

"There is a certain satisfaction in this use of mind and hand and superb materials to produce printing not attainable on motor driven high-speed machines . . . in hand-printing there is the most direct and stimulating intercourse with ink, paper and press."

by Randy Silverman
photos: Michael Hallet

The First Word In Lasting Impressions

The creaking lever-action of a Columbian letterpress printing damped, handmade paper with cast metal type is an anomaly in the modern age. What now can be achieved within minutes on an offset press requires hours of

meticulous setting, locking up, inking, and proofing to print on a Columbian powered by hand. So why bother? What is

it that makes this ancient branch of the printer's craft so sought after by collectors that a few are willing to pay almost any price for the work of certain presses?

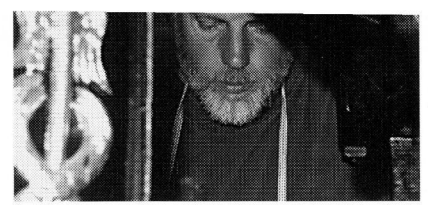
THE PRESS

Invented by Philadelphia-born George Clymer in 1813, the Columbian iron press was viewed by contemporaries as a dramatic improvement over the unwieldy wooden Ramage previously used by Benjamin Franklin and other Philadelphians. It established new milestones in production speed, with two skilled pressmen able to print 250 sheets, on one side, in an hour! Crisp, Extra Size Double Royal sheets came out every bit as clear as Foolscap or Crown, evidenced by the Columbian's appearance in every news room in New York City by 1817. Sporting its patriotic gilt eagle atop the counterpoise lever, the Columbian represented the epitome of Victorian machine design.

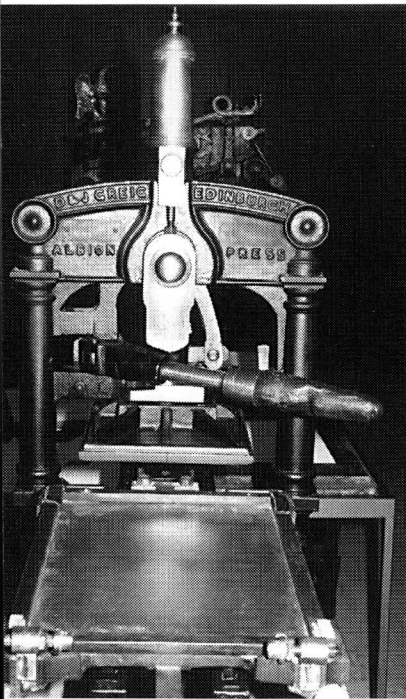
It also had its problems. "If the merits of a machine were to be appreciated wholly by its ornamental appearance, no other press could enter into competition with the Columbian," wrote an admirer in 1825. Yet, despite numerous attributes, the Columbian fared poorly on the American market. After four years of sales, only 25 presses had been sold on the east coast, probably as a result of two factors. While the Columbian's 10 models

ranged in price from \$300-500, the Ramage sold for \$130. Additionally, in a time when horse-drawn wagons were the chief mode of transport, a cast iron Columbian was far more difficult to ship than its lighter, wood-framed competitor. As a result, Clymer took his design to London in 1817 where the climate was more receptive. By the time of his death in 1834, he had built and sold more than 1,000 presses. His partner, Samuel Dixon, continued the business, but following the patent's expiration about 1838, he had to compete with at least 20 rival manufacturers imitating Clymer's design.

The Columbian (one of the "improved" later models), presently owned by University of Utah was built in 1846 in London by F. Mooney, and purchased by McCorquodale & Co. of London, the first of what became one of the largest print shops in the world. It resided as a showpiece in their front office until 1967 when it re-entered the work place in the San Francisco apartment/print shop of Lewis and Dorothy Allen. The Allen Press carefully selected its texts, combining solid manuscripts with graphics from noted artists to achieve timeless publications. From their single, tiny press room, the Allen's flawless typography and craftsmanship emulated the goals espoused by the Arts and Crafts Movement a century before. As with William Morris, the Allen's had a calling to produce beautiful yet utilitarian objects by hand in reaction to tasteless machine standardization. In his manual, *Printing with the Handpress*, Lewis Allen explains: "There is a certain satisfaction in this use of mind and hand and superb materials to produce printing not attainable on motor driven high-speed machines . . .



Day Christensen, Printer/Designer



The Red Butte's Columbian Press

in hand-printing there is the most direct and stimulating intercourse with ink, paper and press.”

This venerable machine now operates under the auspices of the University of Utah's Red Butte Press under the direction of Everett L. Cooley. Recalling his delight when the press was offered to the library in 1980, Cooley says, “It was one of less than 100 surviving Columbian presses! It was natural for the Library to want to perpetuate the art of the hand press as the Allen's had done.” To date, four meticulous books have been completed at the Red Butte Press. Under contract with Utah printer and designer Day Christensen, the fifth,



Mark Strand's *A Poet's Alphabet of Influences*, is currently in production.

THE BOOK “Choosing what's to be printed requires care because letterpress is so time consuming and expensive,” says Christensen, a self-taught printer with a master's degree in landscape architecture from Harvard. Strand, the poet laureate of the U.S. in 1991, fit the criteria. *A Poet's Alphabet of Influences* documents his poetic influence from “A” to “Z”.

THE DESIGN An endless number of creative opportunities present themselves in the design of a letterpress book, such as the way handmade paper responds to various print-making techniques. Seeking an artistic complement to his own design approach, Christensen invited Salt Lake City artist Bonnie Sucec to join the project because of her imaginative use of image and color. In collaboration, they laid out the text, deciding to include initials created and illuminated by Sucec at the beginning of each of the book's 26 page breaks. “I normally don't design letter forms,” comments Sucec, “and I

didn't want to just illustrate the text. The initials for this book grew out of hundreds of designs, just stacks and stacks of ideas on little pieces of paper.”

“Once the finished designs were selected,” continues Christensen, “zinc photoengravings of the drawings were made by Utah Engraving of Salt Lake City and mounted on type-high blocks. This allowed us to print the black line-work with the text on the letterpress.” Sucec will hand-watercolor the 2,300+ images as each page is printed. The finished sheets are breathtaking, reminiscent of the printed and hand watercolored books produced 200 years ago by English engraver and mystic William Blake, a poet Strand includes as one of his “Influences”.

THE TYPE The type, Van Dijk, was produced in San Francisco by M & H Type, the former Mackenzie-Harris, which is now the oldest and largest surviving type foundry in the country. Recently bought out by Andrew Hoyem of the Arion Press, M & H remains staunchly committed to producing quality type for hot-metal printing. “Van Dijk, originally designed by Christoffel van Dijk, a leading founder in mid-17th century Amsterdam,” states Hoyem, “is still cast one letter at a time on a monotype machine from a mixture of lead, tin and antimony.”

THE PAPER A large quantity of handmade paper was required for this book. Twinrocker Handmade Paper, founded by Howard and Kathryn Clark in Brookston, Indiana in 1971, was chosen for the task. According to co-founder Kathryn Clark, paper for the Strand book was made from 100% cotton rag with a neutral pH. “As with all our papers, cotton rag fiber is beaten to a pulp in a Hollander beater. The additive that actually changes the cotton fiber to cotton paper pulp (as opposed to cotton felt) is the powerful chemical—water!” To prevent Bonnie Sucec's watercolors from feathering, the pulp is internally sized in the vat.

“A hand paper mold, first designed in Europe in the 14th century, is dipped into the vat and lifted with a specific amount of pulp slurry on its surface,” says Kathryn. “As the papermaker lifts the mold, a wave of pulp is cast over the

top to control the thickness of the sheet. Then the mold is shaken from side to side and front to back to interlock the fibers evenly and cause uniform sheet formation. This all happens as water is draining through the mold.”

The ‘deckle,’ or wooden frame, that surrounds the mold and forms the shape of the sheet is then removed. “The mold is turned upside down and the sheet is pressed onto a woolen felt” continues Kathryn. This process is called ‘couching’ derived from the French verb ‘couche’ meaning ‘bed’. The papermaker literally puts the paper to bed between two wool blankets! After a third group of sheets (collectively called a ‘post’) has been couched, the sheets are placed inside a hydraulic or a screw press and squeezed to remove as much water as possible. The sheets are parted from the felt, placed in a ‘pack’ and pressed a second time before loft drying. Once dry, the paper is again flattened, packaged, shipped and ready for printing,” concludes Kathryn.

THE PRINTING The book's actual production begins with setting the type, each letter picked from the type case and individually placed in a composing stick,” says Christensen. “Metal spacing is added between words to justify each line, with leading separating the lines.” In hand setting, typography is handled visually to avoid the pitfalls of using too many hyphens, repeating words, or leaving rivers of white space running down a page.

“The type is set and tied up in the galley,” explains Christensen, “and tightly locked in a chase with wooden furniture.” To obtain a uniform impression, platen bearers on the Columbian require adjustment. This is followed by the make-ready, where low areas are built up on the tympan with thin sheets of paper, the registration is checked, and proofs are taken to eliminate worn pieces of type.

Once the press set up is finished, Twinrocker's handmade paper is torn to the sheet size, retaining two deckled edges. One sheet is dipped into a tray of water, interleaved between three dry ones, and left under weight overnight to evenly distribute moisture throughout the stack. “Damped sheets require less pressure in

(Continued on next page)

Lasting Impressions (Continued)

printing to achieve a good impression, preventing excessive type wear,” explains Christensen. Additionally, the damped sheets require less ink, minimizing disfiguring over-inking.”

Ink is rolled out on a marble slab with a brayer, allowing for subtle adjustments in consistency. The ink is transferred to the type with a two-handled form roller, passing over the block 8 to 12 times to build up the image in thin layers. A sheet of paper is then removed from the damp pack, placed in guide-pins inside the tympan and closed inside the frisket to prevent it from touching the inked type. With the tympan closed, the bed is cranked under the platen and the bar-handle pulled. The platen descends onto the back of the tympan, forcing the paper into contact with the type. Mechanically, the ink is pressed in relief into the paper’s damped fibers. The bed is then cranked back out to remove the freshly printed sheet. “It takes a day to set up and print 100 sheets, printing the reverse side the following day,” states Christensen. “The paper is then air dried and flattened between blotters. With the type redistributed into the type case, the process starts again until the edition is printed,” he concludes.

THE BINDING With the printing and hand coloring complete, the sheets are sent to BookLab, Austin, Texas, for binding. “Given the amount of care required to print a private press book, it is appropriate to present the finished work in a hand bookbinding,” said Priscilla Spitler, manager of BookLab’s edition bindery. “With the Red Butte project, we worked with Day to create a box and binding appropriate for the edition and within press’ budget, and then made him a prototype.”

According to Spitler, “planning an edition is a lot like planning a meal. Getting all of the food out on the table at once is the trick. Our editions are sewn with an unsupported link stitch giving the book optimal flexibility for rounding and backing. This sewing structure also opens well and is relatively fast to execute, minimizing the client’s expense. The binding for *Poet’s Alphabet* is a fairly traditional one, a

cloth case binding and housed in a drop-spine box. To dress it up, Sucec may hand paint the covering material before the case is made so that some of her brush strokes wrap around the edges of the binding.” Whatever the final decision, the edition is in good hands at Booklab, recognized nationally for its exceptional craftsmanship.

THE CONCLUSION When asked how he felt after a day of printing on Clymer’s press, Christensen responded candidly, “It’s not simple to operate. It doesn’t produce an optimal image. And, certainly, it isn’t cost effective. The things you try to control are constantly changing.”

So why print on this lovely, if persnickety monstrosity? “To carry on the tradition of hand press work,” he replies without pausing. “There’s a pleasant, physical aspect to working with a machine this old even though it can be frustrating. Certainly, other methods of printing have their advantages, and highly mechanized printing can do wonderful things that can’t be dreamed of on a letterpress. But there are subtleties to the letterpress you can’t capture any other way. The integration of type with the irregularities of handmade paper give you a rich, three-dimensional, almost sculptural effect. My interest and enjoyment come from combining that effect with original art work to create an unusual and unique object.”

Accordingly, the limited editions that result from private presses like the Red Butte are restricted in their availability, as hand printed books were in their incunabula, or “cradle” period. Once, available only to collectors, scholars and institutions of higher learning, this rarified status is retained in modern press books, though not entirely due to cost. Appreciation for these grand productions is limited as well. Certainly mass-produced, fine quality books abound, but here, too, at the upper reaches of the printer’s craft, the prize is often passed over for a cheaper version. The value to printers and graphic artists that these handmade works communicate is a personalized aesthetic that is alive, something akin to the smell of a good, home cooked meal to the weary traveler. **GAJ**

GLOSSARY

Brayer — Small, one-handled roller made of composition and used to distribute ink.

Case Binding — Cover of a binding made separately from the text and attached by adhesive to the endpapers.

Chase — Iron frame used to hold blocks of type on the press bed.

Counterpoise Lever — Support arm for the eagle used to counter-weight the platen on the Columbian press.

Crown — British paper size, 15” x 20”.

Deckled Edges — Feathered edge of a sheet of handmade paper resulting from pulp flowing between the frame and deckle of the papermaker’s mold.

Drop-Spine Box — Standard rare book box that opens like a hinged candy box.

Extra Size Double Royal — British paper format, 42” x 27”.

Foolscap — British paper format, 13.5” x 17”.

Form Roller — Large, two-handled roller made of composition and used to distribute ink directly to the type.

Frisket — Attachment on the inner face of tympan to protect paper from touching inked type until bar-handle is pulled.

Furniture — Pieces of wood in graduated sizes and less than type high used to fill in space between chase and type.

Galley — Metal tray for holding lines of type after they have been set in pages.

Hollander Beater — Dutch machine invented about 1680 for macerating cotton rags into pulp.

Illumination — Color decoration of books or manuscripts with painted pictures, ornamented letters or designs.

Internal Sizing — Material added to paper pulp before sheet formation to increase the resistance to penetration by liquids.

Platen — Large iron pressing surface on hand printing presses.

Platen Bearers — Placed inside the chase near four corners to support platen when the form is uneven.

Rounding and Backing — Shaping and lining the spine of a sewn, unbound book.

Tympan — when opened, area where paper is mounted in preparation for printing, the back receiving pressure from the platen when closed.

Unsupported Link Stitch — Method of sewing folded sections of a book without reliance on tapes or cords.