



# Minnesota Wood

An Affiliated Chapter of the American Assn. of Woodturners

2nd Quarter 1999

Volume 13, Issue 2

## Alan Lacer, the Skew, the Hook, the Grinder & the Flu

By Mel Turcanik

With a whole day to demo and teach, someone with Alan's background can cover a lot of territory. This brief article about our March meeting will not even touch on most of what he did and talked about, but here are a few things that were quite noteworthy.

The main focus of this demonstration was the use of the skew. O.K., you can do a lot of turning without ever picking up a skew. If you do primarily bowls and vessels, you have very little use for this tool, but

different things, it's fast, and it produces a very clean cut. In my experience, there are a few things that simply can't be done with any other tool.

With any turning tool, sharpening is critical. Alan recommended that the bevel on the skew be ground on an 8" wheel, to produce the best hollow grind for subsequent honing. A slow speed grinder, 1725 rpm if possible, is best. His hand out recommended 1" wide white wheels, J or K hardness. The bevel width should be approximately 1 1/2 - 2x the thickness of the chisel. Should the bevel be curved or straight? Depends on who you ask, but many prefer the curve though it may be harder to grind. He uses a Japanese water stone, or diamond stone for honing, an India slipstone is also recommended. The angle of the point (when viewed lying flat) should be about 70 degrees. He also suggested that when sharpening a gouge, the inside of the flute should be polished. This makes sense since the intersection of the bevel and the flute needs to be as perfect as possible to get the best sharpness.

A tool cannot be honed if it isn't ground correctly. A properly hollow ground tool hones back to sharpness very quickly. When honing, the stone hones the bevel, not the edge. What this means is, the stone

bridges the back of the bevel and the actual edge, so that very little metal has to be removed. After enough honing, the hollow disappears, and it may be time to grind again. But, even though it may take longer to hone without the hollow, as long as the stone doesn't rock to the edge, the original sharpness may be returned without grinding. Alan said that production turners would often grind only once a day, after that just hone. When grinding, use a light touch, again just the bevel. Avoid heating the tool so that temper colors develop (like that dreaded blue color). When grinding high carbon steel tools, quench regularly. A high carbon steel tool will lose its hardness if you see the colors. On the other hand, a high-speed steel tool can be heated quite a bit without softening, not enough to see the colors, and should NOT be quenched, as it may become brittle. If a high-speed steel tool gets too hot to hold, just let it air cool, or continually cool it so that it never gets hot.

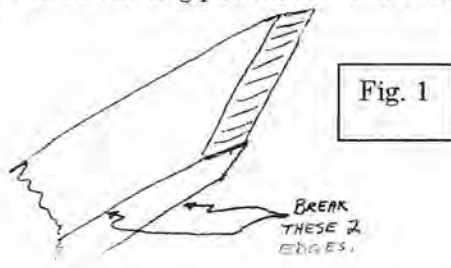
A sharp tool requires no effort to cut, and produces ribbons and curls. If you can see the edge when catching a glare from a light, it's dull. It's impossible to see the edge of a sharp tool.

If you don't have a grinder, such as above, a tool can be ground on a belt sander. Be sure to clean all the dust from the sander first. Alan assures us that it can catch on fire. Sounds like the voice of experience.

Alan demonstrated all the different cuts that can be made with the skew. This was the first tool I learned to use, and I still came away from this demo with another use that I hadn't considered before. One thing that always looked scary to me is the peeling cut. For this cut the tool is perpendicular to the axis of the work and advanced like a parting tool. Rub the bevel, move the tip down, continue to advance toward the center of the workpiece always staying above center. This gets rid of stock faster

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than anything I have ever seen and is very comfortable. I have to stress for safety sake, staying above center. On another cut, which I don't remember the name of now, Alan told us of a case where someone cut off a finger by letting the tool get below center. Below center, the work may tend to pull the tool under the workpiece. If the tool is balanced on the edge, as it was for that cut, it can also tip sideways and down, catching an unsuspecting finger between the tool rest and the edge of the skew. In that particular case, the edges of the skew were sharp and so was the edge of the tool rest.....instant scissors. Alan recommends grinding off the corners of the edges of the skew coming back from the short point, so that it is rounded on the whole bottom edge (see Fig. 1). The corners coming back from the long point he might relieve, but he doesn't round over the entire surface because he uses the flat to balance the tool when cutting in with the long point down and the cut is



perpendicular to the axis. Having that flat on the top surface of the long point also gives you two more cutting surfaces, and a vee tool. He hones the top and bottom surface where it meets the bevel. This helps when cutting to a point where two surfaces meet.

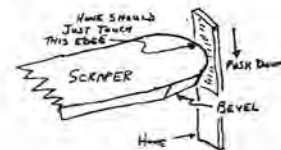
As long as I mentioned altering the shape of the skew, I might also relay what Alan said about the different skews on the market now. He feels the oval skew is not as good as the traditional rectangular ones. There is less stiffness (less metal) and it is less stable on the edge. The round skews are stiffer than the traditional, but it's hard to get a thin enough blade to cut cleanly. The traditional shape, modified by treating the edges is the best.

After lunch, Alan got out the torch and made a basic hook tool. It wasn't that hard! What's a hook tool, and why would I want to turn hooks? O.K., maybe I'm a little ahead of the story. With wood mounted so that the grain is running parallel to the axis of the lathe, i.e. spindle turning, hollowing the wood requires starting the inside cut at the deepest part of the "bowl". It's possible to grind a short enough bevel on a gouge to almost be able to rub the bevel on the bottom as the cut moves from the center

outward, but as you come up the side, you'd pretty much have to be inside to keep the bevel on the work. This is why scraping is used a lot for cutting end grain. A hook tool is like mounting a short gouge at 90 degrees to the tool shaft. This way the cut can be started at the bottom and the bevel can be kept on the work all the way up. Ring tools, the "Exocet" (TM), the "Termite" (TM) all work the same way. The beauty of what Alan showed us was that you can make a hook tool with nothing more than a MAPP gas torch, a grinder and file, some cheap pliers, a little olive oil, and O1 drill rod 3/8 x 9". It should be easy to crank out a half dozen in an afternoon, each with a slightly different angle. Too much to get into here, but if there's enough interest, maybe we can have a tool making meeting some day where we get together and make a bunch of these. The club has done it before.

If you're stuck using a scraper to clean out your end grain, this will help a lot. I've always felt that trying to raise a burr on a high-speed steel tool was a time wasting exercise in futility. That's because we are all taught to raise a burr the way it's done on rather soft cabinet scrapers. After trying to flow that high speed steel, the rather brittle burr breaks off, and you have a real dull edge. I felt that it was a lot easier and faster to just get a sharp edge and it works. You just slide the scraper at a different angle than if you have a burr. What Alan showed us was how to raise a burr in 1 second (fast enough for me). This makes no sense whatsoever....BUT IT WORKS! After sharpening the scraper, that means grinding the bevel and honing the top surface to a polish, with the scrapers top facing up, take a diamond hone and pass it DOWN across the edge at an angle a bit off from vertical leaning back toward the handle. See Fig. 2 below.

Fig. 2



Like I said, makes no sense. I have done this and it raises a burr that lasts surprisingly long, probably because it's a short burr. The best part is that it's fast and easy to renew. That one technique was worth the whole day for me. Seeing those nice fine curly shavings coming out of end grain means a lot less sanding.

Finishing up the day, Alan shared with us slides of his recent trip to Germany where he visited various production turning shops. The relationship of

people to their craft is certainly different in different parts of the world. Here, we share ideas, tools, and techniques rather easily. In other places where people depend on these things for their living, these things become trade secrets, not easily shared. Alan also brought several pieces with him that were made in these shops. They were simple decorative items, but done with great care and skill. No torn grain or uneven surfaces.

It was extraordinary that Alan was able to present all this material. The night before he was still recovering from a bout of the flu, and was about to cancel. In the first five minutes of his program, I was having a hard time believing that his voice was going to last the day. Never-the-less, it was a good learning experience, and definitely worth my dues money. Our thanks to Alan for a very helpful presentation under trying circumstances.

## Making the Hook Tool

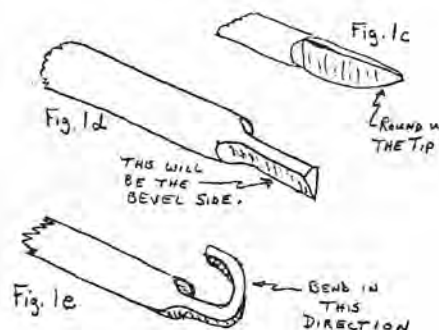
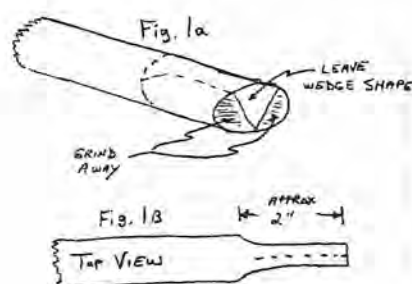
By Don Robinson

As a follow-up to Mel's article above I will explain how I actually made a hook tool following Alan's instructions. Believe me it really works great. I've struggled to get the bottom of the bowl smooth using several other tools and methods with only moderate success. This tool leaves a beautiful, smooth cut and doesn't feel unsafe or grabby when you are cutting quite a ways away from the tool rest. Since I've used it I have found you can actually bring it up the inside wall of the bowl with some success. You do have to rotate the tool so the cut is on a different part of the hook, however.

The bad news is that it is fairly expensive to buy the necessary equipment to get started. You will need the following: MAPP gas nozzle and valve assy. (\$35 at Mennards), MAPP gas canister (\$6 at Mennards), 3/8<sup>th</sup> inch, O1 drill rod (\$15 for 3ft at any machine shop) and a 24 oz. bottle of peanut oil (\$2 at Cub). The drill rod will make 4 tools at 9 inch lengths or if you choose to make 3 inch lengths for use as an insert into a longer piece of plain cold-rolled steel you can obviously make more tools.

### Making the tool

- 1.) Start by cutting off a 9 inch piece of the drill rod. (Use a Multi-disk or similar. The hacksaw won't work.)
- 2.) Get a metal can ready with peanut oil. (I used a Planters peanut can filled to about 3 inches)
- 3.) Have a pair of pliers handy. I used round-nosed pliers of a medium size.
- 4.) Grind the drill rod to achieve a wedge shape for about 2 inches. (See Fig. 1a, 1b below). Use a coarse wheel to get most of it. Follow with a finer wheel to put a sharp and straight edge along the apex of the wedge. (this eventually will be the cutting edge). Note: The thick part of the wedge should be approx. 1/8<sup>th</sup> to 3/16<sup>th</sup> across.
- 5.) Grind the tip to a butter-knife shape (see Fig. 1c below). Regrind the sharp edge of the wedge along this area. Remember that this will eventually be the tools bevel and cutting edge. (see Fig. 1d below)
- 6.) When the wedge looks to be sharp you get to do the "muscle" thing by heating and bending it into a hook (see Fig. 1e below)



- 7.) Fire up your MAPP gas system (Note: You cannot use Propane). Heat along the 2 inch wedge until the last 1 inch glows on the pink side of red.
- 8.) Work quickly to shut off and/or set aside the gas system, take the round-nosed pliers and bend the wedge



into a "U" shape. If you can't get a complete bend before it cools just reheat to the reddish-pink level and bend to the desired shape.

9.) Once you have the desired shape you can reheat to the same level then IMMEDIATELY quench into the can of peanut oil. **PLEASE take all precaution when using this torch and working around hot metal.**

10.) When the metal is cool you can test for correct hardness by trying to use a file on the hook. It should have a high pitched ringing and should have no effect on the metal. If not, go back to step 8 and get it hotter.

11.) Now comes the tricky part to bring the hardness back to a point where the metal is not brittle.

12.) Have a metal can of water handy for quenching at the proper heat.

13.) Fire up your MAPP gas system and point the flame at a point about 3 inches back from the hook. Pay attention to the color of the metal from the point of heat out to the tip of the hook. **This is critical** – The color change will occur first where the flame is applied but will quickly move out to the hook. When the hook turns to a golden bronze color you must immediately quench in the can of water.

14.) At this point you should grind the cutting edge to sharpness as required then hone to perfection. You can now turn a handle and insert this hook tool in about 1 ½ inches and you are ready for a pleasant experience. It is possible you may have to tweak the bevel angle but try it out.

A big thank you to Alan Lacer for this idea !!

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### **June Meeting**

This meeting is a joint venture of the Minnesota Woodworkers Guild and the Minnesota Woodturners Assoc.

JUNE 12TH, 1999 SATURDAY 10:30AM -12:30PM

ROBERT SORBY WOODTURNING PRESENTATION:

Toolmakers Robert Sorby of Sheffield, England will provide a presentation of woodturning techniques and some of his newest turning tools. They will also do informal demonstrations in the afternoon. 1-3PM.

LOCATION: Rockler Woodworking and Hardware, 3025 Lyndale Avenue South, Minneapolis. There is no charge but pre-registration is required due to space limitations. Pre-register at any Rockler store.

### **August Picnic**

Set aside August 14<sup>th</sup> for the annual picnic. This year it will be held at the 3M Tartan Park. Directions will be included with the postcard reminder. The Challenge this year will be Baseball Bats ----- Start turning now !! Remember to bring a good appetite for some of Rod Olson's sweet corn.

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### **Correction:**

The letter regarding the group purchase program from Craft Supplies had one error that couldn't be corrected before it was mailed. Mail order items such as this are not free of MN Use tax.

There is a bright side, however. The first purchases up to \$770 per year are excluded. If you exceed this amount you should file on the entire years purchases including the \$770.

The vendor simply doesn't collect the tax. It is the purchaser's responsibility to report the tax and remit it to the state. Please contact a tax advisor. Failure to do so is tax evasion.

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### **Notice to members:**

Don't forget that you have free access to this news letter for want ads pertaining to wood working. I haven't seen any come in for quite a while. Maybe we've all got enough toys. NOT!

### MWA Board

**President:**

Mel Turcanik (507) 634-7570  
e-mail: turcanik@means.net

**Vice President:**

Duane Gemelke (612) 566-8516  
e-mail:  
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**Newsletter Editor/Membership:**

Don Robinson (612) 441-8207  
e-mail: dmrob@worldnet.att.net

### Member Helpline

*Do you have a question or need help with a project or turning? The following members have volunteered to try and answer your questions or point you in the right direction.*

Mel Turcanik (507) 634-4986  
John Engstrom (612) 475-0307  
Jim Jacobs (651) 437-2302  
Ed Johnson (651) 224-4194  
John Magnussen (612) 477-6294  
Dave Schneider (612) 934-4667  
Don Wattenhofer (612) 572-1045

If any others wish to volunteer for this list please call Don Robinson @ (612) 441-8207.

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(651) 785-4194 Today!

### Membership Application/Renewal MINNESOTA WOODTURNERS ASSOCIATION

Name (Please Print) \_\_\_\_\_

Telephone # \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip Code \_\_\_\_\_

Dues are \$20 Yearly (starting in January)  
But \$10 after July 1<sup>st</sup> (2<sup>nd</sup> half year)

Amount Enclosed: \$ \_\_\_\_\_

Please Check: Renewing Member ☐ New Member ☐

Are you a member of the AAW ? Yes ☐ No ☐

You will receive all issues of the newsletter starting  
with the next mailing after you join along with a  
new members kit.

I would be willing to:

Help out at meetings	<input type="radio"/>
Be on a planning committee	<input type="radio"/>
Help at demos/shows	<input type="radio"/>
Serve on the Board	<input type="radio"/>
Contribute to newsletter	<input type="radio"/>

Mail To:  
MN Woodturners Association  
c/o Ron Meilahn  
1638 23<sup>rd</sup> Ave NW  
New Brighton, MN 55112

## FOLLOWING THE HURRICANE

By: Duane Gemelke

This article is a presentation of the work I have been pursuing in the area of wall art. The initial work in this area was presented in the September 1997 Minnesota Woodturner newsletter for a piece that was



Fig. 1

titled *Hurricane Woodrow*. If you are interested in the process, I would invite you to review that newsletter for a brief description. The five separate pieces here were all done with the same basic technique as was described there.

The shapes in this

work all start out with a round wall plaque with a series of turned forms (see Fig. 1 with section removed to show cross-section). The round wall plaque is subsequently cut into thin strips or wedges and reassembled. Close inspection of the photos (see pg. 9) will bring more understanding of this than I could describe here.

The basic difference between this work and *Hurricane Woodrow* is in the cutting and re-assembly. *Woodrow* was cut into rectangular shaped strips. This work is formed by cutting the turned piece into triangular shapes. All of the pieces here were turned and cut alike, the only difference is in the re-assembly.

As I have been working on these pieces I have realized that the secret in the turning is not on what you see. The turning on the face only affects the appearance of the finished form. The turning that really needs to be done is to get that back

perfectly flat. Without that, the cutting and the gluing cannot be done without breaking one or more of the segments, which taper down to about 1/32 of an inch thick. If the segment is broken, it really doesn't matter what it would have looked like.

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### TIPS & TRICKS

1. Jim Jacobs suggests using  $\frac{3}{4}$  MDF fiberboard to polish the inside of your gouges. First mount a chunk of MDF on a face-plate and turn it to a 4 to 6 inch disk (not critical). Round over the edge so it will fit inside your gouge. If you taper this round-over back and have the round-over fit your smallest gouge you could use this disk on all of your gouges. Load up the round-over with polishing rouge and you're ready to go. **CAUTION:** Move your toolrest out of the way. If you stand in front of the lathe you **MUST** hold the tool **UNDER** the disk. That is think of the consequences if you don't follow this rule.

2. You can get away with out-of-balance on small turnings but in most cases of large stock you think the world is going to end. I have a couple of ways that often work. The first is to take the bare chunk of wood and decide which end you plan to use the faceplate. Take a  $\frac{3}{4}$  inch sheetrock screw and choose the center by eye. Drive the screw it in about  $\frac{1}{4}$  or so. Now try to balance the chunk on this screw-head. Keep moving the screw until the chunk is close to balance (the heavier the chunk the better the balance must be). Once you have the balance, temporarily leave the screw in place and set your faceplate so this screw is centered in the spindle hole. Put in all screws on the faceplate in a normal fashion then remove the balancing screw.

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## Things Worth a Look

by Dave Dunn

My tendency to be a catalog nut gets out of hand from time to time, but in the process I find that some rather obscure sources can offer viable alternatives to our better known woodturning suppliers.

A case in point is the full face shield I prefer to use. I bought my first one at Sears years ago. It had a good head piece and a polycarbonate (Lexan) shield or window. All was fine until some time later, I needed to replace the window. By then Sears had discontinued the item. Other sources had similar windows, but they were costly and required retrofitting (pop rivets etc.). TEK Supply, 1-800-835-7877, to the rescue! Their catalog is full of stuff - some of which you've never heard of and most of which you'll never need. But get the catalog and look closely for the headpiece called the "T-lock ratchet" at \$8.65 ea. (cat # DH5020). The window (cat # DH5000) is \$3.19 ea. or \$2.76 ea. in packs of ten.

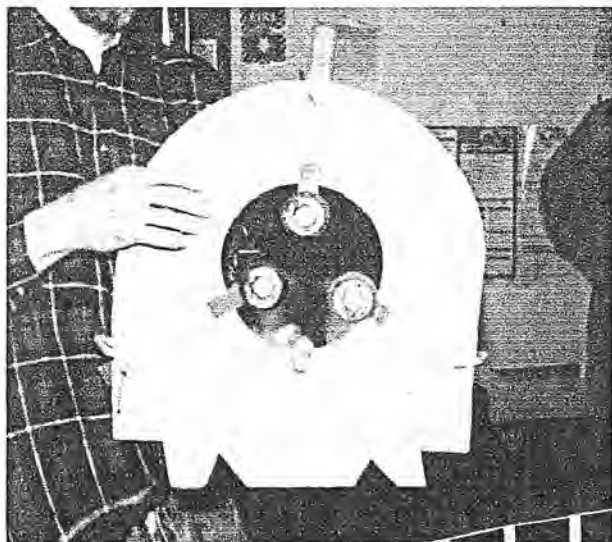
This is good quality merchandise and priced such that you can afford to replace a window when it gets filled with superglue splatters and scratches.

TEK Supply catalog also shows a variety of dust masks and filtered air hoods & caps - no minimum required.

Sears is getting further into the woodturning business. The tool catalog offers both the tube bed lathe and a new 15 inch, 2 hp, variable speed, swivel head, #2 M.T., cast iron lathe. In addition, the catalog offers #1 & #2 M.T. centers & work arbors at a very reasonable cost.

And finally, the growing demand for low speed grinders is frustrated by high cost. This time, it is Trendlines catalog (1-800-767-9999) to the rescue, offering a Reliant 6" bench grinder at \$49.95 regular price.

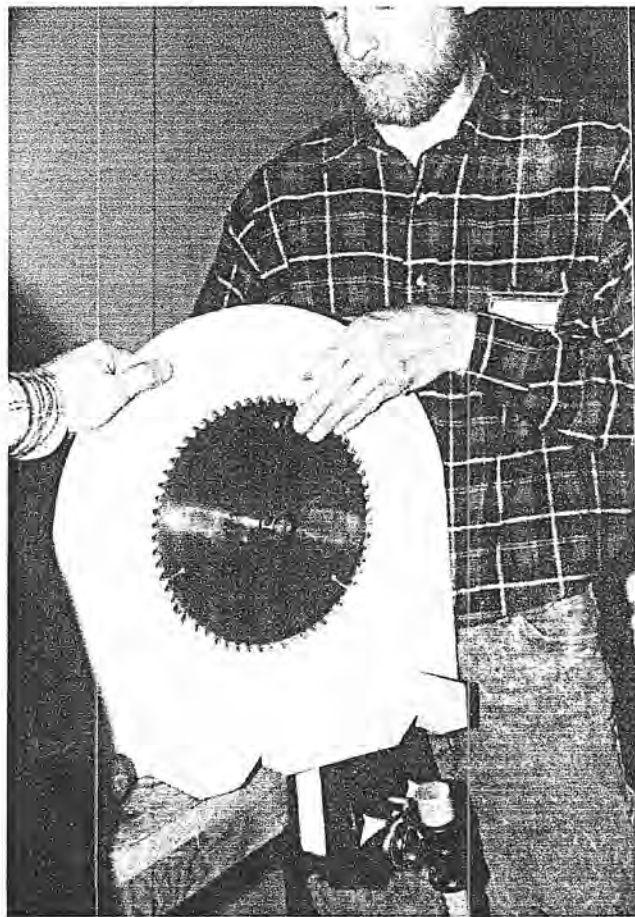
Turn on!



**Above:** Some fine Show & Tell

**Left:** Jim Jacobs with his come-along fixture made with rollerblade wheels.

**Right:** Jim shows his indexing fixture using an old saw blade with symmetric teeth as gauge.

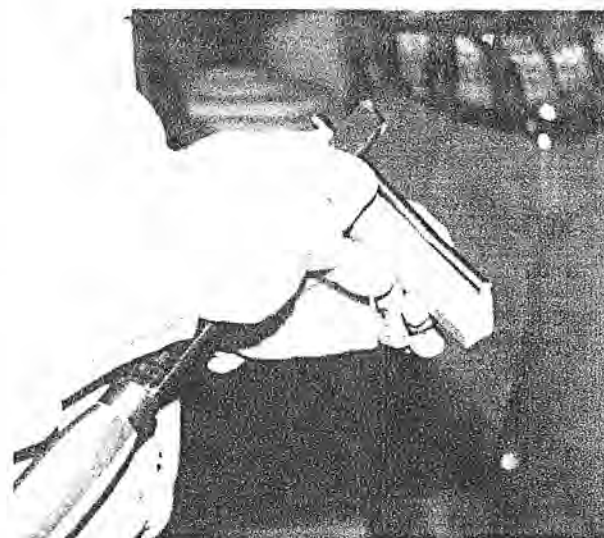
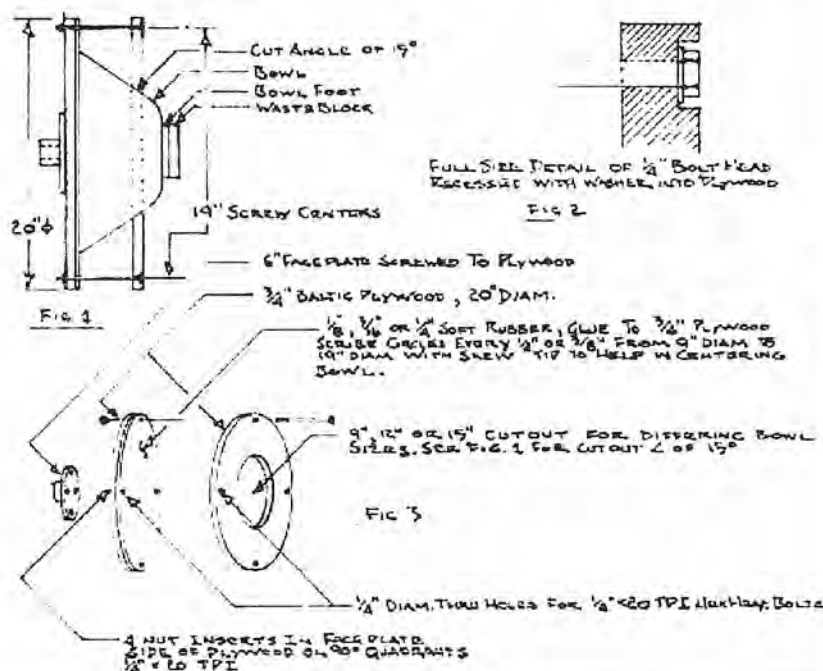


Photos taken by Chuck Pitschka.

**Right:** John Barklow shows his ultra smooth toolrest surface using drill rod welded to the top edge of the original rest.

**Below:** George Dupre uses this fixture to help finish off the bottoms of large bowls.

BOWL TOOL FOR REMOVING WASTE BLOCK AND TURNING FOOT ON LARGE BOWL



## Using Your faceplate By Don Robinson

Last issue we discussed using the faceplate on the bottom side of your bowl. Sometimes you may want to turn just a round tenon on the bottom of the bowl-blank and finish the piece by using a Nova-Chuck or similar. To do this you will mount the faceplate to the eventual top of the bowl-blank. You must think ahead and drive the screws into the center of the bowl area, which will eventually be hogged out. If the piece will have a narrow neck you may be able to screw into an area outside the future neck. I have found that it doesn't pay to turn

too much of the final outside shape at this time since there is always some alignment difference between the faceplate mounting and the chuck mounting. Another reason for mounting the faceplate on the top might be to true up the bottom surface of the blank in preparation for using a waste-block. If you look at the drawing above you will see how George has found a good use for the faceplate. Also, in the Tips section of this issue, Jim Jacobs uses a faceplate on the MDF polishing fixture. As you can see, the faceplate has many uses. I would recommend that you put a mark near the edge of the faceplate for re-orientation if you remove and remount the faceplate. Just mark the bowl-blank at the same point and use this as a guide for re-mounting. This procedure probably shouldn't be attempted too often, however, since the re-mounting is never going to be perfect.

## Appreciation Note:

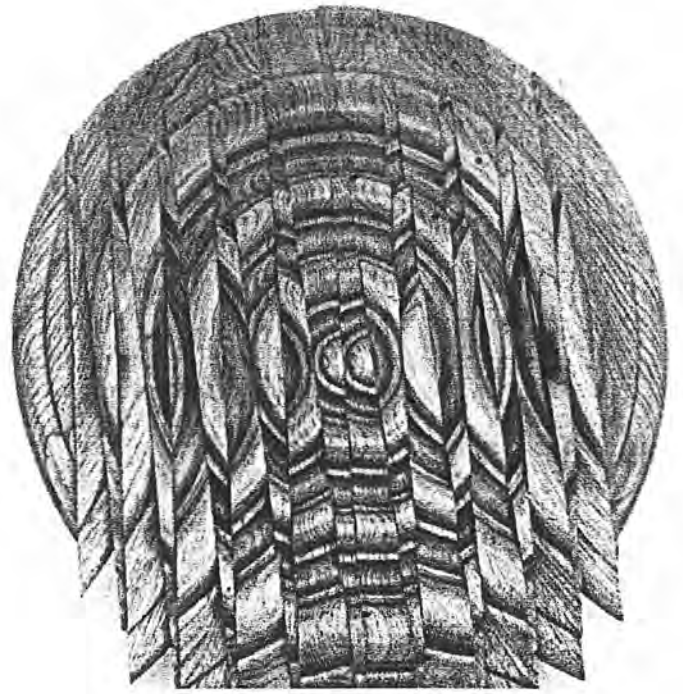
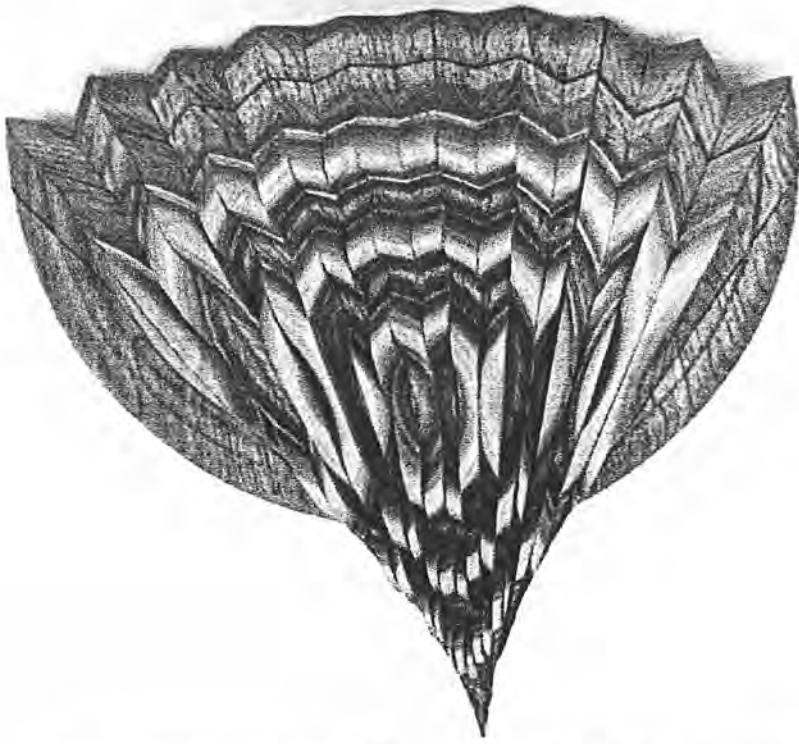
Special thanks go to Paul Keller and his employer, **Andersen Windows**, for copying this news letter free of charge.

We also want to thank the local Woodworking Retail stores, **Rockler** and **WoodCraft**, for the use of their store space for some of our meetings and for their discounts and donations.

There are many other local and catalogue companies that support this club by offering discounts. The next newsletter will include the entire list.

Of course, this organization would not function without the help of our own members. Thanks to everyone who contributes time and energy to making it happen.

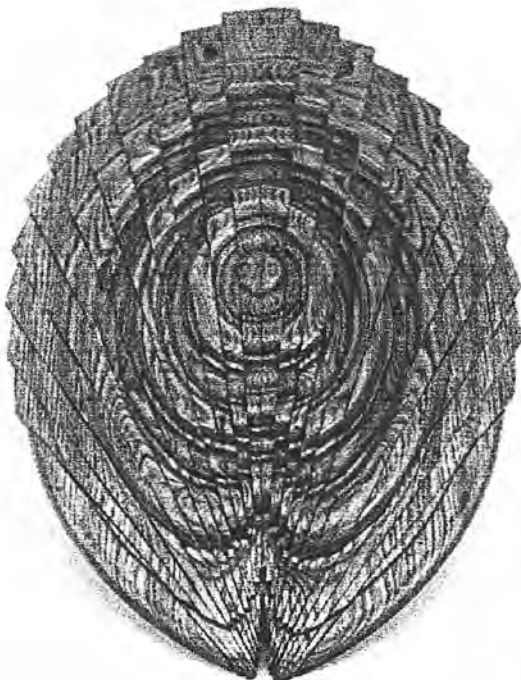




Duane Gemelke's  
dramatic and unusual  
wall plaques.

Very creative work.

See pg. 6 for article.



# Minnesota Woodturners Association

*Dedicated to providing education, information and an organization to those interested in woodturning.*

The Minnesota Woodturners Association was formed in 1987 with approximately 25 charter members and now has about 100 members. The Association is non-profit and all work by members is done voluntarily.

The skill level of our members ranges from complete beginners to skilled professionals. Membership includes a few professionals but hobbyists make up the majority. The members live mostly in the Twin Cities metro area, however there are members in all areas of Minnesota stretching into western Wisconsin.

The Association normally schedules meetings once a month during fall, winter and spring of the year. (September thru May) The meetings are normally held on Tuesdays or Saturdays and the group meets in a different location each time. The meeting locations vary from members shops, educational associations, to the various woodworking stores located throughout the metro area.

The newsletter is published quarterly.

The meetings usually consist of some sort of turning demonstration or related subject. The subjects of the demonstrations vary from basic techniques to advanced levels. The meetings are always open to questions from the members and we invite and encourage them to share their knowledge and skills freely. The Association tries to arrange at least one professional demonstration each year, with past professional demonstrators coming from all areas of the United States, England and as far away as Australia.



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**First Class Mail**