



Minnesota Wood

An Affiliated Chapter of the American Assn. of Woodturners

April 1998

Volume 12, Issue 3

Editor's Corner

Remember the "egg Challenge" at the April Meeting. (Details on p. 8)

The Bonnie Klien demo is coming up May 9th. Give your \$20 to Ron Meilahn at the April meeting or mail them to me at:

Don Robinson
13400 Island View Dr
Elk River, MN 55330

• Treasurer's Report on page 8.

• The following article was written by John Magnussen. He highlights the life and experiences of an interesting woodworker. I agree with John that we should invite Hans to demo for us.

Hans Finsterwalder: Wood Turner

By John Magnussen

I met a wood turner in Lake Havasu City.
His work is excellent and very attractive.
His name is Hans Finsterwalder.
And see if you can rhyme something with that!
(Sorry Hans!)

While visiting in Lake Havasu City, Arizona this winter, I met Hans Finsterwalder, an accomplished wood turner. He took time to share some of his background and wood turning experiences with me.

Hans started in Germany at age 14 on a three-year apprentice program. The first year his duties were clean up, and other odd jobs, and learning the turning process. His only tools were the skew and gouge. At the end of the third year he had to pass a strict exam which consisted of identifying twenty types of wood, and making various types of spindle turnings from drawings given to him. He was scrutinized very closely for days during his exam. After successfully passing, he became a journeyman turner.

Hans worked for three years at very low pay. Nearing completion of his fourth year, the factory closed because of lack of work. He went into a lumber and plywood mill for a few years. In 1963 he came to the United States. He then went into the stone and brick mason business until about 1990, retired, and returned to wood turning as a hobby and profession.

His turnings are mainly segmented bowls, some larger ones with an 18-inch diameter and are 18 to 20 inches deep. The larger segmented bowls may have as many as 600 to 800 separate pieces! During his time in Germany, they never made bowls or other turnings comparable to what we make now. He created only a few plates for decorative and commemorative occasions. The biggest portion of his work was spindle turning.

They didn't have chucks like we do today. Nova, Oneway, etc.)

Cont'd on Page 2

Wood Turners Association

Everything he learned was friction fit. Today he uses a chuck like most of us. He has one chuck, which is approximately six inches, but goes back to the friction fit method on many things. He finish-sands with 180, 240, then 320 grit sandpaper. The work is finished with water soluble sanding sealer applied with a rag, then polished with fine steel wool. The final step is a wax coating. (Bri Wax or any Carnuba wax) That type of finish is fast and easy. Hans says he could spend more time on finishing but feels the design, color, and figure of the wood is more important to increase the marketability of his piece. Hans sells to a few galleries in California. He sells mostly Christmas ornaments, jewelry boxes, segmented bowls, all of which he stocks ahead of time. He has an excellent display of all his works in his home. I was very excited and honored to see the collection. He also does some contemporary turning and 'far-out' stuff. Hans also carves makes furniture, and cabinetry. As an example, his kitchen chairs and table are carved, dovetailed, and assembled with tapered pegs and are extremely sturdy and rugged. He used no nails or glue in the construction of the kitchen set. He likes the segmented bowls the best. He spends many hours compiling several different species of wood into his designs. The opening in one bowl was large enough to fit my hand inside. The finish inside was as smooth as the outside. The walls of the bowl were about ¼ inch thick. I think it would be nice if we could all see some of his pieces and watch him create some objects in person. I will be contacting Hans to propose this trip to Minnesota. I hope he will agree to share some of his turning expertise with us all.

John Magnussen

February Meeting Highlights

The evening opened with a short business meeting followed by show and tell. Boyd Annis showed a segmented bowl with an interesting and novel method of including diamond shapes embedded around the side. By routing opposing v-grooves into abutting segments he was able to fill the resulting diamond with a contrasting color square peg.

Show and tell is one of the best features of our woodturners meetings. It gives the members a chance to see a variety of shapes and woods. Even if you are a beginner don't hesitate to bring pieces in. They are never critiqued unless you ask for comments and usually you can get some advice on any problem areas you are concerned with. An example is the somewhat ugly bowl I brought simply because I needed help with getting a better shellac finish. The help that I got from Mel Turcanik and Larry Heyn was very useful and I have since tried it with some success.

So bring in those pieces, both good and not so good. It's what makes the club interesting and useful.

The special event of the evening was a slide presentation by Alan Lacer. He showed slides from his trip to Japan. The slides showed what methods Japanese turners use and the types of tools they use.

The lathes were, by our standards, somewhat cumbersome and looked to be on the dangerous side from a safety standpoint (apparently some of the turners were missing a few fingers). However, Alan said the lathes were capable of reversing direction by adjusting drive belts while the lathe was running.

I was impressed by the uniqueness of their turning tools. The shape of their tools reminded me of an old fashioned shoe horn. Instead of the cutting edge being at the end of the shank as our tools are they make a 90 degree bend at the end. They flatten and shape this short projection to suit their needs. Even though it doesn't look like our scrapers or gouges they can achieve the same results.

To accomplish this they use a totally different tool rest and hand hold on the tool. It is held somewhat like you would

hold a knife in a stabbing grip. The tool is then brought against the wood below center.

The resulting turnings were excellent and the lidded boxes had delicate chatter work to give it a beautiful design etched into attractive shapes. Alan displayed some of the work he brought back from his trip.

Another interesting fact is that these turners are considered artisans in their village and have a much more emotional tie to the local social structure. One indication of this is the simple doll that is turned. Each turner is known for his style in the turning and painting of his dolls. They are very attractive and oriental in appearance.

Thanks to Alan for taking the time to show us his slides and giving us a chance to see another side of woodturning.

March Meeting Highlights

The meeting was held in the basement of the Woodworkers Store near Lake St and Lyndale Ave. This was the first time we used this facility and it worked out nicely. The Woodworkers staff were helpful in providing chairs, coffer and other items that Judy Ditmer needed for her demo. I hope we arrange to have other meetings there.

Judy gave an excellent demonstration of small box and jewelry turning. She brought some examples of her work which contrasted with larger vessels other demonstrators have concentrated on. It's always interesting to see the wide range of shapes that can be accomplished on the lathe.

The earrings and pins that Judy turns are modified crescent shapes with a slight concavity. These shapes are then layered with contrasting wood colors which gives it

a nice finishing touch.

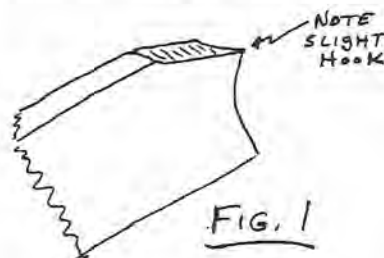
The lidded boxes used some of these layering techniques both on the lids and the bottoms. The lids were made to be a snap fit by using a slight taper on the box tenon (wider at the top).

Judy starts with a pre-turned cylinder which has a 1 to 2 inch diameter by ¼ inch deep tenon at one end. She turns a recess in a waste block of any of the harder woods to hold her workpiece, using a thick instant glue to back up the snug fit.

For the earrings and pins she primarily uses a small gouge with a long fingernail grind to bring the work to the desired diameter and to set the amount of concavity.

She showed us a new technique for grinding the shape of the parting tool to prevent damage to the piece you are removing.

First, grind the cutting edge from the center of the Vee upward so that you have about 1/3 on the high side and 2/3 on the low side. She grinds the low side back slightly to avoid any chance of it touching as she parts the wood. She then finishes the grind by bringing the tool up to the right side of the wheel so the right side of the cutting edge of the tool is not on the wheel. This causes a small hook on the right edge of the tool. (See Fig. 1) This grind assumes that the vessel is to the right of the parting cut thus having the hook leading the cut it will reduce tearout at the instant of parting.



Custom Lathe Setups

Have you ever thought about building a custom lathe or modifying an existing lathe? If so you will be interested in the following article by Jim Jacobs.

The Jack shaft

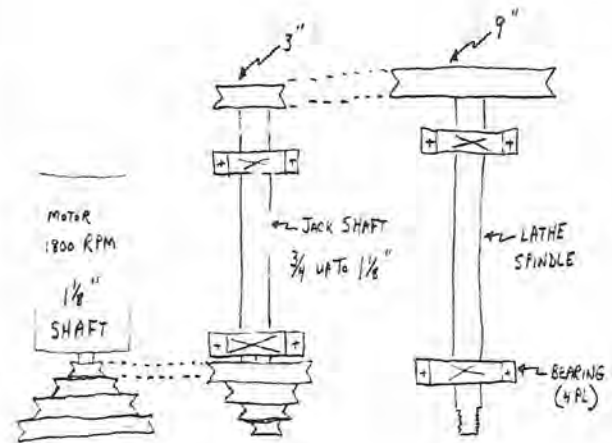
The jack shaft is a driven shaft that is installed between the motor and the lathe spindle. There are several advantages to this arrangement rather than driving the lathe spindle directly from the motor.

1.) With a four step sheave (normal setup) directly driving the spindle resulting speeds are two that are below the motor speed and two that are above. For turning large pieces the higher speeds (3600 RPM or above) are not very useful. The jack shaft allows us to customize the range of spindle speeds that are better suited to the intended use of the lathe and to allow use of the full range of speeds available.

2.) Most custom built bowl lathes are built with a spindle shaft larger than one inch. The typical five step sheaves or four step sheaves are not available with a bore larger than $\frac{3}{4}$ inch for five step and 1-1/8 inch for four step. With a jack shaft, the spindle shaft uses a large diameter single groove sheave that is readily available with a large diameter bore.

3.) The speed range of the spindle can be easily changed by simply changing the diameter of the single groove sheave on the jack shaft. This is a relatively inexpensive change and allows fine tuning of the drive system that is not possible otherwise.

(See further details in sketch at right)



SPEEDS FOR THIS CONFIGURATION:

JACK SHAFT SPEEDS	SPINDLE SPEED 3:1 REDUCTION
900	300
1440	480
2250	750
3600	1200

FORMULA FOR CALCULATING SPEED:

SPINDLE SPEED = JACK SHAFT SHEAVE DIA. DIVIDED

By SPINDLE SHEAVE DIA. TIMES JACK SHAFT SPEEDS.

Along the same vein of customizing, the article on the following page explains torque and horsepower. Woodco carries quite a line of new and used motors and controls and according to their advertisement will help with choosing a configuration. Another vendor to go browsing at for used equipment is Tried & True Tools inc. in Fridley.

CHARLES J. WOODRUFF
WOODCO PRODUCTS
5507 5TH AYE SO.
SEATTLE, WA.
(206) 723-8487

TORQUE AND HORSEPOWER IN VARIABLE SPEED DRIVES

Whenever I discuss variable speed drives one of the first questions asked is "doesn't it lose power at the slower speeds?" To answer this question I need to define the elements of "power" that are of interest to a woodturner: these are torque and horsepower.

In terms of woodturning, torque is a measure of the twisting force on the spindle needed to remove a particular size shaving from the piece being turned, 1/16 inch, 1/8 inch, etc.

Horsepower is a measure of the rate of doing work. In terms of woodturning it is how fast you put the shavings on the floor. The equivalent measure of work for the woodturner would be ounces of shavings per minute or pounds of shavings per hour. (You could mathematically convert this measure of work to horsepower) You can also see that we can put the same amount of shavings on the floor in different ways. A light cut at high speed will be equivalent to a heavy cut at a slower speed. The weight of the shavings hitting the floor will be the same therefore, the horsepower is the same but the torque will be different.

With these definitions in mind lets go back to the variable speed drives. DC motors with electronic speed controls, Adjustable Frequency AC Drives and Hydraulic Drives are all constant torque devices. In other words as you go slower you can make the same size cut but you are putting fewer shavings on the floor.

What gives these devices a bad reputation is misapplication of the drive by not considering the underlying principles that I hopefully put into plain English above. Lets say woodturner "A" has been turning spindles at 2500 RPM on a lathe with a variable speed drive. Woodturner "B" arrives with a bowl blank and decides there is no need to move the belt for a slower spindle speed when he can just slow the spindle to 500 RPM with the motor speed control. By the above rules he will only have 1/5 the horsepower available that "A" had but he will still have the same torque at the spindle. But there is another whammy. The bowl is larger, Therefore the lever arm where the tool is making the cut is longer, requiring more torque for the same size shaving.

This is a classic case of putting the car in overdrive and attempting to start up a hill. A lathe is not unlike a vehicle with a transmission. You need to select one gear for hills and others for city streets, freeways etc. What the variable speed drive provides is the throttle control for each gear just like a car. It cannot function as a one-speed transmission to cover all situations.

These are simple Engineering principles but I know of two major machinery manufacturers that have designed wood lathes with a "one speed does all" approach. The results have not been satisfactory and the reputation of the drives has suffered. (A major automobile manufacturer marketed a car in the early 50's with a transmission that had a similar one-speed approach. The result was equally dismal.) The Engineering miracle in these drives is that they are able to maintain constant torque.

As a practical matter I find that two speed ranges will handle most situations. I am also an advocate of using a variable speed motor on a lathe with a variable speed belt arrangement. These devices typically give a 10:1 speed that can be used to pick a speed range for the variable speed motor instead of a stepped sheave.

MWA Board

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Mel Turcanik (507) 634-7570

Vice President:

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Treasurer:

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Program Director:

Ed Johnson (612) 224-4194

Newsletter Mailing:

John Ratliff (612) 770-6471

Librarian:

OPEN

Member-at-Large

Don Wattenhofer (612) 572-1045

Secretary:

Gordon Miller (612) 484-5052

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	(612) 437-2302
Ed Johnson	(612) 224-4194
John Magnussen	(612) 477-6294
Dave Schneider	(612) 834-4687
Don Wattenhofer	(612) 572-1045

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

Notice to all you members !

Send me your thoughts, articles and photos of your work. It's always interesting for us to read about what's being done by the members of the club.

Even a brief outline and sketches would be great and I can help with the final article.

Pictures have always been a problem for the copier to reproduce clearly. To eliminate this problem we are working on the possibility of printing a single photo page separately then inserting it into the regular newsletter.

The newsletter is still being copied by Paul Keller free of charge at his employer's office. **A big THANKS to Anderson Windows inc.**

Don Robinson

APPRECIATION & RECOGNITION CORNER

Sometimes in our busy schedules we forget to recognize the effort and contributions that go into making this club interesting and useful to its members. This section will highlight and remind us of these things.

- The Bloomington WoodCraft Store for the free use of its back room for demos.
- The Lake / Lyndale Woodworkers Store for its free use of its basement for demos.
- The many wood related stores for their product discounts to our members. (see list in Feb. newsletter).
- Paul Keller and his employer, Andersen Windows, for copying the newsletter.
- John Ratliff for stapling and mailing the newsletter.
- Board Members for organizing and helping out at the meetings.
- George Dupre for his help and expertise at taping interesting demos.

Tim Manning, Don Wattenhofer and John Magnussen for opening their shops for meetings.

THANKS !!



February 25, 1998

Minnesota Woodturners Association
Attention: Ronald Meilahn - Treasurer
1638 23rd Ave. N.W.
New Brighton, MN 55112

Dear Club Members,

During this past year, we received a number of inquiries from woodturning chapters around the country regarding possible discounts that we could extend to clubs and their members. We have spent much time considering this issue and have decided to implement the following in an effort to offer the best possible prices to your club members.

1. Quarterly Newsletter

Each quarter your club will receive a newsletter reviewing happenings in the field of woodturning as well as items that will be on sale at special prices only available to those who are members of woodturning chapters. We will make a point of offering products which will appeal to a wide variety of turners so that all can benefit. In order to take advantage of these sales, you will need to mention to the sales person the name of the chapter to which you belong. You will not be asked for this information, so be sure not to forget to mention it.

2. Club Ordering

If your club would like to place a combined "club order", we will do our best to offer you the best possible pricing. Whereas different products have different profit margins, we will quote each item individually. The quoted price will be determined by the available margin as well as the overall value of the order.

When placing club orders:

1. Orders need to be \$1,000.00 minimum.
2. Orders need to be shipped to a single location with a single method of payment.

Please call or fax your proposed order to the attention of Rachel, we will respond with a quote which you can review and follow up accordingly.

As in years past, we will be forwarding 4- \$25.00 gift certificates to your woodturning chapter for use in fund raising. At the same time, we will include catalogs which we would ask be made available to interested members. You should receive these items within the next 4 weeks. Please be sure to forward a copy of your membership roster to us so that we can make sure your club members receive upcoming mailings and special offers.

We appreciate your business and want to offer you the best products and service available. Any recommendations you would like to make that you feel improve our service, product offering or overall performance in any way would be most appreciated. We work very hard to do our best and at the same time realize that there is always room for improvement, so please contact us anytime.

Best regards always,

Darrel Nish
President

The letter above is a copy of the special arrangement MWA has with Craft Supply. Since they require a fairly high order value we will probably order as a group instead of individually. Therefore if any members have a need to order you should contact Ron Meilahn to see if there are other members waiting to make a combined order.

Future Meetings:

April 14, 1998 - Tuesday
6:30 to 9:00 PM
@ The Woodcraft store in
Bloomington -
9741 Lyndale Ave. So.

Dick Enstad will give us a demonstration on the use of a treadle lathe. This should again give us an appreciation for an alternative method of turning.

Along with the demo we will have another Easter Egg challenge. Two years ago when we had the last challenge we saw some excellent examples of creativity and talent. As we did in the first Egg challenge we will use the egg turnings for show and tell.

You may enter more than one egg if you wish. The judging categories will be:

- Largest
- Smallest
- Most Perfect Shape
- Most Unusual
- Most Creative
- Most Colorful
- Best Finish

This promises to be a fun evening with lots of different turnings for us to view.

Remember to bring wood for the wood raffle if you can find a spare piece in your shop.

Sat., May 9 @ Woodcraft

Bonnie Klein, a professional turner, will give a 5 hour demonstration. If you have viewed any of her tapes in our library you know this will be a very interesting session.

She will demonstrate chatter-work, threaded boxes, small

projects and some basic tool sharpening.

There will be a charge of \$20 for members or \$30 for non-members. Seating is limited to 40 attendees.

Get your checks in to Ron Meilahn at the April meeting or mail to: Don Robinson
13400 Island View Dr
Elk River, MN 55330
ASAP !!

Note: There will be a wood raffle so bring a chunk if you can.

Bonnie will also be conducting a class on screw making for a limited number of students (10) on May 10th. Contact the Woodcraft store for details if you are interested. The class will run for about 6 hours and the cost is \$95. *10-5*

We are still planning the meetings for June and July.

For the August meeting we will again have a family picnic at John Magnussen's house. This year the challenge will be to turn a frisbee. The categories for judging will be:

- Largest
- Best Design
- Best Finish
- Most Colorful
- Most Exotic
- Thinnest
- Longest Actual Flight

The frisbee turnings will be used for show-and-tell.

Note: There will not be a wood raffle at this meeting.

If any of you have any thoughts on topics and/or specific demonstrators you would like to see in future meetings please pass them on to one of the Board members.

Treasurer's Report as of 1/13/98

Jan 1, 1997 Begin. Bank Bal. 1129

INCOME:

A.) 1997 Memb. Dues Rec'vd	1950
B.) Wood Raffle/Name Tag Sales	<u>172</u>
Total Income	2122

EXPENSES:

C.) Prof. Demo Costs (gain)	43
D.) N/L Print'g & Post'g	(321)
E.) Annual Liab. Insur.	(75)
F.) Holiday Party, Picnic	(379)
G.) Glue sales/Purch's. (net)	(152)
H.) Awards, prizes, Misc. Supplies	
Kits, Refreshmt's	(679)
I.) Libr. Tapes, VCR Rental, etc.	(79)
J.) 2 Yr Mag. Subscript. Woodtrn'g	(90)
K.) Equip., Upgrade, Repairs, Tools	<u>(118)</u>
Total Expenses	(1850)

NET OPERATIONS YTD-FAV	<u>272</u>
Memb. Dep's-Libr tapes/1998 Dues	<u>960</u>
Bank Balance 12/31/97	<u>2361</u>

FOR SALE

Classified Ads

Turning related ads are free to members. Commercial ads are billed at \$4 per month, per column inch. To place an ad, call Don Robinson 441-8207.

Ads will run one month unless you call to extend your ad each additional month. Submission deadline is the 1st of the month prior to publication. (i.e. The 1st of Aug, Oct, Dec, Feb, Apr)

FOR SALE

Incredible Wood!

Fantastic Prices!

Bocote	\$11/bdft
Mex. Cocobolo	\$15/bdft
Guat. Cocobolo	\$24/bdft
Osage Orange	\$6/bdft
Paela	\$8/bdft
Granadillo	\$11/bdft
Ziricote	\$15/bdft
Lignum Vitae	Cheap
Chechen Burl	\$5/pound
Ramone Burl	\$5/pound
Paela Burl	\$7/pound
Ziricote Burl	\$5/pound

Other figured woods
also available

Call Craig Lossing
(612) 785-4194

For Sale

Set your bevel grind angles accurately with steel gauges. Each gauge has two angles:

25°/30° and 35°/90°

Price - \$16 for two gauges

Exotic Hardwood 50% Off
6 Pieces 1 ½ x 22 in. long
Assorted types in bundle
Now \$12 per bundle

Call Chuck Pitschka
935-0660

FOR SALE

Manzinita Roots
Call Jim Jacobs 437-2302

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 1st (2nd 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 23rd Ave NW
New Brighton, MN 55112

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 bi-monthly, 5 times a year, excluding the months of July/August

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.



Editor
Minnesota Woodturners Assoc.
13400 Island View Dr
Elk River, MN 55330



First Class Mail