



Trains carried **finished factory goods and settlers**

to the West.

Trains carried **raw materials, crops, beef**

to the East.

Some railroads used unfair methods to destroy other smaller railroads.

This created some of the first **monopolies**.

Inventors and
Inventions~

After the Civil War, American ingenuity seemed to be reborn.

A huge number of **patents** were issued.

Define Patent~ **legal protection for a person's invention. Now, no one can copy your inventions without permission**

American became known as the land of **invention**.

Edison's Invention
Factory~

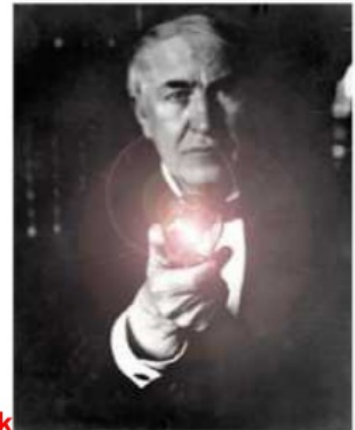
In 1876, Thomas **Edison** created a research lab in **Menlo Park, NJ**.

Edison's inventions include **lightbulb, record player and motion picture camera**

Edison's inventions were useless without **electricity**.

So, Edison created the first power plant in New York City.

Some of the benefits of lighting and electricity include: **factories operate longer, safer machines, more time off from work**



Communications
Revolution~

During the 1800s, the **telegraph** was the primary form of communication.

The telegraph used a system of dots and dashes known as the **Morse Code** transmitted down telegraph wires.



Alexander Graham **Bell** patented the first **Telephone**.

His first "call" was to his assistant, Mr. **Watson**.

Bell's telephone became one of the most important inventions of the last century.

<<<<Bell and his phone

Devices for In 1868, Christopher **Sholes** invents the **typewriter**.

Home and Office~ George **Eastman** invents a cheap, lightweight **camera** which allows everyone to record their lives on photos.

Transportation **European** engineers were the first to develop the gas powered Revolution~ **automobile**. This was invented by Karl Friedrich Benz, a German.

Henry Ford~ However, an American made cars affordable to everyone. He was Henry **Ford**.

Ford's secret was **mass production**.

Ford perfected the **assembly line** in which the automobile being built came to the worker on moving belt.

Worker specialization

allowed each Ford worker to become very fast and good at his job.

Ford cars were also built with **interchangeable parts** which lowered costs.

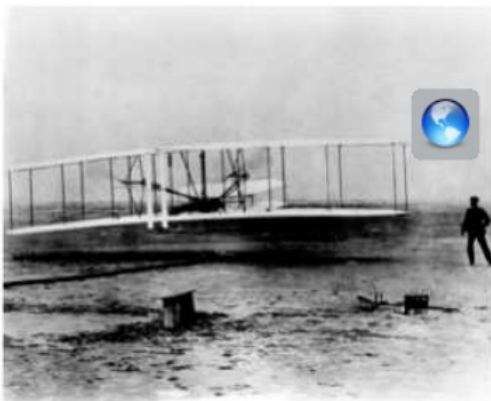
Ford also doubled employee wages. Now his own workers could buy a **Ford car**. Now, that's smart.

Because of the automobile, **roads** allowed people to travel and **live** outside the cities in **suburbs**.



Ford and his famous Model T

Wright Bros~ In 1903, Wilbur and Orville **Wright** make the first gas-powered airplane into the air over Kitty Hawk, **North Carolina**.



Strangely, the first flight did not attract much attention from the world. No one could imagine what an aircraft might be used for.....LOL.

The first military use of the aircraft was during **World War One**.

By the **1920s**, aircraft were being used for travel and mail delivery.