns in upper and lower Egypt, including Gizeh and the Suez Canal, show a total of 757 deaths, including phthisis pulmonalis, 61; enteric fever, 16; smallpox, 1; diphtheria and croup, 5; and whooping cough, 8.

Week ended December 18, 1890. Total deaths, 840, including phthisis pulmonalis, 66; enteric fever, 13; measles, 1; diphtheria and croup, 9; and whooping cough, 10.

FRANCE—*Rouen*.—Month of November, 1890. Population, 106,496. Total deaths, 229, including phthisis pulmonalis, 34; enteric fever, 15; typhus fever, 23; measles, 27; croup, 6; and whooping cough, 7.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 28 great towns of England and Wales during the week ended January 3 corresponded to an annual rate of 28.7 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded in Leicester, viz, 16.2, and the highest in Preston, viz, 43.6 a thousand. Diphtheria caused 3 deaths in Manchester, and 2 each in Oldham and Leeds.

London.—Two thousand five hundred and sixteen deaths were registered during the week, including measles, 86; scarlet fever, 19; diphtheria, 25; whooping cough, 42; enteric fever, 17; and diarrhœa and

dysentery, 20. The deaths from all causes corresponded to an annual rate of 29.7 a thousand. Diseases of the respiratory organs caused 927 deaths. In greater London 3,122 deaths were registered, corresponding to an annual rate of 28.1 a thousand of the population. In the "outer ring" the deaths included measles, 26; whooping cough, 11; diphtheria, 6; and fever, 5.

Newcastle-upon-Tyne.—Two weeks ended December 27, 1890. Population, 145,356. Total number of deaths, 4, including enteric fever, 1; scarlet fever, 1; and diphtheria, 2.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended January 3, in the 16 principal town districts of Ireland, was 36.1 a thousand of the population. The lowest rate was recorded in Lisburn, viz, 19.3, and the highest in Lurgan, viz, 51.3 a thousand. In Dublin and suburbs 275 deaths were registered, including enteric fever, 7; measles, 2; and whooping cough, 2.

Scotland.—The deaths registered in eight principal towns during the week ended January 3 corresponded to an annual rate of 24.8 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Leith, viz, 14.6, and the highest in Glasgow, viz, 30.2 a thousand. The aggregate number of deaths registered from all causes was 643, including measles, 12; scarlet fever, 4; diphtheria, 6; whooping cough, 22; fever, 14; and diarrhoea, 7.

ITALY—Florence—Enteric fever.—The United States consul, under date of January 5, 1891, reports many cases of enteric fever in a mild form in the city. It is not epidemic in its character, but arises from local causes.

JAPAN—Hiogo—Cholera.—The United States consul sends the following report, dated December 13, 1890:

	<i>Cases.</i>	<i>Deaths.</i>
Week ended November 22, 1890.....	5	3
29, 1890.....	1	1

MEXICO—Paso del Norte.—Month ended January 13, 1891. Population, 10,000. Total deaths, 19, including enteric fever 1 and diphtheria 1.

SWITZERLAND—Zurich.—Month of November, 1890. Population, 91,323. Total deaths, 139, including phthisis pulmonalis, 22, diphtheria and croup, 1; typhus fever, 1; and whooping cough, 2.

TURKEY—Constantinople—Smallpox.—Month of November, 1890. Total deaths, 778, including 63 from smallpox.

TURKEY IN ASIA—Cholera.—The United States consul at Beirut, Syria, reports 140 cases of cholera in Tripoli, Syria, and 103 deaths therefrom, during the week ended December 22, 1890.

Abstract of foreign medical opinions and investigations regarding the Koch lymph.

BELGIUM—Middel-kerke.—At a meeting of the Academy of Medicine of Belgium, December 27, 1890, Doctor Casse reported the treatment by the Koch method of 34 children affected with peripheral tuberculosis. The doses administered did not exceed 5 milligrams. In most cases there was general reaction, evidenced by increased temperature. Doses of 1 milligram induced, in some cases, a temperature of 40°, while doses of 3 milligrams induced in others a temperature of only 37° and some tenths. Decreased temperature was also observed. These variations occurred even where the general conditions were improved. Nausea, cephalalgia, delirium, and eruptions were observed by Doctor Casse. With regard to local reaction, the diseased part tumefied. In the case of fistulas, the pus becomes serous and dries up. The injections should, therefore, be repeated every 3 days. Of 7 cases of Pott's disease, Doctor Casse reported that 3 showed improvement. Of 12 cases of coxalgia, all were progressing favorably; 3 were cured, at least for the time. Of four cases of lupus, 1 could be reported cured, the others were improved. In 2 cases of scrofula, all the ocular symptoms (ulcers of the cornea, photophobia, kerato-conjunctivitis, and watering of the eyes), had disappeared. In conclusion, Doctor Casse stated his opinion that the Koch lymph, if not an absolute remedy for tuberculosis, possesses incontestable curative properties.

Doctor Crocq stated that he had observed only an aggravation of symptoms following injection of the lymph. In his opinion, the lymph is an agent of substitutive medication. It induces fever, of irregular duration, which causes congestion of the skin and internal organs, a congestion having no connection with tuberculous lesion, and occurring most readily in organs previously affected. The inflammation superinduced on that already existing may, if produced in the lungs or larynx, cause the death of the patient.

GERMANY—Bonn.—Doctor Burkhart, of the Johannes Hospital, reports, under recent date, the treatment, by the Koch method, of 21 patients. Of these 9 were cases of well-defined phthisis and 12 were in an advanced stage of tuberculosis. The first dose administered was 0.001 c. c. of the lymph. The quantity was increased at intervals of from 3 to 5 days until the dose of 0.003 was reached. In no case did it exceed 0.035. A notable reactionary symptom observed in cases of phthisis was a remarkable increase of cough and expectoration, which did not decrease with the other symptoms, but continued until the second and following injections. Only at a late period of the treatment could a decrease of cough and expectoration be noted. From the diagnostic point of view the fact that certain forms of phthisis show a want of receptivity toward the Koch remedy deserves consideration. In advanced stages of consumption the remedy should be used with extreme caution, owing to the danger of asphyxia from swelling of the upper air passages.

BERLIN.—Doctor Hofmeier, of the Elizabeth Hospital, reports 189 injections practiced on 39 patients between November 22 and December 11, with results analogous to those reported from Berlin, Vienna, London, Paris, and other places. In no case did death ensue on inoculation.

At a meeting of the Berlin Medical Association, December 17, 1890, Doctor Fränkel stated that he commenced the use of the Koch treatment

November 18 on 15 cases of pharyngeal tuberculosis, 7 cases of phthisis, without bronchial affection, and 5 cases of lupus. In most of the cases of tuberculosis, fever ensued, beginning five or ten hours after injection, quickly obtaining its maximum, and then declining. After the administration of the largest dose there was no access of fever. It is advisable to so graduate the dose that the fever shall not exceed 39°. The more nearly the temperature approaches the normal on the days when injection is not practiced the more favorable are the results likely to be. Antisepsis must be rigidly practiced in order to prevent the introduction of any microorganism by way of the puncture. The local effect of the treatment on the tubercular tissue Doctor Fränkel stated to have no analogy in science. A substance introduced under the skin passes into the circulation and produces visible effects at distant points. This fact, considered alone, is of the highest value. The assertion made by Koch that his remedy attacks and destroys the tubercular tissue has so far been verified.

Defective graduation of the Koch syringe.

[From *La Semaine Medicale*, December 31, 1890.]

Doctor Dettweiler, director of the Falkenstein Sanatorium, draws attention, in a letter published in several German medical journals, to the defective graduation of the Koch syringe. In 5 syringes received from Berlin the division marked 10 did not correspond to 1 cubic centimeter of liquid. This defect of graduation was such that of 2 syringes filled with water as far as division 10, one contained 0. gram 70 centigrams of liquid, while the other contained 1. gram 30 centigrams.

MORTALITY TABLE, FOREIGN CITIES.

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.....	Dec. 27.....	5,758,500	2795					9	16	37	108	
London.....	Jan. 3.....	5,758,500	3122					13	20	38	112	
Paris.....	Dec. 20.....	2,260,945	1175			2		14	3	34	13	9
Paris.....	Dec. 27.....	2,260,945	1174			3		8	3	35	14	7
Paris.....	Jan. 3.....	2,260,945	1280					15	2	39	9	9
Vienna.....	Dec. 13.....	800,120	351			5		2	2	11	11	20
Liverpool.....	Dec. 20.....	613,463	316				2	2	15	2		
Liverpool.....	Dec. 27.....	613,463	411				1	1	8	1		
Hamburg.....	Dec. 13.....	570,534	243					1	5	3		
Hamburg.....	Dec. 20.....	570,534	233					2	3	3		
Glasgow.....	Dec. 27.....	545,678	297						2	3	4	
Glasgow.....	Jan. 3.....	545,678	308					4		4		
Brussels.....	Dec. 20.....	469,459	242			3		4				
Brussels.....	Dec. 27.....	469,459	249			9		3				
Warsaw.....	Dec. 20.....	455,852	254			6		1	9	11		
Rio de Janeiro.....	Dec. 13.....	450,000	271		1	7		2	3			
Buda Pesth.....	Dec. 24.....	422,377	37					3		5	19	
Rome.....	Nov. 15.....	417,392	170					4		4	2	
Amsterdam.....	Dec. 20.....	415,360	266					4		4	11	
Amsterdam.....	Dec. 27.....	415,360	255					1	1	16		
Amsterdam.....	Jan. 3.....	415,360	235					2		8		
Lyons.....	Dec. 20.....	401,930	201					2		12		
Lyons.....	Dec. 27.....	401,930	207					1		3		
Munich.....	Dec. 20.....	345,000	146							6		
Munich.....	Dec. 27.....	345,000	163					5		15		
Turin.....	Nov. 2.....	314,827	167							5		
Turin.....	Nov. 10.....	314,827	167					5		5		
Copenhagen.....	Dec. 6.....	312,387	122							3	7	
Copenhagen.....	Dec. 13.....	312,387	107							3	8	
Copenhagen.....	Dec. 20.....	312,387	118							2	10	

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.
Leipzig	Dec. 20	305,479	105					2	3	5	1	
Leipzig	Dec. 27	305,479	97						5	5		
Cologne	Dec. 20	280,206	167						15	3		
Odessa	Dec. 20	276,300	133					4	3	3		
Barcelona	Dec. 20	272,000	233			4						
Barcelona	Jan. 2	272,000	357				26			16	4	
Edinburgh	Dec. 20	271,135	127					1	1	1	1	
Edinburgh	Dec. 27	271,135	174					4	2	1	1	
Edinburgh	Jan. 3	271,135	117					7	3	10	1	
Dresden	Dec. 20	269,000	106					2		2		
Palermo	Dec. 20	250,000	150					3		2		
Palermo	Dec. 27	250,000	120					3		1		
Lisbon	Nov. 15	242,297	171			13					1	
Antwerp	Dec. 27	232,418	151					2	1	2		
Bristol	Dec. 27	232,248	96					1	1			
Bristol	Dec. 27	232,248	137					1	1	4		
Bristol	Jan. 3	232,248	136					2	11	4		
Belfast	Dec. 27	222,222	126					7	4			
Belfast	Jan. 3	222,222	144				1					
Rotterdam	Dec. 27	203,472	129					4		1		
Rotterdam	Jan. 3	203,472	75									
Pernambuco	Dec. 9	200,000	59			8						
Pernambuco	Dec. 16	200,000	64									
Prague	Dec. 20	188,992	123			12						
Prague	Dec. 27	188,992	118					3	1	5		
Genoa	Dec. 13	180,645	93			1		4	1	1		
Genoa	Dec. 20	180,645	109			1			1	1		
Genoa	Dec. 27	180,645	121			1				1		
Genoa	Jan. 3	180,645	128				2					
Frankfort-on-the-Main	Dec. 20	179,850	72					1	1	16		
Frankfort-on-the-Main	Dec. 27	179,850	72						2	13		
Hanover	Dec. 20	163,000	54							5		
Hanover	Dec. 27	163,000	72							7		
Konigsberg	Dec. 20	161,200	72							2		
Konigsberg	Dec. 27	161,200	105							6		
Trieste	Dec. 20	158,054	88							2		
Trieste	Dec. 27	158,054	82									
Ghent	Dec. 20	152,395	112							2	1	
Ghent	Dec. 27	152,395	80					3				
Nuremberg	Dec. 13	142,403	98					1		8		
Nuremberg	Dec. 20	142,403	38						3	7		
Stuttgart	Dec. 27	139,659	40						1	5		
Stuttgart	Jan. 3	139,659	69							2		
Sunderland	Dec. 6	135,506	61					1	3	1		
Sunderland	Dec. 13	135,506	52									
Sunderland	Dec. 20	135,506	15					3	1			
Funchal	Dec. 6	133,250	19			3						
Funchal	Dec. 13	133,250	21			2						
Bremen	Dec. 20	124,940	59					1		2		
Bremen	Dec. 27	124,940	43			2		2		2		
Danzig	Dec. 20	117,206	7							1		
Stettin	Dec. 20	116,000	48					3		2		
Stettin	Dec. 27	116,000	66					4	1	3		
Havre	Dec. 20	112,074	63					1	1	1		
Havre	Dec. 27	112,074	78					4				
Aix-la-Chapelle	Dec. 21	111,189	48									
Aix-la-Chapelle	Dec. 28	111,189	45									
Catania	Dec. 15	109,000	64									
Catania	Dec. 21	109,000	43									
Catania	Dec. 29	109,000	74									
Crefeld	Dec. 29	108,000	92							1		
Leghorn	Dec. 28	103,723	60					1	2			
Gothenburg	Dec. 7	100,622	36						3			
Gothenburg	Dec. 7	100,622	31						2			
Gothenburg	Dec. 27	100,622	32							2		
Zurich	Dec. 20	91,323	29				3			9	2	2
Zurich	Dec. 27	91,323	11				1			2	1	
Hiogo	Nov. 22	89,363	36	3			1					
Hiogo	Nov. 29	89,363	34	1			3					
Mannheim	Dec. 20	80,000	30							2		
Mannheim	Dec. 27	80,000	28								2	
Messina	Dec. 20	79,971	47							3		
Messina	Dec. 27	79,971	40							5		

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.	
Messina.....	Jan. 3.....	79,971	48			2					2		
Leith.....	Dec. 20.....	78,538	23					1			1		
Leith.....	Dec. 27.....	78,538	25								1		
Leith.....	Jan. 3.....	78,538	22										
Mayence.....	Dec. 20.....	73,271	27					1			3		
Mayence.....	Dec. 27.....	73,271	27								5		
Cadiz.....	Dec. 20.....	61,708	48			8		1					
Trapani.....	Dec. 20.....	43,095	7										
Trapani.....	Dec. 27.....	43,095	8										
Marsala.....	Dec. 20.....	40,131	18										
Marsala.....	Dec. 27.....	40,131	16								1		
Cape Town.....	Dec. 9.....	36,000	24					1					
Cape Town.....	Dec. 16.....	36,000	21										
Guayaquil.....	Nov. 28.....	35,000	71			30		18				2	
Guayaquil.....	Dec. 5.....	35,000	70			28		12					
Schiedam.....	Dec. 27.....	25,600	13										
Schiedam.....	Jan. 3.....	25,600	10										
Cardenas.....	Jan. 11.....	25,000	10										
Vera Cruz.....	Jan. 1.....	23,800	18			1							
Gibraltar.....	Dec. 21.....	28,681	13					1			1		
Gibraltar.....	Dec. 28.....	23,681	10										
Girgenti.....	Dec. 20.....	23,547	13					1	1				
Girgenti.....	Dec. 27.....	23,547	16								1		
Licata.....	Dec. 20.....	19,000	11										
Licata.....	Dec. 27.....	19,000	10										
Kingston, Can.....	Jan. 2.....	18,264	18										
Kingston, Can.....	Jan. 9.....	18,264	2										
Cartagena.....	Dec. 20.....	16,000	6										
Cartagena.....	Dec. 27.....	16,000	8										
Matamoras.....	Jan. 3.....	16,000	5										
Rio Grande do Sul.....	Nov. 29.....	16,000	18										
Rio Grande do Sul.....	Dec. 6.....	16,000	17										
Antigua.....	Dec. 27.....	15,847	10										
Hamilton, Bermuda.....	Dec. 31.....	15,700	3										
Cape Haytien.....	Dec. 6.....	15,000	6										
Cape Haytien.....	Dec. 13.....	15,000	8										
Cape Haytien.....	Dec. 20.....	15,000	8										
Cape Haytien.....	Dec. 27.....	15,000	5										
St. Thomas, W. I.....	Nov. 28.....	15,000	46										
St. Thomas, W. I.....	Dec. 5.....	15,000	46										
St. Thomas, W. I.....	Dec. 12.....	15,000	51					1					
St. Thomas, W. I.....	Dec. 19.....	15,000	44										
Flushing.....	Dec. 27.....	13,200	6										
Flushing.....	Jan. 3.....	13,200	10										
Queenstown.....	Dec. 20.....	10,340	7										
Queenstown.....	Dec. 27.....	10,340	3										
Queenstown.....	Jan. 3.....	10,340	4										
Queenstown.....	Jan. 10.....	10,340	5										
Guelph.....	Jan. 11.....	10,173	2										
Puerto Cabello.....	Dec. 31.....	10,000	12										
Puerto Cabello.....	Jan. 7.....	10,000	11										
Tampico.....	Dec. 6.....	9,000	9										
Tuxpan.....	Dec. 20.....	9,000	10										3
Tuxpan.....	Dec. 27.....	9,000	15										2
Chatham, Ont.....	Jan. 10.....	8,730	4					1					
La Guayra.....	Jan. 3.....	7,428	4										
Port Sarnia.....	Jan. 10.....	6,200	1							1			
Turk's Islands.....	Oct. 29.....	5,000	8										
Turk's Islands.....	Nov. 5.....	5,000	6										
Turk's Islands.....	Nov. 12.....	5,000	7										
Turk's Islands.....	Nov. 19.....	5,000	7										
Clifton.....	Jan. 10.....	3,500	1										
Amherstburg.....	Jan. 6.....	3,100	3										
Prescott, Ont.....	Jan. 1.....	2,988	2										
Prescott, Ont.....	Jan. 8.....	2,988	1										
Puntarenas.....	Oct. 4.....	2,100	6										
Puntarenas.....	Oct. 18.....	2,100	6										
Puntarenas.....	Nov. 29.....	2,100	3										
Puntarenas.....	Dec. 6.....	2,100	2										

OFFICIAL :

JOHN B. HAMILTON,
Supervising Surgeon-General, Marine-Hospital Service.