From Gutenherg
to
The Cunen Press



THE PRINTING PRESS Woodcut by Jost Ammann, Frankfurt a.M., 1568

FROM GUTENBERG TO THE CUNEO PRESS

An Historical Sketch of the Printing Press

BY

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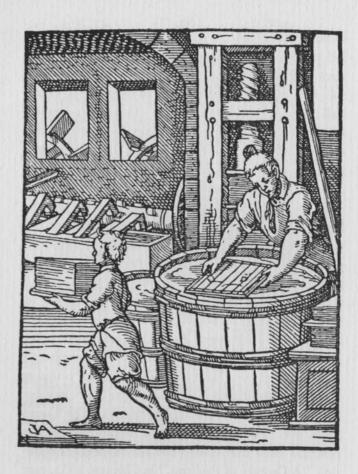
GUTENBERG EXAMINING A PROOF - FROM THE BAS-RELIEF ON THE PEDESTAL OF THE GUTENBERG STATUE IN THE CITY OF MAINZ

LTHOUGH the word "Press" is receiving many interpretations in our modern age, it is rather surprising to find very few publications on the printing press that are historically accurate and technically complete. "The power of the press" is a proverbial expression of the twentieth century, yet it applies only to the magazine and newspaper industries. One often speaks of a certain "Press," using the word for a firm's name. The freedom of the press, press policies, and even press laws, are all current expressions giving only a slight indication of the far reaching social, economic and

political influences of the press. Why is it, then, that in the hundreds of histories written on Printing only a few instances are found of a thorough historical research on the early printing press, while our modern presses, from a simple cylinder press to the most complicated precision color-rotary press, have such an important position in our daily life?

It is a generally accepted theory that printing from movable type was practiced in Eastern Asia centuries before it was known to the Europeans of the Middle Ages. In the sixth century wood-block printing is already found in China, and two centuries later in Japan also. It is, however, not until the beginning of the fifteenth century that the first wood-block prints are discovered in Europe. Of these, one of the earliest and actually dated prints is the one of St. Christopher of 1423. These wood-block prints and the first block-books are looked upon by many authorities as an intermediate stage which may have given the idea of typography. It is especially in this almost "popularized" study of the early documents of printing, that not the press, but the picture and the type have been the main subject of research.

The theory concerning the invention of Gutenberg set forth in D. B. Updike's "History of Printing Types," Vol. I, Harvard University Press, is generally accepted as correct and reads: "Gutenberg's invention consisted, apparently, in making brass moulds and matrices by which type could be accurately cast

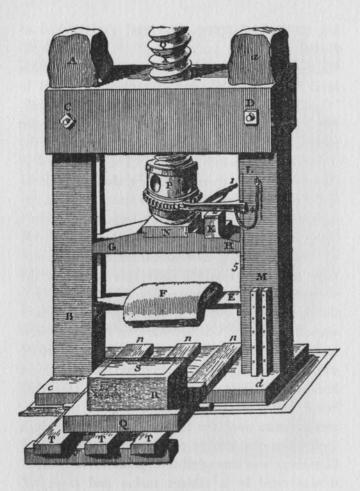


THE PAPERMAKER
Woodcut by Jost Ammann,
Frankfurt a.M., 1568

in large quantities. As Mr. De Vinne reminds us, relief printing, paper, wood-engraving, printed books, even the printing-press, and perhaps the idea of movable types, were not attributable to Gutenberg. These had all been thought of already. Gutenberg availed himself of the different experiments of his predecessors and made something which, however it has been improved upon in detail today, has not been improved upon in theory."

In the many priceless publications of the Gutenberg Society of Mainz, and in the laboratories of the Gutenberg Museum, many hotly disputed questions concerning the early history of printing have been answered during the last twenty-five years. As a result of studies made and of the tireless efforts of men, such as Dr. A. Ruppel, Director of the Museum in Mainz, Gustav Mori, Karl Dieterichs, and other authorities, a complete reproduction of Gutenberg's workshop has been achieved. The honor of bringing this entire exhibit to America for the first time belongs to Mr. John F. Cuneo, President of The Cuneo Press, Inc. The Gutenberg shop is built on such a practical basis that during the International Exposition, "A Century of Progress," in Chicago, 1933, type will be cast in the same procedure as that ascribed to Gutenberg's own operations. Facsimile pages of some of the most famous printed works will be set in this type and printed on the old Gutenberg hand-press.

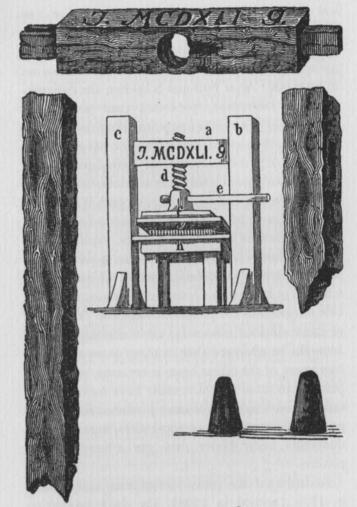
The following notes on the development of print-[10]



PAPER-PRESS
Encyclopaedia of Diderot
[11]

ing are without doubt of general interest, and of special interest to printers, publishers, advertisers, and to all occupied in the graphic arts: The woodblock illustrations of Jost Ammann, published in "Guilds and Crafts" by Siegmund Feyerabend, Frankfurt a.M., 1568, give quite a clear conception of the paper-maker, the type-founder, and the printer of the fifteenth and sixteenth centuries. The paper-press as shown on page 11 is presumably a close predecessor of the printing press. As it was a strict custom in the paper-makers' guild that each apprentice, before being accepted as a craftsman, had to swear that wherever he worked he would never tear down anything old or let anything new come up, it is easily understood how the construction of the paper-press did not change during several centuries. Only a vertical movement was necessary for the paper-press in order to press the water out of the paper stack, while the printing-press required two movements: an horizontal, to bring the type-form under the pressboard, and a vertical movement to bring the necessary pressure upon the form. In a testimony given during one of the many court proceedings in which Gutenberg was entangled throughout his whole life, it was cited by a cabinet maker and carpenter, Sahspach, that the press was of very simple construction.

The first authentically recognized and dated document of printing from movable type is the astronom[12]



EXCAVATED FRAGMENTS OF SO-CALLED GUTENBERG PRESS
Attempts of Reconstruction

[13]

ical calendar of the year 1448. And the first book printed at Mainz is the famous forty-two line Bible, a copy of which was acquired for the Congressional Library in Washington, D. C., at the price of \$500,000. After Fust and Schoeffer, the two associates of Gutenberg, published their well-known Psalter (1457) with the first printed two-color initial, and Sweynheyn and Pannartz had set up a press in Italy in 1465, the University of Paris invited three Germans to mount their presses there, whereupon Lyons followed the example; and in a "Dance of Death" (Danse Macabre) from Lyons, 1499, we find the first view of a composing room, printing office and bookstore. In 1548 we find also a picture of a press in Zürich, Switzerland, used by Christoph Froschauer for his "Swiss Chronicle." This is one of the best drawings of the presses of that time. Yet, many of these old illustrations are not technically correct. It might be observed that in many cases the spiral movement of the center beam is reversed, so that the press as pictured would actually have moved to the ceiling and would never have produced the desired print. The carpenters of those days, however, undoubtedly knew better than the artists of these pictures.

According to the Printers Regulation of Frankfurt in 1573 (revised in 1598), the daily production amounted to an average of 3,600 prints. This can be regarded a high average, considering all the motions

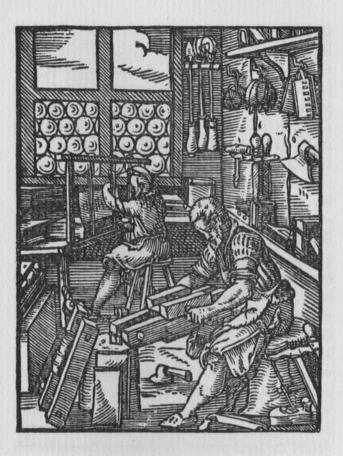
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> Type Facsimile of 42-Line Bible by Gutenberg Mainz, 1452-1455

> > [15]



THE TYPEFOUNDER
Woodcut by Jost Ammann,
Frankfurt a.M., 1568
[16]



THE BOOKBINDER
Woodcut by Jost Ammann,
Frankfurt a.M., 1568
[17]

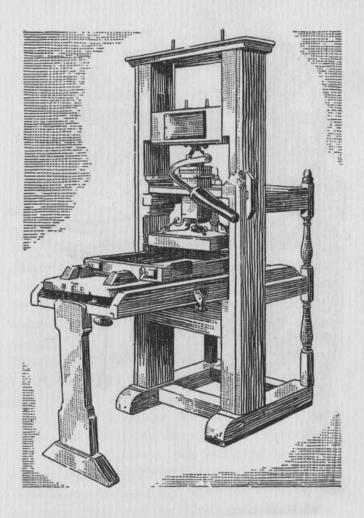
that were necessary to get a single print. The working time totalled then fifteen hours per day, including meal time, making an hourly production of 240 prints. A picture of 1618 shows an hour-glass on a printing press and indicates that already in those early days time was an important factor in printing, and that time studies of our modern age have a very early origin.

With the introduction of the use of metal many of the wooden parts of the old hand-presses are replaced. Many improvements are noticeable in the hand-press of Wilhelm Blaeu of Alkmar in Holland. (See page 19.) The Franklin Press deserves mention here, for Benjamin Franklin worked as a pressman for Watts in London on a hand-press, which after many travels finally found a proper place in the Graphic Arts Department of the U.S. National Museum in Washington, D. C. It was not, however, until the middle of the eighteenth century that a new construction of a press made almost entirely of castiron by the typefounder Wilhelm Haas in Basel, Switzerland, opened the way for the quantity production of the hand-presses. And during the nineteenth century a great number of presses were produced in America and in England, of which the Stanhope, the Columbia Press, and the Washington Hand-Press were distributed to all parts of the world.

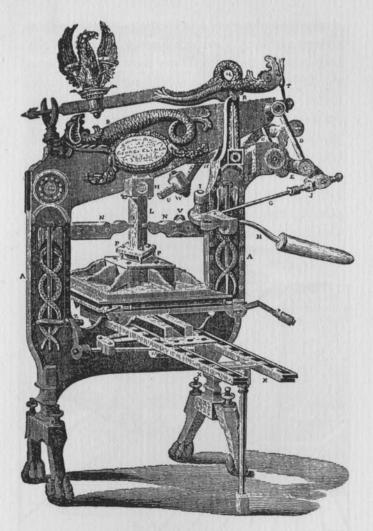
Printing entered a new epoch at the beginning of the nineteenth century. Invention after invention



BLAEU HAND-PRESS Alkmar, Holland [19]



Franklin Press, 1720, United States National Museum, Washington, D. C. [20]



COLUMBIA PRESS 1820 [21]

revolutionized the old hand-setting and printing procedures. In 1814, Frederich Koenig, a native of Saxony, invented the first cylinder press which was commercially successful and was used by the London Times. In 1886, the New York Tribune installed the first "linotype" machine, invented by Otto Mergenthaler, replacing the old procedure of setting type. Hand in hand with the inventions and developments in the fields of Electrotyping, Stereotyping and Lithographic processes, go dozens of inventions in printing press construction which have made possible our modern newspaper, magazine and general printing industry.



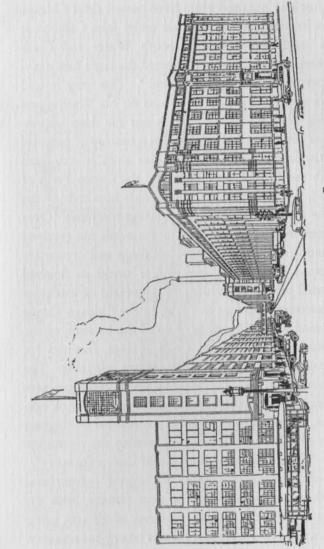
Danse Macabre, Woodcut, Lyons, France, 1499 [22]



PRINTSHOP
From a Copper Plate, Vienna, 1805
[23]

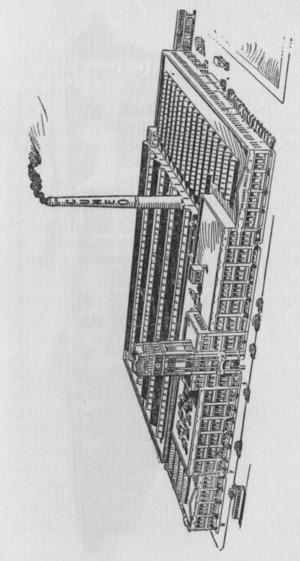
THE CUNEO PRESS BUILDINGS IN CHICAGO

IT IS impossible to mention in a sketch of this kind all the technical changes and inventions from the time of Gutenberg, when 3,600 impressions in a work day of fifteen hours was considered "high production" as compared with the same number of impressions produced in less than one minute by the modern rotary machine. Although for four centuries the type, or printed letter, was the dominating factor in the history of graphic arts, and the hand-press held a minor interest, it must be recognized today that the press now so highly developed, the fast cylinder and rotary press in all their variety of one to four color construction, takes the major place of importance in the present day industrial life. Yet, even in these days of mechanical progress and industrialization of printing, the works of the masters, Gutenberg, Fust, Schoeffer, and their early successors, are still worthy of admiration. It is gratifying, therefore, to see one of the world's largest printing institutions carrying on the ideals of fine craftsmanship set up by the early pioneers. The Cuneo Press, Inc., with plants in Chicago, Milwaukee, Philadelphia, and New York, is producing in its workrooms the finest examples of the various lines of printing-Magazines, Rotogravure Supplements, Catalogs, Books, Brochures, Time Tables, Labels, Booklets-perpetuating for all time high standards of craftsmanship. In the Cuneo Studio will be found many beautiful books bound according to the best traditions of that age old craft.

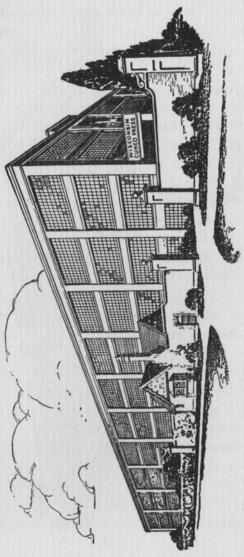


Just one hundred years have passed since Chicago saw its first printing press set up by John Calhoun at the southwest corner of South Water and Clark Streets, in 1833, where he started the city's first newspaper, the "Chicago Democrat." The story is told that when Calhoun printed jobs on his Washington press, his wife would smooth out the deep impressions with a hot sad iron. What a century of progress is realized when this little print shop is compared with the five Chicago plants of the Cuneo Press of 1933, where floor upon floor holds hundreds of the most modern labor-saving printing machines. Over fifteen million pounds of raw materials are received monthly in the Cuneo Press buildings and in turn are shipped out to all parts of the world as finished printed products. As many as sixty-eight carloads can be accommodated at one time in the Chicago Cuneo railroad terminal, and because of the location of the Cuneo buildings on the Chicago river, facilities for transportation by lake steamers are available. The Cuneo Press, Inc., in spite of tremendous mass production of some of the leading magazines, book editions, and other literature, has maintained the highest type of printing and binding, earning the reputation of-"Cuneo Quality-the basis of Cuneo Quantity".

Such has been "A Century of Progress"—from hand work to machine. May the next century, with the help of Printing Art, the preserver of all arts, bring still more knowledge and greater beauty to humanity.



THE CUNEO PRESS BUILDING IN PHILADELPHIA · PENNSYLVANIA



SS BUILDING IN MILWAUKEE · WISCONSIN

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