

BACKGROUND INFORMATION

President William McKinley

William McKinley served in the U.S. Congress and as governor of Ohio before running for the presidency in 1896. As a longtime champion of protective tariffs, the Republican McKinley ran on a platform of promoting American prosperity and won a landslide victory over William Jennings Bryan to become the 25th president of the United States.

Soon after taking office, McKinley called a special session of Congress in order to raise customs duties, an effort he believed would reduce other taxes and encourage the growth of domestic industry and employment for American workers. The result was the Dingley Tariff Act, the highest protective tariff in American history. McKinley's support for the Dingley Tariff strengthened his position with organized labor, while his generally business-friendly administration allowed industrial combinations or "trusts" to develop at an unprecedented rate.

In 1898, McKinley led the nation into war with Spain over the issue of Cuban independence. The Treaty of Paris, signed in December 1898 and narrowly ratified by Congress in February, officially ended the Spanish-American War. Spain ceded Puerto Rico, Guam and the Philippines to the United States and Cuba gained its independence.

McKinley's administration also pursued an influential "Open Door" policy aimed at supporting American commercial interests in China and ensuring a strong U.S. position in world markets. In general, McKinley's bold foreign policy opened the doors for the United States to play an increasingly active role in world affairs. Reelected in 1900, McKinley was assassinated by a deranged anarchist in Buffalo, New York, in September 1901.

Source: <http://www.history.com/topics/william-mckinley>

President William Howard Taft

Distinguished jurist, effective administrator, but poor politician, William Howard Taft spent four uncomfortable years in the White House. Large, jovial, conscientious, he was caught in the intense battles between Progressives and conservatives, and got little credit for the achievements of his administration.

Progressives were pleased with Taft's election in 1908. "Roosevelt has cut enough hay," they said; "Taft is the man to put it into the barn." Conservatives were delighted to be rid of Roosevelt--the "mad messiah." Unlike Roosevelt, Taft did not believe in the stretching of Presidential powers. He once commented that Roosevelt "ought more often to have admitted the legal way of reaching the same ends."

Taft alienated many liberal Republicans, who later formed the Progressive Party, by defending the Payne-Aldrich Act which continued high tariff rates. He further antagonized Progressives by upholding his Secretary of the Interior, accused of failing to carry out Roosevelt's conservation policies.

In the angry Progressive onslaught against him, little attention was paid to the fact that his administration initiated 80 antitrust suits and that Congress submitted to the states amendments for a

Federal income tax and the direct election of Senators. A postal savings system was established, and the Interstate Commerce Commission was directed to set railroad rates.

Taft served as Professor of Law at Yale until President Harding made him Chief Justice of the United States, a position he held until just before his death in 1930. To Taft, the appointment was his greatest honor; he wrote: "I don't remember that I ever was President."

Source: <http://www.whitehouse.gov/about/presidents/williamhowardtaft>

President Theodore Roosevelt

With the assassination of President McKinley in 1901, Theodore Roosevelt, not quite 43, became the youngest President in the nation's history. He took the view that the President as a "steward of the people" should take whatever action necessary for the public good unless expressly forbidden by law or the Constitution. "I did not usurp power," he wrote, "but I did greatly broaden the use of executive power." Roosevelt emerged as a "trust buster" by forcing the dissolution of a great railroad combination in the Northwest. Other antitrust suits under the Sherman Act followed.

Roosevelt steered the United States more actively into world politics. He liked to quote the proverb, "Speak softly and carry a big stick. . . ." Aware of the strategic need for a shortcut between the Atlantic and Pacific, Roosevelt ensured the construction of the Panama Canal. He won the Nobel Peace Prize for mediating the Russo-Japanese War, reached a Gentleman's Agreement on immigration with Japan, and sent the Great White Fleet on a goodwill tour of the world. Some of Theodore Roosevelt's most effective achievements were in conservation. He added enormously to the national forests in the West, reserved lands for public use, and fostered great irrigation projects.

After leaving the Presidency in 1909, Roosevelt ran for President on a Progressive ticket (unsuccessfully) in 1912. While campaigning in Milwaukee, he was shot in the chest by a fanatic. Roosevelt soon recovered, but his words at that time would have been applicable at the time of his death in 1919: "No man has had a happier life than I have led; a happier life in every way."

Source: <http://www.whitehouse.gov/about/presidents/theodoreroosevelt>

President Woodrow Wilson

Like Roosevelt before him, Woodrow Wilson saw himself as the personal representative of the people. "No one but the President," he said, "seems to be expected ... to look out for the general interests of the country." He developed a program of progressive reform and asserted international leadership in building a new world order. He campaigned on a program called the New Freedom, which stressed individualism and states' rights, and was elected in 1912.

Wilson sponsored three major pieces of legislation, a lower tariff with a graduated federal income tax, the Federal Reserve Act, and antitrust legislation which established a Federal Trade Commission to prohibit unfair business practices. Another burst of legislation followed in 1916. One prohibited child labor; another limited railroad workers to an eight-hour day. By virtue of this legislation and the slogan "he kept us out of war," Wilson narrowly won re-election.

After the election, Wilson concluded that America could not remain neutral in the World War. On April 2, 1917, he asked Congress for a declaration of war on Germany, and the massive American effort slowly tipped the balance in favor of the Allies. After the Germans signed the Armistice in November 1918, Wilson went to Paris to try to build an enduring peace. He later presented to the Senate the Versailles Treaty, containing the Covenant of the League of Nations, and asked, "Dare we reject it and break the heart of the world?" But the election of 1918 had shifted the balance in Congress to the Republicans. By seven votes the Versailles Treaty failed in the Senate.

The President, against the warnings of his doctors, had made a national tour to mobilize public sentiment for the treaty. Exhausted, he suffered a stroke and nearly died. Nursed by his second wife, Edith Bolling Galt, he lived until 1924.

Source: WhiteHouse.gov

Trench Warfare

By the war's end, each side had dug at least 12,000 miles of trenches. The development and use of machine guns and rapid fire artillery made it necessary for forces in WWI to "dig in" for shelter and survival. On average, daily losses for the British soldiers were nearly 7,000 men killed, disabled or wounded. Offensive progress was very difficult and trenches came to represent a stalemate.

The Allies used four "types" of trenches. The first was the front-line trench (or firing-and-attack trench), behind which was a support trench, with men and supplies that could immediately assist those on the front line. Third was a reserve trench that contained men and supplies that were available in emergencies should the first trenches be overrun. Finally, there were communication trenches which allowed movement of messages, supplies and men among the trenches.

German trenches were much more elaborate and sophisticated, sometimes with living quarters more than 50 feet below the surface. These trenches had electricity, beds, toilets and other niceties of life that contrasted sharply with the open-air trenches of the Allies. Just as new technologies aided in the need for trench warfare, new technologies such as the tank marked its end.

Sources: http://www.pbs.org/greatwar/chapters/ch1_trench.html,
<http://www.britannica.com/EBchecked/topic/604210/trench-warfare>

WWI Firsts

Rapid technological developments came about during World War I and created a long list of "firsts."

- Flame throwers
- Steel helmets
- Use of tanks
- Fleets of fighting aircraft
- Aircraft carriers
- Chemical warfare
- Gas masks
- Guide dogs
- X-ray machines

- Blood banks
- Enlisted women
- Presidential trips to Europe

Other significant technological uses and improvements included

- U-boats
- Machine guns
- Interrupter gear for guns on planes

Source: <http://www.history.com/topics/world-war-i/videos#wwi-firsts>

WWI Timeline

Pre-1914

January 18, 1871 - Bismarck completes efforts to unify Prussia and the German kingdoms into a single nation and has King Wilhelm I proclaimed Kaiser.

May 10, 1871 - France forced to sign humiliating treaty with Germany that ends the 1870-71 Franco-Prussian War.

1888 - After his father's untimely death, 29 year-old Wilhelm II becomes ruler, Kaiser Wilhelm II, of Germany.

1894 - Nicolas is crowned Tsar Nicholas II of Russia, a position he did not want. Germany and Russia do not renew a friendship treaty and begin their adversarial relationship.

1901 - Great Britain's Queen Victoria, whose bloodline runs through most of the ruling houses of Europe, dies.

1904-1905 - Russo-Japanese War results in disastrous defeat for Russia and major civil unrest at home.

January 22, 1905 - "Bloody Sunday Massacre" by Tsarist troops in St. Petersburg left Russian workers dead and cost Nicholas support among the workers and farmers.

1906 - British launch first "dreadnought" class battleship.

1914

June 28, 1914 - Archduke Franz Ferdinand, heir to the throne of the Austro-Hungarian Empire, and his wife are assassinated in Sarajevo.

July 28 - Emperor Franz Joseph of Austria-Hungary declares war on Serbia.

July 31 - As an ally of Serbia, Russia announces full mobilization of her armed forces.

August 1 - Germany mobilizes her armed forces and declares war on Russia.

August 3 - Germany declares war on France.

August 4 - Germany declares war on neutral Belgium and invades in a right flanking move designed to defeat France quickly. As a result of this invasion, Britain declares war on Germany.

August 6 - Austria-Hungary declares war on Russia.

August 22 - "The Battle of the Frontiers" 27,000 French soldiers die on this single day in an offensive thrust to the east of Paris, towards the German borders.

August 26-30 - German army, led by Erich Ludendorff and Paul von Hindenburg, achieves its greatest victory of the war on the Eastern Front against Russia at the Battle of Tannenberg.

September 5-10 - First Battle of the Marne halts German invasion in France.

September 15 - First trenches of the Western Front are dug.

December 25 - Unofficial Christmas truce declared by soldiers in the trenches along the Western Front.

1915

January, 1915 - War becomes "Total War" with German zeppelin air raid on England.

February 4 - Germany declares a submarine blockade of Great Britain. Any ship approaching England is considered a legitimate target.

April 25 - Allies begin nine-month battle for the Turkish peninsula of Gallipoli.

May 7 - U-boat sinks the *Lusitania*. 1,198 civilians, including 128 Americans, die.

August 30 - Germany responds to U.S. anger by ceasing to sink ships without warning.

September 5 - Tsar Nicholas takes command of the Russian armies.

September 15 - British use gas in battle near Loos, but shifting winds cause 60,000 British casualties.

December 19 - Sir Douglas Haig becomes commander of British Expeditionary Force.

December 28 - Allies begin withdrawal of troops from Gallipoli.

1916

February 10, 1916 - British conscription law goes into effect.

February 21 - December 18 - The longest battle of the war, the Battle of Verdun, is fought to a draw with an estimated one million casualties.

April 9 - Canadians take Vimy Ridge.

April 19 - U.S. President Wilson publicly warns Germany not to continue unrestricted submarine warfare policies.

May 31-June 1 - The Battle of Jutland, the only major naval engagement of the war, is fought with no clear winner.

July 1-November 18 - The Battle of the Somme results in an estimated one million casualties and no breakthrough for the Allies. British introduce the tank, an effective weapon, but far too few to make much of a difference.

November 7 - Woodrow Wilson reelected President of the United States with campaign slogan "He kept us out of war."

December 7 - David Lloyd George becomes Prime Minister of Britain.

December 31 - Rasputin, the self-avowed holy man and confidant to the Tsarina, is murdered by relatives of the Tsar.

1917

January 19, 1917 - Reich Foreign Secretary Zimmermann's telegram to Mexico urging her entry into war against the United States is discovered and translated by the British.

February 1 - Germany again declares unrestricted submarine warfare.

March 15 - Tsar Nicholas II of Russia abdicates. Provisional government is declared.

April 6 - President Wilson asks Congress for a declaration of war with Imperial Germany.

April 16-29 - French launch disastrous offensive at Chemin des Dames, advancing only 500 yards at the cost of 250,000 plus casualties.

April - June - Over half a million French soldiers mutiny, or "go on strike," and refuse to continue the failed offensive.

May 18 - The United States passes the Selective Service Act, empowering the Federal Government to draft men for the armed forces.

July 1 - 16 - Russian Army lead by Alexander Kerensky begins last, disastrous offensive in Galicia.

July 3 - The first wave of the American Expeditionary Force lands in France.

July 31-November 10 - Third Battle of Ypres, known as Passchendaele, results in minor gains, but still no breakthrough in the Western Front at the cost of 700,000 casualties for both sides.

October 23 - American troops in France fire their first shot in trench warfare.

November 7 - Bolshevik socialists, led by Lenin, overthrow Kerensky's government.

December 3 - The new Russian government, represented by Leon Trotsky, signs an armistice with Germany.

December 9 - British capture Jerusalem from the Turks and their Arab allies.

1918

1918-1919 - Two waves of influenza kill more people than the war did.

January 8, 1918 - President Woodrow Wilson declares his 14 points as the path to permanent world peace.

March 21 - Germans launch the first of five major offensives to win the war before American troops appear in the trenches. German advance is finally stopped in late June.

April 22 - Baron von Richthofen, "the Red Baron" is killed in air dogfight.

April 25 - British and Australian troops stop the German advance near Amiens.

May 23 - German shells land on Paris.

May 31 - Germans on the banks of the Marne near Paris are stopped by American forces at Chateau-Thierry.

July - German troops being shipped from the Eastern to Western Front begin to desert in large numbers from their transport trains.

July 16-17 - Former Tsar Nicholas II, his wife, children, and entourage are murdered by the Bolsheviks.

August 3 - President Wilson agrees to cooperate with Allies in sending "volunteer" troops into Russia.

August 8 - Allied counter offensives on the Somme push the German army back and into retreat.

September 27 - Allied troops break through the German fortifications at the Hindenberg line.

October 28 - German sailors mutiny at port when asked to sail and fight a hopeless naval battle.

October 30 - Turks sign armistice.

November 9 - Kaiser Wilhelm II abdicates.

November 10 - A German republic is founded.

November 11 - At eleven o'clock on the eleventh day of the eleventh month of 1918, the war ends as Germany and Allies sign an Armistice.

December 4 - Woodrow Wilson sets sail for the Paris Peace conference.

1919

1919 - Demobilization of the armies, millions return home.

1919-1921 - Russian civil war fails to unseat the Bolsheviks.

January 10-15, 1919 - A coup launched by German revolutionaries is suppressed by paramilitary units.

January 15 - German socialist rebels Karl Liebknecht and Rosa Luxemburg are murdered.

February - Allies' military intervention in Russia is secretly agreed to.

June 28 - Peace Treaty signed by German delegates and Allies in Versailles.

August-September - President Wilson brings his campaign for the ratification of the Treaty of Versailles and its League of Nations to the American people.

September 25 - Wilson collapses and his whistle-stop tour of the country is over.

Post 1919

1920-1922 - War cemeteries created on the fronts; war memorials dedicated in villages and cities at home.

March 19, 1920 - The United States Senate fails to ratify the Treaty of Versailles and U.S. involvement in the League of Nations.

November 11, 1920 - The Unknown Warrior is buried in Westminster Abbey, London.

1921 - Russian Civil War ends after three years with Bolsheviks, led by Lenin and Trotsky, in full control.

March 1921 - American food aid helps save millions of famine victims in Russia.

1924-1925 - Adolf Hitler imprisoned for sedition against the Weimar Republic; writes *Mein Kampf*.

January 30, 1933 - Adolf Hitler named Chancellor of Germany by President Hindenburg.

September 1939 - Second World War begins.

Source: http://www.pbs.org/greatwar/timeline/time_1918.html

WWI Aircraft Radios

The primary use of aircraft radios in the latter part of World War I was for directing the fire of artillery batteries. An observation airplane would circle in the air where its observer could see the enemy target and watch the artillery shells explode in the area. He would then telegraph a message in Morse code to a receiving station near the artillery battery for adjustment of the artillery fire.

Experiments were being conducted at this time with voice radios, but they were less reliable and had a much shorter range than wireless telegraph sets.

Generally speaking, WWI flyers were not too impressed with airborne communications at this early period and many had the radios removed from their airplanes to reduce weight. They continued to rely upon hand-written messages dropped to the ground.

Source: <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=14708>

Zeppelins: The Birth of Strategic Bombing

Strategic bombing had its beginning during World War I when German zeppelins began raiding London. Small attacks against England were carried out early in the war, but by October 1915, "squadron-size" raids by numerous zeppelins had begun, always at night and in the dark of the moon.

Early in September 1916, a British fighter shot down an airship in flames, and three weeks later, two zeppelins attempting to attack London were also destroyed. Although zeppelin performance gradually improved, so did British defenses, and heavy losses continued. After a disastrous raid on August 5, 1918, the Germans practically discontinued zeppelin warfare.

There were 159 zeppelin attacks against England during WWI, resulting in the death of 557 people, primarily civilians, and damages of \$7,500,000.

Source: http://www.nationalmuseum.af.mil/factsheets/factsheet_print.asp?fsID=697

The Red Baron: Manfred von Richthofen

The leading ace of all nations during World War I was Baron Manfred von Richthofen, the famous "Red Knight of Germany." Although he scored most of his 80 victories while flying the Albatross fighter, he is most closely associated with the Fokker Dr.I triplane, the type of plane he flew during the latter part of his combat career.

The Baron was shot down and killed on April 21, 1918, several miles east of Amiens, France. His death started one of the greatest controversies in aviation history. Although his downing was officially credited

to Capt. Roy Brown, a Canadian flying Sopwith Camels with the RAF, some historians claim he was shot down by Australian ground troops.

Source: <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=714>

Biplanes and Dogfights

WWI sparked rapid innovation in military aviation. Planes were initially used for scouting purposes but the need for offensive firepower soon became apparent. The main problem was that to have a gun directly in front of the pilot would place the plane's propeller directly in the firing path, leading to some obvious problems.

One method of getting around the propeller was to mount the gun on the wings. This got it out of the way of the propeller but also out of reach from the pilot, making reloading or fixing a jam precarious. Another solution would have been to create a "push" plane where the propeller is mounted behind the pilot and pushes rather than pulls the plane through the air. Unfortunately these do not work as well as pulled planes and pose danger to the pilot in the event of a crash.

Source: <http://www.wwiaviation.com/development.html>

Captain Phelps Collins, First Combat Air Casualty

The first member of the U.S. Air Service to die on a combat mission was Capt. Phelps Collins of Alpena, Michigan. He enlisted in the French Aviation Service in May 1917 and transferred to the U.S. Air Service when America entered the war. He was assigned as a pilot to the 103rd Aero Squadron, successor to the Lafayette Escadrille, at La Noblette, France.

On March 12, 1918, Collins and four other pilots were attempting to intercept enemy airplanes in the area of Paris when, for an unknown reason, Collins' SPAD VII fighter left the formation. Observers on the ground saw his plane make wide circles at about 15,000 feet, then descend and finally spin and dive into the ground.

Collins' commanding officer wrote that "It will never be known whether he was shot down in combat, fought at so great an altitude that it could neither be seen nor heard, whether some vital part of his machine gave way or whether he fainted as a result of the terrific strain he had placed upon himself, flying at every possible opportunity." Investigators believed that Collins had fainted at high altitude, perhaps from lack of oxygen.

Source: <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=706>

Sergeant Stubby

While training for combat in 1917, Private J. Robert Conroy found a puppy and named him "Stubby." The dog soon became the mascot of the 102nd Infantry, 26th Yankee Division. He learned the bugle calls, the drills, and even a modified dog salute. Stubby had a positive effect on morale, and was allowed to remain in the camp, even though animals were forbidden.

When the division shipped out, Stubby was smuggled to France and allowed to accompany the division to the front lines. His first battle injury occurred from gas exposure and the injury left him sensitive to the tiniest trace of gas. When the Division was attacked in an early morning gas launch, Stubby recognized the gas and ran through the trench rousing the soldiers to sound the gas alarm, saving many from injury. Stubby even caught a German soldier mapping out the layout of the Allied trenches, for which he was promoted to the rank of Sergeant, and became the first dog to be given rank in the United States Armed Forces. After returning home, he was awarded many medals for his heroism, led the American troops in a pass and review parade, and visited with presidents.

Source: <http://amhistory.si.edu/militaryhistory/collection/object.asp?ID=15>

The Polar Bears

The North Russia Expeditionary Force – known as the “Polar Bears” – arrived in Archangel, Russia on September 4, 1918. A majority of the 5,000-troop contingent hailed from Michigan, with most of these being from Detroit. Upon arrival, they were ordered to join a British campaign against the Bolsheviks.

The Marxist Bolsheviks (with Vladimir Lenin as leader) came to power after the ousting of the Russian Czar in 1917, and ended Russia’s involvement in World War I. The Allies wanted to keep Germany occupied in the East, and to guard military ordnance that the Allies had previously given to the Russians. On November 11, 1918, an armistice officially ended World War I. That same day, the Polar Bears found themselves engaged in their fiercest battle to that date! The Polar Bears remained in Russia as a new year began.

In Detroit, they held protest meetings and circulated petitions. In Lansing, the state senate called for immediate withdrawal from Russia. Finally, orders came to withdraw. The first returning group of Polar Bears reached Detroit on July 3rd, 1919. The next day a formal ceremony on Belle Isle welcomed them home.

Altogether, the Polar Bears had spent over nine months in Russia, suffering 245 casualties. They battled the Bolsheviks through a harsh Russian winter, remaining at war while other Americans celebrated peace.

Source: <http://seekingmichigan.org/look/2010/11/09/polar-bears>

Spanish – American War

By the late 1800s the remnants of the Spanish empire in Cuba, the Philippines and Puerto Rico were longing for independence. By 1895 Cubans were ready for their third attempt at gaining their independence, but presidents Cleveland and McKinley were reluctant to engage in the growing conflict. However, on February 15, 1898 the battleship *Maine* was sunk in Havana harbor from which point events moved swiftly, and on April 25, 1898 the U.S. declared war on Spain.

Fighting began in the Philippine Islands at the Battle of Manila Bay on May 1, while war actually began for the U.S. in Cuba in June when the Marines captured Guantánamo Bay. Notable units in Cuba included the African-American Ninth and Tenth cavalries and the Rough Riders, commanded by Lt. Col. Theodore Roosevelt.

The war ended with the signing of the Treaty of Paris on December 10, 1898, which established the independence of Cuba, ceded Puerto Rico and Guam to the United States, and allowed the victorious power to purchase the Philippine Islands from Spain for \$20 million. The war had cost the United States \$250 million and 3,000 lives, 90% of whom had perished from infectious diseases.

Source: <http://www.loc.gov/rr/hispanic/1898/intro.html>

Andrew Carnegie

At the age of 13, in 1848, Andrew Carnegie (1835-1919) came to the United States with his family from Scotland. They settled in Allegheny, Pennsylvania, and Carnegie went to work in a factory, earning \$1.20 a week. The next year he found a job as a telegraph messenger. He moved up to a telegraph operator position in 1851. He then took a job at the Pennsylvania Railroad in 1853.

By the next decade, most of Carnegie's time was dedicated to the steel industry. His business, which became known as the Carnegie Steel Company, revolutionized steel production in the United States. Carnegie built plants around the country, using technology and methods that made manufacturing steel easier, faster and more productive. For every step of the process, he owned exactly what he needed: the raw materials, ships and railroads for transporting the goods, and even coal fields to fuel the steel furnaces. This start-to-finish strategy helped Carnegie become the dominant force in the industry and a wealthy man. By 1889, Carnegie Steel Corporation was the largest of its kind in the world.

In 1901, Carnegie sold his business to the United States Steel Corporation, started by legendary financier J. P. Morgan. The sale earned him more than \$200 million. At the age of 65, Carnegie decided to spend the rest of his days helping others. In 1901, he donated approximately \$5 million to the New York Public Library. Devoted to learning, he established the Carnegie Institute of Technology in Pittsburgh in 1904, now known as Carnegie-Mellon University. The next year, he created the Carnegie Foundation for the Advancement of Teaching.

Source: <http://www.biography.com/people/andrew-carnegie-9238756>

Andrew Mellon

Andrew W. Mellon (1855-1937) belonged to a remarkable American generation, but among industrialists, Mellon was unique in that he excelled in four fields of endeavor: as a businessman and banker; as a politician and statesman; as an art collector; and as a philanthropist.

After joining his father and brother in the family banking business, Mellon transformed Western Pennsylvania into one of the richest industrial regions in the United States during the forty years before the First World War. Andrew Mellon was an extraordinary judge of entrepreneurial talent, and among the many companies he helped to found and fund were ALCOA, Carborundum, Koppers, and Gulf Oil. By 1914, he was one of the richest men in the country.

Appointed by Warren Harding as Secretary of the Treasury in 1921, Mellon cut taxes, enforced Prohibition, and presided over a period of such unprecedented financial prosperity that he was hailed as the greatest Treasury Secretary since Alexander Hamilton. But the Great Crash of 1929, combined with

growing criticisms of his close business ties, meant Mellon lost the confidence of President Hoover, and in 1932 he resigned from the Treasury.

This was the end of Mellon's public career; but it was far from being the end of his life. An avid art collector for most of his life, Mellon specialized in Old Masters and British portraits, and by the early 1930s he had amassed the greatest collection of his generation. During his life, Mellon gave away nearly \$10 million. Much of it went to educational and charitable institutions in his native Pittsburgh, but his most famous gift was of the money and the pictures to establish the National Gallery of Art in Washington, DC.

Source: http://www.mellon.org/about_foundation/history/andrew-w-mellon

A Giant Among Detroit Leaders –David Whitney, Jr.

In the late 1800s, when David Whitney Jr., the first of a three-generation family of Detroit Athletic Club members, built his majestic home on the corner of Woodward and Canfield, he was famous in local lore as "the man who could out-lumber Paul Bunyan."

The multi-millionaire lumberman, vessel owner and banker had built a fortune from the pine forests of Michigan and Wisconsin, and made his mark on Detroit building "some of the finest business blocks" in the city, according to the *Detroit News*. His "palatial residence on Woodward Avenue" was "perhaps the costliest and most magnificent ever erected in the state."

Whitney came to Detroit about 1857. In partnership with his brother Charles and others, he built a hugely successful lumber business that spread to the Upper Peninsula, Ohio, Indiana, and Pennsylvania. He was able to buy up Michigan and Wisconsin pine lands at a cost of from \$3 to \$50 an acre, sometimes realizing a profit of 100 times his initial investment. Whitney's instincts concerning the land values in Detroit were equally keen, earning him the nickname "Mr. Woodward Avenue." When he lived at the corner of Woodward and Sproat, many of Detroit's leading families of the day were his neighbors – the Pridgeons, the Heavenriches, the Farrands and the Heinemans, for example.

Source: <http://www.thewhitney.com/david-whitney-jr.htm>

J. P. Morgan and the Panic of 1907

The Panic of 1907 was a six-week stretch of runs on banks in New York City and other American cities in October and early November of 1907. It was triggered by a failed speculation that caused the bankruptcy of two brokerage firms. But the shock that set a recession was the earthquake in San Francisco in 1906.

J.P. Morgan was 70 years old at the time of the Panic. He was in the twilight of his extraordinarily successful career as a financier of the boom era of American expansion from 1865 to roughly 1900. He had engineered the mergers of firms that we would recognize today as still dominant—U.S. Steel, American Telephone and Telegraph, General Electric and others. He was widely respected. He had deep and extensive relations throughout the financial and business communities, and he was able to galvanize people.

He arrived in New York City on Sunday, October 20th and immediately convened a meeting of the leading financiers at his mansion on 34th Street. Over the next several weeks he organized successive rescues of the major institutions. He did allow some institutions to fail, because he judged that they were insolvent already. But of the institutions that he declared he would save, every one survived. The Panic of 1907 led to the founding of the U.S. Federal Reserve System. The act was passed in December of 1912, and is arguably the high water mark of the Progressive Era.

Source: http://www.smithsonianmag.com/history-archaeology/1907_Panic.html#ixzz2JfUmplMA

Jay Gould

Born in 1836 to a farmer and store keeper, Jay Gould knew at an early age that farming was not for him. Gould moved to New York City and before long, he found his place on Wall Street, where he became both a power and a terror.

In 1867, he set out to control the Erie Railroad and to defeat Cornelius Vanderbilt's effort to acquire the railroad. In 1868 the "Erie War" ensued with Vanderbilt. Gould issued fraudulent Erie Railroad stock, using illegal means and bribing legislators to "legalize" the action. Vanderbilt ended up losing millions, leaving the Erie Railroad to Gould.

Eventually Gould's manipulations led to a day of widespread financial catastrophe, known as Black Friday. In the summer of 1869, the price dropped significantly. Gould and many others lost a fortune in stocks when the Panic caused by this hit Wall Street.

Gould made his fortune back by moving his operations westward into railroads. He bought stocks at bargain depression prices, obtained control of railroads and then inflated the stock prices, and sold them when the market recovered.

Gould was not a philanthropist, but his daughter, Helen, gave generously after her father's death in 1892. She hosted ill and impoverished children and families at her own estate, founded a sewing school, maintained a fresh air charity and home for physically handicapped children, among other pursuits.

Sources: <http://www.notablebiographies.com/Gi-He/Gould-Jay.html#ixzz2Jfj43oj5>
<http://dlib.nyu.edu/findingaids/html/nyhs/gould/gould.html>

John D. Rockefeller

John D. Rockefeller (1839-1937) was born into modest circumstances in upstate New York. He entered the then-fledgling oil business in 1863 by investing in a Cleveland, Ohio refinery. In 1870, he established Standard Oil, which by the early 1880s controlled some 90 percent of U.S. refineries and pipelines.

Critics accused Rockefeller of engaging in unethical practices, such as predatory pricing and colluding with railroads to eliminate his competitors, in order to gain a monopoly in the industry. In 1890, the U.S. Congress passed the Sherman Antitrust Act, the first federal legislation prohibiting trusts and combinations that restrained trade. Two years later, the Ohio Supreme Court dissolved the Standard Oil Trust; however, the businesses within the trust soon became part of Standard Oil of New Jersey, which functioned as a holding company. In 1911, after years of litigation, the U.S. Supreme Court ruled

Standard Oil of New Jersey was in violation of anti-trust laws and forced it to dismantle. It was broken up into more than 30 individual companies.

Rockefeller retired from day-to-day business operations of Standard Oil in the mid-1890s. Inspired in part by fellow Gilded Age tycoon Andrew Carnegie, Rockefeller donated more than half a billion dollars to various educational, religious and scientific causes, including funding the establishment of the University of Chicago and the Rockefeller Institute for Medical Research, now Rockefeller University.

Source: <http://www.history.com/topics/john-d-rockefeller>

S. S. Kresge, Detroit Philanthropist

S.S. Kresge was an American merchant who established a chain of nearly 1,000 variety and discount stores throughout the United States. Kresge worked as a traveling salesman before going into business with one of his customers, John G. McCrory, the owner of several department and five-and-ten-cent stores. They became partners in 1897 in two new five-and-dime stores in Memphis and Detroit. Two years later they traded interests, and Kresge became sole owner of the Detroit operation. He managed the store and opened seven others in major Midwest cities with his brother-in-law Charles Wilson under the firm name of Kresge & Wilson. By 1907 Kresge bought out Wilson and established the S.S. Kresge Company. When the firm was incorporated only five years later, it was capitalized at \$7,000,000 and included 85 stores in the North and Midwest.

Kresge established the Kresge Foundation in 1924 to benefit educational and charitable activities. By the time of Kresge's death in 1966, the foundation had distributed \$70,000,000 in grants with a remaining net worth of \$175,000,000.

"Giving away money is not an easy job," Kresge observed. "Money alone cannot build character or transform evil into good; it cannot restore the influence and vitality of the home; neither can it maintain the valleys and plains of peace. Spent alone, it might as well stay in the vaults . . . It cries for full partnership with leaders of character and good will."

Source: www.britannica.com; <http://www.kresge.org/about-us>

"The Commodore" Cornelius Vanderbilt

Cornelius Vanderbilt's first business was running a ferry service from Staten Island, where he was born. He eventually built a fleet, switching to steam ships in the 1830s. The size of his operations earned him the nickname "Commodore" from the press.

He earned a reputation for efficient management practices and ruthless business practices. By the 1860s Vanderbilt saw that the railroad industry was growing more than shipping. Instead of building new railroads, he simply bought existing ones. By the end of his life, Vanderbilt had become one of the richest men in the U.S., ever.

Despite holding an estimated 1/9th of all the money circulating the U.S. economy, Vanderbilt's philanthropy was modest, at best. He left most of his fortune to his children, though he did establish Vanderbilt University with a gift of one million dollars.

His lack of charity may have been due to a complete disinterest for public good, though it has also been suggested that Vanderbilt did not like to use displays of public charity as a means to gain favor in public opinion.

Sources <http://apps.detnews.com/apps/history/index.php?id=203#ixzz1xhgDDLri>
<http://www.gilderlehrman.org/history-by-era/gilded-age/essays/robber-barons-or-captains-industry>
http://www.philanthropyroundtable.org/topic/excellence_in_philanthropy/the_commodore

Henry Ford and the Birth of the Assembly Line

Henry Ford founded the Ford Motor Company in 1903, after two other companies he was involved with, the Detroit Automobile Company and the Henry Ford Company, failed. Originally, Ford produced only a few cars a day, but as demand grew for the Model T, Ford built a new, larger factory in Highland Park, allowing him to increase his capacity.

At first, Ford built cars one at a time, with a small group of men working on each one, in one place. Ford came to realize that to improve efficiency and make more cars, his workers would have to build them differently. In 1913, he rigged a rudimentary assembly line, pulling a chassis slowly across the factory floor, with parts and assemblers stationed along the line. As the chassis moved, workers attached parts to the car. Production time for a single vehicle fell from 12 hours and 30 minutes to five hours and 50 minutes. The line was soon improved with a motorized conveyor system and by 1914 it took only 93 minutes to assemble a car.

Sources:

<http://www.hfmvgv.org/exhibits/hf/>
<http://corporate.ford.com/our-company/heritage>
<http://www.hal.state.mi.us/mhc/museum/explore/museums/hismus/1900-75/erlyauto/assembly.html>

Early Automakers: Pioneers of the Horseless Carriage

At the turn of the century, automobile manufacturers sprang up across the nation, but the auto industry eventually centered in Michigan, and by the early 1900s, became Michigan's largest manufacturing enterprise. Michigan had been a leader in carriage making, and those workers' skills were easily used for building "horseless" carriages. Michigan was also the nation's leading iron ore producer, which the auto industry needed to make machinery and parts.

In the early 1900s, 270 auto companies were in business in Michigan - most failed quickly. Names like Duryea, Lozier, American, Monarch, and Scripps-Booth have been forgotten, and technology like steam-powered cars has been abandoned. However, many early automakers' names are still familiar today.

Packard built his first car in 1899, and Studebaker's first car, built in 1902, was electric. By 1901, Ransom E. Olds, of the Olds Motor Company, had developed the Runabout, the most popular car of its era. Billy Durant, a successful carriage maker, moved to cars and he consolidated several firms including Buick, Cadillac, Olds, and Chevrolet to form the General Motors Company, offering cars for everyone's needs and price range. Walter P. Chrysler came to Michigan in 1912 to work at General Motors, but left G.M. and started the Chrysler Corporation in 1925, acquiring Dodge in 1928.

By the end of the 1930s, less than 20 Michigan auto companies were in business. Today, only the Big Three survive.

Sources:

<http://www.hal.state.mi.us/mhc/museum/explore/museums/hismus/1900-75/erlyauto/onwheels.html>

Treasury of American Automobiles by Fred Clymer

Orville and Wilbur: The Wright Brothers

“The desire to fly is an idea handed down to us by our ancestors who, in their grueling travels across trackless lands in prehistoric times, looked enviously on the birds soaring freely through space, at full speed, above all obstacles, on the infinite highway of the air.” - Orville Wright

The Wright brothers’ seminal accomplishment encompassed not only the breakthrough first flight of an airplane, but also established the foundation of aeronautical engineering.

The Wrights built a five-foot-wingspan biplane kite, in the summer of 1899. After testing the glider, Wilbur and Orville tested wing shapes. They built a small wind tunnel to gather accurate aerodynamic data. The Wrights' 1902 glider, based on the wind tunnel experiments, was a dramatic success.

During the spring and summer of 1903 they built their first powered airplane, another success, but continued testing in 1904 and 1905 in Dayton, Ohio. The 1905 plane could stay in the air until the fuel was used up, almost half an hour. After six years of work, the brothers finally had a practical working airplane.

Source: <http://airandspace.si.edu/collections/artifact.cfm?id=A19610048000>

The Wright Brothers’ 1903 Flyer

On December 17, 1903, at Kitty Hawk, North Carolina, the 1903 Wright Flyer became the first powered, heavier-than-air machine to achieve controlled, sustained flight with a pilot aboard. The 1903 Wright Flyer was constructed of spruce and ash covered with muslin and was powered by a simple four-cylinder engine.

With Orville Wright as pilot, the airplane took off from a launching rail and flew for 12 seconds and a distance of 120 feet. The airplane was flown three more times that day, with Orville and Wilbur alternating as pilot. The longest flight, with Wilbur at the controls, was 852 feet and lasted 59 seconds.

To fly the airplane, the pilot lay prone with his head forward, his left hand operating the elevator control. Lateral control (roll) was achieved by warping the wing tips in opposite directions via piano wires attached to a hip cradle mounted on the lower wing. The pilot shifted his hips from side to side to operate the mechanism, which also moved the rudder, turning the plane (yaw). The Wrights' original concept of simultaneous roll and yaw control represents the solution to controlled flight and is used today on virtually every fixed-wing aircraft.

This model was built at $\frac{3}{4}$ scale by the Macomb Center for the Performing Arts Technical Department.

Source: <http://airandspace.si.edu/exhibitions/gal100/wright1903.html>

The Rise of Newspaper Empires and Sensationalism

In the 1870s, Joseph Pulitzer, editor of the *New York World* pioneered a "new journalism" which drove the popularity of daily newspapers to unheard of highs. Pulitzer was an innovator, particularly in his Sunday paper, which added expanded women's and sports pages, color comics and the regular use of photographs. He fought important crusades on behalf of workers, immigrants and the poor, but also knew how to use reports tinged with violence and sex to sell newspapers.

William Randolph Hearst, an admirer of Pulitzer, purchased the *New York Journal* in 1895. In their battle for circulation, Hearst and Pulitzer cut the price of their newspapers to a penny, tried to hire away each other's editors and reporters and filled their papers with salacious stories. This rivalry developed large circulations for both papers. Sensationalist or even fabricated reporting became known as "yellow journalism."

This era also saw the first newspaper chain in the United States, assembled by E. W. Scripps. Scripps' older half-brother, James Scripps, was the founder of the *Detroit News*. His daughter, Ellen Warren Scripps, married George Gough Booth in Detroit in 1887. Booth and Scripps worked closely to build the *News* into Detroit's largest daily and eventually established the Booth Publishing Company, the most extensive and profitable chain in Michigan's history. The Booths founded the Cranbrook Education Community in 1904, with original buildings designed by Albert Kahn.

Sources: <http://www.nyu.edu/classes/stephens/Collier's%20page.htm>
<http://www.scripps.com/scripps-timeline>
<http://housegardens.cranbrook.edu/about>

Muckrakers: Watchdogs of the Progressive Era

The term "muckraker" was coined by President Roosevelt; he quoted *Pilgrim's Progress*, which referred to "the Man with the Muckrake . . . who could look no way but downward." While he meant it as a criticism, eventually "muckraker" took on favorable connotations. Muckrakers provided detailed, accurate accounts of the corruption and social hardships of the industrial United States.

Muckrakers often wrote for newspapers or mass-market magazines like *McClure's*, *Munsey's Weekly*, and *Collier's*. Stories were published as serials and the public would wait anxiously for the next installment. Muckrakers didn't preach to the converted; they did the converting. They turned local problems into national issues; local protests into national crusades.

McClure's is the best remembered muckraking magazine. They published "The Shame of the Cities," by Lincoln Steffens, which exposed municipal government corruption, and Ida M. Tarbell's "History of the Standard Oil Company" in 1904, credited with hastening the breakup of Standard Oil's monopoly. These and other works, such as Upton Sinclair's 1906 novel, *The Jungle*, which helped to pass the Meat Inspection Act and the Pure Food and Drug Act; helped to change American society.

Photography proved a useful tool for muckrakers as well. *How the other Half Lives*, by Jacob Riis, documented the squalid environment in tenements in New York, and Lewis Wickes Hine's work for the National Child Labor Committee brought attention to the conditions faced by young workers to help rally for change.

Source: www.Britannica.com

The Early Labor Movement

Labor conflict was never more contentious or violent in the United States than during the late 19th and early 20th centuries, when bloody confrontations wracked the railroad, steel, and mining industries. During the early 1880s, there were about 500 strikes a year. By the 1890s, the number had climbed to 1,000 a year, and by the early 1900s, the number of strikes was 4,000 annually. Most workers fought for fair wages and better working conditions including an eight-hour workday.

Unions initially formed around particular skilled crafts (craft unions). Later they organized entire industries, such as mining or railroads. Employers often hired workers from different ethnic groups to make unionization more difficult, but the International Ladies' Garment Workers and the Amalgamated Clothing Workers demonstrated that the new immigrants could be effectively organized.

The Great Railroad Strike of 1877 was the country's first major rail strike and the first general strike in the nation's history. The strike briefly paralyzed the country's commerce and led governors in ten states to mobilize 60,000 militia members to reopen rail traffic. Although the strike was broken in a few weeks, it helped set the stage for later violence in the 1880s and 1890s, including the Haymarket Square bombing in Chicago in 1886, the Homestead Steel Strike near Pittsburgh in 1892, and the Pullman Strike of 1894.

Source: <http://www.digitalhistory.uh.edu/>

Segregation and the Rise of "Jim Crow"

After 1890, state governments in the South adopted segregationist laws mandating separation of the races in nearly every aspect of everyday life. These laws required separate public schools, railroad cars, public libraries, water fountains, restaurants, hotels, baseball leagues, barbers, hospitals and even cemeteries.

These laws were given federal protection as the judicial branch used technicalities and loopholes to avoid striking them down. In 1875, Congress enacted The Civil Rights Act of 1875, which barred "any person" from depriving citizens of any race or color of equal treatment in public accommodations. In 1883, the Supreme Court declared the law unconstitutional.

The most significant judicial decision came in the *Plessy v. Ferguson* case. Homer Plessy, a public education advocate with a white complexion and a black great-grandmother, purchased a ticket for a "whites-only" rail car. When he revealed his ancestry, he was arrested. In 1896, in a seven-to-one decision, the U.S. Supreme Court upheld the segregationist Louisiana law. "The enforced separation of the two races," did not, the majority ruled, "stamp the colored race with a badge of inferiority." If black Americans disagreed, that was their own interpretation. This led to what became known as "separate but equal" segregation, not overturned until the *Brown v. the Board of Education* case of 1954.

Sources: <http://www.learnnc.org/lp/editions/nchist-newcentury/5704>
http://www.pbs.org/wnet/jimcrow/stories_events_plessy.html

The Growth of Cities: “Especially bad is the tenement house . . .”

In the 40 years after the Civil War, people flocked to American cities. Jobs, higher wages, and technological wonders like electricity and the telephone drew farmers from both the rural U.S. and Europe.

Cities of the late 1800s grew without planning, and manufacturing and commerce crowded into city centers. Central business districts with clusters of tall buildings began to appear, as steel frame construction allowed architects to design taller and taller buildings. Wealthy and middle class residents moved away from these busy city centers, along rail lines to the country's first suburbs while the urban poor were concentrated in tenements.

Tenements were overcrowded, unsanitary, and unsafe brick apartment buildings, four to six stories tall. In 1900, two-thirds of Manhattan's residents, all poor, many immigrants, lived in tenements. In one New York tenement, up to 18 people lived in each apartment, sharing just two common toilets on each floor. Many apartments were dark and airless because interior windows faced narrow light shafts, if there were interior windows at all. These conditions were breeding grounds for typhoid, smallpox, cholera, tuberculosis, and other diseases which swept through the cities on a regular basis.

With his book *How the Other Half Lives*, published in 1889, muckraker Jacob Riis effectively advocated for tenement reform.

Sources:

http://www.digitalhistory.uh.edu/disp_textbook.cfm?smtID=2&psid=3051

<http://ehistory.osu.edu/osu/mmh/response/transcript.cfm>

"Industrialization" Gale Encyclopedia of U.S. Economic History.

Social Reform through Settlement Houses

Social settlements, or settlement houses, began in response to problems created by urbanization, industrialization, and immigration. Settlement houses typically attracted educated, native born, middle-class and upper-middle class women and men, known as “residents,” to live (settle) in poor urban neighborhoods. Stanton Coit founded Neighborhood Guild, the U.S.’s first settlement house, in New York City in 1886. By 1900, the U.S. had over 100 settlement houses. Forty percent of settlement houses were in Boston, Chicago, and New York—the leading industrial centers.

The most famous social settlement was Hull-House in Chicago, founded by Jane Addams and Ellen Gates Starr in 1889. Hull-House was located in the midst of a densely populated urban neighborhood full of Italian, Irish, German, Greek, Bohemian, and Russian and Polish Jewish immigrants. Hull-House residents provided kindergarten and day care facilities for the children of working mothers; an employment bureau; an art gallery; libraries; English and citizenship classes; and theater, music and art classes.

Settlement house services were mainly geared to the “Americanization” of European immigrants, to assimilate immigrants into middle-class American society. Since African-Americans were often seen as incapable of entering mainstream American society, black settlement houses were segregated from white settlement houses. By the mid-1900s, most residential settlement houses had been replaced by non-residential social services organizations.

Sources: <http://www.uic.edu/jaddams/hull/>
<http://ocp.hul.harvard.edu/immigration/settlement.html>
<http://ehistory.osu.edu/osu/mmh/response/transcript.cfm>

Immigration at the Turn of the Century: "Give us your tired . . ."

Between 1880 and 1920, over 20 million immigrants entered the United States. During the late 1800s, immigration jumped sharply and remained strong until 1914, when World War I began in Europe. During this era, most immigrants came from Europe, and left their home countries due to political instability, restrictive religious laws and deteriorating economic conditions. Families immigrated together, although men often came first, later sending for their wives, children, and siblings.

Many immigrants were unskilled workers who moved to cities to find industrial jobs. Large businesses welcomed the newcomers, since a steady stream of workers meant that jobs would be easily filled. Immigrants from many countries worked side by side with emigrants from the rural U.S.

However, some American-born workers saw new immigrants as competition. They felt that immigrants would work for less money and in poorer conditions, making labor more competitive and dangerous. Other native-born Americans opposed immigration for religious or racial reasons. Fueled by these prejudices, Congress passed the Chinese Exclusion Act in 1882, the Immigrant Quota Act of 1921, and the National Origins Act of 1924, which effectively ended the era of mass immigration.

Sources: http://www.ellisland.org/genealogy/ellis_island_history.asp
<http://ehistory.osu.edu/osu/mmh/response/transcript.cfm>
<http://www.americancenturies.mass.edu/turns/theme.jsp?x=3&y=3>

Ellis Island

From 1892 to 1954, Ellis Island was America's largest and most active immigration station. From its opening in 1892 until it closed in 1954, about 12 million immigrants were processed there, with over one million immigrants processed in 1907 alone.

Any immigrant passing through Ellis Island had to pass an inspection. The ship's manifest log contained the immigrant's name and his or her answers to twenty-nine questions. This document was used to interview potential immigrants, who were also given a health physical. If an immigrant's papers were in order and he or she was in reasonably good health, the inspection process would last three to five hours.

Only two percent of the arriving immigrants were excluded from entry to the U.S., most often for health reasons, or if an inspector thought the immigrant was likely to become a public burden.

Source: http://www.ellisland.org/genealogy/ellis_island_history.asp

Child Laborers

At the turn of the century, the average income of an urban worker was not enough to care for a family. Children as young as six worked to help support their families. They worked in mines; glass and textile

factories; agriculture; canneries; home industries, and as newsboys, messengers, bootblacks, and peddlers. Children were even preferred, because factory owners viewed them as more manageable, cheaper, and less likely to strike.

The National Child Labor Committee was founded in 1904 and worked to end child labor and to instead provide free, compulsory education for all children. Their work culminated in the passage of the Fair Labor Standards Act in 1938, which was the first law to set federal standards for child labor.

Sources: "United States." *World Education Encyclopedia*.

http://www.continuetolearn.uiowa.edu/laborctr/child_labor/about/us_laws.html#top

The Photographs of Lewis Wickes Hine for the National Child Labor Committee

Courtesy the Library of Congress

Beginning in 1908, Lewis Wickes Hine worked as an investigative photographer for the National Child Labor Committee (NCLC), documenting the working and living conditions of children in the United States. Often hiding his camera and tricking his way past bosses, Hine even learned to write with his hand inside his pocket in order to get accurate captions without giving himself away.

His photographs provided the NCLC with the leverage it needed to promote the passage of state and federal laws protecting the rights of children in the workplace, including the Fair Labor Standards Act of 1938. In 1954, the chief executive of the NCLC gave their photographic collection to the Library of Congress, along with the NCLC records. The photographs reprinted here are from that collection.

Sources: <http://www.nationalchildlabor.org/lha.html>;

<http://www.loc.gov/pictures/collection/nclc/photo.html>

Albert Kahn

One of the most prolific architects in American history, Albert Kahn designed well over 1,000 buildings in his lifetime. He undertook an extraordinary variety of commissions, including some of the largest manufacturing plants ever constructed.

Albert Kahn was born in Germany in 1869. The Kahns immigrated to Detroit in 1880, where financial difficulties forced Albert, the eldest child, to help provide for his family. Kahn obtained work as an architectural apprentice in the early 1880s. He eventually obtained the position of chief draftsman, and in 1891 won a scholarship for study in Europe. Kahn never had formal college training.

Kahn formed numerous partnerships in his career and collaborated often, including with his brother Julius, a civil engineer. Frequent commissions for new types of manufacturing facilities, particularly automobile plants, enabled the Kahn brothers to experiment with new building materials and freed the Kahns from conforming to "appropriate" styles and designs.

At Ford's River Rouge complex, Kahn produced architecture startling for its scale, modern materials, and unpretentious lack of ornamentation. Their huge rows of steel roof trusses, walls of glass, new construction techniques, and minimal geometric shapes attracted the attention of avant-garde architects and artists.

It is for factories that Kahn is best remembered, though he designed a wide variety of buildings, including the Fisher Building, the Belle Isle Conservatory, and many more.

Source: <http://www2.si.umich.edu/umarch/architects/kahn.html>

Frank Lloyd Wright

Experimenting with forms and materials, Frank Lloyd Wright developed a distinctly American form of architecture, and came to be recognized as one of the greatest architects of the twentieth century.

Frank Lloyd Wright was born in 1867 in Wisconsin, and began his career in Chicago. It was in his own studio next to his Oak Park home where he and his draftsmen developed the Prairie style of architecture, a reaction against the historic revivalism common in American architecture in the early 1900s. The Prairie style was characterized by low-pitched roofs, open interiors, and horizontal lines that reflected the prairie landscape. This architecture, which utilized natural materials such as wood, clay, and stone, sparked a revolutionary shift in the American interior.

Although others were reluctant to embrace change, Wright welcomed the social and technological advances made possible by the Industrial Revolution. His goal was to create an architecture that addressed the individual physical, social, and spiritual needs of the modern American citizen. To Wright, architecture was not just about buildings, it was about nourishing the lives of those sheltered within them. He believed architecture must stand as a unified whole, grow from and be a blessing to the landscape, with all parts contributing to the final unity, whether furnishings, plantings, or works of art.

Sources: <http://www.franklloydwright.org/about/Overview.html>
http://www.metmuseum.org/toah/hd/flwt/hd_flwt.htm

Detroit's Buildings from the Turn of the Century

Although many of Detroit's most iconic architecture was built in the 1920s and after, the years around the turn of the century also contributed many notable buildings to the city and region's landscape.

The Cadillac Hotel stood on the corner of Washington Boulevard and Michigan Avenue from 1888 until 1923. Presidents Benjamin Harrison, Grover Cleveland, William McKinley, Theodore Roosevelt and William Howard Taft all stayed there. The Book brothers renovated and it became the Book-Cadillac in 1924; today it is the Westin Book-Cadillac.

The Hammond Building was Detroit's first steel-framed skyscraper. It stood 10 stories high at 31 W Fort St. in 1889. It was demolished in 1956.

The Col. Frank J. Hecker House, also known as the Hecker-Smiley mansion, was designed by architect Louis Kamper and built between 1889 and 1892. It still stands at 5510 Woodward, home to a law firm.

"The Whitney," was completed in 1894 as the home for David Whitney, Jr. and his family. Its distinctive rose-colored exterior, made of South Dakota jasper, makes the Whitney home, today an upscale restaurant, instantly recognizable on Woodward.

Charles Lang Freer's house was built in 1892, on East Ferry, near the Hecker Mansion. A masterpiece of American shingle-style architecture, it was enlarged to accommodate Freer's growing art collections in 1906, 1910 and 1913. Today it belongs to Wayne State.

Detroit Cornice & Slate Building was opened in 1897. The outside of the building is made of steel, which was pressed and hand hammered, then painted to look like stone. It was converted in the 1990s to the offices of the *Metro Times*.

Savoyard Center, at 151 W. Fort, is the only building in Detroit designed by the legendary Stanford White and his partners. It was built in 1900 for State Savings Bank and is still in use.

The old Wayne County Building is a magnificent example of Beaux-Arts Classicism. Located on Randolph St. it opened in 1902 and was used by the county until 2009.

Pewabic Pottery was founded in 1903 and four years later moved to a facility on East Jefferson, designed by architect William Buck Stratton. It still houses the organization.

The Statler Hotel was the largest hotel in the Midwest, as well as Detroit's most expensive and luxurious hotel when it opened on Feb. 6, 1915. It was located at 1539 Washington Boulevard until it was torn down in 2005.

Michigan Central Station, Detroit's most notorious eyesore, was designed by Warren & Wetmore and Reed & Stem, who had teamed up on the Grand Central Terminal in New York. It opened in 1913.

Construction started on the Book Tower, also built by the Book brothers, in 1916, though it wasn't completed until 1926. It is still standing, though empty, at 1265 Washington Blvd.

Though best remembered for his factory work, Albert Kahn also designed many commercial and residential spaces in the city and beyond, including:

- The Temple Beth El synagogue, now Wayne State's Bonstelle Theatre. It opened at 3424 Woodward in April of 1902.
- Cranbrook House, today part of the Cranbrook Educational Community. It was built in 1908 for the Booth family. It is a Tudor style country house in the English Arts and Crafts tradition.
- The Detroit Athletic Club's six-story Clubhouse on Madison Avenue. It opened in April of 1915 and is still the magnificent DAC today.
- The Detroit News Building, which has been home to the News since 1917, though it was recently announced that the paper would be moving to a newer facility.

Literature in the Gilded Age and Beyond

In the Gilded Age, realism came to replace the romantic idealism that was popular before the Civil War. Realism refers to the attempt to represent familiar and everyday people and situations in an accurate, un-idealized manner. In the United States, authors included William Dean Howells (*The Rise of Silas Lapham*, 1885) and Henry James (*The Portrait of a Lady*, 1881).

The naturalist style grew out of realism, but these authors tried to study human beings with the objectivity of scientists. The characters in these stories are controlled by their heredity, environment,

instincts, and passions. Leading naturalist authors included the Stephen Crane (*Maggie: A Girl of the Streets*, 1893), Frank Norris (*McTeague*, 1899), and Theodore Dreiser (*Sister Carrie*, 1900).

Some authors' writings reflected problems in the world. Kate Chopin wrote about feminist themes in *The Awakening* (1899), and W.E.B. Du Bois said on the launch of his groundbreaking 1903 treatise *The Souls of Black Folk*, "the problem of the Twentieth Century is the problem of the color-line."

At the turn of the century, Owen Wister's *The Virginian*, Willa Cather's *My Antonia*, and the works of Zane Grey helped the West achieve mythical status. Authors produced many fine books we still enjoy: L. Frank Baum's *The Wonderful World of Oz*, Mary Johnston's *To Have and To Hold*, Jack London's *Call of the Wild*. Authors Rudyard Kipling, H. G. Wells, Edith Wharton and poets Carl Sandberg and Emily Dickinson all published during this time period.

Sources: <http://www.scholastic.com/browse/article.jsp?id=3753924>
<http://online.sfsu.edu/cherny/cultlexp/lit.htm>
<http://kclibrary.lonestar.edu/decade00.html>

Mark Twain: The Gilded Age

The towering novelist of this era was Mark Twain (Sam Clemens). Samuel Clemens was born on November 30, 1835 in Missouri. When Sam was 11, his father died and he went to work as a printer's apprentice for a local newspaper. At 18, Sam headed east, where he worked on several different newspapers. By 1857, he had returned home to become a riverboat pilot on the Mississippi River. With the outbreak of the Civil War in 1861, Sam joined a volunteer Confederate unit, but quit after just two weeks.

Sam headed west in July of 1861. After failing as a silver prospector, Sam began writing for a Nevada newspaper where he used the pen name Mark Twain for the first time. In 1865, Sam's first "big break" came with the publication of his short story, "Jim Smiley and His Jumping Frog."

In 1873, Sam's focus turned toward social criticism. He co-wrote *The Gilded Age*, a novel that attacked political corruption, big business and the American obsession with getting rich. In classics such as *Tom Sawyer* and *The Adventures of Huckleberry Finn*, Twain continued to write social satire, poking fun at social pretensions. In his writings, Mark Twain provided images of the romantic, the real, the strengths and weaknesses of a rapidly changing world.

Source: <http://www.marktwainhouse.org/>

Art Nouveau

Art Nouveau was a new style in the visual arts and architecture that developed in Europe and North America at the end of the nineteenth century. At its height, Art Nouveau was a concerted attempt to create an international style based on decoration. It was developed by a brilliant and energetic generation of artists and designers, who sought to fashion an art form appropriate to the modern age. During this extraordinary time, urban life as we now understand it was established. Many artists, designers, and architects were excited by new technologies and lifestyles, while others retreated into the past, embracing the spirit world, fantasy, and myth. This led to a wide range of contradictory images and ideas.

Art Nouveau was, in many ways, a response to the Industrial Revolution. Some artists welcomed technological progress and embraced the aesthetic possibilities of new materials such as cast iron. Others deplored the shoddiness of mass-produced machine-made goods and aimed to elevate the decorative arts to the level of fine art. They wanted to apply the highest standards of craftsmanship and design to everyday objects. Art Nouveau designers also believed that all the arts should work in harmony to create a "total work of art," or Gesamtkunstwerk: buildings, furniture, textiles, clothes, and jewelry all conformed to the principles of Art Nouveau.

Source: http://www.nga.gov/feature/nouveau/exhibit_intro.shtm

The Arts and Crafts Movement: A Rejection of Industrialization

The Arts and Crafts movement emerged during the late Victorian period in England. Arts and Crafts designers sought beautiful and fine workmanship rather than machine-made goods, which they believed were inferior. The Arts and Crafts movement did not promote a particular style, but advocated for reform in philosophy and criticized industrial labor.

The British movement's figurehead (and ardent socialist) was William Morris, who believed that industrialization alienated labor and created a dehumanizing distance between the designer and manufacturer. The American Arts and Crafts movement was linked to the British movement, but the U.S. movement was multi-centered, with societies forming nationwide. The Detroit Society of Arts and Crafts may have been the second such organization in the U.S. It was founded in 1906 with George Booth, managing editor of the Detroit News, as president. Albert Kahn and Mary Stratton were also among the founding members. Pewabic Pottery is an example of the Arts and Crafts style.

Eventually, people gave in to technology and urban life, and by the 1920s, machine-age modernity essentially ended the Arts and Crafts movement in America.

Source: http://www.metmuseum.org/toah/hd/acam/hd_acam.htm

The Industrial Revolution's Impact on Fashion

The Industrial Revolution had a large impact on the fashion industry at the end of the 1800s. Improved transportation and communication allowed people to share information quickly. Mail-order catalogs allowed people in rural areas to access the latest trends. In urban areas, department stores influenced tastes, purchasing behavior, and made more and more fashions available.

Improved manufacturing and science also affected the fashion industry. By the beginning of the twentieth century, large quantities of textiles and clothing could be made amazingly quickly. Complex weaves and prints were affordable thanks to advanced manufacturing processes, and the majority of garments were made by sewing machine instead of by hand.

Synthetic dyes, artificial fabrics and inventions like the zipper continued to influence trends in the clothing industry after the turn of the century.

Sources: *Fashion: The definitive history of Costume and Style* by DK – Smithsonian.
http://www.kci.or.jp/archives/index_e.html

Style and the New Woman

The era before the turn of the century is known as the Victorian era. Women's fashion of that time was very elaborate. Dresses featured bustles, high collars, puffy "leg of mutton" sleeves and stiff steel boning under corsets that forced a woman's silhouette into an S-curve, emphasizing a large bust, tiny waist, and full hips.

In the early 20th century, simplification and "less is more" governed fashion. The fashionable silhouette gradually became straight and narrow, and high-waist, corset-less dresses were popular. As the century moved on, women stopped wearing corsets altogether, preferring free-flowing garments. The first modern brassiere was patented in 1913.

Sportswear developed as women began taking part in archery, croquet, boating, tennis, and bicycling. At first, these dresses preserved a tiny waistline, puffy sleeves and a full skirt, with drawers worn under petticoats. Later, shirtwaist and skirt combinations were adopted for sports. Women could wear divided skirts or a "Bloomer costume," a knee-length dress with pants, provided they had their legs covered with high, laced up boots.

The beginning of World War I accelerated the trend toward less restrictive clothing as many women entered the workforce, and became used to wearing practical uniforms, darker colors and simple cuts.

Sources: *Fashion: The definitive history of Costume and Style* by DK – Smithsonian.

http://www.kci.or.jp/archives/index_e.html

Blues and Early Folk Music

At the turn of the 20th Century, a new type of music emerged from the South known as "one-verse songs." The vocal form, based on the folk narrative of southern plantation songs, was matched with great improvisation and a heavy, almost emotional, harmonic line. The style was the Blues, a combination of dramatic gospel hymns and tortured slave emotion singularly referred to as southern slave music.

The Blues remained "underground" from popular music until 1912 when W.C. Handy published "Memphis Blues." Handy was the first African American publisher of his own material and became known as "The Father of the Blues." Even though popular music did not fully recognize the Blues until the middle of the 1920's, the music is considered to be the one truly American genre with the richest history from which all other types of American music sprang. It was the harmonic foundation for Jazz and later it was the emotional inspiration for Rock n' Roll.

White Folk music began with the Colonial interpretation of the English, Scottish and Irish dance music. In the new country, the dance music relied heavily on the fiddle and was later joined with more percussive instruments, such as the tambourine and the banjo, adopted from plantation work songs. Folk music was traditionally passed on by oral tradition, until the first recordings in 1920 by Jimmie Rodgers and the Carter Family. This new sound was decidedly "Country & Western."

The pioneers of Folk and Blues music set the groundwork for what would later be R & B, Western swing, Country and the singer-songwriter.

Source: <http://www.songwritershalloffame.org/exhibits/eras/C1107>

Tin Pan Alley

"Tin Pan Alley" was the nickname given to the street where many music publishers worked during the period of 1880 to 1953. In the late 19th century, New York had become the epicenter of songwriting and music publishing, and publishers converged on the block of West 28th Street between Broadway and Sixth Avenue in Manhattan.

During the period when a song's popularity was determined not by the number of records it sold, but by the number of sheet music copies it sold, publishing companies hired composers and lyricists on a permanent basis to create popular songs. The publishers then used extensive promotion campaigns to market these songs to the general public in sheet music form.

Never in the history of American popular music were so many genres centered in one area. Through the 1880s and into the early 1900s, the European operettas were a heavy influence on American songs. This period is referred to as the golden age of the ballad. Between 1900 and 1910, more than 1800 "rags" had been published on Tin Pan Alley, beginning with "Maple Leaf Rag" by Scott Joplin. In 1912, W.C. Handy introduced popular music to the underground sound of the Blues. By 1917, a recording by a new musician, Louis Armstrong, took over Tin Pan Alley and the 1920s were dedicated to the playing and recording of jazz.

Source: <http://www.songwritershalloffame.org/exhibits/eras/C1002>

Ragtime

Ragtime, a uniquely American, syncopated musical phenomenon, has been a strong presence in musical composition, entertainment, and scholarship for over a century. It emerged in its published form during the mid-1890s and quickly spread across the continent. By the early 1900s, ragtime flooded the music publishing industry. The popularity and demand for ragtime also boosted sale of pianos and greatly swelled the ranks of the recording industry. Ragtime seemed to emanate primarily from the southern and midwestern states with the majority of activity occurring in Missouri -- although the East and West coasts also had their share of composers and performers. Ragtime's popularity promptly spread to Europe and soon became a fad there.

It is not easy to define ragtime. Like jazz, another distinctly American musical art form, Ragtime's composers, practitioners, and admirers each see its boundaries differently. However, these groups are distinguished by subgroups of purists who generally agree on, and stand by, a precise definition:

Ragtime – a genre of musical composition for the piano, generally in duple meter and containing a highly syncopated treble lead over a rhythmically steady bass. A ragtime composition is usually composed of three or four contrasting sections or strains, each one being 16 or 32 measures in length.

Source: <http://lcweb2.loc.gov/diglib/ihis/loc.natlib.ihis.200035811/default.html>

Vaudeville

At the turn of the century in America, thousands of people escaped small apartments in big cities to see the amazing acts of vaudeville. Vaudeville was made of comedians, singers, plate-spinners, ventriloquists, dancers, musicians, acrobats, animal trainers, and anyone who could keep an audience's interest for more than three minutes. Beginning in the 1880s and through the 1920s, vaudeville was home to more than 25,000 performers, and was the most popular form of entertainment in America. From the small-town stage to New York's Palace Theater, vaudeville was an essential part of every community.

There were usually a dozen or more acts in every vaudeville performance. Starting and ending with the weakest, the shows went on for hours. The performances ranged from the truly talented to the simply quirky. There were musicians, such as the piano player Eubie Blake. There were great acts of physical talent; everything from contortionists, to tumblers, to dancers. Actors performed plays, magicians put on shows, jugglers juggled, but the real focus of vaudeville was comedy. Great comic acts brought in the biggest crowds.

Vaudeville was symbolic of the cultural diversity of early twentieth century America. Vaudeville was a fusion of centuries-old cultural traditions, including the English Music Hall, minstrel shows of antebellum America, and Yiddish theater. Though certainly not free from the prejudice of the times, vaudeville was the earliest entertainment form to cross racial and class boundaries. For many, vaudeville was the first exposure to the cultures of people living right down the street.

Source: <http://www.pbs.org/wnet/americanmasters/episodes/vaudeville/about-vaudeville/721/>

Stage

By the 19th century, live entertainment had been well established in America and the theater proved to be a great medium for introducing the American public to the diversity of popular entertainment. During the last years of minstrel shows, European operettas were a heavy influence on the stage and introduced a new intimacy between music and scene. Operettas were later adapted into comedic vaudeville or variety shows that provided a range of live entertainment, musical presentations, novelty and specialty acts.

Musical revues were introduced in contrast to vaudeville, using a theme to connect each song and act. While vaudeville strung individual acts together, revues used a single cast performing interconnected skits, dialogue and songs. A new format called musical comedy adapted both the revue and operetta to a new platform by adding a script or libretto, and interpolating a narrative with songs and dances. Stage productions, which had remained the entertainment of choice for over a century, had their final manifestation in 1920 by fusing all preceding stage formats, minstrel, vaudeville, musical comedy and revues, to create the Broadway musical. While the preceding formats would continue for another 20 years, nothing ever matched the success or grandeur of the Broadway musical.

Source: <http://www.songwritershalloffame.org/exhibits/eras/C1104>

Early American Film

American film began in the late 1890s, and in 1903 the first silent film was released. While the screen remained silent, songs were incorporated into the scenes by a house pianist who decided what and when to play. It was not until 1918 that a musical score was composed specifically for a movie (still played by a house pianist, but with structured cues and songs). In 1926, the first "talkie" was released, and the following year, Warner Brothers produced *The Jazz Singer*. This film is not only viewed as a pioneer of film sound, but as the inauguration of the movie musical.

In early 1910, director D.W. Griffith went to the west coast with his acting troupe, consisting of Blanche Sweet, Lillian Gish, Mary Pickford, Lionel Barrymore, and others. They started filming on a vacant lot in downtown Los Angeles. While there, the company decided to explore new territories, traveling several miles north to Hollywood, a little village that was friendly and enjoyed the movie company filming there. Griffith then filmed the first movie ever shot in Hollywood, *In Old California*. In 1913 many movie-makers headed west to avoid the fees imposed by Thomas Edison, who owned patents on the movie-making process. There are several starting points for American cinema, but it was Griffith's controversial 1915 epic *Birth of a Nation* that pioneered the worldwide filming vocabulary that still dominates celluloid to this day.

In the early 20th century, when the medium was new, many Jewish immigrants found employment in the U.S. film industry. They were able to make their mark in a brand-new business: the exhibition of short films in storefront theaters called nickelodeons, named for their admission price of a nickel. Within a few years, ambitious men like Samuel Goldwyn, William Fox, Carl Laemmle, Adolph Zukor, Louis B. Mayer, and the Warner Brothers (Harry, Albert, Samuel, and Jack) had switched to the production side of the business. Soon they were the heads of a new kind of enterprise: the movie studio.

Source: http://en.wikipedia.org/wiki/Cinema_of_the_United_States

Circus Day

People knew the circus was coming months ahead. "Advance men" and billposters had already plastered vivid lithographs all over to advertise the upcoming show. On circus day, shops, schools and factories shut down. Special trains transported rural circus-goers. Roads became thick with people, horses, and wagons.

An hour before each big-top production, masses gathered at the sideshow tent lined with banners depicting the Fat Lady, the Skeleton Man, the Dog-Faced Boy, and the others inside. Spectators saw all sorts of animals, and the circus band told the audience members when it was time to head inside the big top for the main program. The cavernous big top could hold over 10,000 people. Over twenty acts followed the grand entry processional. Players worked simultaneously on three rings and two stages. Clowns cavorted around in vignettes. The program ended with horse races on the arena's outer track.

In 1903, ninety-eight circuses and menageries traveled the nation, the most famous of which were the Barnum & Bailey and Ringling Bros. circuses. No other amusement saturated consumers like the circus at the turn of the century reaching virtually all Americans. Circus day disrupted daily life thoroughly, normalized abnormality, and destabilized the familiar.

Source: http://www.ibiblio.org/unccpress/chapters/davis_circus.html

The Circus Age: Culture and Society under the American Big Top by Janet M. Davis

Wild West Shows

William F. "Buffalo Bill" Cody opened Buffalo Bill's Wild West show in 1883 launching a genre of outdoor entertainment that thrived for over three decades. Features such as the Pony Express, the wagon train, or the attack on the stagecoach recreated specific and well-known events. Skill acts such as sharp shooting, roping, and riding showcased star performers.

The biggest of them all, Buffalo Bill's Wild West carried as many as 500 cast and staff members. The show generated its own electricity and staffed its own fire department. Expenses were as high as \$4,000 per day. In 1899, Buffalo Bill's Wild West covered over 11,000 miles in 200 days giving 341 performances in 132 cities and towns across the United States.

The decade just before America's entry into World War I saw audiences decline. Motion pictures captivated public attention and the old Western stars were fading. The era of the Wild West can be said to have died in 1917 along with its greatest proponent, Buffalo Bill Cody. The most pervasive legacy of the Wild West shows has been the narrative vision of romance and conquest, based on real people and events that they created and disseminated so successfully across boundaries of race, class, and geography.

Source: <http://www.bbhc.org/learn/western-essays/wild-west-shows/>

An "Olympic Class" Tragedy: The *Titanic*

In the early 1900s, the transatlantic passenger trade was highly profitable and competitive, with ship lines vying to transport wealthy travelers and immigrants. In their quest for passengers, the White Star line planned to build 'Olympic Class' liners that would be known for their comfort: the *Olympic*, the *Titanic*, and the *Britannic*. These vessels were industrial marvels and *Titanic* was to be the biggest, fastest and most luxurious liner yet. Construction began on the *Titanic* in March, 1909.

In addition to ornate decorations, the *Titanic* featured an immense first-class dining saloon, four elevators, and a swimming pool. Its second-class accommodations were comparable to first-class on other ships, and its third-class offerings, although modest, were still noted for their relative comfort. As to safety elements, the *Titanic* had a system of sealable compartments that led many to claim the ship was unsinkable.

On April 14, 1912, four days after setting out from England, *Titanic* scraped alongside an iceberg. At least five of its supposedly watertight compartments were ruptured. Although the *Titanic's* number of lifeboats exceeded the requirement, its 20 boats could carry only 1,178 people. In the end, 1,500 people perished.

Because of the tragedy, the *Titanic* became perhaps the best-known ship in the world. The glamour associated with the ship, its maiden voyage, and its notable passengers captured the public imagination. Some 100 years after its sinking, the *Titanic* remains an enduring legend.

Source: <http://www.britannica.com/titanic>

