American Woodturner

The Journal of The American Association of Woodturners Volume 3 Number 1 September 1988 $5.00

Dedicated To Providing
Education, Information,
and Organization
Among Those Interested
in Woodturning

Stewart Tool and Delta Donate to Education Fund Drawing

Delta Deluxe Super Chuck Kit

A unique work-holding system for vessel or faceplate turning. Quickest material mounting method of its type. Saves time. Easy to use.

Features a patented positive grip expanding collet mechanism that works in conjunction with a drilled recess to securely hold stock for face and edge turning operations. Entire visible surface of material can be turned without the need to remove, reverse and remount the work.

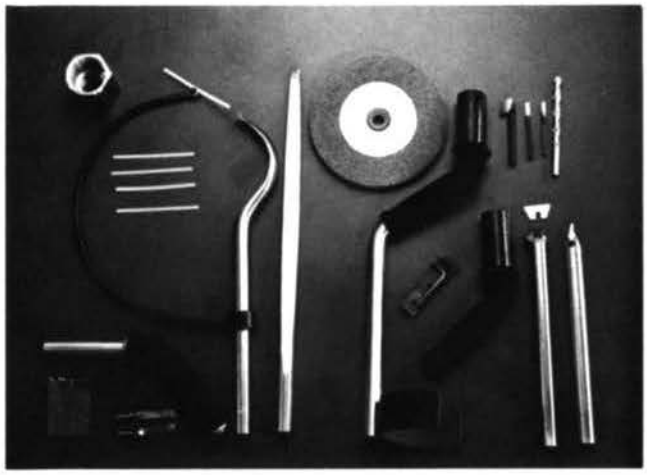
Comes complete ready-to-use. No extras to buy. Kit includes two chucks (2″ and 3″ diameter) complete with spring and clamp to handle both small and large turnings, two cutters (2″ and 3″ diameter) to drill recess holes in material for mounting to chuck; backing plate with stud and wrench to mount loaded chuck to lathe plus complete instructions.

Also includes Cup and Pin Type Screw Chucks threaded to fit the Super Chuck backing plate. These specialty chucks are ideal for fine, cylindrical and deep hollow turnings such as pepper mills, candle stick holders and similar items.

There's a Delta Deluxe Super Chuck Kit to fit most popular wood lathes.

Kit No.	For Use On:
46-270	All Delta Lathes with 1″ 8 RH thread spindle
46-271	Powermatic Model 90 with 1½″ 8 RH thread spindle
46-272	Oliver Models 159 and 2159 with 1⅛″ 8 RH thread spindle
46-273	Shopsmith Mark V with ⅝″ 8 RH thread spindle
46-274	Sears Model 2280N with ¾″ 16 RH thread spindle
46-275	Powermatic Model 45 with 1″ 8 RH thread spindle
46-293	All Delta Lathes with ⅞″ 14 RH thread spindle
46-294	General Model 260 with 1¼″ 8 RH thread spindle

Our thanks to Stewart Tool and Delta for their generous donations to our education fund.



Stewart Tool Component System

These tools were designed and developed by professional turner Dennis Stewart. He is well known for his innovative approach to turning. Before teaching himself to turn, he was a sculptor. He has always made most of the tools for his own use. Whenever he wanted to create a turning that was difficult to do with traditional tools, he would design a new tool to make the job easier. Over the years his tools became more efficient, more versatile, and more innovative. As other turners learned of these tools, they wanted them too. That was the beginning of Stewart Tool.

The tools have evolved rapidly, incorporating many of the latest technologies from other fields. All these tools have been brought together to form a system of interchangeable parts from which many different tools can be made. When Dennis recently toured Australia to demonstrate and teach workshops, he carried all the tools he needed in one small briefcase.

Stewart Tool will be donating a $250.00 gift certificate good toward the purchase of any combination of tools in the line, including a special video showing how each tool is used and the special techniques involved.

Now to the details.

As before, in exchange for each voluntary contribution to the Education Fund—that we would like to suggest would be $5—we will send you a ticket. Again, we will send you five tickets for a $20 contribution. The order form is on the back dust cover of *The Journal*. As before, we will return half of your ticket so that you know that we have received your contribution. You need not keep the ticket. We will have put your membership number both on the ticket that we send you and on its mate, the one we put in the drawing box.

Remember. . . there is still time to purchase tickets for the drawing of the Shopsmith Mark V. Drawing will be at the 2nd Annual Symposium, Sept. 15-17. See back dust jacket for more information.

American Woodturner

The Journal of The American Association of Woodturners

The American Association of Woodturners is a non-profit corporation dedicated to the advancement of woodturning. It includes hobbyists, professionals, gallery owners, collectors and wood and equipment suppliers. *American Woodturner* is published quarterly by the American Association of Woodturners. Regular membership rates are $20 for individuals and $50 for businesses. Supporting memberships are $100 and $250, respectively. Patron memberships are $1,000 and $1,500 repectively. Of any membership, $6 is allocated for an *American Woodturner* subscription. Single copy price is $5. Known office of publication and sales office is Smithermans, 4807 Spicewood Springs Rd., Austin, Texas 78759. Telephone (512) 343-6491. Second-class postage paid at Austin, Texas.

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Contents

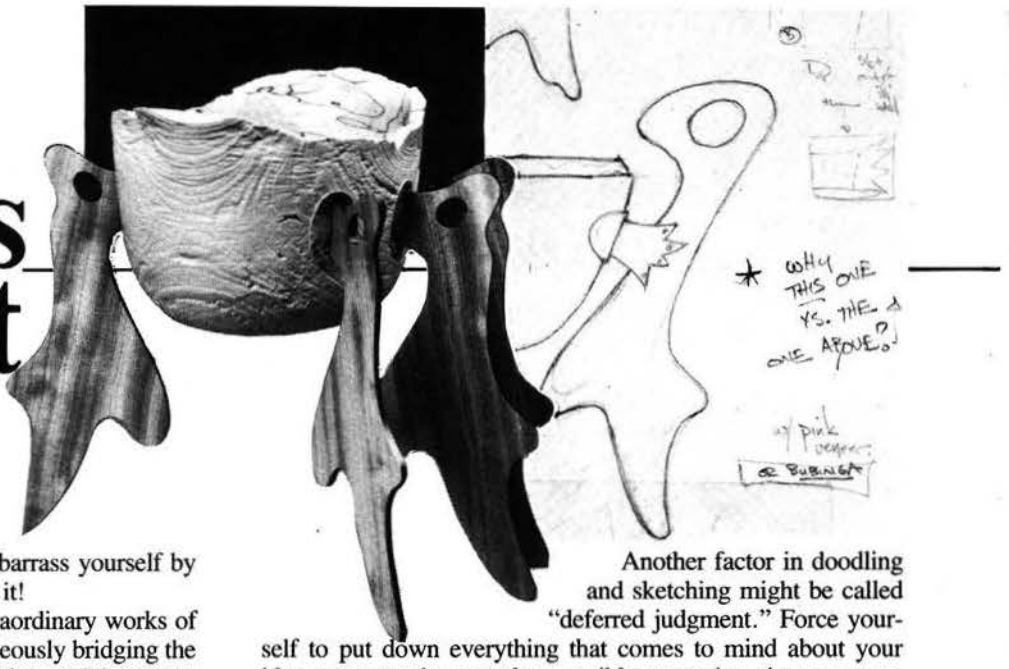
"Falls/River Bowl"
By Steve Loar
15" x 18" x 13"
Bowl is spalted maple with lacquer and acrylic paints. Fins are 1/4" plywood with olive ash burl veneer with dye and paint.

On The Cover

By first constructing a Foamboard model of his object, Steve Loar can better plan to craft the final piece.

Doodlin's Alright

By Steve Loar



America has a fixation about drawing. It's something that "artists" do. They can create pictures and images that generally look like a particular object or scene; and, supposedly, if you can't do that, well, you just shouldn't embarrass yourself by trying, and most likely making a mess of it!

Some people can design and create extraordinary works of art directly in a media, seemingly instantaneously bridging the gaps between the demands of utility, aesthetics, and the potentials (or limits) of the particular lump of material in front of them at the moment. In this regard, the names of many of the world's best-known woodturners come to mind. There are parallels among the masters of virtually all of the fine arts.

My approach to design also utilizes intuition, but mostly in the early stages of development. After I have "intuited" the idea, I put it in the back of my mind for a time while it gets further "baking." It is at this point that I need to record, play with, alter, expand, and develop ideas on paper. Only after pushing the idea around for some time do I arrive at a particular form that I wish to pursue.

Designing need not be a time-consuming, or even a regular endeavor, but it can create a rich storehouse of ideas (which can de drawn upon later). It tends to make your in-shop time much more efficient due to pre-planning and having specific goals, and it greatly increases your chances of creating a totally successful piece (although, I always keep an eye out for the "happy accident!"...) In developing and creating a form, I have three broad steps:

1. doodling and sketching;
2. refining an idea through slower and more rigid drawings coupled increasingly with the building of models; and
3. making the piece.

It is the first stage of recording what is imagined or seen by your "mind's eye" that is most crucial. You need not be working towards radical or "art" designs, simply personalized designs (versus reproduction or direct copy work). As already mentioned, many of the Master Turners design in direct response to the medium, whereas my way is a somewhat more distant design process.

Doodling and sketching is not drawing. Doodling and sketching is more like "talking to yourself," a personal kind of shorthand. It's only important that you are able to interpret what is put down, and it is only in the later stages of development that you may want to express your ideas so that an onlooker might understand them.

Initially, the primary goal of doodling and sketching is to get something on paper. Many great inventions, productions, and structures began as seemingly incoherent scrawls — that only the designer could understand. Speed is important, as is an acceptance that your quick strokes may result in a somewhat crude sketch. That crudeness should not bother you; consider them a means to an end — a method that you can use in order that you may better keep up with the fragmentary and fast-changing first impressions of an idea.

Another factor in doodling and sketching might be called "deferred judgment." Force yourself to put down everything that comes to mind about your idea, no matter how wacky, possibly expensive, time-consuming, or seemingly off-base the mental image may seem. Put it down no matter where or when it comes. Sort it out later, when you're feeling more objective! As part of this, feel free to make notes, paste down photos or samples, add colors, do tracings — anything to record and develop your first impressions and their off-shoots. The very fact that the results of this sort of "sketching" are not exact and can be interpreted in several ways is a strength — not a weakness.

Remember: a DRAWING depicts a finished something, whereas a SKETCH is the development of that something. This sketch can be seen in some ways by you, in other ways by other people. As your skills develop both in turning and in designing, you can go back to this deposit of "ore" and pull entirely new interpretations from it.

With some simple preparation and exercises you can develop skills that will allow you to convey ideas more rapidly and effectively. For materials, I suggest that you forget any sort of bound sketchbook. They are restrictive and only enable you to see one page (thus one idea) at a time. Go and get yourself a pile of typewriter or photocopy paper. Loose paper lets you see and scan your ideas as you put them down. Placed in this way, they can work together — the ideas can interact instead of remaining isolated on the bound pages of a sketchbook.

So far as mechanics are concerned, I suggest you obtain a plain #2 pencil, select a place where you can comfortably work, and give yourself some quiet time to think. Creativity is a sporadic creature and you've got to grab it when it comes around. I have found that during movies about art, and especially about architecture, I can barely keep up with my ideas. So I make frantic scrawls and notes on whatever is at hand (including my hand on occasion!). To decode those scrawls, I go to my dining room table (without onlookers) and refine my ideas.

I also suggest that you forget about erasers. They don't exist. As part of our mania about drawing, most of us will draw a thing, and then go through a series of erasings and alterations of the one drawing; eventually stopping at a point that is several alterations beyond the best one — with no way to return to it. My credo is, "If you have another idea, make another sketch." Use tracings to play off of that first idea, if you don't want to make a whole new sketch.

In terms of actual sketching, force yourself to put down lots of lines — your eye will help guide you towards the best effects. Practice making LIGHT lines — and practice them as strokes. Remember, you're "talking to yourself", not making

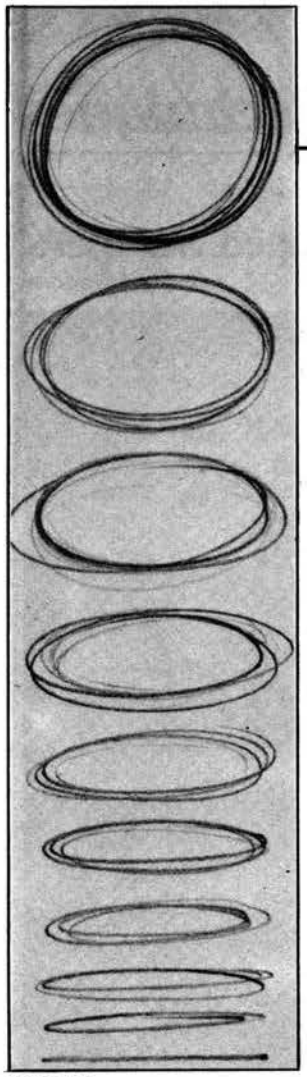
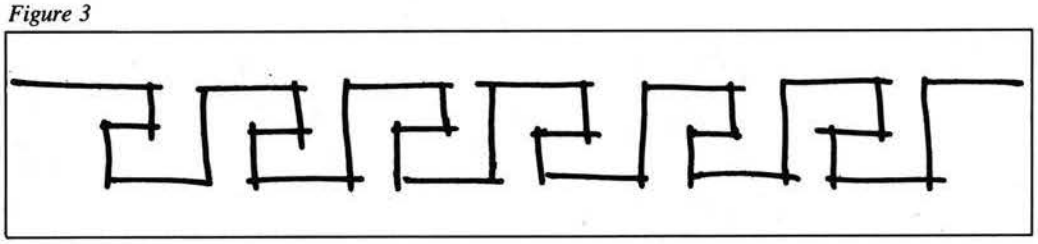
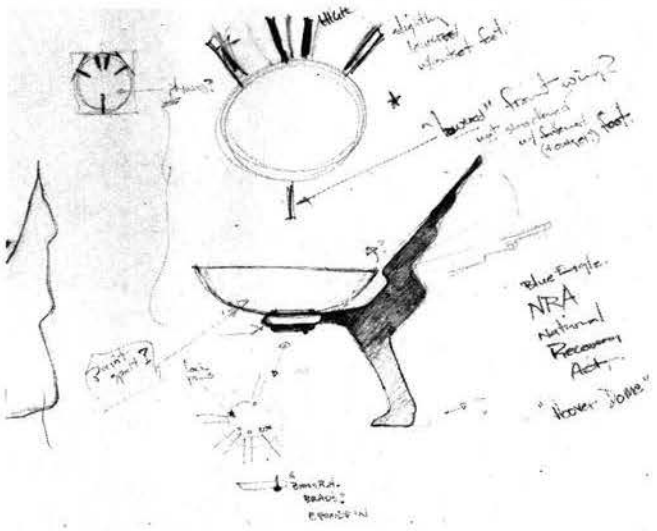


Figure 1

Figure 2

Figure 3





a coloring book! Beginners tend to make choppy dark lines; these look messy, are time-consuming, and don't enable you to describe things very well. While watching yourself sketch, there are two things that you can do by way of self-improvement. First, allow your wrist and hand to touch the paper only lightly. Force your hand to GLIDE across the surface. Most of us "draw" form our knuckles — or at best from our wrists. Unglue that hand! Then, force your whole arm to move, from the shoulder. If you can do these two things, you will automatically make better and faster lines, not to mention getting away from those teeny-tiny sketches that we so commonly make.

There are three actual sketching exercises you can do that will develop your sketching skills and enable you to sketch most anything. As in figure 1, freehand sketch a circle. Remember: lots of lines, and move your whole arm from the shoulder. If you're doing this, the arm will act as a "cam" and automatically give you ovals, at least! So practice some circles. When you have a feel for that, move down, and step-by-step shrink only each circle's height. Try for consistent steps, moving toward a flat line. You will probably have to fight the tendency to get both narrower and darker as you move toward the flat. As an analogy to what you're sketching, take a look straight down into a cup (the circle) that you can turn in space until you're looking straight across the rim (the straight line).

Next, try the flip-flop pattern of figure 2. Do this in strokes and forget about exact corners. Your lines will create visual intersections. Work at making strokes (from the shoulder), and at placing your strokes so that you create the modular repeating pattern. Your goal is to make an even band that goes horizontally across the page.

The final exercise (figure 3) is useful for basic "shading" where you want to suggest volume. It is an exercise that should help you to gain more control of your hand motions. Start moving your pencil back and forth, as dark as you can. Now slowly move down the page (still making your motions from the shoulder), trying gradually and evenly to lighten your touch. As was the case when you were doing the circle/oval exercise, you will initially tend to make awkward jumps instead of even change, and as your pressure becomes lighter, you'll notice a tendency to make the shaded area more and more narrow. Once you gain control of these three basic strokes, you should be able not only to put down more ideas and plans, but you should be able to record them more quickly, with less effort, and in a clearer fashion.

Recommended books:

Hanks, Belliston, and Edwards, Design Yourself, *published by William Kaufman. (Best text for this topic.)*

Cheatham, Cheatham, and Haler, Design Concepts and Applications, *published by Prentice-Hall. (Fundamentals of design.)*

McKim, Experiences in Visual Thinking, *published by Brooks, Cole and Co.*

See also: Koberg and Bagnall, Universal Traveler, *published by William Kaufman. (Creativity and the design process.)*

Steve Loar is an Assistant Professor/Design, College of Fine and Applied Art, Rochester Institute of Technology; and has an extensive exhibition, award, and publication record with his turned forms.

"S" Shaped Scrapers

By Ralph Najarian

For internal turning, "S" shaped scrapers add a degree of versatility to bowl and box designs that can't be done with mill run, store bought tools. The "S" shape was introduced to me by Newborne Key of Hillboro, New Mexico. Key, a retired marine, is a life-long turner.

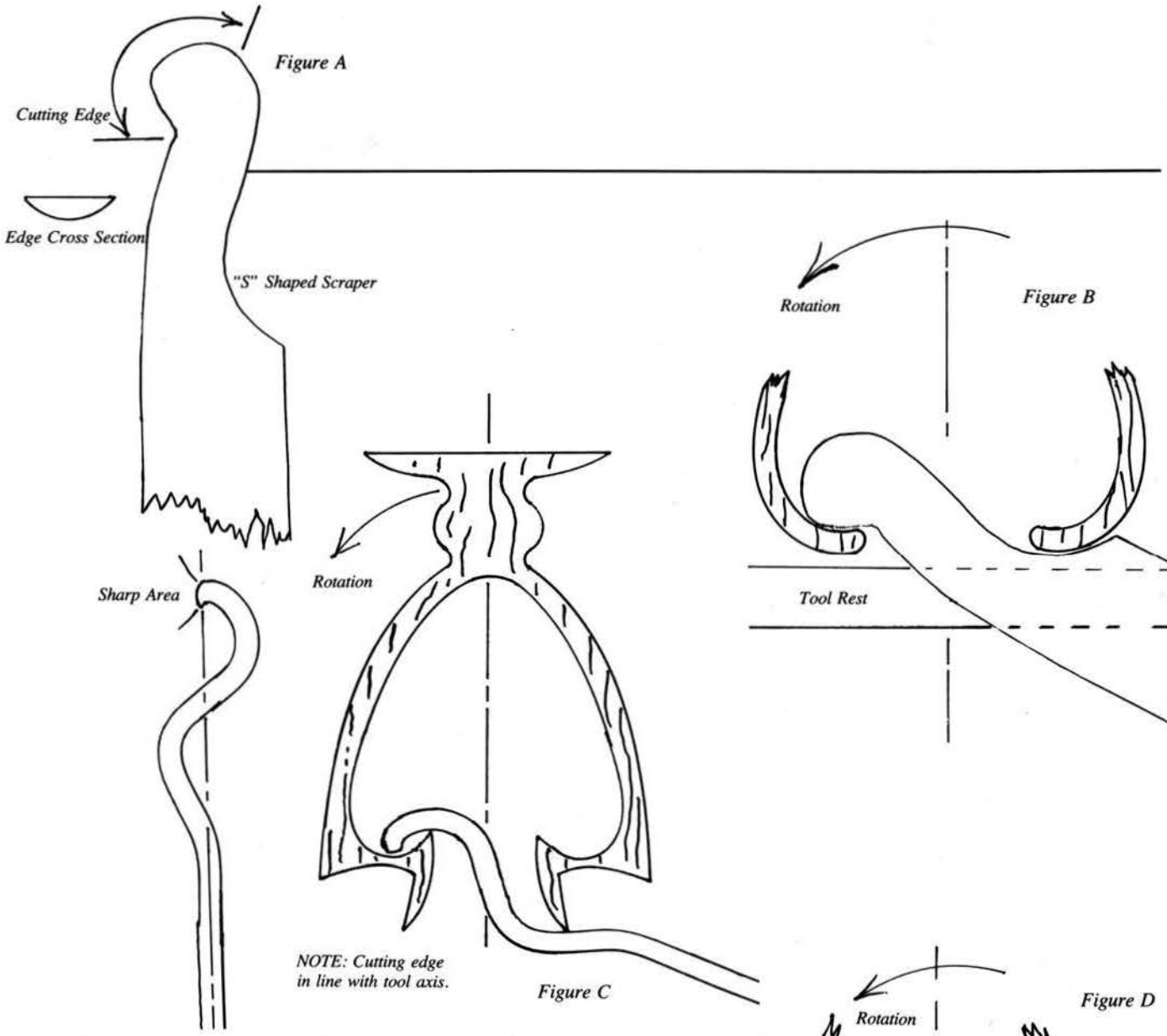
These "S" shaped scrapers have three advantages over other bent scrapers. First, they enable the turner to make shapes not otherwise attainable. Second, the cutting edge is in line with the axis of the tool and handle making it easier for the turner to know where the point is while making cuts. Third, being in line with the axis of the tool, the tool doesn't have a tendency to twist or rotate giving the turner greater control over the tool.

"S" scrapers are used primarily for hidden cuts, the shoulder portion of bottle necks (see Fig. B) and back cutting (inside the work cutting toward the tail stock) (see Fig. C). Straight tools are used for bottom and sides where they fit. The "S" shape fits through the box or bottle opening and accomodates the design so as not to interfere with the back side of the work.

I usually make a tool to fit my intended design. Therefore my designs are never limited by the tools at hand. After sketching the piece, I sketch in the tool that will do the necessary cutting. I know exactly what the tool will look like before I make it. The tool can be used for more than one piece and after a number of projects, I have enough turning tools to turn whatever I want.

The tool on the left in the photo (and Figs. A, B and D) I made from a flea market special half round file. When making lathe tools from old files, it is best to temper them. Files are very hard—so hard that they are very brittle and break easily. When a tool made from a file breaks in the middle of a cut, it is hazardous to both the work and the turner. Ashley Iles, a tool maker from England, taught me a simple method of tempering files. Bake the files in the kitchen oven for one hour at 375 degrees F. Then quench the hot files in tap water. Then the tools are hard enough to retain the edge but pliable enough that they won't break easily. The Rockwell "C" hardness will be around 58-62. Use a good thermometer in the oven, 0-600 degrees F, and preheat the oven adjusting the oven dial to the thermometer and ignoring the numbers on the oven dial.

The tool second from the left in the photo is made from a piece of ⅝" diameter water hardening drill rod. Drill rod is very good steel for making tools other than drill bits. I first



sawed the rod down the middle with a hack saw and shaped from there. Drill rods can, of course, be hardened and then tempered back. It's barely soft enough to work with in the annealed state, but hard enough in its annealed state to hold an edge well when working with wood. Drill rod is cheap and can be bought at any machine shop supply house. The subject of hardening and tempering tool steels will be addressed at another time.

The three small scrapers on the right in the photo (refer also to Fig. C) were simply hammered from 3⁄16" diameter spring steel and bent to fit the design required. I scrounged the stock for these from a scrap metal pile. The original use for this scrap was conveyor belting made by "Wendway" Corporation.

The shape of the tool is entirely dependent upon the design-need of your work. That beautiful chunk of wood deserves the best design that can be turned from it. It's always nice when someone reaches inside a turned piece and wonders how it was cut. Remember, when the cutting edge is in line with the axis of the tool, it won't twist or turn and you'll know exactly where it is even when you can't see it.

Editor's Note: Mark Lindquist discusses making and using "S" shaped tools in his book, Sculpting Wood.

President's Page

David Ellsworth, Page Editor

Teaching—The New Generation

The end of the summer holiday season also marks the end of summer turning workshops at most of the craft schools around the country. Many of you have traveled extensively this year for the opportunity to attend one of these courses, so it's a good time to thank all of those who were able to participate and to encourage others to involve themselves in the coming year.

I'd also like to recognize our "new generation" of woodturning teachers and to offer some thoughts on how important their contributions have been to the overall growth of our field. When I say "new generation," I'm referring to that broad body of very talented individuals who have taken valuable time away from their own workshops to share their knowledge with the woodturning community as a whole. Many of these new teachers have been students in previous turning workshops who have now brought their experiences back to the classroom. Some have come through the ranks as teaching assistants where they've gained the experience of organizing and managing a class that might last a week or more—a very different experience from an hour-long demonstration, as you might imagine. Most, but not all these new teachers are full-time professional woodturners, but they share one thing in common; a willingness to sacrifice their own time so that the process of learning can continue.

I use the term "sacrifice" because the image of being a teacher is often quite different from the reality of doing it, especially when it comes to economics. In life's ever-present battle of supply and demand (i.e., teachers and students), the question always comes up: "How can we continue to attract new teachers when the salaries are so low?" How low? An average of $100 per day (plus room, board, and transportation). Now, if that figure sounds high to some, consider this fact: Any professional craftsperson who can't make $100 each day in the workshop is living in poverty! Also, add to this the time spent away from the studio to teach a workshop (at least two days to prepare, five days for the class itself, three days for transportation, and another four or five to recover from the experience), and you begin to wonder what the attraction of being a teacher really is. (Incidentally, salaries do vary from school to school, but they have been established at this general level to keep student tuition costs down. Obviously, classes fill up when they become available to a broader range of students and full classes help craft schools stay in business.)

Of course there are tremendous opportunities available to teachers in the crafts that have nothing to do with economics; meeting your peers who share a common interest, building self-confidence as a demonstrator, answering questions you never thought would be asked, travelling to new and often very far away places, and exposing your work to professionals in other craft media who are *genuinely* interested in the aesthetic development of your work. What may be the most important is learning about the "process of learning," which is one of the best qualities that a good teacher can bring to the classroom.

I am drawing attention to this issue on teaching because all of us, students, teachers, hobbyists and professionals are *already* involved in this "process of learning." The best part is that we now have a golden opportunity to supply the number of woodturning teachers necessary to take care of our growing number of students. Who are these potential teachers? Those reading this page, of course!

You may not realize it, but teaching is one of the best ways of learning. Just because you're not a master woodturner with hours of experience in demonstrating, don't think that you're unqualified. The best time to show off your stuff is in your own workshop with a friend, or during a meeting of your local AAW chapter. As soon as you make that first magical cut, turn around and "teach" it to the person next to you. This sharing of roles is a great way to build up your confidence and it encourages you to try other technical feats that you might otherwise pass over.

Put together an Information Package. This can include video tapes and slide shows that you assemble and present to the industrial arts teachers of your local junior and senior high schools. Live demonstrations provide extra incentive, of course. A book list can be submitted to the school librarian as a permanent library resource. This is a wonderful way to get our younger generation interested in woodturning, and, best of all, the facilities already exist. Videos don't need to be professionally made. Just borrow a camera from a friend or contact the audio/visual department at your local high school, college or university and have the students do the shooting.

For you professional turners who are already teaching, try locating someone interested in becoming your "teaching assistant." Assistants do all the preparatory work for the class, including machine maintenance, which helps the students get a better start on the first day. Assistants use their own experiences to share in the overflow of teaching responsibilities, and they provide a valuable bridge between the students and the teacher which helps communication and allows you to do a better job. *Very importantly,* they become a second pair of eyes in the classroom to spot a potential accident before it happens. Using an assistant is a great opportunity to maximize the efficiency of the class and it gives these up-and-coming professionals a special boost of experience and exposure that they can get in no other way. Assistants must pay their own transportation, but craft school directors will be encouraged to provide room and board once they recognize the benefits provided by assistants.

Did I miss something? Let me know what you think. I'll compile a list of ideas and publish the results.

Letters To The Editor

Gentlemen,

Perhaps at some near future date you could include an article with working drawings of a heavy-duty bowl lather. Not a "GIANT", not many people need one, but say one with a 24″ turning capacity maximum with a shaft of 1.5″ - 1.75″.

Surely among our members there are people with experience on a lathe of their shop-built design.

Commercial models have many short comings and are high priced. Perhaps someone like Rude Olsonik could review the design and critique it before publication.

Each issue of *American Woodturner* is even better than the previous issue.

Yours truly,
Allan F. Phillips
Pacific Palisades, CA

James F. Erwin,

I was disturbed by your letter to *The Journal* I only wish that you could come to one of our local Chapter meetings. If there is a local chapter in your area, go to their meeting as a visitor guest and reconsider your membership.

We have about 50 members in our local chapter. Some members sell their work but most of us do not. Some members are artists, some are craftsmen, some of us don't know the difference but, all are friendly. We have a great time exchanging ideas, techniques, designs and handshakes.

I feel that A.A.W. has provided me with a vehicle to communicate with other woodturners of all skill levels. My membership has provided me with a challenge to improve myself as a turner and a person. If you are ever in this area, I invite you to come by my home and we will turn some wood and trade some handshakes.

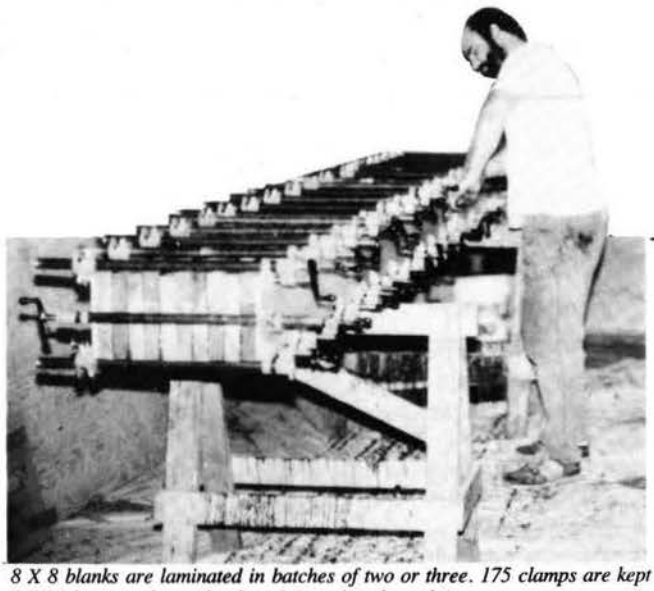
Very truly A Fellow Woodturner,
S. Gary Roberts, Pres.
Central Texas Woodturners Assn.

Announcements

The Society for Art in Crafts Seeks Works For Exhibit, Sale

The Society for Art in Crafts is a non-profit organization dedicated to the advancement of crafts as a contemporary art form. For 15 years, SAC has exhibited outstanding craft artists from across the country. Programs include a temporary exhibition program, a permanent collection and a sales gallery, The Store.

The Store, the marketing project of The Society, shows limited production and one-of-a-kind pieces. Work is purchased outright or accepted on a consignment basis. Generally, retail prices range from $5 to $300. Unlike most for-profit galleries, The Store is not limited to only established gallery artists. Interested craft artists are encouraged to submit resumés, printed materials, slides of current work and prices for review. Contact: Diane Novosel, 2100 Smallman St., Pittsburgh, PA 15222.



8 X 8 blanks are laminated in batches of two or three. 175 clamps are kept full 24 hours a day with edge gluing, then face gluing.

Turning 9 to 5

Shawn Christman, Page Editor

Industrial Strength Woodturning

Seattle Stair and Millwork, Inc. Project Data	
Quantity:	132 columns
Thickness:	7.5 inches
Width:	7.5 inches
Length:	14 feet 3 inches
Materials:	Clear KD Western red cedar
Total Footage:	13,860 board feet
Glue:	Rosorcinol
Scope of Work:	Millwork, Lamination, Hand-turning
Project Duration:	Two Months

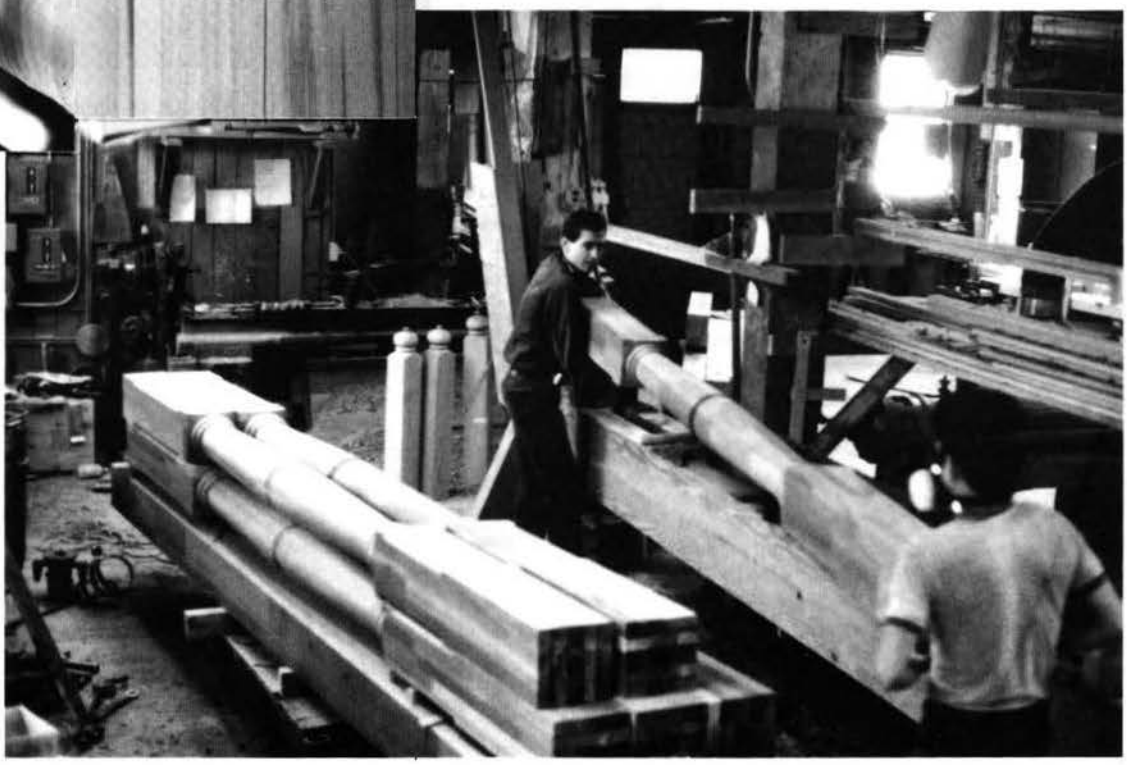
When we built our twenty-foot lathe, we thought it would take many jobs over the course of several years to make it pay for itself. In fact, it happened quite quickly, all in the course of one job.

Recently we were asked to provide Western red cedar structural columns for a project located in Florida. No doubt we had the lathe located the farthest from the site, but at least in Seattle the cedar was right in our back yard.

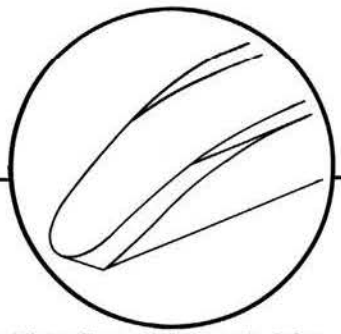
When we saw the Kenworth pull up laden with 16,000 board feet of rough cedar, we knew we were in for a heavy-duty job. In turn, when we saw the Kenworth pull away with our completed columns, truly we knew we had been doing industrial strength woodturning.

A completed set of beads.

A large skew is used to cut the sides of the beads. They are rounded over with a gouge. Note the area to the right of the skew is still full diameter. This allows the detail work to be done while the column is still fairly rigid. The tapered shaft is turned after the detailed portion is complete.



Western red cedar is lightweight enough for two men to load and unload the lathe. Columns are then taken outdoors for crating as the crates are too long to be driven through the door on a forklift.



Technical Tips

R.W. (Bob) Krauss, Page Editor

Sharpening The Super Flute

By Hans B. Ludwigsen

When sharpening the Super Flute Gouge (Figure 1), I frequently have difficulty holding the tool in correct relation to the grinding wheel so as to duplicate the bevel. There is a tendency to grind either the edge or the heel too much. A fellow woodturner, Clif Sessions, came up with an idea that eliminates the problem. I modified his idea slightly to suit my needs (Figure 2). Herein are sketches, a list of materials needed, as well as directions for construction as it applies to the 1/2" Super Flute Bowl Gouge using a 6" fine grit wheel on a moveable grinder. This is listed in the craft supplies catalog under: Henry Taylor High Speed Tools.

Materials

1 each — 8" long 2" PVC pipe
1 each — 8" long hardwood dowel, turned to the same diameter as the end of the gouge handle
1 each — 4" long 1/4" metal rod (or bolt)
3 each — 2 and 1/2" hose clamps
1 each — 2" piece hardwood sawn into a "U" shape

Construction Details

1. Cut the PVC pipe in half as squarely as possible. You now have two pieces of 2" PVC, each being 1" long.
2. Cut the hardwood dowel in half diagonally. It is important that the diagonal is cut in such a manner that the long side is 1/2" longer than the short side (see Figure 3). The cut should be as smooth as possible since the two surfaces rotate against one another.
3. Stand each of the PVC pipes on end and cut through one wall (on band saw). This will enable you to flex the PVC pipe a little bit.
4. Cut a "U" shaped bracket to hold one end of the dowel. This is the "anchor" end of the construction (see Figure 4).
5. Drill a 1/4" hole 3/8" in from the side and 5/8" down from the top of the "anchor" (again refer to Figure 3), through both legs of the "anchor" and through the dowel, about 3/8" in from the flat end of the dowel. CAUTION! It is important that the hole be drilled parallel to the face of the diagonal cut. Hole in dowel should be large enough to allow the dowel to move.

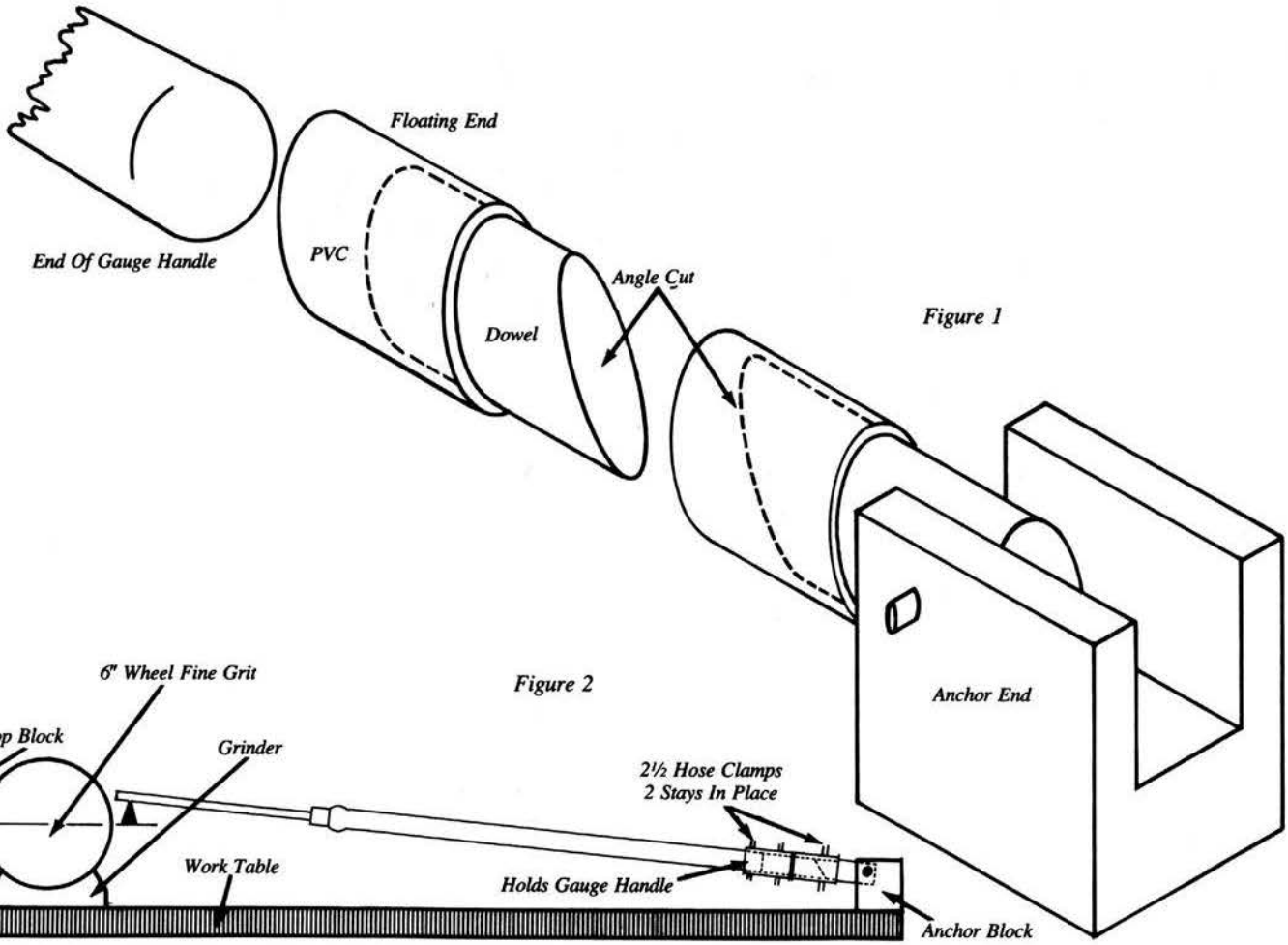


Figure 1

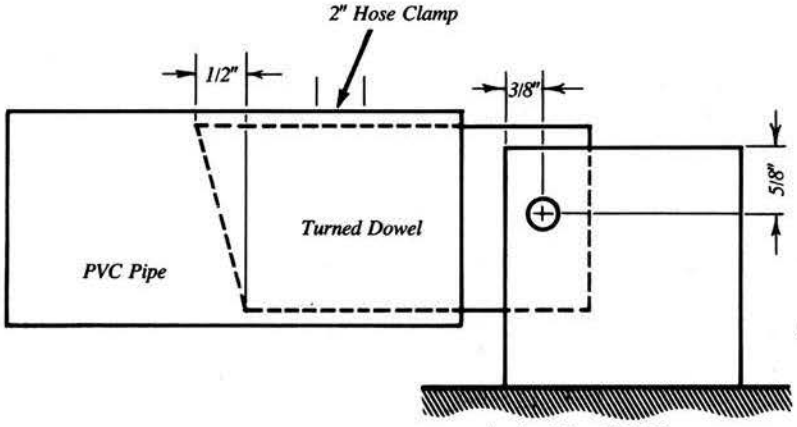
Figure 2

Use of "Session" Grinding Jig

1. Insert the end of a gouge handle into the open end of the PVC pipe on the "floating" piece. Make sure that it is seated against the dowel. Rotate the gouge so that the tips of the gouge are facing up and are level with one another. Tighten the hold on the gouge with a hose clamp. This is opened and tightened each time you use the sharpening jig, so NO GLUE HERE.
2. Clamp the "U" piece to table or to a plank long enough to position the grinder on other end. Distance depends on the overall length of gouge.
3. Position the grinder so that the wheel is at the correct angle to the gouge to produce the bevel you desire. You want the heel of the gouge to touch the wheel when you sharpen it. Now roll or rotate the gouge and it rides up on the grinding wheel. Each time you grind it, it will be in exactly the same position.
4. Mark the gouge handle end so it is in the same rotational position when you set it in to be sharpened again.
5. Fasten the block to table so that the grinder is located in EXACTLY the same position if you accidently pushed it out of place at a later time.

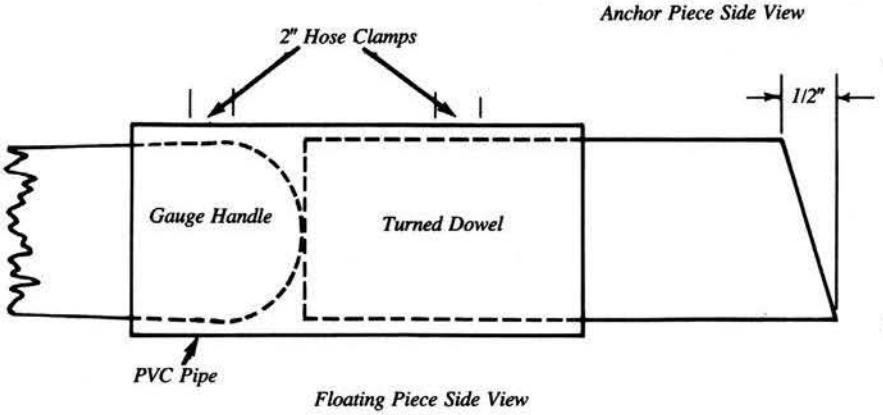
Assembly Detail

1. Tap a metal rod through the legs of the "U" and the dowel, making sure that the long side of the dowel is on top (see Figure 3). You may wish to put washers between the legs of "U" and the dowel.
2. Slip PVC pipe over the "anchor" dowel leaving about 1 1/2" out toward the "U."
3. Secure this assembly with a hose clamp. This pipe stays in place. (Eventually, you may wish to glue the PVC to the dowel.)
4. Slip the "floating" end of dowel into the open PVC pipe of the "anchor" end. It may be necessary to sand this since it is important that the "floating" piece can rotate freely.
5. Seat the "floating" end of dowel against the "anchor" end of dowel so that the long end is on the bottom. Pull the PVC pipe away about 1/16" and lock it in place with a hose clamp. It helps if the slits in the PVC pipe are both on top. (Again, you may wish eventually to glue the pipe in place, rather than use a hose clamp.)

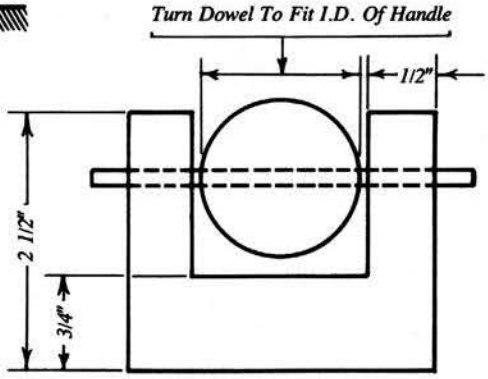


Anchor Piece Side View

Figure 3



Floating Piece Side View



"U" Shaped Anchor Piece End View

Attention All Members

ITOS: Diverse Dimensions

The International Turned Objects Show (ITOS) will open in Philadelphia, Pennsylvania, U.S.A., at Port of History Museum, on September 17 and run through November 13, 1988. This is the first juried and invitational exhibition of global magnitude featuring lathe-turned objects.

More than 200 pieces will be exhibited and available for sale. The selection was made by a panel of jurors who reviewed more than 1,100 slides of original, unsupervised work from over 100 artists—67 were accepted. In addition, 39 turners were invited who have demonstrated a lifetime commitment to turning and whose work has impacted the field of woodturning.

The show truly represents the diversity that exists in the turning field today. Functional, decorative, and sculptural objects—ranging in size from less than an inch in height to more than five feet in length—have been turned from wood, alabaster, metal and acrylic using traditional and contemporary techniques and treatments. The following is an excerpt from Albert LeCoff's curator's statement:

"Today, the use of the lathe around the world has reached an ever increasing popularity. From the hobbyist to the full-time turner, from the educator to the industrial designer, from the artisan to the artists, the use of the lathe is receiving more attention and creative use now than during any other period in history.

To further the worldwide development within the field of turning, it is beneficial to have international turned objects exposed for viewing and study. Through the exhibition of collective work from around the world, the individual users of the lathe and the general public will become aware of the high quality and diversity of objects being produced. For those who closely study these objects there is the opportunity for further appreciation and stimulation of individual growth.

The discovery of previously unknown work, coupled with the open sharing of techniques and ideas, will set the future of the turning field spiraling upward toward new heights of individual and collective growth.

The International Turned Objects Show and its catalog—*Lathe Turned Objects*—should serve as an inspiration to all those involved in furthering the growth of the turning field."

Several special events have been scheduled during the 58-day exhibition. These include demonstrations by world renowned artists, a panel discussion among turners, and, coinciding with the exhibition, two woodturning symposia. For details contact the Wood Turning Center, P.O. Box 25706, Philadelphia, PA 19144, (215) 844-0151.

ITOS, organized by the Wood Turning Center (a nonprofit research and development foundation), is cosponsored by the Port of History Museum of Philadelphia. Following the opening exhibition, the International Sculpture Center, Washington, D.C., will coordinate the three-year touring schedule for a smaller version of the show.

If interested in hosting ITOS, please contact the International Sculpture Center, 1050 Potomac St., N.W., Washington, D.C., (202) 965-6066.

A color catalog with 104 color and 94 black & white photographs, and artists and jurors statements documenting the ITOS, is available ($29.95). For more information about the show or for a catalog, contact the Wood Turning Center, P.O. Box 25706, Philadelphia, PA 19144. (215) 844-0151.

Here's What's Happening During ITOS

Sept. 15-17: AAW International Symposium
Sept. 16, 5:50-8 p.m.: ITOS Preview and Artists Reception for Wood Turning Center members*, artists, and invited guests
Sept. 17-Nov. 13: ITOS
Sept. 17: Panel Discussion: *Our Contemporary Roots in Bowl Turning;* James Prestini, Rude Osolnik, Melvin Lindquist, Bob Stocksdale; Moderator, Albert LeCoff
Oct. 1: Demonstration: *Designing Furniture with the Lathe;* Mark Sfirri, Joanne Shima, Christopher Weiland
Oct. 5-Nov. 13: Exhibition of 50 objects from the Center's collection, Bucks County Community College (BCCC), Newtown, PA
Oct. 8: Demonstration: *Production Turning* with Jay Weber
Oct. 15: Demonstration: *Spindle Turning* with Palmer Sharpless
Oct. 22: Demonstration: *Designing Vessels* artist to be announced)
Oct. 29: Demonstration: *Making Christmas Tree Ornaments* with Dave Hardy
Nov. 5: Walk-through lecture: *Diverse Dimensions,* Albert LeCoff
Nov. 11-13: Educators Symposium: *The Use of the Lathe: Ideas for the Classroom,* with Rude Osolnik, Palmer Sharpless, Dale Nish, Allen Androkites, Leo Doyle, and Mark Sfirri. Hosted by the Hicks Art Center at BCCC, Newtown, PA. Contact the Wood Turning Center for details
Nov. 11-13: Philadelphia Craft Show, The Armory

Shop Safety

Alan Stirt, Page Editor

Solvents

Most of us use finishes containing solvents of some kind. We often have little idea of the kinds of chemicals involved and their possible effects on our health. I've become increasingly aware of my own and many other turners frequent casual handling of finishes. My growing interest has prompted some research. Here's some of what I've learned about the hazards of solvents and the precautions to take when working with them. Most of the following information is from "The Hazards of Solvents" from the Center for Occupational Hazards (C.O.H.), 5 Beekman Street, New York, NY 10038. Additional information comes from my notes on a lecture given by Michael McCann of the C.O.H.

All solvents are toxic. Some are worse than others but all should be treated with great respect. In general, solvents can damage the body in four ways.

1) They can cause skin disease. All solvents can cause dermatitis by dissolving skin oils which form a protective barrier for the skin. Some solvents can actually penetrate the skin and enter the bloodstream.
2) Solvents can irritate the eyes, nose and throat. Some solvents and especially some mixtures of solvents can cause this irritating effect at very low levels. In addition, some solvents are sensitizers and can cause allergic dermatitis. For example, turpentine is a sensitiser and some people do become allergic to it.
3) Solvents can affect the central nervous system. Acute symptoms can range from irritability, fatigue, headaches, dizziness to nausea, unconsciousness and death. Chronic or long-term exposure may result in permanent damage to the central nervous system.
4) Many solvents can cause damage to internal organs, primarily the liver and kidneys. Aside from liver and kidney damage, various solvents have been implicated in causing cancer, peripheral nerve damage, heart attack, and psychological problems.

In addition, solvents present an explosion and fire hazard when their vapors are present in the air.

There are precautions which can minimize the dangers of working with solvents.

1) Use the safest solvent you can. It is often possible to substitute a safer solvent for a more toxic one. (The C.O.H. reprint cited above has a chart comparing the relative toxicity of many solvents.)
2) Wear gloves when handling solvents and finishes. The gloves must be compatible with the type of solvent used. Most safety supply catalogs have charts showing compatibility.
3) Wear eye protection. This is especially important when using finishes on the lathe. A rotating bowl or spindle can throw finishes a long way.
4) Use good ventilation. For highly toxic solvents, local exhaust and /or organic vapor respirators designed for a specific type of vapor are necessary. In general, before

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Woodworking Shows

Sept. 9-11	Cincinnati Conv. Center, Cincinnati, OH
Sept. 9-11	St. Paul Civic Center, St. Paul, MN
Sept. 16-18	Baltimore Conv. Center, Baltimore, MD
Sept. 23-25	Del Mar Fairgrounds, San Diego, CA
Sept. 30-Oct. 2	Royal Plaza Trade Center, Marlborough, MA
Oct. 7-9	Brooks Hall, San Fransisco, CA
Oct. 14-16	David L. Lawrence Conv. Center, Pittsburgh, PA
Oct. 28-30	L.A. County Fairgrounds, Pomona, CA
Nov. 4-6	Cobo Hall, Seattle, WA
Nov. 18-20	Memorial Coliseum Complex, Portland, OR
Dec. 2-4	Valley Forge Conv. Center, Philadelphia, PA

For more information, contact them at: MAS, Inc. 1516 So. Pontius Ave., Los Angeles, CA 90025 (213) 477-8521, (800) 826-8257.

Woodworking World 1988

Sept. 6-20	Switzerland Woodworking Tour. Hosted by Gottlieb Brandli. Departs Boston, New York or Chicago: $2,600 per person.
Sept. 23-25	3rd Annual - The New York Show, Westchester County Center, White Plains, NY.
Sept.30-Oct.2	4th Annual - The Carolina Show, The Merchandise Mart, Charlotte, North Carolina.
Oct. 7-9	5th Annual - The Chicago Show, The Metro Center, Rockford, IL.
Oct. 21-23	5th Annual - The New England Show, The Big E, Springfield, MA.
Oct. 28-30	1st Annual - The Cleveland Show, International Exposition (IX) Center, Cleveland, OH.
Nov. 4-6	2nd Annual - Central New York State Show, New York State Fairgrounds, Syracuse, NY.
Nov. 11-13	4th Annual - The Philadelphia Area Show, Hyatt Cherry Hill, Cherry Hill, NJ.

For more information, contact them at P.O. Box 796, Plymouth, NH 03264 (800) 521-7623. Admission is $6, including seminar.

Shop Safety

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using personal protective equipment such as a respirator it is best to see if a safer solvent can be used and/or better ventilation provided.

5) Practice good housekeeping and use proper personal hygiene precautions.
6) Many solvents are fire and explosion hazards. DO NOT smoke or allow ignition sources such as open flames, sparks, etc. near solvants.

For further information on the hazards of solvents and many other artists' materials and an excellent discussion of precautions to take, I highly recommend Artist Beware — The Hazards and Precautions In Working with Art and Craft Materials by Michael McCann, Ph.D., Watson Guptil, New York (1979) available from the C.O.H. at the above address for $18.95 + $2.50 postage and handling.

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