

Technology V9/S3: The Printing Press

The printing press is one of the most revolutionary inventions in human history. The printing press had as big an impact on **information sharing** as the internet did. Before the existence of the printing press, **scribes** created handwritten copies of books (mostly the Bible). It could take years to make a copy of a book. Sometimes a scribe only completed one page in an entire day. This made written texts expensive, so many people did not read.

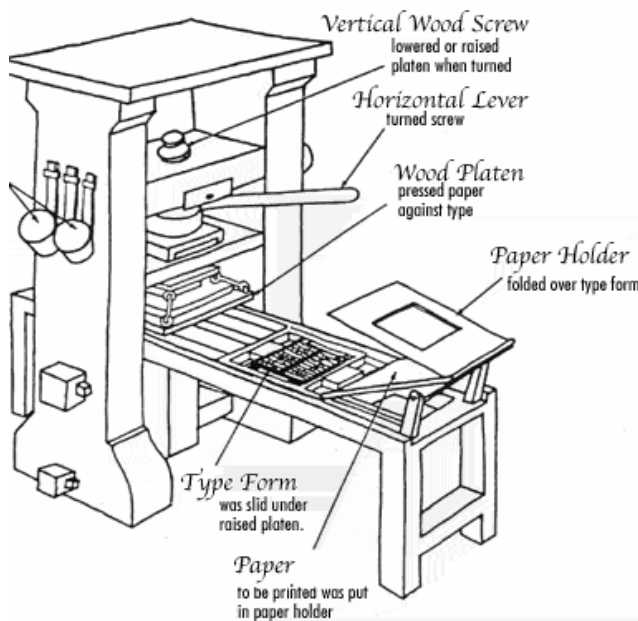
The first printing presses used letter blocks that could be changed to create new documents. The first printing presses were invented in China around 1040. In fact, the first book was printed in Korea. In 1450, **Johannes Gutenberg** adapted this technology to fit the characters used in European alphabets. This version of the printing press is called the **Gutenberg Press** and was invented in Mainz, Germany. The Gutenberg Press used metal letter blocks instead of porcelain or wood ones. This created more uniform lettering that eventually led to the development of **fonts and typography**.



The effects of the printing press are numerous. Printing presses were in hundreds of European cities by the year 1500, only 45 years after Europe's first printing press. Cities that adopted the printing press experienced economic and population growth. Cheaper information sharing created a demand for education, thus improving both trade and technology. Basically, people were able to share their ideas, and others were able to respond to those ideas more quickly than ever before.

One of the most important effects of the printing press in Europe was the development of specific languages. The ability to take a spoken language and solidify it on paper created official forms of each language.

Using the printing press was a time-consuming process by today's standards. Printing something today is as easy as pressing Ctrl+P on your keyboard. In the past, skilled workers were needed to operate the printing press. The worker needed to lay out each letter backwards so that it would



print in the correct orientation for the reader. If one word was misspelled, the document would need to be created again.

Step 1



Ink is applied to the letter blocks using "ink balls".

Step 2



The paper holder is put on top of the letter blocks.

Step 3



Both are then pushed under the platen.

Step 4



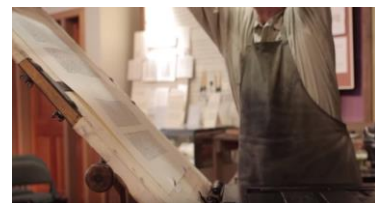
The lever is used to press the platen into the paper.

Step 5



The lever is released, and the form slides out.

Step 6



The newly printed paper is taken out to dry.