

# Inventors & Inventions

## Alessandro Volta



Alessandro Guiseppe Antonio Anastasio Volta was born in Italy in a town called Como (near Milan). In 1774, he was given his first academic job as principal of the state gymnasium in Como. Three years later, in the year 1777, he was given the job of Professor of Physics at the University of Pavia. Here he began to repeat experiments first done by Galvanis, with decapitated frogs! He attached a brass hook between the frog's brain and the body. When he put an electrical current through the brass hook, the frog's body twitched. In 1801, he went to Paris to show Napoleon his experiments.

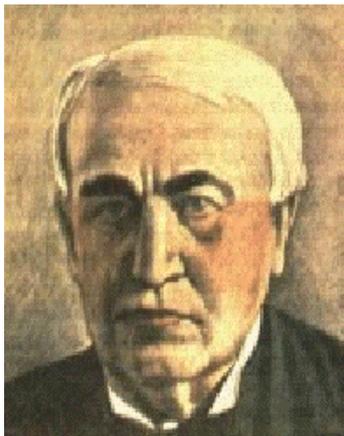
## Thomas Edison



Thomas Alva Edison was an only child and his mother, a former school teacher, taught him instead of sending him to school. Thomas loved to read, especially about Science where he then learned many experiments.

As a boy he had a great deal of imagination and curiosity, and was taken away from school because the teacher thought his non-stop questioning meant he was stupid. His first interest was chemistry, he read all could about the subject and he was only ten when he started growing vegetables, in the back garden and selling them so he experimented with them in the garage.

At the age of twelve he worked selling magazines and fruit on a train and starting printing a weekly newspaper on a printing press set up in the luggage van, but one day one of his bottles of chemicals broke and set fire to the van. He was kicked off the train and lost his job. He also suffered an injury that made him partially deaf. The paper was the first ever printed on a train.



A station-master, whose child saved him from an on-rushing train taught him Morse-code and Edison became a telegraphist. He worked in a few different telegraph offices in the United States and Canada. In 1869 he went to New York, he had no friends there and was in debt, but he had the luck to walk into a building of a telegraph company just as the telegraph stopped working. He was the only person there who could fix it, and after that he was given a good job with the company. Soon afterwards he made loads of

money by selling his design for a telegraphic instrument called a stock ticker that replayed information about share prices from the markets.

Edison developed a practical light bulb towards the end of 1879. In 1880, he designed this version - the first to have all the essential features of a modern light bulb - an incandescent filament in an evacuated glass bulb with a screw bottom.

A list of Edison's Inventions follows:

#### **1868**

- Invented the electrical vote recorder.

#### **1869**

- Invented the universal stock ticker.

#### **1872**

- Invented the "motograph".
- Invented the automatic telegraph system.
- Invented paraffin paper.

#### **1875**

- Discovered "Ethereic Force," an electric phenomenon that is the foundation of wireless telegraphy.

#### **1876**

- Invented the electric pen used for the first "mimeographs".

#### **1877**

- Invented the carbon telephone transmitter, making telephony commercially practical. This included the microphone used in radio.

#### **1877**

- Invented the phonograph. This was Edison's favorite invention. He sponsored the Edison Phonograph Polka to help make the new device popular.

#### **1879**

- Discovered incandescent light.
- Radically improved dynamos and generators.
- Discovered a system of distribution, regulation, and measurement of electric current-switches, fuses, sockets, and meters.

## **1880**

- Invented the magnetic ore separator.

## **1885**

- Discovered a system of wireless induction telegraph between moving trains and stations. He also developed similar systems for ship-to-shore use.

## **1891**

- Invented the motion picture camera.

## **1896**

- Invented the fluoroscope.
- Invented the fluorescent electric lamp.

## **1900**

- Invented the nickel-iron-alkaline storage battery.

## **1914**

- Invented the electric safety miner's lamp.
- Discovered the process for manufacturing synthetic carbolic acid.

## **1915**

- Conducted special experiments on more than 40 major war problems for the Navy Department. Edison served as Chairman of the Naval Consulting Board and did much other work on National Defence.

## **1927-1931**

- Tested 17,000 plants for rubber content as a source of rubber in war emergencies. A piece of vulcanized rubber was made from a strain that he developed.

*C. A. , N. B. and R. G.*

## Michael Faraday



Michael Faraday had a good life and became very famous. He did different things in different dates and years.

Here are some his dates and things he did:

In 1791 Michael Faraday was born in London.

Then in 1805 he was apprenticed to Mr. Riebau as book binder.

In 1812 Faraday became Humphrey Davy's assistant at the royal institution.

In 1813 he went on a European tour with Davy.

After a while in 1821 he married a young woman called Sarah Bernard.

Then in 1825 he was appointed director in the lab and he started a weekly Friday discourses and children's Christmas lectures.

In 1831 he discovered the electromagnetic induction.

In a couple of years (1838) Faraday got his first bout of mental illness.

Then in two years (1840) Faraday recovered temporarily.

Nearly twenty one years later (1861) Micheal resigns as lecturer at the royal institution.

In 1865 he retired.

And in 1867 he sadly died.

One or two other things Michael Faraday did was that based on the experiments he did himself on electromagnetic rotation, he was the first man to build a practical electric motor.

## James Watt

James Watt was born in Greenock, Scotland on the 19th of January 1736. He was the son of a merchant and town councillors. He went to Glasgow in 1754 to learn the trade of a mathematical-instrument maker, and after a year in London, he set up his business in Glasgow. The hammermens' guild caused trouble for him but Glasgow University made him its mathematical instrument maker, (1757-1763). He was employed on surveys for the Forth, the Clyde and the Caledonian canals (1767), also in the improvement of the harbours Ayr, Port Glasgow and Greenock, and in the deepening of the both the Forth and Clyde canals and other rivers.

As early as 1759, his attention had turned to steam as a force for movement. In 1763 he was asked by John Anderson to repair a working model of the newcomen steam engine. He easily fixed it, and seeing its faults, hit upon expedient of the separate condenser. He also improved the air-pump, steam jacket for cylinder, double acting engine and c. he entered a partnership with Mathew Boulton of Soho Engineering works. Watts soon superseded Newcomens machine as a pumping-engine and between 1781 and 1785 he obtained patents for the sun and the plant motion, the expansion principle, the double engine, the parallel motion, a smokeless furnace, and the governor. He described a steam locomotive in one of his patents (1784). He also invented a letter copying press, a machine for copying sculpture and c. The Watt, press, a machine for copying sculpture and c. The Watt, a unit of power was named after him.

A.H. + R.T.G.