

# Inventors

## Thomas Alva Edison and Alexander Graham Bell



**WHY THEY MADE HISTORY** Thomas Alva Edison and Alexander Graham Bell are two of the most important inventors in history. Their work influenced much of the technology of today's world.



*As you read the biography below, think about how each inventor contributed to the industrialization of the United States.*



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### **THOMAS ALVA EDISON (1847–1931)**

Thomas Edison experienced physical hardship as a child when he lost most of his hearing. Because of this, he had little formal schooling. He persevered, though, and entertained himself by building a lab for electrical experiments.

Edison's interest in electricity led him to **telegraphy**, which was one of the few practical uses of electricity at that time. He got a job as a telegraph operator, and soon began tinkering with the equipment. One of Edison's first inventions was an automatic telegraph that could send four messages at the same time.

Beginning in 1869, Edison turned his skills toward inventing full time. He created the first light bulb in 1879, and then developed a system for generating and distributing electric light and power.

Soon Edison opened an "invention factory" in Menlo Park, New Jersey, where he and his team of scientists produced many new innovations, including the phonograph and motion pictures. By the end of his life, Edison held 1,093 U.S. patents—the most patents that the U.S. Patent Office has ever granted to one person.

### **VOCABULARY**

**telegraphy** the use of an apparatus that uses coded signals to communicate over a long distance

**ALEXANDER GRAHAM BELL (1847–1922)**

An interesting link between inventors Edison and Alexander Graham Bell is hearing loss. While Edison lost most of his hearing as a child, Bell worked most of his life to improve the lives of people with hearing impairments.

In 1865 Bell began thinking of ways to transmit speech by electric waves. By then, he had moved from England to the United States and had started a school for the deaf in Boston. In 1876 Bell was granted a patent for his device. Three days later, Bell's famous sentence to his assistant, "Mr. Watson, come here; I want you," was transmitted by his invention—the telephone. Bell became a very rich man. He continued inventing such machines as a Graphophone, the first successful sound recorder. Bell also remained devoted to helping the deaf, resulting in detailed studies of deafness and inventions designed specifically for those whose hearing was impaired.

**WHAT DID YOU LEARN?**

- 1. Interpret** Why might these inventions have been especially important during this time in American history?

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- 2. Expressing and Supporting a Point of View** What do you think was the greatest accomplishment of Thomas Alva Edison or Alexander Graham Bell? Provide reasons or examples to support your point of view.

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**ACTIVITY**

- 3.** Think of an invention. Draw a diagram of your invention and write a description of how it works and how it would improve lives today.