

HISTORY OF YELLOW FEVER

IN PROVIDENCE,

IN YEARS 1797-1800-1803-1806-1820.

PREPARED BY E. M. SNOW, M. D.

REPRINTED FROM THE JOURNAL, JUNE, 1877.

1797.

The first appearance of the yellow fever in Providence of which we have any record, was on the 13th of August, 1797. The schooner *Betsy*, Capt. Burr, from St. Nicholas Mole, in the island of Hayti, arrived on the 10th of August, and anchored on the south side of what is now the ferry dock, where she remained for two weeks or more. She had lost two men on the passage, with the fever, but this fact was kept secret. As she was coming up the river she was boarded by Nicholas Winsor, of Seekonk, who, with a boat load of vegetables was on his way to Providence market. He went on board the schooner and his boat was taken in tow to the city. On his return home he was taken sick, and died in four or five days. His disease was called bilious fever, and no suspicions were entertained, at the time, of its origin.

This vessel was loaded with coffee, and was in a filthy condition. She remained at the wharf until the 25th of August, when she was removed to Starvo Gant Island, and the cargo was landed there. The crew of the schooner were discharged on their arrival, and some of their clothing, with the bedding of the vessel, was sent to the "Long House" to be washed. This house was situated at the present junction of Wickenden and South Main streets, reaching westerly from the present line of Wickenden street to the south end of Carrington's block. On the south side of the house was a lane leading from Wickenden street to the water, a portion of which still exists at the south end of Carrington's block. The house was about eighty feet long, and was occupied by ten or twelve families of ship carpenters, caulkers and washerwomen. The clothing was carried to this house on the 11th or 12th of August, and on the 15th several persons were taken sick with the fever, three of whom, Robert Fuller, Mrs. Mitchell, and Mrs. Goss, died on the 18th. These were the first deaths from this disease, in Providence, and there were no cases of the disease south of this house during the year 1797.

On the 20th of August, William Tillington and Mrs. James Arnold died. Mr. Tillington ate his breakfast with his family in the morning, and, though sick, was walking about his room at noon, and died before night. He lived in the house, still standing, and owned at present by his grand-children, at No. 239 (present number) South Main street. Mrs. Arnold lived in the house still in existence, at the northeast corner of James and South Main streets. On the 23d of August her husband, James Arnold, and her son Joseph died in the same house, and on the 2d of September a domestic in the family, Jerusha Townsend, also died. This house stood alone, and in the rear extending to Benefit street, was a grove of locust trees. The prevailing winds at that season of the year, from the southwest, would be from the vessel and docks to this house. James Arnold was possessed of a large property, which, if he died first, would descend to his only child, Joseph. The son had made his will disposing of the property; but the son died five minutes before his father, and the property went to other heirs.

Much excitement prevailed in the town from fear of contagion. The bodies of those who died were ordered to be wrapped in tarred sheets, and by order of the Town Council, tar and brimstone were burned upon the wharves and streets of the infected district.

No case of fever originated, during this year, north of Williams street; but it was wholly confined to the small section between Williams street and the present junction of Wickenden and South Main streets.

The last death occurred on the 6th of October, and the whole number of deaths from August 13th to October 6th, a period of forty-nine days, was thirty-six. The number of cases of the fever cannot now be ascertained. During the same period, the fever prevailed in Bristol, and sixteen persons died. It was supposed to originate in Bristol from the ship *Washington*, which arrived at that port from Savannah, via New York, on the 13th of August. It was the opinion, however, of intelligent men, even at that day, that the fever could not have prevailed as it did in Bristol or Providence, had there not existed local causes calculated to give rise to it.

These causes in Providence were undoubtedly the docks which existed in the location where the fever prevailed. South Water street was not then in existence, and the docks extended, many of them, nearly to South Main street. They were filled with filth, portions of which were exposed at low water; the wharves were mostly built of wood much of which was decayed, and their condition was such as has been found, precisely calculated to give rise to fever in other places.

There were no cases of fever on the opposite side of the river, and the disease did not spread in any instance from the cases which were removed from the infected districts to other parts of the town. At that time, it should be recollected, there were no docks existing at present on the opposite shore, and besides, the prevailing southwest winds had the effect to keep the disease from the west side of the river.

I am unable to find any particulars of the temperature and weather at that period, except the general fact that from 1796 to 1800 the winters were very cold and long, the springs very cold and wet, and the summers excessively hot and dry. One writer says of the winter of 1797-98: "The winter was excessively cold and long, the spring was rainy; never have I seen so long and severe a rainy season at the breaking up of winter. The summer was ushered in at once, and was as remarkably hot and dry as the preceding winter and spring were cold and rainy. About the middle of June were several days almost insupportable, and universally spoken of by our oldest men as the hottest ever known."

Such was the general character of the seasons from 1796 to 1800, during which time the yellow fever prevailed extensively and severely in most of the northern cities. It did not prevail in Providence again until the year 1800, and afterwards in 1803, 1805 and 1820. I propose to give hereafter an account of the disease in these years. It is impossible to obtain any particulars of the disease from the public papers or from the records of that period. Nothing is given in relation to the number of cases, the supposed origin, the location of the disease, or the state of the weather. Indeed, not a single particular is given which can be of any value in ascertaining the causes or character of the disease. For many of the particulars given in this article I am indebted to John H. Ormsbee, Esq., who lived at the time in the infected district, and had the disease severely himself.

1800.

The last ten years of the last century, and first five or six years of the present century, seem to have been marked by a general epidemic influence in the Northern States. They comprise what may be called an epidemic cycle. During this time the yellow fever prevailed more or less extensively every year in some of our cities, and there was a general expectation among the people every year that the disease would prevail. Numerous circumstances of a peculiar nature, which were supposed to indicate an unusual condition of the atmosphere, are noticed by the writers of that day. One writer mentions that "soap suds were decomposed in three hours" and the separation of the ingredients was so effectual as to require boiling water to detach the tallow from the basin. "Beef in barrels became putrid much more frequently than usual, and when putrid the smell was thought to be much more offensive than usual. Meat of all kinds spoiled more quickly than in ordinary times, and the odor from sewers, and all sources of filth is described as much worse than usual. These peculiarities were ascribed to the presence of "effluvia" acid in the atmosphere. During the same period, epidemics were common to the animal kingdom, and one writer, in 1788, speaks of epidemics among other animals as being as rife as among men. The cats were affected and thousands died, in 1787, in Philadelphia, New York, Boston, Albany and other cities. In Connecticut a distemper destroyed great numbers of neat cattle. In New York State, horses and dogs were affected with a distemper in the head and throat which destroyed many. In Massachusetts and New Hampshire, "foxes were affected with a disorder which rendered them an easy prey to hunters," and, in the same States, the geese had a disease which caused them "to seize some object with their bills, and keep hold of it until they died." Hydrophobia is mentioned as being remarkably prevalent, and small pox prevailed extensively. I find no mention of any disease among hogs at that time.

Yellow fever did not prevail as an epidemic in Providence from 1797 to 1800, though Dr. Wheaton states, in a medical journal, that there were four or five cases in the town in 1798. He also mentions during the same year, thirty or forty cases of low, typhoid fever in the north part of the town, "evidently caused by draining a mill-pond at the commencement of the hot and dry weather."

clans in the town, Drs. A. Throop, Wm. Bowen, Levi Wheaton, Benjamin Dyer, Henry Faulkner, and Joseph Mason sent a letter to the Town Council recommending that all the inhabitants be removed from the infected district without delay, and that all the sick be sent to the hospital, and stating that they considered it dangerous to themselves and their families to attend the sick in that district.

This does not seem to have been done very effectually, and not until the 18th of September was a fence ordered to be placed across South Main street from the south side of Powers lane, and another across South Main street at the foot of Transit street. From the 16th to the 26th of September there were 29 new cases and 21 deaths. The last case and the last death was on the 3d of October, and during the whole time from August 15th to October 3d, a period of 49 days, there were 85 cases and 52 deaths. The duration of the disease was precisely the same as in the year 1797, it having commenced and ended three days earlier than in that year.

The disease was more severe and caused more excitement than in 1797. Vessels from Providence were subjected to quarantine in New York, Philadelphia and Boston. On the 29th of September a letter was received by the Town Council from Philadelphia, offering assistance to the sufferers in money or necessities. The Town Council of Providence replied that owing to the powers of the Council in providing for the poor, there had been very little distress from want of provisions; but that many families having been deprived of employment for some time were in need of assistance. Soon after a check for \$2000 was received from Philadelphia, which was distributed to the needy. The correspondence between Providence and Philadelphia is extremely interesting and creditable to both cities.

The summer of this year (1800) was excessively hot and dry. Under date of August 28th, the "Providence Gazette" says: "The parched earth was last evening refreshed by some fine showers.—*Louis Dea.*"

The origin of the fever this year was not so clearly known as in 1797. No direct connection could be traced between any vessel, and the first cases. The Town Council in a letter to the authorities of Newport, state as follows:

"With respect to the origin of the disease, whether imported from abroad, or derived from causes of a local nature, is not yet satisfactorily ascertained, and about which a great diversity of sentiment prevails. It is represented by some as coming from the United States ship General Greene lately arrived in your harbor, which it is said had the contagion on board, and that it originated here from some of the crew of that ship who put up in the quarter where the disorder made the first appearance, and in the neighborhood of which it is still continued."

Whatever was the origin there was no doubt then, and there is none now, that the filthy docks in that neighborhood were the local causes which are always necessary for the existence of an epidemic of this character.

After the year 1800, a strict quarantine was enforced in Providence every summer, and every summer vessels arrived which had cases of the fever on board. There were, however, no cases of the disease among the inhabitants of the town, except a very few in 1803, and more in 1805.

The history of the yellow fever in Providence in 1805, is remarkable as exhibiting the effect of prompt, efficient, and energetic sanitary measures. This will be given hereafter.

The yellow fever appeared in Providence for the third time in 1803. The town records mention the frequent arrival of vessels with the fever on board, but say nothing about any cases in town. There were only five deaths from the disease this year, the last of which, Mr. and Mrs. John Viall, died on the 2d and 4th of October. No allusion is made to the disease in Providence in the *Gazette* of that year, though full accounts are given of the fever in New York, where it prevailed with great severity.

1805.

The fourth appearance of the fever in Providence was in July, 1805. On the 3d of this month the brig *Planter* arrived from St. Croix, having lost some men with fever on the passage. On the 12th, the brig *Junio* arrived from Matanzas under similar circumstances. They were permitted to come to the wharves after a brief detention at quarantine. The weather was excessively hot and dry. The fever broke out about the 20th of July, in the same locality as in previous years. The first cases were at the foot of James street, foot of Williams street, foot of Power street, &c., some of them being in the same houses in which persons had died in 1797 and in 1800.

On the 25th of July the Town Council met and adopted vigorous measures. A committee was appointed to examine the vessels in that locality, to ascertain the cause of the malignant fever which prevailed. An order was passed requiring all the inhabitants "south of Power's Lane, and north of the south still-house," which stood where the present building of the Providence Tool Company stands, to remove from their houses within three days. This order was faithfully obeyed, and on the 29th of July a watch was appointed to protect the property in the deserted houses. As in previous years, the only cases were in the infected district, or among those who had frequented that locality, and in consequence of the prompt action of the Town Council in removing the inhabitants, the fever ceased immediately, no new cases occurring after the 2d of August. A change of the weather, from excessive heat and drought to cooling showers, perhaps aided in the result. Very great alarm existed at the commencement, it being some weeks earlier than the fever had begun in previous years. The rejoicing at this cessation of the disease was very great. In all, there were twelve cases and six deaths. On the 9th of August the Town Council announced that there had been no new cases, and that the town was never more healthy at that season than at that time. This healthy condition continued until the last of September. Encouraged by the absence of disease, the inhabitants of the infected district had all returned to their homes by the 20th of September. The consequence of their imprudence was, that seven cases of the fever occurred during the last ten days of September, of which four were fatal. These were mostly on Wickenden street, between South Main and Benefit streets. The cold weather at this time put a stop to the disease.

We have, in the history of the fever this year, a most striking illustration of the efficacy of prompt and energetic action at the beginning of the disease, in checking its progress; and also a less marked illustration of the fact, now so well established, that when a district becomes infected nothing but cold weather and frost can remove the infection and make it safe for the inhabitants to return.

After the cessation of the fever, about the first of August, the Town Council, in a letter to the authorities of New York, stated that the fever was supposed to have originated from the brig *Planter*, from St. Croix; the packet *Friendship*, from Charleston, and the brig *Junio*, from Matanzas. No particular circumstances are given which led to this belief. On its second appearance in September it was clearly of local origin. At this time, the last of September, the weather was again dry and hot, and the papers speak of a pestilential fever as prevailing in some parts of the country almost as fatal as the yellow fever in the cities.

The condition of the infected district at this time was very much the same as in 1797 and 1800, except that a fire in January, 1801, had destroyed the buildings on both sides of South Main street, from Planet street nearly to Williams street. This fire destroyed thirty-six buildings and about \$300,000 worth of property. Some of the houses destroyed were those in which there had been cases of the fever. We are indebted to this fire for the widening of South Main street in that locality. The docks, however remained unchanged, and after the appearance of the fever, in 1805, their condition began to excite the serious attention of the people. An "Address to the inhabitants of the southern part of this town on the epidemic fever," written by Col. H. Sabine, in March, 1806, thus describes the condition of the infected district:

"It is notorious to every person who is conversant about the docks at the south end, that the obnoxious filth towards those docks, and lodges the floating substances which it brings down along the wharves from the upper part of the bay. The ships between the wharves by this means are so far filled up, that they are left bare for many hours every tide, and as the docks are made the receptacles of every kind of filth, and in the heat of summer is put into a state of fermentation, and millions of bladders arise, heaving up their noxious air from this mass of vegetable and animal putrefaction."

"Many of the cellars under the stores in this quarter being found unsanitary depositories for property are suffered to decay, and are filled with mud and filth, which in the heat of summer form hot beds of impurity, generating much impure and unwholesome air."

"There are a number of large wells in this quarter, originally designed for filling water for vessels, and not being used for many years they have become stagnant and putrid and are receptacles of dead toads and rats, and in the heat of summer send forth their pestilential vapors."

papers constantly assured the public that the town was healthy.

The *Gazette* of August 28, 1820, says—"no unusual or alarming sickness prevails." The same paper of September 8th, says that unfounded reports are in circulation, and to correct them "we would state for the information of our country friends that no unusual sickness prevails here." The *Patriot* of Sept. 6th, says that two sudden deaths had occurred, but that they were not yellow fever, and that there was no case of malignant fever in town. The *Gazette* of Sept. 11th, says—"We rejoice in the fact that no malignant nor contagious sickness prevails in this town;" but unfortunately for the truth of the statement, the same paper, "since the above was in type" publishes a certificate from Drs. W. Bowen, L. Wharton and P. Bowen, dated Sept. 10th, and stating that they were then in attendance upon eleven cases of the fever.

The Board of Health seem to have been equally desirous of concealing the facts, and they issued no information to the public until the 12th of September, when they published the fact that there were several cases of *suspicious* fever in the south part of the town. In the meantime, the greater portion of the inhabitants removed from the infected district, and on the 15th of September a fence was ordered to be placed across South Main street on the south side of Power street, and another on the north side of Transit street. These fences were removed six days after, the disease having apparently ceased. The inhabitants began to return to the infected district, and the same results followed as in 1806; new cases of the fever occurred, and several died.

The temperature of the month of September, in Providence, was as follows:

7 A. M., 62°; 2 P. M., 74°; 9 P. M., 63°.

The last case of fever was on the 9th of October, the whole period of the existence of the disease being fifty-four days.

The town records and newspapers of that period give no information from which the exact number of cases can be stated. As nearly as I can ascertain, there were twenty-two deaths from the fever during the whole season.

The efforts to conceal the existence of the disease only served, as such efforts always do, to aggravate the evils desired to be avoided. The most absurd rumors were circulated in the country towns. Farmers coming to Providence were informed in Olneyville that the mortality was so great that the inhabitants were obliged to spend the nights in burying the dead. Other rumors equally false were prevalent.

The origin of the disease in 1820 was not accurately ascertained. Some persons traced it to one vessel, others to another vessel. All that can be stated with certainty is, that vessels arrived from the West Indies having had cases of the fever on board, the fever broke out in Providence. South Water street at this time was not extended below where the Fall River Building now stands, and the docks below there were in much the same condition as twenty years previous.

This year (1820) was the last in which the yellow fever has been epidemic or endemic in Providence. Fears were entertained for several years that it would prevail again, and in one year, I am informed, there were two or three cases which caused considerable excitement for a short time. The Board of Health, however, immediately published all the facts in the case, and this wise course at once secured the confidence and allayed the fears of the public here and in other cities. For more than thirty years there was not, so far as I can ascertain, a case of the disease in Providence. During the last three years there have been cases of yellow fever in this city; but they were all of persons who came directly from places where the fever was prevailing, and were generally very slight. Late in the summer of 1856 there were two mild cases in the city, one of which was brought in a vessel from Charleston, S. C., and the other came from Staten Island.

This completes the facts in relation to the yellow fever in Providence so far as they have come to my knowledge. Different persons will probably draw different conclusions from them; but some conclusions seem to be so obvious and so important, that I may take occasion to present them hereafter.

Summary and Conclusions.

A brief summary of the facts presented in relation to the yellow fever in Providence, and a few of the conclusions to which they lead, may not be unprofitable.

The whole number of deaths from the fever in this town during the five periods in which it has prevailed has been as follows: In 1797, 36; in 1800, 32; in 1803, 5; in 1805, 19; in 1820, 22; total, 125. When we consider that this is the whole number of deaths from the disease during sixty years, it lessens its importance as a destroyer of human life in this city. I think it would be difficult for any one to give any sufficient reason why a disease, to which we are so little liable here, should excite so much attention and alarm, while diseases which destroy more lives in Providence every year than the yellow fever does in fifty years, are very little noticed.

The time at which yellow fever commences in Providence depends upon the character of the season. At one period it began about the 20th of July; at the other periods it commenced between the 10th and 20th of August. Whenever a locality becomes infected, the infection is never removed, and the disease does not cease, if there are any inhabitants remaining, until the appearance of frost. This has generally been, in this town, between the 1st and 10th of October.

The origin of the fever in Providence is a question which might excite some discussion. At its first appearance, in 1797, the disease was directly and unequivocally traced to the foul bedding and clothing of an infected vessel. At the other periods no such direct connection could be traced. At all times, vessels were named which it was said brought the fever; but the blame was put upon different vessels by different persons. It was, and is still, the opinion of some persons that the vessels themselves were the only foci of infection, and that there was nothing in the town itself which could sustain the disease. I cannot agree with this opinion. We know that all infected vessels were immediately removed from the infected district, and yet the fever continued to prevail, and new cases arose after they were removed. In 1805, when it reappeared the last of September, after an interval of six weeks, there were no infected vessels at the wharves. In 1820 a lady died with the fever near the corner of Transit street, who had not been into the street, nor had been exposed to infected vessels, from its commencement. It is evident that the vessels were not the sole points of infection. Though the fever might have originated from them, it found local causes in the town itself, precisely calculated to receive, sustain and spread the infection after the vessels had been removed. Those local causes, I have no doubt, were the rotten wharves and filthy docks in that locality, a description of which has already been given.

At the time the yellow fever first appeared in Providence, a considerable portion of the community, including many men of great intelligence, believed in an intimate connection between epidemics and comets, earthquakes, storms, whirlwinds, &c. Noah Webster, in his *History of Postludical Diseases*, published in 1798, gives a list of fifty severe epidemics between the commencement of the Christian Era and the year 1789, all of which, he says, were accompanied by "great elemental convulsions, such as earthquakes, comets, storms, &c. He also states that severe winters always coincide with the approach of comets.

The locality of the infected district in Providence was always remarkably restricted, and its limits accurately defined. In September, 1805, the portion of Wickenden (then South Main) street between Transit and Benefit streets was infected; at every other period the infection was confined to a small section of a single street (South Main), never extending above Power nor below Transit streets.

Is yellow fever contagious? This question is still disputed with great earnestness, though the majority of medical men, and particularly of those who are interested in sanitary measures, have decided it in the negative. It might be supposed, at first thought, that the question could be decided in New Orleans, where they have the disease every year. But there is less harmony of opinion on the question among the profession in that city than in other parts of the country. It seems to me that New Orleans is just the place where the question can never be decided, for this reason, that there are local causes which render every part of the city and surrounding country an infected district. Of course, where every person is exposed to infection, it will be impossible to decide that any particular case arises solely from contagion.

The history of the fever in Providence is conclusive against its contagiousness here. The following reasons may be mentioned:

1. During the five periods in which the yellow fever prevailed in this town, no case ever occurred out of the infected district which could not be directly traced to exposure in that locality.

2. Many persons with the fever were moved from the infected district to other places in town, and persons died with the disease in every part of the town; yet, never in any instance, did any other portion of the town become infected, nor did a single person take the disease from those who were sick out of the infected district.

Metemorphosis.—There is a remarkable similarity in the character of the seasons of these years in which the fever appeared in Providence. The preceding winter was always very severe, the spring was late, cold and wet, and the summer was very hot and dry. This may have been entirely an accidental coincidence. It is certain that we have had many seasons precisely similar when we have had no yellow fever.

The class of persons who have had the fever in Providence has always been good. They have nearly all lived in comfortable houses, not crowded, surrounded with the necessities of life, and giving the usual attention of such persons to cleanliness and order in and about their houses. There could be no reason why they should have had the fever, except the fact that their residence was in an infected locality. I should judge that the majority of the victims were in the prime of life.

"CIRCUMSTANCES NEVER LIE."—Day before yesterday, in the Lewis mill case, at Hoboken, experts seem to have conclusively proven that a marriage certificate previously offered in evidence, dated the nuptials which it described three or four years before there existed the unmistakable stool plate from which the original blank of the certificate was taken. "It requires most steel dates, lot Arab proverb, of the truth of which this is only one example. An important suit in this State was decided by a discovery that the water-mark of the paper on which a deed was written was not brought into use until some years after the date of the instrument. And the English story is familiar of the wanton and superfluous perjurer who pretended to have been the witness of a will, and declared that the testator had put his seal over a sixpence. The seal being removed, the sixpence was found, but it was of more recent date than the will.—*New York World.*

Hon. Alexander H. Stephens has had two hemorrhages from the lungs, and is very ill. This is the first time he has been affected in this way.

Upon invitation of a number of prominent citizens, Hon. Carl Schurz will visit Cincinnati on September 27, and deliver an address upon pending Kansas issues.