

Carolina Conductor



Volume 12 Number 02

Monthly Newsletter of the Carolina Railroad Heritage Association, Inc.

© February 2025

Preserving the Past Active in the Present Planning for the Future

Web Site: hubcityrrmuseum.org

Facebook: Carolina Railroad Heritage Association & Hub City RR Museum

Hub City Railroad Museum and SOU Rwy Caboose #X3115:

Spartanburg Amtrak Station

298 Magnolia Street

Spartanburg, SC 29301-2330

Wednesday 10-2 & Saturday 10-2

Meeting Site:

Fountain Inn Presbyterian Church

307 North Main Street

Fountain Inn, SC 29644

Third Friday of the Month at 7:00 p.m.

Officers:

President: Raymond "Bo" Brown -

president@hubcityrrmuseum.org

Vice President: Bob Klempner -

vice.president@hubcityrrmuseum.org

Secretary: Pat O'Shields -

secretary@hubcityrrmuseum.org

Treasurer: Marv Havens -

treasurer@hubcityrrmuseum.org

Directors:

Steve Baker -

bod@hubcityrrmuseum.org

Bruce Gathman -

newsletter@hubcityrrmuseum.org

David Winans -

museum.info@hubcityrrmuseum.org

Mailing Address:

Carolina RR Heritage Association

Suite #129 2123 Old Spartanburg Road

Greer, South Carolina 29650-2704

Newsletter Editor:

Bruce Gathman -

newsletter@hubcityrrmuseum.org

Articles can be submitted anytime.

History of U.S. RR's

This will be a multi part article covering generally the history of railroads in the United States. Study it carefully so you will be as smart as Mac. ED.

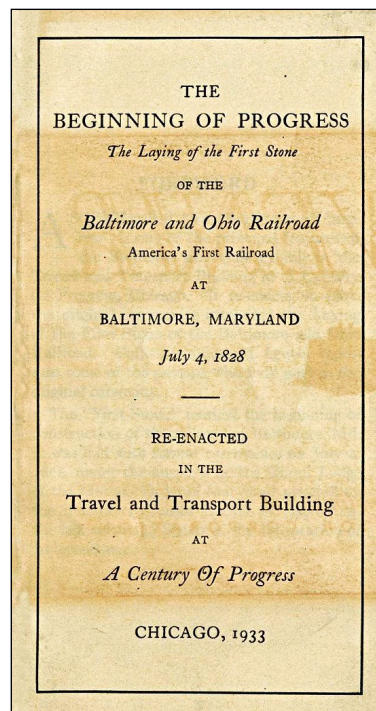
Railroads played a large role in the development of the United States (US) from the Industrial Revolution in the Northeast (1820s-1850s) to the settlement of the West (1850s-1890s). The American railroad mania began with the founding of the first passenger and freight line in the country, the Baltimore and Ohio Railroad (B&O), in 1827, and the "Laying of the First Stone"



ceremonies and the beginning of its long construction heading westward over the obstacles of the Appalachian Mountains. It flourished with continuous railway building projects for the next 45 years until the financial *Panic of 1873*, followed by a major economic depression, that bankrupted many companies and temporarily stymied and ended growth.

Railroads not only increased the speed of transport; they also dramatically lowered its cost. The first transcontinental railroad resulted in passengers and freight being able to cross the country in a matter of days instead of months and at one tenth the cost of stagecoach or wagon transport. With economical transportation in the West ranching and mining could be done at a profit. As a result, railroads transformed the country, particularly the West.

For example, before the railroads were built in the West, if a farmer were to ship a load of corn



Continued on Page 3 - US RRs

Museum Happenings



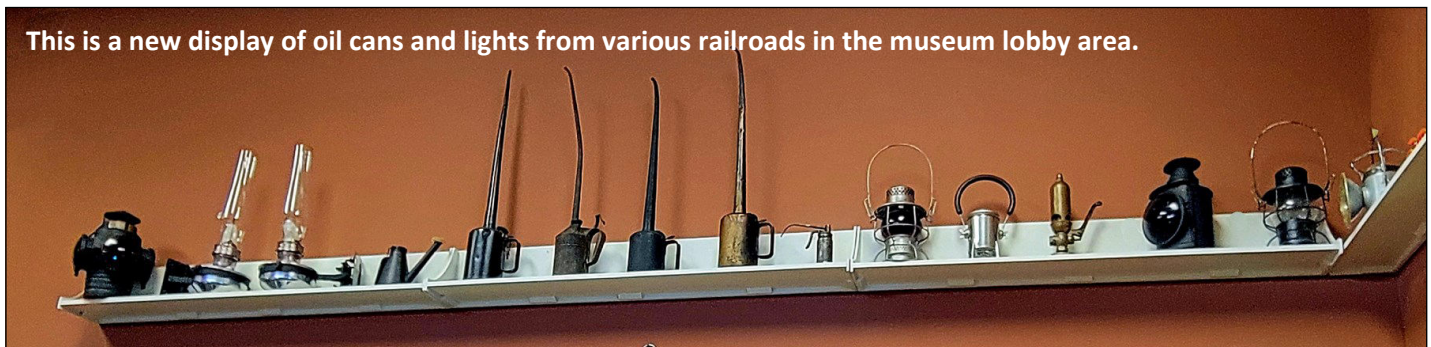
↑ Santa and President Bo renew a longtime acquaintance. Bo's list was long for the museum.

Old postcard view of the Piedmont and Northern Greer station with train headed towards Greenville seen during David Lovegrove's program. →

Our well stocked hobby shop →



This is a new display of oil cans and lights from various railroads in the museum lobby area.



Wanted—Articles for the Carolina Conductor

Submit an article of 200 words or more with some photos and captions and see them in print. Every one of us has some unique railroad experience that would make interesting reading for our membership. Your editor always needs more contributions of railway history and news.

only 200 miles to Chicago, the shipping cost by wagon would exceed the price for which the corn could be sold. So, under such circumstances, farming could not be done at a profit. Mining and other economic activity in the West were similarly inhibited because of the prohibitive cost of wagon transportation. One Congressman referring to the West, bluntly stated that "All that land wasn't worth ten cents until the railroads came."

Freight rates by rail were a small fraction of what they had been with wagon transport. When the US bought the Louisiana Purchase in 1803, people thought that it would take 300 years to populate it. With the introduction of the railroad, it took only 30 years. The low cost of shipping by rail resulted in the Great American Desert becoming the great American Breadbasket.

Although the antebellum South started early to



Typical early Southern steam locomotive.

build railways, it concentrated on short lines linking cotton regions to ocean or river ports, and the absence of

an interconnected network was a major handicap during the Civil War (1861-1865). The North and Midwest constructed networks that linked every city by 1860 before the war. In the heavily settled Midwestern Corn Belt, over 80 percent of farms were within 5 miles of a railway, facilitating the shipment of grain, hogs, and cattle to national and international markets. A large number of short lines were built, but due to a fast-developing financial system based on Wall Street and oriented to railway bonds, the majority were consolidated into 20 trunk lines by 1890. State and local governments often subsidized lines, but rarely owned them. Because of the economic importance and complexity of this new national system and failures in how they were run, the first federal regulatory agency, the Interstate Commerce Commission (ICC) was created in the 1880s.

The system was largely built by 1910. However, federal and state policies to subsidize, fund, and prioritize competition with railroads resulted in its de-

cline. With the proliferation of a system of highways built and owned by the state, operated at a loss and were not restricted by the requirement to make a profit, trucks began to eat away freight traffic and automobiles and later airplanes, which were also subsidized by the state via airports, air traffic control, etc., devoured the passenger traffic. After 1940, the replacement of steam with diesel electric locomotives made for much more efficient operations that needed fewer workers on the road and in repair shops.

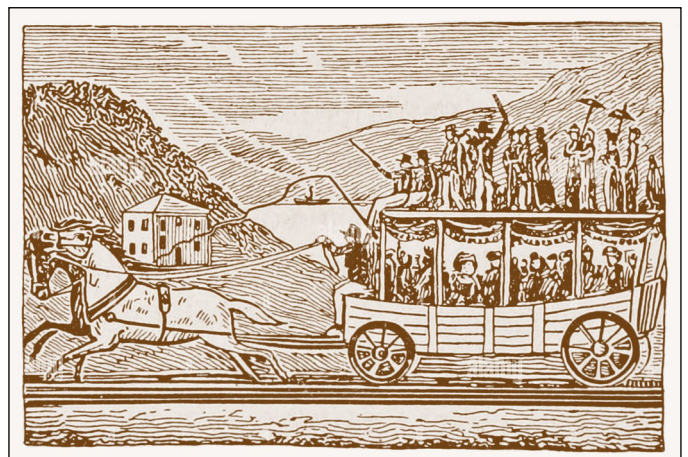
A series of bankruptcies and consolidations left the rail system in the hands of a few large operations by the 1980s. Almost all long-distance passenger traffic was shifted to Amtrak in 1971, a government-owned operation. Commuter rail service is provided near a few major cities, including New York City, Chicago, Boston, Philadelphia, Baltimore, and Washington, DC. Computerization and improved equipment steadily reduced employment, which peaked at 2.1 million in 1920, falling to 1.2 million in 1950 and 215,000 in 2010. Route mileage peaked at 254,251 miles in 1916 and fell to 139,679 miles in 2011.

Freight railroads continue to play a key role in the US economy, especially for moving imports and exports using containers, and for shipments of coal and, since 2010 of oil. Productivity rose 172% between 1981 and 2000, while rates rose 55%. Rail's share of the American freight market rose to 43%, the highest for any rich country, primarily due to external factors such as geography and higher use of goods like coal. In recent years, railroads have gradually been losing intermodal traffic to trucking.

History

Early Period (to 1860)

The animal powered Leiper Railroad followed in

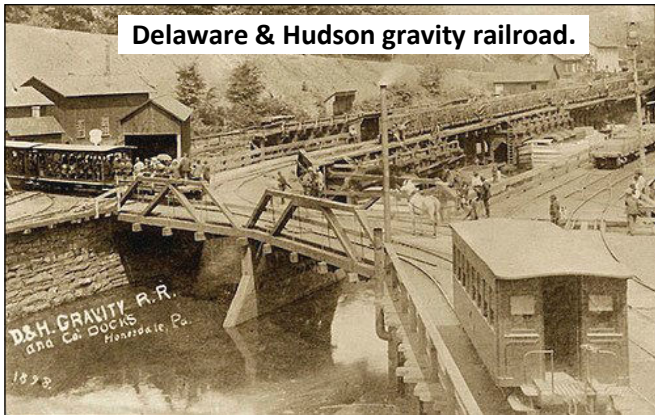


Continued on Page 4 - US RRs

1810 after the preceding successful experiment was designed and built by merchant Thomas Leiper. The railway connected Crum Creek to Ridley Creek, in Delaware County, PA. It was used until 1829, when it was temporarily replaced by the Leiper Canal, then it was reopened to replace the canal in 1852. This was the first railroad meant to be permanent, and the first to evolve into trackage of a common carrier after an intervening closure.

In 1826 Massachusetts incorporated Quincy's Granite Railway as a common freight carrier to primarily haul granite for the construction of the Bunker Hill Monument; operations began later that year, and which still had a section of it operating until the 1940s.

Other railroads authorized by states in 1826 and constructed in the following years included the Delaware and Hudson Canal Company's gravity railroad;



Delaware & Hudson gravity railroad.

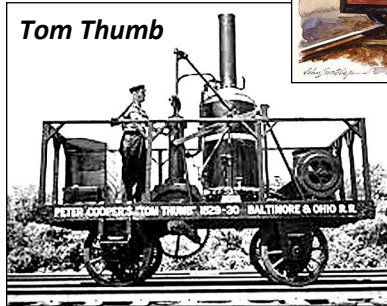
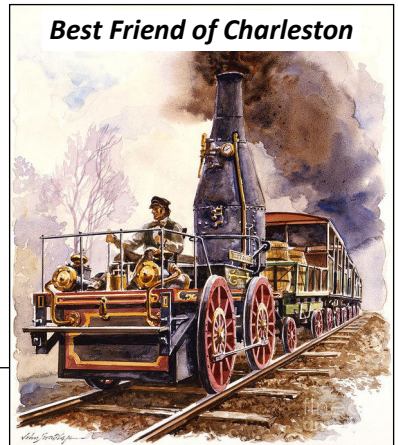
and the Mohawk and Hudson Railroad, to carry freight and passengers around a bend in the Erie Canal. To link the port of Baltimore to the Ohio River, the state of Maryland in 1827 chartered the B&O, the first section of which opened in 1830. Similarly, the South Carolina Canal and Railroad Company was chartered in 1827 to connect Charleston to the Savannah River, and Pennsylvania Railroad (PRR) built the Main Line of Public Works between Philadelphia and the Ohio River.

The Americans closely followed and copied British railroad technology. The B&O was the first common carrier and started passenger train service in May 1830, initially using horses to pull train cars.

Steam Locomotives

The South Carolina Canal and Rail Road Company was the first to use steam locomotives regularly beginning with the *Best Friend of Charleston*, the first American-built locomotive intended for revenue service, in December 1830.

The B&O started developing steam locomotives in 1829 with Peter Cooper's *Tom Thumb*. This was the first American-built locomotive to run in the U.S., although it was intended as a demon-

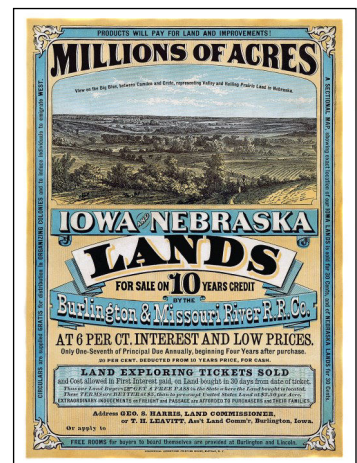


stration of the potential of steam traction rather than as a revenue-earning locomotive. Many of the earliest locomotives for American railroads were imported from England, including the *Stourbridge Lion* and the *John Bull*, but a domestic locomotive manufacturing industry was quickly established, with locomotives like the *DeWitt Clinton* being built in the 1830s. The B&O's westward route reached the Ohio River in 1852, the first eastern seaboard railroad to do so. By 1850, 9,000 miles of railroad lines had been built.

Other railroads authorized by states in 1826 and constructed in the following years included the Delaware and Hudson Canal Company's gravity railroad;

Land Grants

The federal government operated a land grant system between 1855-1871, through which new railway companies in the west were given millions of acres they could sell to prospective farmers or pledge to bondholders. A total of 129 million acres were granted to the railroads before the program ended, supplemented by a further 51 million acres granted by the states, and by various government subsidies. This program enabled the opening of numerous western lines, especially the Union Pacific (UP)-Central Pacific (CPRR) with fast service from San Francisco to Omaha and east to Chicago. West of Chicago, many cities grew up as rail centers, with repair shops and a base of technically literate workers.



Continued on Page 4 - US RRs

Displacing Water Routes

When a rail line entered a region, typically stagecoach and wagon cartage, which was slower and more expensive, over that route ended. However, stage and wagon service would then be offered between the railroad and smaller off-line towns. As a result of the lower transportation costs provided by arrival of the railroad, overall economic activity in the region grew dramatically.

Railroads soon replaced many canals and turnpikes and by the 1870s had significantly displaced



Canal-Railroad interface

steamboats as well. The railroads were superior to these alternative modes of transportation, particularly water routes because they lowered costs in two ways. Canals and rivers were unavailable in the winter season due to freezing, but the railroads ran year-round despite poor weather. And railroads were safer: the likelihood of a train crash was less than the likelihood of a boat sinking. The railroads provided cost-effective transportation because they allowed shippers to have a smaller inventory of goods, which reduced storage costs during winter, and to avoid insurance costs from the risk of losing goods during transit.



Shipping of agriculture greater distances year-round.

Changing Style of Travel

Likewise, railroads changed the style of transportation. For the common person in the early 1800s, transportation was often traveled by horse or stagecoach. The network of trails along which coaches navigated were riddled with ditches, potholes, and stones. This made travel fairly uncomfortable. Adding to injury, the coaches were cramped with little leg room. Travel by train offered a new style. Locomotives proved themselves a smooth, headache free ride with plenty of room to move around. Some passenger trains offered meals in the spacious dining car followed by a good night's sleep in the private sleeping quarters.

Networks

Railroad companies in the North and Midwest constructed networks that linked nearly every major city by 1860. In the heavily settled Corn Belt, Ohio to Iowa, over 80 percent of farms were within 5 miles of a railway. A large number of short lines were built, but due to a fast-developing financial system based on Wall Street and oriented to railway securities, the majority were consolidated into 20 trunk lines by 1890. Most of these railroads made money and ones that did not were soon bought up and incorporated in a larger system or "rationalized". Although the transcontinental railroads dominated the media, with the completion of the first transcontinental railroad in 1869 dramatically symbolizing the nation's unification after the divisiveness of the Civil War, most construction actually took place in the industrial Northeast and agricultural Midwest, and was designed to minimize shipping times and costs. The railroads in the South were repaired and expanded and then, after a lot of preparation, changed from a 5-foot gauge to standard gauge of 4 foot 8½ inches in two days in May 1886.

With its extensive river system, the United States supported a large array of horse-drawn or mule-drawn barges on canals and paddle wheel steamboats on rivers that competed with railroads after 1815 until the 1870s. The canals and steamboats lost out because of the dramatic increases in efficiency and speed of the railroads, which could go almost anywhere year-round. The railroads were faster and went to many places a canal would be impractical or too expensive to build or a natural river never went. Railroads also had better schedul-

ing since they often could go year-round, more or less ignoring the weather. Canals and river traffic were cheaper if you lived on or near a canal or river that was not frozen over part of the year, but only a few did. Long-distance transport of goods by wagon to a canal or river was slow and expensive. A railroad to a city made it an inland port that often prospered or turned a town into a city.

Civil War and Reconstruction (1861-1877)



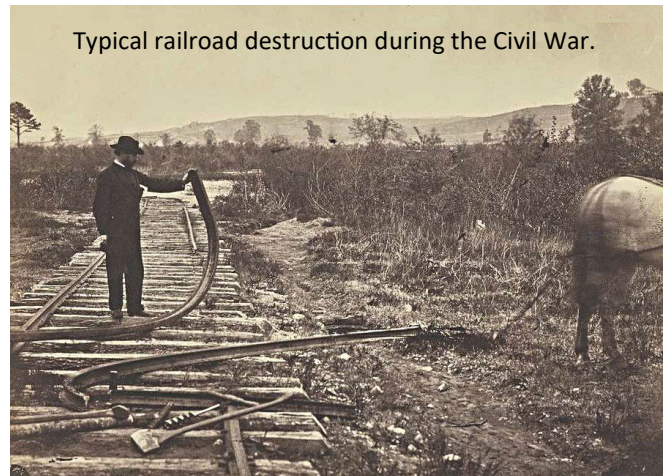
A mortar mounted on a railroad car during the Civil War, 1865.

Rail was strategic during the American Civil War, and the Union used its much larger system much more effectively. Practically all the mills and factories supplying rails and equipment were in the North, and the Union blockade kept the South from getting new equipment or spare parts. The war was fought in the South, and Union raiders (and sometimes Confederates too) systematically destroyed bridges and rolling stock and sometimes bent rails to hinder the logistics of the enemy.

In the South, most railroads in 1860 were local affairs connecting cotton regions with the nearest waterway. Most transports were by boat, not rail, and after the Union blockaded the ports in 1861 and seized the key rivers in 1862, long-distance travel was difficult. The outbreak of war had a depressing effect on the economic fortunes of the railroad companies, for the hoarding of the cotton crop in an attempt to force European intervention left railroads bereft of their main source of income. Many had to lay off employees, and in particular, let go skilled technicians and engineers. For the early years of the war, the Confederate government had a hands-off approach to the railroads. Only in mid-1863 did the Confederate government initiate an overall policy, and it was confined solely to aiding the war effort.

With the legislation of impressment, the same year, railroads, and their rolling stock came under the de facto control of the Confederate military.

Conditions deteriorated rapidly in the Confederacy, as there was no new equipment and raids on both sides systematically destroyed key bridges, as well as locomotives and freight cars. Spare parts were cannibalized; feeder lines were torn up to get replacement rails for trunk lines, and the heavy use of rolling stock wore them out. In 1864 and 65 the Confederate railroad network collapsed; little traffic moved in 1865.



Typical railroad destruction during the Civil War.

The Southern states had blocked westward rail expansion before 1860, but after secession the *Pacific Railway Acts* were passed in 1862 and 1863, which respectively established the Central Pacific route and standard gauge was to be used. With federal financing in the form of bonds and generous land grants and with the heroic help of the mainly Chinese and Irish laborers, CPRR working eastward and UP working westward combined to complete in 1869 the major breakthrough first transcontinental railroad, which linked by rail the eastern states with the Pacific coast and made possible moving from New York to San Francisco Bay in only six days. In addition, other Transcontinental's were built in the South (Southern Pacific (SP) and Santa Fe (ATSF) and in the North along the Canada-US border (Northern Pacific (NP) and Great Northern (GN)), accelerating the settlement of the West by offering inexpensive farms and ranches on credit, carrying pioneers and supplies westward, and cattle, wheat and minerals eastward. In 1860 before the transcontinental, railroads carried less than half as much freight as inland waterways, whereas by 1890 railroads carried five

The Golden Spike ceremony with the joining of the East and the West.



ening situation for railroad workers led to strikes against many railroads, culminating in the *Great Railroad Strike* of 1877, involving over 100,000 people in multiple cities.

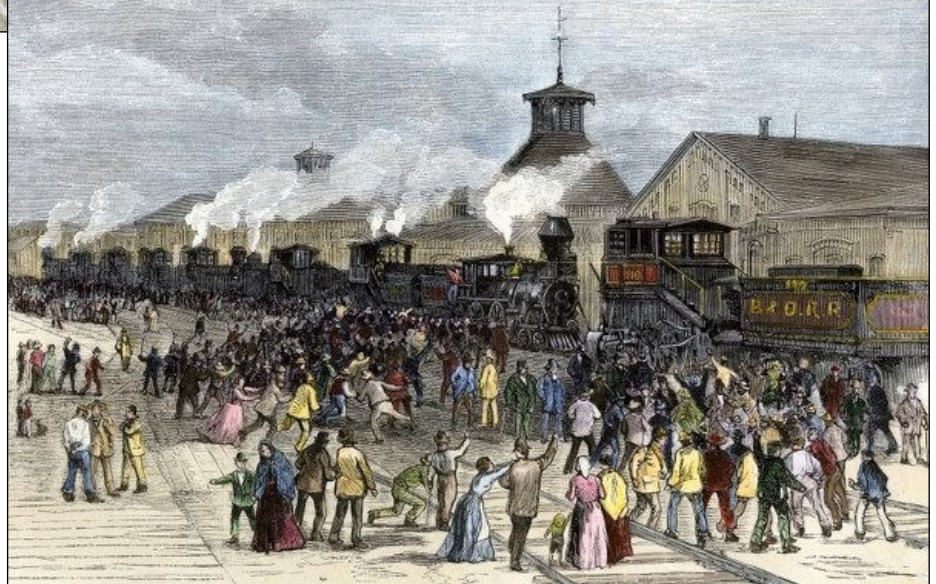
The Great Strike began on July 14 in Martinsburg, WV, in response to the cutting of wages for the second time in a year by the B&O. The strike, and related

times as much freight as waterways.

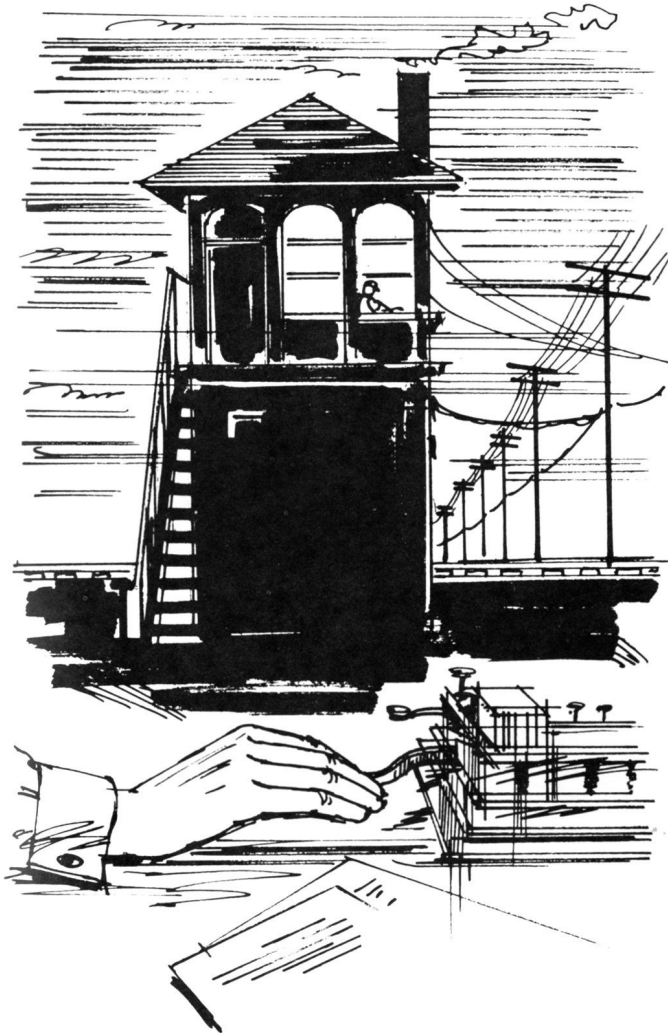
During the Reconstruction era, Northern money financed the rebuilding and dramatic expansion of railroads throughout the South; they were modernized in terms of track gauge, equipment, and standards of service. The Southern network expanded from 11,000 miles in 1870 to 29,000 miles in 1890. The lines were owned and directed overwhelmingly by Northerners. Railroads helped create a mechanically skilled group of craftsmen and broke the isolation of much of the region. Passengers were few, however, and apart from hauling the cotton crop when it was harvested, there was little freight traffic.

The *Panic of 1873* was a major global economic depression which ended rapid rail expansion in the United States. Many lines went bankrupt or were barely able to pay the interest on their bonds, and workers were laid off on a mass scale, with those still employed subject to large cuts in wages. This wors-

Strikes became common to improve worker conditions and wages.



violence, spread to Cumberland, Maryland, Baltimore, Pittsburgh, Buffalo, Philadelphia, Chicago and the Midwest. The strike lasted for 45 days and ended only with the intervention of local and state militias, and federal troops. Labor unrest continued into the 1880s, such as the *Great Southwest Railroad Strike* of 1886, which involved over 200,000 workers. ~



BRASS POUNDER

*The highest job on any road
Is in the tower sending code.
All others say, this one has class,
It gets big pay for pounding brass.*

The tower telegrapher was a very important man on all railroads. Taking and sending messages helped keep the railroads running smoothly and on time. Orders from the home office were quickly transmitted to all operating personnel.



CHECK OUT THE CRHA:
WWW.HUBCITYRRMUSEUM.ORG/CAROLINA-RAILROAD-HERITAGE-ASSOCIATION
WWW.FACEBOOK.COM/GROUPS/CRHA/NC/



CHECK OUT THE HCRRM:
WWW.HUBCITYRRMUSEUM.ORG
WWW.FACEBOOK.COM/HUBCITYRRMUSEUM/