ABSTRACT OF SANITARY REPORTS.

Vol. VI. Washington, D. C., February 13, 1891.

No. 7.

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UNITED STATES.

Report of official experiments with the Koch lymph in progress.

FEBRUARY 11, 1891.

SIR: I have the honor to report that since my last communication the experiments with the Koch lymph have been steadily pursued on

the lines indicated by your orders of January 19, 1891.

Eleven patients have been subjected to the treatment up to date, ten males and one female. It has been deemed advisable to suspend treatment in one case, leaving ten now actually under treatment. This suspension was rendered necessary by reason of repeated and violent hæmoptysis in the patient designated as No. 2 in the appended tabular statement, but it must be here stated that the hemorrhages began prior to the treatment, though they have undoubtedly acquired frequency and severity since its inception. It yet remains to be proved whether his present condition is simply incidental or consequent upon the treatment.

The use of the Koch syringe has been abandoned since the second series of injections, it having proved difficult of manipulation and uncertain in delivery. An ordinary hypodermic syringe is now used, and no difficulty is experienced in keeping it perfectly sterilized by the use of absolute alcohol, and by using one-half per cent. carbolic solution for the dilution of the original lymph.

Commencing with an initial dose of .001 gram, the injections have been steadily increased by that amount up to .006 gram, which amount was administered in the treatment of February 10. In two instances only was it deemed unadvisable to administer an increased dose, consequently two patients received two doses, respectively, each of .002

and .003 gram.

It is now noticeable that even with the increased dosage, the pyrexia ("reaction") is longer in making its appearance, does not reach as high a point, and subsides more promptly than it did after the first and second injections. There is also a notable diminution of the critical sweats which formerly marked its defervescence. During the continuance of the fever the severity of the cough and the quantity of the expectoration are markedly increased, and equally well marked is the diminution of both cough and expectoration in the intervals of treatment, which is given every fourth day.

Physical examination shows no change as regards the areas of dullness first mapped out, and very slight and unimportant changes as to

respiratory sounds.

10

Examination of the sputa, twice repeated, shows practically no change in the number or morphology of the tubercle bacilli.

The patients, with the exception of case No. 3, all report themselves as feeling better, with improved appetites, better rest at night, and diminished night sweats.

I append herewith a tabulated statement, showing the weight of the patient at the beginning of treatment, his or her present weight, the number of injections received, and the maximum dose given up to this date:

Patient.	ht at inning treat- nt.	Present	of injec- ions.	aximum dose.		ence in gh t.	Remarks.
	Weig beg of	weight. 5.9		Max	Gain.	Loss.	
	Kilos.	Kilos.		Grms.	Kilos.	Kilos.	
	73.8	72, 45	6	.006		1.35	
2	63	60.075	4	. 003		2,925	Treatment suspended.
3	67.5	67.95	6	.006			•
	53, 55	52.2	6	.005	·	1.35	
i !	51.637	51.975	4	.004	. 338		
S	54.9	55, 575	6	.006	. 675		
<i>7</i>	71.1	69.75	6	.005		1.35	
3	42.75	42.3	6	. 006		. 45	
)	44, 327	45	4	.003	. 673		
10	55, 575	54	5	.005		1.575	
11	54.9	54.9	ĺ	.001			First treatment.

Very respectfully, your obedient servant.

H. D. GEDDINGS, Assistant Surgeon, M.-H. S.

Smallpox in Mexico and Texas.

The sanitary inspector of the Marine-Hospital Service at El Paso, Tex., reports as follows, under date of January 31, 1891:

From private information and local Texas newspapers I learn that smallpox is prevailing still at different points in this State.

Smallpox is within 20 miles or less of the city of El Paso, in New Mexico. City Health Officer Yardell, who is also State health inspector, requested me to make an inspection of the different little villages and ranches in southern New Mexico with the view of ascertaining to what degree smallpox prevails and assisting those requiring it In compliance with this request, I visited several small villages and ranches (having no local physicians) within a radius of about 25 to 40 miles from El Paso, and found several families with children suffering from confluent smallpox.

In the village of Chamberino, about 27 miles from El Paso, 11 children died within the last thirty days, of smallpox; others were convalescing. I vaccinated at this point 23 children. There were some more unprotected children and grown persons, but the mothers objected to have them vaccinated, saying that everybody one day or other would have smallpox, and that it was less dangerous for children to get the disease in childhood, and there being no isolation whatever thought of or enforced of such as have the disease, the mothers' wishes will be very likely gratified. Others would not allow me to vaccinate the children, they having an ill-defined fear that some malign influence.

or disease may, through vaccination, be introduced into the bodies. Others refused to be vaccinated on the plea that they had smallpox in their childhood, and that there was no necessity of being vaccinated.

At La Union, another village, I vaccinated 17 children, and at differ-

ent isolated ranches, 15; total, 55.

There are several other little villages and ranches within 50 miles from here, in New Mexico, and I am informed that smallpox is prevailing there, with many children not vaccinated. I would suggest that the Department authorize or order me to visit these places for the purpose of vaccinating children and grown persons needing it. With such an order I am sure the local authorities in New Mexico would gratefully make vaccination compulsory, as well as the isolation of such as have the disease.

Seven-eighths of Mexican families immigrating into the United States at this port, with their children, have never been vaccinated; the other

eighth present abnormal cicatrices.

On inquiry, I learn that most of these people had either vaccinated themselves or had been vaccinated by other incompetent or unprofes-

sional persons.

The health officer of El Paso requested me to vaccinate every unprotected child or grown person I find entering El Paso through the railroad coming from Mexico.

The inspector has been directed by telegraph to visit and report upon the villages and ranches in New Mexico above indicated.

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

INDIANA—Evansville.—Month of January, 1891. Population, 50,600. Total deaths, 58, including phthisis pulmonalis, 4; enteric fever, 1; diphtheria, 8; croup, 4; and whooping cough, 1.

IOWA—Keokuk.—Month of January, 1891. Population, 18,589. Total deaths, 11, including phthisis pulmonalis 1.

KENTUCKY—Louisville.—Month of January, 1891. Population, 227,000. Total deaths, 267, including phthisis pulmonalis, 24; enteric fever, 7; scarlet fever, 2; diphtheria, 10; and croup, 5.

LOUISIANA—New Orleans—Case of diphtheria in U. S. Marine-Hospital.—Surgeon James M. Gassaway reports one case of diphtheria in he marine hospital. The patient has been isolated, and is doing well.

MICHIGAN.—Month of January, 1891. Reports from observers, compared with the preceding month, indicate that cholera infantum, whooping cough, dysentery, cerebro-spinal meningitis, and typhomalarial fever decreased in prevalence.

Compared with the average for the month of January in the fiscal years 1886–1890, cholera morbus, membranous croup, influenza, and puerperal fever were more prevalent, and whooping cough, cholera infantum, typhomalarial fever, diphtheria, measles, and typhoid fever were less prevalent in January, 1891.

Including reports by regular observers and others, diphtheria was reported present in Michigan in the month of January, 1891, at 78 places, scarlet fever at 301 places, typhoid fever at 41 places, and measles at 70 places.

Reports from all sources show diphtheria reported at 8 places more, scarlet fever at 1 place more, typhoid fever at same number of places, and measles at 37 places more in the month of January, 1891, than in the preceding month.

Grand Rapids.—Month of January, 1891. Population, 75,000. Total deaths, 77, including phthisis pulmonalis, 15; enteric fever, 2; and diphtheria, 7.

NORTH CAROLINA.—Month of December, 1890. Reports to the State board of health from 19 cities and towns, having an aggregate population of 116,200, show a total of 122 deaths, including phthisis pulmonalis, 16; enteric fever, 4; and diphtheria, 1.

OHIO—Cincinnati.—Month of January, 1891. Population, 300,000. Total deaths, 505, including phthisis pulmonalis, 10; enteric fever, 10; scarlet fever, 5; diphtheria, 30; measles, 1; and whooping cough, 1.

Texas—Reported spotted fever, etc.—The assistant surgeon of the Marine-Hospital Service at Galveston transmits a clipping from the Galveston News of February 7, reporting an epidemic of spotted fever at Springtown, Tex. Springtown is a small place in the northwestern part of the State, and lies in the northern part of Parker County. It is about 150 miles northwest of Fort Worth. It is not on the line of any railroad, the nearest being (according to a State map) the Fort Worth and Denver City Railroad. It has a population of about 500. Another case of smallpox is reported at Palestine, Tex. In Galveston, the 2 cases of smallpox reported some time ago have recovered and no other cases have appeared. Scarlatina and measles are disappearing. Influenza in a mild form is very prevalent.

VIRGINIA — Lynchburg.—Month of January, 1891. Population, 25,000. Total deaths, 42, including enteric fever 1.

Washington—Seattle.—Month of December, 1890. Population, 50,000. Total deaths, 34, including diphtheria 1.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.			-gInc		from	Deaths from-										
	Week ended.		Estimated popula-		Total deaths fall causes.	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
New York, N. Y	Feb.	7	1,661,	298	736							2	20	30	13	9
Chicago, Ill	Feb.	7	1, 200,	000	493	1						12	9	15	6	1 8
Philadelphia, Pa	Jan.	31	1,069,		434	63						13	7	13	1	
Brooklyn, N. Y	Jan.	31	853,		372							. 1	12	19	5	
Brooklyn, N. Y	Feb.	7	853,		337						 	3	13	19	2	(
St. Louis, Mo	Jan.	3		000									4	2		
St. Louis, Mo	Feb.	7		000	164								1	7	2	1 2
Boston, Mass	Feb.	7	448,		168							1	1	8		:
Cincinnati, Ohio	Feb.	6		000	108	13						4	2	10		
San Francisco, Cal	Jan.			000					•••••	•••••		3		15		
Detroit, Mich	Jan.			000	62		•••••	•••••		• • • • • • •		1		7		
Washington, D. C	Jan.			000	96		•••••					3	1	1	1	••••
Milwaukee, Wis	Feb.			000	68	1				ļ:		··· <u>·</u>		6	. 1	
Newark, N. J	Feb.	7		264	79 57	10	•••••	•••••	•••••	•••••		5		•••••	•••••	
Rochester, N. Y		7			47			· · · · ·				1		1		•••••
Providence, R. I Toledo, Ohio	Feb.	7		$\frac{000}{652}$	25				•••••			1		3	1	
Nashville, Tenn	Feb.	6		309	38							1	•••••	3	3	••••
Fall River, Mass	Feb.	6		000	36		•••••					1	1	•••••	3	•••••
Charleston, S. C	Jan.			165	41	3						•••••				•••••
Charleston, S. C	Feb.	7		165	43	7				·····		1		·····	9	• • • • • • • • • • • • • • • • • • • •
Galveston, Tex	Jan.			000	15	1 1		•••••				1			4	•••••
Galveston, Tex	Jan.			000	12	1						•••••	••••			•••••
Binghamton, N. Y	Feb.	7		000	8											
Altoona, Pa	Jan.	3		000	8							2				
Altoona, Pa	Jan.	10		000	15							l ī			ļ	
Auburn, N. Y	Feb.	7		887	10							ļ <u>-</u>				
Newton, Mass	Jan.			375	7	2	l				l					
Newton, Mass	Feb.	7		375	6											
San Diego, Cal	Jan.			000	2								1			
Pensacola, Fla		31		000	7		1		1	1			-	1		1

Table of temperature and rainfall, week ended February 6, 1891.

[Received from War Department, Signal Office.]

Locality.	Mean ter	nperature Fahrenhe	in degrees it.	Rainfall in inches and hundredths.						
,	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.				
New England States:						t-				
Eastport, Me	21	4	l	.98	.30	l				
Eastport, Me Portland, Me	22	19		. 89	. 34					
Boston, Mass	25	50		. 91		. 12				
Riock Island R. I	31	22		1.13		.18				
Middle Atlantic States: Albany, N. Y New York, N. Y										
Albany, N. Y	24	18		.63		.17				
New York, N. Y	31	38		.91	. 09					
		20		. 77		.03				
Atlantic City, N. J	33	28		.84	. 60					
Baltimore. Md	35	26		.84		. 22				
Washington, D. C	34	31		.78	.11					
Lynchburg, Va	39	12		.91		. 23				
Atlantic City, N. J. Baltimore, Md. Washington, D. C. Lynchburg, Va. Norfolk, Va.	42	32		.91		.16				
South Atlantic States:		-				1				
Charlotte, N. C	44	29		1.12		. 45				
Charlotte, N. C Wilmington, N. C	49	40		.84		.46				
Charleston S. C	51	43	1	.91		72				
Augusta, Ga	50	26		1.00	. 32	l				
Savannah Ga	54	25		.77	.14					
Savannah, Ga Jacksonville, Fla	58	40		.84	.11	.81				
Key West, Fla	71	20								
Gulf States:	11	20		. 49		. 49				
	46	13		1 01	0.16	1				
Atlanta, Ga	40			1.31	2.16					
Pensacola, Fla	55	25		. 99		.59				
Mobile, Ala	53	28		1.12	. 64					
Montgomery, Ala	52	30		1.27	1.82					
Vicksburg, Miss	51	20		1.25	.05					
New Orleans, La	57	32	1	1.11	. 69					
Shreveport, La	49	16		1.12	. 16					
Fort Smith, Ark	40	6		. 79	. 24					
Little Rock, Ark	43	. 8		1.42	1.83					
Palestine. Tex	50	4	l	.98	.33					
Galveston, TexSan Antonio, Tex	55	21		.78		.28				
San Antonio, Tex	54		7	. 46	.89					
Corpus Christi, Tex	57	17		.82		.78				
Brownsville, Tex	61	0	0	. 42	1.40					
Rio Grande City, Tex	61	Ŏ	Ŏ	.23	1.40					
Ohio Valley and Tennessee:	"-	1			1 20					
Memphis Tenn	43	28		1.40	2.83					
Memphis, Tenn Nashville, Tenn	40	27		1.32	.92					
Chattanooga, Tenn	44	22		1.47	.63					
Knoxville Tenn	41	26		1.27	.97					
Knoxville, Tenn Louisville, Ky	36	īŏ		1.08	1.05					
Indianapolis, Ind	29	10		.83	1.00	.17				
Cincinneti Ohio	34	23		.94	. 64					
Cincinnati, Ohio Columbus, Ohio	30	26	•••••		.12					
Pitteburgh, Pa	32	34	•••••	. 89 . 70	.31					
Taka Dagian	02	94		. 10	. 01					
Lake Region: Oswego, N. Y Rochester, N. Y Buffalo, N. Y	23	17	1	. 63	04					
Dashagton N V	24	25	***************************************		0-2	90				
Duffele N V	24	29		.70		.38				
Erie, Pa			••••••	.70		.10				
Classic A. Ohio	27	16		.84	• • • • • • • • • • • • • • • • • • • •	.16				
Cleveland, Ohio	27	34		. 67		.05				
Sandusky, Ohio	27	47	••••••	.70		.38				
Toledo, Óhio	26	24		. 56		.31				
Detroit, Mich	. 25	17	•••••	. 54		.31				
Port Huron, Mich	21	31		. 57		. 24				
Alnena Mich	16	10		. 56	. 26					
Marquette, Mich	14		30	. 42	. 30]				
Grand Haven, Mich	23	5		. 51	.07					
Marquette, Mich	19		3	. 49		.11				
Chicago, Ill	24		4	. 56		. 35				
Chicago, Ill Duluth, Minn	10		50	. 24		.07				
Upper Mississippi Valley: St. Paul, Minn		1			l	1				
St. Paul, Minn	12		45	. 21		.07				
La Crosse, Wis	15		40	. 28	l	.02				
La Crosse, Wis Dubuque, Iowa	19		4	. 35		.31				
Davenport, Iowa	22	5	l	. 42		.34				
Des Moines, Iowa	19	l	5	.30	l	.10				
Keokuk Iowa	25	7		.41		32				
		•	9	.82	1	.65				
Springfield III	224									
Springfield, Ill Cairo, Ill	28 36	12	. 9	1.05	.81	.00				

Table of timperature and rainfall, week ended February 6, 1891—Continued.

. Locality.		nperature Fahrenhe	in degrees it.	Rainfall in inches and hundredths.						
,	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.				
Missouri Valley:				à						
Springfield, Mo	34	4	i	.72		. 61				
Kansas City, Mo	29	· ·	1							
Leavenworth, Kans	27	11		. 35						
		5								
Concordia, Kans	25			.18						
Omaha, Nebr	20		28	.14	. 23					
Valentine, Nebr	19			.08	. 10					
Huron, Dak	9		45	. 07	. 04					
Extreme Northwest:	1		į.							
Moorhead, Minn	1		41	. 17		.11				
Bismarck, Dak	5		2	. 14		.10				
Buford, Fort, Dak	5		14	. 07	0					
Rocky Mountain Slope:	-	1								
Assinniboine, Fort, Mont	11	i	14	. 21		.20				
Helena, Mont	19			. 21	0					
Custer, Fort, Mont				. 14	ŏ					
Custer, Fort, Mont				.32		.20				
Salt Lake City, Utah										
Cheyenne, Wyo	25			.07						
North Platte, Nebr				. 07						
Denver, Colo				. 07						
Pueblo, Colo				.14		. 13				
Montrose, Colo			56	.07	. 20					
Dodge City, Kans	29	1		. 09	· · · · · · · · · · · · · · · · · · ·	.09				
Abilene, Tex		3		. 27		.2				
El Paso, Tex		Ō	0	.07		.0				
Sill, Fort, Ind. T		ň	Ŏ	.34						
Fort Grant			14	.28						
Santa Fé, N. Mex			31	.20						
Pacific Coast:	30		91	.20		.0				
	26		14	. 56		.30				
Spokane, Wash			14							
Olympia, Wash		14		1.89						
Portland, Oreg	39		14	1.68						
Roseburg, Oreg	41	0	0	1.24						
Red Bluff, Cal		0	0	. 89						
Sacramento, Cal		6		.78						
San Francisco, Cal		14	l	.99	i 	. 50				
Los Angeles, Cal		0	0	.79	0					
San Diego, Cal		ŏ	ŏ	.57		. 40				
Yuma, Ariz		ŏ	ŏ	.14	0	1				
I WILLIAM	9,		1	.14		1				

FOREIGN.

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

SPECIAL REPORTS.

Sanitary Commission at Constantinople—Report of U.S. commissioner—Cholera in Asiatic Turkey.

CONSTANTINOPLE, January 4, 1891.

SIR: I have the honor to submit reports Nos. 14 and 15 of Dr. Zavitziano, the legation's representative, on the sanitary commission of Constantinople.

I have the honor to be, sir, etc.,

SOLOMON HIRSH.

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

Sanitary Report No. 14.

I should be very happy indeed if I could make a report on some other question rather than cholera, but unfortunately this sad disease spreads continually, notwithstanding the cold weather, and threatens the table land of Asia Minor on the north and Beyrout and Lebanon on the south. It seems that in these two latter provinces strong measures have been taken against the spread of the epidemic, and by military cordons travelers coming from the infected places are forbidden entrance.

The commission of physicians appointed by the Vali, or governorgeneral, of Beyrout, together with the population, desires the removal of the lazaretto to another place, but the board of health, not finding another convenient place for its establishment, has decided on its remaining at Beyrout, except in case of Beyrout being infected, when it will be removed to the Island of Laros.

The number of deaths occurring daily at Tripoli is not less than 8,

and has never exceeded 33.

On the 30th instant, at which time there had not been a single case of cholera at Aleppo for many days previous, two deaths occurred, but these two men had just arrived from Killis. At this city, as at Aintab, Marash, Orfa, and their neighboring places, new deaths from cholera are registered daily. Besides these places cholera has made its appearance much further to the north. In the district of Behzne deaths are daily occurring, and we see it at Djeven-maden or Meoner-maden, near to Kharpoot. I do not doubt that the authorities are continually establishing cordons, but surely they do not take any serious measure for cleaning and disinfecting the cities, towns, and villages.

Months ago the sanitary council made an application to the Government for the purchase of furnaces for disinfection, but up to the present

time no answer has been received.

I hope that these furnaces will be bought, but under present appearances, if they are bought at all, it will be too late, as all Asia Minor, and perhaps Constantinople, will have been infected.

In the capital, 778 deaths have been registered for the month of November; among these 63 were caused by smallpox.

S. C. ZAVITZIANO.

CONSTANTINOPLE, December 26, 1890.

P. S.—Since the beginning of the epidemic at Tripoli up to the 21st 151 deaths have occurred in that city. Last week 73 deaths occurred, and the previous week 39. This has been taken word by word from the official reports, and I report this only to show what reliance can be placed upon them. Reckoning day by day the number of deaths noticed they amount to more than 200.

The official news of the 23d instant reports the appearance of cholera

at Osmaine in the Sanjar of Gebel at Berellet.

S. C. ZAVITZIANO.

Sanitary Report No. 15.

I am very glad, indeed, to begin the New Year's report with rather agreeable news.

In the north of Syria in the vilayet of Aleppomamuriet-el-Aziz, and Adana, cholera has nearly disappeared. There are always, it is true, a few cases, but we can hope that shortly they will also disappear.

So at Sintab on the 5th instant one death occurred, and on the 4th one death has also been registered at Slasta-Viran, in the vilayet of

Diarbekir.

All the table lands in Asia Minor are now covered with snow, and cholera is no more heard of.

In the south, on the contrary, the news is rather bad. At Tripoli and in the surrounding villages of Corno, Tel-el-Honfrey, Kafrefy, Talihi, Tel-at-Hodide, Vachiel, Missi, Gebel-Souan, from the 17th up to the 22d of December (O. S.)—that is to say, from the 29th of December, 1890, up to the 3d instant—107 deaths from cholera have been officially registered.

The official sanitary news from the other vilayets of the empire is

favorable.

In the vilayet of Erzerum there is an epizootic of typhus in oxen. In the capital the public health is rather good. Smallpox is decreasing, as also is the congestion of the lungs.

S. C. ZAVITZIANO.

Prevention of the introduction of leprosy.

The United States sanitary inspector at Havana, Cuba, under date of February 2, 1891, writes as follows:

During the month of January, 3 well-marked cases of leprosy, for whom passage had been taken for the United States, were prevented from going there.

CHINA—Hong-Kong.—Month of November, 1890. Total deaths, 361, including phthisis pulmonalis 44.

CUBA—Havana.—Under date of February 2, 1891, the United States sanitary inspector reports as follows:

Month of January, 1891. Total deaths, 602, including yellow fever, 11; enteric fever, 7; so-called pernicious fever, 8; smallpox, 2; diphtheria and croup, 4; measles, 4; and glanders, 2.

Santiago de Cuba.—Two weeks ended December 31, 1890. Total deaths, 40, including phthisis pulmonalis, 7; smallpox, 1; yellow fever, 3; pernicious fever, 1; croup, 1; and whooping cough, 1.

DANISH WEST INDIES—St. Thomas.—Quarter ended December 31, 1890. Total deaths, 87, including phthisis pulmonalis, 7.

DEMERARA—Georgetown—Yellow fever on board steamship Esk and mortuary report.—Under date of January 3, 1891, the United States consul reports the following:

The steamship *Esk* of the Royal Mail Line arrived here on the 24th of December, having been quarantined at Barbadoes on account of a case of yellow fever taken on board at St. Thomas. She was immediately put in quarantine here, passengers not permitted to land, and left, still in quarantine, on the 1st instant. No further case was developed.

The following mortuary report has also been received: "Month of November, 1890. Population, 55,000. Total deaths, 267, including leprosy, 1, and measles, 1."

EGYPT.—Week ended January 8, 1891. The towns in upper and lower Egypt, including Gizeh and the Suez Canal, show a total of 824 deaths, including phthisis pulmonalis, 63; enteric fever, 13; smallpox, 1; diphtheria and croup, 3; and whooping cough, 6.

FRANCE—Bordeaux.—Month of December, 1890. Population, 240,582. Total deaths, 657, including enteric fever 22 and diphtheria and croup 11.

Nantes.—Month of November, 1890. Population, 127,482. Total deaths, 250, including phthisis pulmonalis, 29; enteric fever, 20; typhus fever, 14; diphtheria, 2; and measles, 29.

Month of December, 1890. Total deaths, 432, including phthisis pulmonalis, 51; enteric fever, 24; typhus fever, 7; diphtheria, 9; measles, 57; and whooping cough, 3.

Nice.—Month of December, 1890. Total deaths, 130, including phthisis pulmonalis, 7; diphtheria and croup, 2; enteric fever, 1; scarlet fever, 1; smallpox, 1; and measles, 1.

Rheims.—Month of December, 1890. Population, 97,903. Total deaths, 199, including phthisis pulmonalis, 25; enteric fever, 2; diphtheria and croup, 8; and whooping cough, 1.

Rouen.—Month of December, 1890. Population, 106,496. Total deaths, 356, including phthisis pulmonalis, 38; enteric fever, 18; and diphtheria, 10.

GREAT BRITAIN—England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended January 24 corresponded to an annual rate of 25.1 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded

in Bradford, viz, 18.9, and the highest in Halifax, viz, 39.0 a thousand. Diphtheria caused 3 deaths in Manchester, 3 in Salford, and 2 each in Leeds, Sheffield, Portsmouth, and Newcastle-upon-Tyne.

London.—Two thousand two hundred and twelve deaths were registered during the week, including measles, 38; scarlet fever, 13; diphtheria, 17; whooping cough, 58; enteric fever, 7; and diarrhœa and dysentery, 16. The deaths from all causes corresponded to an annual rate of 25.7 a thousand. Diseases of the respiratory organs caused 845 deaths. In greater London 2,723 deaths were registered, corresponding to an annual rate of 24.2 a thousand of the population. In the "outer ring" the deaths included measles, 8; whooping cough, 17; diphtheria, 5; and scarlet fever, 4.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended January 24, in the 16 principal town districts of Ireland, was 34.2 a thousand of the population. The lowest rate was recorded in Kilkenny, viz, 4.2, and the highest in Lurgan, viz, 77.0 a thousand. In Dublin and suburbs 260 deaths were registered, including enteric fever 4 and whooping cough 1.

Scotland.—The deaths registered in eight principal towns during the week ended January 24 corresponded to an annual rate of 24.9 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Greenock, viz, 13.6, and the highest in Paisley, viz, 40.4 a thousand. The aggregate number of deaths registered from all causes was 651, including measles, 7; scarlet fever, 18; diphtheria, 9; whooping cough, 27; fever, 5; and diarrhea, 10.

Dundee.—Month of December, 1890. During the month there were 293 deaths registered, representing an annual death-rate of 18.45 per 1,000 of the population, and including phthisis pulmonalis, 29; enteric fever, 2; scarlet fever, 2; diphtheria, 1; croup, 2; and whooping cough, 4.

ITALY—Milan.—Month of December, 1890. Population, 399,081. Total deaths, 970, including enteric fever, 21; diphtheria, 24; and smallpox, 1.

MALTA AND GOZO.—Two weeks ended December 15, 1890. Total deaths, 152, including enteric fever 1 and diphtheria 4.

MEXICO—Paso Del Norte.—Two weeks ended January 31, 1891. Population, 10,000. Total deaths, 10. The United States consul, in his report, states that there is no way of ascertaining the number of cases of contagious diseases which occur in this district.

SAXONY—Plauen.—Month of December, 1890. Population, 49,376. Total deaths, 87, including scarlet fever 5 and diphtheria 1.

SWITZERLAND—Zurich.—Month of December, 1890. Population, 91,323. Total deaths, 205, including phthisis pulmonalis, 20; diphtheria and croup, 2; typhus fever, 1; and whooping cough, 1.

TURKEY IN ASIA—Cholera.—The United States consul at Beirut, Syria, reports as follows:

Week ended January 5, 1891. Three deaths from cholera in the city of Tripoli, Syria.

Week ended January 12, 1891. One hundred and fifteen cases and 5 deaths from cholera in the dependencies of Tripoli, Syria. No cases or deaths in the city of Tripoli.

The latest intelligence received from the vilayet of Aleppo gives 4 deaths from cholera during the period from December 27 to 31.

The following report is from the acting United States consular agent at Mersine, dated December 15, 1890:

In the vilayet of Adana Asiatic cholera first made its appearance at Mersine. We had a single case on the 14th November, followed by death on the 18th. The house was surrounded by a cordon and the people inside, 15 in number, were prevented from communicating with the town for eleven days. Since then public health in Mersine is excellent, but this is not the case with Adana, where cholera broke out on the 21st of last month with 4 cases, of which 2 were fatal. Since then it went increasing, reaching to its climax on the 2d of this month with 100 cases, of which 70 were fatal.

It is impossible for any of us to get correct accounts, as there exists

no sanitary office in Adana.

Most of the doctors have fled, and those remaining avoid as much as possible to risk their lives without any profit. So that, according to their reports, they have only verified up to this day 99 cases of Asiatic cholera, all mortal within forty-eight hours, and of which 15 cases were instantaneous. Of course this is only the number of those who were attended by doctors, but the number of fellahs (peasants) and others who die without calling for medical attendance can not be verified. The grave-diggers say that they opened up to 100 graves in one day (the 2d current), and that very day the official report was 38.

MORTALITY TABLE, FOREIGN CITIES.

			ula	rom	Deaths from—									
Cities.	Week ended.		Estimated popula- tion.	Total deaths from all causes.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
London	Jan.	17	5, 877, 390	3, 123					6	27	27	59		
Paris	Jan.	17	2, 260, 945	1,234					13	5	37	20		
Liverpool	Jan.		620, 443	304 285				• • • • • • • • • • • • • • • • • • • •	1	$\frac{7}{2}$	1 5			
Hamburg Hamburg	Jan. Jan.	10	570, 534 570, 534	312					4	3	6			
Glasgow	Jan.	17	545, 678	364					<u>.</u>	3	3			
Brussels	Jan.	10	469, 459	236	ļi		7				2			
Brussels	Jan.	17	469, 459		•••••				7		17			
Warsaw Rio de Janeiro	Jan. Jan.	3	455, 852 450, 000	244 281					1 2	1	17			
Rome	Nov.	29	417, 392	181					2		9	2		
Amsterdam	Jan.	10	417, 392 415, 360 415, 360	278					3		9			
Amsterdam	Jan.		415, 360	$\frac{272}{222}$		•••••		····	1	2	15 7			
Lyons Leipzig			401, 390 360, 671	136					1	2	6			
Munich	Jan.	10	245 000	168					1	3	13			
Copenhagen		3	312, 387	88	1				1		77			
Copenhagen	Jan. Jan.	10	312, 387 312, 387 312, 387 312, 387 280, 206 280, 206 276, 300 276, 305	119 136	į	•••••		· • • • • • • • • • • • • • • • • • • •	1	2	4			
Copenhagen Cologne	Jan.	3	280, 206	156							7	1		
Cologne	Jan.		280, 206	145							10	1		
Odessa		3	276, 300	119					3	6	4			
Odessa Dresden		10	276, 300	$\frac{114}{102}$		•••••		•••••	3	5	3	•••••		
Dresden		17	276, 085 276, 085	102	•••••		•••••		1	1	8			
Barcelona	Jan.	16	272,000	231					7		5			
Barcelona	Jan.	23	272,000 272,000 271,135	419			6		14		14			
Edinburgh		17	271, 135	109	,	•••••				1	2		1	
Palermo Palermo	Jan. Jan.	10	250,000 250,000	162 155	t			ì	1	1 2	3			
Bristol	Jan.		235, 175	135						ĩ				
Belfast	Jan.	17	235, 175 234, 822	118	1				3	1	1			
Antwerp	Jan.	17	232, 418 209, 137	106					1	1	1			
Rotterdam Rotterdam	Jan. Jan	24	209, 137	116 125										
Lyons	Jan.	10	201, 930	232					1		2			
Pernambuco	Dec.	23	200, 000 188, 992	66									·	
Prague	Jan.	10	188, 992	128				2		2	4			
Prague Genoa	Jan. Jan	17 17	188, 992 180, 613	106 108				2 2	ļ	1	6			
Frankfort-on-the-Main	Jan.	10	179 850	64										
Hanover	Jan.	10	165, 800 161, 200 161, 200 158, 054	69							5			
Konigsberg	Jan.	11	161, 200					¦		1	3	•••••		
Konigsberg Prieste	Jan. Jan	18 10	151, 200	93	·						6 2			
Venice	Jan.	3	156, 800	98					1	8			1	
Venice		10	156, 800	106			1			5			·	
GhentGhent	Jan.	10	152,395 $152,395$	99 92					4					
Ghent		24	152, 395	66					2	•••••		· · · · ·		
Christiania	Jan.		143, 300	59										
Nuremberg		3	142, 403	79				· · · · · ·						
Stuttgart Funchal	Jan.	17 17	139, 659 133, 250	48 16										
Bremen	Jan.	10	124, 940	49					2					
Cardiff	Jan.	10	121,477	62				١						
Danzig		10	119,000	82				1	1					
Danzig Cardiff	Jan. Jan.	17 3	119,000 117,012	59 70	•••••	•••••			1					
Stettin		10	116,000	65		•			î					
Stettin	Jan.	17	116,000	54	ļ			2	ļ		7			
Havre Aix-la-Chapelle	Jan.	17	112,074	61					2				.	
LeghornLeghorn	Jan.	11	111, 445 103, 723	51 62						1				
Leghorn	Jan.	11 11 18	100 500	64	1			!		i				
Catania	Jan.	18 18 17 10 17	109,000	52					2	1	1			
Catania Crefeld	Jan.	18	109,000	81		•••••			1	1	2		·	
Gothenburg	Jan.	10	108,000 100,622	93 27						į•••••	2			
Zurich	Jan.	10	91, 323	25				1		3	8	ī	1	
Zurich	Jan.	17	91, 323	26		l 	1	7	1	2	10			
77.171														
Edinburgh Mannheim	Jan.	17	80, 736 80, 000	30 43						1			٠٠٠	

MORTALITY TABLE, FOREIGN CITIES—CONTINUED.

		!	ula	from	Deaths from-									
Cities.	Week ended		Estimated popula- tion.	Total deaths fi all causes.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
Messina	Jan.	17	79, 971	41							4			
Mavence	Jan.	10	73, 271 61, 708	28				ļ		ļ	4			
Jerez de la Fontera	Jan.	3	61,708	45			7							
Jerez de la Fontera	Jan.	10	61,708	37	•••••						·····	•••••		
Jerez de la Fontera	Dec.	17 20	61,708	41 46			4		1	·····	3			
Cadiz Cadiz	Dec.		57, 157 57, 157	47					1		i			
Cadiz	Jan.	3	57, 157 57, 157	40					1		4			
Cadiz	Jan.	10	57, 157	54							1			
Cadiz	Jan.		57, 157	40							1			
Merida Merida	Jan.	8	47,000	28		2				••••		•••••		
Merida	Jan.	15 23	47, 000 47, 000	37 31		Z	•••••	•••••				••••		
Merida Frapani	Jan.	10	43,095	9			••••							
Pranani	Jan.	. 17	43,095	8										
Cienfuegos	Jan.	18	41,647	12		1								
Cienfuegos	Jan.	25	41,647	17								·		
Marsala	Jan.		40, 131	19					1				••••	
Marsala Cape Town	Jan.	30	40, 131 36, 000	14 21		••••		•••••	••••	ļ				
Cape Town	Jan	6	36,000	33					3			•••••		
Schiedam	Jan.	17	25,600	10					١					
Schiedam	Jan.	24	25,600	8										
Cardenas	Jan.	25	25,000	10					ļ					
Curaçoa			25,000	6		••••		••••						
GibraltarGibraltar	Jan.	11	23, 981 23, 981	10 13						ļ	Ţ		•••••	
Vera Cruz	Jan.	22	23, 800	19						ļ	1			
Vera Cruz	Jan.	29	23, 800	25										
Girgenti	Tan	10	23, 547	15										
Girgenti	Jan.		23, 547	16								••••	•••••	
LicataLicata	Jan.	10	19,000	8 12	••••	••••	••••	••••				••••		
Kingston, Can	Jan. Jan.		19,000 18,264	6							2			
Cartagena	Jan.	17	16,000	5										
Matamoras	Jan.	17	16,000	8										
Matamoras	Jan.	24	16,000 15,700	9										
Hamilton, Bermuda	Jan.	29	15,700	3		••••		••••						
Hamilton, Bermuda Sagua la Grande	Feb.	8	15,700	1 9				••••		·····		••••	•••••	
Sagua la Grande	Jan. Jan.		15, 605 15, 605	8			••••	••••	•••••				••••	
Sagua la Grande Cape <u>H</u> aytien	Jan.	3	15,000	9								,		
Cape Haytien	Jan.		15,000	4										
Cape Haytien	Jan.	17	15,000	6										
Cape Haytien Flushing	Jan.		15,000	6		••••		••••						
Flushing	Jan. Jan.	17	13, 200 13, 200	8 4	•••••	•••••	•••••	•••••	•••••				•••••	
t Thomas W I	Jan. Jan.	9	12,019	50										
St. Thomas, W. I St. Thomas, W. I St. Thomas, W. I	Jan.		12,019	46										
St. Thomas, W. I	Jan.	23	12,019 12,019 11,000	52							1			
Port Stanley and St. Thomas.	Jan.	7	11,000	1 3										
Port Stanley and St. Thomas.	Jan.		11,000	3									•••••	
Port Stanley and St. Thomas. Port Stanley and St. Thomas.	Jan. Jan.	21	11,000	4	•••••	•••••	••••••	•••••	•••••		••••••			
Guelph	Feb.	1	11,000 10,173	3							1		•••••	
Tuxpan	Jan.	17	9,000	6									2	
Tuxpan	Jan.	24	9,000	4									2	
Chatham	Jan.		8,730	2									•••••	
La Guayra	Jan. Jan.	10	7, 428 7, 428	9	•• •••	•••••	•••••	•••••		•••••		•••••	•••••	
La Guayra La Guayra	Jan. Jan.		7,428	3	•••••		•••••		•••••					
Sarnia	Jan.	31	6, 200	1										
Coaticook	Jan.	24	3,800	1					1					
Coaticook	Jan.	31	3,800	1										
Clifton, Ont	Jan.		3,500	1	•••••								·····	
Amherstburg Livingston	Jan. Jan.	20	3, 100 3, 000	4						•••••			•••••	
Prescott, Ont	Jan. Jan.	22	2,988	1										
Prescott, Ont	Jan.	29	2,988	2										
,			_,	-										

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