The Defending of America
1917-1947

The People, Places and Principles of America



Chapter 10

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WHAT AND *HOW* YOU WILL LEARN FROM THIS COURSE

This study of *America* is presented in twelve chapters divided into four sections:

The Discovering	*Chapters 1 - 3*
The Designing	*Chapters 4 - 6*
The Defining	*Chapters 7 - 9*
The Defending	*Chapters 10 - 12*

The format is designed for individualized or accelerated study. You will be able to progress through the chapter at a rate that is appropriate for you. The secret to performing well is to read each topic entirely, then complete the appropriate Activity questions as you read through the text a second time. Each chapter is divided into three sections of five topics each which reflect the 15 basic components of culture.

A section quiz is assigned at the end of every 5 topics. The chapter test is compiled from the three section quizzes and is issued after the third quiz. At the teacher's discretion, students who score 85% or above on each section quiz throughout the chapter may not be required to take the chapter test.

Numbers of some activity questions are underlined, indicating questions that will be on quizzes and chapter tests. Underlined activity questions are designed to serve as quiz and test review.

Vocabulary words are identified on page one of each topic and are noted in bold, italics type within the text. You will be required to know vocabulary words.

The last few sentences in each vignette are in bold letters and are designed to give you an introduction and smooth transition to the next topic.

The Defending of America

Teddy Roosevelt's charge up San Juan Hill, Santiago de Cuba, in 1898 demonstrated the manner in which the United States would defend freedom during the 20th Century. "The war to end all wars" between 1917 and 1918 (World War I) did not accomplish that objective. Out of the ash heaps of Germany rose the Third Reich of Adolf Hitler. The Nazi military forces marched across Europe while Japanese bombers obliterated the U.S. Navy and Air Force in the Philippine and Hawaiian Islands. The United States was drawn into World War II and successfully defended freedom worldwide against the aggression and cruelty of Fascism and Nazism. Then, from 1950 into the 21st century, American military personnel were called upon to defend freedom against Communism and dictators in Asia, Central America, the Middle East, Europe, and North Africa. On the homefront, citizens in medicine and industry applied their efforts to defend America against disease and economic depression.

Cannons and missile were not the only weapons used to defend American freedom. The use of radio, television, literature, demonstration marches, and assemblies were also employed to oppose ideologies or actions which attempted to chip away at America's core values and principles. Chapters 10-12 put into focus the scope of America's defenders.

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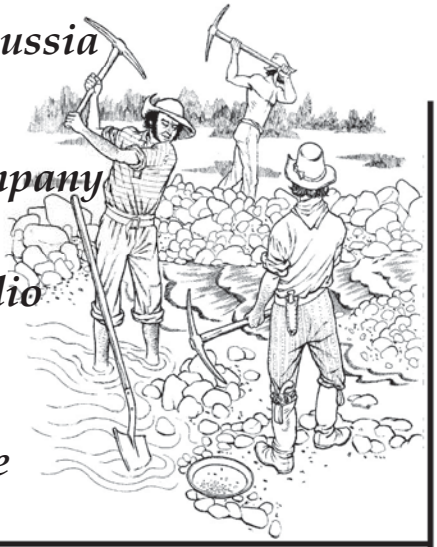


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Chapter 10
Time Line 1917-1947

Use this timeline for referencing important dates throughout the chapter



1917 *Bolshevik Revolution in Russia*

1918 *World War I ended*

1919 *Cummins Engine Company founded*

1920 *First Successful Radio Station*

1926 *Richard Byrd flew over the North Pole*



1927 *Mount Rushmore dedicated; Lindbergh flew "Spirit of St. Louis" across Atlantic*

1928 *Kellogg-Briand Pact*

1930-1933 *Worst time of the Great Depression*

1930s *Monopoly Board Game invented*

1932 *Empire State Building Finished*

1935 *Social Security Act*

1947 *Jackie Robinson breaks racial barrier in sports as the First Black Professional Baseball Player*

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The Defending of America



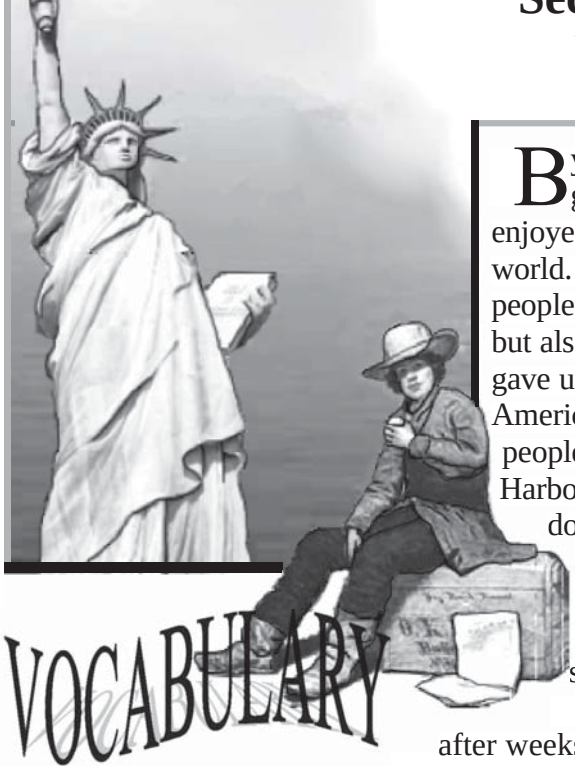
Topic 1
Family & Home

Chapter 10

Section One

Topics 1-5

THE PEOPLING OF AMERICA



By the early 1900s, the United States had become a genuine melting pot of nationalities. The freedoms enjoyed by U.S. citizens were desired by people around the world. Coming to America was the hope of ***downtrodden*** people. America meant not only freedom from oppression, but also opportunity to begin a new life. Many people gave up everything to experience America's opportunities. America represented all the hopes and dreams of distressed people around the world. The Statue of Liberty in New York Harbor reflects the American attitude of friendship toward downtrodden ***exiles*** and ***refugees*** from war-torn nations. "The New ***Colossus,***" by Emma Lazarus, is a poem which conveys the reason millions of immigrants have sought citizenship in the United States of America since 1900.

As steamships ***barreled*** into New York Harbor after weeks at sea, the hundreds of hopeful immigrants standing speechless on the ships' decks were fascinated by an impressive figure rising above the harbor mist. A giant woman, the Statue of Liberty, beckoned "*Welcome!*" to exhausted immigrants seeking better lives.

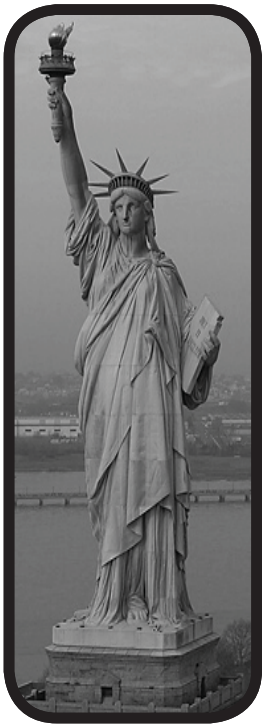
The Statue of Liberty was a gift from the people of France to the United States in recognition of the friendship established between the two countries during the American War for Independence (1776 - 1781). Designed by sculptor Frederic Bartholdi, the statue was commissioned to commemorate the ***centennial*** of the American Declaration of Independence. Officially named, "Liberty Enlightening the World," the statue is lovingly known as "Lady Liberty." Rising higher than 305 feet from the ground to the tip of her uplifted torch, the Statue of Liberty is an awesome sight to behold upon arrival in New York Harbor. In the crook of her left arm, "Lady Liberty" holds a book of law inscribed with the date of United States' Independence: July 4, 1776. The seven spokes in her crown represent the seven continents of the world. To many of the immigrants traveling to America, the Statue of Liberty was more than just a monument. "Lady Liberty" was an awesome symbol

VOCABULARY

Downtrodden: severely oppressed, tyrannized
Exiles: those forced to leave their native countries
Refugee: one who flees his country for safety reasons
Colossus: something of huge size or importance
Barreled: moved at high speed
Centennial: the 100-year celebration of an important event
Apprehensive: anxious about the future
Ideologies: various strongly held belief systems (political, economic, social)
Regimen: a system or course of action
Polygamist: someone who has more than one spouse at a time

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of freedom and a beacon of hope that inspired the ***apprehensive***, weary travelers.



The sight of the Statue of Liberty elicited a multitude of emotions from the immigrants who passed into New York Harbor. The impressive monument that symbolized freedom marked the culmination of a journey, often years in the making. Immigrants saw the Statue of Liberty and thanked God. They had finally arrived after much hard work, sacrifice, and danger. A cascade of thoughts and emotions jostled for first place -- apprehension as to what the future held, money raised for passage...businesses sold, households shut down... meager life savings spent in hopes of joining husbands, wives, and children. Many family members had not seen their relatives for years.

While many languages were spoken on each ship's deck, one word was understood by all: *America!* Soon most of those scared and excited passengers would begin a new life in a young country, in America, the land of their dreams. But their dreams could not become reality until they passed through Ellis Island, otherwise known as the *Isle of Hopes,* the *Isle of Tears*.

Almost daily since 1892, multitudes from Russia, Poland, Germany, the Middle East, Asia, and many other countries made America their home. America's new residents represented a cross-section of nationalities, ages, creeds, religious denominations, and walks of life, such as: Julia Greenberg, who came from Russia in 1903 at age six . . . Manny Steen, who sailed from Ireland at age 19 . . . Axel Ohrn, a 13-year-old immigrant who left Sweden in 1925. More than one million such children, teenagers, and adults came seeking refuge in America, often fleeing war, famine, poverty, and political or religious persecution. When various nationalities from different backgrounds came together in one place, Ellis Island became a huge "melting pot" of diverse languages, ***ideologies,*** and cultures. Most immigrants came to America for a better life, and many ended up making America a better place.

The few immigrants traveling as first- or second-class passengers were allowed to disembark at Battery Park in New York City. However, most men, women, and children had to pass through the immigration process at Ellis Island. On this tiny island (located just one mile south of Manhattan, New York) dreams were realized or destroyed.

Questioning, document checking, and a thorough medical exam awaited immigrants at the 27½ acre Ellis Island complex. Most of those who passed through the island were admitted into the United States. But about 2 percent (or 1,000 individuals per year on average) were rejected for a variety of reasons: papers not in order, illness, or because they did not have the $25 required to prove financial security. Waiting could be the most agonizing part of the process for all who approached their turn, even though thousands of immigrants successfully progressed through the system. A New York journalist equated an immigrant's arrival on Ellis Island to *"the final day of judgment, when we have to prove our fitness to enter Heaven."*

Barbara Barondess, a Russian Jewish immigrant in 1921, described the uncertainty and fear faced by people longing to become Americans:

> *"The time I spent on Ellis Island seemed like the longest waiting period for me because of the* ***regimen****... They weren't unkind, but you had no communication with the people who took care of you...and you had no communication with the other people that were there because everyone was so full of their own fright."*

Ellis Island was designed to receive

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two shiploads of foreign passengers simultaneously. After disembarking, immigrants crowded into a large hall in a maze of lines to begin the questioning process. The main processing center at Ellis Island could handle 5,000 people each day. At the height of immigration, twice that many immigrants were processed. Those who passed the initial screening were separated into groups according to their destinations: New York City, or elsewhere.

Depending on the decade and the political climate of America toward immigration, the line of questioning included the following: name, age, gender, marital status, occupation, nationality, last residence, destination. Questions pelted frightened immigrants:

> *"Can you read and write? Did you pay your own passage? Do you already have a job in the United States? Have you ever been in a poorhouse? Any deformities or serious illnesses? Are you a* ***polygamist****?"*

Medical examinations were a particularly unsettling aspect of the immigration process. One of the most common reasons for rejection was *trachoma*, a contagious disease of the eye that could cause blindness if left untreated. While most immigrants processed through Ellis Island in a matter of hours, some would be detained for days or weeks while papers were corrected or a family member recovered from an illness. Detainees slept in dormitories and ate in a large dining hall, anxiously awaiting approval to enter the United States.



Once allowed into the country, new Americans reunited with family members, joyfully embracing each other on American soil. Estelle Belford, who immigrated from Romania in 1905 when she was only five years old, recalled when her mother was reunited with her father in New York:

> *"I remember my father putting his arms around my mother and the two of them standing a while and crying. And my father said to my mother, 'You're in America now, and you have nothing to be afraid of. Nothing at all.'"*

Once approved for entry into America, immigrants rode a ferry into Battery Park on the Manhattan shoreline. The majority of immigrants stayed in New York City. Others traveled elsewhere to join friends and family who had already arrived. Sections of U.S. cities became communities for immigrants. In bigger cities like New York City and Boston, ethnic neighborhoods sprang up, marked by distinct sights, sounds, and smells of their inhabitants' lifestyles. Neighborhood names like "Little Italy" and "Chinatown" are still common.

Most immigrants worked very hard. Even though strenuous 12 hour days were common, immigrants felt they were better off in the United States than in their homelands. In America, immigrants could take advantage of many privileges and opportunities that were forbidden in other countries—privileges such as children receiving free education, industrious men or women opening businesses, and saving money to buy homes. Family units were strong, with children, parents, and grandparents often living together, supporting each other as they established homes in the New World.

Adjusting to life in America, with a new language and strange customs to learn, was difficult,

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especially during the first few years. But even in awkward social and economic circumstances, immigrants developed strong patriotic loyalties toward their new homeland and were proud of their jobs and simple use of the English language.

Six decades of immigration through Ellis Island can truly be called "the peopling of America." Almost 40 percent of Americans today can trace their heritage to the twelve million people who passed through that tiny island. When immigration laws changed in 1954, the doors closed on Ellis Island.

Restored in the 1980s, the buildings now house the Ellis Island Immigration Museum. The only transportation to the island is by ferryboat. Stepping onto Ellis Island is like stepping back in time. With the Statue of Liberty looming nearby, one can sense the excitement, fear, and hope each of those men and women felt as they became new Americans willing to give up everything to live in the "Land of Liberty."

People coming to America in the early 1900s did not realize that their new home was also on the brink of World War I. The next vignette will tell how the United States became involved in Europe's world war.

"Those who turn back never reach the summit."

- H. Jackson Brown, Jr.

Life Principle



Memory Work

For a bonus of 5 points on your section quiz, quote the bolded part of "The New Colossus" to your teacher.

The New Colossus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon-hand
Glows world-wide welcome; her mild eyes command
The air-bridged harbor that twin cities frame.
"Keep ancient lands, your storied pomp!" cries she
With silent lips. **"Give me your tired, your poor,**
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door!"

By Emma Lazarus

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The Defending of America

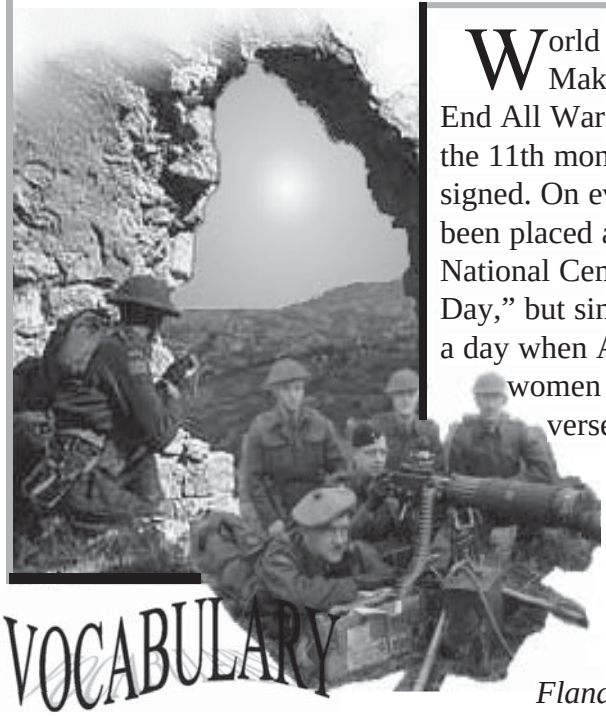


Topic 2
Military

Chapter 10

WORLD WAR I

Section One
Topics 1-5



World War I — also called "The Great War," "The War to Make the World Safe for Democracy," and "The War to End All Wars" — was over. In the 11th hour of the 11th day of the 11th month of 1918, the firing ceased, and an ***armistice*** was signed. On every November 11th since that year, a wreath has been placed at the Tomb of the Unknown Soldier in Arlington National Cemetery, in Arlington, Virginia. First called "Armistice Day," but since 1954 known as *Veteran's Day*, November 11 is a day when Americans remember, with gratitude, the men and women who sacrificed their lives for freedom. The following verse is from a famous poem about World War I:

"In Flanders fields the poppies blow
Between the crosses, row on row,
That mark our place; and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below."
—John McCrae

Flanders is a region in Belgium where some battles of World War I were fought. The crosses mentioned mark the graves of fallen soldiers.

Most Americans of that time did not know why the Europeans were fighting, and the causes are still not well understood today. Several centuries of various empires ***vying*** for control of Europe had resulted in wars that left Europe with strange national boundaries. After these wars were over, boundaries were drawn according to what the rulers wanted, instead of paying attention to the national loyalties of the people who lived there. Thus, some parts of Germany consisted of French-speaking people, and some Italians were part of Austria-Hungary. Some national groups were entirely absorbed by other countries: the Czechs and Slovaks became part of Austria-Hungary; the Poles, Finns, and others were absorbed by Russia; and Bulgarians were dominated by the Ottoman-Turk Empire, which is now Turkey. Additionally, various countries (especially Germany) desired to control more land in Europe and more colonial resources and markets outside of Europe. By 1914, Europe was a powder keg, waiting to explode.

VOCABULARY

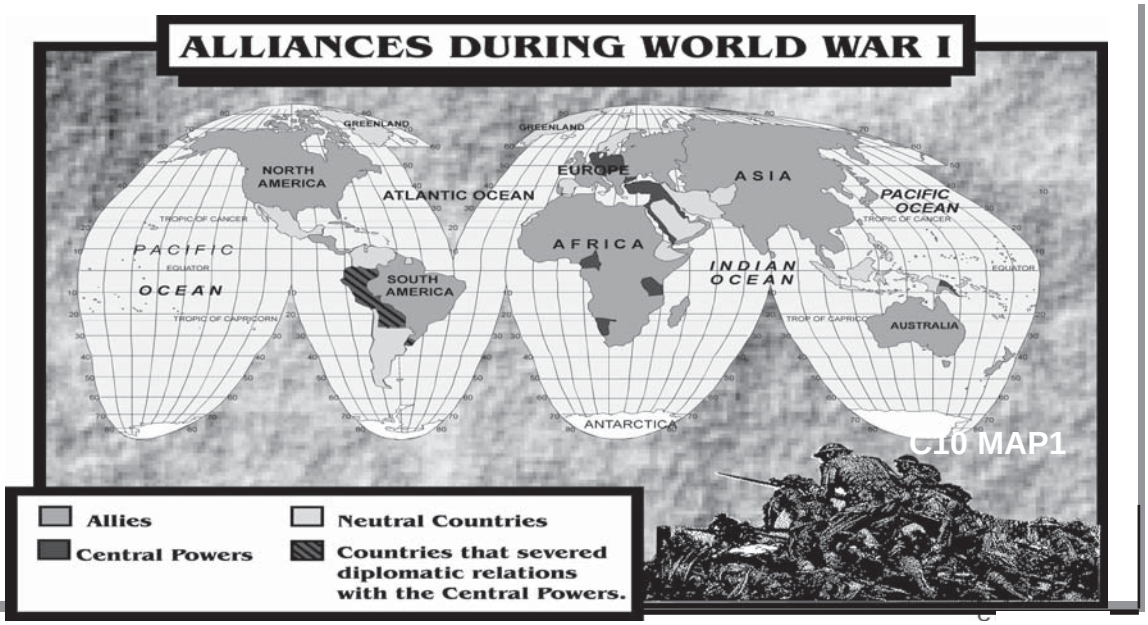
Armistice: a truce, an official agreement to stop fighting until a treaty can be signed
Vying: competing
Catalyst: an event or person that causes sudden change
Domino effect: the cumulative effect produced when one event triggers a chain of similar events
Great Britain: includes England, Wales, Scotland, and Northern Ireland; commonly called *Britain* or the *United Kingdom* (U.K.)
Entente (on-tant): a French word denoting an international coalition of participants with a common goal
Paradox: a statement that contradicts itself
Contraband: smuggled goods designed to assist the enemy

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The ***catalyst*** that lit the fuse of the European powder keg was the shooting of Archduke Francis Ferdinand, heir to the throne of Austria-Hungary, in Sarajevo, Bosnia, on June 28, 1914. The small country of Serbia wanted to possess parts of Bosnia and Herzegovina in order to gain an outlet to the sea. Since Bosnia and Herzegovina were parts of Austria-Hungary, the Austrian-Hungarian people accused Serbia of the assassination. Within a month, the battle lines were drawn. The war officially began on July 28, 1914, when Austria-Hungary declared war on Serbia. A ***domino effect*** followed in quick succession: on August 1st, Germany declared war on Russia; on August 3rd, Germany declared war on France and invaded Belgium; on August 4th, ***Great Britain*** declared war on Germany.

Military alliances had developed between the European countries prior to the war. By the time the war broke out, two distinct military groups had formed. The *Central Powers* were mainly composed of Germany, the Ottoman-Turk Empire, Austria-Hungary, and Bulgaria. The *Allied Powers,* originally called the Triple ***Entente***, consisted of the United Kingdom, Russia, France, and their colonies and territories. Neutral nations included Belgium, Spain, Sweden, Norway, Switzerland, and all of South America. However, as the war progressed, various nations switched positions: Belgium, upon being invaded by Germany, joined the Allies. Neutral Brazil likewise declared war on Germany when a German U-boat sank a Brazilian ship. Russia withdrew from the war, and Italy switched sides to join the Allies. The final lineup of Allied Powers featured five major powers: the United Kingdom, the United States, France, Italy, and Japan (which hoped to win some of German-controlled regions of China and the Pacific). Serbia and many other, smaller nations joined the Allies for a total of 24 nations.

For the first three years of war (1914-1917), the United States managed to keep a position of neutrality. President Woodrow Wilson asked the American people to be neutral in both thought and deed. However, most Americans tended to be pro-Ally because they believed Germany was in the wrong. Furthermore, Americans appreciated our close ties to Great Britain and France's assistance in past wars. The largest group of immigrants in America at that time, however, was German-born, and



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many of these German-Americans expressed support for the Central Powers. However, the rest of the nation was united in support of Allied forces.

America was in the midst of hard financial times, but despite economic circumstances, U.S. businesses were able to accumulate investment capital. The Allied Powers borrowed money from American banks and bought ammunition from American industries. When the Germans protested that America was violating a neutral position, the State Department told the Germans that they could purchase ammunition from America, also, if the Germans would come get the weapons. The ***paradox*** was the British blockade effectively prevented the German ships from entering U.S. ports.

In order to acquire a pathway to France, Germany invaded neutral Belgium. Reports of German atrocities against Belgian citizens soon spread across America, causing American sentiment increasingly to be in favor of the Allied Powers.

One outstanding war crime the Germans committed was the execution of Edith Cavell. Miss Cavell was a British nurse who stayed behind German lines to help injured Allied soldiers and then to assist in their escape. Although Cavell's death before a firing squad was a legal act in wartime, it appalled the civilized world that Germany would shoot a female nurse.

International laws governed the treatment of neutral vessels in occupied waters. Cargo ships that were discovered near war zones expected to be checked by both Allied and German warships to identify war materials. Merchant ships not found carrying ***contraband*** cargos expected to be released. However, the British seized neutral ships, claiming that the supplies on board might fall into enemy hands. On the other hand, German submarines sank neutral ships without



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warning. Because passenger ships sometimes carried contraband and were targeted for bombing, Germany published notices in newspapers warning Americans not to travel on British or any other Allied ships.


General Pershing

In 1915, Germans sank a British passenger ship called the *Lusitania*. One hundred twenty-eight Americans were on board, but even such a horrible attack did not persuade President Wilson to ask Congress to declare war on Germany. German submarine warfare continued to escalate. Hundreds of neutral and Allied ships of all sorts — tankers, merchant, cruise, and even hospital ships — were attacked and sunk by German submarines known as *U-boats.* The U-35 alone, over a three year period (and mostly under a single captain) reportedly sank nearly 200 Allied vessels!


General Pershing Meeting Allied Leaders

Then, in January of 1917, a message, known as the *Zimmermann Note*, was intercepted. This note indicated that Germany was seeking an alliance with Mexico, in case America entered the war. Germany secretly promised that if Mexico would help defeat America, Mexico would receive portions of the land the U.S. had bought from Mexico after the Mexican War of 1846—California, Arizona, New Mexico, and Texas. President Wilson finally asked Congress to declare war because *"the World must be made safe for democracy."*



Thus, on April 6, 1917, the U.S. declared war on Germany. However, America was ill-prepared to fight a war. A *draft* was instituted, which called for all males between the ages of 21 and 30 to register with the government for possible service in the Army or Navy. "Uncle Sam" appeared on patriotic posters, pointing his finger and declaring, *"I want YOU!"* Uncle Sam had long been a symbolic representation of the American government. The image of Uncle Sam inspired patriotism, loyalty, and the desire to defend one's country. With the help of Uncle Sam, thousands of young men signed up for the armed services, and the draft for U.S. soldiers was a rousing success.

President Wilson was granted spending power by Congress that enabled the president to set up government organizations to manage the war effort. The War Industries Board was designed to control war production. The Shipping Board built ships. The Food Administration promoted ways to conserve food. The Fuel Administration curbed use of fuels, so that gasoline could be sent to the Army. The War Trade Board managed imports and exports of products. American business flourished, and the American

VOCABULARY

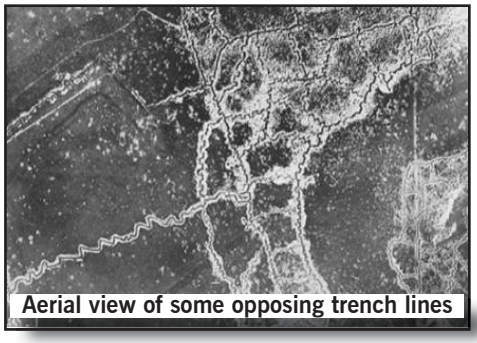
Contingent: a representative group
Attrition: reduction in numbers due to death or impairment
Suit: an example or sequence of something
No Man's Land: typically a land area 100 - 300 yards wide between enemy trenches in WWI, fully exposed to artillery fire from both sides
Surreal: having the intense, irrational reality of a dream
Fronts: battle areas in warfare

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people rallied enthusiastically to help protect democracy.

General John J. Pershing was named commander of the American forces. The first ***contingent*** of American troops arrived in France on June 26, 1917. On July 4th, as requested by the French, General Pershing marched his soldiers through the streets of Paris to the tomb of the Marquis de Layfayette, the 19-year-old Frenchman who had sailed to America with troops to assist General George Washington in America's War for Independence from Britain. In honor of the long-standing friendship between France and America, an American flag has been posted perpetually at Lafayette's tomb since his death in 1834. Pershing's actions boosted the morale of the German-battered, dispirited French. Pershing's speech was delivered by Lt. Col. Charles Stanton, who was more fluent in French than the General. However, Pershing's famous quote at the end of the short ceremony held profound significance for both French and Americans: *"Lafayette, we are here!"*


Trench Warfare


Aerial view of some opposing trench lines

VOCABULARY

***Doughboys*:** a nickname given to U.S. Army foot soldiers; of uncertain origin, emerged during US-Mexican War of 1846
***Stalemate*:** a situation in which neither side wins
***Biplane*:** a small airplane with two supporting surfaces (wings) one above the other
***Impasse*:** a deadlock; similar to a stalemate
Reparations: payment of damages sustained during hostilities

General Pershing's intelligent leadership effectively turned the tide of battle in favor of the Allied forces.

World War I has been described as a strange and haunting war. It was *haunting* because it was the first modern war in terms of weaponry, yet the often arrogant generals in charge came from an age of calvary charges and face-offs in open fields. The result was slaughter on a massive scale — 8,000 per day on average, all troops combined. British generals actually anticipated an 80 percent ***attrition*** rate for their men. In the end, it was less than 36 percent. Ultimately, Germany's grim casualty rate reached 65 percent.

World War I was a *strange* war that included trench warfare and socializing with the enemy at Christmas time. On Christmas Eve, 1914, German guns fell silent. British troops followed ***suit***. Then, along some German trenches, soldiers posted small Christmas trees, lit with candles and other ornaments. Shortly, German troops began singing "Silent Night" and other Christmas carols. British troops joined in, and the opposing armies serenaded each other. Christmas Morning revealed the extraordinary scene of soldiers cautiously venturing out of their trenches into ***"No Man's Land"*** to greet their enemies. Conversation and personal items were exchanged; soccer was played and boxing matches were staged in the snow. Photographs and letters to loved ones documented the ***surreal*** occasion.

World War I was fought on three ***fronts***. The *Western Front* stretched across Belgium, between Germany and France. The *Eastern Front* divided Russia from Austria-

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Hungary. The *Southern Front* extended east to west between Austria-Hungary and Italy.

Technology had changed the methods of war, and at first the Germans, who had been preparing for war for some time, held the advantage. Submarines were used at sea. On land, water-cooled machine guns made "over the top" charges out of the trenches and across open fields to almost certain death. Armored tanks and mobile field artillery enabled both Central and Allied commanders to strike enemy forces quickly and decisively.


A Biplane

Trench warfare developed in fields along the lines of each front. Trenches were dug 8 - 16 feet deep and connected to other trenches in a zigzag manner where a second or third line of ***doughboys*** would stand ready to join in the battle. Some trenches were as long as 600 miles and were connected to each other by a network of ditches and tunnels that enabled supplies and men to be moved to the battle front. Some estimates of the total length of all such WWI trenches range from a staggering 2,500 to 5,000 miles! Dysentery, rain, knee-deep mud, frogs, lice, and rats (gnawing on the corpses of fallen comrades), combined with cannon shells—made conditions in the trenches nightmarish for Allied and Central armies alike.

Between the Allied and Central trenches in "No Man's Land" were unending coils of razor wire meant to slow down attempted attacks by invading enemy forces. Tanks were developed by the British to break the ***stalemate*** of trench warfare. The Germans attacked Allied trenches with deadly chlorine gas and grenades.

For the first time in history, opposing forces fought in the air. Open-cockpit ***biplanes*** were equipped with machine guns which enabled pilots to shoot enemy planes out of the sky. Pilots who shot down five or more enemy planes were called "Aces."

Some men struggled with personal and religious beliefs regarding war. These men of integrity, called *conscientious objectors*, were opposed to fighting with deadly weapons. One such man was Alvin York, a deeply religious man born in the hills of Tennessee. The family pastor encouraged Alvin to enlist to serve his country. The young conscientious objector went to a mountain alone with his Bible to get Divine direction about participation in the war. When Alvin came upon the passage of Scripture that read, *"Render unto Caesar that which is Caesar's, and unto God that which is God's,"* Alvin York decided that defending his country was under the category of "rendering unto Caesar" (obeying the government).

Not only did Alvin York join the Army, the young man from Tennessee dedicated his entire energy toward his duty. York was an expert marksman, and shot more than 20 Germans in one battle. York then captured a German officer, forcing the officer to command his troops to surrender. As the young sergeant marched the German prisoners back to camp, York forced the prisoners to tell other German soldiers along the way to surrender. Alvin York reached Allied lines with a total of 132 prisoners. Sergeant York was awarded the Congressional Medal of Honor and was

VOCABULARY

Monarchy: A form of government having a hereditary chief of state with absolute power and life tenure; a king or queen
Bolsheviks: Communists; followers of extreme German socialist Karl Marx; believed in violent overthrow of Capitalism

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hailed as a national hero in a parade in New York City. York's bravery and fortitude illustrate how much difference one person can make. Later, the movie "Sergeant York" depicted York's heroism.

The war had been somewhat of an ***impasse*** for the Allied Powers before the entry of American forces. With the addition of U.S. soldiers and military strategy, the Allied Powers forced the Germans to bring an end to World War I on November 11, 1918.

President Wilson presented a plan for peace, called the *Fourteen Points*. Although rejected in its entirety by the Allied Powers, certain points were in the *Treaty of Versailles* which was drawn up and signed, whereby Germany had to admit guilt in perpetuating the war and was forced to pay ***reparations***.

In the spring of 1918, even as President Wilson prepared to give his Fourteen Points address, a new and terrible holocaust was looming — the Influenza Pandemic of 1918-1919 that killed more people worldwide than did World War I. Cited as the most devastating epidemic in recorded world history, more people died of the "Blue Death" in a single year than in four years of the Black Death/Bubonic Plague in the Middle Ages (1347-1351). The deadly scourge descended in three waves over several months time, infecting 20% - 40% of the world's population and killing more than 50 million people around the world. An estimated 675,000 Americans died in the epidemic (10 times as many as U.S. troops killed in WWI battles). Fully half of the American soldiers who died on European battle fronts fell to the Flu virus rather than enemy fire.

The illness came on quickly. Many people who felt fine in the morning were dead by nightfall. Those who caught the Flu but did not die from it often perished from bacterial complications such as vicious pneumonia that caused victims to turn a deep blue color, as they suffocated to death, while blood-tinged froth sometimes gushed from their mouths and noses. Bodies piled up faster than they could be buried, much as in the Bubonic Plague era. Young children, unaware of the implications of this global disaster, skipped rope to an odd little poem:

I had a little bird,
Its name was Enza.
I opened the window,
And in-flu-enza.

World War I marked the end of the monarchial form of government. The ***monarchy*** systems were replaced, mostly, with republican, or representative, forms of government in Austria, Germany, Hungary, and other European countries. Russia, however, was a different story. The chaos of war was seized upon as an opportunity for a communist revolution and the bloody overthrow of the Czar of Russia in 1917. ***Bolsheviks***, under the ruthless leadership of Leon Trotsky and Vladimir Lenin, ardent followers of Karl Marx and Charles Darwin, killed Czar Nicholas and his family, and set up the first communist government in the world. Marx embraced Darwinism as a tool to promote socialism, which in turn birthed communism. Those who study the roots of political movements conclude that without Darwinism, neither communism nor Marxism would have existed. Communism was responsible for slaughtering 100,000 people in the 20th century, and Nazism eliminated millions more in WWII.

The 1918 Treaty of Versailles, which officially ended WWI, was signed exactly five years from the day the war began. The treaty included a provision for formation of the *League of Nations*, at the insistence of President Wilson. However, the United States Congress neither approved nor ratified the Treaty. Senators and Congressmen believed that such a document would have forced

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Americans to yield too many freedoms to international authority. America did, however, enter separate peace treaties with Germany, Austria, and Hungary.

World War I changed the way nations interacted politically, socially, and economically. Thousands of men became aware of new languages, customs, and opportunities for business beyond national borders. The war effort encouraged some men to leave their farms and go to work in factories or to "see the world." Many farmers expanded their farm production in order to provide exports worldwide.

WWI boosted the American economy. In the midst of hard times, the country pulled together to meet the hardships of war. The next vignette explains how the needs of the war were met by America's farmers.

LIFE PRINCIPLE



"AMERICA IS GREAT BECAUSE AMERICA IS GOOD, AND IF AMERICA EVER CEASES TO BE GOOD, AMERICA WILL CEASE TO BE GREAT."

—French statesman Alexis De Tocqueville

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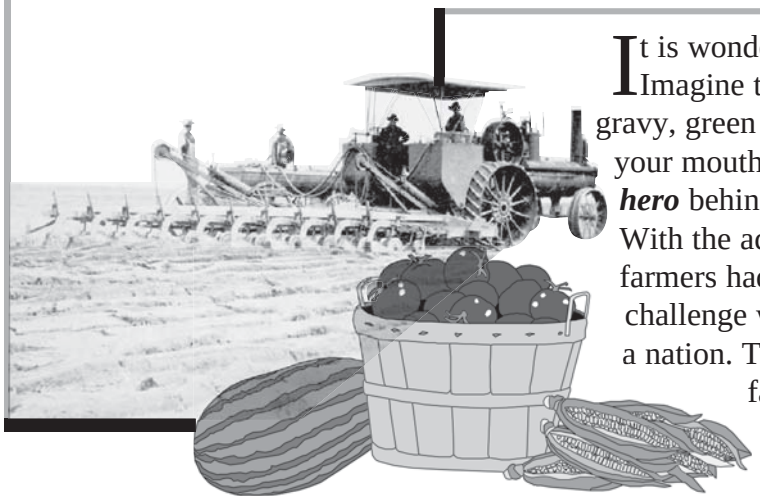
The Defending of America

Topic 3
Agriculture

Chapter 10

FARMERS, WAR, AND GOVERNMENT

Section One
Topics 1-5



It is wonderful to sit down to a good meal. Imagine tender roast beef, mashed potatoes with gravy, green beans, and homemade rolls that melt in your mouth. The American farmer is the ***unsung hero*** behind every good meal.

With the advent of the 20th century, successful farmers had to be wise businessmen. A farmer's challenge was to find a profitable way of feeding a nation. The Industrial Revolution enabled farmers to produce more goods with less physical labor. ***Entrepreneurs*** had provided better crops, better tools, and better farming methods. A combination of technology, research, and wise use of privately owned farmland enabled America to become the world leader in production of agriculture products.

In 1862, the Department of Agriculture was formed to provide government assistance to farmers. The department provided research reports on animal and plant diseases, soil composition, destructive insects, and new plant varieties for differing soils. The Agriculture Department also operated experimental farms where new ideas were tested.

In 1862, Congress passed the *Morrill Act*, which granted U.S. states large tracts of public land for colleges that taught agriculture and mechanical arts. Agriculture was changing, and young farmers needed training in new methods of efficient farming. Studying agriculture in college equipped future farmers with more efficient skills and knowledge about plants and animals.

Empowered by the *Smith-Lever Act* of 1914, the Department of Agriculture assisted local farmers by assigning county agents to live in farming communities. County agriculture agents gave farmers access to research information that helped solve agricultural problems.

VOCABULARY

Unsung hero: a hero who gets no credit or recognition
Entrepreneurs: people who risk their own money and time to start and operate new businesses to earn profits
Urban: in a city
Rural: in the country
Staple: main ones, most important ones
Humanitarian: one devoted to human welfare
Blitzed: attack with quick force
Progressive: advocate of increasing government interference in, and control of, private enterprise

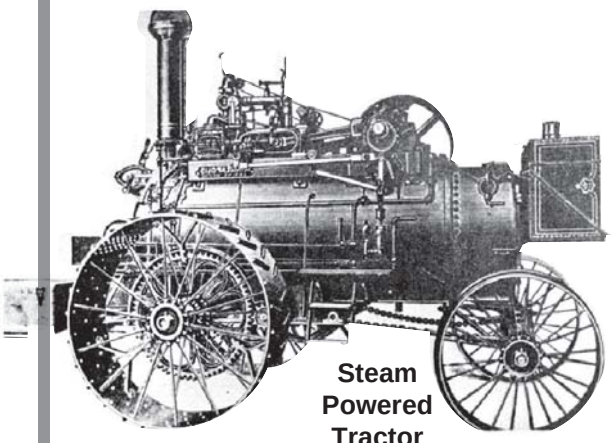
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VOCABULARY

Parity: equal value of standard; a bonus for not raising crops for market
Subsidies: tax money distributed by the government to various groups
Dire: desperate, severe
Transients: people who stay in one place for only a short time

World War I changed the way Americans lived. Soldiers who fought overseas and women who worked in ***urban*** facilities developed a taste for urban lifestyles. ***Rural*** life seemed dull compared to the lure of big cities, where young men and women found easy access to education, recreation, and medical facilities. Young people abandoned family farms to seek adventure and job opportunities in cities. Farmers were ridiculed and called "hayseeds." Something was needed to lend respectability to farming as a profession and to encourage American young people to stay on their family farms.

The *Smith-Hughes Act* of 1917 gave high schools federal money to teach agriculture and home economics. 4-H Clubs were organized in rural areas. The 4-H Club's name came from the club's pledge:



Steam Powered Tractor

"I pledge My Head to clearer thinking, My Heart to greater loyalty, My Hands to larger service, and My Health to better living for my club, my community, and my country."

Club members were taught agricultural techniques and encouraged to undertake projects to show at county fairs. Students competed for prizes for the best garden produce or farm animals. Promoting agriculture as a patriotic profession, 4-H Clubs still flourish in rural America, with a recent upsurge in suburban and even urban areas.

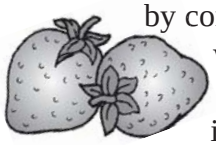
The death of so many American sons, fathers, and brothers caused World War I to be a disheartening blow for the country, but the nation took deep, collective sighs and went on. Ironically, the same war that devastated so many families caused farmers to prosper. Farmers were in demand to feed the nation as well as American troops and allies overseas. The *Federal Farm Loan Act* of 1916 had made financial credit available to farmers at low interest rates, and The *Warehouse Act* of 1916 authorized loans on ***staple*** crops like wheat and corn. Rising to the occasion, American farmers put their tractors to work and provided crops and cattle for food and leather for boots, rifle straps, and belts.

President Woodrow Wilson named an American mining engineer, Herbert Hoover, as director of the Food Administration. Mr. Hoover was a Quaker by faith, and a well-known ***humanitarian***. When Germany viciously invaded the tiny country of Belgium earlier in the war, Mr. Hoover was called upon to help feed the starving nation. He successfully put Belgium back on track and earned the nickname of "Miracle Man." The goal of the newly formed Food Administration was to increase

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food production, reduce food waste, and encourage the public to substitute plentiful foods for scarce ones.



Mr. Hoover was an excellent organizer who coined the motto, "Food Will Win the War—Don't Waste It." He ***blitzed*** the country with slogans like: "Use all leftovers" and "Full garbage pails mean empty dinner pails." Hoover encouraged people to practice "the patriotism of the lean garbage can." Hoover's program inspired the American people, who followed the administrator's requests voluntarily, even inventing recipes that omitted hard-to-find ingredients. Wheatless Mondays and Wednesdays, meatless Tuesdays, and porkless Thursdays and Saturdays were all regular weekly standards during World War I.



Perspiring patriots planted "Victory Gardens" in their backyards or on vacant lots. Farm products increased by 25%, as the U.S. shipped food to hungry Allied forces. Hoover encouraged wheat growers to participate by guaranteeing each 1917 crop a purchase price of $2.20 per bushel.

The end of the war also ended the farmer's prosperity. Small wheat growers suffered when machinery reduced the need for extensive cheap manual labor. Tractors and improved knowledge of agriculture enabled farmers to produce far more per acre than ever before. These advances were wonderful during the war, but in peace time, exports decreased as the market for excess crops diminished.

Progressive politicians in the federal government began to control America's farm economy. The *Agricultural Adjustment Act* of 1933 was designed to raise farm prices by controlling production. The government would pay farmers a bonus not to cultivate some of their acreage. The idea was that if farms produced less, prices would go up, and the farmer could balance his costs.

Other parts of the progressive law were designed to boost the farmer's sagging economy. Loans were granted to help farmers store extra produce, so they could withhold products from the market until prices were better, then release those same products at higher profits. Farmers were allowed to refinance their mortgages at low interest rates to keep from losing their farms. A federal electrification program brought electricity to isolated farms.

A *Second Agricultural Adjustment Act* of 1938 encouraged farmers to plant soil-conserving crops on their extra land, or to let land lay dormant. Emphasis was on conservation. If a farmer followed government restrictions placed on excessive planting, the farmer was paid a bonus, called ***parity***. The Agricultural Adjustment Act provided farmers with sufficient profit to remain operative, but simultaneously made farmers dependent on government ***subsidies***.

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Farmers also faced a severe blow from nature. Late in 1933, a long drought devastated the Great Plains states of North and South Dakota, Nebraska, Kansas, Oklahoma, and parts of northern Texas. Furious winds followed the drought, ripping topsoil from thirsty ground. The farmer watched helplessly as his hard-earned farm literally blew away. Dust storms were sometimes so dense that farmers could not see across their grassless yards. The Great Plains area became known as the *Dust Bowl*, and that terrible time in history became known as the Great Depression. The entire country was in difficult financial circumstances.

Farmers by the tens of thousands abandoned their ruined land and became refugees. They traveled to California, hoping to find affordable, farmable land. In the meantime, they had nowhere to live, and they had no way to make a living. Suffering ***dire*** poverty, displaced farm families huddled in makeshift camps, often sleeping in their broken-down cars and trucks. Homeless farmers, called ***transients,*** were sometimes treated unkindly by communities along the way. John Steinbeck captured the mood of America in two books, *Tobacco Road* and *Grapes of Wrath,* which later became award-winning films, even though they were not historically accurate.

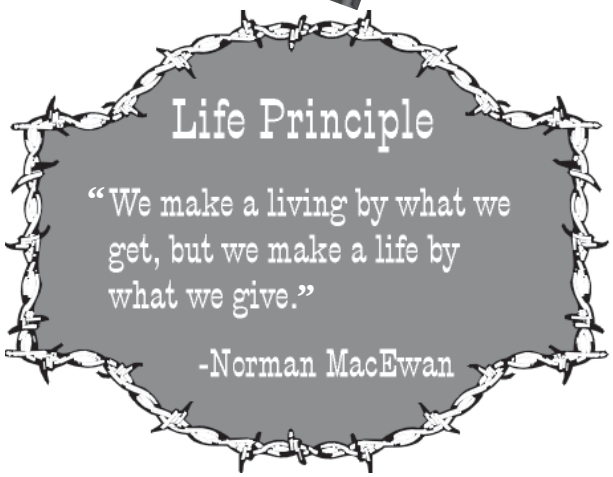

John Steinbeck



Once again, the U.S. government tried to assist exhausted, starving farmers and their children. In 1935, President Franklin Roosevelt set up a Resettlement Administration to help farmers move from poor land to better land. Men and boys in the Civilian Conservation Corps planted millions of trees in the Dust Bowl to act as windbreaks, so the land could be recovered.

Those were hard years for our nation's farmers. Farming was forever changed by events which surrounded World War I. Technology began to replace horses and men. Research improved crop yields, and progressive government involvement established a socialistic relationship between privately owned farms and the federal government. After World War I, America's farmers were free to live on or move off their farms, but the choice of which crop to raise, sell, or plow became a matter of government concern.

The next vignette will tell about food products that were not produced on rural farms.



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The Defending of America



Topic 4
Food

Chapter 10

BEN NELSON: HATCHING A WEALTH OF FISH

Section One
Topics 1-5



Few people would have thought that raising fish would capture the imagination and ingenuity of young Ben Nelson. Ben was one of nine children born in 1916 to a Scandinavian immigrant family in Minnesota. Like many young men in the early 1900s, Ben quit school after eighth grade to work full time. Ben worked with horses, labored on a dairy farm, and even drove a truck for a while. Then Ben Nelson decided to move to one of the places his truck driving had taken him: Lonoke, Arkansas. When Ben began working at the state fish ***hatchery*** there, he never imagined fish production would become his lifelong love. It did, however, and Ben would one day contribute greatly to America's commercial fisheries.

Fish has been on American dinner tables since the First Thanksgiving back in 1621. Rich in protein, numerous species of fish are harvested continually from the nation's oceans, rivers, lakes, ponds, and fish farms. Fish are fried, broiled, baked, steamed, and ***poached*** in a variety of delicious ways.

Oceans are America's largest source of fish. While fish farms produce the smallest portion of America's fish supply, they are still important providers of catfish, crayfish, oysters, salmon and trout.

At Lonoke's fish hatchery, Ben Nelson put his creative mind to work, becoming interested in the scientific side of raising fish. Ben began finding ways to improve fish production. Successful attempts at improving ***propagation*** of channel catfish earned Ben Nelson recognition across the state.

In 1953, the owner of a commercial trout farm in Rogers, Arkansas, hired Nelson to build a catfish hatchery. At that time, farm raising of channel catfish for use in restaurants was still in its infancy. Ben became a hatchery expert, developing new methods of increasing production to make raising catfish profitable.

VOCABULARY

Hatchery: a place where eggs are hatched under artificial conditions
Poach: steam-cooked by holding over a boiling liquid or gently simmering in such liquid; a non-greasy means of cooking
Propagation: reproduction or breeding
Gestation: the time necessary for embryos to develop; pregnancy
Serum: any watery animal fluid

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VOCABULARY

Pituitary gland: the gland in the brain that regulates growth
Incubator: a machine that warms eggs without the mother
Apparatus: a machine designed for a specific reason
Flash-freezing: a process of rapid freezing that preserves the natural juices and flavors
Feasible: possible, attainable
Entice: persuade

One of the most unique improvements Nelson offered the fishery industry was a new method of shortening the ***gestation*** time for fish. Using individual aquariums, Nelson injected female catfish with ***serum*** made from the ***pituitary gland*** of buffalo fish. Mixed with penicillin to prevent infection, the serum caused female catfish to lay their eggs quickly. After the males fertilized the eggs, the fish were removed from the aquariums and returned to separate ponds at the hatchery.

Nelson invented a type of ***incubator*** for fish eggs. In nature, a male catfish hovers over the nest after the eggs have been fertilized. Using fins to move the water back and forth, the male catfish keeps sediment from settling on the eggs and killing them. Nelson's incubator moved the water, keeping sediment off the catfish eggs automatically. Eggs were put in baskets made of fine wire. In the fish building of the hatchery, the whole ***apparatus*** was submerged in one of twenty concrete tanks of water. Once the eggs hatched, the tiny fish (called fry) swam out of the basket holes.

Ben Nelson gladly shared his knowledge and innovations. Nelson's generosity and helpful nature were rewarded with financial prosperity, not only for him but for other catfish farmers who implemented Nelson's ideas.

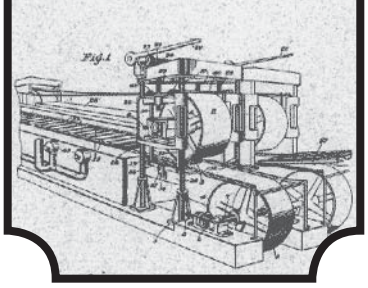
Nelson produced a new species of albino catfish called Golden Channel Catfish. Since Nelson was the only one who owned these new catfish, he was able to sell them at a good profit. Production of Golden Channel Catfish enabled Nelson to enjoy financial security for the rest of his life. Thanks to Ben Nelson, grocery stores provide an abundant, year-round supply of freshwater catfish.

America's love for protein-rich fish led to a creative breakthrough in the food market by Clarence Birdseye who built a company which brought frozen fish to the American dinner table.

MOM OKAYS FLAKED & FROZEN FOOD

In 1917 Clarence Birdseye worked for Fowler Fisheries Company, which sold dressed and chilled fish out of Bay Shore, Long Island. As Clarence processed frozen fish, he recalled how fresh the fish caught off Labrador's banks tasted when they were thawed to eat. Birdseye believed the fish tasted better because it was frozen almost immediately. The fish could be frozen for months at a time and still taste as fresh as when it was originally caught. Birdseye discovered that freezing fish quickly prevented formation of large ice crystals that caused the thawed fish to become mushy.

Birdseye's Food Processor



That first-hand experience with ***flash-freezing***, combined with his work in the fish distribution

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business, inspired Birdseye to experiment with more freezing processes. Clarence wanted to develop a freezing method that was both economically ***feasible*** and also safe for consumers.

In 1923, Birdseye established General Seafood Company in Albany, New York, freezing and selling thousands of pounds of fish. His initial freezing process involved electric fans, ice cakes, and salt brine. Although his company was very successful, Birdseye was not satisfied that his fish was of the best possible quality.

In 1927, Clarence Birdseye developed a continuous freezing process, in which whole fish or packages of fillets were sprayed with forty-degree-below-zero salt brine solution. This system allowed for the economical, large-scale production of frozen fish and launched America's frozen food industry.

Thanks to Birdseye, the frozen food process enabled Americans to buy a variety of frozen foods—peas, peaches, cherries, fish, beef, and more in their grocer's freezer section. By 1940, 15,000 grocery stores proudly offered freezer cabinets, and frozen food sales topped $150 million. The first full-color frozen food advertisement ran in *Life Magazine* that same year.

By World War II, the frozen food market was particularly popular (due in part to the need to ship foods overseas to feed American soldiers). Families on the home front relied on frozen food, which up to that time had remained little more than a luxury. Grocery stores doubled their freezer space. More Americans sampled frozen foods, and found that they liked them. Consequently, the frozen food business boomed.

By 1946, concentrated frozen orange juice, inspired by Gail Borden's success with condensed milk, was in full production. In ten years, Americans were consuming 68 million gallons of orange juice annually.

Today, next to the glass of orange juice, a bowl of cereal holds a standard place on the nation's breakfast table. Americans became fond of breakfast cereals, after refrigerators enabled homemakers to serve cold milk over cereal. Hot, soupy cereals such as oatmeal, mush, and gruel were standard breakfast food before 1930. When "ready-to-eat" cold cereals hit the market in the early 1900s, Americans gave a big "thumbs-down" reaction.

But each night after work and school, Americans from coast to coast crowded around talking boxes called radios. This newest source of entertainment and news also provided a ready audience for advertising cold cereal. Radio advertisements played a big role in making cereal a popular breakfast food. Children took to heart endorsements from radio celebrities such as the Lone Ranger and his Indian sidekick, Tonto, along with Tom Mix and Jack Armstrong. These and other radio heroes made the cereals they promoted household words among America's youngsters. By the 1930s, cereal


Fishery

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boxes were given a favorable reception on America's breakfast tables.

Manufacturing and advertising can claim partial credit for the growth of America's cereal industry. Cereals made from grains like wheat, corn, oats, and bran are shaped into flakes, circles, stars, nuggets, puffs, biscuits, and even little tiny slices of toast. For decades, these cereals in every imaginable shape, color, and flavor have dazzled the taste buds of American consumers. Today, mass advertising and marketing techniques ***entice*** buyers to spend millions of dollars on packaged breakfast cereals.

Boxed cereals and frozen foods represent only a portion of the convenience food industry in this country. As American life became more complex during the 20th century, so did the demand for better and more efficient ways to provide food and beverages. Entrepreneurs like Nelson and Birdseye saw market needs and provided products which consumers were willing and eager to buy.

After World War I, many changes were taking place in U.S. government economic policies, but as we will learn next, all changes were not pleasant.



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The Defending of America



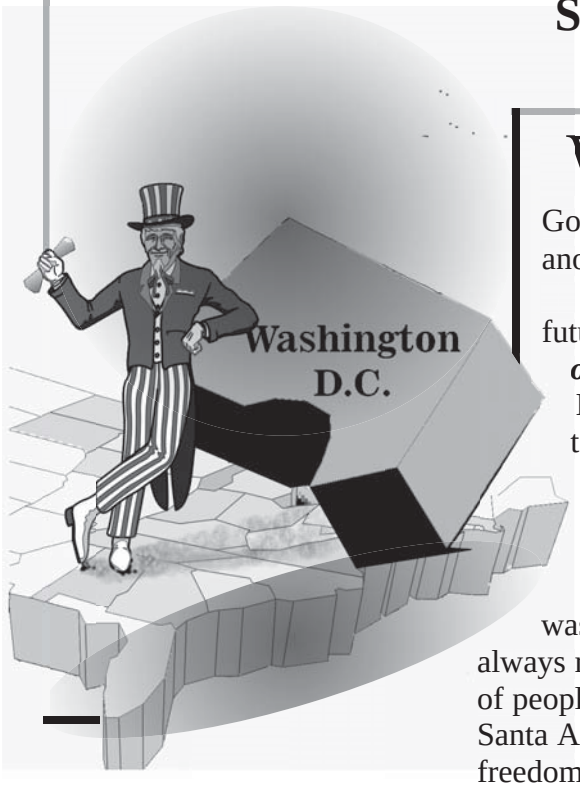
Topic 5
Government & Economics

Chapter 10

BIG GOVERNMENT AND FREE ENTERPRISE CLASH

Section One

Topics 1-5



World War I haunted Americans long after the final shot was fired and the armistice was signed. Government policies were introduced in the 1920s to avoid another world war like The Great War of Europe.

President Woodrow Wilson attempted to prevent future war by forming the League of Nations, which ***ostensibly*** would resolve all conflicts peacefully. However, Congress considered the League of Nations too restrictive and chose not to join. The Kellogg-Briand Pact (1928), a treaty denouncing war, was signed by 62 major nations, including the U.S. The League of Nations and the Kellogg-Briand Pact shared a common goal—to prevent a second world war. The objective was noble, but it discounted human nature. History has always reflected the evil attempts of ***despots*** to rule over masses of people. Alexander the Great, Atilla the Hun, Napoleon, Santa Anna, Hitler, and Stalin are prime examples. The price of freedom is eternal ***vigilance*** against dictators.

To avoid involvement in another world war, Congress adopted a policy of ***isolationism***, which was designed to allow the American economy to operate without reliance on foreign markets. Additionally, Congress passed the Fordney-McCumber Tariff Act (1922) and the Smoot-Hawley Tariff Act (1930) which placed huge taxes on imported goods.

Isolationism also became a policy for immigration. Republicans feared supporters of Russia's 1917 Bolshevik Revolution would come to America and corrupt the U.S. government, while Democrats and labor unions feared the competition of immigrant entrepreneurs and workers. The Emergency Quota Act (1921) and the National Origins Act (1924) temporarily placed strict limits on immigration.

The years after World War I brought many changes to American culture. Public drunkenness was commonplace, and crime ran rampant in the cities. Many concerned wives and mothers joined church groups to stop the negative affects of alcohol on husbands, sons, homes, and businesses. The 1920s are often called the *Prohibition Era*. *Prohibition*, a ban

VOCABULARY

Ostensibly: apparently, supposedly
Despots: evil tyrants, vicious rulers
Vigilance: constant alertness
Isolationism: setting oneself apart from others
Repealed: canceled
Infestation: a huge amount of harmful elements
Stock market: the buying and selling of shares of businesses as investment or profit
Plummeted: fell dramatically

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on alcoholic beverages, passed in 1919, was supported by Protestant ministers like former baseball pitcher Billy Sunday and temperance organizations like the Women's Christian Temperance Union.

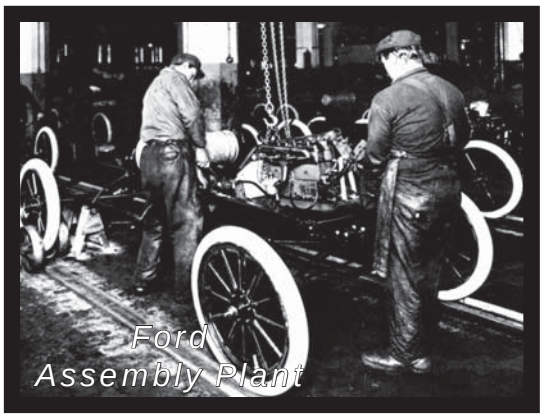
Gangsters, like Chicago's Al Capone, grew rich from illegal, or *bootleg*, liquor and mafia crimes such as organized gambling, drug-running, racketeering, and even murder. Saloons were replaced by illegal, whisper-filled rooms called *speakeasies*.


Al Capone

Enforcing prohibition became difficult as Congress yielded to pressure from lobbyists representing the liquor industry. In 1933, national prohibition was ***repealed***.

As liquor became a major industry in America, opposition to it inspired women to become involved in politics. The passage of the 19th Amendment in 1920 finally gave women the right to vote and to participate in the election process. Women could not only vote, but they could also be elected to public office as mayors, representatives, and judges.

Americans achieved the highest living standards on Earth during the period known as the Roaring Twenties. One reason for this prosperity was the relative lack of government intrusion into the economy. Private enterprise was a catalyst of the 1920s industrial explosion. Entrepreneurs in the quest of a profit developed new products and technology that propelled America to the forefront of industrial leadership. Electric motors replaced steam as an energy source for factories. Moving assembly lines and other technological advances led to efficient manufacturing in which great quantities of products were sold at low prices. Americans' wages could buy large quantities of products at reasonable prices.


Ford Assembly Plant

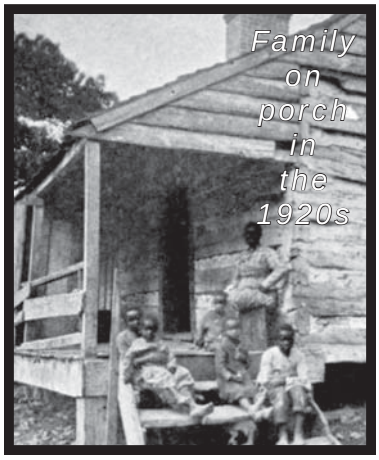
A dominant industrial figure of the 1920s was Henry Ford. Mr. Ford wanted to provide efficient automobiles at reasonable prices. He introduced the concept of assembly line production that consisted of interchangeable parts, a moving assembly line, and a division of labor. Ford's innovative assembly procedure enabled him to mass produce the Model T. Instead of building a few cars and selling each for a large profit, Ford built thousands of cars and sold each for a small profit. Any time Ford saw an opportunity to increase efficiency, he made sure the procedure was implemented. Henry Ford's motto was, "*Everything can always be done better than it is being done.*" Mr. Ford built vehicles to meet the market demand, and in the process, Ford Motor Company created thousands of jobs for Americans.

America became electrified during the 1920s. By the end of the decade, two-thirds of Americans enjoyed electricity in their homes. The electrification of America increased the demand for products like washing machines, vacuum cleaners, refrigerators, and kitchen ranges. Like Ford Motor Company, appliance manufacturers produced items desired by the public. In the process of providing practical household products, appliance manufacturers created hundreds of jobs and greatly reduced the work load of housewives.

The radio industry was also born during the 1920s. David Sarnoff, Commercial Manager of Radio Corporation of America (RCA), was the son of Jewish immigrants who believed radio could be used for entertainment by broadcasting sports and music. In 1922, a radio station aired a real estate firm's advertisement, and commercial

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radio was born. In 1922, only 33 radio stations existed, but by 1923, 556 radio stations were broadcasting across the airwaves.


Family on porch in the 1920s

Another impact of industrialization was its effect on black families in the southern regions of America. Because of difficult relationships in the South and the boll weevil ***infestation*** that was destroying southern sharecroppers' cotton crops, blacks by the hundreds of thousands migrated to the North in the 1920s. During World War I, many black families had moved to cities like New York and Chicago to work in war industries. The migration to Detroit intensified after the war, as Henry Ford's Auto Factory became a popular destination.

Southern *Negroes* (the common term for African Americans before 1960) were generally less educated and cultured than northern Negroes. When Southern migrants reached the North, they found themselves ridiculed by both blacks and whites. Large groups of Southern blacks settled in crowded city neighborhoods, which implanted the seeds of restlessness, fear, poverty, and illiteracy.

However, the industrial North's economic opportunities outweighed the difficulties blacks faced, and the migration continued. More than 750,000 blacks moved North during the 1920s, a number comparable to the great wave of Irish immigrants to America in the 1840s. The Great Depression of the late 1920s brought the black migration to a temporary halt. Employment opportunities dried up after the ***stock market*** crashed, forcing thousands of businesses to shut down.

Late in 1929, when the stock market began to falter, speculators rushed to sell their stocks and pay off their business loans. On October 24, 1929, a record 16,410,030 shares of stock were traded, and stock prices ***plummeted***. Even non-investors recognized the crisis, and they rushed to banks to withdraw their savings. A banking crisis erupted as hundreds of banks closed their doors in bankruptcy.

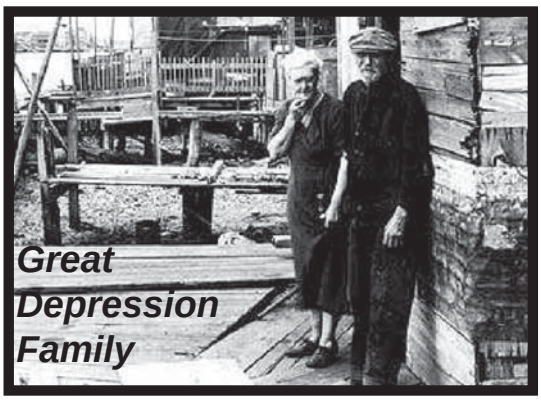
To understand the four-year banking crisis that followed the 1929 stock market crash, an understanding of how banks worked is necessary. U.S. banks operated on a *fractional reserve system*. When a customer deposited money in a bank, only a fraction of that deposit went into the bank's reserves. The rest of the money was used to pay expenses or was lent out to other customers. Banks made money by charging interest on those loans. The amount of money in a bank's reserves never equaled the sum of the deposits made by customers. Banks routinely loaned more money than was actually available in their loan departments. However, if too many customers tried to withdraw their money at one time, a ***bank run*** occurred.

VOCABULARY

Bank run: happens when people who have money in a bank fear that the bank will fail and they all withdraw their money at once—actually causing the bank to fail
Recession: withdrawal, temporary failure
Jumpstart: to help start then leave alone
Utopia: the perfect place
Socialists: people who support government control of industry, education, and private property; socialism is a transitional stage between capitalism and communism
Destitute: terribly poor; without necessary means to live
Nazis: German fascists under dictator Adolf Hitler
Fascist: oppressive, dictatorial breed of socialism
Communists: militant, socialist, atheistic controllers or partakers in political systems that rigidly control the economic, religious, and educational aspects of a society

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The bank could only hope to meet a sudden demand for money by pressing other customers to repay their loans or by borrowing from other banks. An actual banking crisis occurred when many banks faced bank runs at the same time.



A banking crisis is a classic example of a *self-fulfilling prophecy:* the fear of bank failures actually caused banks to fail. First, depositors feared that the banks were going to fail and rushed to the banks and withdrew their savings; consequently, the banks were unable to meet the sudden demand for currency; finally, the banks failed. The frightened bank customers demanded more money than was available, thus the American banking system collapsed.

The banking crisis affected everyone, regardless of their wealth or social status. Businesses needed bank loans to stay afloat, so when the banks failed, businesses failed also. When businesses failed, employees lost their jobs. When businesses failed to make profits, they paid fewer taxes to support the government. The "spin-off" effect of bank failures reached every aspect of U.S. culture in the 1930s.

Before 1913, banks had handled banking crises by collectively agreeing not to pay currency to depositors who wanted to make withdrawals, but to use bookkeeping entries instead. That method was effective, but clumsy.

Some financial experts believed that only the U.S. Government could prevent a nationwide failure of banks, thus the Federal Reserve System was established in 1913. It consisted of a central Federal Reserve Board in Washington, D.C., and 12 regional Federal Reserve Banks in various cities. If a crisis occurred, the regional banks would lend money to commercial banks, and the commercial banks would repay the loans after the crisis passed. The plan seemed infallible, until October 24, 1929.

The stock market crash plunged the nation into a terrible ***recession***, but bank failures actually caused the Great Depression. In 1930, bank runs occurred in the South and Midwest. On December 11, 1930, a commercial bank called the Bank of the United States failed. Although the Bank of the United States was a commercial bank, its name sounded like something of national significance. The failure of the Bank of the United States set off a panic. In the month of December alone, 352 banks failed. The failures continued through 1931, 1932, and early 1933.

Throughout the crisis, the Federal Reserve System was ineffective (at best). The Federal Board and the regional banks were involved in a power struggle to see who would get credit for making the decisions. Since commercial banks thought the Federal Reserve System was solving the crisis, local commercial banks did nothing to relieve the crisis.

The only way to end the crisis was to close banks. New York state closed her banks on March 4, 1933, the day of Franklin Roosevelt's inauguration as president. Thirty-seven other states quickly followed New York's example. On March 5, President Franklin D. Roosevelt (nicknamed FDR) declared a national banking holiday. By March 13, the banks began to reopen. The closing of the banks in order to deal with the crisis was an admission that the Federal Reserve System had failed in its original purpose.

Today, the Federal Reserve System, usually called the "FED," is used mainly to regulate the amount of money in circulation. The head of the Federal Reserve Board holds critical economic power. His job is a difficult balancing act. If he allows too much money in circulation, money will lose its value, and inflation will result. If he does not

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allow enough money in circulation, interest rates will rise, making it difficult to start businesses and make large purchases.

In response to the massive bank failures that produced the Great Depression, the Federal Deposit Insurance Corporation was established in 1934. The FDIC insured bank depositors' savings. Consumer confidence, not centralized decision making, was the key to preventing another catastrophe. Since 1934, no bank runs have compared with the panic that led to the Great Depression.

In 1929, before the crisis, 25,000 commercial banks operated in the U.S. After the crisis, only 15,000 remained. As banks failed, Americans watched their savings disappear into thin air. Their jobs soon followed. By 1932, the unemployment rate was up to 25%. Former business owners sold apples and pencils on street corners. Some people lived in shelters after losing their homes. Soup and beans replaced meat and potatoes as the traditional meal.

The Great Depression shook Americans' respect for the free enterprise system that had made the nation great. President Roosevelt's federal government policies urged public reliance on Washington, D.C. to solve America's economic and social problems.



President Hoover had actually started the trend with farm subsidies, corporate welfare, higher taxes, and government work projects, but he stopped short of providing direct aid to individuals and businesses. President Franklin Roosevelt's policies, collectively called the "New Deal," sent America speeding down the road to government dependency.

The New Deal was inspired largely by British, socialist-economist John Maynard Keynes, an advocate of government spending to ***jumpstart*** an economy, and socialist author Edward Bellamy, who had envisioned a ***utopia*** in which citizens depended on the government "from cradle to grave." The New Deal under President Roosevelt was modeled on existing, centralized governments in Britain, Germany, and Sweden.

Though presented as temporary responses to a temporary crisis, many New Deal policies became permanent institutions. *The Wagner Act* of 1935 guaranteed recognition of labor unions, the beginning of the union age. The *Social Security Act* of 1935 created both social security and unemployment insurance (which were not temporary). *The Fair Labor Standards Act* of 1938 created a national minimum wage. Every minimum wage increase since has been an extension of this policy.

The New Deal's basic approach to solving America's problems was to tax people who worked (employers and employees) to provide funds to employ idle men. (Since then, the Democrats have been known as the "tax and spend" party.) The Civilian Conservation Corps (flood control, soil conservation, forestry), the Public Works Administration (construction of schools, highways, etc.), and the Tennessee Valley Authority (dam building) created government jobs for unemployed persons.

The New Deal did not end the Great Depression — it actually prolonged it. When unhampered by government interventions, recessions almost invariably work themselves into recovery within a year or two. The worst effect of the Great Depression was its impact on the American attitude toward government. ***Socialists*** were quick to blame business owners and bankers for the depression. Many unemployed people lost confidence in the free enterprise system and became more willing to accept government intrusion into their lives and the economy. Franklin Roosevelt won four landslide elections as he promised a car in every garage and work for every man. FDR's socialistic policies passed

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Congress, and the New Deal became the forerunner of the modern, U.S. progressive welfare system.

But not everyone went on welfare during the Great Depression. In New York, 23.9% of blacks and 9.2% of whites were receiving federal aid—both alarming numbers. But the numbers were only 1.2% for Chinese immigrants and a mere .1% for Japanese immigrants. Chicago, Los Angeles, Philadelphia, and San Francisco were similar. Chinese and Japanese-Americans stayed off welfare because of close family unity and involvement in community-based organizations such as the Chinese Six Companies and the Japanese Kenjinkai. These volunteer organizations provided work for the unemployed and relief for the ***destitute***. Asian-Americans valued family loyalty and community involvement and scorned welfare dependency. Thanks to these truly American qualities, welfare dependency remained minimal among Chinese-Americans and practically nonexistent among Japanese-Americans during the Depression.

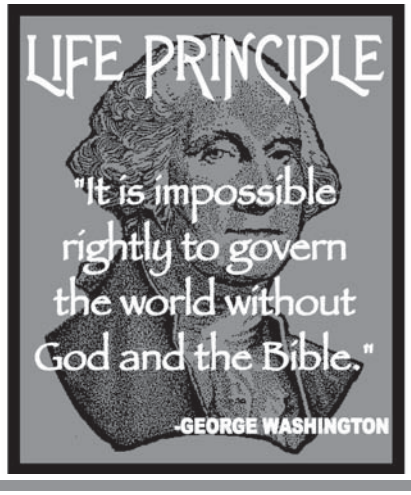
The Depression was not confined just to America. Europe also experienced difficult economic times. Masses of people became discouraged, and dictators assumed control. Hitler in Germany, Mussolini in Italy, and Soto in Japan began to expand their authority. In 1939, World War II erupted in Europe. War-torn European armies needed tanks, planes, ships, and trucks to fight off ***Nazi*** Germany and ***Fascist*** Italy. Americans went to work building vehicles. The most terrible war in world history had begun, and with it came demand for American products and weapons. The massive effort to stop Hitler's Nazi forces brought an end to the worst economic crisis in American History. The Great Depression ended when World War II began.

In 1943, as a wartime policy, the federal government increased the percentage of income taxes withheld from workers' paychecks to help finance the war. *The Internal Revenue Act* of 1913 had made the federal income tax a permanent fixture. The percentage, however, was subject to change. The principle behind the graduated (gradually increasing), or progressive (increasing in rate), income tax was the more one earns, the larger the percentage of tax one must pay — a concept that would have appalled America's founders. Under Roosevelt, top income rates were hiked from 79 to 90 percent, where they have remained.

During Roosevelt's presidency, government had intruded into many areas of Americans' lives, but the wave of government expansion crested with the 1946 *Employment Act* that made the U.S. government responsible for maintaining maximum employment. Voters rejected this democrat-sponsored, government expansion bill in 1946, and elected a Republican Congress. The newly elected Congress stopped President Truman's efforts to continue Roosevelt's socialistic policies.

The Republicans, in turn, scored two points of their own: *The Taft-Hartley Act*, which passed over Truman's veto in 1947, ended *closed shop labor unions*—the union policy that required all new employees to become union members, and the 1949 *Labor Act* purged labor unions of ***communists*** and also monitored union tactics to prevent abuse of power.

In the early 1900s, Americans were becoming more mobile. The next lesson tells about the beginnings of industries that put America on wheels.



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The Defending of America

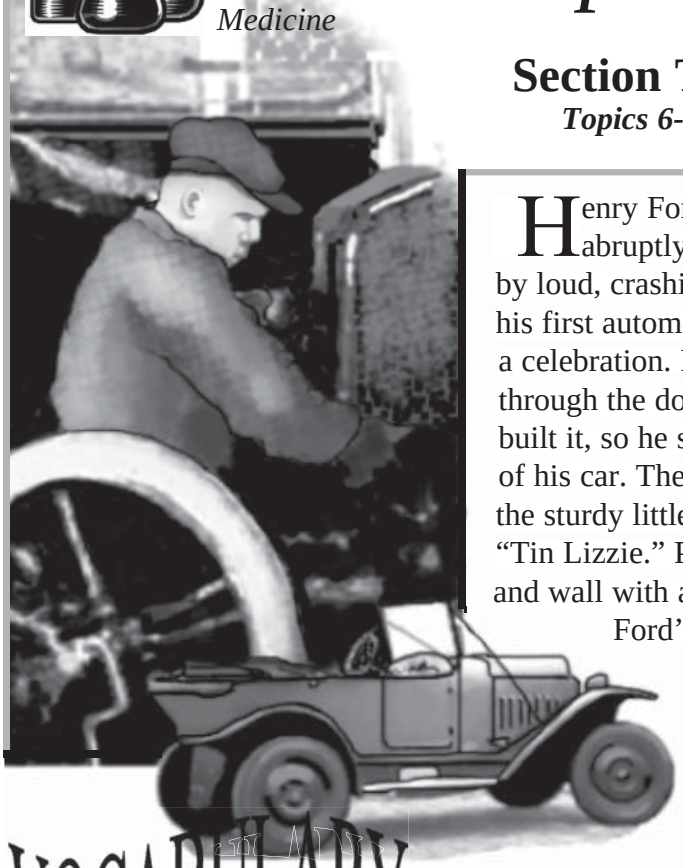


Topic 6
Industry & Medicine

Chapter 10

Section Two
Topics 6-10

THE BIG THREE



Henry Ford's neighbors in Detroit, Michigan, were abruptly awakened at 2 a.m. one morning in 1903 by loud, crashing noises. Ford had just finished building his first automobile, but sleepy neighbors had not heard a celebration. Ford's "***quadricycle***" would not squeeze through the doorway of the backyard shed where he had built it, so he simply tore down the wall to allow passage of his car. The quadricycle was one of the forerunners of the sturdy little horseless carriage, popularly known as the "Tin Lizzie." Perhaps having to demolish the door frame and wall with an ax in order to free his creation inspired Ford's intense attention to detail in the decades that followed.

Without question, this ***eccentric*** mechanic-turned-entrepreneur put America on wheels. Ford's adaptation of mass assembly techniques to the manufacture of automobiles revolutionized the automobile industry and laid the foundation for *The Big Three* automakers in 20th century America: Ford, General Motors (GM), and Chrysler. These auto producers dominated the U.S. automotive industry for more than four decades.

By 1925, Ford was turning out hundreds of Model T cars by using the moving assembly line that made him famous. The Model T was introduced in 1908, five years after formation of Ford Motor Company. The Model T was ***reputed*** to be so inexpensive that ordinary people could afford it and so simple that inexperienced car owners could repair it with hand tools.

In 1908, the same year Ford launched his Model T, inventor William C. Durant combined the Buick, Oldsmobile, and Oakland companies to form General Motors. Durant later added Cadillac and Chevrolet, hoping to incorporate the best features of each. In 1909, William Durant offered to purchase Ford Motor Company for $8 million, but the deal fell through when Durant's financial backing collapsed.

VOCABULARY

Quadricycle: having four wheels
Eccentric: different from the average; odd
Reputed: regarded or rumored as
Expertise: possessing the skill or knowledge of an expert
Inextricably: unable to be removed from
Enmeshed: to be caught in, tangled up in
Ball bearing: small steel balls that revolve freely in a track
Friction: resistance to motion causing intense heat

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Walter P. Chrysler founded the Chrysler Corporation in 1925. Captivated by automotive technology, Chrysler had dismantled and reconstructed a car before he ever learned to drive. Walter began training as a machinist's apprentice in the railroad industry at age 17. By the time he was 33, Walter Chrysler held an important superintendent's post for the Chicago Great Western Railway. Chrysler bought his first automobile in 1910. Two years later, his fascination with cars led to Walter Chrysler's initial job in the automotive industry. Later, as head of Chrysler Corporation, he was recognized as an inspired entrepreneur and one of America's automotive geniuses. Chrysler introduced four-wheel drive Jeeps in WWII. The quarter-ton vehicle revolutionized military tactics and introduced the world to recreational vehicles.

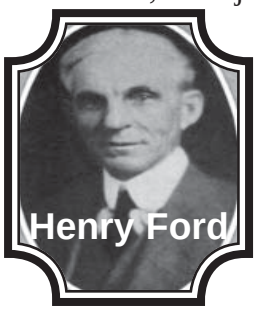
While establishing the company's reputation for engineering ***expertise***, Chrysler bought Dodge Brothers, Inc. Dodge, which was known for rugged dependability, captured public attention by building the first car to drive into and out of the Grand Canyon.

In 1954, Englishman James Morris wrote:

> *"The American civilization is **inextricably enmeshed** with the internal combustion engine . . . It is an old joke that Americans are soon going to lose the use of their legs . . . but it is true that few Americans will walk anywhere if they can help it."*

Morris' comments still hold true, but the relatively simple, internal-combustion engine of the mid-fifties has evolved into a complex piece of machinery.

Computerization and power equipment assured high tech performance in late 20th century vehicles, including military machines and space-age missiles. Seat belts and air bags, sleek styling, plush seating, push-button climate control, and CD players are a few of the features that address automobile consumer demands. Minivans, pickups, and four-wheelers, as well as sophisticated sport cars and convertibles, have joined the parade on America's highways. Henry Ford would scarcely recognize the descendants of his famed Tin Lizzie.


Henry Ford

General Motors, the number one automaker in the world with sales of $158 billion in 1996, headed the Fortune 500 list of top corporations in America. The Ford Motor Company was number two on the list with sales of $147 billion. By 2011, GM was number eight, with Ford in tenth place. Chrysler Corporation, number nine on the 1996 Fortune 500 list, had sales of $51 billion. In 1998, Chrysler and Germany's Daimler Benz combined to create the Daimler Chrysler Corporation, and it became the world's biggest industrial merger. Electric cars were introduced in California in 1998. Ford, Chrysler, and General Motors each initiated programs to modify their vehicles for use by the physically disabled.

Strong international competition, combined with competition among American manufacturers, stimulated research and development departments. Such competition lead to improved vehicle quality and lower prices. Fuel shortages, labor problems, and environmental issues also made an impact on the Detroit-based auto industry, which by 1998 remained one of the most powerful economic and social forces in the world.

That had changed by 2008 when the American economy experienced bank and

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mortgage company failures. In 2009, the auto manufacturing industry collapsed. The Obama administration teamed up with unions to take over General Motors and Chrysler auto industries in America. Ford Motor Company resisted government takeover efforts. By 2010, American unemployment in the auto industry exceeded 17 percent. In 2011, the auto industry began to recover and again posted profits. General Motors remained under the control of the unions but was able to regain its #1 automaker status. Ford Motor Company retained a strong second place.

The secret to the growth of the vehicle industry rides on a hidden ball. The next vignette tells about the manufacturing development that led to major industrial advancement.

RIDING ON A BALL

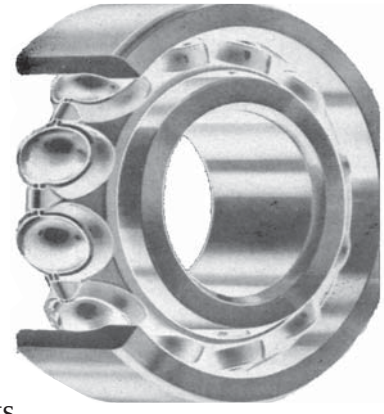
In 1926, the Indianapolis 500 mile auto race was won by Frank Lockhart who sped around the track at 95 miles per hour. Lockhart's #15 car, like all the cars in that famous race, depended upon ***ball bearings*** to keep mechanical parts functioning throughout the demanding competition. In 1926, auto racing was gaining popularity as a spectator sport. Industrial development had made great progress since Henry Ford assembled his Model T Ford. Engineers had improved the gasoline combustion motor, gear boxes, and steering devices. New discoveries in the use of oil as lubricants, rubber for tires, sparks for ignition, and foot brakes combined to enhance development of automobiles into high speed race cars. Development progressed in harmony with inventions and production of other related mechanical devices. One of the "breakthrough" inventions was anti-***friction*** bearings developed during the early 1920s.



Model T Ford

Most spectators at races give no thought to the significance of ball bearings in race car engines, transmissions, or steering wheels. Race cars in the mid-1920s were manufactured from numerous parts that required metal to rub against metal. Friction was minimized through the use of oil and bearings. Ball bearings were enclosed in a metal retainer that allowed the bearings to rotate along a metal track. Manufacture of ball bearings for automobiles also led to other inventions in America. The simple ball bearing allowed industrial inventors to produce high speed motors and transmissions (gear boxes) for cars, trucks, ships, tractors, and airplanes.

By 1930, one of every 4.9 Americans owned automobiles. Manufacture of automobiles encouraged development of related industries. Factories were established to produce heavy equipment for road building projects, clothing designs for travelers, gasoline refineries, petroleum products, and trucks for long-distance hauling.



Ball bearings

In the next vignette, you will learn how big trucks were built to keep America supplied with goods.

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TRUCKING INTO THE FUTURE

When World War I began, the U.S. trucking industry was competing with well-established railroads for a share of the long-distance freight market. During the war, the federal government depended heavily on trucks to haul supplies and equipment for military troops. Extensive military use and improved highways gave the trucking industry a major boost, swelling truck numbers to one million by the war's end in 1918.

By the mid 1960s, 75% of all goods transported in the U.S. were hauled at least part of the way by truck, and local freight was ***monopolized*** by the trucking industry. Railroads were unable to compete with the faster delivery and flexible routes that trucks made possible.


1940 18 wheeler truck

More than 8,000,000 people worked in the U.S. trucking industry by the 1980s, making it the nation's largest, private industrial employer. More than 40 million trucks were registered in the 1980s. Two leaders in developing big rigs were C.L. Cummins and T.A. Peterman. Cummins founded Cummins Engine Company in 1919 and installed the first diesel engine in a truck in the early 1930s. Today, Cummins provides more motors to power heavy duty trucks than any other motor manufacturer.

While Cummins was developing diesel engines, other innovations in rig design were also under development. The popular semi-tractor trailers (also known as *semi*s or *18 wheelers)* were developed in the 1920s. Those big rigs (standards of the modern trucking industry) consisted of a tractor unit with ten wheels pulling a trailer with eight wheels.

In 1939, the year World War II broke out, T.A. Peterman, a logger and plywood manufacturer from Tacoma, Washington, established Peterbilt Motors Company. He intended to build logging trucks for his own use but soon began considering other possibilities. While Henry Ford's assembly lines were turning out hundreds of carbon copy trucks a day, Peterbilt sent its engineers into the field to determine the needs of long-haul truckers. Based on those findings, Peterbilt developed rugged, high performance, low maintenance vehicles designed for long-distance hauling.

Peterbilt became an industry leader and has maintained its reputation through high quality custom manufacturing of new models. Modern semi-trucks are the result of engineering and technological advances which emphasize economy, efficiency, environmental impact, safety, and driver comfort. Innovations included fiberglass bodies, sleeper cabs, air conditioning, and 24-hour roadside assistance to ***facilitate*** vehicle service.

As in other industries, need inspired invention and modification of trucks and trailers. During the 1960s, Texas ranchers were shipping thousands of live cattle

VOCABULARY

Monopolized: completely controlled
Facilitate: to make easy or easier
Containers: large metal boxes loaded onto ships for transporting items across the ocean

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to California and Arizona markets, then hauling back empty livestock trailers. However, Texas truckers were also hauling fruit and grain to California and returning with California produce. Several truckers collaborated to design a two-way trailer that would haul live cattle from Texas and fresh produce from California.



E.B. Little and Fred Pierdolla of San Antonio, Texas, contacted several different trailer manufacturers but were refused production because the special-ordered, two-way trailers required too much investment money and were heavier than regular trailers. Then, in 1958, Hobbs Trailers in Fort Worth, Texas, agreed to manufacture the two-way trailers that Little and Pierdolla had designed. The two truckers purchased two cattle-produce trailers each and began to haul small, light calves to the west where the trailers were unloaded, steamed out, and situated to haul produce as a return load. This new design allowed Texas truckers to save money by transporting good payloads in both directions. Soon, other companies took advantage of the newly designed two-way trailers.

Later, railroads and ocean liners adopted the same "piggy-back" policy. Trailers and ***containers*** were loaded with cargo to haul on trains and ships to major cities and across the ocean. Railroads, container ships, and trucking companies learned how to take advantage of more efficient means to deliver products by land and sea.

The trucking industry supports the American way of life by transporting everything from hair bows to hot dogs, mustard to motorcycles, and jelly beans to jet skis.

Just as America's freight rides on wheels, progress in construction also depends on wheels as we will discover in the next vignette.

MOVING THE EARTH— AND BUILDING A DREAM

Caterpillars do an astonishing job of moving earth. Not those fuzzy little creatures that munch their way through the garden, but huge, highly specialized earth movers that transfer gigantic loads of dirt and rocks from one spot to another. Before the end of the 19th century, Daniel Best and Benjamin Holt began experimenting with steam tractors for farming. The families of these two men united to pioneer track-type tractors and gasoline-powered tractor engines, and eventually formed Caterpillar Incorporated, in 1925.

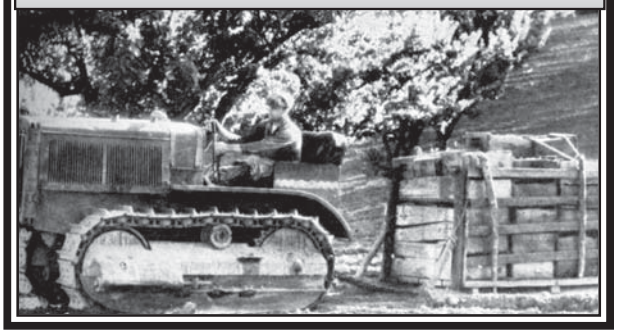
Caterpillar's track-type tractors were in great demand for hauling equipment through muddy battlefields during World War I. During World War II, Caterpillar's tracked vehicles played an important role in designing military vehicles. America's expanding peacetime economy after WWII created the need for new products such as backhoes and other excavators, cranes, graders, bulldozers, and power shovels. The company's equipment lists doubled between 1981 and the mid 1990s, with more than 300 products available by the 21st century. According to company literature,

"Caterpillar makes the machines that allow the world's builders and planners to realize their dreams . . .

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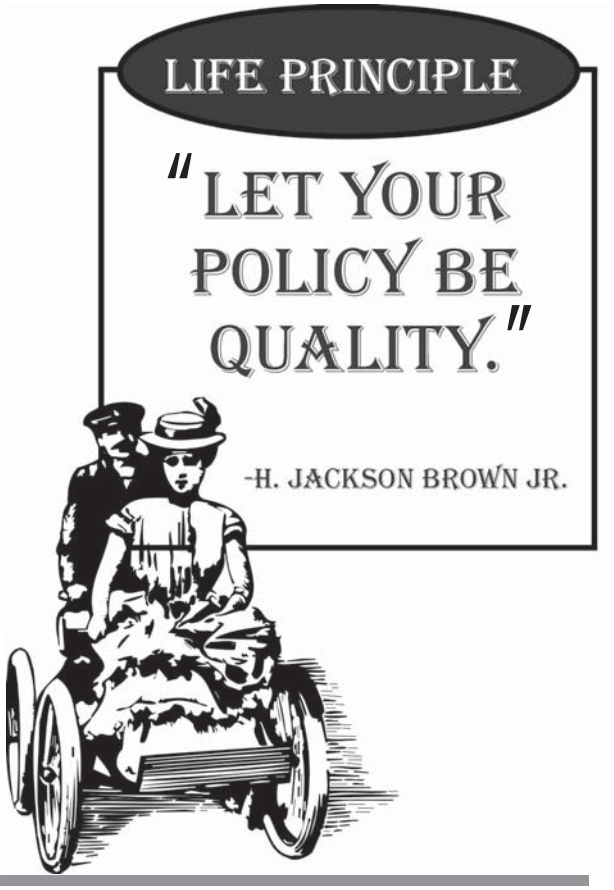
It's not only what we make that makes us proud—it's what we make possible in every corner of the globe."

1930 Track-type Caterpillar Tractor



Caterpillar equipment, weighing as much as 50,000 pounds per unit, moves dirt at mine sites and construction projects such as airports, dams, roads, water systems, and sewer plants in nearly 200 countries around the world. Headquartered in Peoria, Illinois, Caterpillar, Inc. is a major U.S. exporter, with 2010 exports of more than $13 billion out of sales totaling $42.59 billion. The seeds Daniel Best and Benjamin Holt planted more than one hundred years ago have blossomed into the world's largest manufacturer of earth-moving equipment. Cooperative efforts of their families established Caterpillar as a Fortune 500 company that is well positioned to bulldoze its way through the 21st century.

As the U.S. became more mechanized and industrialized, new forms of fuel were needed. The next vignette tells where they were found.



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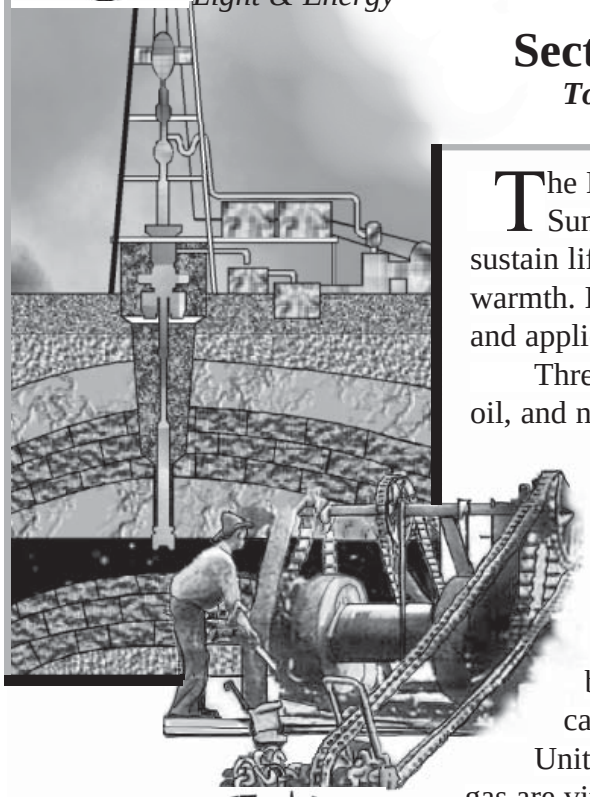
The Defending of America

Topic 7
Light & Energy

Chapter 10

Section Two
Topics 6-10

FROM OIL WELLS TO PINE KNOTS AND WIND ENERGY



The Earth is designed to provide for all human needs. Sun, rain, planting, harvest—all work together to sustain life. Trees provide shelter, and fossil fuels provide warmth. Everything needed is right here. It just must be found and applied.

Three types of fossil fuels have been discovered: coal, oil, and natural gas. Fossil fuels are formed from multiple layers of dead vegetation and animals. When the layers of dead animals and vegetation were covered under many ***strata*** of sediment and soil, pressure and heat deep in the earth's crust formed fossil fuels.

Fossil fuels are also called *hydrocarbons*, because they are made primarily of hydrogen and carbon. Nearly 75% of all the energy produced in the United States comes from petroleum products. Oil and gas are vital for operating electric power plants, heating our homes, and powering our vehicles. In a previous vignette, we examined how coal is mined and used, now we will take a look at oil and natural gas.

Oil and coal are created by much the same process. However, oil is made from marine life that has been deposited, decayed, and covered by layers of clay and ***silt***. Through time and tremendous pressure, marine life is transformed into tiny oil droplets. These oil droplets collect in ***impermeable*** layers of rock to form oil pools, called *petroleum* or *crude oil*. Since the earth was once covered with water, these oil pools can be found on land or in the ocean.

Once a location which may contain oil is chosen, a large ***oil derrick*** is built. Original derricks were built of wood; contemporary derricks are made of steel and range from 80 to 200 feet tall. The derrick supports machinery and pipes for extracting oil from deep beneath the earth's surface.

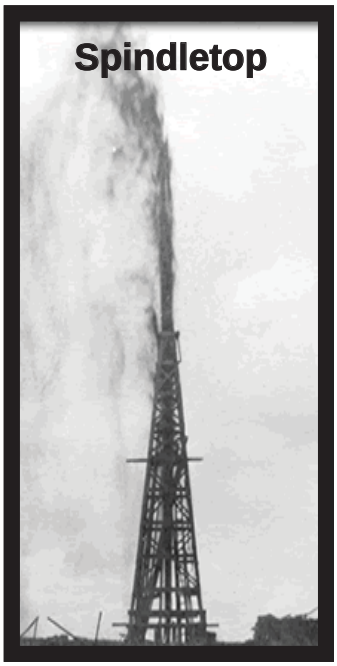
VOCABULARY

Strata: several layers of dirt and rock
Silt: sand and salt deposits in water
Impermeable: unable to break through
Oil derrick: a tower over a well that supports machinery used to pull liquids from the well
Reservoir: underground area containing oil
Distill: to boil, strain, remove impurities

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Only about one in ten wells drilled produces oil or natural gas, thus production is a very expensive process. Offshore drilling rigs are even more expensive to construct. Crews on the offshore rigs live in small apartments constructed on rigs. Helicopters and boats bring supplies and occasionally take crews back to land.

Some drillers, called "wildcatters," sought oil as much by instinct as by science. Many of their wells were drilled where small amounts of oil had seeped to the ground's surface. The term "wildcatters" comes from the early 1920s, when West Texas drilling crews encountered problems with wildcats. They would shoot the wildcats and hang their hides on the oil derricks.



The Middle East holds the greatest quantities of crude oil in the world, but large deposits are also found in the former Soviet Union, Papua New Guinea, and Brazil. America's richest oil supply is found in Prudhoe Bay, Alaska.

One American oil well that gained worldwide fame was drilled near Oil Creek, Pennsylvania, by Colonel Edwin L. Drake. The year was 1859, the ***reservoir*** was shallow (only 69.5 feet deep), and the petroleum was easy to ***distill***. Colonel Drake's discovery marked the beginning of America's booming petroleum industry.

VOCABULARY

Condolences: expressions of sympathy and grief
Odorous: smelly

In 1901, a productive oil well, named *Spindletop*, was discovered in the southeastern Texas town of Beaumont. That well changed the world because it provided oil needed to produce gasoline, just as automobiles were becoming popular. Spindletop and Henry Ford's Model T auto encouraged a practical arrangement of supply and demand - capitalism that put the world on wheels, powered by gasoline engines. Derricks soon were placed so close together that a man could step from one to another without stepping on the ground. Consequently, oil was quickly depleted from that field, but other areas of Texas were found to be rich in crude oil, as well.

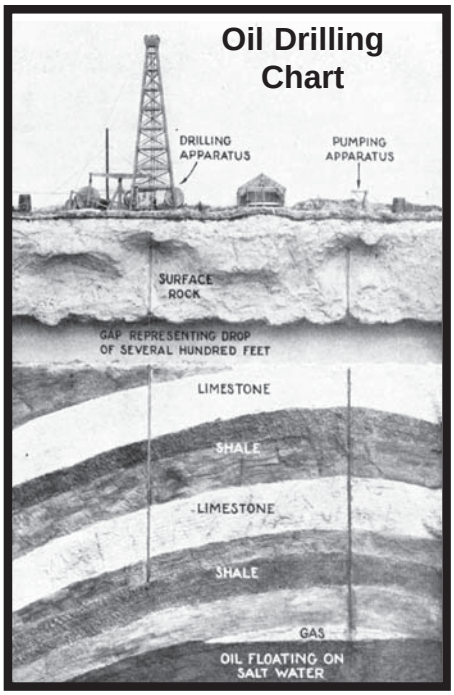
Natural gas is formed where oil droplets receive especially strong heat and pressure, which converts the oil into a gas. Sometimes the gas reaches the surface of the earth and escapes into the air. More often, it is trapped by impermeable rock.

In the mid 1800s, natural gas was used for lighting. Once crude oil was discovered, the popularity of natural gas diminished, because it was highly explosive and hard to transport safely. Uses were found for natural gas in making plastics, explosives, dishes, and paints. Today, natural gas heats homes and fuels gas ranges and water heaters. Natural gas is also odorless and colorless. In 1937, tragedy struck the small oil town of New London, Texas. An undetected gas leak under the junior-senior section of the New London school caused an explosion. More than 300 teachers and students were killed; hundreds more were injured. The whole world shared the small town's grief. ***Condolences*** by the thousands were received, including those

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from American President and Mrs. Franklin Roosevelt, and (ironically) Germany's Adolf Hitler. After the New London tragedy, natural gas companies added an ***odorous*** agent to the gas so leaks could be easily detected (a safety measure still used today).

With modern pipe systems, natural gas can safely be transported all over the country. However, care must be taken to ensure the safety of the pipeline. In early 1997, a pipeline near Fort Worth, Texas, sprang a leak that was ignited when two teenagers started their truck. The resulting explosion and fire not only killed the two young people, but it destroyed property as well.



As you have learned, Americans are an inventive group of people. With the availability of crude oil came the internal combustion engine. Gasoline, used to fuel this new engine, came from refining crude oil. The automobile and motorized vehicles for World War I brought demands for petroleum products that established the American petroleum industry.

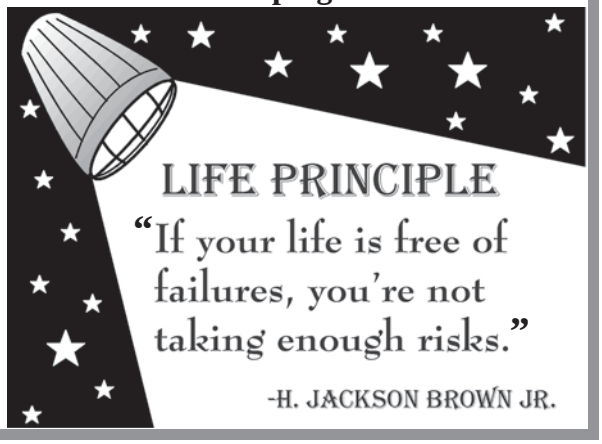
As Henry Ford's economic Model T Ford automobiles increased, demand for oil and cars accelerated. More and more people owned cars, and gasoline to fuel them had to be readily available. Refineries produced gasoline for fueling stations, where it was stored in large, holding tanks. Pumps delivered gasoline to each vehicle, and customers paid for fuel by the gallon.

Gasoline stations once performed only services like filling fuel tanks and making repairs. Along with pumps and repair facilities, today's gasoline stations may include gift shops, grocery stores, and fast food restaurants. Each new auto and service station created jobs for Americans.

High demand for fuel is stimulating exploration for new oil reserves in Alaska, Texas, and Western States. Meanwhile, Americans are seeking new energy sources. The rural Texas town of Jefferson exemplifies the American spirit of resourcefulness. In 1869, Jefferson's small gas company used coal in a process called *carbonization* (burning coal for energy) to produce gas for the city's gaslights. Then, townspeople discovered *pine knots* (natural joints formed in the pine as the wood grows) could be carbonized to produce gas at less cost. Wind energy (via modern windmills) is producing electric power in Texas, California, Maine, and other states.

America is truly a land of opportunity—a place to try new ideas and make new discoveries. American ingenuity and free enterprise have provided energy sources for our country and the world.

Just as advances were occurring in land transportation during the early 1900s, our next vignette will show how quickly air travel was developing.



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The Defending of America



Topic 8
Transportation

Chapter 10

Section Two
Topics 6-10

LUCKY LINDY



An old proverb claims, "*Luck occurs when preparation meets opportunity*." By this definition, Charles Lindbergh was a lucky man. Working hard while others slept, Lindbergh was the first man to fly solo across the Atlantic Ocean. Charles Lindbergh earned the nickname "Lucky Lindy" on that trip. Charles Lindbergh developed creative skills early in life. At nine years old, he devised a system of slides and pulleys to move ice blocks from the family ***icehouse*** into the Lindbergh home. Later, Charles built a garden hut, a raft, and stilts, as well as a suspension bridge over a creek. Charles drove his mother's Model T Ford when he was only 11 and could repair it by the time he was 14.



World War I altered Lindbergh's education plans. With many men fighting instead of producing food, teenagers were offered academic credit for growing crops. Charles farmed to earn his high school diploma. Teachers admired Charles' mechanical genius, but ***deficient*** English skills kept his grades so low that he quit school.

Deciding to become a pilot, Lindbergh learned to fly and repair airplanes in only two months. He bought a cheap plane for ***barnstorming*** at rural fairs. The daring young pilot practiced wing-walking, parachuting, and selling airplane rides to earn money.

Lindbergh knew that he was different from other pilots. He did not smoke cigarettes. He drank neither alcohol nor coffee. While other pilots partied, Charles was busy disciplining himself. Each night, Charles Lindbergh graded himself against a list of 65 character traits. These outstanding qualities included honesty, alertness, precision, unselfishness, and ***tact***.

Eager to learn more about flying, Lindbergh joined the Army Flying Cadets. Eighty percent of the students in the cadet class failed, but the young Lindbergh graduated first in the class.



As a reserve military pilot, Lindbergh needed a job to earn money. At 24, he was hired to operate an airmail service between St. Louis and Chicago. The mail route provided valuable flying

VOCABULARY

Icehouse: a wooden building in which blocks of ice were stored before being transferred indoors to an *icebox* (insulated forerunner of the modern refrigerator)
Deficient: lacking in skills necessary to function
Barnstorming: stunt flying; flying an airplane through a barn
Tact: skill and grace in dealing with others in order to maintain good relationships and to avoid causing offenses
Formidable: overwhelming, fierce
Transcontinental: across the ocean between continents
Endorsements: financial support
Inattention: refusal to pay attention
Aircraft Carrier: floating airfields and repair hangers

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experience during Chicago's ***formidable*** winter weather. Airplane engines were unreliable in cold weather, and open cockpits were bonechilling in freezing temperatures. Ice on a plane's wings made flying treacherous because the frozen water affected the lift from air flow over the wings.

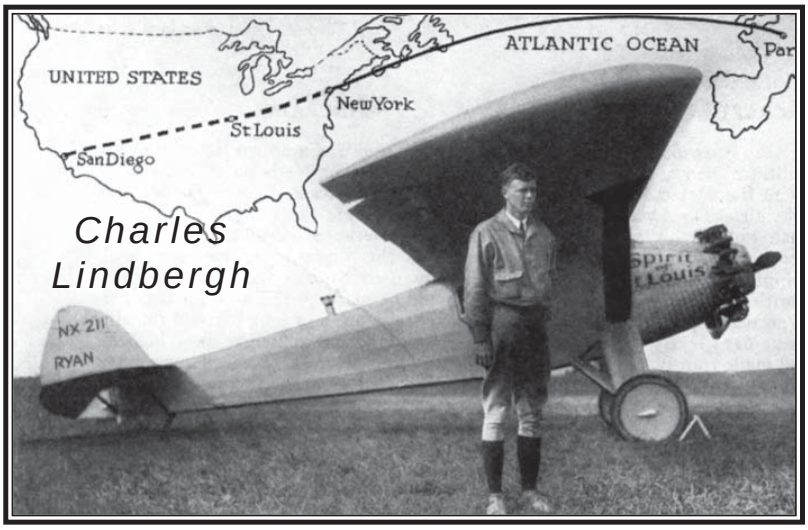
While at an airfield on his mail route, Lindbergh saw a magazine article that changed his life. A Frenchman, realizing the potential benefits of air travel between continents, suggested a race, offering $25,000 to the first pilot who would fly solo across the Atlantic. However, no plane existed that could withstand such a long trip.

Inspired, Charles Lindbergh went to work designing a plane that could make a ***transcontinental*** flight. Charles knew he must overcome several obstacles blocking his path to success. Carrying sufficient fuel added extra weight to the plane. The extra weight of the fuel required a larger engine on the plane. The size of the wings had to be adjusted to accommodate extra weight of the additional fuel and the bigger engine. As the gas tanks emptied, the plane needed to maintain its balance. Charles took each of these items into consideration as he worked on designs for a plane.

Lindbergh could not afford to buy or build a plane capable of trans-Atlantic flight. Additionally, no prominent airplane manufacturer would sell a plane to Lindbergh because the manufacturers had chosen their own experienced pilots to represent their companies in the race. Finally, a small manufacturer in California agreed to build a plane for Lindbergh. His plans helped engineers design a plane that cost less to build than his competitors' planes. Lindbergh persuaded businessmen in St. Louis, Missouri, to pay for the plane, which he named the *Spirit of St. Louis*, and the race was on!

One rival's plane disappeared over the Atlantic Ocean before Lindbergh's plane was built. Three competitors had accidents during their test flights. Two other plane crews were ready, but bad weather prevented their departure. Lindbergh's expertise in predicting weather during his mail route job gave him an edge. After hearing a positive radio announcement regarding the weather, Charles believed the clouds would clear. On faith, Charles Lindbergh headed for the airport at 3:00 a.m. in pouring rain. He fueled up the plane, checked the wheels and wings, then rolled down the runway.

The heavy load of gasoline and rain-soaked fabric of the wings slowed Lindbergh's takeoff. Despite the mile-long runway being almost too short, Charles was airborne by 8:00 a.m. on May 20, 1927.



In the 23 hours before his departure, the exhausted pilot had not slept. Although the constant demands of navigation kept him awake, Lindbergh became drowsy and drifted off the course. Estimating his direction and location by the stars, Lindbergh corrected his position and reached the Irish shoreline only 3 miles off course. Seeing the plane, people radioed the news to

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Paris. At night, 33 hours after his takeoff, Charles Lindbergh landed in Paris, France. Thousands of people greeted the courageous 25-year-old pilot. Lindbergh won not only the prize but also the affection of the world.

Lindbergh's aviation triumph meant financial security. After his return to America, he collected $5,000,000 in monetary ***endorsements*** from manufacturers. Charles also accepted offers to endorse airplane products, but rejected ads for cigarettes and items he considered harmful or immoral.

Suddenly, Lindbergh was a wealthy man, but he chose not to retire. Instead, he planned international travel routes. Charles also advised Henry Ford in manufacturing airplanes. After teaching U.S. Army pilots safety and fuel conservation, Lindbergh was promoted to brigadier general in the Army Reserve. A man of many talents, Lindbergh even helped design an artificial heart pump. The lad who dropped out of school with deficient English skills continued to learn and eventually wrote six books.

America was blessed when Lindbergh proved trans-Atlantic flight was more than just a dream. Air travel around the world became possible because of a determined and skilled young man, Charles Lindbergh.

Not everyone who attempted to fly across the ocean was as successful as Lindbergh. In the next vignette, you will learn what happened to a woman pilot who disappeared over the Pacific Ocean.

THE WOMAN WHO VANISHED

Radio audiences listened attentively as Amelia Earhart Putnam reported her progress on an attempted solo flight around the world. Near the end of her scheduled flight, Amelia radioed a request for guidance to a refueling station in the Pacific Ocean. That transmission was the last the world heard from Earhart. Because she had not taken time to equip the plane with a trailing antenna, her radio could not receive an answer from ships that had been tracking her progress. She disappeared somewhere in the Pacific Ocean.

Amelia was born in Kansas in 1897 and grew up a "tomboy." While most girls wore long dresses, she wore bloomers. Dresses were not practical for the sports and activities she liked. Amelia's father taught her to shoot, fish, and play baseball. Her mother allowed little Amelia to collect worms, butterflies, and frogs. Grandparents encouraged her to read books. With family support, Amelia performed above average both in the classroom and in sports.

At age 23, Amelia's first plane ride convinced her to become a pilot. She was a good student, but daydreaming and ***inattention*** to details threatened disaster. Amelia left on one trip without fueling the airplane. She often confused procedures on different airplane models. Friends grew concerned when she blamed faulty equipment for minor accidents. She constantly lived on the edge of disaster and adventure.

One day, Amelia accepted a daring challenge from a publisher named George Putnam who invited Amelia to cross the Atlantic Ocean by air. Putnam wanted to sell the story of the first woman's flight across the Atlantic. Two other pilots consented to accept Miss Earhart as a passenger. They would not let her fly, however, because she lacked experience with multi-engine planes. Upon arrival in England, Amelia was given more recognition than the pilot and navigator, simply because she was a woman.



With newfound fame came money from lectures and books. Amelia shared her money with family members, a habit she continued as long as

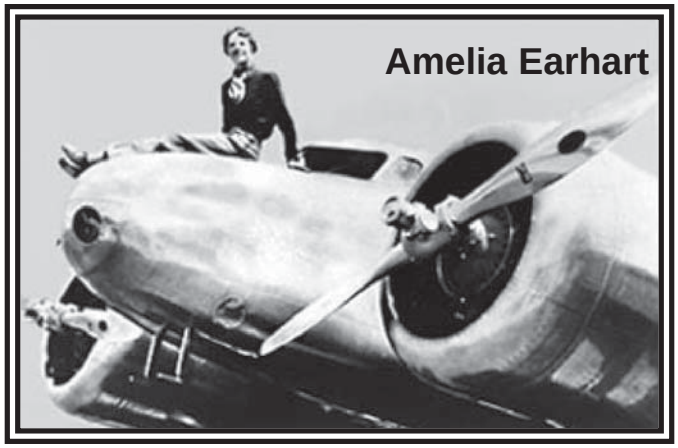
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she lived. Putnam's excellent publicity made Miss Earhart's book earnings soar. When Putnam and Earhart married, she continued to use the name people recognized—Earhart.

Amelia became offended when newspaper articles hinted that she was not a good pilot. Deciding to prove her expertise by flying solo across the Atlantic, Amelia Earhart took off on May 20, 1932, exactly five years after Lindbergh's historic flight.

Four hours into the trip, a broken altimeter and gas leak made the lady pilot uneasy. Struggling to rise above a storm, her plane went into a spin when slushy ice covered the wings. Amelia brought the plane under control just above the waves.

Reaching the Irish coast, Amelia did not take time to hunt for an airport. She feared fumes from leaking gas would be ignited by engine heat, so she landed safely in the nearest cow pasture.



Amelia earned new honors for solo, transcontinental flights, but she wanted to complete a daring trip over the Pacific Ocean. She planned a trip from Hawaii to California. Because strong West to East winds prevented Amelia from making the flight from California to Hawaii, her plane was shipped to Hawaii, and Amelia flew it back to California. Once again, Amelia Earhart was honored.

Desiring adventure and even more fame, Amelia decided to become the first woman to fly around the world. To raise funds for the trip, Amelia agreed to test flight instruments invented by aviation corporations. Amelia invited a navigator and radioman along on the flight to assist with the tests. Help with those duties freed Amelia to devote full attention to the plane's demands.

Amelia's first attempt to fly around the world failed when she damaged the plane on takeoff during the second leg of her trip. The radioman who accompanied her on the first attempt was not available for Amelia's second try. Amelia was impatient to complete her flight around the world and never took the time to complete training on use of new radio and direction-locator equipment.

Amelia and a new navigator, Frederick Noonan, left Miami on June 2, 1937, without the recommended radio equipment or an experienced radioman. They were greeted by enthusiastic crowds when they landed in South America, Africa, India, and New Guinea, where Amelia was to receive a new trailing antenna for her radio; however, she grew impatient while waiting for the antenna to arrive, and she departed without it.

The large expanse of Pacific Ocean from New Guinea to the United States required refueling at a tiny island. A ship waited nearby to broadcast radio messages to help Amelia and her navigator find the island. On schedule, the ship heard Amelia's radio messages, but she was unable to hear theirs. Amelia had failed to include the code for transmitting signals to identify her location. Amelia became lost and was unable to receive signals regarding her location from the ship or airport. Amelia Earhart was never heard from again. Neither she, her navigator, nor the plane wreckage were ever found. Amelia just seemed to vanish; her husband assumed that she had been "lost at sea."

Failing to take radio training and to pack necessary radio equipment was a fatal

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mistake. Amelia Earhart's impatience and inattention to details probably cost her life. But, Americans looked past Earhart's failures and recognized her successes. She is honored as an American heroine.


Linda Finch

An interesting footnote to this story comes from San Antonio, Texas. In 1997, a woman named Linda Finch attempted to complete the same course around the world that Amelia Earhart had planned but never completed. Linda followed the same flight plan and flew in the same kind of airplane as Amelia Earhart. Linda Finch was successful in her attempt because of careful planning.

In the next vignette, you will learn how a combination of ships and planes improved America's military proficiency in the Pacific Ocean.

AN ADMIRABLE DECISION

Strong leaders must make hard decisions and take responsibility for their actions. When Raymond Spruance trained at West Point, he learned to examine facts and make decisions. Raymond's attention to details and ability to assume responsibility helped the United States win World War II.

Japan, while at war with the United States, had taken control of many Pacific islands. If Japan managed to gain control of the entire Pacific Ocean, they could strike any city on America's West Coast.

Military airplanes could not carry enough fuel to cross the Pacific and return to Hawaii. Therefore, military leaders and innovative ship builders developed ***aircraft carriers***. An aircraft carrier was a huge ship with a long runway on the top deck. Steam powered catapults on one end of the ship launched airplanes. Arresting cables on the other end of the carrier helped catch and stop incoming craft, so they would not fall off the edge of the ship. Large elevators moved airplanes between the deck runway and lower storage areas.

Even though aircraft technology had enabled U.S. military forces to equip ships with guns, exposure to enemy aircraft and ships was still a serious issue. Bad weather sometimes grounded aircraft carrier planes, and a surprise enemy attack could catch American airplanes exposed on the flight deck. The lives of the crew and the fate of the ship depended on the ability of the commander to anticipate enemy capabilities. Scout planes were usually sent out to locate enemy ships.

Admiral Raymond Spruance was commander of the carrier, *U.S.S. Enterprise* on June 4, 1942, when he learned that Japan planned to attack American-controlled Midway Island. The *Enterprise* was 300 miles from Midway and vulnerable to Japanese attack. U.S. scout airplanes left the *Enterprise* to locate the Japanese navy. The *U.S.S. Enterprise* planes were successful in locating and attacking Japanese ships. The Battle of Midway was one of the most dramatic encounters of World War II.


Aircraft Carrier

Fierce battles were fought there on June 4th and ended after dark. American pilots indicated that Japanese carriers had been damaged, but no precise reports were available. Admiral Spruance had two options. He could take the damaged *Enterprise* to the combat area that night and be ready on June 5th to continue fighting or, he could remain 300 miles away to make critical repairs,

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then send scout planes at daybreak to gather accurate information.

Admiral Spruance made a decision to repair his ship. The Admiral was unaware of the total impact of his decision. If Admiral Spruance had approached the battle scene during the night of June 4th, he would have been attacked by Japanese battleships sent out specifically to destroy the *Enterprise*. The repaired *Enterprise* engaged enemy forces on June 5th and played a major role in a U.S. victory over Japanese naval ships and planes.

Military documents record that U.S. forces destroyed four Japanese aircraft carriers that day—the entire convoy of Japan's aircraft carriers. *U.S.S. Enterprise* planes were credited with sinking two of Japan's aircraft carriers and assisting in the destruction of a third one. The elimination of all Japanese aircraft carriers was considered a turning point in World War II. Japan lost 17 ships, 275 planes and 4800 men. The U.S. lost two ships and 300 men.

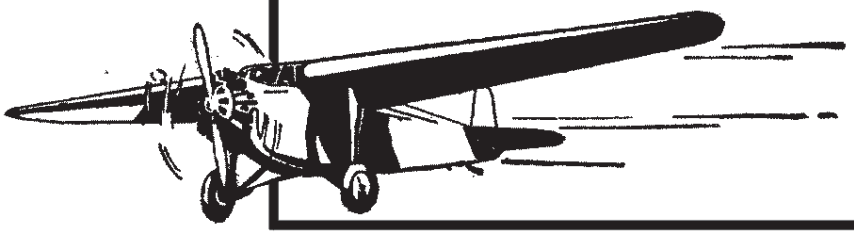
The critical decision made by Admiral Raymond Spruance kept his crew safe and his ship from being destroyed. The *U.S.S. Enterprise's* pilots fought in nearly every battle in the Pacific Ocean, and the ship became the symbol of victory for the United States.

The next lesson shows you what a spinning top and a battleship have in common, and how one invention leads to another.

Life Principle

"Keep away from people who try to belittle your ambitions. Small people always do that, but the really great make you feel that you, too, can become great."

- Mark Twain



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The Defending of America



Topic 9
Discoveries & Explorations

Chapter 10

A PROMISE IN A STORM

Section Two
Topics 6-10



In the early 1900s, Elmer Sperry was busy in Cleveland, Ohio, inventing things like electrical machines for digging coal and storage batteries for powering electrical cars. Once, when Sperry was a passenger on a ship crossing the Atlantic during a storm, he was thrown violently on the deck as the ship tossed about in the waves. Scrambling to his feet, Elmer Sperry made himself a promise. He would discover a way to stop such upsetting motions of ships at sea. Sperry's two young sons shared his desire to understand the mystery of motion.

Back home in Cleveland, Elmer and his boys spent time sitting on the floor studying the motion of a spinning top. The threesome watched the top fall over when the spinning motion stopped. *"Why did this happen?"* They wondered, turning a bicycle upside down, Sperry set the wheel spinning for the boys to watch. Elmer taught his sons how to feel the power needed to make the wheel change directions. As the boys grew older, they wanted to work in their father's laboratory finding answers to the mysteries of motion. They questioned why a spinning top always stayed level, and why a spinning object always stayed in the direction it was pointed.

When Elmer was ready to develop his idea for keeping a ship steady in rough water, the Sperry family moved to New York to be near the Brooklyn Naval Yard. Elmer's first project was to build a reliable ship compass. The compass normally used on huge warships could be pulled off its true direction by all the thick metal in the big guns and in the ship itself. Sperry found a way to use the ***gyroscope*** that Swiss mathematician Leonhead Euler and French physicist J.B.L. Foucault had developed in the 18th and 19th centuries, respectively. The spinning part of the device gave Sperry the idea for making a ***gyrocompass***. Once the gyrocompass was set in the right

VOCABULARY

gyroscope: a wheel that spins on an axis—a wheel that spins like a top
gyrocompass: a compass driven by a gyroscope which bases its position of spinning on the rotation of the Earth so that it is able to point true north
stabilizer: an instrument that keeps ships steady and true to their course
indebted: to owe someone for a favor done for you

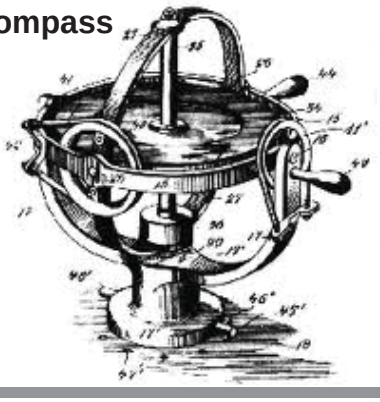
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direction, it stayed on course and was not affected by the thick ship metal. Elmer Sperry's work was honored as the 20th century's greatest step forward in ocean navigation. Practically every vessel at sea today uses the gyrocompass to hold a steady direction.

Sperry and his sons studied a toy version of the gyroscope. They saw how the inner spinning part somehow held the outer metal frame in a level and steady position. Elmer explained how he would build a device to hold a ship steady by using the idea of a gyroscope. In 1913, Elmer Sperry installed his first ***stabilizer*** on the American destroyer, the *Worden*. Elmer worked hard to make many technical adjustments needed to steady the ship's particular roll. Sperry installed a total of 42 stabilizers on ships and submarines.

Elmer Sperry's son, Lawrence, worked hard on making the device light enough to work in airplanes. The French government offered a prize to the man who could stabilize an airplane. In 1914, Lawrence flew a stabilized plane to France and won the prize. Lawrence demonstrated the plane's stability by flying so low that the crowd on the field could see both his hands raised off the controls. The best evidence that the plane was stable came when his French mechanic stepped out onto the wing of the plane without causing it to tilt to one side. For the next nine years, Lawrence worked on making airplanes safer. Sadly, Lawrence Sperry died in 1923 when engine failure caused his plane to crash in the English Channel.

Gyrocompass



The Sperry family had always worked together, thus after Lawrence died, his younger brother joined the family effort to make planes safer. The Sperry Automatic Pilot System was made famous when a pilot named Wally Post flew solo around the world, navigating his plane with the Sperry's Automatic Pilot System.

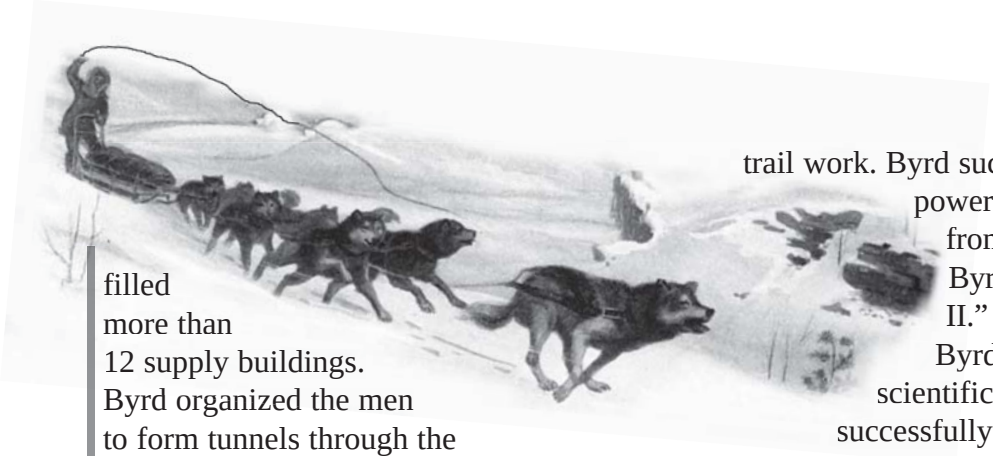
America is *indebted* to two young boys and their devoted father who challenged them with a spinning top. Each of the Sperrys made great discoveries which improved instruments and made flying safer for pilots of passenger planes and explorers in remote regions.

AIRPLANES AND DOGSLEDS IN ANTARCTICA

Inventions like the gyrocompass, gasoline motor, and battery-powered radio gave Richard E. Byrd the technology and equipment he needed to explore the North Pole. Airplanes replaced the dogsleds of earlier explorations. The first successful flight over the North Pole was made by Rear Admiral Richard Byrd accompanied by Floyd Bennett on May 9, 1926. The round trip of 1,440 miles took about 16 hours. Byrd then turned his attention to Antarctica, where he expected to make a successful flight over the South Pole.

As an American hero, Byrd received a huge amount of support for his 1928 expedition. His crew reached the Bay of Whales in Antarctica, with equipment that

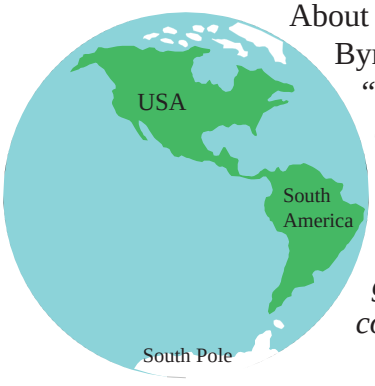
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filled more than 12 supply buildings. Byrd organized the men to form tunnels through the snow which enabled his men to move about as though they were in a city. They had electricity, telephones, and three radio towers to keep them in touch with the outside world. Byrd named the outpost "Little America."

Byrd was the first explorer to replace dogsleds with motor-powered machines. For his first trip, Byrd mounted a Ford engine and ***chassis*** on skis and tractor treads. This mechanical dog sled enabled Byrd to explore the ice-covered South Pole. Only penguins and a few birds lived along the outer rim of land. News of Byrd's findings was beamed by radio to Americans eager to learn about Byrd's discoveries.

The next year, Byrd flew over the South Pole. When blasts of air from the high frozen mountains kept the plane from rising, he ordered emergency supplies thrown overboard. Then, the plane scaled over lofty peaks higher than the Andes Mountains and soared out across the level space of the Pole. About that moment, Byrd later wrote: *"One gets there and that is all there is for the telling. It is the effort to get there that counts."*



Four years later in 1933, Byrd made another expedition with even more supplies and equipment. That time he had four planes, six motor vehicles, and 153 dogs for doing trail work. Byrd successfully blended dog-power with technology. Not far from the first camp he built, Byrd set up "Little America II."

Byrd made sure that many scientific studies were carried out successfully. Planes flew over the region and discovered that Antarctica was one continent, not a series of islands. Its 500 million square miles made it larger than the U.S. and Mexico put together. Byrd's major scientific aim was to take readings of the winter climate. He wanted facts and figures about the icy air that pours off the two-mile high polar ***plateau*** and has a strong effect on the world's climate.

Byrd spent the winter alone in his small 9' x 13' cabin which was dug into the ice 125 miles south of Little America II. One day he went outside to take a weather reading, and a blast of wind slammed shut the trap door to the house, leaving Byrd stranded outside in the sub-zero weather. Byrd struggled to survive until he finally pried the door open with a shovel found in the snow. Another day, Byrd lost his direction in a howling blizzard. He walked in larger and larger circles until he found



VOCABULARY

Chassis: supporting frame of a vehicle
Plateau: a large, flat hill
Harmony: working together peacefully and productively

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the guide posts that marked a safe return. Before the end of seven months, he almost died of carbon monoxide poisoning coming from a leak in his oil stove. The near-death experience changed Byrd's life. He returned home, determined to spend the rest of his life helping people to face conflicts peacefully. In 1936, Richard Byrd spoke in 156 cities to more than 600,000 people. In 1939, Byrd wrote a book, *Alone.* In it, he revealed detailed information about the experiences that changed his life.

President Franklin Roosevelt also decided in 1939 that another expedition should go to Antarctica. Byrd, who was then an Admiral, was selected to organize the trip. The purpose of Byrd's third Antarctica expedition was to establish a permanent base. He claimed the land between longitude 80 W and 150 W for the United States. New tools and new methods made that polar expedition less risky than previous endeavors. Vitamins prevented diseases. Planes dropped food and supplies and lifted out any men who became ill. By 1941, however, America's entry into World War II demanded the nation's attention, and the men assigned to the Antarctica base returned home.

The following excerpt is from Byrd's book, *Alone:*

> *"Real peace comes from struggle that involves such things as effort, discipline, enthusiasm. The* ***harmony*** *of a man's life-course is expressed by happiness; this is the prime desire of mankind, I believe. When a man achieves a fair measure of harmony within himself and his family circle, he achieves peace; and a nation made up of such individuals and groups is a happy nation."*

People who could not participate in adventurous expeditions liked to read about them. In the next vignette, you will learn what else Americans were reading in the 1920s and 1930s.

Life Principle

"Man's mind, once stretched by a new idea, never regains its original dimension."

-Oliver Wendell Holmes

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The Defending of America

Topic 10
Education, Music & Literature

Chapter 10

GATSBY, GHOSTWRITERS, AND PILOTS WITH PENS

Section Two
Topics 6-10





After World War I, America roared into the 1920s. Newspaper headlines focused on gangsters, flappers, and bootleggers. The Roaring Twenties brought dramatic changes to the American lifestyle. F. Scott Fitzgerald wrote about the glittering society life of that time. After his boyhood days near Chicago's elaborate homes, Fitzgerald dreamed of a fancy lifestyle. While he was a student at Princeton University, magazines published his stories about wealthy people having fun to excess. Fitzgerald had clearly researched his subject—he partied so much himself he could not write a successful book. Many of Fitzgerald's admirers believed he could become a great writer if he learned to discipline his talents correctly. The young writer left school after some major disappointments, closed himself up at home, and wrote his first successful novel, *Tender is the Night.*

Success and status enabled Fitzgerald to storm high society in the lifestyle he craved. He and his beautiful young wife entered the fast lane, a glamorous couple who ***hobnobbed*** with famous people in the best nightclubs of New York, London, and Paris. During that time Fitzgerald wrote his most famous novel, *The Great Gatsby*. The book's characters chased wealth and high society so much they never found lasting love. Fitzgerald ended the story by letting the ***protagonist***, Gatsby, finally realize how his bad choices had destroyed real happiness. Fitzgerald's book revealed how Gatsby's lust for riches had pierced his soul with sorrows and disappointments.

During the Great Depression of the 1930s, Americans no longer enjoyed reading about rich, carefree people. Much like his protagonist, Gatsby, Fitzgerald himself paid a great price for his excesses. He lost not only his wealth, but also his wife, who entered a New Jersey mental hospital as an alcoholic. When Fitzgerald died in the 1940s, he was working on a novel about powerful men behind the scenes in industry. (The motion picture titled *The Last Tycoon* was somewhat modeled after this idea.) The book showed how Fitzgerald tried to resurrect the talents he had ruined by following reckless habits. F. Scott Fitzgerald's

VOCABULARY

Hobnobbed: associated with
Protagonist: main person in a story
Ghost writers: people who write books for the presumed author
Espionage: spying
Cliffhanger: a scene that entices the reader to keep reading
Pulitzer Prize: any of various annual, large, monetary awards for literary achievements, established in the will of Joseph Pulitzer in 1918
Tundra: the semi-frozen grass lands in arctic regions
Circumnavigate: to go around
Core: most important, essential

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brilliant earlier work from the 1920s earned him a lasting place in American literature.

During the early 1900s, young teenagers read thrilling adventure books written just for them. One man alone sold 200 million copies of such books from 1900 to the 1930s. Edward Stratemeyer's clever mind created ideas for 1,300 books in his popular series. However, his name never appeared as author of a single book. Stratemeyer introduced a system that used ***ghost writers*** who agreed to write books without the author's real names.



Zelda & Scott Fitzgerald

Stratemeyer sent 3-page outlines to writers who wrote the stories and returned them to Stratemeyer within a month. He paid them $50 to $250 for each book. Before sending it to the publisher, he made sure the plot moved the characters smoothly from one book to the next. Stratemeyer's amazing genius flooded the market with heroes and heroines such as the Hardy Boys, Nancy Drew, Dave Fearless, the Bobbsey Twins, the Rover Boys, Dave Dashaway, the Carewell Chums, and Tom Swift. These clever and courageous characters solved mysteries and had grand adventures all over the world. Their wholesome, exciting lives provided good role models for young people who wished they could grow up to be like their literary heroes.

Ghost writers for these books are still writing today. Ghostwriters for the *Hardy Boys Mysteries* series must follow a rule book. Crimes the characters solve must be realistic and dangerous, and can include everything from terrorist attacks to ***espionage***. Each chapter ends with a ***cliffhanger*** to keep readers "hooked."

Even in today's permissive literary themes, writers of teenage adventure stories are expected to follow the morally sound traditions of earlier episodes. Dialogue must not be vulgar, have shady meanings, or employ cursing. The character's socializing is limited to a rare, friendly hug or kiss.

While young people were reading about the Hardy Boys and Nancy Drew, other brave men and women in the 1920s were experiencing real life adventure in the skies. Early days of railroading did not spur exciting books, but this is not true of the first aviators. These daring pilots wrote about flying into the rising sun... feeling the wind in their faces...looking down upon green fields and winding rivers. With great beauty and color, these first aviators wrote about touching distant corners of the earth.

After Charles Lindbergh made the first nonstop flight from New York to Paris, he wrote the book, *We*. He described feeling himself becoming linked to the plane. He believed both man and machine had won a victory. The name of Lindbergh's plane, *The Spirit of St. Louis*, became the title of his next book and won the ***Pulitzer Prize*** in 1926.

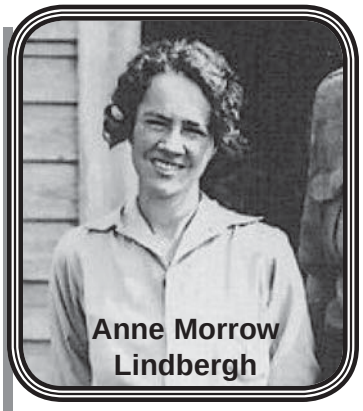
On later expeditions, Lindbergh's wife, Anne Morrow Lindbergh, flew as his copilot and radio operator. Their flight in 1931 took them over the great frozen ***tundra*** of northern Canada and Alaska. Anne's beautifully written book, *North to the Orient*, describes how she and Charles flew along the top of the world to reach Japan. She wrote another book, *Listen, the Wind*, about their most ambitious flight. In 1933, the Lindberghs flew 33,000 miles in 10 days and successfully ***circumnavigated*** the Atlantic. All during her life, Anne continued to write books, personal diaries, and warmhearted poems.

VOCABULARY

Subtle: sneaky, not easily detected or noticed

Consolidate: to add small parts to make one large amount

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Anne Morrow Lindbergh

These early pilots became some of America's greatest heroes. Amelia Earhart, the first woman to fly the Atlantic, wrote three books. *The Last Flight* was compiled and published by Amelia's husband after Amelia's mysterious disappearance in flight.

Americans read these aviators' books as well as books by pilots from other countries. Like Charles Lindbergh, Frenchman Antoine de Saint-Exupery began his career by flying the mail. He flew over the Sahara Desert and high across the Andes Mountains. His novel, *Night Flight*, became world famous, and his children's fable, *The Little Prince*, became a classic.

These aviator-authors saw how airplanes in the future would affect travel and relationships among nations. Near the close of his life, Charles Lindbergh made a speech in Minnesota, sharing some of what he learned from 50 years of watching airplanes change. Lindbergh said "*nature should always be important to man.*" He believed that *"progress could only be measured by the quality of life; not human life alone, but all life."*

During this time, a revolution was taking place in education. In the next vignette, we will see how the military influenced education.



STANDARDIZED TESTING—ONE SIZE DOES NOT FIT ALL

A "revolution" started in clothing when thousands of Civil War soldiers suddenly needed army uniforms at the same time. Prior to the Civil War, individuals had always made their own clothes or hired a tailor to make them fit properly. During the Civil War, recording body measurements of countless soldiers revealed a totally new concept—most bodies grew to be certain "standard" sizes. This collection of measurements was averaged into standard sizes and a chart was set up from these averages. For the first time, uniforms were cut to fit specific, predetermined sizes. After the war, America's huge clothing industry sprang up from this simple discovery. People needed shoes, hats, shirts, and trousers that fit, and Americans began thinking of themselves as belonging to *sizes*.

Charts of body sizes inspired a new science called *psychology* to study ways of measuring a person's mind. Psychologists wanted to know if the mind could grow to a certain size like the body did. Many people made fun of the first mental tests of the early 1900s. When World War I began, the Army found an important use for these tests. Thousands of soldiers needed work assignments; the Army hoped the tests would help determine for which job each man was best suited. The Army conducted the most stunning single exercise in the history of testing: 13,000 testing centers gave the Stanford Achievement Test to 316,000 young men.

Soon after the war, psychologists made the Stanford Achievement Test available to schools. Schools tried to test and grade each child's abilities. They aimed to find what abilities seemed average for large numbers of students from certain age groups. The test compared individual students to the average score. Schools began to base lessons and behavior guidelines on what most students, or the *norm,* did. The traditional

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concept of learning a specific ***core*** of value-based education was replaced by information which the "average" person should learn.

Inspired by the Army's mass testing, colleges began testing students before allowing them to enroll in classes. The College Entrance Exam Board was set up in 1924 and the first Scholastic Aptitude Test (SAT) was administered in 1926. By using such tests, colleges hoped to avoid wasting money when too many students dropped out, and to avoid wasting talent by overlooking students with high abilities. By 1935, the tests used a new grading scale that no longer stopped at 100. The average was 500, with low scores dropping to 200 and high ones going to 800. A new design was set up so that machines graded the tests, so that students' answers were no longer read by trained graders.

By the end of World War II, nationwide testing touched many aspects of American life. Government funds paid for thousands of veterans to enter college after the war. Before being accepted by colleges, the veterans were tested by the Educational Testing Service. That company also tested people wanting to enter programs offered by big businesses like Westinghouse and Pepsi-Cola.

Although mass testing offered some benefits, it came with ***subtle*** side effects. Americans grew comfortable with a system that measured and sized them up according to groups, with minimum consideration of individuality and creativity. Perhaps no arena of American life demonstrated this side effect more dramatically than the public school system. The desperate need for educators to consider each student's individual abilities and talents was often sacrificed for the sake of group instruction. One-room schools were replaced by large ***consolidated*** schools with classrooms for each age level.

This attempt at standardized learning offered administrative convenience for classifying and instructing students but caused slower students to suffer defeat and humiliation, while fast learners became bored. Creative writers, teachers, and editors who pursue ideas for improving education in America are often frustrated by the common policy of operating schools based on standardizing students to become average.

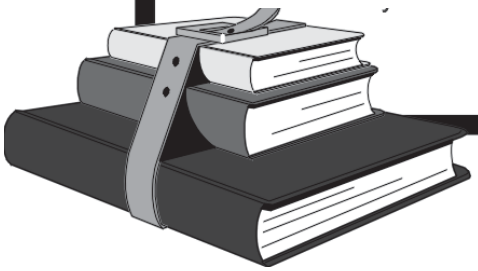
Fortunately, educational choice programs are now available for students who are below average, average, and above average. Alternative programs include private schools, home education, charter schools, and contract academies. Some government school districts establish "magnet schools" which offer specialized studies in career fields such as auto repair, cosmetology, media, computer technology and agriculture. Students currently have the option to learn from the Internet, computer CDs, DVDs, or printed materials available in graded classrooms or in individualized, private, or public learning centers.

Just as Americans loved the written word, so were they intrigued with reproduced sounds and pictures. During this time period, many advances were made in the fields of communication, as you will see in the next vignette.

Life Principle

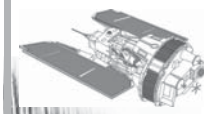
"Hold yourself responsible to a higher standard than anyone else expects of you. Never [make excuses] for yourself."

-Henry Ward Beecher



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The Defending of America

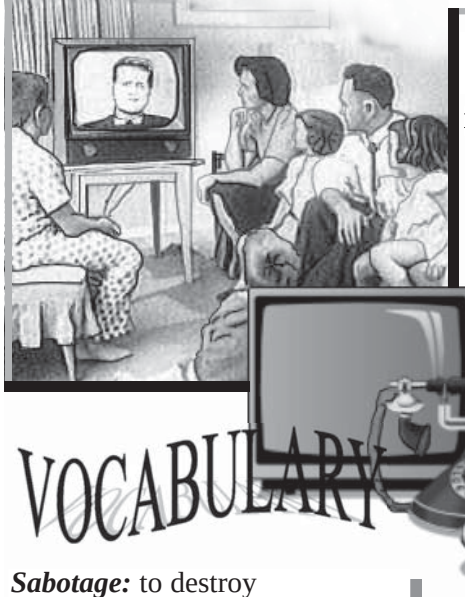


Chapter 10

Topic 11
Communication

Section Three
Topics 11-15

CAN YOU HEAR WHAT I HEAR?



Only 125 years ago, Americans did not have telephones, radios, CDs, personal computers, or the Internet—inventions we take for granted today. In the past, Americans' only means of communicating were by the spoken word or written language. Colonists visited with each other at church or town meetings. Settlers waited anxiously for pony express riders to arrive with mail.

Today, Americans communicate with each other by means of talking and texting on cell phones, by sending a "fax," or the Internet (e-mail, Facebook, Twitter, etc.). Internet technological inventions and advances over the years have expanded methods of communication at both global and local levels. The following overview gives some examples of how technology has helped us "keep in touch" with each other and the world.

VOCABULARY

Sabotage: to destroy intentionally
Electromagnetic waves: waves generated by electrical charges
Profound: intense, deeply felt
Image Dissector: a camera tube necessary for transmitting television pictures
Iconoscope: similar to the image dissector—a tube required for transmitting picture signals
Detrimental: a situation that is harmful
Captive audience: an audience that is very interested
Phenomenal: incredible, huge, beyond expectations
Plethora: a great amount, beyond imagination
Modem: a device that converts and prepares computer data for transmission over phone lines

The Telegraph:

Before telephones were invented, the telegraph was a major form of communication in America. Research that went into developing the telegraph laid the groundwork for the first telephone. In 1832, Samuel F.B. Morse became interested in telegraphy after learning about experiments conducted in Europe. Using an electrical device similar to a doorbell, Morse designed a system of taps using dots and dashes combined with longer connections to represent the alphabet. That system became known as *Morse Code*.

Telegraphs made a dramatic impact on the communication world. For the first time, news could travel from one location to another almost instantly, affecting everything from family life to politics. By the Civil War years, America was so dependent on the telegraph that both Union and Confederate soldiers cut telegraph lines to ***sabotage*** military communications.

The Trans-Atlantic Cable:

In 1854, Cyrus Field attempted to lay an encased telegraphic cable from one side of the Atlantic Ocean to the other. The cable broke 360 miles offshore. Four years later, after three more attempts, the project was still not completed. Despite complications preventing its success, Field was sure the

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system would work. He persisted, and in 1858, America and Europe were linked by underwater cable. Britain's Queen Victoria sent the first message to American President James Buchanan. The cable broke again two weeks later. Finally, in 1866, Field was successful. Cyrus Field's determination paid off. At last, not even the ocean remained a communication barrier between countries.

The Telephone:

Americans seldom send a telegraph these days, but the telephone is probably the most widely used communication tool in the world. Most Americans are so dependent on their cell phones they would be lost without them.

The first telephones did not come in decorative colors and shapes. Nor did they have the many features of phones today. Each telephone on a network system had to be connected to the next phone by wires hung on poles. For 50 telephones, more than 1,000 wires could be necessary. Switchboards were the solution. The first switchboard was used by E.T. Holmes in 1877. He had a switchboard system connecting four banks and a factory. At night, the switchboard acted as a burglar alarm.

At first, telephones were used only for business and emergencies. Installation was expensive, and some geographic areas were impossible to reach with phone lines. Usually, a phone was located in the general store of rural communities.

Today's mobile lifestyles create a market for highly sophisticated telephone technology. Cell phones are independent handsets that operate through satellites in space. Contemporary teenagers almost assume that cell phones are essential for life.

Geographic regions are divided into what are called "cells." As one's call travels from one cell to another, the vocal message is instantly transferred by satellite to the next cell, enabling mobility with worldwide access.

American Telephone and Telegraph Bell Laboratories successfully developed the world's first digital optical processor in 1990. It allowed information to be processed by light rather than electricity. Optics can process at least a thousand times more information at once than electronics, efficiently handling the increasing demands for worldwide communication.

Radio Waves:

In 1895, an Italian physicist named Marconi discovered how to adapt sound waves for communication. When sounds are changed into ***electromagnetic waves*** and sent through air, they travel at the speed of light (about 186,000 miles per second). A receiver changes them back into the original sounds. At first, radio was used primarily for sending and receiving emergency messages, especially during World War I. The full potential of radio was later realized when the first successful station, KDKA in Pittsburgh, Pennsylvania, broadcasted the 1920 Presidential election results of Warren G. Harding's win over James Cox. Little more than a year later, about 500 licensed stations existed in the United States.

Radio flourished during the Great Depression when people found a diversion in radio entertainment. With sound effects only, creative producers communicated stories to listeners' imaginations. Listening audiences were entertained by comedy shows, dramas, music, mysteries, quiz shows, news, documentaries, and children's shows. Many early television personalities launched their careers on radio programs.



Switchboard Operators

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Radio had a ***profound*** effect on Americans. Before radios, information could hardly be communicated to more than an arena full of people at one time. With radios, the entire country could receive the same information instantly and simultaneously. Americans could listen to their radios and share these experiences as a nation. Gathered comfortably around their radios, families heard the latest Sherlock Holmes episode, Gene Autry songs, election returns, or President's speech. Radio brought American families together as they listened to dramatic presentations of "The Lone Ranger," "Johnny Dollar," and "The Shadow."


1920 Radio

Satellite Communications:

Satellites are launched into space by rockets and placed into orbit around planet Earth. Satellites travel at a speed that enables Earth's gravitational pull to keep them at a constant location over the planet. Satellites pick up signals which are beamed into space by transmitting stations on the Earth. Signals are then transmitted to receiving stations elsewhere on Earth—even on the other side of the planet. Through satellites, radio and television waves are sent to any part of the world. Satellites produce better signals than ground systems. One satellite can cover only about a third of the Earth's surface, but a network of several satellites enables instant global communication through radio, television, and telephone communication systems.

English writer Arthur C. Clarke introduced the concept of satellites in 1945. Presidents Dwight D. Eisenhower and John F. Kennedy put America well on the road to space exploration. America and Soviet Russia became involved in an unofficial "Space Race," with wins and losses on both sides.

On October 4, 1957, Russia launched the first satellite into space: *Sputnik I*. No one was on board *Sputnik I* because it was not known if humans could survive in space. November 3, 1957, Russian *Sputnik II* was launched. However, this time, a passenger was on board—a Russian dog, named Laika, that did not survive the entire trip, but proved that earth creatures could survive for a time in space. On January 31, 1958, America launched her first satellite—*Explorer I*—but no humans were on board.

The first human to orbit the globe was Russian cosmonaut Yuri Gagarin on April 12, 1961, proving that humans could travel safely in space. The first American in space was Alan B. Shepard. On May 5, 1961, Shepard was launched into space aboard the Mercury spacecraft, *Freedom 7,* in a suborbital flight. The next step was to determine how to perfect the technology to make space travel profitable, effective, and safe.

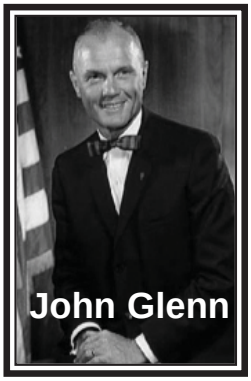
On February 20, 1962, millions of people watched in fascination as John Glenn was safely launched into space inside the Mercury *Friendship 7*. John Glenn became the second human and the first American ever to orbit the Earth.

Men and women who dedicate their lives to serve America are considered heroes and heroines. John Glenn was such a man. As a child and teen, Glenn had developed a strong determination to overcome tremendous obstacles. One year, Glenn survived a Scarlet Fever epidemic but could not leave his house. Instead of being discouraged, he spent his time building and repairing model planes. His interest in model planes developed into a love for flying.

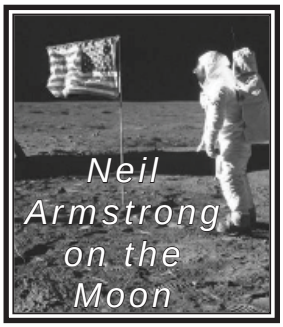
After three years of college, Glenn joined the Navy Aviation Cadet Program, and by 1944, had become a naval aviator and first lieutenant in the U.S. Marine Corps. John Glenn served his country during World War II and again in the Korean War, where he flew 90 combat missions. After the Korean

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War, Glenn became a test pilot and made several record-breaking flights.


John Glenn

In 1965, Glenn retired from the Marines and started his own business. In 1980, he was elected as U.S. Senator from Ohio. In 1998, John Glenn was 72 years old and one of America's heroes. Glenn told his colleagues he was interested in flying in space again as a senior citizen. He decided to return to space in October of 1998. Glenn is proud of that honor—he took one more opportunity to serve his country. John Glenn's dedication to serving his country paved the way for others to go to space, and to the moon.


Neil Armstrong on the Moon

In 1969, the whole world watched as Neil Armstrong placed man's first steps on the moon. The first television pictures from *Apollo 11* astronauts on the moon were seen live via satellites.

Another role model was Sally Ride, the first female and youngest American astronaut to orbit Earth in 1983.

Movies & Movie Theaters:

Moving pictures were developed in 1889 and in common use by World War I. The most popular movie themes were comedy and cowboy heroes. Movie theaters sprang up across America as families discovered the pleasures associated with "Saturday night at the movies." During the 1940s and 1950s movie theaters were favorite places for teenagers to date. Most of the movies were based on good prevailing over evil. Heroes were common and sex-explicit scenes were forbidden. Movie scripts were written to cause the audience to be attentive by following a plot rather than relying on action scenes enforced by technical affects. Actors and actresses such as John Wayne, Humphrey Bogart, James Stewart, Charleton Heston, Audrey Hepburn, Doris Day, and Sophia Loren popularized American movies.

Television (TV):

No single person invented television; many scientists helped develop the concept of television. In 1922, a 16-year-old American high school student named Philo T. Farnsworth developed the idea of an ***image dissector***. Two years later in 1924, a Russian-American named Zworykin invented the ***iconoscope***. In 1926, Scottish engineer John Baird built a television using ideas from Farnsworth and Zworykin.

While radio touched our ears and our imaginations, television commanded our entire attention—and left little to our imagination! World War II delayed development of TV for household use, but by 1948, television was on its way to being an American household fixture. In the 1950s, a teenager riding a bicycle through his neighborhood could see television screens in nearly every house.

Television created perhaps the greatest revolution ever known in the lifestyles of Americans. Some of the changes were positive, but others were extremely ***detrimental***. Instead of living active lives, people watched an imitation of other peoples' lives on a screen. Many became confirmed *couch potatoes*, neglecting healthful exercise. Although families watched television together in the same room, communication skills suffered as people spent less time talking with each other. Young people grew up watching TV actors and actresses whose lives were inconsistent with reality, and program sponsors enticed viewers to buy products advertised on TV. Millions of Americans became materialistic, coveting the cars, clothes, homes, and lifestyles of their television idols.

Advertisers found that television viewers were a great ***captive audience***. Commercials persuaded people that life

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would be easier, more glamorous, and fulfilling when certain products were purchased. A ***phenomenal*** rise in product sales expanded national businesses. Unfortunately, cigarette and beer commercials prompted countless people to start smoking tobacco or consuming more alcoholic beverages. Glamorous actors and actresses were often portrayed lighting cigarettes or drinking whiskey.

Television programs were expensive to produce, so network executives sold advertising time to businesses. TV marketing worked well because gullible viewers spent money on items advertisers enticed consumers to purchase. Advertisers targeted specific programs and baited buyers with a ***plethora*** of products.



During recent decades, cable and satellite television have become popular. Many households pay monthly fees to access a wide variety of programs brought into the home by wire or signal. Unfortunately, television offers violent and pornographic programming that encourages young audiences to "copy cat" TV villains. Many Americans are now realizing their obligation to treat television more responsibly, limiting what is watched, and expecting moral, family-oriented programming. Concerned Americans demand that producers be considerate of children by warning parents before questionable or offensive material appears on the TV screen.

Television has had many positive effects, too. Viewers are informed quickly about worldwide current events. Thanks to television, viewers can share the joy of a rescued child, experience the capture of terrorists, share in the relief when a murderer is brought to justice, or prepare for bad weather. Volunteers can be rallied quickly to aid communities devastated by natural disasters. The whole world can share in triumphs of the Olympic games. Television has brought the entire world (both fantasy and reality) to most homes.

Cassette Tapes:

In 1898, the principle of magnetic recordings on wire or tape was developed. In 1963, a Dutch electronics firm introduced compact audio cassettes, using cellulose tape coated with iron oxide. Cassettes were available to the general public, purposely not patented so they would gain worldwide acceptance. Not only did the public accept them, everybody wanted to be able to play and listen to the tapes. At the time, most homes, automobiles, and offices used compact audio cassette players.

CDs:

Compact disk technology replaced cassette tapes. Developed in 1979, the compact disk has a diameter of only 4.25 inches and is played on a special CD player. Since CDs are played by laser light, wear-resistant disks last much longer than tapes. Digitally recorded and encoded music has much better quality than phonographic recordings or tapes. Durable compact disks are used for studio recordings as well as CD-Rom programs for personal computers.

VCRs:

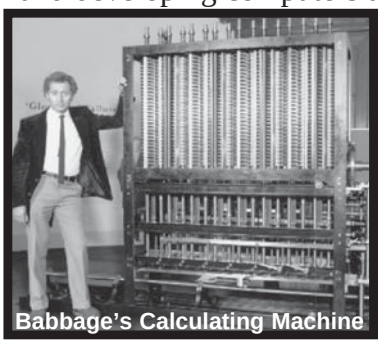
In order to give videotapes both sound and picture, a more complex production system was developed. To produce sound, the tape had to move slowly. To produce pictures, the tape had to be scanned at high speeds. The tape moved slowly through the video playback machine, while internal heads scanned the tape at great speeds, thus producing balanced sight and sound. This technology enabled most American families to own at least one VCR unit, on which to view VHS tapes of sports, musicals, documentaries, or favorite movies. VHS tapes and players were outmoded by DVD disks and players, which are currently being replaced with Blu-ray disks and players.



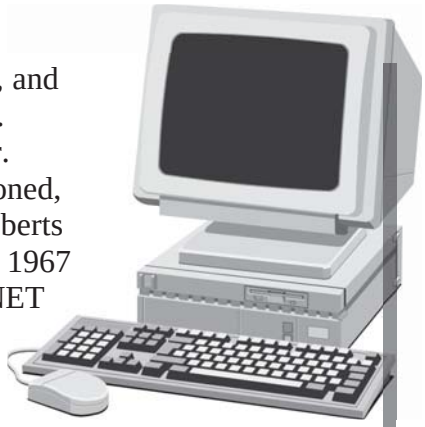
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The Computer and the Internet:

People from different backgrounds and skills were responsible for inventing and developing computers and modern day Internet services. In 1822, Charles Babbage developed a mechanical calculating machine that operated on steam. In 1889, Herman Hollerith developed a computer that used paper *punch cards.* Punch cards were pieces of thick paper that "told" the computer what to do. Instead of using modern-day disks, the first computers operated using paper punch cards that stored programs and data the computer needed in order to operate. Hollerith founded the *Tabulating Machine Company* in 1896 which, in 1924, became *International Business Machines* (IBM) that manufactures computers.

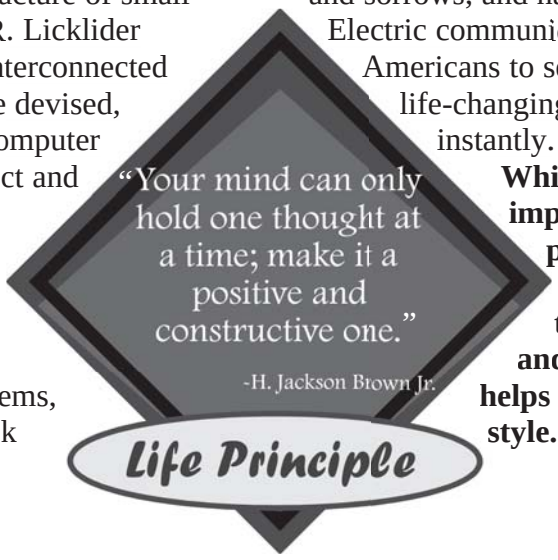

Babbage's Calculating Machine

Professor John V. Atanasoff and assistant Clifford Berry developed the first all-electronic computer in 1940. Their on/off switch system became the basis for all modern computers. By 1956 transistors were invented, allowing manufacture of small computers. In 1962, J.C.R. Licklider believed that a globally interconnected computer system could be devised, allowing anyone with a computer and a phone line to connect and access data and programs from any site. By 1963 all the components associated with modern computers had been developed: operating systems, memory, tape storage, disk storage, printers, and stored programs.



What Mr. Licklider envisioned, Lawrence G. Roberts accomplished in 1967 through ARPANET which evolved into the World Wide Web (WWW or Internet). In 1972, Ray Tomlinson wrote the first electronic mail program messages over the ARPANET. Lawrence Roberts added the ability to read, file, forward, and respond to electronic mail (E-mail) messages. Modern computers enable users to correspond with other computers using wireless systems and ***modems***. Today, the ability to access data, personal messages, and remote programs can be done in most places with cell phones. By 2010, voice-activated, handheld computers allowed information not only to be at our fingertips, but on the tips of our tongues!

The value of communication in America cannot be measured only by technological developments. Computer-transmitted communication is valuable because it allows people to learn about each other: families sharing everyday joys and sorrows, and nations working together. Electric communication systems enable Americans to see, hear, and understand life-changing events around the world, instantly.



While Americans were improving the way they processed information, they were also changing the way they dressed and lived. The next vignette helps you look at a really new style.

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The Defending of America

Chapter 10

Topic 12
Art, Architecture, Fashions, & Furniture

THE NEWEST STYLE — ART DECO

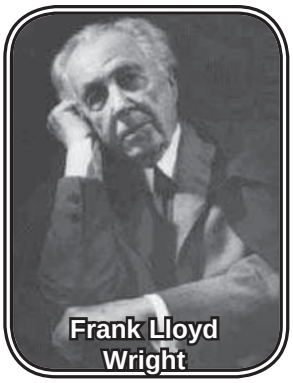
Section Three
Topics 11-15



The 1920s-1930s were times of expansion of America's economy. Skyscrapers built in the late 1880s became great architectural symbols of U.S. wealth. Cities competed to build the tallest and most beautiful skyscrapers. In Chicago, Illinois, the Wrigley Building and the Chicago Tribune Tower won competitions for architectural beauty. Both buildings contained unique ***Gothic pinnacles*** and ***flying buttresses***. The ultimate expression of an industrial design in architecture was the Empire State Building in New York City. It was completed in 1932 after two years of construction. The Empire State Building stands 120 stories above ground and remained the tallest building in the world for 39 years. The Twin Towers, which were destroyed by Islamic terrorists in 2001, were taller than the Empire State Building. Currently, the tallest building in the world is in ***Dubai***, towering 2716.5 feet.

In addition to the Gothic designs built into tall structures, other buildings utilized designs of the *Art Deco Period*, a period defined by lavish colors and extravagant materials. The American Radiator Building in New York featured black and gold colors throughout its design. Chrome, black glass, aluminum, and the use of light and mirrors were abundant in other elaborate buildings. Art Deco design was especially popular in entertainment architecture. Both cinemas and ballrooms built then were famous entertainment centers. Radio City Music Hall in New York City and Graumen's Chinese Theater in Los Angeles were known for their ***opulence*** in decoration: gilded ceilings, black glass, mirrors, and polished metal inlays in walls and doors.

While skyscrapers were being constructed, Frank Lloyd Wright created exceptional architectural work in houses and business buildings from 1924 to 1936. He designed the Charles


Frank Lloyd Wright

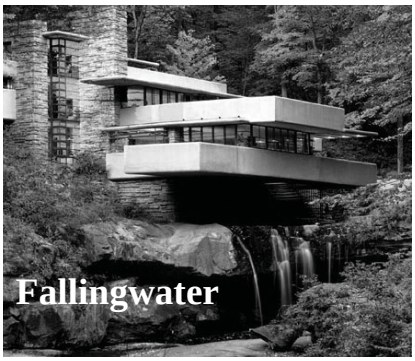
VOCABULARY

Gothic Pinnacles: dark, high, pointing towers
Flying buttresses: arch supports of stone buildings
Dubai: a city in eastern Arabia on the Persian Gulf
Opulence: great wealth, abundance
Chintz: cotton cloth printed in colored designs, usually glazed
Synthetics: man-made, artificial products
Heyday: period of one's greatest strength, vigor, and prosperity
Boa: long, fluffy scarf of fur, feathers, or delicate fabric
Appliqued: a decoration/ornament overlaid on a larger surface

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Ennis House in Los Angeles, California, in 1924; the Arizona Biltmore Hotel in Phoenix, Arizona, in 1927; and Fallingwater in Mill Run, Pennsylvania, in 1936.

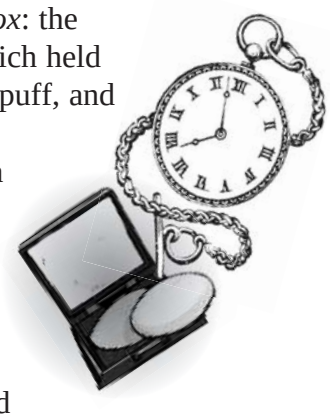
Fallingwater is considered Wright's masterpiece. The structure incorporated Wright's idea of a living place fused with nature. Resting across a small brook, called Bear Run, Fallingwater seems to take roots from a ledge of rock. Several multilevel platforms of the house project out over a small waterfall. To Wright, the construction of Fallingwater echoed how a tree grows its own network of branches. In keeping with the Art Deco theme, Wright created furniture that complimented his buildings, such as an enameled steel chair with walnut arms.


Fallingwater

Art Deco style stressed machine-made furniture which was cylindrical, rectangular, or cubical. Natural surfaces were replaced by new smooth plastics, metal, artificial wood, or stone surfaces.

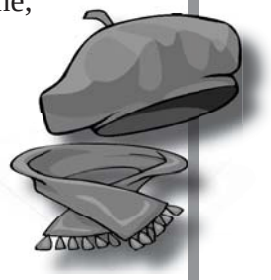
Popular also during this time were designs by Elsie de Wolfe, who is sometimes called the first interior decorator. She drew from 18th-century English styles, which popularized loose, floral-patterned ***chintz*** covers for upholstered chairs. Interiors were decorated with antiques, as well as white, beige, or cream-colored carpets, walls, and upholstered chairs.

Accessories for men and women reflected the architectural and furniture designs of the Art Deco period. Clothes and upholstery were replaced with new items from man-made materials. Men's wristwatches ***ousted*** the pocket watch. For women, the major accessory was the *vanity box*: the first compact which held powder, powder puff, and a mirror.



Both men and women wore berets for motoring. Decorative scarves or mufflers accented their outfits. Artificial flowers, long dangling earrings, lockets, necklaces, and large pocketbooks were popular accessories in the 1920s.

New clothing fabrics included such ***synthetics*** as rayon, cellophane, or combinations. Metal in fabric and *lamé* (a shiny, metallic fabric) was used for evening dresses and coats. Dresses were further decorated with detailed bead work.



This new culture in clothing, dominated by man-made materials, favored freedom for men and women. America's nine years before the stock market crash of 1929 marked the ***heyday*** of the shapeless, one-piece dress worn with silk stockings. The tubular effect of the dress was a change from the hourglass look of centuries past. The beginning of the women's suffrage movement further developed fashion freedom from bulky crinolines and restrictive corsets.



The waist belt of the simple dress slipped lower and lower until it reached the hips. A variation was the slanted or diagonal low waistline. Long

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tunic blouses enhanced the narrow, boxy line of women's clothing.


Miriam Ferguson

As a sign of the times, in January 1925, a fashionable lady named Miriam Ferguson became the first woman governor of Texas. For the inaugural ceremony, she wore a narrow hip-waist dress of black satin, her kimono sleeves trimmed with chinchilla fur. Wearing a wide-brimmed hat decorated with an ibis plume, Mrs. Ferguson completed the outfit with an ivory feather ***boa*** across her shoulders. Her inaugural ball gown was another boxlike style of orchid crepe embroidered with crystal beads and gold threads. The ankle-length skirt was ***appliqued*** with seed pearls.



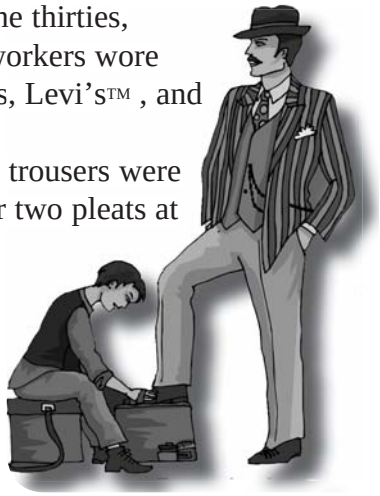
Mrs. Ferguson was not reelected in 1926, but was elected again in 1932. The depression of 1930 had a sobering effect on American fashions. Popularity of colorful, opulent dresses and extravagant accessories diminished. When Mrs. Ferguson took office again in 1932, her fashions reflected the times. Her inaugural ball gown was a black crepe dress with the waist at the normal level. Over her dress, Mrs. Ferguson wore a chiffon cape appliqued in velvet.

The Depression brought the clothes of wealthy and poor Americans closer together. Great design houses of Paris created fashions that were reasonably priced for nearly every woman. Textile manufacturers began using cheaper, synthetic fabrics for clothing. Artificial silk stockings, made of nylon, were in abundance due to shortages of imported silk and advances in production of synthetic materials.



No dominant trend appeared during the 1930s except for a nostalgic return to the tradition of more feminine clothing. Evening gowns were longer, tending to be backless like the new backless bathing suits.

Toward the close of the 1930s, women's styles changed. Skirts raised to knee length, and turbans or felt hats with tiny brims became popular. Women parted their hair in the middle and wore finger waves ending in a roll at the back of the head. Women experimented with clothing and accessories, wearing slacks, play suits, tennis dresses, bathing suits, ski costumes, low sandals, platform sandals, and shirtwaist frocks. Late in the thirties, female factory workers wore zippered overalls, Levi's™ , and dress pants.



For men, trousers were wide with one or two pleats at the waist and moderate to wide cuffs at the bottom of the pant leg. Cuffs on shirt sleeves were eliminated, along with vests for double-breasted suits. Men's suits were made from wool, cotton, or rayon. Eveningwear tuxedos were of midnight blue or maroon color rather than black. White dinner jackets and cummerbunds began to be popular.

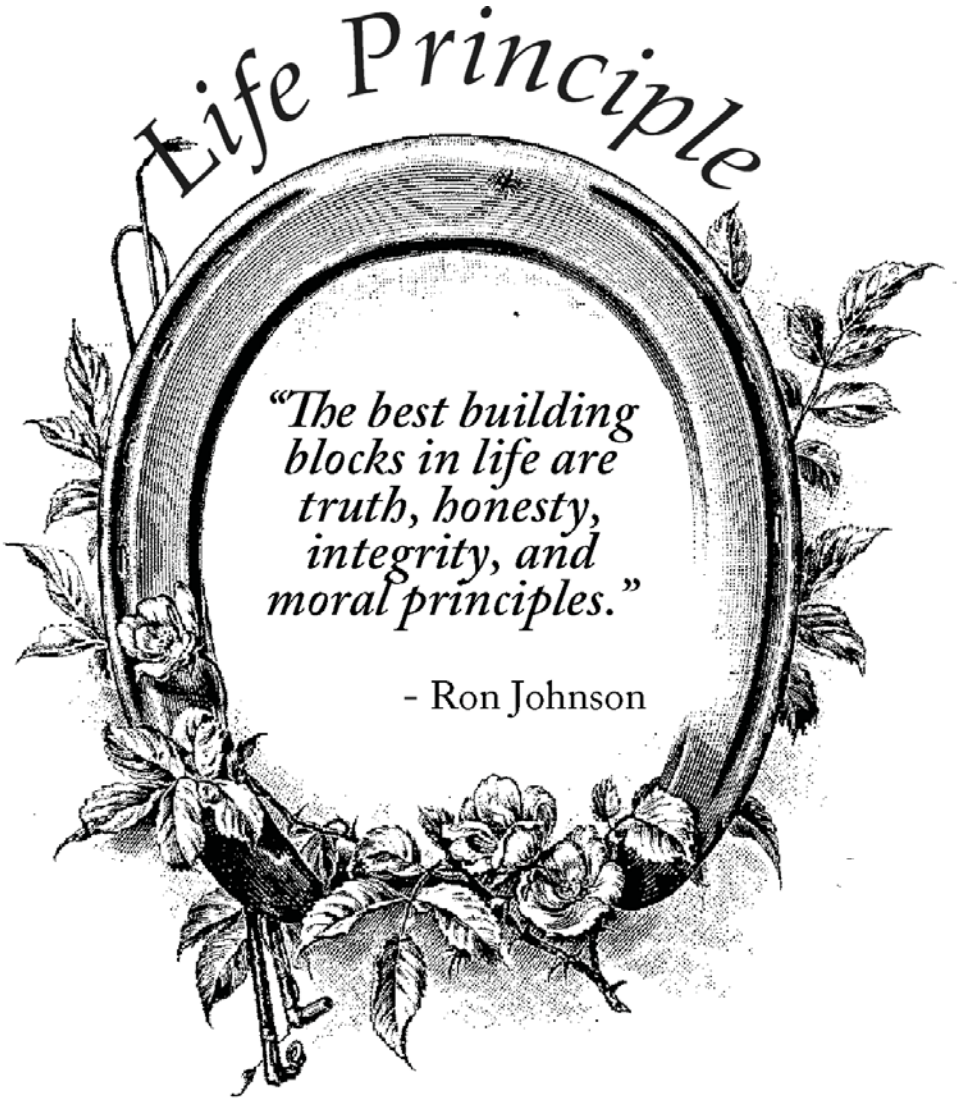
Men's sportswear reflected more innovation. Pullover sweaters, cardigans, sports shirts in pastels, bright colors, and even floral prints were popular. Shirts were

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worn either tucked in or hung outside the trousers. For skiing, men wore the new, fashionable, windbreaker jackets with gabardine trousers fastened at the ankle. Casual wear consisted of Levi's™ denim pants and jackets that faded and shrank after washing.

America's 1920s and 1930s introduced the artistic ideals of Art Deco design and the practical ideas of the new machine age. Excesses of the Roaring Twenties were toned down by the Great Depression of the 1930s. Ready-made fabrics and synthetic materials gave different classes of people a wider variety of styles, and opportunities to experiment.

Read the next vignette to find out how John D. Rockefeller, the richest man in the world at that time, earned his wealth—and what he did with it.



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The Defending of America



Topic 13
Dominant Personalities

Chapter 10

JOHN D. ROCKEFELLER

Section Three
Topics 11-15



It was the shiniest dime the little boy had ever seen. Gratefully, the young boy took the coin from the old man's hand. The stately gentleman handing out the pocketful of shiny dimes was John D. Rockefeller. Known as the richest man in the world, John D. Rockefeller was the first man to become a ***billionaire***. Rockefeller's joy was to hand out shiny new dimes to young boys. It was his way of passing along the American dream to our nation's youth.



By the 1930s, Rockefeller was in his late nineties, closing in on his final days. Forty years had passed since he retired from the company he and a few partners had begun in the 1860s and built from the ground up. It was one of the largest and most successful companies in U.S. history. Nearing the end of his life, Rockefeller was still giving. For generations to come, he would exert a positive impact on multitudes through the ***philanthropic*** projects he funded.

Even today, some 75 years after the death of this charitable businessman, the ***foundations*** he began are annually investing millions of dollars in people around the globe. In 1997, his most prominent foundation, the Rockefeller Foundation, had a budget of $100 million.

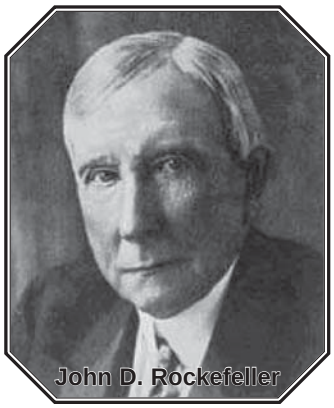
Rockefeller knew the value and power of a dollar bill. Born poor, the son of a ***peddler***, Rockefeller began working at age 16 and started his own business four years later. He soon realized that America's free enterprise system allowed entrepreneurs to earn a good living in the oil business, but only if this ***fragmented***, young industry could be better organized. Rockefeller and a couple of partners did just that. They united small pieces of the oil producing business into one large entity: the Standard Oil Company. This resulted in lower prices and better service for consumers and personal wealth for Rockefeller. By the time he was 38 years old, Rockefeller and his company dominated the American oil-producing industry.

VOCABULARY

Billionaire: one who owns a billion or more dollars (1,000,000,000: a thousand million)
Philanthropic: charitable
Foundations: tax-exempt organizations founded with private money to support charitable activities
Peddler: one who traveled in a wagon from house to house selling goods
Fragmented: disorganized
Flagrant: extravagant, bold, outrageous
Staunch: uncompromising, standing firm in beliefs
Magnanimous: generous, unselfish

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Flagrant spending or being selfish was not Rockefeller's style. Even after attaining incredible wealth, he continued to live a thrifty, simple life. He and his wife raised their four children to be hard workers with strong moral character. Rockefeller's ***staunch*** Baptist upbringing and Christian nature made it only natural that the more money he made, the more he gave away. In his 48th year, he gave away a quarter of a million dollars; two years later he founded the University of Chicago; in another couple of years, Rockefeller's annual giving was more than one and a quarter of a million dollars. Along with his family, the things that brought him the most joy were *not* elaborate homes, expensive travel, or fancy automobiles, but church, golf, and quiet motor drives through the countryside.


John D. Rockefeller

By the turn of the century, Rockefeller was donating so much money to charitable organizations, he had to organize his giving through several foundations. Along with the already-mentioned Rockefeller Foundation, he founded the General Education Board, the Laura Spelman Rockefeller Memorial Foundation, and the Rockefeller Institute for Medical Research, which in 1954 became Rockefeller University in New York.

Rockefeller believed that money given away to help others was an investment in eternal rewards—an investment from which thieves could not steal and decay could not corrupt. Rockefeller's ***magnanimous*** giving certainly accentuated the point. Throughout his life, Rockefeller gave away more than $530 million. Every one of those dollars symbolized a message of generosity to American youth in whom Rockefeller had confidence.

Other men also helped make America great, and four of them have been immortalized in a unique mountain sculpture known as Mount Rushmore.

THE MOUNTAIN WITH FOUR FACES

It was a presidential event, but not just because President Herbert Hoover stood at the base of a South Dakota mountain that July 4, 1930. An impressive gathering—thousands of interested citizens, dignitaries, photographers, and reporters stood ready to watch a once-in-a-lifetime event. The ceremony was unlike any other in history. A 72-foot American flag was draped dramatically across the mountainside. Suddenly the ropes were loosed, and the massive flag ***cascaded*** down revealing a 60-foot replica of George Washington's face carved out of solid rock on Mount Rushmore. Over the next nine years, the faces of three more American Presidents: Thomas Jefferson, Theodore Roosevelt, and Abraham Lincoln, would be added to the monument.

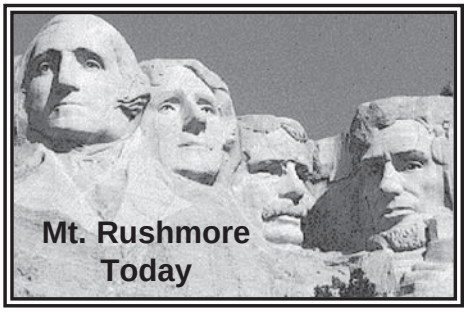
VOCABULARY

Cascaded: flowed down dramatically or majestically
Precipitated: started an action
Showcase: an area in which something is shown off, displayed
Lobbied: tried to persuade Congressmen to pass legislation in favor of the lobbyist's agenda
Colossal: huge, magnificent

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That very moment, no one could have been prouder than Gutzon Borglum, the creator of Washington's likeness on that granite mountain. The idea that ***precipitated*** Borglum's moment of triumph began in 1923. A state historian suggested the possibility of a monument, a giant carving that would draw visitors to South Dakota from around the country.

Once Borglum was hired for the job, he scouted the South Dakota countryside for the perfect location where he could carve such a great tribute to some of America's finest heroes. Borglum chose the 5,725-foot Mount Rushmore for its broad wall of exposed granite, facing southeast. It was the perfect ***showcase***, lit by direct sunlight most of the day.


Mt. Rushmore Today

Then Borglum developed the subject matter for this one-of-a-kind project. Initially, he planned to include Washington, Jefferson, and Lincoln as great leaders who brought America from colonial times into the 20th century. The decision to add Roosevelt came in the middle of the project.

> *"A monument's dimensions should be determined by the importance to civilization of the events commemorated,"* said Borglum. *"Let us place there, carved high, as close to heaven as we can, the words of our leaders, their faces, to show posterity what manner of men they were. Then breathe a prayer that these records will endure until the wind and the rain alone shall wear them away."*

The project was dedicated in 1927 by then President Calvin Coolidge, but it would be three years before the first face would be unveiled. America was suffering an economic depression; the challenge was raising funds. Fiercely believing in this monument's symbolism and the message it would give the American people, Borglum personally ***lobbied*** state officials, congressmen, cabinet members, and presidents to obtain finances. Finally, $836,000 of federal money was committed toward the $1,000,000 price tag.

Two things had to happen before Borglum and his crew could begin transforming Mount Rushmore into a monument. First, the work environment had to be prepared. A wooden staircase was constructed up the side of the mountain. Next came a workshop, dynamite storeroom, and lunchroom on top. At the base of the mountain, other structures were built: a studio, a blacksmith's shop, bunkhouse, restaurant, and custodian's house.

While the work site was under construction, Borglum was preparing models of each presidential figure. They were first sculpted in clay. Larger five-foot models were crafted out of plaster of Paris and wood shavings. The final figures stood five stories tall, about 12 times the size of Borglum's plaster models.

Each carving was completed in steps. First the heads were drawn and marked with one-inch squares in a process called *pointing.* At each "point" on the drawing, workers knew where to insert a drill and precisely how deep it should go. Into the holes went very specific amounts of dynamite which would blast away the appropriate amount of rock. This was very precise work. As Borglum told his crew, error was not an option.

Borglum's team spent six and one-half years of hard work to create Washington's likeness from the concept of the monument to its unveiling. After the first face in the rock surfaced, the faces of

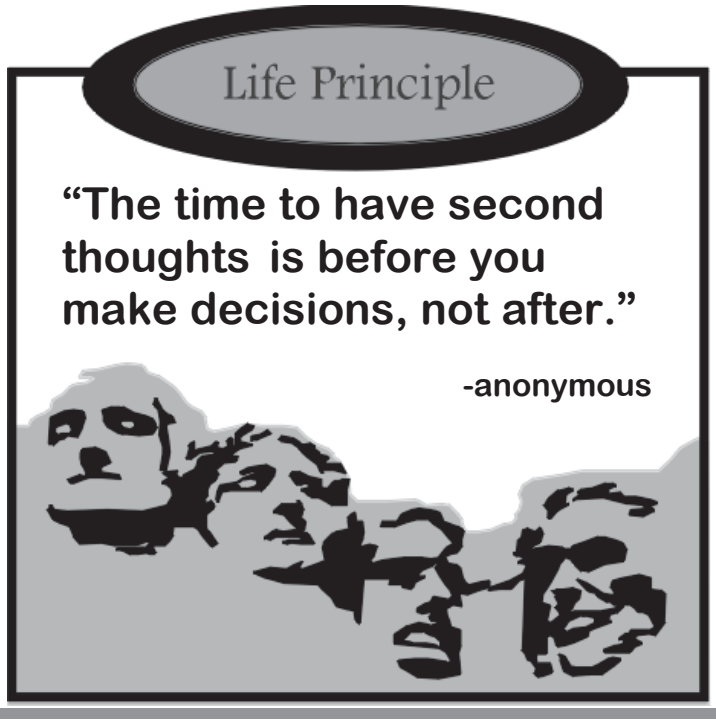
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Jefferson in 1936, Lincoln in 1937, and Roosevelt in 1939, followed.

Remarkably, over the course of this dangerous project, no life was lost, and only two accidents occurred. The 16 years invested in building the monument were much longer than Borglum's original estimate of five years.

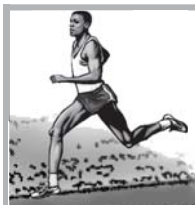
Today, Mount Rushmore stands as a symbol of men who helped shape America into the nation it is today: a proud, tall country with a ***colossal*** image. More than 2.5 million people from around the world visit the monument each year, attesting to the interest such an impressive undertaking generates. What began as Borglum's project now broadcasts a message of principles and moral leadership. A visit to Mount Rushmore is a history lesson and a form of recreation.

As America changed in the new century, so did forms of recreation. The next lesson is about athletic men and women whose faces were not carved in stone, but whose names are recorded in history.



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The Defending of America

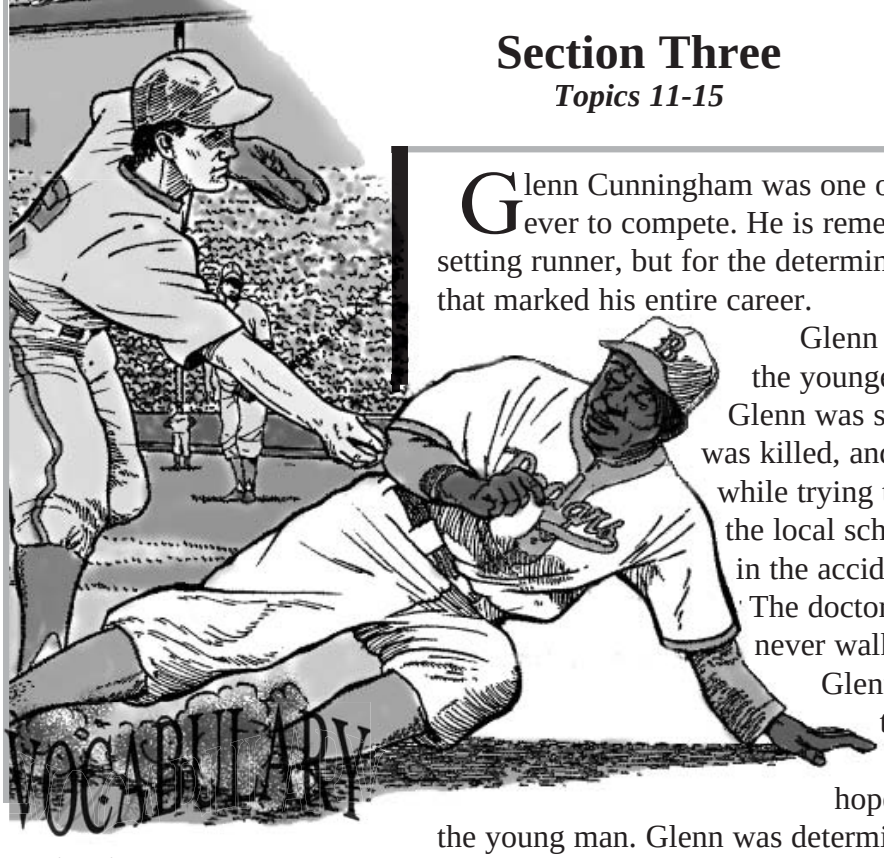


Topic 14
Sports &
Recreation

Chapter 10

Section Three
Topics 11-15

GAMES AND THEIR CHAMPIONS



Glenn Cunningham was one of the few, truly-great athletes ever to compete. He is remembered not only as a record-setting runner, but for the determination and ***pertinaciousness*** that marked his entire career.

Glenn was born in Kansas in 1909, the younger of two children. When Glenn was seven years old, his brother was killed, and Glenn was badly injured while trying to light a wood stove to heat the local school. Glenn's legs caught fire in the accident and were badly scarred. The doctor told Glenn that he would never walk without crutches.

Glenn loved to run, so he refused to accept the doctor's report. Over the next several years, hope and perseverance sustained the young man. Glenn was determined to walk again. His mother spent long hours massaging his legs, and Glenn worked hard doing exercises. By the time he was ten, Glenn was able to walk without crutches; his doctor said the recovery was a miracle.

Though it was very painful at first, Glenn started trying to run. Slowly he built up endurance, disciplining himself to focus on the goal instead of his pain. Glenn was able to join his high school track team, and he did so well the University of Kansas awarded him an athletic scholarship. His sophomore year in college, Glenn set a new American record for running a mile in 4 minutes and 11.1 seconds. That incredible record made Glenn Cunningham famous across America, and for the first time, a lot of people became interested in track as a sport.

The high point of Glenn's career came in the summer of 1934. He and the other two top runners in the U.S. competed head-on in Princeton's Palmer Stadium. Cunningham ran the race of his life, beating out the next closest man by over 40

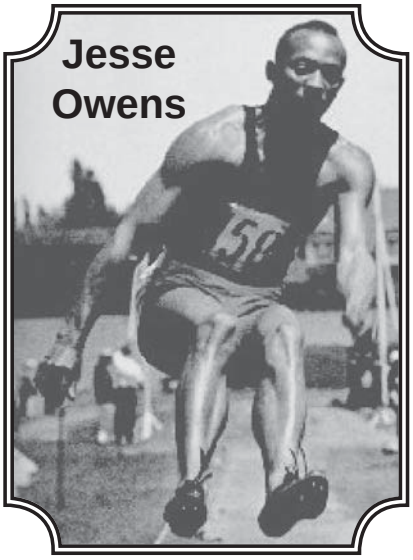
VOCABULARY

Pertinaciousness: perseverance; persistence in overcoming obstacles
Deleterious: hurtful, harmful (sometimes in subtle ways)
Unprecedented: having no equal; unheard of
Providential: planned by God
Farm team: a subdivision of major league baseball teams where young players learn how to compete at the professional level
Benefactor: one who helps, usually through financial means
Benchmark: standard of quality
Sapience: wisdom
Commemorated: honored
Render: to cause to be

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yards and setting a new world record for the mile—4 minutes, 6.7 seconds. His performance made people believe a man could run a 4 minute mile. It would be another 16 years before Roger Banister of England turned in a time of 3 minutes, 59.4 seconds.

Glenn Cunningham was not the one who set the 4 minute mile record, but he was the first man to cause other runners to dream about a 4 minute mile race. Glenn is remembered because he never gave up and because he never let the odds overwhelm him. He is one of the greatest track and field icons of all time, simply because he persevered in spite of pain and great personal hardship.



One of Cunningham's contemporaries in track and field, Jesse Owens, is another man remembered for his victory over ***deleterious*** racial barriers. Jesse Owens was the first black runner to make international headlines. During his sophomore year in college in 1935, Owens attended the Big Ten track championships where he had what is probably the greatest day any athlete has ever known.

A week before the meet, Jesse sprained his back wrestling with a friend. Owens was in such bad pain that he could not work out all week. He decided to compete anyway. When Jesse arrived at the competition, he had to be assisted out of the car. Owens could barely stand, much less run. Still, he never considered giving up; he determined to try. He entered six races and in the span of just 45 minutes, Jesse Owens set five world records and tied a sixth!

The next year, (1936) Owens was part of the U.S.A. Olympic delegation to Berlin, where the Olympics were being hosted by white supremist Adolf Hitler. Germany's Nazis sneered at America for allowing blacks to represent the U.S., but Jesse Owens made a political, as well as athletic, statement in Hitler's own backyard. Owens won an ***unprecedented*** four gold medals in track and field and broke three Olympic records. Owens dominated the track competition and showed the world that blond Nazis were not the superior race, as alleged by Hitler. Perhaps it was ***providential*** that a black man would dominate the Olympic games right in the face of Hitler.

Back in his own country, despite his great track achievements, Owens was not able to turn his athletic abilities into financial advantages. In 1936, Jesse Owens, the greatest runner of all time, was employed as a playground janitor. Sixty years ago in America, four gold medals were of value to Jesse but did not generate financial support. Today, stars like Michael Phelps, Serena Williams, and Tiger Woods headline the news and earn millions in advertising. Jesse Owens was, however, honored by two United States Presidents. Jesse Owens was awarded the Presidential Medal of Freedom in 1976 by President Gerald Ford and the Living Legends Award in 1979 by President Jimmy Carter.

Another great athlete was Jackie Robinson, the first black professional baseball player. Robinson is credited with opening the door of opportunity for black athletes into all major professional sports.

In 1946, Jackie Robinson signed on with the Montreal Royals, a minor league baseball team (***farm team***) for the Brooklyn Dodgers. His ***benefactor*** was

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Branch Rickey, owner of the Dodgers and a visionary who believed that blacks could and should play major league ball. Branch Rickey, as much as Robinson, helped sports fans accept minority players.

Voted Rookie of the Year after a successful season with the Royals, Robinson moved up to the Dodgers. That move incited considerable controversy and hostility from other players. Opposing teams constantly yelled threats, shouted insults, and attempted to hit Robinson with the ball. Even in those tough confrontations, Jackie Robinson remained a true gentleman. His positive, calm, and collected attitude, along with his dynamic ability to play ball, earned him respect in the league. His first season, Robinson was named the National League's Rookie of the Year, and two years later, he had his best year and was selected as the league's Most Valuable Player.



Over the ten years he played with the Dodgers, Jackie Robinson established a ***benchmark*** in professional sports. He inspired many young blacks to pick up the game of baseball. Robinson's positive attitude, ***sapience***, and commitment to training earned him respect. He is ***commemorated*** in the Baseball Hall of Fame along with other "greats" of the era.

During the first half of the 20th century, many other names worth remembering overcame impossible odds and dazzled the world with their abilities. Pete Gray is remembered as an outfielder for the St. Louis Browns. He was not their top hitter or fielder, nor did he set any records, but he was the only one-armed man ever to play major league baseball.

Another man who made sports history was Ben Hogan, a golfer who dominated professional golf in the 1940s and 1950s. Hogan was born in tiny Dublin, Texas. Tragically, when Ben was only age seven, his father died. Later, at the height of Hogan's career, he was in a horrible automobile accident; the doctor pronounced Ben paralyzed from the waist down. Like Glenn Cunningham, Hogan was not a man to give up. With help and encouragement from his wife, Hogan devoted the next several years to getting back into shape. To the amazement of the golfing world, Hogan later won the U.S. Open, the Masters, the P.G.A., and the British Open.

Babe Didrickson was another golfer who fought back against impossible odds and won. After a battle with cancer in the middle of her career, Didrickson claimed the Women's Open title in Miami. Babe was known not only as a golfer. She was named the greatest female athlete of the first half of the 20th century, and her accomplishments live up to that reputation. At the 1932 Olympics, Babe set world records in several events. An expert at bowling, billiards, and golf, she even beat most men at any sport she played. In her later years, Babe Didrickson established funds to promote women in sports and was instrumental in starting the careers of many young female athletes.

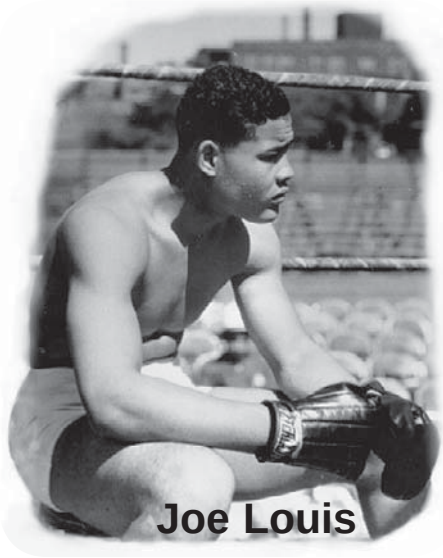
Babe Didrickson is another individual who overcame great obstacles to achieve her dreams. Perhaps in every sport, some athletes reached the top because of natural ability, but true role models are people who persevere over difficulties.

Some sports personalities became famous because their achievements propelled

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their sport into public limelight. Such is the case with prizefighting. During the early 1900s, boxing remained illegal in many parts of the United States. But in 1920, New York passed a law permitting prizefighting. Other states followed. Quickly gaining popularity as a spectator sport, boxing soon entered its golden age.

Joe Louis was a black man who became one of the most famous champion boxers. He held the heavyweight title from 1937 to 1949 when he retired as World Champion. His achievements in the boxing ring opened doors of opportunity for other black athletes. During World War II, Louis joined the Army and conducted exhibition fights for U.S. troops.


Joe Louis

In the late 1930s, Henry Armstrong captured the welterweight, lightweight, and featherweight titles—holding three world championships during his career. Henry Armstrong was ordained as a minister after he retired from professional boxing.

Lou Gehrig is another name remembered for more than his athletic career. This quiet, gentle baseball giant was somewhat overshadowed by his famous teammate, "Babe" Ruth. However, Gehrig's name lives on, inseparably linked to the rare and incurable nerve disease which forced him to retire—now known as *Lou Gehrig's disease.*

Sports and *recreation* are closely related. While organized sports came to the forefront during this period of American history, other forms of recreation thrived and advanced as well. Country fairs provided opportunities for people to join in festivities and contests. Fairs were not expensive, yet provided a variety of social events and recreation: dancing, tractor pulls, wrestling, mechanical rides, and cooking contests.

Bicycling was also popular at the turn of the century. Early forms of the modern bicycle gear shift came into use after 1900. However, even with improvements in bicycle design, rapid development of the exciting automobile ***rendered*** bicycling less interesting. The growing automobile industry triggered growth in a related industry—tourism. Automobiles gave people a new way to go places, both for business and for fun.

Board games remained popular, and new ones were created. Monopoly was invented in the early 1930s by Charles Darrow, an out-of-work heating engineer from Philadelphia. In time, the game made Darrow a millionaire. Nearly 100 million Monopoly games sold in the first fifty years of their creation. In 1975, the United States printed twice as much Monopoly money as real money.

America is a place of enterprise, opportunity, and achievements. She is a land where people with character, ideas, and dedication can become successful. The next topic puts into perspective the role of religion in America's history.



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The Defending of America

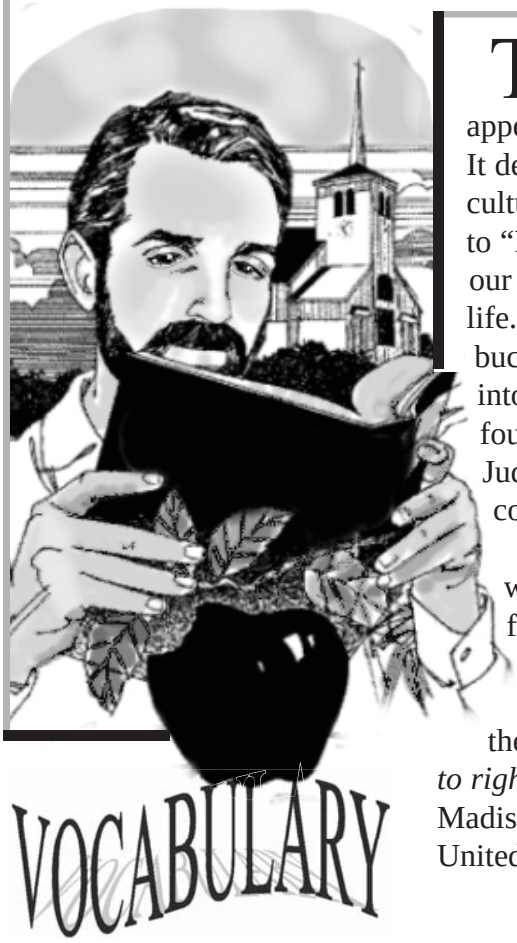


Topic 15
Religion
& Celebrations

Chapter 10

RELIGION FOR A NEW CENTURY

Section Three
Topics 11-15



The United States national motto is "In God We Trust." That statement is printed on U.S. currency, appears in textbooks, and is displayed on public buildings. It declares that belief in God is an integral part of American culture. America's founding documents include references to "Providence," "Creator," and "God." The mindset of our forefathers was that religion pertained to every part of life. They drew strength from deep, spiritual wells as they bucked mysterious seas, fought impossible wars, or plunged into hostile badlands. When the Founding Fathers laid the foundation on which to build America, they believed that Judeo-Christian values were essential for constructing a country that would remain strong and free.

The writers of our establishing documents showed wisdom when they adopted the First Amendment, which forbids the government to establish a national church. Yet our founding Fathers did not ***equate*** "free exercise" *of* religion with freedom *from* religion. George Washington, the Father of Our Country, commented, *"It is impossible to rightly govern the world without God and the Bible."* James Madison, author of the Constitution and fourth President of the United States, wrote:

> *"We have staked the whole future of the American civilization, not upon the power of government, far from it. We have staked the future. . .upon the capacity of each and all of us to govern ourselves, to control ourselves, to sustain ourselves, according to the Ten Commandments of God."*

Declaration of Independence author Thomas Jefferson firmly believed in a Supreme Being. He also asserted that our country needed the "glue" of religion to hold us together. During the War for Independence, Jefferson asked,

> *"Can the liberties of a nation be thought secure when we have removed their only firm basis, a conviction in the minds of the people that their liberties are a gift from God?"*

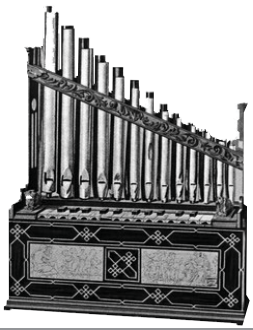
VOCABULARY

Equate: to consider as equal to
Embedded: fixed firmly, stable
Debarked: stepped off a ship
Battalion: large company of troops, squadron, or regiment
Catapulted: launched
Fostering: helping to develop
Chaplain: a military minister
Disillusioned: bitter, disappointed
Scores: a very large amount

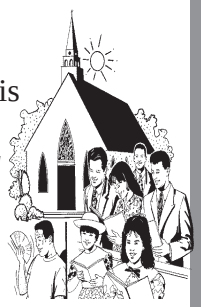
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Religion continued to be a vital force in the 19th century. You have read about the Second Great Awakening, the city revivals of Finney and Moody, and the rise of religious-aid organizations such as the Salvation Army and YMCA. Religion, though personal, was not private. Public figures generally did not withhold their religious convictions. Most U.S. Presidents in that century made direct references to God in their inaugural addresses. Rutherford B. Hayes, our 19th President, made a typical remark in his inaugural speech on March 5, 1877. Hayes acknowledged that he was *"looking for the guidance of that Divine Hand by which the destinies of nations and individuals are shaped."*

When America stepped over the threshold into the 20th century, religion was still ***embedded*** in our national consciousness. Churches dotted the countryside and towered on city corners. Many Americans spent all Sunday at church, attending worship services and Sunday school, and enjoying "dinner on the grounds" with neighbors. Principals, teachers, and students prayed in public schools, and parents read the Bible to their children at home. Public figures spoke unashamedly about the value of religion and virtue. President Theodore Roosevelt said, *"A thorough knowledge of the Bible is worth more than a college education."* Yankee slugger "Babe" Ruth acknowledged that *"the appeal of God"* was a positive force in his life, giving him discipline and strength. Andrew Carnegie, the great steel entrepreneur said that *"the man who dies rich dies disgraced,"* and so he donated over 7,000 pipe organs to churches across the nation.



As the 20th century opened, so did the floodgates of immigration, which swelled the ranks of the Roman Catholic Church in America. In 1890, American Catholics numbered 10.6 million. This number skyrocketed to more than 12 million in 1906. Immigrants hailed from Europe, where the Catholic church was strong.



Catholic organizations helped many immigrants at Ellis Island. Greta Wagner was a German woman who ***debarked*** in New York in 1923. She was scared and single, without anyone to sponsor her. Immigration officials almost sent Wagner back to Germany until a Catholic charity agreed to provide free room and board until Greta could find work. Many religious aid societies came to the rescue of thousands of foreigners who probably would not otherwise have become American citizens.

In 1917, the United States marched into a world war. While American soldiers, called "dough boys," fought in European trenches, American churches became their own ***battalions*** of action. Women huddled in church parlors to pray and knit socks and sweaters for the fighting men. Laymen mobilized a flurry of campaigns, from selling Liberty bonds to holding Red Cross drives. Clergymen held special patriotic services and prayer meetings where American flags were dedicated.

The decade after World War I ushered in a time of decline in religious interests. It was the Age of Prosperity, when the nation's industrial output doubled and wages steadily climbed. For a time, the nation turned its attention to entertainment and business; when the Great Depression struck, people again turned to the only remaining stability in their lives—their faith in God. During the twenties, Christians built beautiful, cathedral-like church buildings

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throughout the land. Many of them contained large auditoriums, gymnasiums, and Gothic-like sanctuaries. More churches were built during the ten years after 1920 than at any time in American history.

A popular book at that time was Bruce Barton's *The Man Nobody Knows*, published in 1925. The son of a preacher, Barton was an advertising executive who wanted to make Christ known among American businessmen. Using everyday language, Barton described Jesus as a fit, sun-tanned tradesman who *"led the most successful life on this planet."* Barton dubbed the moral tales that Jesus told as *"the most powerful advertisements of all time."* Because of its breezy, winsome style, *The Man Nobody Knows* became a bestseller and ***catapulted*** its author into national prominence.

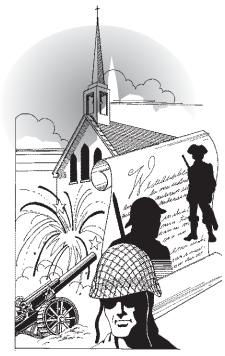
In His Steps, by Charles M. Sheldon, had taken America by storm in 1896. Millions of copies were sold in America, and the book was translated into 25 foreign languages and made into a movie. Second only to the Bible in popularity, *In His Steps* remained the American bestseller for two decades. The story was about a small town preacher and his church members who revolutionized their town and surrounding communities by following the example of Jesus Christ. Each church member in the story responded to social situations and family events by asking, *"What Would Jesus Do?"* The modern slogan, "WWJD," derived from Sheldon's book and was made popular through *Paul Harvey News and Comments* in the spring of 1998.

During the Great Depression, several religious denominations flourished and ministered to people's needs, even as the economy fell. The Southern Baptist Church added nearly 1½ million members between 1929-1941. Pentecostal churches also enjoyed substantial gains. The foremost Pentecostal body, the Assemblies of God, expanded its membership from almost 48,000 in 1926 to over 148,000 in 1936.



President Franklin D. Roosevelt introduced his New Deal programs with inspiring speeches. In his first inaugural address he said, *"The only thing we have to fear is fear itself. . . .We face arduous days that lie before us in the warm courage of national unity; with the clear consciousness of seeking old and precious moral values."* Roosevelt then exclaimed, *"May God protect each and every one of us! May He guide me in the days to come!"*

In 1942, America was at war again. Churches and synagogues rose to the occasion, lending support to the war effort. The United States government took an active role in ***fostering*** spiritual well-being among U.S. soldiers. In the fall of 1940, one ***chaplain*** was required for every 1,200 servicemen. In the spring of 1941, Congress appropriated almost $13 million for building 604 Army post chapels throughout the world. The average chapel seated about 400 people and housed services for Protestants, Catholics, and Jews. Numerous religious bodies, including the YMCA, Salvation Army, Jewish Welfare Board, and National Catholic Community Service, sponsored the United Service Organization (USO), which provided outposts of entertainment and fellowship for war-weary soldiers. An association of military chaplains issued a book of prayers and hymns for "G.I.s," while the American Bible Society and Gideons provided free copies of the Scriptures for every U.S. serviceman. President Franklin D. Roosevelt cheered the soldiers with his remarks in a



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pocket Bible published by The Gideons:

"As Commander-in-chief, I take pleasure in commending the reading of the Bible to all who serve in the armed forces of the United States. Throughout the centuries men of many faiths and diverse origins have found in the Sacred Book words of wisdom, counsel, and inspiration. It is a fountain of strength and now, as always, an aid in attaining the highest aspirations of the human soul."



On December 7, 1941, the U.S. cruiser *New Orleans* came under attack by Japanese at Pearl Harbor, Hawaii. While sailors kept up a steady anti-aircraft barrage against Japanese planes, Navy Chaplain Howell M. Forgy repeated the wartime phrase, "Praise the Lord and Pass the Ammunition," which became one of the songs to come out of the war. A condensed portion reads:

"Praise the Lord, and
Pass the ammunition,
Praise the Lord, we're on
A mighty mission,
Praise the Lord, and
Pass the ammunition,
And we'll all stay free!"

Another phrase that sparked a song was "Comin' in on a Wing and a Prayer," referring to shot-up planes. A condensed portion reads:

"Comin' in on a wing and a prayer,
Though there's one motor gone
We can still carry on...
While we sing as we limp
Through the air,
Look below - there's a field over there!

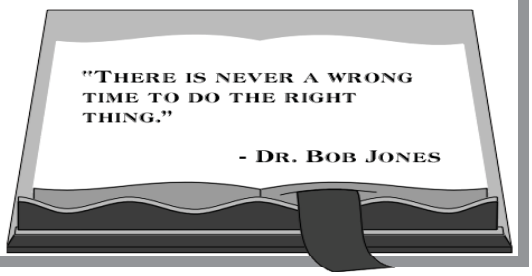
With our whole crew aboard
And our trust in the Lord,
We're comin' in on a wing
And a prayer."

During the most troubling days of World War II, Roosevelt met with British Prime Minister Winston Churchill in an Atlantic summit. Standing on the deck of an American warship, the President of the United States led a rousing chorus of the hymn, "Onward, Christian Soldiers."

The years immediately following the war brought a "baby boom" to America. In five short years, between 1948 and 1953, the national birth rate increased 50%. Young families flocked to churches during this time. Sunday school classes "packed out," increasing their attendance from 30 million in 1950 to almost 39 million in 1956. The *Sputnik* satellite was not the only thing blasting into space during the late 1950s; church membership soared as well. In 1956, sixty-two percent of all Americans claimed affiliation with a local church based on Judeo-Christian beliefs.

In the next chapter, we will see how religion fared in the turbulent '60s. Many of the Baby Boomers became *disillusioned* with American involvement in Vietnam. They rejected the traditional values of their parents and grandparents, including religion. But *scores* of them returned to church in the 1970s and 1980s. The way churches presented Biblical principles began to change in order to meet the needs of the "Boomers" and their young children. You will discover those innovative new methods in the final chapter.

LIFE PRINCIPLE



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