

3. Science, Technology and “Progress” in the Gilded Age America

- Barbed wire is now a norm, huge instrument of ‘progress’

Communications

- Began with telegraphy
 - Duplex system
 - Telegraphic printing system
 - Ticker machines
 - Allowed for faster and more exact sales
 - Western Union: owned 90% of all telegraphic lines
- Media’s dissemination of information
 - News and weather
- Better co-ordination of sales
- Worldwide

Thomas Edison

- Claims to have invented a duplex (an apparatus to send two messages, one in either direction, on the same wire simultaneously)
- Incandescent light bulb
- Created the Edison Universal Stock Printer in 1871
- Devised both the duplex and quadruplex telegraphs in 1873
- Establishes world’s first industrial research laboratory in 1876
- Worked on the electromotograph, acoustic telegraph, autographic telegraph, speaking telegraph, electric pen, mimeograph, electrical dental drill and electric sewing machine
- Invented phonograph in 1877
- Formed Edison Electric Light Company in 1878
- Conceived idea of moving, talking pictures

Alexander Graham Bell

- Telephone was most famous invention; patented on March 7, 1876
 - Importance:
 - Instantaneous verbal communication
 - Dialogue
 - Connect one part of a country to another
 - Disadvantages:
 - Expensive (early on)
 - Only 1 in 66 had telephones in 1900’s
- Faced a lot of legal hurdles

Transportations:

- Streetcar/Tram
 - Important by 1800’s
 - Horizontal expansion of the city: allows for suburbia to exist
 - Cable cars also date to this time period
- Automobile
 - Not significant without internal combustion engine
 - Has an impact by 1880’s and 1890’s
 - First experiment: horseless carriage, in Germany by Benz and Daimler