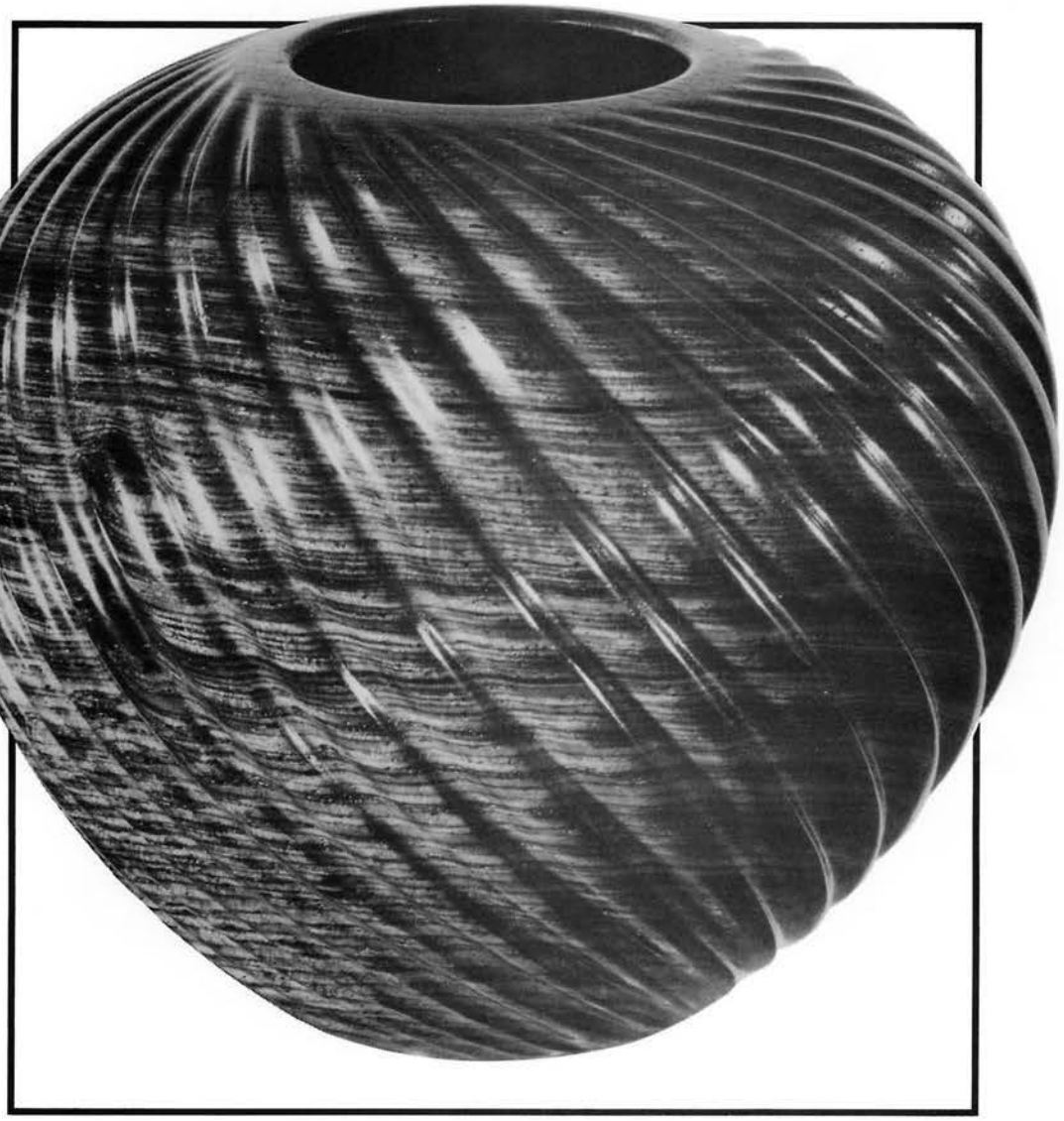
American Woodturner

The Journal of The American Association of Woodturners Volume 1 Number 3 March 1987 $5.00



Dedicated To Providing
Education • Information • Organization
Among Those Interested In Woodturning

Special Funds Update and New Drawing

Your response to our drawings for contributions to our Education Fund have been quite heartening. Furthermore, we have received many comments from members saying that they much prefer the drawing to the auction. So, as long as you like to participate, we are delighted to continue the project. As we go to press, our Education Fund contains about $1,340. These monies are kept quite separate from our operating funds; it requires the signatures of two members of the Board of Directors to draw down any of these monies, and all funds collected through these special contributions MUST be spent on educational projects directly benefiting our members.

Your support in this project has enabled us to begin to offer scholarships, described in detail by Bill Hunter on page 3. Because we must begin the typesetting and printing for this Journal so far ahead of its mailing, we have not yet held the drawing from the December issue. We will have to announce that winner in the June issue.

Now, in this issue we are offering two items to those of you who would like to make voluntary contributions to our Education Fund. As before, in exchange for each contribution — that we would like to suggest would be $5 — we will send you a ticket.

If you would like to make a contribution to our Education Fund, please use the form provided on the back dust cover of *The Journal*. A return envelope can be found in the middle of *The Journal*. As before, we will return 1/2 of your ticket so that you know that we have received your contribution. You needn't keep the ticket. We will have put your membership number both on the ticket we send you and on its mate, the one we put in the drawing box.

On May 1, 1987 we will hold a drawing for a first and second place winners. We will contact the first-place winner and ask whether he or she would like the Bill Hunter work or the English Iles turning tools. The second-place winner will receive the other.

On behalf of all the AAW membership, thanks to Bill Hunter for donating the beautiful fluted bowl, and thanks to P.C. English Enterprises, Inc., for donating the turning tools. If you are interested in contributing items to help build up our Education Fund, please contact our main office.

About the Bowl and the Tools

Bill Hunter writes about "Silent Flutes" registration no. 700; cocobolo rosewood 5" high and 5" in diameter with 32 flutes, 1986: "As I polished piece #700 and realized that it was a donation to AAW's Education Fund, I took some time to reflect on a full life as a woodworker. The adventures...the people...the joy of creation...'Silent Flutes' is but a small way of saying 'Thanks'."

The English Iles high-speed steel turning tools are made from a top quality alloy steel that is 18% tungsten. They will not loose their temper from the heat of grinding. All tools have been hardened between 59-61 on the Rockwell scale. High-speed steel cannot be forged, so the tools have to be made and then hardened and then tempered by a specialist. They have been treated in such a way that the tools are black. This, both to identify them as English Iles tools, and as a rust inhibitor. This set is their Professional Set, and includes a 3/4" round-nose scraper, a 1 1/4" skew chisel, a 1/2" spindle gouge, a 1/4" spindle gouge, a 3/4" roughing-out gouge, and a 1/4" parting tool.

The English Iles Professional Set is available only at P.C. English Enterprises, Inc. A mail order/retail company that specializes in tools and supplies for the decoy and wood carver, P.C. English has expanded it's line to include a lathe, chisels, gouges, scrapers, and more for the woodturner. Their catalog, *The Decoy and Wood Carvers' Wish Book* is jam-packed with over 2000 items — over 200 of which are chisels and gouges — ranging from glues and highly detailed patterns to handmade, imported glass eyes.

To get your complimentary copy just write:

P.C. English Enterprises,
P.O. Box 380,
Thornburg, VA 22565,
or call
(703) 582-2200.

American Woodturner

The Journal of The American Association of Woodturners

Volume 1 Number 3
March 1987

The American Association of Woodturners is a non-profit corporation dedicated to the advancement of woodturning. It includes hobbyists, professionals, gallery owners, collectors and wood and equipment suppliers.

The American Woodturner is published quarterly by the AAW. Regular membership rates are $20 for individuals and $50 for businesses. Supporting memberships are $100 and $250, respectively. Patron memberships are $1,000 and $1,500 respectively. Send dues and address changes to: AAW P.O. Box 982, San Marcos, TX 78667 (512) 396-8689.

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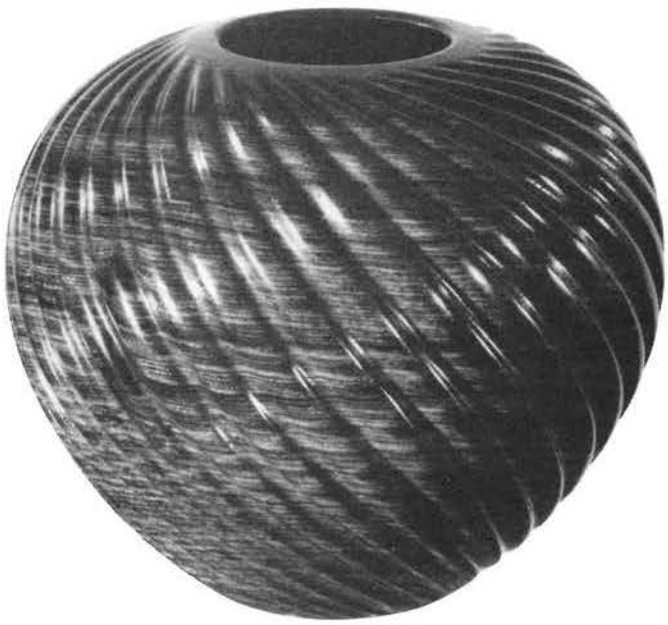


On The Cover

"Silent Flutes," Cocobolo Rosewood. 5" high x 5" diameter, Bill Hunter, 1986.

President's Page

By David Ellsworth

In the past couple of entries to this column, I have paid a good bit of attention to the recent history of woodturning. I have done this because I felt that the better we understand our past, the clearer we will see the present as a means to grow into the future. I will certainly expand on that theme in future issues, for there is much more to learn. For now, I am simply looking at the moment...well, let's say a year of moments.

As we look back at 1986, our Founding year, there is an obvious temptation to take stock of the AAW's accomplishments — and then to make some heraldic projections about the future. Yes, there is cause to celebrate, for the AAW does exist where nothing of its kind did before. Of course, if I used this space to quote all the statistics on how good we are, I'm sure I would bore the pants off of just about everyone.

Instead, I would like to take a look at the AAW from a different viewpoint. I would like to reflect upon what we have learned about ourselves in the past year. After all, we are a "service organization" and if we're doing the job right, the services we provide should reflect the needs of our members. If not, then we need to find out why. The most honest gauge of our progress has come in the form of letters and phone calls from members. And if, for some reason, your letter doesn't get printed as a "Letter to the Editor", rest assured that your words are being heard — the first lesson in learning.

"Are we satisfying the needs of our members?" This question would be much easier to answer if it didn't bring up an even larger question: "Who are our members?" Now, that may sound a bit naive, but it has taken this year of polls and questionnaires to find out that we are much more than just a bunch of folks who like to turn wood. Examples: Many of our members from the professional community seems to want more articles on concept and design, and more emphasis on the "what" and the "why", rather than the "how to" that has always been provided by Fine Woodworking Magazine. On the other hand, our "grass roots" members seem to want more articles on how to get started in woodturning. They are asking for articles about proper sharpening techniques, where to find (and how to get) the things that everyone else "seems" already to have and, (and this is perhaps the most often asked) which lathe to buy. Distressingly, everyone wants an immediate answer — and that may be the toughest problem for us to overcome.

Certainly one of our major challenges has been to produce *The Journal*, and it has taken a year of trial and error just to accomplish this task. All one has to do is to look at the difference between our initial Newsletter and this current *Journal* to appreciate what the learning process is all about. After all, woodturners we may be, but publishers we are not. Learning the demands of the printing industry has taken its toll in time and money.

In its present form *The Journal* is both workable and expandable. It seems to have evolved into the "look" that most members want. In an effort to offer a broader range of articles and information, we have thought of increasing the number of issues to six per year, and/or increasing the number of pages per issue. This will undoubtedly happen as our membership increases. We would go broke if we tried it now. Better, now, to look at the level to which *The Journal* has already grown and use the funds that we have for the services that we can provide. Yes, 1,500 members is a hefty slice, and growing fast. But the simple fact is that fewer than .2% of our members contribute directly to our *Journal's* content, while everyone else is waiting for something to happen. In all fairness to any new organization, those statistics are about average. Again, the first job of a "service organization" is to serve — but not unlike a new recipe, people need time to sample the food before they jump into the kitchen and start whipping up the ingredients.

So, here we go into 1987 with a much better understanding of who we are and what we want and need from this organization. Clearly, much of what we want is expansion in the quality and content of *The Journal*, a broader range of services both to amateur and to professional turners, and stronger educational programs for all the people who are only now entering the field. I don't look at these as the heraldic projections I spoke of in the beginning. Instead, these are the fundamental purposes of this organization, and these goals need to be met.

Of course, every "wish list" has its own set of problems and we all know how different that list looks in January than it did in December. Specifically, we now know that it costs $22 per member just to produce *The Journal* and to process the membership applications in inquiries. You may be inter ested in learning that our office receives about 125 pieces of mail per week, of which about 50 are for new memberships. That's the reason the Board of Directors has voted to raise membership fees from $15 to $20 per year. Had it not been for the generosity of our Founding and Patron members — well, you get the point. Fortunately, with a successful second year (1987), we will have established enough of a track record to begin applying for grants. A steady increase in membership, continued support from our Supporting Members, and a sprinkling of grants will provide the stability we need to increase the services we are all asking for.

What is most important is what is happening now: Merryll Saylan has begun working on the "Interview of the Issue" for *The Journal.* This is a very important assignment for it will enable us to listen and to learn about ourselves from those who are looking at woodturning from outside the field, as well as from within. Bill Hunter, in charge of Special Funds, has now been able to contact enough craft schools throughout the country that we can begin offering scholarships for turning workshops to students who can demonstrate both the desire and the need to attend. Our new Vice-President, Leo Doyle, has taken on the responsibility of soliciting articles

continued on p. 10

Woodturning Scholarships!

What goes around, comes around

by Bill Hunter, Chairman, Special Funds Committee

When the AAW was first conceived, one of our primary missions was to provide educational opportunities for our members. We all wanted a chance to learn more about turning wood — new ideas, new tools, new concepts, a few broken bowls and a lot of laughs. These all open the doors to learning.

Most frequently, intense learning opportunities take place at professional woodturning courses offered by crafts schools. These courses have been offered for many years, all across the country. But we recognize that some highly motivated and talented woodturners have neither the opportunity nor the money to attend them. That's where an organization like the AAW can really help.

As chairman of the Special Funds Committee, I am very pleased to announce our new SCHOLARSHIP PROGRAM. Thanks to the tremendous response of our members to our auction and raffle, some outright financial donations, and a slew of matching funds by some of this country's leading craft schools, several scholarships for turning courses are now available to members of the AAW.

Who's working with us? Arrowmont School of Arts and Crafts (Tennessee), where woodturning is a major focus and where only 16 months ago the seed of AAW was planted; Brookfield Craft Center (Connecticut), who has offered turning courses for many years; Russ Zimmerman (Vermont) and Dale Nish (Utah), whose individualized instruction has helped so many; Ernie Conover (Ohio), whose courses are offered at the facilities of his woodturning company; and Touchstone Center for Crafts (Pennsylvania), a new school sponsored by the Pioneer Crafts Council. What a start! A tremendous indication of what can happen when people work together for the benefit of all.

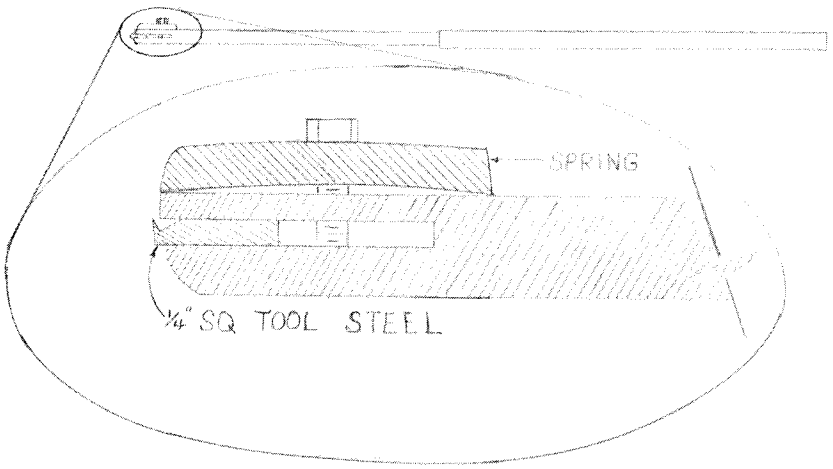
Now, we need applicants for our EIGHT scholarships. These scholarships are intended to help AAW members who want to learn more about woodturning, but who need financial help in order to attend such courses. Rude Osolnik, David Ellsworth and I will serve on a committee to review the applications. We will try to match your needs with the proper school, and to help to keep travel to a minimum.

Here's how to apply: Immediately send a letter of approximately 250 words, along with a $10.00 processing fee to the AAW. Mark the letter and the check: SCHOLARSHIP APPLICATION. Include a bit of your personal background — describe your journey into woodturning, and why you would like to participate in this scholarship program. Also, tell us something about how you hope to benefit from one of these turning courses, and why financial aid would be helpful to you. Please don't be intimidated by the requirement to write an application. Just write a few paragraphs or a page letting us know your honest feelings. Be sure to tell us whether you would be able to provide adequate travel time and travel money should the school be 2,000 miles from your home. Also, if you have strong preferences for certain times of the year or certain of the schools, please let us know.

All scholarship winners will be asked to write a brief review of their experiences so that we can refine the program and help it to grow in the future. With time and experience, I'm sure that more schools will become involved and more of our members will be included. Once again, thanks to all our members who have been supporting our Special Funds drawings, and also to those at the crafts schools who are involved in making these exciting opportunities possible.

Hollowing the Deep, the Rough & the Tough Ones

By James Johnson



Most of us who have been bitten by the bowl turning bug have, at one time or another, been confronted by a piece of wood we wanted to turn, but just couldn't figure out a way to do so. The problem may have been that it was simply too deep, or full of voids, or maybe even had a rock or two embedded in it. I have encountered all these situations, and more, but since building the tool described in this article, I no longer have to stick to the easy pieces.

The tool is simply a piece of 1" square steel bar about 30" long with a 1/4" slot about 2 1/2" deep located 1/4" down from the top of the bar. A 1/4" square piece of high speed tool steel is secured in the slot by a bolt passing through a 1" wide x 1/2" thick x 3" long section of spring steel and threaded into the lower jaw of the bar. The spring steel is cut (by abrasive wheel) from a broken truck spring. It is important to have the curve in the spring up so pressure is applied to the very end of the bar, otherwise the tool steel will be knocked from side to side. Rounding the end of the tool allows the surface being cut to rub smoothly past the tool while the projecting (1/16-1/8") tool steel cuts. The handle is simply a 2-3' length of 1 1/4" x 1/8" wall square tubing slipped over the end of the bar.

Using the tool is as easy as making it. A 1" hole is drilled down the center of the piece being turned, then the tool is worked from the center outwards. It is levered against a concrete nail dropped in a hole in the tool rest. I have holes on 1" centers to help maintain a good cutting angle. As the cut progresses, the wall gets thicker and thicker because the left side of the tool contacts the wall while the cutter is still a little way from it. At the same point I adjust the cutter toward the left side of the tool and thin the wall until I catch up with the bottom of the cut.

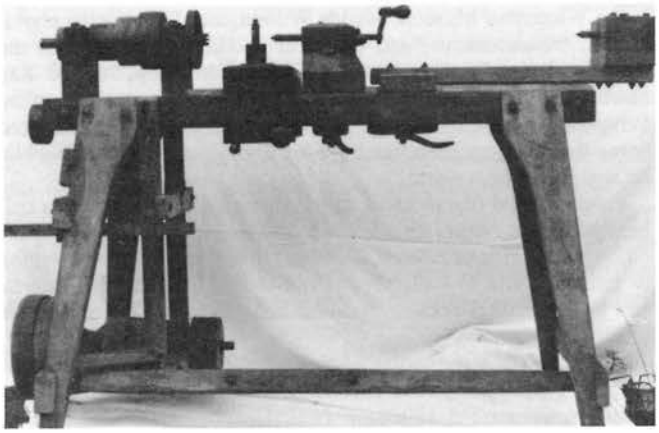
Control is easily maintained, primarily because the rounded nose limits the amount of cut, but also because the flat bottom eliminates any tendency of the tool to twist. As experience is gained, rotational speeds (and therefore cutting speeds) can be increased. At depths over 12" I generally take very light (1/16") cuts.

The high speed tool steel cutter can be ground as per the drawing and with this configuration a semi-shearing actions is obtained. Wet or green wood "loads" the cutting tip but constant forward pressure minimizes its effect.

Questions & Answers

Cliff Schroeder, Page Editor

We welcome your questions. Send them to Cliff at 763 South St., Owatonna, MN 55060 and he will see that they are routed to our panel of experts for a response that will then be printed in The Journal.



Question: I live in upstate New York and I recently purchased this lathe at an auction. It is made of oak. It has feed screw with a 30 inch travel. It has no markings on it but whom ever made it was a precision craftsman.

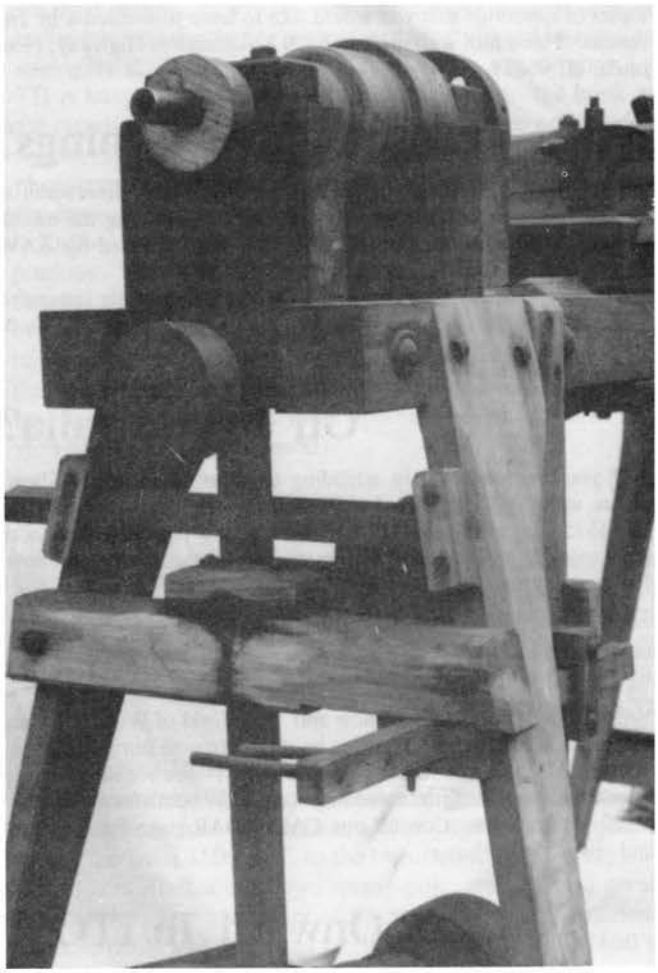
I would like more information on it. I collect old tools as a hobby. I would consider selling it for the right price, But foremost, I would like any thoughts you have on it. (Dean Marshall, Heuvelton NY)

Answer from Harold Barker: After studying my manual on the "*History of the American Metal Lathe*," I would date this machine certainly before the Civil War — probably in the 1850s because the condition of the wood is too good to date much before 1850. Dean's lathe was home built by a master mechanic, as wood and metal workers were called before 1900.

The flat belt pulley appears to be cast iron, but the geared pulleys are laminated wood. The hand control (double) on the White axle lathe is similar to one on Dean's lathe (around the feed screw). This man undoubtedly was hard up for a metal turning lathe because the tool holder is connected to a flat piece of steel connected to a wooden tapered (chamfered) block.

Manufactured U.S. lathes were of course advanced far beyond this old style by 1850, but the common man usually made his lathe — especially for wood turning. This lathe could turn wood with steam power, but metal turning was undoubtedly the primary aim with all the speed reduction. Later on, someone apparently tried to apply a V belt with no flat belt around.

This lathe is worth some money, and I would certainly contact the Ford Dearborn Museum near Detroit, Michigan. They have a fine collection of machine tools but no metal lathe of this type.



Got An Old Lathe No One Has Ever Seen?

Well, Harold Barker might be able to tell you something about it. Harold has compiled a book, "*The Pictoral History Of The American Wood Lathe (1800-1960)*." He is also currently working on a history of other American woodworking machines, such as the scroll, band, and table saws.

Harold has volunteered to try and answer your questions on old lathes and he can probably furnish pictures of any lathes manufactured since the 1850s. The more professional the better. Contact him at this address: Harold Barker 3108 Klingler Rd. Ada, OH 45810. Note: if you want your question and answer considered for *Journal* printing, we will need a pretty good black and white print.

Announcements

Have A Financial Question?

Ron Kent, who — when he is not turning — is Vice President for Investments with the Paine Webber Company in Honolulu, has agreed to become our *Journal* editor for the page titled: Practical Finances (for impractical people). How about sending him some topics or questions that you would like to have him discuss in *The Journal*. Flood him with mail at: 5329 Kalanianaole Highway, Honolulu, HI 96821.

Want To Display Your Turnings?

John Bacon, owner of the John Bacon Associates Showroom at The Mill Centre in Baltimore, is interested in devoting the month of July, 1987 to an exhibit of turned objects produced by AAW members only!

This represents a novel opportunity for us. If you are interested in having your work considered for display, we encourage you to contact him at: (301) 366-1566.

Off To Australia?

If you are interested in attending the Australian Wood Show, please write to Dick Gerard at 7410 Railway Court, Indianapolis, IN, 46256 or call him at 317-841-9312 after 5 pm on weekdays or most anytime on weekends. The tour is just for the Australian Show, November 26 to December 3, 1987.

Want To Hang Out At A Booth?

Both The Woodworking Show and The World of Wood folks are interested in offering AAW a free booth to promote our association. They would welcome turner-demonstrators. If you are interested in demonstrating turning or in standing at an AAW booth for a weekend, please let us know. Consult our CALENDAR page for the dates and cities of the shows.

Onward To ITOS!!

AAW's International Turned Objects Show (ITOS) is a juried/invitational exhibition of world class turnings involving sculpture, furniture, bowls, vessels, toys, functional and non-utilitarian production items, miniatures, architectural forms, etc. The jurors are: Johnathan Fairbanks, Lloyd Herman, and Rude Osolnik. This exhibition will be jointly sponsored by AAW, the Port of History Museum, the City of Philadelphia, and the Society of Phialdelphia Woodworkers. The show opens in September, 1988 (yes, 1988, NOT 1987) at the Port of History Museum in Philadelphia. We expect that this exhibition will tour for two years in museums in the U.S., Canada, the British Isles, Australia, and New Zealand. We are exploring the possibility of publishing a color catalog/book about the show.

For an application, please send a legal-sized self-addressed, stamped envelope to AAW. You can use the return envelope in the middle of this *Journal* to mail your requst to us. Applications will be open to members and non-members of AAW, both within the U.S. and internationally. Please indicate whether you are an AAW member. Due date for slides is November 11, 1987.

Familiar With The "Great Wheel Woodturning Lathe"?

Palmer Sharpless is seeking information, current and historic, on the Great Wheel Lathe. He has researched the Dominy Collection in the Winterthur Museum outside Wilmington, DE, gaining photographs, measurements, and technical building methods from the lathe in that collection. Based on that information, he and Ray Martin have built a similar lathe for use in the "Joynter's Shop" at Pennsbury Manor, Morrisville, PA. Pennsbury is the reconstructed home that William Penn had built for himself and his family while he was in the new world.

Palmer would like to know of existing great wheel lathes in collections, shops, barns, antique stores or elsewhere. He also welcomes others with a similar interest to contact him. He is currently writing to museums and to collectors of old tools for additional material and has a small collection of slides and references relating to the great wheel lathe.

If you can add information, photographs, or slides for this research project, Palmer welcomes your help. Contact him at 192 Durhan Road, Newtown, PA 18940.

Promotions Committee Begins

Our Promotions Committee, led by Board Member Dick Gerard, is about to become active. We have a project in mind. We would like a few of our more tenacious members to pick either a major newspaper *(NY Times, USA Today)* or a major magazing *(Time, Newsweek)* and take responsiblity for ensuring that we get an article placed on some aspect of AAW. If you are interested in this project, please check the appropriate box on the form on the back dust jacket of this *Journal* and mail it in to us. Thanks.

Welcome New Editor-In-Chief

Dan Kvitka has stepped forward enthusiastically and agreed to be our Editor-in-Chief. The June issue will be his. Dan has recently joined the ranks of the professional turners, having resigned from his job as an industrial designer in order to devote full time to turning. I believe that I speak for all the membership in offering him a warm welcome aboard.

For those members who want to write articles for your *Journal*, Dan's address — and those of all the page editors — are on the inside of the front page of the "dust-jacket."

Turners—Please, Please, Again

I can't help but notice that I am not hearing from those of you who have exhibitions planned in galleries. Canadians? Australians? British? Irish? Americans? Someone is BOUND to be exhibiting SOMEWHERE!! Kindly let me know about these events. As soon as you tell your wife or husband, drop me a note; we are as excited as you are, and we want to help you tell others. We need to fill up "The Gallery Calendar" section. Ditto for any exhibitions that you are planning. — Bob Rubel

Reviews

Peter Hutchinson, Page Editor

Turning Wood.
By Richard Raffan.
The Taunton Press,
Connecticut, 1985
(165 pages) $17.95.

Development specialists maintain that loss of hearing has a more profound effect upon communication development than the loss of sight. As a child learns to use sound to communicate, a woodturner also learns to interpret the sounds generated with wood turning. In *Turning Wood*, Raffan stresses the importance of listening to these sounds as the key to professional results on the lathe.

Raffan left a well-paying, big-city job in 1970 to become a professional woodturner. This 15-year internship resulted in the publication of an excellent, well-organized book. *Turning Wood* consists of 9 chapters, 4 appendices, and 6 projects. The first 5 chapters describe the lathe, faceplates, tools, tool sharpening, safety, and measurement. The remaining chapters analyze facework, centerwork and conclude with a gallery section. Additional notes on woodturning are mentioned in the appendices such as trouble-shooting and selecting wood.

Many novel features for the lathe are introduced in the first section of the book. For example, the jam-fit chuck, an unique and home-made chuck, used for finishing the bases of bowls after hollowing out. Raffan also employs a curved cutting edge to his skew chisel which facilitates manipulation of the tool. Another section details the safe operation of the lathe, as well as promoting a face mask with filtration system, somewhat reminiscent of Darth Vader. Much of the mystery surrounding tool sharpening is dispelled through a step-by-step picture guide.

The first section concludes with a general approach to tool handling and introduces the most salient point of this text, that is, being aware of the sounds emanating from the wood as it is cut. "Students or apprentices frequently find it unnerving that skilled turners can tell exactly what they are doing by sounds alone," p. 43. Throughout the book, Raffan stresses that sounds indicate the quality of the cut (torn end-grain or ribbing) and safety problems (a loose faceplate-mounted block). Professional results are expected only through the use of all your senses, especially hearing.

The second section introduces centerwork and facework and represents the actual methodology of lathe work. Raffan maintains standard bevels to the cutting tools except for some of his skew and gouge chisels. For skew chisels, concave bevels exist for cutting beads, shallow hollows, and flat profiles. However, he utilizes a convex bevel on the slew chisel for cutting shallow coves and other concave shapes. The author also adds a spur to the edge of his bowl-turning gouges which facilitates rapid wood removal. Raffan is unique in his use of gouges for hollowing bowls by cutting on the far side of center with the gouge almost upside-down. Accompanying the detailed use tools is an excellent discussion of the types and uses of cuts. For example, scraping cuts leave a beautiful finish on end grain whereas gouges may not. Apropos to Raffan's style is his simple but elegant oil and wax finish.

Turning Wood is an exceptional work. The Taunton Press and the author should be commended for the excellent illustrations, such as the numbered hollowing or shaping cuts which are used to produce a bowl. The two-tone printing is pleasing to the eye and the author's clear writing style and exceptional analogies ("The action is similar to cuing a pool shot," p. 77) is easy to read. Some minor drawbacks to the book are the occasional weakly contrasted pictures, some poor text-to-figure referencing and not enough projects. The 32-color photograph gallery conclusion and the appendices compensate for these minor problems.

Raffan maintains that professional results develop from practice. "When you achieve flowing movements and sounds, flowing forms will follow," p. 163. Dexterity along with hearing are the key to quality work on the lathe and a copy of this book in your shop will point the way. If you talk to the trees they will never listen but if you listen to the wood as it is cut you will always be appraised of your work. (Reviewed by Peter Hutchinson).

Pictoral History of the American Wood Lathe (1800-1960).
By Harold Barker,
(Published by Author, 3108 Klingler Road.
Ada, Ohio 45810),
1986 (109pages) $20.

The *Pictoral History of the American Wood Lathe* consists of a written text and a section comprising magazine articles and advertisements. The text is a nine page synopsis of the wood lathe from 1500 B.C. to the twentieth century complete with figures illustrating bow, spring-pole, treadle, and great wheel lathes. The remainder of the work consists of articles, advertisements and diagrams beginning from the mid 1800's and ending in 1960. The majority of the nineteenth century data are derived from the pages of *Scientific American*. Barker includes a broad array of lathes, some of which appear to have been designed by Jules Verne or Rube Goldberg. The twentieth century is typified by the onslought of the craftsman or hobbyist lathe, as presented through the advertisement eye of *Popular Mechanics*. The author also attempts to set the mood of each era by including pictures of washing machines, radios, phonographs, buildings, and automobiles.

Production quality is low: each page is filled with a mosaic of horizontal and vertical clippings; many pictures show little contrast; and some of the blurbs fared poorly from the indiscriminant editing of the copy machine. Despite these problems, this stapled volume contains a wealth of information. The 300 figures the author has amassed are astounding. This volume presents a facinating view of the growth of the American industrial society. (Reviewed by Peter Hutchinson)

Reviews

Ornamental Turnery
By Frank M. Knox
Prentice-Hall, Inc.
New York, New York
1986, (78 pages), $21.95.

Through the nineteenth century, the Holtzapffel family made ornamental lathes. They also wrote a five-volume treatise about lathes; the last two volumes are still available from Dover Press. The books represent a stifling amount of information, and little has been published since then. Now, Frank Knox has written *Ornamental Turnery* which, in effect, brings up to date the development of this form of woodturning from the last century to the present.

Ornamental Turnery is a short overview of ornamentally-decorated turned objects. The book details the history of the craft from its beginnings in the seventeenth century to when it appears to have languished at the end of the nineteenth century. The craft was a personal favorite of the aristocracy of that time and some of their work is illustrated in the book. Mr. Knox also relates the different manufacturers and books of that period.

The remainder of the text describes with clear precision the lathe, the overhead drive, chucks, cutting frames, and the cutters. Mr. Knox concludes with an instructive project, a fuel-burning candlestick, and a list of what he considers the best tuning materials to use — such as ivory, blackwood, and kingwood.

While *Ornamental Turnery* is a short and somewhat expensive treatment of a lost artform, it is well organized and well written. Now, rather than having to agonize over Holtzapffel's ponderous tomes, we can turn to *Ornamental Turnery* to provide us a good foundation for discovering this ornate craft. (Reviewed by Peter J. Hutchinson)

Editor's note: *The American Woodturner now has a section devoted to ornamental turnery. See Richard Miller's article in this issue.*

Words And Their Origins

WAYS?

I was explaining the operation of my lathe to a shop visitor the other day when the question arose, "What is a ways?" The answer, immediately obvious even to the uninitiated, was that while Los Angeles is a ways west, Japan is quite a ways further." We hope that answers the question once and for all.

Casimer Grabowski, Page Editor

Southeastern Wood Piles

By John L. Roth

We woodturners have one real pleasure not shared by most other woodworkers; the freedom to take a chunk of wood otherwise destined for the fireplace and create something — be it functional or not. Here in the Southeastern U.S., (as almost everywhere in the world) there are many hardwood trees of no commercial value but that are interesting for turning. Three of these — sassafrass, dogwood, and persimmon — are distinctive and can yield surprisingly interesting results.

Sassafrass, a member of the laurel family, is a stocky tree reaching a height of 20 to 50 feet and a diameter of three feet. The wood has a strong aromatic odor, and a grain that is course but dense and of a light yellowish brown color. Depending upon how the piece is oriented for turning, the resulting grain patterns vary from "plain" to "striking." It is a strong, tough wood; sharp tools are required. I have found the wood to be almost abrasive, necessitating frequent tool sharpening. A finish with a little stain or tint will enhance the grain, but a dark finish detracts from its appearance.

The common flowering dogwood is usually a small tree reaching up to 30 feet but with a trunk seldom greater than one foot in diameter. Because of its pretty white and pink flowers dogwood is often planted for decoration rather than for timber; it is common in heavily wooded areas. The wood is hard, heavy, of very fine texture and usually straight-grained. The color is pale to pinkish brown and sometimes contains a dark brown core of heartwood. Dogwood dries slowly, but with little shrinkage or distortion. Because of its hardness it is difficult to turn. If you use sharp tools and high speeds you can produce an extremely fine surface. A filling type of finish is not required and, in most cases, a wax finish will give beautiful results. Oils cause only minor color alteration. If you are seeking a non-natural color, you may want to consider using ordinary shoe polish buffed to a high gloss. Since dogwood pieces will usually be small, turning large objects from a single blank is nearly impossible. It may be used with other, darker woods to provide highlights for decoration and contrast. Also, because of its hardness it is ideal for surfaces subject to wear and abuse. Once smoothed, dogwood will retain that smoothness even after continual use. That is why it was used in the textile industry for thread bobbins for many years. The tightness of the grain also makes this an excellent candidate for children's toys and kitchen utensils.

Finally, we come to our discussion of persimmon, a hardwood that belongs to the ebony family and is sometimes referred to as American ebony. Persimmon is rarely found as a large tree but can grow to 60 feet and up to 2 feet in diameter. It is identified by the orange to reddish purple fruit nearly spherical in shape. The wood is predominantly pale and almost grayish white but can reveal small areas of black heartwood, reminding us of its ebony ancestry. The wood has a fine, even texture, a straight grain, and is very dense — somewhat similar to dogwood. It dries easily but shrinks considerably and is not very stable. Turning persimmon is similar to turning dogwood in that you will be able to produce a glass-smooth finish. The color of the wood is unique, particularly if some of the black heartwood is made visible. You will probably not want to add any coloring during the finishing process, in fact, adding color may detract from the beauty of the finished piece. A finish of paste wax or clear oil will produce very good results; a glossy finish looks especially good. Finding large pieces of persimmon may be difficult so projects will have to be limited to small works or as accents in combination with other woods. Persimmon is traditionally used for wooden golf club heads because of its excellent resistance to impact which also makes it ideal for mallet and gavel heads. Also, if your turning project fails, save the pieces and start planning for the next season on the links with your own handmade clubs.

Of course, one of the main advantages of using "found" wood is the cost — or, rather, the lack of cost. Since you

About Wood

will probably not be able to find these woods at a lumber mill, check with local tree cutters and suppliers of firewood. It is always more fun and challenging for me to work with a piece scavenged from a pile of firewood then with one for which I had to pay an outrageous price. Also, the friend or neighbor who gave you that one special peice of firewood you just had to have from the bottom of his stack — and who had to re-stack it all when you excitedly ran home to chuck it up — will feel a little better when you return with a unique and beautiful turning from that piece.

About the Author: *John L. Roth is an aerospace engineer who lives in Huntsville, Alabama. He has been an amateur woodturner for eight years, and does sell pieces from time to time.*

President's Page

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from professional turners and technicians, so that we can expand our awareness both of concept and technique. Palmer Sharpless is beating the bushes both here and in Canada, forming local chapters. We now have just short of 100 people who have expressed an interest in forming these chapters, and, as the year progresses, we expect more and more chapters to form. Dick Girard is hot on the trail of promoting our organization to the outside world. He has begun spreading the word, explaining to organizations who, what, and why they ought to carry articles about us. Albert LeCoff is soon to form the Woodturning Center in Philadelphia, and is currently finishing the planning for the International Turned Objects Show (ITOS) that will begin at the Port of History Museum in Philadelphia (along with the AAW's '88 Symposium) and then tour the world. Ernie Conover is putting the final touches on our '87 Symposium, to be held in Lexington, Kentucky. We have settled on the Lexington location because it is graphically central to the majority of our members — according to a computer count of members' states. More and more galleries are joining the AAW and exhibiting the work of new and established turners. This is an important signal to us all that the "field of woodturning" is expanding because of the quality and the quantity of objects that are currently being made.

My apologies to those of you who are working long hours for AAW but whom I have not mentioned. Space is at a premium and I do not wish to be a hog — worse, a boring hog. In any case, my hat comes off to the success of our energetic volunteers, and to all of our members who have supported (if not sometimes endured) this initial year of discovery in the American Association of Woodturners.

Ornamental Turning

Richard Miller, Page Editor

If members have any questions that they would like to ask about ornamental turning, or have experiences that they would like to share or articles that they would like published in The Journal, *please write to Richard Miller at: 1661 S. Research Loop, Tuscon, AZ 85710, (602) 722-0800.*

Ornamentally turned sugar sifter, 9 inches tall, crafted on a Holtzapffel type ornamental lathe by Richard I. Miller that recently won the Haythornwaite Cup Award by the Society of Ornamental Turners, London. The material is African Blackwood and Elephant Ivory.

Ornamental turning produces objects in wood, ivory, and other materials that are very ornate and Victorian in design. The craft probably had its start on the European Continent in the 17th or 18th century and was practiced by artisans as well as the very wealthy nobility. In 1794 an Alsacian named John Jacob Holtzapffel moved to England and established a shop to produce lathes. He produced his first "ornamental turning lathe" in 1796. Through a succession of at least four generations of Holtzapffel family members, the firm built 2,557 ornamental turning lathes. The last was manufactured about 1918. All the lathes are numbered and are beautiful works of art in and of themselves. Today somewhere in the order of 300-500 lathes still exist; perhaps half of them are in operating condition. Today there are people who practice ornamental turning as a hobby both with the antique equipment and adaptations that they have made to modern equipment. In addition to the Holtzapffel lathes, there were others produced as well, but the English originators probably produced 80% of the ornamental lathes during the 19th century. No new ornamental lathes had been produced since Holtzapffel's time until the firm of Lawler Gear Company of Raytown, Missouri began a production run of 15 modern machines to be produced and shipped in 1987.

The focal point of ornamental turning today has been the Society of Ornamental Turners of England. They meet quarterly, usually in London. The Society produces a biennial bulletin containing articles by the members on techniques of the craft.

Ornamental turning has been described as an offshoot of standard woodturning. As we are all aware, in standard woodturning the material is shaped by revolving it in a lathe and holding against the rotating material a cutting tool, such as a gouge or chisel. This converts the working material to the plain, circular form. Ornamental turning, on the other hand, consists first of "plain turning" (standard turning) the work and then decorating it by using revolving cutters while the object, itself, is held stationary in a variety of fixed positions. The decorating is accomplished by rotating cutters held in the slide rest in tools such as a universal cutting frame, an eccentric cutting frame, or a drill frame.

The art of ornamental turning consists first of designing the work, and second of a long and sometimes tedious process to set up the equipment to take the often-hundreds of tiny little cuts that ornately decorate the material. Because of the small, very fine cuts that are produced, the object that is worked upon must be of a very dense material.

The wood that has seemed to work the best — and that was most commonly used in the past — is African Blackwood (Dalbergia melanoxylon). Until recently, it had been very scarce; now it is being made available by a West German firm. Other woods have also been used in ornamental turning. English Boxwood — which has become quite scarce in sizes over two inches — is quite popular. It should not be confused with its less dense cousin, the Philippine variety. Lignum Vitae is often used, but poses problems because of its propensity to cracking.

Dense substances other than wood are also used in ornamental turning. These substances range from very modern engineering plastics and brass to genuine ivory. African ivory, from the southern part of Africa (as opposed to its more northern or the Indian variety) is an exceptionally beautiful, natural material. It has the density that woods cannot match. Ivory, too, has become exceptionally scarce, although it is still available. It is well controlled by the African governments, and is reaching prices today of $200 per pound.

The Museum of Ornamental Turning, Ltd. was founded in 1986 by Richard I. Miller. Mr. Miller will also administer it. The museum was formed to preserve the equipment, library, and research of octogenarian Warren Greene Ogden, Jr. of North Andover, Massachusetts. Mr. Ogden has worked for more than 30 years on updating a third edition of the bibliography on ornamental turning as well as tracing all of the Holtzapffel lathe owners, starting with the original Register of Lathes filed with the London authorities by the Holtzapffel firm. Both of these items — the bibliography and the history of lathe owners — will be published by the museum along with a compendium listing nearly 3,000 books and documents concerning the lathe, machine tools, and ornamental turning.

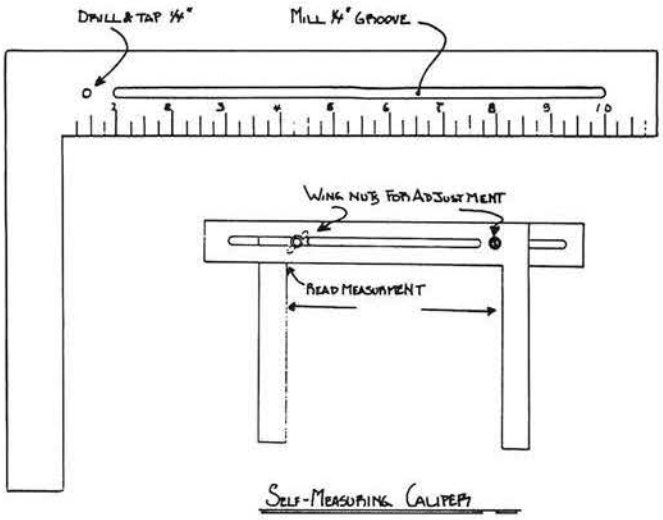
Bob Krauss, Page Editor

Self-Measuring Caliper

Tony Jendrek,
Saco Manufacturing and Woodworking Co.

My company, Saco Manufacturing & Woodworking, specializes in large custom wood turning. Much of our work involves matching existing architectural elements such as columns, porch posts, and spindles. We also do turnings of custom sized dowels and winding cores for industrial customers. Some of the industrial customers order specially sized large dowels to be used as molds to form hoses. They require tolerances as close as 1/16th of an inch on a dowel that is 12 inches in diameter. Our lathes have semi-automated cutters that move horizontally and can be cranked in and out to make different diameters as the dowel turns between centers.

Checking the diameter of these large pieces by the standard method — using a large set of calipers and checking the measurement against a tape measure — was unsatisfactory. It is difficult to look directly down at the tape measure at both ends of the calipers at the same time in order to set them to an accurate width. Machinists calipers are made in sizes that will measure over 12", but they are made with jaws only 2" to 3" deep and can only measure a dowel up to 6" in diameter.



Self-Measuring Caliper

The drawing that accompanies this article shows our shop-made solution. Identical channels were milled in two stanley 12" squares. The corners of the squares were drilled and tapped to accept machine screws that slide along the channel of the opposite square. Wing nuts are used for easy adjustment. When the legs of the squares are adjusted to the sides of the dowel, the diameter can be directly read off the base ruler of either square. The 6 1/2" long legs enable us to measure up to 13" in diameter. Two standard framing squares could be used for larger diameters.

This has not only solved our dowel measurement problem, but also has enabled us to make accurate measurements of porch posts and columns "in the field" so that we can return to our shop and make reproductions of them.

Sanding Techniques

Sanding the inside of a bowl has always been time-consuming and trying for me. I have found a method to get a desirable surface in a short time. Many tool catalogs carry a brush-backed wheel sander. This wheel can be used on a drill motor or a flexible shaft driven off the end of your lathe motor, assuming your lathe motor has a shaft out both ends. The wheel sander should run the opposite direction of the bowl being sanded. Stop the lathe and remove the sanding dust if the shape of the bowl accumulates dust. With a bit of practice you will be able to sand the bottom very well. Sanding the

side wall is simple. You will want to give some thought to the size of the wheel sander in relation to the size of the bowl. Wear a dust mask and happy sanding. (Bryan Johnson, Tuscon, AZ.)

Technical Critique of Jake Irion's Article, "Turning Deep"

At first I sat down and wrote a "Letter to the Editor" about Mr. Irion's article. The letter became too long to print. Next I revised the introductory material and turned it into a brief article for "my page" in *The Journal*. I offer my views to all our members.

I was a bit troubled by Mr. Irion's article. From a professional standpoint, it did not offer any new techniques; from the amateur's standpoint, it could lead to quite a bit of trouble.

Hanging off the Toolrest: While alluding to working off the tool rest 12" - 14", Mr. Irion fails to reference the subtle techniques that are needed to add a margin of safety to the act of running a long scraper 12" - 14" off the tool rest. As most full-time turners realize, a sharp scraper any distance off the tool rest presents a special handling problem. Running down the inside wall of a deep turning is one thing, but approaching the bottom end-grain is quite another story. A sharp scraper loves to grab hold of end grain and cause some absolutely fantastic dig-ins.

To help eliminate end-grain dig-ins, I strongly recommend that you bore a pilot hole (as Mr. Irion mentioned). This will give your scraper mostly side grain to deal with all the way to the bottom of the turning, as well as establish the bottom of the work (a good old standard procedure to gauge the bottom of the turning to prevent tooling deeper than desired).

Before you start hollowing with the scraper, turn off the lathe. Place your long scraper at the bottom of the pilot hole. Now pull the scraper back approximately 1/4" - 1/2" and, using a felt-tip pen, mark this depth (minus the 1/4" - 1/2") on the tool's shank. This will now serve as a reminder to you of the depth of the bottom of the vessel. This should prevent you from inadvertently running the scraper's end into the bottom of the work. As you become more familiar with the subtleties of tool presentation on end-grain in deep turnings you will be able to omit this procedure.

A related point: once the side-walls have been cut to their desired thickness and the bottom remains to be finished, it seems to work best to start that cut from the CENTER and proceed TO THE SIDE-WALLS. If you start your cut from the side-wall and then move to the center of the bottom, you are again likely to dig your tool into the end grain.

Scraper Control on a Surface Cut: When you feel that you are losing control of your scraper on a surface cut (as opposed to a cut on the inside of a vessel), try laying the tool on its side, presenting the flat of the cutting edge at approximately 25-30 degrees. This will often lead to better tool control. By using this procedure, you will be presenting a narrower cutting edge to the work, thus taking a lighter cut as well as a shearing cut.

DO NOT lay scrapers on their sides if they are wider than they are thick. The leverage is against you, and either the tool will be twisted from your grip or it will be slapped down flat on the tool rest. Generally, you have also just won yourself an immense dig-in. Wide scrapers should be used with the tool rest quite close to the work (approximately 1/8") and used to make light cuts.

Tool Chatter: The tool chatter that Mr. Irion refers to is not always an indication of a tool being too light and flexible. It is most often an indication that the cuts are too heavy. Chatter can also arise from a tool rest that is loose or too light or too flexible. If none of these seem to be a problem, then step into a heavier tool. In summary, the best approach to deep turning is to start off easy. Experiment with holes 2" - 3" deep and the tool off the rest no more than 2" - 3". After you feel comfortable and familiar with this, then push on to bigger and deeper turnings. Safely.

Shop Safety

Alan Stirt, Page Editor

Look Out For Your Eyes

Dr. David Pfaffenbach

In wood working, our hands and eyes give the final expression of shape and form to the object we wish to create. Safety to the fingers and hands comes about primarily by visual contact with the work area. However, ocular safety is one which requires protective eye wear.

It has been estimated that more than 90% of the million eye injuries suffered each year could have been avoided by the wearing of protective eye wear, Eye injuries range from foreign bodies of material under the lid to high speed particles, usually metallic, penetrating the eyeball. These injuries may result in just pain and temporary blurring of vision, but blindness can also be the unfortunate outcome.

As an eye surgeon, with wood turning as a hobby, I have experienced an assortment of injuries related to wood working - both personal and through patient contact. The most common injury results from a chip of wood caught under the upper lid. Foreign bodies of wood or metal embedded in the clear portion (cornea) which covers the colored part of the eye are next in frequency. Both of these usually cause only superficial injury to the eye, and following removal of the wood chip or metal, the tissue will rapidly heal in 24 to 48 hours. Vision loss is rare with this type of injury, unless complicated factors such as infection develop. Penetrating injuries of the eyeball are uncommonly seen, but nearly always result in vision loss.

Our goal is to reduce the number of ocular-work related injuries by the use of protective eyewear.

There are three primary types of eye-face protection:

A. Face shields and helmets.
B. Goggles.
C. Spectacles.

Specification for all safety eye wear should meet the ANSI standard, Z87.1 - 1968, which sets minimum criteria for lenses, frames, goggles, and face masks.

A. *Face shields* of high impact plastic are generally satisfactory for wood working particularly when much debris is flying about. These are easily obtainable from tool and hardware stores. The shield should cover the forehead to the upper neck area. This protection is most suitable when large chips or particles are being produced - e.g. with chain saws or roughing out on the lathe. *A word on caution, however; wear some type of safety spectacles or corrective glasses underneath, as the face shield will not give the maximum protection. Frequently, particles will deflect underneath and threaten the eyes.* (Editor's Note: My personal experience bears this out.)
B. *Safety goggles* are basically of 2 types.
   1. Flexible high impact plastic with side shields and ventilation (either clear or tinted).

2.Cover-up goggles to fit over prescription glasses.

C. *Safety spectacles* are the most commonly used method of affording ocular protection. Eye wear manufacturers must follow ANSI Z87.1 - 1986 guidelines in providing occupational eyewear protection. The frame should be heavy duty metal or plastic. If side shields are not used the ocular size should be large enough to afford frontal protection to the eye. Side shields do help deflect flying chips, but I have removed many foreign bodies from eyes in patients who were wearing safety glasses with side protection.

Today all "dress" spectacles or glasses have either glass or plastic lenses. These lenses must meet federal standards for impact resistance, but both types are not as strong as industrial safety lenses which have a minimum of 3 mm thickness at the optical center of the lens. Dress eyewear does not provide eye protection in the industrial sense so one will require safety goggles or a face shield for adequate protection.

Contact lenses do not provide any protection. They should not be worn unless one wears safety goggles.

Safety lenses may be made from glass, plastic or polycarbonate. All can be ground for a spectacle prescription in either single vision or bifocal powers. The following table lists some of the advantages and disadvantages of each type:

1. Glass
   a.) Most resistant to scratching.
   b.) Will withstand most high mass - low velocity impacts.
   c.) Heavier than plasticpolycarbonate.
   d.) Widest range of lens types and tints.
   e.) Scratches reduce impact resistance.
2. Plastic CR-39
   a.) 50% lighter than glass.
   b.) Scratches easily.
   c.) Will withstand most high mass - low velocity impacts.
   d.) Impact resistance not affected by scratches.
3. Polycarbonate (plastic)
   a.) Most impact resistance (10 times greater than glass).
   b.) 50% lighter weight than glass.
   c.) Resists scratching (but less than glass).
   d.) Scratches don't affect impact resistance.
   e.) Limited prescription range at present time.

I hope this brief review of eyewear protection will encourage all of us to think of our sight and its importance and to strive for its preservation when working with machinery that produce air-borne debris. (Dr. David Pfaffenbach is an opthalmologist in Manitowoc, Wisconsin, in addition to being an avid woodturner.)

Editor's note: *Based on personal experience, I recommend the use of a face shield with glasses or safety glasses underneath. I used to wear safety goggles. These worked well in protecting my eyes but offered little in the way of face protection.*

Letters To The Editor

Well! We get dozens of letters in every week — but some may also interest our readers. They are variously addressed to Bob Rubel, Volunteer Administrator of AAW, David Lipscomb, Editor-in-Chief of The Journal, *or David Ellsworth, President of AAW. Feel free to write.*

Dear Bob:

I am confused by your membership rates. I signed on as a charter/founding member and paid my $100 (money well spent) and felt rather proud of the organization and myself. Now it seems as though I'm going to have to pay that hundred bucks again; and again. Nowhere in the list of fees does it say what happens if I don't pay that. Does my name get struck from the role call, am I stripped of rank in front of the rest of the platoon? Sabre broken? Disgraced? Or is it no big deal? Things are tight here right now, but since I am a professional turner I feel it is important to keep my name up there. I am ready to send my money in either case, but I'm holding off 'till I hear from you...

Cordially,
Buz Blum
Box 732
Palmer, Alaska

(The following letter is Bob's reply.)

Dear Buz:

The membership dues are annual. Each year you get to choose whether you will be a "regular," a "supporting," or a "patron" member. A regular member's dues were $15 in our first year, and have just been raised by the Board of Directors to $20. The SUPPORTING LEVEL, which was termed a FOUNDING MEMBER in our first year, remains $100. Patron members ($1,000) are also termed "Founders".

In our second year, you can choose to renew your AAW membership as a regular $20 member, a supporting $100 member or a patron $1,000 member. As you began as a Founding Member, your name is going to be printed on a certificate with ALL the Founding Members and sent to you — probably in the early summer.

If you renew in 1987 at the $100 or $1,000 levels, you will receive the same sort of end-of-year certificate in 1988 listing you along with our other SUPPORTING and PATRON members.

NOW: we DO hope that our 270 supporting and patron (Founding) members will continue to stay with us at that level for this second year. We believe that after that we will be pretty well self-sufficient. But we still need to rely a little bit on our member's generosity to continue the $100 support. And all our SUPPORTING and PATRON members will continue to have their names printed in the "Thank You" section of our *Journal*.

Cordially,
Bob Rubel
Volunteer Administrator
AAW

Dear Editor:

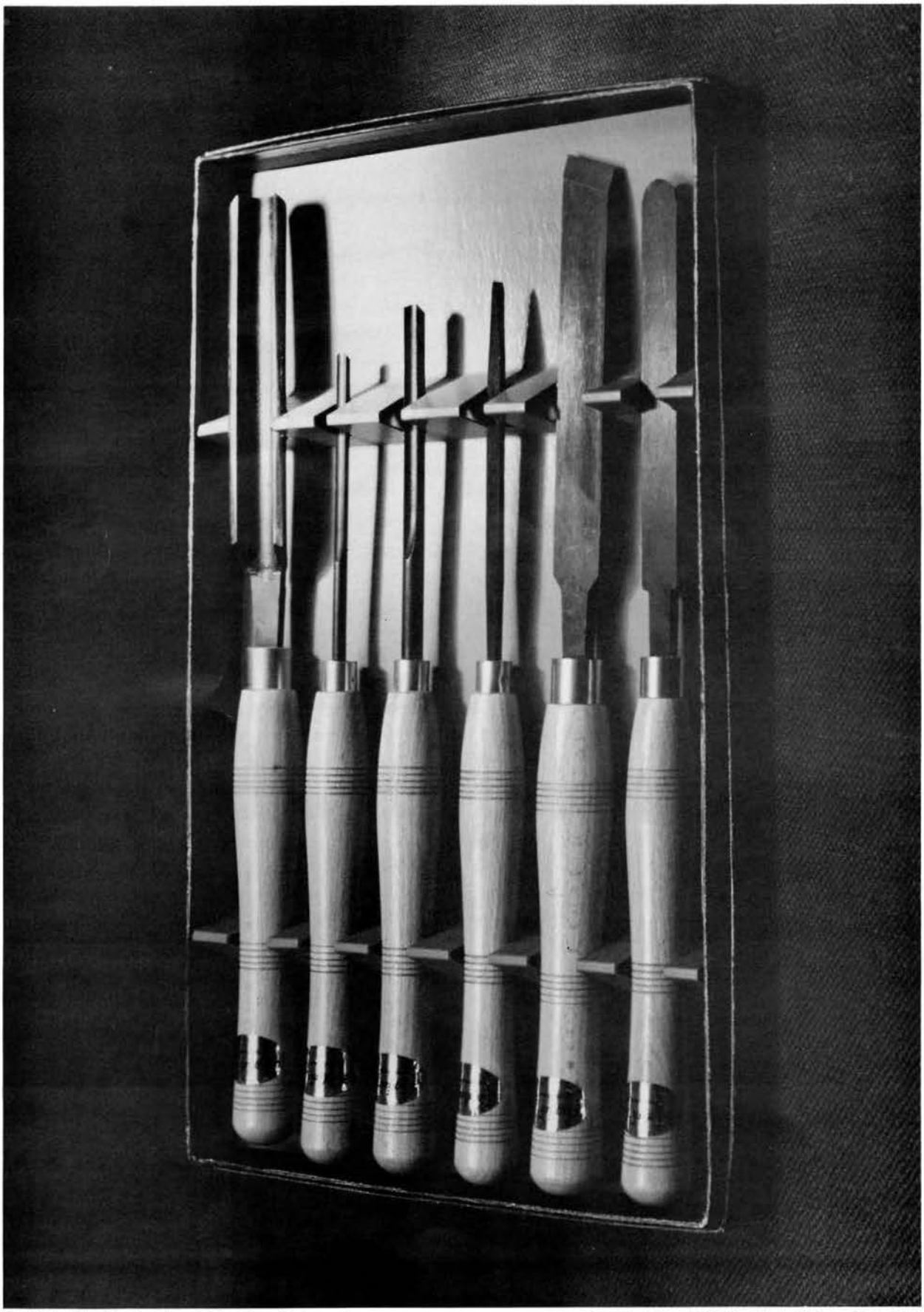
A journal frequently contains newsletters and magazine type material, but the bulk is learned papers detailing the latest research and theorizing. I assume that American Woodturner was not called a journal without due thought, and yet the content to date had generally been no more advanced than that in most other woodworking publications.

I note that the AAW is considering publishing a series of Technical Guides separately rather then incorporating such information into *The Journal*. With the emphasis that woodturning is receiving separate Technical Guides would quickly become outdated and would tend to dilute the importance of *The Journal*.

The average woodturner is wisely seeking an enjoyable hobby rather than intellectual struggle, and attempts to write at an advanced level are not always well received. However, a woodturning publication which is both free of conflicts of interest and unafraid to publish articles of substance has been sorely needed.

To conclude, I certainly agree with Ross Lowell (December 1986 issue) that American Woodturner is off to a fine start, but what are the plans and hopes for the future?

Yours Sincerely,
Mike Darlow
20 A City Road
Chippendale N.S.W. Australia 2008



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