

## Famous scientists and their inventions

Some famous scientists and their most remarkable inventions and discoveries

Invention is something you create by experimentation, where as discovery is finding out that already exists.



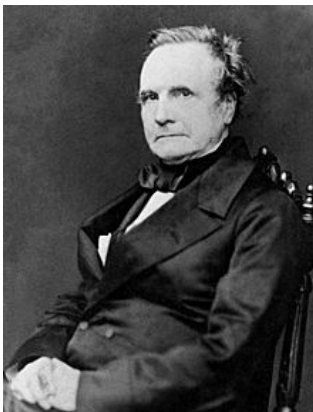
### **Evangelista Torricelli (1608-1647)**

The famous Italian physicist and mathematician is the inventor of the **barometer** (scientific tool used in the field of meteorology to estimate atmospheric pressure), built in 1643. It would be interesting to note that a number of Italian Navy submarines were named after the inventor.



### **Ferdinand Verbiest (1623 - 1688)**

Verbiest was an astronomer and a mathematician. He was the one to invent the world's first **automobile**. The inventor came up with the idea to create an automobile while visiting China as a missionary. His automobile was powered by steam, but could not carry humans.



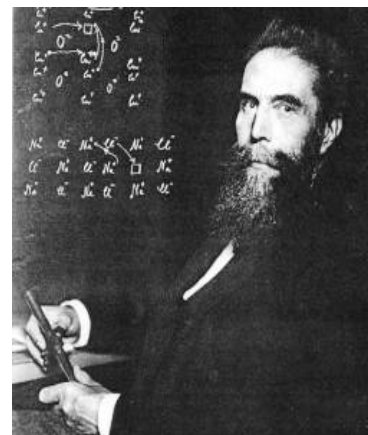
### **Charles Babbage (1791-1871)**

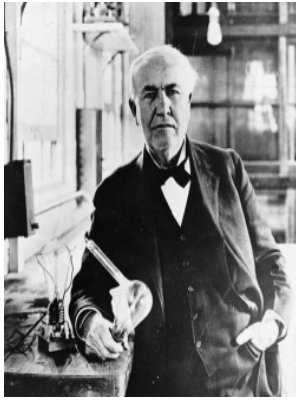
Charles Babbage was an English mathematician, philosopher, inventor and mechanical engineer who originated the concept of a programmable computer. Considered as "**Father of Computers**", Babbage is credited with inventing the **first mechanical computer** that eventually led to more complex designs.

### **Wilhelm Conrad Röntgen (1845 - 1923)**

The famous German physicist Röntgen is the one who discovered the **X-rays** (also known as Röntgen rays).

This invention allowed the German scientist to win the first Nobel Prize in Physics in 1901.



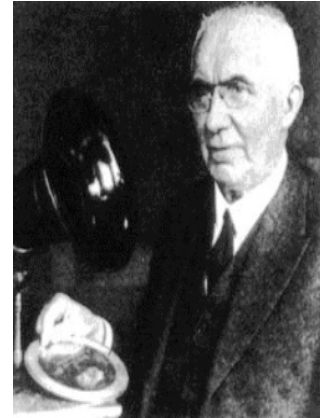


### **Thomas Edison (1847 - 1931)**

He has made a large number of inventions, but the most well-known one is the **electric bulb**. Among other discoveries of Thomas Edison there are telegraph devices, phonograph, carbon transmitter, direct current generator, universal electric motor, and more.

### **Emile Berliner (1851 - 1929)**

The German-born Jewish American scientist became known for his disc record **gramophone** (in the United States known as phonograph or record player). Used for recording and reproducing sounds on a gramophone record, vinyl record, the device (with certain modifications made once in a while) was popular until 1980s.



### **Alexander Graham Bell (1857 - 1922)**

During the experiments he carried out with the telegraph, Bell came up with the idea of the **telephone**.

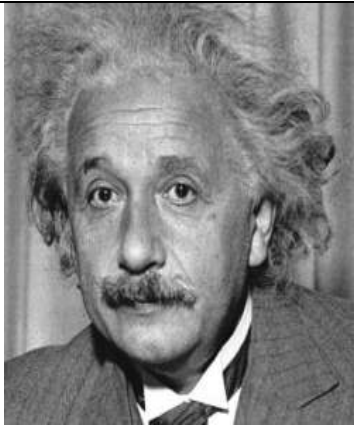
The inventor of one of the most popular devices today thought that the telephone was intruding, that is why he did not have one in his workplace.

### **Rudolf Christian Karl Diesel (1858 - 1913)**

Being a mechanical engineer, Rudolf Christian Karl Diesel managed to discover the **diesel engine**.

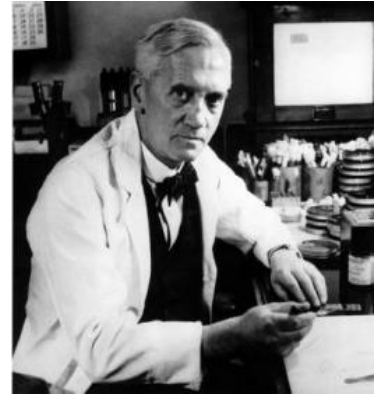
The German inventor was also a well-known thermal engineer, a polyglot, an expert in arts, and a social theorist.





### Albert Einstein (1879 - 1955)

One of the greatest scientists of the 20th century is the creator of numerous inventions and theories that transformed a lot of concepts linked to space and time, with the most important discovery being the **theory of relativity**. Other discoveries of Einstein include the **photoelectric effect** and the **Einstein calculator**.



### Sir Alexander Fleming (1881 - 1955)

During the World War I Fleming worked as an army medical doctor. He is the inventor of **penicillin** that prevented a lot of soldiers from being infected. The discovery of penicillin managed to significantly boost the evolution of medicine industry.



### Fritz Pfelemer (1881 - 1945)

The German-Austrian engineer is the inventor of the **magnetic tape** used for recording sound. Pfelemer decided to grant the right of use to the AEG, a German manufacturer of electrical equipment. The event took place on December 1, 1932. Based on Pfelemer's magnetic tape, the German firm created the world's first practical tape recorder dubbed Magnetophon K1.

### Frederick Banting (1891 - 1941)

Initially Banting was dedicated to politics but later decided to shift to medicine. In 1916 he completed his MD and during the World War I worked as a doctor. He was very interested in diabetes and continuously worked on a cure for it. Banting searched for cure for diabetes together with Dr. Charles Best. In 1923 the researcher was awarded with the Nobel Prize for discovering **insulin**.



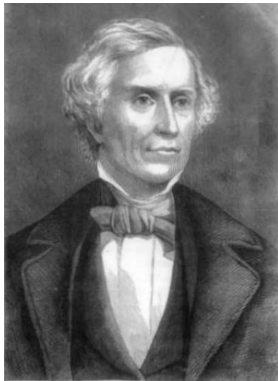


### **Edwin Herbert Land (1909 - 1991)**

The co-founder of the Polaroid Corporation was the first who came up with **low-cost filters for polarizing light** (useful system of in-camera instant photography). His most popular invention, **Polaroid instant camera**, was officially launched in late 1948 and allowed users to take and develop a picture in just under 60 seconds.

### **Konrad Zuse (1910 - 1995)**

Konrad Zuse built Z1, **world's first program-controlled computer**. Despite certain mechanical engineering problems it had all the basic ingredients of modern machines, using the binary system and today's standard separation of storage and control. Zuse completes Z3, world's first *fully functional* programmable computer in 1941.

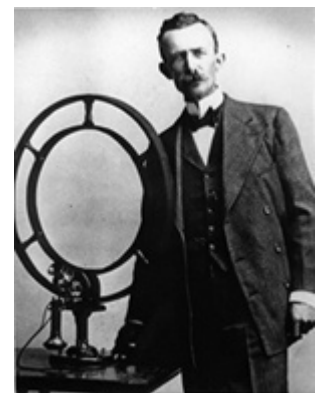


### **Samuel Morse (1791-1872)**

Samuel Morse was an American painter and inventor who is best remembered today for his invention of **single-wire telegraph system** and the co-inventor of the **Morse Code** – method of translating textual information as a series of on and off tones. His discovery changed the way the messages are sent and received in the entire world, and even today Morse Code is still in use in various areas of radio communications.

### **Guglielmo Marconi (1874 – 1937)**

Marconi was an Italian inventor, known as the father of **long distance radio transmission** and for his development of **Marconi's law** and a **radio telegraph system**. Marconi is credited as the inventor of Radio, and he shared the 1909 Nobel Prize in physics with Karl Ferdinand Braun "in recognition of their contributions to the development of wireless telegraphy"







### **John Logie Baird (1888 – 1946)**

Baird was a Scottish Engineer and inventor of the world's **first practical, publicly demonstrated television system**, and also the world's first fully **electronic colour television tube**. Baird's early successes demonstrating working television broadcasts and his colour and cinema television work earned him a prominent place in television's invention.

### **The Wright Brothers, Orville(1871-1948), Wilbur(1867-1912)**

The Wright brothers were two American brothers, inventors and aviation pioneers who were credited for inventing and building the world's **first successful airplane** and making the first controlled, powered and sustained, heavier than air human flight on December 17, 1903. In the two years afterward, the brothers developed their flying machine into the **first practical fixed wing aircraft**.



### **Marie Skłodowska-Curie (1867-1934)**

Marie Skłodowska-Curie was a Polish physicist and chemist working mainly in France, who is famous for her pioneering research **on radioactivity**. She was the inventor of **radium**. She was the first woman to win a Nobel Prize, the only woman to win in two fields and the only person to win in multiple sciences. She was also the first female professor at the University of Paris and in 1995 became the first woman to be entombed on her own merits in Paris.

### **Sir Chandrasekhar Venkata Raman (1888-1970)**

Sir Chandrasekhar Venkata Raman, an Indian Physicist, was the first to describe and explain in the review nature, in 1928, the experimental observation of the phenomenon in liquids. On 28<sup>th</sup> February 1928, through his experiments on the scattering of light, he discovered the **Raman Effect**. He was the recipient of the Nobel Prize for Physics in 1930.

