American Woodturner

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WOODTURNING IN JAPAN

Dedicated to Providing Education, Information, and Organization
To Those Interested in Woodturning

Looking Forward as Well as Back

It's time to say good-bye. Six years on the board and four as president have surely been enough for anyone to serve in a voluntary position. I would like to share some thoughts, looking forward as well as back.

I came to the board during a time when few ran for positions and few voted in board elections. I chose to run because of two strongly held beliefs: that there weren't enough people participating in woodturning's organizational life and that the interior of the country was being grossly neglected. Also, due to several physical challenges, I was forced to dramatically reduce my time at the lathe; involvement with the AAW gave my interest and passion for the field an outlet.

My first years on the board found me in the midst of a struggling organization. Oddly, there are times when I miss the crises days. The days of financial turmoil, survival loans, discussions of shutting down the AAW, relocating our office, multiple administrators, petitions, and the like played an important role in the shaping of this organization. As painful as those times were, they helped formulate a mission and vision for survival and growth. In the struggle to exist, we probably had the closest working relationships within the board, with volunteers, and with the editor and administrator that we have ever seen.

Like most things in life, there has been a mix of success and disappointment during the past six years. On the positive side, there is economic stability, strong growth in membership (from about 1700 members in 1989 to 5000 this year), record-setting national conferences the last three times out, increased scholarship awards, a proliferation of local chapters, liability insurance for our board, the capacity to provide inexpensive insurance to local chapters, involvement in several woodturning exhibitions and the impetus behind a significant number of others, the first steps in a burgeoning video program, the totem landmark at Arrowmont and the birdhouse project in New York, the publication of a project book and annual resource directory, an orderly movement of national conferences around the entire country, the advent of sharply focused mini-conferences (with the Arizona conference this month, we will have run three of these), a quarterly newsletter, a much improved board-selection process, and strong renewal rates (last year was at eighty-seven percent).

It is amazing to me that we have accomplished so much with only one increase in dues since 1987—none of my magazine subscriptions can match that! We have also left significant endowments at two universities, given a sizable donation to the speaker's fund at another, contributed in a meaningful way to the Arrowmont building fund to create a first-class woodworking educational facility, and cleaned-up our own in-house scholarship fund that functions much like an endowment. It has certainly been rewarding to be one of many players in these events.

And the disappointments? We have not solidified the relationship with the local chapters, nor have we been active enough in stimulating the formation of chapters. The initial results of our recent membership survey indicate that only one member in three belongs to an AAW local chapter, which means that we have not done well persuading the members of the sixty-five local chapters to join the AAW, or there is a great opportunity for more local groups, or there are more "non-joiners" than we have figured. Anyway you cut it, we need to be more involved with turners on the local level.

We have not been successful at attracting the youth to our field, offering too few reach-out initiatives. And finally, the curse of every volunteer organization, follow-through and commitment, though impressive in some instances, is still unpredictable. We have struggled with the promises and liabilities of volunteerism—on and off the board—and we have yet to realize the full potential of this essential force.

Where do I feel the AAW should be going? Foremost, I hope it continues to strive for balance and breadth in the field: amateur and professional, beginner and veteran, production turner and studio artist, local chapters and non-chapter members, across the whole country, indeed, throughout the world. Magazines and product-oriented businesses usually target a group of likely consumers; we need not be driven solely by economic concerns and can give play to all kinds of special interests. Our publications can (and do) include an attention to design, technique, art, production, ornamental turning, embellishment, projects, debates, profiles, news, and advertising, all to better reflect our whole field. Let's continue to represent the full compass of woodturning, focusing on no one interest to the exclusion of any other.

Along these lines I sense some disturbing developments. I have noticed in the past year or so stronger condemnations of individuals who hold contrary positions, less tolerance for different points of view. I have had more comments and letters along these lines than at any other time since coming on the board. As I've said before, our field has been characterized by uncommon openness and sharing—I hope this quality, not to mention an even more basic measure of mutual respect, is not in jeopardy.

There are other ideas that need exploration. The size of our national conferences has reached the unwieldy 500-plus level, which makes it hard to deal with a new location and new volunteers every year. If we

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On the cover:

A Japanese turner produces a toy top using traditional methods: a hook tool positioned below the spindle's centerline using an unfixed tool rest. At left, another craftsman paints a kokeshi doll, a common production item among turners in the village of Naruko northwest of Tokyo. For more on woodturning in Japan, see the article beginning on page 14. Photos: Alan Lacer.

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Chi

I must reply to Mr. Stetzko's comments (September, 1994) regarding the piece by Gary Zeff titled "If Fish Could Scream." It must be expected that when we view a piece of art, wherein the artist's feeling, thoughts, and ideas are portrayed, sometimes we will be disturbed. That is precisely the point. In this case, the idea is a question, which each individual must answer for himself.

In many major religions the taking of life, any life, even for the necessary purpose of feeding oneself, is something to be done only with the most serious concern. The Jewish faith has many rules regarding not only what may be killed but how it should be done to minimize suffering. In Buddhism, all life is considered sacred, including plants.

Gary Zeff's piece is probably the most memorable work I have seen in any magazine. That and the fact that it has stimulated this discussion demonstrates its success as a work of art. Some of us that turn wood consider ourselves, or aspire to be, fine artists. Just to produce a finely crafted bowl isn't enough. It's absolutely necessary in the beginning, in order to develop the technique to be able to convey a deeper message, but to stop with technique alone is to relegate ourselves to the role of inefficient manufacturers. A work of art must have life, emotion, part of the artist in it. The Chinese call this *Chi.* A work of art without *Chi* is a failure regardless of the technical virtuosity with which it is accomplished. In order to paint a tiger, the artist must have a tiger within himself. If not, *Chi* will be absent.

I personally feel that to turn successfully, I must feel the life of the tree, make it part of my own, then add mine back to the wood to produce the final object. I pray that the turnings and other work I do are a fitting tribute to the trees that have given their lives, and I exert extra effort to be sure none are wasted.

Just as we cannot avoid all unpleasantness in life, we shouldn't shun it in art. Facing the unpleasant fact that we are, at least organically, animals, and must live as such in this life, can lead us to appreciate the beauty and joy of life in concert with other life on this planet, if we are open to the questions life poses.

—Mel Turcanik, Kasson, MN

Rethinking "plagiarism"

First, I would like to compliment the founders and leadership of the AAW for long-sustained and noteworthy efforts on behalf of the art and practice of woodturning. Those of us who arrived later owe much to the dedication and diligence applied to promoting our common interests.

Secondly, I would like to suggest to leadership that they rethink the surplus of dissertations in the house organ which address the subjects of copying and plagiarism. The presentations have been largely redundant and one-sided. One should not copy, one should not plagiarize, and (perish the thought) one should not "sell" such an item.

We relative amateurs are constrained to observe that our efforts, whether copied or not, are not going to damage the market for the real experts in the field even if we have the temerity to offer them for sale. Those who are selling turnings for prices ranging from a few hundred to a few thousand dollars each are in no danger of market risk from our practicing by copying. They should have faith and take comfort in the fact that the market *knows* the difference and prices products accordingly.

Authors of these protests are often the same turners who are happy to demonstrate for dollars and then say don't copy anything we showed you. From an amateur's viewpoint, these protests apply to objects which are not permitted protection by either patents or copyrights.

To enlarge the perspective, one has only to open the nearest encyclopedia to Greek, Roman, Ottoman, and Phoenician art to find designs for turnings which, while done in stone or clay or bronze, bear witness that much work and artistry has gone before. For an even more broadening view, visit the museums. As an example, one can only marvel when looking at the Chinese art from the sixth to the third century B.C. in the Asian Art Museum in San Francisco—hundreds of turnings in many materials, including jade.

Let's reorient and continue the great good of helping each other progress and helping the craft attract more and more people.

—Harold S. Wann, Fullerton, CA

A more mature symposium

I know it's quite a while beyond the symposium, but Ed and I thought this year's symposium was just great. Not only were the facilities top-notch, but the whole presentation was informative, comfortable, and everything an AAW symposium should be, plus something more. (Let me add that the Colorado groups responsible for organization should be commended for a job well done.)

The overall tone or feel of the whole conference was different, more mature. Throughout my involvement with woodturning (albeit peripherally, as I'm not a turner myself, just married to one) I've experienced a sense of sharing, a camaraderie among people of like minds. I've also noticed that although a minority of the members do woodturning because they enjoy it as a hobby and can do it or

not, the greater majority develop a true passion which underlies their continued turning. That passion, and the related artistic talent involved in the creation of the turnings—the inner workings and stuff (as in "The Right Stuff") of the individual turners—hasn't been discussed much at local meetings or in the journal. The symposium opened the door to change in this regard.

In the panel discussion led by John Jordan, there was much thoughtful dialog on the subject of whether turners consider themselves artists or craftspersons, and what distinction there is between the two. After considerable interplay between panel and audience, in which the majority of the audience indicated they consider turners to be artists, David Ellsworth spoke eloquently on the need for clarification and documentation of the history of turning, as well as the development of a clear definition in order to establish the validity of the field in the art world. Clay Foster's session, "Beyond Woodturning" was an in-depth and heartfelt look at creativity and the creative process. It was also an invitation to all in attendance to look within to find and examine their own wellspring of creativity. In other words, their own stuff.

Evident at this year's symposium was the recognition that woodturning is growing up, and that the process of growth involves self-examination (on both an individual and an organizational level). The sessions mentioned above are but two examples of a willingness to go through the process and to become more than what we already are. They initiate the widening of horizons for the entire field. All of this is what I mean when I say the feel of the conference was more mature.

—Leslee A. Morabito, Secretary, Central Connecticut Woodturners

An Excerpt from CompuServe

Editor's Note: Woodturning is becoming a regular topic on the CompuServe woodworking forum. Here's a taste—excerpts from a recent "string" precipitated by none other than our September issue. The interesting and valuable topics actually ranged much further than you see here, but there weren't six pages to devote. For information on CompuServe, call 800/848-8990. If you're on-line already, simply GO CRAFTS.

Fm: John Jordan (TN) 72202,2057
To: Rick Mastelli 72642,1007

Rick, Another *AW* well done. I particularly liked the coverage of the symposium…. Now I have a couple of questions: Why does excess moisture in the armpits make me a popular teacher? Jack Turley implies in his excellent review of David Ellsworth's tapes that he exercises with Jane Fonda videos. Could we get photos for the next issue? In tights?

Fm: Dale Ludewig 71053,3464
To: John Jordan (TN) 72202,2057

John, you don't know me but I have your video (I thought it was good and watch it regularly) and admire your work. I did have a picture of some of what I'm doing published in the September issue of AAW journal—page 42 in the mailbag gallery section. ...What a treat to find someone like you on-line. I've never been in this section before, but was guided into it from the info at the end of the review you referred to.

re: David Ellsworth's video, exercising via Jane Fonda, I do have David's video #3 on hollow turning and I thought it was quite good.

Fm: Jack Turley, IL (Staff) 73720,2201
To: Dale Ludewig 71053,3464

I spend days reviewing David Ellsworth's tapes and all anyone mentions is my crack about Jane Fonda. At any rate, Dale, welcome to the woodworking section.

Fm: Dale Ludewig 71053,3464
To: Jack Turley, IL (Staff) 73720,2201

I went to the local AAW meeting last night for Chicago. You are a member, but were you there and we didn't meet?

Fm: Jack Turley, IL (Staff) 73720,2201
To: Dale Ludewig 71053,3464

That's remarkable, Dale. Yes, we did meet in a sense. I was the one asking you about when in the process you did the carving. When I got home, I was reading the magazine for the first time and saw your work. Very impressive.

Fm: Dale Ludewig 71053,3464
To: Jack Turley, IL (Staff) 73720,2201

Now I know who you are! I remember your question and realized that I had not made myself clear about what I was doing. I am doing the cut out of the shoulder of the piece, gluing in the ring, and then developing the carving after returning the piece to the original shape. Nothing is preplanned. I start the piece with no preconception of what the carving will be. The form must stand on its own, which is why I regret that the other night I didn't bring a piece with no carving. To me, the form must stand on its own without any inlay or carving. Only then can I add to it. I guess what I'm saying is that form is so important to me that when I see other turners' work, I appreciate good form (outside stuff) even if technique (hollowing capabilities) doesn't follow. When they come together, that is exciting. But it is good seeing others pursuing either option, although I think good form is foremost.

Fm: Jack Turley, IL (Staff) 73720,2201
To: Dale Ludewig 71053,3464

What pleased me, and prompted the question, was that I could see you removed a section of the form

COMPUSERVE (CONTINUED)

equal to the width of the insert so the integrity of the curve was maintained and the complete shape implied. Most would, I'm afraid, have minimized the loss of the basic shape and still inserted a wide carving.

The only comment I have, is that the carving band seems a bit too strong. Either, I thought, the contrast in color or its three dimensional character might well be subdued. Putting the carved band right on the shoulder was also a big boost in emphasis. I'd like to see one where the location was less powerful, perhaps, the neck. In short, you've got a concept that is rich in variants. But, you knew that, didn't you?

Ludewig's 10" dia. osage orange piece.

Fm: Dale Ludewig 71053,3464
To: Jack Turley, IL (Staff) 73720,2201

Thanks for your comments. I realize that the carved bands are strong—but I am yet in the formative stages of what I don't know what will become the evolution of this. I have thought about making the carved section of the same wood as the turning. I have had thoughts but not the time to pursue actually letting the carved ring be the actual piece of wood that is the piece itself. But that would involve scaling down the whole piece in order to let the ring stand out—so far, I haven't done that.

Part of it is an obsession with form, and I'm not sure I'm up to doing what would be necessary: turning what will be the final form down ¼ to ⅜ inch less than what I perceive it to need and 'seeing through' the fact that the 'ring' is there, standing out. It is easier formwise to turn the form, then deal with what will be carved: cut it out and glue in the ring of wood to be carved, turning it and letting it stand out, and then do the carving. I'm learning and experimenting. One thought I've been toying with is to do what I've done, but make the ring out of the same wood; with all the background work, it wouldn't matter if the ring's grain pattern didn't match. After all, it's all drilled out to resemble coral and this process would allow me more subtlety, to put it mildly. We'll see. As time allows, I will pursue many ideas whirling around in my head.

As far as variations go, I've got some mind-boggling ideas that I have yet to figure out how to do. One is this: using the same general theme that you've seen, but on a natural topped vessel. Make the carved ring not a ring, but a section carved that follows the natural top. So the question is how to cut out a section 'freehand' from a natural topped turning and then replace it with a replicate that stands out far enough to carve—a free-flowing carving that follows the natural top, but adds a certain formality to it. Hmmm.... It must be seamless, both inside and out.

Fm: Jack Turley, IL (Staff) 73720,2201
To: Dale Ludewig 71053,3464

There is one way to remove the problem you describe in seeing and cutting the final form with the uncut band interrupting it and that is to make an exact drawing and template before hand. I know, many find this an uncomfortable way of working, and perhaps you do as well but it is a way out. Many find it unfortunate that it moves the creative moment out of the workshop and onto the drawing board. (Perhaps that is more tolerable to an old architect.) It also makes the design effort into a two-dimensional activity, a subject you also address. It is an interesting observation. We, all the time, examine our own work by crouching and squinting, which in effect rules out the third dimension, but when examining the work of others, hold the bowl and turn it in all directions so as to fully experience the full three-dimensional form.

As to the act of creation, David Pye said that some work sang and it does but not loudly. It is easy to destroy the subtleties of the creative act. A single mocking word, a momentary self doubt can destroy the serene state one requires. That is why creativity is a solitary act.

Fm: Dale Ludewig 71053,3464
To: Jack Turley, IL (Staff) 73720,2201

Isn't CServe just great? I think that this forum is quite a thing, as is communicating in general regularly with someone on CServe. I think I sometimes work out solutions to my problems by describing them to others in writing, albeit electronically here.

But I am a stubborn sort and really don't want to go to the drawing board when starting a turning (I do that regularly when making furniture—the lathe is my release, basically, from that). But some of what I want to do and already do does require sitting down and formalizing some things; but primary form: unuh. That must be done, by my way of thinking, in working with the particular piece of wood, grain patterns

CompuServe (continued)

unearthed in the turning process, and all that stuff. Sitting down ahead of time to define a form seems to me to eliminate the interaction with the actual piece of material, each of which is unique, and the way we work with its inherent characteristics. This is not to say that I don't start with a basic form in mind when I start to turn a block of wood—at least a precut block. A natural top is a whole 'nother story. I never know what I will do exactly until I start and continue. At least the exact lines. The general form will start in my head when I start to work with the piece, but it changes.

Only after I have worked out what I feel is the best form for the piece of wood I am working with (within the general idea of what I want to do)—then I think about how to add the carving part to it.

In any case, I have figured out a general way to do what I described to you recently—a free-form carved section that would follow the natural top of a turning. This could, of course, then be applied to any shape. And what is interesting about this is that, although I have thought about it numerous times, it was through the process of describing it in writing, and the relatively slow process that is necessary to type the words and think while reading what I've written, that I came up with a solution that has evaded me previously. Hmmm....

Fm: Jack Turley, IL (Staff) 73720,2201
To: Dale Ludewig 71053,3464

That's right, using the drawing board precludes, to a large degree, the selection of an optimum form for a particular piece of wood. But many, who are profoundly interested in and motivated by form, work with wood of subtle graining and character. Since we have already mentioned Pye, he is something of an example. All of the pieces I can remember at the moment depend on his applied texture to establish their character. So, it depends, I feel, on the individual.

I can't wait to hear about your method of inserting a form that would follow a natural top. I've thought about it since you mentioned it but none of my ideas seemed workable....

Fm: Dale Ludewig 71053,3464
To: Jack Turley, IL (Staff) 73720,2201

Yes, I think I've basically figured out how to do it—a section to be carved following a natural top, or for that matter, any section I would want to introduce for carving or other purposes into a piece. It will entail some machining work for jigs and a lot of personal skill through practice, much of which can be applied from what I have already done in my work over the last 20 years, but I think I can do it. But I can't talk about details here, and I might not talk about it until I do it and have it documented. But here is a bit more excitement, at least to me—I think I can make the inserted section basically free form, varying in width to strengthen ideas at certain points around the piece. Yee-gads. Now, just for the time to work it out. Basically I think it will be fairly straight-forward.

Fm John Jordan (TN) 72202,2057
To: Dale Ludewig 71053,3464

That was very well put, Dale. Practice turning, then carving on green wood—not finished pieces—practice pieces. Very few people work out ideas this way, but it pays off—it makes it fairly obvious where problems will occur and it helps with the visualization of the real pieces.

Fm: Dale Ludewig 71053,3464
To: John Jordan (TN) 72202,2057

Thank you, John. I have been an admirer of your work for a long time and I value any input from you. I think that we all should pursue our own ideas of what is good art. I think what we should all do is look around us and spend a large amount of time creating a vision of what our existence is about and then try to create work that embodies that vision. Isn't that what art is? I see too much of what I consider work done to create sensation and novelty work that does not relate seriously to any vision of a reality that one would want to live in day to day.

Work done to create sensation and novelty…does not relate seriously to any vision of a reality that one would want to live in day to day.

Unfortunately, I see too much of that type of work in 'art' periodicals, including (dare I say) *American Craft*. Even in the little world of woodturning, I see work that enhances one's real life—yours, Ellsworth's, Fleming's, Hunter's, and so forth. I also see work, sometimes there, sometimes elsewhere, that seems done just because it's unusual, is novel, and lacks substance that will withstand time.

And that must be another aspect of real art. What do you think?

Add your answer to the forum, either Compuserve's on-line or ours via the U.S. Postal Service.

FRIENDS OF OSOLNIK WOODTURNING CONFERENCE

"ALL FOR THE LOVE OF RUDE," more than 200 of his closest friends "turned out" for a tribute to the Osolniks staged in the form of a symposium last October at the Arrowmont School of Arts and Crafts in Gatlinburg, TN. They came from as far away as England, Alaska, and California to pay homage to Rude and his late wife Daphne.

There were sixty-four rotations with demonstrations by David Ellsworth, Al Stirt, John Jordan, Ernie Conover, Bonnie Klein, Roger Jacobs, Stoney Lamar, Alan Lacer, Ray Huskey, Philip Moulthrop, Del Stubbs, Dale Nish, Todd Hoyer, Nick Cook, Dave Hout, Jay Weber, Clay Compton, Michael Peterson, and Ray Key, not to mention Rude himself. These turners represented a variety of techniques from the most basic to the leading edge of the turned art form of today. All of these turners have been influenced by Rude Osolnik.

Osolnik and the giant candlestick, studded with 80 candles in celebration of his upcoming birthday.

Panel discussions included the views of collectors and gallery owners, Martha Connell of the Connell Gallery in Atlanta, Ray Leier of the del Mano Gallery in Los Angeles, Arthur Mason of Washington, DC, and Robyn Horn of Little Rock. Another panel consisted of John Jordan, Stoney Lamar, Michael Peterson, Todd Hoyer, Al Stirt and David Ellsworth discussing design.

One slide show by Albert LeCoff depicted Rude's history as a woodturner. There were slides which included images "older than dirt." Alan Lacer showed slides of his recent trip to Japan. He spent time with many turners studying the style and history of turning in Japan (see his article beginning on page 14).

The main gallery was filled with seventy-five pieces of various artists, all recent acquisitions of Robyn and John Horn. The collection was on loan to Arrowmont for the conference, the first time it has appeared outside of Arkansas.

The second gallery was filled with a collection of Rude's work, representing his various styles, including a 1929 turned-and-carved bowl. These items were selected by Martha Connell of Atlanta.

An instant gallery provided space for attendees to exhibit their work. Approximately 300 objects made this gallery a very impressive representation of the conference participants. These pieces proudly included the impressions Rude has made upon these woodturners and thus was itself a tribute to Rude.

On Friday night an auction was held for 105 turnings, tools, and wood pieces, including quite a few treasured pieces by turners from all over the world. Fun was had by all while raising over $30,000 for the Osolnik Scholarship Fund. Rude's dear friend and AAW member Willard Baxter, of Gainesville, GA, did an outstanding job of auctioneering.

More than $9,000 in additional funds were raised in the lathe raffle, coffee mug sales, and general donations. James Lillie of Alexandria, VA, won the General 260V lathe donated by General Manufacturing Co. of Canada. Donations from Rude, The Utah Woodturners and The Georgia Association of Woodturners added another $9,300 to the fund. Add the $25,000 made from the conference itself, and the total came to more than $75,000, a formidable start for the the Rude and Daphne Osolnik Scholarship Fund at Arrowmont.

The entire conference was filled with emotion and oneness of purpose. The event was a celebration of Rude's life's work—woodturning. A major highlight of the conference was the presentation of an oversized Osolnik-style candlestick covered with a spiral of eighty turned candles in celebration of his upcoming eightieth birthday. The candles and candlestick were made by many of the conference attendees, reflecting the camaraderie and generosity that prevailed throughout the conference. It was truly a labor of love for everyone involved.

As a committee member for this conference, I would like to personally thank everyone who helped to make it the success we had envisioned. The unselfish giving of time, expenses, turnings, and expertise is truly a tribute to Rude, Daphne, and all that they have meant to the world of woodturning. A special thank you to Dale Nish and Sandy Blain, co-directors of the conference, to Arrowmont, and to fellow committee member Dave Hout for a job well done.

—Nick Cook, with Stan Harris

CHESAPEAKE REGIONAL WOODTURNING CONFERENCE

WHAT'S THE BEST WAY TO LEARN HOW to mix pearlescent paints like Giles Gilson? To do it yourself, of course, with Giles as your guide.

Students were able to participate in just such a hands-on fashion during the Chesapeake Woodturner's Mid-Atlantic Regional Woodturning Conference held at Maryland Hall in Annapolis, MD, September 9–11. About sixty of us attended presentations by David Ellsworth, Bonnie Klein, John Jordan, Stoney Lamar, Johannes Michelson, Giles Gilson and Palmer Sharpless.

Throughout the conference one could choose from any of five or six demonstrations or lectures taking place. The small number of attendees and the general informality provided a wonderfully relaxed atmosphere for students and demonstrators alike. John Jordan, who dealt with hollow forms, green woodturning, and carving and texturing observed that with a smaller group of students he was able to share a good deal more information. "They aren't afraid to ask questions, and I have the time to answer them," he said. "I can get more of a feel for their level of experience, and I can tell when they fully understand a point and are ready to move on."

In her first class, Bonnie gave a marvelous presentation that was both detailed and comprehensive, with information about tool metallurgy, tool shaping, and tool sharpening. In her other classes, Bonnie turned lidded boxes, threaded boxes, and showed off her dazzling skill with the chatter-tool.

Bonnie Klein making one of her colorful, felt-tip-decorated tops.

Giles said his students got involved at every level. They played and experimented in a hands-on fashion that Giles found both exciting and extremely rewarding. "It's like watching children play," he said. In his classes students mixed batches of pearlescent paints and "candy colors" and took turns decorating and spraying several different vessels. Saturday afternoon Giles delighted all with his dazzling slide presentation. When it was over, the audience was literally speechless. One attendee commented later, "What do you ask a man whose vision is so far-reaching and whose work is always complete and fully realized right up to the last detail?"

Stoney turned a sculptural form out of dogwood. Driven by the excitement of his students (no doubt!), he became so involved in his demonstration that he kept on turning right through a 90-minute break he was scheduled to take. His students remained throughout. One club member commented later, "It was a rich, well-thought-out presentation that gave me a whole new way to think about shape, form, and facet. It was a tremendous opportunity for questions and answers."

David's students learned the tricks he uses to get a vessel with perfectly balanced grain patterns. It is this attention to detail, he explained, that can make an otherwise ordinary bowl an extraordinary one. With his usual grace and humor, David also shared the use of his bent tools in the making of hollow vessels.

The informality of our conference allowed us to reorganize classes at the last minute to better accommodate students and demonstrators. When Bonnie Klein expressed disappointment that she would miss a class because she was teaching in the same time slot, we simply put a poster on her classroom door announcing a new class time, and Bonnie was free to attend the metal-spinning demonstration by club member, John Brewer.

Eighty-five year old John Brewer, a metal-spinner and retired microbiologist, charmed his packed classroom with his wit, relaxed-style, and grace. Beginning with a metal mold in the headstock, he placed pewter disks at the base of the mold and, using two of his metal-spinning tools, shaped the pewter up and around the mold. Throughout the process, a periodic application of wax kept the pewter cool. Watching the metal spin and slide up, out, and around the form was a sensuous experience. John's expertise and many years of working with this material were evident in his finished work. Two lucky class members won the completed demo pieces.

Several impromptu discussion groups began to sprout up. I was lucky enough to fall into one of these gatherings. There was energy and intimacy among the group, a mix of collectors, demonstrators, and students. As is frequently the case when the best and the brightest woodturning minds assemble, the discussion turned ultimately to the unanswerable questions of life, such as "What is our role in the universe?" and the big question, "Are we fine artists or are we craftspeople?" No answer was found. Nevertheless, it was confirmed, once again, that woodturners are a special lot when it comes to sharing what we love to do.

—Susan Ellison, President, Chesapeake Woodturners

"Please carve me, please paint me"

When you're an art student or perhaps have a studio in an artist's complex or neighborhood, the proximity of others results in a great exchange and sharing of ideas, information, and energy. It's the reason why turning clubs and the AAW conferences are so successful. Most of the time, though, we're alone in our studios, plugging away, listening to NPR, talking to ourselves. The Contemporary Woodturning and Furniture Symposium in Saskatoon last July, billed as a collaborative affair with lots of hands-on involvement, sounded like what I needed.

The conference was small—only 80 participants. I'm not sure of the number of instructors (it was hard to distinguish them from others) but Michael Hosaluk, the organizer, said he went overboard this year.

Two of the furniture makers, Garry Bennett and Michael Hurwitz, demonstrated by constructing a piece during the two and a half days. They were more like artists in residence, explaining what they did as they worked. Participants pitched in by cutting parts and helping to glue, clamp, and sand.

Chelsea Franson painting a leg she turned for a collaborative table.

Also in the large woodshop area, Hosaluk set up the surface-design section. He brought carving equipment, wood-burning tools, and paints; I brought dyes and glazing materials. A lathe was available, too. Mark Sfirri and Michael did a demo there on decorative techniques and surface finishes. I did one on dyes and bleaching.

Other rooms, each a very large space, had various things going on. Doug Taylor taught how to make willow furniture and paint it. Frank Sudol demonstrated his pierced work. I was fascinated with Brian Gladwell's remarkable cardboard furniture and the moiré patterns he achieves in the way he cuts the edges and applies color. Don Kondra manned the spray booth, demonstrating many exotic finishes and gave me the best lesson I've ever had in using a spray gun. David Loewy did plastic rims embedded with an amazing array of found objects. Ron David turned chair parts. Al Bakke showed how to build your own forge and make all kinds of carving and turning tools. Jamie Russell demonstrated vacuum-bag lamination.

Del Stubbs epitomized the collaborative spirit. A scheduled demonstrator, he nevertheless announced he wouldn't be making anything on his own; all was to be collaboration. The first morning, Del, Mark, and I came up with an idea for a platter with legs similar to Samoan vessels I'd always admired. We sketched forms on a blackboard and then went about our business, returning to the piece on the last morning.

The final destination for work done became the surface design area and lacquer booth. People brought in pieces that had been turned or constructed in rotations. Additional items from a previous workshop were available for experimentation. Mike made some fish, carving and painting them. I decided to cut a snake on the band saw, having become quite an expert because my grandkids always want to make them when they visit. More and more pieces appeared. It was hard to keep up. At one point I put a sign on a snake: PLEASE CARVE ME. Later, a PLEASE PAINT ME, PLEASE CARVE ME table was set up. There would be consultations between participants and instructors: "How would this color look?" "What about this carved pattern?" There was one bit of tension when someone picked up a piece that someone else had finished, and reworked it because he didn't like the way it had been done. But it wasn't serious, and everyone got into the joint effort.

And there was the table Mark and Mike had begun together. Legs appeared from other demonstrators then disappeared, taken off by others to be painted. People sanded the top and shaped bevels. I suggested the top looked awful unpainted with painted legs, to the consternation of several who had done a lot of work sanding and thought it looked just fine as it was. But Mark and Mike agreed I should stain it, and I made converts of the reluctant.

The Samoan platter: Del turned out legs that looked like Easter Island figures—close enough to Samoan, I suppose. People took them as they came off the lathe and decorated them with individual characterizations. Another participant decided where the leg holes would go in the platter's rim. The platter surprised us all—fantastic!

On the last day, the "command station" (as I came to refer to the surface-design area) was bustling in an exuberant and exhilarating dash to the finish line—the auction, which was even wilder. At one point I realized my husband and I were bidding against each other for the same piece!

And now I'll never know if Michael invites me back whether it's for my expert teaching or the dollars I spent at the auction.

—Merryll Saylan, San Rafael, CA

ANOTHER VIEW OF SASKATOON

THE PURPOSE OF A TURNING SYMPOSIUM is to bring people together who are interested in woodturning, to allow for the exchange of ideas. This is usually accomplished with a series of demonstrations, each about 90 minutes, each by a different presenter, and often concurrent. Indeed, choosing who to see among many presenters is usually the most demanding activity of a symposium participant.

I have been a part of a number of symposia, both as a presenter and participant. I've come away from them very much inspired, but I think, based on recent experience, that we can improve on the structure to increase the opportunity for learning at such events. In technical areas, most beginning and intermediate turners will see things that they will go home and try. They might take some steps forward, but will inevitably have a dig-in or catch and not try that technique again until after the next symposium. I know this from my own experience.

And while technique is regarded as concrete, and technical skill as something attainable over time, design is seen by a lot of people as beyond them. Rather than develop one's own sense of design and the ability to design, it is easier to look at what someone else has done and try to duplicate it while working on your technique. Many organizers find that rotations and workshops with the word "design" in them are the least likely to be attended. It's a shame, for they're the ones that offer the most potential for development. Design, just as technique, involves the acquisition of skill over time.

Alphonse Mattia, the teacher and furniture maker, advises students suffering from design block to go to a junkyard for inspiration. What does a junkyard have to do with furniture design? Nothing, which is just the point. If all that turners do is look for inspiration in work that has been done, there will be no real growth, only refinement and inbreeding.

When I sat down with Michael Hosaluk two days before the Saskatoon conference to help with the schedule, I filled all of my rotations with what I was going to do. Michael proceeded to remove half of them. When were we going to collaborate on a table, he asked, if I was presenting the whole time? Del Stubbs wanted to do a rotation with me ("Winging It," he called it) as did Merryll Saylan. It was clear that there were not going to be enough hours in the day.

Multi-axis martini glass

At first I thought that these loosely specified group assignments were too easy for us and perhaps unfair to the attendees. I felt a little guilty during the first day. But by day two, things were in high gear and going in many different directions. Days started at 8 am and ended at 10 pm. Attendees were actively encouraged to participate, and everyone was working hard. Merryll and Michael's surface-design area, set up with woodburners, paints, dyes, and carving tools, as well as lathes and other woodworking equipment, was always busy. The major collaborative furniture object, a coffee table, involved six presenters and at least six attendees! It was a striking piece, much more than the sum of its parts.

Del introduced "Winging It" by saying we were going to make something neither of us had done before: a spontaneously designed multi-axis goblet (I'd never made a goblet before, and Del has little experience with multi-axis work). We made three rough samples, demonstrating various possibilities, and then let the group decide which one would become a finished object. The result was a cherry multi-axis martini glass that was partially gold-leafed and finished by Leon LaCoursierrie. The piece brought $300 at the fund-raising auction.

From the rotation schedule's few listings, one might think that not much was happening, But this was misleading. Energy was high, exemplary work was accomplished, and a lot of people got involved in things they might not have imagined before.

The Saskatoon symposium offered an unusual opportunity to work spontaneously in new ways within a flexible, responsive structure. Pieces passed from one work group to another, and grew in the process. When a symposium is divided neatly into 90-minute topics, it's liable to yield exactly what's predicted. At Saskatoon, presenters and participants learned new things and from each other because they worked together, supporting one another's creativity.

Michael Hosaluk and his crew deserve a lot of credit for creating an environment where such things could happen. Michael has organized a number of turning and/or furniture symposia over the past twelve years. (The most recent, in 1992, was reviewed by Richard Raffan in the December 1992 issue of *American Woodturner.)* We should all look forward to more such events.

—Mark Sfirri, New Hope, PA

AAW NEWS & NOTES

Mountaineer Challenge

What do you get when you take a piece of hornbeam, cut it into three or more pieces, turn those pieces, then fasten them together permanently and add an optional dash of other material? The answer: the Mountaineer Woodturners 1994 Challenge Project in Ripley, WV.

Late last year each member received a half log of American hornbeam about 7 inches by 24 inches. Each entry had to be constructed of at least three separate turnings that were then to be permanently fixed to one another. A maximum of ten percent of other material was allowed and, to keep the size up, at least fifty percent of the log had to be used.

While design was clearly demanding, one clever member noted that the real challenge of the project was to turn such a hard wood as hornbeam at all. When we got together last spring, it was a surprise and a pleasure to see the results of the challenge. Not only were the pieces themselves delightful, but it was enlightening to see each approach and talk over the solutions used. The result was an analytic as well as aesthetic appreciation. All pieces came across well, whether or not they closely followed the guidelines.

By a secret balloting of the membership, Kermit McCartney was voted the run-away winner with a turned and carved three-section dish of hornbeam, cherry, and holly measuring 8 inches across by $2\frac{3}{4}$ inches high. His first-place prize was a solid round of applause with accompanying handshakes and claps on the back.

The various entries are pictured below, except for one with multiple turnings and inscriptions by the irrepressible Bob Fleming (known to many as the white-haired auctioneer at past AAW symposium auctions). It sold so fast, it eluded shutter speed.

Besides being a technical and design challenge, the project was lots of fun, so much so that we have already scheduled and made guidelines for "The Great Spin Off of 1994" when everyone is making tops. And I expect very few of the tops to be made of hornbeam!

—Jim McGinley

Jim McGinley is a professional woodturner who also spins pewter in West Liberty, WV.

Challenge entries, from left to right: reverse-turned urn by Dick Boeger; stemmed candy dish, by Joe Keeler; "Mexican Cattails" by Clarence Clarkson; carved dish by Kermit McCartney (the winner); display stand by Myke Hymes; and table centerpiece by Claude Conteau. The tallest piece here ("Mexican Cattails") is 18" high.

WOOD HISTORY

Narra

Editor's Note: *At last June's symposium, wood technologist Paul McClure offered a unique perspective on the history of the material we use. In this new, occasional column he explores the background of favorite as well as little-known turning woods, many of which have been prized for properties long forgotten. (Special thanks to writer Pamela Philpott-Jones.)*

During the spice trade in the South Pacific and Western Pacific Rim, the Dutch and Portuguese searched for new woods, spices, and minerals that would better the lives of their countrymen. One of the woods discovered in the Philippines and New Guinea was narra (*Pterocarpus indicus*), also known as red narra, yellow narra, sena, PNG (Papua New Guinea) rosewood, and (in burl form) amboyna.

When immersed in water, narra would leach a yellow dye, thought to be an elixir that could cure everything from the common cold to the plague. Logs of blood red and golden yellow narra were brought back to Europe where they were purchased by local craftsmen. To be a cabinetmaker during this time, you had to have a court patron. If you were a craftsman, but were not subsidized by royalty, you could fashion a goblet or chalice from narra and present it to the king or queen. If royalty accepted your gift, they would fill it with water, let it turn yellow, and drink it. The court would acknowledge such a gift with favors of small plots of land, hunting rights on royal grounds, or pardons from petty crimes.

We now know there are no medicinal properties, and no royal court in the world will grant your wish for a goblet. However, if you can acquire a piece of narra large enough to turn a chalice or goblet, you will have a unique item similar to those that played an important part in the pageant of history. *—Paul McClure*

TURNER'S TIPS

Trim band where you want it

When turning the short barrel of the Mount Blanc pens, it helps to keep the center trim band on the mandrel to test-fit it. Mount the double-diameter bushing on the mandrel using a piece of scrap and file the step shoulder to a taper that will allow the trim band to jam-fit and stay in place. It's quicker and neater than masking tape. *—Ken Ray, Los Osos, CA*

Upgrade your calipers

If you're using calipers to measure wooden cylinders, be sure the caliper tips are shaped to slip over the rapidly turning wood. Calipers manufactured for metal workers have pointed tips to provide more precise measurement. For woodworking, grind the tip round and they will do better.

Those same calipers used constantly at a fixed setting can change from vibration or a slip of the fingers on the adjustment knob. Prevent this with masking tape over the knob and shaft. It can easily be removed at the end of the job.

—Palmer Sharpless, Newtown, PA

Reinventing the wheel

In the June 1994 issue, I went on about the wonders of making a round skew from the end of an extended drill bit. All you had to do was temper the cutting end of the skew and you were in business. Well, I'm here to tell you that I was all wet.

I recently received an order of 24 square $1/4$ x 8-inch pieces of high-speed steel from Enco Manufacturing Company (800/863-3400). The only problem is that they were round! Just before I sent them back, I realized that they were the skews I was raving about. At a cost of about $3.15 apiece, I don't think that you can beat them.

—Robert Rosand, Bloomsburg, PA

PRODUCT REVIEWS

"Diamond Jim" Grinding Wheel Dresser, *Packard Woodworks, P.O. Box 718, Tryon, NC 28782. 800/683-8876. $30.95 handled; $25.95 unhandled.*

JUST LIKE ANY OTHER PIECE OF EQUIPment, grinding wheels need to be regularly maintained. The major maintenance required is dressing them. That means running some type of tool over the surface in order to get rid of embedded metal particles, to square up the edge, and to raise fresh grit.

For years the only tools available to do the job were the star-wheel dresser and the diamond-point dresser. I have used both with mixed results The star-wheel dresser is too aggressive for most grinding wheels that are used for sharpening turning tools. It leaves a very rough surface on the wheel which I find unacceptable for getting a good edge. The diamond-point dresser cuts more cleanly, but the tool is somewhat difficult to learn how to use. Because the point contact is so small, it tends to leave a ridged surface, unless you have a very steady hand and can move the tool across the wheel in a perfectly straight line.

The "Diamond Jim" is a $3/8$-inch diameter rod with diamond chips embedded in the end. The diamonds are $1/8$ inch deep. Because of the larger area, this tool is simple to use. You hold it on the grinder's toolrest and move it across the edge of the wheel as the wheel rotates. I have used this dresser on a number of types of wheels from very fine and soft to rough and hard. It works great for all types.

The price tag may seem a bit high, particularly compared to about $14 for the star-wheel and diamond-point dressers. But it's worth the investment. You will be taking better care of your grinding wheel which will result in getting a good edge on your tools.

—Betty Scarpino, Indianapolis, IN

Diamond Wheel Dresser, *Craft Supplies, USA, 1287 E. 1120 S., Provo, UT 84601, 800/551-8876. $34.95.*

I, TOO, FIND THAT STAR-WHEEL DRESSERS are far too aggressive and leave a surface that is less than desirable. Unfortunately, up until a few months ago there were few alternatives. At the 1993 symposium I saw Vic Wood use a "magical tool" to dress his wheel: a diamond wheel dresser offered by Craft Supplies USA.

This diamond wheel dresser has a plastic-coated handle about 6 inches long and a diamond-embedded working face that measures 1 inch by $5/16$ inch. The width reaches across the edge of most grinding wheels without having to move the tool, although I do move the tool from side to side, and the width makes it easy to keep these movements in-line.

When I first used the dresser I was a bit disappointed. My wheel seemed to get out of round. A quick call to Rex Burningham at Craft Supplies solved the problem. A very light touch is all that is needed to clean the wheel and keep or make it true.

This diamond dresser is a bit more expensive than the "Diamond Jim," but I'm very pleased with it and would purchase another.

—Robert Rosand, Bloosmburg, PA

Multi-Centre Woodturning by Ray Hopper. *Guild of Master Craftsman Publications Ltd. 1994; distributed by Sterling, 212/532-7160. Paperback, 150 pp., $14.95*

IT'S REFRESHING TO FIND A BOOK OF turning projects that assumes the reader already has learned how to work his lathe. Disconcertingly, however, after a short biographical note, safety introduction, and a hint about how to see where you are on an off-center turning, author Ray Hopper jumps right into projects. They all involve multi-center turning, but there is no clarifying overview of what multi-center turning is, how it differs from plain turning, or why you would want to do it.

After a warm-up with such basic projects as oval tool handles and off-center furniture feet, Hopper presents one of his specialties, turned fruits and vegetables. You will learn how to turn an apple with a bite out of it; an avocado that opens to release its wooden pit; realistic pears, bananas, and aubergines (eggplants); and the pièce de résistance, a bell pepper. Most of these pieces do require some hand-carving and sanding to smooth off the shapes.

Hopper moves on to a variety of ingenious fruit bowls, coasters, trivets, and platters, all relying on the shapes and decorative effects that can be achieved by shifting the work to more than one turning axis. He finishes up with flowers, bowls, and jewelry boxes made from burls; a strikingly ugly snowman-with-tree turned inside a cube of wood; and a bizarre family of lumpy birds among burl toadstools.

As a whole, the book is as eccentric as the work it describes. I'm charmed by such earnest nuttiness, and I'm especially glad to have the closing portrait of the author wearing his turned horse-chestnut hat. It's plain to see that he really enjoys fooling around with his lathe, and if you try some of his methods, you will too.

I guess our editor asked me to review this book because he knows that some years ago I myself got deeply into multi-axis woodturning. I made lots of shapes and doo-dads as weird as anything Hopper shows here, some of which became useful objects, sort of. I thought it was wonderful fun, but I finally moved on because I'd tried everything I could think of, and I thought I had reached a dead end. Hopper, however, goes down roads that never occurred to me. It shows yet again how woodturning, for all its apparent simplicity, always remains interesting and provocative. I might even try to turn one of those bell peppers, or how about a giant peanut, or a roasted chicken? *—John Kelsey*

The Woodturner's Workbook by Ray Key. *BT Batsford Ltd., London, 1992; distributed by Trafalgar, 800/423-4525. Hardcover, 112 pp., $29.95.*

ONCE AN AMATEUR CRICKETER OF NOTE, Ray Key has become the W.G. Grace of British woodturning. A large, bluff, hearty Warwickshire man and long-time president of the Association of Woodturners of Great Britain, he refers to his second and recently released book *The Woodturners Workbook* as a coffee table book. In a sense it is: short and with lots of color photographs, mainly of his own work. But the text is much better than coffee table.

Ray's writing roams over wood, finishes, design, and the items that he generally turns—boxes, bowls, platters, and vases. There is much useful information and opinion, but it is presented in a soft and sunny way. For once the barkers on the back cover are true; it is "a book of touchstones and stepping stones." Batsford's design of Ray's first book *Woodturning and Design* was poor. Apart from the cover, which is spoiled by the harsh black background of one photograph, they have done much better with this one, although the correctly focussed and exposed studio shots would have benefited from the flair of a professional still-life photographer.

Will Ray's book achieve its aim of stimulating readers to a "greater creative awareness?" Ray's work is restrained in style and apart from further refinement has not radically changed in the seven years between his two books. Those craving the buzz which they believe can come only from the nothing-exceeds-like-excess school may be initially disappointed, but in time they too will be influenced for the better by someone who has remained a turner of wood.

I support the widening of horizons which we have seen in recent years, yet I am not alone in believing that merit has sometimes been sacrificed on the altar of gimmickry. Could the pendulum start to swing back? If so, Ray Key could again find himself in the aesthetic van. Nothing in *The Woodturner's Workbook* is revolutionary or even new, yet it has charm and integrity. Leave it on the coffee table. You and others will often pick it up and enjoy it—that's a pretty good reason for owning a copy. *—Mike Darlow*

Turning Wooden Toys by Terry Lawrence. *Guild of Master Craftsman Publications, Ltd., 1994; distributed by Sterling, 212/532-7160. Paperback, 172 pp., $17.95*

RESEARCHING FOR OUR CHAPTER'S holiday project, I've looked over more than two dozen woodturning and toy books. Spirit and imagination are not in abundance, nor are knowledgeable and detailed instructions. This book, with its delightful sense of play, stands out.

The author's introduction describes his background and interest in toymaking and his emphasis on design. He discusses equipment, materials, technique, and level of difficulty. You quickly find yourself as if in a friendly conversation with a man you are glad to know.

Turners with some experience on a lathe and basic woodworking tools should be able to complete the work. A scroll and circular saw would make some details easier, but modification or hand tools will do. If you do not have much experience, here is a rich, varied, and fun way to learn.

Projects range from simple toys, such as tops that blend color as they spin or a set of nine-pins, to elaborately detailed models: a locomotive, a castle, an ark (as in Noah's), a submarine, and a flying saucer. You may feel that twelve projects are not many. However, the book is full, offering clear directions, hints, alternative ideas, and a variety of procedures for over 350 parts (many duplicates) and as many more minor accessories.

Because of the many small parts, some projects are not for children under three. (See the choke tester sidebar above right.) If toddlers have access to these toys be sure no small parts can come off.

That said, this is a good book to justify those boxes of odds and ends you're saving because you might need them someday. Lawrence sounds a familiar note when he says, "I've had fun with many hobbies in my time to the exasperation of my wife who has seen, after a suitable period of intoxication with the subject, another box of materials shoved out into the garage...." He capitalizes on fifty years of craft and woodwork collecting as he blends assorted woods with materials such as upholstery nails, veneers, reflecting buttons, self-adhesive paper, line, dried grass, leather, brass eyelets, aluminum tube, O-rings, and crystal.

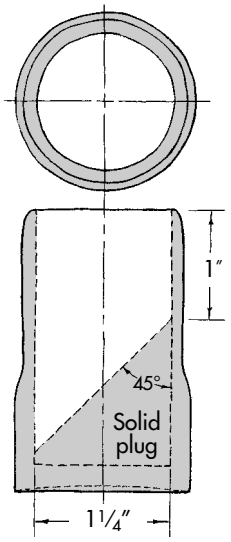
All chapters are thorough and helpful. Consideration is always given to the alternative needs and wishes of the reader. Drawings and black-and-white photos show sizes (in inches and milimeters), views of the parts, assembly, work in progress, and completed toys. Design variations, and chucking techniques are demonstrated. The color pages show all projects, some with more than one view.

Throughout, Lawrence evidences his ingenuity, imaginativeness, and love for intriguing detail. His tops, for example, not only blend colors but show light and dark shades of the mix. Many chapters begin with a fanciful story or explanation that inspires the project. The endlessly various "Mobile Radiolaria" are sculptural hanging forms based on microscopic protozoan which make up the white cliffs of Dover. Two of the more unique works are the flying saucer, right out of Star Trek's Utopia Planitia Fleet Yards, and the model Nautilus with decks and compartments full of intriguing chambers, control areas, and even an organ. The Nautilus is hollowed by adding rings, turning, and adding more until the form is complete. As usual, several alternatives are given.

Turning Wooden Toys will bring you to Lawrence's special world, where imagination turns leftovers into delightful toys. —*Richard Montague*

John Kelsey, former editor of Fine Woodworking *magazine, now runs his own publishing company, Cambium Press, in Newtown, CT. Mike Darlow is a professional turner, teacher, author, and videotape producer in Australia. Richard Montague, an industrial arts teacher for more than thirty years, is currently a consultant, woodturner, and teacher of turning in Groton, VT.*

Choke tester



THE BABY RATTLE ON PAGE 26 of this issue and many projects in *Turning Wooden Toys* (reviewed here) require consideration of the danger to young children from small parts or pieces that may break or come loose. We need to know our attempts to bring joy with turned toys will not end in tragedy.

One important safety check, a choke tester, can be a turning project itself. It's simple and, if skillfully done, can have the same good feel as your other favorite tools.

The U.S. Consumer Product Safety Commission has determined the size and shape of a space that if an object fits into represents a choking danger to toddlers under three. It is a $1\frac{1}{4}$-inch diameter cylinder with a 45-degree sloping bottom that starts 1 inch from the top of the cylinder (see drawing).

I made my own choke tester of maple, turning a cup in maple and a matching plug with one end cut to 45 degrees. Turning the plug slightly undersize and adding a fine finish means that the plug will float to the bottom of the cylinder, making it fun to demonstrate and pleasing to use.

Operation is uncomplicated. Any object that does not protrude above the rim when placed in the tester should not be in the hands of children under three years old. Use common sense, of course, as well. —*Richard Montague*

TURNING IN JAPAN

Tradition at a crossroads

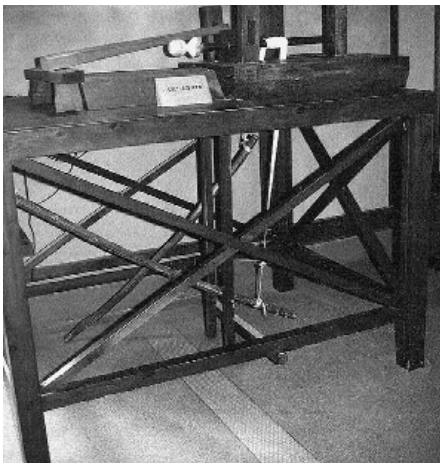
ALAN LACER

THIS PAST AUGUST I HAD THE GOOD fortune to be the guest of two villages, about 250 miles northwest of Tokyo, rich in woodworking traditions. The town of Naruko has been a focal point of woodturning for several hundred years, while the town of Kaneyama, located in the heart of cedar forests, is well known for timber-frame structures, furniture, bath tubs, and the like. In both villages I had the opportunity to turn, show slides of the work of American turners, and discuss the American tradition. I was overwhelmed by the full-bodied woodworking and woodturning tradition I encountered, for it has had little exposure in the U.S. And I found a genuine interest and fascination with American woodturning.

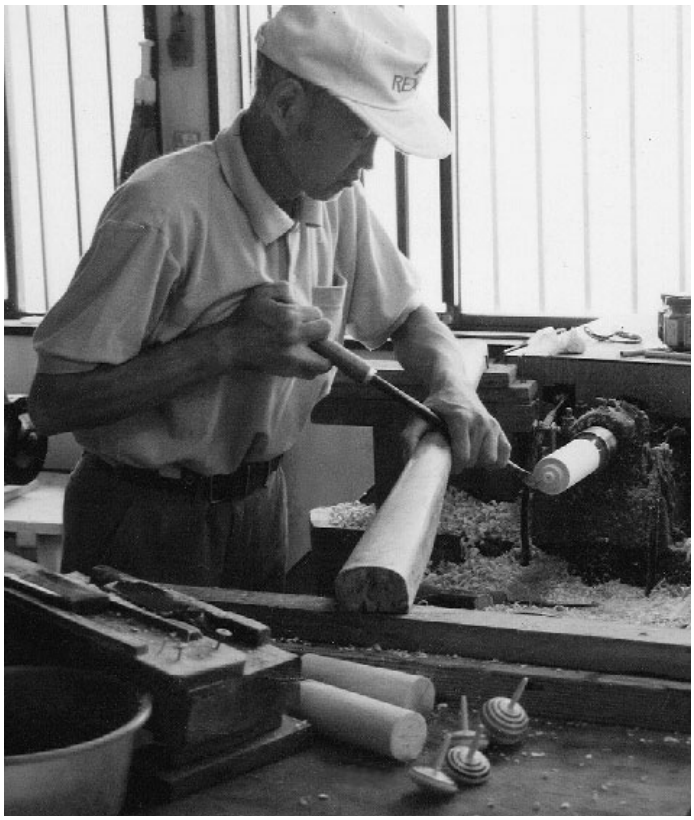
A unique tradition

Woodturning has been practiced in Japan for about 1,000 years. The lathes, tools, and methods have evolved along lines that vary considerably from our Western tradition. First, I encountered two types of human-powered lathes unlike anything I had seen before. The lathe in the photo and drawing below operates somewhat like our spring-pole lathes but is peddled or pumped on the two poles directly below the turner. The action, like a spring-pole lathe's, is reciprocal, that is, alternately toward then away from the turner, with cutting taking place as the wood comes down on the tool. The other type of lathe, seen in the photo and drawing at the bottom of the facing page, was still in use earlier in this century. The turner is seated while an assistant (wife or apprentice) pulls two round rings on the ends of a rope back and forth. The rope is wrapped around the lathe's drive shaft, again producing reciprocal motion. A tailstock is not a part of either lathe; all work is held in a cup chuck (photo, page 16).

The two types of lathes currently in use incorporate features and techniques from the age of muscle power. With one type (pictured above left on the facing page) the turner stands parallel to the lathe shaft. With the other (pictured next to it) the turner sits on a stool and faces the shaft of the lathe—as for doing bowl work, much like working outboard on a Western lathe. Neither of these lathes includes a tailstock; again, the work is held in a cup chuck. Power is provided by either a motor below the lathe or belts that



A foot-powered reciprocal lathe. (Drawings, left and on facing page, courtesy of the Kokeshi Museum in Naruko.)

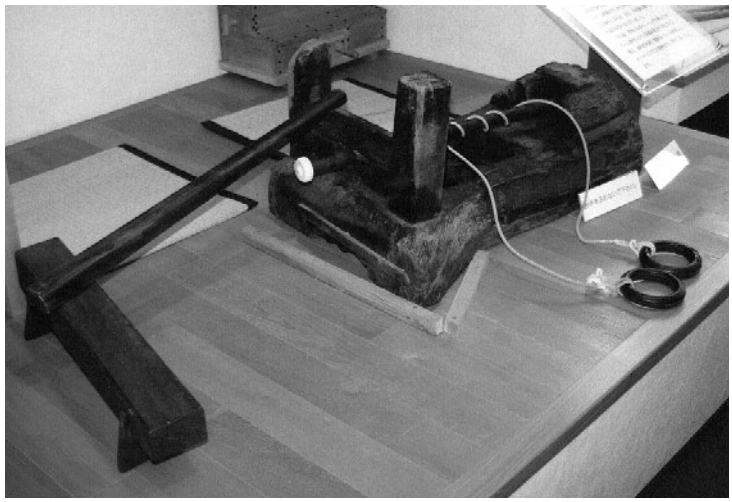


Two types of contemporary powered lathes: At left the turner stands parallel to the lathe axis, and the tool rest is a long, stout bar that spans two rails. At right the turner faces the spindle and the tool rest is a two-legged, freestanding device.

run off a line shaft below the floor, allowing for several lathes to be run from one motor. Reversing mechanisms allow for working either clockwise or counterclockwise.

Floating tool rests, sharp tools

I found the major difference between contemporary Japanese lathes and their Western counterparts to be in the tool-rest system. On the lathe pictured above left, the tool rest has the look and feel of a large ax handle and is angled on a pair of rails from above the centerline to below it. It is hefty but unfixed and easily repositioned as needed while turning. On the other type of lathe (pictured above right and on page 16), the tool rest is even more unusual. Consisting of a wooden bar on two legs of different lengths, it stands on the same work platform as the lathe spindle but is unattached. It can thus be easily moved before and even during the cut, positioned in front of or beside the work—very convenient for bowl turning. But freestanding on two legs, the rest is stabilized only by the turner's grip, which requires con-



This traditional lathe is powered by an assistant pulling back and forth on the ringed rope that is wrapped around the drive shaft.

The two-legged tool rest, left, is unattached to the turning platform. At right, author practices gripping both tool and rest to provide the necessary stability to cut. Sharp tools and a deft approach are essential.

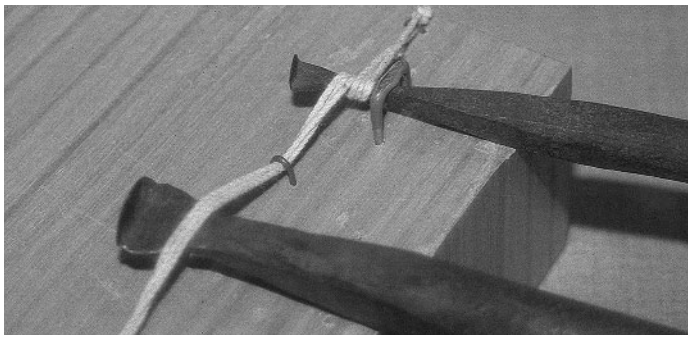
siderable attention and deft cutting. I tried this system (photo above right), and I found it very unusual. It was like entering a new world, having to develop different hand-holds for the tool rest as well as the tool, moving the rest while I was working, and getting used to the floating sensation of the rest. The powerful leveraging of the tool on the rest that we sometimes practice in the West has no place with this rest.

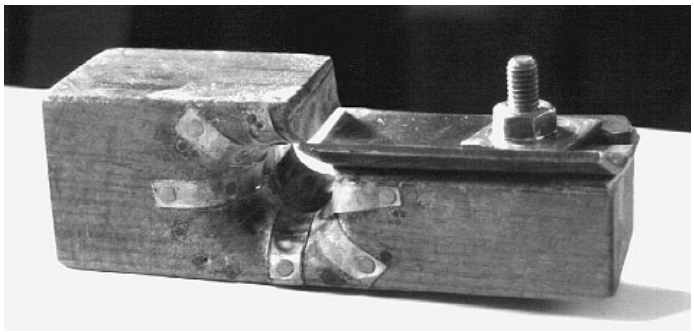
The tools and strategies for turning also held a number of surprises. First, the dominant tools are hook tools, for both spindle and face work. The tool overhangs the rest a considerable distance and is angled quite low on the piece, usually well below the centerline. There are also unusual tools, including a small unhandled tool that looks much like a hand plane's chip breaker—a broad piece of steel, hooked and beveled at one end. This is used as a freehand scraper to level and refine the surface left by the hook tools. Another tool is a unique style of plane that functions much like our hand-held dowel makers. I saw this tool quickly and cleanly take small squares down to rounds. Held at an angle to the work, it cuts tapers.

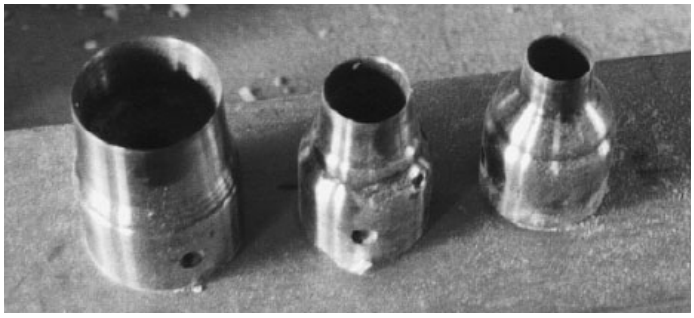
I saw very little sandpaper; sanding was accomplished with dried stalks from the horsetail plant (*Equisetum*), followed by dried rice stalks. The horsetail is probably around 320 grit, and the rice stalks considerably finer, serving more to burnish the surface.

Watching these accomplished turners work was shear delight. Their ease, rhythm, lack of force, and overall smoothness was impressive. Always present was the hissing sound of a sharp tool cutting cleanly through the wood.

Perhaps one of the most intriguing aspects of the Japanese tradition is the fact that each turner makes all of his or her own tools. Consistent







Hook tools, upper left, are used for both spindle and face work. Scrapers, lower left, smooth the surface left by the hooks. The plane, upper right, turns dowels and tapers. And lower right are cup centers used to drive the work.

with this approach, each shop I visited had a forge and blacksmithing tools in the corner. The turning tools evidently were a high-carbon steel quenched in oil. Because tools are held in a manner quite different from our approach, as the tool wears, longer handles are made, thus keeping the overall tool length approximately the same. Turners have a tremendous respect for the sharpness of their tools, with waterstones and water always nearby for frequent sharpening as turning proceeds.

A traditional production item, kokeshi dolls, despite their simplicity, evidence lively variety in shape as well as colorful decoration.

The enchanting kokeshi

In the village of Naruko there are about eighty active turners. Most of the turners are in the business of making kokeshi dolls (photo above right) and an assortment of wooden toys. About twenty percent of the turners produce for the lacquerware trade, with a few doing both the turning and lacquering. This second group of turners make such items as bowls, plates, boxes, and goblets. There are ten women turners in this group of eighty, and work of past women master turners can be found in the local museum.

Kokeshis are the bread and butter of the turners in the area. The history of this item is an interesting one. One account says that the kokeshi was a remembrance of a departed parent or child. Another version traces its origins to the days of the itinerant woodturners. Craftsmen too poor to provide real dolls for their children turned the dolls from wood. Regardless of the historical roots, the item has a long tradition as a gift item and as a collectable. On a visit to the local kokeshi museum where literally thousands of the dolls are on display—as well as a rich collection of wooden toys—one cannot help but be impressed with the variety and subtlety of design in these apparently simple objects. Painting is another avenue for expression by the turner. The historical examples found in this museum clearly illustrated to me that these items went far beyond simple repetition. I found distinctive styles, playful approaches, wonderful patterns, and effective application of color and decoration.

Looking outward and ahead

With such a rich turning tradition, why would there be any interest in American turning? To begin with, the number of young people willing to enter the craft is rapidly declining. Historically, the tradition was passed down within the family, but this is rarely occurring these days. Apprenticeship takes around ten years, and life after that certainly is not easy.

This sounds all too familiar to an American, reminiscent of changing times and professions that characterized the early days of this century in the U.S., as well as today! It is hard for young people to decide to pursue a craft during such an age of technology, well-paying jobs, and the draw of a city like Tokyo. The sale of kokeshi dolls is either flat or in a decline—hardly a consumable object, and one that may reach the point of market saturation. Likewise the lacquerware trade must compete with plastics, glass, and ceramics.

With these points in mind, there was genuine interest to see the form that American turning has taken, especially to the extent that it remains viable in an automated and technological environment. The growth of turning into the fine-craft arena was intriguing to the turners I met. The first evening I showed slides of our turners, we went through the entire carousel three times, with lively discussions and debate. The next day a number of young turners borrowed the slides to view them again and discuss them further.

Looking back, I believe my visit was intended to stimulate interest in the younger turners and to encourage the established turners to see what a different tradition was up to—not to imitate it or replace their tradition with another, but to consider the need to build upon their own rich heritage. Skills are strong there; subtlety and refinement mark the designs. But their tradition is clearly at a crossroads, and it remains to be seen how that tradition will fare with so many challenges.

Alan Lacer is president of AAW and a frequent demonstrator. Photos by the author. One of the turners Lacer met will be a featured demonstrator at next year's AAW symposium in Davis, CA.

A Great Deal of Depth

A portrait of Rude Osolnik

JANE KESSLER

The road up to Rude's place is a snaky drive that begins at the edge of Berea's town square, then bumps, dips, and wobbles past fields and tract houses, reaching its peak at his driveway. Rude's mountain, about four hundred acres of woods and rolling hills, is where he and Daphne, his wife of fifty years, built a house and a rambling woodshop, raised five children, and started and maintained a small industry.

The house sits gently and unpretentiously on the mountaintop. It is all wood, handmade, and well-designed, in a style that is cautiously early modern. Rude built it around 1950 in the woodshop at Berea College, one section at a time, and then raised it on the site. It is smaller than the adjacent woodshop and storage sheds that Rude says "grew like topsy." "Well," he says, "we built this garage out here, and then we added this other garage, and then another one. None of 'em's ever seen a car!"

It's not hard to see why. The buildings are stuffed to bursting with wood. Slabs and boards, burls and spurs, furniture Rude made thirty years ago, hundreds of bowls he's turned, dark shelves stocked with untouched treasures, and beautiful finished pieces residing humbly in the cobwebs. He jokes with his son Joe about what he's leaving him. "There's wood hasn't seen the light of day in forty years," he takes delight in saying. They joke about a "Nessie" monster residing and growing ever larger in the back corner of the end building.

In his woodshop, Rude moves from lathe to drill press to work table with both masterful ease and child-like enthusiasm. At 79 years old, he finds as much joy in turning a piece on the lathe now as he did in high school—maybe more. He's in his workshop sometimes as early as 2 a.m., still going on the scant five hours sleep he required in his youth.

Nick Cook

Osolnik mining one of his treasures, a two-ton maple burl.

When he's not turning a piece on the lathe, he is talking long distance to a fellow woodturner about the possible purchase of a lathe, or to a novice with a piece of wood that has him stumped. They call from all over. His questions to the caller are like doctor to patient: "Was it on the main stem of the rhododendron or was it a root burl? The prettiest part is underground. It's sort of tubular at the bottom, flares out. Grub around it, and then cut it off."

In addition to turning wood, selling lathes, and counseling aspiring woodturners, Rude still maintains a rigorous schedule of workshops, traveling as far away as New Zealand and Alaska.

"I feel sorry for people who dread getting up in the morning," he says. "I've been real lucky. I never had to work for a living. I've just always done something I love. You can't walk out into the shop and say 'I'm gonna go out there and make $20.' You got to go out there because you love it."

He knows them all

In his shop he's surrounded by piles and chunks of various woods that are like a group of old friends. There are burls of rhododendron, dogwood, and maple; slabs of walnut, pieces of rosewood and quilted poplar; a big round block of pink ivory; some South Carolina cedar. He knows them all by name, by age, by personality. He knows the natural force that caused each quirk and every irregularity. He knows how each piece is likely to behave, which piece will cut well, and which will be recalcitrant. Many of these pieces have lived with him for decades.

This veritable warehouse of wood (and there's more stashed inside and

Redwood lace burl, 21″ high.

outside all over the property) does not stop Rude from accumulating more. He can't resist a good find. Standing on the street corner in Berea, he and two other woodworkers watched a huge timber truck rumble down the street. Eyes turned to Rude whose eyes were on the timber truck. He spotted a piece he'd like to have. He didn't chase that truck, but many he has. Driving with his friend Jim Beach one day a few years ago, Rude had just finished complaining about his failing eyesight when the two came up behind a farm tractor with a wagon behind it. "Fella had a bunch of poplar with a black heart. It had been struck by lightning and was full of blacks, greens, and purples," Rude remembers. "I happened to look up and saw that. 'Drive around front and stop the tractor,' I told Beach." Happy to oblige, Beach commandeered the tractor, Rude began negotiations and they followed the tractor and its load to the sawmill where Rude bought fifteen pieces of the poplar for $25.

People bring him or send him wood from all over the world. It seems that even other woodturners would rather see an exceptionally fine piece of wood in the hands of Rude than keep it for themselves.

At the heart of Rude's extraordinary skill and talent is what he calls his "deep and abiding love for wood."

"Down below here," he says, speaking of a spot just beyond his house, "there's a grove of poplar trees, all at least twenty inches in diameter or more. The distance to the first limb is usually thirty or forty feet and, you know, I don't go to church very often but I can get the same sort of feeling by going down in that grove of trees. Just by seeing that, you realize that there's a supreme being that provided all this order and beauty. I stand there and look up and it's like being in one of those huge cathedrals in Europe, with those big white columns going up, and with just a little light coming through those leaves. You have to have a love for the material you're working with. If you don't, then whatever you do doesn't amount to very much."

Seeing what else is inside

Rude and nature work hand in hand. What he brings to the final piece and what nature has brought are in perfect harmony. He listens to the wood. He may walk past a chunk of wood lying at the base of a drill press or gathering dust on a shelf every day for a year. Every day that he passes it, he gives it a little kick with his foot. Sometimes the wood speaks to Rude immediately. Some of it he's been listening to for thirty years. When the wood speaks, starts to reveal itself, he takes it to the lathe to open it up and see what else is inside.

"Most of my pieces are open, because when we see the outside, we don't know what's on the inside. The most exciting part of turning is when you open it up on the inside and you can see all of the grain pattern and the shape of the piece. It's like when I was a youngster, I used to stretch out on a bank in the field and look at the clouds and try to see forms and shapes in the clouds. It's somewhat the same thing when you're doing the inside of a piece."

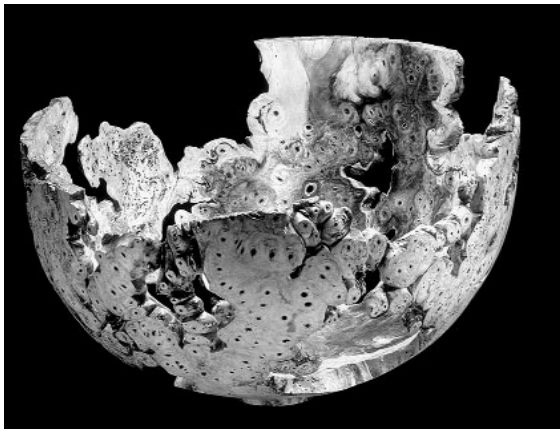
With thousands of turned objects behind him, Rude still finds the variety of patterns, colors, shapes, and textures in his chosen material to be as infinite as when he began.

"Every piece is a challenge, seeing what you can find. It's trying to get as much out of the piece of wood as you have in it. It's the combination of form and shape and trying to utilize the color and texture of the piece itself."

As much felt as learned

Rude started turning wood when he was in high school in Johnston City, Illinois, where John Rohner, the industrial arts teacher, got him interested in working on a lathe. More significantly, however, Rohner's influence went far beyond technical know-how. "He was the one that made me conscious of form," says Rude. ''It's not only important that the piece is made right, but that it looks right."

Rohner encouraged the young Rude to train his eye, to be more sensitive to the aesthetics and good design of any piece that he made. Rude's



California buckeye, 21″ dia.

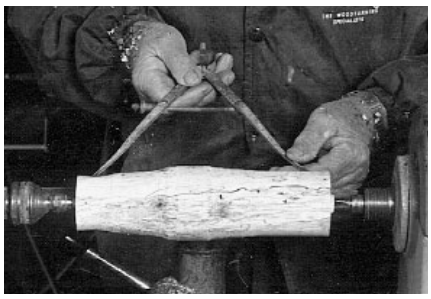
Photos: Chipp Jamison, except where noted

How I make my candlesticks

RUDE OSOLNIK

MY CANDLESTICKS ARE ALMOST A trademark. Over the years I've made more than 150,000 of them, enough to put four children through college. I make the candlesticks from all sorts of hardwoods, in several heights from $4\frac{1}{4}$ to 30 inches. Regardless of height, the top and bottom dimensions of the candlesticks remains the same.

First I rough out a cylinder, working between centers, then

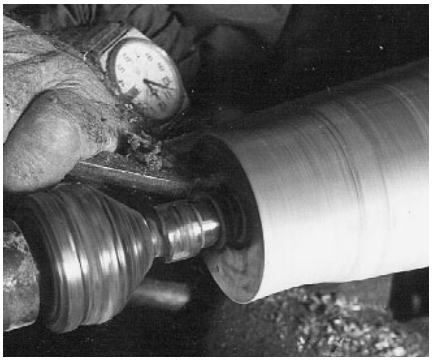


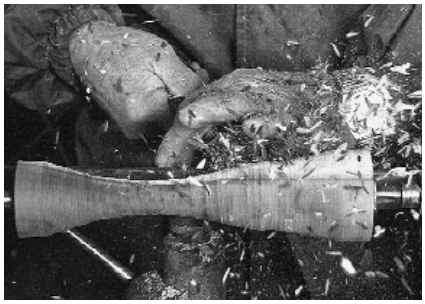
begin to establish the diameter at the top and bottom of the candlestick.

Dividers and calipers are important tools for many turning jobs like this one. They can be used to set the height of the piece, as well as to gauge the various diameters. I have preset dividers for each height of candle I make.

My design guide for the candlesticks is to shape the sides with a slight curvature, creating the impression of a continuous concave line from the base to the top. The narrowest diameter is located so that one third of the height is above the tiny waist, two thirds below. This ratio is applicable with any height candlestick. If they are done properly, you would have a straight diagonal line running through the thin section of a series of candlesticks arranged in order of ascending height.

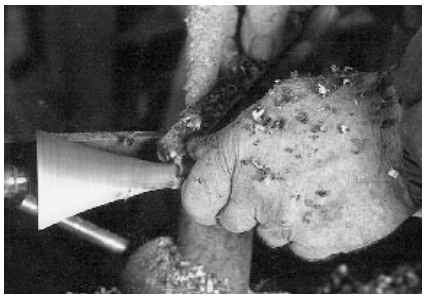
After flattening the top of the piece, I create a concave recess with a flat area at its bottom that will later be bored out more to form the openings into which the candle will





fit. I think this detail is so important that I made a special tool to cut the area while the piece is still on the lathe.

The gentle curves are established gradually by cutting toward the center from the base and from the top, always working downhill toward the narrower diameter. The smaller the diameter, the more graceful the piece. Mine are generally $\frac{1}{4}$ to $\frac{5}{16}$ inch; the ultimate is to



Photos: Dick Burrows, except where noted

keenly developed eye is a hallmark of his work today and has been since the production of his earliest pieces. The remarkable sensitivity of hand and eye is as much felt as learned. When Rude is telling someone how to turn a piece on the lathe, he encourages him or her to feel the wood. It's as if he asks his hands to act as another set of eyes, to tell him more than he can actually see. When a piece is finished, it should feel right. He is as attentive to the haptic qualities of the pieces as to the visual.

Rude has consistently adhered to simple, straightforward, and timeless design criteria. Consequently, his works of the '40s and '50s are stylistically viable in the '80s and '90s.

"Over the many years I've been working in wood, I've steadily moved in the direction of achieving a pure, simple, unadorned style. Almost anything I make has nice, clean, smooth lines—not many curlicues and lumps, and that's been pretty well true from the start. You can see the same in Shaker furniture—the elegance and grace of a slender piece—delicate, but strong."

Proportion is one of the key design elements in Rude's forms. Most of his work is based on a ratio of one to three. His candlesticks, which are perhaps the most well-known of his designs, are a clear example: the top and bottom cones are one-third and two-thirds, respectively, of the overall length. When he and Daphne were first producing the candlesticks in the late 1940s, they started out with a pair but found that the groupings in odd numbers worked better aesthetically and from there on out sold the candlesticks only in odd-number sets. "Odd numbers give you more pleasing forms. It's rather interesting," he says. "You find odd numbers all through the Bible."

Rude's philosophy regarding function and design is akin to the ideas of the Arts and Crafts Movement of the early twentieth century and to the artists of the Bauhaus, who professed that good design should be an integral part of our lives, and the objects

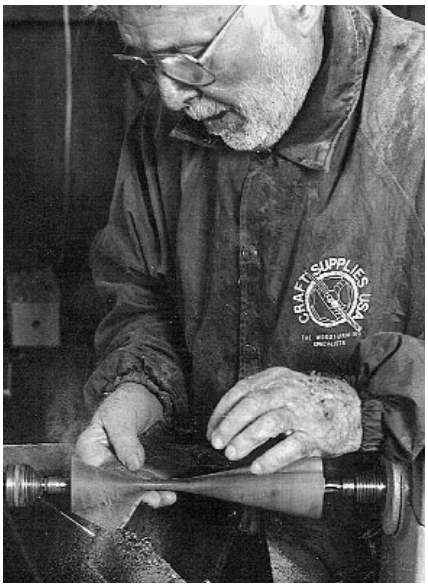
create the illusion of the upper part floating in air over the base. As the candlestick becomes thinner and thinner, it's likely to vibrate, creating a rippled pattern on the surface. To avoid this, I steady the piece with one hand, and guide the tool with my other hand.

Once I've turned the shape, I sand the surface to a mirror finish, which usually doesn't take much because the hardwoods I use for these pieces cut so well.

The finish can be polished even more by applying a coat of urethane oil, then wet-sanding. The fine sawdust and oil slurry created by the process fills any open pores in the wood.

The holes for the candle and for a weight to be added to the base are bored on the drill press. The boring tool here is a modified spade bit. I frequently modify bits and other tools for special uses. Here, I thinned and sharpened the guide spur so that the bit will follow the mounting holes created by the lathe center without being deflected by any irregularities in wood grain.

Always drill the hole in the bottom first. Once the hole is started, I grasp the candlestick tightly and raise it until the proper depth is reached. I fill this hole with lead, to make the candle stick stable enough to resist tipping. Lead shot secured with glue works well. Finally, I cover the bottom with felt.



David Peters, courtesy of del Mano Gallery

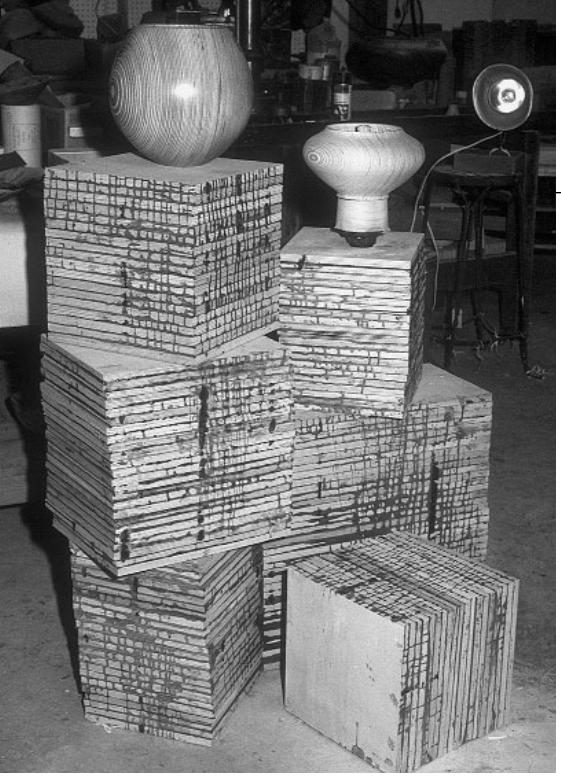
we use daily should heighten our visual sensitivity.

"I feel it's just as important that a functional piece be well designed," he says. "Some turners think the piece ought to be up on a shelf, but I tell them I get more satisfaction in selling somebody a piece they're gonna use every day. If you buy something and put it on a shelf, you have to dust it every once in a while and that's it. If it's a set of candleholders on the dining-room table, you're arranging that every day and if it's a nice design when you look at that, you're gonna be much more conscious of form and shape on everything else. So if you surround a person with well-designed pieces, that's what he's gonna be looking for. If he gets these clunky pieces and that's all he sees, he'll think that's the accepted thing.

"In other words, it's just like in a home. If you surround children with books and music and so forth, they'll take that with them all their lives. If you surround them with well-designed things, then they'll be much more conscious of form and shape when they look at those things. 'Oh, that looks ugly,' they'll say, 'not like those things we had at home.' This is the reason I think it's just as important you have well-designed, functional items you look at every day as it is to have one piece that you put up on a pedestal."

How to use everything

Good design and a sensitive eye are of little use without the skill that comes from turning thousands and thousands of objects. Rude gave himself to the discipline early on. From high school he went to Bradley University where he found what he needed in the industrial arts program. His instructor solicited Rude's help moonlighting, and the jobs provided Rude the opportunity to master spindle turning. They took a contract with a theatrical curtain company in Peoria. "We made ten thousand little pieces that all had to be the same. That way I learned to turn a machine on in the morning and put the piece in and take it out



Among the materials Osolnik has pioneered working with is plywood. Here, glued-up blocks of Baltic birch ply await being turned into bowls.

while the lathe was still turning. Now I never turn a machine off. I take a piece on and off while the machine's turning."

Rude's skill as a turner is equalled by his penchant for invention. He is the quintessential inventor, viewing any problem that arises as simply a new opportunity. "Just because you come up with a certain solution, you don't do that the rest of your life."

His path from problem to solution is always direct and often whimsical. Kelly Mehler, a former student of Rude's, tells of a table he was making out of walnut and one of the pieces had a knothole in it. "What do I do with the knothole?" he asked. "Put a walnut in it," Rude replied.

Rude's love for invention has led him to make his own tools, to redesign existing tools, to find new materials, and to discard accepted techniques and forms. A significant aspect of his inventiveness is figuring out how to use everything. He transforms practicality into ingenuity. Rude has always worked with the leftovers. Rather than felling a tree or searching for the perfect block, he appropriates what nature offers and man rejects. Stumps, fallen trees, logs with deformities, fence posts, his backyard woodpile, and scraps from lumberyards have supplied Rude with all the raw material he can handle.

It was in the 1940s that Rude discovered a nearly endless supply of wood in a mill. The source was spurs—the part of a tree where it transitions from trunk to root—discarded from the logs that had been cut for veneer. Indeed, Rude's enthusiasm for castoffs inspired a generation of turners to abandon the quest for the perfect piece of wood in favor of the beauty to be found in imperfection.

He even uses the leftovers from his own pieces. By using a chainsaw to cut out the center of a large piece, for example, he turns what would have been a pile of shavings on the shop floor into a series of smaller bowls. "Out of that one," he says, indicating a particular piece, "I got seven because I got the slabs off the sides too."

His insatiable appetite for new solutions, and his ability to see beauty where others can't, resulted in his receiving an award in 1955 from the furniture industry for the best utilization of wastewood. This talent is the source of much of the vitality in his work today.

Persimmon, 8" dia.

More than just the outside

The elegance of Rude's pieces belies the crusty, down-to-earth demeanor of their maker. The origin of their simple eloquence can certainly be found, however, in Rude's unvarnished directness, and in the extraordinary depth of feeling that he brings to each piece of wood he puts on the lathe. At the soul of each work is its unique character, something that Rude seeks to find with a diligence matched only by the hours he spends at the lathe.

"It's sort of a spiritual feeling you get when you work a piece. It's not just a block of wood, it has life. I don't know if you have town characters—we used to have a lot more of them than we do now—but we used to have this town character. He had a wheelbarrow and he'd go around cleaning the gutters of the streets. Most people would pass him by and yet if you took the time to talk to him, you'd find out there was a great deal of depth to that person. And the same thing is true when you see a rough piece of wood. You think it's something we oughta throw in the fireplace and yet when you open it up, you have all this beautiful grain that's down in there and there's a great deal more to that piece than just the outside."

There is a heartening humility in his work. He still asks the wood "What have I for you, and what have you for me?" His simple bowls and pots evidence a readiness to revere the idiosyncrasies in nature, to respond rather than to overpower, and to listen as well as to speak.

Jane Kessler writes on the crafts from her home in Mount Pleasant, NC. Special thanks to Dick Burrows for his photos and penwork in the candlestick sidebar. This article is excerpted from material that Osolnik is organizing toward a book, for which he is seeking a publisher.

WORKPIECE-POWERED SANDING

Freewheeling disk has advantages over drill

ROBERT C. OPDAHL

Sanding powered by the work itself.

SANDING LATHE PIECES WITH A SANDing disk powered only by the lathe rotation of the work itself may sound impossible, but it can be done using the following procedure:

1. Drill a hole in the end of a stick of wood, say, a 10-inch-long 1x2.

2. Insert the the sanding-disk shaft into the hole; it must rotate freely.

3. Hold it at a slight angle against the rotating workpiece.

That's it! You are now doing workpiece-powered disk sanding—no electric drill. The best sanding is achieved by following a couple of guidelines:

1. Hold the disk so that an imaginary extension of the disk shaft's central axis will intersect with the workpiece central axis (Figure 1).

2. Tilt the disk right or left to allow the edge to contact the rotating workpiece (Figure 2).

The scratch patterns are shown in Figure 3. Overlapping random ">" and "<" scratch patterns create a series of small diamond-shaped cuts. The patterns become finer as you progress through finer grits. Creating these patterns requires flexible disks and careful attention. Failure to keep the sanding-disk shaft focused on the lathe axis will create diagonal scratch patterns. Using the tool rest to support the sanding stick and its disk helps to counteract the tendency of the workpiece to drag the disk down and cause diagonal scratch patterns.

Inside surfaces are logically the same. Imagine the disk shaft as being extended and intersecting with the lathe central axis.

The advantages of this sanding technique over hand- or drill-powered sanding are several:

- A better (less noticeable) scratch pattern, particularly for end-grain bowls.
- Generation of less heat, of particular importance in working with thin-walled workpieces.
- Easier and safer sanding.

This workpiece-powered system does not work in certain situations. If you hold the disk flat against the workpiece, the system does no more than any stationary sandpaper does. For the thin edges of bowls, there is usually not enough surface area to grab and power the disc. Nor will the disk rotate and sand within a work surface smaller than the disk diameter, as for bowl bottoms and platter centers. Most contours, internal or external, can be sanded if you use an oversize piece of sandpaper, so that the paper curls around the disk.

There is a safety consideration. Some manufacturers and marketers of hoop-and-loop disks recommend 1,500 to 2,400 maximum rpm for all 1-, 2-, and 3-inch disks, values given for drill-powered disk sanding. Good sense dictates that these recommendations be honored in workpiece-powered disk sanding, too.

To illustrate, assume a 2-inch-diameter workpiece on a lathe operating at 2,000 rpm. A 2-inch-diameter workpiece-powered disk is then operating at 2,000 rpm. If the workpiece also has a 4-inch-diameter section, then sanding that section would cause the same 2-inch disk to operate at 4,000 rpm. Sanding-disk speed can be reduced by (1) lowering the lathe speed and/or (2) using a larger disk.

Maximum acceptable lathe speed with 1-, 2-, or 3-inch disks, assuming a 2,000-rpm maximum safety limit, can be determined using this formula:

Max. lathe rpm = 2,000 rpm × (Sanding-disk dia. ÷ Workpiece dia.)

The independent discovery of this technique may be occurring to many lathe operators as it has in my case. It was fun and stimulating to experiment with this procedure, and I hope others are encouraged to extend the idea. It is, however, important to bear in mind that this technique is not a replacement for all hand- and power-sanding.

Robert Opdahl turns in Hurley, NY.

Figure 1: Axial view

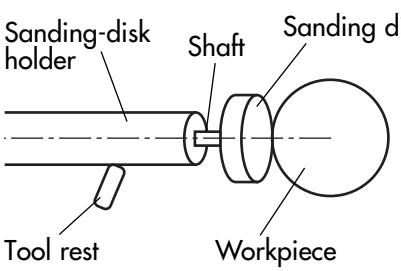


Figure 2: Overhead view

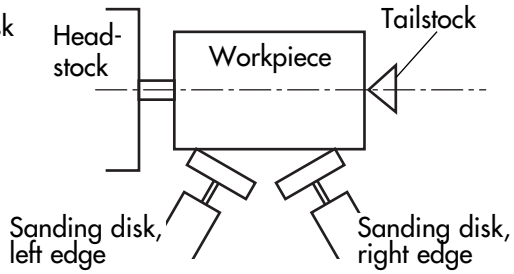
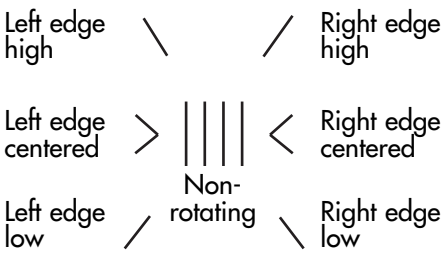


Figure 3: Scratch patterns



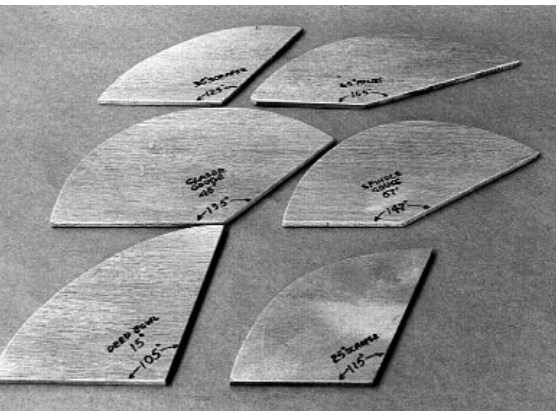
BELT-GRINDER SHARPENING

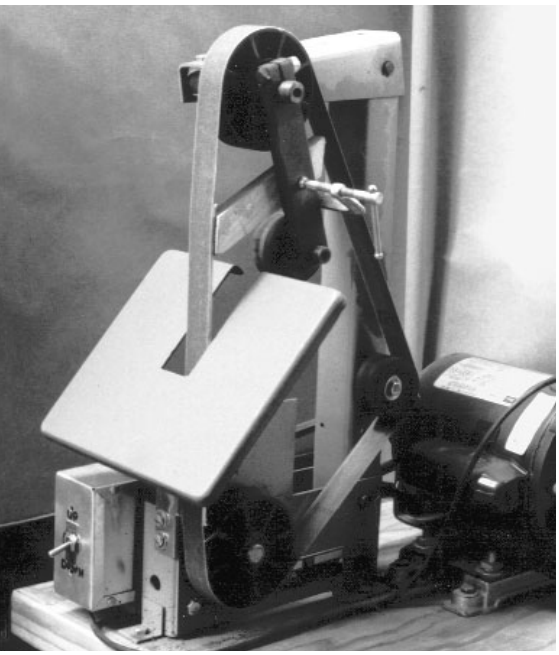
Flat, replicable, and cool

KENNETH A. RAY

I HAVE BEEN USING A 1X42-INCH BELT grinder to sharpen my lathe tools for several years. I still use a 6-inch bench grinder on certain tools, but the belt grinder, with its flat, adjustable table, offers significant advantages:

• The tools are laid flat on the table and never lifted during any of the grinding operations. This greatly simplifies the sharpening of side-ground gouges.





Author's 1-inch belt grinder and angle templates for flat-grind tool sharpening.

• By using a set of simple plywood templates, the table can be quickly set to different angles. Thus the face of each tool can be presented at the exact appropriate angle so that a very small amount of metal is removed. Setting the table angle to a 6-inch-diameter round wheel is rather difficult.

• The belt can be quickly changed, often without moving the table, from coarse for fast shaping to medium for a finished edge.

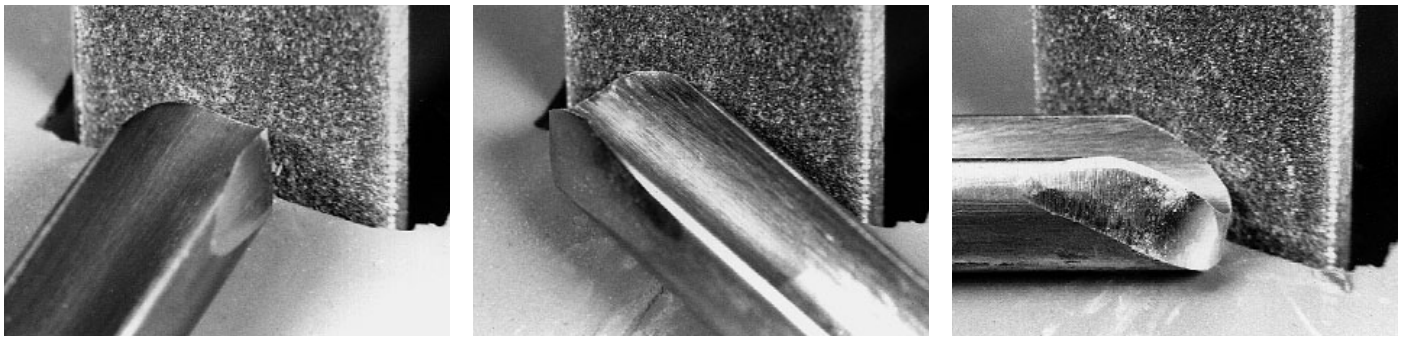
• The long belt seems to dissipate heat better than a small-diameter wheel, so that tool edges are less prone to overheating.

In spite of these advantages, the belt methods do not supplant a regular grinder when a concave bevel is preferable, as for beading and parting tools. Some prefer a hollow grind on skews also.

The grinder I use is a Delta, Model 31-351 (photo below left). Any 1- or 2-inch belt grinder can be used, provided the table has the ability to tilt down about 60° from the horizontal. If the table as supplied cannot do that or moves too far from the belt when tilted to the extreme, an auxiliary table can be added. The table of the Delta grinder can be moved closer to the belt as needed. I tighten the table pivot bolt so that firm pressure is required to tilt the table; a jam nut maintains the position. The table angles are set with plywood templates (photo above left). The template angle is the sharpening angle (measured from the vertical) plus 90°. The Delta grinder has a rather large table which is convenient for long and heavy tools. On small and miniature tools the tool handle will interfere with flat positioning on the table. Place a small piece of wood of the required thickness under the shaft of the tool to provide clearance during sharpening. I have added a motor-reversing switch to run the belt backwards when sharpening scrapers. It is not necessary to reorient the belt, even if it is lap-spliced. Running the belt upward past the tool produces a more pronounced burr, essential for good scraper performance.

I use a $^1/_2$-horsepower ($^1/_4$-horsepower would be adequate), 3450-rpm motor and a pulley ratio that results in a belt speed of 3,951 feet per minute. I have not felt the need to experiment with other speeds. For general sharpening, I use a 120-grit aluminum oxide closed-coat belt, the least expensive version available ($.39 each from Enco). I have tried many different belts, ranging from medium to "premium" grade, and I find the extra cost is not justified. A butt splice will give a much smoother performance than a lap splice. I have never had a belt fail at the splice. If a large amount of metal needs to be removed for the initial shaping, I recommend the blue Norzon R821 80-grit belt by Norton. You can achieve a finer surface with a 220-grit (or finer) belt, at the expense of a slower grind and possible overheating. You can obtain a highly polished finish by using a leather belt charged with a polishing compound and run backwards, away from the cutting edge.

The left hand supports the tool close to the edge, and any onset of overheating can be detected before the metal loses temper. Dipping the tool in a large container of cool water will help keep the temperature down. I use a brace against the back of the belt platen to prevent angle changes, however slight, when pressing the tool against the belt. The pressure required is very light, making it easy to maintain smooth



To sharpen a side-ground gouge, the tool is kept flat on the table and the handle is swung from side to side as the tool is rolled. The more swing and roll, the more pronounced the side-grind.

movements during sharpening.

You sharpen a straight-ended scraper simply by laying it flat on the table and sliding it from side to side. I am in the habit of moving even narrow tools across the face of the belt. This helps in keeping the tool cool and evening the wear on the belt. I sharpen a round-nose scraper using the first finger of the left hand as a pivot and swinging the handle from side to side. A quick glance at the result after the first momentary contact will show a shiny line across the entire bevel, confirming that the angle has been duplicated exactly.

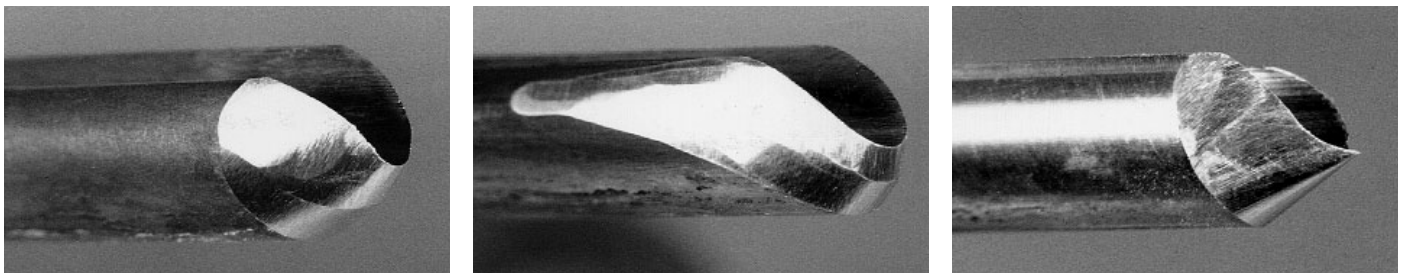
I use two angles for scrapers. The majority are sharpened at 35° (all bevel angles are measured from the vertical, the tool horizontal). Some small narrow scrapers I sharpen at 25°, since the larger angle would remove too much material from the underside of the tool. Steep-angled chisels, such as Rude Osolnik's round-point chisels, are ground at a 57° angle, using the 147° template. I chamfer the underside edges of all flat tools such as scrapers and skews to slide better across the tool rest.

Spindle gouges and large roughing gouges are also ground at 57° using the 147° template and keeping the tool flat on the table; except, instead of sliding or swinging the tool, you roll it. Small-diameter spindle gouges are held at right angles to the belt and simply rolled back and forth along the table. A large-diameter roughing gouge may require a change of position on the table to keep it in range of the belt. This will not show up in the finished surface. A flat EZE-Lap diamond paddle is useful for touching up edges between grinding, and a tapered diamond rod is indispensible for removing the light burr inside gouges and polishing the flute.

To create the side-grind on a deep bowl gouge you again keep the tool flat on the table and now do two movements at once: swing the handle from side to side, rolling the tool slightly as you swing. Start the roll when the tool passes center and increase it progressively until reaching maximum roll at the end of the swing (photos above). There is nothing sacred about the amount of swing and roll; it can vary from a mild side grind shown on the Jerry Glaser gouge (photo below left) to a more pronounced grind on a Sorby deep bowl gouge (photo below center). The relief angles shown (the second bevel you see) are arbitrary. For the sake of convenience, I use the 147° template on the Glaser gouge to get a 57° relief angle and the 135° template to get a 45° relief on the Sorby gouge. I grind the new $^{7}/_{16}$-inch M4 detail gouge by Glaser at a 57° sharpening angle and use a 155° template to get a 65° relief angle. If you are using different angles on your tools, make your templates to correspond.

There are many variations possible using the belt-and table system. The photo below right shows my version of the "nib-gouge" grind by Melvyn Firmager. I use the 147° template and rock the tool slightly on either side of center before completing the roll as you would for a normal gouge. This creates an S-curved edge on each side with a nib in the center and two pronounced wings at the top. These raised wings will cut quickly and smoothly but are prone to catching in some situations.

Ken Ray, vice president of the Central Coast Woodturners, lives and turns in Los Osos, CA.

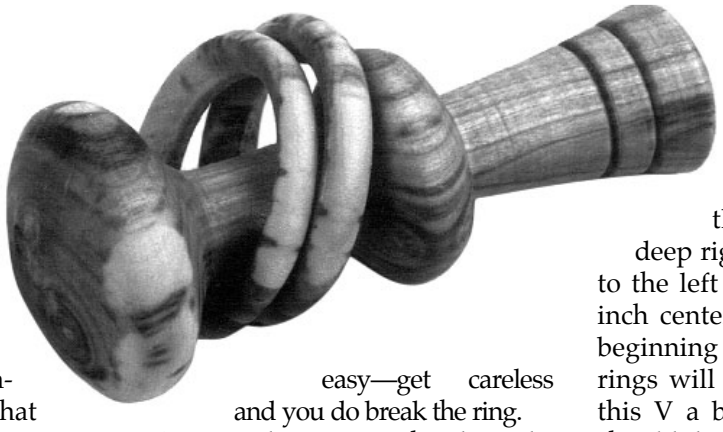


Three different grinds: At left, a mild side grind on a Glaser gouge. Center, a more pronounced side grind on a Sorby deep bowl gouge. And right, a "nib-gouge" grind, after the style of Melvyn Firmager.

A Ringed Rattle

Quick, consistent results from dedicated tools

FRED W. HOLDER



Years ago I was watching a movie set in Australia, I believe, in the 1800s. The baby in the family had died, and the mother was putting away the baby's things. The last thing she laid in the trunk was a wooden baby rattle. I was inspired by the brief glimpse of that rattle and had to try my hand at it. I believe the rattles that I now make very closely resemble that rattle.

My first attempts were not great because I had never before made a loose ring. I broke a number of rings. A number were not round in cross section. Some were very rough. If you try something enough times, it does become easier and your end product gets better. But I always had problems with the bottom of the ring. They were never as round as I would have liked. Nevertheless, they were well accepted by my grandchildren and even a few customers.

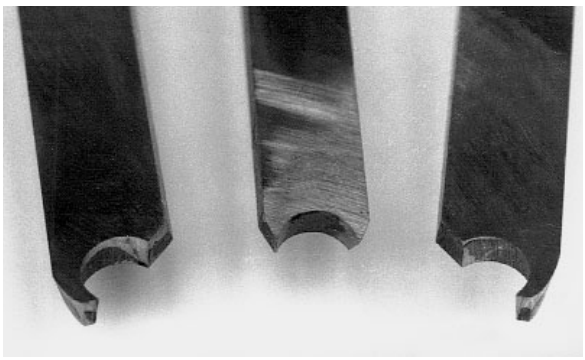
Sometime later Sorby introduced their beading tools. I ordered a full set of five in the hope that they would improve my beads. They did. I tried using the beading tool to make the top of the ring. This made a nice round top on my rings, but it didn't help the bottom at all.

A couple of years ago, Sorby introduced their ring-cutting tools. I immediately purchased a 1/4-inch set and a 3/8-inch set. I've tried both on the baby rattle, and I recommend the 3/8-inch size for sturdier rings in the mitts of a rollicking baby. Either way, my loose rings have taken on a more complete and professional look. The bottoms of the rings are round, too! I've lost track of how many loose rings I've cut now, and it gets easier all of the time. But not too easy—get careless and you do break the ring.

I've used various hardwoods: maple, apple, cherry, walnut, yew, birch. The harder and closer-grained the wood, the better the ring-cutting tools work. Of course, these species are all tasteless, non-toxic, and strong enough to hold up as rings. The rattle made during the photographic session for this article is from a limb of a plum tree.

The lathe pictured is my new Record Power Mini-Lathe (RPML 300). There's only 12 inches between centers and even less when you are using a Nova Chuck on the headstock as I did here. After I turned the baby rattle, I turned the rest of the piece into a small goblet with two loose rings, a rattle of a different sort.

I begin by reducing the stock to about 1 1/2 inches in diameter. I never measure, but they come out about that size. I make a V-cut with the skew close to the tailstock, but far enough away so the centerhole doesn't wind up in the end of the rattle. Don't cut this V too deep right now. Make another V to the left of the first one about 5/8 inch center to center. This V is the beginning of the recess where the rings will slide freely to rattle. Cut this V a bit deeper, about 3/8 inch should do it.



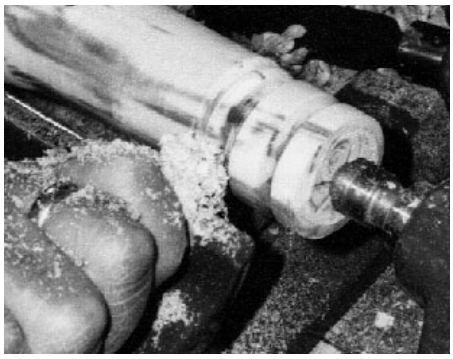
Sorby's beading tool, center, and set of ring tools are available from several suppliers for $16 to $32 apiece, depending on the size.

Now, take the 3/8-inch beading tool and cut a bead. The right side of the tool should just cut into your V. I've found it works best if you gently rock the tool handle from side to side. This tool is basically a scraper, so tip it slightly downward, too. Don't try to cut too heavily, or you may break out pieces of your ring. I generally cut in until the ring has just cleaned up. The only sharpening you need to do on this tool is to hone the top face. Don't grind the areas ground at the factory.

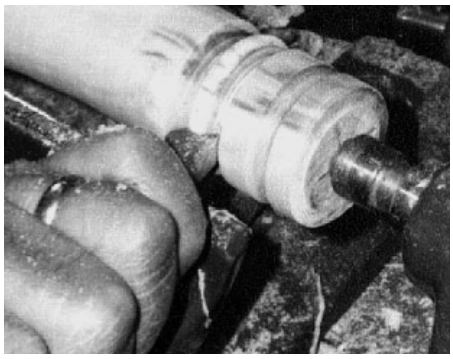
Now use the skew chisel to widen the space on each side of the bead. You need a 3/8- to 1/2-inch-wide V on either side. I generally cut straight in with the long point of the skew.

For the ring itself, I've developed the habit of using the right-side ring-cutting tool first, then cutting the ring loose with the left-side tool. It takes a little practice, and a steady hand. Start with the handle of the right-side tool over to the left, move the cutting edge onto the bead, and gradually swing the handle to the right. The extended cutting edge on the left side of the tool will cut under the ring. The left-side tool works in the opposite manner. The instructions that came with the tools say you can cut rings without using the beading tool first, but my rings are better when I use the beading tool

Cutting the second V to define the beginning of the recess for the loose rings. The first V defines the end of the rattle.



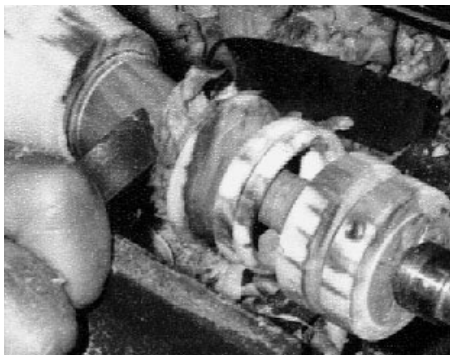
Cutting the top of the first ring with a Sorby beading tool.



Cutting the bottom right side of the ring with the Sorby ring-cutting tool.

Reducing the diameter of the rattle recess with a 1/4-inch spindle gouge.

Cutting the bottom left side of the second ring.



Shaping the handle with a skew.

Forming the bead at the top of the handle.

first. Once the ring is loose, take a 1/4-inch spindle gouge and deepen the recess to allow the ring to move freely.

Cut the second loose ring as you did the first. Then use the gouge again to clean up and size the ring recess. I generally cut this down to a diameter of about 1/2 inch.

Using the skew chisel, cut a V about 1/2 inch to the left of the ring recess, and then, about 1 inch further to the left, cut another V to define the end of the rattle handle. Form a bead between the first V and the ring recess. Make it smaller than the rings' outside diameter but larger than the inside diameter; you don't want the rings to slip off.

Shape the handle and add two decorative V cuts with the skew. At this time I cut the V at the end of the handle down to about 1/4-inch diameter. I then shift to the far right side and turn the piece between the V cut and the ring recess into a pleasing knob. Babies like to cut their teeth on this knob, at least my grandson used his for that purpose. Leave about 1/4 inch of material on the right end also.

I generally don't sand finer than 280 or 320 grit. Remember, this is going into a baby's mouth and it will not be smooth for very long. I personally find them more attractive if they aren't too highly polished.

I part off by turning down the V cuts a little further and separate with a knife or saw. Pare off the excess with a knife and hand-sand each end. Add a coat of non-toxic oil and you have a completed rattle. I use Preserve, a nut oil, that is sold by several suppliers.

Even if you're an expert turner, I believe these bead and ring-cutting tools are worthwhile, if for no other reason than speed. I can complete a loose ring with these tools while I'm thinking about using only a skew.

Fred Holder, a retired printer, turns part-time in Camano Island, WA.

BOXES WITH SNAP-ON LIDS

The production techniques of Judy Ditmer

WILLIAM L. STEPHENSON

Two views of Ditmer's honey locust box with snap-on lid, $2\frac{1}{2}$" high.

TURNING WOODEN BOXES CAN BE FUN and challenging. But turning wooden boxes *with snap-on lids* offers rewards beyond the considerable satisfaction that comes from developing the requisite technical skills. Finished boxes are a delight for the ear, as well as the eye and hand.

As a production turner, Judy Ditmer, of Piqua, OH, has developed uncanny skills for making boxes. Her products range in size from $\frac{3}{8}$ inch in diameter by $\frac{1}{2}$ inch high to 2 inches in diameter by $2\frac{1}{2}$ inches high. During the development of this how-to article, we discovered that a simple box is actually a twenty-five-step process. By studying these steps and practicing a few times, you, too, will be able to make impressive boxes that pop open and snap closed.

Begin by preparing the blank between centers, turning a projection about half the diameter of the box on either end to use in chucking the lid and the bottom. Delineate the division between lid and bottom, allowing about a third of the length for the lid and two thirds for the bottom (Photo 1). In production work, Ditmer bandsaws the blank in two, being careful not to mix up the parted blanks if grain alignment is to be retained. Alternatively, you can part the lid from the bottom using a skew or narrow-kerf parting tool.

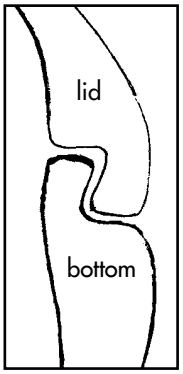
Ditmer turns, sands, and finishes her boxes at a lathe speed of 2,500 rpm. Beginners are advised to practice tool control at a slower speed, in the range of 1,000 rpm.

Since the top or box lid is the most fragile part, complete it first. If the lid breaks, you need not waste time on the rest of the process. Chuck the blank for the lid into a self-centering three- or four-jaw chuck. Face off the bottom of the lid and round over the outside edge so it will not be sharp.

Hollow out the lid (Photo 2) using a round-nose scraper with a steep angle grind (about 35 degrees versus the standard 85-degree angle) or a $\frac{3}{8}$-inch spindle gouge. Periodically pause to check the depth of cut.

Refine the inside of the lid, creating a dome shape. Ditmer decorates the inside with concentric circles, cut (not scraped) using a $\frac{1}{4}$-inch spindle gouge ground back to a fingernail grind. The finished surface must be free of tearout and smooth enough to require little or no sanding.

Shape the inside of the lip, cutting in about $\frac{1}{8}$ inch from the interior surface and about $\frac{1}{4}$ inch in from the rim to form a slight dovetail (see drawing). Carefully round over any sharp edges without changing the shape of the lip.



(Angle exaggerated for clarity)

Sand the inside of the lid. Ditmer starts with 280-grit sandpaper (yes, the cut surface is that smooth) and finishes the sanding with a Bear-Tex extra-fine abrasive pad. The sandpaper is cloth-backed strips about 1 inch wide no-load aluminum oxide. The abrasive pad is a strip $1\frac{1}{2}$ inches wide by 4 inches long.

Apply the finish to the inside using a cloth applicator, and polish with the lathe running. Ditmer (and most production turners) makes her own finish which is a mixture of edible oils and waxes.

Chuck the blank for the box bottom and face off the end. Measure the inside dimensions of the lid using a vernier caliper (Photo 3), and transfer the measurement to the bottom blank. Note that only the left point of the caliper touches the wood. The right point is used for sighting only. If both points touch the spinning piece, expect the caliper—if you are lucky—to fly across the studio.

Begin cutting the lip near the caliper mark, but leave plenty of wood for final fit. As you increase the length of the lip, angle it back slightly to mate with the angle on the lid (see drawing).

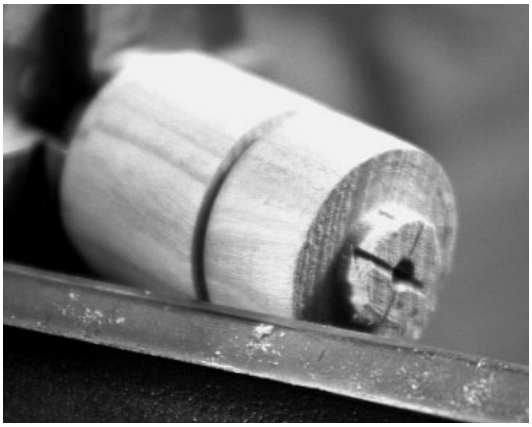
With the lathe off, test the lid for fit. Remove a little material, as necessary. Seek a very snug fit, as the outside of the lid will be turned and finished using the bottom as a jam chuck (Photo 4).

Now shape the outside of the box lid and base together, double-checking the tool rest for clearance each time you reposition it. Especially

1. Divide the blank into lid and bottom, each with an extension for mounting in a compression chuck.

2. Mount the lid blank first, shape the lip as a slight dovetail, and hollow using a round-nose scraper or a $^3/_8$" spindle gouge.

3. Transfer the inside diameter of the lid to the end of the bottom blank.



4. Fit the lid onto the the bottom blank.

5. Shape the lid and base using a spindle gouge.

6. Sand the piece.

make sure the jaws of the chuck clear the tool rest (this is experience talking here). Ditmer uses a $^1/_2$-inch spindle gouge ground to a fingernail grind with a rather pointed curve for this shaping process (Photo 5). Cut any design features such as beads into the top, but recall that the inside is finished and the wall thickness is quite thin. Deep coves are probably not in order, unless you have planned for them in hollowing the lid. Take the time you need to get the shape and surface texture exactly right, as the remainder of the box shape will be dictated by the form developed in this step.

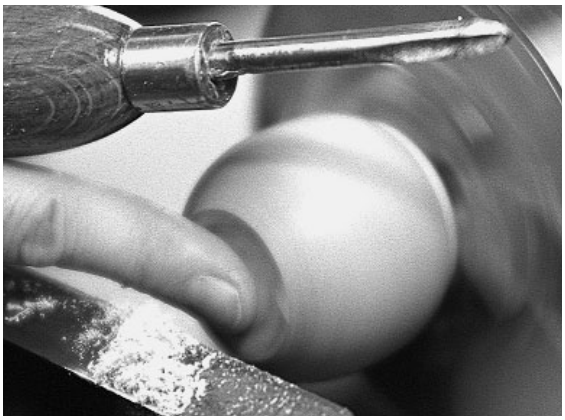
Shape the box bottom to complement the design of the lid with a spindle gouge. Then go back to the top and make any final adjustment for consistency. The bottom of the box should be at least $^1/_8$ inch clear of the chuck jaws. Long point down, a $^3/_4$-inch skew will help in smoothing the curve from side to bottom. Cut any final design details into the outer surface of the box.

Sand the outside of the box (Photo 6). Ditmer starts with 180-grit, progressing to finer grits, and completing with the extra-fine abrasive pad. During sanding, reversing the direc-

7. Before hollowing the bottom, fine-tune the shoulder.

8. Begin hollowing the bottom with a spindle gouge

9. Finish smoothing the inside of the bottom with a round-nosed scraper. Note the left-hand grind that yields a circular edge on Ditmer's tool.



10. Reverse-chuck the bottom and finish the underside with a slight concavity.

tion of rotation (if your lathe has this capability) speeds up the sanding process, removing the tiny bristles. Apply your finish.

Remove the lid carefully, using a sharpened putty knife to pry it off if necessary. The lid should be that tight. Using the $1/4$-inch gouge, carefully make any necessary smoothing and shaping cuts where the top and bottom join (Photo 7), but do not touch the surface that will mate with the lid. It is easy to make the fit too loose at this point.

With the $1/4$-inch spindle gouge (the type that is round in cross section), "drill" out the center down to the depth of the inside. First make a shallow drill hole, then widen the opening to $1/2$ inch or more to give the chips a place to fly free. Once reaching the final depth, continue hollowing with a $3/8$-inch gouge, being careful only to widen not deepen the cavity (Photo 8). After about half the inside volume is removed, widen the cavity from top to bottom. The mass at the base will help stabilize the piece as the wall thickness approaches final dimension. Ditmer completes the shaping of the inside walls, consistent with the outside shape, using her left-sided circular-ended scraper (Photo 9). Be especially careful near the outer edges to avoid chipout and cutting the lip too thin. Sand the inside surfaces and apply finish to them.

Now finalize the fit of the lid. If the lid is too tight, the lip will surely crack. With the lathe running, ever so lightly touch the bottom's lip with a piece of 180-grit sandpaper. One touch, turn off the lathe, and test; and again: lathe on, touch, lathe off, test. Aim for a snug fit but one that allows for easy removal by hand. If you are successful, the lid will go on with a *snap* and off with a *pop*.

Reverse-chuck the box bottom in the four-jaw chuck, gently expanding inside the lip. Ditmer wraps the chuck jaws in a scrap of leather to prevent marks. Turn the bottom consistent with the design of the box, leaving it slightly concave so the box will sit without rocking (Photo 10). Sand and finish the bottom.

Remove the bottom section from the chuck. This is a good time to remember which direction to turn the crank on the chuck to loosen the fit—otherwise the box will surely crack.

Place the lid on and off the box several times, burnishing the mating surfaces, to ensure a good fit.

The box turned in these photos has finished dimensions of $2\,1/2$ inches high by 2 inches in diameter, with a wall thickness of $3/16$-inch on *both* the box and the lid.

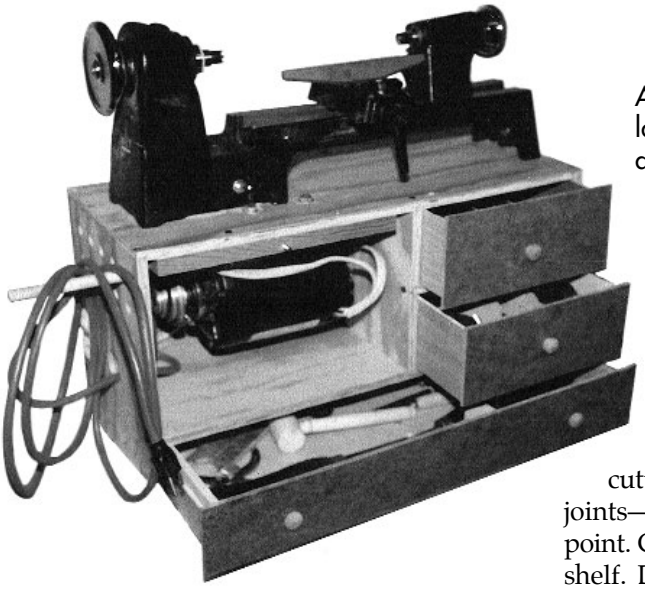
Sign your completed work with pride!

Bill Stephenson is a professional forester and woodturner who turns, teaches, and writes from his studio in Loveland, OH. Photos by Bill Owen.

MINI-LATHE CASE

Less is sometimes not enough

STEPHEN R. GARAVATTI



Author's case for his Carba-Tec lathe includes drawers for tools and supplies.

MANY OF YOU HAVE SEEN CLEAD Christiansen demonstrate making his perfume bottles and lidded boxes at regional and national symposia. Clead uses a very nice case he designed and sells to support the Carba-Tec or Klein mini-lathes, and he graciously allowed me to take measurements so that members of the Association could build their own. This article includes a warning on how *not* to build a mini-lathe case!

I came home and drew up the plans and decided to build one for my own mini-lathe. After all, I have a basement full of shop equipment—I can knock out a case in a couple of hours! Sure! I made up a cutting list with exact dimensions, found a piece of ½-inch plywood in my garage, and let it rip.

So now I have all my pieces to exact size, as per the cutting list. I cut my dados for the joints—everything fits great at this point. Crosscut the dados for the mid-shelf. Disaster! The mid-shelf is too short. I measure it. The measurement is right on. I measure the opening and it's bigger than the mid-shelf. What happened? Seems that ½-inch plywood isn't ½ inch anymore, maybe 7/16 inch. And now my sides are too far apart for the mid-shelf. I had to recut the top and bottom pieces so that the mid-shelf would fit. I couldn't recut the mid-shelf since I didn't have any more material. Of course, every other measurement was off now. And my goal of field-testing the cutting list just didn't work out.

I finally finished my case, which isn't as aesthetically pleasing as some would like it to be. Plus, I used up about 18 hours of valuable woodturning time. So I provide the diagram and cutting list with one warning: You can cut the top, bottom, and sides to dimension, and dry-assemble. But leave a margin of error on the other pieces until you have cut dados and are sure that the pieces will fit. Be sure to put a couple of rows of ½-inch or ¾-inch air holes on the side and back of the motor area before you assemble the case. Add an electrical outlet wired to the supply cord. Cut an opening for the belt and mount a ⅓- to ½-horsepower motor in the motor area.

After that, it's up to you to finish the rest of the case and make your own drawers to fit. Clead prefers a long side drawer. As the photograph shows, I opted for a wide front one instead. You can certainly adjust measurements to fit your own needs. But the 9⅜-inch dimension provides maximum utilization of the standard 48-inch width of sheet plywood.

I hope you have learned from my mistakes. "Case" closed.

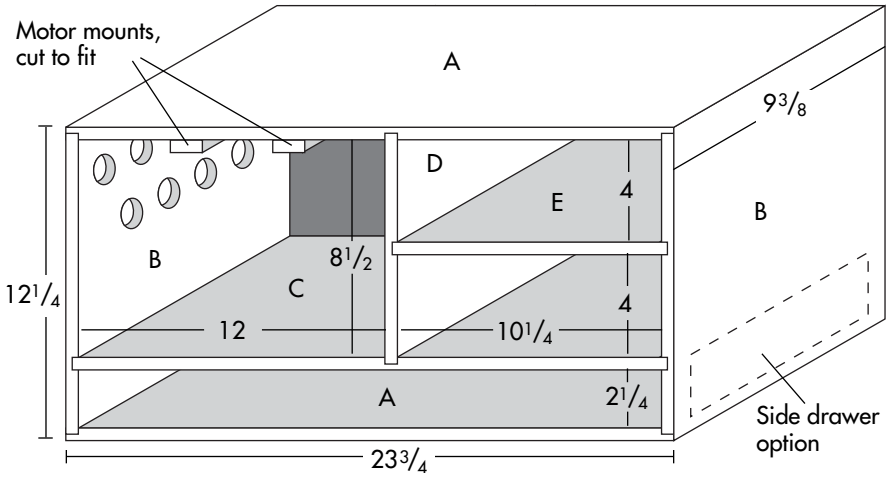
Steve Garavatti turns wood and sells computers in Salt Lake City, UT.

Cutting List

(all ½" plywood, except where noted; all dadoes ½" wide and ¼" deep)

A.	23¾	x 9⅜	(2) top and bottom
B.	11¾	x 9⅜	(2) sides
C.	23¼	x 9⅜	(1) mid-shelf
D.	9	x 9⅜	(1) mid-support
E.	10½	x 9⅜	(1) drawer support
F.	23½	x 12	(1) case back*

*¼" plywood or tempered hardboard, cut to size after case is done



SEGMENTED URNS

Tools and techniques for building, turning, carving

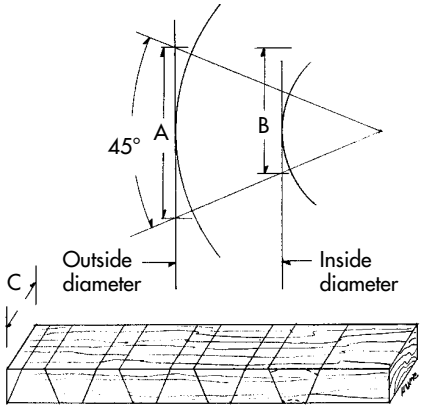
JIM HUME

MY FIRST TURNING, WITH THE EXception of a few tool handles, was a small, segmented, lidded bowl done in December 1988, a Christmas gift for a friend. Until then, lathe-turned bowls hadn't interested me. My passion was assembled pieces requiring precise hand joinery, like my square-spindled Windsor rocking chairs. However, because of the infinite design possibilities using woods of different color and grain pattern, the segmented vessel captured my attention and in the following months I assembled and turned a half dozen more. I began searching for a more advanced vessel style. I found two out-of-print books containing thousands of drawings by architects and designers from the 17th to 19th centuries, including everything from tableware to furniture to complete palaces. The objects that caught my eye were the neoclassical vases and urns. As fabrications, the challenge was irresistible, and I could also try my hand at carving. Since then, I have completed six pairs of vessels, some identical, some complementary, each time learning new techniques and improving my turning skills. My experience as a race car builder and metal fabricator has come in handy in making new fixtures and tools as I needed them.

To give you an idea of the time involved, the pair of padauk and yellow cedar urns (pictured on the facing page) took 205 hours: 100 in assembly and turning and 105 in carving.

Construction

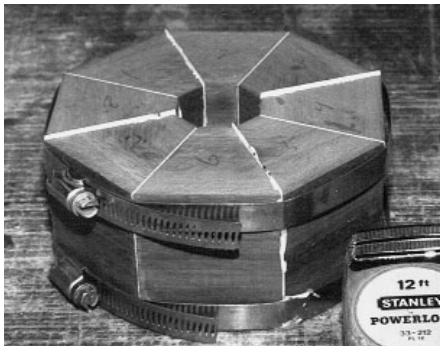
The primary section is formed by assembling eight truncated pie-shaped segments into a thick-walled barrel shape. Contrasting veneer sandwiched between the segments, creates a lighter, more delicate look while adding detail and definition to the finished vessel. Layers and/or smaller sections are then added top and bottom to form the main turning. Often, as with the urns pictured on the next page, I use three sections. I made templates off the drawings and finish-turned each section on the inside and partially turned the outside prior to assembly. For accuracy and ease of assembly, all mating surfaces are machined to interlock.

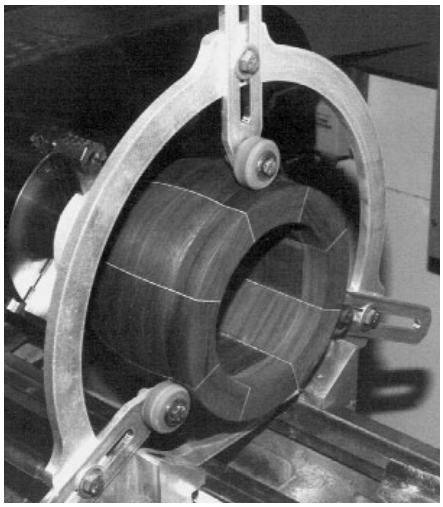


To figure the length needed to obtain eight horizontal-grained segments from a single piece, use the formula:

Length = 4(A + B + $^1/_4$") + 4"

This allows for saw cuts and 4" left over for handling. "C" depends on the height of the section being assembled.



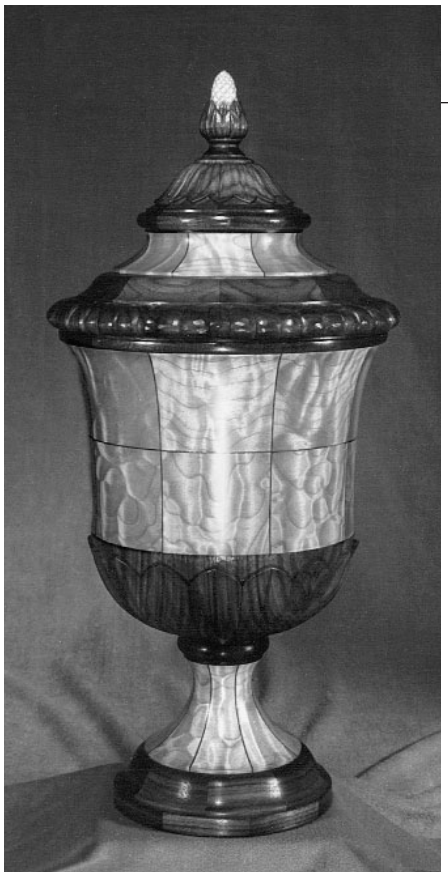


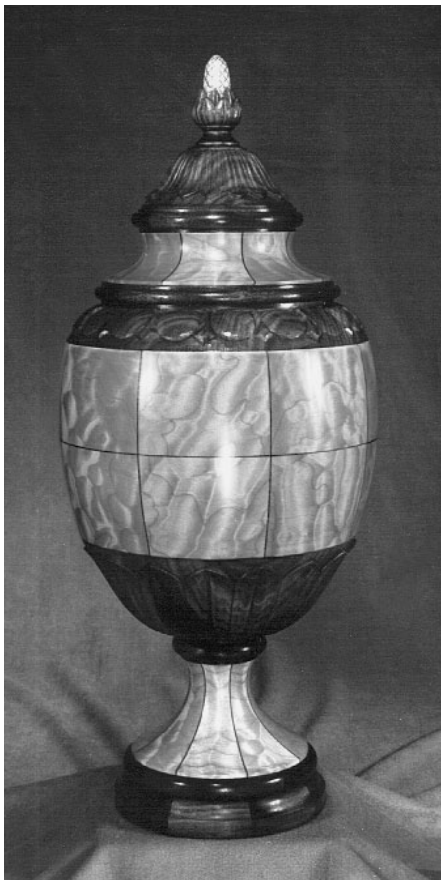
The eight-segment sections are glued up using hose clamps, top. Above, a steady rest stabilizes the section for turning the inside.

I begin by making a full-scale drawing of the vessel including outside and inside shape and the interlocking sectional joints. Most woods are available in no more than 8/4 thickness, and I design my vessels keeping this in mind. Using the formula shown at left along with measurements from the drawing, I make a cutting list of all the pieces necessary (128 to 199 pieces for each of the urns pictured). I cut the segments on the table saw using two different sliding fixtures. The large pieces that compose the sections are cut from planks of the required thickness and width on a 90-degree slider with the blade set at 22$^1/_2$ degrees. The smaller pieces used in the various layers are cut from long strips using a sliding miter fixture with an adjustable fence set at 22$^1/_2$ degrees, the blade returned to 90 degrees. At this time, I also cut the veneer pieces using my 52-inch sheet-metal shear, which works like a big paper cutter.

I assemble and glue the sections, each in a single glue-up, using automotive hose clamps (photo center left). If long hose clamps are not available, two smaller ones connected together work just fine. The advantages of hose clamps are many: most are stainless steel so they don't rust with water-based glue (I use Elmer's yellow glue), they are easily separated from a messy glue-up, they exert even pressure all around,

Photos by the author





Quilted western maple and walnut urns, both 17 1/4" tall.

and they are cheap and readily available. I do all my glue-ups on waxed paper; it saves much clean-up.

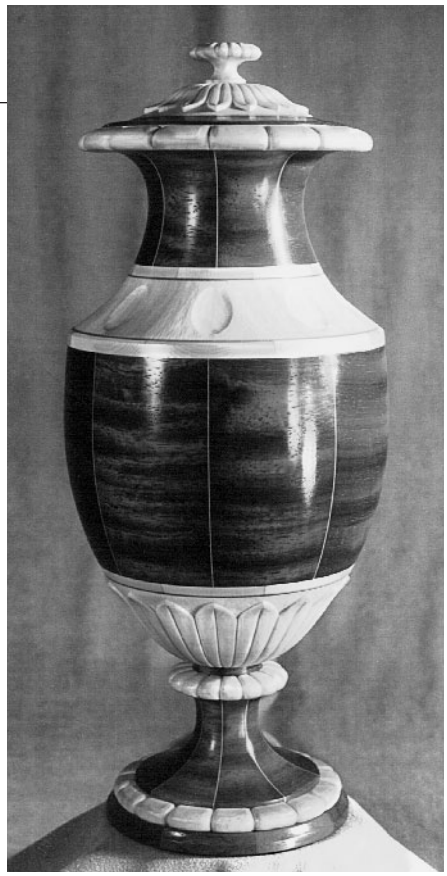
Lathe work

All my turning is done on a 1928 Logan 10-inch machine lathe with a headstock spindle thread of 1 1/4–8. It will take almost any style of chuck, but I prefer the three-jaw with separate removable jaws. With this I can grip inside or out, and it will hold a spur drive, screw plate, or the 6-inch aluminum faceplate, all of which I've made as needed. For cutting parallel or perpendicular to the turning axis or when close tolerances are needed, as with the interlocking mating surfaces of the urn components, I use the cross and longitudinal hand feed with a specially sharpened 1/4-inch square tool bit, as in machining metal. For conventional woodturning, I remove the traveling carriage from the bed and install a tool rest.

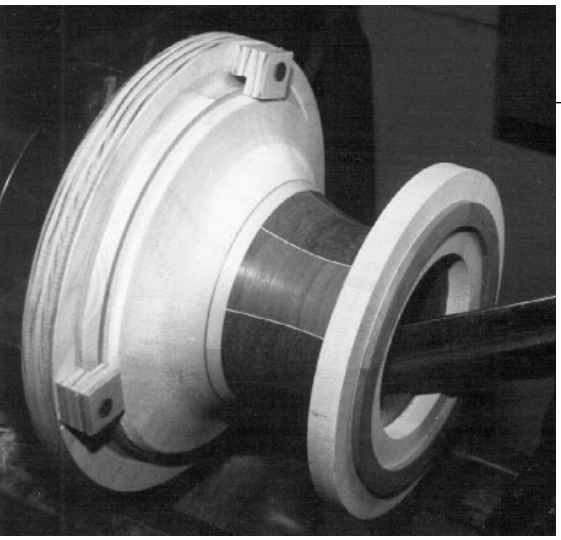
To mount the smaller eight-sided assemblies in my three-jaw chuck, I simply bandsaw them round. But because of size limits on my bandsaw, (6 1/4 inches), and my lathe (10 inches), I handle the main section differently. On my vertical milling machine I bore approximately 7/8 inch into each end. Alternately, one end receives the three-jaw chuck, the other a 3/4-inch plywood disk that I turn to fit the recesses. The disk has a 3/8-inch centerhole to receive the live center in the tailstock. I face off the ends of the main section and turn the outside shape leaving a 1-inch surface on each end for the wheels of the steady rest to roll on (photo facing page).

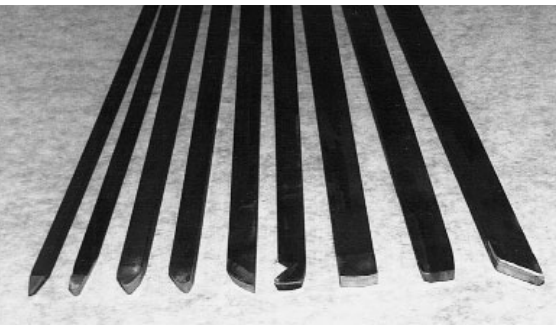
I now glue the layers of veneer to the bottom surface. With the top end in the chuck and the bottom end in the steady rest, I remove the unnecessary stock in the center, machine the interlocking register on the bottom surface, finish-turn the inside, and sand as far in as possible.

I chuck the lower section in the



Padauk and yellow cedar urns with holly and mahogany veneer, both 18" tall.





In order to finish-turn the upper section inside and out, the assembly is mounted on a plywood faceplate, top. Hume turns mostly with scrapers, above, which he makes by milling a recess in the end of a length of bar stock and welding into it a cobalt-based alloy. A pair (they're double-ended) takes about 30 minutes to make from materials costing about $4.

lathe and turn a recess in the bottom surface for a live center disk. Reversing the section, I finish-turn the inside, sand, and machine the interlocking register to fit the bottom of the main section. I glue the two together.

Next, I chuck the upper section, bottom end out, and machine the step that fits down into the center section. I wrap the outer surface of this step with veneer, the grain running across the thin bands, which are held with masking tape while the glue dries. Following this, I finish-turn the inside, sand as far as possible, and partially turn the outside, leaving plenty of material at the outer edge for glue-up.

The bottom of this piece is now too delicate to hold in the three-jaw chuck, so I mount a plywood faceplate in the lathe with a recess machined to receive the step. I use small screw blocks to secure the piece while finish-turning the remainder of the top and sanding inside and out (photo left).

I now return the main and bottom assembly to the lathe where I finish-turn and sand the inside and machine the opening to accept the step on the upper section. With the inside completely finished, the top section can now be permanently attached.

Back on the lathe, the top is held in what I call a friction chuck, that is, a round block of hardwood with a machined recess into which fits the rim of the urn. Cushioned with a thin piece of foam rubber and with slight pressure applied at the tailstock via a live center disk at the bottom, the entire surface is finish-turned and sanded. I begin with 80-grit paper and work down to 400-grit using a $1/8$-inch-thick foam rubber back-up pad as a heat sink. For carving, I secure the piece in a self-made fixture where it can be held in any position needed (photo facing page). Often, to make it easier, I carve the separate sections prior to assembly.

The finish I use is Flecto Varathane Oil. For many years I had been using another popular brand of finishing oil for my finer work while keeping a can of Flecto around for work benches, tool cabinets, and such. A couple of years ago, while cleaning the dried residue from around the lids of both cans of oil, the Flecto seemed tougher and much harder to remove. Deciding to try it on a pair of rocking chairs, I found the end result equaled my previous brand in appearance but left a more durable finish. Since then it's all I use. I rub in three coats, each time removing the excess before it becomes tacky. I allow 24 hours between each of the applications and follow up with a coat of Johnson's Paste Wax.

Scrapers

Occasionally I use a gouge, but my tool of choice is the scraper. There are many high quality brands available, but for reasons I will explain, I make my own (photo left). First, to buy the number of shapes, sizes, and lengths I use, the cost would be prohibitive. Second, each time I need a new shape, I have to stop anyway, either to modify an existing tool or to obtain one by mail order or a four-hour trip to Seattle. And third, I enjoy making tools. The cost of materials is about $4 a pair, (they're double-ended), start-to-finish time is about 30 minutes, and they hold a sharp burr for an incredibly long time. The material I start with is hot-rolled rectangular bar stock, available in any steel supply yard. It comes in any width and thickness in $1/8$-inch increments, thus allowing the tool size and weight to be tailored to the intended job. Since I don't turn much deeper than eight or ten inches, and have a tool rest with a 10-inch inside reach, a 24-inch-long tool works just fine.

After securing the stock in the vise on the milling machine, I use an end mill cutter to create a recess on the end $1/8$ inch deep and 1 inch long. Next, with the heli-arc welder, I fill this area with Ranco 6, a cobalt-based hard-face welding rod made by Rankin Industries, and available at most welding supply stores. A little extra material laid on here allows me to grind the weld back down smooth and flush with the rest of the top surface. I can now grind each end to the desired shape. Because this material is extremely tough and hard to grind, I rough out the shape on a 16-inch Apex-disk grinder using 36-grit paper. Finish-grinding is done on a Delta 611 belt sander, fit with an 80-grit aluminum oxide belt,

with the table set at 12 degrees. The advantage of the double-ended design is obvious: twice the tools from the same bar stock. At first I was concerned about the safety of a sharp edge at each end, but after using them for two years I have experienced no problems and wouldn't change a thing.

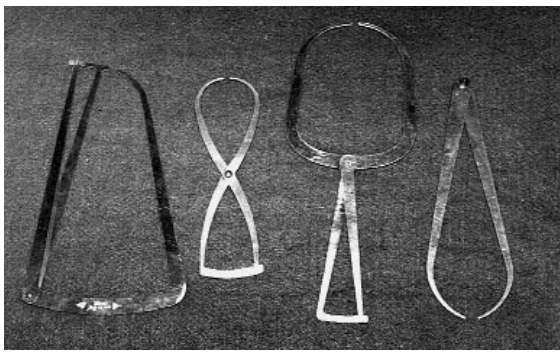
Steady rest

For me making things of metal or whatever is a way of life. My first ten years after high school were spent in cabinet and furniture shops in southern California and the last twenty years I've made my living as a race car metal fabricator, woodworking and model-building as time permits.

As my turnings grew in size, I realized the need for a steady rest to support the outboard end while turning the inside (see photo, page 32). Fabricated of 1/4- and 3/8-inch aluminum plate and using turned-down rubber roller skate wheels on ball bearings, it will accommodate diameters from 3/8 to 10 inches. It is quickly and easily secured to the lathe bed and the three arms holding the wheels are each adjustable and fixed with a 3/8-inch bolt. Because of the medium hardness of the wheels, it is also a very effective vibration damper when doing thin-walled turnings. I've even used it next to the chuck on thin lids, the wheels riding on the finished outer edge with no ill effects. Two interesting things, though: the steady rest must be perpendicular to the bed, or the wheels will draw the work out of the chuck; and when I'm turning, it sounds like I'm in a roller rink on Friday night.

Carving fixture

While carving the outside surface of a large 3/16-inch walled urn, some means of holding it is necessary. The photo above right illustrates my answer to the problem. The fixture's main feature is the ability to hold any size work firmly enough in any position for carving, while at the same time enabling repositioning without having to put the gouge down. It bolts solidly to the 2-inch thick top of my carving table and with a pivoting lamp mounted on top, light can be directed wherever needed. The work is held using the same type of 3/4-inch plywood live-center disks used on the lathe, the 3/8-inch centerholes receiving 3/8-inch stubs in the upper and lower members of the fixture frame. The upper member is adjustable and held with small C-clamps. I set this upper member snug enough to hold the work in place while carving, yet loose enough to allow easy reposition of the work on the vertical axis. The horizontal pivots incorporate leather bushings and 1/2-inch bolts, allowing me to adjust the tightness of rotation prior to carving. Many times, due to the complexity of the vessel, I carve the sections before assembly. The fixture is designed to receive complete urns, separate sections, or even flat lids. Construction took about a day, and the materials cost under $20.



Hume's carving fixture, top, holds the work and is adjustable in three axes. For determining diameters and wall thicknesses, he makes calipers from 1/8" thick aluminum, above.

Thickness calipers

Maintaining the consistent 3/16-inch wall thickness I prefer in my turnings is accomplished with the use of calipers which I make using 1/8-inch thick aluminum. Three of these are shown in the photo above right, along with a pair of inside/outside calipers I use for measuring diameters. After determining the configuration, I cut out the material on the bandsaw with a 1/4-inch x 10-tpi blade which is also used for wood, brass, and copper, the speed remaining the same for all. I finish the edges using a belt sander and small sanding drums in a handheld die grinder. Next, I drill #19 holes at the pivot points and an 8-32 machine screw with a nylon insert nut fastens the pieces together, the self locking nut allowing precise adjustment without loosening. A dab of grease on the rubbing surfaces prevents the pieces from galling. Lastly, by holding different thicknesses of material between the tips, I scribe the scale area in 1/16-inch increments.

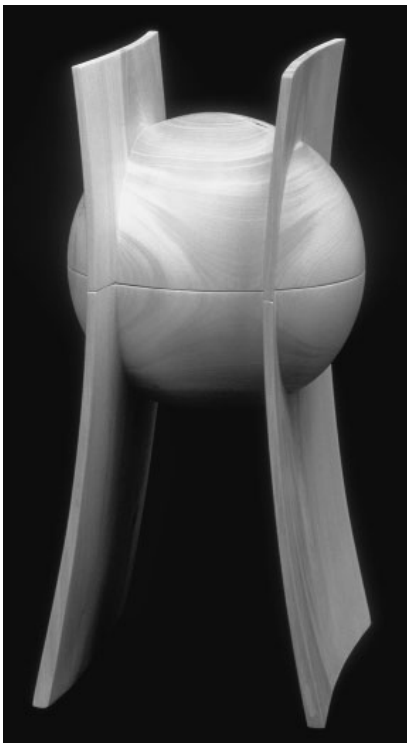
I feel these instruments are indispensable, and I won't hesitate to stop work and build a pair should a new situation arise. The fabrication time is about an hour and compared to ruining a piece the investment is small. Besides, there's always the satisfaction of making a useful tool.

Jim Hume lives and works in Sedro Wooley, WA.

AUSTRALIAN INTERNATIONAL

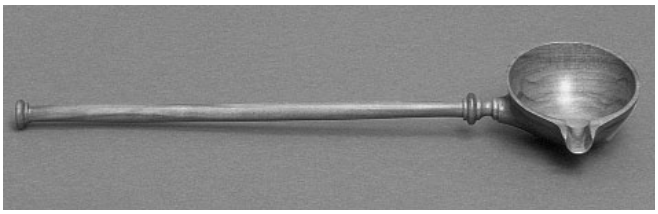
From the pages of Australian Wood Review

STEPHEN HUGHES



This translucent open bowl, above, by Ernst Gamperl (Germany) won Best of Show. The fine laminated and segmented rim of walnut had warped with the thin sycamore walls, giving a powerful yet delicate feel (15 3/4" dia.). At right, author's Vader Box (11 1/2" high), won second prize. Made of huon pine, the two wings were turned after the lidded sphere's interior was completed.

John Stratford won the Best Novice prize for his replica of an egg-beater drill (13 3/8" long) of blackwood and redgum.



Graeme Dean, one of the original organizers of the National Woodturning Exhibition, used a combination of spindle and faceplate turning to make this elegant ladle from rosita, a South American wood.

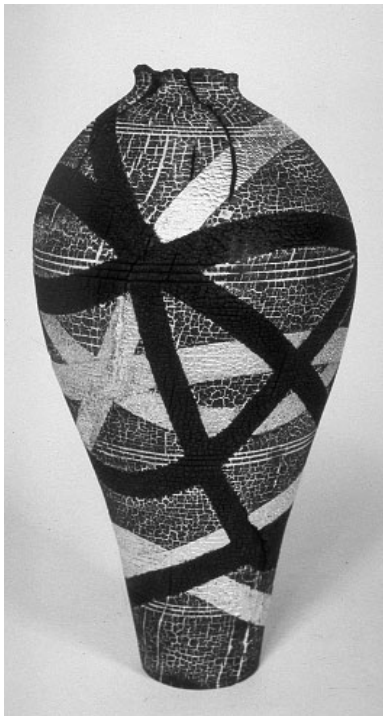
INTERNATIONAL FOR THE FIRST TIME this year, the National Woodturning Exhibition in Melbourne last May attracted thirty-eight entries from overseas, including Canada, the United States, Germany, New Zealand, and Sweden. In fact, it was an entry from Germany, by Ernst Gamperl, that won the Best of Show prize.

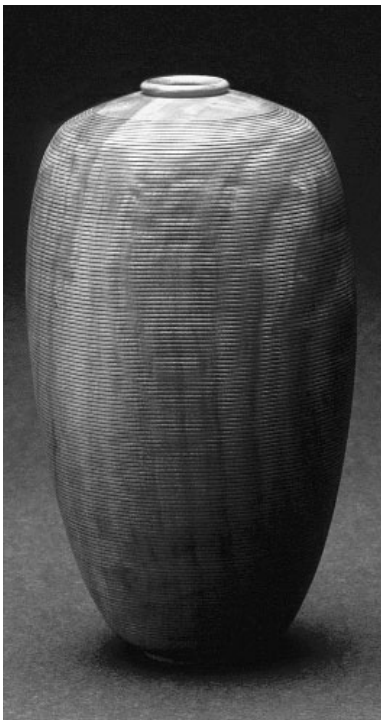
Australian entries, most from Victoria, brought the total up to 338 items, all by 111 people. Some individuals (such as Gamperl) entered as many as eleven pieces.

The organizers have worked hard to get good cash and other prizes for winners in fourteen categories, including a novice (never won a prize) class. Total cash and goods was valued at $8,500 (Australian), Best of Show fetching $1,000.

The display was good, considering the obvious difficulties in mounting an exhibition of this size in one day before its two-day display. Forty-nine pieces juried from the prize-winners went on to be displayed at the Doncaster Gallery for another two weeks.

As a whole, I felt the exhibition represented the finest in woodturning in Australia. The general standard was quantum leaps ahead of previous years' in terms of technical and design quality. The improvement in workmanship was dramatic, and many works were innovative. The standard of the overseas work





Todd Hoyer (U.S.) turned the 10″ high vase, left, of plum, then painted, burned, masked, grouted, and gilded it to produce a raku-like effect. Above, Mike Hosaluk (Canada) went to town, painting, drilling, cutting through, and affixing beady 'eyes' and even animal hair to create a Hekyll-and-Jekyll character in his bowl. Right, J. Paul Fennell (U.S.) hollow-turned the walls of this redgum piece (6″ high) only 1mm thick and textured the outside with tiny ridges.

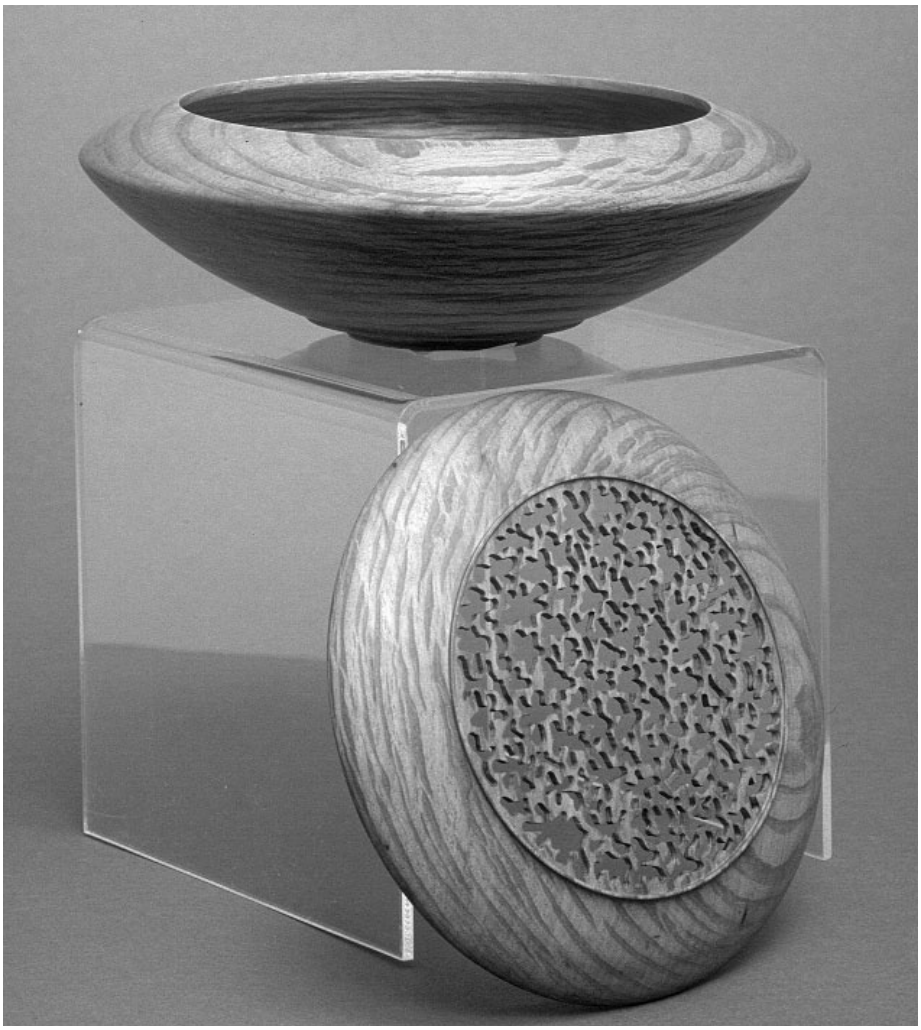
was exceptionally good, especially in the realm of technique.

One criticism: The inconsistency in pricing. Low prices set by many amateurs made the prices of works from professional turners (sometimes positioned adjacent) appear outrageous.

From the number and wealth of entries submitted, some form of preselection might be introduced to even out the standard and allow more time to display each piece to greater effect.

An unfortunate sidenote: because of the problems with freighting and collecting overseas entries, the organizers have decided not to open next year's event to overseas entries. The task is enormous, to be sure, but the value in Australian turners being exposed to the diversity of work being undertaken overseas is immeasureable. I hope they can simplify the procedures—or perhaps someone reading this could facilitate matters. If so, contact NWE organizers at 011 61 3 874-7365.

Stephen Hughes is woodturning editor of Australian Wood Review, *from which this article was adapted.* AWR *is a quarterly available from Interwood, 330 West Mt Cotton Rd., Mt Cotton, Australia 4165.*



Andrew Marshall created this container from sheoak, fretworking the lid with an organic, abstract pattern. The piece won third prize among lidded containers.

CHALLENGE V IN SAN FRANCISCO

A SERIES OF EDUCATIONAL EVENTS marked the third venue of the traveling show, "Challenge V: International Lathe-Turned Objects" (reviewed in the March 1994 issue and on the facing page). Sponsored jointly by the California Crafts Museum in San Francisco (which hosted the show) and the Wood Turning Center (which organized it), these events served to illuminate the exhibition and familiarize the public with its participants, as well as contribute to the general knowledge of lathe-turning.

The events began midway through the show's run with a presentation by Bob Stocksdale, Christian Burchard, and myself, entitled "From the Center." In his opening remarks, Weldon Smith, Director of the San Francisco Craft and Folk Art Museum, cited two revolutionary ideas from the Bauhaus which he connected to the Challenge V show: the significance of form, and the insistence that form can be derived, secured, and pulled out of any material, no matter how humble. He maintained that we do not have to be terrified of functionality, and he quoted juror Michael Monroe's observation from the show catalog: ''The most exciting works here are those in which the craftsperson has made a conscious attempt to simultaneously join the traditions of turning while overturning them."

From the Challenge V show: "Sacred Sexuality," laminated birch plywood, 40" high, by the author.

Wielding a hefty chunk of exotic wood, Bob Stocksdale evidenced his deep knowledge of his material by demonstrating how he anticipates the grain patterning of a vessel. He also showed slides of bowls he has created over the past forty years. Christian Burchard gave a slide presentation of the evolution of his work and the influences on it that other woodturners have had. And I showed the transition I made from painter to sculptor using the lathe as my primary tool.

"Open Studios," the second phase of the event consisted of a tour of eleven woodworkers' studios in the Bay Area. Participating artists included Art Carpenter, Albert Clarke, Dale Chase, Dewey Garrett, Robert Leung, Bruce Mitchell, Gene Pozzesi, Merryll Saylan, Jon Sauer, Mike Shuler, and Bob Stocksdale. It was especially enjoyable, knowing an artist's work, to see the environment in which it was created. For example, six miles outside of Point Reyes, Bruce Mitchell has built a shop inside of a huge barn which was originally used for dairy cattle. His pieces (featured in the September 1993 issue) reflect the surrounding barren, windy landscape. The continuity of Bob Stocksdale's work seems rooted in the basement workshop of his Berkeley house, where he has lived since 1948. And the context for Art Carpenter's lively work is the humble homestead he built, including his unique round house which was featured in *Life* magazine in the 1950s.

On Saturday we had a viewing of the show itself, the first for many of us. It is impossible to convey through a catalog what a powerful show it is. The variety and originality of the pieces is far beyond that of a traditional turning exhibition, setting new standards for creative alternatives in the use of the lathe.

Albert LeCoff, executive director of the Wood Turning Center, introduced the artists present and each of us spoke briefly about his or her work. It was another good opportunity to connect people with the objects on display.

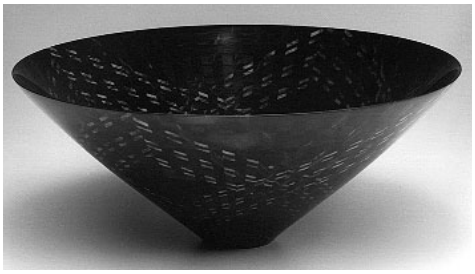
Following the discussion, everyone boarded a bus that took us to visit several craft collectors. The home of Dorothy and George Saxe is a showcase for ceramics, art furniture, baskets, and a small but excellent collection of woodturnings. A coffee table by Wendell Castle was particularly outstanding, as were the ceramic teapots of Adrian Saxe. Bob Stocksdale's turned vessels are well represented in the collection, as are the finely executed pieces by Bill Hunter. The home of Judy and Jerry Rose in Atherton was the second stop on the tour. Their vast collection of glass sculpture and vessels is displayed to utmost beauty in their large contemporary glass house.

This series of events helped raise funds for the museum to mount the Challenge V show. This, along with generous gifts from Ron and Anita Wornick and others, made the whole affair possible.

Louise Gregory, director of the museum, pronounced the show and the coordinated events a great success. Local coverage was vigorous, attracting many residents and tourists alike who would not otherwise have been exposed to such work. Public response, she said, was tremendous.

—Connie Mississippi, Topanga, CA

NON-UTILITARIAN, NON-REFERENTIAL TURNING



Among works of art and personal metaphor in the Challenge V show, there are also clean lines and traditional forms: Left, Peter Kovacsy's "Cosmic Fire Walkers," karri, 19 3/4" dia. Center, Mike Shuler's "Madagascar Rosewood Bowl #692," 12" dia. And right, Ron Fleming's "Passion," pink ivory, 11" high.

BEFORE VISITING THE CHALLENGE V turning exhibit at the California Crafts Museum in San Francisco last September, I browsed through the March 1994 edition of *American. Woodturner,* which had black-and-white photographs of eleven of the 67 pieces that are in the show. I was unimpressed, for they looked like technical virtuosities, which can be interesting but bloodless. They had no emotional impact, not surprising in a magazine illustration, but because of the evident convolutions in the pieces I assumed that that was what the show was all about. Having seen many previous instances of carved ivory balls within carved ivory balls that leave me in awe at the skill, I was prepared to be somewhat less in awe of the art.

In conformance with this fantasy I particularly noted Virginia Dotson's cracked bowl, which I thought not particularly ingenious, if ingeniousness was the show's point. On the same page as Dotson's bowl, Hans Weissflog's "Saturn" was pictured at the same apparent size. Now "Saturn" *is* what ingenious is all about.

I have been taught a difficult lesson. Don't presuppose. I found that out when, with surprise and delight, I entered the cleanly set up and brightly lit display at the craft museum. And everything was much larger or much smaller than I had imagined. Dotson's bowl, which turned out to be my favorite of the show, was twice as large as anticipated, and Weissflog's "Saturn" three times smaller than I had assumed (making it even more ingenious than I had imagined). The importance of scale was again impressed on me. Ed Moulthrop has made his reputation with large scale, as has Dale Chase at the antipode. Most everything else is in between. (This is an aside, but my confusion with regard to the scale of the turnings in the photos is partially due to my involvement with the photography of furniture, which, unlike turnings, will usually assume the correct scale in the mind just by being what it is—a chair, for instance. A carefully proportioned bowl can be two inches or two feet high in a photo if texture doesn't give its size away.)

I will mention a few pieces that I particularly liked because it helps to reveal my point of view: Kovacsy's squat thin bowl of karri wood has a touch of the Australian aborigine, which is always a pushover for me. Shuler' glue-up concoction results in a classic turning with rich texture. And Fleming's pink ivory leaves create a sumptuous traditional vase form. I won't mention skill, for that is a given. Everything I looked at was superbly crafted. There wasn't a scratch that wasn't meant.

As can be seen from my sparse selections, I lean toward clean lines and traditional forms, and shy away from personal metaphors, which I leave to the artists who are not usually concerned with which tool they use and also only modestly concerned with craft—whatever works. For me beauty of form as spun off a lathe has sufficient meaning without the addition of MEANING. To have an art show based on the product of a particular tool helps to absolve the art from competition with ART. The difficulty is that contemporary ART does not have to be beautiful, but craft does, and always has. Craft must be done with skill, care, and love. As a matter of fact, craft stands as a metaphor for these qualities. ART, today, needs none of these virtues in its process, except perhaps the skill of concept. To meld the two—craft and ART—is in many ways an oxymoron.

But, in another aspect, the finest craft always segues to art, and art of the highest order. For it is referential only to itself and others of its like and is usually the penultimate if not the ultimate point of its meaning.

Perhaps I could have saved you and me all of the above by calling Challenge V a turner's non-utilitarian, non-referential show.

—Art Carpenter, Bolinas, CA.

See the Calendar, page 48, for the continuing Challenge V schedule.

Spindle Nomenclature

We have all chucked up a turning square of one kind or another and, with the set of tools common to most, roughed-out, parted-in, and gouged here, skewed there, and ended up with a potpourri of bumps and hollows that somehow pleased our senses. Lathe-hands over the centuries have been doing exactly that and, not surprisingly, have just about exhausted the number of different shapes that can be generated on a cylindrical surface. In fact, because that number is relatively small, a system of naming evolved, and the art of turning became a matter of juxtaposing the shapes in ways that appealed to the eye while satisfying function in the final construction.

Yet I have heard no one, not local members nor paid expert demonstrators, make use of the naming conventions that have been used in the craft for centuries. This, then, is a start to remedy that shortcoming, so that we at least sound like we know what we are doing!

The figure below includes most of the shapes you will be able to contrive, and the name ascribed to each. Your job is to pick a few of them, put them together in pleasing sizes and sequences, and come up with a work of art, or at least a leg, candlestick, or lamp. Of course the figure below shows far too many individual features to be good design. Only a few are included in most classical pieces.

Assuming that the piece shown will be used in a vertical position, let us call the left end the base and work right toward the top. The turners of old probably plunged in with a parting tool to mark the location of each feature first, then went back and finished between the sizing cuts.

The first section is called a *plinth* (1) because it is at the base and is straight-sided. Next is a *torus* (2), and it is a large, semi-circular shape. Above the torus is a *scotia* (3), from the Greek word for "shade," so called because it is a sunk-in ovolo (compare 7). And next, perhaps the most classical of all basic forms, is the *ogee* (4). It is just an S shape, but it can be stretched or compressed and is usually asymmetrical in one direction or the other. Note the difference between shapes (4) and (13). With the large bulge below, it is *ogee, cyma-recta,* and with the bulge above, it is *ogee, cyma-reversa.*

An *astragal* (5) is semi-circular form that extends above the surface of the piece but is much smaller than a torus. A straight section occurring somewhere in an upper area can simply be called a *neck* (6). Above the neck is a protruding segment of an ellipse, an *ovolo* (7).

Above this is a *quarter-hollow* (8), topped by a *quarter-round* (9), and then, abruptly, a *ball* (10), which could be elongated into an *ellipse*. The abrupt transition, itself called a *quirk,* is the only such transition on the spindle; all other shapes are separated by straight sections (called *fillets*), which are parallel to the axis. The flat that ends the quarter round perpendicular to the axis is just that: a *flat.*

Cut into the maximum diameter of the ball (or ellipse) is a semi-circular *bead* (11). The difference between a bead and an astragal is now obvious—the bead is cut into a surface and an astragal protrudes above it.

Topping the ball, a series of three fillets (12), stair-stepped in reverse, effects the transition to the ogee, cyma-reversa (13). Next comes a semi-circular hollow called a *cavetto* (14). You might want to call this a *cove,* which is a loose name for any hollow. If the hollow is semi-circular, it is a cavetto; if it is elliptical, it is a scotia.

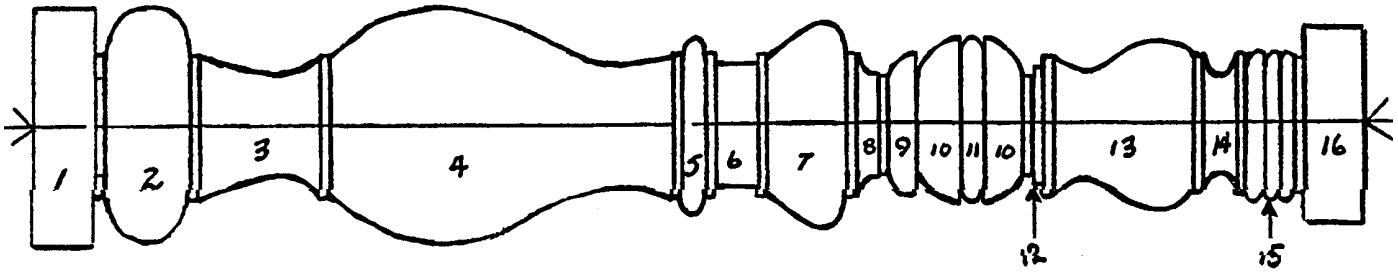
Next is a uniform series of three beads (it could be more than three), called a *reed* (15). The spindle is topped by another vertical, straight-sided section similar to the plinth at the bottom. However, because of its position at the top, it is called an *abacus* (16).

There is just about only one other turned form I can think of—a V, either negative or positive. I have researched a goodly number of classical turned pieces, and the V is notably absent. Beyond the harsh feel and poor wearing characteristics of the positive V, I do not know why this shape has no classical favor.

So, as woodturners—beginner, intermediate, or expert—I'm quite sure these old names are new to most of you. I feel it worthwhile to resurrect this ancient lore of naming. Happy turning, now that you can name what you are doing to that billet of wood!

—Jim Galbraith, Bremerton, WA

This article is adapted from one first published in Chattermarks, *the newsletter of the Olympic Peninsula Chapter.*



PHOTOS FROM THE MAILBAG

My latest creation, shown with my wife inside, is 36 inches in diameter with a $1/2$-inch wall thickness and is composed of 2,777 pieces of six woods: mesquite, satinwood, East India rosewood, bloodwood, maple, and ebony. *—Ray Allen, Yuma, AZ*

Four years ago, after seeing an article in a woodworking book, I turned two weedpots and was immediately hooked. My next lucky encounter was seeing Brenda Behrens and her work at a show and finding out about the Inland Woodturners. I joined and took turning and carving lessons from Brenda. I couldn't get enough turning. I knew I wanted to be a full-time professional. I talked my wife into selling our house in California and quit my office job and moved to the Ozarks. I now turn full-time, sell my work at shows and galleries, and plan to open my own studio/gallery in town. The piece above is wormy black cherry, 6 inches high.

—Michael C. Kornblum, Mountain Home, AR

Judd Mosser

I recently turned this 7-inch segmented bowl from red oak, white oak, and purpleheart.

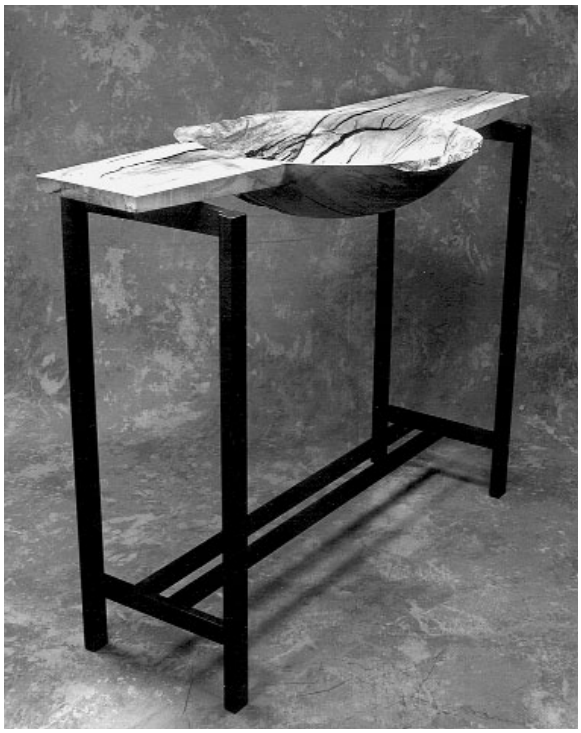
—Jim Hilburger, Colden, NY

This lidded chalice is one of a series I did scaled from a 1-inch engraving of 16th-century drinking vessels. The segments are of highly figured koa, walnut, alder, ebony, and yew. Like the work of my friend and fellow race-car fabricator, Jim Hume (see page 32), these turnings require extreme precision. Unlike Jim, I do my turning on a Shopsmith. *—Vaughn Raviat, Eureka, MT*

GALLERY

PHOTOS FROM THE MAILBAG

I've turned my candlesticks into a series called "Attendees to the Ball." That's "Darth Steps Out" on the left, and "Blondie" and "Vampire" in the foreground on the right. —*Mark Sfirri, New Hope, PA*



I call this turned and constructed table of sugar maple and walnut "Apperception," 40" high x 55" wide x 24 " deep. —*Judd Mosser, East Aurora, NY*

PRESIDENT'S PAGE

(continued from inside front cover)

continue at the current level, we will need a conference coordinator to maintain continuity from year to year and provide necessary management. Offsetting the demands of a full-size annual symposium is the evolving idea of the mini-conference, where only 50 to 100 participants can focus on a specific topic in a more informal atmosphere.

Our publications ought to continue evolving, too. Regarding the recurring question of color in the journal, I personally would like to see a color section, perhaps a membership gallery, with the balance of the journal kept black and white. There could also be value in a new biennial publication, a photo documentary of selected works of members—the AAW 500? Our video program should grow, and the idea of doing specialized documentaries of veteran turners has promise.

And finally, on the question of whether the AAW should be more involved in woodturning exhibitions, I answer with a strong "Yes." I am not alone in that sentiment—almost three-fourths of those responding to our survey felt the same. This must be done cautiously and fairly and on a limited basis, but I see real benefits to expanding the public's awareness of our field and giving exposure to the work of more turners, especially the unknowns.

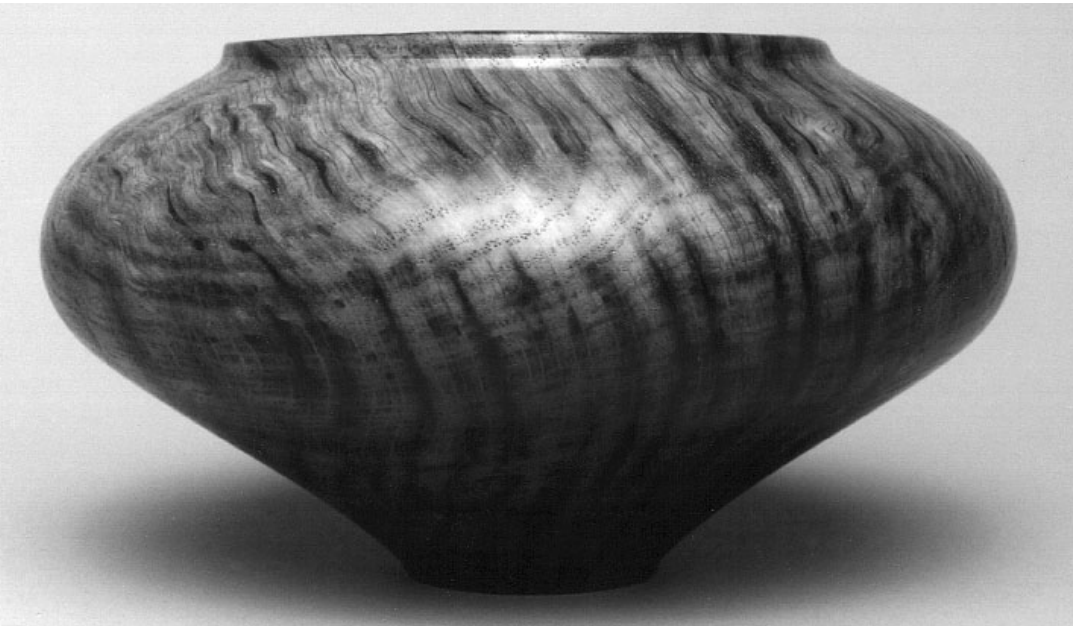
Despite some difficult encounters (I seem to have functioned as a sort of complaint department), occasional politics, conflicts with individuals I admire, legal threats, and other unpleasantries—I love this field and cherish the opportunity to be so involved. I have made lifelong friends, participated in wonderful working relationships, and conversed with turners around the world.

I leave office with our organization financially healthy and on solid ground. I couldn't feel stronger about the quality of our current administrator and editor. This January, almost half of the board of directors will be new, and I anticipate a tremendous infusion of fresh energy and ideas. Although I will miss exploring many of the issues before the board, I applaud the new team.

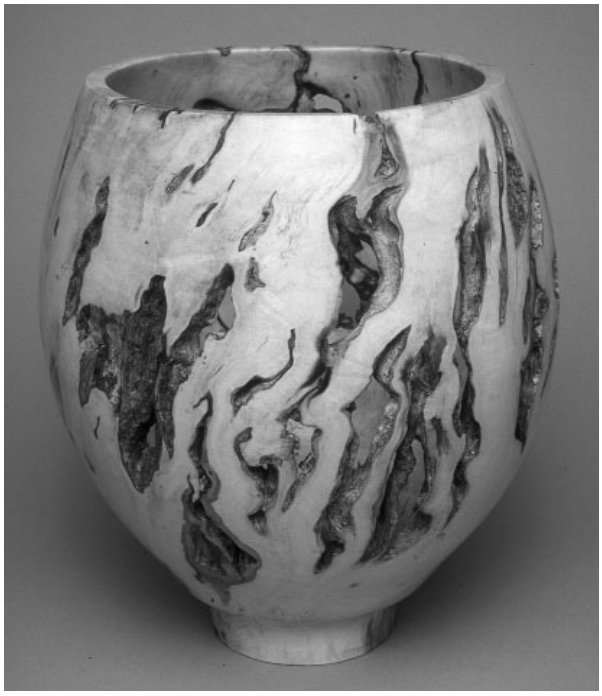
My sincere thanks to so many of you for your support and encouragement over the years—for both the organization and for me personally. It has been a satisfying six years.

—Alan Lacer, President of the American Association of Woodturners

Osolnik at del Mano



A selection from the show, clockwise from upper left: English brown oak, 4″ high; Norfolk Island pine, $8\frac{1}{4}$″ high; laminated birch, $3\frac{1}{4}$″ high; box elder, $8\frac{5}{8}$″ high; and Tabebua wood, $8\frac{1}{2}$″ high. Photos by David Peters.



Last September, the del Mano Gallery in Los Angeles highlighted Rude Osolnik. Gallery director Kevin Wallace had gone to Osolnik's studio in Berea, Kentucky, and hand-picked twenty-three pieces (twice the usual number for a single-artist show), spanning the range from laminated to natural-edged bowls, recent work as well as forms that have become classics. The show attracted many new collectors who were anxious to acquire such foundation work.

Fall saw a number of Osolnik celebrations. The American Craft Council named him a fellow, and Arrowmont School of Arts and Crafts staged a symposium in his honor (see page 6). For more on Osolnik, see the article beginning on page 18.