A reading public

THE INVENTION OF THE PRINTING PRESS was one of the most dramatic developments to affect the Renaissance world. Printing had first been developed in China, where movable type was used as early as the 11th century. But it was not until the 1450s that the method was adopted in Europe, when the German Johannes Gutenberg (c. 1398–1468) began printing entire books using movable type cast in metal. For the first time, exact copies of books could be produced quickly and cheaply. By about 1500 there were more than 1,000 printing workshops in Europe, mostly in Germany and Italy.

IN THE WORKSHOP
The bustle of a printing office was very different from the quiet of a medieval scribe's desk. This 16th-century picture shows everyone hard at work. The compositor sets type, the printers operate the press, and the proofreader checks a printed page for errors. Only the dog is asleep.

Qux postquam uates

ITALIAN ITALICS
German printers used thick, Gothic type that resembled that of old manuscripts. Italian printers cast smaller types, such as *italic*, shown above, and roman. With these typefaces, more words could fit on a page, so fewer pages were needed, and books became smaller and cheaper.

GUTENBERG BIBLE
Gutenberg was a skilled craftsman. He built his printing press by applying the principle of the press used to crush grapes for wine, and he engraved metal punches for molding the type in relief. His workshop could print about 300 sheets each day. In 1455, Gutenberg produced his first complete printed book – the Bible. His edition, known as the Gutenberg Bible, contained more than 1,200 pages in two volumes, and it probably took several years to set and print.

Pieces of type specially shaped to fit neatly together

Printed books continued to be decorated by hand

PROUD PRINTER
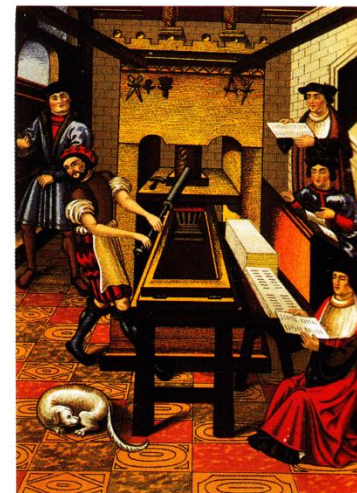Johannes Gutenberg displays a newly printed sheet in his workshop.

Grip

TYPESETTING
Each character, or letter, was cast (in mirror image) on a separate piece of type. The compositor picked out the type and set it in order on a "stick," left. Spaces between words or blocks of text were filled with blank "leading." The movable grip on the left fixed the line length.
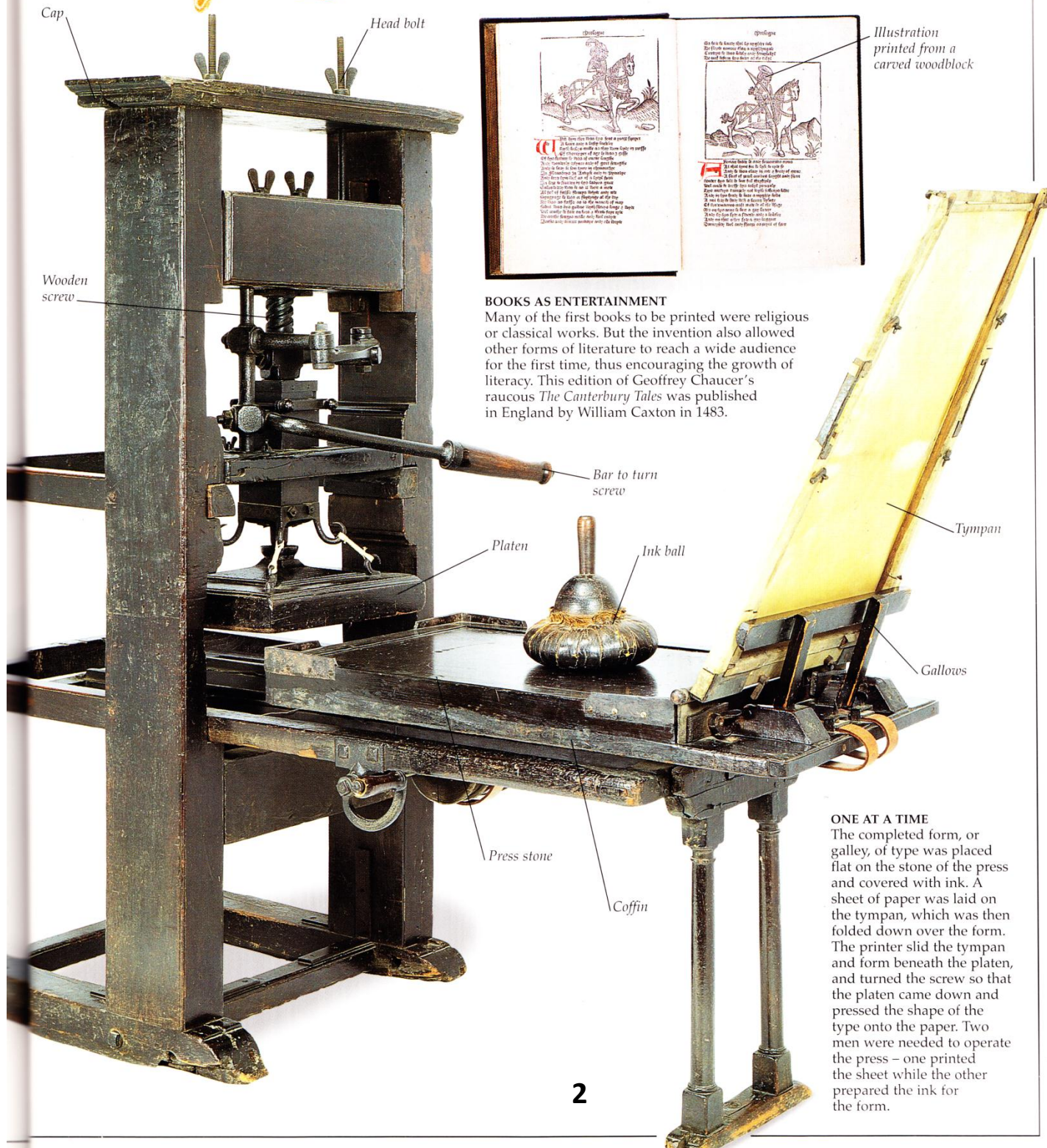
Cap

Head bolt

Illustration printed from a carved woodblock

BOOKS AS ENTERTAINMENT
Many of the first books to be printed were religious or classical works. But the invention also allowed other forms of literature to reach a wide audience for the first time, thus encouraging the growth of literacy. This edition of Geoffrey Chaucer's raucous *The Canterbury Tales* was published in England by William Caxton in 1483.

Wooden screw

Bar to turn screw

Platen

Ink ball

Tympan

Gallows

Press stone

Coffin

ONE AT A TIME
The completed form, or galley, of type was placed flat on the stone of the press and covered with ink. A sheet of paper was laid on the tympan, which was then folded down over the form. The printer slid the tympan and form beneath the platen, and turned the screw so that the platen came down and pressed the shape of the type onto the paper. Two men were needed to operate the press – one printed the sheet while the other prepared the ink for the form.