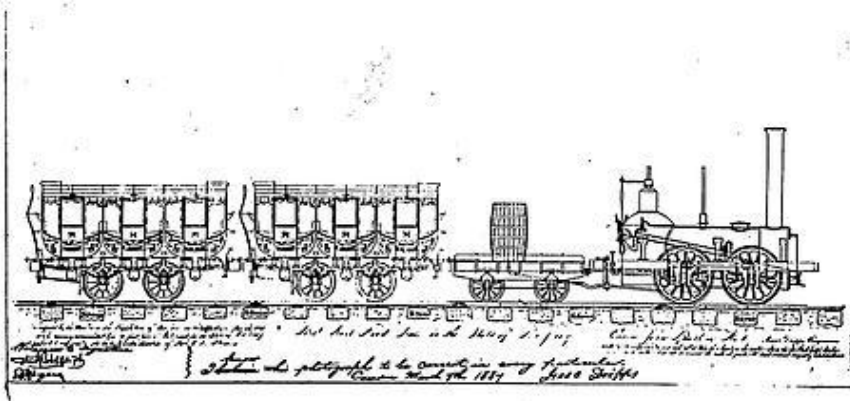


The Pioneer Camden & Amboy Railway

Excerpted from Mike's Railway History

By Michael Islam



The John Bull locomotive, tender and two carriages as drawn by C&A mechanic Isaac Dripps in 1889.

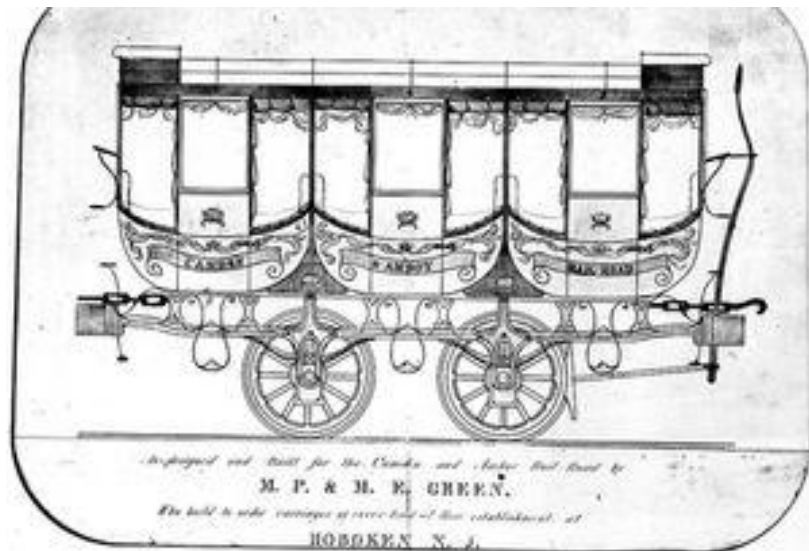
In 1831 the Camden & Amboy Railroad, the first line to be laid in the State of New Jersey, was built - first between Bordentown and South Amboy and later extended from Bordentown to Camden, a total distance of sixty-two miles. The Pennsylvania Railroad took over the Camden & Amboy Railroad in 1871. All records of early railroad construction agree that this ancient stretch of track was one of the first to be laid anywhere in the United States.

Passengers who travel over the Pennsylvania Railroad between Bordentown, N.J., and South Amboy can see this length of old railway, laid on large granite blocks called sleepers, just beside the tracks near Jamesburg Station, about twenty miles northeast of Trenton, the State capital.



Photo of original stone sleepers and rails adjacent to a modern rail and wooden tie roadbed set in stone ballast.

It was in the late spring of 1831 that pioneers, in search of a quicker and more convenient means of transport between Philadelphia and New York than the stage coach and canal boat, laid the old track as part of the original Camden & South Amboy line. Despite the fact that it has been exposed to the elements for a full century, this relic of the infancy of America's railway system is in a fair state of preservation, and gives promise of lasting another hundred years.



The original coaches designed like the coaches of the day.

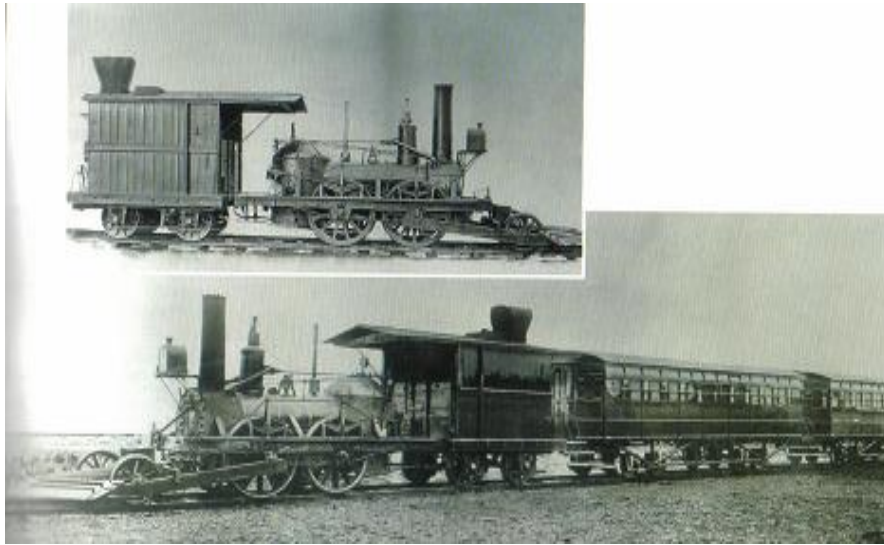
The pioneer Camden & South Amboy Railroad was chartered by the New Jersey State Legislature late in 1830 to operate a combined rail and water route between Philadelphia, Camden, and New York City. No iron suitable for the tracks was available in the United States, and the railroad's first president, Robert L. Stevens, sailed for England to develop with London iron workers a satisfactory rail design.

Whiling away idle hours on board ship, Stevens worked out an entirely new type of rail for his line, marking a distinct departure from the type then in use in England, and on the one or two short stretches of railway already operating in the United States. He discarded the old wooden rail or stone sleeper plated with scrap iron then in general use, and designed a crude but practical anticipation of the T-rail, which, with slight variations in shape and modernization in size and weight, is still the standard design of railway tracks to-day. This rail was used by Robert Stevens for the first time on the old Camden & South Amboy Railroad.

The first lengths of rail for the pioneer line were received by ship from England early in 1831, and the first piece of track, five-sixths of a mile long, was laid during the summer of that year from Bordentown northwards in the direction of Hightstown. Later, the line was extended to Hightstown and thence to South Amboy, reaching completion late in 1832.

Part of this original iron track, designed by Robert Stevens, may be seen to-day at Jamesburg. The track was laid on great stone blocks two feet square bought from the prison authorities at Sing Sing, New York. The rail was attached to the stones by a newly devised hook-headed spike, the forerunner of the spike now in general use. The rail weighed 40 lb. to the yard as compared with 132 and 152 lb. rail weights on the Pennsylvania Railroad today, and was rolled in lengths of 16 feet. The ends of the rails rested on wrought iron plates and were connected by iron tongues five inches long, which were riveted to the rail ends, completing the joint.

[Editors note: A section of the original roadbed has been excavated for display on Railroad Place in Hightstown, NJ. It was formally accepted to the New Jersey Registry of Historic Places in 2016.]



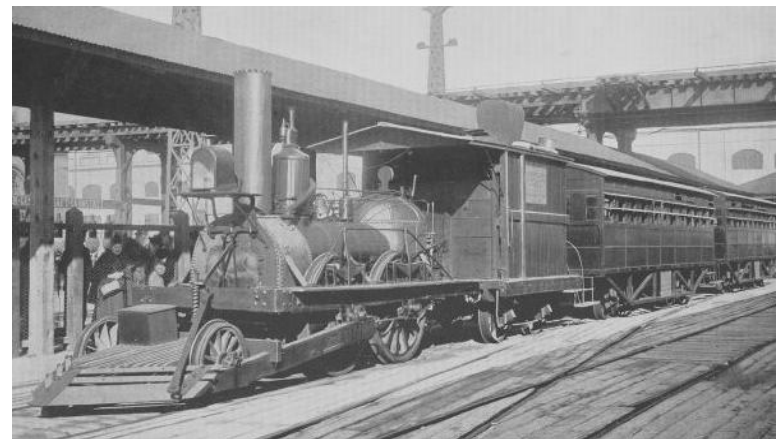
Although the first cars were pulled by horses, this pioneer line was one of the first in the country to use a steam locomotive. The engine "John Bull," built in England, carried the first passengers by steam in the State of New Jersey over the Camden & Amboy, a short distance out of Bordentown, on November 12, 1831. A large party braved the uncertainties of the new means of transport, including many members of the New Jersey Legislature, prominent business men, and others. During the first few years of its operation, passengers over this route traveled in steamboats between Philadelphia and Bordentown, and between South Amboy and New York. With the completion of the line early in 1834, however, the through rail route across New Jersey was opened.

When this early railroad to South Amboy was built, iron rails were spiked directly to wooden sleepers for the first time in railway history. A deep cutting was made near the town for the projected line, and—the authorities at Sing Sing having failed to deliver stone blocks rapidly enough—the engineers in charge

ordered hewn wood sleepers to be laid temporarily, the rail being spiked directly to the sleepers. A number of these sleepers were put down on the sharpest curves of the cutting.

To the surprise of all they gave such satisfactory service and were so well suited to the purpose that they were allowed to remain. As time went on, and experience taught its many lessons, the stone blocks in the track were gradually removed and replaced by the wooden sleepers. This track was undoubtedly one of the first to be laid with rails secured direct to wooden cross ties, a practice which has since been widely adopted throughout the world.

It is not possible here to give historical details of other early railways now forming part of the Pennsylvania Railroad, the lines of which originally embraced over 600 distinct corporations. It is desirable, however, to note the trend of Pennsylvania locomotive development since the days of the "John Bull" referred to above. This locomotive—still in existence—comprises a miniature engine and boiler with a tall chimney, mounted on four small driving wheels, and having a long, protruding "leading truck" and a curious tank-like firebox. The weight is eleven tons.



In 1893, sixty-two years after it was built, the locomotive left New York under its own steam and hauled a "train" consisting of two small trucks. It reached Chicago, 912 miles away, in five days without mishap.

This early locomotive embodied three basic principles of design—the use of exhaust steam for forced draught, a boiler arranged to produce much steam in a small space, and horizontal cylinders to drive the wheels. And as the sixty-two years old "John Bull" puffed along to Chicago, the "Pennsylvania Limited"—then one of the most famous trains in the world—sped past it at thirty-five miles an hour, using these same basic principles for an enormously greater production of power.



This photo is reported to be of the first train to cross the newly completed turntable bridge on the Rancocas Creek in 1906. The span was moved to Delanco from its former location on the D&R Canal.

In the early days, more power was largely a question of greater speed. But soon the important consideration became

rather a question of how much work a locomotive could do, and not merely the speed at which it could do it. An engine in service a little later than "John Bull" drew thirteen tons of freight at a maximum speed of twenty-nine miles an hour on a level track. Today Pennsylvania freight locomotives can draw one hundred steel wagons, containing 7,000 tons of coal, on varied grades and at higher speeds.



A Pennsylvania Railroad engine heading south over the Rancocas Crossing bridge. Note the newer, higher bridge under construction to the right and Delanco Station to the left.

Excerpted from Michael Islam's comprehensive work
[A look at Railroads and Rail Travel before 1936](http://www.mikes.railhistory.railfan.net)
www.mikes.railhistory.railfan.net

Photos provided from the Delanco Photo Archive by the
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