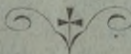


Salomon (L. F.)

REPORT  
— TO THE —  
BOARD OF HEALTH.  
— OF THE —  
STATE OF LOUISIANA,  
— ON THE —  
SANITARY CONDITION OF THE  
ISLAND OF JAMAIGA.  
— BY —  
LUCIEN F. SALOMON, M. D.

With Resolutions adopted at a Meeting held  
Wednesday, April 1st, 1885.



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# REPORT

— TO THE —

Board of Health of the State of Louisiana

— UPON THE —

Sanitary Condition of the Island of Jamaica.

TO THE PRESIDENT AND MEMBERS OF THE  
BOARD OF HEALTH OF THE STATE OF LOUISIANA.

*Gentlemen*—Pursuant to a request of your honorable body I made a visit to the Island of Jamaica for the purpose of inquiring into its sanitary condition, with a view to the removal of quarantine restrictions against said island, should the facts, after thorough investigation, warrant such action on the part of this Board.

Perhaps it may be excusable, for the information of those not acquainted with the exact location and extent of Jamaica, to enter somewhat into these particulars: Jamaica is situated in the Caribbean Sea, between the 17th and 19th degrees of latitude and the 76th and 78th degrees of longitude west, about ninety miles south of Cuba and 1170 miles from the mouth of the Mississippi river. The island is 144 miles in length and its greatest width is forty-nine miles, covering a total of 4193 square miles. It is almost entirely mountainous. Beginning from the west end the land gradually rises, until near the eastern end of the island the highest point is reached, the Blue Mountain peak, 7360 feet above the level of the sea. There is a small area of swamps where malarial fevers of a mild type are found.

I arrived in Kingston, the capital of the island, on March 3, 1885, and immediately upon my arrival and the object of my visit becoming known, every courtesy was shown me and every facility offered for the obtaining of the information I sought.

I am indebted to the Governor, Sir Henry Norman, K. C. B., C. I. E. ; to Hon. H. J. Kemble, Custos of Kingston; to the Assistant Colonial Secretary, Mr. James Allwood; to the Director of Public Gardens and Plantations, Mr. D. Morris, M. A., F. L. S. ; to Dr. Chas. B. Mosse, Senior Medical Officer of the Island Medical Department; Dr. D. P. Rosse, Director of the General Hospital, Kingston; Mr. E. A. Foster, Secretary of the Central Board of Health, and to the physicians of Kingston, as well as to Dr. J. Pringle and Dr. F. A. Sinclair, of Anotta Bay; Dr. C. A. Mosely, of Port Antonio, and Dr. V. Mullen, of Port Maria, for valuable assistance and information.

For the purpose of making as complete an investigation as my limited time would permit, I remained in Kingston five days, and then proceeded overland to the principal ports on the northern side of the island, being altogether eleven days pursuing my inquiries and observations.

To facilitate the object of this report and render it as brief and concise as possible consistent with the subject matter, I shall first enter into the sanitary condition of the island in general and then direct your attention to the individual ports where export trade is carried on. The population of the island according to the census of 1881 is 580,804, of whom 14,132 are white, 444,486 black and the remainder composed of mulattoes, coolies and Chinese. The principal diseases are ague, syphilis and rheumatism. Although malarial fevers of the intermittent and remittent type are prevalent in the low marshy districts, they are of a very benign character, as shown by the following figures found in the report of the Island Medical Department for 1884: Of 1955 cases treated there were eight deaths, a remarkably low mortality, especially when we take into consideration the habits and mode of living of those among whom this disease is most prevalent, the blacks, who for the most part live in poorly constructed bamboo huts, and are but poorly fed at best and among whom syphilis is common.

The island is divided into forty-four districts, under the control of what is known as the Island Medical Department, of which Dr. Chas. B. Mosse is the efficient head or senior medical officer. In each district is a hospital (in charge of a medical officer of this department) for the treatment of all persons unable to employ a

physician. Each officer is required to report to the Senior Medical Officer at stated intervals, so that from the records of Dr. Mosse's office and his published reports an accurate estimate can be easily arrived at of the prevailing diseases, mortality, etc. Twelve years ago this service was established by the government, and it is only since its establishment that any records of vital statistics have been kept. These records have all been placed at my disposal for examination, as well as the individual records of public hospitals, and of the Central Board of Health.

This latter (the Central Board of Health) has control of the sanitary affairs and quarantine of the entire island, and in the city of Kingston there is a Quarantine Board, charged with the enforcement of quarantine laws.

But as we have to do in this report only with yellow fever and the sanitary condition of the seaport towns, I shall not enter into further details of the excellent medical and sanitary supervision of the whole island.

As far as shown by the records, and from information obtained privately from practicing physicians, Jamaica is singularly free from yellow fever. During the past year, that is to say from October 1, 1883, to September 30, 1884, not a single case was treated in any of the hospitals. Since the latter date four cases have been treated in the public hospital at Kingston, but of these I shall treat more fully when considering Kingston individually.

The report of the Registrar-General shows the number of deaths on the island from yellow fever for the four years ending September 30, 1883, as follows:

October 1, 1880, to September 30, 1881, 8; October 1, 1881, to September 30, 1882, 4; October 1, 1882, to September 30, 1883, 2; October 1, 1883, to September 30, 1884, 0.

Eleven of these fourteen cases died at Kingston, where cases are sometimes admitted into the general hospital from vessels which have put in there.

Whenever an isolated or sporadic case of yellow fever has occurred, said to have originated on the island, it has never been known to give rise to other cases through contagion or infection, a fact which, coupled with the very peculiar clinical history of said cases (of which mention will be made later) is worthy of note. The mean annual death-rate of Jamaica is high, about 29

per thousand; but this is accounted for by the fact that a very large proportion of the deaths is among children under five years of age. For instance, in 1883, 41.5 out of every 100 deaths occurred among children under five years, and in 1882, 38.5. This large mortality in children under five years is attributed to want of proper care, caused by the fact that so large a proportion of the children born on the island are illegitimate, about sixty per cent. being born out of wedlock. As a natural result these children are badly cared for, and too often die victims of diseases caused from neglect.

#### KINGSTON.

Kingston being the capital and principal seaport of the island, it is there that our particular attention should be directed in considering this question of the removal of quarantine, and minute details of this city from a sanitary point of view will not be out of place.

Approaching Kingston by sea, the first point of observation is Port Royal, situated upon the extremity of a spit of land at the entrance to the harbor and six miles from Kingston. It is now nothing more than a naval station. Opposite Port Royal and two miles or more across the entrance to the harbor and six miles from Kingston is Green Bay, where the quarantine station is located. The quarantine grounds are marked off by buoys and are over a mile from the channel. The Lazaretto is situated upon a bluff fifty or sixty feet above sea level, and protected in the rear by impenetrable brush and undergrowth which cover the hillside, so that isolation is complete.

Having passed between these two points we next arrive at Kingston, a city of 38,566 inhabitants, according to the census of 1881, of whom 4999 are white. These figures embrace the suburbs as well as the town of Kingston proper.

The mean annual temperature of Kingston is about 80, the variations between maximum and minimum averaging about 15 degrees. The average rainfall is about 30 inches annually. During the day the heat is tempered by a strong sea breeze, generally blowing from the south-east.

Kingston is a town of the customary tropical type—low houses and narrow streets. The streets are all either paved or macadamized, and, owing to the natural declivity, the drainage is per-

fect, the waste water running in clear streams down the streets into the sea. No refuse matter of any kind is found upon the streets. The laws are very stringent upon this point, and any infringement is soon punished. All garbage and household refuse is carted away to some distance outside of the city limits, and there deposited in pits and covered with quicklime. After it has become sufficiently dried it is burned. While earth closets are used by many of the inhabitants, the prevailing style of latrines is similar to our own—vaults dug in the ground. These undergo systematic and periodical inspection by the health commissioner, and are ordered emptied whenever found necessary, so that although the city, owing to its narrow streets and peculiar architecture, is not very attractive to the eye, it is essentially a *clean* city. Added to this, the water supply is most excellent, the water being obtained from the mountain streams and conducted through aqueducts to reservoirs, and from there through filtering tanks, before being delivered through iron pipes to the city. These sanitary precautions render Kingston singularly free from “filth diseases,” as the records clearly show.

#### MORTALITY.

The mortality in Kingston, in view of the foregoing facts, appears to be very high, the annual death rate for 1884 being 28 per thousand. But when we consider the fact that there are a number of public institutions to which people come and are sent from all portions of the island, including a large general hospital, we are brought to see how these factors go to swell the death rate. As an example we may take the month of February, 1885. Of 113 deaths during that month 17 died in the public hospital, 8 in the lunatic asylum and 16 in the destitute home. Added to this, 37 of the deaths were among children under five years of age and 20 above 65. On looking over the records I found that the principal diseases treated in hospitals are malarial fevers and “infantile diseases.”

#### YELLOW FEVER IN KINGSTON.

That yellow fever is a rare disease in Kingston is shown by the records of the Public Hospital, where, through the kindness of Dr. D. P. Rosse, I was permitted to see every patient then un-

dergoing treatment and to examine the records. These records for the past six years show that there were treated in the hospital eighteen cases of the disease in question. Of these fourteen were cases which had occurred upon vessels and removed to hospital for treatment, and four were cases said to have originated on the island. It is a noteworthy fact that although these cases occurred singly and at intervals extending over a period of more than six years, in no instance was the disease communicated to any other individual. That this is due in great measure to the excellent sanitary condition not only of the hospital but of the entire city is very probable.

Of the four cases originating in Kingston or its environment the following brief history of the last case will serve as a type.

A traveling musician who came to the Island had given a performance in Spanish Town, fifteen miles from Kingston, in the interior. After indulging freely in rum he started to walk back to Kingston during the night. To do this he was compelled to cross a marsh. Before arriving in Kingston, and after exposure to the rays of the sun, he was taken with a fever while on the road. He was brought to the Hospital on November 26, and died the next day of black vomit. This is about the history of all cases originating on the island. Exposure to miasm and a tropical sun, coupled with too free indulgence in rum, followed by a fever and death. Comment is unnecessary. While isolated cases giving the above history have occasionally occurred from time to time, there has not been in the recollection of the oldest practising physicians, nor do the records show anything like an epidemic visitation of the disease, and this, notwithstanding the fact that there is estimated to be about 3000 foreign residents, British officials and others, who are fit subjects for the disease. In 1872 there were at one time five cases, all giving a previous history of rum-drinking and reckless exposure. This is the greatest number of cases that has occurred at any one time for many years.

While in Kingston I visited all the public institutions, with a view of obtaining some idea of the prevalence of disease. As an example of what I observed I may state that in the penitentiary



which contained 370 prisoners I found two sick, one with dysentery and one with intermittent fever.

The remarkable purity of the atmosphere of Kingston and its freedom from septic influences can not be better shown than by the results of surgical operations in the public hospital. Septicæmia is a thing unknown in this hospital. In 1883, out of 236 operations, there were ten deaths. These operations were, many of them, what are known as capital operations, such as high amputations, laparatomies, ovariectomies, etc., with a mortality of 4.32 per hundred; in 1882 the mortality after operations was 1.93 per centum, and in 1884, 2.50.

Before leaving Kingston I was invited to meet the Central Board of Health, and accordingly did so on March 6th. A free interchange of views was had between the members of said board and myself, I questioning freely so that I might obtain all information possible. A full exposition of the sanitary and quarantine arrangements was given to me, and I learned that every effort is being made to improve the sanitary condition of the island. Its quarantine laws, and the rules and regulations governing the quarantine administration, are stringent and well enforced. No vessel from an infected or suspected port is allowed to enter any port of the island before undergoing inspection, necessary detention and observation, and, when demanded, thorough cleansing and disinfection. I submit for your information a plan of the quarantine grounds at the entrance to Kingston harbor, and also copies of the quarantine laws, and rules governing the action of the quarantine officer. Every port in the island has its quarantine inspector, and should any vessel arrive with infectious or contagious disease on board she is sent to the quarantine station nearest the port where she arrives, there to await the action of the Central Board of Health and Quarantine Board, who are immediately informed of the facts.

At my request the Central Board of Health adopted, unanimously, the following resolution, I, in turn, pledging the Louisiana State Board of Health, to reciprocate in the same manner. I would, therefore, suggest that this Board adopt suitable resolutions to that end. The resolution reads as follows, an official certified copy of which I herewith submit:

“ *Resolved*, That this Board do furnish to the Board of Health of the State of Louisiana, in the Southern States of America, monthly reports of the sanitary condition of this island and do keep such Board at all times advised as to any cases of yellow fever or other contagious or infectious disease of an epidemic character, or any abnormal state of the public health as it may arise; and that the said Board of the State of Louisiana be requested, through Dr. Lucien F. Salomon, to reciprocate the like information to this Board.”

Every parish in the island has its local Board of Health under direction of the central Board, and any case of contagious or infectious disease occurring on the island is immediately reported to the central Board, so that it is kept thoroughly informed as to the sanitary condition of the whole island.

I learned from the records of this Board that in addition to the cases reported above, in 1868 and 1869 there were thirty-odd cases of yellow fever among the shipping in the harbor, but, although some of these cases were treated in the public hospital, there was no spread of the disease to the inhabitants of Kingston.

Leaving Kingston I proceeded to the principal ports on the North side of the island, and while no cases of yellow fever have ever occurred any where on this side of the island within the recollection of the resident physicians, and no record for twelve years past shows the existence of any case, I learned that about thirty years ago there were six or seven cases at Montego Bay, and in 1871 there were several cases on a vessel lying in quarantine at Port Antonio. There are no records of any case having originated on this side of the island, and we may consider it free from the disease.

Port Antonio, Annotta Bay, Port Maria, St. Ann's Bay and Montego Bay, are the principal ports on the North side, and as it is principally with the three first named ports that commercial relations exist or may in future exist with New Orleans, through the development of the fruit trade, a brief *resumé* of the most prominent diseases may not be uninteresting.

At port Antonio I found, undergoing treatment in the hospital, many cases of intermittent fever and ulcers of the leg. The record shows that in 1884 there were treated 109 cases of intermit-

tent fever with no deaths, and five cases of remittent fever with two deaths. No record of yellow fever was found.

At Annotta Bay I found about the same condition of affairs, malarial fever of the intermittent type being the prevailing disease in the hospital. In 1884 there were treated here 212 cases with no deaths.

Port Maria shows the same record; 120 cases of malarial fever with two deaths.

The apparently large number of cases occurring in the public hospitals of these small towns is readily accounted for when we bear in mind the fact that these hospitals are the refuge for the sick from large districts extending to from fifteen to twenty miles in area.

To recapitulate, it was found that yellow fever does not exist in Jamaica to an extent that would make commercial intercourse a source of danger. An isolated case has occasionally occurred upon the south side of the island, but in no instance did it extend beyond the first cases. Of the cases originating upon the island during the past six years there was in 1879 one case in Kingston, in 1880 one case in Kingston, in 1881 none, in 1882 two cases in the persons of sailors at the Sailors' Home in Kingston, in 1883 none, and in 1884 one in November at Spanish Town. So far in 1885 there has been none.

That there is no reason for maintaining quarantine restrictions against Jamaica, in view of the foregoing facts and the pledge received from the Central Board of Health, is my opinion, based upon the results of my investigation; and in recommending to the Board of Health of the State of Louisiana the removal of said restrictions, I can not do better than introduce in this report a quotation from the last annual report of the senior medical officer of the island medical service, Dr. Chas. B. Mosse. He says:

“Should the immunity experienced from the yellow fever during the year be continued in future, the disease will happily cease to find a place in the medical archives of the colony. If the fact of the exemption from this disease which has obtained for many years past were more widely known, and the climate of the island in relation thereto were better understood, the unreasonable prejudice which is occasionally manifested on this point would cease to exist, and our commercial relations with other countries—not a-

bly the Southern States of America—would no longer be hampered by quarantine restrictions dictated by groundless fears, based presumably upon the sanitary history of the past, and which are even now kept alive by the erroneous assumption that because a neighboring island is unhappily yearly visited by the disease, therefore a risk would be encountered by New Orleans and other Southern ports if unrestricted admission were granted to vessels with clean bills of health from Jamaica.”

From my observations and the information obtained I am in accord with the opinion of Dr. Mose, for with its excellent “Island Medical Service,” its good water supply, its well directed and efficient quarantine and sanitary laws, I believe that yellow fever will in future fail to obtain a foothold on the island, and that its sanitary condition will continue to improve at the same rate that it has done in the past twelve years.

In conclusion, I may add that the danger to us lies not at all in the present sanitary condition of Jamaica, but in its possible condition through communication with infected ports. But with well administered quarantine laws under the supervision of the authorities of the island and the pledge received from the Central Board of Health to enforce all vigilance in this regard, such danger is reduced to a minimum, and the probability of the introduction of yellow fever into the island very small.

All of which is respectfully submitted.

LUCIEN F. SALOMON, M. D.,

435 Carondelet street.

APRIL 1, 1885.

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The foregoing report was presented at a regular meeting of the Board of Health of the State of Louisiana held on Wednesday, April 1st, 1885, after which the following resolutions were unanimously adopted:

I.

*Resolved*, That the Board of Health of the State of Louisiana cordially reciprocates the action of the Central Board of Health of Jamaica, and will keep said Board of Jamaica informed as to the sanitary condition of New Orleans at all times, as well as transmit, immediately, information of the occurrence of yellow

fever or cholera should such make their appearance; also that the weekly bulletins of mortality in the city of New Orleans be regularly forwarded to said Central Board of Health by the Secretary of this Board.

## II.

*Resolved*, That in view of the facts reported by Dr. Lucien F. Salomon in regard to the sanitary condition of the Island of Jamaica, said island shall be withdrawn from the list of places against which a ten days quarantine is annually imposed; but, that all vessels arriving from the ports of Jamaica be subjected to such inspection, cleansing, disinfection and detention as this Board may at any time direct, or as occasion may demand.

[A true copy from the minutes.]

S. S. HERRICK, M. D.,  
Secretary.





