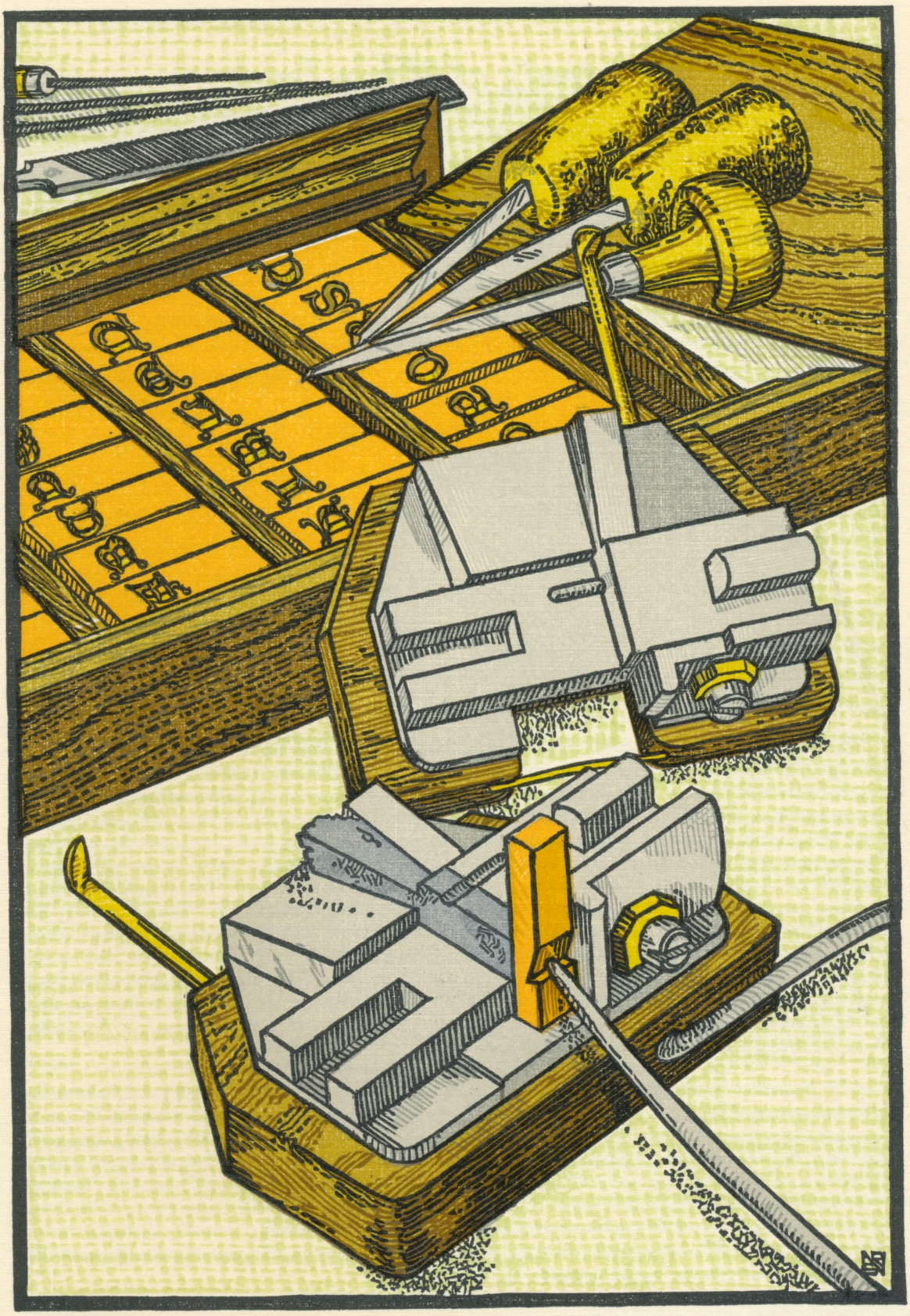


Contents of This Issue

The Cover

The image featured on the cover of this issue of the *ATF Newsletter* is a color relief print made up of nine separate hand-carved blocks. The artwork, engraving, and printing on a Vandercook press have been done by Stan Nelson. The illustration shows a French-style mold with a box of mats and several gravers and files. The mold (the 34th mold Stan has made) as shown will cast 18 pt. type, but special shims fitted beneath the body pieces and mouthpiece allow the mold to also produce 24 pt. types. The matrices are Lombardic initials, a re-cutting by Stan of a face from the 1490s in the collection of Enschede en Zonen, Haarlem, the Netherlands. The graver handles are made from champagne corks, a method learned from the French punchcutters at the Imprimerie Nationale. Those engravers like the way they fit the hand—and the corks are fun to acquire too. Type was cast using just these kinds of materials over a period of 400 years, up until the 1830s and later.

This print originally was created as an invited contribution to a Delux Portfolio of the Fine Press Book Association, and was appended to the 100 slipcased, hard-bound copies of *Parenthesis 17*, their annual journal. But dimensions were expressly planned to suit the proportions of the *ATF Newsletter*, where the image is now employed. It's a two-fer!

ATF Newsletter is published *occasionally* for enthusiasts of hot metal typecasting and linecasting the world over by Richard L. Hopkins, 169 Oak Grove Road, Terra Alta, West Virginia 26764 U. S. A. You may become a subscriber by sending $20.00 U. S., which will entitle you to two future issues, each assessed at $10.00 for United States and Canadian subscribers. All other subscribers are urged to send $30.00 U. S., with issues assessed at $15.00 each (to offset additional postage and handling charges).

Twenty-two of the 42 printed pages of this edition are done letterpress—better than half! Cover details are above. The remaining letterpress work was Monotype-cast and printed by the editor using a Heidelberg 10x15 Windmill press. All remaining pages were done on a Konica-Minolta PagePro 280 combination color printer/copier/scanner/fax machine.

American Typecasting Fellowship
NEWSLETTER
NUMBER 34 — MAY, 2010

Excitement Mounts for Piqua Conference

Registration for the 17th biennial Conference of the American Typecasting Fellowship exceeded 38 persons nearly two months before the June 24-27, 2010, meeting at Piqua, Ohio. Greg Walters, host for the event, reports the pre-Conference "introductory" session is now filled. Most advanced technical sessions are sufficiently enrolled, but slots still are open.

Actual Conference sessions will be held in "The Centre," a meeting room located off the food court of the Miami Valley Centre Mall east of downtown Piqua and convenient to Interstate 75.

There seems to be an urgency and great anticipation for this year's meeting. No doubt, some of that anticipation is the prospect of seeing Greg's extensive and diverse collection of typecasting equipment, ranging from giant hand molds and pivotal casters to several foundry casters and Monotype machines of every description. The Conference schedule includes ample time for visiting Greg's home and storage building to study the equipment. He has promised demonstrations on many machines, meaning they will be operational! Such a diverse opportunity has never before been available—anywhere.

Anticipation also relates to those coming to the Conference seeking specific goals. Some have recently acquired equipment and are seeking guidance on setup and operation. Others are looking forward to being able to talk one-on-one with perhaps the largest assembly anywhere of persons knowledgeable in the far-ranging aspects of type making.

A third "anticipation" relates to evidence of a "changing guard." As the founders and earlier associates of our group grow older, the pressing need for passing their knowledge and equipment to a newer generation is gaining urgency. How such transitions are evolving certainly will be a topic for serious discussion at the meeting. Founded in 1978, our group is now 32 years old!

Latecomers are urged to log onto the ATF website (http://www.atf-hotmetal.com) and obtain the necessary registration form and get your registration completed. Facilities are limited and it may become necessary to turn away late registrants.

Conference sessions are planned at an unlikely location . . . in a showroom in a struggling mall east of Piqua. The location offers excellent access to diverse foodcourt facilities within the mall, yet all is within walking distance of the Conference hotel and other hotels as well. Greg is already busy with arrangements for photo exhibits, and ancillary signage for our main meeting room. Disinterested spouses will especially like the proximity to shopping and associated distractions close at hand.

Greg's idea of an "introductory" session prior to the Conference for those persons who have a great interest in typecasting but have no previous experience has been well received. The session already is fully booked and closed to additional registrants.

The Conference itself will be packed with presentations by persons "doing" typecasting . . . not just talking about it. An ongoing demonstration of electrodepositing matrices will be followed by all attendees. Theo Rehak will be the speaker at the Saturday banquet. He was the last typecaster trained at American Type Founders and has continued the tradition at his Dale Guild Type Foundry.

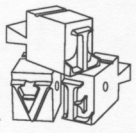
Advanced Conference technical sessions are intended to help individuals with specific interests. Planned sessions include Giant Caster operation and maintenance by Ed Rayher of the Swamp Press; Ludlow Typograph maintenance by Dave and Beth Seat of Hot Metal Services; Thompson maintenance by Sky Shipley of the Skyline Type Foundry; and reviving a Composition Caster by Rich Hopkins of the Hill & Dale Private Press and Typefoundry. If not already registered, you should do so immediately.

Details of specific Conference lectures and demonstrations are not firmed up. These events will begin on Thursday and extend over three days (see article next page).

American Typecasting Fellowship Conferences have become noted for their wonderful packets of keepsakes provided by many of those attending. There are no size or shape limitations. Keepsakes in the past have included broadsheets, books, brochures, matrices, wood rulers, and souvenir types. The keepsakes will be assembled by volunteers and passed out at the banquet on Saturday night.

Sunday will begin bright and early at 8 a.m. for vendor setup for a swap meet, which will be open until noon. The traditional auction will follow lunch. See more details on the Swap Meet & Auction page of the ATF website: http://www.atf-hotmetal.com.

Typecast Souvenir To Be Distributed at Conference



Dave Peat of Indianapolis is keenly aware of the tradition of having a typecast souvenir distributed at the Conference. Toward that end, he asked Rich Hopkins to do a design, and Jim Walczak is engraving the matrix. Souvenir packets will be distributed and there's a good chance the matrix will be on hand for additional casting during the meeting. The finished piece will be sized 48x54 points, the maximum size possible for use on the Thompson caster.

ATF Conference History

List includes year, conference city, host(s), and sponsoring organization, if any

1—1978 Terra Alta, West Virginia, Rich Hopkins
2—1980 New Rochelle, New York, E. H. "Pat" Taylor.
3—1982 Oxford, England, Stan Nelson, meeting jointly with the Printing History Association
4—1984 Washington, D. C., Stan Nelson and the Smithsonian Institution
5—1986 Indianapolis, Indiana, Dave Churchman
6—1988 Terra Alta, West Virginia, Rich Hopkins
7—1990 Nevada City, California, Harold Berliner
8—1992 Williamsburg, Virginia, Willie Parker, Dale Dippre and the Colonial Williamsburg Foundation
9—1994 Buena Park, California, Mark Barbour and the International Printing Museum
10—1996 Charlotte, North Carolina, E. H. "Pat" Taylor and Heritage Printers
11—1998 Sunnyvale, California, Freddie and Monroe Postman
12—2000 Ringe, New Hampshire, Dan Carr, Julie Ferarri and John Kristensen
13—2002 Provo, Utah, Thom Hinckley and the Crandall Historical Printing Museum
14—2004 Terra Alta, West Virginia, Rich Hopkins (a last-minute substitution for a meeting scheduled at Leipzig, Germany, which was cancelled)
15—2006 Carson, California, Mark Barbour and the International Printing Museum
16—2008 Grafton, Illinois, Johanna and Sky Shipley
17—2010 Piqua, Ohio, Greg Walters

Extremely Varied Program Schedule is Developing

Though specific details of the program schedule for the upcoming Piqua Conference have not been finalized, a quick review of some of the events Greg Walters, our conference coordinator, has lined up will reveal a very diverse and exciting agenda is taking shape. Programs will be spread out over Thursday, Friday and Saturday.

Several round-table discussions are tentatively planned on issues such as "what the future holds for us and our equipment, subtitled "You Can't Take It With You." Another will focus on the future of commercial hot metal and the commercial viability of typecasting. Details are yet to be worked out.

Events already lined up:

John Kristensen, Firefly Press, Boston, Mass., will be on hand to explain his apprentice program, set up with help from a state grant.

Bill Welliver of Wapwallopen, Pa., will give an update on the computer interface he has developed for the Composition Caster. He gave a preliminary report at the Grafton Conference in 2008. This time he'll have the interface on hand and will demonstrate it at the open house, revealing that a machine can be run using a traditional ribbon and then be easily changed to the computer interface.

Hal Sterne of Sarasota, Fla., also will make a presentation on Thursday, about special QWERTY keyboard overlays for the traditional Linotype ETAOIN keyboard developed back when linecasting still was "king." Two different models will be shown. The ELK which Hal developed, built and sold is in place on Greg's Intertype and may be demonstrated during the open house. **Don Black** of Scarborough, Ontario, Canada, is bringing a Kellogg keyboard, another brand, for review. He had a second Kellogg but recently sold it to a custombomer buying an Intertype from him—someone who wasn't keen on the idea of learning the ETAOIN keyboard.

Sky Shipley of Skyline Type Foundry, Kampsville, Ill., will talk about how to convert a gas casting machine from natural gas to propane, or vice versa. Such conversions often are necessary since all locations don't have access to natural gas service.

Alex Brooks of Lexington, Ky., will talk about his visit to Japan a couple years ago where he visited Japanese typefounders and photographed their machines. They still make type on a limited scale, basically sort-casting to supplement existing fonts.

Mike Anderson of Port Republic, Md., will start things off by firing up an electrotyping bath for making matrices. Progress in this work will be followed throughout the Conference.

You will get a chance to meet and listen to presentations by **Micah Currier** and **Daniel Gardiner Morris** of Brooklyn, N. Y., and **Jason Dewinetz** of Vernon, B. C., Canada, speaking in greater details on the Dale Guild acquistion and Jim Rimmer's shop (see their articles in this *Newsletter*).

The gentlemen at **Offizin Parnassia**, Vattis, Switzerland have made a DVD which shows the process of their recutting Morris's Troy Type. Narration is in German, resident experts will explain the video in English when it is shown.

Rich Hopkins of Terra Alta, W. Va., will speak on "Finding Tolbert Lanson"; he's doing a book on the inventor and the Monotype machine. Rich will share much early information on the invention heretofore unpublished.

Greg Walters (our host) will be talking about matrix making at the India Type Foundry.

Machines to be demonstrated during various sessions at Greg Walters' shops include the American Giant Caster, a Composition Caster, the Thompson, a Ludlow, Elrod, Kuco foundry caster, and maybe even an ATF pivotal caster. He will have on display a 42-em Intertype equipped with a QWERTY keyboard by Hal Sterne.

To get all the late-breaking details, the will be available exclusively to ATF associates on a not-for-public section of our website. Access this portion of our website at http://www.atf-hotmetal.com/vip/

Brief Notes Regarding Your Fellow ATF Associates

Responding to the article in *Newsletter 33* about making the leathers for the Composition Caster's paper tower, **Lewis Mitchell**, long-time Monotype expert at M&H Type in San Francisco commented in a letter Nov. 30, 2009, saying "on replacing paper tower leathers: I use a putty knife red hot to burn the air channel. This takes about one hour. We start with an old one in a vice, then put it on the machine for finishing. We do not use any Vaseline as that makes it soft. I was told to use only hand power 57 years go when I was learning the machine. It still works. I have two ready and waiting at all times; San Franciso air with water do a lot of damage to these machine components.

Geoff Quadland of St. George, Ontario, Canada, writes that he has recently retired after 40 years in the printing business. His new-found time makes him optimistic about attending the ATF Conference in Piqua, Ohio, this summer. "My family history in printing starts with my maternal great grandfather who started a printing business in Brooklyn, N. Y., in 1868. . . . The firm lasted until about 1970 and I worked for them one summer in the 1960s. . . . Although my father wasn't a printer, I guess the genes and the planets lined up for me to become interested in printing in high school in 1959. . . " he reports.

David L. George of Cupertino, Calif., published a little journal called *The Tantau Avenue Review.* In his December, 2009, issue, he reprinted 12 different résumé plays on words, such as "I studied a long time to become a doctor, but my practice was small because I had no patients." Here's another he included, which is closer to our genre: "I had an acquaintance who lost his job operating a Linotype because he couldn't get the lead out. So I applied for the position and found it to be just my type. Slugging it out line by line, I soon had enough quoin to meet my pressing needs and thus made a lasting impression." (David passed away earlier this month.)

Edgar Woodward of 603 Main St., Conway, S. C. 29526, offers an interesting Intertype machine. His most recent note: "I have really enjoyed getting the *Newesletter* through the years; you do a great job. But everything must come to an end and since I am no longer connected with the printing business, I ask that you remove my name from your mailing list. I thought you might be interested to know I still have Intertype Number 311, bought new by my grandfather approximately 1914. Has not been operated for many years. His phone number is (843) 248-2433.

Gordon Rouze of Sugar Land, Texas, sent these kind remarks: "Another fantastic issue of the *Newsletter* which took the honors away from issue 22. I am certain there would be a market for limited edition prints. It has long puzzled me as to how (and why) you could continue to subsidize the production of the *Newsletter.* None of us knew your costs, but it didn't take a rocket scientist to understand that it was more than a couple of bucks an issue. . ."

Fred Peterson from Meadow Vista, Calif., writes "I sent you an enlargement of Ralph Algren of Sacramento, who ran a caster for many years at the State Printing Plant there. He said to me 'if I were a young man I'd give the next 30 years to Monotype.' Well, at 76 I will give this if I live to be 106. Discouragement and apathy are weapons of the adversary; that we can do without. Stay with it by giving as much attention to your health as you do equipment."

John Setek from Kingscliff, Australia, writes "I enthusiastically continue to follow typecasting, mainly because I love cast-iron machinery, and I am fascinated with all the intricate moving parts so incredibly well made, which remind me of when, at the age of 16, I took apart my mother's wristwatch—something I never will forget." He owned a Supercaster and other Monotype equipment, but was forced to dispose of it because of "downsizing."

G. Richard Hartzell of Glen Mills, Pa., writes "I received your *ATF Newsletter 33* and it's a real gem. Wow. You've been at it over 30 years. that's really being faithful to a cause. That's a calling—probably love of trade. . . . Thanks for your great work.

Paul Quyle of Murphys, Calif., says he has Monotype equipment he would like to find a home for. The first is a Thompson caster which he purchased over 20 years ago. Was working well when he bought it. Never used it. Hundreds of matrix fonts with it. Also two Monotype strip casters, rusty but probably salvageable. Call him at (209) 728-3562.

WANTED: Monoype Composition Caster in operating condition, preferably in Calilfornia area. Email jeffhowardmeade@yahoo.com or call Jeff Meade, (650) 922-5568.

Rare 2-in-1 Linotype Models Explained

As hot-metal composition was perfected, the printing industry sought to move as much work as possible to the keyboard, thus avoiding time-consuming hand-composition of type or Ludlow matrices. To accommodate larger type sizes in their machines, both Linotype and Intertype were forced to come up with a means of accommodating wider matrices by reducing the number of channels from 90 to 72. But having machines which accommodated these special magazines was another problem altogether. The Model 31 and Model 32 machines—and others—answered those needs, as explained here.

By Patrick Leary
Harold's Printing Company
Brookings, South Dakota

It was a "show and tell" session the night before the 2000 ATF Conference began at Rindge, N. H. When I focused the slide of my Model 32 Linotype, Norm Cordes of Wycoff, N. J., exclaimed, "There's a 2-in-1 Linotype!"

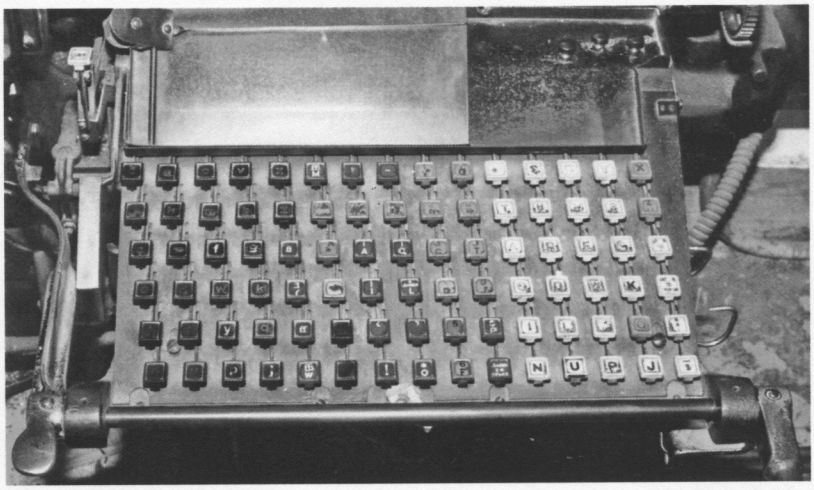
In subsequent conversations, bull sessions and comparing notes, I've learned that not many hot-metal enthusiasts are familiar with Mergenthaler's 2-in-1 "Master Models." What follows is a non-machinist's attempt to describe how they differ from other Linotype models and some anecdotal experiences I've been able to accumulate from the few operator/machinists who worked on them.

The 2-in-1 "Master Models" carried both 90- and 72-channel magazines but had single distributors; retrospective speculation suggests the market Mergenthaler was aiming for was large weeklies, small dailies and commercial shops that needed both text and display type from their linecasters.

The "Master Models" featured both 90- and 72-channel distributor bars and channel entrances that pivoted to match whichever magazine was in operating position. Unlike the mixer models (29, 30, 35 and 36) which had permanent, rigidly mounted distributor bars and channel entrances in a fixed position, the "Master Models" had a delicately balanced mechanism for putting the correct distributor bar and channel entrances into position—controlled by the operator from his chair (in theory, anyway).

In addition to the customary changes required on a linecaster, switching from text to display—or vice versa—involved three additional changes, only one of them automatic. First, the aforementioned distributor mechanism had to be changed by the operator, using a long handle which protruded from the assembler cover near the magazine changing crank. Pulling it toward the operator 12 or 14 inches activated a linkage which caused the two distributor bars to pivot as well as the two sets of magazine channel entrances. Mergenthaler engineers ingeniously installed a set of lugs on the magazine support frames nearest the clutch with different positions for 72 and 90 channels. Corresponding female receptacles move the channel entrances back only ⅛" if the entrances and bar don't match the magazine, causing a distributor stop after only three or four matrices have begun to travel on the bar.

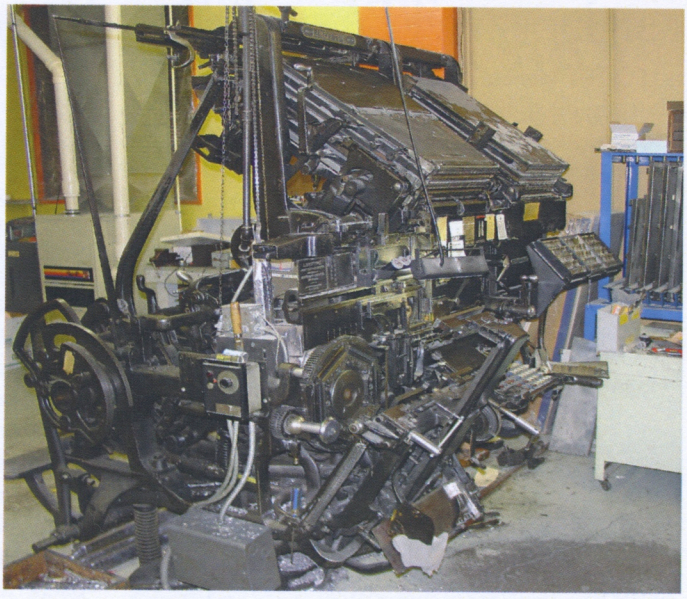
The other manual change involved a revolving front guide with vertical fins spaced precisely to guide falling matrices from either a 90- or 72-chan-



The machine's keyboard—the red keys are inoperative when a 72-channel magazine is in operating position. The white key above the spaceband key (left side) activates the bail-box device for numerals and caps in the four auxiliary magazines.

nel magazine. This mechanism is held in place with a spring-loaded lock at the far right. Sometimes this device gets out of adjustment and has to be reset to support the matrices as they leave the magazine, but if it's set too high, it prevents the matrices from leaving the magazine.

The third change is automatic when the magazines are elevated or lowered. This involves the "channel chooser" assembly which moves the keyrods forward and back as magazines are changed. When a 72-channel magazine is moved into operating position, the keyrods (which transmit upward motion from the keyboard cams) move into position above the cam frame assembly. Ninety keyrods are in the back row but only 72 are in front. When a 72-channel magazine is in position, the 18 red keys on the keyboard are inoperable.



This is my Model 32 (minus the long lever which activates the linkage to revolve the distributor mechanism). We opened the vise and advanced the mold disk for an inspection by Jim Daggs. (Had I known Jim was coming from Iowa to take these photos, I would have dusted off some of the anti-offset powder.)

The "channel chooser" controls a linkage behind the keyboard which automatically moves the two sets of keyrods. It can be adjusted for 11 different combinations of four magazines (72/90/90/90, 72/72/90/90, 72/72/72/90, etc).

Mergenthaler advertising touted the "Master Models" as early as 1932, but it applied to the older, three-main-magazine Models 8 and 14 with the old 10-turn magazine change crank. When the "Blue Streak" line was introduced in 1938, the four-magazine Model 31 (with a one-turn shift) replaced the Model 8, and the Model 32 (with a maximum of four mains and four auxiliaries) replaced the ubiquitous Model 14. Chronologic model lists indicate the 90/72 feature was also available on the Blue Streak Models 33 and 34, too.

According to Patrick Burns of Mercersburg, Pa., who worked both in the field and the Plainview (N.Y.) factory for Mergenthaler, the 2-in-l models were "transitional" machines developed prior to the wide-magazine (nonmixer) 33, 34 and (mixer) 35 and 36.

He says the first Model 8 with the 2-in-l feature (SN 48453) shipped in March 1932. A later, modified, Model 8 (SN 50789) shipped July 1936. [Mergenthaler also briefly offered a 2-in-l "DD" Model 8 with 90-and 72-channel magazines, but the keyboard and channel entrances for display were arranged for only 55 channels. This model was short-lived, however: Introduced in February 1936 with SN 50370, they were discontinued in 1937.] The 8s were superseded by the Model 31 in March 1938. The first 2-in-l version Model 31 carried SN 52652. The 2-in-l Model 31s were discontinued by Mergenthaler in July 1945. According to Burns' records, the first three main-magazine 14 (SN 48454) was shipped in March 1932; the first 2-in-l "Blue Streak" Model 14 (SN 50746) was shipped July 1936. The Model 14s were superseded by the Model 32 (first SN 52472). The 32s were also discontinued in July 1945.

I had the good fortune to run a 90/72 Model 32 for four years in the mid '50s while a college student, and have owned another—still operating—Model 32 for over 40 years.

Model 32 (S.N. 52827) was shipped in late 1938 and was the ad/headline linecaster for the *Brookings*

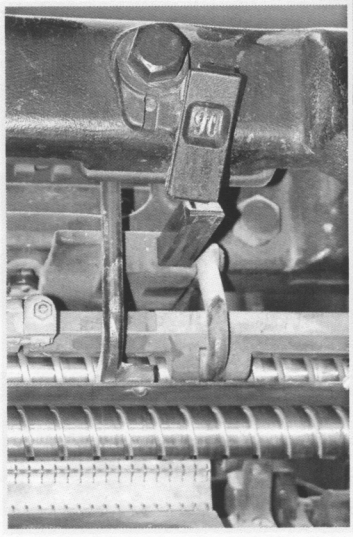
(S.D.) *Register*, a semi-weekly publishing around 32 pages a week. It had a practical, usable array of matrices: A font of 24-pt. Metrolite and Metroblack ran in the 72-channel magazine while four sets of lower case 18-and 24-pt. Erbar Medium and Bold Condensed and 18-pt. Memphis light and Bold and 24-pt. Memphis Medium and Extra Bold Condensed ran in the only two split 90-channel magazines which we "swung" on and off the machine. The capitals and figures for these faces were in the four auxiliaries. The other two 90-channel magazines carried 10- and 8-pt. Excelsior and Memphis Bold. A lot of our grocery, used auto, real estate and dry goods advertising utilized two lines of 8-pt. descriptive type and 18-pt. caps and figures from the auxiliaries—or two lines of 10-pt. with a 24-pt. overhang. All the multi-column cutlines, editorials and lead-ins were set on this machine. It didn't have a quadder until later years, and it never had a Mohr Lino-Saw.

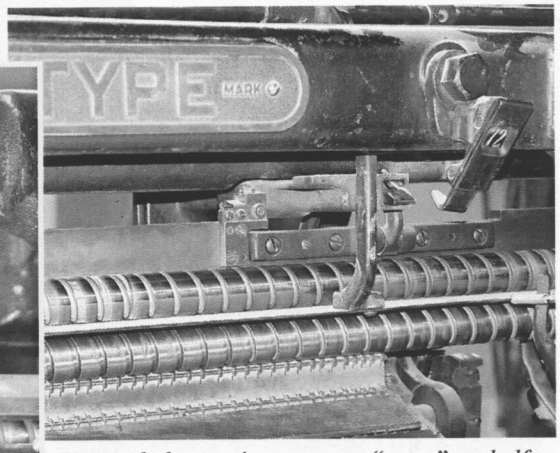
The four auxiliaries shared a common upper "stub"; the counterbalance springs for the auxiliaries were set a mite too strong, so often when I was going from the top auxiliary to one of the lower ones all I had to do was turn the control lever to "Aux" and the tension on the springs would move the four auxiliaries upward—the trick was to know when to disengage the shifting mechanism. Like most Linotypes with auxiliaries, the Model 32 employed the "bailbox" mechanism to access the auxiliaries. When setting 24-pt. display from the 90-channel magazines and auxiliaries, I'd drape my left hand on the knife block and run the "auxiliary" control and spaceband keys with my left hand while keyboarding both caps and lower case from the cap side of the keyboard with my right hand.

About the only difficulty I encountered running it on the night shift was many of the lower-case 18-pt. Memphis characters moved sluggishly—or not at all—in the 90-channel lower case entrances. Many times I could get the o, a, n, h, m and w characters to fall into the magazine by jiggling the handle that rotated the distributor bars and channel entrances without leaving my seat. And I also soon learned that a prudent operator wiped off the mouthpiece after changing from 30-pica slugs to 12 picas with a 9-pt. liner.

Ten years later when I bought my own shop one of the major pieces of equipment was Model 32 (S.N. 53778) with two 72-channel, two 90-channel main magazines and four 34-channel auxiliaries. It had originally been shipped in late 1939 to Webb Publishing in the Twin Cities, and my predecessor bought it used from them in 1953. [The circumstances surrounding that sale are intriguing: it was involved in a running management/ITU dispute. The union wanted to keep casting display faces for ads on the firm's Thompson and Monotype casters, while management wanted to utilize the extensive array of display mats on the Model 32. Finally management decided to sell the Model 32.]

When my predecessor arrived to pick it up, almost as an afterthought, they told him, "You might as well take all those (72-channel) splits, too." Thus my 32 came with scads of display mats: Metro, Cheltenham, Franklin Gothic, Old Style, Bodoni Bold, Ultra Bodoni with Italic, Erbar, Memphis Condensed, and Pabst Extra Bold Condensed with Italic. In every case, the 14-pt. in a series is cut to run in 72-channel magazines. Lower case





Mergenthaler engineers were "green" a half a century before it was a fetish. This device informs the operator which distributor bar and channel entrances are in operating position, powered entirely by gravity.

characters for large sizes of Memphis Extra Bold Condensed were in three of the auxiliaries; a font of 24-pt. Ultra Bodoni and Italic caps were in the other auxiliary, augmented by the lower case running in the cap side of a 72channel magazine.

In addition to 18- and 24-pt. two-letter molds, there is a one-letter 24-pt. mold, a 36-pt. mold, a recessed 10-14-pt. mold and a universal adjustable mold for the smaller faces. A few years after I bought the shop, I had a local plumber connect the water-cooled jacket to our cold water supply, primarily due to a positive experience I'd had with a Model 14 thus equipped. The 32 was originally equipped with the MLCo. inboard mechanical quadder, but it was disabled in the early '60s after the springs weakened and we experienced hairline problems. By the time I owned it, the handle and linkage that activated the mechanism for changing the distributor bars and channel entrances had been removed; each time a change is to be made between display and text magazines, the operator has to move to the rear of the machine and manually rotate the bars and entrances standing on the step.

Thanks to my non-terminal disease of *Matrix Accumulitis*, I have added series of Granjon, Electra, Spartan, Helvetica, Caledonia, Copperplate Gothic and Cairo, all for 90-channel magazines.

Another 2-in-l "Master Model" exists in the Midwest: A Model 14 with three mains and one auxiliary is in the battery of linecasters at Printers' Hall on the Steam Threshers' Reunion grounds at Mt. Pleasant, Iowa, but alas, the distributor box has been cannibalized and at this writing, it isn't operable. A 2-in-l Model 31 at Lino composition. com in Boston is used strictly for 90-channel composition, because as operator Michael Babcock says "we don't own any 72-channel magazines." Burns says he has a customer in Scranton, Pa., with a Model 31 that has been converted to all 90-channel magazines.

Burns said the "Master Models" worked satisfactorily if "they were properly cleaned, lubricated and adjusted—and if the mats were OK." He said "All linecasters must be exactly level for satisfactory assembling and distribution, an important point often overlooked when machines are moved to another location."

This is a small portion of advertising in the January, 1938, INLAND PRINTER promoting the new "Master Models" in three full-page spread. The ad was a little misleading in that an owner had to invest in additional escapements if he wanted to change the ratio of 72- and 90-channel magazines; their position could be altered with some effort.

Dale Guild Succesors Take Helm

The Dale Guild Typefoundry, the longtime effort of Theo Rehak, preserving the rich tradition & excellent product of American Type Founders, is changing hands.

Micah Slawinski Currier, 27, has become Theo Rehak's successor/apprentice. Along with his business partner, Daniel Gardiner Morris, 32, Micah has been working with Theo for the past year to learn the typefounding craft and has now stepped into the role of *castor*. With the help of his mentor, Theo Rehak, Micah hopes to ensure that new foundry type is available for future generations. For the immediate future, Theo will continue working with the new owners on a limited basis.

Micah has worked at letterpress print shops throughout the U. S.; he settled in Brooklyn, N. Y., three years ago. Throughout his printing education, he has worked with handset type, and is an experienced pressman, working with both hand-fed and automatic presses.

Over the past year working with Theo he has cast the lion's share of the type that has come from the foundry. He spent the previous year visiting with Theo and learning the theory and history of type founding. His partner, Dan, has been working along with him, but due to other ventures has less of a role in the actual production of the type and focuses most of his effort on marketing, etc.

The two men plan to retain the name "The Dale Guild Type Foundry," Micah says "I think it's safe to say that I love Tolkien as much as Theo and am very fond of the name."

Though they have a list of fonts they think will sell, casting plans are not finalized. "Of course we hope for sort line orders and plan to continue that practice," he explains.

They are considering subscription castings, whereby interested parties would pool their resources to obtaining specific fonts without having to go the route of an expensive minimum sort line purchase.

A new website is under construction now, and should be launched within very soon. It is found at http://www.thedaleguild.com.

Farewell to Our Talented Friend Jim Rimmer

Shortly after publication of *ATF Newsletter 33*, which featured his work and was graced by a multi-colored linoblock cover showing his immense creative talent, Jim Rimmer succumbed to cancer January 8, 2010.

In his last e-mail message to your editor on December 7, 2009, Jim gave this report:

"Thank you for your special thoughts. I am doing pretty well, keeping busy with a new type design. To some this might seem pointless, making a type I may never get to use, but it keeps me cheerful and motivated. I am taking in as much nourishment as I can, and have actually gained a couple of pounds. It is my hope that keeping as robust as possible will make time more livable.

"I would like to be able to afford to give my equipment away as did Paul (Duensing) , but I am not leaving Alberta (his wife) in the best of financial straits. I have some life insurance, but things could be better in that regard.

"I have many things to do over the next few months. I am happy to have been able to print *Tom Sawyer*. It is what I consider a big part of my life's work; my only regret is that I didn't get to do more of this kind of work.

"I treasure your friendship, and have benefited from knowing you and the members of the ATF. My love and best wishes, Jim."

Good news has just evolved regarding disposal of his equipment. Find details on page 10.

On Assuming the Legacy of Jim Rimmer

In April, Jason Dewinetz, 39, negotiated a deal with Jim Rimmer's widow, Alberta, to acquire all of Jim's equipment and materials with the goal of continuing the letterpress and typecasting tradition for which Jim was so well known. A writer, publisher, graphic designer and typographer now living at Vernon, B. C., Jason is a past instructor at the University of Victoria and now teaches at Okanagan College (English/fine arts & publication design).

By Jason Dewinetz

Having met Jim Rimmer briefly on a number of occasions, it wasn't until Rimmerfest, put on in Vancouver by the Alcuin Society in November of 2006, that Jim and I began getting to know each other. Shortly after that event I made my first visit to his shop in New Westminster. Although I'd heard the stories of what to expect—both in terms of the living museum I would find, as well as the enthusiastic generosity of its proprietor—I was not prepared for the impact it would have on me.

Jim welcomed me graciously and the two of us casually talked away a couple of hours, but I can still feel the sense of excitement and inspiration of those first hours in his shop. Such visits became semi-annual events for me, often to pick up lots of type Jim cast for me, to see how *Tom Sawyer* was progressing, or to drop off something I'd printed. Each was an opportunity to immerse myself in the scents and atmosphere of his workplace, and to learn more about typecasting.

I don't want to give the impression Jim and I were close, as my visits were all too brief and infrequent (I live 500 kilometers away), but we connected on a simple, direct level to discuss type and printing, and Jim seemed to enjoy my enthusiasm as much as I appreciated his skill, knowledge, and kindness.

After moving from Victoria to my home town of Vernon in 2007, I set up my Vandercook 15-21. This was shortly followed by an SP-15. Production began on small ephemeral projects, and three Greenboathouse Press books (released last year). (Greenboathouse *Books* had operated since 1999, but production shifted from offset to letterpress once I had the shop set up, hence the change of name.)

Over the past few years I've accumulated four other presses and various other shop machines, and around 10 cabinets of type. Much of that type has been cast by Jim, including cases of Garamont, Cloister Oldstyle, Centaur and Jim's last metal design, Stern.

In Jim's last year he assisted me in a search for a caster and began giving me quick lessons and bits of advice. We got close to an OA, but shipping from Chicago was simply going to cost too much. I was disappointed, but Jim assured me another would turn up. He had also generously offered to come to Vernon when a caster did appear, to help me clean it up and get it running. Knowing I was a Jenson nut, Jim also offered to give me his Cloister Oldstyle mats—a gesture that solidified my intention to get into casting.

On my last visit in November of 2009, we sat for a short while talking about things each of us was working on, but our time together was short due to his poor health. Jim told of many folks who'd shown an interest in casting, but all too often, he said, that interest quickly waned. I assured him this would not be the case with me; he met this with an encouraging smile. "I have a feeling it won't," he said.

After Jim's death in January, I was struck with an immense sense of loss, but also with the question: "What will happen to Jim's equipment?" This set off a chain of events that has resulted in a plan that will require me to

sell my house and find another with more land for a much bigger shop.

I sent a long letter to Alberta Rimmer, Jim's widow, explaining my interest not only in Jim's gear, but in his life's work and legacy plus a desire to carry that work forward. We arranged for me to spend a week in Jim's shop organizing and cataloging all of his equipment. For seven 10-hour days in April, I organized, photographed, inventoried and boxed up over 500 items, from mats to molds to keybars and type, not to mention the machines, including a Taylor Hobson and an Ogata pantograph, as well as various cutter/grinders, etc. Near the end of that week, Alberta and I sat down to go over the list, and in a matter of minutes we had come to an agreement. This July, all of this equipment will be on its way to Vernon.

My intention for Jim's gear is to carry on the traditions Jim established over the past half-century—to design, cut and cast proprietary types for use at the Greenboathouse Press, just as Jim did at his Pie Tree Press. This will be a long-term plan, for first I need to move, build the new shop and set up the new gear. Only then will I be able to focus my efforts toward leanring how to use all of Jim's mat making tools, casting machines, and presses.

This summer I'll be attending the ATF Conference, where I look forward to workshops with Rich Hopkins and Greg Walters. From there I'll have a lot of reading to do before attempting what will likely be a few years of muddling before I'm able to produce anything worthy of print. Despite the challenge it poses, this all is a source of the same excitement and inspiration I felt on those first visits to Jim's shop. I am honoured to be in this position, and look forward to years of making type.

One last note: After speaking on Jim's type designs and my plans to acquire his equipment at the memorial event in Vancouver at the end of April, I was met with an absolute wave of old friends and colleagues of Jim's who all seemed grateful that I was taking up his work. The sincerity of those people speaks to the impact Jim had on so many, but also to the importance of the work and the traditions behind it. His dedication to the craft is legendary, and will fuel my humble efforts for years to come.

Typesetting Machine Introduced in 1937

When we think of the concept of setting pre-cast type by machine, we think of oldies such as the Thorne, or the Paige (Mark Twain lost a fortune on it). Enthusiasm for automating composition of pre-cast type died out after the Linotype and the Monotype were introduced, yet inventors continued to seek solutions.

Jim Daggs has sent a clipping from the September, 1937, *Inland Printer* revealing the Econo-Typesetter, introduced by Econotype, Inc., Dayton, Ohio. The machine automatically set pre-cast individual pieces of type. It used a standard typewriter keyboard which could be run at standard typing speed.

"This machine sets type which is furnished to the user by the manufacturer at a low cost, the type being supplied in tubes from which it is loaded into the magazines of the typesetting machine," the announcement explained. "The type magazines, of which there are as many as there are faces and different sizes in use, are quickly turreted into position near the keyboard. Justification is accompished through use of compressible spaces between words."

The article includes the extravagant claim that "type has been set at a speed of 600 pieces a minute without mechanical transposition."

I must admit this device has never appeared on my radar screen. I wonder if one of our associates near Dayton might dig into the subject further and shed light onto this very late entry into the realm of automatic typeseting.

Thoughts on Assuming the Legacy of American Type Founders

By Micah Sławinski Currier

Settling on an exact point and style of writing an account of my experiences, and how I have come to be the castor at The Dale Guild Type Foundry is difficult. At first I thought about beginning with my first 6 a.m. bus ride from the Port Authority Terminal in New York City to the Guild plant at Howell, N. J. Feelings of wonder, excitement, and trepidation accompanied me on that trip.

As I looked out at the industrial wasteland of cranes & containers of New Jersey ports, it set a mood, but not exactly what I hoped for.

I could style the piece around a "History Repeats Itself" theme with prose referencing the late 18th century clandestine meetings of Binny and Ronaldson in smoke-filled alehouses prior to the formation of the historic type foundry which bore their names. It was similar to the discussions between me and Daniel Morris in Brooklyn alehouses, where we decided that we could run The Dale Guild Type Foundry if we committed ourselves to it.

Now over a year later, with many more trips to Brooklyn alehouses in between, this also seems to lack the reverence needed.

Another idea was to focus on the overriding theme set out by my mentor Theo Rehak in his book, *The Fall of ATF* (Howell, N. J., privately printed in 2004) wherein he discussed the fact that the lack of new blood was a chief reason for the demise of the company. Theo's desire to have his major life's work continue for future generations has opened the door for several apprentices in the past—to no avail. I admire his acceptance of the fact that nothing remains the same indefinitely and that complacency within a craft leads to its demise.

None of these tacks seems quite right.

Every time I begin my workday, be it casting type or doing repairs and maintenance, I am reminded that I am very fortunate to be where I am. I love what I do and, as William Morris said, "It is right and necessary that all men should have work to do which shall be worth doing." To me there is no work more worth doing than helping to continue the tradition of typefounding. Without the efforts of a select group of people who had the foresight to preserve this craft, I would never experience the wonder of throwing over a pivotal caster and seeing a 72 point initial slide down the chute . . . or having the excitement of gazing at 500 pounds of type standing in galleys waiting to be fonted . . . or experiencing the trepidation of dodging splashes and finessing century-old casting machines.

I will be forever grateful to my friend and mentor Theo Rehak for giving me the opportunity to learn the typefounding craft, and for his continuing guidance and comradeship through all my sometimes-foolish endeavors. Likewise I am grateful to Steve Heaver, Rich Hopkins, and Greg Walters for their role in saving good portions of ATF for future generations to experience. And to others who I have not yet met, I look forward to making your acquaintance in the coming years.

Perhaps that is how I ought to start my story of The Dale Guild.

As it was with so many generations, the craftsman may toil in solitude, but it is in the brotherhood of his community that he finds the most joy, and I am honored to be a part of the American Typecasting community.

This edition of *ATF Newsletter* showcases Bulmer in various sizes. On this page you see 11 pt. Bulmer 462 with 2 points of leading. The Bruce Rogers article is done in 10 pt. with 2 points of leading. Cold type pages are in various sizes of Monotype Bulmer Expert Display & Text.

80-Year-Old Baskerville Revival Sees New Life

It's wonderous to see truly great things endure. It's even more so when that greatness and endurance involves our beloved printing art.

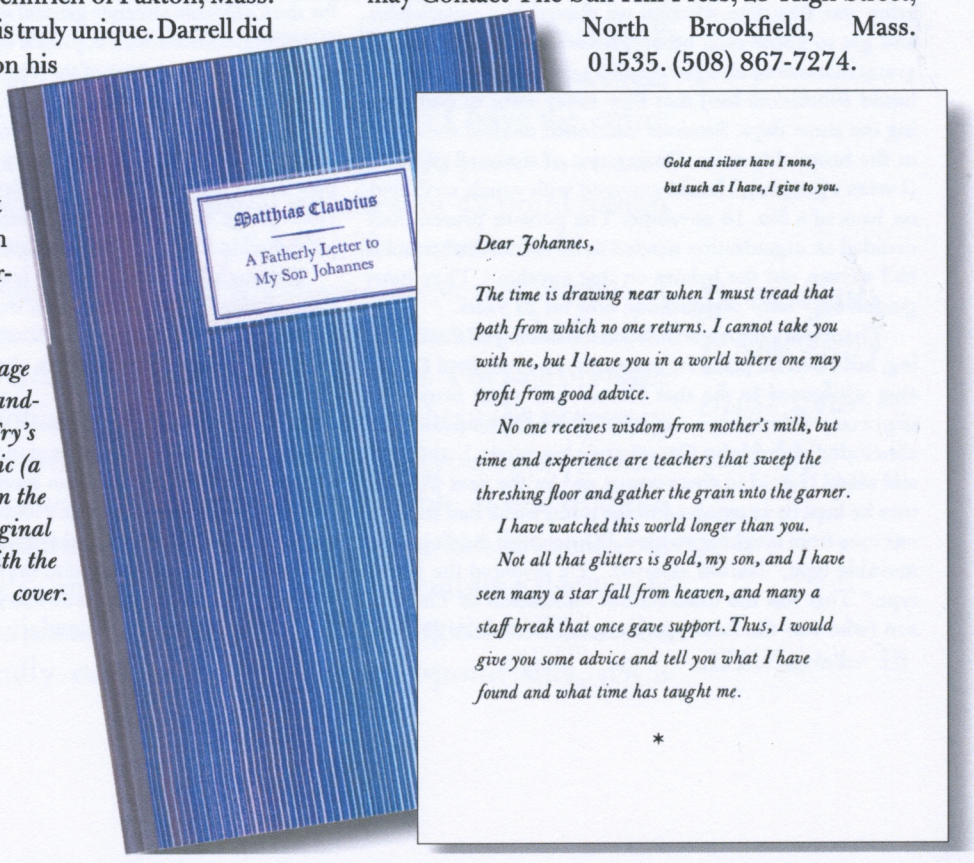
Darrell Hyder, proprietor of the Sun Hill Press, North Brookfield, Mass., has—after many years of tentative starts—completed one of those marvelous gems of wisdom and typographic excellence in the form of a handsome book titled *Matthias Claudius, A Fatherly Letter to My Son Johannes.* Darrell, who came across the text in a Zurich book stall, during the time when he lived in Switzerland and coincidentally met his future wife who now is very much involved in his private press activities and an artist of great merit. (Elisabeth did the paste paper covers for the book.)

The letter itself was written by Matthias Claudius in 1799 to his 18-year-old son who was about to leave his small-town home, parents, and family for an apprenticeship in Hamburg, Germany. Filled with profound advice, It was translated from German by Thomas L. Hansen, professor of German at Wellesley College, and beautifully case bound by Daniel Gehnrich of Paxton, Mass.

The typography is truly unique. Darrell did all descriptive text on his Monotype caster utilizing Fournier (English Monotype). The text itself is hand-set in original Fry's Baskerville; the 20-point font he used has a marvelous history all of its own.

The types were cast in the 1930s direct from original matrices of Joseph Fry & Co., by Stephenson & Blake of Sheffield, England. That special casting was done for the Anthoensen Press of Portland, Maine. Sixty years later, Darrell Hyder, recognizing the true uniqueness of the face, acquired the casting and has held it in anticipation of "doing something of merit" with the font ever since. This is Hyder's first hardcover limited-edition book, completed in 2006. Hyder comments: "Printers just can't seem to resist doing their own publications in addition to other work that pays the rent. After 35 years of letterpress printing for others, we wanted to produce some pieces that we found to be good, or fun, or special, or all three. And we thought you as a kindred spirit would also find them so."

Hardbound, sized 6⅞"x10¼", 32 pages, 125 numbered copies signed by the translator, printer, and "posthumously by the author," $95.00. You may Contact The Sun Hill Press, 23 High Street, North Brookfield, Mass. 01535. (508) 867-7274.



A specimen page showing the hand-set 20 pt. Fry's Bakerville Italic (a casting done in the 1930s using the original matrices) along with the cover.

Harold Berliner, Well-Known Private Typefounder, Dies

By Rich Hopkins

Though he hung up his pica pole and discarded his printer's apron a few years ago, Harold Berliner has remained an abiding force in our typecasting fraternity. He passed away April 28, 2010. He was 86.

In legal circles—he was a lawyer—Harold might be best known for writing the text of the Miranda warning in the 1960s. These words are now recited nationwide to those arrested to inform them of their rights. But in our typecasting circles, he is better known for writing the infamous Bylaws of our American Typecasting Fellowship.

When I put out an "invitation" calling persons interested in typecasting to come together at Terra Alta in 1978, I was pleasantly surprised when 35 people responded. Among those was a man I had never met nor known of—Harold Berliner of Nevada City, Calif. How he got word of the meeting I never knew, but I suspect Paul Duensing invited him personally.

This being the first such meeting, I had not yet learned there were other persons who shared my obsessive interest in letterpress printing, and more specifically typecasting. Harold Berliner definitely was one of those persons! He was so interested that he traveled from California to a little town in West Virginia in hopes of finding others with similar obsessions.

The first meeting was consumed by demonstrations and instructional sessions, but the true value of the gathering was free time wherein we shared our experiences and got to know each other. Harold was among a small group that was so charged up with adrenalin (and perhaps liquid substances too) that they never went to bed during the three days. Sessions continued around the clock in the hospitality suite. During one of those all-nighters (I wasn't present), Harold emerged with words scribbled on back of a No. 10 envelope. The persons present had decided an organization needed to be established, and he had written out the bylaws on that envelope. They have guided our "non" organization now for 32 years.

There was a dinner scheduled the last day of that meeting, but I had no plans for a speaker. I believe Paul Duensing whispered to me that Harold had some extremely important information on what John Thompson had concluded about John Gutenberg's invention. I stood up and asked Harold to give a report and for the next 45 minutes he kept us entertained to the point we all had tears in our eyes from laughing so hard. "Gutenberg didn't invent movable type," Harold asserted. "He invented the Linotype." This was the dead serious conclusion of Thompson (who was the Linotype authority for *Inland Printer* for years and also the inventor of the Thompson Typecasting Machine). Harold had obtained what he believed to be an unpublished manuscript on the subject.

Harold intended to publish it and therefore, purposefully issued lots of innuendo and obfuscation to keep us interested in buying his book, but he never did publish the piece. (I did, in *ATF Newsletter* 27 (Marach, 2002), after coming across a printed copy which Harold apparently didn't know existed). Harold was the center of attention at our first meeting, and a devoted ATF associate until his death. He coordinated a very successful ATF Conference at Nevada City, Calif., in 1990, where he was able to showcase his marvelous shop of several Monotypes, lots of English matrices, and commensurate pressroom and bindery equipment.

He attended law school and completed a master's degree in English at Notre Dame University in Indiana. While there, he founded the student-run Eric Gill Press. After graduating, Berliner moved to Nevada City in 1945 and bought the shop of the defunct weekly *Nevada County Citizen.* His plan was to print books, Berliner said in a 1999 interview. But when he and his wife started a family, he found the printing business was not enough to support all eight of our children, he said.

Berliner then started a private law practice and soon became district attorney for Nevada County, a position which he held for 16 years. He wrote the Miranda warning for the California attorney general in a process that started in 1966. Berliner's love of justice combined with his love of printing in his writing of the famous Miranda warning.

"What he did was put together the wording in a simple form and printed it on little cards. He then had it distributed to law enforcement officers all over the country so they could just read it," former Nevada County Superior Court Judge Frank Francis explained in Harold's obituary published in *The Union* newspaper of that county.

Although Berliner loved the law, his "big love was his fine printing," his daughter Ann Berliner said. "He had a great interest in printing and art, and we had that in common," Judge Francis said. "He always said, 'I am first a printer.'"

Several years ago Harold made the decision to dispose of his shop. Much of the typecasting equipment was purchased by two gentlemen from Switzerland. His daughter Judith, has carried on with the letterpress tradition, creating high-end announcements with her Full Circle Press—in her father's printshop next to the family home.

He is survived buy his wife Mary Ann, their eight children, and many grandchildren.

Studying the Bulmer Design

BULMER is the typeface you're viewing now; a combination of circumstances brings the exposition of the design in this issue of the *Newsletter*. First was a request from Jim Daggs of Ackley, Iowa, asking whether I had mats for larger sizes of Bulmer which he could use in printing the annual *APA Membership Directory* for the Amalgamated Printers Assn. Jim and his midwestern linecasting friends have made this effort a near ritual over the past several years, featuring the versatility of their combined holdings of matrices with each new edition showcasing a different design. In 2004 they featured Clarendon variations; in 2006 they used Palatino and Sapphire, both designs by Herman Zapf; W. A. Dwiggins' design, Caledonia, was featured in 2008; in 2009 Paul Renner's Futura design was utilized.

My Bulmer story will come, but first I must digress

To tease and entice me, Jim noted he had recently acquired Intertype Bulmer mats and had read in Mac McGrew's *American Metal Typefaces of the Twentieth Century* that Lanston Monotype's rendering of Bulmer was superior to Intertype's version. Thus, he wanted to show a visual comparison in the *Directory*. I took his bait and volunteered to set up and print the outer covers displaying my Bulmer holdings. Not only do I have the entire Lanston Monotype series from 8 point up to 36 point in roman and italic, I also have very unusual matrices for 42 point roman though I had not cast that size prior to his request.

For those who envy people who have large stashes of mats, it must be explained that there's a significant amount of effort involved in converting the mats into usable type. The first obstacle is having a machine and the molds and paraphernalia necessary and compatible with the matrices on hand. If you have mats for a Ludlow machine and they're easily accessible in one of those nifty Ludlow matrix cabinets (assuming your Ludlow caster is operational) it's simply a matter of hand-assembling the words and lines you wish to display, and then casting them. Since the Ludlow generally casts everything on a 12-point slug, it's a

Be careful if you envy those who cast type

simple matter to underpin the larger sizes with shoulder-high slugs and you're ready to make up the form. Having a saw to cut the slugs to the desired length is helpful, of course.

Hand-setting on a linecaster

It's a bit more difficult when you have a linecaster. Again, you need the mold, mold liners and a machine (Linotype or Intertype) capable of handling the mats. You must get the matrices into a compatible magazine, then install the magazine on the linecaster, and then (if everything is compatible), start keyboarding. Many years ago I used a Lino Model 31 and I speak first-hand of the time and labor involved in removing a font of mats from a magazine, cleaning it of dirt and debris, and then running a different font of mats into the magazine. It takes a lot of time. The article in the last *ATF Newsletter* about the Intertype Composing Stick attachment brought up the idea of being able to hand-set matrices not available in a magazine. Again, I speak with first-hand experience, addressing the fact that hand-picking matrices out of a big galley full of Linotype or Intertype mats is probably more difficult than hand-sticking type from a case. You do have the advantage of "brand-new type" cast from your assembled matrices, plus automatic quadding or centering if your caster is so equipped, but casting lines of type this way consumes a lot of time.

Looking at single-cast types from a Monotype

Finally, I get to Monotype mats. Depending on the source of these mats and your skill at the machine, casting a single font can take from four hours up to a couple of days. You consume all this time before you can set up your first word in that nice new type. This process is a lot slower than having fonts already cast and in California cases.

Monotype mats made by the English Monotype Corporation, beautifully finished with shiny chrome plating, I claim as the very best matrices manufactured anywhere. They are better justified and more acccurately labeled for set width than any others I have handled. By the way, this includes those handsome steel matrices made by American Type Founders. You may recall the hoopla ATF included in its specimen books about the absolute precision built into these mats? The truth is that the casting machine operator had to closely check

alignment, set width, etc., for every matrix as it was placed in the machine for casting. ATF always kept master fonts for comparison and each new casting was closely compared with the master. It is a tribute to quality control procedures in the ATF plant—this assured new fonts precisely matched those previously made. The precision was not built into the mats.

With English Monotype display matrices, a lucky caster operator, relying only on the markings on the matrices (with regard to set width) stands about an 80% chance of getting a complete font of usable, accurate type. He can bring that percentage up to 100% *only* by checking and confirming set and alignment on every new matrix inserted into the machine. It takes time and skill to know when a letter is positioned properly. Once properly adjusted, the operator can cast as many characters as he wants. It is for this reason that you often hear a Monotype or Thompson operator say something to the effect that he can cast 10 fonts almost as easily as he can cast one.

American Monotype matrices vary greatly as to precision in manufacture. A few electrodeposited fonts are quite accurate; others vary tremendously. The stamped aluminum mats which Lanston made after World War II are far more accurate than the brass/copper electrodeposited mats the company made prior to that time. By "stamped" I am inferring that the aluminum blanks were imaged by being impressed with hardened steel punches, much as the original copper matrices were imaged from earliest times in typefounding.

American-style mats came from diverse sources and vary as to precision

Be aware there were several independent companies making matrices for use with Monotype and Thompson machines. Anyone with requisite equipment and skill could take a font of cast type and make a font of matrices. Baltotype had a division which made and sold electroformed mats. I have in my collection mats made by Triangle Type Foundry and Monsen Typography, both of Chicago; Baltotype; and by (or for) the Kingsport Press in Tennessee. I also have deposited and engraved mats made in India, and, of course, now, several of us have successfully made our own electroformed mats. Don't get too excited over that, however. Doing a complete font—which

might have around 90 characters—would take a couple of months of concentrated effort. For this reason, very few of us have attempted more than a few sorts or ornaments.

Perhaps the best-made American mats came from Andy Dunker

Of all the electroformed mats in my collection, the most precise, well-made and well-justified ones I have were made by an early pioneer hobby typecaster named Andrew Dunker of Jackson, Michigan. Andy was a precision machinist by trade, and applied his tremendous skill to devising the jigs and other tools necessary to do an absolutely superior job of making his own matrices. He spoiled Paul Duensing with a continuing supply of marvelous piece borders, ornaments, and occasional fonts. Compare that with Paul's experience at getting electrotyped matrices made in Japan. He did this for his XVI Century Roman design. Those characters moved in all directions up to 5 and 6 points. Overcoming this consumed a tremendous amount of time adjusting the caster for each letter. Paul had a disaster in the 1970s when he contracted a commercial plant in Chicago to do a recasting for him. Though he provided a master font, the operator neglected to follow his instructions regarding set and alignment and Paul ended up recalling all fonts, melting down and re-casting everything.

The issue regarding letter width

There are advantages in casting individual characters on Monotype equipment. Those using Ludlow, Linotype or Intertype matrices have no option other than to use them as manufactured. Since the days of hot type, tighter letterspacing has become more desirable. We who cast from Monotype matrices have complete control over the amount of space around a letter. If desired, we can cast 24 point letters on a 20 point body (if a 20 point mold is available), allowing descenders to hang off the body, giving much tighter vertical spacing. Likewise, we can remove virtually all the white space originally built into the right and left sides of the letter, accomplishing what modern-day typographers call "tight letterspacing." Of course we cannot overlap letters, but we can squeeze them closely together. Tighter spacing does lengthen the amount of time involved in casting a font because your own judgment must be invoked in setting up each letter. In casting some

Caslon 3371 Italic fonts, I have removed over 5 points of unneeded space around a letter, casting my fonts to match William Caslon's original specimens, rather than adhering to the excessive widths specified by Lanston Monotype.

Composition matrices vs. display mats

Also, it's prudent to differentiate between composition mats made by both Monotype companies. Composition is work generated using the Keyboard, punching a ribbon, and using a mat case in a Composition Caster; justified lines of type are the result. Since the casting machine automatically positions the matrix and establishes the set width as each letter is cast, the machine operator can not intervene in any practical way when he is doing composition work. If he were casting fonts or sorts, it would be possible to adjust set and alignment on each character, but this extra step rarely was taken when casting fonts using composition mats. Comp mats, by the way, ranged from 4½ to 12 point, with "large comp" mats extending up to 24 point for a very few faces. Interestingly, Lanston Monotype intentionally designed its composition matrices to enable as much as ¼ point of space to be removed from the width of all letters to allow tighter fitting; you also could increase letterspacing if that was your desire. To do this, however, you did need to have the larger- or smaller-set wedges.

Finally, we get to the discussion of Bulmer!

So now I finally get to the Bulmer story. My font of 42 pt. Bulmer matrices was custom made for the Kingsport Press in Tennessee. I got the matrices through Pat Taylor at Heritage Printers, Charlotte, N. C. Pat, one of our ATF founding associates, had the undesirable job of disposing of the Monotype plant at Heritage. The mats were deposited direct from ATF-cast type and were fairly well marked as to set, with widths stated to a precision of ⅛ of a point, following the ATF casting which had minimal white space built in. The mats were fairly well justified, but not well finished. Several characters required hand dressing, etc., where the edges of letters had broken away on the deposited matrices, leaving undesirable burrs, etc. Also, the bearing surface of the mats often was not perfectly flat, causing fins on the cast characters. The time consumed in casting this font of 42 point Bulmer was about

12 hours. It included 78 different mats. I cast six fonts (4A, 7a, 4-1) and put two fonts into my own case, meaning I do have four fonts for sale, should you be interested.

A curious note: there was no numeral "6" in the font. I studied the "9" closely and concluded it could be inverted to serve as a "6," so I changed its alignment to accomplish this. Was that character omitted intentionally or was I just lucky that the problem could be resolved so easily? I'll never know.

A second circumstance fell on me via the insistence of Barry Schrader, now of Dekalb, Ill., who had sold his hobby shop prior to moving to Chicagoland from California. He is intent on obtaining from me a casting of 14 pt. Californian to equip his new shop. For me to accomplish this, I needed to devise a way of doing this with my Macintosh-driven Monotype caster. Having never done large comp on my MacMono system (devised by ATF associate Monroe Postman of Los Altos, Calif.), I decided it would be best to experiment with Bulmer before attempting the Californian. Thus, all the text you see here is set in 14 pt. Bulmer using large comp matrices, another rather rare item of American Monotype manufacture.

The 42-pt. Bulmer specimen

ABCDEFGHIJKLMNOP
QRSTUVWXYZ &
$1234567890 (.,-:;"'!?)
abcdefghijklmnopqrstu
vwxyz ff fi fl ffi ffl

Now for a brief history of the design.

The name "Bulmer" is unusual, for it is not the name of the type designer; the design was created initially by William Martin for William Bulmer and the Shakspeare Press in London. Thus, the face was named for the printer rather than the type designer. This was about 1790, according to McGrew's book. William Bulmer is credited with greatly advancing the art of printing in England and these types were hailed as illustrious designs, based on Baskerville's design but he injected it with hints of Bodoni, whose work the Martin admired greatly.

The face was named for the printer, not the designer

A physical description of the Bulmer design? The face is a trifle lighter, a trifle more compressed on the horizontal plane, and it possesses more of the strict vertical and horizontal axes of Bodoni and other modern roman designs, when compared with the Baskerville model just mentioned. During the early years of the 20th century, when American Type Founders was reviving the very best of older typography, Morris Benton chose Bulmer for a revival. Benton's design (both the roman and italic) was introduced sometime between 1923 and 1928 (McGrew notes conflcting dates in this regard).

Though an excellent interpretation of the design, it is my understanding that Bulmer never was a big seller for American Type Founders. My red 1934 ATF specimen book shows the design from 6 to 48 point in both roman and italic. Footnotes indicate small capitals and oldstyle figures were available, and initially also an intermediate size for figures was offered, according to Mac McGrew. Bulmer remained in ATF catalogs through the 1950s and was included in the ATF looseleaf catalog of the 1960s. But by the time the 1979 *Handy Type Index* was issued by ATF, Bulmer was no longer included.

Benton's design for American Type Founders

English Monotype did its own interpretation of Bulmer, but it was not introduced until 1967. It, too, was not very well accepted. Stanley Morison, in *Tally of Types*, says "The face cannot be regarded today as above criticism. The projectors are excessively long for the smaller sizes and the capitals excessively short. It was a mistake to reproduce in the Monotype version these eccentricities, pardonable or even agreeable

as they are in private press printing, where experimental typography is not only justifiable but desirable."

You are asked to help corroborate a deal between ATF and Lanston

When it came time for American Monotype to issue its own Bulmer design in 1954, the company went with the ATF/Benton rendering, and was free to do so. This brings up an issue for which I seek help from my "type nut friend"—I need to find proper references. Theo Rehak has heard the story and so has Steve Saxe. Yet none of us can come up with a solid reference to confirm what transpired during the Great Depression, when ATF went into bankruptcy. During the period, American Monotype remained healthy, never furloughing an employee. These circumstances facilitated Lanston Monotype negotiating with the bankers (controlling ATF at the time) an agreement to "share" designs. The bankers did not understand the value of the Benton-lead parade of excellent designs created during the 20-plus years preceeding the Depression. Nor did they realize it was an "uneven playing field"—ATF sold type, where Lanston Monotype made and sold matrices for making type.

Whatever the agreement, Lanston Monotype in ensuing years was able to copy any of ATF's best designs, including Garamond, Stymie, Cheltenham, Clarendon, and even Goudy Oldstyle. Notwithstanding the fact that Frederic Goudy was type director for Lanston Monotype and did generate several successful designs for Lanston, the company was not other-

wise compelled to generate much in the way of its "own" designs because of its nearly free access to so many wonderful ATF renderings. I desperately want to delineate this arrangement for a book I am presently writing entitled *Tolbert Lanston and The Monotype: An Affectionate Retrospective.* Any help you give by providing proper reference will be greatly appreciated. This is a key factor in assessing Lanston's type design strategy.

I have always admired Bulmer and I have used it many times. My experience with Bulmer definitely gives me a "feel" for it, and that feel is not one of comfort. No other design, in my opinion, requires such close attention at the press. Underinking leaves a weak, broken, difficult-to-read image. Overinking just a little bit leaves you with an image which is unattractive, muddy and fuzzy—all at the same time. Perfect inking gives a crisp, wonderful image. Thus, I conclude that using Bulmer is only for the person who is definitely comfortable with his/her ability to control things at the press. Perhaps this "touchy" nature has made Bulmer resistant to use as a digital face (the design has been done by both Bitstream and Monotype Typography, but it seems to be used very infrequently.)

Bulmer requires the utmost care in printing by letterpress

Printing Bulmer on coated stock emphasizes the difficulties mentioned above. Curiously, I note that ATF chose a coated stock for its undated *Style Book On Bulmer*, written by George F. Trenholm, a noted artist, typographer and type designer of that era. Therein, he says "Bulmer is more regular than Caslon,

more spirited and independent than Baskerville, and has more ease, dexterity and artistry than either." In practical application, he says, "Despite Bulmer's long ascenders and descenders, text sizes of the face will almost always look better for generous leading .... Traditionally, ornamentation shoul be used sparingly. William Bulmer rarely used it, and John Baskerville, Martin's inspiration, was strongly opposed to it, both preferring an abundance of white space to set off the type."

Now you know more than you ever wanted to know about Bulmer. This report is done the only proper way to show the design's subtle nuances—printing direct from freshly cast metal type via letterpress.

Here is the Intertype version of Bulmer for comparison

Since it was a seemingly harmless comment in Mac McGrew's book, *American Metal Typefaces of the Twentieth Century,* which precipitated this discussion of Bulmer, it is only appropriate that we reproduce the statement which may be found on page 55:

"The Monotype cutting of *Bulmer*, about 1954, is unusually faithful to the ATF original for a machine-set face; the Intertype cutting, first shown in 1958, is less satisfactory, due to shortened descenders and mechanical restrictions applied to the italic."

This text has been set in *Intertype's 14 pt. Bulmer* by Jim Daggs, who has both a marvelous collection of Intertype machines and an abundant supply of mats to go with the casters. You may make an easy comparison, for the previous pages all are *14 pt. Monotype Bulmer.*

ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz $ 1234567890 fffiflffiffl
(.,-:;"!?) fiflffffiffl ABCDEFGHIJKLMNOPQRSTUVWXYZ&
ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz $ 1234567890
(.,-:;"!?) ff fi fl ffi ffl

Since it was a seemingless harmless comment in Mac McGrew's book *American Metal Typefaces of the Twentieth Century*, which precipitated this discussion of Bulmer, it is only appropriate that we reproduce the statement which may be found on page 55.

"The Monotype cutting of *Bulmer*, about 1954, is unusually faithful to the ATF original for a machine-set face; the Intertype cutting, first shown in 1958, is less satisfactory, due to shortened descenders and mechanical restrictions applied to the italic."

This text has been set in *14 pt. Monotype Bulmer*, cast utilizing very rare large-composition matrices, made by the American Lanston Monotype Machine Company.

ABCDEFGHIJKLMOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz $1234567890 fffiflffiffl
(·,-:;"'!?—) Small caps available as hand-set, not cast
ABCDEFGHIJJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxz fi fl ffi ffl .,-:;"'!?

Comparison showing of the Lanston rendering

Bibliography

"One Hundred Years of Type Making, 1897-1997." A centenary issue of *The Monotype Recorder*, new series number 10, 1997. Published by Monotype Typography Limited. Bulmer is mentioned in the chronology on page 52.

McGrew, Mac F., *American Metal Typefaces of the Twentieth Century*, second revised edition. New Castle, Delaware: Oak Knoll Books, 1993. Mac's book is the uncontested authority on all matters relating to metal types.

Morison, Stanley, *Tally of Types*. Jaffrey, New Hampshire: David R. Godine, Publisher, Inc., 1999. The volume original was printed in a private edition in 1953. Morison's reference to Bulmer is found on page 95.

Trenholm, George F., *ATF Style Book on Bulmer*, undated, published by American Type Founders. This eight-page 8½x11 booklet gives a biography of the author and a review of Bulmer plus two additional leaves providing one-line specimens of all sizes of both the roman and italic. It is labeled "Number 1 of a Series," and was tucked into a ring-bound *ATF Specimen Book* issued in 1955. A large portion of the booklet is devoted to showing Bulmer in display advertising.

Certainly also consulted were several editions of type specimens issued by ATF from 1923 on to 1955. Also the pole-bound type specimen book issued by Lanston Monotype was consulted.

Looking at Type Over the Past 40 Years—and Now

By Stan Nelson

Forty years as a private press is something to celebrate, except that it means I'm four decades older! In 1970 I began The Atelier Press, choosing that press name because the *atelier* means "the workshop of an artist or craftsman." It fit my interest in combining art with typography, and a commitment to quality workmanship. I wanted to make my own type and use it to print fine, illustrated books (a desire not fully realized).

Forty years ago, as I began my press, it was a different world. Back then commercial foundries and letterpress were a viable part of the printing industry. Hot metal had always been part of printing—and to me as a young man, it seemed it always would be.

New type was expensive. Choices had to be made based on how much cash you had. And just because it appeared in the type specimen book didn't mean they would cast it for you. Ordering type often did involve long delays (until enough orders were in hand to justify casting). In other cases, faces were discontinued and simply not to be had. New type designs were not being produced since shrinking markets and the great expense of preparing a new typeface in a multitude of sizes could not be supported.

The shift to cold type was a boon to many amateurs. Hobby printers were unconcerned at the disappearance of commercial foundries. Their needs were easily met at scrap metal prices. Yet they were limited to buying the types that printers had in their cases.

Those 40 years have made a difference, and the results can be seen in the typographical assembly herewith. With the exception of the *Sterling Cursive*, cast by the Hong Kong Type Foundry and imported by the late Sylvan Kamm, and *Comstock*, cast by American Type Founders, all others were recently cast by members of our non-organization (ATF) and some by earlier amateur founders.

In setting up my piece, I selected types which would fit, so don't infer any other significance to my choices. There were a lot more possibilities than I had room for. But here is a list of the fonts and their founders.

Glyptic, cast for David Churchman, The Sterling Foundry; *Corinthian & Marble Heart*, cast by Charles Broad, the Phoenix Type Foundry; *Type & Composing Stick*, printing ornaments engraved and cast by Paul Hayden Duensing, the Private Press and Typefoundry of Paul Hayden Duensing; *Caslon Openface*, *Crayonette*, *Ornamented No. 12* (a.k.a. *Jim Crow*), *Tudor Black*, & *Tuscan Ombre*, cast by Richard L. Hopkins, Hill & Dale Private Press and Typefoundry; *Trocadero*, *Dutch Initials*, and *Tiern* cast by Theo Rehak, The Dale Guild Typefoundry; *Thorne Shaded*, part of the Smithsonian Type Revival series, cast by Pat Taylor, Out of Sorts Type Foundery; *Clarendon Extended*, *Fournier le Jeune*, *Metropolis Shaded* (a. k. a. *Homewood*), and *Wilhelm Klingspor Schrift*, cast by James Walczak, The Sycamore Press and Type Foundry. To page 40

Complex Bruce Rogers Assembly Re-created in Metal

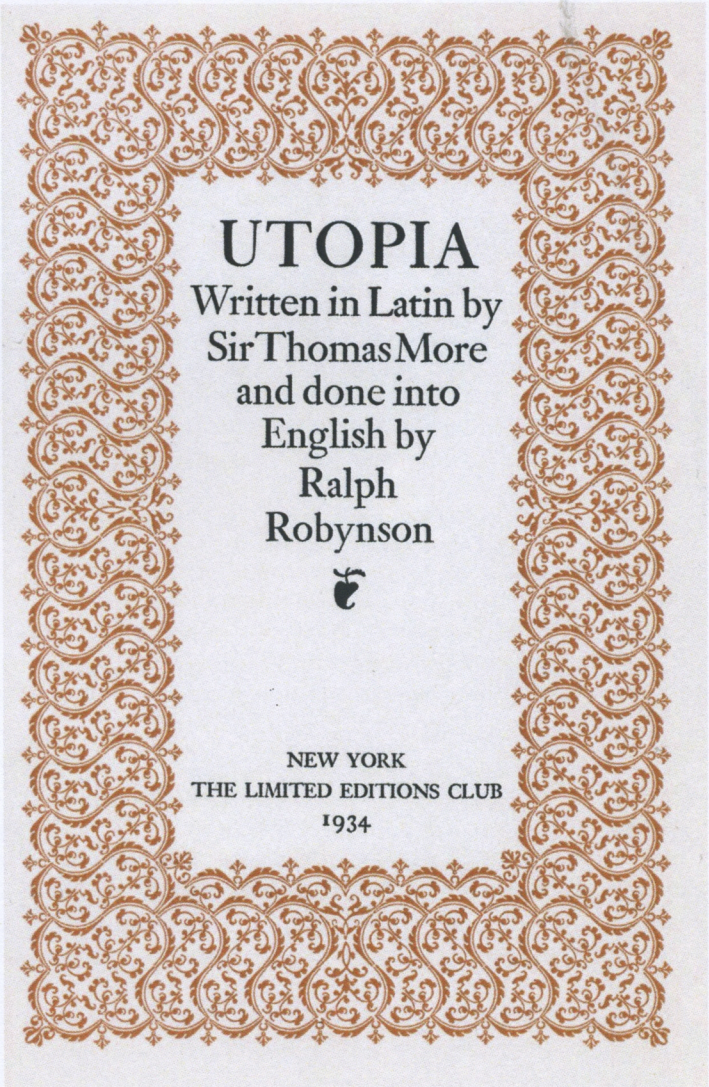
On the following two pages you will find a direct scan of an assembled metal form, and then a direct impression from that form. They are fully discussed beginning on page 30. Not surprisingly, the form weighed significantly more than the fragile scanner onto whose glass surface the form was placed, face down. Doing the scan was an after-thought and thus, you detect slight displacement of the components which would translate into improper alignment if the form were to be reprinted in this state.

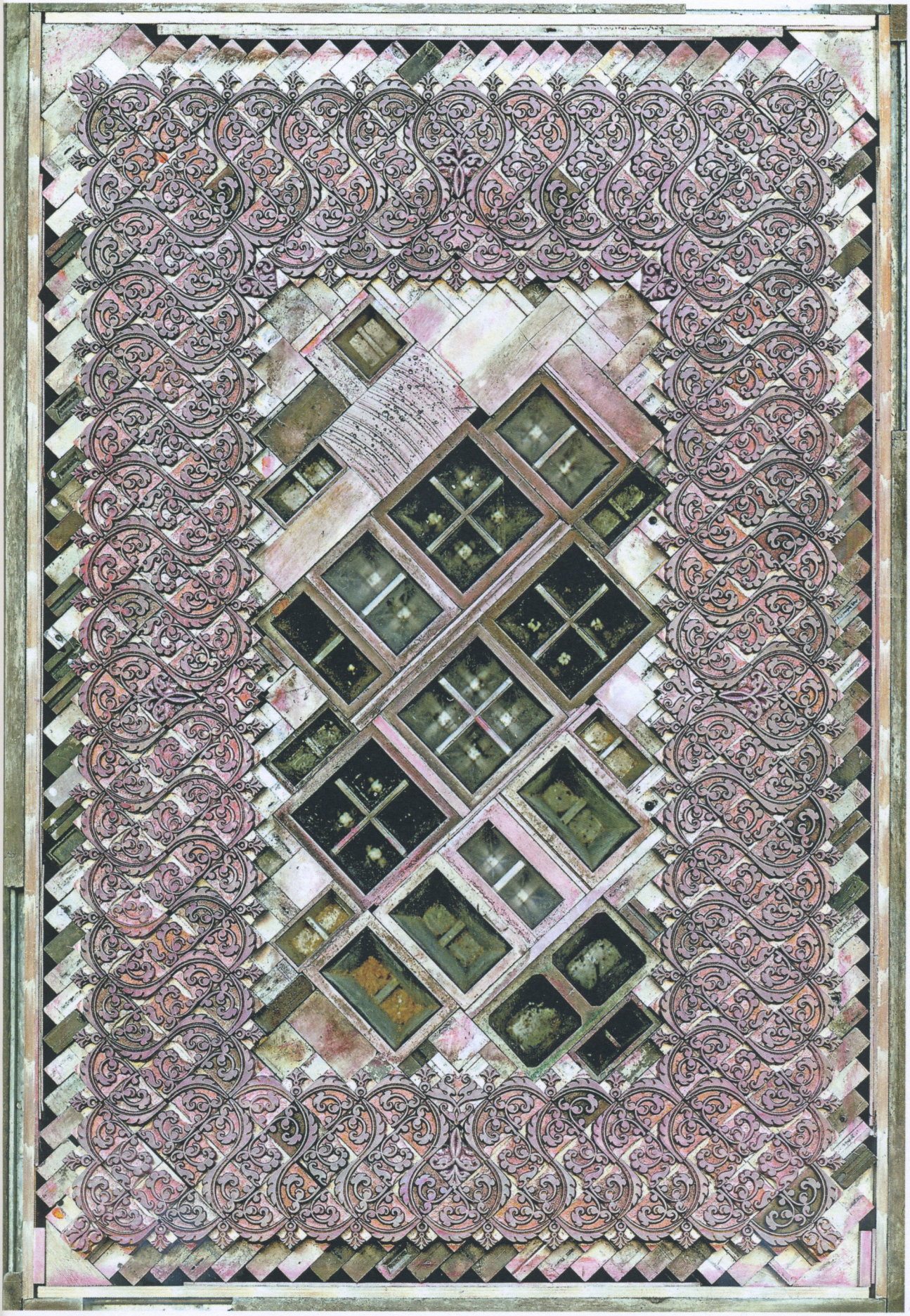
For comparison, the original work which was designed by Bruce Rogers is shown in reduced size at right. Fidelity of this reproduction far exceeds that which was found in *Books and Printing*, which had served as our model. Studying the original confirms our suspicion that the *Books and Printing* specimen was reduced to fit the page, and confirms the fact that our setting is precisely the same in size as the original work. Thanks go to Jim Walczak for providing this scan, made direct from the original Limited Editions Club volume found at the Smithsonian Insitution, where Jim often is a volunteer. The color used is my best attempt to match the color utilized in the original printing.

Regarding assembly: Arie Koewelyn did the preliminary setup. I reworked it, starting with an angle quad in each corner. Thereafter, every step along edges was begun with a 12 pt. 2-em quad. Assembly at a 45° angle was done in an accurate brass galley, constantly pressing against the types as inserted to establish and confirm alignment. Occasionally the entire form would skew in one direction or another, causing much grief and anger.

After being placed in a rigid chase, much manipulation still was necessary to get components to their proper alignment. The largest possible accurate quads were utilized in the center area to give the form greater rigidity. Amazingly, only half a dozen brass and copper thin spaces were needed, though a bit of botching was necessary on a few obstinant quads. You will note 3-point leads in the inner area, these being necessary to bring the remainder of the form into alignment as a result of the 21x24 point units, which were utilized throughout the form. After printing and being unlocked, the form lost much of the alignment it had possessed.

A direct letterpress impression found on the right-hand page (page 30) was made from the form, locked up in a 10x15 Heidelberg Windmill chase. The entire run was completed with no workups or loose characters.





The combination of typographic units into more or less

Illustrative Decoration

is sometimes a matter of long study and many trials before a satisfactory result is reached. Mere ingenuity in the use of ornaments should not be the designer's sole aim or even his primary one. However ingenious or inspired his combinations of printers' ornaments may be, the result must first be pleasing as decoration and appropriate to the text, otherwise the whole book suffers; and the book is more important than any of the component parts. The most useful typographic or border units are those which are least complicated in design; because the simpler the units the more varied the combinations that can be made of them.

—Bruce Rogers

Bruce Rogers Was A Madman

What started out to be an innocent weekend get-together turned into being an obsessive study of some of the work of legendary designer Bruce Rogers. Arie Koelewyn and Joe Warren from Lansing/East Lansing, Mich., were coming for a visit the weekend of March 12-14, 2010, and I had responded telling them I intended to make it a "working weekend" with the goal of producing a keepsake to commemorate their visit.

Earlier, Arie and I had collaborated on a journal saluting our recently departed friend and long-time amateur journalist, Harold Segal. I had done 14 pages of the composition using 10¼ pt. Baskerville, a face I had cast 20 years earlier for Harold (a special size cut by Lanston Monotype especially for the Rumford Press); Arie wanted the forms so he could distribute the type and use the face for his own journals in the future. I told him he had to come pick them up; it was just too clumsy to think of shipping it to him.

After my "dog and pony" show giving them a tour of my typefoundry & printing shop, I asked "what are we going to print?" Arie expressed interest in building a design using arabesque ornaments, but was uncertain what that might be. Joe went to work on writing text for the piece. A light came on in the back of my head. I rushed to my library for my copy of Paul Bennett's *Books and Printing* (Cleveland and New York: The World Publishing Company, 1951) . I had spotted a reproduction therein of a Bruce Rogers' title page for *Utopia*, (New York: The Limited Editions Club, 1934) . The ornaments were familiar to me, being the Granjon Arabesque which I featured in an earlier edition of this *Newsletter*.

"You figure how Bruce Rogers did this thing and we'll put it together," I said naively. Arie spent several moments studying it and concluded the key was that everything was composed at a 45-degree angle. Arie had discovered the key to successful assembly, so I handed him a shiny brass galley, boxes of Granjon Arabesque, and showed where he could find lots of spacing material. Arie was left to figure it out while I moved to the foundry to cast on my Composition Caster the text Joe had been writing. The shop became enveloped with unusual silence as each of us happily worked at our assigned tasks. Arie was working with the galley lying flat on my makeup stone, building the form rather freely, not too concerned with making the form "lift." That in itself would become a task, for though there were only ten different characters involved, each could be turned four ways and Rogers' design utilized them every way possible.

An hour later, Arie interrupted Joe and me to announce there were not enough cast characters to complete the work. So I finished my work at the Comp Caster and turned on the Supercaster to make additional quantities of the 24-point ornaments. Later Arie also announced he would need more of the 12-point ornaments too, so I had to fire up a third machine to complete that task.

More than once that day, Arie pushed away from the stone, saying "I'm getting cross-eyed just trying to figure out how things go together." Around 6 p.m., when I was having difficulty getting set up for the 12-point ornament casting, we opted to break for dinner. We would return later with the goal of at least pulling a proof. As often is the case, we thought through the project much faster than we were able to do the work. The three of us worked at least 10 hours that Saturday.

In *Books and Printing*, Bennett includes an article he had written titled "Adventurer with Type Ornaments," including a specimen to serve as our blueprint. Bennett attempts to explain the "construction," saying "Setting them out individually doesn't give a hint of their possibilities. Yet look at the result of their use by B.R.; scan the design closely to discover just where and how each element is placed with such a telling effect—and you begin to appreciate the man's ability." Bennett didn't do his work thoroughly; he missed listing one ornament integral to the piece. He also failed to note that B.R. modified two ornaments so they would better fit his design.

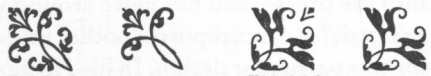

EM 310 EM 311 EM 312 EM 314 EM315

Herewith are shown the 24-point components. But B.R. concluded items 314 and 315 needed modification. His intention was for these to connect to the stems of inner flowers in 311 and 312, but their terminal lines simply didn't connect properly. Modified characters must have been made for him by English Monotype for that is where the characters are found—far later in the sequential list from the source designs shown above. American Monotype offered all other characters in B.R.'s repertoire of ornaments except these two modified characters.


EM 314 315 EM 665 666

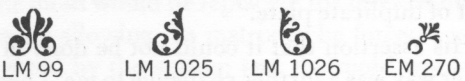
George Mansbridge's book titled *Bruce Rogers: American Typographer* (New York: The Typophiles, 1997) explains: "On his drawing table he kept a case filled with type ornaments. More and more, borders and decorations built up from type ornaments were becoming a distinctive feature of his work. Using an ink pad, he would stamp out preliminary ideas for designs in great variety." Perhaps this mix of ornaments gave him the piece used at the four corners of the design, for it is unique to American Monotype. All others were most likely the English Monotype versions.

Arie had difficulty with the design, largely because pieces 665 & 666 are on bodies sized 24x21 points, where other pieces mostly are on 24x24 point bodies. This provides the necessary offset for connecting the major strokes which create the "S" shapes so prominent in the design. Those extra three points come to bear in places far removed from the "S" shapes and thus, the entire piece had to be assembled with uncanny caution to assure that everything would meet properly. The four "bubbles" (where direction is changed in the center of each of the sides) contain one 24-point piece, 290, which was modified by B.R.; it had to be cast on a 21-point square body for the assembly to fit properly, with right and left portions cut away and the remaining 24 point image heavily kerning on two sides. Three characters adjoining it had to be notched (using my Rouse Type Mortiser) to assure everything would meet properly.


EM 290 EM 310

Above are the two characters as they were created, along with B.R.'s alteration. I was able to make the alterations using both a Dremel tool and an X-acto knife.

It surely took a mathematical genious—*or a madman*—to figure the innerworkings of all these characters to create and pre-determine that the whole thing would go together properly. On more than one occasion when Arie and I were working on it, we probably would have declared it "impossible" if it were not for having a sample of B.R.'s finished piece to guide us. Of course no map or technical guide was available, so the notching and special bodies were left for our own discovery.


LM 99 LM 1025 LM 1026 EM 270

Shown above are the remaining characters utilized by Rogers in creating the assembly.

How did Rogers develop such an idea? Mansbridge quotes from another Typophiles volume. "He resorted to bold experiment to re-create the simple, traditional arabesque forms which were evolved by typefounders before the end of the 16th century. A drawing of a complete arabesque pattern from an old book was photographically enlarged, and a line block made from the enlargement; from this several proofs were taken. In order to gain that ingenious variety which is the never-failing interest of such forms, the printed proofs were cut into their simplest component units, and these units were shifted and rearranged to form different patterns. When a . . . combination had been invented, it was carefully pasted together, and from this was made the reduced zinc line block which was used in the actual printing."

This would suggest that metal type never was composed for the work. Such would certainly an-

swer the critical concern of any person who has set type: "How do you lock up a form (all set at 45 degrees using hundreds of interlocking components) sufficiently tight to hold together while lifted into the press—and not move around while being printed." Rogers reports another route was taken for this particular design. In his *Paragraphs on Printing* (New York: Dover Publications, 1979 —a reissue of a 1943 original) B. R. explains "By composing the border at an angle of 45 degrees and making an electrotype which was restored to its usual rectangular position in the chase for printing, the result was a border that cannot be produced in any other way." Thus, he suggests the piece was set up in type (probably easier than pasting down a bunch of cut-out ornaments) but that the form was not printed; instead, it was made into a solid, easy-to-handle electrotype.

Therefore, the exact replica of his work shown herewith, composed entirely of Monotype-cast ornaments, is likely to be the first-ever printing made directly from type iteself rather than some sort of duplicate plate.

His assertion that it could not be done in any other way was a further challenge to me. I needed to turn all of the type to 45 degrees and somehow get it to lock up and lift! The form was done with the goal of having a 12-point saw-tooth edge on all four sides; the ultimate goal was to lock up the form and print it directly, using my Heidelberg 10x15 Windmill press.

Mike Anderson suggests that Rogers never assembled the cast characters himself. Considering the tight union-controlled environment of the composing room in those days, Mike's thought might be valid. After the experience of assembling the form myself, I insist that whichever compositor received the job of composing the form surely had nothing but disdain for the madman who dreamed up the layout.

This is the most complicated arabesque assembly ever attempted at the Hill & Dale. It is shown here and this discussion has been prepared as my hint to you that perhaps you, yourself, should be attempting similar projects. The private typecaster is especially qualified to do such things, for he, unlike "mere printers," can have virtually an unlimited supply of the ornaments necessary. That factor alone prevents others from attempting such challenging work. *Let's see your work!*

Mixing Castings from Both English and American Matrices

Elsewhere it is noted that most of the ornaments used in the B. R. assembly were offered by the English Monotype company and American Monotype. I have matrices from both firms, and that condems me to keeping my castings separated. Although quite similar, there *are differences*. Below are the English versions on the top row, and the American versions below them, along with their associated numbers.

1234 1235 1238 1237 1233 1023

In previous articles I have suggested that the two companies exchanged ornament patterns. Even if both companies worked from the same patterns, there were opportunities for differences in the weight of strokes, size of image, etc., as affected by cutting tools and followers used at the pantograph utilized for engraving punches. But I also conclude the two firms did not always use the same master patterns.

Close study reveals LM 1234 and 1235 are not precisely the same as their English counterpart; whose heaviest portions are wider. Items 1238, 1237 and 1233 seem the same, but LM 1023 is electrodeposited from an older hand-engraved character; the English version reveals a more uniform recutting of the design.

A wise type founder wouldn't allow castings from both sources in his shop. Mixing would result in pesky variations and misalignment.

Casting 120 pt. Type in a Hand Mold

By Greg Walters

The ladle plunged into the pot of molten metal, coming up with a half-pound of mirror-smooth typemetal. Seconds later a thin column of silver dove into an ancient typecasting mold. A moment later the mold was parted and out popped a perfect shiny sort of 120 pt. type. The jet was tapped off and the mammoth lead soldier joined his comrades on a galley.

That's the scenario that popped into mind as I considered my contribution to the Bird & Bull book, *Private Typecasters*. I was one of 15 typecasters who were preparing contributions for the book, edited by Rich Hopkins, printed and published by Henry Morris. I was trying to think of faces for which I had the only known mats when a crazy vision popped into my head. I had a 120 pt. hand mold, and I was sure anything cast in it would be unique. But the actual casting turned out to be nothing like my warm fuzzy fantasy.

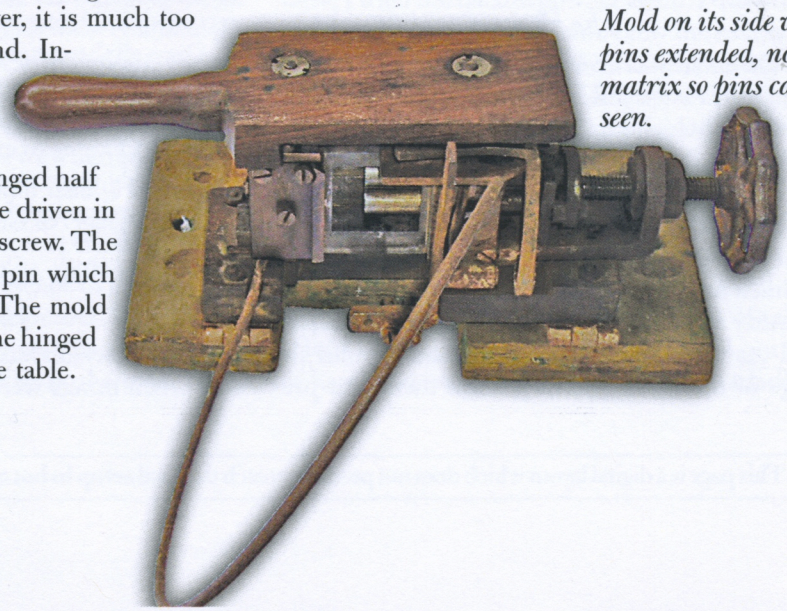
The Mold

Several years ago I acquired a 120 pt. hand mold from Arvind Patel of the India Type Foundry, Ahmedabad, India. Arvind was willing to part with the mold as he had no mats to use with it. I had some 120 pt. ATF mats, but hadn't really planned to cast with it. Rather, I held it more as a curiosity piece.

I don't know the history of the mold, but I suspect it was made in England in the 20th Century. The mold is in two halves according to traditional hand mold design. However, it is much too big to be held in the hand. Instead, one half is hinged to a board which is meant to be clamped or bolted to the edge of a table. The hinged half has two core rods which are driven in and out of the mold with a screw. The free half of the mold has a pin which reads "GANESHJI 120." The mold would be assembled with the hinged half thrown back above the table.

When the mat was placed and ready for casting, the entire mold would be swung forward so that it hangs over the edge of the table and the mouth is up. The mold is equipped with a lever to rock the mat back from the newly cast type. In theory, the mold would be thrown back after casting; the free half of the mold would be removed; the lever would be moved to rock the matrix back from the face of the type; the type would be removed; the free half of the mold would be replaced; the lever would be released allowing the matrix to be forced against the mold by the spring; and the mold would be ready to swing forward for the next cast.

The mold itself was rusty, having gotten wet in transit from India. I started cleaning one half of the mold (with the pinmark): I dismantled it, cleaned it and removed the rust, oiled it thoroughly and reassembled it. The refinished half looked great, and my enthusiasm was peaking so I didn't clean the second half. *I had to try casting that night.* My first thought was to cast a large ornament. I went



Mold on its side with pins extended, no matrix so pins can be seen.

through my ATF mats and found a couple Peignot ornaments which, while not what I really had in mind, seemed like they might work.

I fired up the pot on my Elrod and fitted the Peignot ornament mat to the mold. As soon as the metal was up to temperature, I poured the first cast. The cast was quite *unusable,* with plenty of chill lines, absolutely nothing like the type in my fantasy. Nevertheless, it was good enough to encourage me to try again. Subsequent casts were better as the mat and mold got hot, but it still wasn't good enough to print a sharp, clear image. I decided I would be better off with a mat of simpler design so I looked at my matrix list and found two good possibilities: 120 pt. Harlequin Initials and 144/120 pt. Stymie Inline. A problem with the Harlequin Initials quickly surfaced: several characters were wider than the mold could cast. But the Stymie Inline would work well with the mold, the only thing hanging off the body being the tail of the Q.

A cast letter showing pinmark, below with jet still attached, face of letter with flaw in cast.

Through trial and error extending over half a dozen casting sessions, I devised a casting technique which worked well enough for me to complete casting of an entire alphabet (plus alternates) for the book. At best, only one of every three characters cast was good enough to use.

The Process

The mold was clamped to the delivery table of my Elrod caster, just a couple feet away from the Elrod pot, which would be my metal source. I used a clamp to lock the mold closed for casting. The metal was the standard Linotype alloy used for casting leads and slugs on the Elrod. I found I got best results with metal heated to 725-750° F, which is much hotter than the metal is normally cast.

After a number of pours to warm the mold, the real casting would begin. I put mats around the edge of the Elrod pot to preheat them, but preheating and repeated casting didn't get the mat hot enough to avoid flow problems. To get the mat really hot, I used pliers to hold it over the gas flame of the Elrod pot for about 20 seconds. Then it was a rush to get the mat positioned on the mold and held in place with the spring. Then the mold would be swung forward into casting position. The mat and spring would now be on the bottom, and the mouth would be on top.

I'd get a ladle of metal ready to pour. With the left hand I'd jiggle the mold up and down rapidly while the right hand dumped the metal as quickly as possible, ususally into the mold, sometimes elsewhere. I'd continue to jiggle the mold for a few seconds until I was sure the face had solidified.

Once all the metal was solidified, I would swing the mold back, remove the mat, open the mold and remove the type. Now I examined the type for the faults I had come to expect. Faults that showed up in the body were tolerated, but those in the face usually condemned the cast back to the pot. There were four faults to watch for: a cavity, a depression, incomplete filling of details, and impurities.

Problems

The worst fault was a cavity in the face. It seemed that when things were too hot, the crystalization

process changed and the metal in the center of the type shrunk dramatically. It seemed that when the center of the type reached the plastic state (after the rest of the metal had solidified) and stayed in that state too long, it would shrink so much that it would pull the metal back away from the mat, against the force of gravity. The result would be a very deep "pothole" in the face of the type.

While I was usually able to avoid a "pothole," I still had to be concerned with shrinkage. The face was inevitably lower at the center of the type than at the edge. Sometimes it was only a few thousandths; other times it was a serious depression, as much as a sixteenth of an inch. I was able to get a usable letter after multiple casts in all cases except one. I was unable to cast the "H" without a serious depression on the bar. I decided to give up on the casting and simply fix the type. I drilled holes into the back of the type underneath the bar. I then placed the type face down on an imposing stone, placed a steel rod into the drilled holes, and pounded with a hammer. This raised the bar up to type high. Fortunately it stayed type high through the printing process. I had seen intaglio plates which had been subjected to this process in order to raise the face of the plate to make a correction.

The most frequent fault of the casting was incomplete filling of details, mainly the failure to fill in vertices in the mat. The fact that I had picked an inline face doubled the number of vertices which might not fill in. The combination of jiggling the mold and a very hot mat, metal, and mold was intended to give the molten metal time to flow into the vertices while encouraging the air to float up away from the face. It wasn't particularly successful, and I don't know why. Perhaps the surface tension of the metal is such that tiny bits of air trapped in a vertex couldn't break through. If a mat was prone to producing type with unfilled vertices, I was usually able to get better results by pouring the metal in a different manner to change the direction it flowed over the mat.

A minor fault was the presence of impurities in the face of the type. My ladle poured from the top rather than the bottom, so there was always a possibility of a bit of dross being in the cast. While dross floats in the pot, it always seemed to end up in the face at the bottom of the cast.

Finishing the Type

The ATF mats were not designed for the mold, so my casts were about 40-thousands over type high and too wide by six points on each side. I used a glider saw to trim the six points off each side and to put the groove in the bottom where the jet was knocked off. I rubbed every facet of the type on 600 grit sandpaper. The face always had a depression in the center, so rubbing on the sandpaper reduced the outside by a few thousandths. I successfully proofed the over-height type on my Vandercook by removing most of the cylinder packing. Henry Morris preferred to have the type milled to type high for printing on his Miehle Vertical. Rich Hopkins offered to mill the type on his Hacker Block Leveler, so I shipped it to him. Ultimately Rich used a milling tool in a drill press to cut the bottom down to type high, and the resulting type was successfully printed by Henry Morris.

French Chalk

It is my understanding that French Chalk is traditionally used to dust the mold when casting large type. I understand, perhaps in error, that talcum powder is the same thing. I tried applying talcum powder to the mold and mat in my earliest attempts at casting, but it didn't seem to make a difference. When I was nearing the end of my casting, and had a good idea of what my usual results were, I tried the talcum powder again. I dusted the mold and mat very lightly and blew the excess off. In the case of the mat, I did this after heating it in the flame of the Elrod pot. I think it did make a difference, especially in filling the vertices. But it wasn't a stark difference. Maybe 10% more casts were usable with the talcum powder.

Type Metal

I wonder if many of the problems I faced may have been exacerbated by a poor choice of metal. I used Linotype metal because the Elrod pot was at hand and was easy to dip into with a ladle. I

adjusted my casting technique to make the metal work. I was using the metal at a much higher temperature than usual, and I think I was heating the mat more than one would want to. Perhaps the casting may have worked much better with a different metal. Tin is used in typefounding metals to help the metal flow, and lack of flow was the biggest problem I encountered. Linotype metal has the lowest tin content of the standard typecasting metals. If I had used foundry metal, it may have flowed more easily into the vertices of the matrix. On the other hand, foundry metal solidifies at a higher temperature, so that may offset the advantages of the high tin content. Perhaps a formula high in tin and low in antimony would work. Casting with different metals would be a good future experiement.

Cored Type, Matrix Rocker

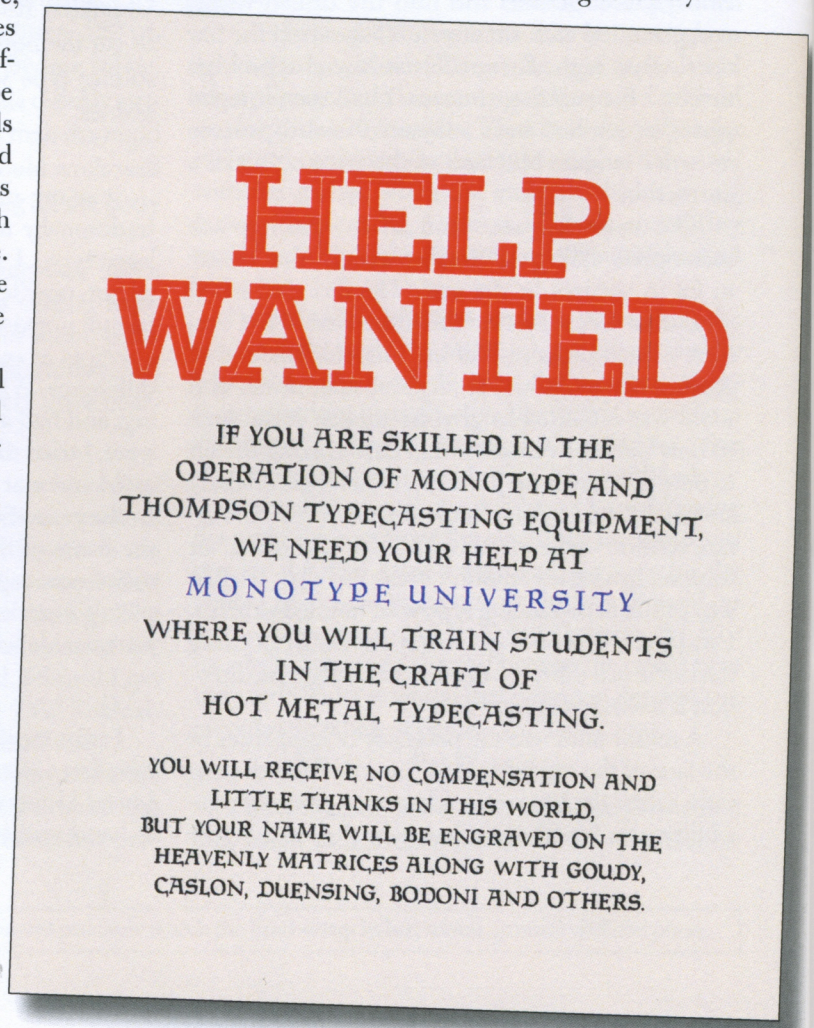
The mold is equipped with cores to save metal in casting type. To cast cored type, one turns a screw to drive the cores into the mold as far as desired. After casting, the screw must again be turned to withdraw the core rods before the type can be removed from the mold. Using the cores adds much time to a process which already consumes too much time. But more importantly, I wasn't able to get a single good cast with the cores in place.

They impeded the flow of metal into the mold, and cooled the metal that flowed over them. I did not attempt to use the matrix rocker because all the mats I had were at least a half inch too short to be engaged by the rocker. The presence of the cores and mat rocker indicate a conviction that the mold could be used successfully for casting type on a production basis. My casting activity never advanced beyond the experimental basis. I envy the casterman who could use this mold to produce galleys full of good 120 pt. type in a day's work.

Good Enough

In my crazy fantasy, I saw perfect type coming out of the mold, looking like Barth-cast ATF type. I don't think anything like that will pop out of any hand mold, but there's no question that it's good enough. Henry Morris printed it and it looks good, very good. The slight depression in the face is inevitable, a circumstance which gave wood type a definite advantage.

I'm very glad I undertook the casting and may experimement further. Perhaps you, too, would like to experiment with the mold. If you are attending the ATF Conference June 24-27, I'll have the mold set up at one of the open houses. You are welcome to give it a try.



Poster-sized page (approx. 12 x 15½ inches) showing the 120-point casting in use. Greg composed this page for the book The Private Typecasters, *published by Henry Morris at his Bird and Bull Press, Newtown, Pa., in 2008.*

Comparing Sources of Type: Foundry vs. Monotype

By Mike Anderson
With Help from Ye Ed

Most users would say that foundry type is better than Monotype. Their argument is that the foundry type is made of harder material, thus outlasts Monotype by giving more impressions. There's validity to that argument, but since the availability of foundry type has diminished immensely, perhaps it's a good idea to look into the history of the two "systems" for providing type.

Early History of Typefounding

Before we answer that question, let's go back to the beginning, back when casting type started. When Gutenberg and friends were preparing to print the famous 42-line *Gutenberg Bible* (B42), all the type they used was cast by them. It is estimated that it took at least six months to cast the type needed just to begin the job (Kapar), and it was an on-going job to keep up with the need for sorts. Of course, we don't know the composition of their type metal, but we do know that it wasn't "foundry hard." The wear on the type has been traced by many scholars, and it has been concluded that the metal was harder than pure lead (probably had some tin and antimony in it), but the proportions are unknown.

Just when the independent type foundry began is another question that doesn't have a definitive answer. When printing started to spread in the 1460s, printers, such as Sweynheym and Pannartz (who set up shop in Subiaco, Italy in 1465) designed their own type faces, cut the punches, drove the matrices, built their own hand molds and cast the type which they then used.

Nicholas Jenson did the same thing, but before he set up his own shop he did the design, cutting and maybe the casting for the Speyer brothers in Venice in the 1460s. Only later did he design his "Jenson" typeface and set up his own printing shop in 1470. Aldus Manutius, in the last decades of the 15th century, used the talents of Francesco Griffo of Bologna, Italy, to design and cut punches for his books. William Caxton, the first printer in England (1476) bought his type from a Cologne typefounder and printer named Johann Veldener. So it is safe to say that the independent type foundry came into existence early in the incunabula period of printing.

When type was cast by hand, the matrices were fitted to the hand mold, and when printing houses such as Plantin's ordered a set of matrices, they received a hand mold along with the type. Although using other molds might be possible, much effort was necessary to assure that type from the two separate molds would be of the same body size and height to paper.

The hand mold prevailed as the only means of casting type until David Bruce invented the so-called "pivotal caster" in 1838. His far more efficient method of making type took over the industry with surprising speed and within 20 years, most type was being cast on Bruce casters or similar devices; the hand mold had became obsolete.

Type foundries abounded throughout Europe and America in the 19th century. It must have seemed that there was a type foundry on every corner of the larger cities of the world. For example, between 1840 and 1900 there were 11 different foundries operating in St. Louis, (Mullen), including one which made brass type. By the mid 1880s there were 70 or more different type foundries in operation in America.

The Need for Standards

This made a huge variety of faces available to printers large and small, but it also created chaos in the composing room, for there were no standards for body sizes—or even height to paper. Mixing type from different foundries was a treacherous adventure. Typefounders recognized the problem but were unable to settle on any standard until, in 1886, the Type Founders' Association of the U. S. adopted what is now called the American Point System. Some founders had adopted the system earlier; others followed once the standard was adopted. Prior to that time, type sizes were referenced by now-archaic names such as brevier, nonpareil, pica, or small pica. Establishment of the system was accomplished largely because of the pioneering effort of Nelson C. Hawks (Hopkins).

Fifty years later, the typefounding industry was severely affected by new mechanization. The Linotype, introduced in the late 1880s, reduced the need for body types, and later the Monotype was introduced, which when fully developed offered an alternate source for types of all sizes. This pressure from automation forced the independent typefounders to seek a way for survival and the merger of 23 separate companies in the formation of American Type Founders in 1892 created a new beginning for the entire typefounding industry.

From its inception, ATF made all its type to the point system. The few independents that remained were soon using the same standards—or were soon out of business.

American Type Founders

With the establishment of American Type Founders (ATF) also came further modernization and standardization in the manufacture of all the type they produced. The Barth Automatic Type Casting Machine was selected for virtually all production, producing superior types because of extremely high pump pressure, compressing molten type metal into more solid pieces of type from 4 point to 144 points. ATF also used a type metal very high in antimony content, giving it greater hardness. Type was the *end product* with ATF and it achieved a level of perfection only dreamed of before the days of consolidation and mechanization. Compared with much type made on Monotype machines, ATF type was simply beautiful—definitely an end within itself.

From its first years, Monotype preached the sermon of "non-distribution." The intention was one-time use of the type and thus, if the type produced an acceptable printed image, it would suffice even if it had more porous bodies, etc. Inspired Monotype "foundries" made immense improvements on the quality of their product, increasing piston pressures, using harder metals, and pushing the machine to its absolute limits. Still, it can be safely argued that foundry-cast type was "better" than Monotype. It must be noted that similar progress in the manufacture of foundry type also was achieved in England and Europe, with several foundry-style casting machines being developed which were equal to—or better than—the American Barth caster.

Mechanized Typesetting

The Linotype machine already has been mentioned. However, it did not produce a product in competition with individual types from the foundry. Linotype "lines" could not be re-used. There were other technical limitations to Linotype and thus, the printing industry was not magnaminous toward the Linotype. Further perfection of automatically cast and assembled type was made available in 1896 by the Lanston Monotype Machine Company. At first Monotype produced only body sizes, but the sytem soon was expanded to cast individual sorts up to 36 point; later, machines were offered by Monotype which literally moved the entire typefoundry back into the printer's own composing room. By 1911 over 3,000 Monotypes were operating in the U.S. and over 830 different type fonts were offered. By 1922 over 10,000 Monotypes had been sold and the Lanston Monotype matrix library had been expanded to include 2,000 fonts. The Monotype Composition Type Casting Machine could cast type from 5 to 18 point. Thousands of faces were available for Monotype from both the American and the English companies. With some adaptation, equipment of English manufacture could be used with American matrices, and vice-versa.

Development Ends with Monotype

After introduction of the Monotype, no further, enduring manufacturing improvements were ever again injected into the old-line typefounding industry. The Barth Automatic Type Caster remained the mainstay of ATF until its demise in 1993. Where the typefounders, especially ATF, had led the parade of type design development and perfection in the early years of the 20th century, Lanston Monotype and especially its sister corporation, the English Monotype Corporation, soon assumed the leadership role in type design innovations. Coupled with this, both companies also introduced auxiliary machines to produce fonts up to 72 point, strip material, furniture, and virtually everything else the printer needed to produce his own printed product.

A Different Product

Type was *not the end product* for Monotype. Type composition was the goal. Monotype made machines and matrices for sale to printers who, in turn, did *composition* and made individual fonts to satisfy their own needs. Upstart "type houses" or "type foundries" (competing with American Type Founders) invariably used Monotype equipment as their method of making type. Their advantage over ATF was that along with producing indvidual type fonts, they were able to produce composed type—a capability totally outside the realm of the traditional type foundry.

This explosion in typecasting flexibility also injected negative factors. Where ATF made all of its type in one plant under extremely tight quality control, each Monotype shop was free to do as it pleased. Thus, issues of type quality, proper set widths, use of proper type metal, and *alignment* once again were infinitely variable.

In many ways, Monotype brought us back to the chaos which existed prior to introduction of the point system. The more prudent and enduring Monotype shops offered extremely well made fonts cast to exacting specifications which assured that their product was consistent, year after year. Other shops, offering the very same faces, were less concerned with quality control and used price competition as a principal sales strategy. Once again, the printer was at risk when he considered buying his type from different Monotype shops. Though Monotype-equipped typefounders might have been working with precisely the same equipment and matrices, there was absolutely no guarantee fonts from different foundries would align, or follow the same set width specifications.

Death of Commercial Typefounding

Some would argue this has not yet happened. Our American Typecasting Fellowship has the laudable goal of preserving the third dimension of type and for over 30 years, we've made a valant effort. But the truth is that commercial typecasting no longer exists as it once did. No one has made Barth typecasters since the first years of the last century. American Monotype ceased operation in the late 1960s and English Monotype closed its doors in the 1990s. American Type Founders breathed its last breath in 1993. So the "industry" remains *only* because of the longevity and durability of the equipment it once utilized.

Returning to the Quality Question

Now, back to the question of which type is the best. Ignoring that there are different *faces* offered by Monotype vs. foundry, extended usability of the type is the issue. Foundry type used a harder metal, and arguably was made to more consistent specifications, insuring that type purchased in 1970 was exactly the same in all respects to type bought in 1930. In addition, it is asserted that the face would produce a sharper image for thousands of more impressions than Monotype because of the higher content of tin and antimony.

But hardness also is a weakness, when it comes to kerned characters, because when harder metal is used, kerns can snap off. Monotype is a little more forgiving. Prudence is essential to preserving kerning characters, whether foundry or Monotype cast. I would suggest that properly handled, Monotype-cast type will far outlast the present-day owner's prospective use. No one is doing 50,000 impressions from metal type anymore. And thus, the argument about longevity evolves more into a concern for preserving the type on hand rather than its source of manufacture.

I assert that properly handled, Monotype-cast type will exceed the lifetime of any careful printer using the type. Further, the argument between foundry and Monotype has become rather academic in most situations, for frankly, new foundry-cast type is available only from one or two sources. If you want Plantin, Octavion, or even Century Expanded, it's most likely you will be able to get it *only* from a Monotype manufacturer. Need more be said?

References

Kapr, Albert, *Johann Gutenberg: The Man and His Invention.* Scolar Press, 1996.

Mullen, Robert A., *Recasting a Craft: St. Louis Typefounders Respond to Industrialization.* Carbondale, Ill., Southern Illinois Press, 2005.

Hopkins, Richard L., *Origin of the American Point System of Type Measurement.* Terra Alta, W. Va., Hill & Dale Private Press, 1976 and 1989.

A Genuine Factory-Trained LinotypeMachinist

Just about the time one comes to the conclusion all of our links to the glory days of letterpress have closed, up pops another "live-and-well" individual who has some rather hefty credentials connecting him to those marvelous days of yesteryear when hot metal was king.

Case in point: Patrick J. Burns of Mercersburg, Penn., whose principal claim is that he's the last-remaining factory-trained Linotype service technician still willing to go out in the field to service Linotype, Intertype and Ludlow equipment wherever those machines still are in operation. From 1964 until 1966, he worked as a service technician for Mergenthaler Linotype. Since 1968 he has functioned as an independent serviceman, adding both Intertypes and Ludlow machines to his realm of expertise.

He has worked in and around most of the larger hot-metal newspaper composing rooms in the East, following a career he knew he wanted to pursue from the age of 6. That was when he first saw his grandfather's Linotype machine. "I didn't know what it did, but I was impressed with the machine," he explains. This same grandfather, William M. Knecht, had owned a foundry in his earlier years and had known and done castings for Ottmar Mergenthaler when his Linotype factory was located in Baltimore.

Speaking of Mergenthaler, Pat relates a story of Herman Holloman, chief Monotype machinist at Judd and Detweiler Company in Washingon, D. C. "We were both reared and apprenticed in Baltimore. Herrman's father had sung with Ottmar Mergenthaler in the Baltimore Germania Men's Choir."—another connection with the legendary past of hot metal typesetting.

Pat got his high school training at—would you believe—Mergenthaler Vocational Technical High School in Baltimore. The school specialized in the printing trade and one of Pat's teachers was Robert P. Mergenthaler, the great nephew of the inventor. Pat graduated in 1959. He gained his ITU membership and worked at several large newspapers in Baltimore and Washington before joining the Linotype company and devoting his full-time efforts to machine maintenance and repair.

Patrick has witnessed the steady decline in Linotype usage. He once worked in composing rooms having 50 to 100 machines running 24 hours a day. "When I first started, I was working seven days a week servicing machines, he explains. "Now I do maybe three or four calls a month. But he continues to do his work with enthusiasm and to prove his love affair with Linotypes is far from over, he boasts of having a "perfect" Linotype Model 31 which he acquired in almost-new condition from a school at auction in Virginia. "I just couldn't see that beautiful machine being trashed," he explains. He continues to pamper the machine, at his home workshop.

Though he says there's still enough work around to keep his skills in demand, Pat is slowly easing toward retirement. Who will replace him? "I would love to have imparted this knowledge to someone, but no one sees any future in it."

(You may have noticed that Patrick was a source for some of the information found in the "Rare 2-in-1 Linotype" beginning on page 5 of this issue.)

Looking at Type

(Continued from page 26)

This showing verifies that we still have new type being cast. In some cases antique matrices have been used. In others, mass-produced commercial mats were used. And in some cases, newly engraved or struck matrices. Today's founders are often—well let us say mature; but others are young and this gives me great hope. In my 40 years I believe I have seen us "turn a corner" with real opportunity before us. Type is no longer part of mainstream graphic production. And while that creates some difficulties, it has opened up this craft to a whole different "breed of cat." Who can say what the next 40 years will bring?