ABSTRACT OF SANITARY REPORTS.

VOL. VIII. WASHINGTON, D. C., MARCH 31, 1893. No. 13.

TREASURY DEPARTMENT, U. S. Marine Hospital Service.—Published in accordance with act of Congress approved February 15, 1898.

UNITED STATES.

One case of typhus fever in Cincinnati, Ohio.

The following telegram, dated March 27, 1893, has been received : Case typhus fever in hospital; isolated; letter by mail.

KALLOCH, Passed Assistant Surgeon, M. H. S. To the SUPERVISING SURGEON GENERAL M. H. S.

Smallpox in Pennsylvania.

Under date of March 27, 1893, Dr. Benjamin Lee, secretary of the State board of health, reports 43 cases of smallpox at Reading, Berks County, to date.

There have been no deaths reported as yet.

Notice.

Persons who have received extra copies of ABSTRACTS Nos. 10 and 11 are requested to return the same to this Bureau.

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

CONNECTICUT--New Haven.--Month of February, 1893. Population, 90,000. Total deaths, 171, including scarlet fever, 15; diphtheria and croup, 20; measles, 8; and whooping cough, 5.

MICHIGAN.—Week ended March 18, 1893. Reports to the State board of health, Lansing, indicate that diarrhea and remittent fever increased, and that inflammation of kidney and pleuritis decreased in area of prevalence. Scarlet fever was reported present during the week at 44 places, measles at 30 places, diphtheria at 27 places, and enteric fever at 12 places. NEW YORK—Buffalo.—Month of February, 1893. Estimated population, 290,000. Total deaths, 434, including phthisis pulmonalis, 31; enteric fever, 2; scarlet fever, 5; diphtheria, 10; croup, 8; and whooping cough, 2.

UTAH—Salt Lake City.—Month of February, 1893. Estimated population, 70,000. Total deaths, 57, including phthisis pulmonalis, 6; scarlet fever, 2; and diphtheria, 4.

			rom	Deaths from-											
Cities.	Week ended.	Population, U Census of 189	Total deaths f all causes.	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhusfever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
New York N.Y	Mar. 25	1 515 301	1 135	121		4			2	8	16	45	3	20	
Chicago III	Mar 18	1 000 850	510	14		•		1	-	10	2	27	ĕ	-4	
Philadelphia Pa	Mar 18	1 046 964	479	56						13	9	22	3	5	
Roston Mass	Mar 25	448 477	220	26						1	3	10	ĭ	5	
Baltimore Md	Mar 25	434 430	100	28			1			2	Ŭ	2	2	5	
Cincinneti Ohio	Mar 24	206,008	143	. 17						5		3	5		
Cleveland Ohio	Mar 25	261 383	+198	11		1	1			6	4	1 ĭ	v	1	
New Orleans, Ly	Mor A	249,000	197	19							· ·	-		1 1	
New Orleans, La	Mar 11	242,035	111	10						Ĩ		1	·····	· *	
Washington D C	Mar 18	230, 202	195	15			1			1 î	·····	5			
Detroit Mich	Mar 25	200, 052	106	10						5	1	ี จึ			
Milwoukoo Wig	Mar. 20	200, 870	100	6						Ĩ	1	5	•••••		
Nowark N I	Man 18	204,400	111	17						5	5	ő			
Newark, N.J.	Mar. 10	200,000	102	16						1 1	5	4	•••••		
Minneepolie Minn	Mar. 25	164 799	100	. 9		4					1 i		·····		
Pochoston N V	Mar. 20	199 000	57	- 11	1	· ¦ · · · · ·	1			1		1			
Dramidance D I	Mar. 20	100,090	01	. 11					•••••		0	1			
Indiananalia Ind	Mar. 25	152,140	00		•••••						1 4	•••••	•••••		
Thuanapons, mu	Mar. 25	100,430	33	4	•••••	•••••			•••••				•••••		
Dichmond Vo	Mar. 24	81, 434	4							T		1			
Kienmond, va	Mar. 18	81, 388	40	4		• • • • • • • • • • • • • • • • • • • •						•••••	•••••		
Nashville, Tenn	Mar. 25	76,306	31	1 2								•••••		3	
Fall River, Mass	Mar. 24	74, 398	30	5						1	্য	•••••			
Erie, Pa	Mar. 25,	40, 634		2		•••••			•••••	1	····	•••••	•••••		
Portland, Me	Mar. 25	36, 426	17	1							1	•••••		1	
Bingnamton, N. Y	Mar. 25	35,005	16	4	•••••						•••••		1	1	
Mobile, Ala	Mar. 18	31,076	14	6						•••••		···· <u>·</u> ··			
Galveston, Tex	Mar. 17	29,084	10								•••••	1			
san Diego, Cal	Mar. 18	16, 159	6												
Pensacola, Fla	Mar. 18	11,750	7	· · · · · ·						1		•••••			
						1	1				1		1		

MORTALITY	TABLE,	CITIES	\mathbf{OF}	\mathbf{THE}	UNITED	STATES.
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Table of temperature and rainfall, week ended March 20, 1893.

[Received from Department of Agriculture, Weather Bureau.]

Locality,	Temp	erature in Fahrenhe	degrees it.	Rainfall in inches and hun- dredths					
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.			
Nom England States									
New England States:	90		0	1 17		7 11			
Portland Me	29	•••••	3	1.17	67	1.11			
Roston Mass	35		5	1.09	.07				
Block Island R I	34	•••••	3	1.02		. 24			
Woods Holl	35	•••••	4	1 12		.08			
Middle Atlantic States :			т.	1.14		.05			
Albany, N. Y.	33	1	7	63		17			
New York, N.Y.	37	•••••	3	. 91		13			
Philadelphia, Pa.	38		ž	.70		.29			
Atlantic City, N. J.	37		6	.91	.54				
Baltimore, Md	42		7	.91		.77			
Washington, D. C	41		5	. 98		. 52			
Lynchburg, Va	44		6	. 89		.86			
Norfolk, Va	46		6	1.05		. 13			
South Atlantic States :						•			
Charlotte, N. C	50		8	1.09		.70			
Wilmington, N. C.	53		1 2	. 98		. 32			
Charleston, S. C	56		7	.91	.03				
Augusta, Ga	56		9	1.24		. 85			
Savannah, Ga	58		8	.84	.31	•••••			
Jacksonville, Fia	01	•••••	9	.13	1.18	17			
Titusville, Fla	00		0	. 09		.11			
Kon West Flo	72	1		.00	•••••	. 20			
Gulf States .	14	1				.40			
Atlanta Ga	52		9	1 44		1 35			
Pensacola, Fla	60		7	1 26	.10				
Mobile, Ala.	60		8	1.84		.02			
Montgomery, Ala	57		9	1.40		. 98			
Vicksburg, Miss	58		10	1.47		. 40			
New Orleans, La	62		8	1.31	. 26				
Shreveport, La	58		10	1.05		. 88			
Fort Smith, Ark	52		11	.53		. 53			
Little Rock, Ark	54		12	1.03		1.00			
Palestine, Tex	59		8	. 98		.82			
Galveston, Tex	62		5	.73	.02				
San Antonio, Tex†	62		6	.49		. 36			
Corpus Christi, Tex	64		4	.36		.33			
Ohio Valley and Tennessee :			10	1 01		1.14			
Memphis, Tenn	52		10	1.31		1.05			
Nashville, Tenn	49		10	1.17		1 90			
Chattanooga, Tenn	10		10	1.4/		1.09			
Knoxville, Tenn	40		11	1.20	 	1.10			
Indiananalia Ind	40		10	91		71			
Cincinnati Ohio	43		1 11	.31		63			
Columbus Obio	39		8	1 .71		.58			
Pittshurg Pe	39		6	. 63					
Lake Region :	1 30			1					
Oswego, N. Y	31		9	.63		. 33			
Rochester, N.Y	. 30		. 5	.70		. 42			
Buffalo, N. Y	. 30		. 5	.63		. 23			
Erie, Pa	. 33		7	.63		. 38			
Cleveland, Ohio	. 33		6	.63		. 52			
Sandusky, Ohio	. 34		. 7	. 56		. 34			
Toledo, Ohio	. 35		. 8	. 49	•••••	. 42			
Detroit, Mich	. 34		, õ	.00	•••••	.40			
Port Huron, Mich	. 29			. 09					
Alpena, Mich	. 23			.42	. 32	71			
Marquette, Mich	. 22		· +	56		12			
Milwaukee Wie	. 31		A	56		15			
Chicago III	29			.56		20			
Duluth Minn	. 94		8	.35		. 19			
Unner Mississinni Vallev ·		1			1				
St. Paul. Minn	. 28		. 14	.28		. 19			
La Crosse, Wis.	. 31		. 9	. 35		.]			
Dubuque, Iowa	. 33		. 8	. 49		. 00.			
Davenport, Iowa	. 35		. 9	.49	.14				
Des Moines, Iowa†	. 35	l 	. 10	1.28	.02	1			

*The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multipled by seven.

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Locality	Tempe	erature in Fahrenhe	de grees it.	Rainfall in inches and hun- dredths.					
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency.			
Upper Mississippi Valley-Cont'd.									
Keokuk Iowa	38		10	. 49		.10			
Springfield Ill	40		10	56		43			
Cairo III	47		Ŷ	84		-10			
St Louis Mo	44		10	70		49			
Missouri Valley			10			. 10			
Springfield Mo	45		11	77		74			
Kansas City Mo	42		18	42		· ii			
Concordia Kana	39		10	44		30			
Omaha Nahr	36		19			.00			
Vaniston & Dalt	20		14	. 49		.00			
Valentine Nehr	92		19	. 21	11	.00			
Valentine, Neor	20		12	.24	.11				
Diama S Dab	30		14	• 14	.08				
Extreme Northwest:	- 31		14	. 14	.00				
Moorehead, Minn	21		19	.14		.09			
St. Vincent, Minn	16		16	.14		.12			
Bismarck, N. Dak	24		17	. 21	.08				
Fort Buford, N. Dak	25		20	.07		.03			
Havre Mont	30		22	12	1	10			
Helene Mont	34		0	14		14			
Papid City S D	30		10	.17					
Spokene Weeh	40		10	. 21	03				
Walla Walla Wash	40		3	.01	12				
Walla Walla, Wash	40		4	.00	.12				
Salt Laka City Htab	41		4	.10	.51				
Sait Lake City, Utan	42		4	.42	.10				
Cheyenne, wyo	35		8	.14		.00			
North Platte, Nebr	37		11	.14	·····	.08			
Denver, Colo	40		5	.14		.16			
Montrose, Colo	41		6	.07		.02			
Pueblo, Colo	42		6	.07		.00			
Dodge City, Kans	44		10	.21		.2			
Abilene, Tex	. 56		5	. 28		. 28			
El Paso, Tex	. 56		0	.12		.12			
Santa Fe, N. Mex	40		3	.14		.14			
Tucson, Ariz	60		4	.21		.2			
Pacific Coast :						. 02			
Olympia, Wash	45		4	1.13					
Portland, Oregon	49		6	1.37	.17				
Roseburg, Oregon	49		4	.70	.05				
Red Bluff, Cal	55		. 6	.77	. 82	1			
Sacramento, Cal.	56		3	.75	. 80				
San Francisco, Cal	55		4	.75	. 35				
Fresno City, Cal	55		3	.28	1.24				
Los Angeles Cal	58		4	.64	1.56				
San Diego Calt			1						
Yuma, Ariz.	. 65		3	.05		.0			

Table of temperature and rainfall, week ended March 20, 1893-Continued.

*The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multiplied by seven. † Missing.

FOREIGN.

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

Winter cholera in Russia.

(Report by Consul-General Crawford, St. Petersburg.)

I feel it my duty to report to the Department certain facts gathered from official sources in this city with reference to the continuance and virulence of cholera in Russia at the present time.

It is now officially admitted that this epidemic will without doubt break out early in the spring and with increased severity. At no time during the present century, as shown by the statistics of the Observatory of the Imperial Academy of Sciences, has the average temperature of the Russian Empire been so low as in the present season. registering an average of $13\frac{1}{2}^{\circ}$ F. colder than the average for the last 138 years. While this abnormal cold brought incredible distress and suffering, especially to the poorer classes, it has been patiently endured in the hope that the germs of cholera might thereby be effectually destroyed. Such hopes, however, have been in vain, as the dread visitor has been in our midst during the entire winter, and in spite of the insufferably cold weather, as will be seen in this brief résumé.

I find in the Official Messenger of this city, under date of February 23, 1893, published data touching this important question, and which may be regarded as the basis of this report.

In general, the cases of cholera and deaths therefrom in the several affected provinces of the Empire are summarized as follows:

In Bessarabia, from January 16 to 31, there were 43 cases and 21 deaths; in Voronegh, from January 13 to February 11, 20 cases and 16 deaths; in Ekaterinaslav, from January 13 to February 12, 41 cases and 23 deaths; in Kiev, from January 9 to February 5, 144 cases and 44 deaths; in Oriol, from January 3 to February 3, there were 6 cases and 2 deaths; in Penza, from January 9 to February 6, 42 cases and 18 deaths; in Padolia, from January 7 to 28, 586 cases and 196 deaths, showing a veritable epidemic in the dead of winter, averaging 27 cases and 9 deaths per day. In Samara, from January 9 to 23, there were 7 cases and 4 deaths; in Saratov, from January 9 to 23, 14 cases and 8 deaths; in Tambov, from January 13 to February 7, 14 cases and 8 deaths; in Ufa, from January 7 to 19, 21 cases and 10 deaths; in the territory of the Don Cossacks, from December 29 to February 6, 24 cases and 14 deaths; in the districts of Zakatal, from January 13 to 26, 8 cases and 5 deaths.

On examination of these data, therefore, it will be seen that cholera. even during the unprecedented cold weather of the present winter, even at a time when the temperature was the lowest, has not only been more or less general in the Empire, but has shown a very high rate of mortality. It is therefore reasonable to suppose that immediately after the breaking up of winter this epidemic will show itself as a very unwelcome visitor to nearly every portion of this great Empire.

J. M. CRAWFORD.

ST. PETERSBURG, March 4, 1893.

Infectious diseases in Hamburg, Germany.

UNITED STATES CONSULATE, Hamburg, March 16, 1893.

SIR: I have the honor to report the following cases of infectious diseases occurring in Hamburg for the week March 5 to 11, 1893, taken from the official reports published in the Offentlichen Anziger: Small, pox, 1; scarlet fever, 33; measles, 7; whooping cough, 17; cholerine, 16; typhoid fever, 12; croup, 1; diphtheria, 33; and puerperal septicæmia, 1.

Of the cases of cholerine, 4 occurred in children and 12 in adults. The last case of cholera was reported March 4, 1893. In this connection it is well to state that only such cases in which the *comma bacillus* of Koch is found are reported as cholera. All cases with choleraic symptoms, but in which the bacillus is not found, are diagnosed and reported as cholerine.

The case of smallpox occurred in a patient at the old city hospital, and seems to have no connection with immigration. The patient is supposed to have caught the disease from the Austrian child, reported in my communications of February 25 and 28, who is lying sick at the same hospital.

Very respectfully, your obedient servant,

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

To the Supervising Surgeon General M. H. S.

Report on the water supply of Hamburg, Germany.

SIR: I have the honor to submit the following report on Hamburg's water supply: The recognized danger in the use of contaminated water for drinking purposes makes this a most important sanitary question, as the prevention of a repetition of the cholera epidemic next summer probably depends upon the purity of the water. It is hoped to accomplish this end by large subsiding basins and central filtration. These improvements were begun in 1891, and were designed to be finished in three years, but on account of the cholera epidemic the work is being rapidly pushed forward. There are 3,000 men working in relays day and night, and the authorities are exerting every effort to supply the city with filtered water before the summer sets in.

At present the city is being furnished with water from two sources: Firstly, unfiltered Elbe River water, pumped from small subsiding basins, which have outgrown their usefulness. Secondly, a provisional source of supply from several artesian wells, numerous public and private wells, connecting taps with the Altona and Wandsbeck systems, and many public stations where the river water is sterilized by boiling.

The shipping interests have been supplied with boiled water since the outbreak of the epidemic, but latterly a new artesian well has been opened on one of the wharves, known as Asiaquai. This well furnishes a good water. Bacteriological examination shows it to be germ free. Six water boats have been chartered to furnish the vessels with any required amount.

The ground water in the alluvial neighborhood of Hamburg is as a rule not to be depended on. The deep borings begun in 1870, both in

Hamburg and in Wandsbeck, failed to find a sufficient supply. These wells were sunk to a depth of 300 meters and earth temperature of 16°

C. A comparatively small number of the wells furnish a good water, but the quantity is uncertain. Several useful artesian wells are now giving out. Many of the borings have furnished a water rich in sulphur and iron. In the past few months many new wells have been sunk and some water of excellent quality found.

Elbe water is soft, and contains a small percentage of organic matter. The cloudiness is mostly due to clay and sandy particles washed down by the surface water from the Saxon Switzerland and districts of Bohemia. Repeated chemical examinations have shown the dissolved mineral substances to be small in amount. In later years the increased quantity of chlorine found is said to have its origin from the chemical works above Magdeburg and from the impurities coming down with the Saale.

The bacteriological examinations show the usual large numbers of colonies found in river waters fed by the sewerage of a large community. The investigations at the hygienic institute of this city have so far failed to find the presence of cholera bacilli.

Altona, which is in Prussia, although the city is continuous with Hamburg, has been supplied with filtered river water since 1859.

Wandsbeck, also in Prussia, a suburban town of 17,000 inhabitants, lying half an hour to the northeast of the free state of Hamburg, receives its supply from an inland lake, known as Grossensee. It is calculated that from this source a town of 100,000 inhabitants may be furnished with good water. The extra precautions taken to prevent the contamination of this supply has been attended with the most satisfactory results.

THE PRESENT SUPPLY.

The pumping station was erected after the great fire of 1842. The works were opened in 1844 and finished in 1849. At that time the Elbe was considered a very good water for all purposes, and it was taken by ships of all nations for use during the voyage in preference to other waters.

It was considered sufficient at that time to allow the heavier particles in suspension to settle, by the use of subsiding basins. The demand increased with the growth of the city. The pumping capacity was augmented, but the subsiding basins retained their original size.

The following extract, taken from the Festschrift über die öffentlischen Banaulagen Hamburgs für die XXII Jahresversamlung des Deutschen vereins von gas und wasser-fachmänner, shows to what extent the evil grew.

"Until now (July, 1887) the water has been furnished the consumer without any purification. On account of the increased amount used the subsiding basins have been rendered useless, and the water furnished the consumer is not to be distinguished from Elbe water. In the spring when the stream is swollen, the water has a dirty yellow color, becomes turbid and opaque. The water drawn from the faucets has the same characteristics. A large portion of the lower fauna of the Elbe have found their habitat in the conduits. In some places, especially where the current is slower, either in neighborhoods of small consumption or from expansions in the diameter of the mains, the inner walls are clothed with mussels and bryozoum, between which small crustaceans and worms have found a lodging place." The supply pipe for the present system is situated about 6 kilometers above the mouth of the main city sewer. As the tidal movements at this point are considerable—an average of 1.8 meters between high and low water—the pumping is only done during the ebb, so as to prevent the possibility of direct up stream contamination.

For the houses situated on the higher ground the supply is intermittent. These houses are supplied with reservoirs, which hold a day's supply, and must be filled between 3 and 5 a. m.

At present the pumps represent a combined horse power of 1,800. An average of 128,000 cubic meters is used by the city per day, being 220 litres per head (industrial purposes included).

THE PROVISIONAL SUPPLY.

In case of need, an additional water supply has been provided for, which is now largely used, awaiting the completion of the filters. This supply will also be looked to in case a return of the epidemic renders the filtered water suspicious.

The sources of this supply are the following: 56 public wells, 34 useful private wells, 43 stations for boiling river water, 126 connecting taps with the Altona and Wandsbeck systems. There are in addition 98 water carts for the distribution of this water, and 6 water boats to supply the shipping interests.

The water of all wells is examined bacteriologically and chemically at the hygienic institute, to determine the propriety of using it for drinking purposes.

A few of the wells were in use before the epidemic broke out, but most of them have been opened since that time. In the past four or five months 127 wells have been bored at public expense, of which but 39 have been found to furnish a useful water. Several were rendered useful only after extracting the iron by a process of oxidation. This is accomplished by spraying the water through the air a distance of 2 meters, from a rose, on to coke contained in cylinders. This contact with the oxygen of the air allows for the complete extraction of the iron. The water is filtered through sand before being used.

More wells are at present being sunk. The state of Hamburg has taken the control of the public stations where the river water is sterilized by boiling. The 43 stations are situated in various districts of the city. Their popularity may be judged from the fact that several of the stations are visited by over 1,400 people a day.

The connecting taps with the Altona and Wandsbeck systems were designed only for those inhabitants of Hamburg who live near these suburbs. This water is now being taken by some of the water carts for distribution at more distant points.

THE IMPROVEMENTS.

The improvements which are nearing completion consist of four large subsiding basins and eighteen filtering beds, on the principle of downward filtration through fine sand.

The water will be taken from a point 2.4 kilometers further upstream, so as to diminish the danger of contamination with sewerage effluvia. The subsiding basins are 350 meters long by 20 meters wide and 2 meters useful depth, with a capacity of 78,500 cubic meters each.

The water is allowed to settle twenty one hours before it is drawn off into the filtering beds.

The filters are eighteen large rectangular open basins, built of brick and cement on a clay base. The basins have been built with slanting walls on account of the marshy soil in which they are laid, and because a slanting wall excludes the possibility of leakage between the sand and the wall better than vertical ones.

Each basin has a surface 7,500 square meters, and a capacity of furnishing 11,250 cubic meters of water per day at a filtering rapidity of 62.5 millimeters per hour.

The arrangement of the filter is as follows: A layer of gravel and stone lies undermost to a thickness of 0.6 meter. A layer of 'sand 1 meter in thickness is spread over this. The water is kept to a depth of 1.1 meter over the surface of the sand.

The gravel and stone are laid in layers of graduated sized, increasing from above downward. The sand and stone are well washed in revolving cylinders before being laid in place.

The inlet pipe to each filtering bed is constructed with an automatic device, by which the water is kept at a constant depth of 1.1 meter above the surface of the sand.

The outlet pipe is so arranged that the rapidity of filtration is under good control, and that the filtrate from each basin may be examined separately. This important construction provides that any one, or any number of basins, may be excluded if found faulty.

From the filtering beds the water will be conducted to large covered basins, which are designed only for storage, until the water can be pumped into the city mains.

I take pleasure in acknowledging the kindness of Chief Engineer F. Andreas Meyer and Prof. Dunbar, of the hygienic institute, for several of the facts contained in this report.

Very respectfully,

M. J. ROSENAU,

Assistant Surgeon, M. H. S.

OFFICE OF THE U. S. CONSULATE, Hamburg, March 10, 1893.

To the SUPERVISING SURGEON GENERAL M. H. S.

Arrival at Guaymas, Mexico, of the infected bark Helena, from Hamburg, Germany.

The United States sanitary inspector at El Paso, Tex., reports as follows:

MARCH 20, 1893.

SIR: I have the honor to forward to you the following item from the Two Republics, a paper published in the city of Mexico:

"GUAYMAS, March 16.—The arrival of the bark Helena, from Hamburg, has caused intense excitement in this port. She left Hamburg August 20, and arrived at Gravesend August 29, with 2 cases of cholera in her crew.

"One of the sailors died. The other, who recovered, sailed in the same vessel for this port September 3.

To the Supervising Surgeon-General M. H. S.

Orders issued by the Canadian Government to land all immigrants at Quebec, Canada.

> UNITED STATES CONSULATE, Quebec, Canada, March 18, 1893.

SIR: Yours of the 13th at hand. I will notify you as soon as navigation is opened at this port.

The immigration business at this port the coming season will be very large. Orders are issued to land all immigrants here, and the vessels arriving early in the spring will probably bring large number of passengers.

Very respectfully,

FREDERICK M. RYDER, United States Consul.

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

Disinfection of immigrant's baggage at Halifax, Nova Scotia.

MARCH 21, 1893.

SIR: I have the honor to report that the steamship *Prussian* arrived March 16, the steamship *Sardinian* arrived March 19, and the steamship *Sarnia* arrived March 20. The baggage of over 1,000 immigrants was fumigated. The immigrants were from all parts of Europe. There were 2 cases of measles on board the *Sardinian*, the 2 immigrants having measles were detained.

Very respectfully,

ALEXANDER B. McDowell,

Sanitary Inspector.

One case of typhus fever at New Laredo, Mexico.

The following has been received from the United States sanitary inspector at Laredo, Tex.:

MARCH 23, 1893.

SIR: I have the honor to report that yesterday I saw (through the courtesy of Dr. Garza, the attending physician) a case of typhus fever in New Laredo, Mexico.

So far as I can learn, this is the only case that has occurred in New Laredo during this year.

There is no history of exposure.

The case is that of a girl of 13 years, now in the second week of the disease, and is, I think, a well-marked case of typhus.

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

Typhus fever abating in Mexico.

LAREDO, TEX., March 20, 1893.

SIR: I have the honor to report that during the past week I have continued the inspection of trains from Mexico. No case of contagious disease has been discovered, and reports from the interior of Mexico are to the effect that typhus is abating.

The case of smallpox in quarantine, reported March 2, is convalescing. The city authorities have enforced free vaccination for the past two weeks, and the city is now pretty thoroughly protected.

I am, very truly,

T. J. TURPIN, Sanitary Inspector, M. H. S.

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

Report on the inspection and disinfection at Alexandria, Egypt, of rags intended for shipment to the United States.

> UNITED STATES AGENCY AND CONSULATE GENERAL, Cairo, February 9, 1893.

SIR : Referring to Mr. Grant's dispatches, Nos. 114, dated August 27, 1892; 129, dated September 19, 1892, and 169, of December 15, 1892, you will note that he has been for some time dissatisfied with the inspection and disinfection of rags at Alexandria intended for shipment to the United States. Last week I spent a day at Alexandria in careful examination of their system of disinfection. The disinfection is done in the places of business of the rag shippers, and by their employés solely responsible to them. At their pleasure they report to the consular agent of the United States: "We have disinfected certain rags." Thereupon he makes a certificate to that effect. Without reflecting on the good faith of the shippers or their employés, it is evident that this is no way to reach a thorough disinfection. Disinfection should be done by persons with no interest in the rags and who are not responsible to those who have. In one shop, at least, I regard the system as equivalent to no disinfection at all. Of late there has been an increase in the rag shipments from Egypt to the United States. These rags come from the dirt and squalor of the fellah village, from the decay and filth of Nubian huts of mud and dung, from noxious and pestilence-breeding haunts of the Caerene, where the smallpox blooms perennial and the cholera lies in wait with patient and cheerful assiduity. While there is no epidemic in vogue just now, these diseases are never absent from the homes of this people. Apparently epidemics are not contagious They are always at home along the Nile, and sally out on other here. nations from this safe retreat. Without shadow of doubt, the seeds of a dozen epidemics lurk in these rags. It becomes essential that there should be careful, conscientious, disinterested disinfection.

I have informed the shippers that for the present no consular certificate of disinfection will be given except by the recommendation of Mr. Sidney Chasseaud, whom I have sent to Alexandria as rag inspector. He has been an employé of this office for over two years, has had experience in this work, and is a reliable and competent man. He will be assisted by Mr. Peter Rudolph, an American citizen who has been acting as inspector in one of these rag marts by direction of Dr. S. C. Ewing, our consular agent at Alexandria. By previous circulars from the Treasury Department on file here the charge for disinfection fees is fixed at 20 cents per bale, 5 cents of which goes to the consular agent at Alexandria and 15 to the inspector. This is the fee already in the one shop where Dr. Ewing's inspector has been working, is satisfactory to them, and is certainly small enough when the extent and disagreeable character of the work is considered.

While the shippers would prefer to have the consular agent certify to their representations, ordinary business sense demands that the consular agent should have disinterested assurance that disinfection has actually taken place according to law. Under my present arrangement he will have this, and we can be reasonably sure that from this bailiwick, at least, disease is not carried into America in the guise of commerce.

I have the honor to be, sir, your most obedient servant,

E. C. LITTLE, Agent and Consul-General.

To Hon. WILLIAM F. WHARTON, Assistant Secretary of State.

AUSTRALIA—Melbourne.—Month of December, 1892. Total deaths, 736, including enteric fever, 4; scarlet fever, 1; diphtheria, 3; and whooping cough, 2.

CHINA—Hongkong.—Month of January, 1893. Total deaths, 452, including phthisis pulmonalis, 61; and smallpox, 2.

CUBA—Havana.—Under date of March 18, 1893, the United States sanitary inspector reports as follows :

There were 115 deaths in this city during the week ending March 16, 1893. Four of those deaths were caused by yellow fever, with approximately 10 new cases, 2 were caused by enteric fever, 1 by so-called pernicious fever, 1 by paludal fever, and 6 by diphtheria and croup.

FRANCE—*Rouen.*—Population, 111,847. Total deaths, 386, including enteric fever, 13; phthisis pulmonalis, 35; measles, 7; and whooping cough, 2.

GREAT BRITAIN—*England and Wales.*—The deaths registered in 33 great towns of England and Wales during the week ended March 11 corresponded to an annual rate of 19.6 a thousand of the aggregate population, which is estimated at 10,322,429. The lowest rate was recorded in Burnley, viz, 11.7, and the highest in Plymouth, viz, 27.6 a thousand.

London.—One thousand five hundred and seventy-six deaths were registered during the week, including smallpox, 6; measles, 20; scarlet fever, 15; diphtheria, 38; whooping cough, 28; enteric fever, 11; and diarrhea and dysentery, 20. The deaths from all causes corresponded to an annual rate of 19.1 a thousand. Diseases of the respiratory organs caused 351 deaths. In greater London 1,991 deaths were registered, corresponding to an annual rate of 17.7 a thousand of the population.

In the "outer ring" the deaths included diphtheria, 10; measles, 8; and scarlet fever, 12.

Ireland.—The average annual death rate represented by the deaths registered during the week ended March 11, in the 16 principal town districts of Ireland, was 19.6 a thousand of the population. The lowest rate was recorded in Lisburn, viz, 8.5, and the highest in Dundalk, viz, 33.5 a thousand. In Dublin and suburbs 169 deaths were registered, including scarlet fever, 1; enteric fever, 6; whooping cough, 1; measles, 1; and diphtheria, 1.

Scotland.—The deaths registered in 8 principal towns during the week ended March 11 corresponded to an annual rate of 22.3 a thousand of the population, which is estimated at 1,447,500. The lowest mortality was recorded in Greenock, viz, 11.6, and the highest in Dundee, viz, 28.5 a thousand. The aggregate number of deaths registered from all causes was 627, including measles, 49; scarlet fever, 6; diphtheria, 7; whooping cough, 17; fever, 5; and diarrhea, 10.

SWITZERLAND—Lucerne.—Month of January, 1893. Population, 22,000. Total deaths, 51, including scarlet fever, 1; and diphtheria, 2.

Zurich.—Month of February, 1893. Population, 104,406. Total deaths, 158, including phthisis pulmonalis, 12; typhus fever, 1; and diphtheria and croup, 13.

Quarantine against cholera in Europe.

[Translated in this Bureau from the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Berlin, March 8, 1893.]

AUSTRIA-HUNGARY.—The authorities at Trieste, under date of February 7, enjoined a 7 day's quarantine, with official medical inspection and disinfection of vessels, against the Russian ports of the Baltic Sea; against ports on the northern seaboard of France and the northern and eastern seaboard of the German Empire; ports of Belgium and the Netherlands; the French ports of the Mediterranean, and against importation from the ports at the mouth of the Elbe.

GREAT BRITAIN.—Traffic with the Island of Jersey is subjected to strict surveillance. No vessel carrying freight or passengers may land except at the ports of St. Helier, St. Aubin, and Gouray. The German Empire, Netherlands, Belgium, the ports of Dunkirk, Calais, and Cherbourg, and the ports between Brest and Nantes have been declared infected, and Russia, Norway, Sweden, Denmark, and ports between Dunkirk and Brest are declared suspicious. Passengers are not allowed to land without official inspection. If they arrive from an infected port the sanitary commissioner has authority to inspect and disinfect their baggage and effects at any time within 8 days after landing. Vessels from Marseilles are subjected to 10 days' quarantine at Gibraltar. that all importations from North Sea ports be officially inspected. Importation of rags from the Elbe ports is prohibited.

TURKEY.—Vessels arriving from Marseilles are subjected to a quarantine of observation in Turkish ports.

BULGARIA. — Quarantine regulations against Hungary, Russia, Asiatic Turkey, Hamburg, and Marseilles have been renewed and put in force.

SPAIN.—Importations from Bruges were declared "clean" February 15.

MALTA.—A quarantine of ten days has been in force since February 20 against vessels arriving from the French ports of the Mediterranean.

Status of the cholera epidemic.

[Translated in this Bureau from the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Berlin, March 1 and 8, 1893.]

GERMAN EMPIRE.—During the last week in February no new cases of cholera were reported throughout Germany. Within the past few days a case of cholera has been verified at Hamburg.

AUSTRIA-HUNGARY.—One choleraic death is reported at Zielona in the Borszezow district of Galicia.

PERSIA.—No cholera reports have been received since February 2. According to information of February 13, a violent outbreak of cholera had occurred in Persian Turkestan near the Turkish border.

EAST INDIES—*Calcutta*.—Twelve choleraic deaths were reported for the last week in January.

Cholera in the East Indics.

[Translated in this Bureau from the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Berlin, March 1, 1893.]

The sanitary report for the province of Assam shows a high rate of mortality for the year 1891. Out of a population of 5,000,000, 150,156 deaths were registered, giving a rate of 29.9 to a thousand of the popu-Of these deaths, 23,882, or 15.9 per cent of the sum total, and lation. 4.76 per 1,000 of the population, were due to cholera. As in past epidemics, the disease was almost restricted to the Surma and Brahma-The sanitary commissioner is of opinion that cholera pootra valleys. does not become epidemic in localities where the water supply is pure, where fruit is eaten only in the ripe state, and where the streams are protected from contamination by infectious matter. In the hill country only three choleraic deaths occurred. Attention is drawn to the fact that pilgrimages, on account of the unsanitary conditions under which they are made, develop and spread cholera epidemics.

The deaths from smallpox numbered 2,361, or 960 more than in the preceding year, and the deaths from "fever," 75,965. Among the latter are included 993 deaths from Kala-azar, a disease imported since 1860 from Bengal, and which resembles the beriberi of Ceylon.

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MORTALITY TABLE, FOREIGN CITIES.

		ula-	rom	, Deaths from—									
Cities.	Week ended.	Estimated pop tion.	Total deaths f all causes.	Cholera.	Yellow fever.	Smallpox.	Typhus feyer.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Vienna	Feb. 18	1, 435, 931	623					1	3	19	18	1	
Hamburg*	Mar. 4	620,000	209						•••••	6		•••••	
Naples	Oct. 29	527, 586 527, 586	243					2	1	3	22	••••	
Nanles	Nov 12	527,586	205					4		3			
Naples	Nov. 19	527,586	261					3		ĭ			
Naples	Nov. 26	527, 586	242					2		6		····	
Naples	Dec. 3	527, 586	307			·····		3	1	8	1	····· <u>·</u>	
Naples	Dec. 10	527, 586	• 317	•••••		•••••		1	2	3	•••••	1	
Naples	Dec. 17	527, 586	327			j	•••••		1	5	•••••	1	
Copenhagen	Mar. 4 Mor 4	334,000	140	•••••			·····	1	1	5			
Cologne	Mar. 11	297, 935	112										
Palermo	Mar. 4	250,000	101							1			
Stockholm	Feb. 25	248,051	118	į				•••••	16	19			
Rotterdam	Mar. 11	222,230	115	•••••	•••••		¦		3			•••••	
Hanover	Mar. 4	191,400	61	•••••				•••••	•••••	3		•••••	
Frankfort-on-the-Main	Mar. 4	180,000	121	• ••••		1		4	•••••	4			
Genos	Mar 4	181 864	107			.		-		î			
Trieste	Mar. 4	158,054	88			1				5			
Nuremberg	Feb. 25	151, 393	60				· · · · · ·		1	5		•••••	
Hiogo	Feb. 25	148,118	91	·····		32		3	•••••	3			
Stuttgart	Mar. 11	139,659	40 E0			• • • • • •		•••••	•••••	5		•••••	
Crefeld	Mar. 4	127,000	71		•••••			•••••				•••••	
Orefeld	Mar. 11	108,000	83							2			
Aix-la-Chapelle	Mar. 4	107, 363	45										
Gothenburg	Mar. 4	105,800	37	·						1			
Zurich	Mar. 4	104,406	42	•••••			2		8	18	3	•••••	
Para	Feb. 12 Feb. 10	100,000	20	•••••	97	•••••	1	1		•••••			
Pará	Feb. 19 Feb. 26	100,000	56		5		1	î					
Pará	Mar. 5	100,000	54		4		1	3					
Marsala	Feb. 25	40, 131	18				1						
Marsala	Mar. 4	40, 131	17					1					
Matanzas	Mar. 11	40,000	19			•••••	·····		•••••	•••••		•••••	
Vera Cruz	Mar. 11 Mar. 17	20,000	20	•••••	1	•••••		2	•••••				
Cartagena	Feb. 11	25,000	14										
Cartagena	Feb. 24	25,000	11										
Cartagena	Mar. 5	25,000	6	·			l	2					
Girgenti	Mar. 4	23, 847	14		.:		·····						
Cienfuegos	Mar. 11	20,000	15						•••••				
Victoria, B. C.	Mar. 4 Map 11	10, 841	9	•••••			•••••				•••••	•••••	
Antigua, W. I.	Feb. 25	16,664	15										
Flushing	Mar. 11	14,000	7										
Guelph	Mar. 18	10, 539	1										
Tuxpan	Mar. 11	10,280	5	i									
Chatham	Mar. 18	10,000	4	•••••			! 		•••••		•••••		
Amherethure	Mar. 18	0,000	l l				·····						
Coaticook	Mar. 18	2,000	1										
		_,	· •		1	1	1			1			

* One case cholera during the week.

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Supervising Surgeon - General Marine-Hospital Service.