

High Railroads
Cunningham School

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Section V

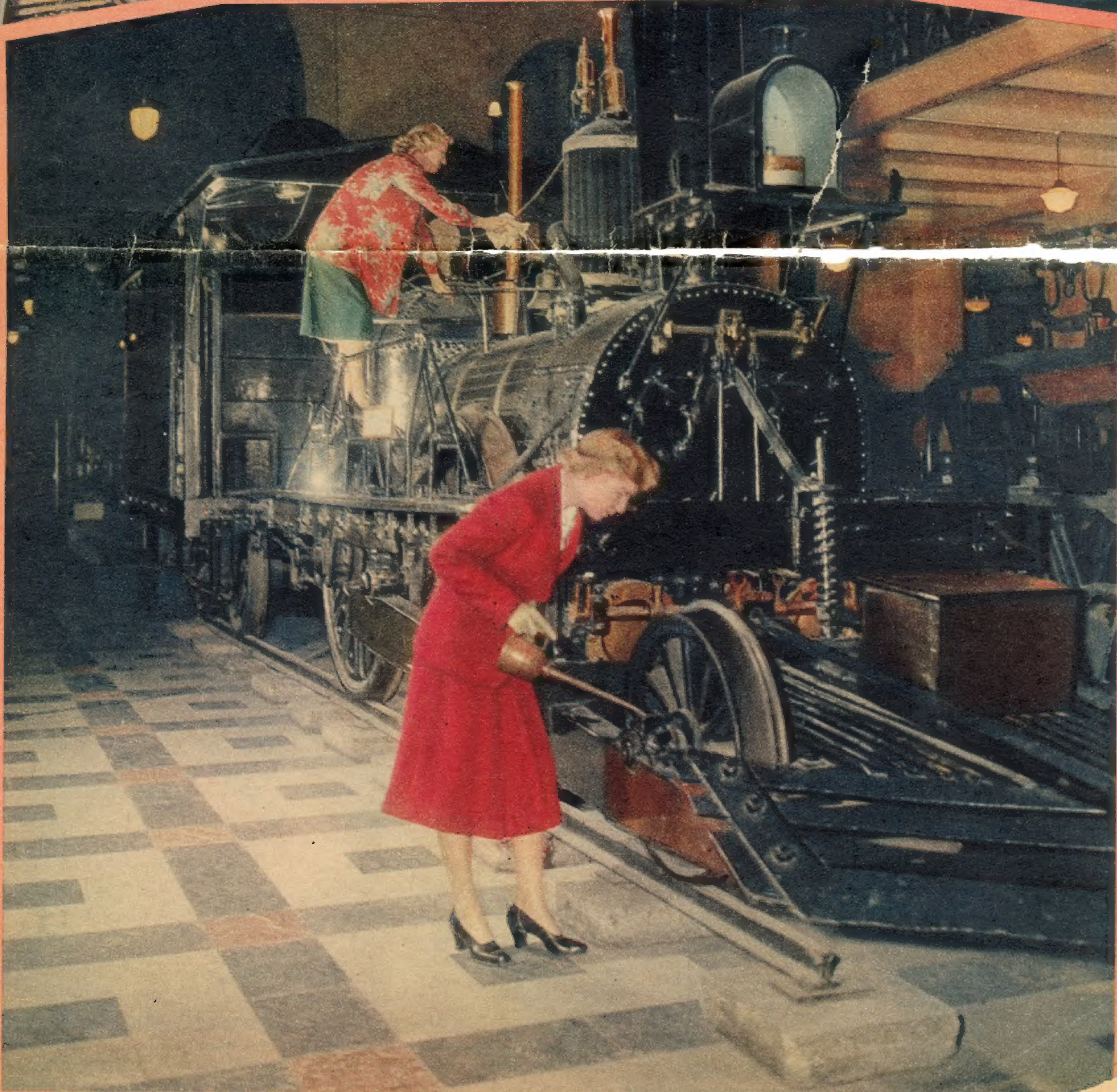
January 7, 1951

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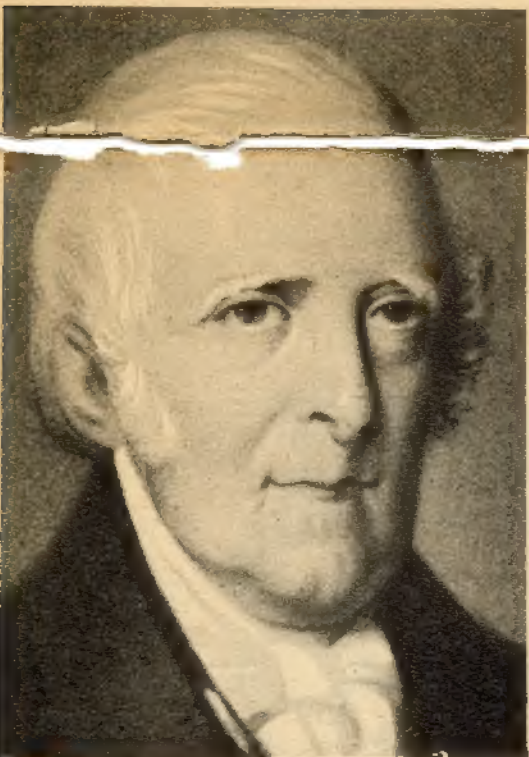
Revolutionary mode of travel started
by nation's first railroad at Hoboken

(SEE PAGES 4, 5, 6, 7)



RAILROADING *in New Jersey*

Contemporary painting shows the Stevens locomotive of 1825 chugging around circular track on "The Green" at Castle Point, now the site of Hoboken's City Hall.



Col. John Stevens from a portrait made at the time he visualized railroading's future in his "Documents."

Father of American Railroads

COLONEL JOHN STEVENS wrote furiously as the first warm winds of the Spring of 1812 swept into the study of his Hoboken mansion. His gray eyes flashed angrily as he paused to reflect on the reception his dream of a steam railroad had met in the past year.

The Jersey colonel now was taking his vision of a railroad to the people as he scratched through the pages of his "Documents Tending to Prove the Superior Advantages of Railway and Steam Carriages over Canal Navigation." This was the only way—maybe the people could help; certainly no one in an official capacity would do more than listen politely.

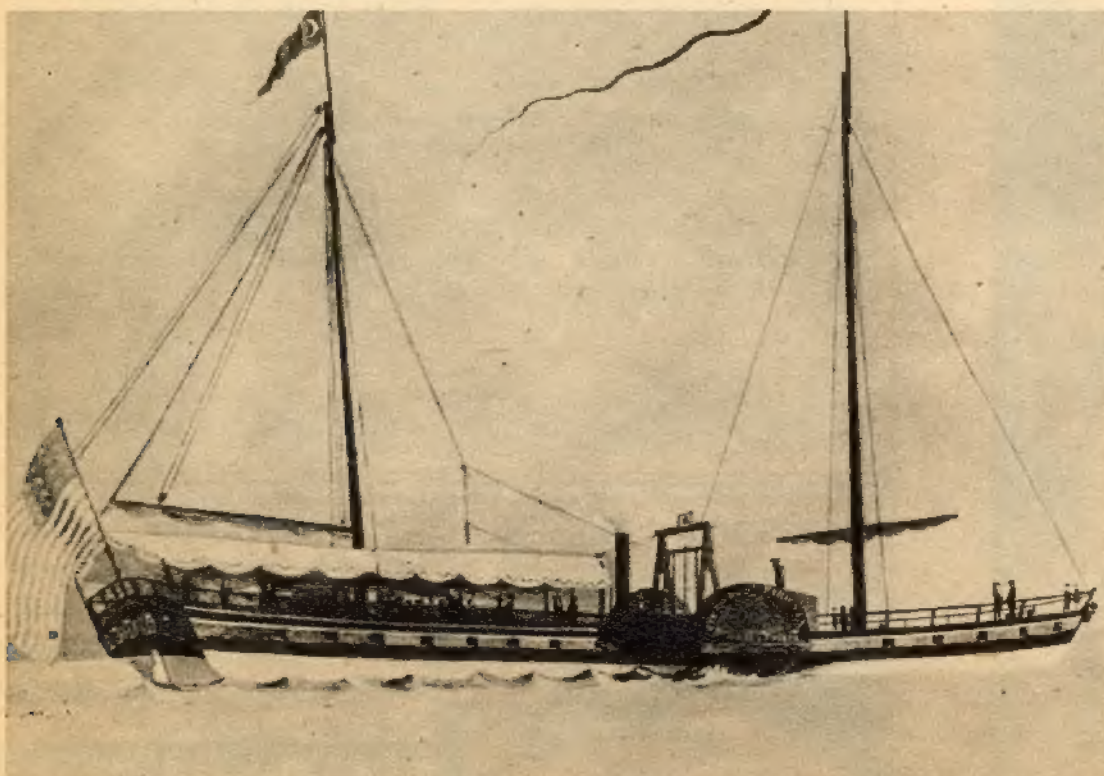
He leaned back from his desk and closed his eyes. Flooding back came the memory of his plea for a railroad charter before the New Jersey Legislature in 1811. Even now he could see the faces, could remember the in-

credulity—yes, the pity—with which they discussed his scheme of a steam railway thundering across the state.

COLONEL STEVENS had reason to expect more than a polite hearing from the New Jersey Legislature. Many of them were his friends, some were relatives. Even those who had never seen him knew about him; knew of his distinguished Revolutionary War record, his successful experiments with steam engines, his early fight for a patent law.

After all, he was no Johnny-come-lately in the field of transportation, no fanatic. He had established the world's first steam ferry in the Hud-

(New Jersey probably had a more important role in the establishment and development of railroads than any other state in the country. This article, the first of a series, deals with the trials of Colonel John Stevens of Hoboken, universally acclaimed as "The Father of American Railroading," his long fight to obtain a railroad charter from the State Legislature and the unveiling of his "Steam Waggon," America's first locomotive in 1825.)



Col. Stevens's "Phoenix," first seagoing steamboat, and his Hoboken home. Latter was destroyed by fire and replaced in 1854 by Castle Stevens.



Advent of steam age in early 1800s was lampooned in this fashion by an artist of that period who had dire forebodings of mechanized transport.

son River and his "Phoenix" had been the first steamboat to venture into the open sea.

But there was no charter. "He could remember the long stage ride home from Trenton over roads rutted and ruined by the heavy wagons lumbering westward laden with supplies for

son had added to the United States in 1803?

LORD Colonel Stevens figured, it would take six or eight months to get to the Pacific Ocean at that rate! Why it took a week of a man's time if he wanted to go from Philadelphia to

new market building west of the Alleghenies, and no way to link the maker with the buyer.

There was no disagreement on the fact that turnpikes couldn't carry the burden of a growing nation. The answer seemed to lie in canals. Everywhere men were excited about these inland waterways.

Colonel Stevens turned to the letters he had exchanged with the Erie Canal Commissioners. He would include them all in his case for the public, starting with the first careful summary of the advantages of a railroad linking Albany and Lake Erie.

CAREFULLY he re-read the letters. Could he have said something fantastic? No, it all seemed reasonable enough:

"... a railroad ... to be built on an elevation above snow level ... the moving power to be a steam engine ..."

He had asked for money to conduct

the experiment, of course, but only about \$3,000. An insignificant sum when he was going to prove that he could haul freight across state for 50 cents a ton in contrast with the Erie Canal's proposed cost of \$3 per ton.

No, answered the Erie Commissioners on February 24, 1812. No, colonel, there is no \$3,000 available. An ingenious idea, however.

Colonel Stevens had responded impetuously: "... when millions are to be spent, shall a few thousand be grudged? Sooner or later the improvement now proposed will be brought into general use ..."

The colonel turned back to his "Documents." He wrote:

"I can see nothing to hinder a steam-engine from moving with a velocity of 100 miles per hour. In practice, it may not be advisable to exceed 20 or 30 miles per hour, but I should not be surprised at seeing carriages propelled at 40 or 50."

(Continued on Following Page)

Dream of Jerseyman Who Established First Steam Ferry on the Hudson Came True With Operation of 'Steam Waggon' Line in 1825

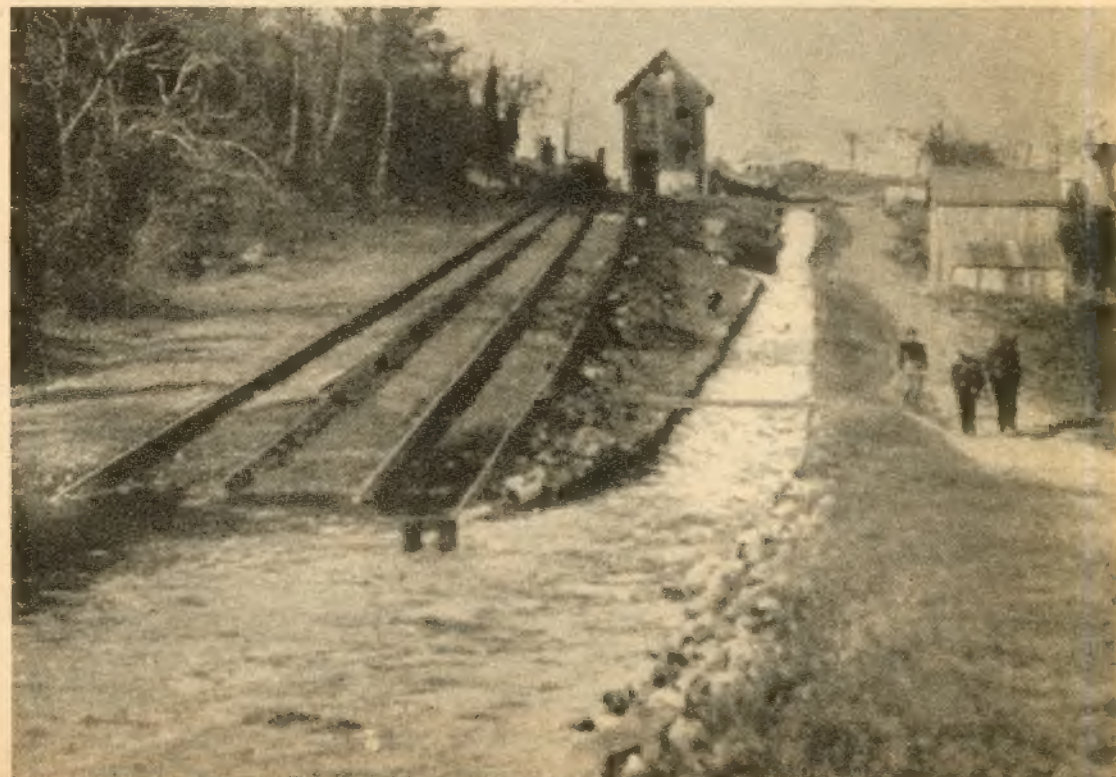
BY JOHN T. CUNNINGHAM

settlers beyond the Delaware. Often the stage was stopped by droves of sheep and pigs being herded to market across state. It was five hours before he was back at Stevens Villa.

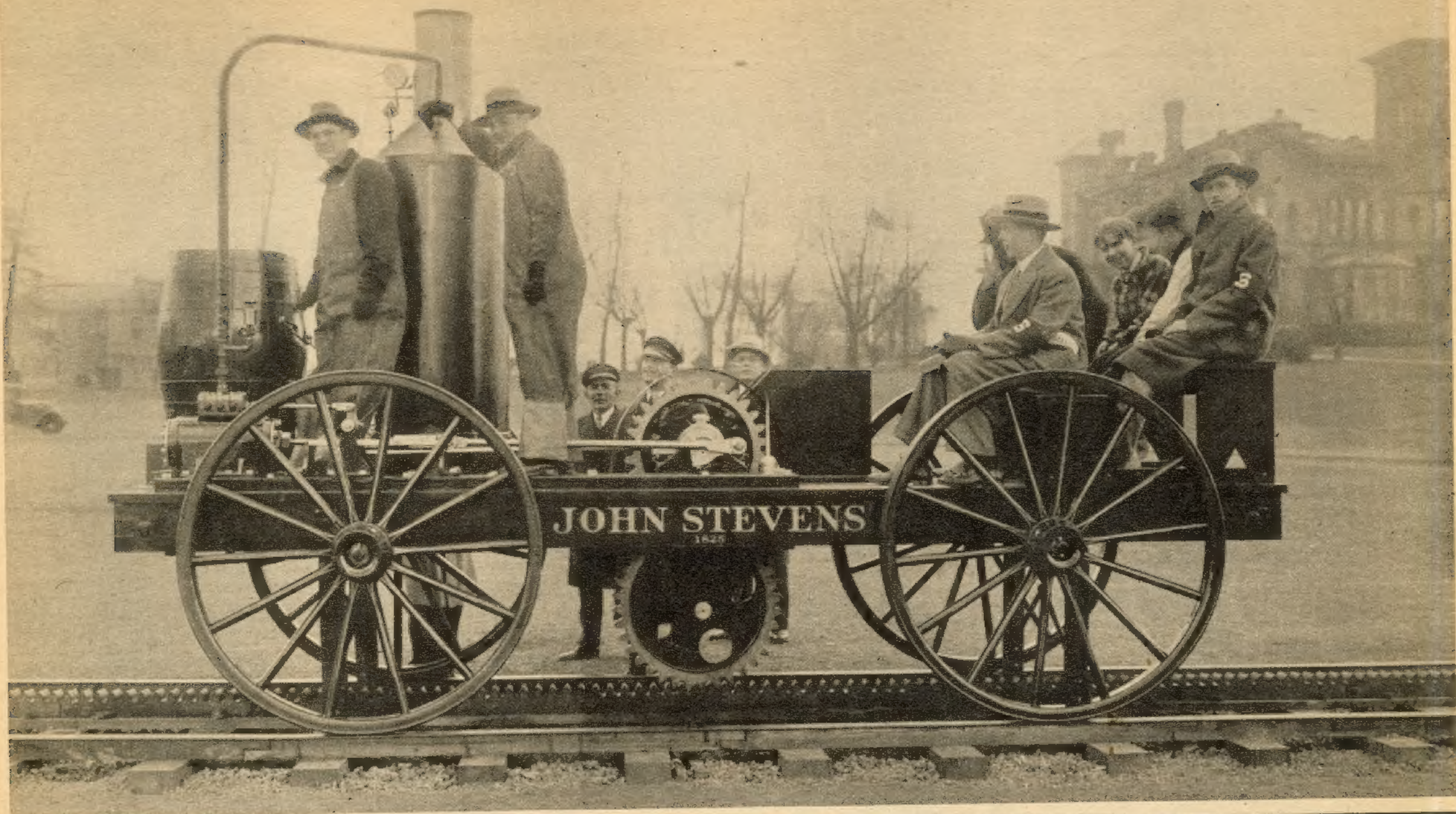
Was this the way to develop the West? Was this the way to move people to the Mississippi and beyond to the great territory Thomas Jeffer-

Boston—and that in the most modern carriages over the nation's best turnpikes.

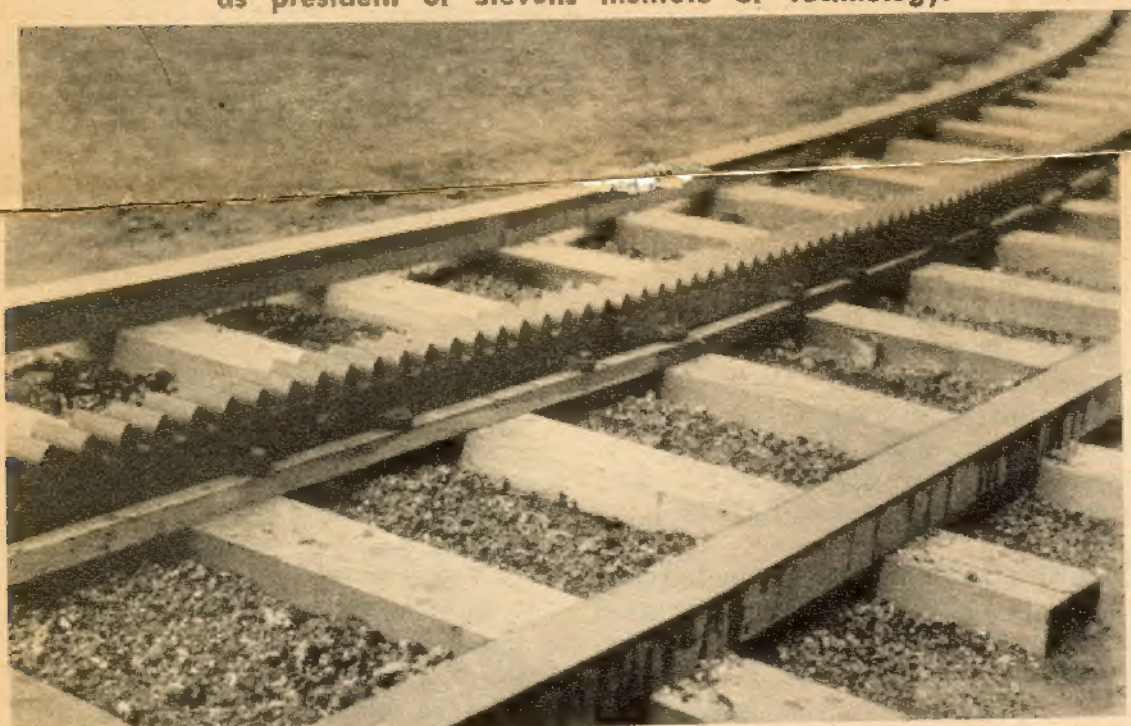
And the cost! He rummaged around in his desk for the figures—\$125 per ton from Philadelphia to Pittsburgh; prohibitive rates even on short hauls. Here was a nation beginning to burst at its industrial seams, with a great



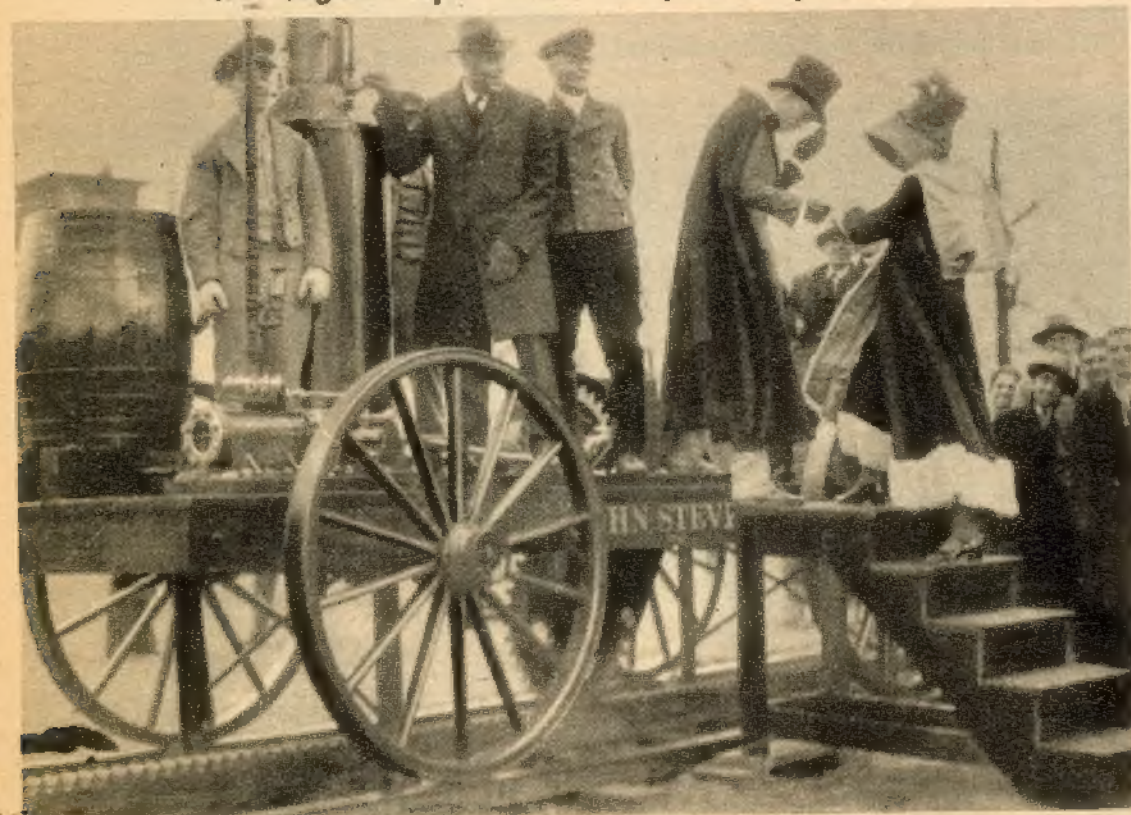
Covered wagons and stages could not develop a young nation and many believed the answer rested with inland waterways like Morris Canal (above).



This copy of the original John Stevens locomotive appeared at Castle Point in November, 1928, for inaugural ceremony of Dr. Harvey N. Davis as president of Stevens Institute of Technology.



Closeup of "third" rail which was engaged by the engine's spur wheel to provide propulsion.



Costumed for the occasion, descendants John Stevens 7th, and cousin Emily Lewis Stevens board working model of the original locomotive. Second from left, with hand on boiler, is Dr. Davis. Right: The "steam carriage" gets under way. Photos taken in 1928.

JERSEY'S FIRST RAILROAD

(Continued from Preceding Page)

This before Colonel Stevens had ever seen a railroad; two years before the illustrious George Stephenson had built his first locomotive in Great Britain!

So what, John Stevens?

Well, the Document replied, such rapid transportation would make the states "one family intimately connected." It would mean greatly increased revenues for the states, it would save the farmer four-fifths of his expenses in reaching markets. Armies could be transported in 24 hours "a greater distance than would take weeks or months to march."

The "Documents" only brought Stevens increased ridicule. His careful biographer, Archibald Douglas Turnbull, wrote that men who gathered to discuss the Stevens work exclaimed:

"Heard John Stevens latest? He's

making a damned fool of himself over steam waggons!"

Down in Philadelphia a newspaper writer picked up the "Documents." "A railroad? What's a railroad, Sir?" he asked his editor. The editor replied that he didn't know, but he was against it.

Elsewhere the reaction was more vehement. Editors lambasted the ridiculous thought that steam could be used to haul passengers or freight. "Why if the contraption doesn't blow up it will terrify livestock to death," wrote one. Cartoons showed to what horrible lengths steam might come, with steam-driven carriages mingling in chaotic confusion with snorting steam-driven individual carts.

RAILROADS and expansion to the West soon became a matter of little import, however. The first seamen had been impressed by British warships. The first cannon were booming the announcement that the United



States was again at war with mighty Great Britain.

Colonel Stevens turned his thoughts to armor-piercing projectiles, but Army and Navy brass weren't snatching up new ideas. Interestingly enough, Stevens decided to try to sell the projectile idea to a foreign nation and he chose the "one nation unlikely ever to go to war with the United States" — Russia! Russia didn't buy it.

The successful end of the war brought converts to the Jerseyman's thinking. The fledgling nation—secretly not too sure of itself until it licked the British the second time around—was ready to move. Difficulties in moving troops and supplies during the war had become evident.

Now, too, the nation was experiencing the full pains of its growing industrial might. Now, more than ever, quick ways had to be found to reach the West.

Moreover, George Stephenson had started working on his first steam locomotive in Great Britain and produced his first crude model in 1814, at about the same time John Stevens, now 65 years old, was tramping across the state making the first railroad survey.

COLONEL JOHN'S journal reveals the lack of development in the area through which he proposed to run the railroad:

Starting at "Lower Landing," he struck out through woods and fields to Cranbury, thence to Trenton by way of "... the Devil's Brook, the



Reproduction of 1852 map shows secondary role of railroads which served as *réeders* for hundreds of miles.

the railroad line — horse-drawn, steam-drawn or spirit-driven.

STEVENS kept knocking on doors, writing letters, imploring politicians for a hearing. He suggested a short line in Washington, D. C.; tried to interest Southern promoters; walked 73 miles to lay out a proposed railroad from Philadelphia to Columbia, Pa., and kept after DeWitt Clinton to build a New York railroad.

Clinton answered occasionally—and cautiously. In 1824 he mailed a note and inclosed a clipping telling about plans for a railroad in England. "If that succeeds," Clinton wrote with admirable restraint, "Then there should be no difficulty in realizing your views!"

This time Stevens laughed. He knew that all the politicians and money men needed to be able to see his vision was to have the vision actually running before their eyes. Accordingly, in 1825 he built the country's first locomotive and ran it around a circular track at Hoboken.

It wasn't much of a locomotive, as today's monsters go. He called it simply, "The Steam Waggon," and visitors to Stevens Villa had to batten down their beavers or tuck in their skirts and ride behind the snorting beast. It took courage, too—as much courage as it would take to ride today in a rocket ship.

The Stevens railroad was simple. The 16-foot "Steam Waggon" was run by a steam-driven gear which meshed into a rack between the tracks (wooden rails covered with strips of iron). One section of the 630-foot long track was deliberately raised 30

inches on one end to prove the engine could run up hill.

Around and around at 12 miles per hour rode hardy visitors, ever fearful that the spark-throwing demon would split its sides and blow them to their destiny. Many refused to go near the work of the devil.

The "Steam Waggon" proved the point. It was to be six years before New Jersey started to build its first railroad. By then three others were in operation of a sort in various parts of the East—South Carolina, New York and Maryland.

Public enthusiasm for railroads far outran that of the legislators, most of whom still favored canals. The Erie Canal was placed in operation the same year the "Steam Waggon" ran, and work started at about the same time on the Morris Canal.

COLONEL JOHN wasn't even represented on the directors of New Jersey's first commercial railroad, the Camden and Amboy, chartered in 1831. Rather, it was his son, Robert L. Stevens, who spearheaded that movement. It has been said that Colonel John was the dreamer, Colonel Robert the doer.

Be that as it may, the old colonel was overjoyed with the charter and when the Camden and Amboy's first

locomotive arrived in this state in August, 1831, he threw a monster party to celebrate. Then 82, his spirits were "as sparkling and abundant as the champagne."

He lived to be 89 years old, and when he died in 1839 railroads were beginning to honeycomb the state and the East and men were even talking about steam lines clear across the country. All of the fancy and dreaming was in other hands and hearts. The "Steam Waggon" knew no bounds.

IRONICALLY, this man who fathered America's railroads without ever having seen a locomotive apparently died without ever having ridden on a real railroad. The railroad an accomplished fact, his facile mind had turned elsewhere. He was trying to get people to listen to a proposal to finance public education and start a state university out of railroad taxes!

The state university was as far ahead of the times as some of Colonel John's other proposals. However, a son, Edward, was to make part of that dream come true in 1869 when he endowed Stevens Institute in Hoboken, close to the spot where the "Steam Waggon" ran to coax others into the colonel's vision.

Next Sunday: The Camden & Amboy Railroad

ON THE COVER

Locomotives have undergone radical changes since George Stephenson built the "John Bull" in Great Britain for the Camden and Amboy, New Jersey's first commercial railroad. Now in Washington's Smithsonian Institution, where it is shown, the ancient engine appears with modern counterparts—electric, steam and diesel.

DOCUMENTS
ENDING TO PROVE
THE SUPERIOR ADVANTAGES

OF
RAILWAYS
AND
STEAM-CARRIAGES
OVER
CANAL NAVIGATION.
NEW YORK:
PRINTED BY T. AND J. SWORDS,
No. 160 Pearl-Street.
1812

Front cover of Col. Stevens's historic "Documents."
Hide's Town road, and so to Princeton, up to Rowland's Tavern and the Ten Mile Stone; past the Quaker Wood by Jacob Haw's stable...
In Trenton the colonel stopped in the Steamboat Hotel and treated himself to a well-earned "whisky and cider."
The following year, on February 6, 1815, he got his New Jersey charter—first in the United States. Significantly, no mention was made of the type of motive power. Willy old John was playing down steam in public. If he could get his rails laid, use horses for awhile, then maybe someday...
It really didn't make any difference what power he proposed. The capitalists of New York and Philadelphia weren't buying anything in