THE YELLOW FEVER IN PHILADELPHIA
1793

BY MULFORD STOUGH
Dickinson College

In 1793 the slaves of Santo Domingo rose up against their French masters, a series of massacres occurred, and the French fled from the island. Seven hundred and fifty arrived in Philadelphia that summer. The people of Philadelphia raised over $16,000.00 for the refugees. But the men who gave so freely of their money and their goods little thought that in four weeks' time, their own city would present a scene of desolation and of misery more appalling than any upon which the French sufferers had looked. Long afterward, when the danger had passed away, it was the custom to declare that the yellow fever had come in with the refugees from Santo Domingo. One writer felt that the plentiful supply of fresh fruit had laid the common people open to infection. But nothing could rid many people of the belief that it came from a heap of putrid coffee and some piles of rotting hides that had long cumbered one of the wharfs.

At this time Philadelphia was the largest city in the United States with a population estimated between 42,000 and 45,000. It had experienced similar epidemics of yellow fever but of a much milder nature in 1699, 1741 and 1762. In the last week of August, 1793, the public mind had become so terrified that scores of families packed up their belongings and hastened into the country—anywhere—as long as they were out of range. For some weeks, almost every hour of the day carts, wagons, coaches and horses could be seen transporting families and their furnishings to the suburbs. Many houses were closed up entirely; others were maintained by servants left behind for the purpose. It was estimated that 17,000 people left the city during the epidemic. Business in the city was soon at a standstill and artisans were thrown out of work. Few people appeared on the streets and

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those who did went about with gloomy faces. Life-long friends evaded one another, even the families of the stricken fled—leaving the suffering to die in barbarous neglect. An air of hopelessness weighed down upon the city and death stalked through the highways and narrow alleys twenty-four hours of each day. No one was spared—rich men, poor men, scholars, laborers—all suffered. The wheels of the city government stopped and the fight with the yellow fever occupied the whole attention of the city authorities. Members of the legislature fled to their homes and the state government barely functioned. Often, the only sign of life on the streets would be hearses conducted by Negroes, mostly without followers. The coffee houses, public library and some churches closed. Out of four newspapers only one continued. Andrew Brown published every day the *Federal Gazette and Philadelphia Daily Advertiser*. From September 15th for about one month almost half the news items were related to the yellow fever. The city paid for the carting of the dead and the taking of the sick to the hospital. They also paid the grave diggers. Piles of coffins were kept near the State House for the poor. By the end of October the trenches made in the potter’s field caused this place to look like plowed-up land. In the morning the sexton of the burying ground of the Friends would find bodies thrown over the walls.

At this time Philadelphia was the seat of the federal government. Washington was ordered out of the city and hastened to Mount Vernon, and Knox took to flight. No one understood the causes of the disaster—not one but Alexander Graydon who thought it a clear visitation of God to purge the foul hearts of the Philadelphians because of their enthusiasm for French democracy. Meanwhile Jefferson, living in the country, thought it his duty to go to the city every day, and did. And then Graydon’s God made a blunder that must have made the angels weep—he struck Hamilton down with the blow that must have been intended for the Jacobin Jefferson. Living two miles out of the city, Hamilton was stricken violently; he attributed his cure to cold water and bark. Congress did not want to meet in the fever-laden city and November found the government established temporarily in Germantown.

There was no organized health department to follow up the findings of the College of Physicians which was doing all it could
to check the malady and calm the fears of the people. The first public health department in America was established by the legislature at its first session after the epidemic. Late in August the College of Physicians recommended avoiding draughts, night air, and intemperance, but recommended in moderation the use of wine, beer and cider. The people who stayed in the city were bidden to stay out of the sun, to be sober, not to get tired, to put a mark on infected houses, to bury the dead quietly, and above all to stop the endless ringing of bells.

The doctors had little faith in bonfires as purifiers of the air and much in the burning of gun powder. No sooner was the advice read than the citizens made haste to try this. The fires on all street corners and hearths were put out and bells ceased ringing. Hearses were no longer seen and the dead were carried away at midnight. Everyone who could buy or borrow a gun loaded and fired it from morning until night. A small cannon was hauled through the streets and constantly discharged. Governor Mifflin thought the flashing of powder would prevent the disease. The rattle of musketry produced a very depressing effect and the doctors ordered this stopped. The people began to burn niter. Indeed, no remedy which an old wife could suggest, or an apothecary's apprentice concoct but had its trial. One day tobacco was thought a good preventative. Men, women and children smoked cigars constantly and dealers in snuff could not supply the demand. On another, garlic was recommended, and in a few hours every particle in the city was bought up. Some chewed it, some put it in their shoes and others went about with huge bunches protruding from their pockets. Some drank tar water, some tried mud baths and others used myrrh and black pepper. Then it was discovered that camphor was a disinfectant and in a little while everyone had a big bag of it around his neck. But no medicine was so much a favorite as the "Vinegar of the Four Thieves." The druggists advertised widely this remedy. Such luxuries and preventatives however were far beyond the reach of laborers and mechanics. Deprived of their scanty wages by the stoppage of every kind of business, they fell a prey to that powerful desperation which poverty and terror can alone produce. Without nurses, without money, without medicine, they sought to forget their ills in riotous living and were swept away by the hundreds. Dr. Joseph Goss
prescribed great quantities of a decoction of turnips, endive and carrots boiled to a thick broth. From late August to October there was very little rain. The weather was hot and dusty. It was thought that the use of fire engines to sprinkle the streets would add to the general health. Quicklime in the necessary houses was believed to be beneficial.

The malady spread through the whole city with a rapidity to defy the medical skill of the day. The treatment to which the best doctors subjected their patients was such that a quack today would blush to practice. When a man detected the symptoms of the disorder—a quick pulse, a dull skin, a rough tongue, an inflamed eye, a dull pain in the head and loins—he would send in haste for the nearest physician. The moment the doctor came he would begin to let blood and the sufferer might count himself happy if, when the sun went down, he had not been bled five times. Toward the close of the fourth day, if the bleeding, the starving and the purging had not killed the patient, he would begin to show symptoms more alarming still. The whites of his eyes would turn yellow, his nose would run blood, his stomach would throw off a black vomit, his body would be of a yellowish-purple, and about the eighth day he would die. There were not many deaths the first two weeks in August, but when the third week came, there was scarcely a family in the city that did not have someone sick of the fever. The streets were black with funerals.

The leading physician in Philadelphia was Benjamin Rush; his office was by far the busiest one in the city. At first he tried a mild treatment, gentle purges, bark—with wine or brandy, blisters to the limbs, neck and head; and blankets dipped in warm vinegar. The patients failed to react. He consulted Dr. Stevens of St. Croix, then in the city, who recommended a cold bath and bark. On the next day Rush ordered buckets of cold water to be thrown frequently on his patients. Three out of four patients who received this treatment died. Rush decided on a treatment of ten grains of calomel plus ten grains of jalap. Sometimes he added five more grains of jalap. By September 3rd Rush was convinced that this was a successful treatment and he gave the prescription to the College of Physicians. At the same time he prescribed blood-letting, cool air, cool drinks, a light diet and applications of cold water to the body. By the second week of
September, Rush was treating scores of patients daily. Later he treated from 100 to 150 patients a day. On several occasions he fainted in the street and at night he had little rest as the sufferers were always at his door. His sister and two others were kept busy mixing the purging powders, but he was unable to meet the numerous demands made upon him for medicine. Being unable to see all of the patients who sent for him, he distributed copies of the prescription to the apothecaries with instructions as to treatments. Rush felt that he could reach the greatest number of sufferers through the newspapers, and the Federal Gazette on September 13th, published directions for the prevention and cure of the fever. One after another Rush ordered patients to be bled and purged. He would not listen to the criticism of fellow physicians, for he had decided that bleeding was a successful method of treatment. It is a marvel that anyone recovered who was bled as much as Rush recommended. Rush suffered an attack of the fever in September and attributed his recovery to several copious bleedings and two doses of mercurial medicine in several days. He also tells of bleeding a Dr. Griffith seventy-five ounces in one day, and of his recovery.

The fever affected persons of all ages. Rush calculated that persons between fourteen and forty were more susceptible to the disease than others, and that men were more susceptible than women. At first he thought that Negroes would be immune to the disease, but as the epidemic progressed many contracted the fever. The spread of the disease was especially favored by the atmospheric conditions in September and during the first two weeks of October. During this period there was little wind and mosquitoes were especially numerous, an important observation. It is interesting to note that there are no records of the yellow fever outside of Philadelphia, except those infected originally in the city.

The whole situation was aggravated by the fact that in some households entire families were ill. There was no one on hand to prepare food or administer medical care, for a great shortage of nurses existed and many on duty were untrained and incompetent. There was likewise a dearth of physicians, caused not only by the desertion of a few from the city, but also by the sickness and death of many who served heroically. Ten doctors died as a result of the disease. At one time, according to Rush, there
were only three physicians who were able to do business outside of their homes, and at this time there were not less than 6000 people ill with the fever.

A very bitter controversy arose between Rush and some of the other physicians regarding Rush's severe purgative treatment and copious blood-letting. Many former patients rushed to his defense and the *Federal Gazette* published a number of testimonials supporting his treatment. James Mease lost two quarts of blood and was violently purged twenty-five times in five days, and was happy to recommend Dr. Rush to all sufferers.

As the death rate mounted through September the various sea-ports along the Atlantic coast put a quarantine against all ships from Philadelphia. Albany kept a gunboat in the river to exclude Philadelphians. At this time Alexander Hamilton and his lady could not land. The health authorities of Baltimore, Trenton and New York posted handbills forbidding communication with Philadelphia. Some towns forbade stages to pass through coming from the infected area. Reading, Lancaster, York and other Pennsylvania towns tried to keep out all people from the yellow fever district. This hostile feeling gradually changed and we find some towns setting up hospitals for the refugees. A number of towns in New Jersey and Pennsylvania later opened their doors to the sufferers, while money and clothing were sent from many places. If a hungry fugitive begged for food at a farmer's door he was given a crust of bread on the end of a pitch fork and bidden to hurry on. Postmasters would handle no letters unless seized with tongs steeped in vinegar.

Often as many as five dead bodies would be in one house at a time, which no one could be induced to take to the nearest ditch and bury. The people rose, denounced the doctors and made threats of burning the houses unless the infected men were taken away. The Almshouse had been refused the infected. In this strait ten citizens volunteered as nurses. The Bank of North America advanced $1500.00 and the Guardians of the Poor began to seek for a building fit to be made a pesthouse. None could be found so well suited as the house of Mr. William Hamilton at Bush Hill. Mr. Hamilton was out of town and could not be located, but the Guardians of the Poor seized his house. The governor and the mayor approved their action. A little later
Stephen Girard took upon himself the duties of superintending the hospital at Bush Hill. He spent the next two months caring for the sick, and would often go into the infected houses, carry out the people and drive them to the hospital in his own carriage. He waited on many in the hospital, performing the most loathsome tasks. Girard in conducting the hospital was assisted by Peter Helm. When they took over Bush Hill the only nurses that could be had were prostitutes, fresh from the tippling houses and back alleys of the city, and they soon turned the house into a brothel. Lewd women rioted on the dainties sent to the sick, the patients died by the scores, and medicine was rarely administered. Food was scanty and ill prepared, the patients were never washed, and the filth in the hospital was beyond belief. Such was the public horror of this slaughter house that rather than go to it the afflicted hid the first symptoms of their malady as well as they could. When unable to do so, they locked themselves in their rooms, or rushed out of the city and perished under haystacks or in ditches.

Girard and Helm at once re-organized the whole establishment at Bush Hill; they enlarged its accommodations, replaced improper with trustworthy attendants, and secured competent doctors. The kitchen was supplied with proper food and competent cooks. Soon the public horror of the place ceased and people were glad to go there. Girard's private affairs suffered much while at the hospital, but he gladly gave of his time, strength and fortune.

The saddest of all sights was the little children orphaned by the fever, wandering starving and homeless through the streets. The authorities moved to pity rented a house and thirteen were at first cared for. Soon the Loganian Library was procured for a temporary shelter and other places were used. The people of Lancaster sent clothing for more than 200 of these orphaned children.

The epidemic reached its height in early October, the greatest weekly mortality list of 720 appeared for the second week of October. Finally, it was apparent that the epidemic was on the wane. After more than seven weeks of terror the fever seemed to be checked about the middle of October by the cold spell which occurred at that time. The number of cases declined steadily during the next two weeks. Through November and December there were only a few scattered cases. People began to return
to the city by early November. Governor Mifflin on November 14th proclaimed a special day of thanksgiving throughout the state set for December 12th.

There were about 25,000 people in Philadelphia during the epidemic. Between August 1st and November 4th there are records of 4044 burials. Of course not all of these people were victims of the yellow fever. However, there must have been a great number of deaths not recorded and also many deaths of people who had fled the city.

Medical science was to wait over one hundred years until the cause of the yellow fever was known. In 1901 in Cuba Dr. Walter Reed of the United States Army definitely proved that the stegomyia mosquito spreads the disease. This mosquito sucks the blood from an infected patient, the germs incubate in its stomach ten to fourteen days, and when it bites another person the deadly germ gets into the human bloodstream. Since this discovery, yellow fever is as little heard of now all over the world as it was prevalent before 1901.