The second Industrial Revolution (IR) in America followed the Civil War, as industry expanded. The IR was characterized by a significant growth in technology. Many of the advances came about due to the advances in electrification, during the 1890's. By the late 1800's the United States was a leading industrial nation and our economy was growing more rapidly than ever before.

## Causes of Industrial Growth:

- Natural resources: America had an abundance of raw resources, such as timber, coal, iron and copper. This allowed the US to use their own resources without the need to import resources.
  Many of the resources were located in the west, so the railroad played a vital role in the industrialization.
  - We also discovered new resources, for example, petroleum, which was used to make kerosene. Kerosene could be used as a fuel for lanterns and stoves.
- 2) Large workforce: the population nearly tripled between the Civil War and the early 1900's. This growth was due to an increase in immigrants and large family sizes (Why large family sizes? Better living conditions, food and health care led to larger numbers of children surviving childhood.). This created a larger workforce and a greater demand for goods.
- 3) New inventions: new technology led to better transportation and communication, which helped to spread industrialization.
  - a. Thomas Alva Edison: first true research laboratory, phonograph, light bulb, electric generator, battery, motion pictures
  - b. Cyrus Field: transatlantic telegraph cable
  - c. Alexander Graham Bell: telephone
  - d. George Westinghouse: AC (alternating current) electricity, air brakes, first company to use hydroelectric production for electricity
  - e. Other inventions: automatic looms, electric delivery systems, ice machine, refrigerated train cars, automatic dishwasher, barbed wire, Coca-cola, machine gun, escalator
- 4) Free Enterprise System: laissez-faire economics encouraged industrial growth. Laissez-faire means that the government should not intervene in the economy except to protect the nation, maintain peace, and protect property rights. There will be little to no government regulations in a laissez-faire system (also called free enterprise system). This system promotes low taxes and low debt. The system uses supply and demand to regulate prices and wages. This type of economic system encourages entrepreneurs to take risks and invest their money in new industries and technologies. After the Civil War, the government removed many of the tariffs on imports, which caused other nations to lower tariffs on American goods. In turn, America became one of the world's largest free trade zones.