

◆ CONTENTS ◆

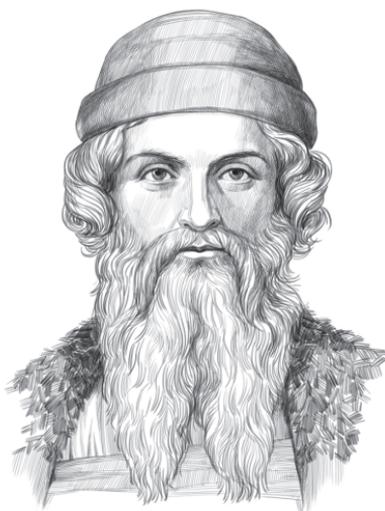
Introduction	4
Johannes Gutenberg	7
Louis Braille	15
Alexander Graham Bell	23
Thomas Edison	31
Guglielmo Marconi	41
John Logie Baird	51
Glossary	59

# Johannes Gutenberg



*c.*1400–1468

the man who invented the printing press



**I invented a machine to print books – the printing press. After my invention, books were cheaper and easier to make. Books spread ideas around the world. I started the information age. But during my life, no one valued my work.**



I went to school in Mainz, Germany. When I was young, there were very few books because it took several weeks to make just one copy. Books were written by hand, usually by priests. They wrote with a quill – a pen made from a bird’s feather – and it wasn’t always easy to read their handwriting. I asked myself, ‘Can I invent a machine to put words on paper?’ A machine can make more books in less time.

My training as a goldsmith gave me good ideas for a printing press. I started my experiments in Strasbourg in 1436. I had a girlfriend and we were engaged, but I didn't have very much money. So I couldn't get married and do my experiments as well. I had to choose – should I get married or continue my work on my printing press? It was so hard to decide that I couldn't sleep at night. Finally, after a lot of thinking, I told my girlfriend, 'I'm really sorry, but I can't get married. I need the money for my experiments.'

It was a difficult time. In my town, people had a bad opinion of me. My girlfriend was so angry that she took me to court because I broke my promise. And I was so poor that I had to borrow money to buy materials for my experiments.

In 1440, after four years of hard work, I invented a printing press that worked. It was a wooden press with 'movable type'. To make it work, I made small metal letters and put them in a wooden block. I used the same block to make several copies of the same page. My system was called 'movable type' because you could move the letters from one place in the block to another.

I was very pleased with my invention, but businessmen weren't interested in it. In 1444, I decided to open my own workshop. I printed some poems and in 1448, I printed the calendar for the year. I earned some money, but I couldn't pay off my debts.



Johannes Gutenberg's printing press



In 1450, I met Johann Fust, a rich man who gave me 8,000 guilders. His daughter's husband, Peter Schöffer, started to work with me in my business. Soon my printing press was working again. I did some small jobs – for example, I printed some poems.

Next, I wanted to do something big, so I borrowed more money from Fust and printed the *Gutenberg Bible*. It was a very beautiful book with 42 lines per page. But the cost of making each bible was much higher than the money I got for selling it. Soon my money problems were much bigger than before. My debt was very big now – 20,000 guilders.

My situation was very bad, but things got worse when, in 1455, Fust took me to court. He said, ‘Gutenberg borrowed some money from me to print books and used it to pay for other things!’ This was not true, but to my surprise, he won the case!

In one day, I lost everything – my workshop, my machine and all my materials! The court gave them all to Fust. He used my printing press to open a new printing company with Schöffer. Without my machine, I couldn’t work or pay off my debts.

After several years, I started printing again, but there was a lot of competition then. There were more than 100 printing companies in Germany and there were printing companies in France and Spain, too. And they all used my idea – the movable type system.

My machine changed the world, but no one thought my work was useful during my life. The printing press was a very important invention. With books, people could read and learn. With books, people could share political ideas and ideas about technology. My printing press started the information age.

## *The Life of Johannes Gutenberg*

- c.1400 Johannes Gutenberg was born in Mainz, Germany. He was the youngest son of a businessman.
- 1407 He went to school and learnt how to read and write.
- 1411 His family moved to Strasbourg.
- 1418 He studied at the University of Erfurt.
- 1420 He had a number of jobs. He worked as a goldsmith.
- 1430 He moved from Mainz to Strasbourg.
- 1434 He became a member of the Goldsmith's Guild.
- 1436 He began work on his printing press.
- 1437 He decided that he wasn't going to get married. His girlfriend took him to court.
- 1438 He borrowed money from Andreas Dritzehn to continue his experiments in printing.
- 1440 He invented the wooden press with movable type.
- 1444 He returned to Mainz and started a printing shop at Hof Humbercht.

## Amazing Inventors

- 1446 He printed the *Poem of the Last Judgment*.
- 1448 He printed the calendar for 1448. He borrowed money from Arnold Gelthus. He was his sister's husband.
- 1450 He borrowed 8,000 guilders from Johann Fust. Peter Schöffer started working with Gutenberg.
- 1452 He borrowed 800 guilders from Fust. He began printing the *Gutenberg Bible*.
- 1455 He had a debt of 20,000 guilders. Fust took him to court.
- 1456 Fust won the case in court. He was given Gutenberg's printing workshop by the court. Gutenberg lost everything.
- 1459 Gutenberg opened a small printing shop.
- 1468 He died in Mainz, Germany. He was 70 years old. At the time, no one thought his invention was important.

## ◆ GLOSSARY ◆

**acid** NOUN

a chemical, usually a liquid, that can burn your skin and cause damage to other substances

**alive** ADJECTIVE

continuing to exist or function

**antenna (antennae or**

**antennas)** NOUN

a piece of equipment that sends and receives television or radio signals

**army** NOUN

a large group of soldiers who are trained to fight battles on land

**basic** ADJECTIVE

simple and not having many different functions or special features

**battery** NOUN

an object that provides electricity for things such as radios, or for computer systems if the main power system fails

**beggar** NOUN

someone who lives by asking people for money or food

**benefit**

**for the benefit of someone** in order to help someone improve their life

**bible** NOUN

the sacred book of the Christian religion

**blind** ADJECTIVE

unable to see

**the blind** people who are blind

**block** NOUN

a large, solid piece of a substance that has straight sides

**career** NOUN

a job that you do for a long time, or the years of your life that you spend working

**case** NOUN

a trial in a court at which people decide whether someone is guilty of a crime

**chief** NOUN

the leader of a group

**church** NOUN

a building where Christians go to pray