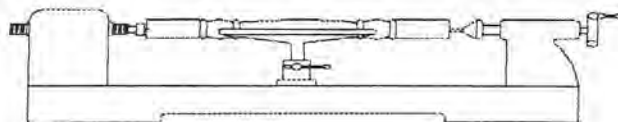


Minnesota Woodturners Association



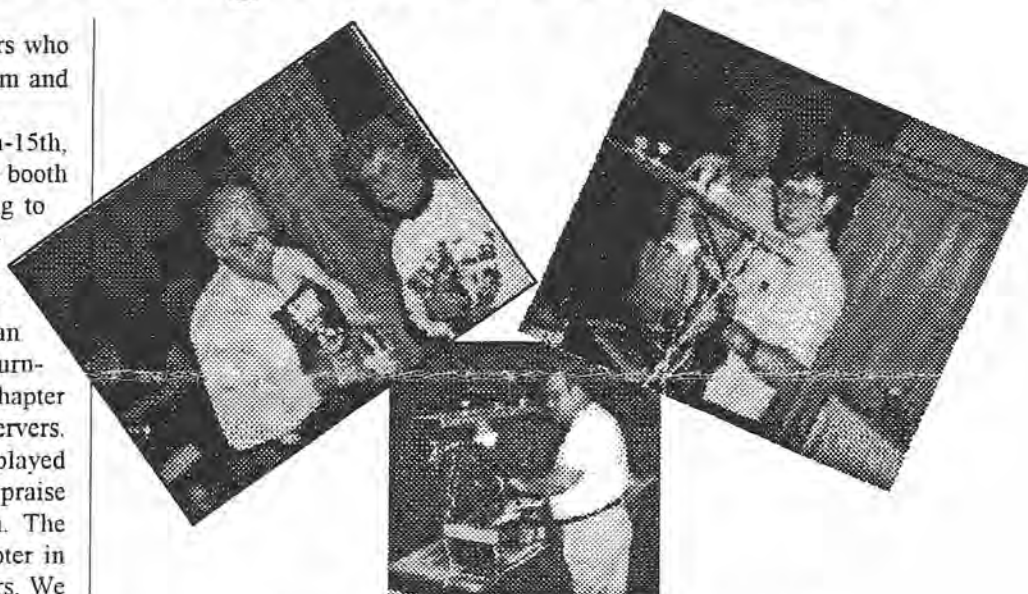
Local Chapter of the American Association of Woodturners

November 1995

Volume 9 Issue 5

Woodworking Show Volunteers

Thank You!! to all members who volunteered their time, enthusiasm and talent at the Woodworking Show. Over the weekend of October 13th-15th, sixteen of our members manned a booth demonstrating their skills, talking to the public and generating goodwill for our organization and the AAW. We were assigned a double booth on a corner which was an excellent spot for display of our turnings and also for having the Chapter lathe set up in plain view for observers. All of the turned pieces displayed brought many compliments and praise for the people that turned them. The show was successful for the chapter in that we signed up 3 new members. We answered questions for many other potential members who we handed out information on our chapter and for our National Association, the AAW. Almost all members left the show with lighter billfolds or purses from the purchase of some of those absolute necessities that you just can't get along without. (grin)



Some of our volunteers at the Woodworking Show

Please see back cover and insert for Membership renewal for 1996

Northern Woods Woodworking Exhibition

Congratulations to members Don Wattenhofer and Joe Nopola for winning prizes at the judging on Friday, 10/20/95. Joe won the prize for best turning at the show with his White Pine bowl (12" dia x 6" high) that was painted on portions of the outside and then french polished. Don won best of show for his domed cedar chest with gorgeous veneering on its top. (Don

is not only one of our more accomplished Turners but as you can see, he is also a master craftsman in woodworking.) Other members entered in the show were: Chuck Pitschka with a thin walled Elm bowl, Ed Johnson with a spalted birch piece sitting on a wrought iron stand, Mel Turcanik with

a miniature turned box of walnut, chaktecoc, and tagua which was very elegant, and James Tracy with two of his unique art pieces. (See article on James on following pages.) The Northern Woods Exhibition is a show of the best woodworking and turning in the Upper Midwest and has been held yearly for the last 13 years.

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Turning Basics...Tools for Turning
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Upcoming Exhibitions and Shows

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Dec 1994 Year end Bank Balance	\$1,342
1995 Activity thru 10/15/95	
Income	
Membership Dues (79 Paid)	\$1,155
Glue Sales	\$332
Meeting Wood Raffles	\$59
Total Income	\$1,546
Expenses	
Net Demo Costs	(\$68)
Library Tapes, VCR Rental, etc	(\$568)
Newsletter Printing, Postage, Supplies	(\$569)
Tools	(\$244)
Annual Liability Insurance	(\$75)
Donations - Arrowmount School	(\$200)
Prizes, Board Mtgs, Misc	(\$95)
Total Expenses	(\$1819)
Membership Deposits-Library Tapes	\$20
Checkbook Balance as of 10/15/95	\$1,089

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 get you pointed in the right direction for the answer.

John Engstrom	(612) 475-0307
Ed Johnson	(612) 224-4194
John Magnussen	(612) 477-6294
Hal Malmlov	(612) 789-9616
Dave Schneider	(612) 934-4667
Don Wattenhofer	(612) 572-1045

If you would like to help out and have your name on this list, please call Dave Schneider @ (612) 934-4667

Know Your Minnesota Trees

Information from Minnesota Division of Forestry

BLACK CHERRY

[*Prunus scrotina*]

FORM: Largest of cherry trees; height 30 to 70', diameter 8"- to 2'; long clear trunk with little tapering when grown in forest; when grown in open, tree has short trunk with many branches and irregular spreading crown.

BARK: On young trunk, smooth and bright, reddish-brown, marked by conspicuous narrow, white horizontal lines; has bitter almond taste; on older trunks, thin, dark brown, rough and broken into thick irregular plates.

LEAF: Alternate; simple, oval, thick, shiny above, paler below; edges broken by many fine incurved teeth.

FRUIT: Borne in long, hanging clusters resembling choke cherries; dull purplish-black about the size of a pea; is edible but somewhat astringent; ripens in late summer; has some medicinal value.

RANGE: Fairly common in Minnesota hardwood region; grows to commercial size only in southeastern part of state.

WOOD: Reddish-brown with yellowish sapwood, medium-heavy, strong, fine-grained; does not warp or split in seasoning; has exceptional lustre and color; used for furniture, interior furnishing, tools, and implement handles; next to black walnut, black cherry has highest value of any hardwood in Minnesota.

BLACK WALNUT

[*Juglans nigra*]

FORM: Handsome forest tree when growing singly in forest; height often 100', diameter 3 to 5'; straight and clear of branches for half its height; when grown in the open, stem short, crown broad and spreading.

BARK: Thick and very dark brown; divided by rather deep fissures into round ridges.

LEAF: Alternate on stem; compound, 1 to 2' long, consisting of 7 to 11 pairs of yellow-green leaflets, each sharply pointed; smooth above, pale and hairy underneath; leaflets about 3-long, extremely tapered at ends and toothed along margin.

FRUIT: A large, round nut borne singly or in pairs and enclosed in solid green husk, which is not sticky and does not spread open even after nut is ripe. The nut is black with very hard, thick, finely-ridged shell, enclosing a rich, oily kernel which is edible and highly nutritious; matures in fall.

RANGE: Grows on rich bottom lands on moist, fertile, hillsides in southern part of state; is easily propagated from nuts and grows rapidly in good soil.

WOOD: Rich chocolate - brown heartwood is of superior quality and value; heavy, hard, strong, and comparatively free from warping and checking, takes a high polish and is very durable; highly prized for a great variety of uses such as furniture, gunstocks, and airplane propellers; finest veneers are made from burls and roots; small trees consist mostly of sapwood, which is light-colored and not durable.

Turning Basics.....

Dave Schneider

Tools used for Woodturning

Let's review the two types of turning, before we get to the tools used.

The first type of woodturning is spindle turning or "turning between centers". The reference to between centers means that the piece of wood is held between the center of the headstock and the center of the tailstock and fully supported by both. Some typical types of spindle turning are table and chair legs, chair spindles, bedposts, handles for tools, etc. Some types of tools generally used in spindle turning are skews, scrapers and spindle gouges.

The second type of woodturning is bowl turning or "faceplate turning". This is where the piece of wood is held on a faceplate or in a chuck that is mounted to the spindle of the headstock (Inboard or outboard). The tailstock is sometimes used in the initial stages of inboard faceplate turning to steady and secure an out of round piece until it can be brought into round and maybe even shaped on the outside. Some typical types of faceplate turning are bowls, vases, plates, platters, table tops, lidded boxes, etc.

If a technique or tool works for you and is safe, stay with it until you can hone your skills to move up to, or change to something different

Each type of woodturning has its own specific tools and there are also tools that can be commonly shared between the two types of turning.

Most lathe tools made today are of High Speed Steel. This is the preferable material for any lathe tool today, as it will hold an edge longer and

will not blue (lose its temper) as easily as the older Carbon steel tools when applied to the grinder or for extended cutting in hard materials.

In turning there are two types of cuts, **Cutting and Scraping**. Cutting takes the wood off in a planing type action that produces long shavings. Scraping takes off wood in a much coarser action and does not produce as smooth a finish. (The exception to this is if you use a scraper in a shearing type cut, which can produce very fine shavings.) Cutting has been used for centuries and requires a higher level of skill than scraping. Cutting will generally give a better finish and is the preferred mode of the professional woodturner. Either method is acceptable as long as the quality of the work does not suffer from it.

The following descriptions are general and used by the majority of the people in turning. Make up your own mind about what works for you and don't get locked into what other people say or do. If it works for you and is safe, stay with it until you can hone your skills to move up to, or change to something different.

Gouges are the most common tool used on the lathe. They are used for roughing out and/or reducing stock to a cylindrical form. Gouges are used for cutting coves and grooves on spindle turnings and are also used to rough out and finish bowls, platters and hollow turnings. The depth of the flute of a gouge will tell you what type it is. (The flute is the indented portion of a gouge and can be cut into the steel if it is round stock or can be forged if the gouge is made from a bar of tool steel.)

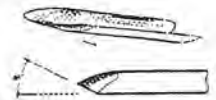
Bowl Gouge: These are generally deepfluted with many different grinds and side grinds. They are designed to remove wood from the inside



and outside of a bowl quickly and in goodly quantities

Spindle Gouge:

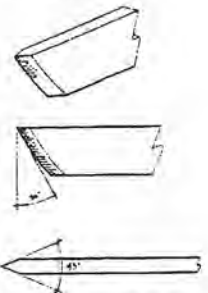
Shallow fluted to create more of a slicing action when turning between centers.



Roughing Gouge: These gouges are made from thicker steel than spindle gouges, have deep flutes and are straight across the front edge. They are used to quickly create a round piece from rough or square cuts blanks for spindle turning.



Skews: These are made from flat steel and their working end is cut on a bias (*skewed*) with an acute hollow grind. (Some newer skews are made from oval or round stock, giving a little more control over the tool.) The two ends of the cutting edge are known as the "long point" and the "short point". This tool is ideally used in spindle turning to achieve "planed cuts" that require little if any sanding. The skew is used for planing, cutting beads and rounding of areas on a spindle turning. The skew is one of the more difficult tools to learn to use properly, but when mastered gives great satisfaction and great finishes.



Two types of cutting edges:

Straight: This is a perfectly straight edge and has been in use for centuries.

Curved: This has just appeared as a general tool in the last 15 years or so and because of the rounded edge has less of a chance for dig-

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ins and seems to give a little better control.

Scrapers:

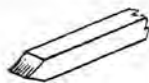
Scraping came into major use with the manufacturing industry turning out mass production pieces. With duplicating jigs setup, a pattern can be followed and the duplicated pieces scraped to shape and then rough and finish sanded. Most people start out with a scraper as their first tool in turning as it will do the job and is the easiest and safest tool in the turning arsenal to use for a beginner to get reasonably acceptable results. The real purpose of the scraper is for final shaping and smooth finishing, usually on a bowl. (*Inside and outside*)

The heavier and thicker a scraper is, the less chance of it bouncing on the piece and it really helps on cutting the cross-grain or any wild grain in and on a bowl. The edges can be straight, skewed, rounded or custom made.

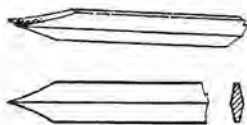
Beading and Parting tools: These are used in spindle work for small beads and for establishing a certain diameter on piece used in conjunction with a set of calipers. Parting tools are used in both spindle and bowl turning to part the piece off from waste wood it is attached to. One of the more standard parting tools is a diamond shaped tool, ground to a point where the center of the diamond shape is, making the cutting surface the widest point of the tool. By having this shape, friction and burning of the piece being worked on is minimized. Other parting and beading tools are made out of flat stock, some with a single edge and some with



Round Nosed Scraper



Beading Tool



Diamond Parting Tool

dual ground edges.

Standard Angles and Grinding of the tools:

The following angles on tools are generally accepted as a good starting point for lathe tools:

Bowl Gouges have a moderate fingernail shaped edge and a 45° hollow grind. This grind allows turners to rub the bevel both on the inside and the outside of a bowl. When used correctly, this will give controlled cuts that help determine the final wall shape and ensures a consistent wall thickness.

Spindle Gouges have a fingernail shaped edge and a 30° hollow grind

Roughing Gouges are ground straight across with a 45° hollow grind

Skews generally have a 30° angle on the tip and a 45° hollow grind (22 1/2° on each side of center) for the cutting edge

Scrapers generally have an 80° hollow grind. The mass of metal directly below the edge offers shock resistance for heavy cutting. There are some turners that put a 45° edge on to produce more shavings, less sawdust and faster wood removal. This should only be done after mastering basic scraping as it now becomes what is known as a shearing cut.

Special Bowl Gouge Grind "Irish or Ellsworth Grind" This has been used for many years overseas and is now being adapted here by many of our professional turners. It has a 20°-25° angle on its nose and the sides are ground back 3/4" or more.

The area to either side of center is used to hog out wood. The center is used to cut bowl bottoms and end-grain and the sides are used to cut the inside and outside of bowls. If the tool is turned 90° to its side, it can be used to produce a finish cut, (with lots of practice).

Modified Irish Grind



Past Meetings

Paul Kachelmyer

October 10, 1995

Steve Brown gave a very interesting talk and slide show, on his recent visit, to the Granville wooden bowl factory in Granville Vermont.

The factory has been operating since 1857, and has probably made more wooden bowls than any other site in the world. They currently produce about 800 bowls a day.

Five mills have actually existed at the site, with fires having destroyed the first four. The mill used waterpower until 1927, when their dam washed out. They have used electric power since then.

Special curved cutting arms are used to cut the bowls from large spinning chunks of green maple. The bowls are cut so that a series of smaller bowls are cut from the same piece of wood. The bowls range in size from 23 inches in diameter, down to 7 inches. The bowls are cut so that the cutter cuts the outside of one bowl, and the inside of the next bowl in the same cut.

The cutters are carbide tipped, and are resharpened every three days.

The wood is driven by a large screw chuck, about 3 inches in diameter, and spun at about 50 revolutions per minute.

If the wood is not wet enough, a person with a water hose sprays a stream of water into the cut while it is being made. It takes about ten seconds to make each cut.

They primarily make bowls out of maple, but will also make them out of other woods. The wood comes from the surrounding 5 state area. The logs used are very straight grained, with no knotholes or crotches. The logs are cut to a length equal to their diameter, and then sawn lengthwise, down their center growth ring. The logs are big, being 20 to thirty inches in diameter.

Surprisingly, the bowls do not warp much, and the loss rate due to breakage, is about two percent.

The bowls are dried for two weeks, and then sanded. For drying, they are stacked face down, in a pile about five feet deep. They are stacked in something of a pyramid

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Member Profile - James Tracy

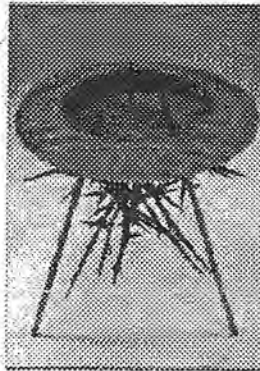
The following article is in the November, 1995 issue of the English Magazine "WOODTURNING". Congratulations James!

A focus on hidden talent- James Tracy

Sharp's the word

Unsettled (Walking Group), osage orange, thorns, brass, scale figure, paint, vermiculite, burnt oil finish, 30.5cm 12" H x 180cm 7' DIA x 180cm 7' W.

*Looking Forward.
Looking Back.
spilled birch, brass, thorns, eye, scale figures, vermiculite, oil finish, 23.5cm 10" H x 200cm 8' DIA x 200cm 8' W.*



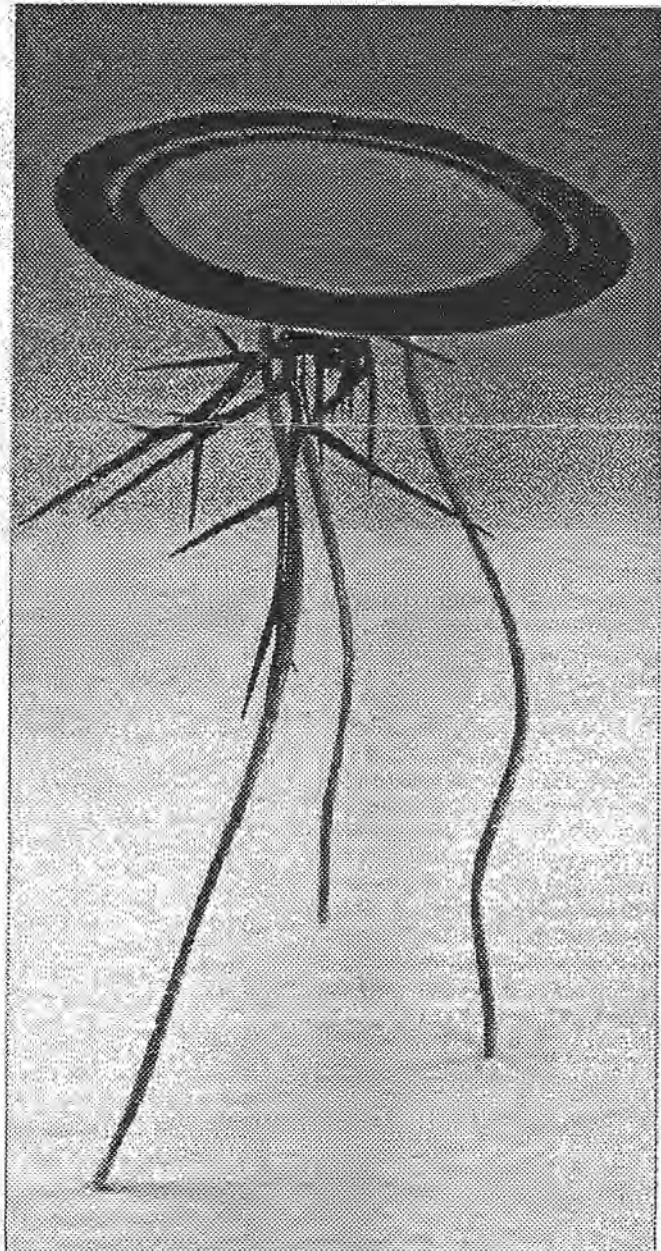
Mountain Group Photographer, big leaf, maple, brass, thorns, brass, scale figure, paint, vermiculite, oil finish, 33cm 13" H x 200cm 8' DIA x 200cm 8' W.

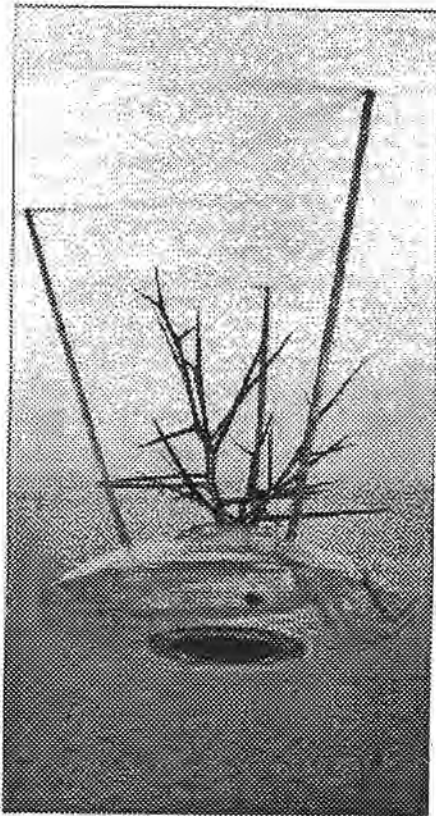


Lathe-turning is an important part of James Tracy's sculptural works, which combine traditional craftsmanship with his study of art and his inquisitive nature.

The works shown here are from his Thorn Series, part-influenced by his fascination for a grove of honey locust trees with massive thorn growth and exposed roots "hanging in the air".

James describes these pieces as having "layers of visual shifts, and perspectives which





Red King, spalted maple, dyed, thorn, brass, paint, vernacular, a few figures, French, 305mm 12" H x 240mm 9 1/2" DIA x 240mm 9 1/2" W.

Twisted, black walnut, eye, brass, thorn, paint, steel, vermilion, vase, ferns and vernacular.



Albert LeCoff is the co-founder and

Executive Director of the Woodturning Center in Philadelphia. Albert selects the photographs for this feature from the Woodturning Center's archives.

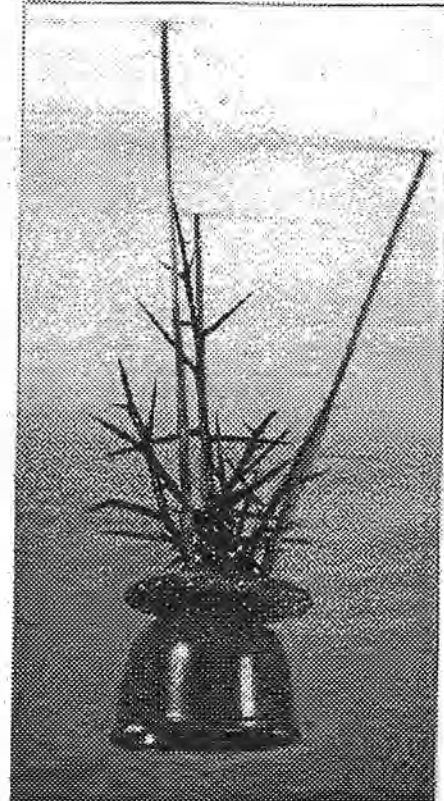
Whoever you are in the work, if you feel you are a hidden talent, send your curriculum vitae with a resume and

personal statement to: Albert LeCoff, Modern Talent, 42 West Center Street, Philadelphia, PA 19144 USA.

Accepted photos will not be returned. From published work will be returned a stamped, self-addressed envelope or informal one, reply coupon is supplied. Featured turners are invited to contribute articles describing their work and techniques for Woodturning. Membership of the Woodturning Center is open to all who possess the turning, or who share an interest in the craft. For details contact Albert LeCoff at the address above.

The author

cause a new way of seeing my pieces each time." He explains that their strength lies in the realism and perspective the viewer brings to them, each piece changing with every viewing. James gained an arts degree in teaching at the University of Wisconsin, where he combined his on glass, clay and sculpture. He continued his training at Indiana University, where he was a teaching assistant in the glass department. James also taught at the Royal College of Art in London, where he was a visiting guest in the glass department. The work has won prizes in several juried shows, including a first place for turning in the 1994 Minnesota Woodworkers' Guild show, Northern Woods. James Tracy, 250 Rice Creek Terrace, Fridley, Minnesota, USA.



(Continued from page 4)

fashion, so that air can circulate in, and around them. A simple household dehumidifier, placed in the room, helps to remove the moisture.

The sanding is done with special belt sanding machines. They start at 40 or 60 grit, and sand up to 120 grit. Most of the bowls are sold without any finish on them. They charge \$125.00 for a 23 inch, plain maple bowl. Bowls from extra nice woods are sold for \$300.00 to \$400.00.

Editors Note:

Paul failed to mention that he gave a demo on Top making after Steve Browns talk. As usual, Paul gave an excellent demonstration and in depth look at how he makes tops, the materials that he uses, the process of turning them out and the little tricks that make the difference in chatter work and decorating them.

All of Pauls tops are made out of hardwood that Paul has harvested, dried and turned. He showed us the standard spinner type top and also the solid body type top that you wrap a piece of string around and then throw it on a flat surface. Paul mentioned the fact that the wrapping the string around the top and bottom was the

key to getting the proper spin to this type of top. Thanks for the demo Paul.

September 16, 1995.

We met at Craig Lossing's shop, at Marine on the Saint Croix, for a very enjoyable talk and demonstration, by him.

Craig first talked about his experiences as a professional woodturner. He said that it is a lifestyle that suits he and his wife very well. It is a lot of work, but it also gives them a lot of flexibility.

His commute to his shop is about 50 feet, but his commute to shows may be 1000 miles. He sells at two to three shows in Minnesota each year, and a number of shows around the country.

In recent years he has focused on creating small sized turnings. He started pursuing smaller turnings as a way of simplifying the work involved in transporting his works to shows, and setting them up. He said that he used to carry 10 to 12 big bins of items to shows. Now he takes three. Storage of raw materials also takes much less space.

He said that he feels life is limited, so he

would like to do work he enjoys, and produce nice turnings that he can be proud of. Even after many years, he said that he is excited every day to turn something.

Even though he has been focusing on small turnings, what he demonstrated at the meeting, was finish turning, of a large, roughed out bowl.

Last year he rough turned two large bowls out of green, figured boxelder. The bowls were roughly two feet in diameter, eight inches deep, and two inches thick. The pieces of wood, before rough turning weighed about 50 pounds each.

To reduce the potential for them to crack while drying, he coated their end grain with "Sealtite" liquified wax. He then put them in plastic bags, and periodically took them out, for about a month. He then put them in the rafters of his garage, for about six months, until they were dry. One of the bowls did crack some, so Craig said that he would not finish turn that one.

He turned the bowls on his "Denver Ulery" lathe. From Denver Ulery, he bought a heavy duty drive shaft, bearings, pillow blocks, faceplate, and pulley. He has mounted them on a heavy homemade

(Continued on page 8)

Minnesota Woodturners Association

LIABILITY RELEASE

The process of woodturning presents an ever-present risk of injury to a person operating a lathe, and to any individual observing its operation.

We want to make sure that all individuals operating or observing a lathe are aware that many hazards do exist.

Lathes spin woods at high speeds, presenting the potential for injury if the wood, or portions of it, somehow breaks, shatters or comes away from the lathe while it is spinning. Potential weaknesses exist in all wood, and in all methods of holding wood, therefore the potential for wood breakage and personal injury exists any time a lathe is used.

Sharp tools, brittle tools, hazardous glues and finishes may also present a potential for injury for lathe operators and observers.

Wood chips, shavings, splinters, bark, chunks of weak wood and dust fly off the wood being worked on the lathe. Eye and face protection is absolutely necessary to protect operators and observers from potential injury from this flying debris. Wood debris on the floor also presents a hazard for slipping/falling. Dust in the air may present respiratory hazards.

Many woodworking shops are not set up to allow observers. Therefore hazards may exist to individuals being in the shop due to areas being cramped, or to tools/supplies being touched, bumped, accidentally started or otherwise affected by themselves or others in the shop.

By signing, I acknowledge that I have read the above information, that I understand that there is a risk of injury to individuals operating or observing lathe operation, and that I accept full responsibility for any injury which may happen to me while attending or participating in any way, any event, gathering, demonstration or seminar, in any way associated with the "MINNESOTA WOODTURNERS ASSOCIATION". I further release from liability, any individual, business, school or meeting place and the the "MINNESOTA WOODTURNERS ASSOCIATION" for any injuries or damages received while attending a meeting or demonstration with the "MINNESOTA WOODTURNERS ASSOCIATION".

(Continued from page 7)

bench. The lathe is powered by a 1 1/2 horsepower motor. A large pulley produces a fairly slow lathe speed, of about 100 revolutions per minute.

Craig said that he enjoys turning large bowls because he gets more of a "sense of the tree" and more of a feel of the wood, from them.

He mounted the dried, roughed out bowl, on the same faceplate as he had used for rough turning it. He used the same screw holes, and used #14, 1 1/2 inch long, sheet metal screws. He likes the sheet metal screws because they have deep threads, and a lot of gripping power.

When the lathe was switched on, it could be seen that the bowl had warped about 1/2 inch, out of round.

He proceeded to use a "superflute" bowl turning gouge, to cut the bowl back into a round shape. Craig had mounted the superflute gouge in a 5 foot long section of 3/4 inch steel plumbing pipe.

When he got to the stage of making his final finishing cuts he used a 3/8 inch spindle gouge, sold by Henry Taylor. He said that he prefers the shape of the flute of the Henry Taylor gouge, to that sold by

Sorby.

Because the wood was highly figured, with very twisting grain patterns, there was a certain amount of torn out wood grain. Those areas had to be sanded out.

Sanding:

1. Before sanding, he coated the entire surface with "Deftoil" finish. He learned from Ray Key, that this helps to stiffen the grain, and helps to reduce the sawdust in the air when sanding. He usually lets the Deftoil set for an hour or so before he starts sanding.

2. He starts sanding with 80 grit, drill mounted, snap on, "Merit" brand, sanding discs. He sands with the lathe running, and the drill going at about 2500 rpm's. Because of the Deftoil, the discs clog up with oily sawdust. He uses a stiff brass wire brush to brush the gunk off of the disc (while the disc is not spinning). Even with cleaning the disc, he goes through about two discs on a big bowl.

3. He then stops the lathe and, with the same 80 grit disc, "spot sands" any individual spots with torn grain. He has found that he has to sand deeply into the end grain, and torn grain areas, with boxelder, or else they will end up looking

like dirty areas, when they are finished.

4. With the lathe running, he then holds a large sheet of 120 grit sandpaper against the bowl.

5. With the lathe running, he then holds a large sheet of 180 grit sandpaper against the bowl.

6. With the lathe not running, he uses drill mounted, 180 grit sanding discs, to spot sand any areas where rough grain remains. The sanding discs are made with 180 grit garnet sandpaper, glued to a 1/2 inch thick foam pad, which is glued to an old sanding disc. The gluing is done with 3M 77 spray adhesive.

7. Using the same 180 grit, drill mounted sanding discs, he sands the whole bowl with the lathe running.

8. For final sanding he uses hand held 240 grit sandpaper, with the lathe running.

9. To remove the base of the bowl, that was mounted to the faceplate, he cuts it off with a chisel, and then sands it smooth.

10. To finish the bowl, he will apply 3 to 4 coats of Deftoil. He uses chunks of foam, taken from old furniture pads to wipe on the oil. To wipe the excess off, he

(Continued on page 9)

1996 MEMBERSHIP RENEWAL

Dues are due now for 1996. For simplification of processing the membership renewals, we are asking for your renewals in November, rather than waiting until January. Please clip out and mail this filled out form with your check to our treasurer, or bring it to one of the two remaining meetings this year.

Please take a moment to list below, what you would like to see as meeting subjects for next year.

Name: _____

Telephone 1: _____

Address: _____

Telephone 2: _____

City, St, Zip: _____

Dues are \$20.00 yearly (Starting In January) but \$10.00 after July 1st of that year

Amount Enclosed: \$ _____

Please Check: Renewing Member ☐ New Member ☐

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

Mail To:

MN WOODTURNERS ASSOCIATION
c/o Ron Meilahn
1638 23rd Ave N.W.
New Brighton, MN 55112