Here foloweth the.xxvi.boke

of the American Typecasting Fellowship Newsletter, which being redde with a feruent mynde, will profit much.

Contents

Provo, Utah, To Be Site for 2002 Conference 1
M&H Type Finally 'On the Move' 1
A 'Blackletter' Issue 1
Two ATF Conferences in Retrospect 2
On Matrices and Type Metal 4
The Survival of 16th Century Fell Types . . . . . Martyn Ould 6
Perhaps Here's a Better Way to Dross a Pot 8
To the Editor: Aligning Matrices 8
Letterpress Specimen of University of California Oldstyle 9
A Specimen of Californian (A Discussion) 10
Two Trivial Bits of History Regarding
The American Lanston Monotype Company . . . . . Rich Hopkins 11
More Than You Ever Wanted to Know
About Monotype Keyboards . . . . . Rich Hopkins 14
Living in the Monotype Factory . . . . . Tara Benson 16
The Once-Thriving Typefounding Industry of St. Louis . . Robert Mullen . . . 18
William Bright: A Rags-to-Riches Story . . . . . Robert Mullen . . . 23
Diary of Two Madmen: *The Casting of the B-42 Blackletter*. . . Theo Rehak 24
Follow-up to Newsletter Article on Scotch Roman 28
1870 Specimen of Dickinson 'Scotch Cut' Design 29
How Much Did a New Model 31
Linotype Machine Cost in 1959? 31
Depth of Drive Big Problem in Revival of Old Matrices 32
A First-Hand View of the Paige Compositor . . . . . Rich Hopkins 33
A Typographical Experiment in Blackletter . . . . . Chris Manson 35
Notes on the Conventions of Early
English Typographical Usage . . . . . Chris Manson 38
Letterpress Specimen of Special Cloister Black Casting. 39
About the Baskerville Design Used Herein. 40
Our Special Type-Making Procedure . . . . . Jim Walczak 41
Hermann Zapf Reports Status of German Museums 43
A True 'Prince' of a Typefounder 44
What Others Are Saying 46
Intertype Slams Competition in Rare Ad 48

ATF Newsletter—*published occasionally for the American Typecasting Fellowship, an informal group of typecasting and linecasting enthusiasts, by Richard L. Hopkins, Post Office Box 263, Terra Alta, West Virginia 26764 USA. You may be added to the mailing list by sending 20 US dollars to the editor.*

American Typecasting Fellowship

ATF Newsletter

Number 26—November, 2000

A journal devoted to the concerns and interests of typecasting and linecasting enthusiasts world-wide!

Provo, Utah, Selected as Site for 2002 Conference

The die is already cast for the 2002 Conference of the American Typecasting Fellowship. It will be held at Provo, Utah, and Thom Hinckley will be coordinating the event.

The offer to host the meeting in Utah was made at the 2000 Conference by Steve Pratt, who has attended the last several meetings and whose company, Pratt Wagon Works, is deeply involved in re-creating historic presses. Recent efforts by his company also have included cutting matrices by hand, and making hand molds.

These two, joined by Rob Buchert, a younger person who has worked with them both, will form a "coordinating committee of three" for the upcoming meeting. Rob is a modern-day graphic designer with a very strong interest in hot metal. He is a graduate of Monotype University.

We met Thom for the first time at the Buena Park, Calif., Conference where he presented a detailed talk and demonstration of the early Monophoto machines. Many years earlier, he had acquired and taught himself to run the Monophoto system which he subsequently donated to the Museum. And now Thom is taking a step backwards by setting up equipment already acquired, and learning to operate the hot metal Monotype Composition Caster.

"I can assure you that by the time we have the meeting, we'll have operational machines in every facet of typecasting, including Linotypes, Monotypes, and Thompsons," Thom indicated when telling of their plans.

Dates are not yet established, so stay tuned for details as they're worked out.

A 'Blackletter' Issue!

This issue clearly can be called a "blackletter" issue. First is the excellent cover, back fold-out, specimen page, and very welcome articles by Jim Walczak and Chris Manson. You'll find their articles starting on page 32.

Next comes a blow-by-blow report beginning on page 24 regarding a most exciting project just completed by Theo Rehak at the Dale Guild Typefoundry, Howell, N. J. When Theo visited the 2000 ATF Conference at Rindge, N. H., he was deeply immersed in the project and was expressing fear he would not be able to meet his deadline.

This was a commission from a museum in Tokyo, Japan, to find necessary models (facsimiles), develop artwork, patterns, matrices, and to cast all necessary type for hand-setting four select pages, to serve as a living facsimile of the 42-line Gutenberg Bible! Those four pages utilized 162 different characters. They estimate the whole Bible utilizes about 245 different characters.

Responsibility for developing the patterns was carried by Theo's associate, Alan Waring of Fairfield, Conn. Fortunately, Alan delved deeply into the project long before the contract was finalized. With both men putting in 12 to 18 hour days for over two months, they were able to complete a project they had initially estimated would require two years to complete.

Congratulations are in order. I suggest this never has been done before in the 550 years since Gutenberg first accomplished the fete.

M&H Type Finally 'On the Move'

M&H Type of San Francisco is in the final processes of making arrangements to move its entire facility to former El Presidio Naval Station near the Golden Gate Bridge.

Lew Mitchell, who has been with the firm over 50 years, says the whole process required approval from 18 different governmental agencies including the EPA; it was about to drive everyone crazy. The good news is that they apparently have been successful in jumping all these hurdles and the move is just about to take place.

Two ATF Conferences in Retrospect

Your editor is in the labored position of having neglected to report on the Sunnyvale, Calif., ATF Conference in 1998, and now he's a bit late to even report on the 2000 Conference at Rindge, N. H., but since this publication may serve as an historic record, I feel compelled to give some comments on both meetings before all memories are lost.

If nothing else, this report will help readers get a better understanding of what we do at our Conferences, and perhaps provide encouragement to all to be present at our 2002 meeting at Provo, Utah.

You simply couldn't have a stronger contrast in settings. The Sunnyvale meeting was staged in a modern, plush Sheraton Four Points Hotel, amidst the buzz of activity swarming in Silicon Valley, U.S.A.; the Rindge meeting was staged at the Woodbound Inn on the shores of a remote New Hampshire lake—a rustic setting removed from many of the trappings of modern society.

In both instances, the concept of an ATF Conference "clicked." People who attended enjoyed the meetings, and found plenty of time to carry on informal discussions about the subjects we all love with both old friends from past Conferences, and new friends just met. It can be said with no hesitation that you'll not attend a meeting *anywhere in this world* with a greater concentration of experts and true proponents of hot metal typecasting and linecasting in all its forms, as well as devotees to letterpress printing.

Our European contingent at Sunnyvale: Harry McIntosh of Edinburgh, Scotland, in deep conversation with Gertraude Benoehr of the Gutenberg Museum, Mainz, Germany.

The Sunnyvale meeting was held October 2-4, 1998. Official attendance was around 59 registrants; spouses and other guests kicked the total to near 80. It was well coordinated by Freddie and Monroe Postman. One of the principal reasons for selecting Sunnyvale was its close proximity to the Postman's shop at Palo Alto, to the Museum of American Heritage where Linotype equipment was available, and a fairly easy chartered bus trip to San Francisco where M&H type would stage an open house.

The Rindge meeting was held June 13-16, 2000, with 59 registered (surprisingly the same number as at Sunnyvale, but certainly not the same list of persons). Rindge was selected by our hosts, Dan Carr, Julia Ferrari and John Kristensen, principally to avoid obscene lodging rates in Boston and other larger cities in the region. Secondly, it was relatively close to Dan and Julia's marvelous shop at Ashuelot, and we also were able to visit several other noteworthy shops in the area, including the John Kristensen's Firefly Press at Somerset, Mass., Ed Rayher's Swamp Press at Northfield, Mass., Darryl Hyder's Sun Hill Press at North Brookfield, Mass., and John Roger's Countree Press (he has an extensive linecaster/matrix collection) at Rindge itself.

Thus you can see both meetings met the requirement that *operational* hot metal equipment be in close proximity to the Conference setting.

At Sunnyvale, the featured guest was Harry McIntosh, who came from his Speedspools operation in Scotland to discuss Monotype in general, and his very unique computer interface created to drive the Composition Caster with great sophistication (including pagination) in book composition. He was available throughout the Conference, and at the technical sessions afterwards. Another featured participant was Leonard Spencer, who has many, many years with the Linotype machine and directed the Linotype technical session afterwards.

At Rindge a featured guest was Gerry Drayton, who is retired after long employment at the Monotype Corporation in England, especially at the Monotype School. He spoke, and also conducted a far-reaching Monotype technical session at Dan & Julia's shop following the Conference. Before the Conference began, linecasting enthusiasts gathered at the Firefly Press where Leonard Spencer and others conducted linecaster technical sessions.

Perhaps the most memorable portion of the Sunnyvale meeting was a trip to M&H Type in San Francisco. Indeed, it was a promise of that visit that led ATF to Sunnyvale, and it was no disappointment. The foundry now is in the process of moving from Bryant Street to El Presidio, an old Naval Base near the Golden Gate, which is becoming a living museum and tourist attraction. So our visit to Bryant Street was, indeed, historic.

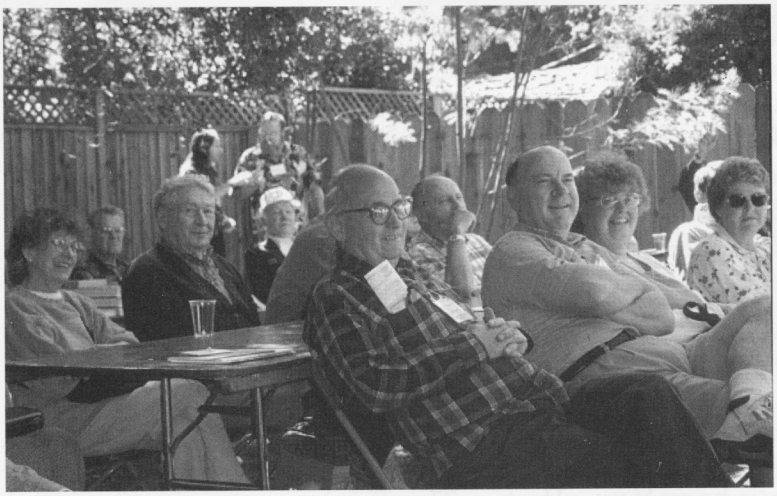
Lew Mitchell took his Monotype Keyboard apart on the spot to demonstrate operation and adjustment and troubleshooting in response to a question from Paul Duensing (foreground). His extensive hands-on sharing of the M&H plant certainly was a highlight of the 1998 Conference.

Owner Andrew Hoyem, also proprietor of the Arion Press, was on hand to greet us and give an overview of his massive undertaking of doing the entire Bible in hot metal in a sumptuous limited edition. Lewis Mitchell threw the shop open to everyone and nonchalantly demonstrated his expertise at Monotypes in all forms as the group roamed the caster bays.

Continuously operating (with minimal attention from Lew) was the *very first* Monotype Composition Caster acquired by M&H in 1904, as well as a Thompson Caster, which Lew had set up to cast dingbats especially for the session. While these machines ran unattended, Lew was all over the shop demonstrating other equipment and answering our questions. Several of us were intrigued by the large amount of stock fonts on the shelves just waiting for buyers—and several ATF associates came forth with cash for that very purpose.

Paul Duensing was having a problem with his keyboard, and much to our astonishment, Lew (nearing his 50th year with the firm when we visited) readily grabbed his keyboard, tore it apart, and explained what points to look for in adjusting and cleaning. What he did in a couple of minutes would take most of us an entire afternoon.

I was fascinated to notice that virtually all typecasting equipment save the Monomatic Caster and Keyboard was of 1930s vintage and there appeared to be no English equipment other than matrices. Lew was assisted by Pete Stoelzl, also a long-time M&H associate, and they collectively staged an excellent visit for all of us.



At every Conference a featured event is an auction of (hopefully) related items such as matrices, machine components, books, cast fonts, etc. The 1998 auction was especially memorable for its relaxed, comfortable setting in the Postman's back yard.

The Sunnyvale meeting was chock full of interesting seminars including Dan Carr and Julia Ferrari, talking about integrated typography and their private press productions; engraving matrices with a pantograph, by Paul Duensing; driving a Monotype Composition Caster with a computer at Speedspools (in England) by Harry McIntosh; Bruce Washbish gave an overview of the tradition of fine book printing in San Francisco; Dave Peat

True Value of a Conference Demonstrated by a Simple Conversation—

On Matrices and on Type Metal

One of the most valuable aspects of getting together with your fellow typecasters and linecasters at an ATF Conference is the opportunity to have casual conversations with others if, for no other reason, just to find out how they approach the process.

What follows is the result of perhaps one minute's conversation with Dan Carr at his shop during the technical session following the 2000 Conference.

The issue was the matter of getting good type from a Supercaster. "It's very obvious that type metal simply hates chrome, and nickle, but that it loves copper." So said Dan Carr. He elaborated saying that in his estimation, when the molten type metal hits the face of a chrome-plated matrix (English display mats are chrome plated) it creates a turbulence that makes a "clear face" much more difficult. "What about aluminum?" asked Jim Walczak. "I think aluminum is kind-of neutural," Dan replied. (Many American Lanston display matrices were made from aluminum.)

"But the steel and lightly chrome-plated brass mats American Type Founders made—now they're so much better! They produce such an excellent face and so easily," Dan exclaimed.

Theo Rehak (Dale Guild Type Foundry, successor to ATF) had explained to me earlier that ATF chrome plated its matrices very lightly (you still could see the brass through the chrome plating) only to protect the brass matrix surface from the natural affinity of hot type metal to absorb the tin from the brass amalgam and thus pit the surface. ATF's chrome plating was far thinner than English Monotype's chrome plating.

Dan's assessment was that Monotype had "other priorities." I chimed in that ATF certainly made a lot more type and was more concerned with making better type *surfaces*.

So, having primarily English chrome-plated matrices to work with, I quizzed Dan as to what steps he took to get the *wonderful* type he obviously was making.

"I probably run too much pump pressure, I possibly run it a bit hotter. I cast every-other revolution so the nozzle can regain temperature which helps prevent chilled faces." Those were some of Dan's procedures. He also maintains his metal supply in the pot right up to the very top edge—almost running over—"to keep as much heat to the nozzle as possible." And to try to keep the matrix cool as possible, he always runs a good stream of compressed air over the matrix surface. Finally, he says he often drops a bit of pure tin into the pot. "It makes the metal flow better—unless I get too much tin and make the amalgam too brittle."

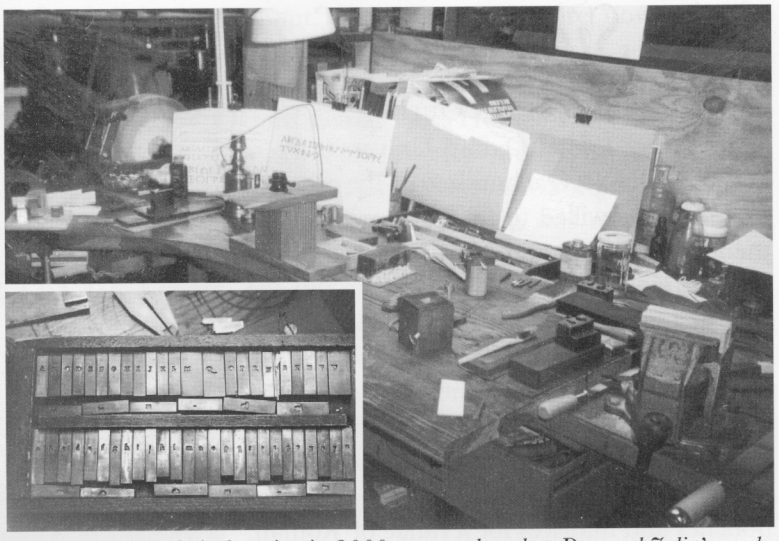
So there you are. A good discussion of metallurgy, matrix making, typecasting, and so much more—all from a one-minute discussion between three people at the ATF Conference.

Reason enough for you to be sure to attend the next Conference in 2002!

talked on assaying type metal; Stan Nelson talked on the practical aspects of using a hand mold; Pat Taylor and Chris Stern talked about setting up a Monotype shop; Tom Hinckley and Steve Pratt talked of replicating early presses; and Stan Nelson presented slides (taken by Jim Walczak) detailing the Smithsonian Institution's matrix collection.

And as already mentioned, technical sessions followed on both Monotype and Linotype. It was a well-coordinated meeting topped off with an excellent and entertaining after-dinner talk on Saturday evening by Dan Solo, noted and highly published author (and authority) on type, who got away with numerous "insider jokes" that probably would not have been understood by any other audience.

At Rindge we also were greeted with a full slate of seminars on subjects including a discussion of five New England type foundries by Steve Saxe, "My life at Monotype" by Gerry Drayton, an update on the Museum of Printing History by Gardner LePoer, slides from our tour of Germany by Dave Peat, discussion of proprietary and revived typefaces of D. B. Updike and Bruce Rogers by John Kristensen, London typefoundries of the 20th century by Chris Rule, a discussion and demonstration of lettering in stone by Arthur Hoener, and a video on driving a Monotype with a computer by Rich Hopkins. Theo Rehak gave an exciting report that his Dale Guild Typefoundry was in the heat of meeting a deadline for producing matrices and cast-



The Monotype technical session in 2000 was conducted at Dan and Julia's workshop and residence in Ashuelot. Top left, Julia and Gerry Drayton pose on the front steps. Top right is Dan's matrix engraving workshop with an inset showing his hand-cut design, Regulus. Below left Gerry shows attentive onlookers Keyboard adjustments, while at bottom right, Dan explains the Monotype Caster's low quad mechanism. Photos thanks to Chuck Klensch and Jim Walczak.

ing type for genuine facsimile pages *in metal* of the Gutenberg Bible for a museum in Japan.

Throughout the meeting during leisure times Stan Nelson carried on a continuous demonstration of the art and processes of cutting punches by hand. The group ventured to the home of bookseller David Godine in Dublin, N. H., for a Saturday-night buffet and afterwards, Claire VanVliet (a graphic and designer and private press operator with an excellent reputation) provided her reminiscences of her days at Lanston Monotype design department with John Anderson, probably the firm's last type director.

The one item so far unmentioned is the issue of "fellowship." It's in the name of the organization and it certainly prevails at each Conference. Where else can you make a snide remark about "justifying with EM quads," and get a hearty laugh from the audience? It's so rare to a single person—let alone a whole room full of people—having such similar interests. An ATF Conference adds greatly to our *positive mental attitude* for the two years until the next meeting—it provides the fuel to keep us going!

As is evident from this report, a significant effort is made to assemble a program of seminars and make all the arrangements. That effort is genuinely appreciated.

If you get the chance, thank Freddie and Monroe, and Dan, Julia and John *in person* for the great effort they all put into these successful Conferences.

The Survival of 16th Century Fell Types

By Martyn Ould

In a large safe at Oxford University Press in England lie several hundred of the punches and matrices willed to the University by the then Bishop of Oxford, Dr. John Fell, when he died in 1686. Fell had helped to put the University Press on a commercial footing, but not without difficulty. The legislation of the time severely restricted the choice of type available to printers. Unable to buy types of sufficient quality in England, Fell sent to Germany, France and Holland in the 1670s for punches and matrices for a range of Roman, Italic, and Greek faces to give the press what it needed to fulfil its role as a press that would 'not so much make profits for booksellers as further the interests and convenience of scholars.' The faces he acquired ranged in size from English (13.5 pt.) down to Nonpareil (6.4 pt.), and, though they were bought in the 1670s, they date in some cases from a century before. In the 1680s, Fell also had punches cut for the larger sizes, in particular a beautiful 3-line Pica (36.0 pt.), the Double Pica (20.3 pt.) (whose Italic is illustrated here), and Great Primer (17.0 pt.).

A sample of
Fell Double Pica.
When the husbandman dresseth up his orchard or Garden, and removes such trees, and plants as are barren, and unfruitful, or that bear naughty fruits, and plants others in their roomes : that are choice

For the half-century between their purchase by Fell and the advent of Caslon's types in particular, the 'Fell types' were part of O.U.P.'s stock-in-trade, but their use gradually declined from the 1720s until the 1790s when they fell into disuse in favour of newer types. However, in the early 1800s, 'old style' faces became fashionable again, and in the 1860s O.U.P. realised that, beneath the dust and rust, it still had the materials necessary for casting its own old style faces, albeit ones that went back, in some cases, to the 1500s.

Between 1864 and 1867, the Press cast a 10cwt fount of the Fell Small Pica (10.4pt.) and used it for two books of Latin verse. But it was a cleric from one of the University colleges—Worcester—just down the street from the Press, who bought a small fount of the Small Pica from the Press to use for his own hobby printing. From 1876 until about 1906, the Reverend Henry Daniel, proprietor of the Daniel Press, printed fifty books in the Fell types, mostly poetry in small editions, never with any great skill, but with plenty of charm. In the 1890s, St. John Hornby—another Oxford man—started his rather grander Ashendene Press and bought founts of several sizes of Fell types from the O.U.P., which he used for ten books before having his own *Subiaco* type cut for him. This wall around the time that Horace Hart was 'Controller' (i.e. Printer) of the University Press. Hart had brought a blast of commercial realism to the operation of the Press, and in particular we have him to thank for the sorting and cleaning of the Fell punches and matrices. Under his stewardship, all the sizes of Fell types had been brought back into use by 1901.

But getting the types cast from the 'ancient matrixes' was not without its problems, as we discover from the Press's archives. The matrices were often incomplete or worn and had to be replaced, sometimes by striking new ones from the original punches. And they were of course originally made for use in a hand mould. Now, in Hart's day, founts were cast in hand moulds when necessary, but for obvious reasons of efficiency Hart had the Fell matrices adapted ('vandalised' one might almost say, to look at them today) to fit on a Johnson machine caster. The archives show a stream of work going out

to printing engineers Bannerman for the electrolytic growing of new matrices, and the construction of special moulds that would hold Fell matrices and cast type to 'Oxford height' (higher than conventional Anglo-American height—a practice continued right up until the Press ceased letterpress printing).

Once Hart had everything ship-shape in 1901, the Press could start using the Fell types for other publishers and for itself. My co-author Martyn Thomas and I have traced over 250 books that were printed in the Fell types in the period of the Revival from the 1860s to 1971 (the date of the last book we know of), and we have a list of about 150 other books that, for various reasons, we suspect were printed in Fell.

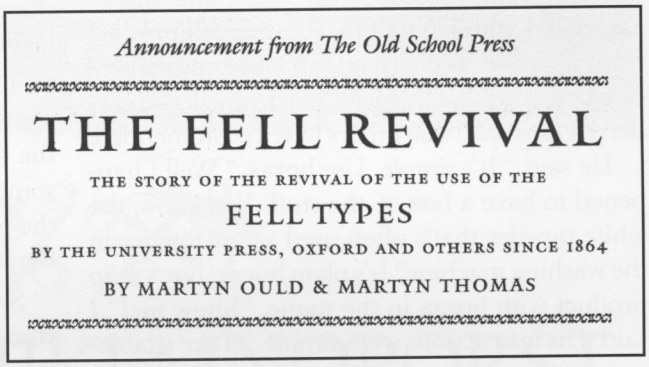
The obvious use for ancient and venerable types like Fell's is for ceremonial pieces —a *Coronation Order of Service*, for instance— and for type facsimiles of seventeenth century texts, all of which we do indeed find. It therefore comes as quite a shock to come across a book entitled *The Book of Happy Gnomes* printed (quite appallingly, probably from stereotypes) in Fell Great Primer, or *Tales from Toyland* in Fell Double Pica. Big type suits small eyes. But Fell?

Many of the great names of 20th century printing pop up in the story, not least designer Bruce Rogers, publisher George Macy (of the Limited Editions Club), designer and typographer Francis Meynell, binder Sarah Prideaux, and type historian Stanley Morison. On occasions, even private individuals would drop into the Press and ask for a quotation for printing in Fell a 'memoir' of a wife or father; the records show that they often left disappointed: 'The lady was alarmed at this price.'

The Revival of these 16th and 17th century types is all the more fascinating because it spanned the entire period of hand-casting and hand-setting, through machine casting, into machine setting and finally to the demise of letterpress altogether at the O.U.P.

The story we have drawn from the archives goes on against that back-drop as well as everyday life in the Type Foundry and Composing Rooms: the tale of the Learned Press Soap Account, the lost jewellery store, how to get the sack, hand-setting at seven pence per thousand ems, and the mystery of the type found in the Oxford Canal lock. Horace Hart in particular comes across—mostly through his comments in thick blue pencil—as an extraordinary manager and character who, sadly, was to take his own life within a year of leaving the Press in 1915.

What is it about the Fell types that makes them 'stick'? For 350 years they have attracted book designers and collectors—and this printer at least has fallen under their spell. I may be handling 20th century castings, but what a rare privilege to be able to use them. To set and print a line of the whacky and whirly, gorgeous Double Pica Italic—what a pleasure!



The Fell Revival was to be published by the Old School Press in July 2000. Too big for the resources of the Press, it is being printed litho, but will have tip-ins printed letterpress on hand-made papers from O.U.P. using the remaining founts of Fell type. A special edition will contain additional type facsimiles and specimens. About 180 pages including about 20 pages of illustrations reproducing archive materials. There are eight tipped-in letterpress samples of work done at The Old School Press using Fell type. Further details can be viewed at www.the-old-school.demon.co.uk/oldschoolpress.htm.

Edition A consists of 50 copies bound in quarter-leather. Edition B is 250 copies bound in cloth. Additionally, 50 copies are reserved for those who wish to bind their edition themselves.

Orders can be sent to press@the-old-school.demon.co.uk or The Old School Press, Hinton Charterhouse, Bath BA3 6BJ, U.K.

Perhaps Here's a Better Way to Dross a Pot

During a visit to the Hill & Dale Private Press and Typefoundry several months ago, Robert Black from Dunn Loring, Va., now a lawyer, but a man who has spent many, many hours at the Linotype keyboard, gave me a great hint as to how to go about drossing pots—a procedure he'd used with Linotypes for many years.

He learned the process from a metallurgist.

I was complaining of the smell and smoke associated with a Vitaflux (commercial product from Imperial Type Metal, no longer available), or when using that magical "black powder" (powdered charcoal?) that others have recommended.

He said, "It's simple. Use borax." Well I happened to have a box of the stuff. You know, the white powder that's often used as a whitener in the washing machine? It's plain borax, not a soap product with borax in the name. "Show me!" I said. His instructions were simple. "Take a tablespoon full—use no more because it only complicates things." He rubbed the powder between his palms to break up any lumps, and then sprinkled it across the top of the hot pot.

My first surprise? No smoke or violent bubbling. No odor either. How wonderful! It takes time to agitate the metal to free up the dross, but it does work. He took my handy skimming spoon and rapidly sliced the surface of the metal, submersing the borax and working everything together. The dross (black powder) slowly precipitated out and the bright shiny metal underneath began to show itself.

Afterwards, I took my ladle (with a handy dam therein) and separated the dross from the metal, leaving the pot quite clean.

The first time, I used too much borax. I ended up with the white powder still very obvious in the dross. "No problem," Bob said. "Just throw some of the dross/borax combination back into the pot next time and it'll work just as well as the borax powder by itself.

So there you have it. An effective way to dross your pot using materials commonly available, and avoiding smoke and odor.

Remember to dispose of your dross properly. It's hazardous waste so never throw it in the trash. Seal it up to keep it dry and when you have enough, seek a commercial smelter that will take the stuff (years ago they actually *bought* it).

To the Editor: Aligning Matrices

I read with interest the article on page 33 of the *ATF Newsletter 24* dealing with the alignment of a font of type. . . . You mentioned you had ignored alignment due to the time required, which I would estimate to be 10 minutes. In my experience as a Monotype operator and technician, I found that as long as the operator intending using the font alone, and not mixing it with an existing casting, the alignment would, in any case, stay similar throughout the font."

—Ray Swinfield, Bankstown, Australia

The reply:

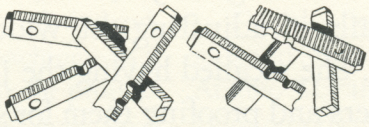
Thanks, Ray, for your comment. You are right in what you say, for I suspect that your work was always with English-made matrices. As long one confines his work to English display matrices, or American aluminum display matrices of most recent manufacture, alignment will not be a problem. These matrix fonts are well justified and aligned, which means that once set up, the operator can move from character to character without a need to constantly review alignment.

The error I made my the article was not saying what kind of matrix font I was using. In the case of the Scotch matrices, they were very old electrodeposited mats made by American Lanston Monotype, and their alignment varies significantly from letter to letter. The same is true of other matrices of very old manufacture, including mats made for use on the pivotal caster.

Conversely, when I cast my last lot of Lanston-made aluminum matrices for Goudy's Californian (shown elsewhere in this issue), there was little alignment variation from letter to letter. The same was true of my most recent casting of Bembo from English chrome-plated matrices. Ray, You have enjoyed the luxury of only using English matrices. Consider yourself lucky!

"University of California Oldstyle is the one face for which I have no regrets."

—Frederic W. Goudy



ABCDEFGHIJKLMNOPQRST
UVWXYZ& fiflffffiffl ctst æœ
abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ÆŒ & $1234567890 [(.,-:;"!?)]
ABCDEFGHIJKLMNOPQQRST
UVWXXYZZ& ÆŒ [(.,-:;"!?)]
abcdefgghijklmnopqrstuvvwwxyz
$1234567890 fiffflffiffl ctst œæ

A Specimen of Californian

The typeface you see here and on the opposite side of this sheet is Frederic W. Goudy's University of California Oldstyle, one of the last designs offered to the matrix-buying public by the American Lanston Monotype Company. It was issued in 1959, even though matrices were first produced in 1939-1940 for the proprietary use of the University of California.

I have had a long affection for the design, beginning when I discovered it in a Lanston specimen book I received in 1965. But my quest to acquire matrices and/or type in all sizes has been frustrated many times.

Claire Van Vlet talked of Californian when she spoke of her work at Lanston Monotype under the tutelage of John Anderson. Apparently they were working out the tiny details of adjusting set width and alignment, prior to public issuance of the face. She recalled having the job of repeatedly setting up a nonsensical series of letters and proofing them for study of set and alignment. On these proofs corrections would be indicated, and new mats or type would be made so the whole process could be repeated in quest of perfection.

It is this intimate adjustment of a face that makes it really "work" when it is put into hot metal. Sometimes called "justification," it requires much effort to be done right, and it requires much knowledge and a keen eye on the part of persons making the adjustments.

It is true that Lanston issued types after Californian, but by then the firm no longer had personnel with necessary skills. Claire and John Anderson both had left. The miserable justification on the font they called 496 (Helvetica) is evidence enough of this lost skill.

When Lanston offered Californian for sale when liquidating all its rental library, I was able to buy only 18 point roman and italic. Later, John Grant was able to rescue 18, 24, and 30 point display matrices for me from the University of California Press itself, when its letterpress equipment was liquidated. Only recently I have been able to borrow 36 point and I now have all components of composition sizes, borrowed from two individuals.

It is exciting to finally be able to cast a full run, from 10 to 36, of roman and and italic. It has been a long time coming! I hope to do the next *Newsletter* entirely in Californian. And yes, by the way, it is called Berkeley as issued by ITC to the digital world. But those fonts lack the special ligatures and small caps in all sizes, which make the hot-metal rendering so charming.

Two Trivial Bits of History Regarding The American Lanston Monotype Company

Documenting the history of a company that's been gone for nearly 40 years isn't easy, and there's probably very little need. Yet the heavily shrouded history of American Monotype still tweaks my interest, so I shall continue to add historic tidbits as they come available.

Two most interesting "side stories" have come to light recently. First was the receipt of a full-sized 4-page newspaper promotional piece "done on the Monotype" carrying a date of August 15, 1894—surely one of the very earliest pieces produced by the upstart company and, indeed, produced before the Monotype machine—as it came to be configured—was ready for production. This piece was sent to me by Steve Saxe, who has an uncanny ability to dig up the impossible when it comes to printing history.

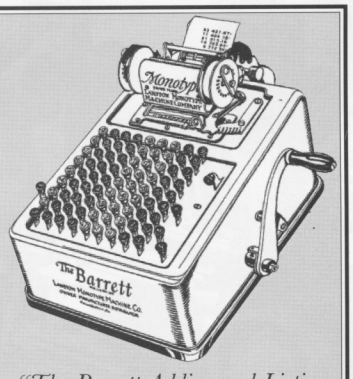
Second was an note from Monroe Postman saying he'd *just missed* an e-Bay auction item listed as a "Barrett Adding Machine manufactured by Lanston Monotype." I had known Lanston made these adding machines, but I never knew much about the product or why Lanston ever got into the arena until a copy of Lanston Monotype's trade publication, *Monotype: A Journal of Composing-Room Efficiency*, dated March-April, 1922, was presented to me by John Kristensen at the 2000 ATF Conference. He made the presentation primarily to let me see Lanston's showing of Scotch Roman, which was featured in the last *Newsletter.* But that issue also had a piece over the signature of J. Maury Dove, president of the company, explaining why the company had elected to get into the adding machine market.

So now it's time "for the rest of the story."

First the adding machine. I had heard Lanston did little with regard to war production for World War II, but I never thought about World War I. The company was around for that one too! Well, Dove reports that the company increased its manufacturing floor space by 40% by putting up additional buildings to accommodate war production. Precisely what war materiel was made there was not detailed. But the company's dilemma after World War I was what to do with all the extra space which was in excess of what was needed to make typecasting machines, keyboards, matrices, and related materials.

They decided diversification would be a good idea and hit on the recently introduced BARRETT ADDING MACHINE as a good direction to take. Dove reports they found the device "was almost identical with the Monotype Keyboard in the processes of its manufacture; and that, in our factory, the Barrett would have the advantage of being built within the very closest manufacturing limits." They bought the company and began producing the machines in Philadelphia.

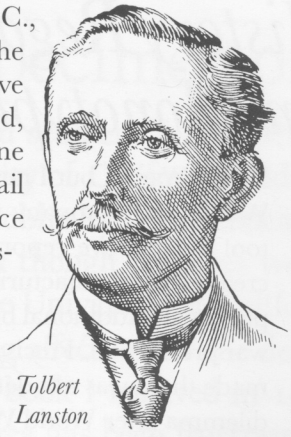
The article already cited was published just about the time Laston was getting geared up to make the machine; Dove indicated all market analysis was pointing to a great success, but there's really no way of knowing whether the adding machine ever added significantly to the profit margins of Lanston Monotype. It is certain that Lanston did manufacture the machine for a period of time. I had seen it mentioned occasionally in display ads in specimen books (whose principal role was to show type designs in use), but prior to seeing the article herein cited, I knew nothing else. At least now we know why the machine was added to the product line.



"The Barrett Adding and Listing Machine is equally practical for multiplying and dividing. It is a calculating machine that is efficient as an adding machine. It provides its own work and prints the proof. It is portable, noiseless and easy of operation." —From the special Kennerley issue of MONOTYPE: A JOURNAL OF COMPOSING ROOM EFFICIENCY, *May 1924*

Now we go to the newspaper that's now 106 years old. First, it's noted the piece

carried a Washington, D. C., dateline, which means the company had yet to move to Philadelphia. Second, the "Monotype" machine the piece discusses in detail is the four-mold device which had been successfully displayed at the Chicago World's Fair one year earlier. Along with the caster was the first Lanston keyboard, I know little about the caster other than what can be deduced from the accompanying photo, which came from the American Monotype archives via Dick Hartzell. of Hartzell Machine Works, Twin Oaks, Pa. These illustrations are precisely the same as the ones included in the promotional piece. Apparently the caster did cast type simultaneously from four bays. It had four molds and four paper towers, and four receiving galleys, leading to lots of questions of why four? We now extensively quote the promotional piece itself:



Tolbert Lanston

THE LANSTON QUADRUPLE FORM

This latest form of machine, which is the logical outcome of the system as already explained, and in which all that is said of the single form of construction may be considered as inheriting, comprises four die cases and mould actions each casting 3000 ems per hour, in the one structure, which are operated either independently or simultaneously with *one* set of actuating mechanism.

Different faces, different line lengths, and, of course, diffferent copy may be in operation at the same time upon these different parts of the one machine, without one part interfering with, or in any way hampering another.

The output of each casting department will equal the maximum output of any typesetting mechanism ejecting type bodies of like sizes. Taking brevier as a body of an average size, 135 types per minute will represent the casting capacity. This is in excess of 3000 ems an hour for each department, making the capacity of the entire machine in excess of 12,000 ems per hour. The advantages of this new quadruple form are set fort as follows:—

(1) Simplification and cheapening. One set of actuating devices sufficing for four casting and setting departments. This feature may be extended to embrace any number of sections: it becomes a matter of dimensions only.

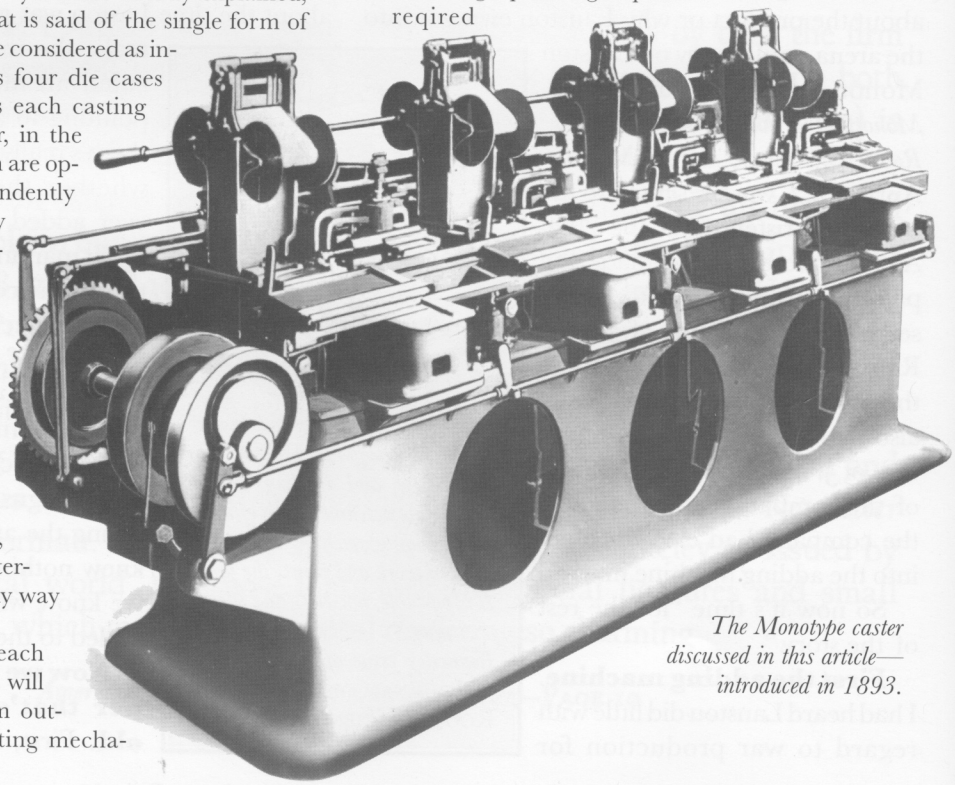
(2) Compactness. The quadruple form occupies a floor space of 9 x 3⅓ feet; greatest height, three feet ten inches. All parts are open to the view and ready control of the operator.

(3) Lightness. The quadruple form weighs 2000 pounds or an average of 500 pounds to each department. It is expected that this will be reduced 20 per cent.

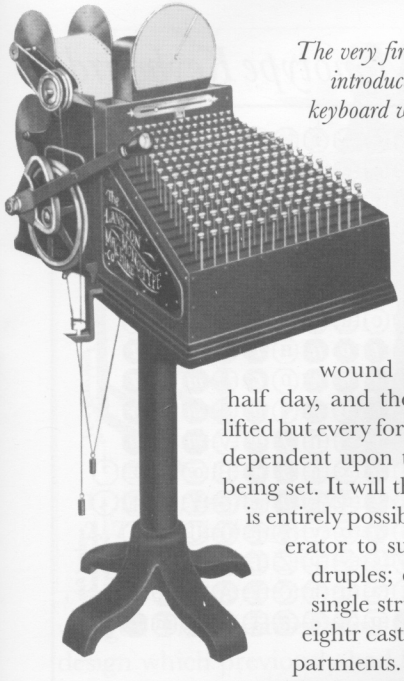
(4) Co-ordination, yet independent of departments, while moving synchronously, each section is independent of all others as to face, body size, length of line, copy, etc.

(5) No counter-shaft and but one belt required. One air and one gas supply suffice for the four machines.

(6) It is not doubted that the use of these machines will soon develop the ability of many operators to superintend and control batteries of sextuple and even octuple form, thus materially lessening operating expenses. The active labor reqired



The Monotype caster discussed in this article—introduced in 1893.



The very first Monotype keyboard, introduced in 1893. Later this keyboard would be designated the "A" keyboard.

is simply that of placing spools in position, lifting galleys, and oiling. A full-wound spool will run a half day, and the galleys need be lifted but every forty or fifty minutes, dependent upon the length of line being set. It will thus be seen that it is entirely possible for a skilled operator to supervise two quadruples; or, if preferred, a single structure embracing eightr casting and setting departments. In this view compactness, affording the convenient reach and control of several machines, becomes very important.

(7) In case of de-rangement or breakage in any department the part involved can be disconnected and the others kept in operation.

(8) Each department has its separate shifter and can be thrown in and out of operation at will without distrubing the other sections.

By the grapevine I have heard that this was really the last device Tolbert Lanston was intimately involved in developing. (Lanston severed formal ties with the company in 1898, but continued to act as a consultant.) Very obviously *it worked* for there are numerous testimonials in the newspaper piece praising its work. In several instances the comments were directed to Tolbert Lanston himself, reporting on "private" demonstrations of the machine made by the inventor himself at the company's offices on 16th Street in Washington. Perhaps this device could be equated to the "Blower" Linotype which the Mergenthaler company first introduced, later to be eclipsed by the "Star-Base" Linotype developed by Ottmar Mergenthaler (much to the dismay of company officials).

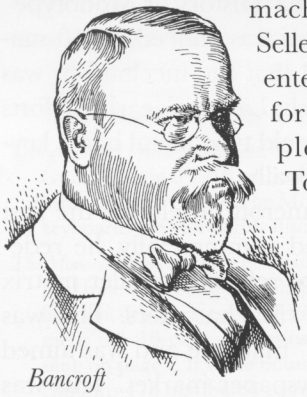
The newspaper featured drawings of the caster and keyboard. It had several lines of display type perhaps up to 18 point, but the great bulk of the publication was done in 8-point type. *If that machine turned out all that 8-point type, then there's no question in my mind that it did work.*

Interestingly, it is suggested therein that a person buying the Monotype could supplement his income by casting type for his own work, and subsequently *selling his forms* to other printers who might have opted not to seek mechanized composition. It is hinted that these printers could tear the forms down for hand-type at a lesser cost than buying new foundry type.

The keyboard apparently had 210 keys. It was not a QWERTY setup but, instead, had keys arranged as matrices were arranged in the matrix case. The more common Monotype keyboard was introduced after the turn of the century.

It was strongly advertised in this publication that "slug casting" was so far inferior to genuine typecasting from the Monotype. Every forward-looking printer needed to buy one of these devices for only $3,000 per machine.

Lanston Monotype did not end up selling these machines. In 1897 John Sellers Bancroft, a very talented machinist working for the company, completely redesigned Tolbert Lanston's ideas into the very compact device—with a single mold and single paper tower—which became the basis for all future refinements of the Monotype clear into the 1960s. The Bancroft machine came three years after the promotional newspaper was issued.



Bancroft

This curious newspaper is full of testimonials, hype, and even a short story which filled nearly three columns of one page, credited to Aubry Lanston, the inventor's son. But the greater significance of the piece is the fact that it was issued three years before the company had a legitimate product to sell.

The two line drawings accompanying this article were taken from THE MONOTYPE RECORDER *(published by English Monotype Corporation) of Autumn, 1949, which illustrated an article, "The Pioneer Days of Monotype Composing Machines." The halftones are from (believe it or not) original photographs which came to me from Dick Hartzell, whose company bought the remains of Lanston Monotype from American Type Founders in 1975.*

More Than You Ever Wanted to Know About Monotype Keyboards

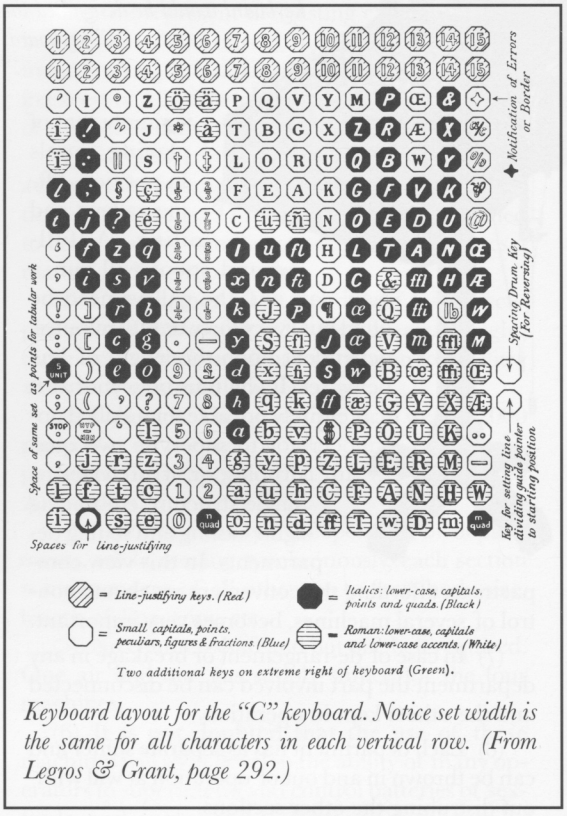
It's amazing how one piece of information fits into a puzzle and creates miraculous revelations. Well, the previous article on the 1894 Monotype promotional newspaper tweaked my curiosity about the Monotype keyboard, and by consulting various sources, including Legros & Grant's monumental *Typographical Printing Surfaces*, I was finally able to answer several lingering questions I had about the progression of Monotype keyboards and where certain terms came from.

Legros and Grant introduced me to the idea that the *first* Monotype keyboard was labeled "A." This was developed by Lanston himself and is depicted with the previous article. The keys were arranged much as the matrices were arranged in the matrix case and I count 14 rows of 15 characters each in a diagram accompanying the 1984 newspaper article. "History of Monotype" (see references) says this was, indeed, a 210-matrix arrangement and that the mechanism was pneumatic. Interestingly, Lanston's earlier efforts to press letters out of cold type metal had a keyboard operated electrically.

When J. Sellers Bancroft developed the first machine to be offered commercially, he redesigned the keyboard to reflect a smaller matrix case arrangement of 132 characters. This was called a "limited font" machine and was aimed principally at the newspaper market. This was called the "B" keyboard; it also was pneumatically operated, according to "History of Monotype." Over 100 of these machines were sold, but the limitation of 132 characters was considered a real obstacle to greater sales.

Bancroft moved to redesign the keyboard and opted for a 15x15 arrangement (225 characters). This was done in 1899, with the "C" keyboard.

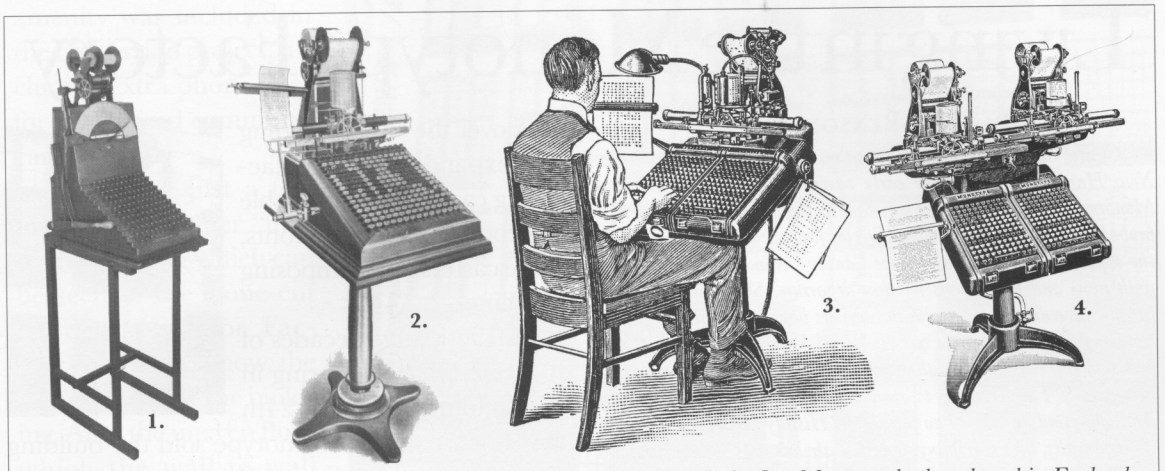
The "C" keyboard also had its keys arranged much as the matrices were arranged, aligned by set width. If you study the keyboard layout and compare it with what Monotype later called the "Standard C" arrangement, you'll recognize the *source* for the term. All characters are in set width rows, but the keys are not arranged precisely as they are in the "C-C" matrix case. It could be that to facilitate keyboard operation, an effort was made to get all the small caps together on each unit row, even though they were split between the right and left sides of the mat case.



Keyboard layout for the "C" keyboard. Notice set width is the same for all characters in each vertical row. (From Legros & Grant, page 292.)

Every font Monotype offered during the "reign" of the "C" keyboard *had* to conform to the set widths embedded in the keyboard. "Workarounds" were developed so that boldface and other arrangements could be used, (later called C-1, C-2, C-3, etc.) but these necessitated "keycaps" over the standard keyboard to reveal where different characters could be accessed. *It demanded a "hunt and peck" approach to keyboarding since actual key arrangement changed with the fonts being used.*

This restriction on arrangement and set width necessitated the development of the "D" keyboard, introduced in 1908. Comparing illustrations, you will see many similarities with the "C" keyboard. The "D" keyboard was the basis for all further development prior to Monomatic in the 1960s. It increased line length to a possible 90 ems, *adopted the standard typewriter* QWERTY *arrangement*, made matrix *access* (at the keyboard) independent of set widths and mat location through introduction of keybars, stopbars and



1. *Actual photo from English Monotype archives of a "B" style keyboard, the first Monotype keyboard used in England.* **2.** *The "C" keyboard as shown in the* Inland Printer, *September, 1903, page 847.* **3.** *The "D" keyboard from* The Monotype Pony Specimen Book, *1921, page xii.* **4.** *The "DD" keyboard from the same publication, page xiii.*

wedges. This removed most restrictions on type design which previously had been imposed and opened the way for greater excellence in Monotype typography both in the U. S. and England.

Later that same year, the duplex or "DD" keyboard was introduced. It featured *two* paper towers, making it possible for a single operator to simultaneously punch a ribbon for two editions of a manuscript utilizing perhaps different sizes and line lengths. This surely required a near-genius to keep mental track of where he was (remember, there was no visual display of what was happening on the Monotype keyboard) when he was interrupted at different places to end lines on both paper towers.

The introduction of keybars and keybanks with the "D" keyboard also made it possible to introduce *without a new keyboard* 15x17 matrix case arrangements in 1925 in England (not in the U. S. until the 1950s) and later the English further modified the system to handle 16x17.

This all went out the window with the American introduction of the Monomatic and Monomatic II casters and keyboards in the mid 1960s, but these machines will not be discussed here because they were introduced *after* the rapid switch to photocomposition and offset printing had begun. As one user stated, "it was a great system, but it was too late getting here."

So now you have it. A detailed history of the development of the Monotype keyboard, an ingenious mechanical calculator and computer developed and extensively utilized many, many decades before the computer came into being.

References

"One Hundred Years of Type Making, 1897-1997," *The Monotype Recorder,* Centenary issue, new series Number 19, 1997. Most dates are from Lawrence W. Wallis's "Monotype Time Check" beginning on page 46.

Typographical Printing-Surfaces, by Lucien A. Legros and John C. Grant. Original 1916 edition republished by Garland Publishing, Inc., in 1980. The Monotype "C," "D," and "DD" keyboards are thoroughly discussed beginning on page 291.

The Monotype Pony Specimen Book published by Lanston Monotype Machine Company, Philadelphia, 1921, is a very rare publication. It's greatest contribution other than type specimens is a 10-page discussion of the system itself, beginning on page v. It's side bound, printed on newsprint, and contains 416 numbered pages and provides dates and details which are found nowhere else in American Monotype literature.

The Monotype System, a hard-bound volume published by American Lanston Monotype in 1912 (red cover) and 1916 (blue cover). Comparing these books reveals many varied matrix case arrangements were developed during the four-year interval. Virtually all, however, conformed to the set width arrangement fixed in the "C" keyboard.

"The History of Monotype: Past and Present," is a seven-page typewritten manuscript in my personal records which came out of the New York (City) School of Printing. I also have a Xerox of a booklet titled *Monotype,* published by the New York School of Printing dated 1957 which repeats virtually all of the manuscript. The piece gives unique insider perception into the very early years of Monotype and its operation, much of which is found nowhere else. The article carries the machine's development up to and including English Monophoto. The printed booklet credits Joseph Quigley, sales manager, and Rocco Giorgio, district manager, both with Lanston Monotype, as well as Freddy J. Tagle, principal of the New York School of Printing, and Peter Lisanti, instructor in "The School for Printers' Apprentices."

Living in the Monotype Factory

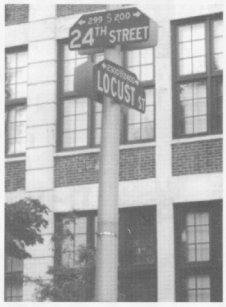
By Tara Benson, Esq.

Claire VanVlet spoke with attendees at the ATF Conference in New Hampshire about her early career experiences at Lanston Monotype in Philadelphia as assistant to John Anderson, who served probably as the last typographic director for the company. In her talk, she explained his decision to leave Lanston Monotype (and take her with him) and the reasons for that departure. She reported that he became exceedingly upset with the various boards of directors for the company, which had come out of World War II "cash rich," and how they proceeded to bleed the company for their own personal financial gain. "This is going to ruin the company," she paraphrased Anderson, and he wanted no part of it. History proved him right.

Ironically, the accompanying article already was on hand and ties in nicely with her report. Does the Lanston Monotype building at 24th and Locust Streets in Philadelphia still stand? Indeed it does, and what follows was written by Ernie Blitzer's daughter. He's an avid letterpress enthusiast, associate of our ATF, and he's responsible for prodding her to provide this piece. Thanks to Ernie, and many thanks, too, to Tara Benson for giving us this fascinating update on the old Monotype building.

The eight-story concrete and brick building has been touted as "converted industrial chic" and "luxury loft" apartments, but to the daughter of a somewhat obsessive letterpress printer (dare I say "hobbyist"?), it is the famed Monotype Building in Philadelphia. From the moment my husband and I moved our belongings into our new home, my father has repeatedly and proudly told his fellow printers that his daughter lives in "letterpress Mecca"—the Monotype Factory.

Built in 1918, the Lanston Monotype Building housed the entire Monotype Company operations, from the corporate offices to the manufacturing of the machines and accessories that made up the "Monotype Method" of publishing. Because this method of typesetting revolutionized the printing industry, the Monotype Company experienced a period of rapid expansion and growth. Nowhere was expansion more evident than in the Monotype Building itself. Initially, the company only occupied two floors of one small wing in the building. After the first six years of operation, Monotype took over the entire building and expanded its manufacturing capabilities to be able to produce additional fonts, more casters and composing machines.



In 1960, after decades of successful manufacturing in the building located at 24th and Locust streets, Monotype sold the building to the National Publishing Company which used it for printing Bibles. Bible publishing operations lasted here until the 1980's when the historical building was abandoned and then later sold to Dranoff Properties, a developer who specializes in revitalizing historic buildings in Philadelphia.

In looking at the building today, it is difficult to believe that it once was headquarters for Monotype as very little remains to remind us of the past except "before" and "after" photographs in the main lobby and elevator lobbies of each floor. The inside of the building was gutted to make way for 152 luxury apartments, a library/media room, a fitness center, a spacious lobby and even a bicycle storage room. Every modern

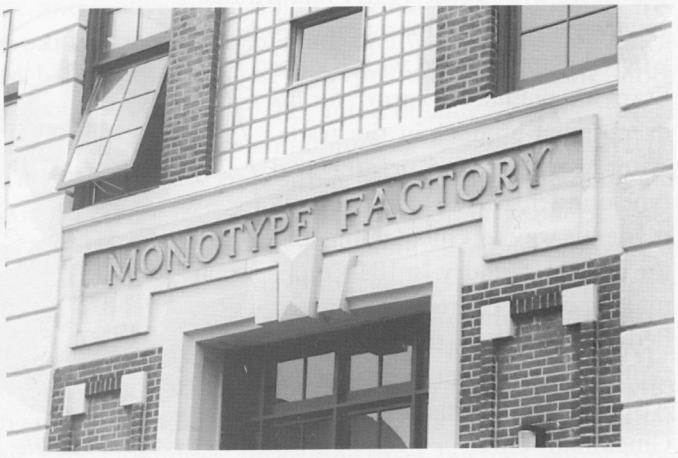
amenity was included in the conversion project, including extra phone lines for high-speed communications.

There are just a few hints at the former "life" of the building which can be seen in the stone-cut words "Monotype Factory" at what is now the *back* entrance of the building. Also, the uneven floor which the wall-to-wall carpet can barely disguise, hints of the days when huge machines created mats, type casters, accessories and, later, Bibles. Indeed, all of our furniture sits at quirky angles, tilts and slants.

Who lives here? There are basically two groups of people who have chosen to call the Monotype factory home. The first and larger group is the young professionals and/or graduate students choosing to live in close to downtown offices and the University of Pennsylvania. The other group is made up of couples in their 50s and 60s with adult children who have decided to move back to the city after raising their families in the suburbs around Philadelphia. The most common profession among the residents is law, with medicine a close second. Unfortunately, there are no printers to carry on the tradition.

While newspapers and promotional materials for Locust on the Park rave about its "Soho styling" and "elegant lofts," and my father refers to this converted warehouse as one of the former centers of letterpress innovation, I simply think of it as home.

Building entrance and spacious lobby are situated in an area which in Monotype days was the loading dock area.



The only hint that this building once housed Lanston Monotype is the cut stone lettering above what is now a rear entrance to the structure. In Monotype days, it was the front door!

The Once-Thriving Typefoundring Industry of St. Louis

By Robert Mullen

Article first appeared in Gateway Heritage, *published by the Missouri Historical Society, Winter, 1998-99. Reproduced with permission of both the society and the author.*

In December 1, 1840, George Charles ran an advertisement in the *Missouri Republican* announcing the opening of the St. Louis Type Foundry. A portion of the ad read:

> G. Charles respectfully informs the printers of St. Louis and elsewhere that he has commenced the above business in the city of St. Louis. He is now prepared to furnish orders for type on as reasonable terms as any establishment in the west.

Charles's new typefoundry was the first of its kind in the city. It became one of the earliest mechanized factories in St. Louis and one of the city's first incorporated businesses. The operation eventually ruined one man financially, but it made its later owners quite wealthy. One branch of the business, the Pavyer Printing Machine Works, still operates today.

The story of typefounding in St. Louis describes how changing technology and marketing turned an age-old craft into a large and profitable business and eventually proved to be its demise. Charles's advertisement stated his type was cast in "hand moulds," a method the foundry would continue to use for more than 10 years.

George Charles had a Junior partner in the new type-making business, Augustus P. Ladew, whom he had met while working at Lawrence Johnson's Type Foundry in Philadelphia. Ladew grew up in Albany, New York, where he apprenticed with Richard Starr, a typefounder known for his exceptional abilities in the trade. After working as a printer and typefounder in New York, Ladew made his way to Philadelphia and the Johnson foundry. In 1840, typemaking in the United States was a fledgling industry; the only other type manufacturer west of the Appalachians was located in Cincinnati, Ohio.

Augustus Ladew

Cutthroat competition was not yet a matter of serious concern in this business. Most typefounders had all the trade they could handle, and if an employee wanted to open a new shop in another city several hundred miles away, he was not considered a threat. In several instances one typefounder assisted another in starting up a business elsewhere, and this may have been the relationship between Lawrence Johnson and his former employees, Charles and Ladew.

All newspapers periodically needed a new set of type, depending on the circulation or frequency of publication, and typefoundries supplied this ongoing demand for their product. The publisher's type frequently wore down with use, making it harder to print the ink clearly. Such was the case when the January 3, 1851, edition of the *Missouri Republican* announced its new "dress" of type supplied by the St. Louis Type Foundry. In addition to newspaper type, printers increasingly demanded fancy advertising and display typefaces.

Styles changed every few years, and the printing craft needed to provide its customers with the most modern types by purchasing the latest offerings from the typefoundries. Foundries also supplemented their incomes by selling general printing supplies and equipment.

After Charles died in 1843, Ladew continued the business and prospered for nearly 20 years. St. Louis had grown tenfold, from 16,000 in 1840 to a population of 160,000 in 1860. As a result, the number of newspapers in Missouri increased from 35 to 148 in those 20 years, and the number of papers elsewhere in the West grew by similar proportions. As new towns formed in the western lands, frequently the first business estab-

lished was a local newspaper. Ladew found himself selling whole newspaper shops, often on credit, to people who sometimes knew little of the printing trade.

Ladew's generosity in giving credit, as well as a penchant for overextending his own credit lines, proved to be his downfall. In 1860 Ladew lost his company to the Cincinnati Type Foundry, to which he had built up considerable debt. The new owners incorporated the company in August of that year, keeping most of the former workers, including Ladew's brother Stephen. Within two years the St. Louis Type Foundry was back in local hands—three of Ladew's former employees and the Cincinnati foundry's manager had bought the business.

One of the new owners, James Pavyer, brought his company into the industrial age. An immigrant mechanic and typefounder from England, he began working for Ladew in 1850. Within a few years he had built fifteen hand-operated typecasting machines. These machines, which eliminated the need to use hand molds for most type, were similar to a machine patented by New York typefounder David Bruce in 1838. With Pavyer's mechanical abilities, the St. Louis Type Foundry cast type with the same speed and quality as any foundry in the world. Pavyer exported his technology, briefly returning to England in 1857 to train the workers at his father's typefoundry to build two of his casting machines.

After the Civil War, competition heated up with two more typefoundries in the city. Two former employees and experienced typefounders began the short-lived Missouri Type Foundry in 1872. The tiny operation could not compete, and the company folded four years later. The more successful new factory was a western branch of the Boston Type Foundry that opened its doors in St. Louis in 1871. Its local managers, James St. John and Carl Schraubstadter, had worked for the Boston foundry for many years. After a year in Missouri, Schraubstadter and St. John purchased the St. Louis branch from their parent company, naming it the Central Type Foundry and sharing space with the *Anzeiger des Westens*, a German-language newspaper, for a dozen years. Central grew rapidly, supplying type for Gould and Aldrich's 1872 St. Louis *City Directory* and soon claiming to supply the type for every newspaper in town.

The Central Typefoundry of St. Louis, as depicted accompanying a history of the foundry in the INLAND PRINTER, *April, 1891, page 638.*

Fortunately for both of the St. Louis foundries, there was plenty of business to go around. As huge population growth and increasing emphasis on education brought new demands on printers, the typefounding industry peaked in America in the last third of the 19th century. Popular magazines supplied entertainment reading public. At the same time, newspaper advertising matured from the strict format of single-column, small classified ads to larger ads designed to attract the reader's attention. In the age of Victorian over-decorating in architecture, decorative arts, and furniture, the type styles used in advertising followed similar tastes. Printers frequently created ads that used 20 or more fanciful typefaces. As typefoundries became more competitive, they hired designers and engravers to produce a multitude of new advertising type styles in hopes that printers everywhere would recognize a need for additional modern typefaces. Many styles were utter failures; those that succeeded were often copied by other foundries.

St. Louis's foundries were among the more successful American firms. The St. Louis Type Foundry seemed content to continue making its standard newspaper faces and selling other foundries' advertising styles, but the Central Type

SAINT LOUIS SERIES NEW SHADED FACES.

ORIGINAL DESIGN OF THE CENTRAL TYPE FOUNDRY, ST. LOUIS, MO.

5a 4A 72-Point St. Louis. (Twelve-line Nonpareil.) $12.50

RANKEST WOODLAND
Grandeur Noted

6a 5A 48-Point St. Louis. (Eight-line Nonpareil.) $7.50

COLLECTED STATE REVENUE
Heavy Taxes Reported 15

6a 5A 36-Point St. Louis. (Six-line Nonpareil.) $5.00

MEANDERING LOVERS MUCH DEVOTED
Sweethearts at Sundown 24

10a 6A 24-Point St. Louis. (Four-line Nonp.) $4.00

SUMMER PICNIC JAUNTS
Rustic Pleasures 48

14a 8A 18-Point St. Louis. (Three-line Nonp.) $3.25

AUTUMN MOONLIGHT EXCURSIONS
Viewing River Scenes 360

NEW LINING FACE
UNIFORM BOTTOM LINE

LABOR-SAVING SYSTEM

NOTE.— The five sizes of the ST. LOUIS Series line with each other, and can be used in combination as Caps and Small Caps, accurate lining and justification being secured with Nonpareil Slugs and Six-to-Pica Leads — thus avoiding the use of cardboard or paper, an advantage which every practical printer will appreciate. This lining feature will be added to all new faces made by this foundry.

CAST BY THE CENTRAL TYPE FOUNDRY, ST. LOUIS, MO.

The St. Louis Series typeface as offered by the Central Type Foundry in the INLAND PRINTER, *April, 1886, page 411.*

Foundry aggressively hawked dozens of newly designed typefaces. Nicholas Werner, a Belleville, Illinois, native and Central's chief type designer, promoted the value of advertising to printers in Central's catalogs and ads. He persuaded printers that Central's "copper alloy" type lasted longer than its competitors' products, though most likely it was of the same quality. In the November 1875, issue of their house publication, *The Printers' Register*, the company boasted, "Central Type Foundry spends more on advertising in one year than all other foundries in the country combined." Through Werner's use of advertising, St. John's competitive savvy, and Schraubstadter's mechanical skills, Central's business increased dramatically. With agents in many U. S. cities, England, Mexico, and Australia, Schraubstadter and St. John's company claimed to be the largest typefoundry in the world after they bought controlling interest in their former parent company, the Boston Type Foundry, in 1888.

As the demand for more type grew each year, new typefoundries began appearing in cities such as Cleveland, Chicago, Milwaukee, Minneapolis, and Kansas City. There were 18 typefoundries in the United States in 1850, but by 1880 there were 48, with the number of employees in the industry increasing by nearly 1,000 percent. No longer were eastern foundries content with only their local business. They advertised in St. Louis city directories and national printers' journals while their western counterparts sought markets in the East. Price wars occurred frequently; at times foundries slashed prices to below cost in order to reduce inventory and gain customers. In the midst of the competitive frenzy, typefounders found themselves facing a new common enemy: Ottmar Mergenthaler's Linotype. In 1886 Mergenthaler, a German immigrant inventor living in Baltimore, built his first typecasting and typesetting machine—technology that allowed the compositor to sit at a keyboard and type in the text of a news story.

Rather than laboriously setting new copy letter by letter, the machine automatically cast the letters in solid lines. Almost overnight the typefounding industry lost a huge percentage of its lifeblood: providing tons of type to the hundreds of daily and weekly newspapers.

Home office and factory of Inland Type Foundry, as depicted in the foundry's 1906 Pony Specimen Book, page 2.

Seeing the handwriting on the wall, 23 typefoundries across the country cast their lot together in 1892, forming the giant American Type Founders Company (ATF), based in New Jersey. Both St. Louis businesses participated in the merger, and their owners retired. The Central Foundry's establishment stayed in production early into the new century as a branch of ATF. The typefounding industry was not dead, but it was mortally wounded.

Even so, three new typefoundries sprang up in St. Louis over the next 30 years: Inland, Western, and Laclede. The Inland Foundry, operated by Nicholas Werner and three of Carl Schraubstadter's sons, quickly grew to be among the most successful of the independent, "non-trust" foundries in the country. They continued to innovate and advertise heavily and were a constant thorn in the side of ATF.

However, Inland could not compete with the ATF's size and sold out to them in 1911. Western and Laclede followed the same path a few years later. The final blow to typefounding came with the widespread acceptance of the technology of offset printing in the middle of the 20th

THERE is "PIE" in this "PI."

THE subjoined matter consisted originally of thirty-one lines each set in a different face of STANDARD LINE type. After proving the form we "mixed it up." The words remain unchanged, their arrangement only having been altered. The first words of the thirty-one lines, however, are placed in consecutive order in the beginning of the "pied" form here printed. The length of the lines below is 35 ems of 12-Point; in the original matter their length is 27 ems 12-Point. For the First correct solution, placing the words and lines in proper order, and naming (as per names given in our sheets and books) the faces they are set in, we offer a

PRIZE OF $50

For the Second correct solution a PRIZE OF $25

For the Third correct solution a PRIZE OF $10

all payable in STANDARD LINE type at list prices. It should be borne in mind that STANDARD LINE at list prices is worth more than the ordinary type at 50 per cent off. Solutions should be addressed to "Prize Contest, Inland Type Foundry, St. Louis." The correct solution and the names of the prize winners will be duly published in this journal.

Standard **prize** that, necessary **an** **study** **depend** from of **Standard** production **Standard** a **briefly** Standard and *system* line, *had* to **find** rule, **with** *of* **well** *is* on range **Leaders** *with worth* verdict before. **All** series **filling** course printer. **All** Standard **Line** **matter** **profitable** to **prominent** **printer.** *For* it **is** the **type** to satisfy every **quick** and *economic* printer **as** **the** **best.** Standard Line is *the* **greatest** *system.* **We** view **it** as the *one* *sufficient* for practical or progressive printing. **Profits** *are* **now** **numerous** with *this* Line and the **type** **is** **well** **appreciated.** **No** printer will **question** the **fact** **that** the points **of** **special** excellence quickly **and** **thoroughly** *commend* **the** new type, and perhaps **require** *no further* additional dissertation **to** **readily** **declare** *the* usefulness of **it.** The **gratification** becomes wider by *extending* purchase **of** *faces cast* upon **the** simple **Line** **used** **for** plain **or** *other material.* **Another** *point any* **one** may **pause** *on* **to** be considered, *and* a *feature* to be **mentioned:** *Leaders* line accurately *with* **every** **face** *and* body; **the** **setting** **in** position **by** **compositor** **is** subject *to* **any** **requirement** **and** *will* do *it* justice; justification in **combination** *on any* **body,** If point *leads* or **slugs** *alone* **be** *the* means The **feature** in legal blanks of **2-Point** *faces* in **brass** **we** **offer** as justified in *every* typographic specimen. When *all* have **the** **entire** fancy *printing* **outfit,** *their* **sizes** of all leaders will Line **accurately** *All* single *letter-* **itself** *cast* to **line** by **any** other shown classes **the** **caps** *of* **any** *one* **body** **are** **on** *same* **Line** *will* line *other as* **small** **caps,** **also** leaders **a** **any** a *bill bodies*, *be* but *be body* be *body* **can** *cast* **could** can *date-* dotted, ever few events far *face* had *heads* hence have **it** **in** *line* **leads** lengthy *lines* **lead** **means** may of **of** *on* of of *on* or of **of** of point **Rome.** rest **roads** *slugs.* **so** than *this* the this *that thus* that time **that** them **upon** will what *would* **what** **would** **will**

INLAND TYPE FOUNDRY

Inventors and Manufacturers of STANDARD LINE TYPE

217-219 Olive Street, SAINT LOUIS

This page, excepting the Pi, is set in our KELMSCOTT Series. Borders No. 1833 and 1850; latter around page.

The Inland Type Foundry introduced the idea of casting all fonts to a standard line, as very well demonstrated in this advertisement which appeared in the INLAND PRINTER, *August, 1896, page 571.*

century, a technology currently facing a similar threat from digital printing.

The city had witnessed the transformation of an ancient craft that employed a few skilled workers in 1840 into mechanized factories that hired hundreds of skilled and unskilled men, women, and children. The experience in St. Louis paralleled the industry nationally as technology and entrepreneurship pushed the craft to its greatest and most diverse output. Yet, within a few decades, this 500-year-old craft had dwindled to a skeleton of its previous self.

After the tiny Missouri Brass Type Foundry, a manufacturer of specialty type for bookbinders, closed its doors in 1955, the typefounding industry in St. Louis came to a quiet end. Today, St. Louis's role as a major national supplier of printers' type has largely been forgotten.

SIDEBAR TO ST. LOUIS STORY, PREVIOUS PAGES

William Bright: A Rags to Riches Story

BY ROBERT MULLEN

William Bright witnessed several transformations of the St. Louis Type Foundry during his 59-year association with the firm. He saw the foundry's plant processes develop from hand labor to mechanization to full steam power. In 1886 he was named the fourth president of the company and maintained that title until 1892, when the foundry was sold to the American Type Founders Company.

In his early life, Bright didn't show any signs of becoming a successful businessman. He was born in Cheshire, England, in 1830 to less than affluent parents. He had a sporadic education, and at 14 Bright sailed to America with his uncle. A year after arriving in St. Louis, Bright's uncle died, leaving the 15-year-old boy to fend for himself.

Bright found a job as an errand boy at the St. Louis Type Foundry and, in time, worked his way up and gained more responsibilities. As an older teenager William Bright joined the volunteer fire department, gaining respect from his fellow firefighters. The Missouri Historical Society has his fireman's helmet and a speaking trumpet presented to him in 1858 for his 10 years of service as secretary of the Missouri Fire Company.

In 1857, Augustus Ladew, the foundry's owner, took Bright on as a partner, parting with him two years later. Ladew, however, found himself in deep financial straits and sold the company to the Cincinnati Type Foundry, who promptly rehired Bright as secretary. Over the next 30 years he managed the sales and marketing of the foundry and provided the start-up equipment needed for hundreds of newspapers in the western United States.

Bright personally knew many of the printers he sold merchandise to and gave generous credit to both experienced and novice printers, sometimes to a fault. Bright's long tenure and patience with debtors earned him a wide respect among printers in many states, yet it appears some took advantage of this reputation. The Missouri Historical Society archives holds an account book listing about 130 credit claims the typefoundry held against printers with delinquent bills.

After the sale of the St. Louis Type Foundry in 1892, Bright purchased the electrotyping portion of the business from the new owners. He named the offshoot the St. Louis Electrotype Company, and his children and grandchildren continued to operate the business until it dissolved in 1967. Perhaps his difficult early life formed the character of this young teenager into a successful businessman who worked nearly 60 years for the St. Louis Type Foundry. Whatever the source of his motivation, William Bright's story made him the Horatio Alger of the typefounding industry.

Diary of Two Madmen

An account of the cutting of the B-42 Blackletter—a precise facsimile of the type Gutenberg cut and used for the 42-line Bible. Note: Although references are made to seemingly vast numbers of personnel, departments and resources, there are in reality but two individuals involved in this work; namely Bro. Erasmus and his colleague and friend, Bro. Theophillus. (Alan Waring of Fairfield, Conn., and Theo Rehak of Howell, N. J.) "Madness is the furnace of those who aspire to create, it is sanity which destroys the temper of their product." —Dumas

April 19, 2000. Received a call from someone in Tokyo, looking to acquire a font of blackletter for a museum. Not just any blackletter, but the one used by Gutenberg. If they had not mentioned Stan Nelson as a referral, I would have thought it a prank. Many have shaken our tree in the past, but few have paid for the fruit. Mentioned it to E. somewhat later. He reminds me after a brief lesson in the follies of being a typefounder in this day and age, that we have work to do on the Warde Arrighi project.

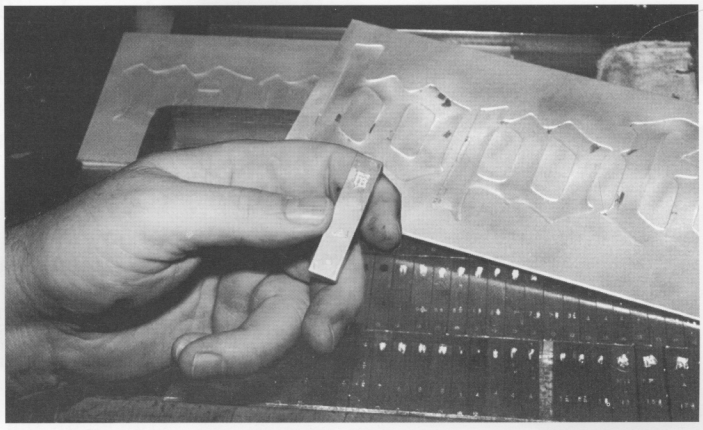
Seated at his Benton Pantograph, Theo Rehak engraves another of the many matrices required for the project. Several are shown in the drawer in the foreground.

April 24. Stan Nelson called today. Did I hear from Tokyo? Well, yes. This is a serious request. Stan is enthusiastic. Problem is, Stan can get enthusiastic about pin-mark variations. Caught E. in a contemplative mode. We toy with the consequences of such a monumental job. A year, perhaps two; if we have the ability and *good models.* He soon recovers and reminds me about the Arrighi.

April 27. In communication with Tokyo representative. He is an American—a bridge between cultures. His credentials are good. Gently testing him, he is knowledgeable about good type. E. is sanguine. They will never pay what it is worth. Do you realize the job encompasses work equal to three italic fonts or more? With numerous variants? Inform E. that the Arrighi engraving plates have arrived from Texas.

April 29. I am alarmed. E. has been doing some research. He is beginning to amass a litany of B-42 confounds. The Tokyo agent has also increased his adamancy. We talk about costs. Beside the need to do a cost analysis, where are the models for the Art Department? Surely there are others capable of doing this job. Phone calls have come to naught. The agent has revealed he has tried the very same out-sources.

May 1. We are talking CONTRACT. The requirements and caveats are staggering. The Museum is to open in October. *The deadline is August 15* for enough type to compose four two-column pages of the Mainz Bible. What is worse, we have determined that it must be on an unusual body size (about 19½ point). However, it is for showing, not direct printing. We could mill down 24 point to the required size. I check and rein in a faint enthusiasm. E. asks are we willing to grovel? Reply: no.



Magnesium photoengravings (large pieces in background) serve as patterns for the pantograph. In Theo's hand: an engraved brass matrix.

May 3. I cannot believe E. is serious. Costs are agreed upon between he and I. What does E. see that I do not? He talks as if he has picked up the gauntlet thrown down at our feet. There is not enough time. Stan has vouched for both parties, I cannot entertain taking money for goods that are not possible to deliver on time. I will not ask for more than the job is worth. I will not take advantage as a charlatan would.

May 5. E. has been busy. There is a strange feverish manner to his speech. He is showing signs of the pathogen. He thinks he can handle the needs for the Art Department and, what is more, is willing to do so. How many matrices can one cut and fit in a given time period? More confounds: the enlargements from vellum copies (of the original Gutenberg Bible) look like tar troweled on cold canvas. Our exemplars have to be from paper copies (also printed by Gutenberg).

I explain to E. that I cannot undertake the commission without his full input. He agrees. He will have to master some new techniques, but in the end, his work must fall on the perception of his eyes and the skill of his hands. He must and will discover the paths that Gutenberg trod, firsthand. I remind him that Johann died penniless and in all probability blind. He does not reply.

May 9. Woe to me! I have the malady as well. The most realistic assessment of the design is that of a study in chaos. No uniform stem weight, alignment, or grades. Each character an individual iconoclastic confound in itself. I struggle with a range of comparisons for stem width and cap heights. It is not conformity; rather a reproducing of a floating, ethereal standard. We discover that Gutenberg's type was quite well designed and cut. It was the casting and the ink which must have been his bane of existence.

We will be criticised for making the design appear overly sharp. Most eyes have only seen those fuzzy, muzzy repros in the text books, and old Zedler's pioneering but poorly reproduced scheme. As for the existing models, five and a half centuries can do a lot to the appearance of the impression.

May 11. Creative paranoia in full swing. E. comes through with sample artwork. We decide to cut and cast a few sample characters. They should arrive in Japan in less than a week. There is nothing quite like price negotiation with a client whose hands are full of your product.

Note: it must be understood that all this preceeded a signed agreement, and that E. had toiled ahead far beyond the point that which a so-called realist might have invested. It is well that he did, for our patrons were to squander the month of May as I was to squander the whole of June. If he had not started the artwork the very day after my first phone call—unbeknownst to me—no amount of labor would have succeeded in meeting the deadline. I stopped counting the estimate of his hours when the total reached 1200.

June 3. Contract signed—funds arrive. I am in trouble. When one is young and healthy, such strenuous endeavors are recovered from lightly. Not so for me. At my age, I recover but slowly

Examining a pattern prior to engraving additional matrices, Theo Rehak is shown seated at the pantograph with many of the 162 matrices required for the project displayed in the foreground.

from such punishment. Even in a good day there is but a slender window of opportunity, when the eyes focus and my motor skills are firm. This month there is much travel and I cannot renege my commitments. I almost cancel my ATF Conference appearance at Rindge, N. H. I spend but two nights there and I am speeding back once again to my rack upon the floor of the matrix department. I take up permanent residence in the shop.

June 14. I am worried about E. He is wobbly after a long string of 16-hour days. The impact on the eyes and neurological system is devastating. I try to encourage him. He almost relents and confides that we should not have taken the commission. He laughs suddenly. "You have not come up to speed yet, on your end, T. Wait until you experience the battle as I have."

June 18. I now realize that without E.'s organizational skills, this all would be for naught. Never before have I experienced such a workload. He wisely divided the needed characters in easier-to-handle groups of those to be used in the setting of the actual pages.

A revelation! Not all the characters (used in the entire Bible) will be present on the four chosen pages. This reduces the number of characters which must be done by deadline. Even so, there are other characters which appear but once in all those four pages, yet they must be made with the same care as all the rest.

I took a few tracings on blank matrix planchets to arrive at the proper cutting tools and their followers. In this case, the roughing tool is the same size as the finisher. What happens is that a series of roughers will be needed, while the finishers last a long time, just doing a slight clean-up to complete the cutting. I thank providence for allowing me to be taught by a master craftsman, Bill Gregan, whose skills he shared with enthusiasm and generosity.

July 1. It has become a marathon of cutting matrices, fitting them, trial casts, and then filling the sorts bill with finished type. There are six lists of characters. All with assistance and encouragement from E. It is I who wobble now.

July 2 to 27. My world is a dark hell of labor, exhaustion, eating, bodily concerns and fitful moments of sleep. I might as well be floating in space. Thankfully, I have ruined few matrix planchets. To my distress, E. has found some characters to do over! I fight the impulse to cry out. I cannot refuse him; he is caught up in this business and has suffered also. I say nothing and prepare yet more planchets.

Types Available

Though this project was initiated by means of a commission from a Japanese museum, The Dale Guild was able to retain the matrices and the right to issue *fonts* for use by others. The scheme available contains sufficient types to set at least four pages of the 42-line Bible, or approximately 218 pounds of type.

No small collector's fonts will be offered.

If you need additional details, ask for a prospectus from Dale Guild Type Foundry, 4621 Route 9 North, Howell, N. J. 07731. Phone/fax (732) 363-3590. e-mail daletype@worldnet.att.net. Or check the website: www.daleguild.com.

My ankles and knees are on fire. I cannot work for more than four or five hours at a time. Then I must sit or lay on my rack until it passes. At dusk I sneak away and drive to the ocean. As soon as I hit the surf, wading and stumbling about, the fires finally go out. There is no time. There is no day or night, I travel in this timelessness, marked only by work periods and unconscious idling. There is no rest.

July 30. The vast army of workers who have set upon the B-42 Project have decided to ship the type from the first three lists at once. They are ready to go. This means nearly 100 pounds of type. It also means that they shall have three-quarters of the needed type in Tokyo, and ahead of schedule.

One of us has a decided yearning to lay down and crash. E. has been using the Insel Verlag facsimile we have invested in for work beyond the original contract. The madmen have concluded: why stop now? In May I had scoured the antique booksellers for Gutenberg facsimiles. Only one person came through, Bob Fleck, my publisher at Oak Knoll. He made us an offer we could not refuse. Now this expense has been justified: the rest of the font can be completed.

I test E. Do you think we should just drop all of this and do the Arrighi? No, he is still afflicted. There is no answer.

August 5. The last three lists of characters need to be finished. They comprise half the characters, but only one-quarter of the total type. Then the spacing material, and we are done. I am by now heartily sick of milling type. I kneel on the floor of the matrix department and vow to re-work a Barth mold to the correct body size, no matter what the cost (thus eliminating the need to mill the type).

August 9. Disaster! I cannot bring myself to tell E. The nipple heater on the 2401 machine is burned out. We cannot cast until I machine a replacement. Three days lost. We will not make deadline. It is also my last spare heater. What the future will bring is anyone's guess, I struggle to fit what has been cut. My eyes and perception are failing. The working period has dwindled to two or three hours at a time. I, who have boastfully claimed never to get headaches (only to give them), have now been presented with a constant dull ache that nothing can alleviate.

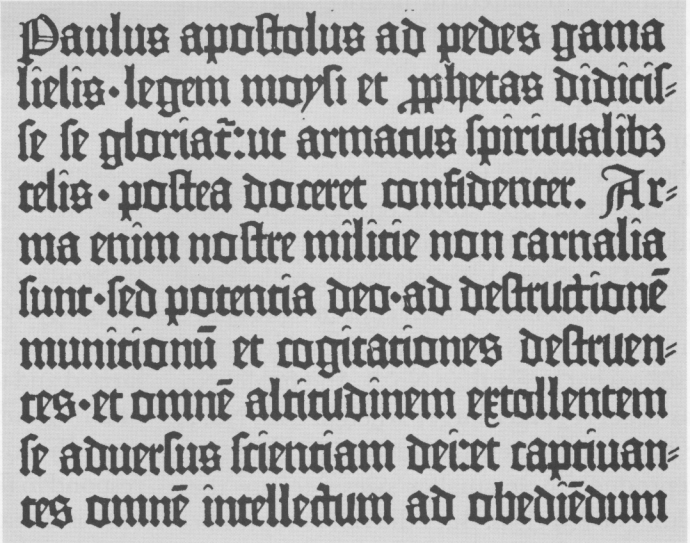
August 15. Deadline day. No more type shipped. An oath: never again will I work to such a deadline.

August 24. Limping along. The last type is finished. Shipment number two is *gone.*

August 27. Third shipment, a small parcel containing the replacement sort needed for a broken kern on the narrow-set lower case "n" number 2, and also including the final obscure characters, goes out. Patron calls for more spacing. It is shipped on Thursday the 31st.

We are finished. E. allows that it might be all right to crash at this point.

September 1. The good news is that there is no news, at least for the time being. I observe that the best type customers are the silent, satisfied ones. *Amen.*



Same-size reproduction of B-42 Blackletter type composed as a precise facsimile of actual text from the Gutenberg Bible.

Follow-up to Newsletter Article on Scotch Roman

No single article in my *ATF Newsletter* has produced as much response (mostly appreciative) as did my Scotch Roman piece in issue number 24. That article was not intended to be definitive; it was to introduce readers to differing ideas about the origin of the design (perhaps that it belonged to the Dickinson Type Foundery of Boston). But I didn't even have specimens from Dickinson to show to my readers.

I don't wish to overwhelm anyone with Scotch Roman. But I do wish to provide a brief follow-up to the initial article, and reveal a little more "original" research by providing to you two specimen pages from the Dickinson Type Foundry itself. By seeing these specimens, one can not question the relationship of this very early design to the later faces we have called "Scotch." They're from the Dickinson Typefoundry's "Supplementary" specimen book of 1870, Phelps, Dalton & Co., Proprietors. The book came from the extensive specimen book collection owned by David W. Peat.

This book, by the way, is the only one in Dave's collection from Dickinson which actually *calls* the design "Scotch." The same designs appear in other books, but generally they were only labeled by their numbers, such as "Brevier No. 2."

Today one cannot imagine the effort made to perfect the design—keep in mind, we're taking about making hundreds of matrices and casting type, not messing around with a digital design. Brevier No. 2, purportedly the "original" Scotch design (see article in *Newsletter* No. 24), was accompanied by no fewer than *five* additional Breviers, all "Scotch Cut."

In the Brevier size (about 8 point), No. 1 was a wider set. No. 2 was expanded (stretched vertically) and seemed to have relatively smaller small caps. No. 3 had larger small caps (height) and a slightly wider set. No. 4 was a tighter-fitting face and somewhat larger than No. 2. And finally, No. 5 was wider set and a larger x-height than No. 2. The pages are somewhat faded and I opted not to reproduce these smaller sizes because they wouldn't be too clear. But I did opt to reproduce the showings from small pica (11 point) up to four line pica (48 point).

Interestingly, by 1876, the "Scotch" name was no longer used, though the No. 2 design still was listed by the foundry. No display sizes were shown. This is also true of Dickinson's 1883 specimen book.

A tattered 1922 specimen I just located from the Linotype company, showing its Scotch Series, says the design (this observation was attributed to Edmund G. Gress, editor, *The American Printer*) *may* have originated in 1796 when Mrs. Henry Caslon brought out a modernized Caslon Old Style to satisfy demand for modern faces that had been created by the Bodoni types from Italy.

I also have learned that English Monotype did not one but two *different* Scotch designs. David Bolton and I are collaborating on a hot-metal comparison of a casting from his Scotch matrices with my American matrix casting. And perhaps the greatest revelation came to me from James Mosley of St. Bride's in London, who sent along a copy of his very extensive article on "Scotch Roman: What It Is and How It Got Its Name," appearing in *Ampersand*, Volume 17.3/4. Another copy of that magazine also came from its publisher, Alastair Johnston. I thank them both for "turning on my light" regarding the design.

James's article has a definite "English" orientation, but that's to be understood. He suggests the modern faces called "Scotch" sometimes have little relationship to their "Scotch" ancestors. *No one who wishes to be well-informed about the face can avoid obtaining a copy of this article and devouring it completely.*

The article in part was done to help introduce Matthew Carter's new digital type design called "Miller," appropriate since the Miller foundry in Scotland probably initiated the design. The design Carter calls Miller, by the way, definitely has some of the Scotch traits, but it's largely regularized and therefore, looks so much like so many other digital designs, but that's another story.

My heart-felt thanks to the many persons who respond to this *Newsletter.* It's your letters, friendly criticism—and praise—which keep me inspired to continue producing this publication.

SPECIMENS OF BOOK AND JOB FACES.

From the Dickinson Type Foundry, 52 Washington Street, Boston.

GREAT PRIMER, No. 2. (Scotch Cut.)

Will be sold by Public Auction, on THURSDAY, February 24th, 1859, that valuable Estate on Commercial Street, formerly known as the *Williams Estate*, adjoining the Property of Isaac Harris, Esq. These premises are under lease.

VALUABLE REAL ESTATE.

TWO-LINE ENGLISH. (Scotch Cut.)

An adjourned Session of the *Supreme Judicial Court* will be holden on FRIDAY, the 17th inst.

ESSEX COUNTY.

TWO-LINE SMALL PICA. (Scotch Cut.)

A Special Meeting of the *Lowell and Nashua Railroad Corporation* will be held in Nashua, at the Depot Hall, on WEDNESDAY, August 22d.

BAY STATE MILLS.

TWO-LINE GREAT PRIMER. (Scotch Cut.)

THIS DAY, at 2 o'clock, an invoice of superior *Cigars*.

PRINCIPE.

CANON, No. 1.

Land at *Auction* this day.

CONNECTICUT.

FOUR-LINE PICA.

Sold for *Cash* prices.

REQUIRED.

SPECIMENS OF BOOK AND JOB FACES.

From the Dickinson Type Foundry, 52 Washington Street, Boston.

SCOTCH SMALL PICA, No. 6.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which the *Laws of Nature* and of Nature's God entitle them, a decent respect to the opinions

ABCDEFGHIJKLMNOPQRSTUV

ABCDEFGHIJKLMNOPQRSTUV

When day, with farewell beam, delays
Among the opening clouds of even,
And we can almost think we gaze
Through opening vistas into heaven,
Those hues that make the sun's decline
So soft, so radiant, Lord, are thine!

SCOTCH PICA, No. 2.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which *the Laws of Na-*

ABCDEFGHIJKLMNOPQRSTUV

ABCDEFGHIJKLMNOPQRSTUV

Those few pale Autumn Flowers,
How beautiful they are!
Than all that went before,
Than all the Summer store,
How lovelier far!

SCOTCH PICA, No. 3.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which *the Laws*

ABCDEFGHIJKLMNOPQRSTUV

ABCDEFGHIJKLMNOPQRSTUV

Oh, precious, precious moments!
Pale flowers, ye're types of those:
The saddest, sweetest, dearest,
Because like those the nearest
To an eternal close!

ENGLISH, No. 1.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which the *Laws of Nature* and of Nature's God entitle them,

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

This earthly globe, the creature of a day,
Though built by God's right hand, shall pass away:
The Sun himself, by gathering clouds oppressed,
Shall, in his silent, dark pavilion rest;

SCOTCH-CUT ENGLISH, No. 2.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which the *Laws of Nature* and of Nature's God

ABCDEFGHIJKLMNSPQR TUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

His golden urn shall break, and, useless, lie
Among the common ruins of the sky;
The stars rush headlong in the wild commotion,
And bathe their glittering foreheads in the ocean.

SCOTCH GREAT PRIMER, No. 4.

When, in the course of Human Events, it becomes necessary for one People to dissolve the political bands which have connected them with another, and to assume among the Powers of the Earth the separate and equal station to which the *Laws of Nature and of Nature's* God

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Write to the young and fair,
That life is but a dream,
A vapor in the air,
A straw upon the stream:

That every thing beneath
The sun will quickly fade;
And the pale phantom Death
Lies hid in ambuscade.

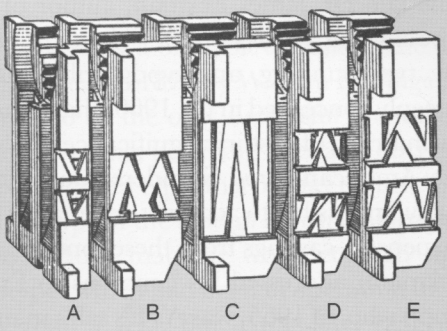
How Much Did a New Model 31 Linotype Machine Cost in 1959?

Persons at the 2000 APA Wayzgoose auction made fun of me for bidding on a piece of paper which was a bill-of-sale for a new Linotype machine. "You're into Monotype," they gestured. "Why Linotype?"

I won the bid (whatever it was) because I wanted some documentation to help myself and future students on the issue of "cost of things back then." The invoice was for a Model 31 Linotype, by the way, and I ran one off and on for about six years before I got into Monotypes big-time.

The figures which follow will be especially revealing to those who have been caught up in the desktop publishing frenzy, for it reveals how different the playing field was "back then." And remember the effect of inflation is not *figured in.*

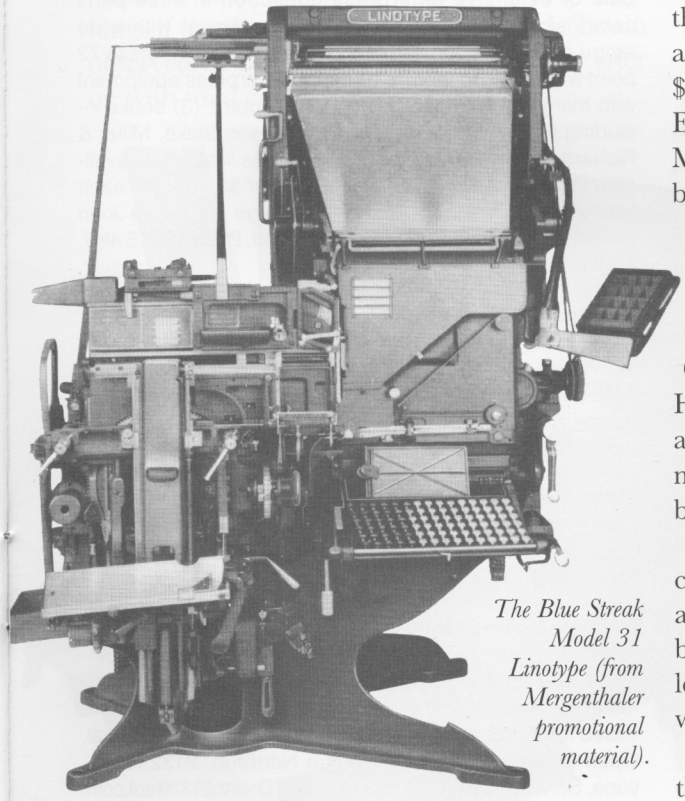
The bill-of-sale was from Mergenthaler Linotype in Brooklyn, dated July 22, 1959, and was for a Model 31-3/90 with various accessories including matrices. Deciphering the model number, the trailing figures say the Model 31 had three 90-channel magazines installed.



The Cost of New Matrices

Putting in a new font of matrices was a significant investment for a Linotype owner. Fonts ranged from 600 mats for a split (half) magazine, to 1,500 mats for a full book font. I have several Mergenthaler matrix pricelists dated from 1966 to 1970. In 1970 the least expensive two-letter text faces (example "A" above) cost 37 cents in fonts; two-letter display matrices ("E" above) at $1.70 each. If you selected less-popular faces, cost could go as hight as $2.00 per text matrix, or $3.00 each for display sizes!

There were matrix vendors other than Linotype and Intertype. Simoncini in Italy and Matrotype in England come to mind.



The Blue Streak Model 31 Linotype (from Mergenthaler promotional material).

The machine, equipped with three magazines, three molds, a Margach metal feeder with mold, and a couple of extra mold liners, totaled $8,274.30, and was to be delivered to The Augusa Eagle in Augusta, Ill. Apparently it was the first Model 31 ordered by the newspaper, though the bill implies other models might have been present.

Ordered with the machine were three fonts of matrices: 8 and 10 point Corona duplexed with Erbar Bold, and 24 point Spartan Black Condensed duplexed with 14 point Spartan Heavy. The matrices cost 18.3 cents each, and as an example, the 8 point font contained 1,217 matrices. Cost for all the matrices was $822.13, bringing the total order to $9,096.43.

Mentally compare those costs with what it costs today to buy a computer, printer, software, and fonts—all that's necessary to get you into business. My guess is that you can do it for way less than $1,500, and if you get the right software all the fonts are free!

No doubt about it. It's a different world out there today!

Depth of Drive Big Problem in Revival of Old Matrices

The late Dr. James Eckman, author of several books and articles on the subject of typography, typefounding, and typographic history, was deeply concerned in the 1960s that although many matrices of historic significance remained in the American Type Founders vaults, it was virtually impossible to acquire—no matter what the expense—castings from these fonts.

Eckmann addressed his concerns to Emil J. Klumpp who, in 1965, was ATF's sales manager (he also designed type faces) and at ATF, efforts were made to draft a reply to Eckmann. A copy of that correspondence has surfaced from Steve Watts' papers (he also was a sales manager at ATF), now in the possession of his son-in-law, Ralph Babcock of Oak Harbor, Wash.

Depth of drive (how deeply the letter design was driven or engraved into the matrix) was the principal problem, as outlined by Frank Hinkel, orders manager from the ATF type division. Singling out only one size—24 point—he stated standards from some of the various foundries that went to form ATF.

Farmer	.0855"	Keystone	.0623"
Bruce	.0820"	Western	.0600"
MacKellar	.0758"	St. Louis	.0535"
BB&S	.0700"	Inland	.0530"

ATF adopted two standards for 24 point, .0535" and .0758" (St. Louis and MacKellar, above). To use the older matrices on equipment still maintained at the foundry, older matrices would have required grinding down or building up to one of these depths. Hinkel says:

"The cost of adjusting a set of matrices so they can be used on ATF automatic casting machines is as expensive as engraving new matrices when pattern plates are available. In most all instances the pattern plates or artwork are available for almost all of the faces cast by the other foundries. This, then, increases the cost of reactivating a type design when it is necessary to do this preparatory work."

Steve Watts, after his retirement from ATF, convinced the foundry to do a few revival castings of various fonts, especially Oxford roman and italic (reported to be the original matrices used by Binny & Ronaldson for its first successful casting back in 1813). A note is penned onto the Hinkel letter saying ATF did make new mats for some characters needed for these castings.

Eckman said he could understand this complication but in a note to Steve Watts said "But if these differences made such a profound problem in the use of the matrices in ATF casters, why did not ATF save a machine or two from each foundry, instead of breaking the machines up? The Barth machine is not the only one in the universe."

Now virtually all the patterns are gone. Patterns were heaped in disrarray into a single pile and sold as a single lot at the ATF auction, and purchased by a junk metal dealer. Several fonts of matrices remain in private hands, and many, many additional fonts are at the Smithsonian. But in the future, if persons are interested in revivals, they will need to confront, once more, this problem of depth of drive.

Classified Listings

Sale of extensive letterpress collection in three parts comprising (1) Monotype casting equipment with wide range of composition, large comp. and display mats to 72 point with rare and unique faces, (2) letterpress equipment with many old faces in lead up to 144 point, (3) books including type catalogues from Stephenson Blake, Miller & Richard, ATF, Caslon, etc. Three separate lists will be available in late November. Send £1 (UK) or $3 (US) for each list (refunded from purchases) plus large s.a.s.e. to John Eickhoff, 28 Honey Hill Road, Kingswood, Bristol BS15 4HJ, England. Telephone (0) 117 967 7903.

Thompson Users: If you are in need of a choker or choker lever, or Monotype comp nozzles, contact Don Winter, 12726 Cowley Ave., Downey, CA 90242. (Don was with LA Type from 1962 until closing in 1998 and is an amateur machinist with the ability to handle these and other jobs for typecasting equipment.

Three Monotype Casters in need of a good home. Giant Caster, Material Maker, Sorts Caster, along with many matrices for same. On pallet and forklift available. Contact Ray Ballash, 17503 South Eric Ave., Cerritos, Calif. 90703.

Linotype Model 29 for sale. With electric pot, Star quadder, four molds, many extra parts salvaged from a second machine. Garaged in upstate New York since 1987. Also 16 full magazines of mats, rack-stand for six, and six more cased fonts plus sorts and manuals. Ground-level removal. Open to offers—part or all. Bruce Northrup, 2132 Niskayuna, Schenectady, N.Y. 12309. E-mail Dnorth2132@aol.com.

A First-Hand View of the Paige Compositor

Several associates of our American Typecasting Fellowship visited the Mark Twain House at Hartford, Conn., during the 2000 meeting of the Amalgamated Printers Assn., principally to view the only surviving Paige Typesetting Machine—the device Twain lost his fortune on.

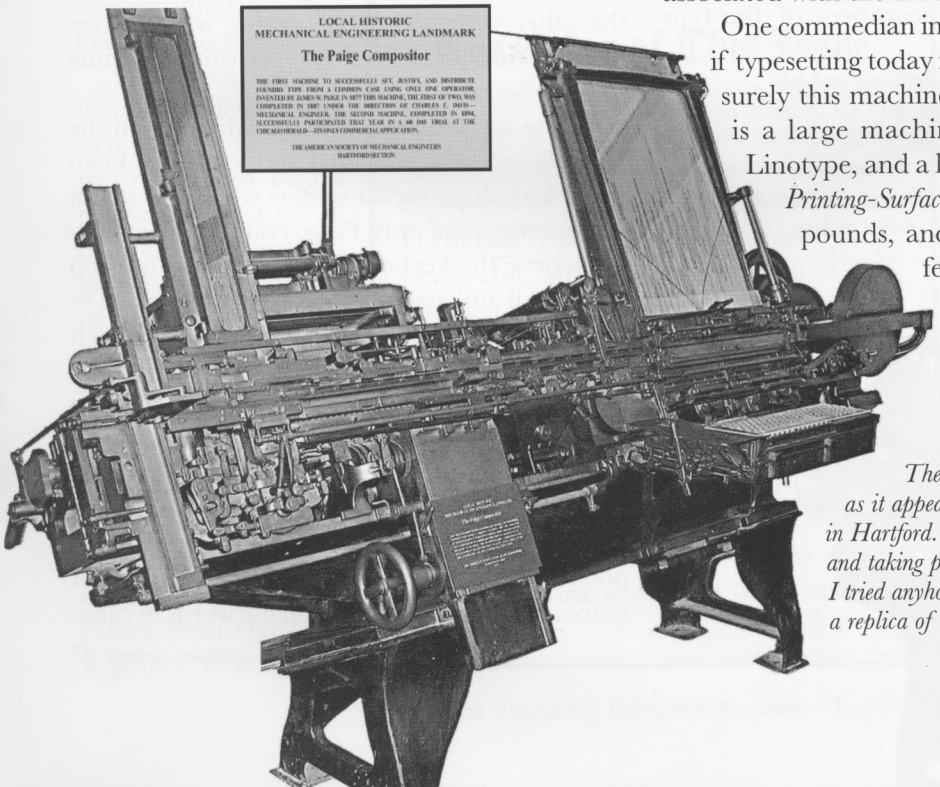
Two machines were built, one in Hartford at the Pratt & Whitney plant, and another by the Paige Company after it moved to Chicago; only one seems to have survived. The one at Hartford is fairly complete, but it's obvious several items have been pilfered, and the wear on the keyboard indicates the plastic cover now over the keys hasn't always been there to protect it from the public.

This legendary machine has been the subject of wild tales and rumors amongst we who embrace typesetting history and I would be surprised to find an associate in our group who hasn't heard something about the machine. I've personally seen pictures and drawings for years. But it's another thing to stand in front of the machine and realize this is the *very device* Paige himself worked on, and the one Mark Twain observed in blind excitement, and surely later on with total consternation and dismay.

To give only a brief bit of history, the device was patented in 1877 by William H. Paige and is claimed to be the only successful one-man machine for setting, justifying lines and distributing lines of foundry type. In a 60-day contest against the Linotype at the *Chicago Herald* newspaper, the *prototype* Paige machine won decisively against Linotypes which had been in operation there for more than a year. But it was later determined the machine would be far too expensive to manufacture, complicated to operate, and still would require foundry type. These three factors would cause it to fail in the marketplace when compared with the Linotype machine it beat.

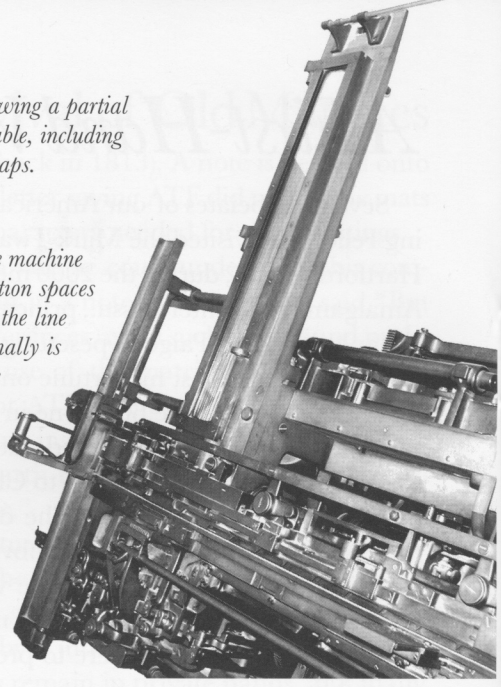
I don't wish to pursue history further. You certainly can dig up the details in your own typographic history books. Instead, I wish to give you a semi-knowledgeable view of the machine to help you review the accompanying pictures more intelligently. I strongly recommend the article beginning on page 378 of *Typographical Printing-Surfaces* by Legros & Grant (first published in 1916, republished by Garland Publishing, Inc., in 1980). This is a very complete description of the machine, its trials in manufacture, and its operation. The article also dispels several of the myths associated with the machine.

One commedian in our group observed that if typesetting today is done on the Mac, then surely this machine was the "Big Mac." It is a large machine. Almost as tall as a Linotype, and a little wider. (*Typographical Printing-Surfaces* says it weighed 5,000 pounds, and was 11 feet wide, 3½ feet wide, and 6 feet high). My first quick observation: The keyboard was



The only surviving Paige machine as it appears at the Mark Twain House in Hartford. Quarters are extremely cramped and taking photos is nearly impossible—but I tried anyhow. Shown above the machine is a replica of the bronze plaque on display.

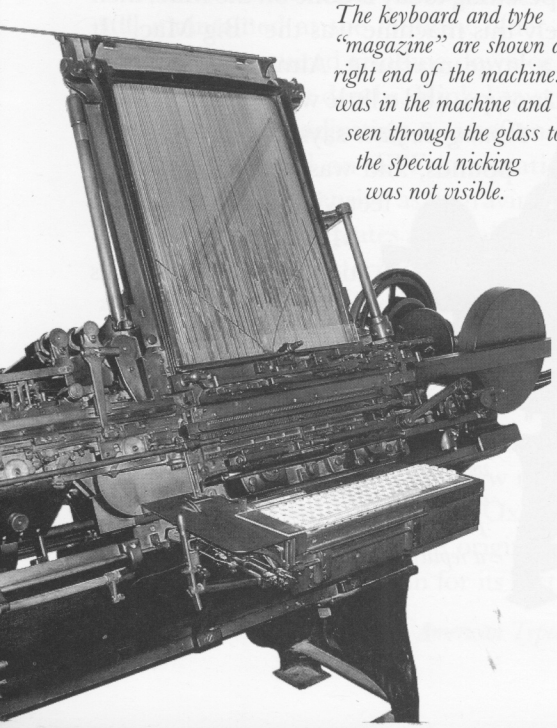
The Paige keyboard showing a partial layout of the keys available, including all ligatures and small caps.



Left end of the machine where justification spaces are inserted in the line and the line finally is delivered to the galley at extreme left end resting diagonally (as are all other type-handling parts of the machine).

not arranged in any familiar fashion except that the small caps were alphabetical across the top row. Whether the letters were arranged to facilitate mechanical operation or frequency of use? One can only speculate. Second observation: The keyboard obviously was positioned for a *standing* operator, not one sitting in a chair. That might suggest he would often need to move to other parts of the machine to fix a malfunction.

Pieces of type were in the various escapements of the machine above the keyboard, underneath a broken glass cover. But we were not at liberty to remove a piece to observe. It's my understanding the machine used regular foundry type. There was a gizmo on the keyboard which apparently allowed the operator to set the *line length*, but the machine also seemed to be fitted up with 13-pica receiving galleys, suggesting it was envisioned primarily for single-column newspaper column composition. From appearances of the type "magazine" (a term I use equating the function to that of the Linotype magazine) *weights* on top of the type helped letters fall by gravity and since the channels were fixed rather closely to the sides of the letters (a narrow channel for the *i*, and a wide one for the *M*) one would assume the machine was fitted up only for a *single font* with small caps, and cap and lowercase roman. Thus, it's quickly assumed the machine would not accommodate any changes in type size or face. *Typogrpahical Printing-Surfaces* says one machine was fitted up with 6 point (nonpareil) type and the other with 5½ point (agate), which Paige manufactured on a Shanks typecasting machine imported from England.



The keyboard and type "magazine" are shown at the right end of the machine. Type was in the machine and could be seen through the glass top, but the special nicking was not visible.

There are more gizmos and whats-its on the Paige than I ever imagined and therefore, I can agree with those earlier writers who suggested it was *so complicated* only Paige could make it run. Somehow, the keyboard caused letters to drop onto a rail and assembled words were carried to the left. I conclude a finger dropped down each time a spaceband (another Linotype term) was called, and words were kept separated by these fingers as the line progressed toward being filled.

After being filled, the operator apparently told the machine he was done with the line and then a very intricate (mysterious) counting process took place which pre-determined what widths of spaces were necessary between the words to cause

Continued to page 47

A Typographical Experiment in Blackletter

Our Intentions

By Chris Manson

The purpose of our experiment was to explore the graphic qualities of books printed in blackletter types in the 15th and early 16th centuries, and to study early typography *by setting type* according to the conventions of the early printers.

Our intention was not to produce any particular facsimile. By working in the tradition of the period, we sought to take advantage of the greater variety of letter-forms available to those printers, which we felt would offer a richer graphic expression on the printed page, allowing a style of typesetting no longer possible with conventional modern fonts and technology.

The essential aesthetic qualities of early printed books differ from modern books precisely because of their close relationship to their calligraphic antecedents.

"The regularity of each letter, the compactness of each line, the closely-woven pattern of each page (comparable to a latticed gothic window or an oriental carpet)—these, rather than clarity or legibility, were the effects which a well-trained scribe sought to produce. The printer unhesitatingly accepted this convention. . ."[1]

The process by which the printed book of the 15th century evolved into the modern book was driven by the technology of printing itself. "It was the recognition of the basic difference between the effects created by the metal-worker and those produced by the quill-driver which brought about the victory of the punch-cutter over the scribe and with it the supersession of the imitation manuscript by the authentic book . . . It is precisely in the lucid arrangement of a given text that the printers have achieved the greatest advantage over the scribes. . . .

"An important by-product of this development was the gradual reduction of the contents of the comp's case. Gutenberg used nearly 300 different letters, ligatures and abbreviations. These have now been reduced to about 40 in the lower case and even fewer in the upper case. The surviving ligatures are restricted to ff, fi, fl, ffi, ffl, ae, oe (and not always all of these) and the ampersand "&" is

The Cover of This Issue

It is noted that printing of the cover and fold-out back cover of this issue was the joint project of Chris Manson of Crooked Crow Press, Rockville, Md., and Jim & Franziska Walczak of Sycamore Press, Oxon Hill, Md. It is a direct result of their blackletter experimentation as described in this and the following article.

All blocks were cut in linoleum by Chris, who also hand-set the type. Printing on Nekoosa Feltweave 80-lb. natural cover was accomplished on a Vandercook Universal III press by Jim with the assistance of Franziska and Chris. Letterpress special matte black ink was made by Hostmann-Steinberg.

the sole existent abbreviation."[2] [There are some few others occasionally available (the ct, st, etc.)].

In addition to a greater variety of letter-forms, abbreviations used by early printers allowed for close, even word spacing when setting type, which is particularly useful when setting text in narrow columns. One of the great beauties of early books is the marvelous consistency of "color" presented by the block of text on the page. This results from the darkness of the type itself, to little or no leading between the lines of type, and to consistently close word spacing.

For modern readers, these features may contribute to a general sense of illegibility, particularly when the text includes arbitrary spelling, little or no punctuation, abbreviations, and two or more forms of the same letter occurring at random.

Chris's steady hands are shown touching up a woodblock for a similar project he and Jim Walczak have completed. Observers say Chris seems to have a God-given talent to produce very effective wood and linoleum cuts with what appears to be deceptively "minimal time and effort."

It should be understood, however, that "legibility" is subjective and any problems a 15th century reader would have had reading a book would have been due to uneven inking and worn type, rather than the use of abbreviations and ligatures. As Stanley Morrison observed, ". . . legibility is a mere matter of fulfilling the custom of the eyes."

There is no question that modern typographic conventions and simplifications have made books clearer and easier to read, particularly in the display of more complex subjects using the now accepted apparatus of footnotes, indices, tables of contents, etc.

But for the hand typesetter, working to achieve the most balanced and consistent effects (only possible with skillful hand-setting, I believe), some very great advantages have been lost with the simplification of the printer's case. The use of abbreviations and alternate letter-forms allows the typesetter, ancient or modern, the very wonderful luxury of setting type to almost any length of justified line, long or short, while keeping an almost supernaturally even and minimal spacing between words.

Anyone who has ever labored to set type into short, measures without excessive blocks of white space appearing in some lines, while other lines end up too tightly spaced, will know what I mean. I am not suggesting here that modern fonts should re-incorporate 15th century typographic conventions, but I will admit to a real fondness for the flexibility those conventions allow in adjusting the length of a line of type.

A very great failure, it seems to me, in modern printing (and particularly in the work of some private presses) is irregular word-spacing from one line to another, as the typesetter struggles to shoehorn an old-style type into a line that is simply too narrow to accommodate the expansive nature of the typeface. His only recourse is excessive hyphenation and whenever possible, to use the ampersand, the "sole existent abbreviation."

Here let me say that while the modern ampersand is better than nothing, I fail to understand why this character is most frequently designed to be the same size as a capital letter when it is meant to stand in for lower case "and." Typically, it is a gross intrusion into a line of lower-case.

If we consider the labor and expense which must necessarily characterize the production of a typeface (particularly a proprietary face in metal) for a press committed to use special paper, special bindings, good press-work, carefully chosen text and a much hand labor in the production, the acceptance of intrusive ampersands and irregular word-spacing is not entirely understandable.

Absent the re-incorporation of 15th century abbreviations into modern typographic usage, the solution to the above problem might lie in the willingness of type designers to provide a series of alternate sorts for some of the most frequently used letters (a, e, o, n, u), and a few of the more bulky letters (m, w), that would be slightly narrower than the standard sort (or, perhaps, a bit wider than standard). This would permit the typesetter to shorten (or lengthen) his line by choosing one or another version of these letters, and at least minimize the most extreme variations in word-spacing from line to line.

To speak specifically about our own typographical experiment, the first problem we had to confront was the lack of any suitable typeface that is still available. A survey of Mac McGrew's *American Metal Typefaces* shows, at a round count, about 30 blackletter typefaces, most of which are unusable for text setting, (or any other purpose except, perhaps, for diplomas or funeral announcements). Even then, most are so poorly designed, and so debased from any authentic source, that their unavailability even in a time of letterpress scarcity, can only be welcomed.

The few usable faces would include: Caslon Text (and its descendants, Priory Text and Cloister Black), Tudor Black, Nephi Medieval, and Frederick Goudy's five blackletter designs. Looking for an "authentic" blackletter reduces this already short list to Tudor Black and Caslon Text—and, since neither of these seem to be available, we settled reluctantly on Cloister Black to begin our experiment. The only advantage of Cloister Black is its resemblance, however faint, to early English texturas and the fact that it actually is available.

There are seven main problems with Cloister Black: over-defined and spiritless capitals, clogged with extra webs and barbs that show to very poor effect in the smaller sizes (particularly the "H"); too many barbs and flourishes on the lower case that give the font a slightly hysterical appearance; shortened foot-spurs leaving too much white space between certain letter combinations (particularly with the "r"); an ugly and intrusive ampersand that bears no resemblance to any authentic blackletter model; traits on the "h", "k", "b" which are much too thick; all variations in the weight of the characters (both upper and lower case) have been regularized, which has ironed the life out of the font; and the omission of the long "s" and short "r."

Our experiment can be seen as an attempt to partially "de-Bentonize" Cloister Black which is, of course, impossible. Nevertheless it was apparent, once we began setting our enhanced font, that putting the long "s" back in and using it in every instance (except where "s" was the terminal letter of a word) reduced the irritating intrusion of the flourish at the top of the short "s" into the text, and when it was confined to its historically appropriate place, gave the flourish a measure of utility as it visually lifted the profile of the word at the end, to some good effect.

We also began to fabricate several "logos" that were commonly used, particularly in the 16th century: Ye, yt, wt, standing for "the," "that," and "with" respectively.

Out of all the possible variant letter-forms, ligatures and abbreviations, which characterize a font of early blackletter type, we settled on those which were most applicable to the printing of English texts, and which we had some hope of fabricating in a reasonable amount of time, at a reasonable expense. These included most of the ligatures associated with texturas, the most commonly used abbreviations, the long "s" and short "r" letter-form variants, and an authentic ampersand. In addition, it was thought desirable to have a selection of early type ornaments to use with the font, and a series of matrices were commissioned to enable us to cast ornaments and borders that were appropriate to the period.

We also began to fabricate several "logos" that were commonly used, particularly in the 16th century: Ye, yt, wt, standing for "the," "that," and "with" respectively. An example printed with our enhanced font is enclosed within the back cover of this *Newsletter*. The text is taken from Caxton's translation of "Godefrey of Bologne," printed originally by him in 1481.

Notes on the Conventions of Early English Typographic Usage

When printing first came to England with William Caxton, the English language as we know it today was non-existent. Regional differences in pronunciation and vocabulary could make it difficult or impossible for two Englishmen to understand each other even if they were both speaking "English." One of Caxton's most enduring contributions was the beginning of the standardization of the English language, an effect of the distribution of identical texts, through the sale of printed books. Still, spelling and punctuation were capricious and variable from printer to printer, and some "archaic" usage persisted for a long time. The long "s" derived (as all else) from the practice of the scribes, was used in English printing as a matter of course until John Bell used the short "s" throughout in a book printed in 1791. The reform was adopted quickly by London printers, but provincial presses retained the older form somewhat longer, and it was used at Oxford until 1824.

It is commonly thought that the letters "u" and "v" were used interchangeably, or in reverse of our modern usage: this is incorrect. In early printing, these two letters were used according to their position in a word, not according to their sound (both being assigned the two sounds we associate with them today): "v" was always used medially. It was not until around 1625 that "u" and "v" were generally used as they are today.

The use of a short bar, (or double curve "tilde") over a letter indicates that an "n" or "m" has been omitted just following the accented letter, but the word should be read as if the "n" or "m" is present. Most commonly used over vowels, these marks are also found over "n" and "m" as well, to abbreviate "nn" and "mm" combinations. This is the usage we have adopted and which was in effect through later times (16th Century), although in the earliest period, the mark could indicate that an "n" or "m" preceded the marked letter as well.

Although popularly mis-read as "ye," the contraction of "ye" stands for "the." The "y" here is a stand-in for the Old English "thorn." So, also, "yt" means "that." (The small "e" and "t" are also found above the "y.") I have also seen a "yu" to mean "thou"; "wt" and "wh" mean "with" and "which," respectively.

Bibliography

Caxton, William. *Godeffroy of Boloyne*, Ed. Min. Colvin, London, Early English Text Society (1893).

Steinberg, S.H., *Five Hundred Years of Printing*, New Edition, Rev. J. Trevitt. Oak Knoll Press and the British Library (1996).

McKerrow, R. *An Introduction to Bibliography*, Oxford; Clarendon Press (1928).

Reed, T. B. *A History of the Old English Letter Foundries*, New Edition, Rev. A. F. Johnson, London: Faber & Faber, Ltd.

Avis, F. C. *Edward Philip Prince, Type PunchCutter.*

Caxton, W. *The Game of The Chesse*, London: J.R. Smith & V. Figgins (1855).

Copland, R. *The History of Helyas, Knight of The Swan*, New York: The Grolier Club (1900).

Duff, E. G. *Fifteenth Century English Books*, Oxford: The Bibliographical Society (1917).

Updike, D. B. *Printing Types, Their History, Forms, and Use*, Cambridge: Harvard University Press (1927).

Isaac, F. *English and Scottish Printing Types (1501-35, 1508-45)*, Oxford: the Bibliographical Society (1930).

Isaac, F. *English and Scottish Printing Types (1535-58, 1552-58)*, Oxford: The Bibliographical Society (1932).

Duff, E. G., *Early English Printing*, New York: Burt Franklin (1970).

McGrew, M. *American Metal Typefaces of the Twentieth Century*, New Castle: Oak Knoll Press (1993).

Morris, W. *William Morris and the Art of the Book* New York: The Pierpont Morgan Library/Oxford University Press (1976).

Footnotes

[1] "Five Hundred Years of Printing" by S. H. Steinberg. (1966) British Library and Oak Knoll Press.

[2] Ibid.

A SPECIMEN

Showing fourteen point Cloister Black with
Supplements and Modifications

The Basic Font

A B C D E F G H I J K L M N O P Q
R S T U V W X Y Z &

a b c d e f g h i j k l m n o p q r s t u v w x y z ß

How the messagers of the duc godefroy declared their message

Cast at Lanston-recommended set-widths

How the messagers of the duc godefroy declared their message

Cast with narrowed set-widths

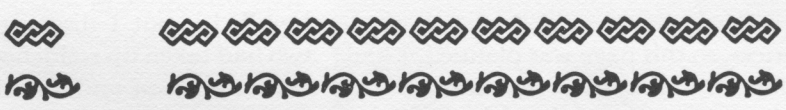
Additional Characters

ff fi ffi fl ffl ll ch th sh ſ ſt ll ſſi æ œ ǽ ꝏ ꝑ

ā ē ī ō ū m̄ n̄ ȳ ye yt wt

Ornaments

14 pt.



18 pt.

24 pt.

18 pt. 24 pt. 36 pt.

Typography by J. Walczak & C. Manson · Ornament matrices by E. Rayher

This full letterpress form was composed by Jim Walczak and Chris Manson to demonstrate their many special-cast letter combinations, to demonstrate their "tight set" casting, and to show the special decorative elements created for the project. Please refer to the back cover fold-out.

About the Baskerville Design Used Herein

When I started writing this issue, it was my plan to use Monroe Postman's Mac-Mono interface and do it all on the Composition Caster. I busied myself getting up a computer setup for American Baskerville 353 for that purpose. But at every turn, I found another good opportunity for an illustration, so I decided to do it offset. The closest digital typeface I had was Monotype Baskerville.

Monotype Baskerville was issued by what once was part of English Monotype. Therefore, the face was patterned after the English hot-metal version of Baskerville. (The typeface company now is merged with Agfa.) *I am not totally in love with the digital design because I think it is too light in appearance*—it lacks that little extra weight the face gains when type is pressed into paper with a slight bead of ink around the edges of every letter.

Later realizing I had two empty pages that I wanted to print letterpress, I decided it would be an excellent comparison to show the hot-metal version of English Baskerville. I have 8 and 11 point sizes of English Baskerville matrices, so this page was planned. I had never before cast using these matrices.

I got them from Carnegie-Melon University (formerly Carnegie Tech). Unfortunately there was no paperwork accompanying anything. So I was up against the seemingly impossible task of finding the proper wedges, stopbars, and keybars. That is not an easy task when you have as much stuff as I have.

So the detective goes to work. I recall Mac McGrew complaining about that odd 17-unit EM quad in Baskerville when he took a Monotype course at Carnegie Tech way back then. I knew American Baskerville had an 18-unit EM, so my first step was to see if I had a stopbar with a 17-unit EM. Surprise! I had one and only one—S-162. So that told me what wedges to look for. I was into searching my third cabinet when I found two wedges marked by hand "Baskerville." It was most fortunate, for the wedges lacked the standard "S-162" marking. Still, I needed to find the proper keybars and I didn't have a clue.

I have at least 100 keybars and fortunately, most of them have the design numbers they support painted on them. Things like "394" for Goudy Oldstyle. But I also have many keybars that aren't designated in any way, so I began checking them out the only way I know—by putting them on the keyboard and pressing keys to see what punches come up.

That's no fun when you've just had back trouble; those keybars weigh about 30 pounds each. Again, I got lucky. I was on my fifth check of a left keybar, labeled 1448, when I hit the "A" and it gave me the right punch combination for the "A" in my English mat case. Several other keys also checked out. Now to find the right keybar. I figured maybe it would be 1449—if I were lucky.

Absolute zero. No can find. Then I thought of the "duplicates" I had put in my storage shed about five years ago. With flashlight, I went searching and there it was! But when I pulled it out I discovered a fieldmouse or two had taken up residence thereon, complete with a big nest and lots of evidence of urine. Only about 15 of the bars actually moved and that's a poor percentage when you have 143 —all of which should move freely.

Well, after two long days of complete disassembly (taking care to stamp a sequential number on each bar as it was removed) and thorough cleaning with heavy wire brushes and lots of elbow grease, and then re-assembly, I finally was ready to check it out on the keyboard to see if it was what I needed. To my great relief, it was the keybar I needed.

So all that was necessary just to give you this specimen page of Baskerville 169. Oh, yeah, I had to change the bridge on my caster to an English centering pin, but all else seemed to work itself out. I hope you are grateful. And yes, it probably took less time to clean the keybars than to make up a mat arrangement for the Mac-Mono computer.

Typographical Experiment in Blackletter—

Our Special Type-Making Procedure

By Jim Walczak

We did not consider having special matrices made when first confronted by the problem of affixing abbreviation accents to the lowercase characters of 14 point Cloister Black. After all, it was just an experiment. Instead, we decided to cast piece accents and slip them in above lowercase characters, cast on a smaller body.

I knew I had a tough task ahead of me. First, we went through my odds and ends of composition matcases in search of a character of the size and weight to simulate the bar-shaped accent which was used liberally to abbreviate words in the tightly-fitted narrow columns of text that we all admire so much in the Gutenberg Bible and works of his successors.

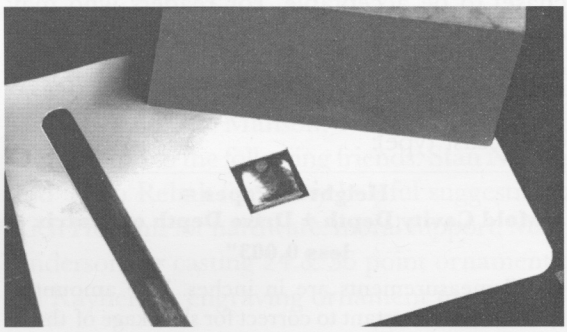
Our first choice turned out to be the ubiquitous 6 point Copperplate Bold cap I. Casting a handful of the little slivers was followed by test-fitting them to various sawn-off lowercase characters of the 14 point Cloister Black font selected for the text. Two problems immediately surfaced. The cutting of the lowercase type characters proved to be labor-intensive and inaccurate, even with the smoothly-operating Hammond glider saw. Furthermore, the 6 point size of the accent piece was too wide for most of the characters being used (a, e, i, o, u, n, m, y, etc.). This necessitated hand-rubbing to the appropriate width on a file or sandpaper—no easy task with such small pieces of type.

It soon became apparent that these problems could be alleviated by casting the needed lowercase characters on 11 point bodies and the accent pieces on a three point body in a variety of widths to match the setwidths of those characters. Together, the matched pieces of type would form a 14 point high unit.

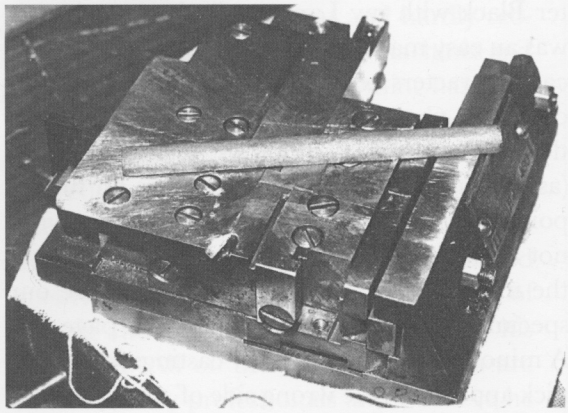
Not having either an 11 point sacrificial mold or the rare 3 point mold in my inventory, I was faced with convincing Rich Hopkins that our project merited his support. Rich showed his trust and interest in basic research by providing us with the hardware and a good dose of moral support. The first item of hardware was a somewhat corroded 11 point composition mold. At a later date, a precious 3 point composition mold arrived on a "sign-your-life-away" loan basis.

With hardware in hand, my first task was to lower the top surface of the 11 point mold to match the drive of the Cloister Black matrices which were at the standard Lanston depth of 0.050". About 0.020" of mold steel had to be removed. This is the difference between the 0.050" display drive and the 0.030" composition matrix drive depth (the Cloister Text in 14 point is a display matrix font).

Preparations for the grinding process were to set the crossblock of the mold in casting position and to lock it tightly against the mold body by screwing in its two adjusting screws. A bit of den-



Top of 11 point mold, masked prior to honing. Round spot is dental wax used to reveal low spots. Main stone (above) and fine stone (left) also are shown.



Composition mold during final honing to get type height to accommodate .050" display matrices.

tal wax was pressed into any low spots around the mold blade to ward off the grinding slurry. Then, with plenty of thin mold oil and an air hose at hand, I proceeded to hand grind the matrix seating surface of the mold. By grasping the rectangular stone with one of its long, narrow edges downward, it was easier to control and to maintain the grinding surface parallel to the base of the mold.

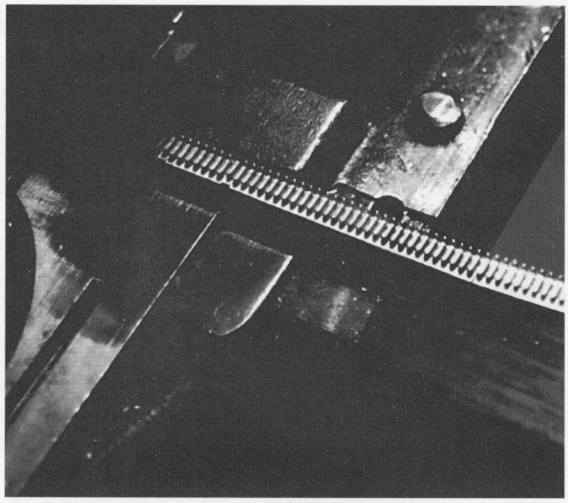
After many minutes of grinding and turning the mold at frequent intervals, I would clean it carefully, open the mold blade and check the depth of the casting cavity with the depth measuring rod of a digital caliper. The process had to be repeated several times and when I thought that I was getting close to my objective, I put the mold into the sorts caster and made a test casting to confirm the actual height of the type.

Three test castings later, and after removal of a minute amount of steel each time, I achieved a height-to-paper of 0.922" which I considered at the time (and subsequently proven in the press chase) to be acceptable. For readers who may want to try this mold modification, or just want to smooth the seat of a worn mold, here is how you can predict the height-to-paper (or height of the cast type):

Height-to-Paper =
Mold Cavity Depth + Drive Depth of Matrix less 0.003"

(All measurements are in inches. The amount 0.003" is a constant to correct for shrinkage of the type as it cools to normal temperature.)

Once I had the mold for casting 14/11 Cloister Black with my Lanston display matrices, it was an easy matter to cast a supply of the lowercase characters needed to fit under the piece accents. To permit the tight setting required for the planned narrow columns, these characters (as well as all the regular characters on full 14 point bodies), were cast at minimum set with, not at the wider recommendations stamped on the matrices. For comparative settings, see our specimen sheet printed letterpress on page xx). A minor "flaw" in the 14/11 castings is that the nick appears on the wrong side of the type. This is inherent in the mold design of the Monotype system, and we just had to live with it.



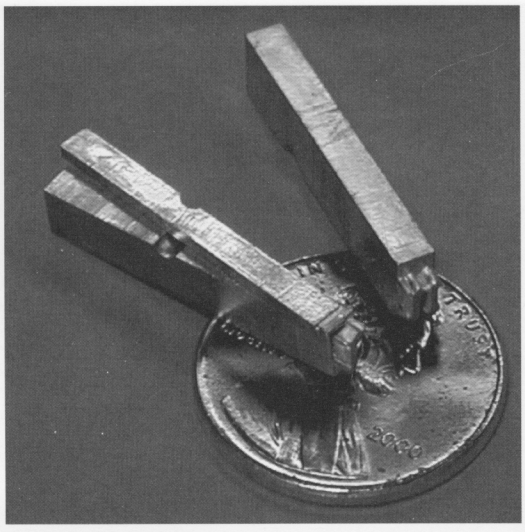
14 point Cloister Black lowercase i's on 11 point body in delivery channel of caster. Note the dots (which will be removed) still cling onto top edge of the cast characters.

With the type ready for setting, the next job was to replace the 11 point mold on the sorts caster with the 3 point mold for the casting of piece accents. With the machine going at almost top speed and the pot temperature close to 800 degrees, I was able to warm up the mold sufficiently to see the little 3 point slivers of type entering the type channel—a new and thrilling experience for me. For casting of these variable width accent pieces I used a composition mat with a bar-shaped character, probably an 8 or 10 point bold underline dash, held in a sorts caster single comp mat holder.

On a sorts caster, the operator can change the set width very easily, so it was a simple matter to cast the bar accent on various body widths to fit above the 14/11 lowercase characters without the need for sanding or filing the tiny pieces. On the downside, however, the cast dash would hang, or kern, over both sides of the narrower type bodies. Therefore, the pieces couldn't be pushed neatly against one another in the type channel. I had to watch them closely and gather them together before they bunched together and "jammed the works."

In addition to the above-described specially cast type, I cast a small supply of several lowercase characters to be used in hand-crafted ligatures or dipthongs. By casting the face to the right or left side of the body, overhanging on one side or the other, a series of special characters could

nour of thēpyre of Rome. Whā Eracles had cōquered Perle, & llaȳ Coldroe, which was a puiſſaūt kynge, he brought agayn to Jernſalem the very croſſe which they had ladde in to Perſe, and abode and dwellyd in the londe of Surrye. And dide do ordeyne & chole a patrairke, a moche wiſe mā named Modeſte, by whos coūſeil he dyde do make agayn the chirches, and habylled the holy places and clēled



Above is a sample setting of the tightly cast 14 point Cloister Text incorporating the special accented characters. At right is an extreme enlaragement showing the 3 point accent on an 11 point cast of the base letter. To their right is a full 14 point casting. Note the mispositioned nicks on the smaller pieces.

be made by sanding and fitting two pieces together. Some possible combinations can be seen as "Additional Characters" in our specimen sheet. Note the ye, yt, and wt using small, lowercase roman letters cast on a 14 point body to match with the Cloister Black base character.

The making of these special characters requires a bit of rubbing, filing or sanding. We found that a self-adhesive 180-grit aluminum oxide sanding disc, stuck to a glass plate or Formica-coated board, greatly facilitates the task. Multiple pieces of type, too small to be held in the fingers, could be attached with double-faced tape to a block holder such as an old piece of 72 or 120 point type.

The f was made by clamping a lowercase f into a small vise and under magnification and a steady hand, slicing the inside bar off with a very sharp engraving tool.

Yes, working with the small 14 point size of Cloister Black you see in this issue was a challenge. Doing the same in 18 point size surely would be easier, but that remains to be seen.

Much credit goes to our wives, Franziska Walczak and Pat Manson, for their continued support and to the following friends: Stan Nelson and Theo Rehak for many helpful suggestions; Rich Hopkins for hardware, moral support; Mike Anderson for casting 24 & 36 point ornaments; Ed Rayher for engraving ornament matrices.

Hermann Zapf Reports Status of German Museums

Hermann Zapf sent a very kind letter to Paul Duensing in late July, 2000, giving us all an update on the museum situations there—news about the museums our group visited a couple of years ago. Here are the excerpts:

"From Darmstadt there is little to be heard. The so-called Museum is closed. Only Gerstenberg still works there. The large debts of the Museum have been taken over by the State, and now a new concept for the future of the Museum will be worked out. . . . Last week I was in Leipzig to visit the Museum and Workshops of the Printing Arts of Schumacher-Gebler.

"It looks totally different and hardly recognizable. There are many new machines and exhibit pieces to be seen. Everything has been renewed, including the outside of the building.; The dust of the former DDR has disappeared. I would place this new Museum ahead of even the Gutenberg Museum in Mainz. Schumacher-Gebler has obtained massive support and now both the city of Leipzig and the state of Saxony stand by his operation. All of the traditional crafts are carried out by professionals and I believe he has 13 workers now."

Obituaries As They Used to be Written

A True 'Prince' of a Typefounder

There is no tremendous historic significance to the obituary reprinted herewith. It comes from THE TYPOGRAPHIC MESSENGER, *a house-organ published by the James Conner's Sons type foundry of New York in November, 1866. It's being reprinted primarily to show the writing style and, perhaps, the more honest approach taken to journalism back in those days. Today, I fear that in no way would one ever read in an obituary that a recently departed soul was a "scoundrel" or a "misanthrope." I suspect that even a bit of editorializing was done in the creation of the wood engraving which accompanied the original article. It does suggest there was somewhat of a "fraternity" among persons in the typefounding industry back then—that they knew and circulated among themselves and were not "islands" on their own.*

GEORGE B. LOTHIAN, TYPEFOUNDER

Although the character of type-founding has materially changed within the past 20 years, or since the introduction of machinery and the art of electrotyping, yet to many (particularly printers) it will be quite interesting to have some account of one who, in his time, was as much noted as a thoroughly practical typefounder as for certain extraordinary eccentricities.

George Buxtox Lothian was the third son of Dr. Robert Lothian, of Scotland, who, in 1806, made an ineffectual attempt to establish a foundry in New York City. Not succeeding, he sold out his material to Messrs. Binny & Ronaldson, of Philadelphia. George remained with a bookseller, in Philadelphia, and—like many young men with minds unfolding, and, perhaps, influenced by his surroundings—conceived a strange fancy for the stage, for which he manifested much fondness even in later years. Following the bent of his inclinations, he made his debut in "Old Southwark" theater in an amateur company. . . . In 1810 he engaged himself to Mr. John Watts, in New York; who was the first to introduce stereotyping in the United States.

The peculiar irritability and vindictiveness of his temper under real or supposed injuries here early manifested itself. Some disagreement arose between them, and in the sequel Mr. Lothian found himself within the walls of the "Old Gaol"—now the Hall of Records; from the roof of which, as he expressed it, he had an interesting view of the Park and its surroundings. The organization, or rather disorganization, of Mr. Lothian's mental qualities, although admitted as highly intellectual, was certainly very unbalanced—so much so, at times, that it required the exercise of all the charity and forbearance of his friends to bear with his unreasonable outbreaks of temper. Although his conversational powers generally rendered him quite companionable, there was no certainty how long this might last. His antipathies against certain persons and things were so crotchety, that not unfrequently a very pleasant interview terminated in high words or a row.

After working about two years with Messrs. Collins & Hanna as a stereotype finisher, he conceived the idea of establishing for himself a type-foundry at Pittsburgh, Pennsylvania. The residence there of a few months, together with an unprofitable experiment at manufacturing, convinced him that he had made a grave mistake. Returning to New York City with somewhat straightened finances, Messrs. D. & G. Bruce purchased his material, and furnished him employment. Mr. Lothian's singular temperament and disposition characterized him as a very disagreeable shopmate; and with all his acknowledged excellence as a workman, Mr. George Bruce was pleased to relieve him from his engagement in order to gratify his desire of once more attempting the stage as a profession. To this end he took a course of lectures in elocution from a distinguished actor, Mr. Foote. His preceptor complimented him highly on his aptness at theatrical portraiture, but frankly told him that unless he could acquire a more ready and correct memory—which he pointed out as quite defective—his probabilities of distinction would be limited, and final success very doubtful. Mr. Lothian thanked him for his candor, and reluctantly resolved to abandon the theatrical profession.

About this time (1822) he commenced in a small way manufacturing type for the Harpers, and, to increase his facilities, formed a partnership with Mr. Alfred Pell. This connection, however, was of short duration. His partner not being able to endure his idiosyncratic manner and mode of expression, a slight skirmish, high words, and ground and lofty tumbling ensued; the partnership was dissolved; and the late W. Hagar bought Mr. Lothian's interest.

About the year 1829 we find him again manufacturing for the Messrs. Harper, and for some other extensive printing houses. It was about this period that he commenced a partnership with the late Mr. James Conner. As in all his former alliances, his naturally suspicious characteristics suggested the possibility of particular advantages to his partner from the connection, and he gave utterance to these notions and conclusions in no very gentle terms; and although self-control was a prominent point in the character of Mr. Conner, yet, on the present occasion—so great was the provocation from the pointedness of the language used—that, somehow or other, Mr. Lothian's body was observed soon after hanging backwards out of a third story window. It is unnecessary to say that the partnership between them was never consummated.

He continued manufacturing for the Messrs. Harper—these gentlemen bearing with all his taunts, sarcasms and wormwood remarks with Christian meekness and charity, perfectly satisfied to bear with all with philosophical calmness, provided he continue to furnish them with well manufactured type; which he certainly did. The excellence of his manufactured articles, the harmony of his several faces, were admitted by all; but the capriciousness of temper which characterized his intercourse with customers had the effect of limiting his business to a very narrow scope.

"He had, moreover, a vast store of antipathies and prejudices for and against authors, men, and things, unusual to most, and which must have an outlet on every convenient occasion . . ."

With a proper appreciation of the quality of Mr. Lothian's material, the late Mr. Hagar conceived the idea of forming a partnership with him. The connection was formed; but, like all the others, was short-lived, the partnership dissolving in less than six months. This was the last business connection attempted by Mr. Lothian (1840). His unhappy temperament became more and more unendurable to his friends, superinduced, doubtless, by the loss of his whole family—wife, sons, and daughters—and his own declining health; and he died in 1851, attended by a single female domestic.

Like Falstaff, Mr. Lothian was not only irritable himself, but was apt to excite a similar irritability among his associates by his offensive personal remarks; and but few, in his time, were more frequently threatened with a thrashing, and yet escaped the unpleasant ordeal by the charitable "sober second thought" of those who came under the scathing influence of his unbridled tongue. With all his faults, that he was a man of extensive information, refined taste, and excellence as an artist, there is no question. His extreme sensibility respecting any reflection cast upon himself kept his temper in a continual state of vindictive activity. He had, moreover, a vast store of antipathies and prejudices for and against authors, men, and things, unusual to most, and which must have an outlet on every convenient occasion; but as he became better understood by his acquaintances, these peculiarities were charitably overlooked. Again, when it is considered that the herculean task of establishing a type-foundry without capital was undertaken by one of so peculiar an organization; that the minutest details were necessarily attended to by himself; that the stupidity of inefficient boy-labor (necessary, in his case, on the score of economy) where skilled workmen were required, was a constant source of irritation; that under all these peculiar difficulties, his exquisite sense of the harmonious and beautiful in type must be (and was) carried out by him—the practical type-founder, knowing how to sympathize with him, will cheerfully throw the mantle of oblivion over most of his faults. Ever on the alert to conduct his business with the greatest economy, he added many improved methods of manufacture which hold their place to this day. He was one of the experimental pioneers in machine type-casting and type-rubbing, and the invention of the method now used of kerning type. There were three subjects which were inexhaustible with him—the stage, music, and type-founding; and should any one be so fortunate as to harmonize with him on any or all of these subjects, everything might go well between them.

Mr. Lothian's unusual family afflictions weighed heavily upon his mind and spirits, producing quite a misanthropic feeling in him for about a year preceding his death. The writer incidentally met him a short time before his decease, and endeavored to be friendly and familiar with him; but, alas! he found his mind quite shattered, and was compelled patiently to listen to the wholesale abuse of himself and all his former friends. All were denounced as rogues, ingrates, and constructive murderers, with unsparing invective, until he fairly exhausted himself. "Come, come, Lothian, you are certainly too severe," was remarked. "The Harpers, George Bruce, Jim Conner, and others, do not talk so harshly of you. They wish you well, and when they speak of you, it is with praise of your abilities; and they always express pity for your family bereavements and your own loss of health." "Pity! pity!" he exclaimed through his clenched teeth. "Pity! has it come to this? Has George B. Lothian lived to become an object of pity to such a set of Shylocks and d—d psalm-singing wretches? Great God!" and running his hands upward through his bushy grey hair, seizing his hat he shambled to the door, grumbling excitedly, and disappeared.

Accustomed as his friends were to these frequent outbursts of temper, it was some minutes before we recovered the shock of this explosion; and believing he had gone for good, we commenced sympathizing with his frailties. But we were destined to witness another and more pleasing trait of his variable character in this, our last, interview with him. Returning with much effort, being nearly exhausted, Mr. Lothian seized both our hands, the big tears overflowing, and exclaimed: "B—, don't mind what I have said. You know how to bear with me; I know you do. I'm not always myself. Do come and see me. Will you come and see me? You know where I live. I'm a solitary, broken down man." Then, looking us fixedly in the eye, still holding on by both hands, he continued: "Will you come? I have much to say to you, for you understand me. Will you come?" Compliance was promised, but death prevented its fulfillment. He died but a few days thereafter—rather suddenly, after all—leaving a handsome competency judiciously bequeathed.

D. B.

What Others Are Saying

In early November I learnt that the Darmstadt Museum will definitely have to close down. And now, today, to my great relief, I hear from you from across the ocean, that its fate could resolve at last minute. This is good news, indeed, and proves how important it is to be subscribed to your precious *Newsletter.*

Alfred Hoffman, Bottmingen, Switzerland

I can sympathize with your alignment problems shown on page 33 of *Newsletter 24.* If you look closely at my 18 pt. Perpetua flyer, the alignment wantered halfway through the casting of the "i". I agonized over it for a few days and then re-cast it.

Dan Jones, Newmarket, Ontario, Canada

Paul Brown, late of Monotype U, is becoming an adept student of the Supercaster and has shown great aptitude in manipulating the beast. He has made a mold change, done a lot of tuneup/cleanup and made himself a font of type. He also got the waterways cleaned out and a suitable recirculating pump operating. I can speak on the issue of forgetting how to run a machine because of lack of practice, so it is most pleasing to have Paul around to make things happen and to sharpen (and retain) skills learned in Terra Alta.

Dave Churchman, Indianapolis, Ind.

Each issue is devoured with much joy and excitement. Having had the pleasure (and agony) of owning a Thompson, Linotype and Ludlow, I re-live the experiences on each page of your journal. I no longer own these machines, but they still have a place in my heart. Please don't ever lose your enthusiasm for doing what you're doing--too many of us out there are counting on you for the sake of history.

George Folchi, Yorktown Heights, N.Y.

I would very much like an opportunity to purchase fancy faces in large sizes, for example 72-point Civilite. To think I could have bought that face in an earlier period only angers me now—with myself, of course.

Ken Abraham, Portola Valley, Calif.

You're right there. The days of buying large foundry faces new are long over. But ATF never made Civilite in sizes over 48 point! Sometime after 1951 they discontinued everything in Civilite above 24 point, according to their catalogs.

You ought to check the translation of the Kastenbein article on the correct birthdate of Karl Kastenbein (page 26). How could he be born in 1880 if he had applied for a patent on composing machines on July 6, 1869?

Carl Schlesinger, Rutherford, N. J.

You got us there, Carl. Eagle eyes! A check of the original document in Swedish done by Bo Berndal has his birthdate at April 3, 1830. So someone hit two 8's instead of 83. A simple (but awful) mistake.

You've done it again with the *ATF Newsletter* #24. It's a beautiful job of typography, typesetting, presswork and most enjoyable articles. The story on Scotch Roman brought back some memories. I set many a line of it while a teenager at the Waverly Press in Baltimore (I'm now 81).

Francis X. Harrigan, Parkville, Md.

We badly need a mat-making facility. We'll die of old age without one.

Charles D. Fitzhardinge-Bailey
Bankstown, Australia

I know letterpress looks good at times, but it's a hard row to hoe. I think polymer plates are silly and an awkward substitute for printing. They're just as bad a duplication as metal type proofs for offset lithography.

Vance Gerry, Pasadena, Calif.

I have a friend and fellow type enthusiast who lives nearby in Kent and has, for a number of years, collected type, in both metal and wood, but until recently has not had a press to print on. This has now been rectified and he is just starting to use his amassed collection. In addition, he has just bought up a large collection of very old French type that formed part of a Carthusian monastery print shop. The type and printery originated in Belgium and eventually moved to England but has since been redundant for a number of years.

My friend has bought the type and ornaments. He is now searching for a second press that can be machined to take the extra height of the type

and intends to start issuing publications using some of the older type like Elsevir, of which there is several hundred pounds in text sizes!

Tony Smith, Aylesford, Kent, England

My primary interest is in Linotype machines. As the historian for our local volunteer fire department, I spent several months reading through microfilms of local newspapers. When I read about the Model 5 Linotype delivered to the *Carleton* (Oregon) *Sentinel* in July, 1926, and the Model 8 delivered to the *Yamhill* (Oregon) *Record* in July, 1927, my interest was aroused. I currently have six Linotypes and three Intertypes. None yet working, but one of these days. . .

Bill Spurling, Yamhill, Oregon

I am a Ludlow user (hobby) and have been buying everything Ludlow here in Maine that I am aware of—that is, if the price is not unreasonable. I have over 500 fonts of mats and only room enough for about 300! I have yet to uncover any Monotype equipment up here. Thanks again for all your efforts to keep this interest alive.

John Powers, Harpswell, Maine

Fire for the Linecaster/Typecaster Debate!

Ron Hylton from Long Beach, Wash., writes "It is very difficult to compare Monotype typography/type composition with linecasting. I don't see much comparison. You have many more variables with which to refine the finished product (with Monotype). I am humbled that my Intertypes are small imitators of true typography. Yes, they do a wonderful job for my customers and myself; and yes, I have every intention of keeping them going. But they are limited in their typographic excellence."

Daniel Boston from St. Davids, Pa., writes saying "I enjoy the *ATF Newsletter* very much, even though I do not cast type myself. I'm an amateur printer with a Golding Pearl, Vandercook, and 6x10 Kelsey. My type is from Van Fos in Philadelphia (now closed), Quaker City, and LA Type (also now closed). I appreciate knowing about typecasting and who is doing it. Would love to see more ads and offerings of revival castings, etc., in the *Newsletter.*"

Paige Typesetter Up Close *(Continued from page 31)*

the line to be justified. Only at that stage did the line move further to the left where various widths of *spaces* were stored for insertion between the words. Space channels were marked in *unit widths* which to me were quite reminiscent of the unit widths used by the Monotype system. After spacing was inserted, the finished line was deposited in a galley and the next line started.

The process of distribution was a mystery to all who studied the machine, and it was very obvious that no one at the Mark Twain House knew anything other than what was on the bronze plaque on the front of the device. All intimate knowledge of the operation of the Paige Typesetting Machine has been lost to history. Only the static, cold iron remains, causing me to revisit my bad dreams of the day when Linotypes and Monotypes meet the same fate.

John Hern says he recalled reading that the operator literally had to un-keyboard composed type. That's not so. The article in *Typographical Printing-Surfaces* says the type had special nicks (which we could not see) and was guided to its proper channels by these nicks. The machine also kicked out broken or excessively dirty types during the distribution operation, and sent the spacing material to its unique compartments too.

Seeing the Paige first-hand was, indeed, a delight. It is a handsome machine and a vivid representation of the mechanical genius and mechanical skills of Paige and the many craftsmen who actually made the parts and assembled them into a working device. And should you ever find yourself near Hartford, you too should make a bee-line for the Mark Twain House. Yes, the guided tour also was very interesting, although the tour guide spent no time at or near the Paige Typesetter. The machine is tucked in a corner in the general area where you wait for the tour to start, so you'll have ample opportunity to give it a personal inspection.

Grandfather's Prejudices Need Reassessing!

Intertype Slams Competition in Rare Ad

One of the on-going arguments during the days of hot-metal typesetting continued to be "which was better?" There were purists who insisted nothing equaled hand composition and rejected automation outright. Perhaps the more intense arguments were staged between the various mechanized systems—Linotype, Intertype, Monotype, and perhaps Ludlow and other lesser-known systems.

Rarely, however, did the arguments get to name calling or boil over into print in the way demonstrated by the following text, which was published in an advertisement by the Harris Intertype Corporation. It appeared sometime near mid-century in an English publication. Unfortunately, we have only a Xerox of the ad, indicating it was page 1011, published by Intertype's English office at Slough.

Paul Duensing found the clipping accompanied by a note from the late Leonard Bahr, who said, "Can you imagine the conversations which must have gone on between writer and client before this ad was completed?" The ad reads:

Headline: "The unprejudiced jobbing printer used Intertypesetting because the profits are much bigger."

"And bigger profits are not the only reason for using Intertypes for quality jobbing. When work is short and clients are calling for estimates, the general printer with Intertypesetting can bid low without fear of running at a loss. Because one-man quick-change Intertypesetting is low-cost setting.

"The general printer with Intertypesetting is given the urgent jobs too; the ones that need to be done at top speed, with the minimum of delay between setting and printing. Because one-man quick-change Intertypesetting if fast setting.

"The only jobs the general printer with Intertypesetting may have to avoid are those placed by the tiny handful of customers who are so concerned about the minutiae of typography, so sensitive to the slightest deviations from aesthetic perfection, that they would find the setting of this advertisement, for instance, intolerable (italics mine).

"But everybody else, say 999 people out of 1,000, are perfectly happy with cheap, fast Intertypesetting.

"Your grandfather might not believe it, but some of the smartest coated-paper jobbing work being done in Britain to-day is Intertypeset.

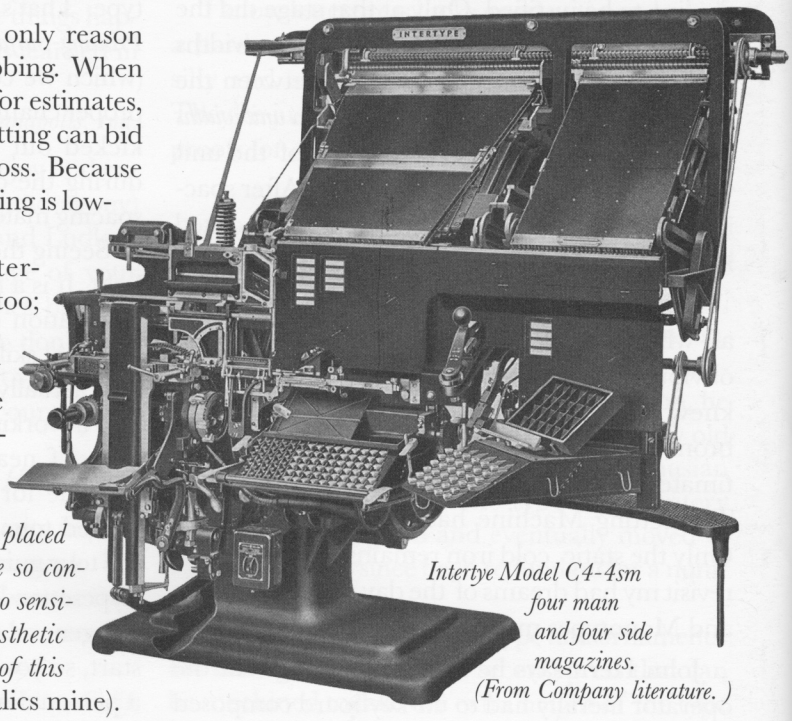
"Typographical snobs would be horrified if they knew how many fine books are being Intertypeset every day.

"And don't tell the stick-in-the-muds who are still living in the past that many of the contemporary perodicals which are pioneering exciting new design standards are Intertypeset; you won't be believed.

"Here at Harris-Intertype we reckon to know as much about good typography as anyone else. But we are realists and we like dealing with realists. We know there is a place for perfection and a price for it—a high one.

"Intertypesetting is for the general printer who wants to make bigger-than-usual profits and who realises that grandfather's prejudices need re-assessing."

Ouch! Thanks, Paul, for sharing this classic clipping with us all.



Intertye Model C4-4sm four main and four side magazines. (From Company literature.)

¶ Here beginneth the boke Intituled Eracles, & also Godefrey of Boloyne, the whiche speketh of the Conquest of the holy londe of Iherusalem conteynyng diuerse warres and noble faytes of Armes

The Auncyent Hyltoryes laye that Eracles was a good Crylten man, and gouernour of thēpyre of Rome. Whā Eracles had cōquered Perle, & llaȳ Coldroe, which was a puillaūt kynge, he brought agayn to Ierusalem the very crolle which they had ladde in to Perle, and abode and dwellyd in the londe of Surrye. And dide do ordeyne & chole a patrairke, a moche wile mā named Modelte, by whos coūleil he dyde do make agayn the chirches, and habylled the holy places and clēled thē that the tyraūt Coldroe of Perle had ſmeton doū and deſtroyed. Eracles ſette grete entente and made grete coſtes forto repayre thē. And whiles he entended ther aboute Homar, the ſone of Captap, whiche was a Prynce of Arabe, the thirde after Machomet, cam in to this contree, named Paleſtyne with ſo grete nōbre of peple that alle the lōde was couered with thē & had theñe taken by force a moche ſtrōge cyte named Jadre. Frō thens he drew hym toward Damaſke, and allieged the cyte, and toke hyt by ſtrengthe, ffor he had ſo grete a nombre of peple that nothyng myght reſiſt hym. Thēperour Eracles, which yet dwellyd in a parte of this londe named Cylyce, herde tydȳges of this peple and ſēt good elpyes and trewe, ī whiche he truſted, for to ſee & ſerche their couīe, for he delyred moche to haue a dō with thile peple ō the felde, & fyghte & chaſe them out of the lōds and cytees which obeyed to Criſtente and to thempyre of Rome. But whā his meſſagers cam, he had by thē knowleche certaȳly that he had not peple ynowhe to fyhte ayenſt them, for they were ſo fyers and ſo orguyllous of the grete nōbre of peple that they had, that they thought nothȳg myght reſiſte them. And ther upō Eracles had deliberacion & coūleilled with his peple that it ſhold be leſt diſhonour to departe and retorne in to his cōtree, than ſuffre his peple to be deſtroyed, and myght not amende it. Thus thenne he departed out of Surye by caſue the kynge of Arabe & his peple were of ſo grete power & ſo proude, as that they fonde alle the contree habandonned to them, for in a ſhort time they had conquered alle the contree of Surye ūto Egypte. One thyng that was to fore happenned in this contree, whiche helpe moche them of Arabe tēcrece their power, for Coldroe the puiſſant kynge of Perle, of whom I haue ſpoken to fore, had ben with grete puiſſaunce in Surye, & had deſtroyed the cytees & caſtels, brēt townes and chirches, and llaȳ grete par-

Turne agayn.