



AMERICAN WOOD TYPE

{ 1828 }
{ 1900 }

by Rob Roy Kelly

The Early Use of Wood in Printing

The history of wood as a printing material has been interwoven into legend as well as fact ever since the inception of the printing arts. Generally, wood has been a prototype medium, and when wood was used originally for letterforms or illustrations, it was almost always supplanted at a later date by an improved material, such as metal, which could be cast, engraved, or etched. Wood preceded other materials simply because it was available in all parts of the world, was comparatively easy to carve, and was capable of receiving and transferring ink exceedingly well by either rubbing or pressing.

It seems logical that printing from raised surfaces on wood may have evolved through the use of seals, stencils, or rubbings, as all three of these processes are extremely ancient. At least two of the techniques, rubbing and printing from seals, include characteristics basic to relief printing: raised printing surfaces and the potential for multiple impressions. Wood, as well as stone, metal, and clay were the principal materials used in these techniques. While it is not definitely known that seals, rubbings, and stencils originated in China, it is certain that all three were used there at an early date, and on the basis of existing evidence, that there was some continuity from one or more of these processes to block printing.

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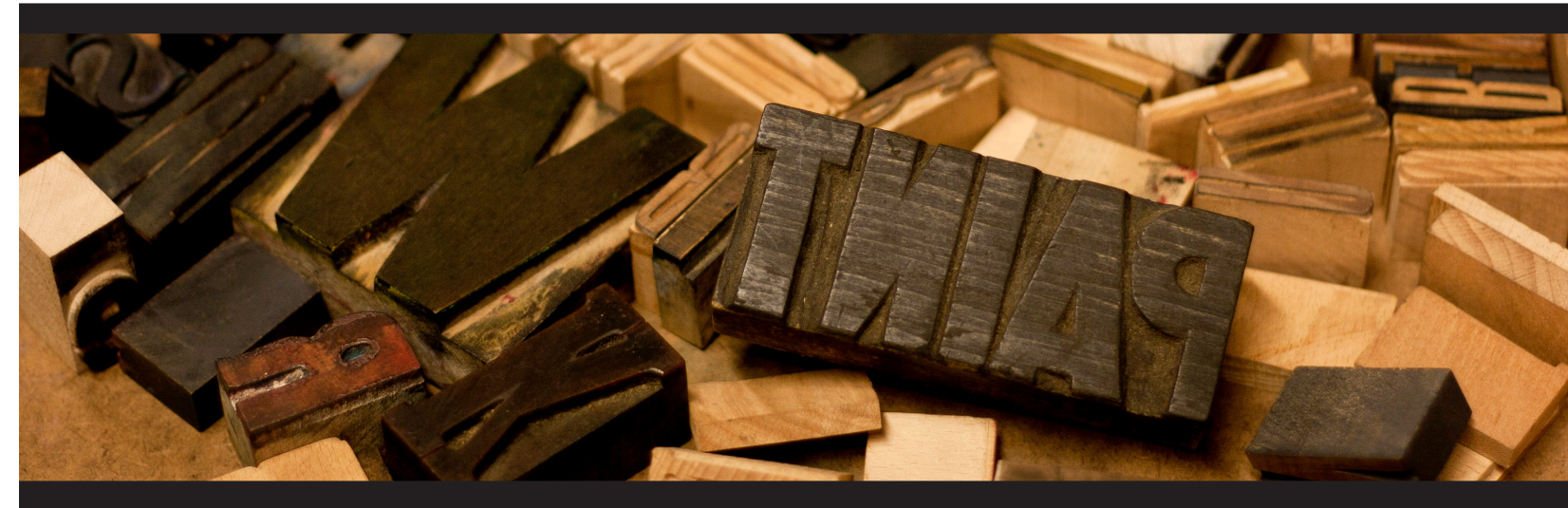
Wood Type Findings

The Diamond Sutra earliest known wood block print in Chinese history, dates from 868. It was found with an accompanying volume containing identical comments, which had been reproduced by the rubbing technique. Even though an earlier block print dating from 770 had been printed in Japan, the Diamond Sutra demonstrated such a high degree of refinement that the art of block printing must have been practiced by the Chinese for a number of years previously. Another believed forerunner of the block print in China was a wooden stamp. The image on these stamps was most often that of Buddha and was quite small. Provided with handles to facilitate their use, the stamps must have been similar to the rubber stamps used in offices today.

At about the same time the Chinese began printing pages in books in place of the traditional scrolls, they began producing playing cards printed from wooden blocks. It is interesting, and perhaps even significant that playing cards printed from wooden blocks date among the earliest examples of printing in both the Eastern and Western civilizations, although printing in China occurred several hundred years earlier than printing in Germany, Italy, and France.

Decorated Letters

The earliest letter forms to be engraved on wood by the printer would usually fall into one of two groups: the ornate initials which were patterned after the works of the scribe, or letters too large to cast with the conventional molds, which were used for public notices or occasionally for title pages of books. These large letters were copied after existing styles of cast type, but might include additional flourishes or other modifications resulting from the comparative ease of engraving on wood. These two categories of large and decorated types represent an extremely simple breakdown of what we now refer to as display types. Of course, the use of text types for display is not denied. Text type initials, all capitals, or arranged with special spacing was the most common means for display until the development of a separate classification called display type.



photos courtesy of SDSU Students

The oldest known wood block found in Europe is dated 1423. Depicting St. Christopher, the print has a Latin legend boxed at the bottom, which was engraved in conjunction with the illustration, much in the same fashion that pages of the xylographic books were to be printed at a later date.

For the printing of letter symbols, the use of wood again may be traced back to the Eastern civilizations. Thomas Carter, in the *Invention of Printing in China and Its Spread Westward*, describes probably the oldest movable types ever found. These types, word rather than alphabetic symbols carved on wood in the language of the Uigur Turks, date from around

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1300. They were found in caves of Tun-Huang by Pelliot. Also reported by Carter are the movable wood types of Wang Chen, which were described by Wang in great detail at the close of his *Book of Agriculture*, written around 1313.

In Europe wooden block books, most frequently religious in content, preceded the invention of movable metal type by many years. It is known that the printing press was used in the printing of these block books, and also that the first oil-based inks came into general use at the same time. Both the press and oil-based printing inks were Western contributions to printing. Whereas the concept of movable type and paper came from the East.

"Both the press and oil-based printing inks were Western contributions to printing."

The evolution leading up to cast display types were relatively slow until the first years of the eighteenth century, when the range of influences became increasingly varied, finally culminating during the nineteenth century in an explosive synthesis of historical revivals, improved technology, increased commercial demand and creative energies. The fanciful letterforms of the penman, the delicacy and flourish of the metal plate engravers and etchers, the

tone and fluidity of the lithographic artist all challenged the competitive instincts of the type foundry and had a profound effect on the design of type forms, particularly the decorated ones.

The earliest decorated letters were large woodcut initials usually cut onto the side-grain of the wood. Because the letters were extremely vulnerable to damage, particularly so with the crude presses of that day, printers soon began to rely on let-

ters engraved on type metal, brass or copper, for longer runs. Wood was used only for the shorter runs. Decorative initials were not cut in complete alphabets, but only the letters required for a specific text. Also, as with ornaments and borders, the printer would often use these ornamental initials for other books or posters, where out of context they often appeared peculiar, if not naive.

Advantages of Wood Type

As previously stated, the use of wood in printing and as a material for making type had been known for hundreds of years before the nineteenth century. In America, with the expansion of commercial printing in the first years of the nineteenth century, it was almost inevitable that someone would perfect a process for cheaply producing the large letters so much in demand for broadsides. Wood was a logical material because of its ready availability, lightness, and known printing qualities.

Darius Wells of New York City, who finally found the means for mass-producing wood letters in 1827, published the first known wood type catalogue in March, 1828. Wells introduced a basic invention, the lateral router, which in combination with the pantograph added by George Leavenworth in 1834, constituted the essential machinery for making end cut wood types. In 1880, I D. Hamilton of Two Rivers, Wisconsin, perfected a veneer type which he was able to sell for less than half the price of

end wood types. William H. Page and George Setchell, in 1887, patented and manufactured a die stamped type which, though limited in sizes and styles, was superior to veneer and sold for the same price.

A celluloid faced wood type was marketed in New York City around 1885, and this type, along with end-cut, die stamped, and veneer types, represented the four principal kinds of large wood letters manufactured between 1827 and 1900.

Darius Wells made the following remarks :

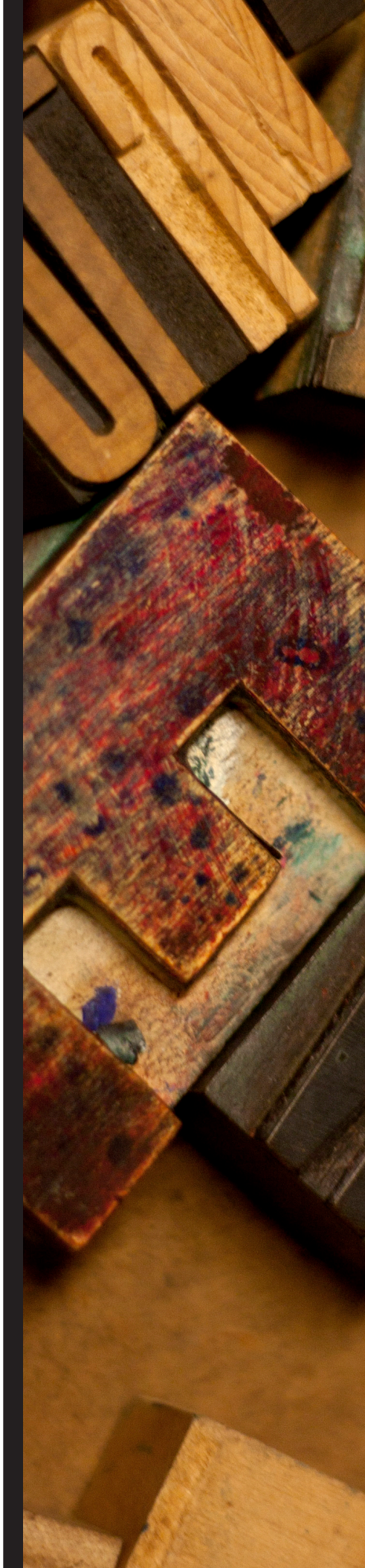
1 "The cost of metal types of the sizes here offered, especially the larger, precludes their use, except by a few who are extensively engaged in job printing. This objection is now completely obviated, as the prices of those offered, are less than one half those of the Founders."

2 "In point of durability, they possess the same advantage over metal types, that wood cost do over stereotype ones. Besides, they are incomparably less liable to damage by carelessness and accidents."

3 "These types are prepared with a machine, which gives them a perfectly even surface, and renders their height exact and uniform, while large metal types are more or less concave on the face, arising from the unequal cooling of the metal when cast."

4 "The difference in the value of the material, after the types are thrown aside, is greatly overbalanced by the fact, that the interest on the cost of a metal font, would in less than seven years pay for a wood fount equal in size and beauty, and more durable."

5 "The perplexity and loss arising from the breaking of metal types through the centre, as well as of the descending and kerned letters, is completely obviated by my wood letter. This advantage, all printers, especially those at a distance from foundries, will know how to appreciate. The subscriber is enabled to state from experience, that the use of wood types when carefully prepared in the manner of those in this specimen, are in no respect objectionable; that they are more convenient in many respects, are more durable, and cost only from one quarter to one half those of metal."





Time was to prove Wells' observations correct, and it appears that not only was he successful in the wood type venture from the beginning, but in the preface to his 1840 catalogue he was able to remark, "Having in the year 1827, originally established the business of Wood Letter Cutting, it is with no small satisfaction that he (Wells) views the great improvement in Job Printing that has in consequence taken place." For want of large type, no larger posting bills than of medium size were then printed, and these exhibiting but a lean variety; while the metal type cost so much as to limit their use to a very few establishments. The manufacture of Wood Type formed a new era in job printing; and the use of them, although at first opposed by a strong prejudice, has now become general; and the universal satisfaction they have given, attests the high estimation in which they are held. In regard to their cheapness and durability, no argument is now necessary.

"Wells views the great improvement in Job Printing"

"The manufacture of Wood Type formed a new era in job printing."

Going back in time

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- 770 077 **Block printing in Japan**
- 868 868 **Diamond Sutra, is the earliest known Chinese wood block known in history**
- 1300 0031 **Uigur Turks language, word rather than alphabetic symbols carved on wood**
- 1423 1423 **The oldest known wood block found in Europe**
- 1827 1827 **Darius Wells of New York City, found the means for mass-producing wood letters in,**
- 1828 1828 **Wells published the first known wood type catalogue**
- 1834 1834 **George Leavenworth, invented the pantograph**
- 1880 0881 **I D. Hamilton, perfected a veneer type**
- 1887 1887 **William H. Page and George Setchell, patented and manufactured a die stamped type**
- 1885 1885 **A celluloid faced wood type was marketed in New York City**

Design Issues

Art Forms in Typography

AMERICAN WOOD TYPE

The History and inventors of mass production.

5 FACTS OF METAL TYPE vs WOOD TYPE

TRIP

PRINT



DESIGN ISSUES

Art Forms in Typography



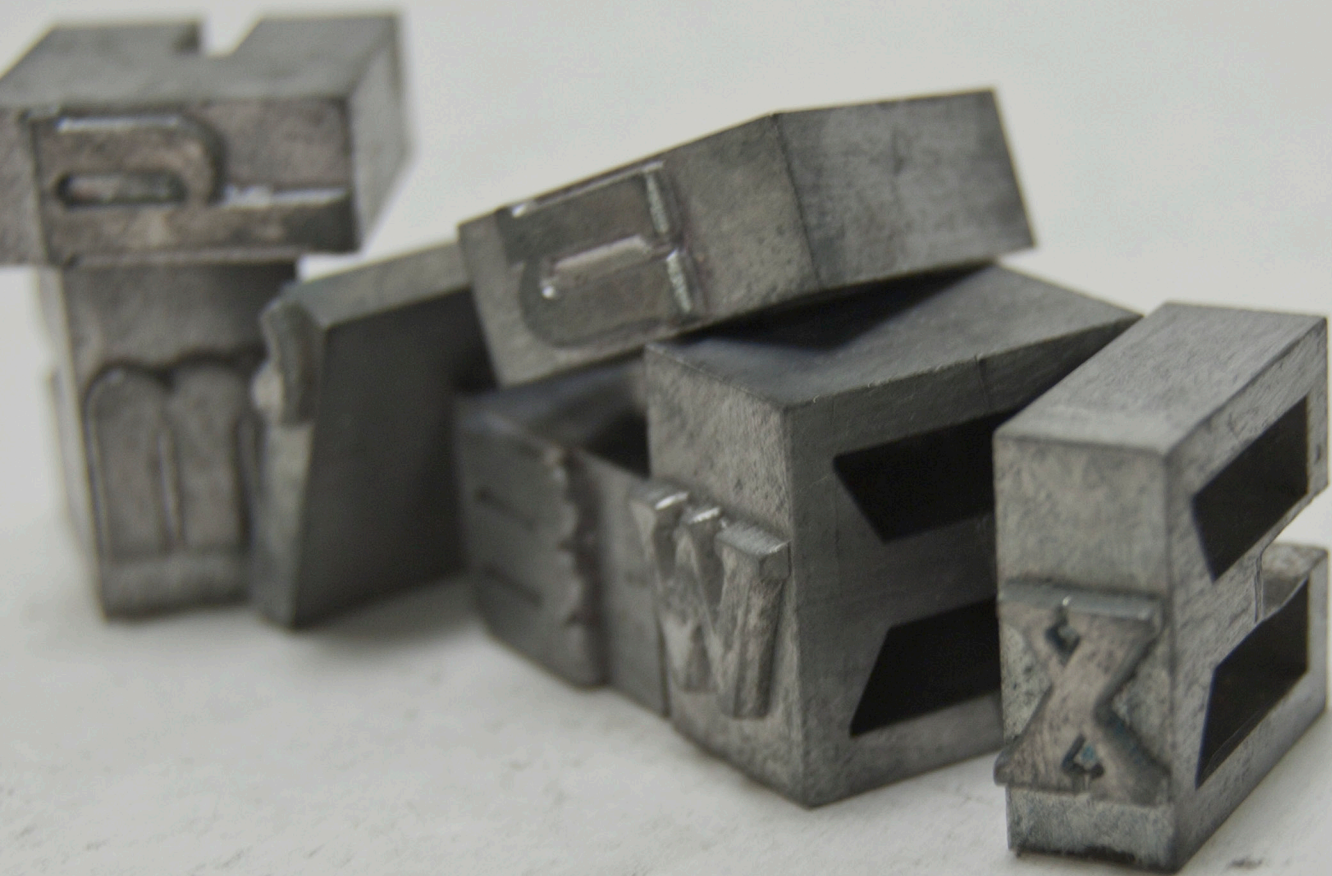
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