

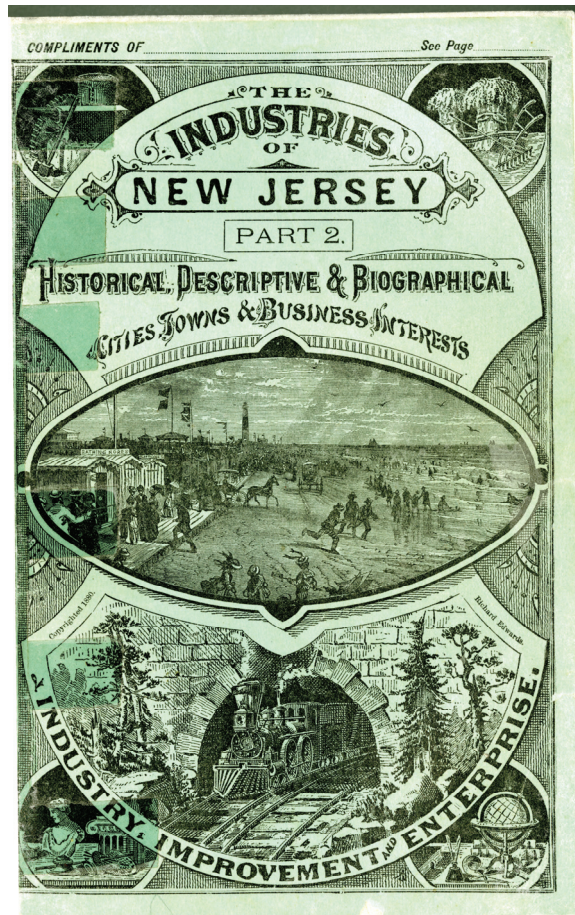
All Aboard: Railroads and New Jersey, 1812–1930

Exhibition Catalog

Curator: David J. Fowler

Rutgers University Libraries

2011



[Case 1]

Introduction

“Industry, Improvement and Enterprise” announced the cover of an 1882 publication on the industries of New Jersey. Fittingly, a locomotive is a prominent part of the accompanying illustration. Railroads had a pervasive presence and an immense social, economic, cultural, and technological influence in the late 19th and early 20th centuries, perhaps even more so than today. Then as now, most people in New Jersey were within earshot, at least, of the sound of a train. Everyone no doubt has a favorite song or movie in which trains play a role, or an early memory, such as that of a kindergartner in a school play reciting his part: “I am a semaphore” Railroads likewise engendered a distinctive nomenclature, some of which have entered popular parlance (“derailed,” “off-track,” “build up a head of steam,” “train of thought,” “train wreck”), and also influenced visual imagery. It is significant that one of the first feature films, *The Great Train Robbery* (1903), was actually shot in New Jersey.

As Louis P. Cain has pointed out, “No innovation is more emblematic of the drama of nineteenth-century American economic history than the railroad”; its impact was “transformative.” In New Jersey and elsewhere, the ramifications included not only railroads themselves, but also canals, turnpikes, steamboats, ferries, stage lines, and bridges and tunnels. The maneuverings of the Joint Companies in the political sphere caused one state senator in 1864 to excoriate “this gigantic, corrupt, and inexcusable monopoly It has debauched the public mind. It has subsidized newspapers. It has corrupted the youth. It has destroyed the purity of elections. Its influence is evil”

Railroads were, however, a significant factor in the transition from a centuries-old agrarian society to an industrial society. They were, in the words of railroad historian John H. White, Jr., “positively essential to the creation of heavy industry and mass public transit.” The locomotive was “unquestionably the stevedore” for modern commercial societies. Thus, railroads were both a product and an agent of the process of modernization and a key element in the development of the United States.

Many railroad-related problems familiar to the nineteenth-century public persist today: fare increases, service disruptions, accidents, noise, and government regulation. One need look no further than recent history for examples, such as the disruption of rail service as a result of the blizzard of December 26, 2010, or the persistent problem of subsidizing Amtrak, or a debate over “train noise” in the Sewaren section of Woodbridge township, the solution to which was a “quiet zone” at a railroad crossing.

The topic of railroads in New Jersey in the period 1812 to 1930 is a large and complex one. The exhibition *All Aboard! Railroads and New Jersey, 1812–1930* is an outgrowth of the publication of *Railroads and New Jersey: A Bibliography of Contemporary Publications, 1812–1901* (Rutgers University Libraries, 2011). It goes beyond that book, however, both chronologically and in scope. From a realm of possibilities, we have chosen to focus on several themes: the experimental phase of railroads; the pioneer phase; polemical debates; technology; agriculture; employees; suburbanization; resorts; and immigration. It is a tribute to both the richness of the subject matter and the richness of the holdings at Special Collections and University Archives that each display case could be assembled with different items several times over.

Acknowledgments

We thank the following donors for their support: Joseph J. Felcone, Tom Higgins, Maxine Lurie, Jim Le Tellier, Bob Mortensen, and Dorothy A. Stratford. I am grateful to the multitalented staff at Special Collections for their help and patience in mounting the exhibit—the worst thing they could hear from me was “Let me think about that.” Foremost I thank Fernanda Perrone, who initially suggested an exhibit on New Jersey railroads, and Tim Corlis, who has an abiding interest in the topic. Other Special Collections or Rutgers Library staffers who lent assistance are Kim Adams, Isaiah Beard, Bonita Grant, Sharon Grau, Ryan Greenwood, Michael Joseph, Al King, Adriana Kuzyszyn, Nancy Martin, Jenner Oliveria, Courtney Sakamoto, Jackie Santana, and Daryl Voorhees. Thanks are also due Anthony J. Bianculli, Bill McKelvey, and Michael Timpanaro.

[Case 2]

The Father of American Railroads

John Stevens (1749-1838) was the scion of a prominent family in colonial New Jersey. During the Revolutionary War he served as state treasurer. In the postwar period he became intrigued by experiments in steam navigation by men such as John Fitch. At his estate at Castle Point in Hoboken, Stevens devoted the rest of his life to experimenting with the application of steam to travel on water and land. Frustrated by the steamboat monopoly given to Robert Fulton by New York, he turned his attention to the new technology of railroads.

In 1812, he wrote the first American publication promoting the advantages of “steam carriages” over canals, which has been called “the birth certificate of all railroads in the United States.” He prevailed on the New Jersey legislature in 1815 to pass an act “to erect a Rail-Road from the River Delaware, near Trenton, to the River Raritan, at or near New Brunswick”—the first American railroad charter. The law said nothing, however, about what kind of motive power would be used. Stevens was not able to raise funds for the project. In 1825, at age seventy-six, Stevens built on his estate an experimental steam engine “for propelling a carriage on railways.” Guests were delighted to ride at six miles per hour on “the circle at the Hoboken Hotel.” Five years later, the Camden and Amboy Railroad was chartered, and his sons Robert L. and Edwin A. became officers in the fledgling company. When the *John Bull* locomotive arrived from England in 1831, the old inventor hosted a grand celebration at his estate. John Stevens had lived to see his vision realized.



[Case 3]

“Commonly Called the Joint Companies”

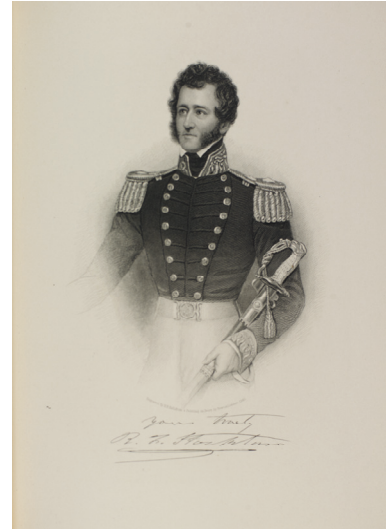
Riding the national trend toward internal improvements that was reflected in numerous turnpike and canal-building ventures, on February 4, 1830 the New Jersey legislature separately incorporated both the Delaware and Raritan Canal Company and the Camden and Amboy Railroad and Transportation Company. Private funds underwrote both enterprises and spared the fiscally conservative state from being directly involved in potentially risky undertakings. Both charters contained a clause that prohibited rival companies from constructing a canal or a railroad within a specified distance. The railroad company was required to pay transit duties to the state, and an act of February 4, 1831, authorized the transfer of one thousand shares of stock to the state. In order to avoid ruinous competition, on February 15 another law, the so-called “Marriage Act,” authorized the consolidation of the two companies’ stock. Thus was created the entity “commonly called the Joint Companies.” Another act of March 2, 1832 guaranteed the Joint Companies’ monopoly of the New York-Philadelphia traffic, and gave the state an additional one thousand shares of stock. Other pioneer railroads chartered in 1831–1832 were the Paterson and Hudson River Railroad, which ran from Paterson to Jersey City, and the New Jersey Railroad, which ran from Jersey City to New Brunswick. The Camden and Amboy’s first locomotive, the *John Bull*, which was imported from England, made its trial run on November 12, 1831; by the fall of 1833 it was making regular runs between Bordentown and South Amboy. The Joint Companies eventually acquired ownership or interests in steamboats, ferries, stage lines, turnpikes, and bridge companies, as well as other railroads. By 1871, the Joint Companies (renamed the United Companies) owned, leased, or controlled more than four hundred and fifty miles of track in the state.



[Case 4]

“The State of Camden and Amboy”

As a result of their “exclusive privileges,” the Joint Companies were an immediate financial success and the state’s coffers were filled. But at what price? As early as 1831, one newspaper feared that the legislature had created a monster that was already the “influence behind the throne, greater than the throne itself.” The deal struck with the state soon excited the jealousy of competing railroad companies, who felt that the state’s economic development was hindered.



Complaints arose within New Jersey and from neighboring states that fares charged both for passengers and for freight were excessive. The Camden and Amboy was parsimonious regarding upgrades to its physical plant. Because of its reluctance to double-track its line, for instance, accidents were more common than on other railroads; in one incident, both John Quincy Adams and Cornelius Vanderbilt (who was injured) were passengers. The monopoly’s wealth, power, and influence were soon exerted in the political sphere. Its adroit machinations in the legislature caused New Jersey to gain the unsavory reputation as “the State of Camden and Amboy.” The chief strategist of the monopoly was Robert F. Stockton (1795–1866), the grandson of a signer of the Declaration of Independence. A naval officer who served in the U.S. Senate, he was ambitious, self-confident, and impulsive, but also congenial and generous. Stockton was instrumental in brokering the consolidation of the canal and railroad companies. He reputedly boasted that “he carried the State in his breeches pocket, and meant to keep it there.” Whenever the monopoly was attacked, Stockton and its other apologists invoked the sanctity of contracts, states’ rights, and the financial benefits to the state.

Matters came to a head in 1848 when a series of letters by “A Citizen of Burlington” appeared in the *Burlington Gazette*. In addition to reciting the usual complaints against the monopoly, the author

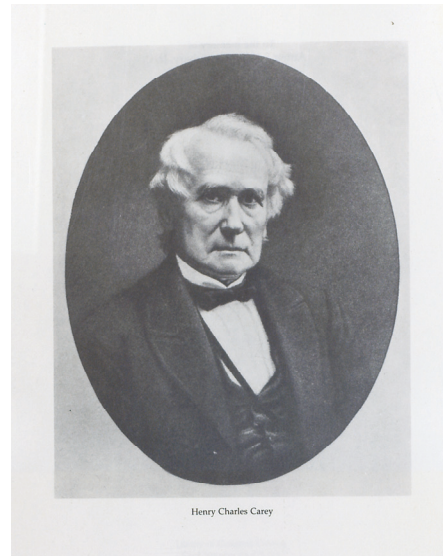
used statistics and detailed analysis to accuse the Joint Companies of the more serious charges of gouging the public and concealing profits in their reports, thereby defrauding the state.

The anonymous writer later revealed himself as the noted publisher and political economist Henry C. Carey (1793–1879).

Robert F. Stockton replied to the charges on behalf of the canal and railroad companies. Two legislative commissions investigated the charges, one of which exonerated the companies, while the other found only “remissness” and “inadvertency” in bookkeeping. Even though he was castigated as a “miserable

monomaniac,” Carey proceeded to pick apart the commissions’ reports in detail, and insisted upon being allowed to inspect the companies’ books. The Joint Companies ultimately refused his demand. It is perhaps a vindication of his charges that subsequently the joint board of directors ordered all the early records destroyed.

Through the vehicle of the state’s Democratic Party, in the antebellum period the Joint Companies influenced elections, often to their advantage, on the Congressional, the gubernatorial, and the local levels. They had their mouthpieces in the national and state legislatures, and controlled several newspapers. But there was also an active anti-monopoly press, including Horace Greeley’s *New York Tribune*. During the Civil War, the monopoly’s chokehold on through traffic drew national attention, as trains carrying troops, supplies, and mail bottlenecked in New Jersey. The Joint Companies’ (renamed the United Companies) monopoly expired in 1869, two years before the Pennsylvania Railroad leased them for 999 years. That lease by a “foreign” (i.e., out-of-state) company was also controversial, and sparked a legal challenge (*John Black et al.*) by the lessees’ stockholders.



Courtesy of American Philosophical Society

[Case 5]

Technology

At its simplest, a locomotive is a “boiler-on-wheels.” In practice, of course, it is a much more complex machine. Imagine what went through the mind of the Camden and Amboy Railroad’s master mechanic Isaac Dripps, when he was confronted with the task of assembling—without instructions—the imported *John Bull* locomotive. American builders were soon applying their ingenuity to replicating and modifying the British invention. They were motivated by pragmatism, conservatism, and economy in constructing railroads to suit both their needs and the demands of their environment.

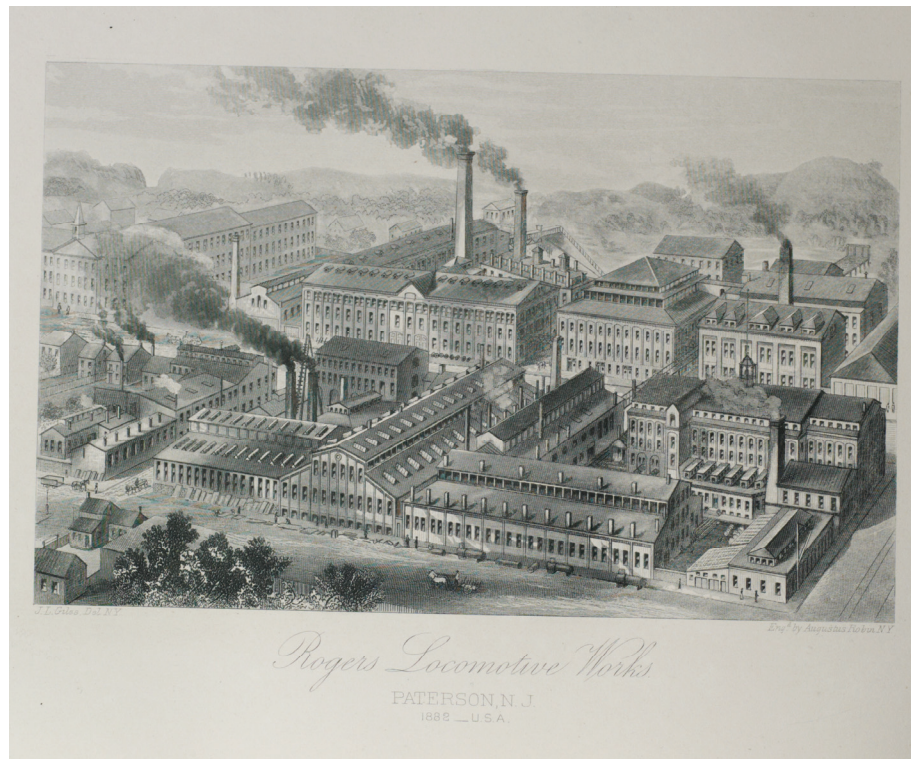
The growing industrial city of Paterson was the headquarters of several leading locomotive manufacturers, such as Danforth and Cooke, Grant, and Rogers. Several other firms located there did not survive the Panic of 1857. During the decade of the 1850s, the Rogers Locomotive Works was “the most progressive builder in the country.” In its peak year of production in 1870, Rogers turned out 145 locomotives; that same year it had in service on all railroads 1818 locomotives. Over the entire life of the company (1837–1900), Rogers produced an aggregate of 5,654 locomotives. During that time, Paterson had evolved from a bucolic town to the major industrial city in New Jersey.

Locomotives were at the center of railroad technology, but were only part of the story. Robert L. Stevens’ invention of the T-rail, for instance, has been deemed “one of the most rational structural shapes ever devised.” Several different track gauges were in use in the United States. For example, the Camden and Amboy used 4 feet 10 inches, the Erie 6 feet. This resulted in much expense and time lost in off-loading passengers and freight. In the 1860s, Ashbel Welch (1809–1882), chief engineer of the Camden and Amboy Railroad, began advocating the standardization of track gauges. Eventually, a gauge of 4 feet 8½ inches became the norm.

Amazingly, locomotive wheels did not have brakes until the 1870s—a train was stopped either by reversing or by brakemen applying brakes on individual cars. George Westinghouse’s

invention of the air-brake was thus an immeasurable contribution to safety. Other improvements to safety were the automatic coupler, automatic block signaling, and telegraphic communication.

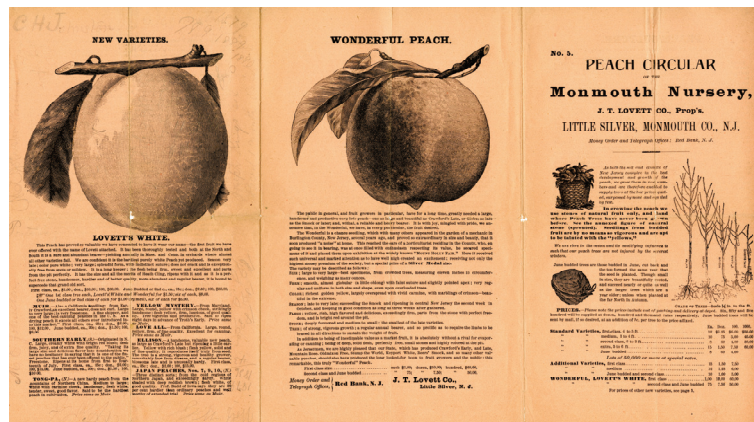
In order to keep abreast of an increasingly technical field, aspiring engineers, mechanics, and machinists could study works such as M. N. Forney's *Catechism of the Locomotive* (1875) or *The Car-Builder's Dictionary* (1879). Several periodicals were devoted in whole or in part to railroad technology and related matters, such as *Railroad Gazette*, *Railway Age*, *Journal of the Franklin Institute*, and *Scientific American*. As Anthony J. Bianculli has pointed out, during the nineteenth century there was overall a "symbiotic relationship" between railroading and technology, "each dependent upon the state and progress of the other to a large degree."



[Case 6]

“The Garden Spot of the Garden State”

From colonial times, New Jersey was noted for its truck gardens. With the advent of railroads, local home gardening developed into commercial production for burgeoning urban markets. As early as 1838, the Camden and Amboy Railroad ran a “Pea Line” to carry agricultural products to market. In the 1840s, “peach trains” were dedicated to the shipment of the luscious fruit. Special ventilated cars were designed to facilitate transportation of the perishable crop. The “peach boom” peaked in the 1880s: on one day in September 1882, sixty-four carloads of peaches were shipped from Hunterdon County alone. Peaches were transported to New York, Philadelphia, and even to New England and Canada. After 1850, “strawberry fever” also flourished as a result of rail connections with cities. Similarly, cranberry production was stimulated by the railroads. In 1881, for instance, two South Jersey railroads carried more than 34,000 bushels of cranberries to Philadelphia. Railroads that hauled produce to market often returned with loads of fertilizer for farmers’ fields.



An offshoot of the development of resorts such as Atlantic City was the sale of farm plots along the railroad right-of-way by railroad-affiliated land companies. Agricultural communities such as Hammonton and Egg Harbor (“The Garden Spot of the Garden State”) owe their growth directly to railroads. Some land promotions failed, however. In the early 20th century, several railroads sponsored “Agricultural Trains” that carried exhibits and lecturers to numerous rural stops. Ironically, faster and cheaper rail service with other states, along with the introduction of refrigerated cars, hurt the market for New Jersey products such as beef and pork. Railroads were indeed “the machine in the garden” of the Garden State.

[Case 7]

Workin' on the Railroad



Despite their many problems, railroads provided employment for thousands of New Jerseyans. In 1907, for example, 45,810 people were reported by the state's Bureau of Statistics as being employed by railroads. In addition to managers, they served as conductors, brakemen, engineers, firemen, switchmen, flagmen, trackmen, agents, baggagemen, clerks, machinists, boilermakers, car builders, telegraph operators, and on construction gangs. But they were victim, as today, to the vagaries of the economy. In June 1893, one locomotive builder employed 800 "hands" in its shops; one year later, as a result of the Panic of 1893, it employed only 300. Employees were subject to strict regulations regarding compliance with operating rules, as well as the use of tobacco and alcohol. In an era when individual life or disability insurance was almost unheard of, employees subscribed to voluntary relief associations, such as those of the Reading and the Pennsylvania railroads, which were both established in the 1880s to provide benefits in case of sickness or death. Employment by the railroad could be a vehicle for upward mobility. Joseph L. Gill (1889–1976), for example, was raised on a farm near Yardley, Pennsylvania. In 1905, he migrated to Port Reading, New Jersey to work as a junior clerk in the office of the Reading Railroad's huge coal facility. Over the years he was promoted until he eventually became chief agent at that office. At age twenty-one, he was also elected a committeeman in his adopted hometown, being at that time the youngest person in the state elected to that office. Together with men and women directly employed by railroad companies, those working in related businesses represented a significant percentage of the labor force.

[Case 8]

“Why Not Own Your Own Home?”

That was the question posed by a promotional pamphlet published in 1891 by the Central Railroad of New Jersey. A similar pamphlet advertised *Homes on the Central Railroad for New York Business Men*. In so doing they tapped into the American dream of home ownership by the burgeoning middle class. One travel writer noted in 1874 that “No such overflow of population has ever been witnessed before, and the past is but the index finger, showing what is to come.” Promotional pamphlets invariably included advertisements by land improvement companies that were affiliated with railroads, and sometimes even included actual designs for suburban cottages. Rapid transit made the commute feasible between urban workplaces and suburban dwellings. In 1904, the Central Railroad transported 3,150,000 passengers in the Jersey City and Newark district alone. The importance of railroads as “lifelines” in the suburbanization of rural communities such as Bergenfield “can hardly be overstated.” A significant part of people’s workday was spent at suburban depots or urban terminals waiting for trains, as well as on the commute itself. Timetables regulated not only trains, but people’s lives. In 1873, a promotional publication commented upon the change wrought in the countryside: “In every direction, within an hour of New York, we find the same signs of growth ...; the old farm look has all disappeared, houses have risen like magic, mere settlements have grown to be villages, villages to be towns, and towns to be cities.”



[Case 9]
The T-Rail

In 1830, Robert L. Stevens (1787–1856), “President & Engineer” of the newly chartered Camden and Amboy Railroad, travelled to England to order rails and a locomotive for the company. He had gained valuable experience in steamboat design and construction from working with his father, John Stevens. While on the voyage, he whittled from a piece of wood the T-rail which, with little variation, eventually became the standard in the United States. Formerly, early railroads in America had used an iron strap laid out on wooden rails. Stevens had difficulty finding an American rolling mill to produce the rails, so the earliest ones were manufactured in Britain. The first T-rails made in America were rolled in 1846 by the Cooper and Hewitt firm in Trenton. Over the next decade they came into common use. Stevens also developed the “hook-headed spike” and the “fish plate” for fastening the rails, and he replaced the stone blocks that rails were originally fastened to with logs that were shored up with crushed rocks. Thus he presaged the wooden “sleepers” still in use on today’s roadbeds. In 1882, an engineer quipped that in America “poverty is the mother on invention” because engineers such as Stevens “used cross-ties as a temporary substitute because too poor to buy stone blocks, and so made good roads because they were not rich enough to make bad ones.” Another Stevens invention was the pilot, or “cowcatcher” attached to the front of locomotives. He never patented any of his railroad inventions. The miles of rail crisscrossing the countryside are Robert L. Stevens’s “imperishable monument.”

[Case 9]
Transcription

Gentlemen

Liverpool November 26 1830.

At what rate will you contract to deliver at Liverpool, say from five to six hundred tons of Railway, of the first quality Iron rolled to the above pattern in twelve or sixteen foot lengths, to lap as shown in the drawing, with one hole at each end, and the projections on the lower flange at every two feet. Cash on delivery. How soon could you make the first delivery, and at what rate pr month until the whole is complete. Should the terms suit and the work give satisfaction a more extended order is likely to follow, as this is but about one sixth part of the quantity required. Please to address your answer (as soon as convenient) to the care of Francis B. Ogden, Consul of the United states at Liverpool.

I am Your obedient Servant

Robt L. Stevens

President & Engineer of the Camden & South
Amboy Railroad & Transportation Company

[Case 12]

Immigration

Immigration is a “defining feature” of the social, economic, and political history of the United States. In 1889, three years before Ellis Island opened as the chief point of entry for immigrants, the Central Railroad of New Jersey constructed a large terminal at Communipaw Cove in Jersey City directly across from Manhattan. In that year alone, 444,427 immigrants entered the country; by 1905, more than one million per year arrived. By 1930, immigration had slacked off to 241,700. The next stop for many of those passing through Ellis Island was the terminal of the Central Railroad or the Pennsylvania Railroad. Thus, millions of people first set foot on the mainland United States in New Jersey. Between 1912 and 1914, a ferry shed and train sheds were added to the CRR terminal. Each day, thousands of immigrants joined thousands of commuters in crossing on ferries to the rail terminals which, like nerve endings, connected to points throughout New Jersey and beyond.



George Grantham Bain Collection (Library of Congress)

[Case 13]

“By the Beautiful Sea”

By the early 19th century New Jersey already had famous resorts, such as Cape May, Long Beach, and Tucker’s Beach, that offered makeshift accommodations, but were relatively difficult to reach. Railroads revolutionized the tourist business and also helped to democratize what were formerly the haunts of the genteel. A growing middle class provided the basis for this market. From New York City, steamboats owned by railroad companies brought travelers to landings where they could board trains to destinations such as Long Branch, a fashionable resort that could boast that seven U.S. presidents had vacationed there. “Excursion Houses” that catered to large groups at discounted rates were popular at both Atlantic City and Cape May. In some instances, trains discharged passengers virtually at water’s edge. Sleepy, economically backward shore towns were transformed as they provided for the needs of their seasonal guests. Larger resorts could offer a choice of grand hotels, boarding houses, or cottages for rent. Perhaps the greatest metamorphosis occurred after 1854 when the Camden and Atlantic Railroad blazed a route across the pines and created Atlantic City. It was destined to become “the queen of American watering places”: from Philadelphia, railroads advertised “only 54 miles from river to ocean” on “seventy minute flyers.” Development, both at the shore and along the route, went hand-in-hand with tourism. Gradually, waterways were bridged, making shore points such as Beach Haven even more accessible. Illustrated guidebooks described “jaunts by rail” to mountain resorts and the Delaware Water Gap in the northwestern part of the state. Overall, the success of New Jersey’s modern billion-dollar tourism industry owes a debt to patterns established by railroads in the 19th century.



Wildwood, N. J.



EXHIBITION CHECKLIST

On Wall

Bridge over the Delaware at Trenton (print)

Trenton Bridge (perspective)

John Bull *Meets the New Jersey at Princeton*. Lithograph from a painting by Richard Pederson. Loaned by Maxine Lurie.

“N. E. View of New Brunswick, N.J.” From John W. Barber and Henry Howe, *Historical Collections of the State of New Jersey* (1844).

Photograph of the depot at Hopewell, July 2011. The depot was constructed in 1880 in Second Empire architectural style.

Delaware, Lackawanna and Western terminal at Jersey City

Bi-level depot at Glen Ridge

Front and end elevations of the Central Railroad of New Jersey depot at Somerville. Designed by architect Frank V. Bodine of Asbury Park. Built at a cost of \$15,000 of Jersey sandstone quarried at Stockton, N.J. A gala event celebrated the completion of the depot in 1890.

“Standard American Locomotive Built by the Grant Locomotive Works, Paterson, New Jersey.” Jacket foldout in Mallory Hope Ferrell, *Centennial Limited Edition of the 1871 Grant Locomotive Works Catalog* (Boulder, Colorado, 1971).

[Case 1]

Introduction

Edward Lamson Henry (1841–1919), *The Camden and Amboy Railroad, with the Engine Planet, in 1834*. (New York: C. Klackner, 1900). Photogravure, printed with

color and finished by hand. Although the artist was noted for attention to historical details, he erred in that the engine *Planet* was never in this country.

[Case 2]

The Father of American Railroads

Pleasure Railway at Hoboken. Colored lithograph by D. W. Kellogg, circa 1833. A view of John Stevens' Elysian Fields, a rural retreat for New Yorkers. The machine depicted on the railway is similar to a hobby-horse rather than the inventor's experimental locomotive. Loaned by Joseph J. Felcone.

[John Stevens] *Documents Tending to Prove the Superior Advantages of Rail-Ways and Steam-Carriages over Canal Navigation* (New York, 1812). Said to be the first American publication on railroads. Stevens predicted that future locomotives would travel at 100 miles per hour.

Copy of an engraving of John Stevens' experimental locomotive based on a scale model exhibited at the Pennsylvania Railroad's exhibition at the World's Columbian Exposition in 1893.

"An Act to incorporate a company to erect a Rail-Road from the river Delaware, near Trenton, to the river Raritan, at or near New-Brunswick," *Acts of the Thirty-ninth General Assembly of the State of New-Jersey, ... Being the Second Sitting* (Trenton, 1815). This was the earliest railroad act in the United States.

[John Langdon Sullivan] *Mr. Sullivan's description of a cheap, durable Rail Road, and certain Routes, in the States of New-York and New-Jersey* (n.p., 1827?) An engineering and economic analysis that deals with highways and railroads, including the elevated railway depicted in the sketch. In the section "Comparative advantages of a Railway through New-Jersey," the author argues in favor of a railroad instead of the proposed Delaware and Raritan canal.

"The First American Locomotive on Rails at Castle Point, Hoboken." From: Archibald Douglas Turnbull, *John Stevens: An American Record* (New York, 1928).

[John Langdon Sullivan] *Report, on the Origin and Increase of the Paterson Manufactories ... also on Post Rail Roads, as the Means of Cheap Conveyance throughout New-Jersey ...* (Paterson, N.J., 1828).

A Map reduced from a Map of the State by Thos. Gordon Esq. Published in 1828. Foldout map accompanying John Langdon Sullivan's *Report, on the Origin and Increase of the Paterson Manufactories*. Perhaps the earliest map depicting projected railroad routes in New Jersey: "The red lines indicate the ascertained practicable and favourable ground for the location of Rail Roads and are supposed continued southward to Trenton, Camden, &c."

[Case 3]

"Commonly Called the Joint Companies"

Hear both Sides. Documents and Papers Relating to the Late Camden and Amboy Railroad Accident, at Burlington, N.J. (Philadelphia, 1855). In addition to this indictment of the Camden and Amboy, the accident generated several published eulogies. The horrendous accident on August 29, 1855 (depicted in the accompanying print), which took twenty-four lives and injured nearly one hundred, provided more ammunition for those attacking the monopoly.

Accident on the Camden and Amboy Rail Road, near Burlington, N.J., Aug. 29th 1855. Reproduction of a contemporary lithograph, probably by John Collins (1814–1902). "Drawn on the spot immediately after the accident."

The Original John Bull Locomotive of the Old Camden & Amboy Railroad Company, 1893. This broadside commemorates the first trial run of the locomotive on September 15, 1831.

Map of the Town of Paterson, N.J. Compiled from actual Surveys, by W. W. Freeman, surveyor, &c. &c. [circa 1831] Perhaps the earliest depiction on a map of a rail line (lower right) in New Jersey. Because the Paterson and Hudson River Railroad's route did not cross the state, it did not conflict with the Camden and Amboy's monopoly.

Map of the Bergen Meadows with the Adjoining Country by T. Gordon, 1836. An early map that depicts the New Jersey Railroad, a rival of the Camden and Amboy, and the Paterson and Hudson River Railroad forming a junction near Jersey City opposite Manhattan, which would eventually become the great hub of several railroad systems.

"An Act relative to the Delaware and Raritan Canal and the Camden and Amboy Rail Road and Transportation Companies," *Acts of the Fifty-fifth General Assembly of the State of New-Jersey ... Being the Second Sitting* (Trenton, 1831). The so-called "Marriage Act" passed February 15, 1831, which authorized the consolidation of the two companies' stock.

Locomotive No. 30, Camden and Amboy Railroad, circa 1850. A Crampton-type locomotive manufactured by the Norris Brothers Locomotive Works in Philadelphia. Locomotives of this curious-looking type were used for several years by the Camden and Amboy.

The appropriately-named *Monster* locomotive, assembled at the Camden and Amboy shops at Bordentown in the late 1830s. Built to haul freight, it was one of the world's largest locomotives in the 1830s. It ended its life as a switcher in the early 1860s.

A Camden and Amboy locomotive on the swing-bridge over the Delaware and Raritan Canal, circa 1860s. The passenger car depicted is circa 1840s. The line is the current route of the "Dinky" train that runs today between the Princeton University campus and Princeton Junction.

Photograph of the *John Bull* and vintage passenger cars at the World's Columbian Exhibition at Chicago. In 1893 the refurbished *John Bull* traveled from Jersey City to Chicago under its own power pulling two vintage passenger cars to the World's Columbian Exposition as part of the Pennsylvania Railroad's exhibit.

Early Camden and Amboy passenger car, built by M. P. and M. E. Green of Hoboken. The influence of stage coach design is evident.

[Case 4]

"The State of Camden and Amboy"

Sylvester Wilson, *Sixty Corporations Guilty Against One Man Innocent*, circa 1876. Loaned by Joseph J. Felcone.

Ontario Stevens, *Prospectus of the Anti-Monopolist*, 1850s. Broadside. The paper may never have been published. The author was interested in various attempts to build a railroad from Keyport to Burlington County in competition with the Joint Companies.

[James A. Garfield] *Free Commerce between the States. Speech of Hon. James A. Garfield of Ohio, Delivered in the House of Representatives, March 24th and 31st* (New York, 1864).

[Henry C. Carey] *Beauties of the Monopoly System of New Jersey. By a Citizen of Burlington* (Philadelphia, 1848).

[Henry C. Carey] *Can the Monopoly Lawfully Be Abolished?* (Philadelphia, 1849).

[Henry C. Carey] *Letters to the People of New Jersey, on the Frauds, Extortions, and Oppressions of the Railroad Monopoly. By a Citizen of Burlington* (Philadelphia, 1848).

Robert F. Stockton, *Captain Stockton's Address to the People of New-Jersey, on the Subject of the Delaware and Raritan Canal and Camden and Amboy Rail Road* (Camden, 1835).

Robert F. Stockton, *Appeal of Commodore R. F. Stockton to the People of New Jersey, in Relation to the Existing Contracts between the State and the United Delaware and Raritan Canal and Camden and Amboy Railroad Companies* (Princeton, 1849).

Robert F. Stockton, *Defence of the System of Internal Improvements, of the State of New Jersey, by the President of the Delaware and Raritan Canal Company* (Philadelphia, 1864).

Report of Commissioners Appointed to Investigate Charges Made Against the Directors of the Delaware and Raritan Canal and Camden and Amboy Railroad and Transportation Companies (Trenton, 1850).

John D. Hager, *Charges Preferred Against the Napoleon Company* (Trenton, 1847). The author accused the Joint Companies of diverting funds from the steamboat company.

Louis Koch, *Monopoly and Corruption Drive a Whole Family From Their House and Home* (Scranton, Pa., 1889). The author charged that a railroad agent flooded marshes near his home, thereby endangering the health of his family.

James Matlack Scovel, *Speech of Hon. James M. Scovel, in the New Jersey Senate ... on the proposed action of Congress on the air-line railroad bill* (1864).

The War with the Monopoly. Speeches and Proceedings Concerning the Air-Line Railroad and Extension of the Camden and Amboy Railroad Charter (Trenton, 1854).

[Case 5]

Technology

Color diagrams of an air-brake. The Air Brake Association, *400 Questions and Answers on the Westinghouse No. 6 "E T"* (Boston, 1909).

Typical freight cars. *From top to bottom*: Stock Car (1880); Coal Car (circa 1861); Tank Car (1870); Caboose (1894).

Aerial photograph of the New York Central rail yard and piers on the Hudson River at Weehawken, opposite Manhattan. Visible are two huge grain elevators and numerous freight cars loaded with export grain. Perched above the facility is the town of Weehawken.

Gravity Coal Piers of the Delaware, Lackawanna & Western Railroad Co., Hoboken.

Snow plow built by the Leslie Brothers Manufacturing Company, Paterson, N.J.

New York and Long Branch Railroad. *Rules and Instructions Governing the Use of Automatic Block and Interlocking Signals* (1906). "To be strictly observed unless otherwise provided in Special Bulletins."

Copy of a photograph of the interior of the Pennsylvania Railroad repair shops in Jersey City, circa 1902.

Photograph of damage caused by the "Great Blizzard of '88" in New Brunswick. The nor'easter of March 11-14, 1888 resulted in snowfall totals in some places of 40 inches, and high winds caused drifts of 30 or more feet. Daytime high temperatures were in the single digits.

Wood Burning Passenger Locomotive No. 44 Built at the New Jersey RR & Transportation Co. Works ... Jersey City, N.J. Side and rear elevations drawn at G. Weissenborn's Engineering Office, New York, circa 1870. The New Jersey Railroad was a rival of the Joint Companies until 1867 when it merged with them to form the United Companies. In 1871 the Pennsylvania Railroad leased the United Companies for 99 years.

Coal dumper at Port Reading, 1930s. This large facility on Arthur Kill opposite Staten Island was built by the Philadelphia and Reading Railroad in the 1890s almost exclusively as a coal distribution center for the New York area and southern New England.

Canfield's Improved Screw Car-Brake (Morristown, N.J., circa 1872). Broadside.

Baldwin Locomotive Works, Philadelphia. *Specification of Locomotive Engine*, No. 1991, Anthracite Passenger, for the Tuckerton Railroad Company, 1884. One of several contracts that the Tuckerton railroad made with the Baldwin company, which was one of the largest builders in the United States. The founder of the company, Matthias W. Baldwin ((1795–1866), was born in Elizabethtown, N.J.

Engraving of the factory of Rogers, Ketchum & Grosvenor, Paterson, N.J., 1832. The land the works were built on was forested, and Paterson was a small village.

Engraving of the Rogers Locomotive and Machine Works, Paterson, N.J., 1886.

Thomas Rogers (1792–1856), was born in Connecticut and came to New Jersey in 1812. He used capital he had accumulated in the manufacture of textile machinery to establish a machine shop in Paterson in 1832 under the name of Rogers, Ketchum and Grosvenor. Soon he began making car wheels, axles, and other railroad fittings. He was more a practical mechanic than an inventor, but by the 1850s the Rogers Locomotive and Machine Works (later renamed the Rogers Locomotive Works) was one of the largest locomotive builders in the country. His progressive designs were copied by other locomotive builders. He has been credited more than anyone else with advancing American locomotive design.

[Case 6]

“The Garden Spot of the Garden State”

Lehigh Valley Railroad Company. “To peach shippers,” 1886. A broadside that provides instructions for shipping the perishable fruit. Loaned by Joseph J. Felcone.

Peach Circular of the Monmouth Nursery, ... Little Silver, Monmouth Co., N.J. “As both the soil and climate of New Jersey conspire in the best development and growth of the peach, we grow them in vast numbers.” More than fifty varieties of peaches are advertised.

Gedenkblatt der Gründung von Egg Harbor City. Copy of a lithograph based on an ambrotype by A. Morhart, April 1858, which commemorates the founding of Egg Harbor City. A Camden and Atlantic Railroad train is visible in the center of the picture. The area attracted many settlers of German descent.

Copy of an aerial photograph by E. W. Spofford of the Cedar Crest (present Bamber Lakes) peach orchards in Ocean County, 1910. A Tuckerton Railroad train is visible in the center of the photo. Loaned by Jim Le Tellier.

West Egg Harbor, New Jersey, the Garden Spot of the Garden State (Philadelphia, circa 1900). Pamphlet issued by the Daniel B. Frazier Co. of Philadelphia promoting the advantages of settling in the thriving agricultural community in Atlantic County. A train is visible in the distance.

Cranberry harvest at Hog Wallow, Burlington County, mid-20th century

Loading strawberries at Vineland depot, 1868. Copy of a photograph in John T. Cunningham, *Railroads in New Jersey* (1997).

[Case 7]

Workin' on the Railroad

“Hands wanted.” A rare broadside advertising for men to work on the Paterson and Hudson River Railroad, 1834. Loaned by Joseph J. Felcone.

Pennsylvania Railroad Company, United Railroads of New Jersey Division, Belvidere Division. A broadside that urges foremen to employ only “sober and moral men,” 1877. The “Bel Del” railroad ran parallel to the Delaware River from Belvidere to Trenton. Loaned by Joseph J. Felcone.

“First Locomotive in Use in Keyport, N.J. with Personnel” (photograph)

“To the President and Directors of the Pemberton and Hightstown Railroad Company,” April 28, 1870. Petition of widow Catherine R. Nutt for a yearly allowance. In December 1867, her husband “being entirely deaf and unable to hear the approach of an engine, was ... struck by a locomotive attached to a construction train ... and instantly killed.”

Color diagram of a Westinghouse air-brake. The Air Brake Association, *400 Questions and Answers on the Westinghouse No. 6 "E T"* (Boston, 1909). The invention of the air-brake by George Westinghouse, which replaced hand-brakes, was a major improvement that greatly increased the safety of trains. Loaned by Dorothy A. Stratford.

William W. Reed, *Reed's Head Light, for Locomotive Engineers and Machinists* (Paterson, N.J., 1874). The book is dedicated "To the Locomotive Engineer, as a testimonial of esteem, and admiration of his nobleness and steadiness of nerve, who controls the power of the Locomotive when at his post of duty, and in whose care the lives of many depend."

Tuckerton Railroad Company. *Rules for the Government of Employees* [1870s] "The use of intoxicating drink, or smoking tobacco is positively forbidden during the hours of duty, to all persons in the employ of the company."

Joseph L. Gill (seated, center), agent of the Port Reading terminal coal facility, surrounded by his office staff, November 22, 1930.

Central Railroad of New Jersey. "Employees Monthly Pass," 1872.

[Case 8]

"Why Not Own Your Own Home?"

George Lynde Catlin, *Homes on the Central Rail Road of New Jersey for New York Business Men* (New York, 1873). [title page; back cover ad]

The Vest Pocket Guide, Published by Grover Brothers, Printers (Newark, 1887).

J. H. Schenck, *A Hand-Book to the Oranges, (New Jersey), and Their Surroundings* (New York, 1880).

New Jersey and New York Railroad Company. *Guide to Rural Homes and Summer Resorts on the New-Jersey & N.-Y. R.R.* 1882. Loaned by Joseph J. Felcone.

Tuckerton Railroad Company. *A Perfectly Safe Home Investment. Mortgage on a Finished Road* [1872] A promotional pamphlet that states that the Tuckerton Railroad

“opens up a new section of the State, heretofore unprovided with Railroad facilities,” and that its bonds are “a good and safe investment.”

North Jersey Transit Commission. *Rapid Transit for New Jersey. Annual Report, 1928.*

Photograph of the ferry *Bound Brook* leaving Jersey City terminal, circa 1920s. From the Liberty State Historic Park Collection. Used by permission.

[Case 9]

The T-Rail

Senate No. 69. State of New Jersey. An Act to regulate the width of Track of the Railroads in this state, [1830s?] Broadside.

Section of early Camden and Amboy Railroad rail. The earliest rails used by American railroads were manufactured in England.

Portrait of Robert L. Stevens (1787–1856)

“Sketch of the World’s First T-Rail.” From Archibald Douglas Turnbull, *John Stevens: An American Record* (New York, 1928).

[Cases 10 & 11]

Artifacts

Rear train lantern, Lehigh Valley Railroad or Jersey Central Railroad, early 1900s. Loaned by Dorothy A. Stratford.

Lantern, Lehigh Valley Railroad, early 19th century. Loaned by Dorothy A. Stratford.

Commemorative dinnerware, Baltimore and Ohio Railroad, 1920s. Scammell’s Lamberton China made by the Scammell China Company, Trenton, N.J.; and by the Shenango China Co., New Castle, Pa. The set was used on dining cars of the Royal Blue

Line, which was an express service that ran from New York City to Washington, D.C. It was a cooperative effort, originally suggested by J. Pierpont Morgan, of the Central Railroad of New Jersey, the Philadelphia and Reading Railroad, and the Baltimore and Ohio Railroad. Loaned by Dorothy A. Stratford.

“Peanut” whistle, Lehigh Valley Railroad or Jersey Central Railroad, early 20th century. The whistle was mounted on the last car of the train or on the caboose. Loaned by Dorothy A. Stratford.

Sconce light, early 20th century. The light hung over the conductor’s desk in the caboose. Loaned by Dorothy A. Stratford.

Toy locomotive, early 20th century. Loaned by Dorothy A. Stratford.

[Case 12]

Immigration

Sheets 61 and 62, *Pier Map of New York Harbor ... Published by Sanborn Map Company* (New York, 1922). Among other features, the maps depict the Central Railroad terminal, the Pennsylvania Railroad terminal, and the basin of the Morris Canal.

Aerial Photograph of the Central Railroad terminal in Jersey City, 1929. From the Liberty State Park Historic Collection. Used by permission.

Passenger steam locomotive departing from the Central Railroad terminal in Jersey City, circa 1930s. Photograph. From the Liberty State Park Historic Collection. Used by permission.

“Birds-eye View of Jersey City, New York Ferries, and Pennsylvania Railroad Station,” *Industries of New Jersey*, part 7 (New York, 1882).

[Case 13]

“By the Beautiful Sea”

Engraving of the United States Hotel, *Sea-side Views of the City by the Sea. Atlantic City* (Philadelphia, 1875).

Atlantic City, New Jersey. Camden and Atlantic Railroad Company, to the Sea-Shore (Philadelphia, 1873).

The Sea-side Resorts of New Jersey (Philadelphia, 1877). [illus. of West Jersey RR depot (p. [24]); illus. of Seaside Park Hotel (p. 72); illus. of Colorado House & ad (p. 92-93)]

Frank H. Taylor. *A Jaunt by Rail through the Meadows and Mountains of New Jersey, New York and Pennsylvania*. Presented by the New York, Susquehanna & Western Railroad Co. (New York, 1882).

Central Railroad Company of New Jersey. *Central Railroad of New Jersey, and Branches. Travelers and Tourists Guide, 1881*.

The steamboat *Jesse Hoyt*, which was built in 1862 at Keyport, was 239 feet long. She ran for more than two decades on the Raritan and Delaware Bay, the New Jersey Southern, and the New Jersey Central railroads' popular route from New York to Sandy Hook. Painting by James Bard, reproduced as a plate in George H. Moss, Jr., *Steamboat to the Shore* (1966). The advertisement for the steamboat is from J. H. Schenck, *A Complete Descriptive Guide of Long Branch, N.J.* (New York, 1868).

Photograph of the steamer *Monmouth*, 1903. Built in 1888 for the Central Railroad's "Sandy Hook Route," she ran until 1941. From George H. Moss, Jr., *Steamboat to the Shore* (1966).

Special Notice to Passengers, 1854. A broadside regarding a change in schedule for the steamer *John Potter*. The vessel was built at Hoboken in 1847 for the Camden and Amboy Railroad; it burned in 1864. The notice was issued by the Freehold and Jamesburg Agricultural Railroad, which was affiliated with the Camden and Amboy.

The New Jersey Ocean Resorts and the Pennsylvania Railroad. 1884. Foldout map that originally accompanied the 1884 edition of the company's *Summer Excursion Routes*.

Pennsylvania Railroad Company. *Summer Excursion Routes. Pennsylvania Railroad Co. 1892*. From the 1870s onward, the company issued an annual excursion route guide.

Reading Railroad Company. Photograph of Wildwood beach scene, 1917; on verso is an excursion advertisement and timetable. The item may have doubled as a fan.

Postcard of the Engleside Hotel, Beach Haven, N.J., July 1912. Message on verso: "This is certainly the State of the Mosquitoe and Fly." In 1886 a railroad spur from the mainland carried vacationers directly to Beach Haven. Anonymous loan.

An artist's sketch of the chaotic scene at the Long Branch and Seashore Railroad's dock at Barclay Street in Manhattan, 1866. Passengers would depart from here via steamboat to the landing at Sandy Hook, then board the train for Long Branch and points south. From: George H. Moss, Jr., *Steamboat to the Shore* (1966).