

Thomas Alva Edison, inventor 1847-1931



Thomas Alva Edison is one of the greatest inventors in history and was responsible for more inventions than any other inventor. He created the first research laboratory, which he called *The Invention Factory*, probably one of his greatest achievements. Altogether he took out patents on 1093 inventions. Some of his inventions developed and improved other people's.

Edison was born in Ohio in the USA in 1847. At school his teacher thought his ideas were crazy and that he might have a learning difficulty. After that, his mother taught him at home. He was full of curiosity and she encouraged him to learn things for himself. He made working models of a steam engine and steam-powered sawmill, and experimented with chemicals.

He was a good businessman all his life. As a child, he grew vegetables and sold them in town. At 12 he got a job selling newspapers on a train, and, at 15, started his own weekly newspaper, which he printed on an old printing press on the train.

He worked as a telegraph operator and in 1869, at 22, he moved to New York where he worked for a gold company. When the machine that printed gold prices broke down, Edison fixed it, then invented a machine that did the job better. This invention made him a lot of money, and with it he set up his own workshop where he manufactured these machines, as well as telegraph machinery.

The famous inventions



Edison's favourite invention was the ***phonograph***, in 1877. He regarded it as a toy, and designed toys that used the device, including talking dolls and children's pianos. He improved it so that it could record and play music. Recordings were made on the surface of a metal cylinder, and the sounds were heard when a needle ran through grooves on the cylinder as it turned round and round. He experimented with recording on disks and tape.

In 1878 Edison worked to discover a way of improving the electric light bulb invented in England by Sir Joseph Swan. Electricity was passed through a filament wire to make the wire glow, and a glass bulb, from which air had been removed, enclosed the filament so that it would burn longer. Edison experimented with materials that would make a filament to produce an brighter light. In 1879, he used a filament made from burnt sewing thread, and in 1880 he used bamboo filaments. By the end of 1880 he had developed a 16 watt bulb that lasted 1500 hours. To make his invention practical for everyday life, he invented ways of producing electricity and distributing it through wires to homes and businesses. By the 1890s, hundreds of towns throughout the world had Edison power stations.



Edison also improved the telephone system that had been invented by Alexander Graham Bell, and sold the Edison telephone system in England.

Another Edison invention was the ***Kinetoscope***, a box containing a strip of photographs. When one looked into the box while the strip was moved, the objects in the photos appeared to be moving. He later invented the *Edison Moving Picture Machine*, an early cinema projector.



Edison set up the first film studio in 1893 and there his assistant Charles Batchelor experimented with combining moving pictures and sound. The Edison Studio produced the first talking motion picture in 1912.



This is Edison's laboratory for experimenting with sound recordings.

Edison died at West Orange, New Jersey, U.S.A in 1931 when he was 84. He had been married twice and had 6 children, three from each marriage. They were: Marion (born 1872), Thomas Alva Junior (b 1876), William (b 1878) and Madeleine (b 1888), Charles (b 1890) and Theodore (b 1898).

Did you know? In 1882 New York became the first city to be lit by electric lights using generators designed by Thomas Edison.

Find out more about Edison's life and inventions

http://www.homeschoollearning.com/units/unit_09-06-01.shtml

http://www.worldalmanacforkids.com/WAKI-ViewArticle.aspx?pin=wwwwak-012&article_id=637&chapter_id=14&chapter_title=Technology&article_title=Edison,_Thomas_Alva

<http://inventors.about.com/library/inventors/bledison.htm>

http://en.wikipedia.org/wiki/Thomas_Edison

Complete list of patents granted to Edison: <http://www.tomedison.org/patent.html>

If you use any part of this in your own work, acknowledge this source in your bibliography like this:

Sydenham, S. & Thomas, R. *Thomas Edison* [Online]
www.kidcyber.com.au (2000)

Updated February 2009 ©kidcyber

[Back to Technology and Inventions](#)