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## Infected Rails: Yellow Fever and Southern Railroads

By R. SCOTT HUFFARD JR.

 ${
m T}$ he sleepy railroad junction at Callahan, Florida, was an unlikely location for a life-or-death dispute over the movement of a train. Yet on August 12, 1888, the Savannah, Florida and Western Railroad found one of its most essential rail lines under dire threat of destruction. The residents of Callahan delivered an ultimatum to the corporation, declaring that if the railroad continued to run trains through the town, the local people would tear up the track and shut down traffic for good. To the south of Callahan, residents of Jacksonville responded with similarly violent statements. If the blockade at Callahan were to continue, they threatened, then they would take up arms and force the way open. The railroad company itself was aghast. How could citizens block traffic on a right-of-way the railroad legally owned and controlled? The operation of the Savannah, Florida and Western line was so controversial because the summer of 1888 was not a normal one for southern railroads. With the appearance of vellow fever in Jacksonville in July, the region's railroads were potential vectors for the disease's spread. Instead of holding typical passengers, the disputed trains at Callahan carried refugees fleeing a raging epidemic of yellow fever in Jacksonville. Growing out of the possibility of infection from a horrible disease, the conflict was a matter of community survival for the localities involved. Callahan's railroad connections, acquired with the Waycross Short Line's completion in 1881, had gone from being a boon to threatening the town's very existence.<sup>2</sup>

Railroads are central to understanding the triumph of industrial capitalism in the nineteenth century. From the 1820s, they steadily

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<sup>&</sup>lt;sup>1</sup> "Callahan Means Business," Savannah (Ga.) *Morning News*, August 13, 1888, p. 8; "Fernandina's Quarantine," Jacksonville *Florida Times-Union*, August 19, 1888, p. 2; "There Is No Increase," Atlanta *Constitution*, August 12, 1888, p. 11; "A Trifle Uncomfortable," Jacksonville *Florida Times-Union*, August 27, 1888, p. 8.

<sup>&</sup>lt;sup>2</sup> Gregg M. Turner, A Journey into Florida Railroad History (Gainesville, Fla., 2008), 122.

marched across the globe, integrating far-flung, previously isolated regions into an emerging capitalist network of markets and altering all aspects of a society. Trading and market-based exchange certainly occurred before the railroad, but the railroad quickened the pace of the market and standardized the rhythms of everyday life. Railroads increased the circulation of commodities and passengers, uprooting what was once local and moving it into the larger network. Once a town connected, trains arrived and left at scheduled times, and the logic of capital, the unseen market forces of supply and demand, dictated movement on the network. However, the adjustment to this shift was anything but smooth. The consolidation of a fully integrated railroad network may have occurred in the 1840s and 1850s in the northeastern United States and Europe, but other areas did not experience the full impact of the railroad until later.<sup>3</sup>

It was in the years after Reconstruction—the so-called New South period—that almost all corners of the American South joined this network. A spurt of railroad construction in the 1850s laid the foundations, but incorporation was far from complete.<sup>4</sup> The Civil War destroyed countless miles of track, and the political uncertainty of Reconstruction served to hamper development on a large scale. With the end of Reconstruction and the recovery of the national economy, southern state governments pursued aggressive policies to woo outside capital, and railroad developers responded with a wave of investment. Between 1880 and 1890, railroad mileage in the South doubled, and by 1890 nine out of every ten southerners lived in a county with a railroad. These years not only saw the quick construction of a sprawling system of rail connections but also witnessed attempts to consolidate the haphazard southern system. Companies standardized gauges and streamlined operations, and corporate mergers left the bulk of the region's railroads in the hands of four major conglomerates by 1895. The disjointed southern rail network that the Confederacy took

<sup>&</sup>lt;sup>3</sup> Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century* (Berkeley, 1977). Though focused mainly on Europe, this work is a major inspiration for its charting of the uneasy acceptance of railroads and industrial capitalism.

<sup>&</sup>lt;sup>4</sup> A number of works discuss the impact of this antebellum boom: Lacy K. Ford Jr., Origins of Southern Radicalism: The South Carolina Upcountry, 1800–1860 (New York, 1988), 219–43; Allen W. Trelease, The North Carolina Railroad, 1849–1871, and the Modernization of North Carolina (Chapel Hill, 1991); Kenneth W. Noe, Southwest Virginia's Railroad: Modernization and the Sectional Crisis (Urbana, 1994); and Aaron W. Marrs, Railroads in Ho Old South: Pursuing Progress in a Slave Society (Baltimore, 2009). The proliferation of southern railroads in the 1850s should not obscure the importance of later developments in the region's railroad network in the 1880s and 1890s.

into war was a quaint antecedent of the fully connected system that existed by the turn of the twentieth century.<sup>5</sup>

Charting the nuanced reaction of southerners to this rapid development is a tricky proposition. New South booster literature unfailingly painted a rosy picture of the region's industrial development, even as the disjunction between booster promises and harsh economic realities became readily apparent in the 1890s. Historians have tended to sketch the advance of the railroad in simplistic tones. While some scholars have followed in these boosters' footsteps by emphasizing the joy brought by new railroads, others have seen railroad expansion as a more insidious leading edge of a "colonial" relationship with the North, an exploitative force stripping the South of its resources.<sup>6</sup> Historians have similarly traced how railroad development and railroad regulation became urgent political issues. By the 1890s, railroads had gone from being seen as saviors to being scapegoats, as political groups like the Populists, Readjusters, and antirailroad Democrats sought to regulate and control the region's railroad network. Even as historians have noted the double-edged sword of railroad development, few have questioned the benefits brought by the incorporation of the South into the national transportation network. The most recent synthesis of the period even places the railroad at the heart of the changes remaking the region.8

<sup>&</sup>lt;sup>5</sup> Numerical data on the boom of the 1880s and 1890s comes from John F. Stover, *The Railroads of the South*, 1865–1900 (Chapel Hill, 1955), 189–97; and Edward L. Ayers, *The Promise of the New South: Life After Reconstruction* (New York, 1992), 7–13.

<sup>&</sup>lt;sup>6</sup> Stover, Railroads of the South, charts the shift over the course of the nineteenth century from local to "carpetbagger" control of railroads. C. Vann Woodward, Origins of the New South, 1877–1913 (Baton Rouge, 1951), sets the terms of the so-called colonial economy argument and views the incursion of the railroad in largely negative terms. Paul M. Gaston, The New South Creed: A Study in Southern Mythmaking (New York, 1970), interrogates the New South movement but fails to question the central role of the railroad. Ayers, in Promise of the New South, provides a more nuanced view of modernization, though he is largely positive about the reception of the railroad in southern culture. The most recent works that address the complicated relationship of the New South to large corporations include Grace Elizabeth Hale, Making Whiteness: The Culture of Segregation in the South, 1890–1940 (New York, 1998), 121–97; Scott Reynolds Nelson, Iron Confederacies: Southern Railways, Klan Violence, and Reconstruction (Chapel Hill, 1999); and William G. Thomas, Lawyering for the Railroad: Business, Law, and Power in the New South (Baton Rouge, 1999).

<sup>&</sup>lt;sup>7</sup> Books that look at railroads as a political issue in southern history include James F. Doster, Railroads in Alabama Politics, 1875–1914 (Tuscaloosa, 1957); Mark W. Summers, Railroads, Reconstruction, and the Gospel of Prosperity: Aid under the Radical Republicans, 1865–1877 (Princeton, 1984); and Thomas, Lawyering for the Railroad. A similar strand is the substantial literature on the rise of southern Populism, best represented by Steven Hahn, The Roots of Southern Populism: Yeoman Farmers and the Transformation of the Georgia Upcountry, 1850–1890 (New York, 1983); and Charles Postel, The Populist Vision (New York, 2007).

<sup>&</sup>lt;sup>8</sup> Ayers, Promise of the New South.

But if the symbolic power of the railroad defines the New South period, it is necessary to come to a more holistic understanding of the changes wrought by the transformations in the railroad network. Railroads did indeed lead to economic development and to "progress" for certain southerners, but as railroads and the logic of capitalism dictated the rapid circulation of people and products in the South, they also facilitated the spread of deadly microbes. Beginning with the 1878 epidemic, railroads were inextricably linked with the spread of vellow fever. To southerners in epidemic years, the railroad constituted an incursion, an invasive force spreading disease and sowing misery. Every time vellow fever appeared in the South, southerners were forced to confront the consequences of their new rail connections and deal with the corporations that controlled them. Understanding that a large class of southerners attempted to literally halt the wheels of commerce every summer an epidemic appeared casts New South capitalism in a new light. In short, vellow fever epidemics exposed the perilous nature of the South's new connections. Yellow fever's reign of terror on southern railroads demonstrated that the incorporation of the South into a cohesive national railroad network caused problems that few people could have anticipated. And for scholars who map the global proliferation of railroads, vellow fever epidemics can serve as a reminder that railroad construction had wildly divergent results in different locales. The distinctiveness of the South led to unexpected and traumatic results for railroad development.9

Yellow fever is not a new topic for historians. Looking at either specific epidemics or broader windows of time, medical historians have skillfully traced how yellow fever shaped the direction and mission of federal and state public health infrastructure and how the disease led to efforts to improve sanitation in cities. More recently, scholars have used epidemics to look at broader issues, such as how the disease inspired sectional reconciliation after the Civil War and how control of epidemics inspired the American occupation of Cuba. Though historians have hinted at the disease's proclivity to

<sup>&</sup>lt;sup>9</sup> The literature on railroads is voluminous, but the most influential works for this study include Schivelbusch, *Railway Journey*; John R. Stilgoe, *Metropolitan Corridors: Railroads and the American Scene* (New Haven, 1983); William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991); and Michael Matthews, "Railway Culture and the Civilizing Mission in Mexico, 1876–1910" (Ph.D. dissertation, University of Arizona, 2008).

<sup>&</sup>lt;sup>10</sup> The long-established model for using an epidemic as a window into society is Charles E. Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866* (Chicago, 1962). Regarding yellow fever in the South, standard narrative accounts include John H. Ellis, *Yellow Fever and Public Health in the New South* (Lexington, Ky., 1992); and Khaled J. Bloom, *The* 

spread via rail, an explicit focus on railroads demonstrates that yellow fever's effects were even more far-reaching.

Yellow fever was a constant threat in the mid- to late nineteenth century, but this article focuses on two specific epidemics, in 1878 and 1888, and the experiences of two different states, Mississippi and Florida. The Mississippi Valley epidemic of 1878 showed clearly that yellow fever could travel on railroads, as southerners learned that yellow fever epidemics meant life or death for interior communities. Ten years later, the Florida epidemic of 1888 provided a test case for management of a network-wide crisis. The virulence of southerners' reactions to railroad movements in the summer and fall of 1888 demonstrated the lingering effect of the conflicts generated by the 1878 epidemic and highlighted the inability of federal and state regulation to keep commerce moving. Rather than ameliorating tensions, the connectivity fostered by the rapid expansion of southern railroads in the 1880s increased the potential for yellow fever to wreak havoc on the southern economy.

Excitable newspaper writers gave yellow fever the curiously affectionate moniker "yellow jack," but the disease's impact on nineteenth-century Americans was anything but kind. Today we know that yellow fever is transmitted primarily through the bite of *Aedes aegypti*, a species of mosquito. After a mosquito bites an infected person, it can then transmit the disease to anyone else it bites. A few days after contact with the virus, sufferers experience an acute fever, and in serious cases the infected person's skin turns yellow, blood seeps from every orifice, and he or she expels a black vomit, which gets its color from blood digested in the stomach. The invention of a yellow fever vaccine has given health officials a means to prevent infection, but once the disease sets in, there is still no known cure, though it is not uniformly fatal.<sup>11</sup>

Mississippi Valley's Great Yellow Fever Epidemic of 1878 (Baton Rouge, 1993). Deanne Stephens Nuwer, Plague Among the Magnolias: The 1878 Yellow Fever Epidemic in Mississippi (Tuscaloosa, 2009), provides detail on the disease's impact in Mississippi. Peter William Bruton, "The National Board of Health" (Ph.D. dissertation, University of Maryland, 1974); and Margaret Humphreys, Yellow Fever and the South (New Brunswick, N.J., 1992), look at how yellow fever shaped the directives of public health agencies. Humphreys makes an explicit connection between the disease and the southern economy, though her overall argument is more concerned with public health agencies. Edward J. Blum, Reforging the White Republic: Race, Religion, and American Nationalism, 1865–1898 (Baton Rouge, 2005), 146–73; and Mariola Espinosa, Epidemic Invasions: Yellow Fever and the Limits of Cuban Independence, 1878–1930 (Chicago, 2009), 1–9, have recently used yellow fever to look at other issues in southern history.

<sup>&</sup>lt;sup>11</sup> Centers for Disease Control and Prevention, "Yellow Fever," http://www.cdc.gov/YellowFever/.

A number of geographic and climatic factors dictated where yellow fever could take hold. Because the disease could not become epidemic in an area unless a critical mass of mosquitoes and humans was present, yellow fever was typically the scourge of crowded urban sites with ample damp areas where mosquitoes could breed. The plague-bearing mosquitoes could thrive only in warm, humid climates, so the bulk of the nation's epidemics were in the South. When the first frost of the year killed off the mosquito vectors, an epidemic would end. Yellow fever could last year-round only in the extreme southern parts of Florida, so the virus had to be imported from tropical areas to start an American epidemic. Therefore, most epidemics in the United States began in southern port cities that traded heavily with the tropics. <sup>12</sup>

The disease spread to new areas when either infected persons or mosquitoes traveled, and without fast transportation like the railroad, early epidemics rarely extended far from coastal urban centers or areas along rivers. Specifically, railroads carried the disease in one of two ways. Infected passengers fleeing an infected city could easily spread the disease to areas where *A. aegypti* already was present. An incubation period of a few days meant infected people could travel long distances without realizing the threat they posed. Alternatively, the trains themselves could harbor the mosquitoes, as dirty, damp freight cars provided excellent breeding grounds. Once the train stopped in a town, these mosquitoes could exit the train, bite new victims, and start a new epidemic.

Medical research has now shed light on yellow fever, but in 1878 uncertainty clouded most aspects of the disease. Yellow fever's horrific method of claiming victims was reason enough to cause panic, but the mysterious way it seemed to spread only added to the horror during epidemic years. By the 1870s the medical community knew that the disease was transportable, but the exact method of transmission was unknown. Some doctors blamed miasmas in the air; others targeted poisonous "fomites" that they thought could latch on to freight and baggage; and many believed that filthy areas of cities bred the disease. Coastal quarantine efforts suggest that officials knew ships could import the disease, but beyond that recognition, yellow fever seemed to move with no discernible pattern. In 1853 the disease struck New Orleans, moving through the city in ways that seemed random to city officials. At every step, the disease confounded

<sup>&</sup>lt;sup>12</sup> Ari Kelman, A River and Its City: The Nature of Landscape in New Orleans (2003; new ed., Berkeley, 2006), 87–93; Humphreys, Yellow Fever and the South, 17–25.

authorities.<sup>13</sup> The diversity of opinion on the method of transmission demonstrates that no one in 1878 really knew how yellow fever behaved.

The 1878 epidemic, however, provided a clear pattern of movement and illustrated a new method of transmission. The disease's progression along rail corridors confirmed suspicions that the infection could travel; it surprised southerners by exploiting a new form of transportation. By the end of 1878, if southerners still did not understand exactly how yellow fever spread, they did know that areas close to railroads suffered heavily in the epidemic. With medical professionals so divided on yellow fever's habits, one can only imagine the diversity of beliefs about the disease in local communities. The real significance of the 1878 epidemic for this article lies not in the specific theories of transmission but in the newfound recognition of the railroad as a dire threat to public health. More than just a key moment in the history of medical research, the epidemic was a turning point in southerners' relationship with the region's expanding railroad network, a turning point that would have lasting repercussions.

The impact of the 1878 epidemic was felt most heavily in New Orleans and Memphis, but for southerners, the most novel aspect of the epidemic was the devastation it wrought in Mississippi. Yellow fever in New Orleans was not a surprise, and Memphis had experience with quarantines because of its proximity to the river. The region's last major epidemic, in 1853, was most harmful to New Orleans, killing at least nine thousand city residents. From New Orleans, the disease spread into dozens of other towns in Louisiana, Mississippi, Alabama, and Texas. But most significant, yellow fever only attacked areas with water connections in 1853. Authorities that year focused their quarantine mainly on water transportation and on the refugees who fled on foot or by horse. Gulf Coast ports like Mobile and Galveston, along with river ports like Baton Rouge and Natchez, were hit hard, but interior areas of Mississippi were largely spared.<sup>14</sup>

By 1878 railroads had brought Mississippi into much closer contact with New Orleans. The line that epitomized these close connections with the Crescent City was Mississippi's most essential rail connection, the north-south route between New Orleans and Jackson, Tennessee,

<sup>&</sup>lt;sup>13</sup> Humphreys, *Yellow Fever and the South*, 17–44, provides the definitive discussion of the evolving research on the disease. For the quotation, see *ibid.*, 154. The distillation of the various theories of transmission comes from Nuwer, *Plague Among the Magnolias*, 6–18. Kelman, *River and Its City*, 88–89, covers the 1853 epidemic.

<sup>&</sup>lt;sup>14</sup> John Duffy, Sword of Pestilence: The New Orleans Yellow Fever Epidemic of 1853 (Baton Rouge, 1966), 115–28, 167.

which eventually became part of the Illinois Central system that stretched all the way to Chicago. Before the Civil War, developers cobbled together this line through the state by joining a few different corporations. In 1858 New Orleans boosters' efforts to construct a railroad bore fruit, and the final rail was driven into place in a line linking New Orleans and Jackson, Mississippi, North of Jackson this road linked up with the Mississippi Central, a separate corporate entity whose line ran north to Grand Junction, Tennessee. The Mississippi Central was finished on the eve of war, on January 31, 1860, meaning that for the first time a traveler could theoretically ride all the way from New Orleans to Maine by rail. The development of this rail corridor spurred the construction of other connecting lines. The assistance of the state of Mississippi and generous contributions from Memphis merchants led to construction of the Mississippi and Tennessee Railroad, which ran from Memphis to Grenada, Mississippi, and which was completed in July 1861. This line connected the important river trade with the railroad network. 15

This vital rail corridor reached completion just as the Civil War broke out, and along with the rest of Mississippi's railroads, it faced misfortune. The state's 863 miles of track became direct targets of Union raids, and the destruction essentially halted circulation on the railroad network. Although postbellum operators quickly restored some basic operations on these lines, it took time for the network to fully recover. The state lacked the capital necessary to repair the damage and build new connections, and even twelve years after the war, traffic on what had been the Mississippi Central line was so disjointed that it was labeled "unsatisfactory" by Henry V. Poor's Manual of the Railroads of the United States. 16 The state passed the Subsidy Act in 1871, appropriating four thousand dollars for every mile of track a company laid, but this measure failed to spur significant development in the depressed economy and uncertain political environment of the 1870s. <sup>17</sup> Outside investors were essential to any new railroad development, as exemplified by Henry S. McComb's efforts to reorganize the bankrupt Mississippi Central line. His efforts led in 1874 to the formation of the New Orleans, St. Louis and Chicago

<sup>&</sup>lt;sup>15</sup> Thomas D. Clark, A Pioneer Southern Railroad from New Orleans to Cairo (Chapel Hill, 1936), 76, 96–111.

<sup>&</sup>lt;sup>16</sup>Henry V. Poor, Manual of the Railroads of the United States for 1877–1878 . . . (New York, 1877), 812.

<sup>1877), 812.

&</sup>lt;sup>17</sup> Bradley G. Bond, *Political Culture in the Nineteenth-Century South: Mississippi, 1830–1900* (Baton Rouge, 1995), 196–203.

Railroad, a conglomerate created by a merger of the Mississippi Central and the New Orleans, Jackson and Great Northern roads; further reorganization in 1877 resulted in the line's rebirth as the Chicago, St. Louis and New Orleans Railroad. By 1878 the road's woes were largely solved, and traffic moved at levels that outstripped the line's capacity. <sup>18</sup> So in the twenty-five years between the 1853 and 1878 epidemics, railroad development created a network in Mississippi for the disease to attack. Mississippi had only three railroad lines in 1853, but 1,127 miles of track crossed the state by 1880. <sup>19</sup>

But just as Mississippi's railroads emerged fully from the war and Reconstruction, they were confronted with a deadly cargo of pathogens and infected refugees. In July 1878 New Orleans residents began falling ill with familiar symptoms, and officials soon realized vellow fever was back. The epidemic began like so many earlier ones, with a few scattered cases in New Orleans that were introduced by sea trade with infected ports in the Caribbean. Newspapers blamed tropical fruit dealers who had "not acted honestly" when they concealed that they had traveled to infected ports before arriving in New Orleans. 20 Investigation later revealed that the Emily B. Souder, a steamer from Havana, was indeed responsible for the disease's introduction.<sup>21</sup> Southerners suspected that yellow fever could travel on boats, so it was no surprise that a patchwork of quarantines popped up all across Mississippi and Louisiana when the New Orleans Board of Health announced the existence of yellow fever in the city. But these early quarantines were focused primarily on water routes of transportation.

Localities across the region mobilized to confront the threat of yellow fever, but the press savagely ridiculed the areas that attempted to quarantine their railroads. As evidenced by dismissive comments and complaints, plenty of people either did not take the threat seriously or doubted the possibility that yellow fever could move by rail. New Orleans merchants bitterly complained about quarantines that threatened to destroy their businesses, especially since many doubted the transmissibility of the disease. When Mobile declared a rail quarantine, shutting down the major rail route east of New Orleans, the New Orleans *Daily Picayune* accused Mobile residents of having "a peculiar dread of cars, engines and mail bags." The editor found it

<sup>&</sup>lt;sup>18</sup> Stover, Railroads of the South, 155-85.

<sup>&</sup>lt;sup>19</sup> Nuwer, Plague Among the Magnolias, 21.

<sup>&</sup>lt;sup>20</sup> "The Fever at New Orleans," Atlanta Constitution, July 28, 1878, p. 1.

<sup>&</sup>lt;sup>21</sup> Bruton, "National Board of Health," 66.

ludicrous that Mobile apparently thought yellow fever was a "malady which specifically attacks the rolling stock of railroads" and that as soon as a train reached an infected town, "every car and locomotive engine instantly becomes diseased to such a degree that it scatters the infection all along the railway." The Atlanta Constitution similarly mocked Mobile for seeing "Bronze John" lurking "in every railroad car." Another Daily Picayune editorial in early August attacked small towns for local quarantines by calling into question their power to control traffic on their railroad lines. "Small towns," the paper argued, "should keep away from railroads." The editorial claimed that such towns should not be able to "issue a quarantine proclamation, and stop trains running if they choose." For merchants and railroads, quarantines were useless and illegal hindrances to trade.

As further proof that southerners doubted yellow fever's mobility, many towns declined to issue quarantines. Some even took an entirely opposite approach. Holly Springs, a town in northern Mississippi along the Chicago, St. Louis and New Orleans Railroad, invited refugees from infected towns to come and wait out the epidemic. The town had never experienced an epidemic before, and residents believed the area was impervious to infection. As a resident later explained, the people "were so confident that their location and the purity of their atmosphere rendered them safe, that they did not establish quarantine."<sup>25</sup> Town officials mistakenly believed there was a "yellow fever zone" beyond which the disease would never spread.<sup>26</sup> They assumed that if an area had not had yellow fever in the past, it would be safe in 1878. For Holly Springs and other towns that welcomed refugees, the epidemic was an opportunity to prove their healthy climate and to profit from a stream of new visitors. Medical opinion supported this decision, as evidenced by a lengthy article from a Louisville doctor applauding Holly Springs for its decision to invite in refugees. Quarantine in areas as far north as Louisville, he contended, would be as rational as a yellow fever quarantine at the North Pole.<sup>27</sup> The surgeon general of the Marine

<sup>&</sup>lt;sup>22</sup> "Their Idea of It," New Orleans *Daily Picayune*, August 9, 1878, p. 4.

<sup>&</sup>lt;sup>23</sup> "The Mobile Blockade," Atlanta *Constitution*, August 1, 1878, p. 2. <sup>24</sup> Untitled editorial, New Orleans *Daily Picayune*, August 3, 1878, p. 4.

<sup>&</sup>lt;sup>25</sup> J. L. Power, The Epidemic of 1878, in Mississippi: Report of the Yellow Fever Relief Work . . . (Jackson, Miss., 1879), 136.

<sup>&</sup>lt;sup>26</sup> J. M. Keating, A History of the Yellow Fever: The Yellow Fever Epidemic of 1878, in Memphis, Tenn. . . . (Memphis, Tenn., 1879), 134.

<sup>&</sup>lt;sup>27</sup> T. L. Bell, "Quarantines and Yellow Fever," Louisville (Ky.) *Commercial*, August 18, 1878, p. 1.

Hospital Service even argued that land quarantines were "impracticable, if not useless." The railroad was simply not widely acknowledged as a potential means of transport for yellow fever.

Despite repeated claims of health and safety in the Magnolia State, it became apparent that something was different about this epidemic. Instead of remaining in New Orleans, yellow jack began to rear its head in entirely new locations. Observers looking for a culprit first fixated on the region's original highway of commerce, the Mississippi River. Steamboats plying the river between New Orleans and Memphis had spread yellow fever in 1853, and when the disease broke out in 1878 in river towns like Vicksburg and Memphis, the steamboats again seemed to be likely vectors of transmission. One boat in particular, the *John D. Porter*, took much of the blame. An early history of the epidemic labeled the boat "a floating charnel-house, carrying death and destruction to nearly all who had anything to do with her."<sup>29</sup>

Steamships like the John D. Porter were important vectors, but vellow fever's march up the river was not new. However, the appearance of the disease in Grenada was quite a shock. Located in the northern part of Mississippi, far removed from the Mississippi River, Grenada may have seemed an unlikely candidate for an epidemic, but it straddled two major rail arteries, the Chicago, St. Louis and New Orleans Railroad and the Mississippi and Tennessee, both of which were transporting potentially infected refugees and mosquitoes. Despite local officials' full knowledge of the New Orleans epidemic. Grenada's quarantine measures were not strict. The Mississippi State Board of Health's report after the epidemic noted that the town was in a "state of apathy" regarding quarantine rules. As in Holly Springs, many Grenada residents assumed yellow fever could not spread there, so officials established only a partial quarantine. Trains were allowed to stop but not discharge passengers, and only essential commodities could be unloaded. The state's official report later noted that these rules were simply not obeyed, and the quarantine was essentially nonexistent.<sup>30</sup> When citizens began to fall ill with yellow fever, newspapers first blamed the sickness on a disgusting sewer in the middle of town. A number of dead and decomposing animals were found in this

<sup>&</sup>lt;sup>28</sup> "Local Paragraphs," Memphis Daily Appeal, August 7, 1878, p. 4.

<sup>&</sup>lt;sup>29</sup> Keating, *History of the Yellow Fever*, 95–96.

<sup>&</sup>lt;sup>30</sup> Report of the Mississippi State Board of Health, for the Years 1878-'79 (Jackson, Miss., 1879), 42.

sewer under a stable, and many assumed that the foul vapors emanating from the area were the cause of the disease.<sup>31</sup> Always critical of quarantines, the New Orleans *Daily Picayune* wryly noted that "opening an old sewer caused yellow fever in Grenada. There is nothing like a strict quarantine."<sup>32</sup>

Further investigation revealed Grenada's railroads to be the real culprit. The first person afflicted in the Grenada outbreak was a Mrs. Fields, a woman who lived two blocks away from the railroad depot. A week before falling ill, she had visited the railroad depot to put her daughter on the train. At the same time, workers were unloading and disinfecting a few cars loaded with freight bound for Memphis. She reportedly had also purchased a dress from New Orleans and fell ill soon after wearing it. The Mississippi State Board of Health's report noted that rumors that she had purchased a dress from New Orleans were unconfirmed, but it was clear that connections to the outside world, specifically the rail link with New Orleans, had caused the infection. 33 From this one case, Grenada developed a full-fledged epidemic. The same rail network that infected Grenada abandoned it while the disease raged, as most trains neglected to stop in the town at all, Locomotives on the Chicago, St. Louis and New Orleans flew by Grenada on August 14, with their whistles blowing. 34 Trains treated the stricken town like a "veritable black hole," charging through the town at up to forty miles an hour with windows and doors sealed shut.<sup>35</sup> In the end, yellow fever wiped out the town's leadership, infected 1,468, and killed 367, a staggering toll in a town with a pre-epidemic population of about 2,500.36

With its first case confirmed on July 26, Grenada was yellow jack's first inland foothold outside New Orleans in 1878. Grenada may have served as the prime example of yellow fever's proclivity to ride the rails, but other Mississippi communities reached similar conclusions about the disease's transmissibility. Holly Springs, the town along the Chicago, St. Louis and New Orleans line that had invited refugees to

<sup>&</sup>lt;sup>31</sup> "Condition of Grenada," New Orleans *Times*, August 23, 1878, p. 8; "The Panic," *ibid.*, September 1, 1878, p. 3.

<sup>&</sup>lt;sup>32</sup> Untitled editorial, New Orleans *Daily Picayune*, August 22, 1878, p. 4.

<sup>&</sup>lt;sup>33</sup> Power, Epidemic of 1878, in Mississippi, 160–62; Report of the Mississippi State Board of Health, for the Years 1878–'79, pp. 42–44.

<sup>34</sup> Keating, History of the Yellow Fever, 378.

<sup>35 &</sup>quot;The Yellow Fever," Atlanta Constitution, August 30, 1878, p. 1.

<sup>&</sup>lt;sup>36</sup> J[ohn] P[arham] Dromgoole, *Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors of 1878*...(Louisville, 1879), 113–14; Nuwer, *Plague Among the Magnolias*, 75.

come and wait out the epidemic, became another flash point when the first yellow fever case broke out there on August 12. With Holly Springs only a short railway ride away from Grenada, yellow fever easily made the trip. Contrary to expectations that the disease would not flourish there, it struck with a vengeance, infecting 1,239 residents and killing 309 of them.<sup>37</sup> In the aftermath of the disaster at Holly Springs, it was safe to say the town would not invite refugees from future epidemics. A newspaper in Holly Springs came out "in favor of quarantining against all infected points, the whole coast of the United States and even the rat-holes of Holly Springs," if yellow fever ever again threatened.<sup>38</sup>

Greenville, Mississippi, also became a site of tragedy, and residents were quick to blame the railroad for their woes. Greenville was located along the Mississippi River in the rich agricultural Delta region. Spirits there were high when the town received its first railroad connection in May 1878. The Greenville, Columbus and Birmingham Railroad, a narrow-gauge road in the northern part of the state, completed laying track to the town, linking Greenville to the railroad network. Commentators enthusiastically predicted the arrival of twenty thousand bales of cotton on the new road in its first year of operation.<sup>39</sup> When the disease hit Greenville in early September, it struck with particular ferocity. Only about 33 of the town's 1,350 residents escaped infection with vellow fever, and 387 people, including the mayor, died. At one point, only five white residents were free of infection. As a report afterward ruefully commented, "Never did a town suffer so terribly."40 Whether the railroad or the river brought the disease cannot be determined, but residents turned on the railroad as a culprit. They blamed the disease's arrival on employees working for the new road. 41 Instead of bringing the anticipated boom in commerce, new connections had virtually destroyed the community of Greenville.

By late August, newspapers and other observers could notice patterns in the way yellow jack traveled. Besides the Mississippi River vector, three clearly traceable paths spread the disease deep into the

<sup>&</sup>lt;sup>37</sup> Nuwer, *Plague Among the Magnolias*, 41, 117.

<sup>&</sup>lt;sup>38</sup> Untitled article, Raymond (Miss.) *Hinds County Gazette*, November 20, 1878, p. 2.

<sup>&</sup>lt;sup>39</sup> "Mississippi—Onward!" *ibid.*, May 1, 1878, p. 1.

Dromgoole, Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors, 113.

<sup>&</sup>lt;sup>41</sup> John C. Willis, Forgotten Time: The Yazoo-Mississippi Delta after the Civil War (Charlottesville, 2000), 209–10n37.

southern interior along railroads. The Chicago, St. Louis and New Orleans Railroad carved a northerly swath of destruction through the middle of Mississippi, striking Holly Springs and Grenada, among other towns. Once the disease took root in Memphis, the Memphis and Charleston Railroad emerged as another vector. From Memphis the railroad spread vellow fever into small towns to the east in Tennessee. The situation became so dire there that the railroad company had to run special daily relief trains full of supplies. Correspondents traveling with these relief trains marveled at the devastation and noted that the "fever is very prevalent along this line." 42 Another observer recorded, "The cry of distress which we were forced to give utterance to six weeks ago, is now being echoed on every breeze that comes wafted to us from the small towns along the line of the Louisville, Memphis and Charleston, and Mississippi and Tennessee Railroads."43

Finally, the Vicksburg and Meridian Railroad brought the disease east from Vicksburg and the river to previously healthy towns in central Mississippi. Yellow jack arrived in Vicksburg from the illfated steamship John D. Porter, and from Vicksburg the disease could be traced along the railroad line. When the disease hit the small railroad town of Lake, 239 of the town's 250 residents fell ill, and 64 of them died. 44 Citizens at Meridian, another crucial railroad junction along the Vicksburg and Meridian, tried to stop the running of a medicine train to relieve Lake, but the superintendent of the road kept trains running anyway. Only the action of the state board of health got him to halt traffic. 45 These efforts to stop traffic were not enough to save Meridian, which developed an epidemic that infected 382 residents and killed 86 of them. 46 The first death in Meridian was that of Lewis Carter, a black employee charged with the task of bringing mail to trains from the post office.<sup>47</sup> In addition to infecting towns along the line, the disease took a heavy toll on the Vicksburg and Meridian Railroad itself: the road's year-end report noted that "the prevailing disease of the past

<sup>&</sup>lt;sup>42</sup> "The Fever Abroad," Memphis *Daily Appeal*, October 12, 1878, p. 1.

<sup>&</sup>lt;sup>43</sup> Keating, *History of the Yellow Fever*, 179–80.

<sup>44</sup> Ibid., 95–96; Dromgoole, Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors,

<sup>&</sup>lt;sup>45</sup> Vicksburg (Miss.) Daily Herald, September 15, 1878; "The Epidemic," New Orleans Times, September 10, 1878, p. 1.

46 Dromgoole, Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors, 119–20.

<sup>&</sup>lt;sup>47</sup> Power, Epidemic of 1878, in Mississippi, 179.

season did not fail to reap some of its harvest from the ranks of the Company's forces."<sup>48</sup>

The historical record does not allow historians to pin down the exact way yellow fever arrived in each town, but evidence does demonstrate how southern attitudes toward their new connections shifted over the summer of 1878. Yellow fever was clearly moving along rail lines, and reports from journeys along the rail corridors penetrating infected areas showed that southerners recognized this fact. On a journey from Winona, Mississippi, to New Orleans along the Chicago, St. Louis and New Orleans road, a correspondent noted the presence of heavily armed guards at every station. A farmer riding a wagon immediately turned his cart away as the train approached, and the train's arrival at a station crowded with African Americans caused a stampede away from the tracks in all directions.<sup>49</sup> A doctor traveling north through Grenada had a similar experience. As the train stopped to drop off nurses for Grenada, the nurses were told they had to jump from the train as fast as possible. The train could not pause any longer because of quarantine rules to the north. Apparently, other towns feared that even a short stay in Grenada would infect the locomotive.<sup>50</sup> Another correspondent on a train traveling through the infected areas around Memphis highlighted the fear of trains exhibited in the countryside. A darkly humorous prank by relief workers on a train making a brief stop in Oakland, Tennessee, gave local people "an impression . . . that they used black vomit on that train as a common diet." Area residents must have assumed that railroad passengers were purposefully breaking bottles of vomit in uninfected areas.<sup>51</sup> Reports of the rural fears of trains could be dismissed as the standard mocking of country rubes by city folk, but such humor also underscored the crucial fact that these rural southerners had begun to see the arrival of new trains as a serious threat.

In a reminder that the spread of yellow fever was never separable from the racial context of the South, the same railroad network that allowed for the dissemination of pathogens and refugees hampered the movement of African Americans. Yellow fever was not color-blind,

<sup>&</sup>lt;sup>48</sup> Eighteenth Annual Report of the President and Board of Managers, to the Stockholders of the Vicksburg and Meridian Railroad Company, for the Fiscal Year, Ending February 28, 1879 (Vicksburg, Miss., 1879), 17.

<sup>&</sup>lt;sup>49</sup> "An Unlucky Town," New Orleans *Daily Picayune*, September 26, 1878, p. 1. <sup>50</sup> "A Physician's Experience," New Orleans *Daily Picayune*, October 16, 1878, p. 8.

<sup>51 &</sup>quot;Nesbitt, Miss.," Memphis *Daily Appeal*, October 22, 1878, p. 1.

but it was less virulent among black populations. Blacks may have been scapegoats for other epidemics, but not for yellow fever. A contemporary assertion that "the negroes in this country are so largely exempt from" the disease was to some extent a true observation. 52 Whether due to African Americans' genetic advantage or to prior acclimation, yellow fever claimed a lower proportion of blacks than whites in every epidemic. In general, white southerners did not see blacks as vectors of transmission, due to their perceived immunity to the disease. 53

But while vellow fever may not have discriminated against blacks. the railroad network that let fearful southerners flee did. Impoverished blacks lacked the ability to leave when the epidemic struck, and at the height of the epidemic the centers of many affected towns were populated almost entirely by African Americans. Authorities in Memphis removed five thousand of the city's black residents to a refugee camp near a yellow fever hospital. A white man at the Memphis camp complained that the five thousand African Americans at the camp "won't budge," and he claimed they were taking advantage of the situation to draw free rations. This man's horrific solution was to cut off railroad connections to this camp and simply let the refugees starve.<sup>54</sup> A manager with the Howard Association, which provided relief to affected communities, complained in a letter to Mississippi's governor that Grenada's "colored people" were committing all sorts of "depredations." This pattern of white flight and black immobility was repeated all across the infected areas. The railroad network facilitated the spread of yellow fever, but the companies' denial of passage to blacks ensured that poor blacks would most heavily feel the economic and social disruptions caused by the disease.

Just as southerners became wary of the dangers of open commerce afforded by efficient railroad connections, they also improved the methods of tamping down epidemics in the wake of these new developments in transportation. The towns that did escape infection

<sup>&</sup>lt;sup>52</sup> Keating, *History of the Yellow Fever*, 13.

<sup>&</sup>lt;sup>53</sup> Bruton, "National Board of Health," 95–96, 103.

<sup>&</sup>lt;sup>54</sup> Dromgoole, *Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors*, 71–72 (quotation on 71). Blum, *Reforging the White Republic*, 168, also cites this passage as an example of a "genocidal" vision promoted by the epidemic.

<sup>&</sup>lt;sup>55</sup>D. W. Coan to John Marshall Stone, September 18, 1878, Box 1015, Correspondence and Papers, 1876–1882, Mississippi Governor (John Marshall Stone), State Government Records (Mississippi Department of Archives and History, Jackson).

in Mississippi exhibited one of two characteristics. Some were isolated from both the river and the major rail corridors. Despite the recent gains in railroad construction, Mississippi still contained many areas without railroads, and these towns successfully kept out infection. Yazoo City was both inland from the river and lacking railroad service and thus suffered only seventeen cases. Isolated from major avenues of commerce, yellow fever did not appear there until October 1. 56

The other towns that escaped had instituted rigid quarantines. For some small railroad towns in Mississippi, it was not hard to drop off the network. In Macon, officials later explained that they "were liable to contract the fever from travelers on railroad and by wagon roads. from tramps, from numerous refugees from the West, and from merchandise from infected districts." The town forbade stoppage of trains and shut its doors to all strange individuals, and it was thus able to escape infection. Oxford was similarly exposed thanks to trains passing through on the Chicago, St. Louis and New Orleans, but "strict quarantine regulations" kept yellow fever away. The most emphatic response to the state's questionnaire about quarantine practices came from Adams County, which hugged the Mississippi River and also contained a railroad. Officials in this county, which included the town of Natchez, concluded that "[v]igilance, activity, fearlessness and the double barrel shot-gun will give a community entire immunity from yellow fever."57 The Mississippi State Board of Health's official report argued that "the true cause of yellow fever is exotic, and that it only exists in this State by importation; that it is transportable in vessels, railroad cars, clothing, goods, etc., and that efficient quarantine regulations are competent to exclude it from the State."58 Dr. John P. Dromgoole, who chronicled the history of the epidemic, wrote. "This yellow-winged monster has taken a wide flight of desolation this vear, but I very much fear it will be exceeded in after years." In contrast to previous epidemics, he continued, "this year it has traveled by rail, and the fear is that rapid intercommunication hereafter may be a fruitful source of its reaching distant communities."59

<sup>&</sup>lt;sup>56</sup> Nuwer, Plague Among the Magnolias, 115, 118; Dromgoole, Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors, 125.

<sup>&</sup>lt;sup>57</sup> Report of the Mississippi State Board of Health, for the Years 1878–'79, pp. 91 (third quotation), 109 (first quotation), 111 (second quotation). <sup>58</sup> Ibid., 7.

<sup>&</sup>lt;sup>59</sup> Dromgoole, *Dr. Dromgoole's Yellow Fever Heroes, Honors, and Horrors*, 21 (first quotation), 22 (second quotation).

The 1878 epidemic thus opened up the fault lines of a conflict that raged every summer until the last U.S. epidemic of vellow fever in 1905. On one side stood merchants and railroad corporations worried about the deleterious effects of so-called shotgun quarantines on business. New Orleans merchants especially protested these local quarantines. If towns in the Mississippi Valley could shut down railroads at the slightest suspicion of vellow fever in the city, New Orleans would have no hope of trading goods in the summer. 60 On the other side of this debate were local communities wishing to assert their right to quarantine and control the movement of trains on their railroad lines. As a Memphis editorial argued, "Life is worth more than cities, trade and commerce": the Mississippi Valley must strictly quarantine against New Orleans every summer. 61 A paper in Jackson, Mississippi, threatened that if vellow fever again appeared in the region, "the people would rise in their might and if necessary tear up and destroy every railroad and burn every steamboat coming within our limits."62 With the health and even the very existence of a community at stake. towns saw no problem with shutting down the network's movement in epidemic years.

Medical historians who document the development of public health infrastructure in the years after the 1878 epidemic portray the era as one of a gradual "search for confidence," with public health organizations slowly instituting rational quarantine laws that not only kept the South healthy but also allowed for free commerce. In the ten years following the 1878 epidemic, doctors, health officials, and merchants waged a vigorous debate over how to properly control an epidemic. For merchants and businessmen, the goal was to prevent localized shotgun quarantines, in which individual communities cut off traffic. These quarantines curtailed commerce and were crippling to businessmen reliant on railroads to ship goods. As Margaret Humphrevs argues, vellow fever's threat to the economy meant commercial interests began to shape southern public health directives. In New Orleans and other southern cities, businessmen were prominent in efforts to establish sanitary organizations and to create more standardized boards of health. Across the South, states established boards of health

 <sup>60 &</sup>quot;The Quarantine Question," New Orleans Daily Picayune, November 22, 1878, p. 2.
 61 "Protect the Public Health," Memphis Daily Appeal, November 23, 1878.

<sup>62</sup> Untitled article from Jackson Mississippian quoted in Raymond Hinds County Gazette, December 25, 1878, p. 2.

with the goal of providing for rational and orderly quarantines in the event of an outbreak.<sup>63</sup>

The federal government also responded to the epidemic with the creation of the National Board of Health. The 1878 epidemic directly inspired the legislation creating this agency, and prevention of vellow fever was the focus of the overwhelming majority of its efforts. The activities of the National Board of Health spoke to the newfound fear that railroads were a vector for the disease's spread. In 1879 the board put out a series of rules and regulations for railroads that demonstrated that it realized railroads could spread the disease, but that board officials had no clue as to the exact method. As a general rule. railroad corporations were expected to keep roadbeds, tracks, and depots clean and "free from filth and impurities," an order that reflected the perceived connection between unsanitary conditions and vellow fever. The board also suggested that railroad cars be ventilated whenever possible and that upholstered seats, mattresses, pillows, curtains, and carpets in sleeping cars be "whipped or beaten" periodically to keep out dust. The regulations stated that any car leaving a town with vellow fever infections had to be cleaned and fumigated with sulfur.64

The board's rules also attempted to provide for orderly movement of trains in the case of an epidemic, laying out specific regulations for travel between towns that were defined as infected, which meant that they had any cases of fever, and towns that were defined as "dangerously infected," where cases occurred as a result of infection incubating within the locale. Any train leaving an infected city had to "be inspected by a competent medical man," who would provide the conductor with a certificate declaring that the train and its passengers were healthy. When a train ran through an infected or dangerously infected town, it would not be allowed to go slower than ten miles per hour. While sleeping cars or any upholstered cars were not allowed to leave dangerously infected locales, passenger cars could do so if they were fumigated. Passengers traveling on the network in infected areas had to carry certificates of health, which were distributed by the "competent medical man" who inspected passenger cars.65

65 *Ibid.*, 304 (second quotation), 306 (first quotation).

<sup>&</sup>lt;sup>63</sup> Humphreys, *Yellow Fever and the South*, 56–57, 77–126 (quotation from chap. 4 title). <sup>64</sup> *Annual Report of the National Board of Health*, *1879* (Washington, D.C., 1879), 5–26, 303–4 (quotations on 304).

The success of these measures can perhaps be seen in the fact that no other epidemic was as devastating as the one of 1878. Indeed, an outbreak in Memphis in 1879 fizzled out without spreading far outside the city limits, and the appearance of yellow fever in Pensacola, Florida, and Brownsville, Texas, in 1882 similarly did not lead to a wide outbreak. But it was unclear whether this change was due to the board's work or was just a case of good luck. The outbreaks that followed the 1878 epidemic may have simply been less virulent, or perhaps the wide-ranging spread of the 1878 epidemic had acclimated large portions of the southern population and decreased the number of potential targets for the disease. 66

But while the lethal impact of vellow fever had lessened, the shotgun quarantines and the widespread fear that railroads spread the disease were not eliminated by the new regulations. In other words, the fundamental conflict between local prerogatives and the movement of the railroad network did not disappear with the creation of boards of health. The death toll may have dropped in subsequent outbreaks, but the virulence with which southerners contested the free movement of goods and people only increased. Legislation ameliorated the worst of the quarantine woes, but southerners continued to doubt the railroad network's ability to both move goods and protect health. Similarly, southerners had little faith in the new public health institutions. Refocusing attention away from public health infrastructure and toward towns along railroads shows how the fear of vellow fever intensified as railroads spread and further connected the region. From the perspective of the railroad network, the time could hardly be labeled a period of increasing confidence.

Yellow jack's next major appearance, in 1888, demonstrated that quarantine problems were far from resolved and that the gap between southerners' interests and the circulation dictated by the logic of capital had only grown wider in the intervening years. When yellow fever appeared in Florida, a state whose geography was transformed dramatically by railroad construction in the 1880s, the disease threw questions about control of the rail network into stark relief. Richard McCormick, "a saloonkeeper and otherwise disreputable person," brought yellow fever to Jacksonville by riding a train from Tampa on July 28, 1888, touching off an epidemic that sent shockwaves of fear

<sup>&</sup>lt;sup>66</sup> Bruton, "National Board of Health," 217, 367.

throughout the South.<sup>67</sup> The disease found a fertile ground for expansion in Jacksonville, as both the city and the state had experienced dazzling growth in the previous decade. The rapid increase in population and economic activity might have been a boon for Jacksonville's pride. But for yellow fever, such growth meant more carriers to infect and more high-speed connections with other communities. In 1888 the virus exploited a new network. The presence of new railroad lines and the memory of the 1878 epidemic transformed what in prior years would have likely been a localized nuisance into a public health crisis of the highest degree for the whole nation.

Yellow jack had good reason to enjoy the sunny new surroundings. In 1888 Jacksonville was in the midst of a meteoric rise from a sleepy Atlantic port to Florida's most significant metropolis and a quintessential example of a New South city forged by the railroad. Postwar Jacksonville continued to rely on the lumber trade until the railroad boom of the 1880s remade the city into the premier market hub for Florida. A historian of Jacksonville labeled the early years of the railroad construction boom, from 1879 to 1881, "an epochal period in the history of Jacksonville." The period led to Jacksonville's becoming the unofficial "gateway to Florida." 68 In 1885 a tourist guide enthusiastically proclaimed, "as all roads were once said to lead to Rome, so here, at least, all roads lead to Jacksonville," Any tourist visiting Florida passed through Jacksonville, either staying in one of its many hotels or continuing south to one of the hotels lining the St. Johns River.<sup>69</sup>

Central to Jacksonville's status as the "gateway to Florida" were its new rail connections. Jacksonville's growth occurred in concert with the state's railroad network. Ten years after the end of the Civil War, Florida's railroad mileage was still the smallest in the entire South, and most development was limited to the northern third of the state. To spur construction, the state adopted a new policy in 1881 giving massive land grants to railroad developers. Under the auspices of the Internal Improvement Fund, the state sold land to railroad companies and capitalists at bargain prices to promote development.

<sup>&</sup>lt;sup>67</sup> Eirlys Barker, "A Sneaky, Cowardly Enemy': Tampa's Yellow Fever Epidemic of 1887-88," Tampa Bay History, 8 (Fall-Winter 1986), 4-22 (quotation on 17).

<sup>68</sup> T. Frederick Davis, History of Jacksonville, Florida and Vicinity, 1513 to 1924 (St. Augustine, Fla., 1925), 160.

<sup>69</sup> Reau Campbell, Winter Cities in Summer Lands: A Tour Through Florida and the Winter

Resorts of the South (Cincinnati, 1885), 8.

By 1884 the Democratic legislature had given 22,360,000 acres to railroad companies, despite the fact that only 14,831,739 of these acres were considered to be in the public domain. However dubious the method was, the results were exactly what the policy makers had intended. The 1880s were a record decade nationwide for railroad construction, and Florida experienced the dizzying boom with more intensity than any other state east of the Mississippi River. Between 1880 and 1890 the state's railroad mileage shot up from 528.60 to 2,470.89. The percentage increase in Florida railroad mileage was an incredible 367.4, while the national percentage increase was 86.3. Only Montana, Washington, and other areas in the wideopen West surpassed Florida's spectacular percentage increase in this decade.

When yellow fever arrived on Florida's new railroads in 1888, it thus came into a state and a region that had seen a compressed period of dramatic change. Rapid railroad construction had outpaced the creation of the government institutions needed to regulate commerce, as Florida lacked a state board of health. Instead, Florida passed a law allowing cities and, later, individual counties to create boards of health. 72 As in many other epidemics, the effects of the 1888 epidemic went beyond the death toll. In fact, the virulence of the 1888 yellow fever epidemic in Jacksonville was mild by historical standards. By the time November's frost killed the deadly pathogens, 427 people had died in Jacksonville. Moreover, the disease did not spread far outside the city. Isolated cases appeared in Alabama and Mississippi, but the disease became epidemic only in Gainesville, Macclenny, and a few other small communities in north Florida.<sup>73</sup> But far more important than yellow jack's actual appearance in 1888, the mounting fear of vellow fever's spread had disastrous repercussions for the railroads recently connected to Jacksonville. Alarm over the epidemic traveled quickly over Florida's new railroad network and did far more damage than the spread of the disease. Cases of

<sup>&</sup>lt;sup>70</sup> Edward C. Williamson, Florida Politics in the Gilded Age, 1877–1893 (Gainesville, Fla., 1976), 7–8, 30–31, 72–78, 89, 97; Stover, Railroads of the South, 94.

<sup>&</sup>lt;sup>71</sup> U.S. Census Office, Report on Transportation Business in the United States at the Eleventh Census: 1890. Part I—Transportation by Land (Washington, D.C., 1895), 4; Stover, Railroads of the South, 186–206.

Third Annual Report of the State Board of Health of Florida (Jacksonville, Fla., 1892), 27.
 Margaret C. Fairlie, "The Yellow Fever Epidemic of 1888 in Jacksonville," Florida Historical Quarterly, 19 (October 1940), 95–108. Fairlie's article presents a strictly narrative account of the epidemic, focusing on the events that occurred in the city.

yellow fever were confined to a few areas, but the quarantine panic gripped the entire South. For a few months, fear pulsed through the South's railroad network, provoking intense reactions in recently connected rural towns.

Mindful of the lessons from 1878, towns along lines emanating from Jacksonville established shotgun quarantines to block traffic once the disease's presence was officially confirmed. The railroad quickly became the focal point for quarantines throughout Florida. As soon as he learned of vellow fever's arrival in Jacksonville, a farmer in southern Florida remarked. "I fear that it will spread to the towns along the R.R."<sup>74</sup> Brief newspaper dispatches captured the wide geographical swath of the panic in Florida. The citizens of New Berlin, an unincorporated area outside Jacksonville, sent word that they had "temporarily incorporated it a town, established a Board of Health and declared a quarantine against Jacksonville."<sup>75</sup> "Farmers" with firearms greeted trains arriving in Hampton, and 250 men guarded the ancient city of St. Augustine, an expensive but effective quarantine paid for with \$30,000 from hotel and railroad developer Henry M. Flagler. 76 At the railroad junction of Palatka. 155 armed men turned back a grain shipment from Jacksonville.<sup>77</sup> In Gainesville, city authorities placed "a double cordon of guards around the city."78 The guard in Gainesville made escaping the state even more difficult, since the town contained the only route north that did not pass through Jacksonville. Farther to the south in Ocala. residents furiously interrogated each other as to their previous whereabouts, and a meeting of town citizens entertained a resolution that no train be allowed to go slower than twenty miles per hour through the city.<sup>79</sup>

Florida's railroads were confronted with what amounted to an insurrection along their lines. Every line had to deal with shotgun quarantines, but the most intense conflict over quarantines happened

<sup>&</sup>lt;sup>74</sup> Entry for August 12, 1888, Edwin Hansford Rennolds Diaries (Special and Area Studies Collections, Smathers Libraries, University of Florida, Gainesville).

<sup>&</sup>lt;sup>75</sup> Charles S. Adams, ed., Report of the Jacksonville Auxiliary Sanitary Association, of Jacksonville, Florida: Covering the Work of the Association during the Yellow Fever Epidemic, 1888 (Jacksonville, Fla., 1889), 197.

<sup>&</sup>lt;sup>76</sup> "Shot Guns at Hampton," Savannah *Morning News*, August 22, 1888, p. 1; "St. Augustine Isolated," *ibid.*, September 19, 1888, p. 1.

<sup>77 &</sup>quot;Jacksonville," Ocala (Fla.) Banner, August 24, 1888, p. 4.

<sup>78 &</sup>quot;Florida," Savannah Morning News, August 14, 1888, p. 6.

<sup>&</sup>lt;sup>79</sup> "An Impromptu Sanitary Citizens Meeting," Ocala *Banner*, August 17, 1888, p. 1.

just to the north of Jacksonville. As the disease became epidemic in the city, residents hoped to use railroads to flee to the north. However, shotgun quarantines in Waycross, Georgia, and Callahan, Florida, blocked the way. The blockade at Waycross was especially ironic, as just a few years earlier the completion of the Waycross Short Line linking Jacksonville to Georgia was hailed as a triumph for Florida's connectedness. When Henry B. Plant completed construction of this line in April 1881, it directly linked the largest metropolis in Florida to Georgia and to the rest of the nation's railroads. Travelers from Jacksonville could journey north on the Short Line to the Georgia town of Waycross, where they could connect to trains to other Georgia cities and to the rest of the country. Instead of requiring fourteen hours, the trip from Jacksonville to Savannah now took little more than six hours. More so than any other rail line, the Waycross Short Line epitomized Florida's new linkage to the rest of the South.80

At the northern terminus of a line emanating directly from a plagued city, the town of Wavcross also became the focal point of disputes over quarantines. Not only did Waycross have to take into account the fears of its citizens, but it had to account for all of Georgia's anxiety over yellow fever as well. The town was a junction that provided rail connections to Savannah, Brunswick, Atlanta, and Macon, among other Georgia cities. Atlanta may have welcomed refugees, but Savannah and Brunswick maintained strict quarantines against Florida passengers. When fever broke out in Jacksonville, shotgun-wielding citizens in Waycross took to the tracks to make sure no one left trains passing through the town. Under pressure both from the local citizenry and from other Georgia cities to the north, the Savannah. Florida and Western acted to shut off traffic from the afflicted city. The railroad company altered its schedule and stopped running all but one passenger train from Jacksonville to Waycross.<sup>81</sup> A newspaper correspondent called the situation on this one daily train "a pitiful sight." No one was allowed to leave the locked cars at Waycross, and the crowded cars were filled with hungry refugees crying out for food. 82 To further ensure that no evacuating Floridians made it to Waycross, the town council approved a resolution offering

<sup>&</sup>lt;sup>80</sup> Gregg M. Turner and Seth H. Bramson, *The Plant System of Railroads, Steamships and Hotels* (Laurys Station, Pa., 2004), 28–29.

<sup>81 &</sup>quot;Jacksonville Shut Out," Savannah *Morning News*, August 11, 1888, p. 8.

<sup>82 &</sup>quot;Precautions at Waycross," Jacksonville Florida Times-Union, August 14, 1888, p. 1.

a ten-dollar reward for anyone who arrested a vellow fever refugee in

A similar scene took shape farther down the Waycross Short Line in the small town of Callahan, Florida, Hardly anyone lived in Callahan, vet it was a vitally important junction in northeast Florida. as passengers from the Florida Central needed to disembark there to catch the train north to Waycross and Georgia. On August 12, Callahan's leaders informed the Savannah, Florida and Western that neither north- nor southbound trains would be allowed to stop at the town. According to their ultimatum, if any train stopped, the citizens would tear up the railroad track and cut off traffic for good. To show they meant business, citizens took to the tracks with guns to enforce the restriction. Fernandina, a port city in the same county, sent a detachment of fifty militiamen to "keep a strict watch of the S., F. & W. trains," When members of an Atlanta baseball team tried to make a connection at Callahan to journey north, a train instead dropped them off a few miles from the town. They tried to walk to the railroad iunction but were met by a "sheriff with two big pistols," who warned them against continuing their walk to the town. They wandered a few miles to another railroad track before a sympathetic conductor picked them up.84

For the Savannah, Florida and Western, the shotgun quarantines at Waycross and Callahan presented a particularly thorny problem. The railroad owned the lines, yet local citizens prevented the operation of the railroad and posed a threat to the company's bottom line. Before the yellow fever outbreak, the road's outlook for fall traffic was "never so good." The company was hopeful for a quick end to the epidemic so there would be no disruptions in shipping the lucrative orange crop out of Florida. 85 The quarantine also short-circuited the line's logistical operations when it locked up in Callahan a large number of the company's much-needed boxcars. The Savannah Morning News reported that the corporate superintendent was "indignant" over the interference with the company's trains. He argued, "[T]he company . . . owns the right of way and proposes to use it," and he planned to sell tickets to Callahan anyway, with the plan of

<sup>83 &</sup>quot;Waycross Quarantines," Savannah Morning News, August 25, 1888, p. 2.

<sup>&</sup>lt;sup>84</sup> "Callahan Means Business," Savannah Morning News, August 13, 1888, p. 8; "Fernandina's Quarantine," Jacksonville Florida Times-Union, August 19, 1888, p. 2 (first quotation); "There Is No Increase," Atlanta Constitution, August 12, 1888, p. 11 (second quotation).

85 "Savannah, Florida and Western Railway," Savannah Morning News, September 6, 1888, p. 4.

letting passengers off outside town if authorities interfered. 86 However. a few days later the paper reported that trains were still unable to stop in Callahan.87

As the noose of quarantine tightened around Jacksonville, the number of new infections began to rise. Yellow jack clearly was sticking around the city until the first frost. Under pressure from the Marine Hospital Service, the Savannah, Florida and Western closed the Waycross Short Line to passenger traffic altogether on August 26, 1888. Railroad lines to the west of Jacksonville were similarly tied un by local quarantines, so the closing of the Waycross Short Line totally isolated the city. Many citizens who had stayed in the city now wanted to leave, but quarantines kept them in Jacksonville. Angry editorials in Jacksonville's newspaper attacked the citizens of Waycross and the Savannah, Florida and Western Railroad, blaming both for trapping residents in the stricken city. Hotheaded citizens in Jacksonville even began to talk of using force to open traffic.<sup>88</sup> Jacksonville refugees in Atlanta lambasted the railroad in a meeting, with one speaker claiming that the company owned and ran the entire town of Waycross.<sup>89</sup> However, it was not just the railroad and railroad towns that kept Jacksonville isolated. John B. Hamilton, the surgeon general of the Marine Hospital Service, sent a statement to newspapers and officials unequivocally denying Jacksonville's requests for more freedom of movement, invoking the memory of a prior epidemic to make his argument. He wrote, "The dreadful ravages of vellow fever in the towns along the railroad lines leading out of New Orleans in 1878 . . . is too fresh in the memory to risk its repetition along the Atlantic seaboard."90

The dispute along the Waycross Short Line proved to be more than local government or the Savannah, Florida and Western could handle, as only the federal government could restore order. With the assistance of the federal government, Jacksonville's governing council established two refugee camps outside town near the Georgia border. At Camps Perry and Mitchell, citizens could wait for ten days and then head north unmolested with a clean bill of health. Conditions at these camps were far from ideal at first. The tents were old and did not keep out rain: the heat was unbearable; and white women and children were forced to eat at the same table with what the board of health

<sup>&</sup>lt;sup>86</sup> "Callahan's Shotgun Quarantine," Savannah Morning News, August 16, 1888, p. 8.

Callanan S Shotgun Quarantine, Savannan Morning News, August 10, 1000, p. 6. 88 "To Put Back One Train," Savannah Morning News, August 28, 1888, p. 8. 88 "A Trifle Uncomfortable," Jacksonville Florida Times-Union, August 27, 1888, p. 8. 89 "To Visit Governor Perry," Atlanta Constitution, August 29, 1888, pp. 1, 5.

<sup>&</sup>lt;sup>90</sup> Adams, ed., Report of the Jacksonville Auxiliary Sanitary Association, 212.

described as "low negroes" who made up half of the camp's residents. Federal funds made some improvements to the situation, ameliorating poor living conditions but establishing segregated living quarters for the black refugee population.<sup>91</sup>

In a sense, the segregation of the refugee camp mirrored developments in the region's railroad passenger cars. Just as the racial mixing in the camp was resolved with racial separation, conflicts over southern rail accommodations in this period invariably involved segregated solutions to rationalize the chaos and racial intermingling of rail travel. For white southerners, yellow jack was not the only dangerous passenger on the newly constructed railroad network. African American travelers, white southerners thought, similarly had to be controlled and segregated by a wave of legislation in the late 1880s and 1890s. Indeed, a bill segregating Florida's railroads had just passed in 1887, and seven other states between 1888 and 1891 passed laws that segregated railroads.

The movement of southerners was likewise structured by race in Jacksonville during the epidemic. Whites with money were able to secure passage on refugee trains and wait out the epidemic in areas to the north, but this option was not available for working-class blacks. A census taken in Jacksonville after most of the refugees had left in September found nearly 14,000 people in the city, and more than 9,800 of them were black. With transportation links sundered and the bulk of the city's business owners on the run, thousands of people were thrown out of work. The city leaders created a Committee on Sanitation to provide jobs for the unemployed and to clean up dirty areas of the city. However, on November 18 the city abruptly announced that it was cutting the number of jobs in half due to a money shortage. Only a massive mobilization under the auspices of the Knights of Labor convinced city officials to keep providing work for the working-class blacks stranded in the city. 95

<sup>&</sup>lt;sup>91</sup> *Ibid.*, 213–15 (quotation on 214).

<sup>&</sup>lt;sup>92</sup> Hale, *Making Whiteness*, 126–36, notes how the railroad introduced uncertainty into the strict culture of segregation.

<sup>&</sup>lt;sup>93</sup> William Cohen, At Freedom's Edge: Black Mobility and the Southern White Quest for Racial Control, 1861–1915 (Baton Rouge, 1991), 217–20, provides a helpful chart showing when various southern states passed segregation laws.

<sup>&</sup>lt;sup>94</sup> Adams, ed., Report of the Jacksonville Auxiliary Sanitary Association, 184.

<sup>95</sup> Ibid., 129-32; Paul Ortiz, Emancipation Betrayed: The Hidden History of Black Organizing and White Violence in Florida from Reconstruction to the Bloody Election of 1920 (Berkeley, 2005), 50-52; Melton Alonza McLaurin, The Knights of Labor in the South (Westport, Conn., 1978), 92-97.

The power of the federal government restored order to the chaos on the Wavcross Short Line, but most of the quarantine disputes in 1888 remained unresolved. The movement of goods through Florida—an activity for which citizens previously lauded the railroads—was severely restricted by local quarantines. South of Palatka, Edwin Smith ran a country store like the ones that proliferated across the South as railroads arrived. Smith attempted to order fertilizer from the Armour Company in Chicago but learned that it was not taking orders due to the closing of its Jacksonville warehouse. 96 He also tried Wilkinson and Co. Bone Fertilizers in New York only to learn that it could not ship until quarantine was lifted from Fernandina, a port north of Jacksonville. 97 The orange growers of his store's region had to farm without fertilizer in 1888, and many other Floridians went without essential products. Savannah wholesale traders, who supplied many Florida merchants, reported in August that country merchants were ordering cautiously due to the "unsettled condition." However, Savannah eventually came to benefit from the epidemic, as south Florida merchants began ordering goods from there rather than from Jacksonville. Instead of traveling via the Waycross Short Line, goods from Savannah traveled around Jacksonville, moving farther to the west before heading south into Florida via Gainesville.99

To solve the problem and get commerce running again in Florida, Jacksonville officials organized a conference of county health officials and representatives from a number of Florida railroad companies. On August 28, officials from ten counties and three railroad companies gathered at Orange Park to grapple with the impact of these haphazard quarantines. The debate over local quarantines, along with the subsequent failure to solve their riddle, illustrated just how hard it was to overcome fears of yellow jack. The proceedings also illustrated how railroad connections carried ominous, as well as profitable, cargoes to Floridians. 100

Jacksonville officials started the conference with a plea to open commerce by letting some types of freight move freely. A Duval County representative then claimed that the quarantine "had no

<sup>&</sup>lt;sup>96</sup> Armour Company to Edwin Smith, October 10, 1888, Edwin Smith Papers, 1884–1896, MS 199 (Special and Area Studies Collections, Smathers Libraries). For more on southern country stores, see Ayers, Promise of the New South, chap. 4.

Wilkinson and Co. Bone Fertilizers to Edwin Smith, October 8, 1888, Smith Papers.

<sup>98 &</sup>quot;The Effect on Trade," Savannah *Morning News*, August 15, 1888, p. 8.
99 "Gainesville Shut Out," Savannah *Morning News*, September 18, 1888, p. 8.

<sup>100</sup> Adams, ed., Report of the Jacksonville Auxiliary Sanitary Association, 200.

precedent anywhere else in the history of vellow fever epidemics." When it "became impossible to send silver money by express to Tampa from Jacksonville, or iron pipe and machinery, to enable a saw-mill to continue operations, because of quarantine restrictions, it was time to inquire whether this quarantine is more rigid than the public safety demands." Lamenting the "scarcity of even the necessaries of life" in south Florida, the speaker sought a way to keep traffic open. 101 The president of the Marion County Board of Health argued for the maintenance of quarantines. He stated that he would not permit any goods from Jacksonville in the county because of pressure from "panic-stricken" residents. Angry over the unauthorized shipment of two cars of freight into his county from Jacksonville. he stated that "corporations had no soul," and that he "could not trust the railroad companies." He had no worry about shortages of provisions in Marion County, as he declared it to be "the Egypt of Florida," with overflowing granaries that would be able to supply all of southem Florida. 102

The difficulties of creating a fair quarantine policy that served the interests of both the people and the railroads were best illustrated at the conference by the presence of James E. Ingraham, one of Henry Plant's top lieutenants in Florida. At the Orange Park conference Ingraham represented both the Osceola County Board of Health and the South Florida Railroad. As a railroad official, he was conscious of the need to make a profit for his employer. He declared that he "was keeping trains running now at heavy loss to his company," and he argued that freight traffic needed to be opened before the maturation of the orange crop. With men like Ingraham in charge of quarantine policy in some areas, one can see the basis for Marion County's mistrust of the proceedings. How could Floridians be certain that a railroad official would put the health of the public above the health of the corporation?

In the end, the representatives at the conference reached a tentative agreement over the movement of goods. Conference attendees adopted a resolution "[t]hat rice, grits, flour, sugar, coffee, bacon, lard, butter, potatoes, corn and oats in barrels; hardware and machinery, unpacked tobacco in any form, and cigars" could pass through their counties without quarantine. Merchants would be able to order supplies from

<sup>&</sup>lt;sup>101</sup> *Ibid.*, 203–4 (first quotation on 203; second and third quotations on 204).

<sup>102</sup> *Ibid.*, 201.

<sup>&</sup>lt;sup>103</sup> *Ibid.*, 202–3 (quotation on 203).

Jacksonville, and the problem of the local quarantine seemed to be solved. Jubilation over this settlement was short-lived, however, as most counties quickly sent word that they would still not accept freight from Jacksonville. The head of the Marion County Board of Health explained that the board "admits nothing, and wants nothing except artificial stone and machinery, by special permit," and the Alachua County board decided it would "not consent to admit freights from infected points. whether fumigated or not." The only message confirming that a board of health would follow the agreement came from Osceola County, which promised to admit goods. The chairman wryly noted, "Our Board is not composed of crawfish."104

Until December's frost allowed for the lifting of all vellow fever quarantines, it was anyone's guess whether goods shipped into or out of Florida would reach their destination. Many quarantine officials simply destroyed shipments of goods. An entire carload of fresh fish on its way to Albany, Georgia, from Cedar Key was dumped into a river near Gainesville. 105 The frantic rayings of a northerner writing Edwin Smith captured the fear of starvation caused by the quarantines. A mother sent the letter to her daughter who had recently immigrated to Florida. The mother had not heard from her in a while, probably because of the disrupted mails. She had heard rumors that those in Florida were "suffering for food," and she wrote that it was the "hardest thing to bear" that her "own dear Mary should lack bread." A letter from Smith assuring her all was well assuaged the woman's fears. 106 Despite widespread shortages, there were no reports of starvation from quarantines. Still, the shortages surely caused Floridians to doubt the reliability of their new railroad lines. In summer and fall of 1888, their new connections brought only fear, rather than the commodities they usually carried.

But the 1888 epidemic was more than just a Florida problem. Yellow jack had wreaked havoc on the economies of Florida and Georgia, but its final and perhaps most devastating economic blow came in September when isolated cases of yellow fever were found in Decatur, Alabama, and Jackson, Mississippi. These cases did not develop into a full-fledged epidemic, yet a few cases were all it took for a panic to start. Quarantines entirely halted railroad traffic in the

<sup>&</sup>lt;sup>104</sup> Ibid., 205-7 (first quotation on 205; second quotation on 206; third and fourth quotations on 207).

105 "Refugees Passing Albany," Savannah Morning News, September 19, 1888, p. 1.

105 "Refugees Passing Albany," Savannah Morning News, September 19, 1888, p. 1.

Mississippi Valley for about a week in September, Mindful of the horror of 1878, some Mississippians even followed through on their threat to destroy railroads. A newspaper correspondent reported that the entire state was "one vast howling mob without any semblance of humanity" and noted the destruction of a bridge outside Jackson. 107 All across the South, people looked back to 1878 fearfully. M. F. Surghnor, a woman in Monroe, Louisiana, recorded her fears in her diary as the disease threatened to move west from Jackson, Mississippi, through which "travelers are constantly coming to Monroe." As she recalled, the disease previously "came to all the Railroad Stations," and she feared for her family's safety in 1888. 108 At the height of the panic, the Atlanta Constitution wryly captured the magnitude of the scare: "Northern tourists on southern roads who see squads of men armed with shotguns moving about in the bushes need not fear that another revolution is about to break out—it is nothing but a crowd of volunteer quarantiners hunting for bilious looking subjects."109

Mississippi had a more highly developed public health infrastructure than Florida did, but the State Board of Health's edicts were largely irrelevant to people on the ground in Mississippi. After a case was found along the line of the Natchez, Jackson and Columbus Railroad, the board gave the company permission to continue running trains, but people in Natchez "rose up en masse and declared they would tear up the track if the running of trains could not be otherwise prevented." Faced with this threat to its property, the railroad was forced to halt traffic. 110 In Meridian the local paper attacked the laxity of the city's quarantine and accused officials of "knuckling to the railroads, to whom, of course, a strict quarantine is productive of much trouble and inconvenience." A Grenada paper blamed excavation work along railroad lines in Jackson for the handful of cases there. 112 Other towns had to balance the need to retain provisions with their desire for safety. As towns began to relax quarantines as they ran low on supplies, Winona and Durant, two Mississippi towns along the

<sup>&</sup>lt;sup>107</sup> "Jackson," New Orleans *Daily Picayune*, September 28, 1888, p. 1 (quotation); "Decatur," *ibid*.

<sup>&</sup>lt;sup>108</sup> Entry for September 23, 1888, M. F. Surghnor Diary, Mss. 647 (Louisiana and Lower Mississippi Valley Collections, Hill Memorial Library, Louisiana State University, Baton Rouge).
<sup>109</sup> "Northern Tourists," Atlanta Constitution, September 17, 1888, p. 4.

<sup>&</sup>quot;Will Tear Up Tracks," Louisville *Commercial*, September 25, 1888, p. 1.

<sup>&</sup>lt;sup>111</sup> "Sustain the Officers and Maintain the Quarantine," Jackson *New Mississippian*, September 5, 1888, p. 3.

<sup>112 &</sup>quot;The Fever in Jackson, Miss.," Grenada (Miss.) Sentinel, October 13, 1888.

Illinois Central, kept up the blockade, as "[t]heir supply of provisions seems to have been larger in proportion to population than other towns possessed." At the high point of the panic in September, local quarantines held sway at over 150 points along the Illinois Central. A manager of the road hoped "wiser councils will prevail, and that system and method will take the place of the present practices." But in September and October 1888 the "system and method" developed by public health agencies and railroad corporations had fallen to pieces. The increased rationalization and standardization of southern railroads increased the potential for chaos when southerners feared infection.

For the rest of the South, the blame for the mess in 1888 fell squarely on the shoulders of Florida. In the years after the 1878 epidemic, all the other southern states organized boards of health to coordinate the response to epidemics, and most were confident that another epidemic could be prevented. Florida, however, lacked a board of health, and many observers saw the state "as a weak link in an otherwise strong chain." But the problems in 1888 were more than just a failure of state and federal health authorities. New public health agencies could not prevent 150 separate towns along the Illinois Central from setting up blockades or stop widespread vigilante attacks on bridges and rail lines. The link between the railroad and disease, seared into southerners' minds by the 1878 epidemic, overcame any efforts by officials to eliminate shotgun quarantines. Southerners fundamentally did not trust corporations to safely move goods and passengers in epidemic years.

Even beyond the 1888 epidemic, attacks on trains and railroad property continued to persist whenever yellow fever made an appearance at a point on the southern railroad network. After yellow fever appeared in southern Mississippi in September 1897, "lawless parties" destroyed a bridge on the Alabama and Vicksburg line two miles west of Jackson, and the local press reported other threats to tear up tracks and throw switches. The Jackson *Daily Bulletin* condemned this act yet agreed with the sentiment behind the destruction, accusing the road of "persistent and defiant disregard of quarantine regulations." All the regulation in the world could not do away with the

<sup>&</sup>lt;sup>113</sup> "Railroads Resuming," Louisville *Commercial*, September 29, 1888, p. 1.

The Panic Widespread," Grenada Sentinel, September 29, 1888, p. 1.

Humphreys, Yellow Fever and the South, 114.

<sup>116 &</sup>quot;Mayor's Proclamation," Jackson (Miss.) Daily Bulletin, September 18, 1897, p. 1.

shotgun quarantine, as the only way to kill the phenomenon was the extinction of yellow fever itself. As historian Mariola Espinosa argues, suppression of the yellow fever threat was a motivating factor in the occupation of Cuba during and after the Spanish-American War. The threat of yellow fever faded after Walter Reed's confirmation of the mosquito vector at the turn of the twentieth century and the widespread implementation of mosquito control efforts in southern cities. The region's last epidemic, in 1905, was managed by a concerted campaign to halt mosquito breeding, and only after this success did the fear of yellow fever's spread via railroads fade. 118

The link between railroads and vellow fever, established in 1878 and clearly visible in the fearful reaction to Jacksonville's epidemic in 1888, is significant, as the growth of the railroad network defined the decade for the South. For the region, rail mileage doubled between 1880 and 1890, and the railroad turned from an abstraction, a dream in the mind of boosters, to a reality that often fell far short of expectations. Distant corporations increasingly came to control these railroad lines, and the unseen forces of the market directed the flow of commodities and passengers. While almost every community wanted a railroad, residents struggled to control what moved on the lines that ran through their towns. As much as communities wished their local railroads would serve them, railroads were in the end beholden to the larger dictates of the network. The conflicts over the movement of potentially infected trains in places like Waycross, Callahan, Jackson, and Meridian made these forces tangible. The circulation of trains on the network and the logic of capital directly threatened lives. When a steamboat captain hid yellow fever cases among his crew, when a New Orleans merchant concealed the presence of the disease in his city, or when railroad companies ran a train full of potentially infected freight and passengers against the wishes of towns along the line, the dangerous downside of this market logic revealed itself.

Refocusing attention on the railroad in the years after Reconstruction provides new insight into the traumas that shaped the region, and never is this benefit clearer than when analyzing yellow fever. Rather than being a source of joy or a cause for celebration, the new railroads lauded by boosters and the southern press were often sources of terror. The distinctive environment of the South led to results for railroad

<sup>117</sup> Espinosa, Epidemic Invasions.

Humphreys, Yellow Fever and the South, chap. 5.

development that few had expected. Coming at a crucial time when capitalist social relations spread not only to the southern countryside but also to other far-flung corners of the globe, the resistance and uncertainty exposed in the American South's yellow fever epidemics underscored the often-ignored perils of connectivity and the traumas that frequently accompanied the spread of market relations. Yellow fever epidemics remind us that the road to an orderly, rationalized railroad network in the South was anything but smooth. The acceptance of the Iron Horse in the South was not as simple as New South boosters would have had us believe.

<sup>&</sup>lt;sup>119</sup> Sven Beckert, "Emancipation and Empire: Reconstructing the Worldwide Web of Cotton Production in the Age of the American Civil War," *American Historical Review*, 109 (December 2004), 1405–38, reminds us that the South was but one region that was incorporated into capitalism's global web of markets in the years after the Civil War.