

Wood News

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Serving Woodworkers

Number 12, Fall 1983

High Speed Steel Turning Tools

Highland Hardware is proud to make available Henry Taylor's new range of high speed steel woodturning tools. Using a special steel formulated for its toughness, ease of sharpening to a fine edge, and long edge retaining characteristics, these tools signify a state of the art improvement in performance of woodturning tools.

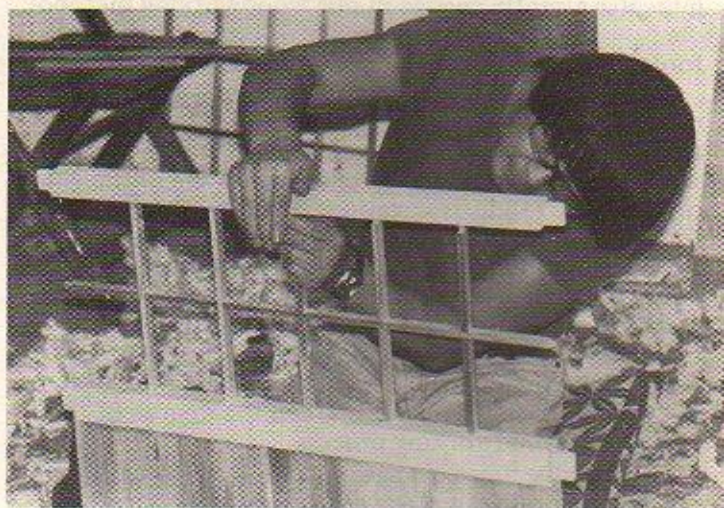
More information on woodturning tools can be found on pages 5-7.

Hand Tool Seminar October 14-16

Those seeking to learn more about the preparation and use of hand tools in their woodworking will enjoy the weekend seminar at Highland Hardware October 14-16. Bill Stankus, a designer, woodworker and teacher living in Bayside, Wisconsin will be with us to offer his excellent hand tool seminar, which incorporates lecture, demonstrations, and hands on opportunities for participants. Bill has taught woodworking at the university level as well as offering his popular weekend seminars and classes at tool stores on the west coast and in the midwest. His Friday evening lecture will be free and open to the public. The workshop Saturday and Sunday costs \$40, and class size will be limited. For an outline of the seminar and registration information, turn to page 4. Bill Stankus' article "A Perspective on Hand Tools" begins on p. 2.

Sharpening Seminar Saturday, November 12

Zach Etheridge will offer a one-day seminar on sharpening planes and chisels on Saturday, November 12 from 9 am-5 pm. Demonstrations will be followed by a hands on opportunity for participants to apply and develop successful sharpening techniques. Cost is \$20. Register now as class size is limited. Bring along chisels and plane irons you wish to sharpen. Sharpening stones will be provided.



Build a Shoji Nov. 21-23

Would you like to learn to build a shoji? This traditional Japanese style screen is finding increasing use in Western environments in the form of room dividers and as a part of furniture, as well as being used for interior partitions.

Toshio Odate will show how to do it, and assist each member of a small group assembling at Highland Hardware November 21-23 through the process of actually building a shoji. Cost of the seminar including one set of materials is \$75.00. For more information, turn to page 12.

Toshio's article on Japanese saws appears on page 11.

Inca Tools Day Saturday, October 8

If you are interested in power tools, join us for an active live demonstration of our Inca planers, jointers, bandsaws and tablesaw Saturday, October 8.

Brad Packard, a North Carolina woodworker who is a sales representative for Inca tools in the Southeast will show the finer features of Inca tools in action from 10 am to 12 noon. The demo will be repeated in the afternoon from 1 to 3 pm. Special offers on Inca tools will be available to those attending the demonstration. Our Hegner scroll saws and duplicator lathe will also be shown in action.

Please call us at 872-4466 to reserve a space for yourself at either the morning or afternoon session.



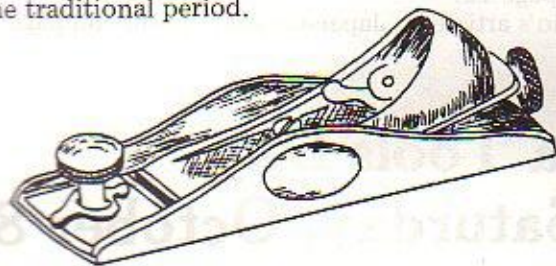
A Perspective on Hand Tools

By Bill Stankus

Over the last several years I have frequently heard the phrase, "woodworking is in a transitional period." This may not seem all that important, but to me it indicates a subtle change in our woodworking methodology — the rebirth of fine woodworking using hand tools.

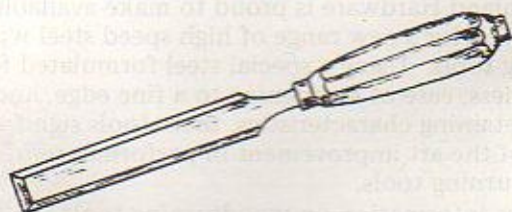
It is difficult at times to appreciate the significance of the last 125 years of history on the essence of woodworking. Two thousand years of traditional woodworking was radically changed by the onslaught of the Age of Industrialization. Hand working traditions and techniques, which had been passed from generation to generation, were almost extinguished by the then new processes of mass production and semi-skilled labor. Entire groups of skilled craftsmen, coopers and wheelwrights for example, were competing for work against the machine. In fact, the period of our Civil War marked the demise of the traditional woodworking process.

Thankfully times change, and we seem to be finding our woodworking heritage and we are now relearning old skills. Today's woodworker is drawing on sources which have been able to survive the mass production complex and is now rededicated to real use of those skills and tools. Isolated craftsmen, schools and guilds, and tool manufacturers in Japan, Germany, Scandinavia, England and the U.S. are now being "mined" for useful information on how to use hand tools. In this country, we are keenly observing craftsmen like Toshio Odate, Sam Maloof, Tage Frid, George Nakashima and James Krenov — men with gentle purpose who can translate their passion for woodworking into accessible information. Along with their unselfish gifts of themselves, their style, grace and sense of purpose, they have added a new view to woodworking — one which helps define that issue of the traditional period.



Today's woodworker, having had insights into the nature of the aforementioned men, should be able to harmonize the best of two worlds: hand tools and power tools. Power tools are not going to disappear just because we want to learn the old woodworking skills and they shouldn't be ignored because industry uses them for mass production. What we can do is use them for processes best suited for their function — crosscutting, ripping, removing waste wood or drilling dowel holes. And now a most significant concept — by learning to use hand tools, we slow down the woodworking procedure enough to fully develop our design sense, wood knowledge and tool skills. I like to refer to this as the "quality percent" of woodworking.

Consider this, there is no tool which can improve on the surface created by a tuned plane. With a hand plane you are dimensioning stock and finishing it at the same time. Additionally, you are discovering the particular properties of wood (grain, figure, tear out, etc.) and you are creating a surface which accepts glue and finishes much better than either sanded or machine prepared surfaces. But the learning process is not limited to the above; it also extends through such concepts as: fine tuning a tool, learning how to hold the plane, how to stand, how to hold and clamp wood being worked, how to make auxiliary jigs and aids, and how to select the proper tool for specific functions. Learning how to use an edge tool, in effect, opens up the entire spectrum of learning how to work wood.

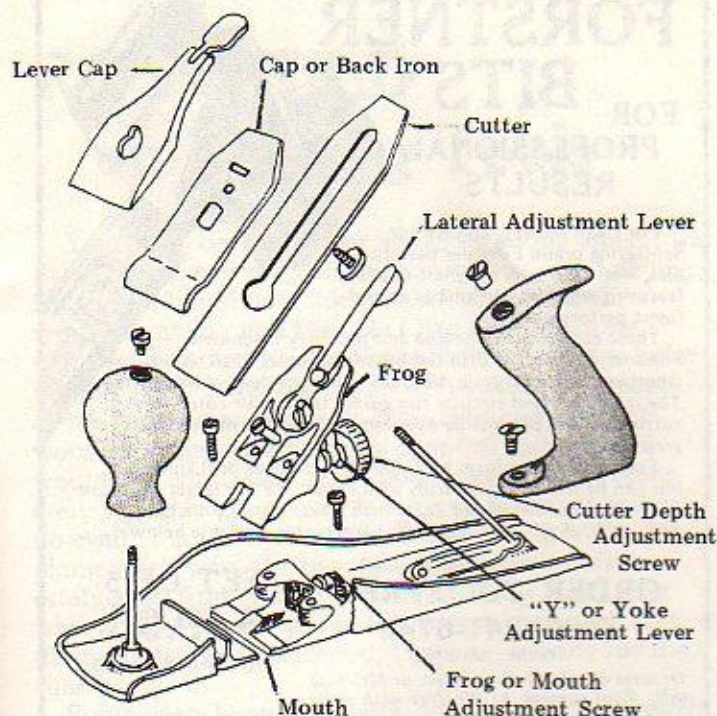


It is my supposition that today's woodworker will be using hand tools primarily for joinery or finishing work. Most of us are buying lumber already sawed, thicknessed, and in most cases, surface planed. Of course it is still a viable alternative to thickness a board with a scrub plane (approximately 10" in length with a tongue shaped blade), but I suggest that most plane work will be that of preparing edges and end grain and smoothing or polishing surfaces already thicknessed by an electric planer.

If the hand tool is indeed a finishing tool, what criteria does one use to choose a tool which works well? Ideally, finishing tools (or tools used in that final 10% of work) should be selected for quality and capability. Judging the quality of a tool can be difficult. Probably the safest method for measuring quality is to be as conservative as possible. My suggestion is to listen to the storekeeper who is a woodworker, read as many tool catalogs, magazines and books as feasible and notice what tools such craftsmen as Toshio Odate or James Krenov are using. Then select what seems to fit into your own particular situation.

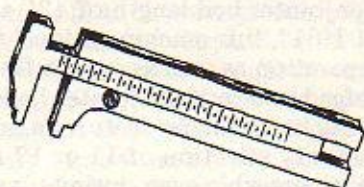
One of the reasons for the proliferation of power tools is that most are capable of multiple functions. Hand tools, however, are generally restricted to singular functions. For example, a plane which cuts dovetails cannot smooth an edge, whereas a table saw can accomplish both. All it takes to reinforce this point is to visit an historical woodworking shop (Colonial Williamsburg, for example) to see the quantity of planes old time woodworkers used. To understand capability does require a working knowledge of the variety of woodworking functions and then attempting to find the right tool for that work. Only through tool use and a variety of woodworking techniques does one begin to appreciate what the variety of specialized tool use means (shooting planes, rabbet planes, bull nose planes, etc.). Unfortunately, as tool interest has increased, the manufacturing of a diverse range of tools has decreased.





Parts of a Bench Plane

One hundred fifty years ago there was a mutual bond between the tool maker and user. Today we are fortunate that hand tools are manufactured at all. Except for one German tool maker and several Japanese companies, wooden body planes are not widely made. In fact, the introduction of Japanese wooden planes to our country has reinforced the notion of quality, sophistication and elegant usefulness in a plane. James Krenov has also shown that it is indeed possible (and perhaps better) for the woodworker to construct his own wooden planes.



One of the real glories of being a contemporary woodworker is that it is now possible to choose from a wide variety of tools, from many different countries, and to harmonize them into your own workshop environment. In my own work, for example, I use a German scrub plane, English number 8, 5, and 4 bench planes, Japanese smoothing, block and chamfer planes, and for variety, a metal low angle block plane, a 1935 Stanley number 606 Bedrock plane, a Ken Wisner edging plane and a wooden smoothing plane of my own construction. The diversity extends to other tool groups: Japanese and German chisels, Japanese and English hand saws. It is absolutely marvelous — I can select tools imported from many countries and also learn the subtlety of their use and cultural values. In effect, tools are a door into the mysteries and histories of Man — the Craftsman.

Some Suggestions for Fine Tuning Metal Hand Planes

1. I've never understood why it is necessary for manufacturers to have wooden handles so heavily varnished or lacquered. The handles look and feel like simulated wood-plastic. Begin the fine tuning by stripping the varnish or lacquer from the handle and knob and then oiling them with an oil such as linseed oil. By doing this first and then holding and working the plane in the other fine tuning steps you begin the wood mellowing process and also begin to sense the newfound liveliness of real wooden handles.

If the shape of the handle feels awkward to your hand, this is the time to reshape it for a better fit.

2. Work the bed and sides of the plane on aluminum oxide wet-dry sanding paper to achieve a smooth and lustrous finish. Secure the paper to a flat surface, such as a jointer bed, use a light penetrating lubricant such as WD-40, and work the plane on finer and finer grits (begin with 220 grit and finish polish with 600 grit). Do not remove the iron assembly but simply back it up well clear of the throat opening. Leaving the iron assembly in the plane will keep the plane in normal stress. Presently there is a fad to have plane bottoms machined "dead" flat. In my estimation this is an unnecessary expense and not that significant. If a plane is warped or has had damage of some sort the machining could be useful. If you work a plane as mentioned above, you can achieve a degree of flatness that will produce superb results. Additionally, the smoothness created by 400 and 600 grits will cause the plane to glide so beautifully over wood that practically no lubricant is necessary for the sole of the plane.

3. The yoke astride the depth adjustment screw should be made snug as possible for maximum adjustment sensitivity in raising or lowering the plane iron. Warning: do not flex this yoke in antique planes, for it can break.

4. Smooth out any mill marks on the front and heel of the plane body using a file. Also round over the lower edge of the plane sole on all sides.

5. Smooth out all edges, corners and projections on the upper areas of the plane so that your hands don't take abuse.

I have not attempted here to cover the subject of sharpening the plane iron or preparing and fitting the chipbreaker. Sources for this information include the article in *Fine Woodworking* No. 14, the chapter on sharpening in the book *Planecraft*, and the seminars offered October 14-16 and November 12 at Highland Hardware.



SEMINAR OUTLINE

Bill Stankus on Hand Tools October 14-16

Friday evening, October 14

7:30 pm to 9:30 pm

Admission is free

"Tools of the Modern Workshop"

Presentation of tools. Hand and power tools — the advantages and disadvantages of each, and ways to blend the two. Current tool trends. Guidelines for selecting and purchasing tools for specific requirements. A comparison and evaluation of American, European and Japanese made tools. A look at trends in tool manufacturing.

Saturday, October 15, 9 am to 5 pm
through

Sunday, October 16, 9 am to 4 pm

Cost is \$40.00 per person

"Getting Tools Ready to Use"

Preparation, maintenance and care of traditional hand tools and Japanese tools. How to sharpen tools. Lecture and demonstration will cover planes and chisels as well as cabinet scrapers, knives, auger bits, carving tools and turning tools. A hands on session will be included for participants to apply techniques shown. Bring along tools you wish to get specific advice on how to sharpen. Sharpening stones will be supplied.

"A Practical Demonstration of Tools"

Discussion of tools and how they relate to specific woodworking tasks. Demonstration of the tools, followed by hands on practice by participants. Items covered will include: preparing a board for joinery, dovetail joints, mortise and tenon joints, dowel joints, and bridle joints. Tools to bring for practice include jack plane or smooth plane, $\frac{1}{4}$ ", $\frac{1}{2}$ ", and $\frac{3}{4}$ " bevel edge chisels, fine tooth saw, 6" or 9" square, marking knife, 6" or 12" rule, mallet and scraper.

"Wood Finishing Techniques"

A discussion of finishing products and methods of applying them. On hand will be a collection of samples of walnut, cherry, oak, and maple, each finished using different methods, including lacquer, shellac, polyurethane, Deft Wood Armor, Deftco, natural tung oil, poly tung oil, Minwax Antique Oil, Watco Danish Oil, linseed oil plus beeswax, varnish oil, Renaissance Wax, and Seal-a-Cell 1-2-3.

Register now to attend the lecture Friday evening, or the entire weekend workshop. Complete the form on page 11 and return to Highland Hardware. Space is limited, so hurry.

FORSTNER BITS FOR PROFESSIONAL RESULTS

For clean joinery, choose our Schlagring brand Forstner pattern bits, West Germany's highest quality, featuring superior workmanship and finest performance.

These carefully engineered and precisely machined Forstner bits cleanly drill flat-bottomed holes in all woods, whether in difficult grain, delicate veneer, or densest heartwood. The inside beveled circular rim guides the bit for consistent cutting action, permitting overlapping holes for mortising or grooving.

Forstner bits perform best with drill press or drill guide, but can be used in hand drills with chuck $\frac{3}{8}$ " or larger. Bits are $\frac{3}{4}$ " long. Diameters are exact inch sizes. Set of 5 includes $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ " and 1". Larger sizes available below.

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Or send check, money order, or MC/Visa info. Tool catalog, \$1.00 (free with order).

SET OF 5

\$49.95

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OTHER SIZES:

1-1/4"	\$21.50
1-3/8"	24.50
1-1/2"	27.50
1-3/4"	27.50
2"	29.50

Set of 5 Large Bits

\$99.95 POSTPAID

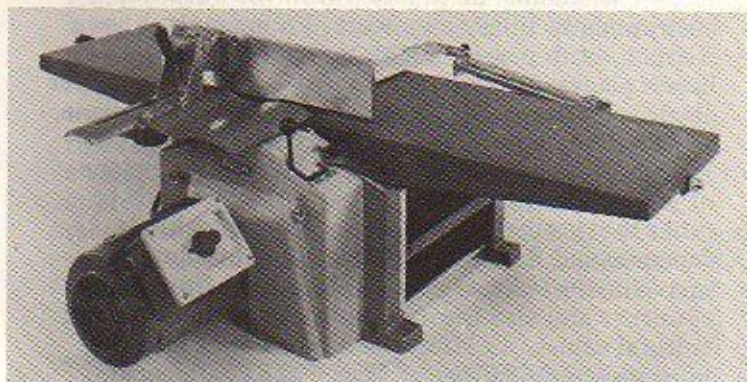
highland hardware

1034 N. Highland Ave., NE Dept WN12
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Inca Jointer-Planer Now Bigger and Better

We are pleased to announce the introduction of Inca's new model 550 thickness planer and jointer. With a new longer jointer bed length of 42" along with its width of 10 1/4", this machine is ideal for large rugged stock preparation as well as superb finish planing. Both infeed and outfeed jointer beds are adjustable. The thickness planer features a new drive system permitting easy selection of 11 or 17 feet per minute feed rate, changeable even during planing. A neutral position to stop feeding entirely is also included.

The new unit is due to be available in late October, and will sell for \$1495 including 1 1/2 hp motor.



ROY CHILD

on Turning Tools

Years ago, before I knew anything about tools, I was living in digs and decided to have a go at woodcarving. I bought a brand new shiny set of 18 tools from a reputable maker and because I had no grindstone I spent many hours honing the set to a razor edge before I could start. I was dismayed to find that with some of the tools whenever they came into contact with wood the edge crumpled like bacofol and the tool would not cut. Many more hours were spent desperately trying to get a durable edge on the tools but to no avail. I could not believe that the tools were to blame; they were the best available from a well-established firm. Surely I must be doing something wrong? The books on carving were no help and very disappointed and frustrated, I gave up carving for the time being.

Some years later, now back home, my father bought a box of old Addis carving tools from a local farm auction and I tried them out. They were magnificent. They took a fine edge which cut all day with only an occasional wipe on a strop to keep them razor sharp. Carving became a pleasure. As an experiment I tried "carving" the metal of my modern set of tools. The old tools could take steel peelings away from the soft metal of my modern chromium plated set which had caused so much frustration. The penny dropped. My sharpening technique was not at fault. The modern tools were soft. The old box of tools also contained some ancient turning tools stamped "Ward" and I tried the same experiment with my father's modern set of woodturning tools made up from various manufacturers. The results were the same. In most cases the modern tools were much softer steel than the old ones and the old tools were greatly superior in use.

Talking to other carving and turning enthusiasts who had been fortunate enough to acquire old tools, revealed that the problem was widespread. Any good old tools still in existence were valued beyond price by those who knew their craft. As the years passed and my knowledge and experience grew, my interest in steel for turning tools developed. I discovered that I could make my own tools by shaping them from carbon steel and hardening and tempering them using a blowtorch and a bucket of water. These homemade tools kept a better edge than the ones I could buy but I could not match the old tools. I acquired a modern machine shop and a forge and spent many hours experimenting. I found the modern bought tools could be greatly improved by re-hardening them and tempering them to light straw colour. This takes only a modest amount of practice and care and anyone can use this method to revive tools which refuse to keep an edge. Soft tools can be detected by attempting to scratch the tool with the corner of a good sharp screwdriver. If you can scratch the tool it is too soft for woodturning and needs re-hardening. To do this,

heat the last inch or so of the tool in the flame until it is red hot. Do not allow it to turn orange or yellow or it will be too hot and the steel will be damaged. Do not attempt the process in bright sunlight or you will not be able to judge the colour. When the tool is ready dunk it quickly in a bucket of warm water and stir vigorously with the tool vertical until it stops sizzling. While the tool is still warm, clean it with emery cloth until it is bright. Test it with an old file to see if it is hard. If you can file it it is not fully hard and the process must be repeated. Check for full hardness, particularly at the bottom of gouge flutes where the steel might not have quenched properly due to bubbles of steam sticking to the surface.

The tool should be tempered immediately before it has time to cool and possibly crack. To do this, heat very carefully and evenly in the flame. Take your time, give the tool a chance to heat to the same temperature throughout. Heat for a second or two in the flame and then expose for a second or two in the air watching all the time for the temper colours to appear. This happens surprisingly quickly so be ready to quench the tool again immediately as the correct colour appears. The steel will at first take a yellowish tinge then turn yellow-brown, brown, brownish purple, then blue as the steel becomes softer. Blue is much too soft. I quench when the tool turns yellow or deep straw colour. I like my turning tools harder than hand carving tools or carpentry chisels which should be deep brown.

Do not attempt this process with high speed steel or with tools you know to be good. The snag is that only an inch or so of the tool will be hard and when this is used up the hardening will have to be repeated. It is better to do only the final inch or so rather than risk a brittle or cracked position in the centre of the tool which may snap in use.

Nine years ago, by which time my father had established a business selling turning tools, we were asked to demonstrate woodturning at the D.I.Y. Exhibition at Olympia. The problem was that safety regulations prevented us from using a grindstone to sharpen tools in the stand. We needed a set of bowl turning tools which would stay sharp and usable all day until we could sharpen them in the evenings ready for the following day demos. Our best tools would only do one bowl before they were blunt. The answer was to make a set of turning tools from high speed steel.

I had known for a long time that High Speed steel would stay sharp much longer than even the best carbon steel tools, but I did not then know enough engineering to fathom how to shape this difficult material on a production basis and the manufacturers I contacted then did not want to know.

I managed to make a set of tipped H.S.S. scrapers myself and I laboriously ground two gouges out of solid hardened high speed steel for the exhibition. These tools were a tremendous success and as far as I know this was the first time H.S.S. tools were demonstrated in public.

Continued on next page

Roy Child on Turning Tools

continued

High speed steel is carbon steel with substantial additions of other expensive metals such as chromium, tungsten, molybdenum, cobalt and vanadium. Different recipes are made up according to the use demanded of the steel. I prefer molybdenum H.S.S. because it is tougher than the standard tungsten high speed steel so it makes a safer tool. More exotic and expensive grades of H.S.S. tend to be brittle and difficult to grind on a normal grindstone.

H.S.S. is not to be confused with carbide-tipped tools for metal turning. That material is really not a metal at all, being made up of tiny particles of carbide packed together and stuck with a cobalt metal binder. The resulting rather granular material is in general unsuitable for wood turning, because it will not take a thin edge and is very difficult to sharpen.

Dreams of putting full sets of H.S.S. tools on the market however were dashed because of the apparent inability of manufacturers to produce them then and the lack of knowledge and equipment required for us to make them.

My interest turned to the design of carbon steel turning tools, and in particular, deep fluted bowl turning gouges. Hand forged gouges arrived from our suppliers in all shapes and sizes. Some were good, but most were bad. Experiments soon proved that the detail design of the gouge flute shape was vitally important for controllability of the gouge, and I evolved my ideal shape for a gouge flute by machining different experimental shapes from annealed steel and then hardening them. Suppliers' gouges were also prone to fail the hardness test. One gouge, tested by a local research institute gave hardness readings alternating between very hard and very soft at 1"

intervals all along the length of the gouge. The manufacturing method by which the makers achieved this is still a mystery to me. Appeals to manufacturers for improvements were to no avail, so I had some gouges machined to my shape from tool steel locally and hardened by precise electronic induction methods. This was a huge success with our customers and I received glowing comments from all over the world. One customer rang me at midnight (here) from Florida to tell me how wonderful his new gouge was and could he have two more by airmail please?

Encouraged by this, I was getting around to having some made in H.S.S. when Henry Taylor approached me saying that they had heard about the gouge and could they make it in H.S.S. Thus the Superflute was born.

When I tried the carbon steel gouges from Henry Taylor's range I was astonished. They were every bit as hard and as good as my set of old tools which I treasured, and they were better than the tools I had carefully made at home. A visit to their works provided the reasons for this miracle. I imagined I was going to see a vast array of modern machinery, power hammers, electric furnaces and so forth. These they have, but the tools I was interested in were being made by hand. In one part of the works I was amazed to see tools being forged to shape between a shaped anvil and a shaped punch held by one man using what appeared to be a nest of twigs (actually willow twigs) while another man wielded a large hammer. I asked why they didn't use more modern technology. The answer was that they did for some products but for hand tools the old methods were essential for quality results. They relied on human judgement, skill, and long years of experience. Henry Taylor Tools Ltd. was established in 1834 with Henry Taylor personally producing each and every tool. He would surely approve of the present setup and the results achieved. Apparently correct forging can improve the steel. Forging mixes and consolidates the structure of the steel itself enabling it to give of its best. Once the steel is forged the hardening and tempering is done largely by hand and human judgement, but in this case aided by the most modern measuring instruments and controls to achieve the optimum results every time. I was very impressed.

Now after struggling for years to make tools and consistently failing to make them fast enough to meet the demand, though we never advertised them, I can leave the job of manufacturing to a group of people who know what they are about.

For some years I have manufactured in a small way a limited range of high speed tools, notably my design of a parting tool with a flute ground along its bottom edge, a small spindle gouge and miniature scrapers and chisels but it was a struggle to meet demand and we didn't dare advertise. Local engineers were not able or willing to do the necessary grinding, etc. I had to convert an ancient Colchester Triumph lathe into a robot grinding machine packed with makeshift electronics so it could produce tools while I was occupied elsewhere.

Now Henry Taylor has produced a whole new range of high speed steel turning tools backed by all their experience. I have not had a holiday for five years. Perhaps I can have one now!

JAPANESE WATERSTONES

America's best selling new sharpening stones. Rapid cutting action produces razor sharp edges in minutes by hand.

SET OF FOUR WATERSTONES \$39.50 POSTPAID

Set includes a 1200 grit medium stone for establishing a sharp bevel, a 6000 grit finish stone for honing and polishing the edge, and an 8000 grit Gold finishing stone for producing a final edge of unsurpassed quality. A 1000 grit waterstone slipstone is also included for use with gouges and carving tools. Medium stone is 2 1/2" x 8" x 1-3/8". Finish stones are 2 1/4" x 7 1/4" x 1/2". Slipstone is 4" x 2" x 1/2" thick tapering to 1/32".

GREEN COARSE STONE \$19.50 POSTPAID

This 200 grit silicone carbide waterstone pictured above features an extremely fast cutting action suitable for grinding out nicks in blades and reshaping bevels, yet is hard enough to resist rapid hollowing common to most manmade coarse stones. Complements the set of waterstones above. 3" x 8 1/4" x 2".

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Wood News 12 edited by Chris Bagby and Zach Etheridge.



FLUTED PARTING TOOL BY ROY CHILD
This tool has a flute ground along the bottom edge. Sharpening, which is done by grinding the top bevel only, leaves two sharp points which scribe the wood before it cuts, leaving an exceptionally clean finish. Cuts easily without binding. Must be used with the flute down on the rest.

HS.2 1/8" cut 3/4" x 1/8" section.



DEEP FLUTING GOUGES

Forged, deep fluted heavy gouges, ground straight across for roughing down square section timber to round between centres and also for turning gentle curves and hollows. Carefully used these tools will produce such a good finish that further work with a chisel is not necessary.

HS.3 3/4" HS.4 1 1/4"
Dimensions HS.3 - 16" HS.4 - 19"



TURNING GOUGES

Precision made shallow fluted pointed nose gouges for general purpose between centres work.

HS.5 1/4" HS.6 3/8" HS.7 1/2"
Dimensions HS.5 - 13" HS.6 - 13 1/2"
HS.7 - 16 3/4"



SKewed TURNING CHISELS

For cleaning up end grain, V-notches, squares or pummels in furniture work. Also for finishing cylindrical and conical surfaces when a square end chisel is not obtainable.

HS.8 1/2" skew end HS.9 1 1/4" skew end
Dimensions HS.8 - 16" HS.9 - 19"



1 1/4" SQUARE END CHISEL HS.10

The best tool for finishing cylindrical and conical surfaces.

Dimensions HS.10 - 19"



BEADING AND PARTING TOOLS

Square section chisels ground straight across. Useful for producing beads, notches and V-grooves between centres. Can be used instead of small skew chisel and also for recessing work.

HS.11 1/4" HS.12 3/8"
Dimensions HS.11 - 13" HS.12 - 16 1/4"



STANDARD PARTING TOOL

Takes only 1/8" cut to minimise wood wastage and the cutting forces on the tool.

HS.13 3/4" x 1/8" section
Dimensions HS.13 - 16 1/4"

INDIVIDUAL HSS TURNING TOOLS

No.	Description	Price
HS2	1/8" Fluted Parting Tool	27.50
HS3	3/4" Roughing Out Gouge	27.50
HS4	1 1/4" Roughing Out Gouge	44.95
HS5	1/4" Turning Gouge	9.95
HS6	3/8" Turning Gouge	12.95
HS7	1/2" Turning Gouge	19.95
HS8	1/2" Skew	14.95
HS9	1 1/4" Skew	27.50
HS10	1 1/4" Square	27.50
HS11	1/4" Beading & Parting Tool	10.95
HS12	3/8" Bead & Parting Tool	14.95
HS13	Standard Parting Tool	19.95
HS14	Straight Scraper	34.95
HS15	Full Round Scraper	34.95
HS16	Domed Scraper	34.95
HS17	Righthand Half Round	34.95
HS18	Lefthand Half Round	34.95
HS19	Righthand Skew	34.95
HS20	Lefthand Skew	34.95

When ordering individual tools HS2 — HS20, add \$2.50 shipping on orders up to \$30.00, \$3.30 on orders \$30.01 to \$60.00, \$4.20 on orders \$60.01 to \$90.00, and \$5.00 on orders over \$90.00.

HIGH SPEED STEEL



NEW TURNING TOOLS THAT STAY SHARP LONGER

High Speed Steel blades are easy to sharpen to a keen edge which lasts many times longer than edges of carbon steel, due to HSS's outstanding resistance to abrasion and frictional heat. DIAMIC HSS turning tools were developed by Henry Taylor in cooperation with Peter and Roy Child.

SPINDLE TURNING TOOLS

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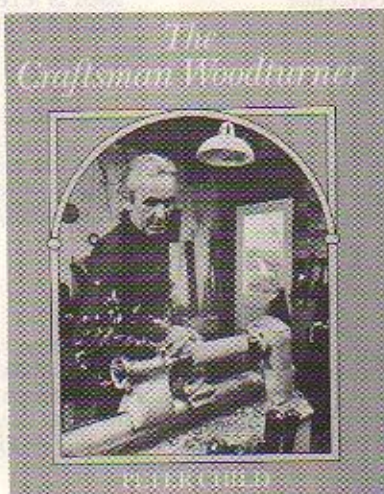
By Peter Child

This is one of the most effective teaching texts we've seen on any subject; it is thorough, comprehensive in scope, well illustrated, and mercifully devoid of

obscure, pedantic, or just plain boring writing. Peter Child has been doing and teaching woodturning for many years, and in this book his talent at both comes through clearly. Child has taught everyone from school children to retired professionals, and here successfully melds the instruction needed by novices with the more sophisticated information on tools and techniques sought by practicing turners. The first half of the book examines the principles of turning, with emphasis on the tools used for faceplate and spindle turning.

The second half of the book presents 14 practical examples of turned objects taken from start to finish, each thoroughly explained. Whether just starting, or seeking to improve your techniques, mark this book down as a best bet for good information and encouragement.

Available from Highland Hardware for \$29.50 plus \$2.50 shipping.



Vise Addiction

By Zach Etheridge

My first forays into the field of woodworking were staged mostly atop a convenient washing machine, with an occasional descent to the end of an old apple crate when the upper reaches of a workpiece needed to be brought down to human perspective. I owned nearly a half dozen tools, and had a good collection of concrete blocks which were used as clamps by being piled onto a glued-up object and balanced against the machine. It took a while, but eventually I discovered C-clamps, and later still pipe clamps. I accumulated several of each, and enthusiastically set about building jungle-gym rigs to hold things still while I worked on them and to squeeze them together afterward. Time passed. I built a workbench, an ungainly thing with a fabulously flexible base, and discovered new potential for piling up the clamps and for nailing blocks into the plywood top as well. I got a lot done with that system, and hardly even noticed how terrifically inefficient all the four-armed acrobatics with the multitude of clamps was getting to be.

I bought my first vise on the spur of the moment — it was a stout little piece of hardware and looked like the very thing a workbench ought to have. It was a proud moment when I finally got around to mounting it on the bench, and I must have wasted the whole afternoon happily twirling the handle, cranking the vise open to its full four or five inch reach and then cranking it all the way closed again. Thereafter it was frequently put to use, gripping a bolt that needed cutting off or holding a piece of wood that wouldn't stand up by itself. The only two drawbacks were its limited capacity and the less and less entertaining business of cranking away at that handle. It wasn't a bad vise, but it assumed a relatively low position in my hierarchy of tools. Time passed.

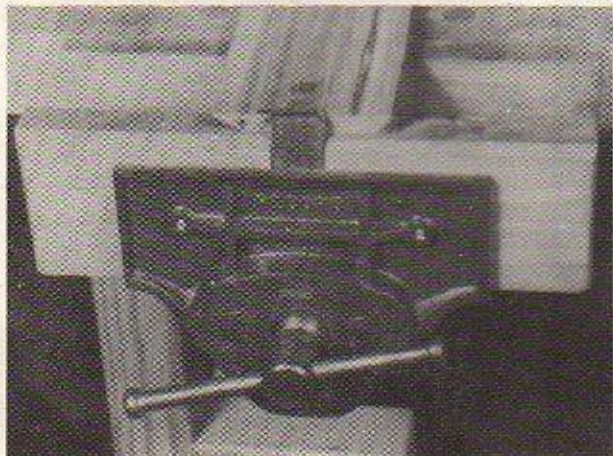
To my great good fortune a friend coerced me to take a woodworking class at my favorite local neighborhood hardware store, wherein I was exposed for the first time to the existence of fine hand tools and ways of working with them. At some point during the tool-buying spree that followed this revelation came the acquisition of a new vise, a Record 53E — a huge, heavy, Rolls Royce of a vise done in royal blue with gleaming guide rods, prehistorically heavy jaws, awesome fifteen-inch opening, and a quick-release

feature that allowed instant showing off to friends and visitors. Less than a year and a half later I whipped together a new workbench, attached the vise to it, and spent the afternoon sliding the floating jaw in and out with effortless ease, slamming the jaws together with a thunk worthy of Detroit's finest. When I felt sufficiently practiced on the vise to get back to earning a living, I began to see right away that this vise was capable of more than holding bolts or providing a place to hang ear protectors.

It took a while, but eventually I noticed that my work seemed to be going more smoothly, and that about half of my favorite clamping arrangements were no longer in use. I spent less and less time figuring out how to get things to hold still while I worked on them, and most of the jigs and fixtures I'd cobbled together over the years could at last be put to use without first having to be nailed to the bench.

I've grown quite fond of my hand tools, and now that I'm working as an amateur again I prefer their use almost exclusively. I'm always praising my planes, and can wax lyrically sentimental about fine chisels, scrapers, saws and measuring instruments. Nor have I forgotten my clamps and sanders and routers, and even the occasional concrete block. Somehow it seems to go almost unnoticed that the vise is almost always the first tool that gets put to work, holding a workpiece or a jig or a tool, never demanding sharpening, tuning, repair or replacement, or sweat-popping, curse-muttering four-handed gymnastics. Maybe the strongest evidence of the indispensable usefulness of a good vise is how quickly it comes to be taken for granted.

Earlier this year I built my third workbench, a small, relatively light model for use in my minute basement shop. Aesthetics and budget alike demanded a smaller vise than the 53E or 52½D, so I turned to the 52E, a vise not much larger in appearance than the first one I had bought years ago. The 52E's 8" opening capacity is larger, and the 12" wooden jaws much wider, than on that first vise, but what makes the most significant difference is the quick release, allowing the same efficient, easy use that the 53E has addicted me to. My little 52E is rapidly squeezing its way into my affections, and doubtless before long I won't be able to live without it. The fact that it will probably be around a lot longer than I will, its strength still sound when mine is gone, its quick release still working when mine is shot, is of little concern. This dependency on a mere tool is a relatively innocent vice, and I'm willing to live with it.



Left.

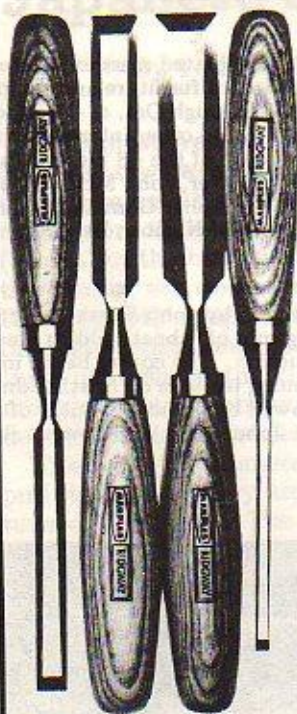
If desired, a wooden dog can easily be dropped into a shallow mortise routed in the floating wooden jaw of a 53E or 52E vise.



Right.

The indispensable planing stop, a thin strip of hardwood about 2" wide glued to a heavy block which is dropped into the vise, keeps a workpiece from sliding or pivoting under the plane.

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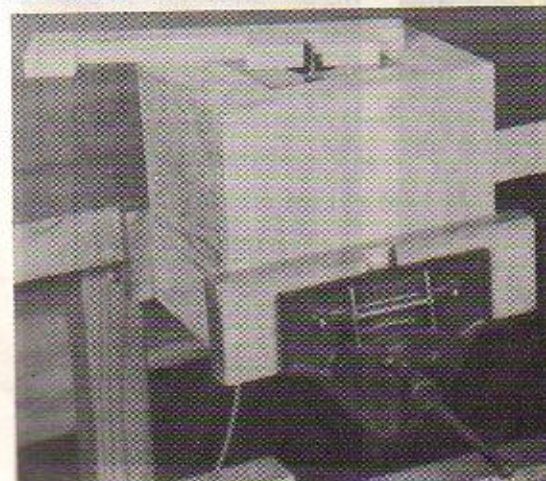
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Upper left.

The 52E holds the 24" length of a Tage Frid mortising jig steady and vibration-free.



Lower left.

The 10" depth of this router-and-drill dowel-making jig is quickly secured at a convenient height in the 53E.



Upper right.

Any number of jigs can be secured by the vise by the addition of a strip of wood under the outside edge of the jig.



Lower right.

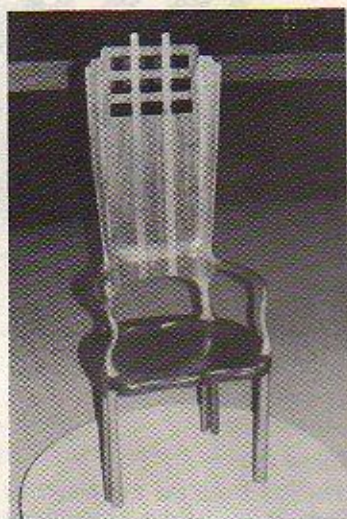
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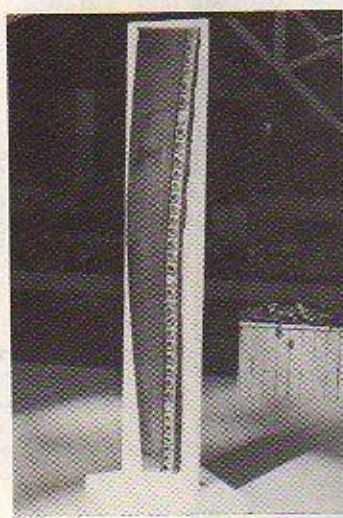
Expressions in Wood

Nineteen area woodworkers achieved mass exposure of their work during this exhibition of furniture and sculpture at the Omni in Atlanta Sept. 3 through Oct. 4. The show is sponsored by Rizzoli Bookstore and other interested merchants. Below are photos of some of the 68 pieces exhibited. Other participants include Rip Potter, John McGee, David Carlton, Patrick McGauley, Christopher Gonzales, Charles Walker, Jr., Mike Neagle, Haywood Nichols, Heather Hilton, and Caroline Montague.

The Wiscasset Dinghy entered by John Wermescher was constructed by John and a group of 8 boatbuilding students working under John's instruction. The course began in March with a series of 6 evening lectures on boatbuilding at Highland Hardware, followed by about 3 months of week-end construction sessions at John's Highland Avenue shop.



Clockwise from upper right:
John Wermescher, Allen Venable,
Max Green, Thomas Williams, Kimo
Minton, George Berry, Michael Couch,
Roger Foster, Timothy Sutherland



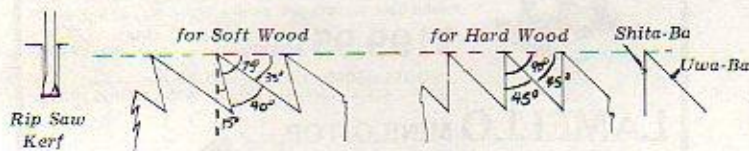
Japanese Saws

By Toshio Odate

Today most Western woodworkers know that Japanese saws work on the pull stroke. However, the difference between Western and Japanese saws involves much more than just the direction of cut. The shape (design) of the blade, the material used to make it, the handle, the weight of the tool, the shape of the teeth and other factors as well all contribute to the distinction between the two kinds of saws. Among these differences, the kind of teeth will be one of the most interesting subjects to talk about, so I will describe here the details of Japanese saw teeth.

The teeth of Japanese saws are made to accommodate pull strokes but they are not simply Western teeth turned backwards. The teeth of the rip saw, although similar to the Western rip saw, seem to have a slightly different angle (Fig. 1), because the Japanese frequently use softwoods, and also because the pull stroke (which involves both the angle of cut and the blade being put under tension) can more easily handle the sharper

Figure 1. RIP TEETH

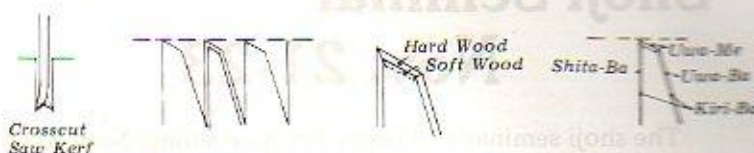


tooth angle. The teeth are graduated in size, with the smallest at the heel and the largest at the toe of the saw. This is so the accumulation of shredded fiber in the kerf will be removed efficiently throughout the cutting stroke. Further, the teeth are sharpened like individual chisels to cut with the grain of the material.



Figure 2. CROSSCUT TEETH

Difference in teeth for hard wood and soft wood is only the bevel of the Uwa-Me



In contrast, the teeth of the crosscut saw are very different from those of the Western crosscut saw. For the purpose of cutting across the wood's grain, the teeth are designed like the tip of a Japanese knife (Fig. 2). The teeth are not graduated, being of equal size from the heel to the toe of the blade.

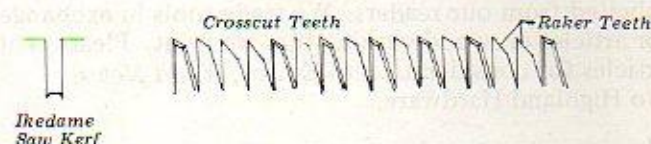
Another tooth configuration is that of combination rip and crosscut saws called Ibara-Me and Nezumi-Ba (Fig. 3). These teeth are made for cutting the grain at an angle such as 45°. The Ibara-Me is for soft wood and the Nezumi-Ba for hard wood. These two tooth styles, as on crosscut teeth, are beveled on both front and back edges.

Figure 3.



These are traditional tooth shapes of Japanese saws. However, a new tooth style has appeared, called Ikedame (Ikeda-Me). (Fig. 4) These teeth are used on crosscut saws, but this style has each sixth or tenth tooth set and ground like ripping teeth. These rip teeth clean the sawdust and the bottom of the kerf much faster than a common crosscut saw, acting as rakers. When you sharpen these rip teeth "rakers", they have to be topped slightly lower than the other crosscut teeth; otherwise the bottom of the kerf will be roughed up.

Figure 4. IKEDAME TEETH



Cut here

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Shoji Seminar

Nov. 21-23

The shoji seminar will begin Friday evening, Nov. 21 at 7:30 pm at Highland Hardware. During the opening lecture, Toshio Odate will discuss the history of the shoji, and describe the role of the shoji in the home. The tools involved in shoji construction will also be introduced and discussed.

Saturday and Sunday, participants will be provided a set of materials and given the opportunity to begin building a small simple shoji, which Toshio says should be completed by the end of the weekend workshop. Participants will provide their own hand tools, and either Western style tools or Japanese tools can be used in the project, depending on what you have and are comfortable using. Tools required include a fine cutting backsaw, 1/4" & 3/8" mortise chisels, smoothing plane, jointer plane, marking knife, marking gauge, square, and rule. More information will be provided after you register.

Hours will be 7:30 pm to 9:30 pm Friday, 9 am to 4 pm Saturday, and 9 am to 3 pm Sunday. Fee is \$75.00. Friday evening's lecture is open to the public for free, although reservations are requested in advance.

Toshio has twice demonstrated shoji building at Highland Hardware, and this seminar is offered for interested woodworkers who would like a guided hands-on experience. A limited number of positions are available on a first come-first served basis. Register now by sending your fee with the enclosed application form to Highland Hardware.

Articles Wanted

Contributions of material for use in *Wood News* are solicited from our readers. We trade tools in exchange for articles on woodworking that we print. Please send articles for consideration to Editor, *Wood News*, c/o Highland Hardware.

12

Woodworkers Guild

The Georgia Woodworkers Guild meeting Oct. 12 at 7:30 pm will feature a show of small containers crafted by Guild members. Location is Highland Hardware's annex at 1045 N. Highland Ave., across from the store.

October 17-27, members will show their work at the Archifest Exhibit at Peachtree Center.

November's meeting will be Saturday, Nov. 12 at 10 am at Foster-Couch Studio, 1260 Foster Street, and will feature a demonstration of timber framing.

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