Industrial Revolution

Part 2 Transportation

Transportation

Mass production and factories meant more goods available to sell. The problem was how to get them to the consumer.

Robert Fulton, was given credit for creating the first steamboat in 1807.

The steamboat was used to move goods and people up and down the Hudson river. It was faster and cheaper than going overland.

In 1807, President Jefferson approved building the National Road, commonly called the Cumberland Road. It was the first road built entirely with federal funds. It opened for traffic in 1818.

Erie Canal

In 1817, workers in New York began to build the Erie Canal connecting the Great Lakes with the Hudson and Mohawk Rivers.

Many people thought it would be impossible to build the canal. It took 8 years to overcome the many physical obstacles that blocked the canal's finish.

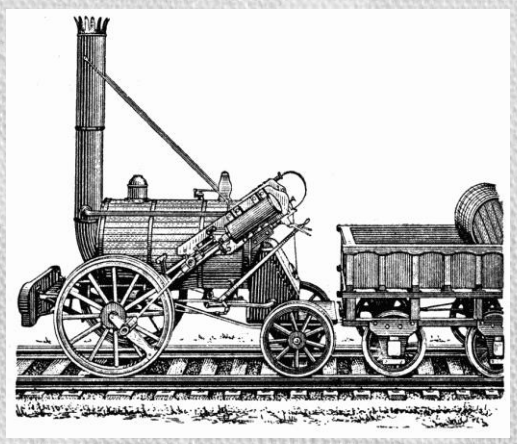
Finally, in 1825 the Erie Canal was finished. It was a boon to New York's economy. Goods could be shipped from Buffalo to Albany in 8 days instead of the 20 days needed for overland shipping.

Steam Engine

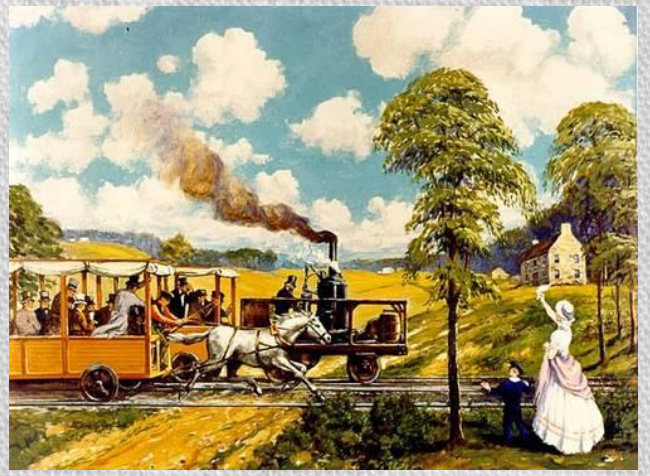
By 1829, the steam engine had been invented.

"The Rocket" was the first engine that included features that would be standard in future train engines. It could travel 30 mph.

Many people questioned whether steam powered railroads could ever become a major form of transportation in America.

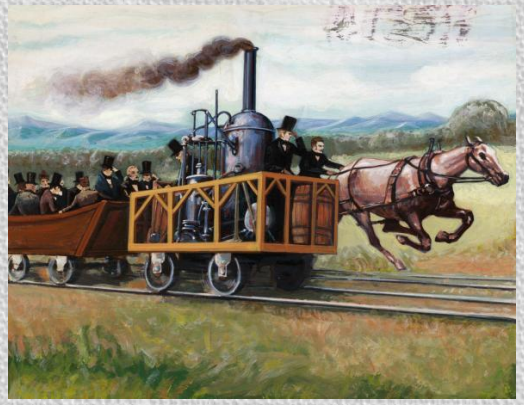


Inventor and businessman Peter Cooper designed and built a small locomotive he called Tom Thumb. On August 28, 1830, Cooper was challenged to race his little locomotive against one of the trains being pulled by a horse on the Baltimore and Ohio Railroad.

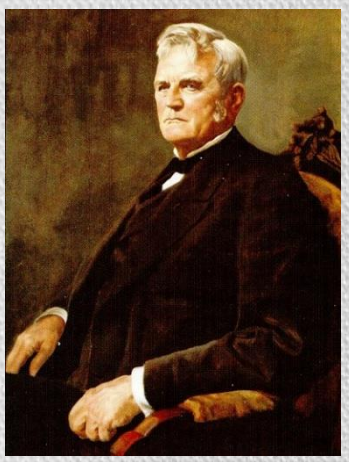


Cooper accepted the challenge. Tom Thumb was winning until the engine threw a belt and came to a stop.

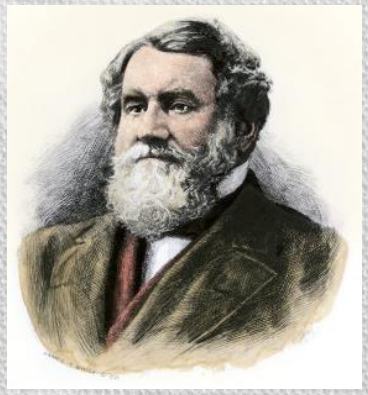
The horse won the race that day. But Cooper and his little engine had shown that steam locomotives had a bright future.



Communication and Farming



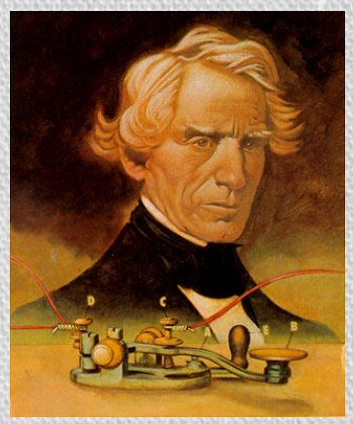
In 1834, Cyrus McCormick invented a grain reaper which made harvesting grain faster and easier.



In 1836, John Deere invented a lightweight steel plow which made farming easier and faster.

In 1837, Samuel F.B. Morse invented the telegraph to speed up communication.

He also invented the Morse code which allowed communication through the telegraph.

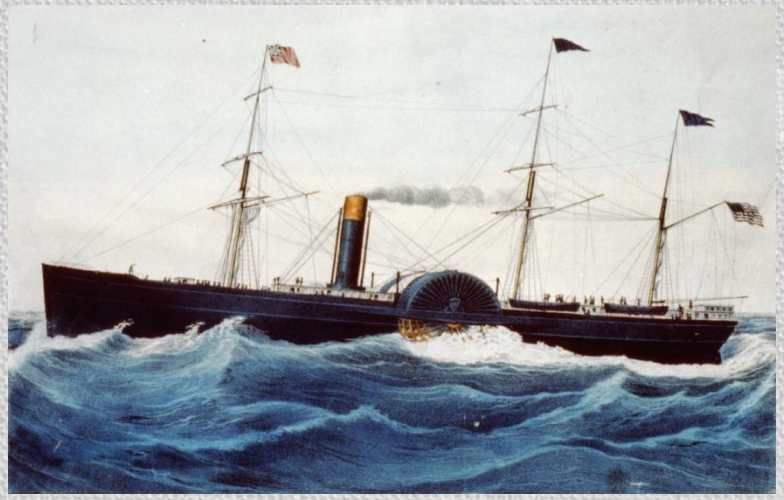


MORSE CODE

A	•—	N	—•	1	•————
B	—•••	O	———	2	••———
C	—•—•	P	•——•	3	•••——
D	—••	Q	——•—	4	••••—
E	•	R	•—•	5	•••••
F	••—•	S	•••	6	—••••
G	——•	T	—	7	——•••
H	••••	U	••—	8	———••
I	••	V	•••—	9	————•
J	•———	W	•——	0	—————
K	—•—	X	—••—		
L	•—••	Y	—•——		
M	——	Z	——••		

Clipper Ships

- In 1845, America led the world with their Yankee Clippers or Clipper ships.
- A clipper ship had a very tall mast and huge sails but a narrow hull that could move swiftly through the water.
- The standard trip from New York to San Francisco took 200 days, on a Yankee Clipper it took 79 days.
- The time of the Clipper ship ruling the seas was brief as steam ships were improved in the 1860's with the invention of the compound engine and quickly outpaced the Clipper ships.



Industrial Revolution Summary

- The industrial revolution was all about creativity but there were three themes underscoring all the creativity.
  - Faster
  - Easier
  - Cheaper