The TOOL SHED

NUMBER 75 FEBRUARY 1993

A Journal of Tool Collecting published by CRAFTS of New Jersey

What Makes a Fine Piece of Furniture

by Frank Klausz

As a cabinetmaker, I often meet people that have no idea what makes one piece of furniture different from another. Architects and designers come up with all kinds of styles and detail "looks." However, a design is an individual thing, and to say it is "good" or "I like it" is a very personal response. Some people like modern design, reaching out for something different, but most people prefer more traditional furniture.

Fine furniture is made of only the best materials, which means fine veneers and selected solid hardwoods. It has proper joinery and a durable, beautiful finish.

Companies that make and market fine furniture call their pieces "re-creations" rather than reproductions if they cannot meet the above criteria. The most common variable that separates the two is the joinery. A piece cannot be called a reproduction if its joinery is different than its earlier counterpart; e.g., Chippendale, Queen Anne, etc. Our ancestors used mechanical joints, because these joints will hold even after the glue has failed.

Some fine furniture joinery "rules" are:

- A drawer has to be dovetailed together, not rabbeted.
- A frame and panel has to be mortised and tenoned, not doweled.
- An ogee bracket-foot has to be blind dovetailed, rather than only mitered and glued.
- A drawer runner should be a sliding dovetail, not merely glued and nailed.
- Tabletops should be fastened with buttons (see sketch on page 4), instead of the customary metal brackets of today.

- Butt joints, although shown in contemporary "fine furniture" catalogs, should never be used.

continued on page 4

February 7, 1993 Crafts Meeting

Traditional Joinery

The speaker will be Frank Klausz, renowned Master Cabinetmaker. He will explain traditonal joinery, and actually make standard and sliding dovetails, and a rarely seen watertight joint. Frank takes his demonstrations seriously, and will bring his personal seven-foot custom workbench. Time permitting, he will cut a few complex moldings.

If you only get to an occasional meeting, this is the one to make!

CRAFTS of New Jersey

Collectors of Rare and Familiar Tools Society
of New Jersey

President . . . JOHN M. WHELAN, Murray Hill
Vice President . . JOSEPH G. HAUCK, Lebanon
Secretary . . . BARBARA FARNHAM, Stockton
Treasurer . . . . HELEN WHELAN, Murray Hill

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 ten dollars for the membership year of July 1 through June 30. Membership fees may be sent to the Treasurer: Helen Whelan, 38 Colony Court, Murray Hill, NJ 07974.

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 1 P.M.; meeting is at 2:00.

THE TOOL SHED

Published five times a year for members of CRAFTS of New Jersey. Editor: Stuart Shippey, 251 Hillside Ave., Chatham, NJ 07928-1732. Articles, especially about New Jersey tools and trades, are encouraged and may be sent to the editor. Text can be hand written, PC ascii, *Word Perfect*; FAX 201 301-9780.

In Memorial

We regret the loss of Dorothea Connolly, curator of Lebanon Township Museum for the past ten years. She was also curator of the Clinton Historical Museum from 1963-1971. She brought history to life through her programs, lectures, and collections of rural 19th century items. Memorials can be sent to the Dorothea M. Connolly Scholarship Fund, 137 Lilac Dr., Annandale, NJ 08801.

Speaker's Profile
Frank Klausz

Born and raised in Hungary, Frank Klausz apprenticed for four years and went on to an additional three years of specialized training to become a Master Cabinetmaker. He and his brother worked for their father and grandfather in a small shop that did "old world" quality work.

Because they would not join the Communist Party, their machinery was "purchased away" from them for about the value of a loaf of bread. Undaunted, Frank's father brought in a table jointer that stood over five feet tall. Puzzled as to how they would work at such a height, they "carefully" asked their father if he would "please explain." They were told to get shovels and dig a 6 by 3 ft "grave" 2 ½ ft deep. The jointer was set into the grave, reinforced and leveled. Concrete was then poured to fill the hole, covering the legs of the machine. The result was a jointer that had no vibration or resonance, but more important - a jointer that no one would be able to take away.

For the past 20 years, Frank has owned and operated Frank's Cabinet Shop, now located in Pluckemin, N.J. They produce fine furniture (and I do mean fine), reproductions, restorations, and architectural fixtures. A few of their many clients have been: Malcolm Forbes, Cyrus Vance, The N.J. State House (Senate Chambers), and Jackie Onassis.

Frank writes for many woodworking magazines, has videos on the market, and gives seminars throughout the United States and Canada. He donates his time to worthy causes - such as the annual use of his shop by over 50 Cub Scouts to make tiny wooden race cars for their Pinewood Derby.

He has a real feeling for wood. When I asked him why the underpinnings of his workbench were out of low grade woods, he replied, "Good wood belongs in furniture; a workbench should utilize the rest."

This is a man who is more than just a superb woodworker!

Herb Kean

At the meeting of Patina last November I heard rave reports on the talk that Frank Klausz gave at their May meeting. Several who enjoy joint membership in CRAFTS will be coming up for a repeat this month. Don't miss this one!

Bud Brown's auction last October was too late to make the November TOOLSHED deadline, but may still be news to some of you. It drew over two hundred registered bidders from all parts of the country, all of whom came prepared to spend, judging by the total take of almost 105 thousand dollars. Stanley tools, new in the box, continue to do well. The rare #56 brought $1700, a #57 $1300. A Pilkington, Pedigore and Co. brace did $2100, a C.T.Pilkington $1700. A beautiful crown molder by A.Smith, Rehobeth brought $2200. A very rare complex molder by the early Philadelphia maker John Passcul went for $2600. A rare Hedge patent (1835) two foot two fold rule at $775 sparked a strong showing by rules. Of the New Jersey tools, one of Mockridge and Francis's great witchets went for $270, and a W.J.C. Ward (Saddle River) complex molder was repatriated for $180. The tool dealer show (the day before the auction) was one of the best ever, with both dealers and buyers pleased. Dates for Bud's tenth anniversary auction are October 29 and 30, and it promises to be another great one.

Steve Zluky and Joe Hauck tell me that the tool submissions for the April auction are shaping up nicely. Be warned that the April TOOLSHED will print only a prices realized list - lot number and price - in place of the complete catalog. Save the catalog you get at the auction or, if you can't attend, send a stamped, self-addressed legal size envelope with one dollar to Helen Whelan, 38 Colony Court, Murray Hill, NJ 07974 a week or so before the auction to receive one.

We were saddened to learn of the passing of Virginia, Harry O'Neill's widow.

Welcome to new members Robert and Sylvia Freed (Landsville, PA), John and Kathie Garetti (Staten Island), Frank Klausz (Peapack), Charles Kolenut (Washington Twp), Phil and Gloria Potter (Beachwood), Eric Poysa (Ithaca, NY), Richard Rosen (East Brunswick), D. Alan Rothenberger (Worcester, PA), Michael Shackelford (Trenton), Robert Shippey (Ballston Spa, NY), Donald Traylor (Sussex), and Chris and Beth Slusser (Bloomsbury).

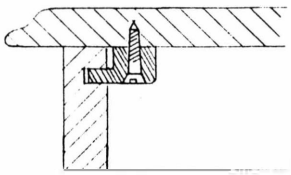
Auction Update

By the time you read this you should have sent in your lists. Tools are to be delivered no later than the February meeting, however, as always, I'll try to make an exception for special circumstances and "sparklers." Some of the early deliveries turned up some nice items: a rosewood Marples Ultimatum brace, some Stanley in the box, and one list had a Robert Woodling molding plane. There will be many other great items, as always, for our April 3 sale. Enclosed in the TOOLSHED mailing is a copy of the first flyer; please feel free to copy and distribute it in your area or get it displayed where non-members will see it. Some suggested locations are antique centers, auctions and shows, as well as hand tool stores, especially outside of central New Jersey (which is covered pretty well by advertising, etc.). Remember to ask the permission of the management before leaving or posting copies. We will give out additional flyers at the meeting, as well as oaktag posters. Finally, as many of you already know, it takes a large team effort to make the sale the success it has traditionally been, and I intend to call on previous helpers for their assistance. I expect to set up at the Holiday Inn on Friday evening and will contact previous set-up helpers. I could also use several more runners for the day of the sale and would like to break in another person or two as tally keepers. So, if you have not been involved before and would like to volunteer, please give me a call at 908 236-2072 in the evening.

Joe Hauck

In addition, fine furniture must have:

- solid brass reproduction hardware, and
- a proper finish; i.e., shellac, varnish, hand-rubbed "oil," or French polish (whichever is called for by the period or the use of the furniture). The finish must be complete, which means that after the required number of finish coats are dry, they are sanded with micro sandpaper (600-1000 grit) and buffed with rotten-stone and pumice, or waxed to a silky smoothness.



Tabletop button (cross-section). Note the clearances that allow for expansion and contraction.

The biggest challenge for a business man is to educate the public, so they might understand the difference between reproduction and re-creation. When you read a label in a furniture store that proudly states: "Solid Hardwood in a Warm CHERRY Finish," it can be misleading. If you read it carefully, it becomes obvious that the wood is probably not cherry. It could be almost any wood, but most of the time it is poplar, birch, or maple.

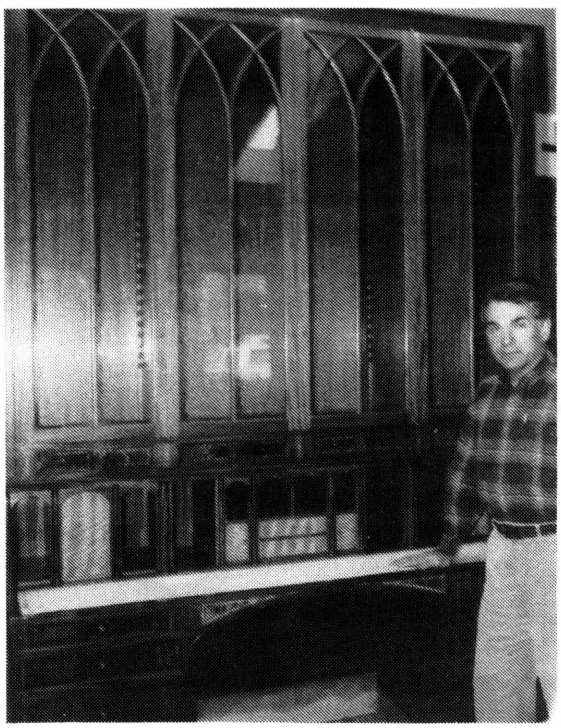
Even though modern furniture might have all the proper joinery, it is not considered in the same light as true reproductions because of some of the differences below:

- High gloss polyester finishes are acceptable for modern styles but never for traditional.
- The use of metal beams for framing and bases is found only in modern construction.
- Materials such as fiberboard, particleboard, and laminates are used only in modern pieces. An example of this would be the material for drawer bottoms: plywood is acceptable for modern and re-creation, while only solid bottoms are allowed in a true reproduction.
- Beware of low-end imitations, which sometimes use photographed wood grain on MDF (medium density fiberboard). Even the edges look like wood, because they are edge-banded with grained strips. It can fool an expert if he doesn't look closely, as the "boards" actually have pores processed into them!

In my shop we make very high-end furniture with carvings and inlays. We use selected hardwoods such as walnut, cherry, mahogany, curly maple, birdseye maple, and various exotic woods for inlays (These hardwoods are still available in wide boards if you specify this requirement to the lumber company).

Our finish for the fine pieces is a "hand rubbed oil finish." We use this term because that's how the manufacturers sell the finishes, and that's how the public perceives them. However, it is a misnomer. Polymerized oils are actually "long" (i.e., low viscosity) oil varnishes. We use these oils, such as processed tung oil, by applying as many as 12 coats, and rubbing between coats with very fine sandpaper, using #0000 steelwool on the final coats. We complete the job, after at least a wait of one week, by waxing with a paste wax.

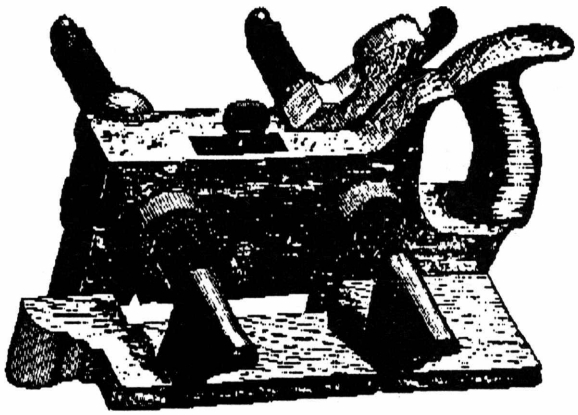
There are still some people who understand and want fine furniture in their homes and offices. These are the people that we are proud to have as our customers.



Frank, with one of his current in-process pieces, a magnificent slant-top library desk in African crotch mahogany and satinwood.

Cleaning and Restoration of Planes

by John Whelan



Part I

This first part discusses reasons for cleaning and restoring planes and offers suggestions for handling the plane iron.

The surviving old wooden planes usually come to light initially in attics, barns, garages or other places where they were "put away" many years ago. Most have endured a century or more of weather extremes, dust, dampness, and assorted sources of grime unrelated to their original use. Some have been used (and abused) by long-gone heirs of the original owners. You have acquired it, from a garage sale, flea market, or a dealer who describes it as in "as found" condition. What are you to do about cleaning it? Perhaps no subject has given rise to more argument and discussion among tool collectors than this. Let's examine some contrasting views.

One extreme believes that the grime holds historical information which must be preserved, and that any cleaning beyond gently blowing the dust off risks loss of a part of the history. The shavings in the throat tell what wood was last worked by the plane, and the stains of the workman's hands shows how he held it in use. At the other extreme, some collectors want their tool to look as it did when it was first purchased, and sand, scrape and polish to try to make it so.

The intent here is not to preach either position. It is your plane, and your right to decide what you wish to do with it. Both extremes have pitfalls which should be pointed out, and there are many options which you may wish to consider in making this decision. Most collectors take a position between these extremes, and choose different cleaning procedures after weighing historical, personal preference, and future market value factors.

First on the dangers of over-cleaning. If this is the appearance you prefer, a good plan is to acquire a plane of little historical or monetary value and go all out to make it "as purchased". Strip it, sand it, use a wire wheel and an acid rust remover on the blade, take it apart, replace corroded screws with modern ones, varnish it. You will learn the limitations of these procedures. Show the result to fellow collectors, and most will not want it even as a gift.

At the other extreme, leaving it alone does nothing to stop the deterioration that has been taking place. Rust on the cutter begets more rust. Moisture trapped under it sets up electrochemical processes that attack the iron, and lead to pitting, or deepen pits that are already present. If fungal or insect damage has taken place measures should be taken to prevent continuation (more on this later). Weathered wood, or wood riddled with insect borings, is more susceptible to further deterioration by seasonal humidity change.

Planes of high historical interest have by this time acquired a monetary value high enough to give pause before restoration attempts. Most have received attention from previous owners and require little further cleaning. Should you be fortunate enough to unearth a previously undiscovered rarity it is simple financial prudence to take advice before embarking on irreversible procedures. The owner of such a treasure will have no difficulty in obtaining this from fellow collectors.

Should you decide that your plane is in need of cleaning, some of the procedures available are outlined here. Removal of the wedge and iron is the first step. They may resist the usual methods of removal. Clamping the wedge in a

vise between scraps of soft wood or rubber and applying force or shock to the stock, along the line of the wedge, usually succeeds.

The iron merits examination. Iron has two forms of rust, the red iron oxide and the magnetic brown or gray oxide. The latter adheres well, resists abrasion and helps to protect the metal from further rusting. It develops slowly over time on dry, oiled metal, and is the patina most collectors value. Red rust forms when the metal is subjected to dampness. It does not protect, but promotes further rusting.

The iron should have loose red rust removed by flaking with a dull knife. Some prefer to do this dry, others think that soaking in a penetrating oil helps. If you wish to preserve the brown patina, much care is required, as a slip exposes bright metal. An alternate procedure is a motorized wire wheel, but again this can quickly destroy the patina unless operated properly. A new wheel will do this. The wheel should be a well-used one, with wire tips abrading rather than cutting. If you remove the wheel from the drive and reverse its direction of rotation, it will cut harshly. The side of the wheel is more gentle than the rim. Even a used wheel will quickly round sharp corners, so that care should be taken to apply it only to flats. Some prefer fine wet-dry abrasive paper, but this is quite risky unless you wish to see bright metal.

If the metal is pitted, complete removal of the red oxide manually is quite difficult. The rust forming inside the pit is larger in volume than the iron from which it forms. In many cases the overlying metal is deformed and thrust upward, above the original surface. Trying to remove the elevation exposes bright metal.

Acid cleaning methods do not discriminate well between the two iron oxides. Jellied muriatic acid is a widely sold rust remover, but leaves bright metal and should be avoided unless this is what you want. Milder acids have been recommended, such as vinegar and salt, or lemon juice. Both have been reported to give satisfaction if used with care. Their merit is that they operate slowly and, if watched, can be stopped before going too far.

The safest procedure is an electrochemical one, used by museums on valuable artifacts. The iron is immersed in an alkaline conducting solution (washing soda dissolved in water works well). Direct electric current, from a battery charger or other source, is passed from a stainless steel anode through the bath and out through the iron as cathode. This reduces the red rust to a black, powder easily removed with brass wool, and does not change the brown oxide. Details were given in previous *TOOLSHED* articles. Time spent in setting up such an apparatus is saved many times over, if you treat many tools.

However cleaned, the iron should be well rinsed and thoroughly freed of water by mild heat, to ensure that none remains in pits or crevices. (This should not be overdone, as even an electric hot plate can damage the temper of the steel.) A good gun oil should be applied and rubbed to ensure complete coverage, and the iron then wiped dry; or the iron may be immersed in melted wax to acquire a protective coating.

Many collectors feel that they have not finished until the iron is sharpened and returned to full working order. The proper sharpening of molding plane irons) is not as simple as it appears. Unless you are experienced in the use of the plane, and can judge the performance of the sharpened iron, you may come to regret a routine sharpening of your irons (especially if you use a grinding wheel).

Brass parts may have the green verdigris removed by scrubbing followed by the finest steel wool, with care at the sharp edges. If you prefer bright brass, remember that repeated polishing dulls sharp edges. Polish, then protect the surface with clear lacquer (clear nail polish is convenient). Proprietary brass polish in the form of treated fibrous pads (such as *Nevr-Dull*) works well. Bronze parts will have a brown patina which will stand up to fine steel wool gently used, and will acquire an attractive sheen that lasts better than a bright polish.

continued in the next TOOLSHED

Part II will offer suggestions for working with the wood parts of the plane, including knobs, wedges, and finishes.

Book Review by Robert Fridlington

SEARCH FOR EARLY NEW JERSEY TOOLMAKERS
by Alexander Farnham

With photographs by Donald D. Kahn. Stockton, N.J.: Kingwood Studio Publications, 1992. Pp. 148. Hardbound. Illustrations and index. Price: $25.00. Order from Alexander Farnham, 78 Tumble Falls Road, Stockton, NJ 08559

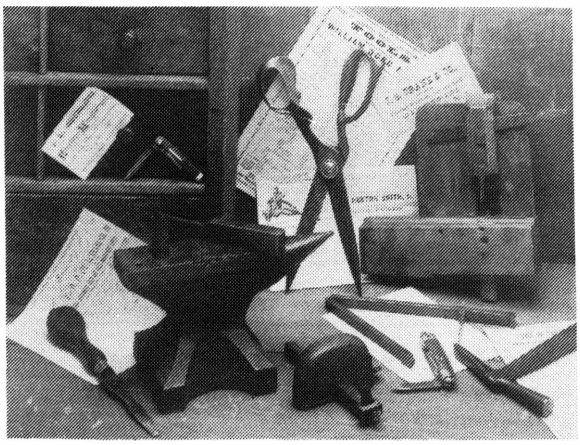
It has been more than eight years since Alexander Farnham published his landmark work, EARLY TOOLS OF NEW JERSEY AND THE MEN WHO MADE THEM. Even before the applause for that fine book died down, Farnham and his legion of volunteer "research assistants" were scouring flea markets, tool sales, and auctions in search of New Jersey signatures. As the better-known makers were already recorded, the hunt had become more difficult. But before long one heard talk of a Farnham supplement, some type of list of newly discovered makers.

The "supplement" has now appeared, although not as a list. Appropriately titled SEARCH FOR EARLY NEW JERSEY TOOLMAKERS, it is a lavishly illustrated, beautifully produced, full-blown book that continues the authoritative and ambitious chronicle begun in the 1984 work. And like the earlier work, it is marked by solid research, thoughtful presentation, and enthusiastic tone.

Although a supplement, the volume stands on its own as a tool book of great merit. Donald Kahn's superb photographs make it a visual feast as well. There are pages and pages of tools, old advertisements, price lists, bill heads, and assorted ephemera. With the mass of illustrations, the large 8 ½" x 11" page size, and attractive format, this makes a handsome companion piece for the earlier volume.

Organized around the different types of toolmaking, the work contains chapters dealing with plane manufacturers, producers of woodworking tools, rule manufacturers, edge toolmakers, cutlers (including manufacturers of harnessmaker's tools, knives, and shears and scissors), makers of blacksmith and farrier tools (including file and rasp manufacturers and makers of anvils), wrenchmakers, makers of agricultural implements and tools, and makers of miscellaneous tools.

Throughout the book Farnham provides a wealth of information about individual toolmakers who were slighted or ignored in the earlier volume (who would have thought back in 1984 that there were unknown New Jersey planemakers still waiting to be discovered?). In addition, whole areas of toolmaking are explored for the first time. As mentioned above, there is a section on knife manufacturers. And wrenchmakers finally receive their due in a chapter that contains an especially interesting discussion of engineer and manufacturer William Baxter, who invented Baxter's "Diagonal" Wrench and Baxter's Adjustable "S" Wrench.



Farnham also expands on our knowledge of well-known makers, whether it is the story of what happened to Newark's Heller Brothers (they moved to Ohio) or whether Mockridge & Francis made anything other than the usual run of molding planes. Some of the items that bear the MOCKRIDGE & FRANCIS signature are, among other things, an adjustable witchet, an ingenious sash coping device, a peculiar wooden C clamp, and double routers.

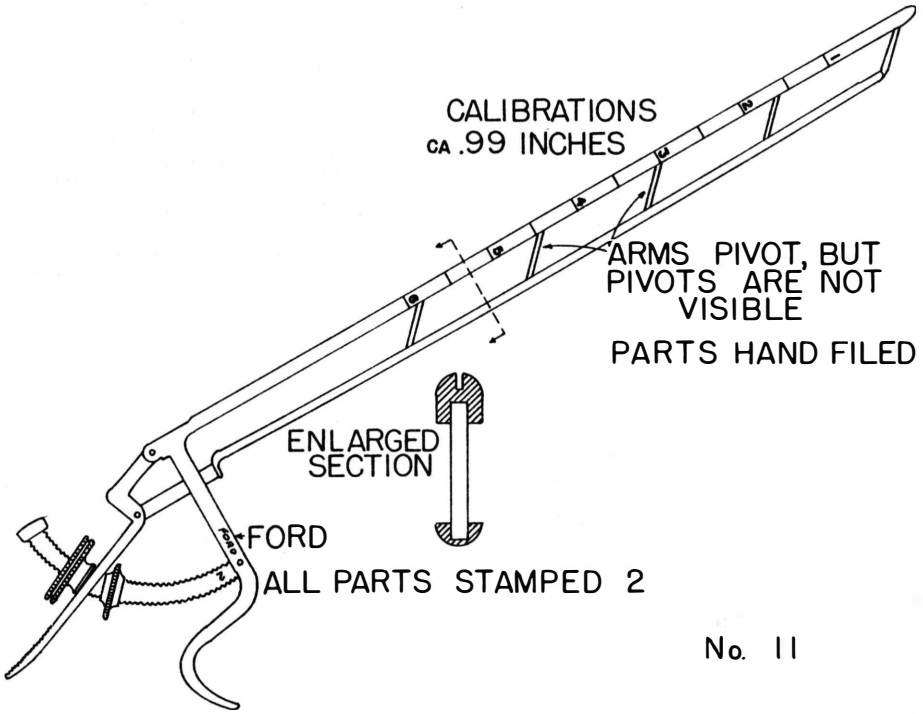
The reader is never allowed to forget just how imperfectly known and inadequately documented the history of toolmaking is. Farnham labels one group "mysterious partnerships and elusive toolmakers" -- firms and makers whose names (or tools) are known but about whom little or no information is available. Who, for example, were English & Goodsell? Or how about Bontgen/Baldwin? And how does one explain the fact that three of the five New Jersey toolmakers who displayed their products at the Franklin Institute Exhibition in 1856 left no trace of their existence in the cities where they presumably lived and worked? These are unsolved mysteries.

Even more intriguing is the mystery of the unknown "Francis" of Haslam & Francis, Lyon & Francis, and Francis & Ward. Was it one man? Two? Three? Farnham doesn't know for sure, but he suspects that it was one man, Elias Francis, who also teamed up with Abraham Mockridge in Mockridge & Francis. Farnham hypothesizes that Francis was an entrepreneur who bankrolled the various toolmaking enterprises, while his partners provided the toolmaking knowhow.

At the November, 1992, meeting of CRAFTS Alex Farnham stated emphatically that he was finished forever with writing books about tools. Those of us who owe him so much, however, can see a faint glimmer of hope -- he includes a plea in the book (under the heading "The Search Continues") asking readers to let him know if they find any inaccuracies or if they can provide answers to any of the questions he has raised. Let's hope we can look forward to a supplement to the supplement.

Alexander Farnham is to be congratulated. He staked out his own playing field and he has dominated the game. Two times at bat. Two home runs. It's hard to improve on a record like that.

WILLY TELLUS WHATSIT

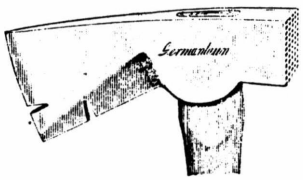


BARREL HATCHETS

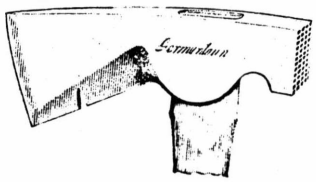
PECK'S PATTERN

Warranted Solid Forged Tool Steel

FULL POLISHED



No. 287 and 288



No. 289

No. 287 . . . . . Peck's Pattern, Double Slot . . . . 2″ cut . . . $11.50 per dozen
288 . . . . . Peck's Pattern, Double Slot . . . 2¼″ cut . . . . 12.00 "
289 . . . . . Boston Pattern, Single Slot . . . . 2¼″ cut . . . . 13.50 "

Half Dozen in a Box **Six Dozen in a Case**

Letter Received

Enclosed is a photo-copy of a portion of a page from a 1909 Germantown (Philadelphia) Tool Works Catalogue which shows a Peck's pattern barrel hatchet with a double slot and a Boston pattern barrel hatchet with a single slot. During the Whatsit session at the November 8th meeting of CRAFTS the purpose of this type of hatchet elicited several guesses. As its name would indicate this hatchet was used to seal and or open barrels. The Peck's pattern hatchet shown at the CRAFTS meeting would have cost a hardware dealer $1 if purchased by the dozen in 1909. At a flea market in 1973 I paid $1.50 for an early one with a 2" cut.

Alex Farnham

CRAFTS Calendar of Events

February 7 - meeting at High Bridge

February 28 - *TOOLSHED* deadline

April 3 - Auction, Clinton Holiday Inn

April 4 - meeting at High Bridge