

MINNESOTA WOODTURNER'S NEWS

March 1992.

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**Minnesota Woodturners Association Officers**

President	William Allshouse	(612) 755-3373
Vice President	Don Wattenhofer	" 572-1045
Secretary	John Engstrom	" 475-0307
Treasurer	Hal Malmlov	" 789-9616
Newsletter Editor	Paul Kachelmyer	" 738-3940
Program Director	John Berglund	1-558-2338

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**Membership Application and Renewal**  
**Minnesota Woodturners Association**

\_\_\_\_\_  
Name (Please print)

\_\_\_\_\_  
phone

\_\_\_\_\_  
Address

\_\_\_\_\_  
Zip code

Dues are \$15 yearly (starting in Jan.)	Mail to:
but \$10 for new members joining after July 1.	MN Woodturners Assoc
Please check: Amount Enclosed _____.	c/o Hal Malmlov
Renewing member _____. New member _____.	3613 Belden Dr.
	Mpls. Minn. 55418

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MN Woodturners Association  
64 108th Ave. N.W.  
Coon Rapids, Minn. 55433



First off, I want to thank Ron Krietemeyer for handling the copying and mailing of the newsletters. He has been doing this for over a year now. Ron also keeps the mailing list current. A copy of the 1992 list is being sent to all members with this newsletter. If there are any errors in your name or address, please contact Ron with corrections, 739-8410.

Dues :

The membership runs from January through December. The dues are \$15.00 per year. Please make checks ( no cash, please ) payable to the "Minnesota Woodturners Association" and mail them, along with the membership registration form on the front of this newsletter to our treasurer, Hal Malmlov, 3613 Belden Dr., Mpls. Minn. 55418.

Safety:

Right up front, we wish to remind all members and guests, that woodturning can be dangerous. Many of our members have had accidents, and injuries, of some sort, with the lathe. This is a reminder, that by attending our meetings, you do so at you own risk. This is also a reminder that we ask all members to sign a liability release. If you have not signed one, please ask one of the club's officers for one to sign. Lastly, this is also a reminder that we ask that everyone near a lathe at our meetings, bring, and wear, eye protection.

We now will be asking everyone attending a meeting to sign a "sign in sheet and liability release", for that meeting. This will include nonmembers, and will insure that everyone attending has signed a liability release.

Sorry to have to repeat this message so often, but it is such an important one that we want everyone to be aware of it.

Meeting Cancellations:

If "wintertime" bad weather occurs on the day of a meeting, you can assume that the meeting will be canceled. We will try to inform the "person, place or store" where the meeting was scheduled, of the cancellation, during the day, just in case you want to call them to confirm it. If "summertime" bad weather occurs on the day of an outdoor summertime meeting, the meeting will also be canceled.

### Upcoming Meetings:

April 4, Saturday 9:00 - 4:00.

#### Professional Woodturning Demonstration by Rus Hurt:

Cost: \$10.00

Rus gave a wonderful demonstration to our association three years ago. Unfortunately, space limitations at that time, forced us to limit attendance to 15 people. Because of that limitation, and because we have so many new members, we are again sponsoring a demonstration by Rus.

Rus is a professional woodturner with over a dozen years of turning experience. He maintains a private studio near Lake Superior's south shore near Port Wing, Wisconsin.

Rus will concentrate most of his demonstration and discussion on woodturning basics. However he will also demonstrate some advanced techniques. He will deal with the different methods that he uses for commercial, production, and artistic woodturning.

He will also talk on some of his experiences of trying to make a living from woodturning, and some of the harsh realities that that has entailed.

Rus asks that you come prepared to ask questions, and that you bring any tools that you may be having trouble sharpening or using. It will be a full day, and he feels that everyone should have a chance to ask all the questions they want. The demonstration will be very loosely structured, so that he can deal with subjects that people ask about.

The demonstration will be held at William Allshouse's house. William's house is located at 64 108th Ave. N.W., Coon Rapids, Minn. This is about one mile north of Highway 10 and just west of University Avenue (one mile west of Highway 65 - Central Avenue). From Highway 10 go approximately one mile north on University Avenue to its intersection with Northdale Blvd and 109th Ave N.E., turn left (west) and go one long block to Butternut street, turn left (south) and go about three blocks to 108th Avenue N.W., turn left again and William's house is about 1/2 block down that dead end street.

As with past professional demonstrations sponsored by our association, the attendance fee covers only a portion of the cost, with the association making up the difference. Consequently, attendance will be limited to only current members of the "Minnesota Woodturners Association".

Please bring a check for \$10.00 (no cash please) made out to the "Minnesota Woodturners Association", to the demonstration.

Also please bring a chair, and a lunch. We will take a lunch break



around noon.

The demonstration will be held in William's garage, which is only partially heated, so if it is cool that day, wear warm cloths.

We are looking for a volunteer to videotape the demonstration for our association. If you would be willing to do this, please call William to arrange this. The person videotaping, will be admitted free to the demonstration.

After the demonstration, we will probably go out to dinner. Anyone interested is very welcome to come along. It will be a nice chance to get to know people better. We will try to go to someplace simple and economical.

Rus has mentioned that he would be happy to have a turning/camping/sightseeing/socializing weekend at his place (225 miles away) sometime this summer. It could be a real chance to get to know each other better, and to spend some concentrated time sharing woodturning knowledge. We will ask at the meeting, to see if there is enough interest in this, to set something up.

April 25, Saturday 1:00 - 3:00.

Mark Reschke will be demonstrating some of his unique woodturning methods. Mark is one of our professional members, who has been turning for many years. In addition to having showings at a number of galleries, for many years he has had booths at "The Renaissance Fair" and "The Uptown Art Fair".

Anyone interested in making their own lathe or tools should also come to this meeting. Mark made his own lathe, and it is of a very unique design. Many of his tools are also different than most that I have seen.

The meeting will be held at Mark's house in Mound Minnesota. It is located roughly 8 miles west, and 3 miles south, of the intersection of I-494 and Highway 12.

Directions: from I-494 go west on Highway 12 approximately 4 miles to County Road 15. Take County Road 15 west for about 5 miles as it winds its way around Lake Minnetonka into the community of Navarre ( Navarre is not shown on most maps). Go to the third stoplight, where there is a Spur gas station. Turn left (south) on that road (Interlachen road) and follow it for about 1/2 mile to a Y in it. Keep left at the Y (on Tuxedo) for about 1/2 mile to Clyde. Turn left at Clyde, go a short block to a stop sign and take a right. Go another short block and take another right on Aberdeen. Go to the top of the hill to Mark's house at 4737 Aberdeen. Mark's phone is 472-3283, just in case you get lost.

Please bring a chair, and items for show and tell, if you have any.

The meeting will be in Mark's outdoor shop, so wear warm cloths if it is cool that day.

May 2, Saturday 1:00 - 3:00.

Harvesting, cutting, and processing green wood.

We will have a bunch of logs and branches at this meeting. John Berglund, Craig Lossing, and anyone else who is interested, will demonstrate how they cut up the wood to use it for woodturning. We will discuss methods of using green wood, and methods of drying wood. For someone who may get a tree, or a log, of some nice wood, this knowledge may make the difference between ending up with woodturnings, or firewood.

The meeting will be held at John Ratliff's house at 4583 Geneva Avenue North, Oakdale.

Geneva is also know as Century Avenue, and Division Street. It is on the county line between Ramsey County and Washington County, and also divides a number of cities, hence the many names. There are actually street signs on both sides of the street !

John's house is located one mile west of I-694, and 5 blocks south of Highway 36. There is a stoplight at Highway 36 and Geneva Avenue. Go south from Highway 36, and go one full block past the Union 76 gas station to 42nd street (not upper 42nd street). Turn left (east). John's house is that corner house.

This is an outdoor meeting. If it rains, the meeting will be held the next Saturday, May 9, at 1:00.

Summer meetings: Unless we have a meeting at Rus Hurt's place, we will not meet in June, July, or August. Past experience has found that summer meetings are just not well attended.

#### Past Meeting Minutes:

February 15

John Berglund gave a demonstration, and discussion on photographing your work. Unfortunately, I was not able to attend this meeting, so I don't have anything to report on it.

February 24

The meeting was held at "Woodcraft Supply" at 9741 Lyndale Avenue South, in Bloomington. We appreciate their generosity in allowing us to meet there.

Some general things that were discussed before we got into the

subjects for the meeting:

-The American Association of Woodturners would like to put together a slide show of woodturnings to use for educational purposes. They are seeking donations of slides for this. If you have any slides which you may be willing to donate, please call Mary Redig at (612) 484-9094.

-The editors of "The American Woodturner", the journal of the "American Association of Woodturners", would like to have a section of the journal devoted to tips on woodturning. They are seeking tips from YOU on anything that you have found that helps you in woodturning.

They have stressed that it doesn't matter how trivial the tip may seem, or how you write it up, or draw it up. If they can figure it out, they will be happy to rewrite it, or redraw it.

Please send all tips, suggestions, comments, etc. to: Robert Rosand, R.D.#1 Box 30, Bloomsburg, PA 17815.

If I can find time, I may go through some of our old newsletters, and send in some of the tips that members have given at our meetings. Please let me know if there is anything that I have put in a newsletter, that you would not want me to send in.

- The subject of trying to establish a permanent "collection" of turnings for displays and demonstrations was discussed.

This last month, one of our members, Jim Tracy, organized a display of woodturnings which are being shown in a display case at a local library. The display is of an informational and educational nature. It will gain exposure of woodturning, and our association, to the public.

In the past, it has taken quite an effort to put together displays for booths we have had at woodworking shows, or displays for other purposes.

It was decided that we will try to gather a permanent collection of turnings that our association can use for such displays in the future. William Allshouse volunteered to take care of the collection.

If anyone wishes to donate (or loan) any turnings to the association for this, please just bring them to a meeting to give them to William. Please write your name on them, and the type of wood. We will consider the turnings to be on something of a long term loan, and if you should ever want them back, you can certainly have them back.

We anticipate that it will take some time for this collection to



grow, so we will probably be bringing up the subject a number of times in the future.

Unfortunately, we can not guarantee that donated items won't be damaged, or stolen, so please don't offer pieces that you consider irreplaceable.

Since the meeting, Jim has been asked by the Anoka County library to put on another display, at their main branch near Northtown shopping center. The display will run from May 3 through June 13. We ask that anyone willing to donate, or lend, turnings to the Association bring them to either of the meetings we will be having in April, or call Jim at 571-3374. Jim asks that all turnings be identified with the type of wood, and the name of the person who made them.

#### Kaleidoscopes:

- Ron Krietemeyer gave a very informative talk on how he has made some Kaleidoscopes.

A Kaleidoscope is basically a tube, which holds three strips of mirrors, in the position of a triangle. If someone looks in one end of the tube, they see a large number of reflections of what is visible through the other end.

The Kaleidoscopes have a number of parts to them. They can also be made in a number of different ways.

Ron starts out by cutting 6 strips of 1/2 inch boards about 1 1/2 inches wide and 12 inches long. The boards are cut with their sides at 30 degrees. He glues the boards together with regular white (or yellow) woodworkers glue. To clamp the boards he uses a bunch of heavy rubber bands.

After the glue has completely dried, he mounts this Hexagon shaped tube on the lathe, and turns it either completely round, or leaves some of its outside as a hexagon. Ron mounts it on the lathe by wedging small, 3/4 inch wide boards, into the inside openings for the drive center and tail center to hold on to.

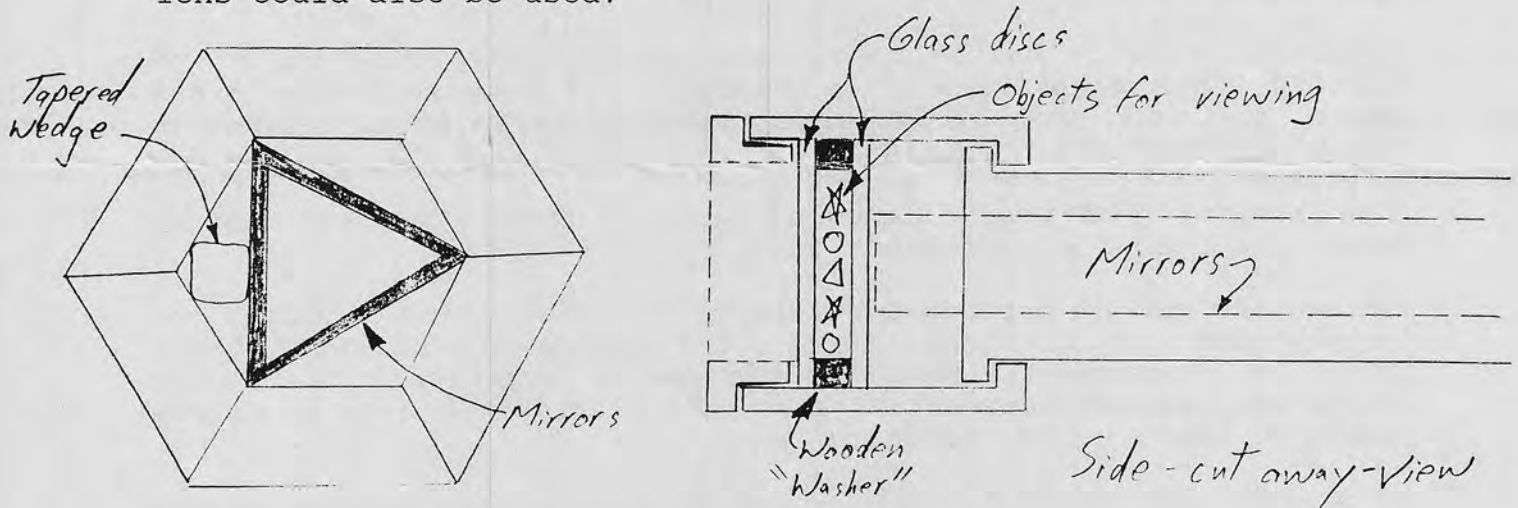
Ron cuts three strips of mirrors to fit into the opening. Cutting the mirrors takes some practice. Ron uses a sharp glass cutter and a straight edge to score the glass. He lays the scored mirror on a piece of masonite, then lays another sheet of masonite on top of it to break it. He has found that the cuts have to be very straight, for the mirrors to fit properly inside of the kaleidoscopes. He cuts the width of the mirror strips so they fit in the interior opening just slightly loosely. He places a small wood wedge behind one of the mirrors to hold them snug.

With kaleidoscopes, the longer the mirrors are, the more they magnify.

What to do at the ends of the kaleidoscope, can vary greatly. The simplest scopes just have an eye opening at one end, and a round piece of clear glass at the other. These round ends can be made on the lathe, and glued to the ends of the scope. The round piece of clear glass can be bought at hardware stores as flashlight lens's, or can be cut from glass with a round suction cup glass cutter, typically costing under \$10.00.

More complex scopes can have an actual glass lens at the eye end, and a device at the other end which holds objects which can be moved around.

The kaleidoscope that Ron made had a device which held objects which could be moved around. The drawing shows the parts of Ron's scope. Ron has found that colored, translucent, irregularly shaped objects, produce nice effects for viewing. A piece of wax paper can be placed on the outside lens to diffuse light and to prevent anything from outside the scope from being seen. To get a similar effect the glass lens could be sandblasted. A colored plexiglass lens could also be used.



#### Wood Finishes:

Also discussed at the meeting was the subject of wood finishes. Some of the items that were brought up were:

- Most finishes darken the wood. For some woods this can be very pleasing. However, for some light colored woods such as maple and boxelder, it may be desirable to use a finish that does not darken them. Lacquers, such as "Deft" tend not to darken light woods very much. "Behlens" and "Rockler" both make nontoxic salad bowl finishes that also do not darken light woods much.

- The "Behlens" and "Rockler" salad bowl finishes were discussed quite a bit at this meeting, and also at the next meeting. Chuck Pitschka has used the "Rockler" finish a number of times. Some of his findings: The finish is fairly expensive, \$10.25 per quart. A quart could probably finish a couple of dozen 8 inch bowls. The finish is very thin, like water. He used 3 to 4 coats to finish



his bowls. He wipes it on, lets it sit for a minute or so, and wipes off any excess. He lets it dry at least 6 hours between coats. The resulting finish is a very pleasant, satin surface. The finish is THIN, and does not build up to a thick coat. One person at the meeting said that they had applied 10 coats, and it still did not produce a thick coat. They also found that the numerous coats produced areas that looked foggy, and would not produce a shine.

-The "General Finish" was discussed. A number of members use this, and say they like it. It is advertized as a nontoxic finish. It is applied in two parts. The first part, "seal a cell" is wiped on, and let to dry at least 6 hours. The second part, the "top coat" is then applied. Somebody gave the advice that you should not put on to thick a coat. I believe that somebody said that it was available from Youngblood Lumber.

-The subject of nontoxic finishes was discussed quite a bit. In addition to the above listed finishes, some turners in the past have advocated using vegetable oils for a finish. Some people at the meeting had done this, and had their bowls turn rancid over time.

-In the past, we had heard that Mineral oil could be used for wooden ware that is used in the kitchen, and is washed. The oil reportedly will not turn rancid. It also will not form a dry finish. It apparently has to be reapplied periodically.

-Waterlox finish was discussed briefly. It apparently can be a nice finish, but unused portions left in the container set up, and become unusable fairly quickly.

-Some "clear" finishes, yellow with age. I have had that happen with some polyurthane I used a number of years ago. It really made the elm and boxelder turnings look bad.

#### French Polish:

-I demonstrated the application of an oil and shellac finish that is sometimes referred to as a french polish. I use this finish on over half the things I make. It produces either a satin or gloss finish, and only takes about 60 seconds from starting it, to having a complete, and "dry" finish.

I love the finish because it looks good, and because it is done so fast. It also doesn't give off any stinky fumes to breath in.

I have read descriptions of applying French polishes that sound very complicated. On regular woodwork it may well be complicated. However, on the lathe it is very simple.

I applied the finish to a 6 inch diameter by 3 inch high, black Walnut rounded shape, that was to become a pencil holder.

I wiped on a coating of boiled linseed oil, let it soak in for about 10 seconds, then wiped off any excess.

I then poured about a teaspoon of white shellac on to a small part of a cotton cloth. I wiped the shellac on to the object to cover the entire surface. I then switched the lathe on. I pressed the part of the cloth that had held the shellac, hard against the spinning object. after about 5 seconds, the surface at that spot became glossy. Still pressing the cloth, I slowly moved it over the object. Within about 15 seconds the entire surface had become glossy, and the finish was done.

Some tips on this:

It is the heat generated by the spinning, and pressing hard, that causes this instant setting up of the finish. Typically the faster the object spins, the better the finish.

Since the outer edge of my 6 inch turning, was moving much faster than the inner portion, I had to hold the cloth harder, and longer against the inner portion, to produce the same "heat", and thus, the same glossy finish.

The heat that is generated from the pressing and spinning can burn your fingers. To avoid this, I use about 6 layers of old cloth under the new layer that is on top, and holding the shellac.

The cotton cloth rags that I use are only about 4 inches by 4 inches. I only use about 1/4 th of the rag for each application.

Softwoods tend to absorb much of the finish, and produce a satin, rather than a gloss finish. It might be that a couple of applications would produce a gloss finish; I don't know, I have never tried it.

For a minute or two after the finish is applied, the surface is still warm, and thus, somewhat soft. You must be careful not to damage it at that stage. A couple of minutes later, when it has cooled, it will be completely hard.

A gloss finish can be made into a satin finish by "sanding" the object with fine steel wool, after the finish has hardened. You can also produce a satin finish by not using as much shellac, and not pressing as hard.

Shellac that gets on your hand will dry very fast. I like to use thin, medical type, rubber gloves, when handling it. They can be reused, and usually last for a couple dozen finish applications.

I have heard that shellac is made from secretions, or something, from some tropical bugs. It can be purchased in flake form, and mixed with denatured alcohol, or in cans already mixed up. In the mixed up form it has a shelf life of about 5 years in an unopened can. An expiration date is usually marked on the can. I bought a

can once that had passed the expiration date, and it turned out to be no good. I have used shellac from opened cans for up to a couple of years with it still being good. I paid about \$7.00 for a quart of the mixed up shellac. Many hardware stores and building supply stores do not carry shellac any more. However, paint stores, some woodworking stores, and some well stocked hardware stores should have it. The only dry white shellac flakes that I have seen for sale cost about \$28.00 for about a quart.

I have seen "orange shellac" sold in both mixed up, and flake form. It is much cheaper than white shellac. I am not sure, but the orange shellac may have an orange tint, or darker tint, to it. If so, this might not look good if used on light colored woods.

A little bit of linseed oil, and a little bit of shellac, go a long way. My guess is that it costs less than 5 cents to finish most objects.

I put both the linseed oil, and shellac, in plastic shampoo, or dishwater bottles. The bottles have small, easy closing flip tops, which make it easy to pour them out on to rags.

I put lacquer in a plastic bottle once, and it made the bottle real soft and rubbery. The solvents in it must have dissolved some of the plastic.

The surface of the wood to be finished should be fairly smooth. I usually sand the object to about 300 grit, and then burnish the wood with the leather glove that I wear.

It may be hard to get a glossy finish on larger pieces, say 12 inches in diameter. I haven't really tried anything that size.

I had heard that shellac finishes do not stand up well against water. To check this out, I put some drops of water on a turning that I had put the French polish finish on. The finish was destroyed within one minute. Obviously then, the finish should not be used for objects that will be exposed to water.

-At one point in the meeting the subject of hot melt glue came up again. Several people reported good luck using it to hold their work to waste blocks. I believe that it was Mark Reschke who said that he separates the two with a chisel and a mallet, and that they just pop apart. He also suggested that they could be placed in the refrigerator or freezer beforehand to make the glue more brittle.

-For making baby rattles, somebody suggested using popcorn for the insides.



March 10,

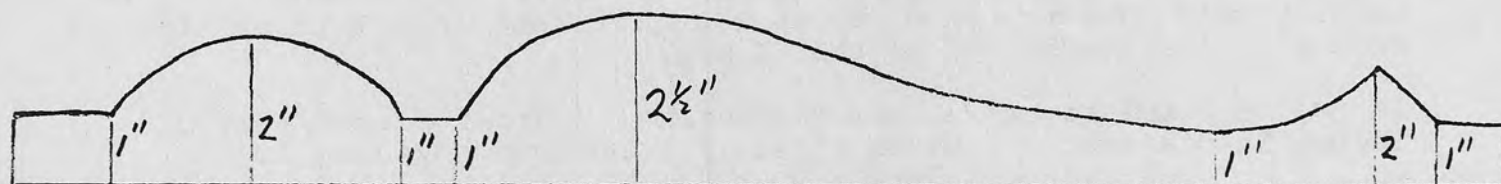
William Allshouse gave an excellent demonstration, and discussion on methods of duplicating spindle work.

If you have ever tried to make more than one of the same type of turning, you know that it can be a real challenge. Such objects might include: sets of matching table legs, stair railings, sets of candle holders, chess sets, etc.

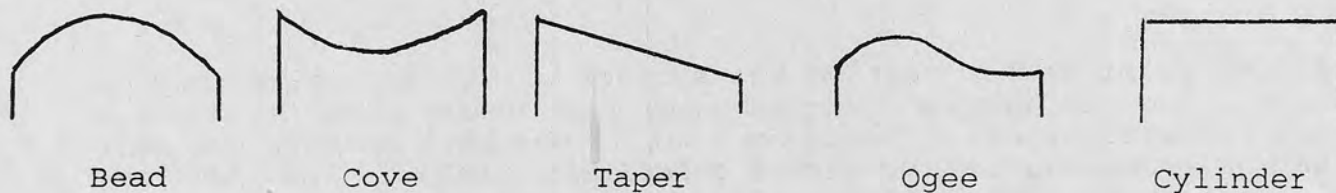
Here are just some of the highlights of the meeting:

William started out by telling of the \$500.00 duplicator that he bought for his lathe a number of years ago. He found that it did work, but that it took an awful lot of time and effort to set it up and use it, and that it produced a turning that needed a lot of sanding before finishing. He found that he could make duplicate turnings much faster by hand.

When William wants to make duplicates of a spindle, he usually draws out 1/2 of its shape, on a board, before he makes even one. He calls this board, a story board. On it are listed all the diameters of the various shapes.



He has found that 5 basic shapes make up almost all spindles. They are:



William likes to produce spindles that do not have too many details to them for the following reasons:

1. They are more pleasing to the eye. A spindle with many details can look too "busy".
2. The beauty of the wood itself, is shown off better.

3. It is easier to turn a spindle that has fewer details.
4. When in use, it is easier to clean a spindle with less details.

As an example of beauty in simplicity, William mentioned Rude Osolnik's famous candlestick holders. They are just one big cove shape.

Through studying many spindle shapes, William has found that certain diameters tend to be used repeatedly on a single spindle. He has also found that it is much easier to turn a spindle if it has the same diameter at a number of points.

To start a spindle, he mounts his wood on the lathe using a cup "dead" center to drive the piece, and a "live" center of the same size, in the tailstock. The cup drive center allows the wood to be removed from the lathe, and remounted, perfectly centered. The wood can also be turned around and remounted, perfectly centered. This may be helpful during the sanding stage.

With the wood turned to a cylinder, he holds his story board against the cylinder, and marks with a pencil, the ends of the spindle, and all the locations of the various diameters of it. The end points of the various shapes are also all marked.

He sets a calipers to the size of one of the diameters of the spindle. He holds the calipers in one hand, and with the other hand holding a parting tool, he cuts all of the diameters of the spindle that are that size. He repeats the sizing of the various diameters until they have all been cut.

After the diameters have been cut, he freehand cuts the various beads, coves, ogee shapes and tapers.

After cutting the spindle he sands it, and possible reverses it on the lathe to sand it again.

William said that many times, duplicated turnings do not have to be perfectly the same. For instance, table legs will be relatively far apart, and a difference of 1/16 th of an inch in a bead or cove is probably not going to be noticed.

When making freehand cuts of beads, coves, and ogee shapes, he likes to make a number of thin cuts to get down to the final shape. That way, he gets the feel of the cut, and all the hand movements, refined, by the time he makes the finish cut.

William had a couple of bits of advice for anyone doing spindle work for others:

1. Have them buy the wood. That way all the wood for their project will have come from the same source, and will hopefully look the same. This will help to avoid a situation such as an oak tabletop being a different shade than it's oak legs. Woods can be

very different, for instance, oak grown in Kentucky may not have the same coloring, or grain structure, as oak grown in Iowa.

2. If making tenons to fit in a hole which will be drilled by someone else, get them to drill a couple of sample holes with their drill bit. Not all drill bits are the same size, so this will insure that you can size the tenon to fit the hole that their drill bit will drill.

National Woodturning Symposium, June 18, 19, 20, 1992.

The American Association of Woodturners has scheduled this years national symposium for June 18, 19, 20, in Provo Utah. The cost will be \$200.00, before May 15, and \$210.00 after.

Past symposiums have drawn rave reviews by our members who have attended. Last years symposium was said to have over 15 woodturning demonstrators, giving a number of demonstrations each. A trade show, large gallery showing, and other events were also part of the symposium.

The nationally known woodturner Dale Nish, is holding his annual turning conference this year in conjunction with the AAW symposium. It should be quite an event !

For more information, contact the American Association of Woodturners, 667 Harriet Avenue, Shoreview, Minn. 55126. (612) 484-9094.

Need help with the basics ?

Willie Allshouse, 755-3373, Ron Krietemeyer, 739-8410 and I, Paul Kachelmyer 738-3940, have all offered, that if any club member needs a little help learning some woodturning basics, that we would be happy to help you. Feel free to call us.

**CLASSIFIED ADDS:** Any member wanting to place an add, (free to members) send the pertinent information to me, Paul Kachelmyer, at 558 Farrell st. Maplewood Minn. 55119. I will try to get it in the next newsletter.

**FOR SALE:**

Arundel woodturning lathe. Made in England, 6 years old, perfect shape. Five step pulley 540 - 3231 RPM, 3/4 hp motor, cast iron headstock and tailstock, solid maple bed, 6 in 1 chuck, screw chuck, spur center, faceplates, #1 morse taper. Parts are available through "Garret Wade". \$700.00 call Chuck Pitschka 935-0660.

Craftsman 10 inch tilting arbor table saw. Cast iron table, metal stand, about 10 years old. \$300.00, also call Chuck Pitschka.



Bostitch N80S Framing Nailer, used once, New \$480.00, asking \$375.00. Call David Cushman 435-6506.

Dick Enstad, who has made two treadle lathes, has found a source of flat and rope leather drive belts: S R Sikes, 3715 Oregon Avenue South, Saint Louis Park, Minnesota. (612) 931-9905.

Stihl model 032 chain saw, 18 inch bar, anti vibration handle, approximately 7 years old. Asking \$225.00, new they cost about double that. Will give a 30 day warranty, call John Berglund 1-612-558-2338. John said that if he doesn't sell the saw by the May 2, meeting, that he will bring it to that meeting to demonstrate it.

Bosch cordless hammer drill. For drilling in concrete. Carrying case, extra battery pack, extra drill bits, 5 years old, hardly used. New cost \$550.00, asking \$225.00, call Paul Kachelmyer, 738-3940.

Wanted: I would like to buy a used wood splitter. If you have one for sale, or know of one for sale, please call me, Paul Kachelmyer, 738-3940.

#### Library

Our Association now subscribes to "woodturning" magazine. This is an excellent magazine, and is published in England. The magazine will be available for viewing at meetings, and for checking out between meetings. Rules for checking it out are the same as with our videotapes: You must bring it back to the NEXT meeting.

#### Articles needed

Anyone who would like to add anything to the newsletter, is encouraged to do so. These could be anything that could be of interest to anyone...tips and techniques, jigs that you have found useful, reviews of new products, tools, or lathes, book or videotape reviews, or reviews of seminars or symposiums that you have attended. Just send the info or article to me, Paul Kachelmyer, 558 Farrell street, Maplewood Minn. 55119, and I will put it in the next newsletter.

**DEMONSTRATORS:** If any accomplished turners are travelling near or through Saint Paul, Minnesota, please give one of our officers a call to possibly set up a demonstration --- (yes, we will pay you a fee). We would appreciate at least a month or two notice.