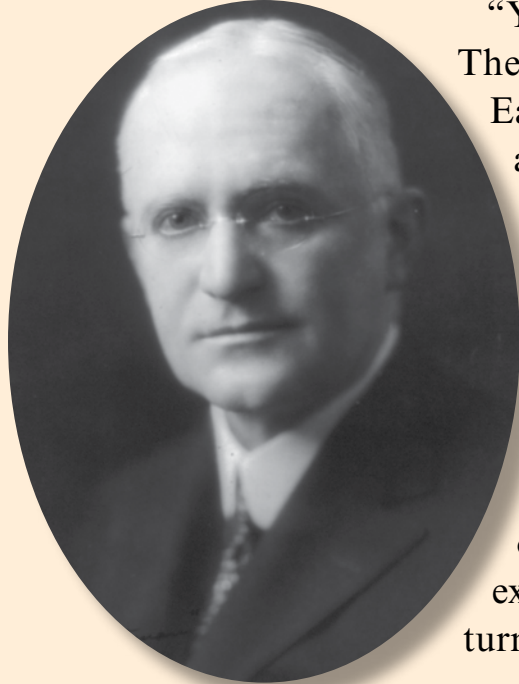




## George Eastman (1854–1932)



“You press the button, we do the rest.” These words were written by George Eastman. He was talking about the simple act of taking pictures.

George Eastman is known as the man who brought photography to people around the world. Before Eastman, photographers had to work very hard just to take a simple picture.

He became interested in photography on a family vacation. He began to experiment in his family’s kitchen. He turned his passion into a life’s work.

Eastman invented roll film and changed the way cameras worked. With that, even the common person could take a good picture. Eastman founded the Eastman Kodak Company. He registered the trademark name Kodak on September 4, 1888. Many people are surprised to learn that Eastman came up with the name Kodak by arranging some of his favorite letters into a word.

### Did You Know?

Kodak products support work on NASA’s Space Telescope. The telescope is designed to take images from outer space and send them to Earth for review.

Early camera →



## Faster Than the Speed of Light

Most people today know the work of such inventors as Daguerre and Eastman. Almost everyone has taken and enjoyed a photo. Other scientists are doing work that, while not widely known, may have even greater effects in changing the world as we know it. One of these scientists is Dr. Lene Hau. Hau has traveled faster than the speed of light! How did she do it? She didn’t go faster. She made light go slower.

Light travels at 300 million meters (186,000 miles) per second. That is, when nothing is in its way. In a substance, it slows down. For example, it slows to 225 million meters (140,000 miles) per second in water. In 1999, Hau froze atoms to an extremely cold state. Light passing through them slowed a great deal to 60 kilometers (37 miles) per hour. She found she could ride a bicycle faster than light! Then, further experiments led her and her team to stop light for a split second altogether! They actually made a pulse of light start and stop and start again. There’s no telling what this may mean for future discoveries.





# Thomas Edison (1847–1931)

Sound travels in waves, just like light does. The study of sound has led to many great inventions. Some have helped people communicate better, such as hearing aids and **telephones**. Some bring enjoyment, such as recorded music and movies. Some inventions improve our safety, and some are used to improve our health.

The advancements in use of light and sound have taken off in the last 100 years. Early pioneers of physics could hardly imagine our world today. Some scientists explored the subject of light and others studied sound. Some studied both. A very important pioneer in both light and sound is Thomas Edison.

As a young boy, Edison loved to study new things. He liked to read, too. But he didn't begin to speak until he was four years old. He did not do well in school. His teachers thought he wasn't very smart. His mother took him out of school and helped him learn at home.

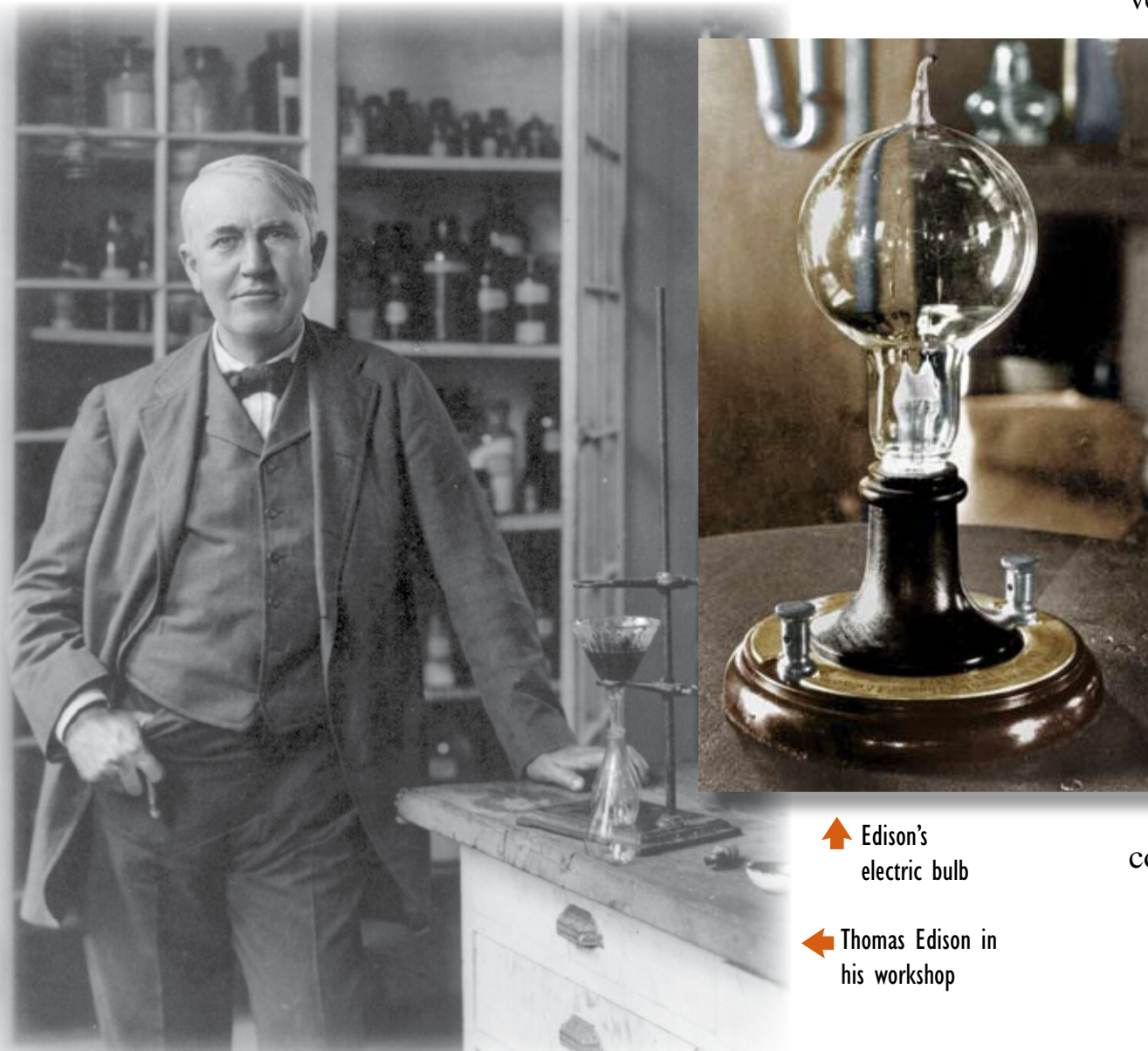
When Edison was a teen, he left home and traveled around the country. He began to work as a telegraph operator. The telegraph uses electric signals sent through wires to send messages. Edison thought he could use electricity in many other ways as well.

In 1879, he made the first long-lasting light bulb. He also made a generator to bring electricity to homes and businesses so they could enjoy the light bulb and other inventions.



## Hey! Is Anybody Out There?

Ann Devereaux is a communications engineer. She works for NASA. She has helped to develop communications systems on spacecraft. She was also part of the team that worked on communications for the *Mars Observer*. Who knows who Devereaux might be able to talk with in the future?



↑ Edison's electric bulb

← Thomas Edison in his workshop