The TOOL SHED

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A Square What ?

by Hank Allen

Perhaps inspired subliminally by the bulletin board at my local post office, I have kept a 10 Most-Wanted Tool List for over ten years. The list changes with acquisitions and changes in taste, and now includes primarily unusual or very rare tools that I may never find (i.e. a two-handled froe), or that Bill Phillips will never sell. But, last year I found a Square Boring Machine, which had been on all my lists. I can't recall where I first learned of this tool, and I'm sure I had no idea how a machine could *bore* a square hole. But, Jack Zimmerman had one for sale last fall in Nashua. Actually, he really didn't want to sell it because he wanted to exhibit it at a Mid-West meeting. In a great compromise he sold it to me and then borrowed it to take to the meeting. I picked it up and brought it home from Harrisburg last October.

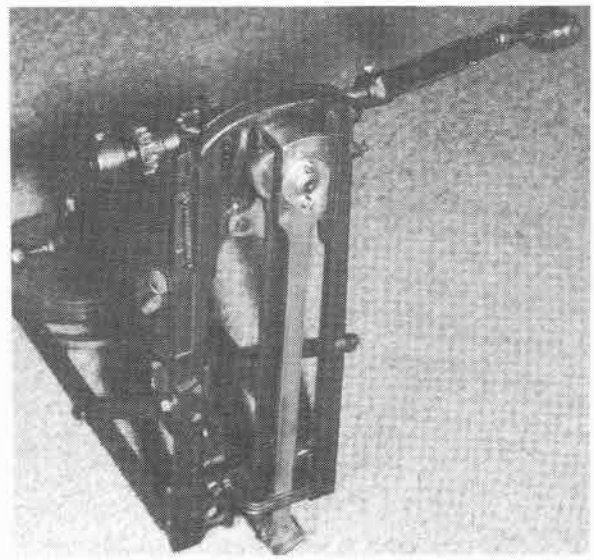

Photo 1. The Square-Hole Auger.

Some time before I found the machine, I had copied three sets of patent papers for square boring machines at the Newark Library, but had never found the time to study them. It turned out that two of these patents applied to my machine. One, dated January 31, 1888, was granted to Richard Hughes of Wooster, Ohio, and to Abraham and John Lake of Big Prairie, Ohio. It patented an improvement on a patent that had been granted to the Lakes on April 6, 1886. Both were called Square-Hole Augers. Actually, my machine is a hybrid of the two patents with, I think, the best features of both. I've attempted to describe it for you in this article, which includes photos by Charlie Flynn.

My Square-Hole Auger was manufactured by the Square-Hole Auger Company of Wooster, Ohio. (See the new EAIA *Directory of American Toolmakers* edited by Bob Nelson). This company started in business to manufacture a Mortising Machine based on an 1884 patent granted to James Oppenheimer of Shenandoah, Iowa. Soon they were making the machines patented by the Lakes in 1886 and by Hughes and the Lakes in 1888 as well as some variations, which were mentioned in the patents. As an aside, Oppenheimer's patent involved modifying a carpenter's rotary boring machine to be a mortising machine by means of an attachment that converted rotary motion to the oscillating motion that is required to operate a mortising cutterhead.

At first glance, the Square-Hole Auger (Photo 1) might appear to be a traditional carpenter's boring machine, but in lieu of the usual boring bit, this machine has a main shaft with an oscillating cutterhead at its base.

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September 12 - CRAFTS Annual Picnic

CRAFTS of New Jersey

Collectors of Rare and Familiar Tools Society
of New Jersey

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The purpose of CRAFTS of New Jersey is to encourage interest in early trades and industries, and in the identification, study, preservation and exhibition of tools and implements used and made in New Jersey as an integral part of our heritage.

Membership in CRAFTS is open to anyone who shares the above interests. Annual dues per person or couple are fifteen dollars for the membership year of July 1 through June 30. Membership fees may be sent to the Treasurer: John Whelan, 38 Colony Court, Murray Hill, NJ 07974 (write check payable to Craftsof New Jersey).

CRAFTS of NJ meets at the HOST Masonic Lodge, High Bridge. Take I-78 to Route 31 exit at Clinton. Go north on Rte. 31 two miles to second traffic light at the High Bridge exit. Turn right and go about half a mile to Dennis Ave. Turn left, then straight to the Masonic Lodge (on the left). Tailgate sales in the parking lot begin at 12 P.M.; meeting starts at 1 P.M.

The TOOL SHED

Published five times a year for members of CRAFTS of New Jersey. Managing Editor: Hank Allen, 524 Harristown Rd, Glen Rock, NJ 07452. Production editor: Stuart Shippey, 251 Hillside Ave., Chatham, NJ 07928-1732. Articles, especially about early tools and trades, are encouraged and may be sent to the Managing Editor. Please send legible hand-written or typed text, or a PC disk with *Word Perfect®*, *MS-Word®* or ascii file, FAX: 973 701-2050 or e-mail: stushippey@prodigy.net

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CRAFTS Calendar of Events

Sept. 12, 1999 - CRAFTS picnic
Sept. 15, 1999 - *ToolShed* (Nov.) free ad deadline
Nov. 14, 1999 - CRAFTS meeting, High Bridge, N.J.
April 1, 2000 - CRAFTS Auction

CRAFTS New Website

http://members.aol.com/craftsofnj

Last Issue Reminder ☞

See You at the Picnic

This is our picnic issue with the usual information and exhortations. You will have received a separate notice of the picnic and a reservation form to send back, but here is an important reminder: reserving in advance is the only way to participate in the great lunch that Ken has arranged for us. No reservation, no lunch! It's that simple. This will be our biggest tool day ever because PATINA members will be joining us for their September "away" meeting. New this year: your Directors are springing for some serious prizes for displays, so how about making the effort to bring one and cash in?

2000 Auction

April 1, 2000 is the date for the next CRAFTS Auction. It's not too early to think about your consignments, especially those high-end tools that might be described and pictured on our website and eligible for absentee bids. No junk please. CRAFTS commission rate is 10% with no buyer's premium, and is even lower for tools featured on the website. Check the website for details. Consignment forms will be available at the November meeting, or by request from Greg Welsh. If you have a great tool that you'd like to be on the website, contact him directly at either 908-439-3266 or glwelsh@aol.com.

New Books

More and more new books enhance our pastime. EAIA's new *Directory of American Toolmakers*, edited by Bob Nelson, is a tour de force at 1176 pages. Next time you see Bob, give him a pat on the back; this was a monumental task. The *Directory* is available now from EAIA. Also just released is Erv Schaffer's book *Hand-Saw Makers of North America.* See the Osage Press ad in this issue. There will be a review in the November *Tool Shed.*

Meet Your Dealers

For the next several issues, "Meet Your Dealers" will cover three dealers who were featured in the column before we started including photos. (To date we have covered 26 dealers.) We'll have photos and brief updates. "Meet Your Dealers," in a small way, gives dealers some recognition for what they do for tool collecting. Remember that they make the market, and we all need that.

Last Issue?

Dues notices were mailed out around the end of May. If you did not renew, this will be your last issue of the *Tool Shed.* (If you had paid in advance you would not have received a notice.) Dues are $15 payable to CRAFTS. If you always forget, send $30! Send to Jack Whelan at his address on this page. There will be no reminders.

PRESIDENT'S CORNER

The slate presented for election at the June meeting was unanimously elected. I want to thank all the incumbent officers and the re-elected directors for their continued commitment to CRAFTS. At the last meeting I stated that I would be appointing a director to finish the unexpired term of the late Dominic Micalizzi. I am happy to report that Ken Hopfel has accepted that position. Ken has been a long-term friend and member; his chief shortcoming is he collects the same planemakers that I do. Just kidding Ken, and welcome aboard.

Many thanks to Frank Pollaro our speaker at the June meeting. Frank made veneering look so easy that I know I will have to do something now with that stash of curly maple veneer that I've had salted away for about twelve years. Also, thank you to Steve Orbine for suggesting Frank as a speaker.

For those of you who pay attention to such things, our treasury has become a little fuller, not a bad problem to have. At our last board meeting we agreed to do two things that would put some of that money to use in a way that conforms to our purpose. The first expenditure we agreed to make is in the area of a grant. We have decided to put up $500 dollars to pay for awards that will be given to students in a manual trades program. Bob Garay, CRAFTS member and full time teacher at the Randolph Township Middle School, will be instructing around 75 students in the "secrets and mysteries of planemaking." Imagine a class where Jack Whelan's book is required reading! Bob will judge the planes his students make. Hopefully we can produce a new crop of New Jersey planemakers.

The second expenditure deals with the picnic. In the interest of encouraging more members to bring displays, we have decided to up the reward. There will be three prizes awarded and the winners will pick, in order, (i.e. first prize goes first) from a group of five valuable prizes that will range in value from $50 to $200. We will also provide security for the displays so exhibitors can feel comfortable about bringing displays. I'm hoping to see many of your displays at the picnic, but be forewarned that competition for the prizes will be stiff. PATINA members will be out in force as the picnic will be a joint meeting with our neighbors to the South.

Jack Whelan has received EAIA's prestigious J.D.Hatch Award. Jack is our past president, current treasurer, author of two books on wooden planes, and a contributor to EAIA's Chronicle, amoung other things. Emil and Martyl Pollak received this award in 1996. More on this in the November issue.

Welcome to new members: Jim Bode, Clinton Corners, NY; Edward & Ann Chenevey, North Plainfield; Robert & Sally Brown, Montoursville, PA; Sam Finnell, Princeton; Albert & Roma Mindler, Princeton; Gloria Renehan, Montoursville, PA; Robin Townsend, Chalford, Stroud, Glos. U.K.

Joe

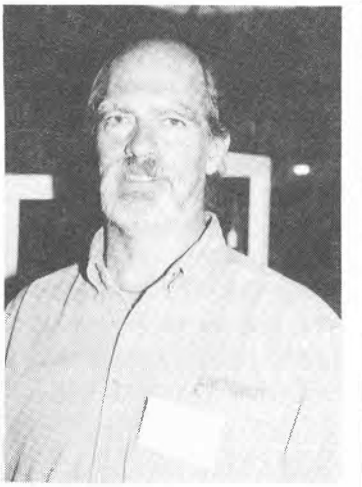
Meet Your Dealers

The purpose of this column is NOT to evaluate dealers, but simply to present useful & interesting information about tool sources.

Jack Zimmerman

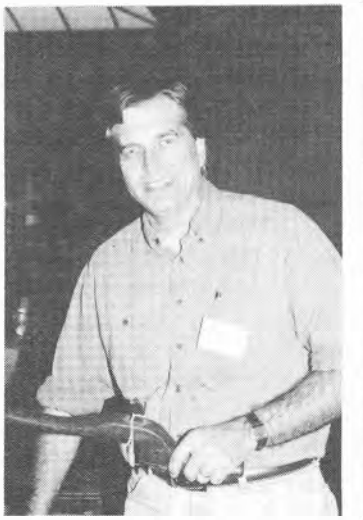
Jack can be found at most auctions and tool group meetings where he buys and sells. He belongs to EAIA, Mid-West, CRAFTS, and most other regionals. The photo shows him in Nashua with the square-hole auger that is featured in this issue. If you're looking for something special, just let him know. You can reach him at 814 - 692 - 7691 or via e-mail at zimmermn@penn.com.

Peter Habicht



Peter's business is Falcon-Wood which specializes in British tools, but also carries a good inventory of collectible American tools, user tools, and books. He belongs to everything. Check out the tools for sale on his website at www.oldtools.com. He and Annette have a shop in Sheffield, Mass., which is open by chance, or appointment. You can contact Peter at 413-229-7745 or at peterh@oldtools.com.

Bill Hermanek



Bill is a founding member of LIATCA, its President for many years, and a regular at CRAFTS events as long as I can remember. He's in EAIA, Mid-West and many regionals. You'll find him at shows, auctions, and meetings from New Hampshire to Maryland. Bill is one of the leading specialists in Stanley tools, but carries a full line. You can reach him at 516 - 360 - 1216 or via e-mail at bhermanek@aol.com.

A Square What ? by Hank Allen

(continued from page 1)

Photo 2 is a closer view of the front, Photo 3 a closer view of the back, and Photo 4 a top view of the crankshaft and gearing.

☐ Vertically Sliding Stock

In Photo 2 you can see the vertical grooves in the frame in which the sliding stock is moved up and down. Attached to the sliding stock are a main shaft and cutterhead; the feeding mechanism; and the gearing, crankshaft, and handles. The main shaft is of brass, and there are two pairs of brass eccentrics journaled at the top and bottom. A bevel gear is journaled behind the top eccentrics. Two rods join the top and bottom eccentrics (you can see one top eccentric and its rod in Photo 2) and impart an oscillating movement (right to left and vice versa) to the cutterhead as the crankshaft is turned. When the crankshaft is shifted fully to the right (See Photo 4), a pin through the shaft engages the bevel gear which otherwise floats on the shaft. This is the operating position.

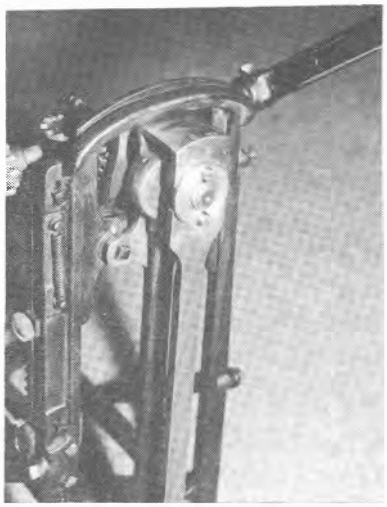


Photo 2. Front view.

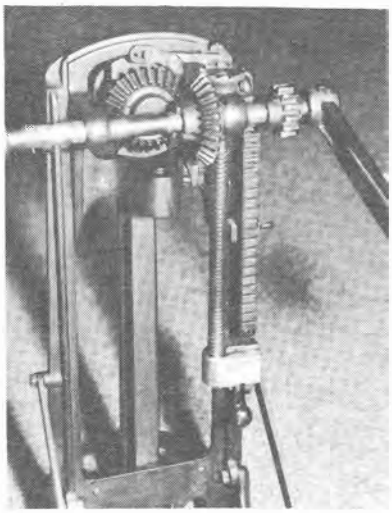


Photo 3. Back view.

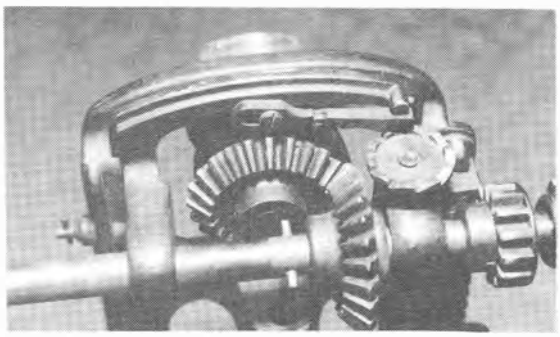


Photo 4. Top view.

☐ The Cutterhead

The cutterhead has two curved end cutters (on its front and back - you can see the front one in Photo 1) with integral sawlike teeth that cut across the grain of a timber as the cutterhead oscillates. Attached to the bottom of the cutterhead is a set of removable side cutters, which span the distance between the end cutters and are perpendicular to them. The individual side cutters are arranged to slice wood from the mortise after the end grain is cut by the end cutters. My cutterhead will cut only a 2 1/4" square mortise. But, the bottom eccentrics and cutterhead have a bearing screw that may permit changing cutterheads. Why would you buy a machine that would cut only one mortise? The Lakes 1886 patent described an elegant way to remove chips from the mortise, but it probably didn't work very well, for my machine has none. I was just about to cut a mortise, so that I could report on this and show the result, when I learned that my removable side cutters have, in fact, been removed. So much for that.

☐ The Feeding Mechanism

In Photo 3, you can see a vertical feeding screw on the right side of the sliding stock. In Photo 4 you can see a ratchet wheel that is attached to the top of this screw. The ratchet wheel is advanced two notches for each revolution of the crankshaft by means of an L-shaped arm with a pawl that engages the ratchet wheel. Two lugs on the front of the bevel gear behind the eccentrics push the arm forward, and a spring returns it to its starting position. Thus, as the crankshaft is turned, the ratcheting of the feeding screw automatically lowers the entire sliding stock and feeds the cutterhead into the mortise. Twenty turns of the crankshaft feed the cutterhead about 5/8 of an inch. In Photo 3 you can see a housing box that is fixed to the right side of the frame. It houses a sliding threaded nut section that the feeding screw turns through when the two are engaged. A bent bar through the nut section causes it to slide to engage the feeding screw when the bar is pulled upward and to slide to disengage from the feeding screw when the bar is depressed. A lever attached to the bottom of the box is one way of raising or lowering the bar, which enables the operator to throw the feed in or out of gear as needed. When in gear the cutterhead advances automatically. When out of gear the cutterhead will continue to oscillate as the crankshaft is turned, but will not be advanced.

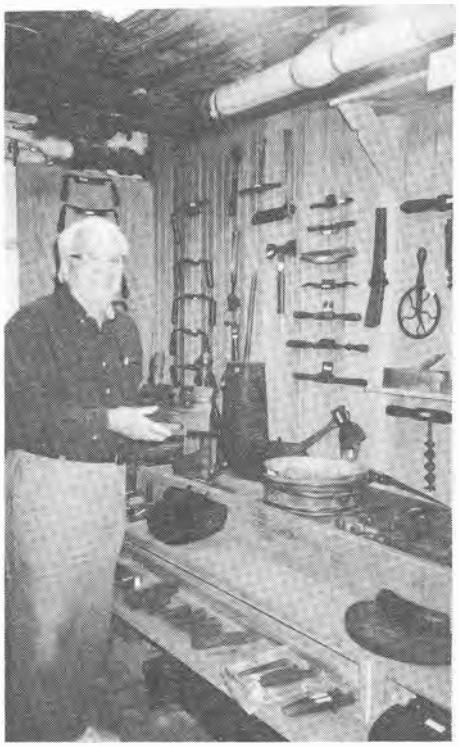
☐ The Rack

On the right side of the frame (Photo 3) you will see a vertical rack to the right of the feeding screw. The rack is attached to the frame by bolts in elongated slots so that it can move up and down, but only by about 1/4 inch. The bottom of the rack is attached to top of the bar that passes through the housing box. Shifting the crankshaft fully to the left disengages the cutterhead drive and causes a pinion on the crankshaft to slide into the rack. With the rack and pinion engaged, turning the crankshaft moves the rack and the bar attached to its bottom down 1/4 inch, which disengages the sliding threaded nut from the feeding screw. Continued turning raises the entire sliding stock, removing the cutterhead from the mortise. (I initially thought that there should be a way to move the sliding stock downward using the rack and pinion, but there is not.) In Photo 3 you can see a depth stop on the inside of the rack which is held by a thumbscrew that slides up or down in a slot that runs the length of the rack. When the sliding stock hits the depth stop the rack and bar are depressed, which throws the feed out of gear.

That's my report on the Square-Hole Auger. Any additional information, or photos of other types would be welcome. ☐ ☐ ☐

Greenfield Hall Museum
by Bill McDougall

On my latest visit to New Jersey to attend the CRAFTS auction my friend Hank Allen took me to visit Greenfield Hall, a museum in Haddonfield in South Jersey, just across the Delaware River from Philadelphia. Haddonfield has an interesting history. In 1867 an enterprising citizen named John Buchanan established the Livingston University of Medicine and Surgery in Haddonfield. The "university" had no buildings, no classes, and no students, only a post office box. Candidates sent in their money and received their diplomas. This was all perfectly legal as long as a five-dollar fee was paid to each state in which the person wanted to practice. I think that my doctor is an **alumnus** thereof.



Don Wallace

As we approached the entrance to Greenfield Hall we were greeted by Don Wallace, the museum's Curator of Tool Collections and an avid tool collector, as well as Whatsit Presenter and Secretary of CRAFTS. Not long after his retirement from the graphics arts industry (paper and printing) in 1995, he put on a demonstration with some of his own whatsits at a meeting of the Historical Society of Haddonfield, after which he was invited to be Curator of Tool Collections at Greenfield Hall (a very non-paying job). Don accepted, of course, with the proviso that he be allowed to stabilize the cellars in order to protect the tools. Don and his six other volunteers have spent most Monday mornings for three years cleaning, repairing, and painting the cellars which had been in pretty grim shape.

Greenfield Hall was built by John Gill IV in 1841 on the foundation of an earlier 18th century house. The stately federal period house was occupied until 1963 when it was sold to the Historical Society of Haddonfield. Founded in 1914, the Society's mission has been to preserve the history of the area and to acquire articles of historic value and preserve them for future generations. In this regard, working with the Education Committee, Don has been conducting tours of the tool collections with fourth grade classes and Cub Scouts.

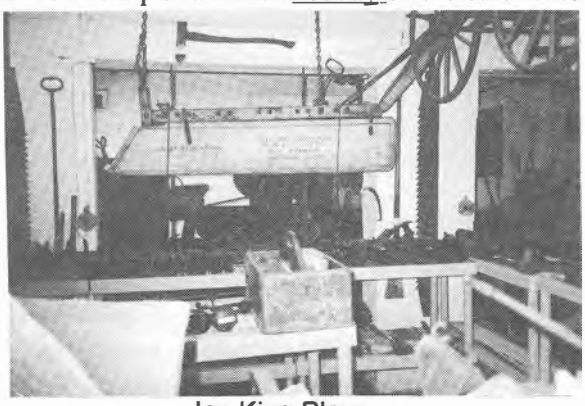
The first, second, and third floors have also been filling up over these many years with many, very nice items of early Americana, including excellent collections of dolls, toys, china, and, naturally, South Jersey glassware. My favorite piece of furniture is in the keeping room (we might now call it the "family room"). It is a rather plain, rectangular table, the top of which swings up to form the backrest of a bench. If you're interested, Don tells me that this table/bench inspired the saying "turning the tables." Remember - you read it here first!

The most unusual items, I thought, were two fire screens. Not the large ones we put in front of the fireplace to keep sparks from popping out into the room. These fire screens (one in the Colonial parlor and the other in the Victorian parlor) are small, about one foot square in area and mounted on adjustable stands so they could be placed to shield a woman's face from the heat. Many women had deep pockmarks caused by smallpox, and filled these with wax before applying the rest of their makeup. Direct fireplace heat could melt the wax, resulting in instant debeautification. On the mantel in the keeping room are two old, decorated, leather fire buckets used until the Haddon Fire Company No. 1 (the second oldest in the United States) acquired more advanced apparatus. There's something for everyone in this handsome old house museum!

The Cooper's Display.

After Don's admonition to watch the steps we headed downstairs to the tool-museum cellars. The first thing you see is a great display of cooper's

tools. These were left with the house by the previous owner who was also the last operator of his family's beer-barrel cooperage in Brewery Town, Philadelphia. The next item to catch my eye was a long, scrolled veneer-cutter's knife used for marquetry with over-the-shoulder leverage, probably the rarest tool in the collection. Next was a very large ice plow complete with wooden blade guard, which was used not just to protect the blades, but to position the plow in order to make the first cut. The "Ice King" plow manufactured by the Gifford-Wood Company was pulled by a horse and cut a deep kerf in the ice. After the ice was marked in blocks by the plow, the blocks were cut out by a stout dude using an ice saw, which is like a pit saw with nobody on the other end.



Ice King Plow.

We saw many well-displayed items - everything from kitchen tools such as a very hyper, hand-cranked meat chopping machine made by L. C. Starrett (see *Chronicle* cover, September 1996, Vol 49 No 3), a job printing press that is treadle operated, a Vulcan anvil and farrier's forge, and even several items from a 1940s gas station.

Don has already added 81 additional tools from his own collection (41 from an old barn in Haddonfield that was to be demolished); this should make his wife, Caryl, happy since his tools have been slowly migrating from his cellar into the living room. Looking around, I can certainly appreciate all the work of repairing cellar walls and floors and arranging and displaying tools. Don relates that a young man earning his Eagle Scout badge had first organized this cellar museum in 1973, but that it had been neglected until 1996 when Don took it over.

After seeing so much (but not everything - I want to go back next year), I was ready for a sandwich and a beer; but at great risk to my reputation I had to settle for a sandwich and a Coke. Lovely Haddonfield is a dry town. Oh well.

Curator's Note: If I had known Bill McDougall and his proclivities, we could have driven a mile east or west to either edge of town to satisfy his malt desires. Greenfield Hall is open Wednesday through Friday, 1 to 4 PM.

Philadelphia Tool Makers - 1845

Bud Brown recently acquired an 1845 Philadelphia Directory to add to his collection of directories from that city. He sent me a listing of the toolmakers that he had extracted from its pages. They are shown below by category:

Planemakers
John Bell
Thomas Beckman (1)
*Charlotte Burnet (2)
David Colton
John Colton
*Peter Crock
Thomas Donoho
*James Dunan
*Albert Engle
George Goldsmith
William Goldsmith
*Benjamin Gray
David Hanley (1)
John T. Jones
*John Kuker
William McDaniels (1)
Adam Miller (1)
*James Miller
*James Milnor
*Aaron Music (3)
William Souder
Martin Summers
Jacob White (Camden)

Sawmakers
J. & S. Butland
John Butland
Henry Disston
Charles Johnson
Paul Jonathan
John McArthur
Samuel Markward
William Rowland
Thomas Stimmell
William Toland
Edward & James Turner
Jonathan Turner
Joseph Nichols

Rulemakers
John Carpenter
George Harrar
S.B. Patterson

Cutlery
H. Huber Jr.

Instruments
Edward Draper
Richard Ford
L.C. Francis
Edward Giles
Theodore Gysi
Chas. Hellfrecht
George Hocker
Joseph Knox
William Young

Augers
Nathan Brooks
Samuuel Newell
Benj. Pugh

* Not in Pollaks' Third Edition

(1) Israel White's journeymen benchhands.

(2) Probably the widow of Israel White, probably now remarried. Her address was 129 Callowhill, different from Israel's 1840 directory address of 139 Callowhill. Bud is certain that he once had a plane marked "Burnett."

(3) Could Aaron Music have been Israel White's "AM" bench hand instead of Adam Miller?

Spruance Library

Volumes of Old Tool Information

by Chris Kozakiewicz

A real gold mine for tool aficionados, whether experienced or novice, is the Spruance Library in the Mercer Museum, Doylestown, Pa. Anyone who has visited the museum knows the incredible variety of that collection, showcasing dozens of trades, crafts, and household chores. Spruance expands the information available in the display by providing background to the artifacts and those who used them.

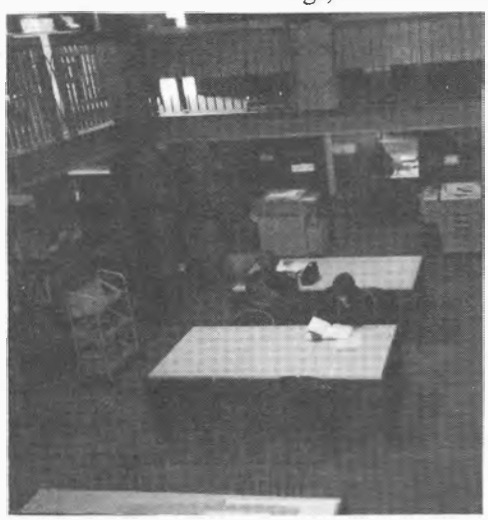
Henry Mercer designed the original library to house his own research materials and those of the Bucks County Historical Society. Although enlarged by four additions, Henry's original library room still contains part of the collection, and is well worth a look. Reinforced concrete arches & columns in that room are decorated with Mercer tiles which describe places and events from Bucks County history. The rest of the library is equally impressive. Spruance contains over 25,000 books and magazines as well as several thousand manuscripts, photos, maps, catalogs, and other rare information sources. The museum is open to the public for a nominal fee of $5, which includes the library.

Chris at work.

What makes Spruance even more valuable to tool collectors is the unique relationship with Early American Industries Association. EAIA boasts an extensive library of books and catalogs related to tools, industries, manufacturing, products, and processes. In a wonderful symbiotic relationship, Spruance provides a safe, convenient, climate-controlled storage-and-working space while EAIA expands the materials available to all researchers at Spruance.

To give you an inkling of the scope of these materials, I have selected a few EAIA titles at random from the shelves. They represent the kinds of subjects found there, although they do not by any means even hint at the variety of topics you can find at the library.

* *Antique Woodworking Tools* by Michael Dunbar discusses which planes, saws, and boring tools to buy (and which not to buy); how to repair them; and the special appeal of 18th and 19th century tools. Elsewhere in the collection is *Windsor Chairs* also by Dunbar.



Reading Room.

* *The Village Blacksmith* by Ronald Webber is a history of that ancient trade, illustrated with everything from woodcuts from medieval manuscripts to photos of the author's own relatives. An interesting chapter on "Horseshoes as Charms" gathers all sorts of horseshoe lore like cures for gout, and plants that strip the shoes off horses' feet because of their shape.

* *Vanishing Ironworks of the Ramapos* by James Ransom is a detailed history of the iron mines, miners, and manufacturing in New Jersey and New York from Colonial times. Chock full of maps, photos, letters, interviews, documents, newspaper accounts, and 25 years of research, this is a fascinating picture of a vital industry in its heyday.

* *Covered Bridges of the Northeast* by Richard Allen answers the age-old question: Why were the bridges covered, anyway? And it describes uses for these structures besides crossing rivers: advertising, playing games of daring, and spooning. (And spying on the spooners!) The book includes engineering details of various bridge styles, the engineers who influenced these styles, as well as photos and descriptions of the preferred tools and methods. A state-by-state inventory may inspire you to take a little tour.

* *Sulphides: the Art of Cameo Incrustation* by Paul Jokelson begins in the 1750s when the secret of this highly specialized art was discovered. The trick, for these early cameos embedded in glass, was to discover a substance capable of uniting with glass but requiring a stronger heat to render it fusible. The variety is astounding. Far beyond the familiar silhouette broaches, there are cameos in decanters and doorknobs, cameos of gold and full color enamel, cameos of kings, and cameos of pet dogs. Histories of famous sulphide designers such as Baccarat are beautifully illustrated with numerous photographs.

* *A Guide to the Makers of American Wooden Planes* by Emil and Martyl Pollak not only lists 2000 planemakers with their imprints (in actual size), wedge outlines, and rarity of their planes, but adds notes about dates, places, and connections with other companies. Chapters on how to judge the value of a plane, and types of planes, and a list of planemakers by state make this extensive guide a valuable research tool for the collector.

There are many other wonderful books in the collection for lovers of tools or history. *Early American Weaving and Dyeing* seems a perfect companion to *The Book of Looms*; while *Kendall Whaling Museum Paintings* is an overview of a trade which could have used (or maybe written) *The Ashley Book of Knots*. An enlightening & often amusing account of a more mundane subject can be found in *Clean and Decent: the Fascinating History of the Bathroom and the W.C.* in which we learn why it was said that London Bridge was "for wise men to go over and for fools to go under."

Spruance also has copies of the Patent Office Gazettes which can be helpful in patent searches if you have the patent date, or even patent year. They do not have patent document microfilm, which can be found either at the Newark Library or at Rutgers).

I hope this inspires you to plan a trip to the Mercer Museum, and particularly the Spruance Library. It's full of treasures for the researcher, historian, or anyone interested in the past. The Mercer Mile makes a delightful day or even weekend outing, and there are more than enough interesting pubs and restaurants to nourish body and soul. But I have an ulterior motive in introducing you to this wonderful library. EAIA members enjoy the added benefit of being able to borrow almost all EAIA books and catalogs by mail. Currently there is no list of the EAIA holdings available to members, but thoughts are being given to an internet list or even a CD. To request a book send $3 to cover shipping to: EAIA at Spruance Library, Mercer Museum, Pine & Ashland Streets, Doylestown, PA 18901.

As an EAIA member and librarian (as well as being a librarian in my other life) I am eager to introduce other lovers of the past to this valuable resource. If you are interested in joining EAIA, just contact: Early American Industries Association c/o Elton Hall, 167 Baskerville Road, S.Dartmouth, MA 02748 for details.

I hope to see you at Spruance!

Moveable Wall Shelves.

BOOK REVIEW by Jack Whelan

The Art of Fine Tools

by Sandor Nagyszalanczy

Cloth bound, 10"x10", 240 pp., over 300 photographs. Taunton Press, $37 ($33.30 from EAIA)

If you are delighted with fine photography of beautiful tools you will be enchanted by this work. The author (and photographer of most of the illustrations) is a furniture designer and wood craftsman. He serves as West Coast Editor of *American Woodworker* and was a contributing editor of *Fine Woodworking*. For this book he traveled extensively to seek out and photograph beautiful tools from dozens of major collections. (It is worth noting that CRAFTS members were well represented.)

Beauty, of course, is in the eye of the beholder. One authority has declared that the ax handle is one of the finest examples of American art, in that it is perfectly designed to accomplish its purpose. Others are taken by the elaborate filigree work used by Stanley in their early combination planes. The author has encompassed both tastes in his selections; examples range from the humble British turnscrew to an ivory rule adorned in 1849 with a frieze that would not be out of place on a Roman temple.

Tradesmen who respected their implements and felt them worthy of the best efforts to make them attractive, made some of the most beautiful tools long ago. These are well represented, but are complemented by recent examples, such as an attractively engraved Stanley Bedrock plane. Modern reproductions, such as the plow planes of Gordon Auld and a Holtzappfel rose engine by Fred Armbruster, need no apologies for inclusion with early works of art. Not missing are examples such as the Stanley Odd Jobs which would only be considered as art by a collector who has long hungered for one.

There are not many tool books in the class of "coffee table" books. This one is. Displaying it is a perfect response to those guests who fail to understand your reason for collecting "old tools."

Ed: The book's author has an article in the Winter99 issue of the *Fine Tool Journal* "The Quest for Fine Tools" which tells the story of the making of this book. It's a fascinating story ending with the possibility of a Volume II. Wouldn't that be great?

An Ironmonger's Rule
by Max Richardson

An ironmonger is the British equivalent of the early American hardware dealer. The ironmonger's rule described in this article is a one-foot, three-fold, ivory rule with an end caliper. It is marked "LONDON" but without a maker. It was apparently made for the South American trade, as in Figure 2 you can see a name and "BUENOS AYRES."

I had some ideas about the scales on the rule, but mostly questions. So, much of the information that follows is through the courtesy of David Stanley. Incidentally, if after reading this article you must have an ironmonger's rule, many of David's auctions will offer one in boxwood, and occasionally one will come up in ivory.

One side of the rule, which is scaled in centimeters, has three tables: "FLAT IRON PER FOOT/ BY 1/4 IN. THICK," "SQUARE IRON PER FOOT," and "ROUND IRON PER FOOT." See Figure 1. The function of these tables is to give the weight per foot for the different types of iron stock in pounds (LB) and parts of a pound (PS). Parts are one-hundredths of a pound (weight) where two digits are used and one-thousandths of a pound where three digits are used. Thus, in the flat iron table, one foot of iron two inches wide would weigh 1.67 pounds.

The reverse side of the rule, which is scaled in inches, has two tables: "CWT" and "COPPERS. To avoid confusion I have appended "(weight)" where pounds has that meaning rather than monetary. CWT stands for hundredweight or 112 pounds (weight), and the purpose of the table is to give the price per hundredweight for different prices per pound (weight). The left column is the price per pound (weight) in pence represented by "D." The prices per hundredweight for a given price per pound (weight) appear in the next three columns in pounds, shillings, and pence, which are represented by "L," "S," and "D" at the top of the table (1 pound = 20 shillings = 240 pence). Thus, for example, if the price per pound (weight) is one pence (fourth line) then the cost per hundredweight, or 112 pounds (weight), would be 112 pence which is given in the table as 9 shillings (108 pence) and 4 pence. [In 1970 English currency was changed to decimal, so the pound now has 100 pence (or new pennies), and one new pence (p) equals 2.4 old pence (d)].

The second table, "COPPERS," is descriptive and does not involve prices. The *Oxford English Dictionary* gives the meaning of "coppers" as: "A vessel made of copper, particularly a large boiler for cooking or laundry .. in pl.,esp the large boilers or cooking vessels used

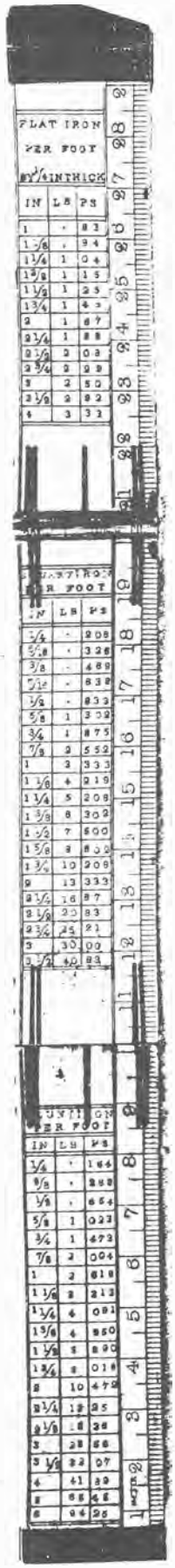


Figure 1

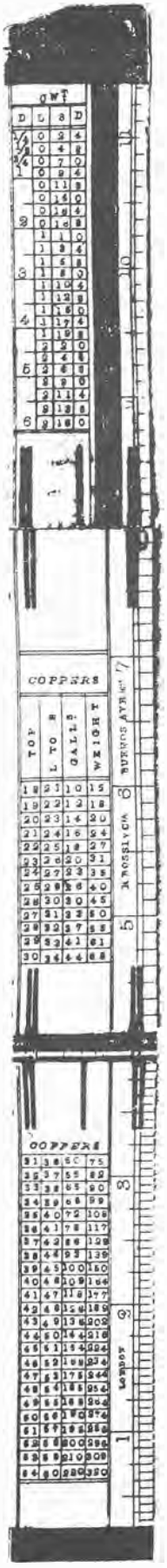


Figure 2

aboard ship." Knight's *American Mechanical Dictionary* gives the following: "A large vessel, usually of copper, set in brickwork, and used by launderers, coopers, brewers, bleachers, dyers, and on shipboard, in boiling clothes, staves, cloths, etc. or in making extracts or decoctions [an extract resulting from boiling down]." A brewers copper is shown in Figure 3. It was taken from *The Art of Coppersmithing* by John Fuller Sr. (1894). As you can see, *the* top of a copper is round. It tapers to a convex bottom with the lowest part called the lag (or the lea or ley). The bottoms were convex so that every drop of liquid could easily drain away to the outlet tap.

David reports that only large, posh, English households would have had proper copper coppers built into brickwork alongside fireplaces. When it became possible to produce these shapes cheaply in cast iron, they were installed in more ordinary homes, but were still called coppers. The home David grew up in had a cast-iron copper, but with a rounded bottom rather than convex.

The "COPPERS" table in the rule is headed by "TOP," "L TO B," "GALLS," and "WEIGHT." The first two are dimensions in inches: diameter across the top, and the diagonal measurement from the lag to the brim on the opposite side. The third column is the capacity of the copper in imperial gallons. One imperial gallon is equal to 277.42 cubic inches and 10.22 pounds (weight) of water. Thus, the first three columns serve to define coppers in size and capacity. The fourth column is the weight of the copper itself (empty). I don't know the reason for this column; perhaps it's a means to determine price.

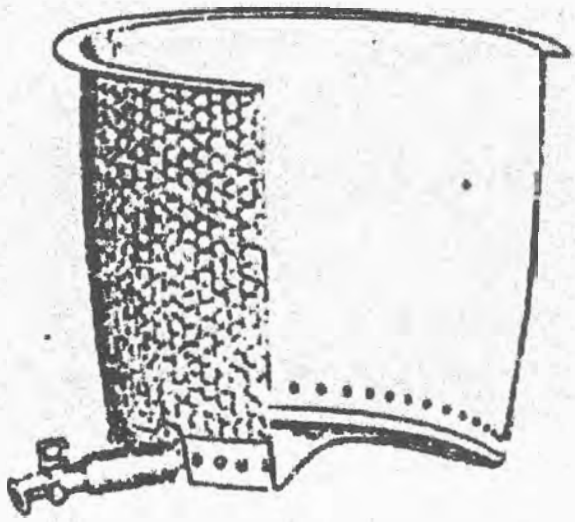


Figure 3.

ED: Thanks to David Stanley who enlisted several of his collecting friends to help with this article. See the "Auction Schedule" (Page 12) for David's fall auction.

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20 Years Of Antique Tool Auctions
Richard Crane's Grand Finale
April 24, 1999

Weather in Nashua this time of year is never predictable and this year was no exception. In three days we had the full range from sunny and warm to rain and then clear, windy, bone-chilling cold.

But neither the weather nor the less-than-thrilling offering of tools in the listed auction prevented the faithful from gathering for Richard Crane's final curtain call. Richard says it all began 26 years ago when his father gave him a bushel basket of wooden planes to auction. Richard's mother wasn't too pleased because she had planned to make jelly and was looking forward to burning the planes in the kitchen stove.

Crane's first catalogued antique tool Auction was held in Nashua, New Hampshire, in 1980. Since then there have been two catalogued auctions per year. The last, Catalogue No. 37, completed the 19th year of catalogued auctions and tool shows. This April Richard held a listed auction and tool show to round out a 20-year career.

Over the past twenty years the semi-annual Crane tool auctions and dealers' sales have became a tradition. Tool collectors from all over the United States and Canada looked forward to these semi-annual events as both an opportunity to acquire great tools and as a chance to meet with and share information with their tool-collecting friends.

Where else could one count on finding the greatest tool researchers and authors gathered in one place including: Kenneth Roberts who researched and wrote so much of the story of the early American and English tool makers, Roger Smith whose two wonderful books *Patented Transitional and Metallic Planes in America Volumes I and II* are the definitive works on that subject, Philip Stanley whose book *Boxwood and Ivory* has become the preferred reference for Stanley rules, and Tom Lamond author of *Manufactured and Patented Spokeshaves and Similar Tools* .

One could also meet and learn from people who have put together some of the world's truly great collections and, in the process, have become experts on a select area of tool collecting.

One of the wonderful perks of the Crane auction has been the opportunity to occasionally see very rare or previously undiscovered tools or variations of tools brought by collectors to share with their friends.

At this show we saw an unknown experimental variant of the Stanley Bailey Type 3 plane. In this example the frog is held in alignment by complex milling of the frog seat which allows the frog to be rigidly secured with a single screw. The extra machining undoubtedly cost more than simply attaching the frog piece to a vertical cross rib in the plane with two screws and was never put into production.

Even though quality and unusual tools are becoming quite scarce there were a few pleasant surprises both in the parking lot sale and in the auction.

In the parking lot a spectacular pair of bronze trammel points and a rare Stanley No. 45 board stick in mint condition brought a broad smile to the new owner. A nice John Nicholson badger plane was sold to a west-coast collector of 18th century Wrentham planes. A 6-inch Stanley No. 98 brass-bound, rosewood level in fine condition was found in a vendor's box of undistinguished tools.

The star of the auction was a slightly smaller than average joiners chest with sliding tills. The inside of the chest lid and the top of the upper till were decorated with marquetry in a geometric design in woods of contrasting colors. The chest was hammered down at $2800 plus buyers premium (all prices in this article are plus a 10% buyers premium).

The most interesting level in the auction was an early, gear-operated, cast-iron inclinometer patented by Clifford of Holyoke, MA. It brought $360. A great handsaw by J. Peace & Co. Sheffield, England, with metal side plates on the handle and etched with a super image of a train, that was imported at Boston in 1860 brought $350. A set of salesman's sample leatherworking tools signed J.B. Mann, N. Bridgewater, Mass., packed in a neat felt-lined, walnut case, was hammered down for $375.

A Stanley No 3 brass-bound, boxwood caliper rule in fine condition with a nice patina brought a surprising $375 and a No. 12 two-foot, two-fold, boxwood rule with a brass Gunter's slide in G+ condition sold for $180. A rare and underappreciated Stanley No. 11½ Floor Plane was a bargain at $425. A Stanley No. 67 spokeshave, complete with both bottoms and the little fence, all packed in the original, labeled box brought $305.

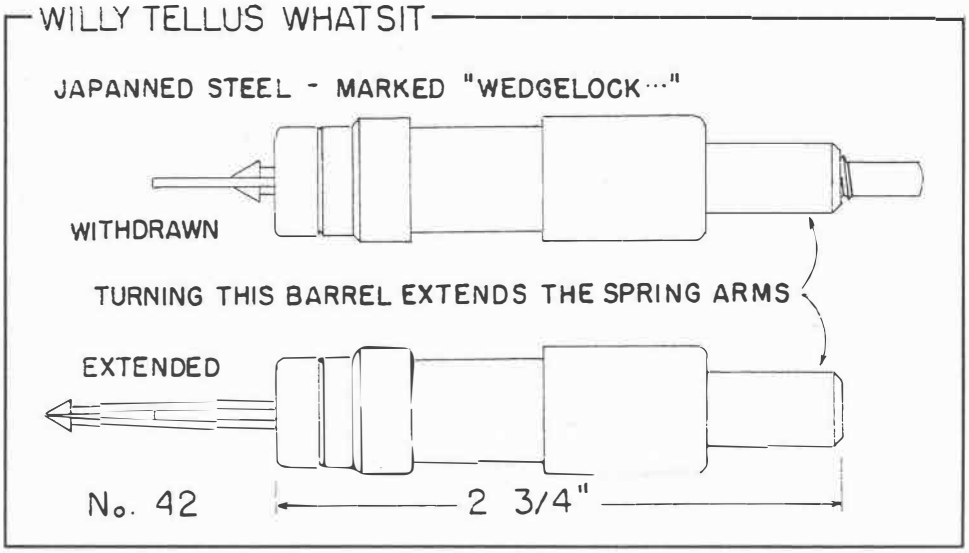
The rare, latest, japanned version of the No. 41 Miller's patent plow plane complete with filletster bed and cutters was a good buy at $925. This version has the four-hole fence with *STANLEY* cast in raised letters on the face of the fence.

Several box lots of parts and cutters brought hefty prices. An optimistic buyer who had just paid almost $500 for a box of parts was heard to say "there must be a pony somewhere in this pile of pooh."

After the last lot was sold we thanked Richard Crane for putting on wonderful tool events for the past twenty years. It was the end of an era but every ending is also a beginning of something new. We eagerly look forward to the auctions and tool shows the new owners of "Your Country Auctioneer" --- Steve Mitchell and Gary Yeaton --- will put on in coming years. We wish them every success in attracting major collections.

John G. Wells

WILLY TELLUS WHATSIT



No Fall Dates Yet: Boyertown, Pennsylvania. Barry Hurchalla's auctions. Barry needs tools! Call Barry 610-323-0333 to consign tools or to get on his mailing list.

Notices

WANTED FOR RESEARCH: Early or unusual spiral screwdrivers or information such as catalogs, advertising, or manufacturing information. Particularly seeking Forest City, Bowser, Ellrich, and Mueller (Archimedian). Cliff Fales, 1435 South Urban Way, Lakewood, CO 80228. 303-987-3849

Fall Auction Schedule

Sept. 12 and **Dec. 5**: Fine Tool Journal absentee auctions. Call Clarence Blanchard for information or subscription 207-688-4962.

Sept. 17-18: Baxter's, Indianapolis, Indiana. Tom Witte's Fall Tool Show and Auction. Call Tom 616-668-4161 for a catalog or information.

Sept. 24-25: Holiday Inn, Nashua, New Hampshire. Your Country Auctioneer's Annual Tool Sale and Antique Tool Auctions (Listed on the 24th & Catalog on the 25th). Call Steve Mitchell for information 603-485-2800. Steve has a new website in preparation at toolauctioneer.com.

Sept. 25: England. David Stanley's 34th International Catalog Auction. Call Mechanicks Workbench for a catalog 508-748-1680.

Oct. 22-23: Sheraton Inn East, Harrisburg, Pennsylvania. Brown's16th Annual Dealer Show and International Antique Tool Auction. Call Clarence Blanchard for a catalog or information 207-668-4962.

Nov. or **Dec.**: (call for date): N. Kingstown, Rhode Island. Bill Spicer's tool auction managed by Bud and Vera Steere. Call Vera for information or to get on Bill's mailing list 401-884-5049. Send $2 for a list to 110 Glenwood Drive, N. Kingstown, RI 02852.

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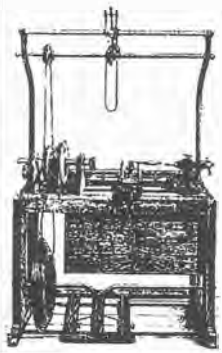

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Cory Amsler, curator at the Mercer Museum in Doylestown, Pennsylvania, reports that the Museum's annual Tool Discovery Day will be held on November 13 from 10am to 3pm. Come and see exhibits and programs by CRAFTS and EAIA members, as well as the Museum's vast collection. For lunch your editor recommends Maxwell's Restaurant and Victorian Pub.

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CRAFTS members only may have a free 5 line (40 word) ad that is primarily related to the exchange of tools or information. Each line over 5 is $1. Send to: Stuart Shippey, 251 Hillside Ave., Chatham NJ 07928-1732, FAX 973 701-2050, or email: stushippey@prodigy.net. Ads accepted if space permitted.

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Wanted

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