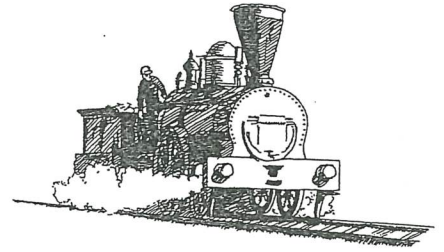


Improvements in Transportation

The coming of the steamboat was only the beginning of a great change that occurred in America. Prior to 1800, Americans were plagued by slow transportation. Roads were often paths cut through the forest with stumps just low enough that a wagon could pass over them. Rivers were the main method of getting goods to market, but they could run low, flood, or have a current too swift at points for safe passage. The need for improvement to travel was obvious, and different approaches were used to accomplish it.



Roads

Construction began on the National Road in 1811; it was to be a turnpike built between Cumberland, Maryland, and Wheeling, Virginia. It was America's first superhighway, and it was completed in 1818. It was 30 feet wide in the mountains and 66 feet wide elsewhere. With solid bridges and a gravel base, it seemed like a work of wonder to travelers. By the 1830s, a trip from Washington to Wheeling took only thirty hours! Other privately owned turnpikes were built as well, but most roads continued to be very poor.

Canals

Another improvement was the Erie Canal. Built between Albany and Buffalo, New York, from 1817 to 1825, it was an enormous success. It was 364 miles long, four feet deep, and 40 feet wide. It carried the commerce of the Great Lakes to New York and made it the center of the nation's trade. For shippers, the cost dropped from 20 cents a ton mile to 2 cents. Other states also built canals, especially Ohio and Indiana, but theirs were never as successful as New York's. It did not take long for the canal era to end, however, as stiff new competition came from the railroad.

Railroads

In the early 1820s, English inventors began to work on steam engines to do work, and Americans who were aware of this saw the potential of railroads for America. In 1828, construction began on the Baltimore & Ohio (B&O) Railroad, and in 1830, thirteen miles of it opened for business. Soon other railroads were being built in America.

Traveling by train was regarded as an almost foolhardy thing for a person to do. Sparks from the locomotive's boiler blew back on passengers, and since many boilers were poorly made, explosions occurred. Railroads put on barrier cars that were piled high with cotton between the locomotive and the train to protect the customers.

Improvements came very quickly. The "Tom Thumb," the first American-built locomotive on the B&O, had a top speed of 15 mph but averaged only 5.5 mph. In a race with a horse, it lost because of mechanical failures, but it proved itself in the long pull by hauling 42 passengers with its 1.43 horsepower. In 1832, just two years after the "Tom Thumb" was built, the Mohawk and Hudson Railroad built the "Brother Jonathan," which was much heavier and more powerful. It could move at a top speed of 80 mph.

Americans quickly saw the importance of railroads, which could transport people far more rapidly than a stagecoach. Most railroads were constructed east-west, and this caused less contact between Northerners and Southerners. The North's railroads were far superior to those in the South, which would become a factor during the Civil War.