

WCK
C472r
1856

*Charleston, S.C. City Council
Committee on Health
and Drainage*

*13
30*

REPORT

OF THE

COMMITTEE on HEALTH and DRAINAGE,

ON THE ORIGIN AND DIFFUSION OF YELLOW FEVER IN
CHARLESTON IN THE AUTUMN OF 1856.

TO THE

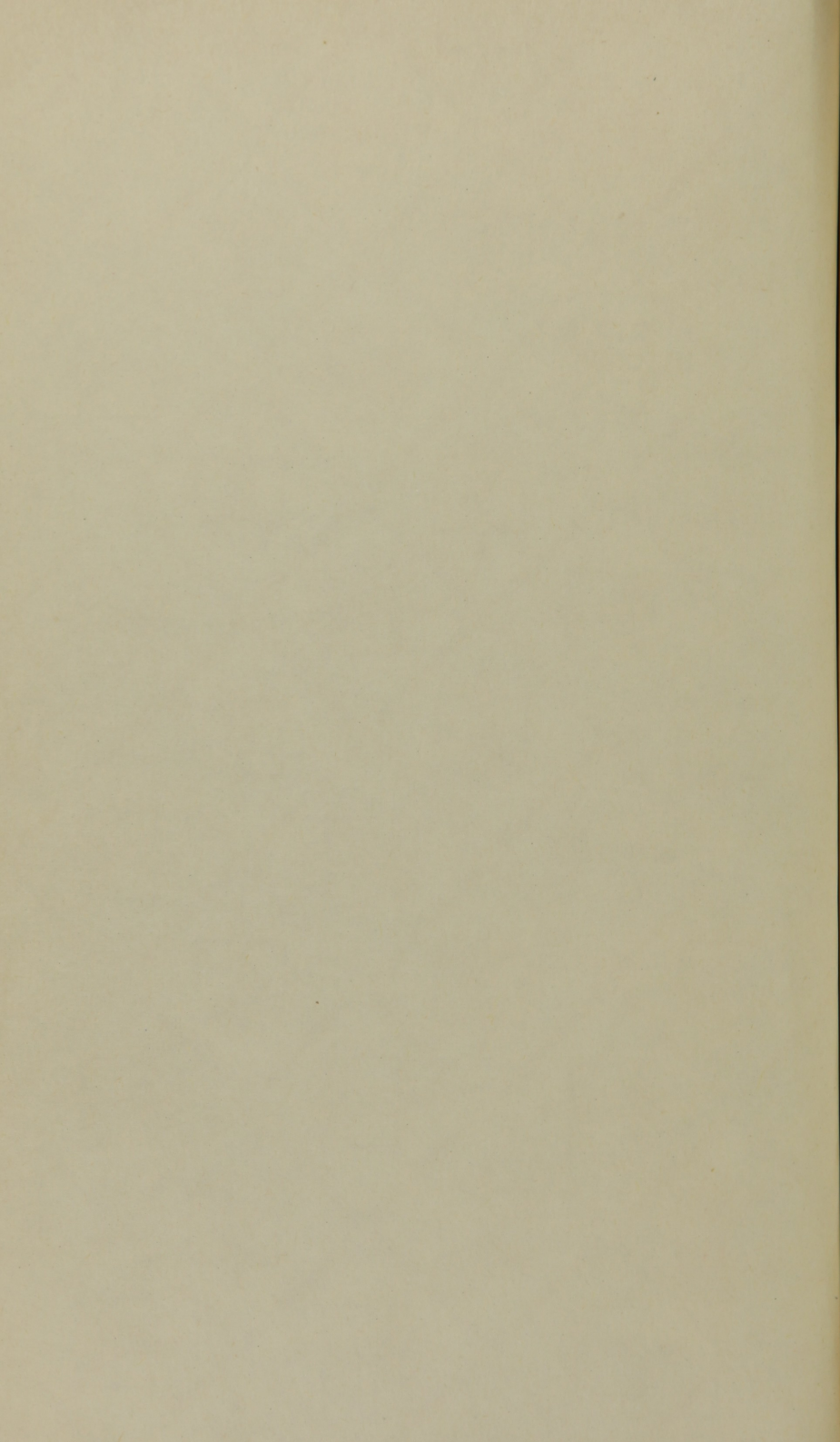
CITY COUNCIL OF CHARLESTON.

PRINTED BY A. E. MILLER, 3 STATE STREET.

1856.





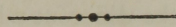


WCK
C472r
1856
c. 1

FRANCIS & TAYLOR
BOOKSELLERS
& 1502 MARKET STREET
RICHMOND, VA.

REPORT
OF THE
COMMITTEE on HEALTH and DRAINAGE,

ON THE ORIGIN AND DIFFUSION OF YELLOW FEVER IN
CHARLESTON IN THE AUTUMN OF 1856.



The Committee on Health and Drainage to whom was referred the following Resolution, passed by Council at their meeting on the 16th September, viz. :

“ *Resolved*, That the Committee on Health and Drainage, to whom was referred the Report of the Port Physician, in reply to a resolution of Council, calling for information in relation to the operations of the Quarantine regulations, be instructed to report to Council, at their earliest convenience, all the facts that they may be able to collect relative to the origin and diffusion of yellow fever in Charleston, during the present season.”

Beg leave respectfully to report that they have carefully considered the subject intrusted to them, and now offer the results of their investigations.

In entering upon the important duty of investigating “ the facts” “ relative to the origin and diffusion of yellow fever in Charleston during the present season,” the Committee have thought themselves restricted by the terms of the Resolution to two points—first, to “ the facts” of the case ; secondly, to the “ present season.”

It will, therefore, be their duty to leave out of sight, as far as this can possibly be done, all mere theoretical views. It will, from time to time, be necessary to refer to such inferences as may be deducible from the facts, in order that the facts may be made to assume their proper places in the picture—may have their fair and just degree of importance assigned to them, but it will not be necessary, nor in consonance with the instructions conveyed in the resolution, for

LIBRARY OF THE
MEDICAL DEPARTMENT
OF THE
UNIVERSITY OF CHICAGO

the Committee to set before Council any pre-conceived views of their own, or any that may not be fairly deducible from the facts they may present.

Nor will it be proper for them to extend their researches further back than the present season, except for the sake of such comparison as may enable them to confirm or refute the inferences which may appear deducible from the history of the season the events of which they are called upon to chronicle.

With a view to carry out these objects, the Committee will 1st, inquire into all the facts connected with the Quarantine operations—the arrival of vessels at the Quarantine ground—the delay they were subjected to there—the treatment to which they and their cargoes were submitted—the intercourse had with the Quarantine ground and the vessels and cargoes there by the different wharves—the operations of the lightering business, and the personal intercourse between the City and the Quarantine ground by means of passengers, crews and visitors to the vessels; 2nd, into the connexion which may exist between the occurrence of the earlier cases of yellow fever and the objects considered in the first inquiry; 3rd, into the local circumstances about us which may seem to have a connexion with the fever; and 4th, into the imperceptible, yet not inappreciable, influences of the atmospheric condition about us, to which we are fairly entitled to attribute such epidemic tendencies as cannot be accounted for on the exclusive suppositions of introduction or local origin.

The first vessel brought to at Quarantine was the bark Cherokee, on the 2nd May, after a passage of twelve days, from New Orleans. Her crew, consisting of nine men, were all well, and, after the vessel had been inspected, she was allowed to proceed to the City, and she hauled into Brown's wharf. Other vessels, to the number of 27, continued to arrive, and undergo the same treatment, till June 1st, and, on coming up to the City, they took their places at Commercial, North Atlantic, Brown's, Accommodation, Central Dry Dock and Union wharves.

So far no sickness had occurred in any of the vessels, with the exception of one case of small pox on board the schooner Charles Williams from Boston, which was brought to at Quarantine M y 21st.

From this date (June 1st) our Vigilant Port Physician began to increase the stringency of his operations, and all

vessels reaching the Quarantine ground from Ports where fever was known to prevail, were required to remain there till their cargoes (if they had any) could be discharged, and until the vessel could be completely disinfected. Some of these vessels never came to the city at all, but were reloaded at the Quarantine ground, and proceeded to sea.

Up to the 27th of June, there was still no sickness, except one more case of small pox in a vessel (the H. Buck), which arrived on the 17th from Boston. On the 27th, the bark Balear arrived, after a passage of seven days, from Havana, in ballast, with a crew of 17 men, one of whom was sick with fever. Three others of the crew were taken sick at the Quarantine ground, on board the vessel, two of whom were sent to the Lazaretto, where they died, and one died before he could be removed. This vessel never came to the city but proceeded to sea from Quarantine.

On the 8th of July, the Active arrived from Havana, in ballast, after a passage of five days, with eleven men on board, all of whom were well. On the 10th, one man was aken to the Lazaretto, and on the 14th, another, both with ever, and both of whom died. The vessel never came to he City.

On the 13th of July the steamship Isabel, with an assorted cargo, arrived in two and a half days from Havana, with a crew of 40 men, and with 49 passengers. She had two sick on board, but their diseases did not prove to be serious. She did not come to the City.

On the 13th, the bark Industria, arrived, in five days, from Havana, with a cargo of wine and lead, and a crew of 20 men. On the 14th, a passenger was sent from her to the the Lazaretto, where he died on the 17th; and on the 16th, three men were sent, all of whom recovered. On the 23rd, two others were sent down, both of whom died, one on the same day and one on the 26th. This vessel went to sea without ever having come up to the City.

On the 27th, John Abbot was sent to the Lazaretto from the City. He had been employed on board the St. Andrew, which vessel had arrived at the Quarantine on the 8th July, after a passage of six days, from Havana, with a crew of seven men, all of whom were well, and continued so, till the vessel sailed, which she did without having come up to the city. She had, however, during her stay in Havana, where the disease was prevailing, lost one or more of her men. Abbot was taken sick on the 26th July, and recovered.

On the 2nd August, the Ketch Brothers arrived from Cienfeugas, after a passage of 14 days, with a cargo of sugar and molasses and a crew of six men, two of whom were sick. They were sent to the Lazaretto on the 4th, and both recovered. The vessel went to sea without having come to the City.

The bark Mercy Ellen 19 days from Aspinwall, in ballast, with a crew of 10 men, put in on the 3rd August on account of sickness, the disease being Chagres fever. On the 4th August eight men were sent to the Lazaretto; one died on the 5th and the others recovered. The vessel went to sea without having visited the City.

On the 6th August, Michael Denning was sent from the City to the Lazaretto, and he died on the 8th. He resided on East Bay, near Pinkney street; was taken ill July 31st, and sent to the Roper Hospital, where it was ascertained that he had been loading the bark Industria at Quarantine, the vessel from which so many sick had gone to the Lazaretto, and he was ordered by the Mayor to the Lazaretto, where he died August 7th.

On the 13th August, the Tern A. Manderson, in ballast arrived in five days, from Key West, with a crew of eight men, one of whom was sick. She was brought to the Quarantine ground, and the man sent to the Lazaretto on the same day, where he recovered. The vessel went to sea from the Quarantine ground.

On the 13th August, the steamer George's Creek, with an assorted cargo, arrived from Baltimore, having two men sick on board. The vessel was allowed to come up to the City, as the cases were reported to the Pilot as broken bone fever. But, upon an application being made for permits for the men to enter the Marine Hospital, the vessel was visited by the Mayor and Port Physician, who ordered her to the Quarantine ground, and the men to the Lazaretto. One of these men died of yellow fever, and the other recovered.

On the 14th August, two men were sent to the Lazaretto from the Marine Hospital. These men were sent to the Hospital from the schooner George A. Tittle; one died on the 16th August with yellow fever, and the other recovered. These men, at the time of their seizure, were in Ashley river where the vessel was loading lumber. She had come previously from a Northern Port, and had been at Central wharf, before she hauled round to Ashley river. As soon as it was discovered that cases of yellow fever were occurring

on board, she was sent to the Quarantine by order of the Mayor.

It may be here remarked, that at this time, there seemed to be a cessation in the occurrence of cases in the city, and the plan was adopted by the Mayor and Board of Health, of sending all who were taken sick in vessels to the Lazaretto, instead of allowing them to go to the Hospital, in the hope of thus arresting the spread of the disease. The plan was, however, abandoned, as soon as it was found that other cases were occurring in the city, and were going to the Roper Hospital.

On the 17th August, a man was taken to the Lazaretto from the brig Venus; he died on the 19th. The Venus was from Boston, and was in Ashley river loading lumber at the time this man was taken; she had hauled round from Palmetto wharf.

On the 26th, a man was carried down to the Lazaretto from the ship Royal Victoria, where he died on the 29th. This ship was also in Ashley River, loading spars, having gone round from Union wharf.

On the 26th, a man was sent to the Lazaretto, from the cutter Wm. Aiken, where he died on the 4th September. At this time the Wm. Aiken was in the employment of the City, by the courtesy of the Collector of the Port, sanctioned, afterwards, by the Secretary of the Treasury of the United States, as a guard boat, for the purpose of aiding the proper officers in carrying out the Quarantine laws. The vessel was usually moored on the edge of the Quarantine ground, and her boats made excursions during the night for the purpose of intercepting clandestine communication. The men were also in the daily habit of visiting the city for business or other purposes. There was no other case of sickness on board this vessel, nor on the pilot boat Marion, employed by the Mayor on the same service.

On the 2nd September, four other men were taken to the Lazaretto from the Royal Victoria; one of them had yellow fever, and one Catarrhal fever, and these both recovered, while the other two were not sick, but only sent there as a safe retreat from the danger of remaining on board the vessel from which so many cases of sickness had been taken. The well men were provided for in a house distinct from the Hospital, and quite out of the way of any danger.

To this date the Report of the Port Physician brings us. Before turning to the state of things within the City, it may be well to recapitulate some of the statements of the Report.

29 - The total number of arrivals from May 2d to September 6th, was 105. Of these 41 were allowed to come to the City after they had been inspected by the Port Physician, 99 were allowed to come to the City after the cargo (if any) and vessel had been disinfected; 41 were compelled to undergo the disinfecting process at Quarantine, and to leave without ever having come up to the City, while, in the case of four it was not stated what course was pursued. Of those which were not allowed to visit the City, many took cargoes through the intervention of lighters, and some, it is believed, proceeded to sea without any load. The Ports from which the vessels came were Havana 29, Matanzas 9, St. Jago 6, Trinidad 3, Cienfuegos 6, Sagua la Grande 2, Porto Rico 10, Nassau 3, Barbadoes 1, Harbor Island 2, Maracaibo 1, Campeachy 1, Key West 1, Rio Janeiro 1, Gibraltar 1, Barcelona 4, New Orleans 9, Aspenwall 2, Ivica 1, Boston 2, Mobile 1, Baltimore 6, sent from the City 2, and not mentioned 1.

Of the cases treated at the Lazaretto 23 are stated to have been yellow fever; 11 of these were in vessels from Havana, 2 in a vessel from Cienfuegos, 1 in a vessel from Key West, 2 in a vessel from Baltimore, 1 in a vessel from Boston, 2 in a vessel from Liverpool, 1 in a vessel plying about the Quarantine. Those in the vessels from Boston and Liverpool were taken in Ashley river and sent down.

The Committee will now turn to the consideration of matters within the City; and first, they will give a full and complete statement of the intercourse which the different wharves have had with the vessels, the cargoes and the lighters concerned in the Quarantine.

This information, the Committee will here remark, has been obtained by personal application to the wharfingers of each wharf separately, and for the courteous and ready manner in which they were received and facilitated in their researches by those gentlemen, they here publicly express their grateful acknowledgments.

1st. *Bennett's Wharf*.—No vessel or cargo has been brought to this wharf, or any communication had with the Quarantine ground by boats; but two vessels have been loaded, and one partially loaded at Quarantine, with lumber, by lighters, which carried the lumber down and then returned to the wharf. These vessels were loaded on the 18th, 20th, and 24th of July.

2d. *Sanders' Wharf*.—Has had no communication.

3d. *Savannah Steam Packet Wharf*.—While the steamer

Isabel was at Quarantine, where she arrived on the 12th July, a boat from her came once or twice to this wharf, but after that, was refused admission.

4th. *Palmetto Wharf*.—A lighter, which had landed sugar on Union wharf, the next wharf South of this, on the 10th September came to this wharf where she lay up.

5th. *Union Wharf*.—On the 22nd June, a cargo of sugar was brought in a lighter from the bark Lunette, at Quarantine, and in a few days after the bark herself came up and discharged her ballast. On the 2nd July, the bark *Transito* came to this wharf without cargo. Early in August the cargo of the *Industria*, consisting of lead and wine, was landed at this wharf in lighters. The *Industria* arrived at Quarantine on the 13th July, in five days, from Havana, with two men ill of yellow fever and cases continued to occur on board till the 23d.

6th. *North Dry Dock Wharf*.—September 10th, a lighter with a cargo of sugar from the bark *Telegraph* came to this wharf and the sugar was stored in part at this wharf and in part on Central Wharf. The lighter which brought up this cargo is the same that went to Palmetto wharf, as above stated.

7th. *South Dry Dock Wharf*.—Early in August, the *Industria*, the infected vessel alluded to when speaking of Union wharf, was loaded from this wharf by lighters.

8th. *Central Wharf*.—July 17th. the bark *Minerva* arrived at Quarantine and came to this wharf a few days after, where she remained but 12 hours, when she was sent back to Quarantine. She was in ballast and was discharged by lighters. On the same day the *Polacre Ermencinda* arrived at Quarantine; on the 15th, came up to this wharf, discharged her cargo of sugar, loaded with cotton and cleared on the 19th.

Two cargoes of sugar and molasses were landed at this wharf, one on the 22d, and the other on the 25th July.

All other vessels consigned to this wharf from infected Ports were in ballast only. They were all discharged by lighters; the vessels themselves remained all the time at the Quarantine ground. No account was kept at the wharf office of the dates of these discharges.

9th. *Accommodation Wharf*.—June 16th, brig *Einrich* came from Quarantine ground in ballast and went away without taking any load. June 26th, brig *Maria* came up from Quarantine, discharged ballast and loaded cotton. July 1st *Lola* came up from Quarantine, discharged ballast, and

loaded cotton. July 10th, brig *Jaconita* did the same as the *Lola*. August 6th, a cargo of sugar and molasses was lightered up from the schooner *Effort*, at Quarantine. The lighters employed in this business usually returned to the wharf after their trips to Quarantine.

10. *Brown's Wharf*.—June 1st, Ketch Brothers came to the wharf from Quarantine with a cargo of sugar, which was discharged, and stowed on the wharf. June 3rd, schooner *Aid*, with molasses, arrived at Quarantine; her cargo was lightered up two or three days after. June 9th, *Uncle Sam* came to the wharf from Quarantine, where she arrived on the 7th, with an assorted cargo. It was discharged here.

June 9th, the cargo of the *Adela* was lightered to this wharf. It consisted of fruit and molasses. July 2nd, the *Zephyr* came from Quarantine, where she had arrived on the 27th June. She landed ballast on this wharf. July 15th, the *St. Andrews* lightered up her cargo from Quarantine; it consisted of sugar. On board of this vessel, it will be remembered, John Abbot was working whose case was considered as yellow fever and he sent to the Lazaretto on the 27th July; the vessel, though free from fever during the whole time she was here, was said to have lost one or more men by yellow fever before leaving Havana.

July 15th, the bark *Miaco* lightered up an assorted cargo; and the same was done with the cargoes of the Ketch Brothers on the 2nd August, the brig *Somers* 14th, schooner *Heyward* 16th, and schooners *Zephyr* and *Aid* September 12th.

As this wharf had by far the most intercourse with the vessels and cargoes arriving from infected Ports, it may not be unimportant to the objects of our inquiry to state that there was not a case of fever among the employees of the wharf.

11th. *North Atlantic Wharf*.—No vessels came to this wharf, and the only communication had with Quarantine was the lightering down of a load of cotton on the 11th July, when nothing was brought back by the return of the lighter, and one load, of cotton also, in the steamer *General Clinch*, on the 22d July, and another in the same steamer on the 14th August, when a cargo of sugar was brought back in return from a vessel at Quarantine.

12th. *South Atlantic Wharf*.—May 8th, the *Neuvo Ramecito* discharged ballast at this wharf. May 21st, schooner *Zephyr* discharged a cargo of sugar. May 27th, *Paquette de St. Jago* discharged a cargo of sugar, which was stowed

here. June 28th, bark *Lunette* came to this wharf from Quarantine; her cargo of sugar had been lightered to Union wharf, and she herself, on leaving Quarantine, first went there and discharged her ballast. August 19th, the *Deseo* came up from Quarantine; she had arrived there in 22 days from Campeachy in distress, with a crew of 15 men, all well. She discharged her cargo of logwood, and went to a ship yard for repairs, after effecting which she returned, took in her logwood again, and went to sea.

13th. *Boyce's Wharf*.—Has had no intercourse.

14th.—*Adger's Wharf*.—Some fruit was landed on this wharf from a vessel at Quarantine, some time in August, and some clothing from the steamer *Isabel* at a date not distinctly remembered, but probably on the trip before the last, (July 12th,) or the last (July 27th.)

15th. *Vanderhorst's Wharf*.—There has been no intercourse except by lighters. July 18th, and August 1st, rice was sent down, and the lighter returned. August 14th, rice was sent to the Governor Dudley, then at Quarantine, and fruit brought up. August 18th, and September 10th, 12th and 15th, rice was sent down, and the lighter returned.

16th. *Commercial Wharf*.—June 17th, August 12th, 16th, 21st, September 13th, 15th, 17th, 20th, and 29th, rice was lightered down, and the lighter probably returned. Small boats have come to this wharf at various times with hands returning from working in the vessels at Quarantine.

17th. *Southern Wharf*.—June 14th, July 19th, August 19th, and 21st, rice was sent in lighters, and the lighters may or may not have returned to the wharf. Boats going to and returning from, Quarantine, made free use of this wharf, as they also did at Commercial wharf as just stated.

The Committee will now examine these arrivals, with reference to dates, as a convenient way of showing what connexion, if any, may exist between the vessels and the fever.

May 8th, the *Neuova Ramencita* from Matanzas discharged ballast on Atlantic Wharf; she had been stopped at Quarantine, and then allowed to come up on the same day. On 21st, the schooner *Zephyr* discharged a cargo of sugar on the same wharf. On 27th, the *Paquette de St. Jago* discharged a cargo of sugar on the same wharf, where it was also stored. On June 1st, the *Ketch Brothers*, from Cienfuegos, came to Brown's wharf, with a cargo of sugar and molasses; she had been stopped at Quarantine on arriving, and then allowed to come to the *City* the same day. Her cargo was

stored on the wharf. June 6th, the schooner Aid, from Havana, had her cargo of molasses lightered up to Brown's wharf, from Quarantine, where she had arrived on the 3rd, and about the 8th or 9th she came up herself. June 9th, the Uncle Sam came to Brown's wharf, from Quarantine, with an assorted cargo of molasses, bacon, &c.; she had been brought to at Quarantine on the 7th, having come from New Orleans. The cargo was discharged here. The same day, June 9th, the cargo of brig Adela, consisting of fruit and molasses, from Havana, was lightened up from Quarantine to Brown's wharf; the vessel had arrived at Quarantine on the 8th. On 14th June, rice was sent to Quarantine in a lighter from Southern wharf. June 16th, the brig Enrique came to Accommodation wharf from Quarantine, in ballast, and went away without taking any load; she had arrived at Quarantine the day before from Barcelona. June 17th, rice was lightered down to Quarantine, and the lighter returned, at Commercial wharf. June 22nd, a cargo of sugar was brought in a lighter from the bark Lunette, at Quarantine, where she had arrived on the 17th from Cienfeugos, and in a few days the bark herself came up and discharged her ballast on Union wharf. June 26th, the bark Maria came up to Accommodation wharf from Quarantine, where she had arrived on the 22nd from Cienfeugos; she discharged ballast and loaded cotton. June 28th, the bark Lunette came to Atlantic wharf; she had already discharged her cargo and ballast at Union wharf, as mentioned above. July 1st, the Lola came up from Quarantine to Accommodation wharf, discharged ballast and loaded cotton. July 2d, brig Transito came to Union wharf, without a cargo, and on the same day the Zephyr came to Brown's wharf, from Quarantine, where she had arrived on 27th June from St. Jago de Cuba, in ballast, and landed it on this wharf. July 3rd, the brig Vencedor came to Union wharf without a cargo; she reached Quarantine on the 25th June in 52 days from Barcelona, and was reported to have on board a cargo of wine and lemons; what became of the cargo is not stated. July 10th, the bark Minerva came to Central wharf from Quarantine, where she had arrived on the 7th from St. Jago de Cuba, in ballast; she remained there only 12 hours, and was then sent back to Quarantine. On the same day, July 10th, the brig Juanita came up from Quarantine, where she had arrived on the 5th from Trinidad in ballast, to Accommodation wharf. July 11th, one load of cotton was lightened

down from North Atlantic wharf to the Quarantine, and nothing brought back. July 12th, a boat came from the Isabel once or twice during her stay at Quarantine, on this trip, to the Savannah Steamer Packet wharf, but she was soon ordered off, and on one occasion, probably this same trip of the Isabel, some clothing was brought from her up to Adger's wharf. There was also a cargo of fruit landed on this wharf by a lighter from Quarantine about this time. July 15th, the Polacre Ermencinda came to Central wharf from Quarantine where she had arrived on the 15th; she discharged her cargo of sugar, was loaded with cotton, and cleared on the 19th. On the same day, the St. Andrews, from Quarantine where she arrived on the 8th, lightered up her cargo of sugar to Brown's wharf. On the same day, the bark Miaco lightered up an assorted cargo; she had arrived at Quarantine from New Orleans on the 9th. July 18th, a load of lumber was lightered down to Quarantine from Bennett's mill, and on the same day rice was lightered down from Vanderhorst's wharf. July 19th, rice was lightered down from Southern wharf. July 20th, lumber was lightered down from Bennett's wharf. July 22d, a cargo of sugar and molasses was lightered up to Central wharf, and on the same day a load of cotton was sent down from North Atlantic wharf in the steamer General Clinch. July 24th, lumber was sent down from Bennett's wharf. July 25th, a cargo of sugar and molasses was lightered up from Quarantine to Central wharf. August 1st, rice was lightered down from Vanderhorst's wharf. August 2nd, the Ketch Brothers lightered up her cargo of sugar and molasses from Quarantine where she had arrived the same day from Cienfuegos, having two sick men on board. Early in August, the cargo of the bark Industria, consisting of wine and lead, was lightened up to Union wharf. This vessel reached Quarantine June 13th from Havana, and it will be remembered continued to have cases of yellow fever on board till the 23d. About the same time, the Industria was loaded by lighters from South Dry Dock, two wharves South of Union. August 6th, a cargo of sugar and molasses was lightered up to Accommodation wharf from the schooner Effort at Quarantine, where she arrived on the 31st July from Sagua la Grande. August 12th, rice was sent down from Commercial Wharf. August 14th, an assorted cargo was lightered up from the brig Somers to Brown's wharf. On the same day, the steamer General Clinch brought a cargo of sugar from a vessel at Quarantine to North Atlantic wharf.

On the same day also rice was sent to the steamer Governor Dudley at Quarantine from Vanderhorst's wharf, and fruit brought back. August 16th, an assorted cargo was lightered up from the schooner Heyward to Brown's wharf. On the same day, rice was sent down from Commercial wharf. August 18th, rice was sent down from Vanderhorst's wharf. August 19th, the Deseo discharged her cargo of logwood at South Atlantic wharf; went to a ship yard for repair, and then returned and took it in again; she arrived at Quarantine in 22 days from Campeachy in distress. August 21st, rice was sent down from Commercial wharf, and also from Southern wharf. September 10th, a cargo of sugar from the bark Telegraph, which vessel had arrived at Quarantine on the 6th from Maracaibo, was brought to Union wharf in a lighter where it was stored in part while a part went to Central wharf. The lighter went to Palmetto wharf, the next wharf to the North. September 10th, rice was sent down from Vanderhorst's wharf. September 12th, assorted cargoes were lightered up from the schooners Aid and Zephyr to Brown's wharf. September 12th, rice was sent down from Vanderhorst's wharf. September 13th, rice was sent down from Commercial wharf. September 15th, rice was sent down from Vanderhorst's and Commercial wharves, and on the 17th, 20th and 29th from Commercial wharf.

It has been mentioned that throughout the season boats having intercourse with Quarantine came to Commercial and Southern wharves, and the Captains of the quarantined vessels often came in their boats to Central wharf.

The next point to which the attention of the Committee has been turned is that comprised under the second head of their division, viz. :

2d. The connexion which may exist between the occurrence of the earlier cases of yellow fever and the objects considered in the first part of the inquiry. In order to investigate this connexion, it will now be necessary to see when and where these early cases occurred.

The first case spoken of as *suspicious* was one occurring under the care of Dr. Happold, in Woolf street, on the 7th June. It will not be possible for the Committee to analyze the cases with a view to determine whether they were genuine yellow fever or not. Such a proceeding would extend their report to undue length. They will merely say in reference to this, that its claim to be placed among the yellow fever cases has been doubted. The Committee may,

however, state that the patient was a fit subject for the disease, if it had been prevailing at the time, and if it could be unqualifiedly admitted as such, would hardly be traceable to even the remotest connexion with the shipping; it occurred at least a mile from the nearest wharf to which the West India vessels came, and almost a month before the first case of yellow fever was brought into the harbor. We will, however, let it pass, simply stating that it is represented by the attending Physicians, (one of whom was House Physician of the Roper Hospital in the fearful epidemic of 1854,) to have exhibited many of the most characteristic symptoms of the disease, and to have died throwing up black vomit, four days and fifteen hours from the invasion of the fever. The genuineness of the black vomit has been doubted by some, and so the whole case called into question.

The second case reported as yellow fever occurred in the person of a seaman on board the schooner Exchange, at Palmetto wharf, on the 14th July, more than a month after the one just alluded to, and nearly a mile distant. This case has also been called in question. The fever lasted only about thirty hours, after which the patient recovered promptly. But supposing it to have been yellow fever, let us see what intercourse there had been with the West India vessels. No vessel had come to this wharf from Quarantine, nor had any cargo been landed or any other intercourse had either personally or by goods. At Union wharf, the next wharf below, however, on the 22d June, the cargo of sugar of the bark Lunette was brought up and landed from lighters, and in a few days the bark herself came to the wharf and discharged her ballast. This vessel had arrived at Quarantine in five days from Cienfeugos on the 17th June, which port she had left 20 days before, making 25 days from the time she left Cienfeugos to the time her cargo was landed on Union wharf, and about 30 days to her own arrival at the wharf, to which add 17 days till the day the case of fever on Palmetto wharf occurred, and we have 47 days between the sailing of the vessel from a suspected port and the breaking out of the fever. The only two other arrivals from Quarantine were the Transito July 2nd and the Vinceror July 3rd. Add to this that the patient was on board a vessel from a healthy port, was not on the wharf at which the suspected cargo and vessel arrived, and finally that there had been no case of sickness on board the suspected vessel, and we have the whole facts of the case before us.

The third case reported was that of a young man residing

in King, between Wentworth and Hasel streets. He recovered. This part of the City, it is well known, is far removed from the wharves.

The fourth case reported was that of the Irishman Abbott mentioned among those who were sent to the Lazaretto. He had worked at Quarantine on board the brig St. Andrew, which vessel had come from Havana, and though she had no fever on board during her stay here, was reported to have had one or more cases while in Havana. His case occurred on the 26th, and may be fairly traceable to the infected vessel; and had it been the first to occur in the City, or had the others preceding it been so directly in contact with a foreign focus of disease, the question of origin, to many minds, would have been settled. Such, however, was not the case, and the Committee are, therefore, constrained to refrain from doing more than give the facts as they are and leave the inferences unformed.

Three cases of fever occurring on board the bark Baldur from Bordeaux at Brown's wharf, though pronounced not to be yellow fever by the attending Physician, cannot be passed by in silence. The Committee will state the facts and let them go for what they are worth. It will be recollected that the largest part of the West India business was done at that Wharf, and by reference to the chronological statement given above, it will be seen that vessels and cargoes from those ports were going there constantly from June 1st. The Baldur arrived from a healthy port and hauled into Brown's wharf on 22d July. On 30th, three of her men were taken with fever, which was pronounced by the Physician to be break-bone fever, and one of them died on the fifth day. No other cases occurred on board the vessel. If the disease was yellow fever, it must have originated at this wharf. But we have the testimony of the Physician that it was not yellow fever, and we know that it did not spread further in the vessel, but terminated there; leaving the inference almost irresistible that the disease, whatever may have been its type, was not capable of spreading itself to the well.

The fifth case (leaving out those of the Baldur) was that of Denner or Denning, residing at 142 East Bay, near Pinkney street. He was taken ill on the 31st July and sent to the Roper Hospital, from whence, on its being ascertained that he had been loading the bark Industria at Quarantine, he was sent to the Lazaretto by the Mayor, where he died with black vomit on the 7th August. The Industria

it will be remembered was the infected vessel from which six men had been sent to the Lazaretto between the 17th and 26th July.

The sixth case was that of Joseph Diola, a seaman from the bark Jasper, which vessel arrived from New York on the 21st July, and lay at Accommodation wharf. He was admitted into the Marine Hospital on the 2nd August and died on the 10th, bleeding profusely from the gums and bowels. Vessels, it will be remembered, came to this wharf from Quarantine on the 16th and 26th June, and the 1st and 10th July, discharging their cargoes and ballast and loading again. It should also be borne in mind that this wharf is between Central and Brown's wharves at both of which there was communication with Quarantine, and at the last the heaviest business in West India produce of any wharf in the City, was done. Yet, on the other hand, it should not be forgotten that among the numerous laborers and others employed about Brown's wharf not a single case of fever occurred; showing that if Diola did contract his disease from the intercourse of the wharf with vessels from infected ports, others equally subject to the disease and exposed to it for a longer time, failed to suffer. We must also remember that it is not impossible that Diola brought his fever from New York, since we know that cases were occurring in the neighborhood of that City if not in the City itself at that time.

So far it will be seen the cases occurred at points widely removed from each other; the first (if we omit the case in Woolf street) at Palmetto wharf; the second in King, between Hasel and Wentworth streets; the third in King, near Broad street, the patient having been on board the St. Andrews; the fourth (again omitting those on board the Baldur) on East Bay near Pinkney street, the patient having been on board the infected vessel the *Industria*; the fifth on Accommodation wharf. The patients in these cases certainly had no personal communication with each other; did they take their disease from the same source? The case on Palmetto wharf does not seem traceable to any intercourse with Quarantine or the West India vessels; and if we are to make any use of the Woolf street case, that had certainly none. The second case, or that occurring in King between Wentworth and Hasel, was at least three quarters of a mile from the wharves and is not known to have been in any intercourse with them. The third in King near Broad street, worked in the St. Andrew, which vessel came from Havana and was reported to have had sickness while

there, but had none while here, either before or after Abbott's case. The fourth worked in an infected vessel, the *Industria*, and was taken sick in East Bay near Pinckney street, not very far from Palmetto wharf, but most probably got his illness in the vessel; other cases occurred near this place afterwards which by some are attributed to it. The fifth was taken on Accommodation wharf but may have brought his disease from New York. Though supposing him to have got it at the wharf, he was the only case there up to this time.

If it cannot be satisfactorily shown that the cases up to this point had a common origin, can we see any direct extension of the disease from any one of them to those which followed? Nothing of the kind can be traced in reference to the first, second and third. Of the fourth we have just spoken. In reference to the fifth we have to call attention to the fact that whereas it did not become a source of infection and spread the disease among the remaining members of the ship's crew, yet that an inmate of the Hospital, occupying a bed in another ward, was taken with fever on the third day after Diola's admission and died. Whether this case is to be considered as one propagated from Diola's or to be accounted for by reference to the local condition of things about and around the Hospital will be more particularly considered further on.

The sixth and seventh (omitting the Woolf street and Baldur cases) occurred on board the schooner *George Harris*, eight days from Baltimore, at Central Wharf. This wharf had intercourse with vessels from Quarantine on the 7th, 22nd and 25th July and is the next above Accommodation, being the second from Brown's wharf. The vessel arrived on the 21st July and the men were attacked on the 3d August; one (Pettyjohn) died, the other recovered. It should not be forgotten, in referring to the intercourse had with Quarantine that boats with the captains and crews of quarantined vessels came up frequently and landed, the men actually making use of the *George Harris* for the purpose of reaching the shore. The man Pettyjohn, from the *Harris*, whose case proved fatal, had felt great alarm at this, and was heard to say that there was no use in keeping the vessels at Quarantine if the men were allowed to come up.

The eighth case was a man from the ship *Royal Victoria*, arrived on 8th July from Liverpool, and laying in Ashley river, having gone there from Union wharf on the 4th August. On the 7th, three days after, one of the mates was

taken to the Marine Hospital with fever. He recovered.

The history of the cases from this vessel are highly important. She cannot be suspected of having brought the seeds of the disease with her, as she came from Liverpool. Did she gather them at Union wharf? Previous to her going there the wharf had had but little intercourse with Quarantine; one vessel and cargo having gone there on the 22nd June and two empty vessels, one on the 2nd and the other on the 3rd July; she remained at the wharf from the 8th July to the 4th August, during all of which time her crew were well. On that day she hauled round to Ashley river at the west end of Broad street, and three days after that the case occurred. Was there any thing in her new position to give rise to the fever among the crew? This question will be considered hereafter.

The ninth case was that of Nelson, the man in the Marine Hospital, who was alluded to while speaking of the fifth case. He had been an inmate of the Hospital for four months with a fracture of the leg, and had never quitted it except once for a walk, a day or two before, when he had passed along Franklin street, as far as Broad street, on the 5th August. Three days after the admission of No. 5 into the ward on the opposite side of the corridor, he was attacked and died on the 10th. Was this case contracted from the other? The circumstances are strongly in favor of that inference, yet it will be prudent not to decide too hastily, but suspend our opinion till the condition of things in that neighborhood has been examined.

The tenth case was that of Mrs. Molona, in Weims Court, lower end of King street, at least a quarter of a mile from the nearest case, that of Abbot on 26th July. Mrs. Malona was attacked August 5th and recovered. She was in the habit of visiting the Market. On the day of the attack she had made some purchases on Vendue Range; had never been on any of the wharves or visited any body who had; her husband worked in the Western part of the City. This case is important, as it was completely isolated from all those previously occurring.

The eleventh and twelfth cases occurred under similar circumstances. They had been residing at the corner of Elizabeth and Washington streets, about one mile from the wharves at which the West India vessels had been coming. The man, Matthews, had been working on the new custom house, next to Central wharf, and had been drinking. Shortly before his attack he had removed to Mazyck street. He

was taken to the Roper Hospital and recovered slowly. The woman had removed to Laurens street, and she also recovered.

The thirteenth case was that of Mr. Chamberlain residing in Society near Meeting street, and doing business in Meeting street, opposite the Charleston Hotel. He had not been in contact with any person or place in connexion with the fever; having only once, ten days before his attack, accompanied a friend to Adger's wharf when the New York steamer was leaving. He was attacked on the 7th August and died on the 10th. This case, like so many of those already detailed, seems to have had no kind of connexion with any other.

The fourteenth case was that of Capt. Crowhurst of the Royal Victoria the history of which vessel has been given above. He was attacked August 9th and taken to a house on East Bay, near the Battery, where he slowly recovered from his fever and did not spread the disease.

The fifteenth case was that of Mrs. Kegan in Weim's Court, in the same yard with Mrs. Molona. She was attacked on the 9th August.

The sixteenth case occurred in the Jail adjoining the Marine Hospital, in the person of a seaman sent there as a witness on the 4th August. He came from the bark Carolina from New York, having reached Accommodation wharf on the 24th July. He was attacked on the 10th August and recovered. This case has been cited in proof of the extension of the fever from the Marine Hospital to the Jail by contagion. We will allude to this again.

The seventeenth and eighteenth cases were from the Royal Victoria, sent to the Marine Hospital August 11th.

The nineteenth case was from the bark Helois in the Dry Dock August 11th, at the Marine Hospital. The vessel was from Harbor Island and all were well. Did this man contract his disease on the wharf? Doubtless he did. Was it from the cargoes or vessels from Quarantine? None had come to this wharf up to this time; though at Union wharf close by there had been some intercourse.

The twentieth case was from the George A. Tittle in Ashley river. The schooner was from Philadelphia; had been three weeks at Central wharf, and eight days in Ashley river, before the man (Thomas Lawson) was attacked. He was attacked on the 11th August and sent into the Marine Hospital.

The twenty-first was from the same vessel and entered the Marine Hospital on the 12th August.

The twenty-second and third cases are not fairly to be taken into our account. They occurred on board the steamer George's Creek on the 8th August during her voyage from Baltimore, and were sent to the Lazaretto on the 13th.

The twenty-fourth and fifth were from the George A. Tittle in Ashley river. They were sent to the Marine Hospital on the 14th August and then removed to the Lazaretto on the 15th.

The twenty-sixth case was a slave residing in Legare street.

The twenty-seventh was a sailor who was in the Marine Hospital under treatment for venereal disease. He entered the Hospital on the 2nd August and was attacked on the 15th. There may be some doubt as to whether this man got his disease in the Hospital or came in with the poison already in his system.

The twenty-seventh was that of the nurse of the preceding in the Marine Hospital. He had been in the Hospital about three months. The date of his attack was about the 20th and he died on the 25th.

The twenty-eighth was in Queen near Rutledge street. She was attacked on the 15th.

The twenty-ninth was in Weim's court, and was attacked on the 15th.

The thirtieth and thirty-first were on East Bay near Pinkney street.

The thirty-second and third were in Pinkney street, quite near the last. They were attacked on the 17th and 18th August. They were sisters in the same house.

The thirty-fourth was in Queen, corner of Smith street, next door to No. 28.

The thirty-fifth and sixth were in Weim's court, attacked on the 19th and 21st August.

The thirty-seventh was in Cromwell's court in Franklin street, opposite the Marine Hospital. She was seen first on the 21st, having been ill for some days.

The thirty-eighth case was from the Vendue Range, and was admitted into the Roper Hospital on the 23d, having been sick several days.

The thirty-ninth case was from Queen near State street, admitted into the Roper Hospital on the 23d August.

The fortieth was an inmate of the Roper Hospital under

treatment for a sore leg. He was attacked on the 24th August.

Other cases were reported about this date in the following localities, viz. : in Queen near Meeting ; at the corner of Church and St. Michael's alley, corner of Market and Anson ; State between Queen and Chalmers ; and on East Bay.

The Committee will examine these cases in reference to the localities in which they occurred. The largest number were from Ashley river and the immediate neighborhood, viz. : eight from the vessels near the West end of Broad street, three from the Marine Hospital, one from the Jail, two from the corner of Queen and Smith streets, one from Cromwell's court in Franklin street, opposite the Marine Hospital, one from the Roper Hospital, one in Legare street, five from Weim's court in King street near South Bay ; making twenty-two. The next largest number was on or near the wharves, viz. ; one from Palmetto wharf, three from near the corner of East Bay and Pinckney street, one from Accommodation wharf, two from Central wharf, one from Dry Dock wharf, one from Vendue Range, and one from Queen near State street ; making ten, which added to the twenty-two from the neighbourhood of Ashley river, gives thirty-two ; leaving only five distributed over the rest of the City, if we omit the Woolf street case and the three from the Baldur. As the disease continued it became more generally disseminated, but evidently taking root more deeply and spreading more extensively in the Eastern than in the Western districts of the City, while the central portions were comparatively exempt. If the Committee should point to one particular section more infested by the disease than any other, they would unhesitatingly say that the Ashley river shore-line was that ill-fated district. The next division thus early obtaining this unenviable distinction was that along the wharves, or the Eastern district of the City.

We may now pause to ask the question why has this been so ? Have we any reasons to offer in explanation of these facts ? What influence the West India vessels may have had in the mischief, we have endeavored fairly to investigate by going over all the known facts. bearing on the connexion between the vessels and the disease on the Eastern side of the City. We may now look to the cases on the Western side and see if the ships could have had any influence there.

The Royal Victoria came into Ashley river on the 4th August from Union wharf. We have already endeavored

to discover whether she became infected at the wharf or not. It was shown that there was no disease on the wharf during her stay there, and that the wharf had but little intercourse with the quarantined vessels. Further than that we have not been able to go. Certain it is that no disease occurred in the ship till she had been three days in the river.

It has been shown that twenty-two of the thirty-eight earlier cases came from the district of the City around that part of Ashley river which is contiguous to the west end of Broad street, and it has been shown how far the connexion of vessels with this neighborhood may be supposed to have been influential in the mischief. If we admit that this connexion *may* have been the cause, we are, on the other hand, compelled to admit that the relation of cause and effect has not been entirely *established*. If, going a step further, and perhaps one step further than circumstances justify us in going, we admit that the vessels may have been the actuating, the exciting, cause of the disease in this quarter, the "fons et origo mali;" yet still we want something more to enable us to account satisfactorily for the quick and fast hold which the fever took upon the locality.

And this brings up for consideration the third head under which the Committee proposed to consider their subject, viz.: 3rd. The local circumstances about us which may seem to have a connexion with the fever.

Having traced as much in detail as it was possible to do, with a due regard to the indispensable limit of such a paper as this, the earlier cases individually; the Committee must, during the remainder of the report, deal more in generalities. And first they will remark that certain portions of the City which were formerly exempt from the scourge of yellow fever, have, within the range of a certain number of years past, lost their exemption. And this change, they will show, has invariably followed the obnoxious practice of filling up low lots with offal and other deleterious matters. They will show that since the year 1838 these reciprocal changes have been going on. That wherever low lots, over which the salt tide had been flowing, have been reclaimed from the sea, water and filled with putrifying and decaying matter, there has the yellow fever element seated itself, as a hen upon her nest, and hatched out broods of cases. A few instances must suffice, and these the Committee will offer as examples of the spread of the disease under the circumstances indicated, without, at this time, touching the ques-

tion of its *first origin*. True to their pledge in the beginning, they will only give the *facts* which bear on their subject, and leave all theoretical inferences to be deduced by others.

In the year stated above, 1838, the yellow fever, for the first time, appeared above Calhoun street. At the corner of Elizabeth and Ann streets a case occurred in a young stranger who had been kept scrupulously housed for six weeks or longer, and she died of the disease in its most aggravated form. The low lots bordering the Creek running up through that and some of the neighboring squares were then being filled up for building purposes. A few years later the same thing was undertaken for the low grounds near the East end of Calhoun street, while the street itself was filled up with wood; the fever tread hard upon the heels of improvement, and Calhoun street up to Meeting has ever since been an unhealthy vicinity. South Bay has always been considered one of the healthy districts of the City yet this year we have traced the yellow fever from the corner of East Bay to that of King street; and in looking for a cause for this change, we remember that White Point garden along this line has been filled with destructible material just long enough for the decaying matters to puff forth their death-giving gases.

Continuing our progress along the shore line of the Ashley, we find that numerous cases of yellow fever have occurred this year in Gibbes, Legare, West end of Tradd, New and Savage streets, and we know that Limehouse and Council streets have been made up, and many low lots all about that neighborhood, reclaimed and filled with destructible matter. Further west, in Franklin street, where the Marine Hospital and Jail are situated; in the lower end of Queen street where the Roper Hospital stands; in Cromwell's court and all over the adjoining parts of the City, the fever has been, in this and other recent epidemic years, rife, whereas in former times it was unknown there. Is it necessary for the Committee to advert to the extensive filling that has been going on there? To calculate how many acres have been snatched from the sea and converted into hot beds of putrefaction and decay? To one fact, however, they must allude, and that is that whereas, the Marine Hospital and Jail have occupied their present positions for fifty years, and whereas during all that time yellow fever has been introduced into the Hospital, and treated there whenever it existed among the seamen in the shipping, yet never till 1852 has the Jail suffered. Why are these

things so? Without attempting to assign the cause, the Committee will just refer to the local changes mentioned above. Almost under the windows of the Jail, the Marine and the Roper Hospitals, are to be found reeking and putrifying masses of filth, to which the attention of the Board of Health has been repeatedly called this very season, and which they have endeavored to obviate by using their most extreme authority in causing these abominations to be covered over with wholesome filling. Such measures, it is evident to all and to the Board of Health themselves, are totally inefficacious. The evil is deeper than the surface and cannot be remedied by covering the surface over. It should be effectually prevented from any further extension by a positive prohibition against the use of any filling matter except the purest earth.

Before passing to other localities, the Committee may pause for one moment to ask who can say how far the extension of the fever in the Hospitals and Jail may depend on these local causes of disease? Do we know enough to say positively that contact with other sick was the cause, and that local circumstances are not to be counted? Are we to suppose the *pari passu* march of the decaying accumulations and the advancing disease are only coincidences and in no wise cause and effect. Let any fair reasoner answer the questions.

And now leaving this neighborhood, let us make our way onwards. The upper part of Bennett's mill pond, extending in a North-Easterly direction from Radcliffe to Coming streets, has been filled up in the usual way, and the fever has gone into the new made district. Upon another branch of the same pond, in what is known as Cannonsborough, similar works have been going on, and we know that Cannonsborough has been converted, simultaneously, from a region of proverbial salubrity to a yellow fever district. This instance is sufficiently striking to arrest our attention, did we not find it necessary to hasten to another even more so in itself, and more appropriate for our purpose, as relating specially to the epidemic of this season. The Committee refer to Gadsden's green. Here, up to the present year, we looked for country fever, or its modification known under the name of neck fever. This year we have had pure yellow fever. How did yellow fever go there? It has been contended that contact with infected persons or places gave it origin. The Committee need not examine that point now. They will, for argument sake, yield it as proved,

and ask in reply why similar contact in former years did not produce similar results? Why has the disease taken root here now and spread?

In reply to this they will refer to the past and present condition of the neighborhood. In former years the soil remained in the condition in which nature had made it. In recent years the hand of man has been upon it, and it has undergone the same metamorphosis that has been described above. First, President street on the North, and immediately adjoining, was filled up with offal. Then the Bridge causeway on the West was made up in great measure with saw-dust, and extensive excavations of the earth were made in the same direction. Finally, the entire offal of the City was deposited at the West end of Line street in a North-Easterly direction from the infected district. This deposit consisted of the usual ordure of the City, and also of an unusual number of dead animals. It was so placed that every high tide overflowed and saturated it till, at the ebb of the tide, the soluble matters of this immense mass of offal with the receding waters were daily spread out over the large expanse of low marsh land adjoining the region in question, there to be acted on by the ardent sun, and wafted by the prevailing winds in all directions. Here then we have the same condition of things described as existing in so many other places in which yellow fever has newly made its entry. The residents on this Green were principally laborers on the Savannah Railroad, who were exposed to the causes of country fever. But when they sickened it was with yellow fever.

The Committee refrain from drawing any conclusions. They wish to deal with facts, and not to weaken these by warping them towards any preconceived theory. It is enough for them in this connexion to have called public attention to the facts that in numerous parts of the city, within a few years past, yellow fever has become denizenized, and that it has followed on the reclaiming of low lots with decaying matters. They wish to do this in order that any measures suggested for the good of the public health may be initiated in full view of all the requirements. Having shown how much connexion there was between the fever in the City and the vessels from infected ports, they thought it their duty also to show its connexion with local causes.

It may be asked if yellow fever depends upon these decomposing matters, why it does not *occur* in those places every year. And we may also ask why, if it depends on

importation, it does not *spread* every year that it is introduced into the City. The reply to these questions brings us to the consideration of the last point we intended to touch upon, viz. :

4th. The imperceptible yet not inappreciable influences of the atmospheric condition about us, to which we are fairly entitled to attribute such epidemic tendencies as cannot be accounted for on the exclusive supposition of introduction or local origin.

These influences are indeed imperceptible. They come about us like the electricity which may abound in, or be absent from, the air around us, and give no note of its presence or absence. Or like the wind that "bloweth where it listeth," whilst "no man knoweth whence it cometh or whither it goeth." But they are far from being inappreciable, for, like the electric explosion that rends the steadfast earth, or the hurricane blast that sweeps with destructive and overwhelming power over the face of the ocean and the land, they are known by their works.

Epidemic influences are seen in their effects. We cannot doubt that they do exist and are real, though they are not seen or felt, except by their deeds. All authors recognize them, though none have described them further than by their results. All endeavor to make for themselves and their readers an idea of what an epidemic influence is by grouping together all the concomitant circumstances under which it may exist, and thus making an entity out of that which gives no other proof, even of its presence, than what may be inferred from its effects.

Epidemics have been defined to be "Such diseases as occasionally prevail more or less generally in a community at the same time or season, and depend upon a common cause."* This common cause is the influence, imperceptible but not inappreciable, to which we allude. When brought into a community, it gives life to the previously unvitalized seeds or ova of disease, or else, bearing these within itself, they remain undeveloped until they find in the vitiated atmosphere of neglected localities the fructifying power. That epidemics act in one or both of these ways might be sustained by ample authority. But the purpose of the Committee now is simply to show that when this mysterious influence is abroad in the air, it develops disease in those places where it finds the proper nidus ready formed. One at least of the elements that go to make up that nidus is the

* Copland, Art: Epidemic.

faulty Hygienic condition which we have shown exists in parts of our City. An example, by way of illustration, will show what we wish to prove in fewer words than we can otherwise do so. In the British and Foreign Medico-Chirurgical Review for 1854, at page 15, we read: "One wing of a Cavalry regiment, just arrived from England, and in high health, ascended the Ganges from Calcutta (where there was no cholera at the time) in boats. At a certain period of the voyage, the troops arrived at a part of the country where cholera prevailed in the villages on the banks of the river, but with which they did not communicate. Here cases of cholera occurred; they were advised to push on rapidly, and after a few days, when they had passed the limits of the existence of the disease on the banks, it ceased to show itself in the boats. But what makes the case peculiarly conclusive is, that the other wing of the regiment followed afterwards by the same mode of conveyance, became afflicted with the disease at the same point, and lost it again at the same point. So that the limits of the tainted district seemed to be as clearly marked out by the voyage of the one detachment as of the other."

This illustrates what we mean by epidemic influence. It is an influence which cannot be *controlled* by human means, but we may render it in a great measure inoperative by taking from it the coincident, and more or less, necessary circumstances of foul air and deteriorated atmosphere. This we may do by paying more strict attention to Quarantine as well as to Hygienic measures. And in conclusion, the Committee would recommend that proper measures be taken for such supervision and amendment of both of these as may be called for by the demands of the public health.

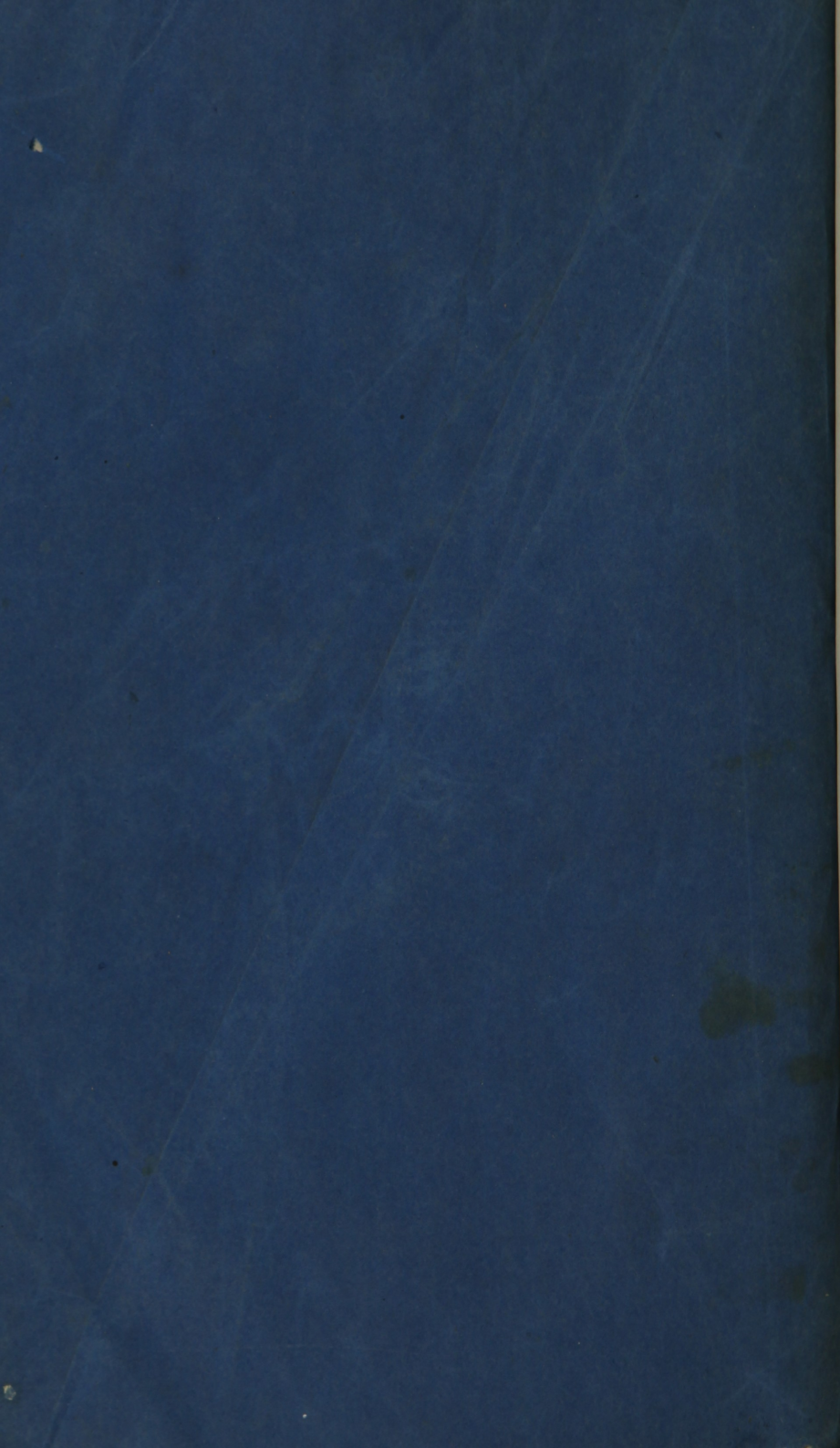
WILLIAM T. WRAGG,
WILLIAM HUME.
JAMES M. EASON.

List of the Deaths from Yellow Fever in 1856, and the Places where they occurred.

Marine Hospital,	12	Washington street,	1
Roper Hospital,	52	Burn's Lane,	1
Jail,	3	Drake street,	1
Orphan's House,	1	Stoll's Alley,	1
Ship Victoria	1	Market street,	3
Society street,	2	Laurens street,	1
Pinckney street,	6	Pritchard street,	3
Franklin street,	1	President street	2
Spring Street,	9	St Philip's street,	1
Hard Alley,	1	Wharf street,	1
Horlbeck's Alley,	1	Broad street,	3
East Bay,	5	Chalmer's street,	1
Anson street,	2	Wentworth street,	2
Cromwell's Court,	2	Norman's Lane,	1
Magazine street,	1	Church street,	4
Legare street,	1	Liberty street,	1
Bull street,	1	Berresford street,	3
Archdale street,	6	Central wharf,	1
State street,	6	Friend street,	1
Tradd street,	12	Beaufain street,	1
King street,	12	Bogard street,	1
Meeting street,	5	Wall street,	1
Savage street,	1	Linguard street,	2
New street,	2	Rutledge street,	2
Elliott street,	1	Coming street,	1
Queen street,	13	Vernon street,	1
Bedon's Alley,	1	Ship-board,	1
Atlantic wharf,	1	Calhoun street,	1
Line street,	1	Guignard street,	1
Cannon street,	1	State Magazine,	1
Cumberland street,	2	Mazyck street,	1
Total,			212

Of the 52 deaths in the Roper Hospital, there were from—

Vendue Range,	1	Court House Square,	1
Queen street,	7	East Bay,	1
State street,	1	Adger's wharf,	1
Spring street,	6	Market street,	2
Cromwell's Court,	1	Washington street,	1
Bedon's Alley,	2	Tradd street,	1
House of Correction,	1		26
Total,			







NATIONAL LIBRARY OF MEDICINE



NLM 04142429 7