Show What You Know

1865–1900

The animals on which the Plains Indians relied were actually bison, not buffalo. Bison have bigger heads, a large hump at their shoulders, and more ribs than true buffalo. For some reason, though, most Americans use the word "buffalo" to describe that shaggy-haired, horned, bearded beast of the Great Plains.

Before the railroads crossed the United States, perhaps 20 million bison roamed the Great Plains. Then, the trains brought "buffalo" hunters to the region. Some of the buffalo hunters were even hired by the train owners, who hated the bison. A herd of bison grazing around the tracks could delay a train for hours. A bison stampede could knock a train right off its tracks.

Some of the buffalo hunters shot the bison just for fun. Some shot them for their hides. Millions were slaughtered, and millions of bison bodies were left to rot on the Great Plains.

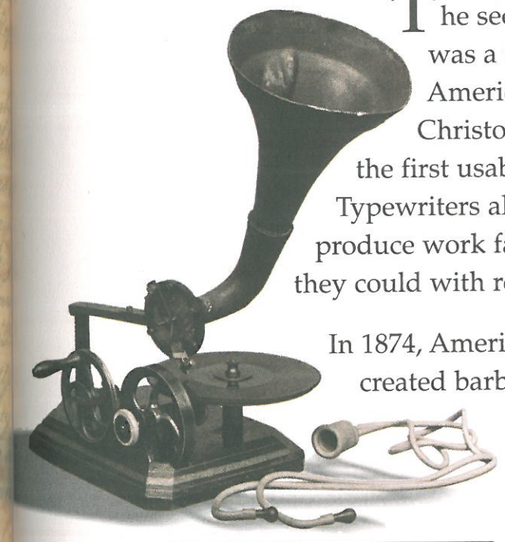
By 1889, only 541 bison could be found in the whole United States. Only then did some Americans begin trying to protect the bison from extinction, or disappearing from the earth.

Imagine that you are living in the 1890s. You want to save the bison. Draw a poster that shows why the bison should be saved. Or, if you prefer, draw a poster using an animal that is in danger of extinction today. This includes animals such as the American crocodile, the blue whale, the red wolf, and the tiger.

Bell and Edison Change the World

The second half of the 1800s was a time of invention in America. American Christopher Sholes invented the first usable typewriter in 1867. Typewriters allowed people to produce work faster and neater than they could with regular handwriting.

In 1874, American Joseph F. Glidden created barbed wire. Great Plains farmers used the thorny wire to fence in their new farms.



This picture shows what a gramophone looked like.

There were other important inventors of the time, too. One of them was Alexander Graham Bell. His invention helped people talk to each other over distances. Another was Thomas Edison. One of his inventions lit up the world.

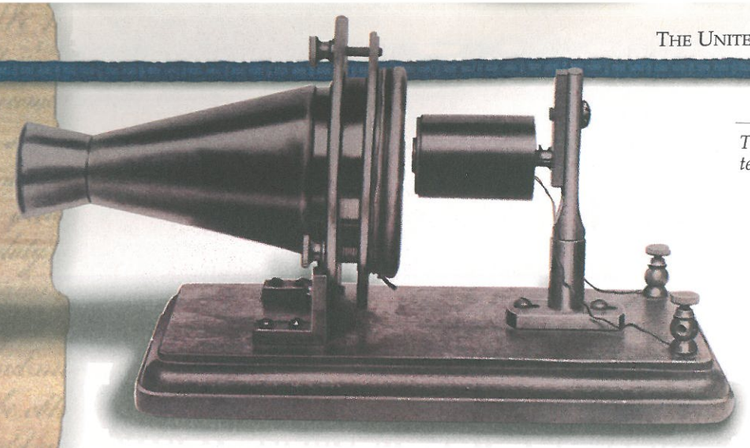
Bell Invents the Telephone

Sound was always important to the Bell family. Elisa Bell was a musician. Her husband, Alexander Melville Bell, taught deaf people to talk. It made sense that their son, Alexander Graham Bell, would study sound, too. Like his mother, he became a musician. Like his father, he became a teacher of the deaf.

How to Use a Phonograph

When Thomas Edison invented the phonograph, no one was exactly sure what to do with it. So, Thomas thought of these ten ways to use a phonograph:

1. *Letter writing*
2. *Records that would speak to the blind*
3. *The teaching of good English*
4. *To reproduce music*
5. *Have family members record their memories for future generations*
6. *Music boxes and musical toys*
7. *Clocks that tell the time aloud*
8. *Record different languages so we will always know exactly how the words were pronounced*
9. *For education*
10. *Connect a phonograph to a telephone and record conversations*



This picture shows one of the earliest telephones.

In 1871, Alexander came to America from Scotland, where he was born. He came to teach deaf children in Boston, Massachusetts. He also taught teachers of the deaf. Then, he began to experiment with inventing a way to send voices over wires. Alexander called his invention the telephone.

For months, Alexander and his helper, Thomas A. Watson, experimented with transmitters, or senders, and receivers. Then, the remarkable day came when the first voice was heard over a telephone. That day was March 10, 1876. Alexander was in one room with a transmitter. Thomas Watson was in another room with a receiver. Alexander accidentally spilled dangerous battery acid on his pants. Quickly he said into his transmitter, "Mr. Watson, come here, I want you." In the other room, Thomas heard Alexander's voice come out of the receiver. He rushed into Alexander's room and cried, "I can hear the words!" Because of that accident, with the genius of Alexander Graham Bell, the telephone was invented.

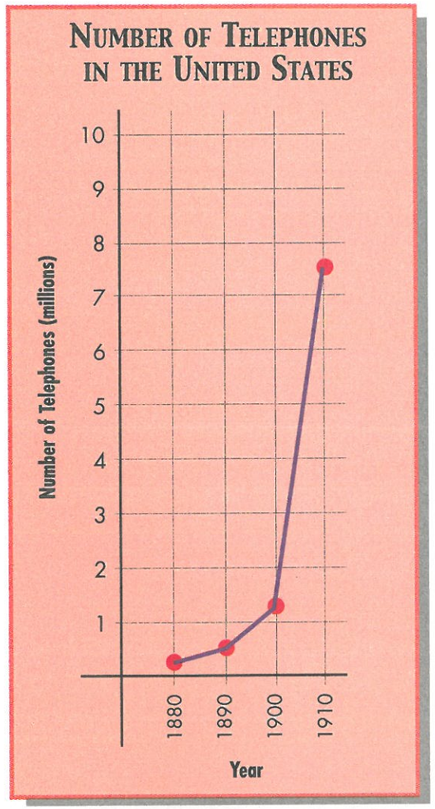
The Wizard of Menlo Park

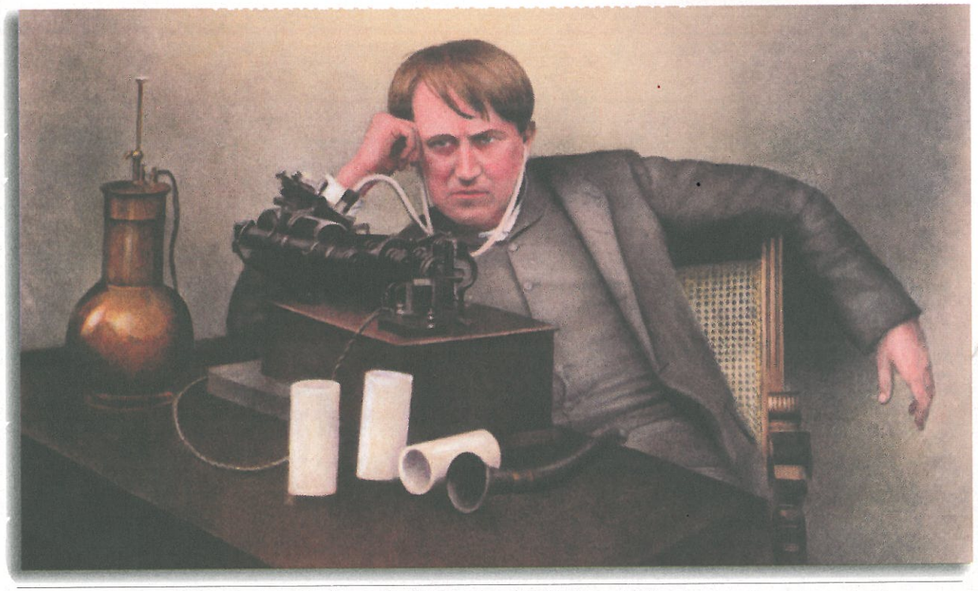
Thomas Edison could not serve in the Civil War, because he was deaf in one ear. During the war, he became a telegrapher. Many telegraphers had gone to work for the northern and southern armies. There was a lot of work for Thomas.

Near the end of 1869, when he was about 22 years old, Thomas left his telegraph job. One paper announced what he planned to do next: "T. A. Edison has resigned his situation and will devote his time to bringing out his inventions."

Even as a young man, Thomas was inventing things. Unfortunately, some of his first inventions were designed to fool an employer into thinking Thomas was working when he really was napping!

As a grown-up, some of Thomas's first inventions were improvements in the telegraph business. For example, he invented a new telegraph that quickly reported the buying and selling of stocks. When Thomas finished his invention, he offered to sell it to the Gold and Stock Telegraph Company. The company asked him how much he wanted for the rights to the machine. Thomas said, "Make me an offer." Secretly, he hoped he might get $3,000 for it. He must have almost fainted when he was offered $40,000! After he got the $40,000 check cashed, Thomas stayed up all night, because he was afraid someone would break in and steal his money.





Thomas Edison looks quite tired after having worked five days and nights to perfect the phonograph.

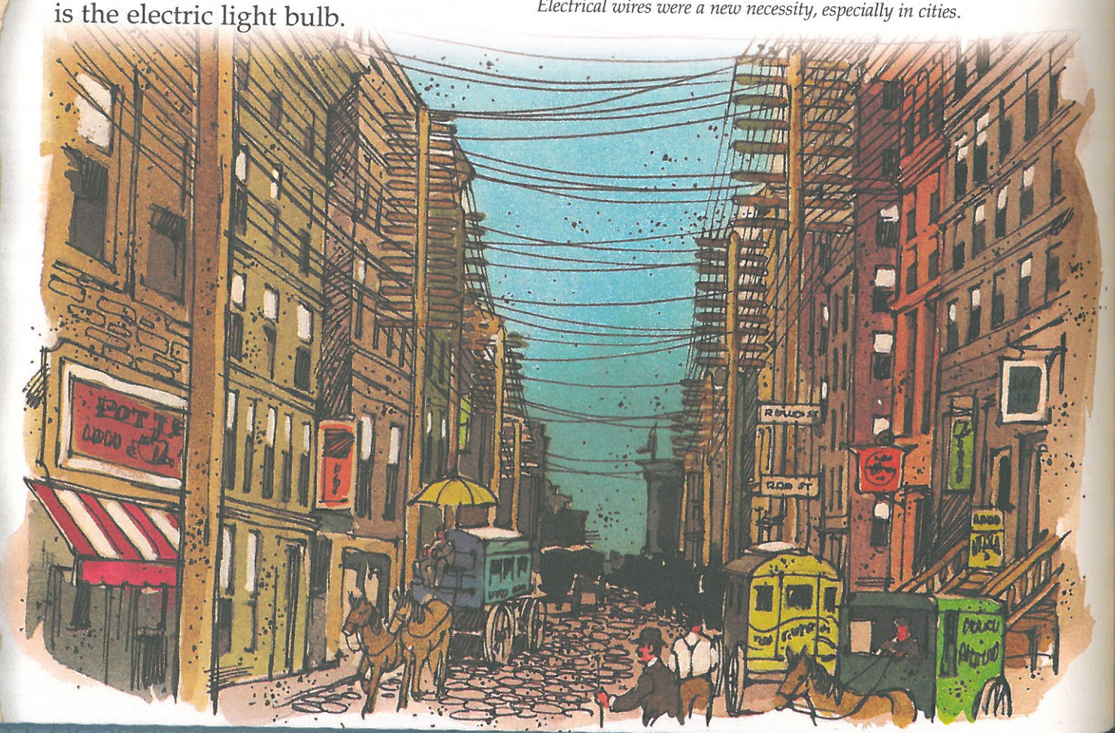
In 1876, Thomas built a laboratory near Newark, New Jersey, in the town of Menlo Park. He soon became known as the "Wizard of Menlo Park" because of all the things he invented there. He once said that at Menlo Park, he and his assistants produced "a minor invention every ten days and a big thing every six months or so."

One of the "big things" Thomas invented is something you might have in your home. It was the phonograph, or record player. Another "big thing" was the world's first motion picture machine. However, the "big thing" for which he is best known today is the electric light bulb.

Thomas Edison did not actually invent electric light. But, he did invent the light bulb that makes it possible to have electric light.

Thomas ran into a problem with his electric light bulb. There had to be electricity for the light bulbs to work. To answer this need, Thomas began building electric power plants. Before the 1800s ended, there were hundreds of Edison Power Plants making and sending electricity to thousands of people. No longer were nights lit only by candles and gaslights. Electric light bulbs had turned darkness into light!

Electrical wires were a new necessity, especially in cities.



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1865–1900

At his Menlo Park Laboratory, Thomas Edison and his staff worked on at least 40 projects at one time. His laboratory applied for 400 patents each year.

Under Thomas' direction, he and his staff were responsible for over 1,300 United States and foreign patents. Most if not all were applied for under Edison's name.

Use reference books, your local library, and the Internet to find the names of ten of Edison's interesting inventions and the year their patents were issued. Write your findings in the chart below.

Name of Invention	Date of Patent