

WEEKLY ABSTRACT OF SANITARY REPORTS.

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TREASURY DEPARTMENT,
OFFICE SUPERVISING SURGEON-GENERAL,
U. S. MARINE-HOSPITAL SERVICE,
Washington, D. C., October 19, 1888.

Abstract of Sanitary Reports received through the Department of State from foreign countries during the week ended October 19, 1888, and information received through other channels.

(Published in accordance with section 4, act approved April 29, 1878.)

England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended September 29 corresponded to an annual rate of 18.3 a thousand of the aggregate population, which is estimated at 9,398,273. The lowest rate was recorded in Huddersfield, viz., 13.7, and the highest in Manchester, viz., 28.4 a thousand. Small-pox caused 1 death in Hull. Diphtheria caused 3 deaths in Manchester, and 2 in Bristol.

London.—One thousand three hundred and fourteen deaths were registered during the week, including measles, 30; scarlet fever, 22; diphtheria, 27; whooping-cough, 13; enteric fever, 13; diarrhœa and dysentery, 77. Diseases of the respiratory organs caused 213 deaths; different forms of violence, 61; and 13 suicides were registered. The deaths from all causes corresponded to an annual rate of 16.0 a thousand. In greater London 1,634 deaths were registered, corresponding to an annual rate of 15.4 a thousand of the population. In the "outer ring" the deaths included diarrhœa, 14; diphtheria, 7; scarlet fever, 6.

Ireland.—The average annual death rate represented by the deaths registered during the week ended September 29 in the 16 principal town districts of Ireland was 22.2 a thousand of the population. The lowest rate was recorded in Lurgan, viz., 0.0, and the highest in Dundalk, viz., 43.6 a thousand. In Dublin 165 deaths were registered, including measles, 1; enteric fever, 1; scarlet fever, 1; diarrhœa, 16; whooping-cough, 4; dysentery, 2; diphtheria, 1.

Scotland.—The deaths registered in 8 principal towns during the week ended September 29 corresponded to an annual rate of 17.6 a thousand of the population, which is estimated at 1,314,274. The lowest mortality

was recorded in Perth, viz., 12.8, and the highest in Paisley, viz., 26.1 a thousand. The aggregate number of deaths registered from all causes was 444, including measles, 9; scarlet fever, 4; diphtheria, 6; whooping-cough, 4; fever, 8; and diarrhoea, 23.

Denmark.—The following is a translation of a Danish quarantine order of the 13th of September, 1888:

The proclamation of the Ministry of Justice, dated May 19, 1888, and ordering a general examination according to the law of July 2, 1880, section 2, paragraph 1, against ships coming from Grimsby, and the provisions against the importation of things mentioned in section 32 of the law are hereby discontinued. Quarantine will henceforth be discontinued. The provisions of section 2, paragraph 1, of the law of July 2, 1880, referring to precautionary measures against the introduction of contagious diseases into the kingdom, are hereafter to be enforced with reference to the following places:

Ports on the French coast between Nantes and St. Malo, both inclusive; Egersund; all ports in Chili; all ports in Florida; all ports in Jamaica; all ports in Martinique; all ports in Guadeloupe, St. Iago de Cuba; ports in the East Indies, Tonquin, and Cochin China; Trieste; all ports in Egypt; ports on the Red Sea; Rio de Janeiro, and Havana.

The prohibition against the importation into the kingdom of used linen, used articles of clothing, and used bed-clothes, providing the articles named do not constitute the personal effects of travelers, waste, cotton or wool, refuse paper, hair and hides, remains in force in reference to the following places:

Ports on the French coast between Nantes and St. Malo, both inclusive; Egersund; all ports in Florida; all ports in Jamaica; all ports in Martinique; all ports in Guadeloupe, St. Iago de Cuba; all ports in the East Indies, Tonquin, and Cochin China, and all ports in Chili.

The prohibition against the importation into the kingdom of used linen, used articles of clothing, and used bed-clothes, providing the articles named do not constitute the personal effects of travelers, remains in force in reference to Rio de Janeiro and Havana. In addition thereto, special attention is to be paid to the cleansing, under official inspection, of linen, clothing, and bed-clothes brought from either of the last-named places as the personal effects of travelers.

Montevideo, Uruguay.—Four hundred and seventeen deaths were registered during the month of July, 1888, including small-pox, 33; typhus and enteric fever, 6; diphtheria, 52.

Havana, Cuba.—The United States sanitary inspector reports 10 deaths from yellow fever during the week ended October 6, 1888.

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	Sept. 27	2,260,945	873			1		10	5	13	12	3
Glasgow	Sept. 29	545,678	195					5	4	3		
Warsaw	Sept. 22	444,814	248			4			17	8		
Amsterdam	Sept. 22	389,916	157					1		1		
Amsterdam	Sept. 29	389,916	137				1	1				
Palermo	Sept. 29	250,000	76			2				3	1	
Genoa	Sept. 29	179,819	62								1	
Trieste	Sept. 15	154,500	71			7					3	
Trieste	Sept. 22	154,500	71			8					5	
Toronto	Oct. 5	130,000	34					1				
Toronto	Oct. 13	130,000	16					1				
Stuttgart	Sept. 29	125,510	41								1	
Bremen	Sept. 22	122,000	48						2			1
Mayence	Sept. 15	65,802	41				1				1	
Mayence	Sept. 22	65,802	35				1					
Merida	Sept. 24	48,121	57					1				
Callao	Sept. 8	31,000										
Paramaribo	Aug. 31	27,553	57									
Curaçao	Sept. 29	25,000	5									
Vera Cruz	Oct. 4	23,800	24			2						
Gibraltar	Sept. 25	23,631	9			1						
Laguayra	Sept. 22	7,428	4									
Laguayra	Sept. 29	7,428	4									
San Juan del Norte	Sept. 17	500										

UNITED STATES.

Macclenny, Fla.—The following has been received from Sanitary Inspector J. L. Posey :

In obedience to a telegraphic order received after completing my inspection of Orlando, Fla., I proceeded to investigate the origin and spread of a fever which had become epidemic at the town of Macclenny, Fla. This is a small town with an estimated population of 600 inhabitants, situated in Baker County, about thirty miles west of Jacksonville, on the line of the Florida Railway and Navigation Co.'s road. I arrived at Baldwin, where the tracks of this road intersect, nine miles distant from Macclenny. I reached my point of destination on the afternoon of September 9, the engineer refusing to approach nearer than half mile of the town. I was there met by Mayor D. J. Watkins and C. B. Macclenny, two of its prominent citizens. They escorted me to the office of the hotel, where I found Doctors James and Williams awaiting us. The general appearance of the town, which consists of perhaps a hundred stores and dwellings scattered over a rather large area, indicated a very wretched sanitary condition. The streets along the railroad track, as well as others, were covered with heaps of decaying sawdust and garbage of every description spread over them, drains obstructed, and open lots overgrown with weeds and rank vegetation. The floors and platforms of the depot buildings, passenger and telegraph offices, and their vicinity, were covered with lime, which had recently been thrown broadcast. A further stroll through the town revealed a similar deplorable sanitary state; the steps and front galleries, and porches and premises of residences lavishly

sprinkled with lime, and the yards filled with accumulated garbage. No organized measures had been adopted by the local health authorities to even ameliorate, much less correct, this unsanitary state of their town.

The site of the town is a low, flat, sandy plateau, without sufficient elevation to give effective drainage; the surrounding pine forests being interspersed with a series of marshes and alluvial basins. No attention had been given to the removal of excreta or their proper disinfection. The water supply is generally obtained from wells at a depth of fifteen or twenty feet, and is of a quality which I consider very unwholesome, having experienced personally its disagreeable effects. The atmospheric condition, resulting from such foul surroundings, was fully prepared to propagate the infectious material, which had been already introduced into the town, and had been gradually developing since the 1st of August. After an interview of over an hour with Messrs. Watkins, Macclenny, and Doctors James and Williams, I ascertained that previous to or about the 1st of August, Charles Corbett reached the town from Jacksonville, and within five days after his arrival was taken with slight chill, followed by a fever lasting seventy hours, with severe headache, pain in back and limbs, nausea, vomiting of coffee-ground fluid, and expired on the 8th of August with suppression of urine and uræmic coma; the body becoming, after death, of a deep yellow hue. The diagnosis in this case was bilious remittent fever. Corbett was a printer, and found employment in the office of the local newspaper, edited by the Rev. J. W. Folsom, and it was in this building that he died. Many of the residents visited Corbett during his illness, and the next death occurred in the family of the Rev. Folsom, in the person of Mrs. W. B. Folsom, who died August 25, with the same series of symptoms as those presented by that of Corbett. Then followed the cases of J. C. Smith, Alfred Snead, and N. G. Macclenny, all of whom after having had symptoms similar in every respect to the preceding cases, died with black vomit and suppression of urine, on the fifth and sixth days of their sickness.

The diagnosis of all these cases was that of "grave bilious fever," and the history of them was given me by their medical attendants. I inquired very diligently of the resident physicians whether they had kept any record of pulse and temperature of these cases, and if any tests had been made for albumen, and was informed that it had not been deemed necessary. Without further consultation, I accompanied Doctor Williams to visit some of his patients, and saw J. W. Macclenny, who was in "articulo mortis," having been sick five days. He presented, in a typical manner, all the physical signs and appearances of yellow fever. His garments and bed-linen were stained with black vomit, the face of a dusky bronze color, the brow and lower part of neck of a marked yellow hue, the eyes deeply injected, and of the familiar icteric color; the lips dry and fissured, teeth covered with bloody sordes, the gums and nasal apertures showing recent signs of hemorrhage; and a bloody froth flowing from the mouth. A more striking picture of this disease, in its hemorrhagic form, would be difficult, indeed, to find than that presented by this case. Death followed in this case at 6 o'clock that evening, the body turning of a deep yellow color. There were in an adjoining room of the same house three cases of children all in the first stages of yellow fever, the symptoms being well-marked. One of them, a boy of 12 years, in his

fourth day of fever, I visited on the morning of the 10th of September, and found by careful test 30 per cent. of albuminous deposit in the urine. This boy died on the 11th. In company with Doctor James, I saw quite a number of cases all presenting unmistakable symptoms of yellow fever; one a lady, whose name I failed to record, in a most critical condition, with coffee-grounds vomit, scanty urine, and signs of uræmic poisoning.

I next saw with Dr. George E. Shuey the cases of George Miller and Mrs. Kersey, who were in a hopeless condition, both presenting a striking counterpart of cases already seen. I visited these two persons again the following morning and found them with subsultus tendinum, suppression of urine, and in a comatose state; both dying, as I saw from the reports on the 11th of September. I went from house to house and found the sick and dying huddled together in small rooms, with windows and doors closed, the floors sprinkled with chloride of lime, carbolic acid, and a variety of other disinfectants. The oppressive odor of disinfectants mingling with the close atmosphere of the sick rooms, laden with the emanations from the excreta and ejecta of the patients, together with the dreadful visages of the dying, was shocking to every sense, and the scene well calculated to appal the stoutest hearts. I have seldom witnessed a more pitiable and melancholy sight than that presented to my view in my house-to-house inspection through this desolate scourge-swept town. As I returned to the hotel in the evening, I met many whose pale, wan features, languid air, and step marked them as convalescents from the disease, and others who, with anxious look, approached me, and, in whispered tones, asked to know my opinion of the prevailing fever. I told them that they must escape with the rising sun, or, remaining, fall victims to yellow fever. The following morning at the time of my departure the panic-stricken populace were moving away in every direction, my great regret being that it was then impossible for them to reach Camp Perry. There were, at the time of my visit, 60 cases and had been 5 deaths from the 8th of August up to the 11th of September. The results of my investigation clearly show the importation of the disease from Jacksonville. The arrival of Corbett with infected baggage, and his subsequent death—the Sentinel office, where he died, became a focus, from which the disease gradually spread, invading successively every house up and down the street, and radiating thence to the front and rear of the village, until the entire place became infected. In view of the prevalence of so many undoubted and typical cases of yellow fever, the occurrence of 5 deaths and 60 cases in the course of thirty days, it seems to me incredible, that the resident practitioners had so signally failed to recognize or suspect the true nature of the disease. I was unable to obtain any reliable data from the health authorities, as no record is kept of vital statistics.

The following information was given me by Mayor D. J. Watkins: President board of health and mayor, D. J. Watkins; disposal of sewage, surface drainage; distance of cemetery from business center, 2 miles; burial permits, none issued; population, 400 white, 300 colored; mode of burial, 6 feet below surface; closets, open.

Quarantine established against Jacksonville August 9.

I cannot close this report of my investigations at Macclenny without expressing a profound feeling of indignation at, and condemnation of the conduct of the medical corps of the local board of health, whose

utter ignorance of the nature of the prevailing epidemic, and fatal delay in this matter, has resulted in the cruel sacrifice of the lives of so large a proportion of their citizens, wives, and children. A late report shows that there have been 189 cases out of an actual population remaining of 195; the deaths being 21 whites. Of the above number 160 were whites and 29 colored. There are now sick 11 white and 8 colored. I desire likewise to mention the cruel treatment to which this community has been subjected by the Florida Railway and Navigation Company's road that added to the existing horrors of a yellow fever epidemic. Their trains were run through the ill-fated village at a speed of fifteen miles an hour, cutting them off from all supplies of food and medicine; a condition which was found to exist when the relief committee reached the town.

Respectfully submitted,

J. L. POSEY, M. D.,
U. S. Sanitary Inspector M.-H. S.

Doctor Posey himself contracted the fever at this town, as five days after his arrival at Camp Perry he was taken with the symptoms of yellow fever. As soon as the diagnosis was made clear he was removed to the fever hospital, where, under the care of Doctor Fag t, he made a good recovery and returned to duty.

The following reports have been received from Dr. J. F. Hartigan, United States Sanitary Inspector :

St. Augustine, Fla.—In compliance with your instructions to make a sanitary inspection of St. Augustine, and other places in Florida, I have the honor to report that upon invitation, in company with Doctor Gary, president of the county's board of health compact, Dr. W. H. Cyrus and Mr. Canova, president and secretary of Putnam County board of health, I arrived at St. Augustine Monday. There we met the mayor and board of health. The different physicians of the city were also present at the conference to give their views on the reported prevalence of "dengue" or any other fever they were called upon to treat. Only one or two stated that they had seen cases of dengue of a mild type, but all were sure that no case of yellow fever had existed in the community. Next day, in company with Doctors Shine and Alexander, I saw several cases of this so-called dengue, but only in one was there any elevation of temperature. Yesterday I made a general tour of the city, personally inspecting every case or suspicious case of fever that I could find. Altogether I saw ten to twelve additional patients, white and colored, who had or were supposed to have dengue. I think probably that but few could have escaped my attention for everybody seemed anxious for the most thorough investigation, aiding me every way in my search. The utmost facilities and cordiality were also shown me by the authorities, and they, with the people, were gratified and felt secure at the action of the Surgeon-General in sending a sanitary inspector among them.

St. Augustine has peculiar interests, and it was resolved that the fair city, a resort for the opulent and health-seekers in the winter months, should not be under a shadow of suspicion. For this reason the most extraordinary measures have been adopted to exclude yellow fever. A double cordon of guards numbering 300 invests the city night and day

subject to military regulations, no one being allowed to enter from any direction. It was only at the meeting Monday (already referred to), that the quarantine, as regards express and freight, was removed against its sister city, Palatka, the absurdity of its establishment in the first place, being acknowledged by both parties.

The alarm of the people of Florida, at least in the sections so far visited, is extreme and astonishing, and the strict quarantine regulations, harsh and sometimes unnecessary, contribute to the panicky feeling. Several cases of hardship have come under my notice where male and female alike suffered, although coming from non-infected districts. This could have been avoided had some of the quarantine officers been men of ordinary discretion. But in times like these it is not always easy perhaps to find such. There is now a universal desire for a state board of health, and no doubt at the next biennial session of the Legislature, which will be in April, it will be speedily established. This will prevent hereafter, it is to be hoped, one county arraying itself against another, and meetings of excited citizens censuring their local health board one day, dictating to them the next, and then perhaps commending them. One thing more which will inspire confidence is, that the general government should supervise it all. Let it patrol the Gulf thoroughly and use the most repressive measures, if necessary, in preventing smuggling from Havana, and communication at least during the summer months.

Now as to this "dengue." I think it is a misnomer, or is but a common type of fever peculiar to the climate at certain seasons, and is easily managed. It does not follow the course laid down in the books; nor is it like the epidemic of dengue that prevailed at St. Augustine five years ago. Doctor Shine tells me that then it lasted the usual time—two to four weeks—and was characterized by an eruption and desquamation, with the "break-bone" feeling lasting a long time, sometimes being concentrated in a finger, an arm, or the eye-ball. There was often nausea but no vomiting. It was ushered in generally by a chill; quinine did not affect it, and there were no deaths. The prevailing winds being southeast and northeast, blowing from the Bahamas or Arctic regions, it is quite likely that meteorological causes enter as a factor, which, with night exposure in this situation, develop the disease. This is strengthened by the fact that it is best amenable to treatment by salacine, showing clearly a rheumatic as well as malarial tendency. I have not seen a case, with the possible exception of the one referred to with elevated temperature, that can be dignified as dengue. The "break-bone" symptoms and stiffness are mild; the majority do not go to bed at all, nor even take medicine, and they are generally attending to business in a few days.

Following are the deaths from all causes from May 1 to October 1, 1887 and 1888:

1887—May	11	1888—May.....	14
June	21	June	15
July	22	July.....	17
August.....	14	August.....	12
September	13	September.....	7
Total	81	Total.....	65

Of the number for 1887 there were 27 from zymotic diseases, 7 of them being cholera infantum. For 1888, zymotic diseases, 20; 8 from cholera infantum.

St. Augustine is an antique city, with narrow streets, and has much history. It is built on a peninsula, two miles from the ocean, between the Matanzas and St. Sebastian Rivers, and is the capital of St. Johns County. It is one hundred and sixty miles south of Savannah, thirty from Jacksonville, and is separated from the sea by Anastasia Island. The city has a ridge about its center, running north and south, gradually sloping east and west. The site is level, and is only five feet above the water. Its length is two miles and width half a mile. It is situated on a bed of coquina, which, on the island, crops out on the surface. This coquina rock is a clean shell, cemented together, and, with a sandy loam over it, makes a porous soil. The population is about 8,000, about one-fourth being colored. Forest trees of pine, live oak, and cypress surround the city, while all the tropical fruits, plants, and vegetables are grown in abundance. A sea-wall, one mile long, built of coquina and capped with granite, fronts the city, commencing at the ancient Fort Marion. The famous Ponce de Leon Hotel is also one of the principal attractions.

As far as I can learn there have been three epidemics of yellow fever in the history of the town.* One was about 1830, the second 1840, and the last in 1877. The first case was not announced until November 9 of that year, although it was thought to have existed from October. The disease, which was supposed to have been introduced from Fernandina, lasted three weeks, there being about 50 deaths and over 250 cases.

Three railroads center in the town—the St. Johns River road, Palatka and St. Augustine, and Jacksonville, St. Augustine, and Halifax—thus putting it in direct communication with all points north and west.

The mean temperature for the year ending September 30, 1888, is as follows:

October, 1887.....	72. 09	April, 1888.....	70. 05
November, 1887.....	62. 49	May, 1888.....	74. 03
December, 1887.....	57. 39	June, 1888.....	Not given
January, 1888.....	57. 33	July, 1888.....	79. 82
February, 1888.....	60. 16	August, 1888.....	81. 77
March, 1888.....	60. 64	September, 1888.....	76. 90
Yearly average.....		68. 43.	

The highest temperature, 93 degrees, occurred during the month of August, and the lowest, 30 degrees, in January.

The rain fall for the same period was 39. 85 inches, the heaviest being in February, 9.20 inches, and the lightest in January, 0.20 inches. The prevailing winds were southeast and northeast.

Mayor of the town, George S. Greenoe; president of county board of health (appointed by the Governor, same as in all counties of the State), Dr. J. K. Rainey.

Artesian water is the principal kind used. There are about 70 wells scattered through the city, averaging in depth 250 feet. The water is of a uniform character, with a strong sulphur odor; it is used for all purposes. These wells were first sunk six years ago, and the supply is unlimited. About ten per cent. of the population use cistern-water.

*The annual report of this Bureau for 1873, pp. 80 and 81, states yellow fever occurred in St. Augustine in 1807, 1821, 1838, 1839, and 1841.—J. B. H.

There are no springs. Surface-wells were first used and are also pretty general; they are now beginning to be condemned, disease having been clearly traced to their use. Deeper surface-wells give purer water. One artesian well will supply fifteen or twenty families. This water is considered the most wholesome for drinking purposes, although there are many who cannot use it on account of its cathartic effect.

There are several private sewers carried out into deep water. By a resolution of the council, all sewers are ordered to be sunk at least 5 feet below the surface of low water. They are connected with the hotels, and many business houses and private residences. The other soil is carted off weekly, two miles north of the town, deodorized and sunk in pits of dry sand, 25 feet long and from 4 to 5 feet deep, and covered with sand. Plans have already been made for a general system of sewerage.

Burial permits are required in all cases; this rule is stringent. They are issued by the city clerk.

There are two cemeteries, the nearest half a mile from the center of town. This has been ordered to be closed, and arrangements for a new one, three miles south of the city, in an elevated locality, are completed. The other cemetery is situated two miles west of center of town on a ridge.

Respectfully submitted,

J. F. HARTIGAN, M. D.

Palatka, Fla.—Palatka, the county seat of Putnam County, is situated on the west bank of St. John's River, about twenty miles in a direct line from the sea, and one hundred miles by river. It is 15 feet above low water; its soil a sandy loam. The town was first incorporated in 1853. There is no history of yellow fever or other epidemic; only occasionally is there a case of so-called dengue, but it is very mild. The place is in all respects healthy. Four years ago it was visited by a disastrous fire which laid waste the entire business section, principally frame buildings; but the pluck and enterprise of its people soon replaced them with substantial brick structures.

On account of its favorable situation, and other advantages, Palatka has five railroads centering in it. Rigid quarantine is also established here against the fever. Eleven years ago there was an imported case in the town, but it was isolated, and the disease did not spread. The forest trees of the outlying districts are pine, oak, magnolia, and hickory; part of the town extends into a hummock country.

There is probably no place anywhere better supplied with water than Palatka. The water-works are situated on the edge of the town, near a large spring, which furnishes considerable overflow. On a hill adjacent is an iron stand-pipe 50 feet high, supplied with two pumping-engines. In case of fire this pressure is sufficient to throw a stream of water over their highest building. On account of its excessive hardness and large amount of residue, it is not recommended for domestic or boiler use. Another reason that it is not generally introduced is the expense. Artesian water is more popular, and a well can be sunk now much cheaper than formerly. Several of them are scattered over the city. Surface wells are used principally by the colored people, and, although considered unwholesome, the water does not seem to be injurious to them.

There are fewer private sewers here than in St. Augustine, but, like

that city, plans for a general system are already drawn up, which it is thought will soon be carried out. Holes are used in place of boxes in the privies; when full these are periodically emptied into others only a few feet off, which are dug for the purpose and then filled up.

Burial-permits are required in all cases, and are issued by the health officer. The death rate from May to October, I was unable to secure on account of imperfect records.

There are two cemeteries, both adjoining, half a mile from center of city, but they are separated from the city proper by a branch or rivulet.

The population of Palatka is 4,500, about equally divided as to color. Mayor, W. J. Webb; president county board of health, Dr. W. H. Cyrus.

Respectfully submitted,

J. F. HARTIGAN.

Tampa, Fla.—The following letter has been received from Dr. J. P. Wall, president board of health, under date of October 13, 1888.

I received a letter this morning from Governor Perry, relative to taking off the quarantine at Plant City—it seems that the people out there had written or petitioned him about it—and he stated that he had communicated what they wanted to you.

I would respectfully suggest that things be allowed to remain as they are at Plant City till the last of the present month, at least. If the cordon is removed and the unacclimated allowed to move into that place, there would be risk of getting the infection into it again from Tampa, even if it should have entirely disappeared from Plant City. As long as there is fever in Tampa, it would be best to keep Plant City closed against unacclimated people moving back into the place.

The weather appears to be getting cool, and I hope that by the end of the month we will be rid of the fever. Of course nothing positive can be prognosticated as to the end.

There are only 4 cases of fever in Tampa now, and 1 of these has been on hand since the 3d instant; 2 of them have albuminous urine; 1 is very yellow, and is mainly suffering now with inflammation of left parotid gland which will be likely to suppurate, 1 of these 4 cases only suspicious, taken sick last night; no deaths since night of the 7th instant; a total of 5 deaths since the 7th of August.

Jacksonville, Fla.—The following letter has been received from Dr. J. Y. Porter, in charge of Government relief measures, under date of October 10:

I would invite your attention to a copy of letter of my instructions to Doctor Echemendia, and also the general notification to the public of Jacksonville, on the subject of disinfection. I think they are both sufficiently plain so as not to be misunderstood in respect to any responsibility for destruction of infected material that may be destroyed at the request of the owners. It is my impression that the destruction of all infected material of the class enumerated in your letter to me of the 6th inst. should be made compulsory if it is the desire to rid the city of all fomites or germs.. Anything short of compulsory destruction must make the whole matter a *farce* and a useless expenditure of money.

JACKSONVILLE, FLA., *October 10, 1888.*

To the Public.

The disinfection and fumigation of houses where cases of yellow fever have occurred, together with the staff, of which Dr. DeM. Echemendia is chief, having been transferred to the Marine-Hospital Service under my charge, the following will be the general rules regulating the same :

Disinfection of houses :

1. No general disinfection of houses will be practiced until after the close of the epidemic.

2. Requests to fumigate apartments will be honored in cases where the party making the requests signifies willingness to defray all expenses incident to the same.

3. Where parties are financially unable to perform the necessary cleaning of apartments after the discharge of a patient by recovery or death, or are unable to procure intelligent help, the fumigating staff will be instructed to perform the work.

Destruction of property :

1. Mattresses, pillows, comforts, and blankets, soiled by dejections from the sick to such an extent as to prevent their further use by any one else sick in the same house or family, should be destroyed at once by burning, which destruction will be done, at the request of the owners, by the Fumigating and Disinfecting Department of the Government Aid Bureau, on application to me. The Government will assume no pecuniary responsibility thereof.

Parties totally unable to sustain the loss of infected material of the character above cited, may expect to be reimbursed by the General Government, but no receipt for the articles stating that fact, can at present be given.

2. All applications for reimbursement for destruction of infected material must first pass through the Committee on Claims of the Citizens' Auxiliary Sanitary Association, fixing the valuation and particularly stating the question of impecuniosity of the owner, before they can be entertained by me and forwarded to the U. S. Marine-Hospital Bureau at Washington.

3. Articles of linen and cotton goods in use about the sick should be immersed in a solution of bi-chloride of mercury, afterwards boiled in the same solution, and, on the cessation of sickness in the family, again boiled in a similar solution and laundered.

4. On application to Dr. DeM. Echemendia, the solution of bi-chloride of mercury, referred to in paragraph 3, will be furnished free.

Inspection of houses preparatory to disinfection and fumigation :

1. The fumigating staff, under Dr. DeM. Echemendia, will visit each house from which cases of yellow fever have been reported to the board of health of Duvall County, and will endeavor to ascertain the quantity of infected material therein, taking an accurate record of the same, and, to designate the articles at the close of the epidemic, will stamp them with the device—

“Yellow Fever Epidemic, 1888,”

and doubtless the citizens of Jacksonville will be sufficiently public-spirited to aid in the destruction of infected material, and to prevent

the secreting of any article which would, in the future, propagate this disease.

JOSEPH Y. PORTER, M. D.,
Surgeon in Charge Government Relief Measures.

JACKSONVILLE, FLA., *October 9, 1888.*

DEAR SIR: The board of health of Duval County having transferred to Surgeon-General J. B. Hamilton, U. S. Marine-Hospital Service, the disinfecting of houses where yellow fever cases have occurred, in compliance with a telegram from him, I have taken charge of the fumigation of such premises, to date from the first instant, and of the fumigating staff of which you are the chief. You will please, therefore, observe the following instructions:

1. That until the epidemic ceases, and shall be declared at an end, by the Duval County board of health, no general disinfection of houses will be practiced.

2. On the discharge of a patient by recovery or death you will visit the house and recommend a cleaning of the character such as any good housewife would make. When the mattresses, blankets, and woolen goods in the room occupied or used by the sick are soiled to such an extent as to prevent further use by any other sick person in the same house, you will recommend that they be at once burned, and you can give a receipt for the articles, with the distinct understanding with the parties, however, which you will write or stamp across the face of the receipt, that the United States Government assumes no pecuniary responsibility in the destruction of these articles. Application for reimbursement for articles destroyed, by parties financially unable to bear the loss of the same, can be made to the Marine-Hospital Service at Washington through me. In no case when the parties are financially able to sustain the loss, can reimbursement be reasonably expected.

3. You will obtain a list of persons now sick, and who have been previously reported as having had yellow fever, from the president of the Duval County board of health, who will be requested to furnish you the same with their locations, and you will visit the house and will ask permission to stamp all mattresses, pillows, blankets, carpets, and woolen curtains with a stencil of "yellow fever," which will be furnished you, keeping an accurate record of the places visited and the articles stamped, with the names of the owners thereof. You will explain to the parties whose property this is, that infected material to be destroyed at the close of the epidemic, and that to those financially unable to sustain the loss, the General Government will be asked to reimburse, and a board of appraisers will determine the question of impecuniosity.

4. Articles of linen or cotton material in use about the yellow fever sick should be boiled after being used, in a solution of bi-chloride of mercury in the strength of 1:500.

Very respectfully, your obedient servant,

JOSEPH Y. PORTER, M. D.

Surgeon in Charge Government Relief Measures.

DOCTOR ECHEMENDIA,

Chief of Fumigating Staff in charge of the

M.-H. Bureau, Jacksonville, Fla.

Jacksonville, Fla.—Dr. J. Y. Porter telegraphs as follows :

October 13 : “New cases to-day, 31 ; deaths, 3. Total cases reported, 3,526 ; deaths, 316. Patients, St. Luke’s, 14 ; patients, Sand Hills, 33.”

October 14 : “New cases to-day, 18 ; deaths, 2. Total cases reported, 3,544 ; deaths, 313. Patients, St. Luke’s, 13 ; patients, Sand Hills, 25.”

October 15 : “New cases to-day, 25 ; deaths, 3. Total cases reported, 3,569 ; deaths, 316. Patients, St. Luke’s, 12 ; patients, Sand Hills, 19.”

October 16 : “New cases to-day, 58 ; deaths, 2. Total cases reported, 3,627 ; deaths, 318. Patients, St. Luke’s, 16 ; patients, Sand Hills, 16.”

October 17 : “New cases to-day, 36 ; deaths, 3. Total cases reported, 3,633 ; deaths, 321. Patients, St. Luke’s, 12 ; patients, Sand Hills, 16.”

October 18 : “New cases to-day, 29 ; deaths, 1. Total cases reported, 3,692 ; deaths, 322. Patients, St. Luke’s, 14 ; patients, Sand Hills, 16.”

October 19 : “New cases to-day, 27 ; deaths, 4. Total cases reported, 3,719 ; deaths, 326. Patients, St. Luke’s, 12 ; patients, Sand Hills, 18.”

Camp Perry, Fla.—Surgeon W. H. H. Hutton reported as follows :

October 14 : “Morning report : Present, officers, 5 ; guards, 11 ; employés, 42. Refugees arrived, 9 ; discharged, 32 ; remaining, 113. Fever camp, 6 ; all convalescent. No new cases in 8 days.”

October 15 : “Morning report : Present, officers, 5 ; guards, 11 ; employés, 42. Refugees arrived, 2 ; discharged, 20 ; remaining, 95. Fever camp, 5 ; all convalescent.”

October 16 : “Morning report : Present, officers, 6 ; guards, 11 ; employés, 44. Refugees arrived, 12 ; discharged, 24 ; remaining, 83. Fever camp, 5. Ten nurses start for New Orleans to-day.”

October 17 : “Morning report : Present, officers, 6 ; guards, 11 ; employés, 44. Refugees arrived, 12 ; discharged, 19 ; remaining, 76. Fever camp, 5.”

October 18 : “Morning report : Present, officers, 6 ; guards, 11 ; employés, 47. Refugees arrived, 7 ; discharged, 15 ; remaining, 82. Fever camp, 5.”

Gainesville, Fla.—Dr. N. D. Phillips, president board of health, telegraphs as follows :

October 13 : “We have 2 new cases to-day developed in different parts of the city. The outlook is not good.”

October 15 : “Two more new cases have developed here this afternoon. We have declared the fever epidemic.”

Assistant Surgeon Wm. Martin, U. S. Navy, telegraphs as follows :

October 18 : “To date there have been 16 cases yellow fever, 6

deaths. Examined carefully 3 cases now under treatment; doing nicely. No new cases since October 15th."

Green Cove Springs, Fla.—Assistant Surgeon Martin, United States Navy, telegraphs as follows:

October 13: "No new cases in four days."

Palmetto, Fla.—Dr. W. B. Harrison, United States sanitary inspector, telegraphs as follows:

October 17: "For week ending October 14, there were at Palmetto, Fla., 10 new cases yellow fever; deaths, 1. Total number of cases to date, 76; total number of deaths to date, 7."

Orange City Junction, Fla.—Dr. B. F. Fox, United States sanitary inspector, reports as follows:

October 13: "Towns between New Smyrna and St. Augustine all healthy; no yellow fever. I go to Titusville to-day."

Titusville, Fla., October 14: "Titusville healthy; no yellow fever. I start for St. Augustine by next train."

Deland, Fla.—Dr. J. F. Hartigan, United States sanitary inspector, reports as follows:

October 14: "Arrived here yesterday; place healthy. Leave for Sanford this evening."

October 16: "Have investigated Sanford and this place; both healthy. Leave for Orlando to-morrow."

October 18: "Am at Orlando to-day; place healthy. Leave for Kissimmee to-morrow."

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.....	Oct. 13.....	1,539,036	702							15	19	18	11	17
Philadelphia, Pa.....	Oct. 13.....	1,016,758	333							17	4	4		3
Baltimore, Md.....	Oct. 13.....	431,879	147							3	3	2		2
Boston, Mass.....	Oct. 13.....	415,000	186							11		15		4
San Francisco, Cal.....	Oct. 5.....	330,000	87			1				5		2		
Cincinnati, Ohio.....	Oct. 13.....	255,000	83							3		6		1
New Orleans, La.....	Oct. 6.....	248,000	114											
Pittsburgh, Pa.....	Oct. 13.....	230,000	64							2		8	1	1
Cleveland, Ohio.....	Sept. 15.....	227,861	96							3	2	1		3
Cleveland, Ohio.....	Sept. 22.....	227,861	76							8		6		1
Washington, D. C.....	Oct. 13.....	225,000	110							9		2		4
Milwaukee, Wis.....	Oct. 13.....	195,000	56							2	2	1		1
Kansas City, Mo.....	Oct. 13.....	180,000	42							2				
Minneapolis, Minn.....	Oct. 13.....	180,000	64							9		7		1
St. Paul, Minn.....	Oct. 6.....	175,000	50							7		5		1
St. Paul, Minn.....	Oct. 13.....	175,000	43							4		3		
Newark, N. J.....	Oct. 9.....	174,954	65							2		3		
Rochester, N. Y.....	Oct. 13.....	120,000	53							6	1			
Detroit, Mich.....	Oct. 13.....	116,340	65							6		6		3
Richmond, Va.....	Oct. 15.....	100,000	34							1		1		
Denver, Colo.....	Oct. 12.....	96,000	29							7	1	1		
Columbus, Ohio.....	Oct. 13.....	93,000	32							5		2		
Toledo, Ohio.....	Oct. 12.....	80,000	21							1				
Nashville, Tenn.....	Oct. 13.....	65,153	13							2				
Fall River, Mass.....	Oct. 13.....	65,000	33							4				
Charleston, S. C.....	Oct. 13.....	60,145	36							3				
Galveston, Tex.....	Oct. 5.....	40,000	17									1		
Portland, Me.....	Oct. 13.....	40,000	11											
Mobile, Ala.....	Oct. 13.....	40,000	21											1
East Saginaw, Mich.....	Oct. 6.....	33,000	10											
East Saginaw, Mich.....	Oct. 13.....	33,000	6											
Burlington, Iowa.....	Oct. 10.....	30,166	3											
Davenport, Iowa.....	Oct. 13.....	30,084	14							1		2		
New Albany, Ind.....	Oct. 13.....	30,000	4											
Altoona, Pa.....	Oct. 6.....	29,546	1											
New Bedford, Mass.....	Oct. 13.....	26,845	13											
Auburn, N. Y.....	Oct. 13.....	26,000	11											
Haverhill, Mass.....	Oct. 13.....	25,009	9							1	1			
Poughkeepsie, N. Y.....	Oct. 12.....	23,000	7									1		
Jackson, Mich.....	Oct. 13.....	22,500	9											
Pensacola, Fla.....	Oct. 13.....	15,000	5							1				

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