ABSTRACT OF SANITARY REPORTS.

VOL. V. WASHINGTON, D. C., OCTOBER 3, 1890. No. 40.

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

UNITED STATES.

SPECIAL REPORTS.

Vessels bound for the United States from Barbadoes, West Indies, neglecting to take bills of health.

The following vessels are reported by the United States consul at Barbadoes as having sailed from that port without bills of health:

Steamer *Bermuda*, for New York, via the Northern Islands, sailed August 27;

Steamer *Advance*, for New York, sailed August 31; and

Barkentine *Britannia*, for New York, via Antigua, sailed August 28.

While the above vessels may have already reached their port of destination, it is nevertheless deemed advisable, for the information of quarantine officers, to place them upon record for such exceptional restrictions of quarantine as may appear to said officers to be properly imposed upon vessels willfully neglecting a necessary sanitary obligation.

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

CONNECTICUT—*New Haven.*—Month of August, 1890. Population, 86,000. Total deaths, 148, including phthisis pulmonalis, 17; enteric fever, 4; diphtheria and croup, 5; and whooping-cough, 3.

MICHIGAN.—Week ended September 20, 1890. Reports to the State board of health, Lansing, from 75 observers indicate that cerebro-spinal meningitis, puerperal fever, typhoid fever, inflammation of brain, and inflammation of bowels increased, and that whooping-cough and pneumonia decreased in area of prevalence. Diphtheria was reported at 24 places, scarlet fever at 27 places, enteric fever at 23 places, and measles at 7 places.

NEW YORK.—Month of August, 1890. Reports from 137 cities, towns, and villages, including New York and Brooklyn, show a total

of 8,407 deaths, including phthisis pulmonalis, 501; enteric fever, 47; scarlet fever 21; croup and diphtheria, 155; measles, 56; and whooping-cough, 98.

Publications received.

Seventeenth annual report of the board of health of the city of New Haven, 1889.

Annual report of the board of health of Philadelphia for the year ending December 31, 1889, with the annual message of the mayor and director of the department of public safety.

Medical reports upon the health of cities of China, for the half-year ended March 31, 1888 (35th issue), published by order of the inspector-general of customs.

Public health in Minnesota, September, 1890.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cholera.	Yellow fever.	Small-pox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-cough.
New York, N. Y.	Sept. 27	1,643,248	639	.....	.....	.....	.....	.....	.....	16	3	11	2	6
Chicago, Ill.	Sept. 27	1,100,000	337	.....	.....	.....	.....	.....	.....	18	1	17	.....	4
Philadelphia, Pa.	Sept. 20	1,064,277	322	.....	.....	.....	.....	.....	.....	14	2	4	.....	1
Brooklyn, N. Y.	Sept. 27	871,852	370	.....	.....	.....	.....	.....	.....	4	2	5	1	7
Baltimore, Md.	Sept. 27	500,343	162	.....	.....	.....	.....	.....	.....	3	.....	7	1	6
St. Louis, Mo.	Sept. 20	460,000	175	.....	.....	.....	.....	.....	.....	4	2	7	.....	.....
St. Louis, Mo.	Sept. 27	460,000	158	.....	.....	.....	.....	.....	.....	8	2	6	.....	1
Boston, Mass.	Sept. 27	446,507	165	.....	.....	.....	.....	.....	.....	9	1	4	.....	1
Cincinnati, Ohio	Sept. 26	325,000	87	.....	.....	.....	.....	.....	.....	4	.....	3	.....	.....
Cleveland, Ohio.	Aug. 30	260,000	79	.....	.....	.....	.....	.....	.....	4	.....	7	.....	.....
Cleveland, Ohio.	Sept. 6	260,000	98	.....	.....	.....	.....	.....	.....	4	.....	4	.....	.....
Cleveland, Ohio.	Sept. 13	260,000	99	.....	.....	.....	.....	.....	.....	6	2	3	.....	2
New Orleans, La.	Sept. 13	254,000	126	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
New Orleans, La.	Sept. 20	254,000	113	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Washington, D. C.	Sept. 20	250,000	103	.....	.....	.....	.....	.....	.....	8	.....	4	.....	1
Minneapolis, Minn.	Sept. 27	200,000	41	.....	.....	.....	.....	.....	.....	1	1	4	.....	.....
Rochester, N. Y.	Sept. 27	135,000	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Providence, R. I.	Sept. 27	132,043	42	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Richmond, Va.	Sept. 27	100,000	42	.....	.....	.....	.....	.....	.....	3	.....	2	.....	3
Toledo, Ohio.	Sept. 26	81,650	24	.....	.....	.....	.....	.....	.....	1	.....	3	.....	.....
Nashville, Tenn.	Sept. 27	76,309	26	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Fall River, Mass.	Sept. 27	75,000	32	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Charleston, S. C.	Sept. 27	60,145	31	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Portland, Me.	Sept. 27	42,000	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston, Tex.	Sept. 12	40,000	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Binghamton, N. Y.	Sept. 27	35,000	8	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Yonkers, N. Y.	Sept. 26	32,000	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pensacola, Fla.	Sept. 20	15,000	5	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

Table of temperature and rain-fall, week ended September 26, 1890.

[Received from War Department, Signal Office.]

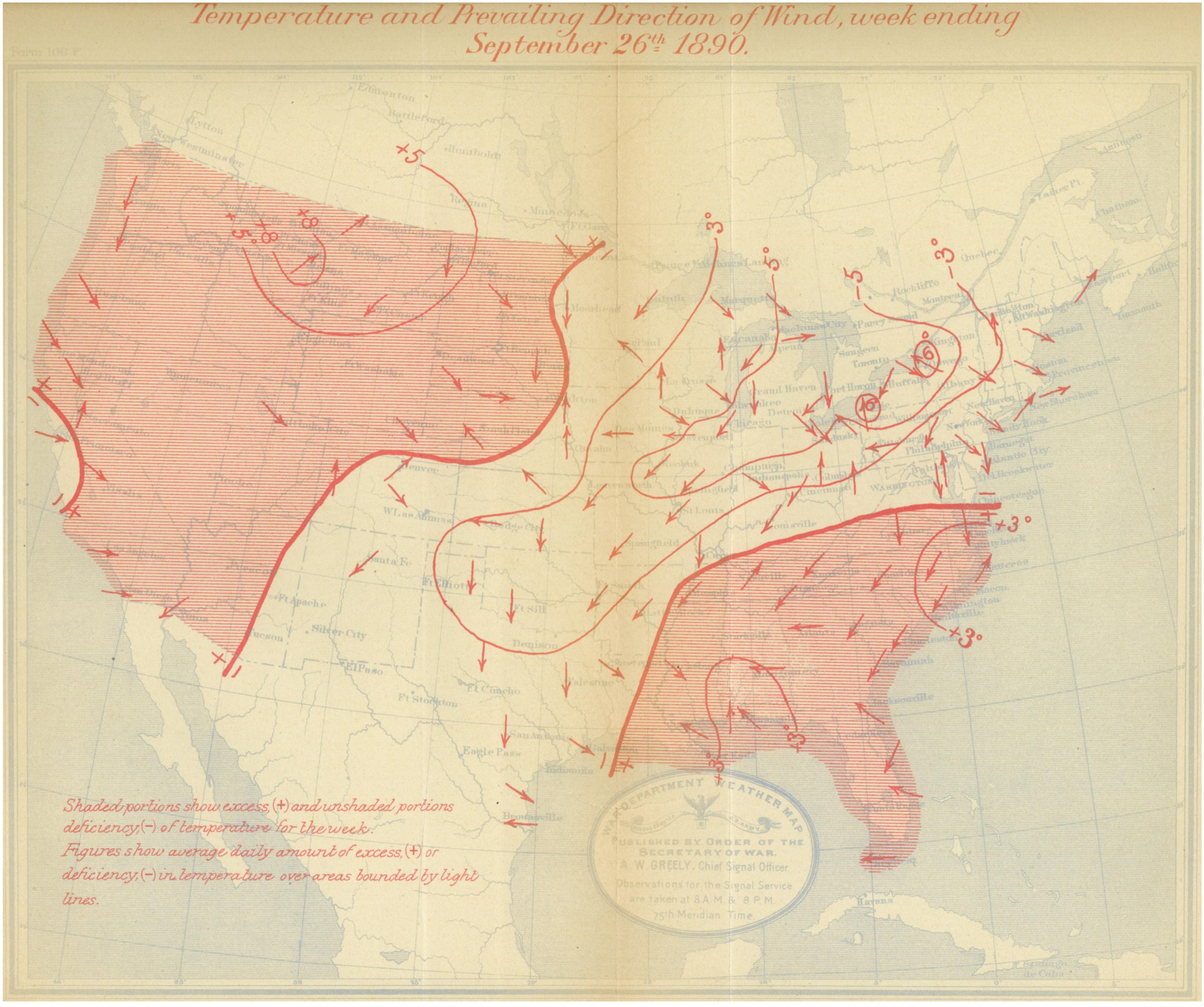
Locality.	Mean temperature in degrees, Fahrenheit.			Rain-fall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
New England States:						
Eastport, Me	54		4	.83		.67
Portland, Me	57		14	.71		.53
Boston, Mass	59		7	.69		.37
Block Island, R. I	61		4	.77		.21
Middle Atlantic States:						
Albany, N. Y	59		24	.77		.39
New York, N. Y	63	4		.78		.12
Philadelphia, Pa	64		9	.74		.20
Atlantic City, N. J	64		11	.74	.46	
Baltimore, Md	65		6	.87	.05	
Washington, D. C	65		9	.90		.24
Lynchburg, Va	66	10		.75		.57
Norfolk, Va	68	20		1.11		.64
South Atlantic States:						
Charlotte, N. C	68	6		.69	.47	
Wilmington, N. C	71	22		1.69	3.14	
Charleston, S. C	74	16		1.48	4.38	
Augusta, Ga	72	18		.86	1.39	
Savannah, Ga	73	9		1.27	4.56	
Jacksonville, Fla	76	8		1.82		.06
Key West, Fla	82		15	1.53	1.84	
Gulf States:						
Atlanta, Ga	69	9		.69	3.38	
Pensacola, Fla	75	22		1.35	1.21	
Mobile, Ala	75	24		1.20	.61	
Montgomery, Ala	73	21		.68	2.12	
Vicksburg, Miss	73	14		1.06		.67
New Orleans, La	77	4		1.13		.57
Shreveport, La	73		17	1.04	2.75	
Fort Smith, Ark	72		24	.77	.87	
Little Rock, Ark	69		15	.80	1.54	
Palestine, Tex	72		12	.91		.21
Galveston, Tex	78		19	1.85		.86
San Antonio, Tex	76		17	1.05		.81
Corpus Christi, Tex	78		16	1.61		1.43
Brownsville, Tex	78	5		1.84		1.68
Rio Grande, Tex	80			.88		
Ohio Valley and Tennessee:						
Memphis, Tenn	68	20		.76	5.14	
Nashville, Tenn	67	10		.82	3.42	
Chattanooga, Tenn	68	3		.88	2.10	
Knoxville, Tenn	66	17		.66	.50	
Louisville, Ky	65		1	.68		.12
Indianapolis, Ind	63		21	.64	.41	
Cincinnati, Ohio	65		17	.52		.18
Columbus, Ohio	63		27	.62	.92	
Pittsburgh, Pa	62		22	.61		.27
Lake Region:						
Oswego, N. Y	59		45	.62		.30
Rochester, N. Y	59		37	.55		.39
Buffalo, N. Y	59		37	.78		.65
Erie, Pa	61		42	.97		.63
Cleveland, Ohio	61		25	.88		.50
Sandusky, Ohio	63		40	.78		.56
Toledo, Ohio	61		38	.62		.22
Detroit, Mich	60		37	.63	.02	
Port Huron, Mich	59		38	.61		.29
Alpena, Mich	55		40	1.08		.52
Marquette, Mich	54		26	1.11		1.07
Grand Haven, Mich	58		35	.94		.82
Milwaukee, Wis	39		23	.72		.71
Chicago, Ill	62		45	.71		.65
Duluth, Minn	53		8	1.06		.96
Upper Mississippi Valley:						
St. Paul, Minn	56		14	.79		.77
La Crosse, Wis	59		36	1.16		1.16
Dubuque, Iowa	60		28	1.11		1.05
Davenport, Iowa	62		32	.77		.67
Des Moines, Iowa	61		21	.91		.91
Keokuk, Iowa	63		36	.85		.01
Springfield, Ill	64		35	.91		.81
Cairo, Ill	67		18	.63	.59	
St. Louis, Mo	66		23	.84		.76
Springfield, Mo	64		37	.55		.96

Table of temperature and rain-fall, week ended September 26, 1890—Continued.

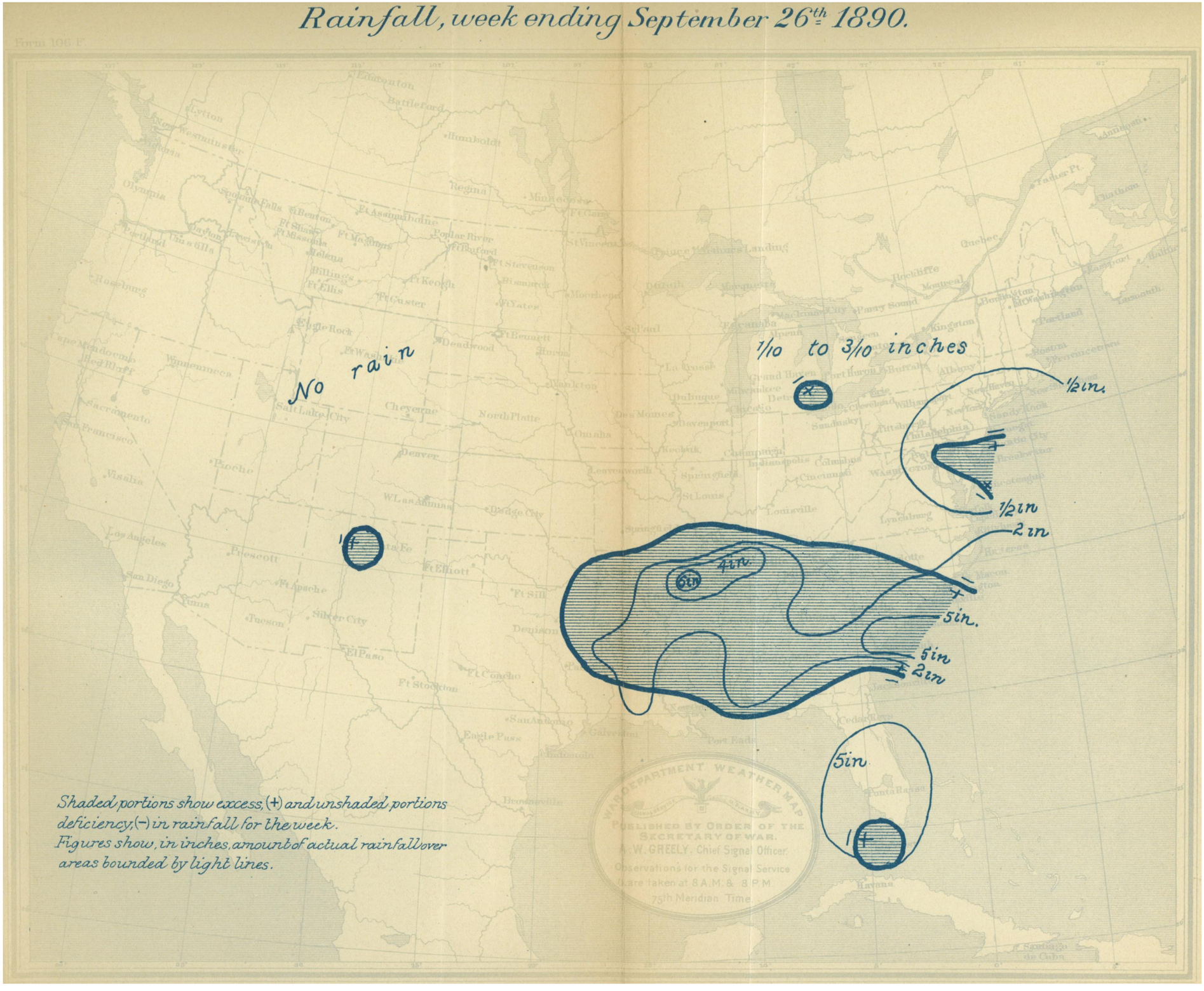
Locality.	Mean temperature in degrees, Fahrenheit.			Rain-fall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Missouri Valley:						
Kansas City, Mo	64		35	.82		.06
Concordia, Kan	62		1	.77		.77
Omaha, Nebr	61		3	.83		.82
Valentine, Nebr	58	17		.34		.34
Huron, Dak	57	14		.35		.35
Extreme Northwest:						
Moorhead, Minn	53		3	.49		.49
St. Vincent, Minn	50	10		.42		.34
Bismarck, Dak	54	15		.29		.25
Buford, Fort, Dak	53	33		.16		.16
Rocky Mountain Slope:						
Assinniboine, Fort, Mont	53	39		.28		.28
Helena, Mont	53	56		.35		.35
Custer, Fort, Mont	33	35		.17		.17
Rapid City, Dak	52			.13		
Salt Lake City, Utah	62	24		.22		.22
Cheyenne, Wyo	53	9		.20		.20
North Platte, Nebr	59	9		.32		.32
Denver, Colo	89		2	.22		.21
Dodge City, Kans	64		29	.32		.20
Elliott, Fort, Tex	66		30	.52		.40
Sill, Fort, Ind. T	71		43	.64		.36
Santa Fé, N. Mex	57		17	.35	.17	
Pacific Coast:						
Olympia, Wash	55		6	.72		.72
Portland, Oreg	59	6		.43		1.13
Roseburg, Oreg	59		7	.20		.20
Red Bluff, Cal	74	2		.15		.15
Sacramento, Cal	68	13		.06		.06
San Francisco, Cal	60		12	.04		.04
Los Angeles, Cal	68	1		.04		
San Diego, Cal	67	17		.01		.01
Yuma, Ariz	82	25		.01		.01

Temperature and Prevailing Direction of Wind, week ending September 26th 1890.

Form 106 F



Rainfall, week ending September 26th 1890.



Shaded portions show excess, (+) and unshaded portions deficiency, (−) in rainfall for the week.
Figures show, in inches, amount of actual rainfall over areas bounded by light lines.

FOREIGN.

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

GREAT BRITAIN—*England and Wales.*—The deaths registered in 28 great towns of England and Wales during the week ended September 13 corresponded to an annual rate of 18.6 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded in Bradford, viz, 13.2, and the highest in Plymouth, viz, 27.8 a thousand. Diphtheria caused 5 deaths in Salford and 3 in Manchester.

London.—One thousand four hundred and ten deaths were registered during the week, including measles, 39; scarlet fever, 18; diphtheria, 18; whooping-cough, 35; enteric fever, 18; and diarrhœa and dysentery, 117. The deaths from all causes corresponded to an annual rate of 16.6 a thousand. Diseases of the respiratory organs caused 210 deaths. In greater London 1,741 deaths were registered, corresponding to an annual rate of 15.8 a thousand of the population. In the "outer ring" the deaths included measles, 7; diphtheria, 7; and whooping-cough, 8.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended September 13, in the 16 principal town districts of Ireland, was 19.6 a thousand of the population. The lowest rate was recorded in Armagh, viz, 0.0, and the highest in Galway, viz, 48.1 a thousand. In Dublin and suburbs 117 deaths were registered, including measles, 1; enteric fever, 2; and whooping-cough, 1.

Scotland.—The deaths registered in eight principal towns during the week ended September 13 corresponded to an annual rate of 17.8 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Greenock, viz, 7.9, and the highest in Glasgow, viz, 21.2 a thousand. The aggregate number of deaths registered from all causes was 463, including measles, 8; scarlet fever, 5; diphtheria, 8; whooping-cough, 25; fever, 8; diarrhœa, 26; and croup and laryngitis, 6.

ENGLAND—*New-Castle-upon-Tyne.*—For the two weeks ended September 10, 1890. Population, 163,000. Total deaths, 3, including scarlet fever 1 and diphtheria 2.

NOVA SCOTIA—*Diphtheria.*—The following report has been received from the United States consul at Pictou, dated September 18, 1890:

SIR: I have known for some time that the diphtheria reigned in Halifax and other places in Nova Scotia.

It has been very bad in Halifax, but as this was not within my consular jurisdiction I have not deemed it incumbent upon me to report

it. This disease has also made considerable ravages in Truro and Moncton in this province.

In this connection I beg to inclose two extracts from the Halifax *Morning Herald*, which will, in my opinion, only partially demonstrate the extent to which this dread disease rages. The statistics, as set forth in this extract, only relate to school children, and when it is borne in mind that many of the poorer classes do not send their children to school, and that this disease is worse under poor sanitary conditions, it can be seen at a glance that the disease is very much worse than is here set forth. Indeed, the newspapers of Halifax have endeavored, up to this time, to conceal the fact from the public that the diphtheria was in Halifax to any alarming extent, and if any precautions were taken even now that would tend to call public attention to it these newspapers would be the first to assert that there was no such thing as diphtheria in Halifax.

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

GEORGE C. TANNER,
Consul.

SCOTLAND—*Dundee—Health report for August*, 1890.—During the month of August there were 270 deaths registered in Dundee, representing an annual death rate of 19.16 per 1,000, including scarlet fever, 20; typhoid fever, 12; diphtheria, 7; measles, 18; and whooping-cough, 1.

The following table shows the deaths and death-rates for the years noted:

	1887.	1888.	1889.	1890.
Deaths in August	299	194	220	270
Death-rate per 1,000	23.04	14.23	15.8	19.16

SPAIN—*Barcelona.*—Month of August, 1890. Population, 272,000. Total deaths, 569. Prevailing diseases, enteric fever, diphtheria, and measles.

Cadiz—Reported cases of cholera—Sanitary comments, etc.—Under date of September 10, 1890, the United States consul writes as follows:

SIR: I have the honor to state that the papers of Madrid have reported nine cases of cholera at this place.

These reports are strictly denied by the authorities, and I believe them to be without foundation.

Yesterday the civil governor informed me that the health of the center province is normal. It is never good.

It is rumored that cases of cholera have also occurred at Medina, Sidonia, and at Algar.

The translations of inclosed clippings from the *Diario de Cadiz* give the accepted explanations of the causes of the deaths that were reported to have occurred at the above-named places from cholera.

The additional clipping shows the vital statistics of three of the villages, Rota, Leuta, and Ubriqus, of this province for August.

As usual with such reports, it shows a larger number of deaths than births.

A recently published article in the *Diario de Cadiz* tended to show that if the normal sanitary condition of Spain could be made to equal

that of England, 340,000 of its population would be saved each year, the annual death rate in England being given at $1\frac{8}{10}$ per cent. of the population, and that of Spain being more than 2 per cent. larger.

I am, sir, your obedient servant,

R. W. TURNER,
U. S. Consul.

Province of Cadiz.—Month of July, 1890. Total deaths, 1,392, including small-pox, 11; enteric fever, 24; throat troubles and diphtheria, 40; typhus fever, 3; scarlet fever, 1; and measles, 4.

Jerez de la Frontera.—Week ended September 6. Population, 61,708. Total deaths, 22.

HOLLAND.—Month of July, 1890. Reports from the 12 principal cities, having an aggregate population of 928,905, show a total of 1,927 deaths, including typhus and enteric fevers, 9; small-pox, 1; scarlet fever, 2; measles, 94; croup, 14; and whooping-cough, 10.

SWITZERLAND—*Lucerne.*—Month of August, 1890. Population, 21,500. Total deaths, 20, including one from scarlet fever.

ROME—*Italy.*—Week ended August 9, 1890. The United States consul-general writes as follows:

The prevailing diseases, as usual at this season, were those of the organs of digestion, with 44 deaths, of which 26 were from enteritis and intestinal catarrh. Other chief causes of mortality were as follows: Pulmonary tuberculosis, 14 deaths; pneumonia, 11; bronchitis, 4; and eclampsia, 11.

The foregoing, relating to the week ended August 9, 1890, has been compiled from the weekly "Statement of Vital Statistics" by the city authorities of Rome, published and received at the consulate-general this 15th day of September, 1890.

From nine to ten months of each year, including the seasons when Rome is mostly visited by foreigners, the weekly statement of vital statistics by the city authorities is usually published from five to seven weeks after the week to which it refers. Therefore it can have little more than a historical value.

By reference to the "Abstract of Sanitary Reports," and notably to No. 35, Washington, D. C., August 29, 1890, just received at this office, it may be seen that in a list giving the current mortality of 65 great cities of the world, the statistics of Rome are delayed more than those of any place on the list, even of cities requiring a full month to reach Washington.

JAPAN—*Nagasaki—Ken (district)—Cholera.*—The United States consul reports 715 new cases of cholera and 478 deaths therefrom during the period from August 4 to August 17, 1890. From the outbreak of the epidemic until August 17, 1890, there have been officially reported 2,120 cases and 1,281 deaths.

INDIA—*Singapore.*—Month of July, 1890. Total deaths, 555, including fever, 161; beri-beri, 23; and small-pox, 2.

CUBA—*Havana—Yellow fever, etc.*—The sanitary inspector reports 15 deaths from yellow fever, and 3 deaths from small-pox, during the two weeks ended September 27, 1890.

The United States consul-general reports that during the last two weeks, owing to climatic changes, yellow fever has shown a tendency to increase, is more fatal, and highly infectious at wharves on the Havana side of harbor.

BRAZIL—*Rio de Janeiro.*—Week ended August 23, 1890. Population, 450,000. Total deaths, 289, including yellow fever, 8; enteric fever, 7; phthisis pulmonalis, 5; typhus fever, 5; and small-pox, 2.

The consul-general states that this report is not accurate, but is as much so as possible, it being semi-official, but he has reason to believe that all deaths from above causes are not reported.

Prevention and treatment of cholera.

[Translated for this bureau from *La Pratique Médicale*, Paris, September 16, 1890.]

At the time of the recent epidemic of influenza it was recalled that in the past, cholera had almost invariably followed the inroads of this great pandemic in Europe. This experience has been in part repeated. For three months past Asiatic cholera has been epidemic in certain provinces of Spain, and its ravages in Asia threaten the eastern frontiers of Europe. In view of the fact that the disease may be among us any day, it is well to consider the subject, in anticipation, under the double aspect of treatment and prevention.

The etiology of cholera has made considerable progress since the discovery of the comma bacillus as the pathogenic element of the disease. This discovery is not only of the highest scientific interest, it is a valuable element in diagnosis; it may serve as a guide in the prophylaxis of cholera, but it has no influence on the treatment of the disease. In other words, it is true of cholera as of other diseases, that the discovery of the pathogenic micro-organism has not led to the discovery of efficacious germicide treatment.

The late discoveries in bacteriology show that pathogenic microbes are noxious, not of themselves, by reason of their mere presence, but as the result of poisons (ptomaines, toxins, etc.) which they accumulate in the contaminated organism—poisons secreted, according to some authorities, by the microbes themselves, or, as recent researches of Brieger and Fränckel show, by cells of the human organism, the normal functions of which are deranged by microbic inroads. It is a question whether we possess the means of effectively neutralizing these poisons.

Doctor Bouchard writes as follows on the subject of the antiseptic treatment at the commencement of a case of cholera:

"I have faithfully applied the theory of Koch to the treatment of cholera. This theory may be briefly stated in these words: Cholera is the product of a poison secreted by organisms having their seat in the intestinal cavity. It is an infection of an accessible surface. We can practice antisepsis in the case of other microbes of the digestive canal. If Koch is right, it is only necessary to introduce into the digestive canal a substance capable of arresting microbic existence there—

a substance which resists absorption and hence is insoluble. I was induced to practice in cholera what I have practiced in typhoid fever. I employed iodoform in such a state of subdivision that the dose administered represented a surface of only sixty square meters. I administered it at the rate of one gram a day, in connection with five grams of naphthaline, a substance which is scarcely soluble. I had a mortality of 66 per cent.—that is to say, equal to that of other hospitals."

It can not be objected to these results, which Doctor Bouchard qualifies as unsatisfactory, that the comma bacillus is refractory to the action of iodoform and naphthaline. An experiment of M. Chantemesse, performed on bouillon culture, demonstrates the contrary. Nor can it be said that the antiseptic medication was applied too late, the poison having been already formed and absorbed. Facts refute this objection. A number of cases were cured by the antiseptic treatment. Doctor Bouchard concludes that the intestine is not the seat of the germination of the microbe.

In all likelihood the first symptoms which indicate cholera are to be imputed to a poison connected with the presence of a specific microbe, but we have no precise knowledge of this microbe, still less of its antidote. There is no resource, then, but symptomatic treatment. The dominant primordial element of the cholera attack, that in which the process of morbid evolution is initiated, consists of an inflammation of the gastro-enteric tube. Experience demonstrates that the attack may be prevented by treatment of the first premonitory symptom of inflammation, and that the most efficacious remedy is opium.

The contagiousness of leprosy.

[Translated for this Bureau from the *Archives de Médecine Navale*, Paris, September, 1890.]

The contagiousness of leprosy is demonstrated by the facts of clinical observation, by accidental inoculation, and by the positive results of experimental inoculation. It may be said of leprosy as of tuberculosis: It is inoculable; hence it is contagious.

As in the case of tuberculosis, the result of the progress of experimental bacteriology should be, not the demonstration of the fact that the disease is contagious, which has been proved, but to give a scientific explanation of this contagiousness by making known the biologic conditions of the bacillus of leprosy within the diseased organism and outside of it, in artificial cultures, and the receptive conditions of the contaminable subject. Only then shall we understand the slight degree of contagiousness of leprosy and the almost constant failure, up to this time, of leprous inoculations practiced on men and animals.

Geographical pathology—Prevalent diseases of the several countries—Australasia and South America.

[Translated for this Bureau from *La Rivista Internazionale d'Igiene*, Naples, July, 1890.]

POLYNESIA AND AUSTRALASIA.—As far as is known, these islands are healthy, malaria being on the decrease. Wide-spread epidemics of typhus have never been known. Exanthematic fevers are rare. On

the other hand, it is stated that phthisis decimates the native population which comes in contact with Europeans. Alcoholism is spreading to a disastrous degree. Syphilis is widely prevalent. Dysentery is extraordinarily diffused, but in a mild form. The same may be said of scabies and scleroderma. Cholera and dengue, though not unknown, are not widely diffused. The same is true of beri-beri.

AUSTRALIA.—Most Englishmen who have experienced the climate of Australia describe it as eminently healthy. Neither cholera nor yellow fever has ever appeared in the colonies as an epidemic. Small-pox is frequent, but has never prevailed in a disastrous form. The increase of phthisis pulmonalis and enteric fever has for some time past occupied the attention of Australian physicians. At Melbourne, for example, phthisis has attained a proportion approximating that of the great European cities, there being 22.29 consumptives in a population of 10,000, while in London the proportion is 26.06 to 10,000. In other cities it is less. At Victoria, in 1878, the proportion was 7.24 to 10,000. At Melbourne typhus gives a large contingent of cases: 12.23 to a population of 10,000. For some years echinococcus in a grave form has been diffused among the Anglo-Australian colonies, relative statistics showing a frequency formerly completely unknown, and rapidly increasing in almost all the large cities.

VAN DIEMAN'S LAND.—It is stated that the diseases observed here are benignant in character. Malarial fever, diphtheria, small-pox, measles, and scarlet fever are almost unknown. Syphilis in a mild form appears from time to time. Old people succumb to epidemics of influenza. A form of typhus, localized in the peritoneum, the intestines, and the meninges, rheumatic affections and inflammations of the respiratory system, with diseases of the digestive organs, are stated by Europeans living there to be frequent.

NEW ZEALAND.—Present climatic conditions are favorable. Malaria is entirely absent. Cholera and small-pox are almost unknown, only once having been epidemic. Measles made its appearance for the first time in 1854, scarlet fever in 1848, the epidemic being in each case of slight importance. Cases of dysentery are much more frequent than formerly, while phthisis is more rare. Typhus is relatively very slightly diffused, and the same may be said of scabies, syphilis, and scleroderma. Rheumatic affections are, next to dysentery, apparently the most diffused.

SOUTH AMERICA.—Taking as a point of departure the countries adjacent to the eastern coast of the Pacific Ocean, we find in the equatorial climate of Peru, the temperate climate of Chili, and the frigid zone of the lands bordering on the Straits of Magellan, the multiform variations of natural influences which characterize the coast, the temperate zone, and the high altitudes. Malaria, which prevails to a terrible extent along the equatorial coast, diminishes with latitude, and ceases altogether in the regions to the south. Typhus, everywhere diffused, occurs with great frequency on the higher levels of Anahuac. Recurrent typhus has been observed once in epidemic form on the Andes, at a level of 4,000 meters above the sea. Small-pox has occurred in a grave epidemic form; other exanthematic affections are ordinarily diffused and do not prevail in fatal forms. Diseases of the digestive organs increase with vicinity to the equator, while diseases of the respiratory organs diminish. These latter attain their maximum on the higher levels, but it is noticeable that phthisis

diminishes with altitude. Asthma and cardiac affections are frequent on the higer levels, and inflammations and hemorrhage mark the pathology of these altitudes. Among cutaneous affections may be noted, as very frequent, abscesses and boils. No physician of those countries mentions scabies or scleroderma. Yellow fever is slightly diffused and not attended with severe consequences. Cholera is unknown. Ophthalmia is frequent and severe.

PATAGONIA AND LA PLATA.—The higher levels of Patagonia and the States of the Plata may be noted as among the most healthy regions of the globe. Malarial fever is so rare that, strictly speaking, the limits within which the disease occurs can not be defined. Epidemic enteric fever and recurrent typhus are entirely unknown. Exanthematic fevers have claimed attention by their frequency and severity. Diseases of the respiratory organs, caused by sudden changes of temperature, are frequent, as is also mountain disease. Syphilis, although diffused, is mild; scrofula is almost unknown; cancer is rare; nervous and cutaneous diseases occur with some frequency; scabies and scleroderma have been observed for some time past; cholera and yellow fever have reappeared.

BRAZIL.—Malaria prevails to such a frightful extent that pernicious fevers and consecutive anæmia constitute, at Rio, almost the limits of disease. With these are associated diarrhœa, hepatitis, enteritis, and dysentery, their totality far surpassing that of thoracic diseases. The frequency and intensity of small-pox may be noted, and the rarity of typhus. Yellow fever appeared in an epidemic form in the years 1850, 1861, 1869, 1870, 1878; cholera in 1857 and 1867–1868. Phthisis increases in frequency. Erysipelas occurs in two forms, of which the form characterized by the inflammation of lymphatic vessels is the most frequent. Apoplexy, epidemic cerebro-spinal meningitis, and tetanus occur with frequency. Beri-beri is also frequent. Goître and cretinism are endemic in the mountainous regions. Syphilis is universally diffused. The pathology of Brazil is further characterized by the frequency of endemic hematuria, ainhum, hydrocele, and dracontiasis. Scleroderma and scabies are not lacking. With regard to yellow fever, it should be observed that in the case of the late epidemic it could not be ascertained whence the disease was imported, and some physicians incline to admit a slowly-developed endemicity.

GUIANA.—The pathology of Guiana should be considered with reference to the high and low levels. In the first, intermittent fevers and dysentery, frequently followed by hepatic affections, predominate. The digestive organs are seriously attacked by the entozoa; for example, anchylostomum duodenale. Tropical phagedæna prevails among the inhabitants of all races; scabies and yaws occur with marked frequency among the negroes. Phthisis, although not very frequent, often takes a very grave form. In the mountainous parts of Guiana, which are regarded as a sanitarium for Europeans living in the country, inflammatory thoracic affections, rheumatism, and erysipelas predominate.

COLOMBIA.—Malarial diseases, with yellow fever and, next in frequency, intestinal catarrh, bronchitis, tetanus, rheumatism, scabies, scleroderma, cutaneous diseases, and entozoaria predominate.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-cough.
Paris	Aug. 30	2,260,945	806	.....	.....	.....	.....	11	3	21	15	4
Paris	Sept. 12	2,260,945	793	.....	.....	.....	.....	17	6	24	20	6
Glasgow	Sept. 12	545,698	9	.....	.....	.....	3	.....	3	3	.....	.....
Naples	Sept. 13	519,655	260	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brussels	Sept. 6	469,459	180	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamburg	Aug. 30	455,000	268	.....	.....	.....	.....	4	1	9	.....	.....
Rio de Janeiro	Aug. 30	450,000	271	.....	6	6	5	3	.....	.....	.....	.....
Calcutta	Aug. 9	433,219	188	5	.....	2	.....	.....	.....	.....	.....	.....
Rome	Aug. 9	417,392	157	.....	.....	.....	.....	2	.....	3	3	.....
Lyons	Sept. 6	401,930	155	.....	.....	.....	.....	2	.....	.....	.....	.....
Leipsic	Sept. 6	305,479	141	.....	.....	.....	.....	.....	2	2	1	.....
Munich	Aug. 16	298,000	210	.....	.....	.....	.....	.....	2	2	.....	.....
Munich	Aug. 23	298,000	215	.....	.....	.....	.....	.....	4	3	.....	.....
Munich	Aug. 30	298,000	189	.....	.....	.....	.....	1	2	6	.....	.....
Cologne	Sept. 6	285,042	154	.....	.....	.....	.....	.....	.....	2	.....	4
Barcelona	Sept. 11	272,000	210	.....	.....	1	.....	24	.....	4	.....	.....
Dresden	Sept. 6	269,000	95	.....	.....	.....	.....	.....	1	3	.....	.....
Palermo	Sept. 6	250,000	99	.....	.....	.....	1	.....	3	.....	.....	.....
Genoa	Sept. 13	180,391	88	.....	.....	3	11	.....	.....	.....	.....	.....
Frankfort-on-the-Main	Sept. 6	170,733	61	.....	.....	.....	.....	.....	.....	2	.....	.....
Frankfort-on-the-Main	Sept. 13	170,733	64	.....	.....	.....	.....	.....	.....	1	.....	.....
Konigsberg	Sept. 7	160,537	2	.....	.....	.....	.....	.....	1	1	.....	.....
Trieste	Sept. 6	148,245	73	.....	.....	.....	.....	1	.....	1	.....	.....
Venice	Aug. 23	156,800	96	.....	.....	5	.....	.....	1	.....	.....	.....
Venice	Aug. 30	156,800	71	.....	.....	9	.....	3	.....	.....	.....	.....
Venice	Sept. 6	156,800	85	.....	.....	11	.....	.....	1	.....	.....	.....
Hanover	Sept. 6	155,000	71	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ghent	Sept. 6	152,395	89	.....	.....	.....	.....	.....	.....	.....	.....	6
Christiania	Aug. 30	143,300	54	.....	.....	.....	.....	1	30	15	.....	.....
Funchal	Sept. 6	133,250	22	.....	.....	.....	.....	2	.....	.....	.....	.....
Nuremberg	Aug. 30	129,218	101	.....	.....	.....	.....	.....	2	1	.....	.....
Stuttgart	Sept. 13	125,510	34	.....	.....	.....	.....	.....	.....	2	.....	.....
Bremen	Sept. 6	124,000	43	.....	.....	.....	.....	2	.....	1	.....	.....
Bologna	Sept. 12	121,579	346	.....	.....	.....	.....	.....	16	5	.....	.....
Pernambuco	Aug. 24	120,000	184	.....	.....	98	.....	.....	.....	.....	.....	.....
Pernambuco	Aug. 29	120,000	159	.....	.....	97	.....	.....	.....	.....	.....	.....
Sunderland	Aug. 30	116,548	58	.....	.....	.....	.....	1	2	1	.....	.....
Dantzic	Sept. 6	115,140	57	.....	.....	.....	.....	.....	.....	1	.....	.....
Havre	Sept. 6	112,074	72	.....	.....	.....	.....	5	1	.....	.....	3
Havre	Sept. 13	112,074	64	.....	.....	.....	.....	4	.....	.....	.....	.....
Aix-La-Chapelle	Sept. 14	109,858	51	.....	.....	.....	1	.....	.....	.....	.....	.....
Crefeld	Sept. 13	108,000	46	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stettin	Sept. 6	99,550	49	.....	.....	2	.....	.....	2	.....	.....	.....
Leghorn	Sept. 15	103,723	41	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zurich	Sept. 10	91,323	22	.....	.....	3	.....	.....	1	.....	.....	3
Messina	Sept. 13	79,971	44	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mannheim	Sept. 6	100,000	37	.....	.....	.....	.....	.....	1	3	2	.....
Gaspé Basin	Sept. 23	43,909	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trapani	Sept. 6	29,095	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cienfuegos	Sept. 14	40,665	19	.....	2	.....	.....	.....	1	.....	.....	.....
Marsala	Sept. 6	40,131	20	.....	.....	.....	1	.....	.....	1	.....	.....
Cape Town	Aug. 27	36,000	26	.....	.....	.....	1	.....	.....	2	.....	.....
St. Pierre, Martinique	Aug. 31	30,106	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre, Martinique	Sept. 7	30,106	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amherstburg	Sept. 24	30,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Castle, N. B.	Sept. 13	28,000	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Curacoa	Sept. 13	20,000	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vera Cruz	Sept. 18	23,800	17	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gibraltar	Sept. 7	23,681	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Girgenti	Sept. 6	23,547	7	.....	.....	.....	.....	2	.....	1	.....	.....
Iquique	July 26	19,000	22	.....	.....	.....	.....	1	.....	.....	.....	.....
Iquique	Aug. 2	19,000	15	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iquique	Aug. 9	19,000	16	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iquique	Aug. 16	19,000	21	.....	.....	.....	.....	1	.....	.....	.....	.....
Iquique	Aug. 23	19,000	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Victoria, B. C.	Sept. 13	18,500	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingston	Sept. 26	18,000	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cartagena, Cola	Aug. 23	16,000	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cartagena, Cola	Aug. 31	16,000	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cartagena, Cola	Sept. 6	16,000	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Matamoras	Sept. 13	16,000	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Antigua	Aug. 30	15,847	15	.....	.....	.....	.....	.....	.....	.....	.....	.....

MORTALITY TABLE—FOREIGN CITIES—CONTINUED.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-cough.
Antigua	Sept. 13	15,847	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunfermline	Sept. 6	15,839	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sagua la Grande	Sept. 13	15,605	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moncton, N. B.	Sept. 13	15,000	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sonneberg	Aug. 9	11,600	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sonneberg	Aug. 19	11,600	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sonneberg	Aug. 30	11,600	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sonneberg	Sept. 6	11,600	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Stanley and St. Thomas	Sept. 13	11,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guelph	Sept. 20	10,173	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colon	Sept. 4	8,000	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colon	Sept. 16	8,000	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
La Guayra	Sept. 6	7,428	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
La Guayra	Sept. 13	7,428	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Sarnia	Sept. 20	6,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prescott	Sept. 25	2,988	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coaticook	Sept. 20	2,860	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Governor's Harbor	Sept. 6	997	2	.....	.....	.....	.....	.....	.....	.....	.....	.....

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