

A crowded wharf at the Port of Brunswick. Courtesy Golden Isles Arts & Humanities Association

## The Yellow Jack in Brunswick, 1876

By Leslie Faulkenberry

Yellow fever, a tropical arbovirus for which there is no cure, was the scourge of warm climate areas worldwide in the 18th and 19th centuries. High fever, pain, kidney complications and the liver failure that caused the trademark jaundice for which the disease is named, killed millions of its victims. The exact modality of contagion was determined in the early 20th century.

Before 1876, yellow fever was somewhat episodic and relatively rare in Brunswick. The lack of crowding, and therefore lack of problems with sanitation and sewer systems, plus its abundant supply of clean water were seen as natural healthful advantages. The excellent harbor allowed ships to be brought in close to the town. Unfortunately, the proximity of the ships from tropical ports, the assumption that Brunswick was "fever proof" and a lack of understanding of the method of transmission of the disease created a perfect storm of epidemic proportions.

The summer of 1876 was brutally hot in coastal Georgia, with temperatures hovering in the high 90s to 100 degrees. Unprecedented wet weather accompanied the suffocating heat, with June 1876 recording 18.8 inches of rainfall. Although July and August followed with normal rainfall levels, the conditions for disaster were present: heat, humidity and standing water. In northeastern Glynn County and adjacent McIntosh County, attempts were underway to resurrect the dormant rice fields in plantations that had first been established in the late 18th century. With the city still struggling to free itself from the grip of Reconstruction, any and every new opportunity for earning a living was fair game–even those old farming ventures that had previously required scores of slaves with complicated engineering knowledge. A prevailing northeasterly wind pushed clouds of mosquitoes from the flooded rice fields to join what would have been an absolutely miserable overpopulation of the insects plaguing the boggy, brimming city ditches.

In May of that year, an outbreak of yellow fever hit Cuba, with a particularly high concentration of the disease in Havana. For several months, the shipping community suffered from manpower shortages as sailors fell ill, literally by the boatload. It was not uncommon for the entire crew of a ship to sicken almost at one time, leaving the ship unmanned. One ship, in particular, the Spanish bark *Marietta*, had suffered the loss of its entire crew to yellow fever, either from death or lingering effects of the illness. The crew was replaced with convalescents from the nearby hospital, all recent yellow fever victims. Therefore, when the *Marietta* left Havana bound for Brunswick, it was given a clean bill of health by inspectors. To their eyes, all the recently infected crew had recovered sufficiently to perform rigorous shipboard duties, so there was no sickness aboard.

When the *Marietta* reached Brunswick, there was no quarantine period required, and the ship was tied into berth at the municipal docks alongside several American and British ships. In Brunswick, the sailors generally did not leave their ships, taking all meals and sleeping on board their ships. The stifling heat compelled sailors to sleep on the deck as opposed to suffering in the unbearably hot bunks below. On the decks, they were fodder for ravenous mosquitoes freshly hatched from the overflowing ditches and puddles all over the sea-level town, as well as the swarms blown in from rice fields by a northeasterly wind. The unhealthy pests drank the blood of recently infected sailors whose symptoms had abated, and collected active viral cells from their epidermal tissues before they moved to the next meal. As a result, the previously healthy American and British sailors were inoculated with the disease.

In reports by a US Army medical officer in 1877, there was some speculation as to whether the use of a canopy over the sleeping sailors would have done any good to protect them from the night air. Night vapors, sometimes called miasmas, were continuing subjects of debate among physicians at the time as a source of contagion. No thought was given to the presence of mosquitoes; in those times, insects were regarded as omnipresent and annoying, but not unhealthy in themselves. They were there when sickness was not an issue, so they were seen as an unrelated constant.

At first, the spread of the disease was limited to sailors on the four ships berthed at the docks with the *Marietta*. The adjacent ship, the American schooner *Wm. H Boardman*, reported the first casualties. The outbreak of yellow fever traveled methodically along the waterfront, with new cases on every ship except the carrier ship, *Marietta*. Soon, townspeople began to report new victims among vendors who visited the ships, from butchers who supplied the vessels with meat, to a seamstress who came aboard to collect several suits that needed mending. The impact of the disease spread like a blast pattern from the waterfront into the interior of the town.

Many citizens fled, and those who were unfortunate enough to evacuate to Savannah were soon confronted not only by an outbreak of yellow fever that dwarfed the epidemic in Brunswick, but a scene of horrifying sewage backup, garbage overflows and water supply contamination. The entire city was overpowered by a stench so staggering that doctors blamed the foul odors for sickening the population. The recent rains had washed an overabundance of organic matter from recently cleared fields into the city, along with human sewage waste and debris from flooded garbage dumps. Since yellow fever convalescents also

manned ships originating from Cuban ports that docked in Savannah, the scenario played itself out in even larger numbers than the unexpected outbreak in Brunswick. Workers who attempted to clear clogged sewage lines and drains at the mouth of the harbors were exposed to the swarms of mosquitoes hatched in fetid puddles filled with rotting filth. Soon, the problems escalated, as anyone willing to work in such appalling conditions fell ill with yellow fever.

This was at a time when medical science was eagerly embracing the relatively new theory of microbial causes of disease and infection. French physician Louis Pasteur's work identifying the origins of numerous diseases was about 20 years old, and had survived dismissal by its critics as its validity was proven time after time. In the United States, the lack of a rigid, existing medical peer hierarchy opened the doors to an enthusiastic acceptance of the theory of contagion from bacterial sources. Public health officials, in reports written after the epidemic, cited the filthy conditions in Savannah as the possible source of yellow fever, but were baffled as to how the relatively spotless town of Brunswick, with its lack of urban decay, was also subject to the disease.

Searching for a substantive cause that related to the microbial theory, while it acknowledged the common factors of all coastal outbreaks from Brunswick to Darien to Savannah, health researchers settled on the ships themselves. They theorized various sources as the cause. Some doctors favored contamination of ballast materials quarried from the cliffs surrounding a port in Cuba where yellow fever was commonplace. Others blamed the color of the fabric used for the bedclothes and garments of the fever's victims. Dr. Ely M'Clellen, an Army surgeon who authored *A Study of the Yellow Fever Epidemic of 1876 As It Affected the State of Georgia*, concluded that some agent of contamination was vaporized in the foul air of the ships' holds. This mysterious contagion, which was released when cargo was taken on or unloaded, escaped and infected sailors and those beyond who breathed in its poison. He could not explain how the sailors on the *Marietta*, who were closest to the miasma, escaped re-infection, or how townspeople far from the smells and fumes of the docks died from the disease. He acknowledged the imperfect nature of the study, but admitted that the unpredictable nature of the epidemic was "too terrifying to face" without some sort of working theory.

It would be five years later, in 1881, when Cuban physician Carlos Finlay published his theory of mosquitoes as agents of transmission of the disease. Nearly twenty years after that, U.S. Army Surgeon Walter Reed completed research that upheld Finlay's discovery. Today, a vaccine is available to prevent infection before contact, but the dreaded "yellow jack" is still without a cure other than palliative care.

An accurate count of fatalities in Brunswick from yellow fever in 1876 is not recorded, but the impact was devastating. Many died, with some dying as they cared for the sick, and the confidence the town sorely needed as it struggled out of Reconstruction was badly shaken.

Another outbreak in 1893 hit the city cruelly as a national economic meltdown devastated the city's railroad interests and railroad tie export trade. A hurricane added to the misery of that year, with the attendant loss of property and life. Locally published newspaper and magazine reports of the epidemic were almost apologetic in tone, as the

city struggled between truthful accounts and a hope that the disease would not be held against it in attracting new opportunities for prosperity.

Many families, who attempted to escape after everyone realized that the 1893 outbreak was obviously more than an isolated incident, were detained and held in quarantine camps for months. These rudimentary arrangements were little more than squalid holding pens resembling prisoner of war camps. The U.S. Army policed the makeshift villages of tents and crude huts. Lurid descriptions and illustrations of their despair were printed in scores of Northern newspapers, much to the dismay of local politicians and businessmen.

The second home of Ocean Lodge No. 214, located on Jekyll Square. Courtesy Coastal Georgia Historical Society

In each outbreak, one organization stood out from the rest as the city suffered. The Masons of Brunswick, Ocean Lodge No. 214 F&AM, made it their group's mission to care for the sick, taking food and medicine to the families of the stricken, regardless of their own safety. From their temple atop City Hall in Hanover Square in 1876,



to their new meeting place on Jekyll Square in 1893, the Masons persevered in the stricken city. As their historian, Nathan Ballard, noted, no member of the Masons who stayed behind to help, held anyone who evacuated for the welfare of their families, in the slightest bit of contempt. It was, as he rightfully recalled, "a time to try men's souls."