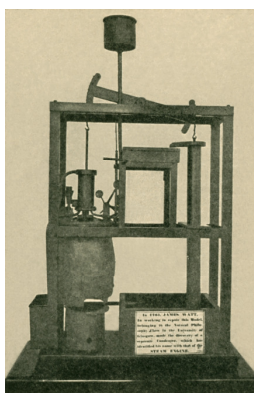


Industrial Revolution



JAMES WATT REPAIRED THIS NEWCOMEN STEAM ENGINE, AND DEVELOPED THE IDEA OF CONDENSING THE STEAM IN A SEPARATE CHAMBER, ALLOWING FOR LESS ENERGY BEING REQUIRED TO RUN THE PUMP. THE FIRST NEWCOMEN ENGINE REPLACED A TEAM OF 500 HORSES THAT WAS USED TO PUMP WATER OUT OF A COAL MINE SHAFT.

The industrial Revolution started in Great Britain in the 1800s, when machines replaced human labor, and steam engines replaced the use of animal and natural forces as power.

Dramatic changes took place in the following areas:

- Clothing production (wool and cotton)
Mechanized cotton and wool looms
- Coal and steam power
Replaced reliance upon wood and running water as power sources
- Greatly increased use of metals (Iron and Steel)

steam engine—powered machines in factories, as well as railroads; the use of the first steam engines to pump water out of coal mines increased the amount of coal available, lowering its price. Cheaper coal made it more economical to use machines (fueled by coal) than pay the relatively higher labor costs in Britain in the 1700s and 1800s, encouraging the invention of more coal-consuming machines.

Industrial Revolution Stats				
Growth of use of power looms in England		Railroad mileage in Britain grew from 95 miles in 1830, to 6,600 in 1850; although Britain saw the first steam railroad in 1830, the US soon caught up, and by 1850, had about 9,000 miles of track.	Production of pig iron in Britain, in tons:	
1813	2,400		1740	17,350
1833	100,000		1825	581,367
1850	250,000		1852	2,701,000

Creation of a middle-class, as well as mass-production of goods that middle class families could afford.

Inequality?

The Industrial Revolution has been often charged with creating massive income inequality. However, (1) inequality was not created by the Industrial Revolution—before this time, there typically was a large gap between the large landowners, and the poor serfs and slaves working the land. (2) The Industrial Revolution did, create conditions whereby the standard of living of BOTH the poor masses, as well as the wealthy elites, would be greatly increased. (3) Additionally, it was in these early industrial societies that voting rights were extended to the entire male populace.