# ABSTRACT OF SANITARY REPORTS.

Vol. IX. Washington, D. C., September 14, 1894. No. 37.

TREASURY DEPARTMENT, U. S. Marine-Hospital Service.—Published in accordance with act of Congress approved February 15, 1893.

## UNITED STATES.

[Reports to the Supervising Surgeon-General M. H. S.]

No cholera at Cumberland.

WASHINGTON, D. C., September 13, 1894.

In accordance with your instructions of the 7th instant, I have to report that I arrived at Cumberland on the morning of the 8th, and, accompanied by Health Officer E. T. Duke, had the body of the patient Walther, who was reported to have died of cholera, exhumed, and obtained a portion of the contents of the intestinal tract. I have further to report as a result of a bacteriological examination the entire absence of the spirilla of Asiatic cholera.

Respectfully,

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

Yellow fever on British steamship Tyzack, at Baltimore.

Baltimore, Md., September 7, 1894.

British steamship Samuel Tyzack sent to local quarantine this morning by Health Commissioner Mc Shane. Two men of crew admitted to University of Maryland Hospital September 3, 1 man on the 6th and 1 now sick on the vessel. One died in the hospital twelve hours after admission. Diagnosis, yellow fever. Sick removed to quarantine hospital. Precautions taken. Vessel left Havana August 25, and arrived here August 31.-G. W. STONER, Surgeon, M. H. S.

Note.—Dr. John Guitéras, sanitary inspector, M. H. S., was ordered, on September 7, to proceed to Baltimore and cooperate with the Baltimore health authorities in regard to these cases.

BALTIMORE, MD., September 10, 1894.

SIR: I have just telegraphed you that 1 of the cases at quarantine is suffering with yellow fever, the other 2 are not.

Dr. McShane was unable to accompany me to quarantine, and I had to engage a tug boat to go there. Every facility was given me for the 71

(757)

examination of the patients. Wilson is slowly recovering from a severe attack of yellow fever.

The chief engineer, Mr. Pool, has a very severe bronchitis and pos-

sibly typhoid fever.

The steward of the ship has a slight attack of ephemeral fever.

As to the 2 deaths, I did not think it advisable to exhume the bodies for a post-mortem examination, since the one case of Wilson was enough to decide the question of the existence of yellow fever on board. From the history of the cases I am inclined to the opinion that they both died of yellow fever.

I visited the ship, and found all hands well. I hope to-morrow to inspect the men who worked on the ship. I shall, unless you other-

wise direct me, look up statistical data in this city.

Very respectfully,

JOHN GUITÉRAS, Sanitary Inspector, M. H. S.

Yellow fever at Cape Charles Quarantine Station.

American bark Alice, eight days from Havana, crew of 10, stone ballast, arrived at quarantine to-day with 2 cases of yellow fever aboard and 1 person convalescent of same disease. The vessel will be towed to Fishermans Island early to-morrow morning.—T. B. Perry, Passed Assistant Surgeon, M. H. S.

NOTE.—See letter in this issue from Dr. D. M. Burgess, sanitary inspector, M. H. S., at Havana, Cuba, relative to the departure from that port of the American bark *Alice*.

Yellow fever at Key West Quarantine, Dry Tortugas.

KEY WEST QUARANTINE, FLA., September 3, 1894.

SIR: I have the honor to report the development of a case of yellow fever on board the American schooner Louis V. Place on August 30. This is the vessel from which 2 cases of yellow fever were removed on the evening of August 26. The occurrence of this case was not unexpected, and measures had been adopted to render the chance of infection of the vessel very slight. The case was removed in about three hours after being sick, and isolated, to await the development of the nature of his disease, which was as stated. I would also report the arrival to-day of the American schooner Sarah A. Fuller, one day from Havana, for Punta Gorda, with 1 case of yellow fever aboard, taken sick just after leaving Havana. This vessel lay at San Jose wharf, in Havana; is very clean and in general good order, and will be disinfected just as soon as I can get her to the wharf.

Respectfully, yours,

H. R. CARTER, Surgeon, M. H. S.

Smallpox in Wisconsin.

MILWAUKEE, WIS., September 10, 1894.

SIR: I have the honor to report that since my last communication, August 20, 1894, the following concerning smallpox in this State has been reported to this office: Raymond, Racine County, 1 case; Wausau, Marathon County, 1 case, 1 fatal; Lake, Milwaukee County, 2 cases, 2 fatal; Greenfield, Milwaukee County, 2 cases, 1 fatal; Wauwatosa, Milwaukee County, 3 cases; Milwaukee, Milwaukee County, 103 cases, 32 fatal. Total number of cases at present existing in Milwaukee, 80.

Since the outbreak in the State in January the disease has appeared in 34 different places; at present it only exists in 4 places, all confined to Milwaukee County.

Total number of cases reported in the State since the outbreak to date, 331, of which 93 were fatal. Total number of cases reported in the city

of Milwaukee, since outbreak, 236, of which 60 were fatal.

Injunctions issued in the city of Milwaukee during the past two weeks to restrain the health authorities from removing patients from their homes to hospital, and to restrain the city from erecting hospital barracks, have been dissolved, and the usual precautions are being continued. Inspectors are still at all depots and steamboat wharves.

Very truly yours,

U. O. B. WINGATE, Secretary State Board of Health.

Report of immigration at New York for the week ended September 8, 1894.

### OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of New York, September 10, 1894.

Number of alien immigrants who arrived at this port during the week ended September 8, 1894; also names of vessels and ports from which they arrived.

Date. Vessel.		Where from.	No. of immigrants from Russia.	No. of im migrants.
1894.		,		
Sept. 2	Steamship La Bretagne	Havre		13
2	Steamship Belgenland	Antwerp		6
2	Steamship Zaandam			17
3	Steamship Friesland	Antwerp		18
3	Steamship Gellert			12
4	Steamship Elbe			7-
5	Steamship Britannia			3
5	Steamship Aurania	Liverpool and Queenstown	1	15
6	Steamship Lahn			16
6	Steamship Massilia			
7	Steamship Germanic	Liverpool and Queenstown		37:
7	Steamship Columbia	Hamburg		5
7	Steamship Edam			8
7	Steamship Sorrento	Hamburg	41	11:
7	Steamship Chateau Lafitte,	Bordeaux		
7	Steamship Norwegian	Glasgow		
8	Steamship Persia	Hamburg	9	7-
	Total		254	1,86

EDW. F. McSweeney,
Acting Commissioner of Immigration.

Report of immigration at San Francisco for the week ended September 1, 1894.

### OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of San Francisco, September 1, 1894.

Number of alien immigrants who arrived at this port during the week ended September 1, 1894; also names of vessels and ports from which they arrived.

Date.	Vessel.	Where from.	No. of immigrants.
1894. Aug. 30 31	Steamship Mariposa, Steamship Acapulco	AustraliaPanama	23 2
	Total		25

# VESSELS REMAINING, ARRIVING AT, AND DEPARTING FROM UNITED STATES QUARANTINE STATIONS.

#### DELAWARE BREAKWATER QUARANTINE.

Week ended September 8, 1894.

Three vessels inspected and passed.

#### GULF QUARANTINE.

#### Week ended September 3, 1894.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Am. schr. Millie Williams Am. schr. Emma Hawkins				Disinfecteddo	
Am. schooner Montana	Sept. 2	St. Christo- pher.		Disinfected and held for observa- tion.	

#### KEY WEST QUARANTINE.

### Week ended September 4, 1894.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Am. schr. John R. Bergen *† Am. bk. C. Southard Hulbert *.	Aug. 12 Aug. 23	Havana Matanzas	Port Tampa Punta Gorda.	Disinfected Disinfected and held for observa- tion.	Aug. 31
Am. schr. L. V. Place †* Am. schr. E. H. Cornell	Aug. 26 Sept. 2	Havana Cienfuegos	Pascagoula Apalachi- cola.	do	
Am. schr. Sarah A. Fuller †	Sept. 3	Havana		do	

<sup>\*</sup>Previously reported. †Yellow fever at quarantine.

#### REEDY ISLAND QUARANTINE.

### Week ended September 9, 1894.

Name of vessel.	Date of arrival.	Where from.	Destina- tion.	Treatment of vessel and cargo.	Date of dep'ture.
Am. bark Harriet S. Jackson	Sept. 9	Havana	Philadel- phia.	Held for disinfection.	

Seventeen vessels inspected and passed.

#### SAN DIEGO QUARANTINE.

Week ended September 5, 1894.

One vessel inspected and passed.

#### SOUTH ATLANTIC QUARANTINE.

#### Week ended September 1, 1894.

Name of vessel.	Date of arrival.	Where from.	Destina- tion	Treatment of vessel and cargo.	Date of dep'ture.
Am. schr. Sadie Willcutt*† Spanish brig Mayaquez*	Aug. 19 Aug. 23	Cienfuegosdo	Brunswick do	Disinfected Disinfected and held for observa-	Aug. 29
Span. ss. Berengner el Grande	Aug. 31	Caibarien	Savannah	tion. do	

<sup>\*</sup> Previously reported. †One case of yellow fever at quarantine.

One vessel inspected and passed.

Reports of States and yearly and monthly reports of cities.

CONNECTICUT—Enfield.—Two weeks ended September 1, 1894. Estimated population, 7,200. Total deaths, 4, viz: enteric fever, 1; and phthisis pulmonalis, 3.

Hartford.—Month of August, 1894. Estimated population, 57,500. Total deaths, 88, including diphtheria, 1; whooping cough, 1; enteric fever, 5; and phthisis pulmonalis, 9.

Meriden.—Month of August, 1894. Estimated population, 28,500. Total deaths, 36, including whooping cough, 1; and phthisis pulmonalis, 8.

FLORIDA—Pensacola.—Month of August, 1894. Estimated population, 15,000. Total deaths, 31, including phthisis pulmonalis, 5; enteric fever, 3; and whooping cough, 1.

Tampa.—Month of August, 1894. Estimated population, 15,688. Total deaths, 8, including 1 from phthisis pulmonalis.

GEORGIA—Columbus.—Month of August, 1894. Estimated population, white, 10,726; colored, 9,027; total, 19,303. Deaths, white, 16; colored, 31; total, 47, including enteric fever, 2; whooping cough, 1; and phthisis pulmonalis, 4.

INDIANA—Evansville.—Month of August, 1894. Estimated population, 60,000. Total deaths, 69, including enteric fever, 5; measles, 1; whooping cough, 3; and phthisis pulmonalis, 8.

Iowa—Davenport.—Month of August, 1894. Estimated population, 35,500. Total deaths, 41, including enteric fever, 1; and phthisis pulmonalis, 3.

Dubuque.—Month of August, 1894. Estimated population, 40,000. Total deaths, 49, including whooping cough, 2; enteric fever, 2; and phthisis pulmonalis, 6.

Keokuk.—Month of August, 1894. Estimated population, 20,000. Total deaths, 15, including phthisis pulmonalis, 2.

MASSACHUSETTS—Haverhill.—Three weeks ended September 8, 1894. Estimated population, 31,390. Total deaths, 25, including 2 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, by observers throughout the State indicate that for the month of August, 1894, compared with the preceding month, dysentery, cholera infantum, diphtheria, typhoid fever, inflammation of bowels, cholera morbus, diarrhea, and remittent fever increased, and measles and pleuritis decreased in area of prevalence. Compared with the average for corresponding months in the eight years 1886–1893, smallpox, scarlet fever, cerebro-spinal meningitis, and typhoid fever were more prevalent, and membranous croup, typho-malarial fever, erysipelas, intermittent fever, measles, pleuritis, cholera morbus, and puerperal fever were less prevalent in August, 1894. Including reports by regular observers and others, consumption was reported present in Michigan in

the month of August, 1894, at 234 places, typhoid fever at 82 places, scarlet fever at 73 places, diphtheria at 51 places, measles at 17 places, and smallpox at 3 places. Reports from all sources show typhoid fever reported at 44 places more, measles at 26 places less, diphtheria at 18 places more, scarlet fever at 9 places more, smallpox at 10 places less, and consumption at 5 places more in the month of August, 1894, than in the preceding month.

Week ended September 1, 1894. Reports to the State board of health, Lansing, from 66 observers, indicate that remittent fever, influenza, and whooping cough increased, and that cholera morbus decreased in area of prevalence. Phthisis pulmonalis was reported present during the week at 234 places, enteric fever at 47, scarlet fever at 30, diphtheria at 23, measles at 4, and smallpox at 1 place, Detroit.

OHIO—Cleveland.—Month of August, 1894. Estimated population, 325,000. Total deaths, 583, including measles, 3; scarlet fever, 30; diphtheria, 8; enteric fever, 14; whooping cough, 14; and phthisis pulmonalis, 42.

Youngstown.—Month of August, 1894. Estimated population, 35,000. Total deaths, 68, including enteric fever, 2; measles, 1; whooping cough, 9; and phthisis pulmonalis, 3.

MINNESOTA—Winona.—Month of August, 1894. Estimated population, 22,000. Total deaths, 24, including whooping cough, 1; and phthisis pulmonalis, 2.

PENNSYLVANIA—Plymouth.—Two weeks ended September 8, 1894. Estimated population, 14,000. Total deaths, 8. No deaths from contagious diseases.

Williamsport.—Month of August, 1894. Estimated population, 27,132. Total deaths, 33, including 1 from enteric fever.

TENNESSEE—Chattanooga.—Month of August, 1894. Estimated population, white, 27,000; colored, 13,000; total, 40,000. Deaths, white, 18; colored, 25; total, 43, including enteric fever, 3; and phthisis pulmonalis, 6.

Memphis.—Month of August 1894. Estimated population, white, 32,276; colored, 25,575; total, 57,951. Deaths, white, 49; colored, 74; total, 123, including diphtheria, 1; enteric fever, 4; whooping cough, 1; and phthisis pulmonalis, 16.

Nashville.—Month of August, 1894. Estimated population, white, 54,595; colored, 33,159; total, 87,754. Deaths, white, 62; colored, 72; total, 134, including enteric fever, 8; scarlet fever, 1; whooping cough, 2; and phthisis pulmonalis, 18.

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

			from				]	Deat	hs fr	om-	_			
Cities.	Week ended.	Population, U. Census of 1890	Total deaths f	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Allegheny, Pa	Sept. 8	105, 287	33	2						2		1		
Altoona, Pa Amesbury, Mass	Sept. 8 Sept. 8	30, 337	10 3							2		1		
Ashtabula, Onio	Sept. 10	9, 798 8, 338	2											
Augusta, Ga Baltimore, Md	Sept. 7 Sept. 8	33, 300 434, 439	14 165	18				••••			3	5		4
Baton Rouge, La Belleville, Ill	Sept. 1	10, 478	8	ì						1				î
Bennington, Vt	Sept. 1 Sept. 8	15, 361 6, 391	4	1										
Binghamton, N. Y	Sept. 8	35,005	13	2						2	4	14		1
Boston, Mass Bristol, R. I	Sept. 8 Sept. 1	448, 477 5, 478	216 1	33						2				5
Bristol, R. I	Sept. 8	5, 478	10	3				- <b></b> -	ļ. <b></b> .		••••		••••	
Brockton, Mass Brooklyn, N. Y	Sept. 8	27, 294 806, 343	404	50						8		23	3	6
Brownsville, Tex Brownsville, Tex Brownsville, Tex	Aug. 11 Aug. 18	6, 134 6, 134	4 3	1						1				
Brownsville, Tex	Aug. 25	6, 134	2											
Brownsville, Tex Butler, Pa	Sept. 1 Sept. 1	6, 134 8, 734	3 1		•••••					1		••••		
Butler, Pa Butte, Mont	Sept. 8	8,734	3											
Butte, Mont Cambridge, Mass	Sept. 1 Sept. 8	10,723 70,028	3 27								3			
Carlisle, Pa	Sept. 8	7,620	2											
Charleston, S. C Cincinnati, Ohio	Sept. 1 Sept. 7	*54,955 296,908	†28 52	5 6						1 3		2		····i
Claremont, N. H	Sept. 1	5,565	4									ļ <u>.</u>		
Claremont, N. H Claremont, N. H Cleveland, Ohio	Sept. 8 Sept. 8	5, 565 261, 353	97	4			••••			1	8	1	1	····i
Columbus, Ohio	Sept. 8	261, 353	1											
Columbus, Ind Columbus, Ohio	Sept. 1 Sept. 8	6, 719 88, 150	20	3						5				
Crawfordsville, Ind	Sept. 1	6, 089	5											
Crawfordsville, Ind Cumberland, Md	Sept. 8 Sept. 8	6, 089 12, 729	3 7	2										1
Dayton, Ohio	Sept. 6	61. 220	16 2	3		ļ				1		ļ		
Dedham, Mass Dedham, Mass	Sept. 1 Sept. 8	7, 123 7, 123	5 2											
Dunkirk N. Y	Sept. 1	9, 416 17, 823	2 4									<b></b> .		
Elgin, Ill Erie, Pa	Sept. 3 Sept. 1	40,634	12								4			
Evansville, Ind Everett, Mass	Sept. 8	50, 756 11, 068	14 3	1							1			
Fall River, Mass	Sept. 8 Sept. 8	74, 398	49	2						1				2
Flint, Mich	Sept. 1 Sept. 1	22, 037 9, 803	8 1											1
Flint, Mich	Sept. 8	9, 803	5										1	
Utrang Kaniga Mich	Sept. 1 Sept. 8	23, 076 60, 278	6 25	1 2						1				
Green Bay, Wis	Sept. 8	9,069	25 3											
Hannibal, Mo Hamilton, Ohio	Aug. 31 Sept. 8	12,857 17,565	5 5	1										
Hazleton, Pa	Aug. 18	11.872	5 5									1		
Hazleton, Pa Hazleton, Pa	Aug. 25 Sept. 1	11, 872 11, 872	1 3											
Hazleton, Pa Hoboken, N. J	Sept. 8	11,872	2											
Hoboken, N. J	Sept. 1 Sept. 8	43, 648 43, 648	31 21	1						1	2	3		
Jamestown, N. Y	Sept. 9	16,038	3									1		
Johnstown, N. Y Johnstown, Pa	Sept. 8 Sept. 8	7,768 $21,805$	3 10	1										
Kalamazoo, Mich	Sept. 1	17, 853 22, 535	5 6	1						1		1		·····•
Kalamazoo, Mich Knoxville, Tenn Knoxville, Tenn Lebanon, Pa.	Sept. 1 Sept. 8	22,535	17	3						1				1
Lebanon, Pa Leavenworth, Kans	Aug. 25 Sept. 1	14, 664 19, 768	10 4							2	2			
Lowell, Mass	Sept. 8	77,696	37	1										
Ludington, Mich Ludington, Mich	Sept. 1 Sept. 8	7,517 7,517	3 11		•••••									•••••
Lynchburg, Va	Sept. 8	19,709	7	1										
Lynchburg, Va	Sept. 8 Sept. 1	44, 126 7, 710	1							1		1		
Massillon, Ohio	Sept. 1	10,092	2	I								l		

<sup>\*</sup> Estimated population, white, 28,870; colored, 36,295. Total, 65,165. † White, 11; colored, 17.

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

			rom				]	Deat	hs fr	om-	_			
Cities.	Week ended.	Population, U. Census of 1890	Total deaths from all causes.	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Massillon, Ohio Memphis, Tenn	Sept. 8	10,092	3		<b> </b>								<b></b>	
Memphis, Tenn Middletown, Ohio	Sept. 8 Sept. 1	64, 495 7, 681	27	2										
Middletown, Ohio	Sept. 8	7, 681	3	1										
Milford, Mass	Sept. 10 Sept. 1	8,780 204,468	83	5		6						2		4
Milwaukee, Wis Minneapolis, Minn	Sept. 8 Sept. 8	204, 468 164, 738	98 49	3 4		16					1	3		<b>2</b>
Mobile, Ala	Sept. 1	31,076	. 12	î										2
Mobile, Ala Nashville, Tenn	Sept. 8 Sept. 8	31,076 76,168	17 39	5		····								
Naugatuck, Conn	Sept. 8	6, 218	8	2								١		
Newark, N. J Newark, N. J	Sept. 1 Sept. 8	181, 830 181, 830	97 84	11 10		3 1							1	1
New Bedford, Mass New Brunswick, N. J	Sept, 8 Aug. 25	40,733 18,603	18 6	2										
New Brunswick, N. J.,	Sept. 9	18,603	2	1				ļ						
New Haven, Conn New Orleans, La	Sept. 6 Sept. 1	81, 298 242, 039	31 117	19								4		2
Newport, R. I	Sept. 8	19, 457	11	1										
New York, N. Y North Adams, Mass	Sept. 8 Sept. 8	1, 515, 301 16, 074	710 4	78		1				1	1	27		3
Norristown, Pa	Sept. 1 Sept. 8	19, 791 19, 791	10 6	2						1				
Northampton, Mass	Sept. 1	14,990	8	1										
North Attleboro, Mass North Attleboro, Mass	Aug. 18 Sept. 1	6,727 $6,727$	3	1					'					ļ
North Attleboro, Mass	Sept. 8	6,727	3	1										
Olean, N. Y Omaha, Nebr	Sept. 1 Sept. 1	7,358 $140,452$	1 26	3										
Oneonta, N. Y Ottumwa, Iowa	Sept. 8	6, 272 14, 001	3						•••••	•••••		•••••		
Paducah, Ky	Sept. 1 Sept. 1	12,797	6	3						1				
Pensacola, Fla Portage, Wis	Sept. 1 Sept. 1	11,750 5,143	0	1						1				•••••
Portage, Wis	Sept. 8	5, 143	0											
Portland, Me Portland, Me	Sept. 1 Sept. 8	36, 425 36, 425	18 14											
Port Richmond, N. Y Pottsville, Pa	Sept. 3 Aug. 25	6, 290	$\frac{1}{12}$	1										
Pueblo, Colo	Sept. 1	14,117 $24,558$		2								1		
Providence, R. I Putnam, Conn	Sept. 8 Sept. 1	132, 146 6, 512	54 1											2
Racine, Wis	Sept. 8	21,014	7	1						l				
Reading, Pa Richmond, Va	Sept. 10 Sept. 1	58, 661 81, 388	22 24	8;		l				2				"ï
Richmond, Va Rochester, N. Y	Sept. 8	81,388 133,896	28 38	- 3			ļ			1				
Salt Lake City, Utah	Sept. 1	44, 843	14							1		1		2
San Diego, Cal San Francisco, Cal	Sept. 1 Sept. 1	16, 159 298, 997	5 135							1				
Santa Barbara, Cal	Sept. 1	5, 864	2											
Sault Ste. Marie, Mich Saut Ste. Marie, Mich	Sept. 8	5, 760 5, 760	2							1				
Scranton, Pa Seattle, Wash	Sept. 8 Sept. 1	75, 215 $42, 837$	27 15	4	•••••					1	1			•••••
Seneca Falls, N. Y	Sept. 1	6, 116	4											
SiouxFalls, S. Dak South Bethlehem, Pa	Sept. 1 Sept. 10	10,177 $10,302$	$\frac{2}{0}$											
Springfield, Mass	Sept. 8	44, 179	19	1			ļ			1				
St. Louis, Mo St. Louis, Mo	Sept. 8	451,770 451,770	152 166	15 15						3 11	1	5 3	1	1
Sterling, IllSuperior, Wis	Sept. 1 Sept. 1	5, 824 11, 983	2 4										ļ	
Syracuse, N. Y	Sept. 1	88, 143	39	3										1
Taunton, Mass		25, 448 25, 448	12 5	1								1		
Tiffin, Ohio	Sept. 1	10, 801	3											
Tonawanda, N. Y Urbana, Ohio	Sept. 8	7, 145 6, 510					ļ							
Utica, N. Y Vallejo, Cal	Sept. 2	44,007 6,343	18	1						ļ		·		
Vallejo, Cal	Sept. 1	6, 343	1											
Virginia City, Nev	Sept. 1	8,511	0				l	l	••••	١			l	í

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

		U. S.	from				I	Death	ıs fr	om–	-			
Cities.	Week ended.	Population, U Census of 18	Total deaths all causes.	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholers.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Wakefield, Mass	Sept. 8 Sept. 1 Sept. 7 Sept. 1 Sept. 7	6, 982 6, 584 18, 707 18, 707 5, 973 230, 392 12, 981 12, 981 18, 208 13, 499 84, 655 32, 033 33, 320	8 5 2 86 5 4 11 6 8 34 13	1 1 5 1 1 2 1						7 1	1	1  2 1		2

# Table of temperature and rainfall, week ended September 10, 1894.

### [Received from Department of Agriculture, Weather Bureau.]

Locality.	Tempe	erature in Fahrenhe	degrees it.	Rainfall in inches and hun- dredths.				
,	Normal.	*Excess.	*Defic'ncy.	Normal	Excess.	Deficiency		
New England States:								
Eastport, Me	57	1		.77		-6'		
Portland, Me	60	4		⊢ ·ŝi		.0		
Northfield, Vt	59			·78		.2		
Boston Mass	65	7		.73		4:		
Block Island, R. I	65	3		.70		.60		
Block Island, R. I New London, Conn Middle Atlantic States:	65	5		*86		.6		
Albany N V	66	8		.86	.14			
New York, N. Y	69	5		.98	1 .22			
Philadelphia, Pa	71	5		*88	1.82			
Atlantic City, N. J Baltimore, Md	68	4		.84	1 .36			
Baltimore, Md	71	7		.91	.89			
Washington, D. C Lynchburg, Va	70	9		.98		•9		
Lynchburg, va	72	6		.91	••••••	.4		
Norfolk, Va	73	7		1 . 23	•••••	1.1		
outh Atlantic States:	73	-		.86				
Charlotte, N. CWilmington, N. C	73	5				.8		
Charleston C C	75 77	5		1.74	.16	7 -0		
Charleston, S. C	77	5 2		1.47		1:2		
Augusta, Ga Savannah, Ga	78	2		.98		.9		
Jacksonwills Els	77 79	5 3		1 .62		1:4		
Jacksonville, Fla	80	0		1.42	.78	.0		
Titusville, FlaJupiter, Fla	81	1		1.90	10	1 .77		
Key West, Fla	83		1	1.65		1.7		
fulf States:	00	•••••	1	1 05	•••••			
Atlanta, Ga	74	. 2		.73	İ	-5		
Mobile, Ala		ĩ		1.35	•75	٠ .		
Montgomery, Ala	77	3		1.77		•0		
Montgomery, Ala Vicksburg, Miss	78	2		1·10		· š		
New Orleans, La	80	2	l	1.33		1.1		
Shreveport, La	79	3		1.03		9		
Fort Smith, ArkLittle Rock, ArkPalestine, Tex	75	6		.77		·i		
Little Rock, Ark	76	4		.91	1.09			
Palestine, Tex	78	4		•77	1 ·09 2 ·33			
Galveston, Tex	80	2		1.63		1.3		
San Antonio, Tex	79	5		1.11		1.1		
Corpus Christi, Tex	80	2		1.77	•••••	1.7		
Memphis, Tenn	75	5		*84		-1		
Nashville, Tenn	73	7		1.02		.0		
TEHOAVING, J. CHILL	12	6		•79		.6		
Louisville, Ky	72	8		•75		.0		
Indianapolis, Ind Cincinnati, Ohio	68	10		.70	.10			
Cincinnati, Ohio	71	9		'62		.2		
Columbus, Onio	68	10		.70	1.10			
Parkersburg, W. Va	68	13		.77	.03			
Pittsburg, Pa	69	9		.63	1 .57			
ake Region:		_				ļ.		
Oswego, N. Y Buffalo, N. Y	63	7		.66	.54			
Buffalo, N. Y	64	6		.77	1.33	·••••		
Erie, Pa	69	9		.97	1.33			
Cleveland, Ohio	. 65	7		.92	:68			
Toledo, Ohio	66	6		. 63	.87			
Detroit, Mich	65	5		.63	.97	•••••		
Port Huron, Mich	63	7		.56	2 .94	•2		
AlpenaMarquette, Mich	59 58	5 8		.91				
Grand Haven Mich	62	8	***************************************	1 ·03	3.96	.8		
Grand Haven, Mich Milwaukee, Wis	65	5		•67	2.23			
Chicago III	68	4		-63	6.27			
Chicago, III	58	6		1.01		.6		
St. Paul, Minn	63	6	1	•77		-7		
La Crosse Wis	63			1.21	2 . 29	·		
La Crosse, Wis Davenport, Iowa	67	7		1.77	2 20	•]		
Des Moines, Iowa	66	6		-84	.06			
Keokuk, Iowa	68	, š		•84	.36			
Springfield, Ill	68	6		•77		•1		
Cairo, Ill	72	6		-63		.2		
			1		-00	-		
St. Louis, Mo	72	6		•82	28			
St. Louis, Mofissouri Valley:	72	6		*82	-28			

<sup>\*</sup>The figures in these columns represent the average daily departure.

Table of temperature and rainfall, week ended September 10, 1894—Continued.

Locality.		erature in Fahrenhe		Rainfall in inches and hundredths.				
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency		
Missouri Valley—Continued.								
Kansas City, Mo	70	6		1.11	.89			
Wichita Kans	72	4		1.49	6.31			
Concordia, Kans	70	4	•••••	-65	0.01	-35		
Omaha, Nebr	67	5		.77	.73	•		
Omana, Nebr					13	-00		
Valentine, Nebr	63	3		.28		.08		
Huron, S. Dak	62	6		.39	1 .21			
Pierre, S. Dak		3		.27	.03			
Moorehead, Minn	59	5		•56		.56		
St. Vincent, Minn	56	4		.49		•49		
Bismarck, N. Dak	60	2	1	.29	3:41			
Williston, N. Dak	59	-	-1	.21		•21		
Rocky Mountain Slope:	"		-	21				
Towns Mand	58			.01		.01		
Havre, Mont		0		.31		U		
Helena, Mont	60		2	.28	.62			
Spokane, Wash	61	1		.21	.09			
Wallawalla, Wash	68	0		·14	.06			
Winnemucca, Nev	63		. 3	.07		.07		
Salt Lake City, Utah	67		7	l •14	1 .36			
Cheyenne, Wyo	59		3	.27	.43			
North Platte, Nebr	65	3		.42	10	•49		
	64			.25	1 25	72		
Denver, Colo		•••••						
Pueblo, Colo	67		. 1	•40	.50			
Dodge City, Kans	70	0		28	1 .72			
Abilene, Tex	76	6	·····	.63		.53		
Santa Fe, N. Mex	62		. 6	.39	'11			
El Paso, Tex	76		. 2	•34		.34		
Tucson, Ariz	80		4	•41		•41		
Pacific Coast:						-		
Port Angeles, Wash	54	4		.42		-12		
Portland, Oreg	63	i		-32	•••••	.12		
Dasahuma One	63	1 1		.13	••••••	.03		
Roseburg, Oreg								
Red Bluff, Cal	76	0	•••••	·14	•••••	14		
Sacramento, Cal	72	4		.07		.02		
San Francisco, Cal	61	3		.00	.00			
Fresna, Cal	l 78	0		.00	.20			
Los Angeles, Cal	71		1	.00	.00			
San Diego, Cal	69		3	.00	.00			
Yuma, Ariz	87		Š	-05		.0.		
	٠,		•	٠,				

<sup>\*</sup>The figures in these columns represent the average daily departure.

# FOREIGN.

[Reports received from the U. S. consuls through the Department of State and from other sources.]

Cholera and yellow fever as reported to the Supervising Surgeon-General M. H. S., May 15 to September 13, 1894.

#### CHOLERA.

Places.	Date.	Савев.	Deaths	Remarks.
Arabia : Mecca	June 11			Cholera reported.
				_
Lustria-Hungary: Bahnia district	July 24-July 30	94 6	43 3	Total to May 29 in all Galicia.
Bochnia district	July 31-Aug. 6	9	3	
Borszczow district	May 30-June 12	38	12 2	Borsczow, Husiatyn, Nisko, and Ta
	June 19-June 26 July 3-July 30	2 52	25	noborzeg, June 12-June 19, 31 case 15 deaths.
	July 31-Aug. 6	49	25	To deaths.
Buczacz district	Aug. 7-Aug. 12	73	17 29	
Buczacz district	July 24-Aug. 6 Aug. 7-Aug. 12	56 61	29	
Bouhajce	Aug. 7-Aug. 12	3	1	
Bukowina	June 4-June 7 June 19-June 26	5 2	2	
	July 3-July 30		11	•
	July 3-July 30 July 31-Aug. 6	22	9	
Cracow district	Aug. 7-Aug. 12 July 10-July 30	82 92	39 88	
CIACOW district	July 31-Aug. 6	29	14	•
~ · · · · ·	Aug. 7-Aug. 12	21	7	
Czorkow district	July 17-Aug. 6 Aug. 7-Aug. 12	18 63	11 16	
Dabrowa district			10	
Horodenka district	July 10-Aug. 6	90	36	
Husiatyn district	Aug. 7-Aug. 12 June 19-June 26	150	65 1	
Husiaty ii district	July 3-July 30	15	8	
	July 3-July 30 July 31-Aug. 6 Aug. 7-Aug. 12	11	6	
Ilumacz district	Aug. 7-Aug. 12 July 31-Aug. 6	17 14	10	
Tumacz district	Aug. 7-Aug. 12	50	20	
Kolbuszow district	July 10-July 16		1	
Kolomea district	July 17-July 23 July 31-Aug. 6	1 19	6	
	Aug. 7-Aug. 12	27	13	
Melec district	July 31-Aug. 6	1	1	
Nisko district	July 17-July 30 July 31-Aug. 6	3 12	7	
Oldenburg district Skalat	Aug. 7-Aug. 12	7	4	
Oldenburg district	July 20			3 deaths reported.
Saybusch district	July 24-July 30	30	9	
	Aug. 7-Aug. 12	4	2	
Sniatyn Stanislaw district	Aug. 7-Aug. 12	4	2	
Statistaw district	July 31-Aug. 6	2	1	
_	Aug. 7-Aug. 12	11	2	
Tarnossel	July 31-Aug. 6	2 1		
Tarno district	July 24-July 30 July 31-Aug. 6	13	9	
Tarnobrz district	Aug. 7-Aug. 12	20	4	
Tarnobrz district	July 3l-Aug. 6	25 30	14 10	
Wieliczka district	July 24-July 30	7	5	
	July 31-Aug. 6	21	9	
Wadowion district	Aug. 7-Aug. 12 Aug. 7-Aug. 12	28 1	12	
Zaleszcznky	June 5-June 12		2	
	June 26-July 30	303	116	
	July 31-Aug. 6 Aug. 7-Aug. 12	107	64	I .

### CHOLERA—Continued.

Places.	Date.	Савев.	Deaths.	Remarks.
Belgium:				
Angleur	July 17-July 30	11	5	
Cheratte	Aug. 3 July 18		1	
	Aug. 8	1		
Ghenée Herstel	July 29 July 18	1	1	
•	July 18 July 22-July 25		1	
	July 26 July 29	1	3	
Tomonnos	Aug. 3 July 23-July 30 June 9-July 1		1 2	To June 25, 50 cases.
Jemappes Liege	June 9-July 1	4	8	10 June 25, 50 cases.
•				
	July 22-July 25 July 21-Aug. 4 Aug. 4-Aug. 11		33	
	Aug. 4-Aug. 11 Aug. 7	6	10	
	Aug. 11-Aug. 18		15	
Marchienne au Pont	Aug. 18-Aug. 24	39	7	In city and suburbs.
Montegnee	Aug. 4 Aug. 7 July 17-July 30		2 1	
Ongrée Seraing	July 17-July 30 June 15-June 30	9	5	
_	July 18		7	
Angleur, Alost, Liege, Mon-	Aug. 4 June 25	2		Cholera reported.
olas.		İ		Choicia reported.
Angleur, Buleur, Grace, Jemeppes, Montegnee, Tilleur.	June 15-June 30	90	49	
Tilleur.  Angleur, Buleur, Fleron, Grace, Montegnee, Olne, Schlessin, Sommague, Tilleur.	July 18			Cholera reported.
			1 -	
Wandre	July 18 July 28-Aug. 4	16	10	
China:	June 25 and July 2		1	Cholera reported.
Fuchau	June 23–June 30		2	
England: London	July 28-Aug. 4	5	1	On vessel from Russia lying in the
Gravesend				Thames. On steamship Bradford, from St.
France:				Petersburg.
Avignon	July 19	1		
Bordeaux Department of Finistère	Aug. 4-Aug. 11 Apr. 22-Apr. 29 May 20-May 25	19		13 localities.
Marseilles	May 20-May 25 Aug. 3 and Aug. 9	7	1	Cholera reported.
	Aug. 4-Aug. 17		21	-
Manoel sur Seille Mont devant Sassey	Aug. 10 Aug. 10			2 cases reported. 1 case reported.
Nantes	July 7	!		Cholera reported.
Paris	May 27-June 2 July 4-July 18 Aug. 1-Aug. 19	6	1	
* Division	Aug. 1-Aug. 19	8	2	
Rheims	June 23-July 7 July 21-July 22	2	. 1	
Germany:				
Agilla		1		•
AlthofBerlin	Aug. 13-Aug. 20 July 19	1		
Bohnsack Brahamunde	July 11-July 16	1 2		
Bromberg	Aug. 7-Aug. 15	10		
Cologne Christefelde	Aug. 18	1	1	Cholera reported.
Dantzig	July 7			
-	July 7-July 28 Aug. 6-Aug. 13	18 5	6	
	Aug. 11-Aug. 18 Aug. 13-Aug. 20			
	Aug. 13-Aug. 20 Aug. 18-Aug. 25		. 3	4 cases on a boat from Konigsberg to Dantzig.

# CHOLERA—Continued.

Places.	Date.	Савев.	Deaths.	Remarks.
Germany-Continued.				
Deutsch Eylau	June 28-July 4 July 11-July 23	2		
Direchau	July 11-July 23	2		
Dravlitten	Aug. 13-Aug. 20	2	2	
Einlage	Aug. 13-Aug. 20	1		
Emmerich	Aug. 13-Aug. 20 July 11-July 23	1	}	
Fordon	July 11-July 23	2		
Garnsee	Aug. 6-Aug. 13	1	•••••	
Gollun	Aug. 13-Aug. 20	3		
GollupGrandenz	July 30-Aug. 13 July 16-July 23	2		
Grone Walz	July 11-July 30	4		
Holm	July 30-Aug. 13	7		•
Huntel	Aug. 13-Aug. 20	1		- **
Johannisburg District	Aug. 1-Aug. 13	51	16	
Josefinen	Aug. 8		1	4
Knuzebrack	July 11-July 30	3		
	July 30-Aug. 6	2		
Konigsberg	July 30-Aug. 6 Aug. 12-Aug. 18	1	1	
~ , ,	Aug. 18-Aug. 25	1	1	30-4
Lubeck	July 18		1	On steamers during voyage from St. Petersburg.
Makal	July 30			∫ Petersburg.
Nakel	Aug. Il		1	
Neusfahrwasser	July 11-July 16	1		
Nauhmush	Aug. 6-Aug. 13 Aug. 13-Aug. 20 Aug. 13-Aug. 20	1		
Neubruch Netze-Warthe district	Aug. 13-Aug. 20	15	11	
Niedzwedzen	Aug. 13-Aug. 20	14	6	
Oberschliesen district	Aug. 16	1	1	
Ortelsberg	Aug. 5	î		
Osterode		î	1	
Plehnendorf	June 14	. 2		
	July 11-Aug. 6 July 30-Aug. 6 July 11-July 23	12		
Sagorsch	July 30-Aug. 6	3		In country districts.
Schidlitz	July 11-July 23	5		
Schilno	June 14	1	2	
	July 11-July 23	7		Another report gives 5 deaths to
	Aug. 13-Aug. 20 July 30-Aug. 6 May 25-May 28	1		June 4.
Schnarse	July 30-Aug. 6	1		<b>31</b> 1
Silesia	May 25-May 28		2	Cholera reported.
Stettin	June 6	6	1.	
Thorn (department)	Avg. 31 July 11-July 23	5		
Thorn (department),	July 23-July 30	"	1	
	Aug 6-Aug. 13	1	•	
	Aug. 13-Aug. 25		5	
Useh	Aug. 11	1		
Weichselmunde	Aug. 13-Aug. 20	1		
Weisenhohe	Aug. 11		. 1	
Holland:			1	
Alkmaar	July 14-Aug. 8	1		
	Aug. 15	2	2	
Amsterdam	Aug. 1-Aug. 15 Aug. 8-Aug. 22	29	9	
-	Aug. 5-Aug. 22	37	12 5	
Barsingerhorn	Aug. 18-Aug. 25	6	1	
Benebroek	Aug. 2-Aug. 12 Aug. 2-Aug. 12 July 14-Aug. 8	i	i	
Beverwyk	July 14-Ang 8	i	-	
201011111111111111111111111111111111111	Aug. 15	2	1	
Bleslensgraaf	July 11-Aug. 8		2	
Broenhaven	Aug. 2-Aug. 8	2		
Charlerol	Aug. 10	1	1	
Cosvorden	July 24-July 26		. 1	
Dordecht	Aug. 2-Aug. 8	1		
Dostdesst	Aug. 2-Aug. 12	1	1	
Elslo Erp	July 18	1		
Erp	July 14-Aug. 8		1	
Groenendal Haarlem	July 27		. 1	
Haarlem	July 14-Aug. 8		5	
	Aug. 10		2	
Uaarlammarmaar	Aug. 18-Aug. 20 Aug. 15	1	1	
Haarlemmermeer	Aug. 10	5	2	
Halfwer	Ang 10			
Halfweg	Aug. 10	1 1	_	·
Halfweg Heer	Aug. 10	ĭ		
Halfweg	Aug. 10 Aug. 2-Aug. 8 July 11-Aug. 8	1	5	
Halfweg Heer	Aug. 10	1	5	

### CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Holland-Continued.	A 10			Chalana and d
Lobith Maestricht	Aug. 18 July 18 July 27-Aug. 2	1	7	Cholera reported.
	July 27-Aug. 2 Aug. 2-Aug. 8	20 76	7 39	Including 48 cases and 23 deaths in
	To Aug. 21		30	suburbs.
Middlerode	July 11-Aug. 8		1	
Mydrecht	July 14-Aug. 8 Aug. 18	1		Cholera reported.
Roermond Rotterdam	Aug. 2-Aug. 8 Aug. 3	1	1	On foreign vessel bound for Germany,
	July 27 July 29-Aug. 11	1 2	1	On canal boat from Maestricht.
	Aug. 11-Aug. 18	1	1	Two cases on a Rhine boat Aug. 18.
	To Aug. 18 Aug. 18-Aug. 25	7	6	
Utrecht	July 14-Aug. 8 Aug. 13	1	1	
Velzen Vroenhoved		4	1	
	July 14-Aug. 8 Aug. 10 July 11-Aug. 8	2		
Wertgrastyk Womerveer	July II-Aug. 8		1	
Zaardam	Aug 12-Aug. 18 July 14-Aug. 8	1	1 2	
Zvidschalwyk,	Aug. 15	2	2	Cholera reported.
	rug. rommin			Choice reported.
India: Bombay			29	
	May 30-July 10 July 10-July 31		81 101	
Calcutta	July 10-July 31 July 31-Aug. 7 May 6-June 2		71 85	
	June 3-June 30		99	
	June 30-July 21 July 21-July 28	í • • • • • • •	10	
Madras Italy:	Apr. 21-May 4		2	
Leghorn	June 17-June 23	1		
Hiogo	July 14-July 21 July 21-July 28	1 2	2	
Description of the second of t	July 28-Aug. 4	ĩ	ĩ	
Russia: Astrakhan (government)	July 8-July 14	4	1	
Brest (city)	July 14-July 19 July 2-July 20	19 34	12 13	
Courland (government)	July 3 July 5-July 15	5 35	19	
Change of (management)	July 8-July 21	44	23	
Cronstadt (government)	July 1-July 26	189	70	
Estland (government)	July 29-Aug. 4 July 1-July 21	10 64	4 31	
	July 18-July 26 July 22-July 28	32 21	15 11	
	Aug. 2-Aug. 9	31 103	43	
Grodno (government)	June 2-June 29	66	31	
	June 30-July 21 July 29-Aug. 18	63 1520	42 629	
Finland	To July 22 July 23–July 29	11 5	4	
Hangoe (Finland)	July 11-July 18	195	90	
Kalisch (government) Kielce (government)	June 17-July 9	280	117	
	July 10-July 25 July 26-Aug. 4	1165	381 543	
Kovno (government)	Aug. 5-Aug. 10 May 6-May 19		384 4	
	May 13-June 9 June 17-June 30	7 104	17	
,	July 1-July 28	277	118	
	July 22-July 21 July 29-Aug. 4	23	23	
Livland (government)	July 1-July 14	ļ	2	l

# ${\it Cholera\ and\ yellow\ fever,\ etc.} \hbox{---} {\it Continued}.$

### CHOLERA-Continued.

Places.	Date.	Cases.	Death	Remarks.
Russia—Continued.				
Lomza (government)	July 21-July 30	29	13	
,	July 31-Aug. 6	40 47	10 25	·
Lublin (government)	Aug. 7-Aug. 10 July 29-Aug. 5	14	5	
360 (24.3)	Aug. 6-Aug. 11	27	18	
Mlava (city)	May 28-May 29	20 64	10 38	
Narva (city) Novgorod (government)	July 8-July 28	55	26	
	Aug. 21		······ <u>·</u> ·	Cholera reported.
Olonetz (government)	July 4-July 9 July 16-July 27	29	11	
Petrikov (government)	May 13-May 29	7	6	
_	May 31-June 5	4	2	
	July 1-July 12 July 22-July 28	10 40	11	
	July 29-Aug. 8	273	120	
Disab (management)	Aug. 7-Aug. 12	521	252	
Plock (government)	May 6-May 12 May 11-May 31	26 109	19 66	
	June 1-June 7	74	32	Includes city of Ciechanow, June 1 to
	June 3-July 4	349	178	19, 157 cases, 74 deaths.
•	July 1-July 7 July 5-July 28	47 359	16 188	
	July 29-Aug. 3	155	77	
Padalia (gayannmant)	Aug. 4-Aug. 8 May 9-May 23	233	119	
Podolia (government)	June 3-June 9	11 2	1	
Radom (government)	May 6-May 30	38	28	
	June 3-June 16 June 13-July 3	34 55	8 29	
	July 4-July 18	455	190	
	July 20-July 27	553	402	
	July 28-July 31 Aug. 1-Aug. 9	431 1449	126 740	
Revel	July 12		1	
Riga	Aug. 17	10		
St. Petersburg (gov't)	July 1-July 28 Aug. 5-Aug. 11	321	232 104	
St. Petersburg (city)	July 1-Aug. 1 Aug. 1-Aug. 8	3354	1550	
	Aug. 1-Aug. 8 Aug. 8-Aug. 14	185 120	145	
Serenetz (government)		11	68	
	July 16	13	6	
Tomsk Tula (government)	July 22-July 28 May 20-June 10		5	
Tuta (government)	June 3-June 30	20	î	
XX7 (	July 8-July 21	4		
Warsaw (government)	Apr. 28-June 3 June 5-June 28	107 134	58 69	
*	June 28-July 8 July 6-July 28	22	8	
	July 6-July 28	911 627	456 280	
	July 29-Aug. 3 Aug. 4-Aug. 12	910	448	
Warsaw (city)	May 6-June 5	64	41	
	June 5-June 27 June 29-July 5	45 34	29 22	
	July 9-July 30	329	150	
	Aug. 2-Aug. 9	190	87	
Werchnye Sselo	Aug. 10-Aug. 15	169 30	46	
Witibst	July 16 July 22-July 28	12	4	
Zedletz	July 22-July 28 July 16-July 26 July 22-July 29	4	2	
	July 22-July 29 July 30-Aug. 6	60 35	22 15	
	Aug. 7-Aug. 10	36	20	
Kiev, Mohilev, Orel, Pskow, Jaroslav, Smolensk.	Aug. 10	10	8	Cholera reported.
Spain: Lucena	Aug. 9	1	1	
Sweden:		1		
Stockholm, Fejan Quaran-	July 4-July 18	14	4	1 death on steamer during voyage from
tine Station.	Aug. 28	1		St. Petersburg. Reported on steamship from St. Petersburg.
		1	1	1
Switzerland:		1	i	

# CHOLERA-Continued.

Places.	Date.	Савев.	Deaths.	Remarks.
Turkey:				
Adrianople	July 17-July 21	4	3	
Akschehi		3	1	•
Akserai		7	6	
Angora		146		Reported present July 18 and Aug. 9.
Arabson			1	reported presents dry to and ridg. V.
Avanas		27		
Ben Bunar		l	7	
Bogazlian		21	l	
Constantinople	Apr. 1-Apr. 30		5	·
Divriki	May 24-June 22	7	3	
Erbaa		19	l	
Ezeroum	Apr. 17-Apr. 19		46	
Gumusch Hadji	June 26	ĭ		
Harpoot	Aug. 11-Aug. 18			Cholera reported.
Iskilih	May 19-June 1			Cholera reported.
Izneek				
Jozgat				
Kadikoi				
Kaulkoi	June 26			
Kaisseci	June 21-June 26			7
Kastamouni	May 5-May 30	303	103	Includes vicinity.
Aastamouat	June 1-June 21			
				G1 - 1 1
Kaza von Zeila	Aug. 9 May 16-May 31		82	Cholera reported.
Aaza von Zena			63	
William all all an	June 1-June 26		03	
Kirschehr	June 3-June 27		4	
Kouia	May 13-May 16	9		
	June 1-June 3			
	June 21-June 23 June 30-July 3		6	
	July 23-July 24			
	July 30			
	Aug. 9			Chalana namento d
Maaden	June 26			Cholera reported.
maace	Aug. 9			Cholera reported.
Mahmurat el Aziz	May 13			Cholera reported.
Marsowan	June 21-June 22			
Maisowall	Aug. 11-Aug. 18			Chalana manantad
Milan	March 19		17	Cholera reported.
мпан	April 9-April 16		10	
Mustapha Pasha				Cholera reported.
Neuschehr	June 30			Onoicia reporteu.
Niksar	May 27-May 30			
Oolash	Aug. 11-Aug. 18		11	Cholera reported.
Sansoum		10	6	Choiera reported.
Shedavendikiar			U	Cholera reported.
Sivas			1500	Not official.
Sparta				Cholera reported.
Tokat				Cholera reported.
I OEGV	June 1-June 27			
rebizond	May 16			1
1100120Hd	May 31-June 24			
Tschataldga				Cholera reported.
Unia				Onoicia reporteu.
Urgup	May 18-May 19			1
01gup	June 23-June 26			1
	June 30-July 3		2	
	louncon our o	1 0	4	1

### YELLOW FEVER.

Places.	Date.	Cases.	Deaths	Remarks.
Brazil: Rio de Janeiro	May 6-June 2 June 2-June 30 July 1-July 28 July 28-Aug. 4		244 84 13 2	
Cuba: Cardenas	Aug. 4-Aug. 11  July 1-July 7  July 4-July 11	1	3	
Cienfuegos	July 14-July 28 July 28-Aug. 4 Aug. 4-Aug. 18 Aug. 18-Aug. 25	14	13 3 1	
	May 20-June 3 June 4-June 30 July 1-July 28 July 29-Aug. 25 Aug. 25-Sept. 1	18 	12 14 17	
Cruces CityGuantanamo Havana	Aug. 1 June 1-Aug. 31 Apr. 27-May 3	12	11 2	Fever reported.
	May 4-May 31 June 1-June 28 June 28-July 26 July 26-Aug. 2 Aug. 30-Sept. 6		15 31 59 21 67 18	
Manzanillo	July 1-Aug. 31	4	2	
Manzcaragna Matanzas.	Aug. 1	2	1	Yellow fever reported.
MARIELIZAS	June 20-June 27 July 4-July 11 July 18-Aug. 1 Aug. 1-Aug. 8	30 32 12	6 6 3	
Sagua la Grande Santiago de Cuba	Aug. 8-Aug. 15 Aug. 15-Aug. 22 July 1-July 7	6	2 2 1 1	
Equador:	Aug. 3	6	3 3	6 cases, 3 deaths, in the fortnight preceding Aug. 3.
Guayaquil	May 4-May 10		3	
Nacaome	Apr. 8-Apr. 14 Apr. 22-Apr. 28		2 3	
Laguna	Sept. 13	. <b></b> .		Yellow fe ver reported. •
Vera Cruz	Apr. 27-May 3 May 4-May 31 June 1-June 28		59	
•	June 28-July 26 July 26-Aug. 2 Aug. 2-Aug. 23 Aug. 23-Aug. 30		42 11 24	
Salvador: La Libertad	Aug. 3			Yellow fever reported.
San Salvador	July 14-July 21 July 28-Aug. 4	3 5	3	
West Indies:		1	1	
Puerto Rico (San Juan)		61 15 22	13 3 4	
	Aug. 2-Aug. 9	25	5	Confined to barracks. Fever not
	Aug. 2-Aug. 9 Aug. 10-Aug. 16 July	35	4	among shipping.
Port of Spain (Trinidad) Yucatan:	0 413 1111111111111111111111111111111111			

### Status of cholera in Europe and Asia.

GLASGOW, SCOTLAND, August 28, 1894.

SIR: I have the honor to submit the usual weekly report relative to cholera and other epidemic diseases in Europe, officially, for the period from August 15 to 22, and with later information, including August 27. There has been an extension of cholera in Germany and in Austria-Hungary since last report, extensive in Galicia, but in Germany not alarming. The disease appears to be at a standstill in Holland and Belgium, and has not increased greatly in Russia. On the whole, it may be said that the spread of cholera is not so alarming as at this time last week, and at the danger point, the Prusso-Russian frontier, it appears to be well under control. As far as danger to the United States is concerned, it may be said that very few emigrants are going forward at this time, and at the ports of Great Britain (an inspection of which I have just completed) all precautions as to detention and disinfection are being taken. Indeed, nearly all the greater steamship lines are declining to take emigrants from infected ports, and have instructed their agents to that effect.

Germany.—In the week from August 13 to 20 the following cases are announced to have occurred: In the district of Konigsberg, village of Draulitten, on the canal, 2 fatal cases, a canal boatman and his son. In the town of Osterode 1 fatal case, wife of a railway employé. In Konigsberg, August 15, a case, the driver of a wood wagon. village of Agilla, district of Labau, a case in the person of a raftsman. In the village of Medzwedzen, district of Gumbinnen, there were 14 new cases and 6 deaths. In the district of the Vistula 11 cases were Of these, 1 occurred in Schilno, 1 in Neubruch, 1 in Einlage, reported. near Danzig, 4 in Althof, a suburb of Danzig, 3 on a boat going from Konigsberg, through Marienberg, to Danzig, and 1 in Weichselmunde. In west Prussia it was reported in Gollub that a postman had been ill with cholera at Garnsee. In the district of Netze-Warthe there were 15 new cases reported, with 11 deaths. Of these, 3 occurred in Lochnowica, 1 in Josefina, near Bromberg, 1 in Laskownica, 1 in Paulina, near Schubin, 1 in Hoffmansdorf, 1 in Josefkowo, near Nakel, 2 in Usch, 1 in Smolory, near Kolmar, in Prussia, 1 at Landsberg, on the Vistula, and 3 at Kladow, also near Landsberg. Six of these cases were raftsmen and the rest their relatives. In the district of Oberschliesen, in Rosdzien, near Kattoyidz, a fatal case occurred in the person of a workman on August 16. In the district of the Rhine, at Emmerich, a bricklayer was ill with cholera. In the district of Osnabruck, at Mappen, a canal workman was reported to be ill with cholera at Huntel.

Berlin, August 21: Isolated cases of cholera still continue to occur in the province of east Prussia, chiefly in the district of Landsberg, but the only spot where it has assumed the character of an epidemic on this side of the Russian frontier is the village of Niedzwedzen, in the district of Johannisburg, where, up to Sunday last, there had been 67 cases and 21 deaths. All precautions, however, have been taken, and there

is not considered to be any cause for increased anxiety.

Owing to the danger of the importation of cholera from Russia, the Prussian authorities have ordered that the frontier between Upper Silesia and Russia shall be blocked. Until further notice travelers will not be allowed to cross the borders, except at certain specified points, and after careful medical examination. The Kolnisches Zeitung of August 24 states that the day before the following cases occurred in Germany:

At Trohl, near Danzig, 3; at Little Plehnendorf, 2; at Weichselmunde,

1; and Oldschlosen, 1.

Prof. Koch arrived at Konigsberg August 26, and expressed his approval of the precautions there taken against cholera. At the last meeting of the Imperial cholera committee, in Berlin, he emphatically contradicted the opinion prevalent in many quarters that this year's cholera is not so dangerous as formerly, and that, therefore, less caution is In support of his opinion he pointed to the epidemic at Niedzwedzen, in east Prussia. At the same time he said there was no reason for fear, as all necessary precautions had everywhere been taken, but that, nevertheless, there was need of the greatest caution, not only on the part of the authorities, but also and especially Five deaths and 4 new cases are reported from a of the people. suburb of Thorn, and 3 cases from other places on the Vistula. Vossische complains that the Argentine Government subjects all ships from German ports after the 9th instant to eight days' quarantine, though it is known that cholera has appeared only in east Prussia, not to mention the fact that scientific research long ago demonstrated the uselessness of such measures, which merely subject passengers to great inconvenience and severely hamper commerce.

The public bathing establishments in the city of Posen have been

closed by the police, owing to the danger of cholera.

Austria-Hungary.—On August 16 the districts of Obestyn and Tlusta were declared by the minister of the interior to be infected by cholera. Between August 7 and 12 the following cases and deaths were reported in Galicia and Bukowina:

District.	Villages or communi- ties.	Cases.	Deaths.
Galicia:			
District of Vistula a-			
Saybusch	1	4	2
Wadowion	1	1	1
Cracow (government)	7	16	5
Cracow (city)	1	5	2
Wieliczka	3	28	12
Tarnow	1	20	4
Tarnobrzg	5	30	10
Nisko	1	7	4
District of Dnjester b—	_	•	_
Stanislau	3	11	2
Tlumacz	š	50	20
Buczacz	6	61	22
Bodhajce	ĭ	3	1
Kolomea	3	27	13
Sniatyn	2	- 4	2
Horodenka	12	150	65
Zaleszcznki	12	102	42
Borszczow	9		17
Czortkow		73	
	3 2	63	16
Husiatyn	2	17	10
Total	76	672	250
<b>.</b> .			
Bukowina:			
Czernowitz (city)	1	8	4
Czernowitz (government)	1	3	2
Gurahumona	1	3	1
Kotzman	7	30	14
Stnoznnetz	1	3	2
Suczawa	1	5	2
Wiznitz	4	30	14
Total	16	82	39

The reports given in the foregoing table are official. The following

are of later dates, some from semiofficial sources and some from press

dispatches:

Vienna, August 21: According to the latest official returns, 263 cases of cholera and 172 deaths were registered in Galicia on Sunday and Monday, and there were 23 cases and 18 deaths in the Bukowina. gust 22: The report which has been received to-day on the progress of the cholera epidemic in Austria shows that in the last twenty four hours there have been 17 fresh cases and 9 deaths in the Bukowina and 187 fresh cases, with 109 deaths, in Galicia. The percentage of fatal cases as compared with the total number of attacks still continues alarm-August 23: The cholera report this morning states that in ingly high. the past twenty four hours there have been 144 fresh cases and 74 deaths in Galicia and 31 new cases, with 18 deaths, in the province of Bukowina. August 24: The cholera report to day from Galicia shows the percentage of deaths to be still excessively high. Out of 138 fresh cases in that province yesterday, there were 73 deaths, while in Bukowina, with 17 new attacks, there were 9 deaths. August 25: According to the latest reports, 148 fresh cases of cholera and 79 deaths occurred in Galicia yesterday. There were 5 fresh cases and 9 deaths in the Bukowina. August 26: Returns state that 146 cases of cholera and 79 deaths occurred in Galicia on Saturday. In the Bukowina, 16 cases and 15 deaths were registered.

Great Britain.—A case of cholera was reported Saturday on a vessel from St. Petersburg now on the Tyne. The report has not yet been confirmed. The following extract from the Times of August 22 is of interest: "It will be remembered that when Mr. H. H. Fowler was president of the local government board he promised Parliament that there should be a scientific inquiry set on foot by his department with a view to differentiating fatal attacks of so-called English cholera from fatal attacks of true or Asiatic cholera. The opportunities for carrying out such an investigation are naturally difficult to obtain, and probably now is the earliest moment when such a scientific inquiry could be carried out with satisfactory results. It is only within the last few weeks that cases have arisen giving opportunities to decide, on a scientific basis, the relation of so-called English cholera and true or Asiatic cholera, and every advantage is being taken of the opportunity. recent fatal case in the south of London is typical in this respect. Those who have had experience of cholera declare that the symptoms in every respect resemble those of the Asiatic type of the disease, and that the post-mortem appearances confirmed this view in every detail; but when bacteriological investigation was made there was an utter absence of those microscopic and cultivation appearances without which it has been recently held by men of science at home and abroad true cholera does not exist. On the other hand, cases have occurred in which the bacteriological requirements have been present, and yet there has been neither antecedent nor subsequent cholera. These are the two cases that present one of the greatest difficulties to the etiologists and to students of public health. Complete arrangements have been made by Dr. Thorne Thorne, C. B., F. R. S., chief of the medical department of the local government board, with the assistance of Dr. Klein, F. R. S., and a number of clinical and bacteriological workers, for the careful study and investigation of all such cases; and if during the present season a sufficient number of these obscure attacks should occur, it is to be hoped that substantial progress will be made in the inquiry, which received the sanction of the late president of the local government board. Up to a late hour last evening there had been nothing in the form of true cholera reported officially within the previous twenty four hours to the local government board."

Netherlands.—It is stated that most of the cases occurring in Holland have been traced to either drinking or bathing in the infected water of canals. The official figures are presented in tabular form:

Place.		Date.		Cases and deaths.
Province of Limburg:				•
Maestricht	July	14-A 110	8	57 cases, 27 deaths.
Broenhoven		II-Aug.		
Province of North Brabant:		-		
Erp	July	14-A 110.	8	1 death Both from river boats.
Middelrode	July	11-A110	8	1 death Both from river boats.
Province of South Holland:	Jany	ug.	····	
Rotterdam	July	14-Ang.	8	2 deaths, from Rhine boat.
Blestensgraaf	July	11-Ang.	8	2 deaths.
Leyden				1 death, canal boat.
Province of North Holland:	o uij	II IIug.	0	r death, cantar boat.
Haarlem	July	14- A 110	8	5 deaths, in barracks.
Beverwyk		14-Aug.		
Amsterdam				8 cases, 4 deaths.
IIIIIstorum		14-A 110	8	Many new cases daily.
Zaandam				2 deaths, river boats.
Wormerveer				1 death, tramp.
Westgrastyk				1 death, workman.
Brock of Langendyk	July			5 deaths.
Alkmaar		14-Aug.		
Province of Utrecht:	July	rug.	····	2 0000
Utrecht	July	14-A 110	8	1 death.
Woydrecht, near Lönen	July	14-Ang	8	1 case
Total	July	ug.	J	72 cases, 53 deaths.

August 21: To-day's cholera bulletin reports 1 case and 2 deaths in Amsterdam. Two cases of the disease are reported from Maestricht. Total to date for Amsterdam, 36 cases and 15 deaths. August 22: To-day's cholera bulletin reports 3 cases in Amsterdam, thus making the total number 39 and the deaths 15. One case and 2 deaths of the disease are reported from Maestricht, 1 from Haarlem, and 1 death at Kinderdijk. August 23: Two cases of cholera are reported from Ratendrecht, near Rotterdam, and 2 suspected deaths occurred at Schalkwyk. August 24: One case of cholera has occurred in Amsterdam, 1 case and 1 death at Maestricht and 1 case at Amstelveen, near Amsterdam. A cook on board the steamer Dordrecht, recently arrived at Gmunden from Riga, has died of a disease presenting suspicious symptoms. August 25: Two deaths from cholera occurred at Amsterdam to-day. At Amstelveen there was 1 case and 1 death and at Spykenisse 1 death.

Sweden—Stockholm: After twenty-four hours at the quarantine station of Fejan, a case of cholera in the person of a stewardess developed on board the steamer Nordkusten from St. Petersburg.

Russia.—The Russian reports state that cholera was taken to the Prussian city Gollub, district of Briesen, government of Marienwerder, by Jews coming from Drewenz, city of Dobrzyn, about the end of July. From August 3 to 6 there occurred here 30 cases, nearly all Hebrews. On August 9 cholera was reported to be present at Nijni-Novgorod, but officially denied. The following figures are official and given in tabular

form. The dates are the Russian and those used in the rest of Europe, a difference of twelve days.

Government (city).	Dates.	Cases.	Deaths.
Finland St. Pefersburg (city) Narva (city) Narva, beginning of epidemic	Aug. 8-Aug. 14 Aug. 2-Aug. 9	5 120 13 64	4 68 38
Government of Estland: Cities: Joachimsthal, Koanholm, Hungerburg, and Kramersmuhl	Aug. 2-Aug. 9 Aug. 9-Aug. 16	31 103	43
Rija (city) Kovno, district of Schaulen Lomza	Aug. 9-Aug. 16 July 29-Aug. 4 Aug. 7-Aug. 10	11 23 47	11 25
Plock. Warsaw (city) Warsaw (government) Petrikau	Aug. 10-Aug. 15 Aug. 4-Aug. 12	233 169 910 521	119 46 448 252
Kielze	Aug. 5-Aug. 10 Aug. 1-Aug. 9 Aug. 6-Aug. 11	744 1, 449 27	384 740 18
Siedlez	· .	4, 526	2,316

A dispatch from Moscow of August 21 is as follows:

Gen. Baranoff, the governor, has notified the appearance of cholera at Nijni-Nov-gorod. Up to the date of the fair the number had been 60 cases; they were, however, of a sporadic rather than an epidemic character. Last year the existence of cholera at the time of the fair was never officially acknowledged.

The following are the latest reliable figures at hand: From the 21st to the 24th instant, in St. Petersburg, 123 cases and 41 deaths; from the 11th to the 18th instant, in Warsaw, 236 cases and 88 deaths; in the government of St. Petersburg, 208 cases and 73 deaths; Siedlec, 336 cases and 154 deaths; Petrikov, 747 cases and 370 deaths; from the 5th to the 10th instant, in Kielce, 946 cases and 469 deaths, and in Radom, 1,285 cases and 612 deaths; from the 29th ultimo to the 18th instant, in Grodno, 1,520 cases and 629 deaths.

Turkey.—According to a report dated August 9, cholera had broken out at Isnik, and also in the barracks at Tschataldja.

Spain.—On August 8, a case of cholera was reported at Lezcena.

East Indies—Calcutta: In the week from July 8 to 14 there were 13 deaths from cholera and 5 from smallpox. It will be observed that there are no reports from France or Belgium. Reliable information is practically unobtainable. It is well known that cholera is present to considerable extent in both countries—Liege, in Belgium, and Marseilles, in France, for example.

Respectfully, yours,

FAIRFAX IRWIN, Surgeon, M. H. S.

#### AUSTRIA-HUNGARY.

### Cholera spreading in Galicia.

VIENNA, AUSTRIA, August 17, 1894.

SIR: I have the honor to report cholera as spreading in Galicia. In the week ending August 12, 672 new cases have been reported, of which 250 proved fatal.

I remain, etc.,

MAX JUDD, Consul General.

#### BELGIUM.

### Continuance of cholera at Liege.

Under date of August 29, the U. S. consul at Liege reports that during the week ended August 25, 1894, there were 11 deaths from cholera in that city. He writes:

During the past week the new cholera cases average about 5 per day. The newspapers no longer report their occurrence. I shall refuse certificates to any exports I think at all likely to conceal the microbes. In the invoices of firearms there is just one danger—the guns are made by hand in the houses of the workmen, which are in every part of the city.

#### BRAZIL.

Sanitary report of Rio de Janeiro, week ended August 11, 1894.

RIO DE JANEIRO, August 14, 1894.

SIR: I have the honor to inclose report for week ended August 11, 1894:

The deaths from accesso pernicioso were the same in number, 2, as in the previous week; from yellow fever, 3, 1 more; from smallpox 2, 5 less; from typhoid fever 2, 1 more; from diphtheria 2, the same as in the foregoing week; and from beriberi, 3, 1 more. The total from all causes was 220, as against 243 of the previous week, a fall of 23.

The health of the port is about normal, and I believe that the alarm about diphtheria was premature. I am sorry to say that 2 of the deaths from yellow fever occurred aboard a Portuguese merchant ship, which I understand has been sent to Ilha Grande for disinfection. Since last report I have inspected or given bills of health to the followingnamed ships: August 8, American bark Amy, for Baltimore, Md., and English bark Sasmation, for Ship Island, Miss.; August 9, German steamship Capua, for New York, a visé from Santos; August 10, American ship Titan for Barbados, West Indies; August 11, English steamship Biela, for New York; August 13, Norwegian bark Victoria, for Tybee Roads, Ga.; August 14, English steamship Chinese Prince, for New York, a visé from Buenos Ayres.

Respectfully, yours,

R. CLEARY, M. D., Sanitary Inspector, M. H. S.

# Relative to the plague in China.

YOKOHAMA, JAPAN, August 14, 1894.

SIR: Your letter of July 18 received yesterday. \* \* \* We have been fortunate so far in excluding the plague from Japan, and as it is apparently nearly at an end in Hongkong, at least as an epidemic, our anxiety is somewhat less. However, as both Canton and Hongkong are saturated with the virus, and as the summer temperature of southern China is above the point at which the disease is usually prevalent, we greatly fear a renewal of the epidemic on the approach of cooler weather—a fear unquestionably justified by what we know of the history of the malady—while it is not at all improbable that both the cities

named may from now on prove centers of endemic plague, with the

ever-present possibility of epidemic outbreak.

The Hongkong pestilence does not appear to have assumed the most malignant type. Bad as it has been, not only the symptoms, but the death rate, under rational treatment, go to show a medium severity only, and this despite the delay in enforcing any sanitary precautions.

But 1 case of undoubted plague occurred on any of the steamers coming from Hongkong to Japan, and the very prompt and thorough measures taken by the surgeon of that vessel, the Pacific Mail steam-

ship *Peru*, were effectual in preventing a ship epidemic.

This exemption from plague on shipboard was undoubtedly chiefly due to the precautions taken by the ships themselves while in the infected port, in enforcing, as strictly as possible, noncommunication of crew with the shore, and in excluding any passenger baggage or freight of a suspicious nature.

In conclusion, permit me to call your attention to the inclosed preliminary report of Dr. Kitasato, who was sent to Hongkong by the Japanese Government to study the etiology of the plague by modern methods. \* \* \*

I shall promptly inform you of any matter of importance from a sanitary point of view, if necessary, by cable,

And remain, very sincerely, yours,

STUART ELDRIDGE, M. D.,
Member Imperial Board of Health, Health Office, Yokohama.

Preliminary notice of the bacillus of bubonic plague.

[By Prof. S. Kitasato.]

Hongkong, July 7, 1894.

• Early this year (1894) an epidemic of bubonic plague broke out in the south of China and Canton, from which city the disease was imported into the neighboring island of Hongkong, where it has prevailed from

the beginning of May until now.

The Imperial Japanese Government sent a commission to Hongkong in order to study the plague, especially as regards its bacteriological character and its pathological and clinical features. The pathology and medicine were the special study of Prof. Aoyama and the bacteriological part received the care of the author. Having left Japan 5th of June, 1894, we arrived at Hongkong on the 12th of the same month. Here Dr. Lowson, acting superintendent of the government city hospital, put everything needful at our disposal in the most friendly spirit. A room in the Kennedy town hospital (one of the plague establishments) was given to us, and there we began our work on the 14th of June last.

On that day we were able to see a post-mortem examination, performed by Prof. Aoyama. I found numerous bacilli in the bubo (in this case a swelling of the inguinal glands), in the blood of the heart, in the lungs, liver, spleen, etc. As the post-mortem examination was made eleven hours after death, I had still doubts about the true significance of what I found. I therefore made a cultivation and inoculated a mouse from a small piece of the spleen. On the same day I took, with all due precautions, some blood from the finger tips of a patient who had the disease in a very bad form, with a temperature of 40.5° C., swelling of the axillary glands, etc. Under the microscope I found bacilli with capsules, the poles of which were stained much deeper with aniline dyes than the middle part. This gives them a great likeness to the bacilli of chicken cholera (bacillus cholera galinarum). On the next day all

the serum cultivations which were prepared in the incubator from the different organs of the body and of blood from the finger tips showed a growth of microorganisms which, under the microscope, were not to be distinguished from those which we found in the blood and in the interior of the bubo at the first post-mortem examination. The bacilli differed only by being a little longer and staining easier in the middle than those taken from the blood. With these cultivations I inoculated subcutaneously mice, guinea pigs, rabbits, and pigeons.

The mice which were inoculated on the first day with a piece of spleen and some blood from the finger tips died in two days' time, and at the post mortem examination upon them I found ædema round the place of inoculation, the same bacilli in the blood, in the internal organs,

and in the ædematous part around the place of inoculation.

All animals which had been inoculated with the cultivations (pigeons excepted) died after periods extending from one to four days, according to the size of the animal. The same state of the organs after death and the same bacteriological observations always obtained as in the case of the mice previously referred to. I propose to give further details about my experiments on animals at a later time.

Every day I took blood from many plague patients and examined it, and almost every time I found the baccilli as above described, sometimes in great numbers, sometimes only few in number, so that many

glass slides had to be examined to find good specimens.

On the other hand, these same bacilli were to be found at every postmortem examination (of which we had upward of fifteen) in great quantity in the bubonic swellings, in the spleen, the lungs, the liver, in the blood contained in the heart, in the brain, intestines; in fact in all internal organs without exception; and every cultivation from any

particle of these parts invariably produced the same bacilli.

Suppose the contents of a bubo or a small piece of the spleen is rubbed on the cover glass, and the latter, after having been stained, is examined under the microscope (one-twelfth inch oil immersion, Zeiss) bacilli will be discovered in the form found in pure cultivation (Reinkultur). In the spleen especially the bacilli are aggregated in heaps. Bacilli from bubonic swellings and from other internal organs are more easily stained with aniline dyes in their middle part than those taken from the blood, but any serum cultivation prepared from them produces the same form of bacillus.

In any case where cultivations are prepared from parts of any internal organs or from the blood taken from the finger tips, with careful observation of all due precautions, pure cultivations (Reinkultur) of one and the same bacillus are always obtained; therefore the most intimate connection must exist between the bacillus and the disease.

For particulars about the observations at the post-mortem examinations will be given later on by my colleague, Prof. Aoyama. Generally it may be said that the parts in the neighborhood of the bubo are edematous, of a color between black and red, infiltrated with gelatinous exudation, and that the spleen is enlarged. Both phenomena are to be found in inoculated animals in which the parts round the place of inoculation present the same edematous exudations as we find in human beings.

I shall now give a few short notes about the bacillus.

The bacilli are to be found in the blood, in the buboes, in the spleen, and in all other internal organs of the victims of the plague. The bacilli are rods with rounded ends, which are readily stained by the ordi-

nary aniline dyes, the poles being stained darker than the middle part' especially in blood preparations, and presenting a capsule, sometimes well marked, sometimes indistinct. The bacilli found in the spleen are best stained by a solution of methyl blue. I am at present unable to say whether or no "Gram's double-staining method" can be employed. I shall report upon this on a future occasion.

The bacilli show very little movement, and those grown in the incubator in beef tea make the medium somewhat cloudy. The growth of the bacilli is strongest on blood serum at the normal temperature of the human body (37° C). Under these conditions they develop luxuriantly, and are moist in consistence and of a yellowish-gray color; they do not liquefy the serum. On agar-agar jelly (the best is good glycerin agar) they also grow freely. The different colonies are of a whitish gray color, and by a reflected light show a bluish glance; under the microscope they appear moist and in rounded patches with uneven At first they appear everywhere as if piled up with "glass wool;" later on as if having dense, large centers. If a cover-glass preparation is made from a cultivation on agar agar, and, after having been stained, is observed under the microscope, long threads of bacilli are seen, which might, by careless inspection, be mistaken for a coccus chain, but are recognized with certainty as "threads of bacilli" under closer observation.

The growth on agar gelatin is similar to that on agar-agar. In a puncture cultivation, at the ordinary temperature after a few days, they are found growing as a fine dust, in little points alongside the puncture, but with very little growth on the surface. Whether these bacilli are able to liquefy ordinary gelatin or not I am at present unable to decide, as the temperature of Hongkong ranges so high that the employment of simple nutritive gelatin is out of the question. I shall give further information on this question later.

On potatoes at a temperature of from 28° C. to 30° C. there was no growth after ten days' observation, but at a temperature of 37° C. the bacilli developed sparingly after a few days; they were whitish gray in color and exsiccated.

As mentioned before, the bacilli grow best at a temperature of from  $36^{\circ}$  C. to  $39^{\circ}$  C. At how low a temperature growth is possible I am unable at present to state.

So far I have been unable to observe the formation of spores.

Experiments on animals.—Mice, rats, guinea pigs, and rabbits are susceptible to inoculation. If these animals are inoculated with pure cultivations, or with the blood of a plague patient in which the bacilli have been observed, or with the contents of a bubo, or with pieces of internal organs, or even with the contents of the intestine, they begin to become ill in from one to two days, according to the size of the animal. Their eyes become watery, they begin to show disinclination for any effort, later on avoid their food and hide quietly in a corner of the cage. The temperature rises to 41.5° C., and with convulsive symp toms they die in from two to five days.

I must observe that in Hongkong I could only obtain small guinea pigs (weight from 100 to 150 grams) and small rabbits (from 200 to 250 grams). If I could have experimented upon larger animals it is possible life would have been somewhat prolonged beyond the periods mentioned above.

The parts around the point of inoculation are infiltrated with a reddish gelatinous exudation, the spleen is enlarged, sometimes there is a swelling of the lymphatic glands, and in all the organs the bacilli are

found. The results found after death in animals are very similar to those found in anthrax and in ædema malignum.

Pigeons do not appear to be susceptible to the influence of the bacilli.

I made experiments by feeding some mice and guinea pigs with pure cultivations of the bacillus and with small pieces of the internal organs. The result was such animals perished in a few days under the same symptoms as those which had been inoculated. In all the internal organs of animals so destroyed I found the bacilli.

With the dust of dwelling houses from which the plague-stricken had been removed I made several experiments upon animals. Some of the animals died from tetanus. In one case only a guinea pig died with plague symptoms, and in this animal the same bacilli were found in the internal organs as in those of plague patients who had succumbed.

These experiments with the dust from infected houses I shall certainly

continue.

Many rats and mice at present die spontaneously in Hongkong. I examined some of them. In the internal organs of a mouse I discovered the same bacilli.

Power of resistance of the bacilli to physical and chemical agencies.

Experiments with desiccation.—The contents of a bubo in which the bacilli were present in great numbers were wiped over cover glasses (perfectly cleansed by heat and alcohol), and some of the cover glasses were dried in the air of a room at a temperature ranging from 28° C. to 30° C. Others I exposed directly to the sun's rays, and from among them, after an exposure of from one, two, and three hours (up to six days), I removed some parts, putting such portions in beef tea and placing them in the incubator. Those which had standing in the room from one to thirty-six hours showed a pretty good growth in the incubator, but those which had been in the room for more than four days were unable to show any growth even after one week's incubation. Those exposed directly to the sun were all destroyed after from three to four hours.

Further cultivations on serum were treated exactly like the contents of the bubo with very similar results.

Experiments with heat.—Beef-tea cultivations which had been heated for thirty minutes in a water bath up to 80° C. were destroyed. At 100° C. in the vapor apparatus they were destroyed in a few minutes.

Chemicals—carbolic acid.—To every 10 cubic centimeters of beef-tea cultivations, which had been standing in the incubator from two to three days, and had grown well, carbolic acid was added of a strength of 0.5 per cent of the whole, 0.75 per cent, and 1 per cent. They were afterwards well shaken and left at the ordinary temperature of the room. Of each of these cultivations a few drops were brought into sterilized beef tea after one, two, and three hours, and left in the incubator with the following results:

Those cultivations which contained 0.5 per cent and 0.75 per cent carbolic acid and had been left standing in the room for one hour grew in the incubator after two days. A cultivation, however, of 1 per cent, which had been left standing for only one hour, did not grow even after one whole week in the incubator.

Cultivations that had been mixed with only 0.5 per cent of carbolic acid and had been left standing for more than two hours did not show growth after one week in the incubator, neither did the other cultivations containing a greater percentage produce any growth.

Quicklime.—Experiments were made with quicklime in exactly the

same way as with carbolic acid, with the following results:

Those beef-tea cultivations which contained 0.5 per cent of quicklime grew sparingly after two hours; those containing 1 per cent of quicklime ceased to grow. Cultivations which had been mixed for more than three hours, even if containing only 0.5 per cent quicklime, showed no growth.

Further experiments with chemicals should have been made, but as

my time was extremely limited I had to leave them to a future time.

The following is a short review of "the plague" generally:

History shows us that plague epidemics existed in the fourteenth century both in Asia and Europe, and thousands of human beings perished. Since then, from time to time, now here, now there, an epidemic has appeared, and until lately the disease almost seemed to have vanished from the face of the earth. This, however, was not so. In China it has existed to this day, especially in Yunnan, where it occurs every year in an endemic form. From the latter place it was imported to Canton, and from Canton, for the first known time, has reached Hongkong.

This recent outbreak has given us opportunity for studying this disease—a cause of mystery for centuries—with the means which modern

science places in our hands.

The principal symptoms of the disease now ravaging Hongkong are the following: After the period of incubation, which lasts from three to five days (possibly a little longer, and some doctors say as long as eight days), the patient complains of high fever and swelling of one or more of the lymphatic glands (buboes). These swellings may antedate, coincide with, or follow the rise in temperature, and are accompanied The most common gland affected is one of the femoral by severe pain. chain, next an inguinal, next axillary, and sometimes a cervical gland The tongue is coated with a grayish-white or dark-brown is affected. There is commonly headache, also delirium; the heart is heavy fur. generally affected; occasionally vomiting and diarrhea are present (not frequently the last two conditions, which are generally forerunners to a fatal issue).

In patients who survive the onset of the disease the temperature does not fall until a week has passed, and convalescence is a slow process.

Sex and age make no difference in the disease—men and women, in-

fants and old people, are attacked equally.

If in such a case as described the blood be examined, the beforedescribed bacilli, in greater or lesser numbers, will be found present (in 30 patients I obtained 25 positive results, and 2 of my subjects which were without bacilli were subsequently proved not to be suffering from the plague at all).

As indicated before, it is not always an easy matter to demonstate the presence of the bacilli directly in the blood of many patients; they are present sometimes in such small numerical strength that only after examining several slides can they be discovered. In order to be safe, not only must the blood of a suspected plague patient be examined, but a

cultivation should also be made.

In the buboes the bacilli always occur in the form of pure cultivations, but it is obviously not always easy to procure a specimen of bubo contents from the living subject.

The question arises, "Is it possible to make a diagnosis of bubonic plague from examination of the blood of the suspect? In many cases,

yes! But a good deal of bacteriological practice is required, or such

diagnosis is impossible.

It is a well-known fact that so far, amongst infectious diseases produced by bacilli, only two microorganisms have hitherto been found in human blood, viz, the bacillus of anthrax and the spirochætiæ of relapsing fever (we do not include the plasmodia of malaria). Here in the blood of human beings suffering from bubonic plague we have a new bacillus possessing the following qualities:

1st. This bacillus occurs in the blood, in buboes, and in the internal

organs of the plague striken only.

2d. This bacillus is not to be found in any other infectious disease.

3d. With this bacillus it is possible to produce in animals the iden-

tical symptoms which the disease presents in human beings.

From this evidence we must come to the conclusion that this bacillus is the cause of the disease known as the bubonic plague; therefore the bubonic plague is an infectious disease produced by a specific bacillus.

What are the channels by which these bacilli enter the human body? We may suppose that they have three principal channels of entrance: By respiration, through an external wound, and by the intestinal tract. Examples of the first two ways, of which I shall speak later on, are abundant. Examples of the last-mentioned way are not positive so far, but considering that we discovered the bacilli in the intestinal canal and experiments on animals prove that feeding alone produces definite results, the concession must be made that the third is a possible method of infection.

Most of the cases of bubonic plague occur amongst the Chinese, a few

other nationalities excepted.

Whoever has looked into a Chinese dwelling in Taipingshan is at once persuaded that here is a suitable hunting ground for the plague bacillus. The houses are so filthy that they are unfit for human habitation.

What means are to be employed against the plague? Preventive measures, general hygiene, good drainage, perfect water supply, cleanliness in dwelling houses and cleanliness in the streets. As soon as an epidemic breaks out the sick must be perfectly insolated. The infected dwellings, before the household things are removed, have to be disinfected by 2 per cent carbolic acid solution or by a solution of quicklime Afterwards, wearing apparel, linen, bedding, etc., in a correct way. should be specially disinfected by a steam disinfector for one hour at a temperature of 100° C. Should a steam disinfector not be available the things ought to be exposed directly to the sun's rays for several hours. Articles unfit for use ought to be burned. Dwelling houses thus emptied should be cleaned over again with quicklime or carbolic acid. The fæces should be disinfected carefully with quicklime. bodies covered with quicklime are either to be burned or to be buried at least 3 meters from the surface. Mice and rats which have died spontaneously in dwelling houses should be carried away with proper After a patient has apparently recovered he must be kept apart from the healthy community for a period of a month, for during convalescence the bacilli may be discovered in the blood from three to four weeks after all symptoms have ceased.

Individuals ought to keep away from plague patients and infected

houses and be careful about their solid and liquid nourishment.

These measures have been generally in force during the epidemic in Hongkong.

The question as to whether immunity against the bacillus of plague is possible on the lines practiced against many other bacillary infectious diseases remains at present an open one. I shall study it thoroughly later on and in an exhaustive manner.

All that I have described above must be regarded only as a short preliminary notice. The results of extensive study on the subject of

the plague bacillus will be published by me at a later time.

Before I conclude this notice, I beg to tender my heartiest thanks to the colonial government of Hongkong, to all the medical men here, and especially to Dr. Lowson for his kind assistance.

#### CUBA.

### Departure of infected vessel from Havana.

HAVANA, September 2, 1894.

SIR: Yesterday I had the honor of sending you the following telegram:

Alice, American bark, Friday, Hamptom Roads, had 3 yellow here.

The American bark *Alice*, which sailed in ballast for Hampton Roads on Saturday, September 1, entered this port August 7 with a crew of 10 persons and a cargo of lumber from Nova Scotia.

She went almost immediately to the infected Tallapiedra wharf (military hospital) to discharge, sending while there 3 of her men to civil hospital with yellow fever, who convalesced, and returned to the vessel just before her departure.

The bark is an old wooden one, and has had yellow fever occur aboard

in the same place in years gone by.

Several of those of her crew who did not have yellow fever here this time have no immunity to the disease, but as the master did not desire any fumigation, this infected old craft started on a voyage of at least seven and perhaps twenty days without any attempt at all being made to protect them by any kind of disinfection.

Very respectfully,

D. M. BURGESS, Sanitary Inspector, M. H. S.

# Yellow fever at Santiago.

SANTIAGO DE CUBA, September 1, 1894.

SIR: I have the honor to acknowledge the receipt of your favor of the 13th, in which you ask me to furnish you with a statement showing to what extent yellow fever is prevalent here, also the location of various cases with reference to shipping. I answer by return mail.

My current letters to you of August 4, 11, 18, and 25, all of which you have probably received before getting this letter, show 12 deaths in this city from yellow fever for the first twenty-four days of this month, with an approximation of 30 cases. From the 25th to the 31st ultimo, inclusive, there were 4 deaths, making a total number of 16 deaths for the month. There are probably 12 or 14 cases in the city now.

As to the location of the disease, I beg to inform you that 2 cases were taken off a Spanish man of-war lying in the harbor, 1 of which proved fatal; and 4 or more occurred in houses directly or nearly opposite shipping wharves. Remaining cases in various parts of city.

Heretofore, this year, there have been practically no cases among the

Spanish soldiers quartered here, but I have been informed by Dr. H. Caimanero, ex-U. S. medical inspector here, that about four days ago 3 cases, 1 lieutenant and 2 privates, were taken to the military hospital, stricken with that disease.

In the above enumeration and location of cases I have had to rely in a degree on information obtained from private inquiries. The report for the month of July, handed this office two weeks ago by the board of health, showed no deaths from yellow fever in that time, whereas cemetery records showed 4 deaths during the last fifteen days of that month from yellow fever.

Reports from consular agents at Manzanillo and Guantanamo, this district, show 4 cases and 2 deaths in the first place during the past two months, and 12 cases, 11 deaths and 1 still sick, in the second

place, during the last three months.

Since writing the above I have been informed, reliably, that the County Down, British steamship, chartered by Earn Steamship Company, of Philadelphia, arrived this morning from Havana, and buried a sailor at sea last night from yellow fever. This vessel is now held in quarantine pending investigation, and will load in a day or two with iron ore for Philadelphia or Baltimore.

Your obedient servant,

JOHN T. HYATT.

GERMANY.

Existence of cholera in consular district of Königsberg.

STETTIN, August 16, 1894,

· Sir: I beg to inform you of the cholera situation in this district and agencies up to date.

The first case of cholera has happened in the consular district of Königsberg, east Prussia, at Johannisburg, a small place near the Russian Polish frontier.

The condition of health in the other parts of the province, and espe-

cially in Königsberg, is excellent.

I also beg to inform you that cholera still keeps up its appearance at Dantzig and neighborhood.

Up to date, Stettin has had no trouble with the disease.

I have, etc.,

F. W. KICKBUSCH,

U. S. Consul.

To the Hon. Assistant Secretary of State.

Relative to one case of cholera in Cologne.

Cologne, August 17, 1894.

SIR: On this date I cabled as follows:

Gresham, State Department, Washington: One fatal case of Asiatic cholera. Came here from Holland. No epidemic.—Wamer, Consul.

The history of this case is as follows: The deceased was a workman (a machinist) who was taken sick last week on a Rhine boat on its way from Holland to Cologne. When the boat arrived at Düsseldorf, the deceased felt too unwell to continue his trip, and he was put off at that place, where he remained a day or two and then came to Cologne by rail. On last Saturday (the 11th instant) he was discovered in a small

inn and his case immediately pronounced to be Asiatic cholera. He was at once removed to the City Hospital for Infectious Diseases where he died on the 16th instant. He reported that on his way from Holland to Düsseldorf he drank large quantities of Rhine water. This is the only case of cholera that has occurred here this year, and with the great precautions that are being taken by the officials, it is hoped that the disease will be kept away.

I have, etc.,

WM. D. WAMER, U. S. Consul.

To the Hon. Assistant Secretary of State.

Detention at Hamburg of emigrants from infected districts.

BERLIN, August 26, 1894.

SIR: I have the honor to report my arrival in Hamburg on the evening of the 24th instant. On the morning of the 25th I paid a visit of inspection to the immigrant barracks, where all those persons coming from districts where cholera now prevails are detained prior to their embarkation. As this institution has been previously described by Passed Assistant Surgeon White, it is unnecessary to go into details, but I give the present status of its operations: The city maintains this simply for its owir protection against cholera. The Hamburg-American-Packet Company have a certain portion of the building for the reception of their steerage passengers, such as come from the infected districts or as may be adjudged by the city authorities fit subjects to be kept under observation. The institution is fairly well managed, and the apartments were, with two exceptions, in a tolerable state of order and cleanliness. This was due in great part to the class of people, Russian Jews. majority of those under detention came from Russia, Galicia, Hungary, and Roumania, and had been detained for a day or two at the central station at Ruhlehen, where their personal effects are said to have been disinfected. Those effects not marked "disinfected" are disinfected at the station.

I was informed by the physician in charge that everything was done to keep the people in as good sanitary condition as was possible, and that after they had been detained for the prescribed time, they were sent to the chief physician for inspection before they were allowed to depart. At this time they are given the consular and ship inspection As to the disinfection as practiced at the detention barracks, it is efficient. Those effects which have been disinfected at Ruhleben are accepted as sufficient, and are passed by the consular inspector, and labeled accord-

ingly.

I took occasion to mention to the U. S. consult he fact that so far the city authorities had not detained any person from the infected districts of Prussia. I was informed that a strict watch would be kept. Immigration from this port (Hamburg) has almost entirely ceased, especially from the infected districts of Russia and Austria, by reason of the severe restrictive measures instituted by the general government and Hamburg authorities.

The outlook for the next three weeks is encouraging. The greatest danger to our country lies in the direction of England, where the steamship companies are taking all the Russian immigration they can get.

Very respectfully,

J. J. KINYOUN,
Passed Assistant Surgeon, M. H. S.

#### GIBRALTAR.

### Quarantine notice.

GIBRALTAR, August 25, 1894.—Amsterdam having been declared by the board of health as an infected port, arrivals from thence less than ten days out will be subjected to three days' quarantine of observation.—John C. King, Secretary to the Board of Health.

#### HOLLAND.

#### Cholera in Rotterdam.

ROTTERDAM, August 23, 1894.

SIR: I deem it my duty to inform you that since my last sanitary report, covering the week ended August 18, forwarded to the honorable Secretary of the Treasury, 2 new cases of cholera asiatica have occurred in Rotterdam. The total number of cases from the 27th of July last up to the present date is 5, with 3 deaths. One patient has been discharged from the hospital as recovered, and 1 is still in the hospital, apparently recovering. The first 3 of the above cases were imported on the Rhine boats.

I beg further to state that I have issued circulars to the shipowners, shipping agents, and merchants of this port, advising them of the requirements of the quarantine regulations of the Treasury Department,

and that I am strictly enforcing the same.

I have, etc.,

LARS S. REQUE, U. S. Consul.

To the Hon. Assistant Secretary of State.

#### MEXICO.

# Yellow fever at Laguna.

LAGUNA, MEXICO, September 13, 1894.—Yellow fever has appeared at this port.—GERMAN HAHN, U. S. Consular Agent.

#### RUSSIA.

# Report on cholera in St. Petersburg.

St. Petersburg, August 21, 1894.

SIR: I delayed my usual weekly report on the cholera in order to note the effect of the public festivals at the end of last week, and it has turned out regarding them as I feared.

The number of deaths in the hospitals had rapidly diminished until for the day ending on Saturday noon, August 18, it was only 4, but Saturday being a great festival, the number of deaths ran up on the following day to 11.

The prospect is that the number will now diminish and that when the

September frosts arrive the epidemic will mainly disappear.

As to the provinces, the reports are somewhat mixed; cases are acknowledged in several of the frontier towns, but not in such numbers as to create any general alarm.

It ought to be mentioned that the above reports refer only to the cases in the hospitals; beside these there are undoubtedly a small number of cases in the private residences of the better classes of people,

but as regards these no indications of value are given.

There was, also, for a day or two, quite an outbreak of cholera in the camp at Krosnoe, near this city, among the troops assembled for autumn maneuvers. The disease was traced to the fact that the soldiers drank water from a stream which had been, it is said, polluted at a point 6 miles above the camp, by washing in it the linen of the cholera patients; but as rigorous measures were taken the epidemic soon ceased to be serious.

I am, sir, your obedient servant,

ANDREW D. WHITE,

Envoy Extraordinary and Minister Plenipotentiary.
To the Hon. Secretary of State.

#### TURKEY.

### Cholera in Turkey.

Under dates of August 11 and 18, 1894, the U. S. consul at Sivas writes that cholera is reported to exist in epidemic form at Harpoot, Oolash, and numerous villages to the east and south of Sivas. Cases of cholera or cholerine continue to occur at Marsovan and many villages in the vicinity of Sivas.

#### PROMULGATION OF FOREIGN QUARANTINE REGULATIONS.

Official notification has been received that the quarantine regulations made by the Secretary of the Treasury have been posted in the offices of the U. S. consuls at the following-named ports for ten days: Autofogasta, Bahia, Batavia, Rangoon, Samarang, St. Helena, Tamatave, and Zanzibar.

#### STATISTICAL REPORTS.

BAHAMA ISLANDS—Dunmore Town.—Two weeks ended August 31, 1894. Estimated population, 1,472. Total deaths, 3: No deaths from contagious diseases.

Green Turtle Cay, Abaco.—Two weeks ended August 30, 1894. Estimated population, 3,900. No deaths reported.

Governors Harbor.—Two weeks ended September 1, 1894. Estimated population, 1,160. No deaths reported.

Mathewtown.—Three weeks ended August 17, 1894. Estimated population 1,200. No deaths reported.

CANADA—Hamilton, Province of Ontario.—Month of August, 1894. Estimated population, 50,000. Total deaths, 55, including scarlet fever, 3; diphtheria, 4; whooping cough, 2, and phthisis pulmonalis, 7.

CUBA—Havana.—Under date of September 8, 1894, the U. S. sanitary inspector reports as follows:

There were 685 deaths in this city during the thirty-one days of August, 1894. Sixty-three of those deaths were caused by yellow

fever, 13 by enteric fever, 17 by so-called pernicious fever, 7 by paludal fever, 1 by bilious fever, 4 by diphtheria, 8 by measles, 15 by smallpox, 1 by glanders, 37 by entero-colitis (acute and chronic), 41 by dysentery, 5 by cholera infantum, and 21 by pneumonia.

During the week ending September 6, there were 143 deaths, 18 of which were caused by yellow fever, with, approximately, 45 new cases, 5 were caused by enteric fever, 7 by so-called pernicious fever, 2 by paludal fever, 1 by diphtheria, 1 by measles, 2 by smallpox, 5 by enterocolitis, 6 by dysentery, 1 by cholera infantum, and 3 by pneumonia.

Twelve of the 18 deaths by yellow fever during the week ending Sep-

tember 6 occurred in the military hospital.

FRANCE—Rouen.—Month of June, 1894. Estimated population, 111,847. Total deaths, 155, including enteric fever, 5; measles, 3; whooping cough, 3; and phthisis pulmonalis, 42.

Month of July, 1894. Total deaths, 203, including enteric fever, 6; measles, 6; whooping cough, 2; and phthisis pulmonalis, 40.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns of England and Wales during the week ended August 25 corresponded to an annual rate of 16.8 a thousand of the aggregate population, which is estimated at 10,458,442. The lowest rate was recorded in Plymouth, viz, 10.7, and the highest in Preston, viz, 27.6 a thousand.

London.—One thousand two hundred and eighty-four deaths were registered during the week, including smallpox, 2; measles, 27; scarlet fever, 17; diphtheria, 43; whooping cough, 22; enteric fever, 11; cholera and choleraic diarrhea, 2; and diarrhea and dysentery, 114. The deaths from all causes corresponded to an annual rate of 15·4 a thousand. In greater London 1,671 deaths were registered, corresponding to an annual rate of 14·7 a thousand of the population. In the "outer ring" the deaths included diphtheria, 9; measles, 12, and whooping cough, 7.

Ireland.—The average annual death rate represented by the deaths registered during the week ended August 25 in the 16 principal town districts of Ireland was 23.7 a thousand of the population. The lowest rate was recorded in Dundalk, viz, 4.2, and the highest in Sligo, viz, 30.5 a thousand. In Dublin and suburbs 188 deaths were registered, including 6 from smallpox, 4 from enteric fever, 4 from scarlet fever, and 4 from whooping cough.

Scotland.—The deaths registered in 8 principal towns during the week ended August 25 corresponded to an annual rate of 14.9 a thousand of the population, which is estimated at 1,447,500. The lowest mortality was recorded in Perth, viz, 6.9, and the highest in Glasgow, viz, 16.3 a thousand. The aggregate number of deaths registered from all causes was 425, including measles, 3; scarlet fever, 6; diphtheria, 14; and whooping cough, 7.

# MORTALITY TABLE, FOREIGN CITIES.

	-	-sln	rom	Deaths from—									
Cities.	Week ended.	Estimated population.	Total deaths from	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
Acapulco	Aug. 25	4,000	5				ļ	ļ			<b> </b>		
Aden	Aug. 4	33, 561	15										
Aden	Aug. 11	33, 561	20		1	•••••			1			•••••	
Aix la Chapelle	Aug. 18 Aug. 9	109,072 231,396	46 187					2		3			
Amsterdam	Aug. 25	426, 480	117	5					1				
Antigua	Aug. 18	16,664	11										
Antigua	Aug. 25	16,664	14 17		····								
Antigua	Sept. 1 Aug. 18	16,664 254,370	86					1		1			
Barmen	Aug. 18	124,000	46	l						2			
Basle	Aug. 18	80,000	22									٠	
Baltoum	Aug. 21	28,000	3							4			
Belfast Belleville, Canada	Aug. 18	269, 200 10, 201	89 5							*	1		
Belleville, Canada	Aug. 25 Sept. 1	10, 201	i										
Birmingham	Aug. 25	492, 301	150					3	1				
Bologna	Aug. 25	146,008	45		¦					1			
Bremen	Aug. 7	853, 926 127, 500	675								2		
Bristol	Aug. 19 Aug. 18	226, 578	56						1		5		
Brussels	Aug. 18	498, 400	167					1		1	<b> </b>		
Cairo	Aug. 9	374, 838	470					3		1		1	
Calcutta	July 28	681,560 113,000	333		•••••			5					
Catania	Aug. 19 Aug. 26	113,000	51 46				2	5					
Chatham, Canada	Aug. 26 Sept. 1	10,000	6					2					
Chemnitz	Aug. 18	150,000	100							2			
Cienfuegos Christiania	Sept. 1	23,000 167,588	21				•••••	2		4			
Coaticook	Aug. 18 Sept. 1	2,500	76			•••••		1			1		
Cognac	Aug. 27	17,500	5										
Cologne	Aug. 18	309, 848	155		ļ					4	4		
Copenhagen	Aug. 18	341,000 121,000	116					2	5 2	6	1		
Dantzig Denia	Aug. 25 Aug. 25	14,000	72						2		1		
Dresden	Aug. 11	316, 660	172							1			
Dresden	Aug. 18	316, 660	162							4		:	
Dublin Dundee	Aug. 18	350,000 158,719	132		¦		•••••			2		•••••	
Dusseldorf		167, 412	45 81						1	3	1		
Fayal	July 28	23, 382	2										
Fayal	Aug. 4	23, 382	2		·								
Flushing Frankfort on the Main	Aug. 25	15, 250 201, 000	8							1	·····		
Funchal	Aug. 25 Aug. 18	35, 665	57 22							î		ļ <u>.</u>	
Funchal	Aug. 25	35, 665	15							2			
Genoa	Aug. 25	182, 274	74							2			
Ghent Gibraltar	Aug. 25 Aug. 19	153, 803 25, 800	60 12								•••••		
Gibraltar	Aug. 26	25,800	10										
Girgenti	Aug. 18	23, 847	11									ļ	
Glasgow	Aug. 18	686, 820	195						2	4		٠	
Gothenburg Guelph	Aug. 18	108,000 10,689	23		•••••			1			ļ		
Halifax	Sept. 1 Sept. 1	38,700	14										
Hamburg	Aug. 18	598, 372	242					1	3	9	4		
Hamburg	Aug. 25	598, 372	226					1		3	2		
Hamilton, Bermuda Hamilton, Bermuda	Aug. 28 Sept. 4	15, 013 15, 013	1 0					•••••			•••••		
Hanover	Aug. 11	197,000	108					1					
Havana	Aug. 23	198, 620	140	ļ	8 21	3		2		2	2		
Havana	Aug, 30	198, 620	159	;	21	2		2		2	1		
Hiogo Jamestown, St. Helena	Aug. 4 July 14	153, 055 3, 877	0					2					
Jamestown, St. Helena	July 21	3,877	1										
Jamestown, St. Helena	July 28	3,877	1										
Kenl-Strassburg	Aug. 18	129,556	66			ļ <b>.</b>							
Kingston, Canada Konigsberg	Sept. 7 Aug. 25	17, 348 167, 000	3	1							•••••		
Leeds		388, 761	150					1	1	1	3		
Leghorn	Aug. 25	102, <b>9</b> 56	31					1	ļ <b>.</b>	<u>-</u>		٠	
London England		507, 230	301				1	9		 57	6	3	
London, England	Aug. 18	5, 948, 300	1,819	l		4	ļ	6	14	57	34	l 3	

### MORTALITY TABLE, FOREIGN CITIES—Continued.

		ula-	from	Deaths from—									
Cities.	Week ended.	Estimated popula- tion.	Total deaths fall causes.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
Lyons	Aug. 18	500,000	152					4		1			
Magdeburg	Aug. 11	219, 823	115					<b> </b>	3	4			
Magdeburg	Aug. 18	219, 823 522, 365	135 199					2	1	4		;;	
Mannheim	Aug. 18 Aug. 18	88,000	29							5	3		
M 9.78.C8.100	Aug. 11	38,000	18					ļ					
Maracaibo Maracaibo	Aug. 18	38,000 38,000	19 19		·····	ļ					•••••		
Marsala	Aug. 25 Aug. 18	40, 131	23					1			•••••		
Motemoras	Aug. 31	8,000	9										
Mayence Mayence	Aug. 18	72,281								1			
Mayence Melbourne	Aug. 25	72,281 $1,140,405$	39					1		1			
Melbourne	July 14 July 21	1, 140, 405						2					
Melhourne	July 28	1, 140, 405						1					
Messina	Aug. 25	86,900	30				!	4	3				
Montevideo Moscow	Aug. 4 Aug. 11	231, 504 800, 000	56 479				4	3	6	$\frac{2}{7}$	8		
Moscow	Aug. 18	800,000	518				2	6	13	11	5	l	
Munich	Aug. 18	390,000	208	ļ						8	1	1	
Naples	Aug. 25	540,000	225	ļ		ļ	2	•••••					
Newcastle on Tyne Nogales	Aug. 18 Sept. 1	201, 947 1, 200	49 1										
Nuremberg Odessa	Aug. 11	158, 453	9Ô						1	1	1		
Odessa	Aug. 18	158, 453 324, 500	148			1		3	3	7		1	
Palermo Paris	Aug. 25 Aug. 18	273, 000 2, 424, 705	104 788			•••••	1	10	1	11	12		
Paso del Norte	Sept. 1	7,000	3								12		
Plymouth	Aug. 25	86, 781	18			1							
Prague	Aug. 18	190, 135	101		•••••		•••••			3			
Prague Puerto Cortez	Aug. 25 Aug. 28	190, 135 1, 500	100		•••••		•••••			3	1		
Queenstown	Sept. 1	15,000	ĭ										
Rheims	Aug. 25	105, 408	53				•••••	5		2			
Rio de Janeiro	Aug. 11	600,000	220 151	•••••	3	2	•••••	2		2			
RomeRotterdam	Aug. 28 Aug. 25	456, 777 228, 596	77	1		2				1			
Sagua la Grande	Aug. 25	17,536	ii										
San Juan del Norte	Aug. 25	500	2					ļ					
Schiedam Sheffield	Aug. 25	25, 580 339, 401	11 112		•••••		•••••		1	1	•••••	·····	
Sonneberg	Aug. 25 Aug. 12	12,000	112							*.			
Sonneberg	Aug. 19	12,000	1										
Southampton	Aug. 25	67, 283	24 26			1		ļ	1	2		····	
South Shields	Aug. 18 Aug. 18	87, 045 125, 000	89	ļ				3	1				
St. Georges, Bermuda	Aug. 20	15,013	1										
St. Georges, Bermuda	Aug. 27	15,013	1		ļ								
St. HelenaStockholm	Aug. 4 Aug. 18	3, 877 252, 937	1 79					1		2	·····		
Stockholm	Aug. 25	252, 937	86						2	ī			
St. Stephen	Sept. 1	2,700	1	ļ									
Stutteart	Aug. 23	139,659	25							1			
Sunderland Tegucigalpa	Aug. 18	136, 101 12, 000	80					2	1		4		
Trapani	Aug. 18 Aug. 18	43,095	9						2	1	1		
Trapani Trapani	Aug. 25	43,095	10				ļ	·	2		4		
Trieste	Aug. 18	158, 314	92	·····		1		2	2	9			
Truxillo	Aug. 18 Aug. 25	5,000 5,000	0									1	
	Aug. 11	160, 282	53					2					
Venice		05 500	33	1	7	1	J		1		I		
Venice	Aug. 30	25,500			1 .			1 -	1	1			
Venice Vera Cruz Vienna	Aug. 30 Aug. 18	1, 465, 537	511	ļ		1		1	5	19	10		
Venice	Aug. 30	25,500 1,465,537 515,654 2,750		65		1		1	<b>5</b> 8	19 18	10 7		

By authority of the Secretary of the Treasury:

WALTER WYMAN,
Supervising Surgeon-General Marine-Hospital Service.