Industry Comes of Age

1. The Iron Colt Becomes an Iron Horse
   1. Railroads skyrocketed after the Civil War. Track mileage increased from 35,000 miles in 1865 to over 192,000 miles by 1900.
   2. Congress encouraged this boom by giving millions of acres of land to the railroad companies. The total acreage was greater than the size of Texas.
      1. The land given to the railroad companies was in a checkerboard fashion along the track. Since it adjoined the track, it's value likely increased and the railroad company would then sell it for a huge profit.
   3. There were arguments on both sides…
      1. People said giving land for railroad companies to profit just wasn't right. Pres. Grover Cleveland fell in this category. He felt this system was wrong and ended it.
      2. Others said the railroads were what gave the land most of its value. And, the value of the railroads themselves to the nation was undeniable.
2. Spanning the Continent with Rails
   1. The ultimate goal for the rails was a **transcontinental railroad** (from coast to coast). The only question had been whether to build the transcontinental railroad in the North or South. With the South seceding from the nation, the North would get the railroad.
   2. Congress commissioned the **Union Pacific Railroad** to push westward from Omaha, Nebraska to California.
      1. For their efforts, the Union Pacific got (a) pay, (b) free land, (c) loans for more land or building.
      2. The ***Crédit Mobilier*** company made fantastic profits.
         1. Insiders in the company managed ridiculous profits for themselves through sneaky deals.
      3. They also bribed Congressmen to look the other way.
      4. Irish workers ("Paddies") did most of the labor on the Great Plains. Clashes with Indians were frequent.
   3. The **Central Pacific Railroad** started in California and pushed eastward.
      1. **Leland Stanford** headed up the railroad efforts from California.
      2. He and his partners made fabulous profits but kept themselves clean and bribe-free.
      3. Chinese laborers did most of the work.
   4. The transcontinental railroad was completed in 1869 near Ogden, Utah. As a symbolic measure, a golden spike was driven into the track. The nation was connected by two ribbons of steel from coast to coast.
3. Binding the Country with Railroad Ties
   1. By 1900, four more transcontinental lines had been constructed.
      1. The **Northern Pacific Railroad** from Lake Superior to Puget Sound.
      2. The **Atchison, Topeka, and Santa Fe** from Kansas to California.
      3. The **Southern Pacific** line went from New Orleans to San Francisco.
      4. The **Great Northern** linked Duluth, MN to Seattle.
         1. This line was constructed by James H. Hill, perhaps the greatest railroad constructor. He built railroads with a sense of public duty and shipped in cattle for the locals.
   2. There were drawbacks to railroad construction as well. Some communities waged all they had on a railroad line increasing the value of the town. Oftentimes, tracks were laid that turned out to go "from nowhere to nothing." Bankruptcy usually followed.
4. Railroad Consolidation and Mechanization
   1. Back east where railroads were already built, changes were occurring. **Cornelius Vanderbilt** began consolidating the New York Central line. This meant he bought up the little railroad lines into his one company.
      1. The results of railroad consolidation were cheaper fares/rates and faster travel times.
   2. There were technological advances too.
      1. Vanderbilt began to use steel rails, instead of iron. Steel was stronger, lasted longer, and didn't rust as fast as iron.
      2. A standardized gauge (distance between tracks) made things uniform.
      3. The Westinghouse air brake was invented which was much more efficient and safe.
      4. **Pullman Palace Cars** (luxury passenger cars) were built and were very popular for travelers.
      5. Other developments like the telegraph to communicate when tracks were open, double-tracking, and then the block signal made railroad travel safer.
   3. Despite advances, accidents and tragedies on the track were not uncommon.
5. Revolution by Railways
   1. The railroad network had the effect of physically linking the nation and psychologically impacted the way people looked at the country.
   2. The greatest impact that railroads had was on business and industrialization.
      1. Eastern and western markets were now linked.
      2. Investors could pour money into new markets.
      3. Travel was eased and the wide open west beckoned settlers as much as ever.
      4. Farmers were taken out west and ore mined from the soil was shipped back east.
      5. Cities boomed out west, notably Chicago, and the cities back east were brought whatever the West had to offer.
      6. Fortunes and millionaires were also made by the railroads.
   3. The land itself was also impacted by railroads.
      1. The Midwestern plains became Midwestern cornfields and the great herds of buffalo began to die off ("go the way of the buffalo").
   4. Before trains, cities and towns simply operated on their own local time. Since accurate timing was critical in safely running trains, time zones were created so that everyone would be