The TOOL SHED

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SPOKESHAVE: A SMOOTH FACING TOOL

by Frederick A. Shippey

More than a half century has gone by since I first saw a spokeshave. This memorable event happened unexpectedly. One day during my apprenticeship, the top cabinetmaker in our shop asked me to examine an odd-shaped gadget laying on his workbench. Unfortunately, I was not able to identify the two-handed device because I lacked knowledge of its proper name and its primary function. Hence, Gus had to rescue me from personal embarassment. "It's a spokeshave," he said simply. "It puts a smooth cut on curved edges and rounds off irregular surfaces. Mechanics classify it as a smooth facing tool." Then he showed me how a spokeshave works. This experience fueled my lifelong interest in tools.

Eventually, I learned that the spokeshave belongs to a huge family of woodworking tools which are utilized for what Mercer (Ancient Carpenters' Tools) describes as a surfacing, hewing and paring function. This amazing category encompasses the broad axe, the adze, the drawknife, the scorper, the witchet, the plane, the howel, the croze, the scraper, and kindred tools. Years before Mercer's comment reached print, Graham and Emery (Audel Carpenters and Builders Guide, 4 vols.) already had urged the importance of distinguishing between "rough facing tools" and "smooth facing tools."

Today this primary distinction is accepted widely among cabinetmakers, coopers, furniture makers, patternmakers, and wheelwrights. Indeed, Aldren A. Watson describes the latter (smooth) process as "shaping, smoothing and finishing," which properly follows the rough work done by drawknife, chisel, and compass saw. Superior skills are required in smooth work. Here the word "smooth" means that the artifact has reached its final stage. Among those tools essential for fine work is the spokeshave.

[Continued on page 4]

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CHARLES AND WALTER JACOB TO SPEAK AT NOVEMBER 24 MEETING

CRAFTS of New Jersey will hold its second meeting of the 1985-1986 year on November 24 at Clinton Historical Museum Village in Clinton.

Tailgate sales will get underway at 1:00 p.m., and the formal program will begin at 2:00.

The afternoon's program should be of great interest. It will feature Charles and Walter Jacob, the foremost authorities on and collectors of Stanley tools (See Speakers' Profile on page 2). The two will present a lecture-demonstration "Using the Stanley #55 Plane." Those who attended the Jacobs' last presentation to CRAFTS know that we are in for a treat.

The latter part of the program will be devoted to the "Whatsit?" session.

To reach Clinton Historical Museum Village, take I-78 to Clinton. Turn off at Exit 15, marked CLINTON-PITTSTOWN. Do not turn off at Clinton-Washington exit. Turn right onto route 173 East (West Main Street). Proceed about a quarter of a mile and turn at first left (Clinton House on corner). The Historical Museum Village lies directly ahead.

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CRAFTS of New Jersey

Collectors of Rare and Familiar Tools Society of New Jersey

President ——— STEPHEN ZLUKY, Whitehouse

Vice President ——— HARRY J. O'NEILL, Annandale

Secretary ——— BARBARA FARNHAM, Stockton

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Membership in CRAFTS is open to anyone interested in early trades and industries, and the identification, study and preservation of tools and implements used and made in New Jersey. Annual dues are seven dollars for the membership year of July 1 to June 30. Membership fees may be sent to the Treasurer: John M. Whelan, 38 Colony Court, Murray Hill, NJ 07974.

The Tool Shed

Published five times per year for members of CRAFTS of New Jersey. Editor: Robert Fridlington, 8 Keith Jeffries Ave., Cranford, NJ 07016. Contributions, especially about New Jersey tools and trades, are welcomed.

CRAFTS AT HARVEST JUBILEE
by Les Beyer

On October 6 the Clinton Historical Museum Village held its annual Harvest Jubilee. Once again CRAFTS members were invited to demonstrate their tools and trades, vend their crafts, and generally entertain the visitors.

Ken Vliet displayed some finely crafted pieces while demonstrating how to cut exquisite dovetails by hand.

Frank Kingsbury never had fewer than half-a-dozen people thoroughly absorbed, listening and asking questions at the table where he displayed a fascinating assortment of wrenches.

I am sure that if Harry O'Neill's pedal jig saw had not been firmly anchored, he would have been in Trenton by the end of the day. He still found time to demonstrate bowl turning on his "newest" lathe (circa 1890). Thanks, Harry, for the use of the machines.

Yours truly intended to turn a few rolling pins on a pre-Civil War lathe. I actually finished one.

Thanks to you all. You made the day a great one. This affair is held the first weekend in October every year. We would like very much to share the fun, and a little work, with more CRAFTS members. This includes the ladies, too, whether you are a spinner, weaver, knitter, potter, or axe grinder.

There is no fee for CRAFTS members to participate. And it is a great chance for us to demonstrate what we do, how we do it, and what we do it with.

You may sell the things you make, but the point really is to have fun, talk with people, and maybe learn something. I always do.

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SPEAKERS' PROFILE: CHARLES AND WALTER JACOB

No, you won't be seeing double at the meeting on November 24th. You will be seeing Charles and Walter Jacob, authorities on Stanley tools. The title of there presentation will be "Using the Stanley #55 Plane."

Most of our members already know the Jacobs from their attendance at CRAFTS meetings. As boys in Pennsylvania, they set out to acquire some

[Continued on page 8]

THIS IS A RARE SET OF CHELOR MATCH PLANES. ONE IS GENUINE. THE OTHER IS A GENUINE FAKE. I DON'T KNOW WHICH IS WHICH!

HARRY J. O'NEILL RECEIVES CRAFTS PRESIDENT'S AWARD

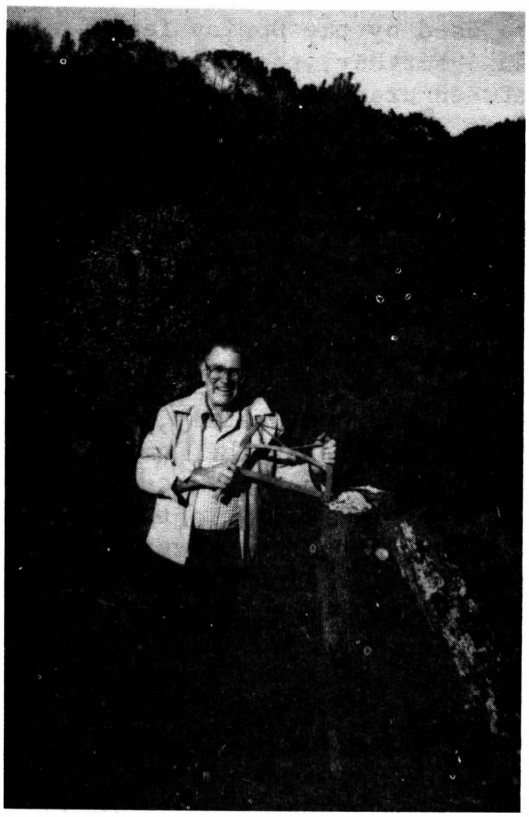
Harry J. O'Neill of Annandale has been named the recipient of CRAFTS President's Award for 1985. The award, which is given annually in recognition of outstanding service to the Society, was presented at the September meeting. As a token of its esteem, the Society presented O'Neill with a small saw to add to his tool collection.

One of the Founding Fathers of CRAFTS of New Jersey, O'Neill has served on the organization's Board of Directors since its beginning, and he has served as Vice President since shortly after the Society was formed. In addition, he has held numerous other offices and positions, officially and unofficially, including "Whatsit?" Chairman, Auction Manager, fall-picnic organizer, and chief sign painter. He has contributed articles to "The Tool Shed," and his cartoons have been a regular of this publication.

In announcing the award, CRAFTS President Steve Zluky praised O'Neill's unstinting work in behalf of the Society. "Whatever activity we are engaged in," said Zluky, "we know that Harry will be one of the first to arrive and the last to leave—no one has worked harder to make this organization a success." And Zluky added: "Equally important, Harry has been a great and good friend to all of our members."

A native of the Garden State, Harry was born in Bayonne, and he followed in his father's footsteps to become a pattern maker. Also an entrepreneur, he owned his own pattern-making business in Jersey City until he "retired" to the country a few years ago. Retirement didn't agree with him (there were not enough tool auctions to fill up his time), so after a couple of years he returned to the labor force.

Harry began collecting tools about twenty years ago, and about nineteen years ago he began planning to sort and catalog them. He continues to collect and to plan. When asked about a particular type of tool, his response is always the same: "I know I have one, but it will take me some time find it." Give him the time—perhaps a day, perhaps a week—and he can produce almost anything, from a great-wheel lathe to a miniature plane (though he can usually find the big items more quickly than the small).



Harry O'Neill, at Work with a Child's Buck Saw.

He still attends most of the auctions, and has time enough to be active in a number of organizations. He is a member of EAIA, Mid-West, and SWEAT, as well as CRAFTS. He is "Whatsit" Chairman of EAIA and "Whatsit" Editor of the EAIA "Chronicle."

The good woman behind this good man is his lovely wife Virginia, who attends to all of the details that Harry misses. Despite her preference for dogs and horses over old tools, Virginia is also a loyal member of CRAFTS.

Congratulations to both O'Neills.

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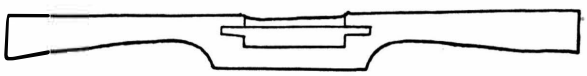
[Spokeshave, continued from page 1]

Hummel (With Hammer in Hand) places the spokeshave on a linear continuum that embraces both drawknife and smooth plane. Some features of these tools influence the design of the spokeshave utilized within particular trades. Moreover, he provides a temporal orientation, 1770-1850, a span of eighty years. Hummel's book contains an illustration of three spokeshaves with traditional wood frames that were used by the Dominy family of craftsmen. Further, the intervening pages between drawknife and plane present a list of thirty-six templates (furniture patterns) which await further use.

Within the lifetime of the Dominys customers could order a candlestand, tea table, chair, or carriage wheel. The three-dozen curved work patterns required a spokeshave to "clean and true up" newly cut out parts of a wooden artifact. Fortunately, Hummel reminds the reader that the Dominys were experienced carpenters, coopers, cabinetmakers, and wheelwrights—four trades truly relevant to practical life in the eighteenth and nineteenth centuries. A variety of spokeshaves were utilized within these several manual occupations. In summary, Hummel comments: "It can be assumed that the Dominys used these tools (spokeshaves) for smoothing the curves of cabriole legs, chair seats, and cresting rails and for other cabinetmaking tasks."

Wood Spokeshaves. According to historical records, the wood spokeshave has existed in the Western World for approximately four centuries. In its elementary form, this tool comprises two major parts: a wooden framework and a steel cutter. For several hundred years, the basic framework was made of wood—apple, beech, boxwood, cherry, ebony, Lancewood, oak, or rosewood. In length the tool varied from nine to twelve inches. This two-handed implement comes with either raised or straight handles. The former prevents injury to the artisan's hands.

Where the iron is bedded horizontally, one glimpses an original wood spokeshave type. The cutter, made of cast steel and ranging from 1½ to 5 inches long, usually had a square tang bent up at right angles at each end of the blade. Moreover, the tangs were tapered slightly to achieve a snug or tight push-fit into small, mortise-type holes cut vertically through the hardwood frame. A "knock-in tightness" incorporated sufficient friction to grasp and hold the cutter at any designated position. Gentle hammer taps, alternately struck on the upper ends of the tangs, and/or on the bottom of the cutter, enabled the artisan to adjust the blade to make a thin shaving.



Ordinary Wood Spokeshave:
Bottom View, Showing blade

Some spokeshaves bear the imprint of American manufacturers: e.g., ELIJAH HOLMES, WILLIAM JOHNSON, POWELL, PHILIP QUIGLEY, and GEORGE WHEATCROFT. Surprisingly, in an 1897 Strelinger catalog (Detroit), superior wood spokeshaves made in Sheffield, England, by JOHN WILSON, were imported. Still, many of the tools remain unmarked. Further, the eight wood spokeshaves illustrated in Mercer (five) and in Hummel (three) are unmarked probably because a local artisan made some of them. A complete roster of manufacturers is not available.

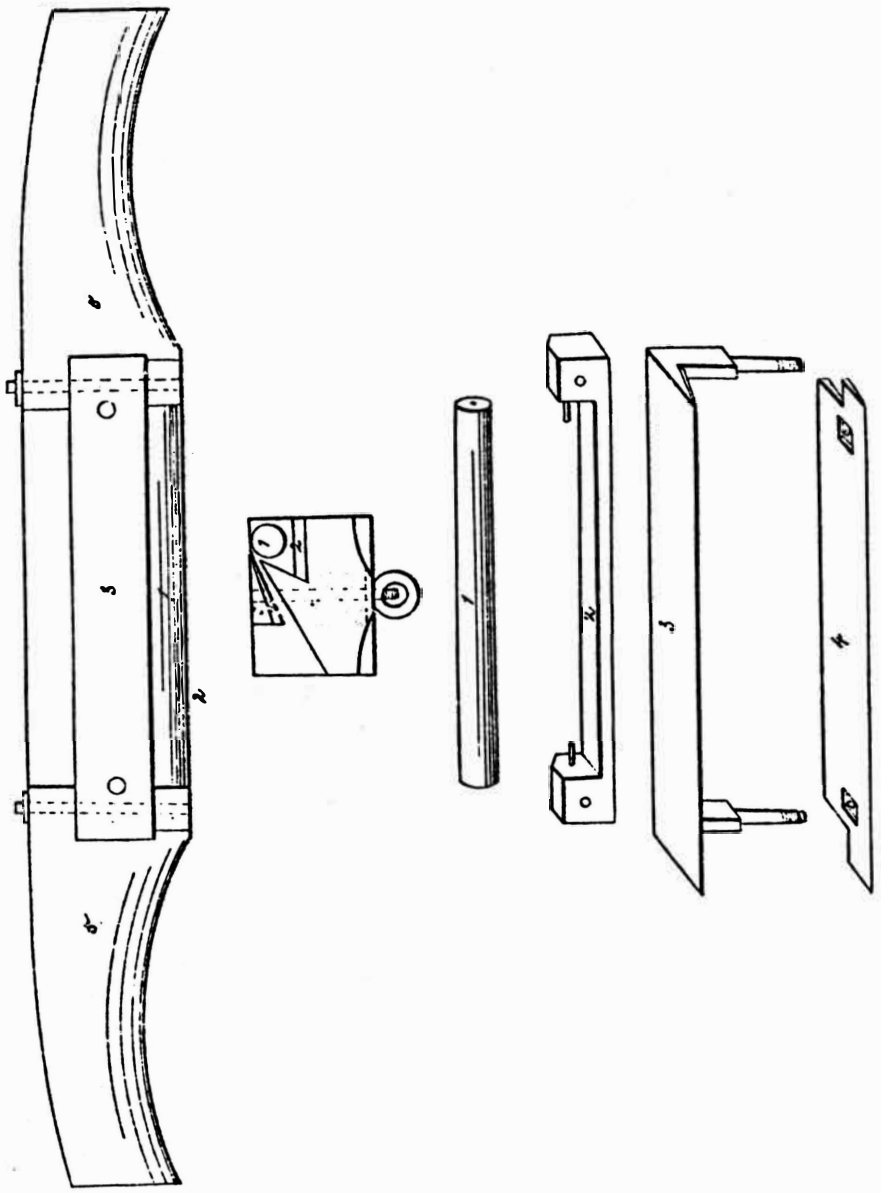
Chair Maker's Spokeshave:
Front View

As a tool, the spokeshave underwent technological improvements across the centuries. At least four changes merit mention here. First, an inlay of bone or brass was added to the sole in front of the cutter. Protection of this vulnerable wear point extended the useful life of the tool. Second, the extremely short sole of the spokeshave called attention to a little-noticed improvement: a flat and a round frontage. The former facilitates the cutting of outside curves; the latter yields smooth work on inside curves.

I.L. Beckwith,

Spoke Share.

No. 184, Patented Apr. 29, 1837.



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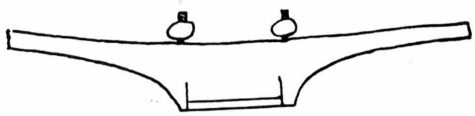
Third, a screw adjustment iron was perfected, providing greater precision and ease in setting the cutter for thin shavings. Fourth, the development of a metal spokeshave was achieved by utilizing malleable iron or brass to cast the basic frame. Fewer wood spokeshaves are around in the twentieth century due in part to the increased availability of the iron spokeshave.

Iron Spokeshave. Early forms of the metal spokeshave appeared in the United States during the early 1860's. The tool was shaped along the lines of its wooden prototype. Handles were made either straight or raised. However, its overall frame was cast of iron or occasionally of brass. The implements overall length extended from 9 to 19 inches; its cutter measured 1½ to 5 inches. American manufacturers involved were: BAILEY, GOODELL, HARGRAVE, MILLERS FALLS, and STANLEY, to mention a few.

Along with the iron spokeshave came a cast steel cutter which resembled a small plane iron! It yielded a definite advantage over its wooden counterpart—greater ease in sharpening the cutter (because of the latter's projecting tangs, the ironhad to be ground and whet from the inside). Moreover, the metal tool soon demonstrated adequate effectiveness in the smoothing of curved edges. This process utilized tools with a flat sole face for convex curved work, and tools with a round sole face for concave curved work. Hence, at least two different spokeshaves were required to smooth undulating edge shapes. It involved an encounter with the changing directions of the wood grain. Thus a working knowledge of wood was essential. The artisan had to know how a tool can finish the edge without damaging the stock.

The early type of iron spokeshave had a single thumbscrew to adjust for thinness of shaving. Later a more sophisticated metal model was manufactured. Mechanical improvements included a pair of knurled, threaded nuts mounted on vertical bolts which regulated the inward and outward movements of the cutting iron. This complex tool could be adjusted with greater ease and accuracy. It eliminated trial and error methods.

Tasks For the Spokeshave. At least ten uses can be noted: the smoothing of chair rockers; the chamfering of curved pieces; the truing up of elliptical arches; the finishing off of cornice scroll work; the shaping of spokes and felloe segments; the making of a broken pediment; the forming of chair designs—rolled arms, tusk-tenons and splats with contoured edges; the making of cabriole legs, dutch or onion feet, highboy skirts, and clockcase bonnets; the achieveing of smooth helical surfaces on a laminated airplane propeller; and the fabricating of an 'eyebrow" window in the roof of a Queen Anne house. To this list can be added the special tasks of the cooper, patternmaker and wainwright. The spokeshave is a versatile tool.



Screw-Iron Spokeshave

Hints for Use. For the reader who welcomes a few practical hints about using a spoke shave, the following decalogue is provided. (1) Hold the spokeshave with both hands. (2) To sharpen, hollow grind and then whet the iron on an oilstone. (3) Always adjust the iron for a fine cut, a thin shaving. (4) Always go with the grain of the wood. (5) Where ever possible, make the cut by pulling the tool toward you. (6) For a concave shape, use the round-face tool. (7) For a convex shape, use the flat-face tool. (8) Work up carefully to the original curved guidelines. (9) Let firm contact between workpiece and proper short sole serve to guide the iron's cutting action. (10) Remember, the spokeshave is a smooth facing tool.

The first spokeshave that I ever saw was made of boxwood and had raised handles. Its shape reminded me of a bird in graceful flight. Truly, it looked too fragile and too beautiful to be a woodworking tool. Today I am grateful that a Swedish cabinetmaker took time out to share with this country boy an appreciation of this elegant hand tool.

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L. Bailey,

Spoke Share.

No. 55,599. Patented June 19, 1866.

Fig 1.

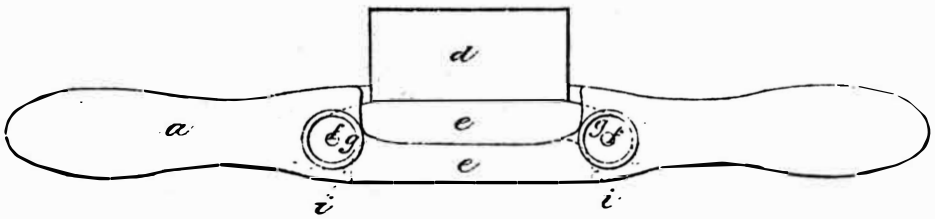


Fig 2

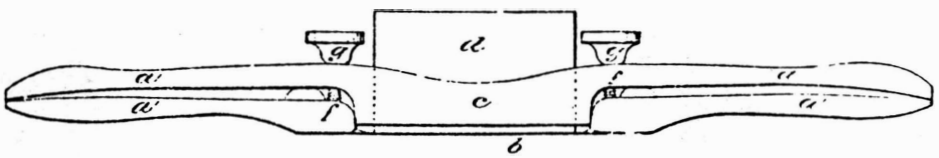
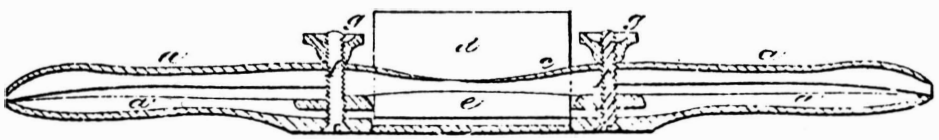


Fig 3

Fig 4



Witnesses.

Samuel W. Piper

Frederick Coutts

Inventor:

Leonard Bailey

by his attorneys

R. H. Eddy

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[Jacobs, continued from page 2]
good tools for woodworking, and they began picking up the planes that were shown in a 1958 Stanley catalog they had sent for. It was not long, however, before they discovered a 1926 Stanley catalog that showed even more planes that Stanley had made. The rest, as they say, is history.

When they were still young and energetic, the brothers were attending more than two-hundred auctions a year—and in their spare time they covered every flea market they could find.

When the rage for collecting Stanley tools developed, the Jacob brothers were the acknowledged authorities in the field, and they had already acquired the premier collection.

The collection covers all of the tools that Stanley has made: levels, squares, rules, tapes, mitre boxes, screwdrivers, spokeshaves, planes, and a host of other items, both related and unrelated.

Of course they continue to use Stanley tools. Developing skill with the Stanley #55 is not too difficult, Charles and Walter insist. "After all," they say, "once you have mastered the #45, you are half-way there."

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