



The WAYZGOOSE GAZETTE

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R. Hoe and the Cylinder Press

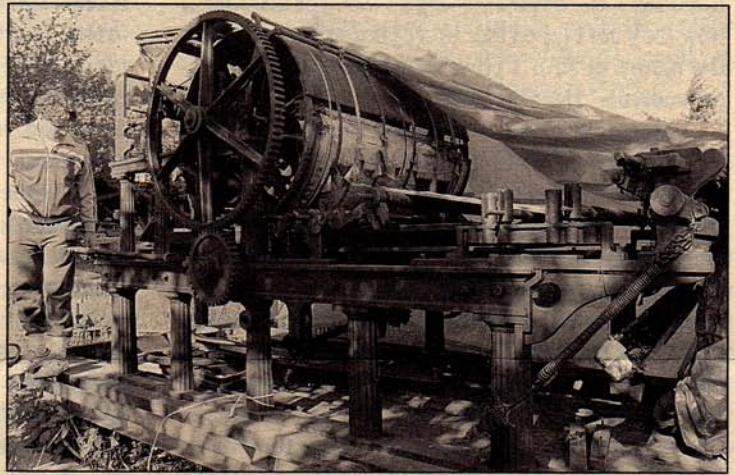
Throughout the nineteenth century and into the twentieth, the firm of R. Hoe & Co. dominated American press manufacturing. Begun in 1805 under the name of Smith, Hoe & Company, the firm was involved chiefly with the construction and repair of wooden presses but by the turn-of-the-century, most major newspapers in this country were printed or had been printed on a Hoe newspaper press.

Robert Hoe arrived in New York as a young man from Liverpool at the age of 19 in 1803. Prior to leaving England, Robert purchased the remainder of his indenture to a carpenter, and upon arriving in the New World boldly called himself a professional carpenter. As he ventured through the deserted streets of New York (the yellow fever was raging through the city and many had fled to safer places), he stopped at one of the only open shops, that of Grant Thorburn, a nail-maker. After listening to the young lad's account of coming to America, Thorburn offered Robert accommodations until he could find gainful employment in the city.

Within a week, Robert came down with the yellow fever, which nearly ended his life. Had it not been for the ingenious coaxing of Thorburn during the last stages of the disease, Robert would have surely died: the debilitated nineteen-year-old was despairing of life when Thorburn had convinced the young man that his health was indeed improving. Within an hour of that good report, the fever had left Robert and he began to return to normal health.

Robert Hoe met up with Matthew Smith in 1805, a printer's joiner and equipment maker. They formed a partnership and began manufacturing printing equipment for the growing New York printing industry. When Smith died in 1820, Hoe became the

senior partner in the firm, with Matthew's brother Peter filling the vacant spot. A carpenter and engi-



Early Hoe cylinder press, circa 1840, donated by Bill Sheppard of Blue Lake, California, in the Spring of 1989, awaits restoration. Note the fluted columns.

neer as well, Peter Smith introduced an "Acorn" printing press in 1822. With a cast iron frame in the shape of an upside-down acorn, together with a simple toggle mechanism to create the impression, the press was a powerful replacement to the wooden presses of the day.

The Smith Acorn Press became the first "name" product for the firm, which by 1822 was called simply "R. Hoe & Co". The Smith Press, along with the famous Washington Hand Press, acquired in 1835 from the inventor Samuel Rust, were successfully manufactured and marketed throughout the century.

The hand press, however, had a limited if not doomed future. No matter how powerful and simple the toggle mechanism could be, even with the addition of self-inking devices, the speed on a hand press could not top 200 impressions per hour. But by 1811, a successful cylinder press was introduced by the German engineer Frederick Koenig which could produce 800-1000 impressions per hour, immedi-

ately used by the *London Times*. The age of industrialization had come to the printing industry as the cylinder press rapidly developed into a highly efficient device capable of meeting the needs of a growing world. By the turn-of-the-century, rotary perfecting presses were capable of an output of 48,000 eight-page newspapers per hour, quite a difference from the 80 impressions per hour with the wooden presses a century earlier.

Throughout this development of the high-speed newspaper press, R. Hoe & Co. held one of the leading roles. The firm introduced their first cylinder press in 1830, the Single Large Cylinder Printing Machine, which by mid-century was available in three sizes, the largest costing \$1490. The account of how they developed that first cylinder press typifies the nature of firm's press developments and "improvements" over the years.

Mordecai Noah, who was a friend of Richard Hoe (the son of Robert), held the position of surveyor for the port of New York. While in this capacity, a cylinder press from England, manufactured by David Napier, arrived and lay stranded at the port. Being interested in how this new Napier style press operated as well as needing to appraise it, he called on his friend Richard to set up the press. This gave Richard the unique opportunity to completely examine his competitor's machine.

Richard was highly impressed by the Napier Press, and in his judgement it was far superior to any press in America at that time. He made full use of the opportunity before him, detailing every part of the

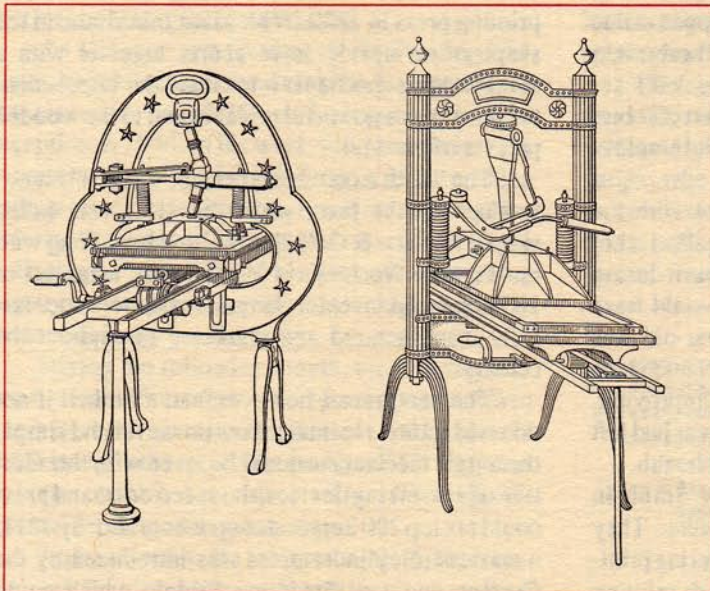
press through drawings. In this same time frame, Richard Hoe was actually able to view four separate Napier's, one of which he was allowed by the owner to duplicate by sand casting: Hoe had convinced the owner that he would be able to supply spare parts faster and cheaper than those only available from England.

In short, R. Hoe & Co. was able to take an existing press, incorporate its successful ideas and introduce an "improved" version of the press under his own firm's name. The lack of international patent protection allow the company to do this on a number of occasions. This technical resourcefulness combined with innovative engineering and the firm's successful marketing abilities allowed R. Hoe & Co. to take a leading role in printing equipment manufacturing. The Hoe catalogues contained scores of state-of-the-art machines, some being their own development and others adapted or directly copied from competitor's products.

Another great example of 19th-century industrial espionage is how Hoe managed to secure the rights to manufacture Samuel Rust's Washington Hand Press. Invented by Rust between 1821 and 1828, the Washington Press was considered to be superior in design and efficiency to the Smith Acorn Press. Hoe felt he had to have it, but despite his incessant offers to buy the rights to the press, Rust refused to sell it to a man he had little respect for, except at a very high price. Then one day John Colby, a foreman for the Hoe Co. approached Rust with a bid to buy the rights. This employee expressed

a similar dislike of Hoe, and promised that the press would continue to be manufactured by him alone. Rust accepted the idea and sold Colby the rights to the press for \$3,000. Immediately, that individual whom Rust assumed was an ex-Hoe employee, turned over the rights to Hoe. In a confidential letter regarding this transaction, the Hoe Co. gloated, "we shall have it snugly fixed...[Rust] was always cutting under & ruining the business...." Justification for their ethical actions! The R. Hoe & Co. continued the manufacture of the Washington Press for close to 100 years, making it the most famous hand press of the 19th century.

The original Single Large Cylinder Press was manufactured by Hoe well past the middle of the nineteenth century, many of them finding their



On the left, the Smith Acorn Press; on the right, Samuel Rust's Washington Press. Drawings by Ralph Green.

homes in rural country papers as second or third hand equipment. Their size was small enough to operate in the back woods areas where country papers were often located, and yet they could give enough economical automation to meet the moderate circulations. Also, these presses could be powered by a number of means, from steam to hydraulic, from human to horse, which made a significant difference in areas of the country lacking standard sources of power.

In 1989, the Printing Museum was able to acquire an early Hoe Single Cylinder Press, circa 1840, through the generous donation of Bill Shepard. It was used to print the Blue Lake Advocate near the border of California and Oregon from the 1890's until the 1960's. Prior to its use in Blue Lake, the large press was used in San Francisco for book production. Its beautiful fluted columns speak of a

day when machinery reflected the pride of craftsmanship. Standing eight feet tall, the press weighs in at almost 10,000 pounds.

The Museum has begun the long process of restoring the press in order to bring it on exhibit, as well as researching its history from its manufacture on the East Coast to its shipment by clipper boat around the Horn into San Francisco.

If you would like to assist in this process of restoration by sponsoring the costs incurred in its restoration or assisting in the physical restoration, please contact the Museum at (714) 523-2070. We expect the costs to accomplish this will be close to \$10,000. This is an opportunity to be tangibly involved in the preservation and presentation of our history as printers, and help put an impressive piece of antique machinery on display for the public to enjoy—with YOUR name associated with it!

Typeslingers and Taverns: The Country Newspaper Shop

Few in this age of daily newspapers over one hundred pages thick would appreciate the effort of frontier printers to put out their weekly newspapers. If you had a copy of the Alta Californian from 1850 in your hands, one of California's earlier papers, you would notice the small size of the type, the lack of pages and illustrations. By comparison, our papers today use large type and an ample amount of color photographs to maintain our interest. Since paper was a hard item to acquire in the 19th century and the process of printing so laborious and difficult, the early newspapers packed as much information as they could in two to eight pages.

Often coming across the frontier in a covered wagon with only a cabinet full of type, a Washington-style hand press, a platen press and some odds and ends, the printer was ready to start printing as soon as his wagon stopped. The work these printers engaged in when they settled down was far from glamorous and certainly not the easiest way to make a living. To work on a frontier newspaper meant a commitment to long days of very hard labor and little pay.

Your day in the newspaper shop would begin sometime in the morning after the editor had finished writing the copy. Perched in front of a California job typecase on a stool, along with a few other "typeslingers", you would begin to hand-set the type, one letter at a time, paragraph by paragraph, until you finished sometime that afternoon. Most country newspapers were hand-set like this until the turn-of-the-century, when the first Linotype ma-

chines began to make their appearance in the West.

After the type was set it would have to be locked up into "forms", proofed if there was time and then carried to the Washington press to begin the printing. An average "form", which was a rectangular iron frame with the pieces of lead type wedged tight inside it, weighed sixty to seventy pounds.

Because of the poor quality of ink and paper used, it was required to dampen the sheets of paper hours beforehand to allow for a satisfactory impression. The Washington Hand Press, though it was an economical and portable machine, required an incredible amount of physical stamina to print on. A fair estimate of its speed on a Monday, if it was a somewhat calm weekend for the pressman, would be around 120 impressions per hour. As the week wore on and fatigue set in, the speed might drop to 75-80 an hour. The use of a second operator to ink the type with a roller after each impression would help increase the speed of the printing.

Hopefully the edition would be completed by supper, at which time the whole crew would leave the shop and head for the local tavern for some food and a few drinks. Quite often it was more for the drinks and less for the food!

Assuming the employees could still walk straight, they had to head back to shop that evening to "hand-spike", or distribute, the used type back into the job cases so that the paper would be in business the next. Hopefully by nine o'clock at night, their job would be finished and they could retire home for a few hours of sleep before the next



Typeslingers at the case, setting the Tahlequah Advocate, about 1900.

deaths for many of the printers (assuming it wasn't their liver which gave up first!). But the country printer took great pride in his trade, a pride which would be the needed element to sustain him through the years since seldom was the occupation itself financially rewarding.

There are still a few places in the nation, in the backwoods towns, where country printers continue to crank out their weekly newspapers with slightly more advanced techniques than those described here. A Linotype replaces most of the California job cases and a big cylinder newspaper press instead of the stately Washington Hand Press. But the printer and his pride are the

same, and the tavern can still be found right down the street!

day's work. Such long hours and physical toil were not uncommon, and was often the cause of early

Printing Museum Receives Two Distinguished Honors

In February of this year, the Printing Industries Association, Inc. of Southern California (PIA-SC) honored Mark Barbour, Curator and Director of the International Printing Museum, as the Industry Pioneer of the Year at its annual Graphics Gala. The award recognizes industry members who originate or take part in the development of new methods, whether technical or educational, to benefit the graphic arts industry. Barbour is the 14th industry recipient of this prestigious award.

As Director and Curator of the Printing Museum, he has been involved with the development of the museum, its exhibits and programs since its inception in 1988. In his work with the museum, he is continually researching the history of the printing industry and its equipment, as well as an on-going effort to "hunt down" or acquire new artifacts for the collection. The results of his research on printing history are read by many in his monthly columns in various industry publications.

During the following month, the Printing Museum received another note of recognition when Mark Barbour was selected as one of "20 Leaders in the Printing Industry Under the Age of 40" by *Printing Impressions*, one of the leading national publications for the printing industry.

"Recognized as the leader in its field, the International Printing Museum has definitely benefited from Barbour's vision," noted *Printing Impressions*.

Through tours and theatre presentations, the museum's educational programs currently reach over 125 students and visitors daily, covering such topics as the history of communication and printing, literacy, Freedom of the Press and Constitutional studies.

Although Barbour loves antiques, he points out that the museum offers much more than displays of old equipment. As he states it, the purpose of the museum is to get people excited and interested in the history of printing industry by showing the important role it plays in their lives.

"These awards are more than the recognition of one man's work," mentions Barbour. "They shine a brilliant light on the various creative and dedicated people who together have helped to build the most unique and dynamic printing museum in history!" Barbour hopes that these awards will draw even greater interest and participation in the museum.

THE WAYZGOOSE GAZETTE

is issued quarterly for the Friends of the Printing Museum. Annual membership to the Friends is \$25.00 and helps to support the efforts of the Museum to preserve printing history. *The International Printing Museum is a non-profit museum founded by David Jacobson and featuring the Ernest A. Lindner Collection of Antique Printing Machinery.*
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