

American Woodturner

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TURNING PLUS...

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

THE NEW BOARD MEETS

WHEN FRIENDS OR ACQUAINTANCES ASK me about this group I'm involved in—after first explaining what woodturning is—I tell them about the members, the diversity that makes up the AAW, the conferences, the local club meetings. Teaching a design class for fellow turners last year, I thought that one of the most remarkable aspects was the diversity of the participants—our differences in expertise and of backgrounds. Nevertheless, our mutual love and fascination for woodturning—the materials we work with, our tools and machinery, as well as working with our hands—brings us together. We might have had little in common, but this occupation/preoccupation gives us a very special camaraderie.

When first meeting other turners, as a graduate of art school where I had concentrated on the lathe, I had no idea what they were talking about when they asked about "cutting or scraping." To my embarrassment, I later found out I was "scraping." Now, years later, I'm the new president of the AAW!

Outgoing officers Alan Lacer and Bonnie Klein, along with Mary Redig, our administrator, came to lead the AAW during a period of organizational turmoil and financial difficulty. Today the AAW has a much more solid foundation, enabling the new board to look to and plan for the future and relegate these times to history. Speaking for the new board and for all AAW members, I would like to express our gratitude and appreciation for the years of dedicated service that make it possible for us to move forward.

With four board members stepping down—Alan and Bonnie each finishing six years in office, Dave Hout because of work commitments, and Gary Roberts finishing the term of a vacated position—plus a whole new set of officers coming on, these

are dramatic changes. Last January, the new board met in Nashville to begin working together. We had an informal gathering Friday evening before the weekend work sessions. Charles Alvis, our new vice-president, and I had invited Sandra Blaine, the director of the Arrowmont School of Arts and Crafts, to speak. Discussion about the future, the membership and its diversity, AAW's role in education, uses of scholarships, and the status of other programs made for a thoughtful opening to a very exciting, busy, and far-too-short weekend. We had hoped Alan would be able to come and have an informal exchange of gavels and say farewell; unfortunately, family commitments did not permit that to happen.

Orientation started Saturday morning with introductions, discussion of the board's role, and a review of committees and tasks. My goal for this meeting was to get the board on quickly, get new committees in place, take care of business for this year's conference, and see that plans for '96 were well under way.

Realigning and strengthening the committee process was an important part of the meeting and included ways to increase our contact and exchange of information. In my view, the new board is a microcosm of our membership, a diverse group, working as a team, sharing skills and expertise. I believe the President's Page, should become a Board of Directors' Page, giving each board member an opportunity to share his or her views with the membership. Wider knowledge of the committees and the board encompasses the ultimate goal: that all of us, board and general members alike, will improve our working relationships.

We have a new Executive/Administrative committee, comprising the president; vice-president; our new secretary, Phil Pratt; our new treasurer, Charlie Gabriel; and Mary

Redig. Feeling that financial concerns have outgrown the job of one person, we've formed a Finance Committee, chaired by our treasurer and including Jack Aarsvold, Dan Ackerman, and myself. There will be a Nominating Committee, governed by the rules we ratified last year and headed by Charles Alvis. The Chapters Committee has been combined with both Membership and Scholarship, making one larger committee to strengthen these interconnections and to further develop community and outreach programs. Its members will include Jack Aarsvold, Charles Alvis, Cas Grabowski, and Karen Moody. We now have a combined Publications and Promotions committee to develop a comprehensive public-relations program and to oversee all our publications, including the journal and video projects. Nick Cook will chair it, working alongside Dan Ackerman, Phil Pratt, and our editor Rick Mastelli. The board decided that the Conference and Events Committee is so large a job that all will work on it. Mary Redig remains the organization's core and runs the administrative office. I came away from the meeting excited, confident, and looking forward to my new job with us all working together.

This summer's conference is in my home state, and as a Californian I'm working hard with the local committees to host another great event. Next year will be the AAW's tenth anniversary, quite a milestone, and, with one of those wonderful coincidences life hands us, the conference will be in the southeast where our organization began. A tenth anniversary, a new board, could there be a better time both to celebrate and to reflect on our hopes, our aspirations? I'll do my darnedest to do a good job as president and for the future of AAW.

—Merryll Saylan, *President of the American Association of Woodturners*

American Woodturner



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A Note about your Safety

An accident at the lathe can happen with blinding suddenness; respiratory problems can build over years. Take appropriate precautions when you turn. Safety guidelines are published in the AAW Resource Directory. Following them will help ensure that you can continue to enjoy woodturning.

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On the cover:

A view of the Instant Gallery at last December's "Turning Plus..." mini-symposium at the Arizona State University in Tempe. In the foreground are three pieces by Stoney Lamar. At left, Lamar demonstrates how he uses the lathe to sculpt turnings. For more on the symposium and the international juried show that accompanied it, see the article beginning on page 16. Photos: Rick Mastelli.

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December feedback

Re: the article on Judy Ditmer's boxes (*AW*, December 1994), Ditmer demonstrated at a meeting last year of our Mountaineer Woodturners group and gave one of the best presentations I have seen. Lots of good practical tips. On the other hand, the article calls for reversing the direction of rotation to speed up sanding. I tried this once—my Nova chuck came unscrewed, jammed a bowl against the tool rest, and ended work on that piece. I surmised this is not a safe practice.

I would like to say a word in praise of the center drill driver. (It may be known by other names, also.) This tool is fashioned to fit into a Morse taper and receive the shank of a drill bit. By using this instead of a Jacob's chuck, I reduce the distance from the tip of the drill bit to the headstock (or tailstock) from $7\frac{3}{4}$ to 4 inches. This reduces the wobble of the bit considerably. I also use it for turning spinners and bottle stoppers. It holds the $\frac{3}{8}$ -inch dowel very well and affords access to all parts when turning. These can be bought for about \$12 from MSC Industrial Supply, 800/645-7270.

I found the article on spindle turning nomenclature (p. 40) very informative. The included drawing could serve as a model for sharpening one's spindle-turning skills.

—Clarence H. Clarkson, Ceredo, WV

Star dresser maligned

Re: Product Reviews in the December issue, the star-wheel when in use eighty-five years ago dressed 8- to 12-inch-diameter wheels driven by flat leather belts off a line shaft. Cutting tools were made from $\frac{3}{4}$ -inch square stock. High-speed steel had yet to come. Tool rests then went down each side of the wheel, and an age-old turning law was observed: Tools should be used at or below center. The modern thing called a tool rest requires enlarging and low-

ering to bring the star dresser in line with the 6-inch wheel. Or grind $\frac{1}{4}$ inch off the base of the dresser. Then the tool will not be so aggressive, and a perfect wheel will result.

Due to its age I consider more research be taken before printing, after all it is the prerogative of the engineer not amateurs. And a fine tool has been maligned due to ignorance.

—Douglas Corner (a.k.a. John Timby),
Deming, NM

Two reactions to June

I have just put down Vol. 9, No. 3, and the judgmental attitude of reviewers Jack Turley (on the Ellsworth tapes) and Mike Darlow (on the Hunnex book) really got to me. Let me put it this way: Ralph Sprang's objectivity was a breath of fresh air and a much-needed counterpoint to Turley's and Darlow's seemingly opinionated critiques.

Please, gentlemen, you were asked to *review*, as the section title says. Open your minds! Try a more positive attitude and more objectivity in future; it will be more satisfying for your readers and more honestly revealing for the product you were asked to describe to us.

On another note, I was pleased to read Richard Rawlings' letter that there is an appreciation in the UK of American and Canadian woodturners who "exercise their skills within far wider parameters than most of their British counterparts."

Funny, I have always admired the traditional values and the control that the British have demonstrated in their work. It has been the turners of Great Britain and Ireland who have been greatly influential in the rapid growth of woodturning—David Pye, Richard Raffan, Ray Key, Mick O'Donnell, and Liam O'Neill, to name but a few.

I also thought that the turners of the UK were very fortunate to create among a people whose heritage was founded on traditional crafts and

trades and thought that they lived in a land of appreciative consumers. I guess it just depends on your perspective.

—Mark Salusbury, Markham, ON

The stroke of a pen

I've been reading the "pushed the pen in too far" pen controversy in your Letters section, and I believe I can help solve the problem. There is a device called The Pen Saver, which will help to get the mechanism back to where it belongs without damaging it or the brass tube. I've used one for the last two years and have not ruined a single pen (due to bad mechanism insertion, anyway). They are manufactured by New Concepts in Wood, 10975 Valldemosa La., San Diego, CA 92124, and costs \$3.95 plus \$1 for shipping.

—Steven Waterbury, Chula Vista, CA

From x-y to manzanita stain

My lathe is an old Delta (old enough not to even have a model number) with an 11-inch swing and two sets of indexing pins built in on the headstock. For me the single most valuable feature is an x-y feed which bolts to the ways.

In addition to turning exotics and burls, I often turn green root balls and curbside hardwoods discarded by landscape contractors. The x-y feed allows me to accurately (and easily) face any stock for glue up to scrap using a sheet of newspaper. My x-y feed also allows me to true up an out-of-round piece by simply cranking a handle, thereby avoiding shock to both the tool and my arms. There are only two negatives to my antique: I must move belts to change speeds, and when the x-y feed is close to the headstock, swing is reduced by almost two inches.

Robert Rosand wrote about fast epoxy chucking in the September issue, but cautioned that a catch

could send the piece flying. I tried it, caught an end grain, and my piece sailed across 25 feet of basement, aiming itself at two glass jars of beets. No one was hurt, but the cleanup of beets plus beet juice plus sawdust and other paper items took hours.

I recently turned some very beautiful manzanita. Rather than simply discard the shavings, I boiled them for an hour in minimal water and filtered the dark liquid through several coffee filters. I used this water-soluble stain on a maple lace burl bowl. Different areas of the burl accepted the stain differently. The result was outstanding.

—Donald P. Kronish, Rockaway, NJ

Questions along the continuum

I just finished most of the recent issue of the journal and, as usual, was impressed by the quality, not only of the articles, but of the journal as a whole. I read with interest the CompuServe dialog and appreciated the discussion of form, idea development, creativity and associated thought processes. References to woodturning that “embodies the meaning of our existence” or turnings that are “a vision of reality,” however, are beyond me. In her article on the Chesapeake Conference, Susan Ellison mentions a question of the same genre, “What is our [woodturners’] role in the universe?” but admits that the question is unanswerable. Such questions have been and continue to be unanswerable even in the realms of language and philosophical thought. I have some difficulty with the idea that these questions can be

dealt with in the slightly more limited arena of lathe-turned objects. Perhaps this is because I am a novice turner and while *learning to crawl* cannot apprehend the complexities and experiences of *walking upright*. I do, however, have a few ideas that I believe are relevant.

Ms. Ellison mentions another question asked by turners concerning the “ultimate meaning of what we do.” This question is not unique to woodturning. It can and must be asked by anyone who creatively transforms a basic medium into an object of expression. Whether the created object is a bowl from wood, a painting from pigments on paper, or a story turned from a block of words, the answer can be given only in relation to an individual, and to that individual only at a specific point in his or her evolution as a cre-

we craftspeople or are we fine artists?” When asked about woodturners in general, the question falls into the “if a tree falls in an uninhabited forest, is there noise?” category. Here again, the question can effectively be related only to an individual’s stage of development. Whether we smith metal, words, colors, stone, or wood, we come, historically and individually, from a craft background and have the potential to develop our craftsmanship into fine art. Where we are on that developmental continuum defines our individual state of craftsmanship/artistry and, ultimately, frames the answers to each of the above considered questions as part of a personal but temporal portrait.

As to the “vision of reality” concept, I believe that our works are capable of expressing two types of reality, but no visions. Our turnings can recreate and interpret objects that exist in the physical world, either natural or man-made. More importantly, they can be statements of what we believe about the quality and integrity of both the objects themselves and the ability we bring to the lathe. These are aesthetic rather than moral values. When we venture into the realm of moralism, as in the case of Gary Zeff’s “If Fish Could Scream” (in the June 1994 issue), we transcend woodturning.

We pop the shell, as it were, into another level of creativity where turning is but one piece in the artistic mosaic. We then become sculptors, or painters, or poets, or whatever is dictated by the nature of the created object as a whole. I am not suggest-

Woodsong

Birch turnings, like concave fluted mushrooms,
long-stemmed, delicate, translucent as parchment,
from fairy rings on the dusty windowsill.

In the dark cavern of your workroom,
you choose and lift another slab, listen for its voice,
caress its knots and ridges, envision its possibilities.

A bowl for Buddha? The living element yields its heart
to your fingertips, to your eye and ear. Satisfied, you
secure the iron bolt into its rough-hewn end.

Ivory-colored tendrils spiral to the floor forming fragrant heaps,
soft curling drifts to join and mingle with those of
apple, birch, maple, camphor, and oak.

And on the lathe, seduced and shaped by the sure
touch of your lean hands, the cherry wood sings.

—M. E. Williams

ative person. Applied to a group, the question, though it can generate very interesting discussions, is ultimately devoid of meaning.

This leads to another related question often heard and read about in the woodturning community, “Are

ing that this is inappropriate, only that at this point we are dealing with something other than woodturning.

I for one have no aspirations to turn paintings or poems. The rewards of aesthetic turning, the pure joy of mounting wood on a lathe and making it into something it wasn't before, even a pile of shavings, is more than sufficient for my present purposes. What I will aspire to as I progress along my craftsmanship/artistry continuum is, however, another unanswered question.

—Alan Hildebrand, Cincinnati, OH

AOL vs CIS

In the December issue I noticed the printing of e-mail from CompuServe. I wanted you to know that there has been a small core of woodturners that have been meeting for over a year in a forum in America On-Line. We meet every Tuesday night at 8:30 Central Time in a private room called "WOODTURNERS."

Also, the magazine *American Woodworker* is going on-line with AOL.

I don't know how popular woodturning is on CompuServe or why you chose CIS over one of the other bulletin boards, but you may want to take a serious look at AOL, especially if the woodworking folder continues to grow in popularity and we get our own forum instead of being under sewing. The new software for AOL is great. We can download graphics in a snap. I'm connecting at 14,400 baud at no extra charge. It sure would be nice to download a digitized picture of a gallery photo or a dimensional drawing from our journal.

—Jim Labiak, Kirkland, WA

EDITOR RICK MASTELLI REPLIES: I stopped in at the AOL woodturners' forum a few weeks back. I prefer CIS because it is larger and better organized. Instead of a live discussion, the CIS forum is organized as topic strings. I find

browsing by topic a more efficient use of on-line time.

Recently, however, I received a press release indicating that *American Woodworker Online* has just been launched and that it includes message boards with separate sections devoted to bowl turning, spindle turning, and lathes. *American Woodworker* contributing editor Steve Blenk, a turner and AAW member, is active in the forum, and Jim Cummins, who recently contributed a book review to our journal, manages it. So AOL may well be worth looking into (by calling 800/764-4400). Meanwhile, I can still be reached at 72642.1007@compuserve.com.

Errata

Stephen Hughes' Vader Box ("Australian International," p. 36 of the December issue) won second prize in the *Open Lidded Container* category; second prize in Best of Show went to Michael Shuler.

REPORT

FIRST SCOTTISH WOODTURNING SEMINAR

THE NEWLY FORMED SCOTTISH WOODWORKERS Group showed that they were a force to be reckoned with when, last October, they staged their first international woodturning seminar in the highlands of Scotland.

Pitlochrie, close to the city of Perth, was an ideal setting for an exciting event, organized by Graham Burhouse, Brian Carroll, and Michael O'Donnell. Surrounded by hills and woodland, the Atholl Palace Conference Center in Pitlochrie stands like a fortress, ready to accept whatever is thrown at it.

With international turners in abundance, both as demonstrators and delegates, the ingredients for a successful event were ever-present.

A wonderful mix of styles and

philosophies was brought together in the five demonstrators: Nial Fitzduff from Northern Ireland, Stuart Batty from England, David Ellsworth from the U.S., Michael Hosaluk from Canada, and Michael O'Donnell, the Lancashire lad who thinks like an Irishman and lives in Scotland.

Nial Fitzduff demonstrated with great sensitivity, (rarely seen in woodturners of today) the way that his concern for the environment had influenced the pieces that he makes. Taking nodules from the sides of ash trees, where many years ago his father had cut the branch and the wound had healed over, is perhaps the most environmentally friendly way of producing bowl forms that I

have seen. The holding methods that he has developed for turning these shell-like forms is simple, yet most effective. A wonderful demonstrator and communicator, Fitzduff is rarely seen outside his native Ireland.

Stuart Batty once again showed that despite his tender years, he is one of the leading demonstrators in the world today. His enthusiasm is exceeded only by his skill. He has become not only a master of the techniques for turning exotic woods, but a fine communicator as well, pleasing his audience with a well prepared demonstration and concise answers to their many, often challenging, questions.

Much has been said through the years about David Ellsworth. He is

SCOTTISH SEMINAR (CONTINUED)

Mr. Consistency himself. His professionalism is unquestionable. His demonstration in Scotland was both informative and entertaining, and he adjusted to the standard of his audience with such ease that it was undetectable to the untrained observer. This surely is a sign of a great demonstrator. It is pleasing to see that Ellsworth isn't the type to sit back on his haunches and relax. It is evident by his style that he is a dedicated teacher who has time for the most raw beginners' questions. Feedback that I received from other delegates highlighted his ability to convey information in a most understandable way.

The other demonstrator from across the Atlantic, Michael Hosaluk, was somewhat of a surprise to me and also, I suspect, to many of the other delegates. Images of his work have been splashed over many magazines, and woodturners would have to be blind, deaf, and dumb not to have heard of the stocky man from Saskatoon. Maybe it is because of our similar age or similar background in turning, but I felt an immediate affinity towards Michael. He is a realist. He knows that it is difficult, well nigh impossible, to make a good living from woodturning unless you are diverse and fast. So, demonstrate his diversity he did. Every demonstration was different, from turning production work between centers, to wafer-thin bowls, to the application of gold leaf and paint. He had so much to give in the way of knowledge and enthusiasm. He's a truly inspirational demonstrator who I am sure will be welcome at conferences throughout the world.

Michael O'Donnell is probably the most widely travelled demonstrator in the world, and so it was unusual to see him demonstrating virtually on his own doorstep. I have seen Michael demonstrate many times since I first met him in 1985 and



Author's pierced and dyed bowls of sycamore, upper left, included the prize-winner for Best Vessel. Ian Baird's "Flying Insect," left, won the prize for humorous piece. And Norman Halcrow's ash chair was named Best Spindle Turning.

each year the guy gets better and stronger. His dedication to teaching is ever undeterred, and his concern for every detail is amazing. His demonstration was and always has been a well prepared package of information, impressive skill and tool control, flair for design, and showmanlike humor. His ability to attract large attentive audiences, despite sometimes a distinct lack of flying shavings, shows the respect that this man commands and deserves.

As with most seminars, part of the event included an instant gallery and its consequential critique. The critics in Scotland were Ellsworth and Hosaluk, both having vast experience in this very sensitive area. Considering the size of the seminar, which in comparison to AAW events was quite small, the critique lasted a considerable time. Attentive delegates listened with enthusiasm to constructive comments made by the two, and it is a reflection of the variety and quality of the turning on dis-

play that the critique went way past its scheduled time.

As a demonstrator, I am often asked to critique other people's work and to judge it by awarding prizes. This has always been difficult for me, as it must have been for David and Michael. In any competition the personal preferences of judges is a controversial point, and judges are aware of this. In Scotland, the task was particularly difficult because the work was so good. More prizes could easily have been awarded.

This seminar was the closest I have encountered to the dictionary's definition of a seminar. "A gathering of advanced students to discuss a particular subject" is difficult to achieve, but the Scottish Woodworkers Group were successful in raising the awareness of woodturning's importance in the Scottish crafts movement and, with support, will likely continue to do so.

—Kevin Lightfoot,
Stoke-on Trent, England

A NEW-FLEDGED FRIEND OF RUDE

THE TWO HUNDRED OR SO OF US WHO attended the woodturning conference in Gatlinburg last October knew this would be a watershed event. Arrowmont School of the Arts and Crafts, along with Dale Nish, was hosting a major conference as a tribute to the first family of American woodturning, the Osolniks, and I was determined to be part of it. A craft was emerging into a serious art form and all of us—great and small—would be there to honor one who had carried the torch—or should I say candlestick?—for a long, long time. The occasion was a singular one, not soon to pass this way again. It was a tribute to the life and work of Rude Osolnik, and new as I was to the passion of turned wood vessels, having turned less than thirty or so bowls in my life—bad, ugly bowls at that—I was going to spend a long weekend taking part in an important, historic event. I would not be disappointed.

Arrowmont is less than a half-day drive from my home in North Alabama. I had never met Rude Osolnik; indeed, I had never met anyone who even remotely admitted to being a woodturner. Maybe turning wood is a misdemeanor or even a felony, I used to think. But here was my chance and I was going to be part of this, even if I was the least among the least. I was about to make amends for the long hours of isolation and struggle that goes with the term “self-taught.” So, I must admit I was taken back a little when I first saw the Grand Old Man of American Woodturning. If I had never seen a picture of him, I would have given him a dollar or two to help feed him and maybe find him shelter for the night. Later in the week I would learn he would have gleefully taken my money, and never let the facts get in the way of the story. The only way to describe Rude, from the tips of his toes to the top of his head, is *rumpled*.

Standing there at the edge of the ramp, watching the crowd purposefully move up into the exhibit hall, he looked every inch like a lost homeless soul in search of a handout. The crowd moved on into the gallery where there was a retrospective exhibit of Rude’s work. And here you saw the incongruity of it all—the light years that separate the man from his flawless, virtually perfect turned pieces. There is nothing disheveled or careless about the man’s work.

In the next several hours I made a discovery that is, I’m told, one of the unique aspects of woodturning as an art form. The best among us—those who have earned the right to be called artist—are so accessible and willing to share. I had come to this conference somewhat inhibited by the fact that I was a complete novice, only a few hours old, while here were people who had spent lifetimes mastering this craft. It didn’t matter. The equality that exists among woodturners is a genuine phenomenon. I ate breakfast with Nick Cook, talked about plum jelly and Pennsylvania with David Ellsworth, had a discussion with Ernie Conover and David Hout about baby boomers and how woodturning would affect the quality of our lives in years to come. I teased John Jordan and noted that Ray Key, from England, and I really do not speak the same language. That this is the golden age of woodturning is in little dispute, and the accessibility to the techniques of the craft to the least of us is a driving force. Woodturning is about, I suspect, to become the common man’s art form. I would learn that most who had come to honor him attributed this to Rude Osolnik, and the road that leads to the top of Poverty Hill.

The gritty, real world was there, too. It’s hard making a living as a woodturner. That much became obvi-

ous in the way the professionals had to constantly keep an eye out for those who wanted to buy a tool, book, or schedule workshops later on. Very few seemed to be surviving solely on their work. I also saw that if you want to emerge at the top, you will have to find a niche or, to put it less kindly, a gimmick. It’s not enough to just turn well and work with rare, wonderful pieces of wood. Walls are about as thin as they can go. Del Stubbs has seen to that. Natural-edge bowls are everywhere and done to perfection. All the good turners have many examples of perfect bowls. Before I was born, and I’m a grandfather now, the open bowl had been explored. Now the Ellsworths and Jordans have closed the form. Nevertheless, I couldn’t help but notice that, even though it’s been done to perfection, I would have to learn to do it myself. Turning a flawless natural-edge bowl—preferably a burl—is one of the steps I will have to take. I especially liked what Martha Connell, who represents David Ellsworth, Alan Stirt, and Rude Osolnik in her Atlanta gallery, had to say about those of us who follow: “Sign and date your best work. You never know.” “Let me echo what Martha just said,” said Dale Nish with that biting, dry humor of his, “There’s a rumor going round the craft circuit that it was Daphne and not Rude who signed all those weed pots years ago.” For just an instant, a look of panic lights the eyes of all the collectors in the audience, and then Rude and Dale laugh.

“Friends,” said Rude at the end of the roast honoring his contribution to woodturning, “are the most important thing. The only regret I have is I wish I could have met all of you sooner.” And then this old man, who I first mistook for one of the homeless, forever won a place inside me. He stopped for a moment, looked at

his feet, then up at the crowd. "I want to mention Daphne," he said, and quietly laid the microphone down. What you are will come through in your work, I thought, and understood now how this man could do such clean, honorable works of art.

I watched and listened to Stoney Lamar and Michael Peterson as they showed us how and where they were taking the turned wood vessel. The art of woodturning now spins on multi-axes and includes the void in which wind and rain are celebrated. Intense young men they are, who, I think, will pass the acid test that David Ellsworth says must be applied to every woodturner: "If your work is for someone else and not yourself, then it will not last. You can succeed over a long period of time only if what you do comes from someplace within." This lesson was balanced with the one taught by Alan Stirt, as he took the humble salad bowl and gave it both purpose and dignity. "It's the little things," he said, "that make the difference." You have to be quick or you'll miss the subtle, almost imperceptible transformation of an average bowl to something more. It happens very fast.

There was one delicious private moment, too, for me. A moment of insight and prediction. I was sitting next to Del Stubbs as we watched a slide show on Japanese woodturning presented by Alan Lacer. The techniques used by the Japanese are entirely different than those we use. The day before, some of us had come up on Lacer practicing with a Japanese turning tool—a sort of cross between a spatula and a knife that had been thrown against a rock wall—and he grinned rather sheepishly and said he hadn't meant for everyone to watch him go through his learning curve. I loved it. He had catch after catch. Made me feel good. At one point dur-

ing the slide presentation, Del Stubbs sat straight up and said "Wow." The wheels are turning again inside the invisible man of woodturning. Give it time. "How long," I ask John Jordan, "will it take me to stop knocking my bowls out of round. I'm getting discouraged." "Don't," he said, suddenly serious. "It'll come. I've knocked more off the lathe than anyone here. Still do." You gotta' pay your dues if you want to dance with the best, I thought, as Jordan effortlessly moved his left hand in that unique, practiced, open-and-clinch method he uses to hollow his forms.

Woodturning is about, I suspect, to become the common man's art form.

"I don't want to do this when it gets to be hard work," he later tells the crowd.

I watched the British influence, in the form of the irrepressible Ray Key, take the tiny box to absolute perfection. His worst box-making day will still be above my best, I thought, as he fiddled and flirted with the perfect fit. "A thousandth of an inch," he said in our demonstration, "does make all the difference." And yet I can't help thinking back to one tiny thing that happened during a break. I overheard him and Del Stubbs talk about the German Hans Weissflog who really makes perfect little boxes. It was obvious the two men admired this far away turner. It's the journey that's important, I learned, and you should never expect to "arrive" at the end of it.

On Thursday, after lunch, I had just finished watching Philip Moulthrop make a distinctly recognizable Moulthrop bowl. It was break time—"You'll learn more in the hallways by accident than you do intentionally in a rotation...certainly in my

rotations," said Dale Nish earlier, who spares no one, not even himself—and a few of us were talking about PEG, bowls that split, and wood that won't stay where you turn it. "I wish there was something better than PEG," one of the fellows said. Up walks Rude. "Try denatured alcohol," and off he shuffles, forgetting more than the bunch of us will ever know. Later in the day, I talk with someone who studied years ago at the top of Poverty Hill, Rude's home in Berea, Kentucky. "I don't know why more isn't said about that," this fellow said, "Rude showed me years ago what happens when you put a bowl in five gallons of denatured alcohol for a day of so. You can just see those bubbles displacing that water. Take it out a few days

later or so and it's ready to finish. Doesn't have that waxy feeling that you get with PEG. It works, it really does."

Thursday night I call home. "How are things?" my wife asks. "Well, Arrowmont has the strangest policy. All the doors to the rooms stay unlocked. I guess you have to be honest to be a woodturner." "Well, you just watch yourself...Even if it is just a bunch of old men," she laughs, pleased that I'm enjoying myself. The next morning I stop Bonnie Klein and ask if I can have my picture taken with her. I see the startled look on her face as I take and hold her hand. John Jordan, who is just in front, takes the camera and snaps the shot. I have always admired the pioneer spirit, and I tell Bonnie I like what she is doing. I tell her the photograph is a joke on my wife, but keep to myself my plans to, in twenty, thirty, or forty years, make it available as part of another celebration, one that, in retrospect, celebrates the contributions of those who built on the likes of Rude Osolnik.

—Conner Runyan, Fyffe, AL

TEXAS TURN OR TWO III

HOW DO YOU DESCRIBE A TWO-DAY jam-packed turning get-together? Easy—A Texas Turn or Two III.

After two years under Mark Potter's tutelage at his shop in Columbus, this year's event was held at the Maricopa RV Ranch Resort near Canyon Lake in the Texas hill-country. With the past two years of ground work laid down by Mark this event is shaping up to be a great annual affair. This year the Alamo Woodturners Association was in charge of putting together the weekend.

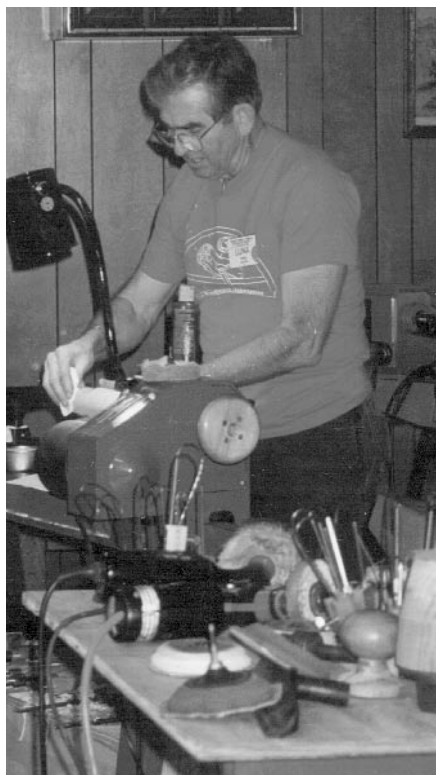
Led by the four major demonstrators, and a group of Texas turners, the more than 150 attendees went home with heads full of ideas and tips, and stomachs full of good ol' Texas Bar-B-Q.

The topics for the weekend were chosen from the responses to a survey sent to all of the Texas-based AAW members.

Bonnie Klein covered the most requested topic—sharpening. Her three rotations on this subject drew the largest number of attendees of the weekend. She covered other popular topics in a session on small gift ideas and in another on lidded boxes. As always, Bonnie was exceptional, her easy delivery and numerous tips making it all just a bit easier.

John Jordan offered an in-depth look at the making of his trademark hollow vessels in two back-to-back sessions. The room was packed with onlookers. One of the great things John did was to make the whole subject of hollow vessel turning a lot less intimidating.

The single best-attended session of the weekend was Stoney Lamar's, covering multi-axis turning. It was very thought provoking to see the slide show depicting the piece-by-piece progression of Stoney's work and then to see him actually do one on the lathe. What an eye-opener! "I



Local adept Luna Ford, filling a session with basic tool techniques.

didn't know you could do that with wood," was heard over and over after the session ended.

What can I say about Texas' own Clay Foster that hasn't already been said? Clay took care of the sessions on stock selection and preparation and also did a couple of sessions on bowl turning technique. He's one of the best demonstrators I've seen, with an unforgettable way of getting ideas and techniques across.

The great group of Texas turners was composed of Luna Ford, James Johnson, Larry Mart, Larry Roberts, Freeman Anderson, Bobby Bridges, and (somehow, too) myself.

Luna (pictured above) was his usual self, giving out almost more knowledge than you could digest in his sessions on basic tool technique. Larry Mart covered photography and documentation and showed all of his portable studio set-up; Larry

Roberts did a session on fundamentals and design, and I covered the topic of bowl bottoms. James Johnson's transition to smaller pieces has not lessened one bit the WOW factor of his work. He did several sessions on the techniques for making smaller hollow vessels. Freeman and Bobby did their usual great job in the hands-on area, accommodating a constant flow of people trying out what they had seen in the earlier demos.

There was also a command demo by the founder of A Texas Turn or Two, Mark Potter. Mark messed up in a big way this year, showing all in attendance that the art of making wooden hats isn't as impossible as it seems. I hear that next year you wear a wood hat or none at all.

Two panel sessions were held during the weekend. The first covered texturing and was led by the masters of this technique: Stoney, Clay, and John. The second (our final rotation) was held to cover finishing techniques and included all the demonstrators.

There were also a total of four vendors at the event with just about every tool or widget you could want along with a great supply of some beautiful wood.

Both a raffle and a door-prize drawing were held during Sunday's lunch, and it seemed that for a while almost everyone was going to win something.

The weekend was concluded with an auction of the pieces from the weekend's demonstrations. Over \$1,000 was raised. After the expenses of the weekend were covered, a donation of one half the auction proceeds was made to the fund-raising drive for the new woodcenter at Arrowmont.

See ya'll next year.

—Clayton Cochran, San Antonio, TX

LATHE REVIEWS

EDITOR'S NOTE: *An increasingly common feature in woodworking magazines these days is the product review, a combination of manufacturer's specifications and the results of testing by a freelance writer or a staff of editors. Our lathe reviews are not of this sort. What follows is the response to a call made last June for feedback on the lathe you use, with special attention to the sort of work it's best suited for. This is the largest response to a forum we have had, though surely not all we can expect. If you have experience with a lathe not appearing here or wish to add your perspective to what you read here, please write. I will find space in a future issue to continue this forum.*

Powermatic Model 45

I have been teaching and working with Powermatic Model 45 lathes for over 30 years and have found the machine to be very dependable and durable. Powermatic (800/248-0144) is American-made and the physical features have gone virtually unchanged for almost fifty years. The castings are of good quality and quite substantial. Motor size is adequate for all types of turning as well as metal spinning. The Model 45 comes equipped with a $3/4$ -hp motor, available in single- and three-phase. All the motors can be wired for at least two voltages and some for three different voltages. Tool rests and tool posts are convenient to adjust and when fine-tuned are a pleasure to work with. Like the bed and other castings, they are substantial. The headstock bearings are readily available and quite easy to replace. The Model 45 has a 1-inch x 8-tpi spindle with a left-hand thread on the outboard end. This is a very common thread found on many lathe accessories. The internal opening is a No. 2 Morse taper, as is the ram in the tailstock.

The only shortcoming I find on

the Model 45 is the sheet-steel base cabinet and the motor mount. Some of the base cabinets tend to vibrate, which of course creates a less-than-pleasant sound. Some of the 45s I've been around do not hold the motor in correct alignment when the belt is tightened. On the plus side, both faults can be corrected with a little Yankee ingenuity.

As far as the type of work for which the Model 45 is suited, it will handle virtually all size work within its capacity. I have used it for tiny goblets about 1 inch tall and finger rings to 8 inches in diameter (over the tool-rest base) by 39-inch spindles. Swing over the gap in the bed is 16 inches. The largest diameter I have turned outboard is 36 inches. Powermatic builds a very substantial outboard tool post which sits on the floor and works well. The four-speed model has a speed range of 600 to 3000 rpm. The variable-speed model ranges from 330 to 2100 rpm. Crated shipping weight is 439 pounds. The headstock is equipped with an indexing plate. For my height (5' 11"), the 45 is just about right and if repair parts are needed, they are readily available from the manufacturer. My own lathe is about forty years old and sold for about \$700 new. The same machine today is about \$3,000.

—E.C. Dutch Hollenbach, Roanoke, VA

Conover lathe

I had an old Sears lathe with a $3/4$ -inch spindle and single tubular-steel way. I did some very nice work on it, but about two years ago, after agonizing over Generals and Woodfasts, I bought a Conover lathe that had only about ten hours on it. To be honest, one reason I bought it was because it was for sale at such a fantastic price I couldn't refuse. But I never regretted my decision.

You can get this data by looking in the catalog (800/433-5221), but

here's a brief description of the lathe: It has a hefty 16-inch swing, a $1\frac{1}{2}$ -inch x 8-tpi spindle with tapered roller bearings, a $1\frac{1}{2}$ -hp infinitely variable DC drive, and it weighs 400 pounds. I figure the Conover spindle has four times the cross-sectional area of my old Sears spindle. I keep several loaded toolboxes and a couple of steel plates stored on the lower shelf of the lathe, so altogether it probably weighs closer to 600 pounds.

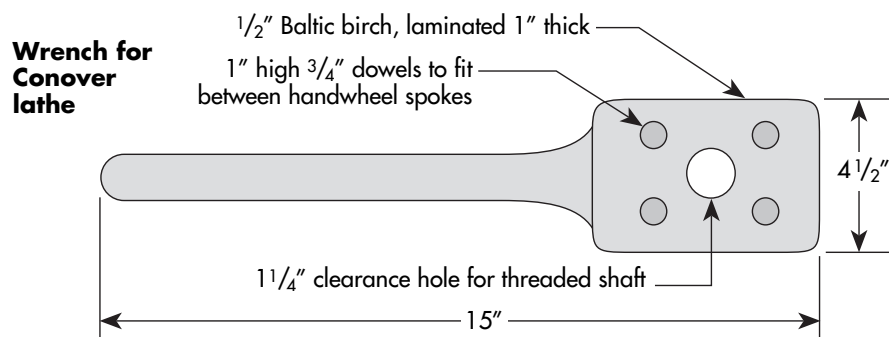
As you may know, when you buy a Conover lathe, the ways are not included; you make those yourself. Conover suggests clear spruce or fir, but I decided to laminate two beams of Baltic birch. I used $1\frac{1}{2}$ -inch material sawed 6 inches wide and laminated it up into two beams, 6 inches wide by 5 feet long by just under 2 inches thick. Then I covered the tops of the ways with 0.032-inch stainless steel strips. In hindsight I'm not sure I'd do that again. The stainless steel is so slick that the tailstock slips if I don't tighten it down especially hard. (More on this later.)

The variable speed drive is a wonderful luxury, but I do notice that although it's not supposed to do this, it does lose power in the very low speed range. Of course if I weren't so lazy, I'd change the belt to a lower one of the four pulleys that come with the machine and power would not be a problem.

The lathe is wonderfully solid and rarely do I have vibration problems, even when turning a badly out-of-balance piece. The Conover people claim that using wood for the ways helps dampen vibration, and I'm inclined to believe them.

Another interesting feature about the Conover is that it can be used to turn outboard by moving the headstock to the tailstock position. I estimate that could be done in about half an hour. The nice thing about

LATHE REVIEWS (CONTINUED)



this idea is that the spindle rotation remains the same and you don't have to "work backwards" with a counter-rotating spindle. You can use all your existing faceplates and chucks, too.

Conover lathes and accessories are not cheap. I wanted a few extra 3-inch faceplates, but at \$32.95 each, I hesitated. After some difficulty I located a source of 1 1/2-inch x 8-tpi nuts (they're easy to find) and used them to make my own faceplates by brazing a large washer to each nut.

One feature I do not like about the machine is the method of tightening the tool rest and the tailstock using a round cast iron wheel under the ways. They do sell a quick release lever, but at \$59 that seemed to me a little steep also. Finally, I made a husky wooden wrench from some of the scrap Baltic birch (see drawing, above) and that made life a lot easier. One other minor irritation is that when you want to change the belt from one pulley to another you must remove a loose cast-iron headstock cover. It comes off quite easily but then you have to figure out where to set it while you're changing the belt. It would be more convenient if it were hinged, and one of these days I'll get around to doing that.

—Paul Burri, Ventura, CA

Delta 46-700

The Delta model 46-700, with a 12-inch swing, variable speed, No. 2

Morse tapers, cast-iron bed, and pivoting headstock, can't be beat for the money. Its only shortcoming is that it has no handwheel. I made one for my 46-700.

The pivoting headstock is a nice feature for lightweight turnings, including platters. But if you plan on turning anything over 12 inches in diameter of any thickness over a few inches, you really should go to a heavier lathe.

Some of the earlier ones had bearing problems. Delta (800/438-2486) of course took care of them with replacements. —Bill Funk, Dillon, CO

I have a gap-bed, variable-speed Delta lathe. I would not recommend the gap bed. The gap is too narrow to turn a bowl with appreciable depth and is too wide to position the tool rest properly for turning the back of a faceplate object. I do find the variable speed handy, but for my hobby turning, it is not a great deal better than step pulleys.

—Paul V. Converse, Jamesville, VA

Woodfast M-Series

Woodfast lathes are manufactured in Woodville, South Australia, and imported to the U.S. by Craft Supply USA (800/551-8876). They import the headstock, lathe bed, tailstock, and tool-rest assembly. The base and the electronics are manufactured in the U.S. and assembled in Provo, UT.

Woodfast manufactures a fine

piece of equipment that can be recommended to any woodturner, amateur or professional. It is of sufficient weight and strength to stand up well to the heavy work of large bowl turning and remain sufficiently aligned to turn the finest spindle bobbin.

The lathe can be ordered with a 12-, 16-, or 20-inch swing. The larger sizes are made by inserting riser blocks in the headstock and the tailstock. The tool rest is specific for each swing. The length can be ordered as a "short bed," which is about 16 inches between centers and is intended for bowl turning, or as a "long bed," which is about 36 inches between centers.

The headstock is indexed at 24 and divisions thereof. Both the headstock and tailstock spindles are bored for No. 2 Morse taper, and the hole extends through the length of the spindle. The spindle size is a sturdy 1 1/4-inch x 8-tpi, something of a standard in the machine industry (probably because it almost exactly matches metric sizes elsewhere in the world).

There are several options: First, the drive can be variable-speed DC or five-speed AC. The AC motor is considerably less expensive and you are limited to speeds of 370, 650, 1200, 2000, 2700 rpm. The variable-speed DC motor, in my judgment, is worth the extra expense.

With the DC drive, several other options become available: an electronic noise filter (worth the price especially if your studio is small or the lathe in a confined space); a remote off/on switch (worth the small price and saves on fuses and life of the electronics); and a reversing switch (worth the extra, especially for production turners that need to sand in the most efficient manner by reversing direction with each change of grit). Also consider a remote speed

control. It is rarely convenient to reach to the headstock to control the speed.

The lathe comes with a number of really nice features that are not widely advertised or discussed. The belt is about $\frac{3}{4}$ inch wide with multiple V-grooves for positive drive. The speed change has a tightening knob that can be left loose when turning rough pieces where slippage is preferable over a catch. The entire machine can be disassembled by removing several bolts, should the lathe need to be moved into a tight place. The cam locks on the tailstock and the tool rest are the best design I have encountered and require few minor adjustments (once in the past year). And the machine is substantial—about 550 pounds of metal.

The drive spindle has ball bearings—three sets; two on the inboard side and one on the outboard side. The extra set of inboard bearings likely minimizes bearing wear on the side where the work is mounted.

There are any number of accessories available for the lathe, from the vendor or from other suppliers, including a line of metal-spinning accessories. You could easily spend as much on accessories as on the original lathe.

There are also a few shortcomings that should be considered in the next design: The footprint is rather small (8 inches by 12 inches per leg), requiring that the lathe be bolted to the floor. Alternatively, a 4x4 about three feet long can be attached to the outside of each leg to minimize the possibility of tipping, should you accidentally turn on the lathe with an unbalanced blank at high speed. The lathe is also available without a base (at a lower price) so you can build your own. The smaller footprint is intentional in the design, as a larger base interferes with your ability to position yourself while turning.

A plate should be (and recently has been) added near the bottom of each leg to permit the addition of sand bags to absorb vibration in the legs (see pp. 24–27). An access door on the base would permit the easy addition of more sand, or permit use of the space for storage. And the hinge on the headstock lid is not substantial, so the lid vibrates (making a noisy distraction) during operation. Surely a better hinge could be added at little cost.

The underside of the lathe bed is not machined and has a lot of flashing from the original casting. If the flashings were ground away rather than painted over, the machine would appear to be of higher quality and interference in the movement of the tool rest and tailstock would be virtually eliminated.

The manual that comes with the lathe leaves a lot to be desired. More information on the machine's components and their service would be appreciated. On the other hand, Craft Supply USA has been very responsive to questions. And a new manual is in the works.

In a two-year period, I've encountered the following problems: the fuses internal to the electronics have blown several times and they are in the most inconvenient location for changing; the main power switches have had to be replaced; the main relay in the electronics has needed replacing; the original DC motor was defective; and the No. 2 taper in the headstock had a ridge left by the original machining that caused the drive center to run untrue. *In all cases*, Craft Supply USA made good with replacement parts at no charge for the defective components. (There's a five-year guarantee on the electronics and a two-year guarantee on the mechanics.) For the Morse taper, a (rather expensive) reaming tool was sent, and 20 minutes of

carefully following the accompanying instructions cured the problem.

Craft Supply USA has also taken steps to correct these problems in future units. Fixing problems through design and manufacturing upgrades as well as after-market support illustrates that Craft Supply USA is dedicated to delivering a quality product that will serve you well for a lifetime or more. It sure would be nice to get the same service on other woodworking equipment.

Net, the Woodfast is a wonderful lathe from a supplier that is oriented to service after the sale. You can do much worse for a lot more money.

—Bill Stephenson, Loveland, OH

Like most of you, I have always been interested in "a better mousetrap," especially if the aspects which make it better are refinements not adornments, the result of user input that enhance the *usefulness* of the object, not merely how it works. This is further heightened if the improvements employ the "kiss" principle (keep it simple, stupid!).

I first saw the Woodfast lathes newly installed at the Appalachian Centre for Craft at Smithville in 1990. At first glance I could tell that this was indeed "a better mousetrap." The cast iron bed was much brighter and shinier than on any other wood lathe—closer to the substantially harder, more durable metal used in metal-turning lathes. The finish throughout was excellent.

Woodfast's current lathes are the result of a collaboration of Woodfast, one of the world's top woodworking machinery manufacturers, whose facilities are in Woodville, Australia, and two of the world's best spindle and bowl turners, Richard Raffan and Dale Nish. The purpose was to produce the perfect affordable all around wood lathe.

Drive to the headstock is through

LATHE REVIEWS (CONTINUED)

a four-step (now five-step) pulley system utilizing the new poly V-belt-design employed by most auto makers today for its superior power transmission and reduced wear.

The tool rest locks via a cam-type design; a bronze bushing around the shaft reduces wear in this oft-used mechanism. Also user-friendly: the tool-rest locking bolt has two positions, so it needn't be in your way yet is always convenient. High-quality metal and precise machining mean that the tool rest moves smoothly and freely; changing position is a pleasure, not a chore.

Another significant and oh-so-logical improvement is the use of a round locking plate under the tool-rest base and the tailstock. How often have you fought to align the usual rectangular locking plate with the gap in the lathe bed while reinstalling a tailstock or tool-rest base? These pieces will slide effortlessly on and off the lathe bed, using only one hand, yet lock positively and smoothly once repositioned.

The very substantial tailstock is hollow through the spindle in order to facilitate hollow boring. The lathes are supplied with a live center with removable center. A very impressive chrome-plated handcrank finishes the tailstock and provides for quick, precise, positive yet delicate advancement of the tailstock spindle.

In use the lathe runs as smooth as silk. Since seeing the lathes in Tennessee, I have purchased one of the short-bed models and mounted it on a wood stand following the plans that Woodfast provided. The wood base offers much better damping than a steel stand does. Making your own also allows much more flexibility in modifying height, adding ballast to the base for extra mass, customizing for motors and/or switches, and adding a clutch to the drive belt. (See pp. 24-27.)

Equipped with either a single-speed motor and switch offering 370, 650, 1200, or 2000 rpm (good speeds for most turning requirements) or with a DC variable-speed motor and controller which offers total speed and torque control from 0 to 2000 rpm, these lathes are a pure pleasure to use. Everything has been thought of and designed, right down to the taper on the headstock cover to give the turner greater clearance to the spindle side of a bowl. Of course the very broad range of accessories is built to the same exacting quality as the lathes themselves.

There are a lot of good lathes out there that are well-suited to spindle turning and a few good lathes that are designed for bowl turning; then there is the Woodfast. The collaboration between technology and hands-on experience has worked to produce "the better mousetrap"—a lathe that is as close to perfection for most turners and their budgets as can be found.

—Mark Salusbury, Markham, ON

Myford ML8

When I first became interested in woodturning back in the 1970s, I didn't know enough about turning to have any idea what to look for in a lathe. Nor did I have the foggiest notion of what kind of turning I would be doing in the years to come. I certainly couldn't afford more than one lathe. What I purchased had to last for a number of years.

I knew few other turners, so I didn't have that source of guidance. My solution was to read turning articles and observe the type of lathe being used. Peter Child was alive at the time and had written a number of articles picturing his Myford lathe. Craft Supplies sold a lathe made by Myford. My one turning acquaintance, Earl Edris, had an ML8, and so I purchased a Myford.

Myford no longer makes the ML8, but on occasion a used one becomes available, and you can still purchase parts from the manufacturer. (Myford's current model, the Mystro, is a heavier, cast-iron, larger-capacity machine with a swiveling head and an integral motor. For information and sales, call 802/387-4337.) I have had very good service from both the machine and the company; in almost twenty years, I have needed only to purchase bearings for my lathe, except for that time I broke the tool rest clean off, but I don't talk about that!

My Myford has an 8-inch swing over the bed and 36-inch capacity from headstock to tailstock. The bed of the lathe is tubular (extruded aluminum, I believe), and so is not as stiff as some other lathes but quite adequate for most purposes. The feature I like most about it is the ease of moving and adjusting the tool rest, which is accomplished by tightening or loosening the lever assembly.

I have never been fond of noisy metal cabinets, so I purchased the basic machine and built my own wood lathe table. This allowed me to easily install a foot pedal and cable system (à la Del Stubbs, pp. 24-27) that gives me a form of variable speeds in addition to the four-step pulley system that comes with the basic lathe.

The headstock spindle is 1-inch diameter on the inboard side and 7/8-inch diameter on the outboard side. I no longer turn outboard on this lathe and I'm not convinced that the 7/8-inch diameter is sufficient for that purpose. More to the point, I feel that the swivel arm provided for outboard turning is totally inadequate and has too much give under heavy cuts, resulting in unnecessary chatter or catches. Earl Edris solved this problem by replacing the unit with a General outboard tool rest.

The bearings are relatively easy to

replace, but must be pressed in. Once in, they can be adjusted by loosening two set screws on an adjusting collar. Lubrication is accomplished via two oil plugs. You know to replace the bearings when friends tell you that your lathe is awfully noisy. Generally it is a very quiet running machine.

I think that the Myford is an exceptional light-duty machine. If you can find a used one, it would make a great first lathe. I now own two and would love to pick up another.

—Robert Rosand, Bloomsburg, PA

D/J Lathe

About three years ago, having stretched the capabilities and safety of a Shopsmith well beyond what I now believe to be wise, I went searching for a new lathe.

I am a serious turner, if not a professional. That is to say, I sell my work through a few galleries, but I can't really call my income a living wage. Short of trading my first-born (which I pondered on certain days) I did not have money to consider any-

thing but moderate-priced machinery. Yet I wanted a lathe that I would not outgrow in just a few years. Because I do primarily face-plate turning, I really wanted a bowl lathe. Most importantly, after the Shopsmith, I wanted something that was not going to move; I wanted *heavy*. And finally, I wanted to be able to see what I was getting before I spent a penny. It seemed this did not leave much selection between Seattle and Portland, my geographic range.

Several local turners suggested that I look at a lathe designed by Denver Ulrey in Seattle. I did, was impressed, and am writing to say that I am still very pleased with my choice three years later.

Denver supplies his customers with a basic package, lots of options, and detailed plans for a wood base that you build yourself and fill with 700 pounds of sand. Believe me, it stays where you put it. The package includes a 1½-hp DC variable-speed motor with reverse, 1¼-inch x 8-tpi drive shaft set in pillow block bearings, tool rest and tool-rest support

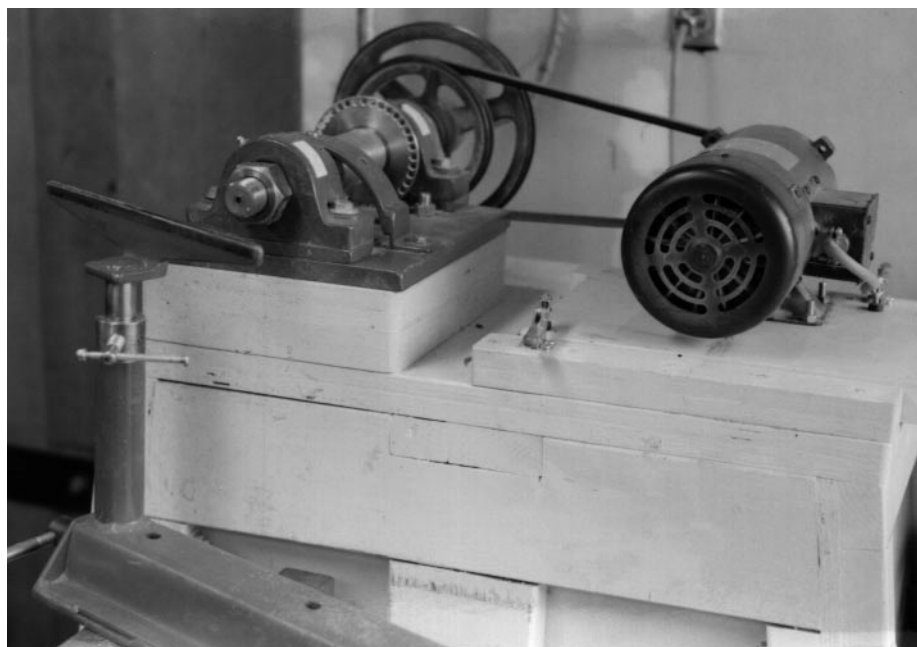
system, a spindle lock, and three faceplates. Options include a nifty indexing wheel and a bed, if you really want a spindle lathe. You determine your own speed range when you order your lathe. You may also choose a smaller motor, different thread sizes, different tool-rest lengths, different tool-rest-post heights, or plans for a concrete base, to say nothing of the ability to build the base to whatever height you desire. Each lathe is really a custom order, one of the greatest advantages of choosing the D/J lathe.

This lathe allows you to work BIG if you want—in one tool-rest configuration, you can turn up to 38-inch-diameter stock—though I find a 24-inch natural-edged piece quite daunting and seldom have larger wood anyway. Depth of work is limited to about 10 inches, though I find that tool length has limited me more than the lathe.

My disappointments are few. I bought the 1-hp, 110-volt motor, as rewiring my shop for 220 volts was financially out of the question at the time of my purchase. Now I would choose to go into debt for the larger motor so that I could be a bit more aggressive when roughing out large turnings. For all its heft, the tool rest still vibrates loose occasionally. And finally, while the lathe is a joy to use, my turning did not become instantly and uniformly breath-taking as a result of my purchase; that part still takes work.

Denver and Jean Ulrey (that is where the J comes in; Jean Ulrey is also involved in this enterprise) can be reached at (206) 487-6190. Check with them for current prices. By the way, I spent less than \$200 on building the base, and sixty percent of that was on hardware. A more resourceful person might be able to make it for less.

—Marquita Green, Longview, WA



Marquita Green's D/J lathe.

FOR THEIR OUTSTANDING CONTRIBUTIONS in 1994, winners of the second Annual Turners Tips Contest—David Ellsworth, Mark Krick, and Rodger Jacobs—will each receive a thank-you turning. Congratulations! Please join in and add your own tips to this year's contest. Send them to Robert Rosand, RD1, Box 30, Bloomsburg, PA 17815.

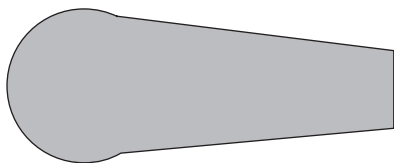
Pain in the back?

Many people have problems with their backs. I do, and I discovered that working on a concrete floor all day only aggravated the problem. My solution was to fasten furring strips to the floor followed by $\frac{3}{4}$ -inch plywood in my lathe work area. I also use an anti-fatigue mat directly in front of each lathe. While it's not a panacea for my back problems, it seems to allow me to turn longer with less discomfort.

—Robert Rosand Bloomsburg, PA

Blunt your tailstock

I keep my tailstock handy when I turn faceplate jobs, but don't like to be jabbed in the elbow with the point of the live center. I made a pine plug center to fit the No. 2 Morse taper in the quill. It looks like this:



When it replaces the pointed center, it prevents dust and chips from entering and my elbow from being punctured.

—Palmer Sharpless, Newtown, PA

Stow it

A fiber barrel partially filled with shavings behind my lathe is a handy place to store green pieces either before or after turning. But what it's really good for is to jam-store the long David Ellsworth hollow-form tools.

—Stan Benedist, Norwich, NY

Custom faceplates

Faceplates from 2 to 4 inches in diameter can be purchased from a variety of sources for \$13 to \$26 or more. But you can make your own faceplates for much less—less than \$5 per faceplate.

With nuts that will fit your headstock, and steel washers the size of the faceplate you wish, head off to your local welder to have them welded together. Don't forget to tell the welder just where you plan to drill the holes in the washer so that you have space where screws can be inserted flush, free of any weld material. Better yet, drill the screw holes (three or four) before you go off to the welder.

I have found the 2- and 3-inch faceplates most useful and have made more of these than of the 3- or 4-inch ones. They work great, especially for turning small diameters.

—John H. Sellers, Carleton Place, ON

Longer hot-melt glue sticks

If you've purchased the 4-inch length of the hot-melt glue sticks, you will recall how often you have to load a new one into the gun. It always seems to happen just after you start a job. A solution, besides discarding the 4-inch sticks and buying 8-inch ones, is to glue the 4-inch sticks together, thus reducing loading times by fifty percent. A spot of hot-melt glue, of course, will do it. Excess glue at the joint should be rubbed off to make a smooth connection before the glue becomes hard.

—Mark Salusbury, Markham, ON

Ring picks

Apropos "Picky picky" on page 7 of your (much enjoyed) June 1994 issue, old picks and scrapers also serve well if you are making an object (cup, baby's rattle, etc.) with a captive ring. But go gently, as the tip of the pick is not very strong.

—Timothy Horner, Saint Louis, MO

Static ancillary lathe functions

Although wood lathes are owned primarily for turning, they are often used for ancillary functions such as boring, sanding, and shaping. These functions are based on the use of attachments to the rotating spindle.

In the static mode, you can take advantage of the reasonably high compressive force that can be generated between the headstock and tailstock to clamp and press-fit parts together. I frequently use my lathe as a clamp, especially when gluing a waste block to a turning blank. The lathe is also convenient for pressing ferrules on tool handles and similar operations. For both purposes, a suitable faceplate is used on the headstock spindle, but the tailstock center is replaced by a specially made "ram." Mine consists of a No. 2 Morse taper section with an extension 3 inches long by $1\frac{1}{2}$ inch in diameter. This should be made of a hardwood and faced with a $1\frac{1}{2}$ -inch washer attached with turners' tape. Keep in mind that excessive force can damage the tailstock threads, depending on the sturdiness of your lathe.

—Isaac Behar, Enterprise, AL

Shopmade vacuum chuck

Vacuum chucks have become the tool to use to finish off the bottom of bowls. This method sure beats using tape to fasten a bowl to a large faceplate, or jigs made especially for the effort, or a jam chuck tailored for each different-size bowl.

I have made a vacuum chuck using an old refrigerator pump and some nylon tubing, closed-cell sponge rubber, clamps, an electrical switch, a shut-off valve, some medium-density fiberboard, and miscellaneous hardware.

I had the union, which connects the tubing with the outboard end of the lathe spindle, fashioned at a local machine shop. It is a piece of alu-

minum with a sealed ball bearing press-fit into it. Press-fit into the inner race of the bearing is a $\frac{3}{8}$ -inch threaded lamp pipe, to which the tubing is clamped. The opposite end of the union is threaded to accept another piece of lamp pipe, which goes through the spindle and then is attached to a 12-inch MDF plate. The plate is faced with $\frac{1}{2}$ -inch-thick sponge rubber, glued on with spray adhesive.

Costs were as follows:

Pump	15.00
Union	15.00
Sealed bearing	7.00
Sponge rubber	4.30
Nylon tubing	2.10
Misc. hardware	3.84
TOTAL	\$47.24

This chuck works beautifully. It is now a snap to attach a bowl and finish the bottom in no time. It requires only 2 to 3 inches of mercury to firmly hold a large bowl.

—Bob Dietz, Arroyo Grande, CA

Freeing stuck chuck

For the first time in sixteen years I got a chuck stuck on the lathe spindle. It was a Precision combination chuck which I had been using to turn some Civil War mini-balls for my son. The only way I know to get something so stuck is to start the lathe with the chuck only partly screwed on. That will spin the threads into the chuck with great force. I am certain I did not do this.

But this is really about how to get the chuck off. The chuck comes with a curved spanner wrench that began to bend around the body when the going got rough. A pipe wrench was called in.

My Conover lathe has what I thought was a very rugged way to lock the spindle. The knockout bar is placed through a hole in the shaft near the pulley and rests on part of the headstock 3 inches below. This resulted in bending the knockout

bar. I got another scrap of steel rod to save the knockout bar, and it bent like it was spaghetti. What I needed was a hard steel rod. I tried a star drill and bent it nearly as easily. This thing was really stuck.

I brought in the principles of physics. Heating the chuck body would expand it while the threads remained relatively cool. No luck. I was afraid to overdo this and heat the bearings. The problem here was the mechanical disadvantage in the steel rod extending 3 inches beyond the shaft before resting on the headstock. I needed closer support.

I cut a $1\frac{1}{4}$ -inch square piece of wood the right length to extend from the base of the headstock to the center of the spindle. Now a steel rod through the spindle in the horizontal plane could rest on the top of the stick, providing no leverage to bend the rod. One last thrust on the wrench freed the stubborn chuck with only a few jaw marks for damage. Now I will make a permanent accessory with a short rod mounted in a hole in the wood to lock the spindle.

Maybe those plastic washers meant to keep this from happening are worthwhile after all!

—Stewart Holt, Marietta, GA;
reprinted from the newsletter of the
Georgia Association of Woodturners

Reusable jam chucks

I have access to a supply of medium-density fiberboard that I use for jam chucks when I turn the bottom of bowls and platters. I cut a disk on the bandsaw and mount it on the screw-center faceplate. I reuse these disks, but I find that the thread cut by the screw center wears out. To beat the game, I now glue a hardwood block to the disk before using it. The threaded hole in the hardwood lasts through many reverse turnings.

—Charles Brownold, Davis, CA

LIGNUM VITAE (WOOD OF LIFE) WAS DISCOVERED by the Portuguese in the 17th century, and it was thought to cure every illness known. Grown in the Caribbean Islands and West Indies, lignum vitae (*Guaiacum* spp.) is the heaviest of all woods, weighing 84 pounds per cubic foot. It was sold by the ounce in Europe until the early 20th century when it was found to have no medicinal effects.

In preparation for the American Civil War, both the North and South were developing steam-powered, ironclad warships. Every time the ships put to sea, there were accounts of violent explosions with shrapnel shredding the engine room, killing the stokers and boilermen. The cause of these explosions baffled everyone. Finally it was discovered that the friction caused by the rotation of the steel propeller shaft super-heated the lignum vitae bushings until they exploded. The bushing had to be kept cool, but with what? Oil was tried, to no avail; tallow didn't do it; and with grease the explosions continued. Yet the solution was there all the time—sea water! Constantly run through the propeller-shaft housing, the sea water cooled the lignum vitae so it did not overheat. Many years later it was discovered that sea water also increased the lubrication properties of lignum vitae. By the mid 1800s lignum vitae was widely used throughout the United States for pulleys, bearings, and rub blocks in hand-, water-, and steam-driven machinery because of its self-lubricating properties. (It makes a good hand-plane sole, too.) Lignum vitae is still used today in propeller shafts of ocean-going vessels, since no adequate substitute has been found.

Lignum vitae is an excellent turning wood and is used to craft items where weight is desired: carving mallets, gavels, and pool-cue handles.
—Paul McClure, Denver, CO
(with Pamela Philpott-Jones)

TURNING PLUS...

Beyond beauty and first impressions

RICK MASTELLI

TURNERS IN THE PHOENIX AREA were treated to a cosmopolitan event last December with the opening of "Turning Plus..." an international juried show at the Arizona State University Art Museum in Tempe. Subtitled "Redefining the Lathe-Turned Object III," this show continues a commitment to woodturning as art that this museum began in 1989 when Edward Jacobson donated his celebrated collection of bowls and lathe-turned objects.

Accompanying the show was a two-day symposium (complete with instant gallery), sponsored by the Arizona Woodturners Association with support from the AAW. It featured nationally recognized local talents, Ray Allen, Todd Hoyer, and Paul Fennell, as well as outlanders David Ellsworth, Stoney Lamar, and Michelle Holzapfel.

Many attendees read the word "Plus" in a technical sense. Thus they saw the use of tools such as die grinders and carving gouges or materials such as metal leaf and aniline dye (all of which was much in evidence in the juried show) as exactly what the organizers had ordered: a varied selection of woodturning amplified by other materials and techniques. But when the turned work—so many rough cylinders of various species (Karen McCoy's *Sinkers and Swimmers*, pictured at right)—was wrapped in mordant-soaked cotton and submerged for some time in a slow-moving river, then hung like sausages above the wrappings, now dyed with the woods' extractives, next to photos and paragraphs that explicated the idea and process of the work, then these same people seemed left behind. I confess, I was among them.

I caught up with most of the other piece in this progressive show, but I

didn't connect with McCoy's piece, despite its being touted by those who embraced it as the first conceptual installation piece in woodturning since the heyday of conceptual and installation art had passed in the early 1970s. It won the "School of Art Award." Its inclusion in this show, it was claimed, marks a breakthrough in the development of woodturning. But I think it was a bad break.

It was a break from the craft in that the turning involved was without distinction and so was the use of wood. In fact, the cotton, the mordant, and even the slow-moving river seemed beside the point. For the point was the pseudo-experimental *process*, as if art (or craft, for that matter) were something you could conduct, record, and present without any initial or felt meaning, as if process by itself could absorb meaning (like color from wood, perhaps?) along the way. But without the photos, without the paragraphs of explanation, this piece was an enigma.

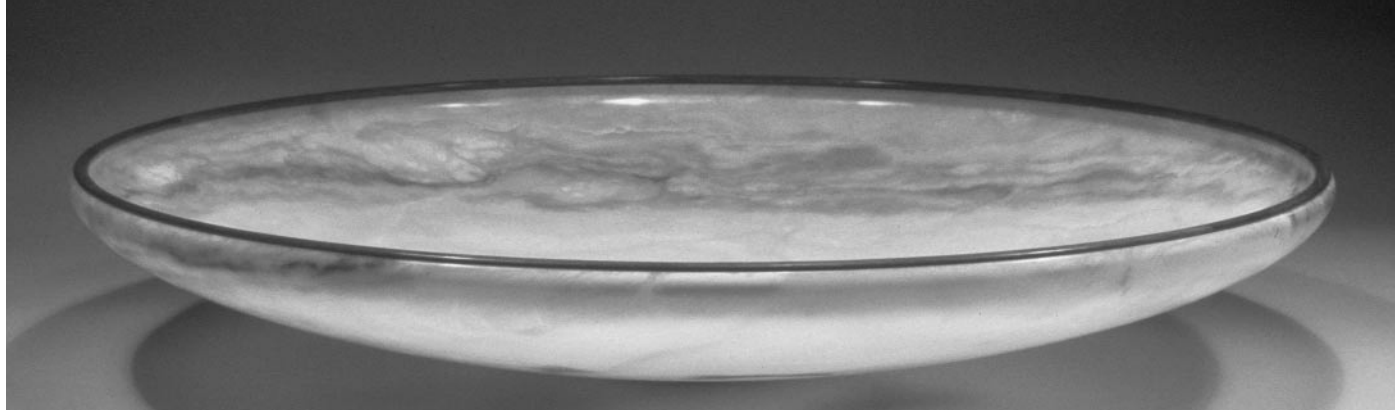
Turning plus or sculpture minus?

Where *does* meaning come from in a work (if it is to be considered art) that is rooted in craft? Most pieces in this show raised this question, for they were not merely beautiful objects secure in a tradition of turned beautiful objects. They were *Turnings Plus*. They played off traditional woodturning—varying materials, stretching techniques, and teasing expectations. The best, to my mind, were those that embodied high craft while carrying a subtle message. Perhaps the subtlest message (and one deserving further examination) is that craft, originally the servant of utility and necessity, could be made to serve no other purpose than pure beauty. (I heard from a couple of speakers during LeCoff's show critique and Ellsworth's and Lamar's instant-gallery critique the notion, as if self-evident, that woodturning is in the business of making beautifully crafted objects. That may be more and more so—it is easy to lose sight



courtesy of Arizona State University

Like sausages, the turned wood innards of Karen McCoy's "Sinkers and Swimmers" hang above the cotton casings they dyed while being submerged in a river.



Luminous and curvaceous: Max Krimmel's 22 $\frac{1}{2}$ "-diameter alabaster bowl with satine-accented rim.

of the fact that woodturning, in practice for thousands of years, has not always been concerned with beauty. The making of a serviceable bowl or a properly sized tenon on a consistently shaped baluster would go far in constituting the foundation of this craft. It is natural that the bowl-maker and the spindle turner would come to include beauty among the ends they aimed to achieve. But consider how many pieces in a show like this seem to make beauty the *sine qua non* of the craft. It turns out that other meanings may thereby be overlooked.) A number of show pieces come to mind—for their sheer beauty nearly eclipses the synergism they strike between woodturning and something else.

Beauty and the point

For luminescence, Max Krimmel's 22 $\frac{1}{2}$ -inch-diameter alabaster bowl (pictured above) outperforms any I have seen in wood, fairly floating in pink-veined translucency. Its form scribes such a long, capacious, supine curve that only a poignantly tight return, the one that forms the rim in this case, could resolve it. To say it is a beautiful piece is to state the obvious. To recognize how, by being beautiful, it transcends ordinary expectations of this material and this process is to begin to understand the meaning of creating beautiful things.

Also beautiful was Paul Fennell's hollow form adorned with variegated gold, green, and rose metal leaf (see photo, right). Fennell has perfected the tall, closed vessel, a sharp shoulder at the top and an accelerating turn at the bottom accent-

ing its otherwise long, full curves. (Fennell showed an even more voluptuous piece in the instant gallery.) The walls, of course, are consistently thin, the result of hollowing work guided by fiber optics, a technique Fennell demonstrated in his symposium rotations. With so little mass, the piece leaves you nothing but its volume and surface to luxuriate in. In fact, you might say it's the point of the piece: that surface can take on a pronounced presence when reduced to minimal mass. It is surface that captivates the eye—rich, shining colors playing in the light and shadow of horizontal striation, like the fine texture of an embroidered silk kimono.

Geoffrey Wilkes vessels (one in the juried show, pictured on the next page, and three in the instant gallery) evoke another exotic culture:

that of the Southwest Indians as manifest in the pottery of the Tewa pueblos. Like the carved and colored "basketry illusions" of Lincoln Seitzman and the segmented turnings of Ray Allen (both of which were also represented in the show), Wilkes' vessels evidence a reverent fidelity to the original forms. But Wilkes pieces go beyond that. Turned from boxelder and bleached to a sepulchral whiteness, the vessels stand as ghosts of the substantial tradition they imitate. The pots look at first like stone; they have the quiet surety of stone. But their luster, figure (muted by the bleaching), heft, and even temperature to the touch are that of wood. The first impression they make of cool, inert, elegance captures your attention, but ultimately the wood—once thriving, now subdued—sends a different



Paul Fennell, left, ponders the variegated surface on his metal-leaf-decorated hollow form of citrus wood.



Standing like a ghost of a substantial tradition, Geoffrey Wilkes' "Storage Jar" (bleached box elder, 12" high).

message. (I was not troubled by the question raised over this and several other pieces in this show: why is it of wood? Woodworkers usually know why they are working wood.) These vessels embody the spirit of the Native American culture they honor, a sacred force to be worked with in harmony. Sure, these pieces are beautiful, but their beauty not central. It serves to connect us with the concept of homage, respect, and appreciation.

Bigger than beautiful

Beautiful objects in a show like this can be misleading. To assume beauty is the point of contemporary woodturning at the same time claiming that the craft is advancing over the threshold of art is to embrace a contradiction. For art has itself moved forward, certainly in contemporary times, by testing and refashioning existing conventions of beauty. Now we find beauty in the work of van Gogh and Picasso, Beethoven and Stravinsky. But contemporary viewers and audiences often did not. If contemporary woodturning is as ripe with art as it is sometimes claimed, I wouldn't think it was the exquisitely beautiful work that makes it so. Rather I would look for the kind of unsettling encounters that hold the possibilities for new understandings. Art, by my definition, is at the vanguard of a culture.

Many pieces in the show stirred the question: Is it art or is it craft? In fact, I learned from its maker, Joe

Van Putten, that one of my favorite pieces, "Number Five" (pictured below), was designed to explore the relative identities of art and craft. Reminiscent of the iconic works of Claes Oldenburg, this gigantic top was yet firmly rooted in the craft of woodturning. Where Oldenburg forced stature on mundane, mass-manufactured items such as clothespins and eggbeaters, this giant top was *crafted*, its beads and coves crisp and clean from a capable gouge, its laminated knotty pine worked and finished appropriately. The top—a toy, a production item, a quick project, an exercise in skew and gouge work, an endlessly variable form that invites colorful decoration, a hand-powered gyroscope that perpetuates the movement that formed it—is here a symbol of much that is fundamental to lathe work. Being big, it grabs your attention (immediately, you're on top of it), and then it plays with your assumptions. You might want to dismiss it as a monstrosity.



Speaking for itself, beyond its first impressiveness, Joe Van Putten's knotty-pine top became a focal point of the discussion of art and craft that Albert LeCoff, second from right, conducted among participants at the symposium.

But it is so well made, it commands your appreciation, the way any well-made object does. In fact, it's hard to avoid appreciating it; it's so imposing. But overwhelming as it is, it's easy to overlook its subtlety.

If it did nothing more than make you imagine what flick of your fingers at the end of its 8-inch-diameter spindle could possibly get all 9 feet of it, all hundred or so pounds of it, to stand up and spin on its own, well, then, it would be doing quite a bit. It would be engaging you, compelling you to participate in its function and its essence, in its craft *and* its art.

I favored this piece, for, just as the beautiful, synergistic vessels, it spoke for itself, surely but quietly, beyond its first impressiveness. There was no photo record or screed accompanying this work to tell how it came to be or how it should be regarded. It is true, its maker was driven by a concept. He spoke in our discussion group of his plan to test the line that may exist between craft and art: use a material associated with craft (wood); use a technique associated with craft (turning); make an object traditionally regarded as craft (a toy top); and then vary one thing—its scale. At what point does it cease to be craft and become art? Van Putten made three of these giant tops, the one in this show being the smallest. His conclusion? Size doesn't matter. Nor, apparently, does the expression of this concept for the piece to work powerfully. Art has a way of asserting itself where it can take form unprepossessed.

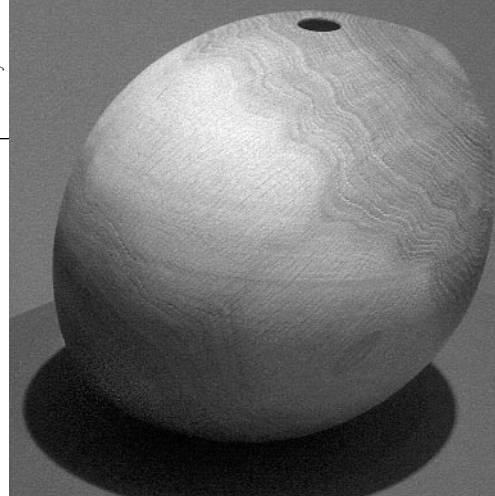
Walk softly...

Yes, the most powerful messages in the show were the most understated. And the most understated piece I found was Ellsworth's "Pot Dancing" (photo, above right). It was easy to pass this one by, its unpolished surface and unaccented form looking like nothing in particular. It did seem

unusually shaped for a turning, not really round, the more you looked at it, yet obviously lathe-formed. Perhaps it had been turned on two sets of axes, one to give it that sense of a circular center, the other to suggest the outside of an ovoid. But there was something more intriguing about this shape, at once natural and unusual. There were the growth rings looking very much the way white oak growth rings look, concentric and complete, just laid over on their side, and then there was the tool striation, clearly horizontal.

Then I caught sight of it, the small black orifice positioned unexpectedly at the top of the piece that was not the top of the form. It could not have been more discreet...or eery. Suddenly I was reminded of the feeling I have often had upon encountering a hornet's nest. First, you see the seemingly amorphous mass of it, which upon closer inspection turns out to be the result of long accretion, each mouthful of mud built on the last. You become fascinated with the form as history, until upon closest inspection you suddenly confront the black mouth out of which hornets come and go. And you realize you are too close; you have underestimated this powerful thing.

So with "Pot Dancing." You see an unassuming oval mass. Then the annular legacy centered at an angle. Then the tool tracks and the center of the turning which is not in the center of the tree nor the center of the form. You can not help but wonder at the processes that produced it: first the growth of the tree on one axis, then the shaping and excavating of the form (a hollow sphere out of green wood) on another; then the drying of the wood (which is the solution to the mysterious shape) that warps the form out of round. A simple maneuver—orienting the axis of the tree neither along nor perpendicular to the axis of the lathe, but diagonal to

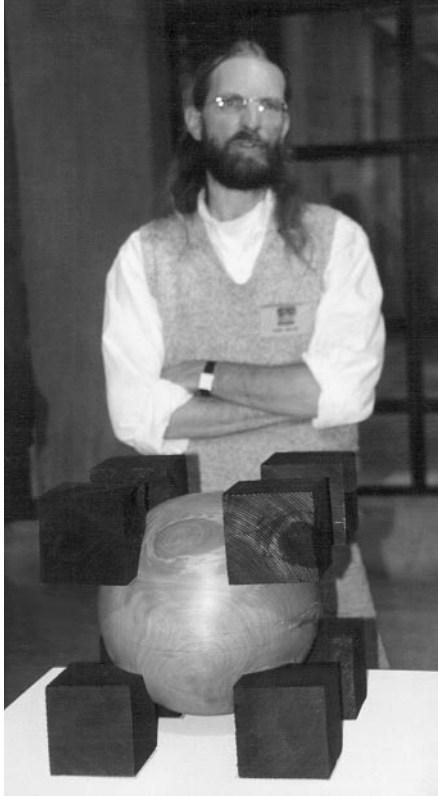


Masterful simplicity: Ellsworth turned a spherical hollow form (9" in diameter) out of green white oak, orienting the wood's axis of growth diagonally. Shrinkage across but not along the grain produced the ovoid shape of "Pot Dancing."

it—produces both a disquieting effect and a quiet statement about the correlation of nature and craft. The piece is masterful in its simplicity; the intrigue with how it was done resolves in the realization that it was as plainly conceived as it was finished.

Your inside is out

Another piece whose "how" led to its "why" was Todd Hoyer's "Untitled, 1994," a sphere cornered by six ink-black cubes, each scored with the concentric arcs of a turning tool. Like all the other work I saw that commanded second and third looks, a first impression does not tell the whole story. What you see first of Hoyer's cubed sphere is a very deliberate construct, not apparently imaginative in that the cubes are positioned equidistant from each other and oriented to align with the same planes that a single cube surrounding the sphere would describe (photo, next page). In other words, the arrangement is so regular it might be an abrogation of the opportunity to find some more interesting sculptural complex. It's true, the more you look at it, the relationship between cubes and sphere starts to play some optical tricks, as if the cubes are in orbit about the sphere, or maybe it's the sphere that's floating in the cubic space. (One viewer observed that it was as if Hoyer had constructed the fittings



Todd Hoyer reflects on the contrasting components he turned (not assembled) from a block of alligator juniper.

of a Plexiglas surround for his central sphere, and then left off the Plexiglas.) If you look closely at the connection between cubes and sphere, it begins to seem that the cubes have emerged from the sphere, only the inside corner of each still buried under the surface.

All this is interesting enough, until it occurs to you that the cubes have not been placed where they are but rather have always been there, for underneath the ink, the cubes and the sphere are actually one piece of wood! Your (or should I say my?) attention immediately shifts from weighing the sense and meaning of this particular arrangement of what seem to be seven pieces of wood to the fascination with *how* he accomplished such a thing from only one. Hoyer's explanation was obvious: "First you turn a cube and then you turn a sphere inside the cube." Yes, that would do it. The ink, of course, would have been applied last.

Now knowing how he did it, I could return to considering why. On the way, the piece had become much more compelling, for the sphere really was suspended in the cubic space, and the cubes really had grown out of the sphere. Metaphor had turned out to be

reality. Hoyer's work had not been to construct these ideas but to reveal them.

Hoyer has a lot to say about the relationship between the dark, rational, masculine (I'll add *yin*) of the cubes and the light, organic, female (*yang*) of the sphere and about their essential unity. I found myself receptive. His subtext deepened my appreciation of the piece, but it was my own discovery, as with all the work I came to favor, that made it valuable to me. (It is the meaning that a work takes on by means of such discoveries, such personal interactions, I believe, that distinguishes a work as a work of art.)

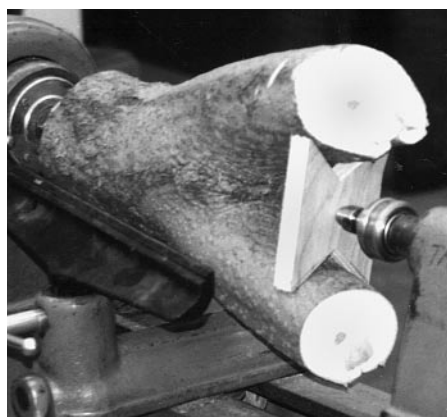
From art to craft

I have not said much about the demonstrations that accompanied the juried show and instant gallery. The connection between the two, between the technical and artistic components of the event, was perhaps less explicit than it might have been. Nevertheless, Michelle Holzapfel's slide presentation of some twenty years of her work in turning and carving was overwhelmingly inspiring. How encouraging it was to see that passionate personal expressiveness can cohere such a rich variety of

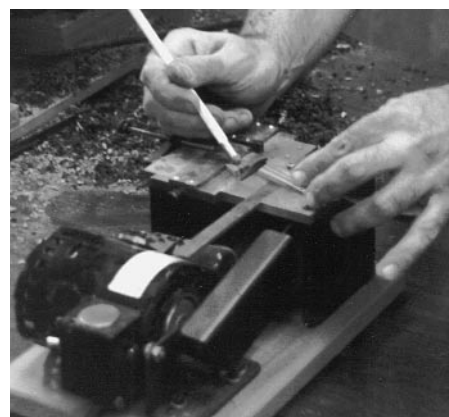
subjects, styles, and techniques. Ray Allen gave a slide presentation, as well organized as his work, of the steps he uses to turn graph-paper sketches into impeccably composed segmented forms. Todd Hoyer evidenced how his thought-provoking work is birthed in a thoughtful sensitivity to his materials and tools. And Stoney Lamar showed what organic shapes can come from approaching the lathe as a rotating vise, working through stock orientations as if through a Rubric cube, but much more interesting.

The event organizers, Heather Lineberry and Tom Eckert at ASU, and Virginia Dotson and Jack Aarsvold with the AWA, deserve a lot of credit for bringing together, for a third time now, the technical and artistic concerns of woodturning. But for many attendees, chips flying in the demo rooms seemed the antidote rather than the application of the art evident in the work on display. It may take a time or two more for the show and the demos really to meld.

Rick Mastelli is editor of American Woodturner. Photos by the author, except where noted.

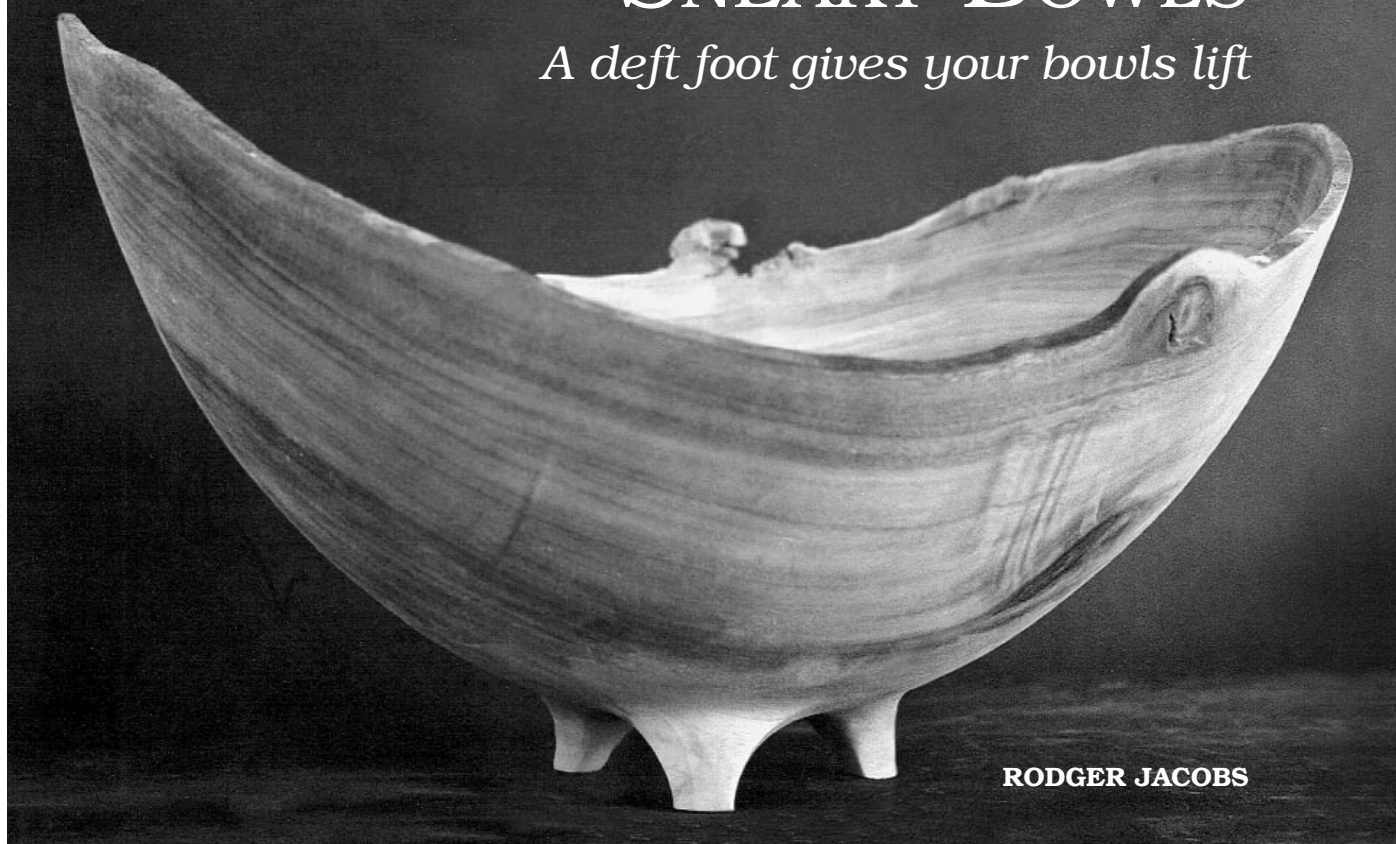


Hoyer demonstrated how he begins turning a crotch into a winged form, left. The plate that receives the tailstock allows him to finely position and shape the outside. The area between the branches is then turned with the blank on a compression chuck. At right, Jeff Kuchlak, a local turner who specializes in segmented bowls, demonstrated his 4-inch tablesaw, ideal for precisely and safely cutting the smallest parts. The saw is available from Preac Tool Co. (516/333-1500).



SNEAKY BOWLS

A deft foot gives your bowls lift



RODGER JACOBS

Although decorative vessels are a small part of what I do, they are the most fun artistically and, financially, the most rewarding. I never get bored making these legged vessels, even though I've turned a couple of hundred of them since 1986.

A lot of factors figured in my making the first Sneaky bowl, but as I think back there is one significant event that caused it all. In 1985, after doing three or four years of local shows and selling my work about town, I made the decision to apply for membership to the Southern Highlands Handicraft Guild. The Guild is a prestigious organization first formed in 1930, and to the present day it is an important part in the total lifestyle of being a maker in the Appalachian highlands. Rude Osolnik is past president of the Guild, and members include John Jordan, Dave Sengel, and current Guild president Stoney Lamar.

Membership is earned. There is a two-part jury system: first slides are judged, and if you pass that part,

then a jury of exhibiting members looks at your objects. I heard many stories of rejection from fellow craftspeople; some had submitted work several times before being accepted.

Having a hard head and a strong heart, I took the plunge and gave it my best shot. I passed the slide jury on the first try and then submitted five of my best pieces to the object jury. A few sleepless nights after the jury met I received a letter of rejection. After swallowing my pride my somewhat obsessive nature surfaced and I called the Guild and asked what was wrong with the work and what I needed to do to bring it up to Guild standards. I was sent a written critique that said the bases of my vessels needed attention.

I took this to heart and really started looking at how the parts of my work related to the whole. The jury was right! There was an artificial stiffness to my bases, and the bowls appeared to sag with visual weight. I went to work on the bases, trying to understand their relationship to the

total vessel. After six months I reapplied to the Guild, submitted five pieces of new work, and was accepted as an exhibiting member.

My first rejection and subsequent professional criticism was a pivotal point in my work. Having others that you respect review your work is both good and bad. Handing control to others, even for limited reasons, involves some risk, but learning how others see your work is important for growth. This rejection opened my eyes, made me slow down, shift gears, and ultimately crest the largest challenge in my career at that time.

The Sneaky series did not appear immediately. My first vessels after that time had a rather formal, defined foot. I kept looking at the bottoms of Stocksdales and Osolnik's bowls. My work was getting better, but it didn't have a sense of identity. I was focused, but I was having trouble putting myself into the work. After assisting Al Stirt for a week at Arrowmont, I started carving bands around the rims of some of my func-



A small (3-inch) faceplate, top, allows flexibility in designing the legs. With the bowl reverse-mounted, above, use a $\frac{3}{8}$ " gouge to hollow the base.

tional bowls. Soon, I was carving bands around the bases as well, to balance the form. One thing led to another and after overworking one piece, I discovered the only way to save it was to carve away some of the foot. I did, and it ended up being supported on three points. I knew I was onto something when I could see the bowl's contour coming through the base and starting to lift.

On the next vessel I deliberately went for legs and—hot damn!—that curve coming through the base took the visual weight up and away. I was really excited about this and started researching historical ceramic vessels with legs. I noted that they seemed more prevalent in primitive cultures where the vessels were used mainly for ceremonial purposes. The most visually successful seemed to be well thought out, the legs an integral part of the piece. I've always been drawn to the raw strength and casual elegance of primitive works of art. These legged vessels were becoming easier and more natural to make.

When the Sneaky series is most successful, the vessel seems to come

alive and “sneak” across the surface it is resting on. Here's how I turn, layout, and carve the legs.

I've made several different types of vessel forms into Sneaky bowls. It doesn't really matter what kind of bowl you start with, but I'm partial to natural-rim bowls. Turning can be done single-stage: one mounting with the rim towards the tailstock, start to finish. Or two-stage: two mountings with the rim toward the headstock first and then toward the tailstock to finish. I place all my natural-rim pieces between centers initially to manipulate and balance the rim and to bring forward and incorporate any naturally occurring features. When the rough form is pleasing, I face off the base, mount a faceplate, and turn single-stage.

I use the smallest diameter faceplate I have, usually 3-inch, because a small circle of screw holes in the base allows me to keep the leg design flexible. When the legs are tucked into a tight area under a vessel and the baseline is right, the bowl stands up on it's toes and appears young and perky. I don't normally use an expanding or contracting chuck in this operation because it would damage the base that the legs are carved from. Most important, I believe the whole act of turning should be kept as simple as possible. The focus should be on the object being created, not the process.

With a faceplate mounted on the bottom of the bowl, define the rim and then the bottom of the base. When these two points are established, turn and refine the shape. Turn a foot a little longer than your mounting screws and let the diameter next to the faceplate be a little larger than the area that sweeps up into the bowl. Try to visualize the curve as it sweeps from the rim down around through the base and up to connect with the rim again. When the legs are carved out, this curve will be crucial in lifting the vi-

sual weight. Imagining this line is difficult at first, but the more pieces you do, the easier it will become. Sometimes it helps to chalk in the line. To bring this line alive, I try to imagine a membrane filled with water—a liquid line with no flats, interruptions, or dead spots. Adjust the final curve of the bowl with shear scrapes. Make sure your base is long enough to eliminate the screw holes inside when you go after the legs.

When the bowl is turned completely, sand it. Refer to my article in *American Woodturner*, March 1989, for my approach to sanding.

Once the bowl is sanded, it is ready for reverse-mounting to turn the foot. I usually use a lightly padded faceplate- or chuck-mounted cylinder to drive the vessel and a live center in the tailstock centered on the foot and cranked in snug to hold the piece between centers. Any way will work, just start at low speed. Go for simplicity. Getting a tool to the foot is sometimes difficult. I usually use a $\frac{3}{8}$ -inch spindle gouge sharpened with the wings back for tight areas. If you have a hard time getting a tool into the foot, it's useful to extend the tailstock ram and move the tailstock body back out of the way by using a No. 2-to-No. 2 Morse taper sleeve.

Turn out the material inside the foot and leave a ring of wood with a wall thickness of about $\frac{1}{4}$ inch at the rim, tapering to twice that thickness or a little more as it flows into the body of the bowl. You want no abrupt changes of line inside the foot and a nice, tight little radius at the inside base of the foot that flows towards the center. Leave the stub from the tailstock, as it is needed to lay out the legs. The depth inside the foot is crucial. If it is too shallow, then when the legs are carved there will be a hump or definite change of surface that will interrupt that liquid sweeping line through the foot. If you are too deep, you'll go through the bottom of the bowl. Try again to

imagine the ring you've turned as a separate design element just resting against the curve that sweeps through the bottom of the bowl. You'll have to turn a little deeper than you think to get it right.

If you don't know exactly where you are during this process, stop immediately, grab your calipers, and find out. Go slow, get it right.

When you think you are done, unmount the piece, check for constant wall thickness through the base, and see how the piece feels. It should feel like it looks: light if it looks light; heavy if it looks heavy. You want no surprises. If you're satisfied, remount and sand inside the ring.

In order to lay out, carve, and blend the legs, the piece needs to be held upside down somehow. I take the reverse-turning fixture from the lathe and clamp it upright in a bench vise on my carving table. This works great on natural-rim bowls. However you hold the vessel, make sure it's secure and at a good working height.

To lay out the feet, use a compass or dividers set for the foot's radius and walk it around the base, dividing the ring into six equal segments. Eliminate every other one, and you'll be left with three equidistant points for the feet of your legs. Be aware of any cracks, splits, or questionable areas, and keep your legs in sound wood. I draw the feet on the top of the ring, first making them a little longer than the ring is wide. There is nothing written in stone about the size of the feet or the thickness of the legs. Please your own eye.

I draw a line down from the foot into the body of the bowl to define the sides of the legs next. Use something round like a small sanding disk to get a nice consistent radius on each side of your three legs. Next, carve off the center stub left from the line center. I use a bent gouge.

With a coping saw, I saw down on the outside of the marked-out legs; these stop-cuts help eliminate any ac-

cidental splitting or torn fibers finding their way into the legs. Saw well to the outside of your lines.

Carving the legs is a pretty straight-forward operation. I use a reciprocating gouge on a flex shaft made by Auto Mach, but a regular shallow-sweep gouge would do fine. Try to make the transition from the sides to the bottom of the bowl blend between the legs. Feel for irregularities with your fingertips. The shallow gouge will allow you to carve very close to the finished surface. If the inside depth is right, everything will fall sweetly into place.

When the carving is done, I switch handpieces on the flex shaft and mount a 2-by-4-inch sanding drum. With 80 grit I blend the legs into the body, aiming for a smooth, continuous surface. The sanding drum fits the radius on the sides of the legs, and, with care, everything can stay nice and crisp. I usually take the drum sanding to 180 grit and then switch to a small foam-backed disk. Final sanding is done by hand, using various shop-made padded cylinders to preserve detail.

To bring life to the wood surface I like a light, natural-looking finish, some sort of penetrating oil. Use whatever finish you like, but try to avoid smothering the wood with a heavy, artificial coating. After finishing, I sign the bowl and do a final buff with 0000 steel wool and wax.

The test for success in a Sneaky bowl is to set the piece at eye level and see if the line that goes down from the rim on one side and sweeps through the legs and up to the rim on the other side is without interruption. Use your eyes and your fingers. If you have it right, the visual weight will disappear and you will probably have to keep an eye on that bowl because it's liable to stand up on its tip-toes and sneak away.

Rodger Jacobs turns and teaches workshops in Newland, NC.



Four steps in creating the legs: Lay out the profiles using a circular pattern; use a coping saw to make stop cuts; remove the waste with a carving gouge; and smooth the area between the legs with a drum sander.

TUNING UP YOUR LATHE

Mass and rigidity make clean cutting easier

DEL STUBBS

MOST LATHES I'VE SEEN, IN BOTH amateur and professional shops, do not function as they could. Yet improving them is simply a matter of understanding and putting into effect the basic principles of lathe operation. The idea is to have no play anywhere, not in the mounting of the stock on the faceplate or between centers, not in the bearings or the shaft, not in the tool-rest base or the tool rest. Then the lathe needs to be mounted on a base so solid that the vibration of an out-of-balance piece or the jarring of an improperly used tool is immediately damped.

A common misconception is that the less serious you are about turning, the less of a lathe you require. The reverse is true. The beginner has enough problems, without a poorly built lathe adding to the burden. A skilled turner can cope with a sloppy lathe and get by, though there's no question vibration slows down the rate at which he can work and makes clean cutting more difficult. Vibration in a beginner's lathe can drive him to quitting. It should be pointed out, though, that in small-diameter turnings the stock has so little mass and leverage against the tool that a very solid lathe is not so necessary. Faceplate turning and large spindle work are the real test of a lathe.

Though the base is perhaps the most neglected part, it is the first priority in tuning up your lathe. For a test, grip the headstock and see if you can move it. It shouldn't budge. If yours is a sheet-metal base, so common on smaller, less expensive lathes, it will probably have to be braced or replaced. Price, though, is no sure determinant of a lathe's quality; I've seen \$2,000 lathes whose mass was not proportioned effectively. One quick, inexpensive and removable way to keep the lathe

fixed to the floor and to damp vibration is to use sand. Contain it in boxes or gunny sacks as close to the headstock as possible. Take care that grit doesn't get loose and into the bearings of the motor or lathe; wrap the sand first in a plastic trash bag.

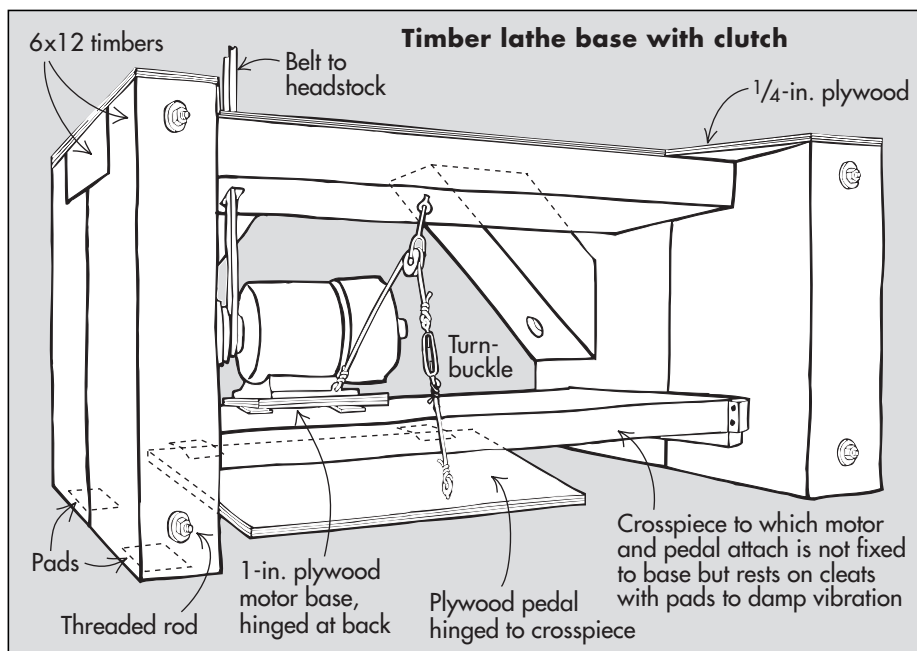
For one of my lathes I bolted together some old 6x12s into a base that is so massive (it weighs about 500 pounds., which I consider a minimum) it must be disassembled to be moved. Timbers damp vibration (without sending it back, as steel may). But putting timbers together rigidly, as they must be, involves a disadvantage: If the base is not sure-footed (if one corner is slightly higher), the whole lathe can rock, causing vibration. The solution here is to wedge and shim carefully until each corner carries the same weight. I also use felt pads to separate the wood from the concrete floor—these stop the lathe's tendency to walk around the shop while an unbalanced piece is turning.

What about bolting the lathe to the floor? If the floor is wood, the whole building may shake as well as the lathe. If the floor is concrete, well, an old millwright told me, "If you bolt a rigid lathe to a solid floor and turn a heavily unbalanced piece, it could tear up your lathe—something's got to give." The alternative is not a lathe that walks around, but a base that absorbs vibration and deadens it. That's what's ideal about sand: Bang a steel bar and it resonates, punch a bag of sand and it's dead. Wood and cast iron have similar advantages. An old cast-iron lathe has so much mass that it will not resonate like a light steel one. If you build out of wood, triangulating the structure will help achieve rigidity. Set the legs out at an angle and cross-brace them.

One addition that's rare on lathes is a foot-operated clutch; I consider one important. A clutch allows you to start the motor under no load, which saves the motor and electricity and makes for quicker starts and stops. A clutch is also a safety feature. Out-of-balance pieces can be started slowly—if a corner hits the tool rest, it just stops, and you have the chance to see if the lathe will shake. A clutch also is a foot release, if ever your hands can't get to the switch.

The most important advantage for me in having a clutch is that by slipping it I can modulate speed readily while cutting—mostly to slow down to help stop chatter in difficult or delicate cuts. I often use speeds about 200 to 300 rpm in getting that final clean-up cut in some faceplate and spindle work, the foot on the clutch constantly adjusting the speed as the cut changes. I also experiment with slower speeds, especially if I'm having trouble with a particular cut. Generally, if the tool isn't cutting right when the stock is turning slowly, it won't cut any better at high speed. Adding a handwheel to the outboard end of the lathe and turning the stock by hand so the tool cuts at about the speed of a pocketknife through a piece of whittling wood is one way to see if you're getting the shear cut you want. With a clutch you can move the stock almost this slowly, and still have both hands on the cutting tool. A clutch is also advantageous in applying finishes.

Probably the simplest clutch is to have some way of lifting the motor and thus lessening the tension on the belt. This method uses only the weight of the motor on a hinged motor mount to provide belt tension. A pulleyed cord, moved by a hinged foot pedal, raises the motor mount and releases tension. There should be



enough travel for the belt to slip, but not so much for the belt to come out of the pulley grooves. I include a small turnbuckle in the cord that raises the motor to allow fine adjustment. With one foot under the plywood pedal and the other pressing it down, I adjust the clutch to release just as the pedal touches my foot. (Thus, my stance is natural.)

Belt quality is very important. An unevenly manufactured or worn belt creates vibration and is the most common lathe malady I've seen. Standard-grade belts often have a thicker part where the joint is, causing impact as it hits each pulley. If you can't remove such a belt to replace it, use chalk (while the lathe is running) to mark this thick spot, then grind it off. For smooth, positive power I've found a notched V-belt best. They're made for systems with small-diameter pulleys, which are difficult for solid belts to grip well without very strong tension. In some cases these will grab even when tension is relaxed; only then should a solid, stiffer belt be used. Old-style flat belts slip best, and an adjustable idler pulley can be used as a clutch with these, or with any belt if the motor is too heavy or inconvenient to lift. Use an idler pulley (common on some garden equipment) on a bolt in a hinged board. Add a spring

to the board, attach the clutch cord, and you have a clutch. If in heavy-duty cutting you find a belt slipping, use a cam to lock the motor down or add weight to the motor mount. If possible mount the motor separately from the lathe, to reduce transferred vibration. If not, include a damping pad between the motor and the lathe.

The secret to making a really functional clutch is to use your imagination. Lathes are so different, each one needs a different solution.

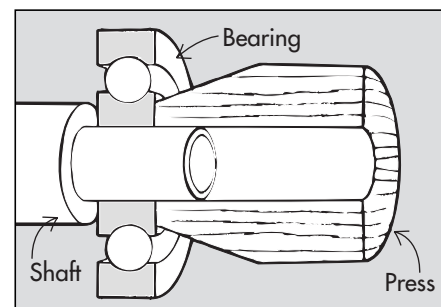
One more point about drive mechanisms: If children enter your shop, be certain that curious fingers can't get near belts or pulleys. A moving belt can cut, and a pulley and belt can remove a finger.

Testing for play in your shaft and bearings can be a lesson in sensitivity. Have the shop completely quiet. Take the belt off the pulley, and grip the shaft. Try to rock it from side to side and in and out. Listen and feel very carefully for any knocking. End play is as much a problem as side play in faceplate work. All end play and some side play are eliminated in spindle work by the pressure of the tailstock. You felt a knock—now what? If it's end play, the problem might be solved by tightening an allen screw, moving a collar, adding a shim, or tightening an outboard faceplate. Side play probably means

shot ball bearings, worn sleeves or Babbitt bearings, or a loose fit between shaft and bearing or between bearing and headstock. If it's a ball-bearing lathe, turn the shaft (belt disconnected) and feel for any catch or roughness. Also give it a spin and, with your ear pressed to the headstock, listen for rumble. If you sense either of these, plan on getting new bearings. In lathes with external grease fittings, play can be temporarily reduced by filling the gaps with a shot of grease; don't overdo it.

If you have to replace the bearings, try first to get an assembly drawing of your headstock from a tool supplier or the manufacturer. Also take care not to apply pressure or impact to any part of a bearing except the inner sleeve. I pound on my bearings with a piece of hardwood drilled out to just fit over the shaft and turned down at one end to just the thickness of the sleeve (see drawing, below). On my Rockwell lathe I replace the bearings every 1,000 to 1,500 hours of lathe time, and this has become a routine operation. But my Babbitt-bearing lathe (circa 1867) just spins quietly year after year.

Shaft size is important in selecting or in building a lathe. Flex in a small, 3/4-inch shaft is significant, especially in faceplate work. I would recommend 1 1/4-inch as a minimum for serious bowl turning. Not that fine bowls can't be turned on a smaller shaft; I'm talking here about ease of cutting quickly and cleanly. I'd not recommend taking a small lathe and



Metal lathe's third incarnation

OTTO REGIER

UNDER A PILE OF LUMBER IN A FARMER'S BARN WAS A FORGOTTEN lathe. Originally it had been a back-geared metal lathe manufactured by the Springfield Foundry Co. Then it was a jerry-built, makeshift wood lathe. Our best guess, mine and my partner, Lloyd Crumb's, is that it was used to make rounded ornamental tops on fence posts. The ways were 2x6 fir, 8 feet long and mounted on well-braced 4x4 oak legs. The original headstock, with some of the gearing removed, was bolted to the ways, giving a 6-inch swing. A 2-inch hollow spindle was supported by two 4-inch-wide, bronze bearings. A 14-inch flat pulley was at the outer end, and a monstrous 4-jaw chuck weighing 70 pounds was on the inner end, threaded 1 $\frac{3}{4}$ x8 and the hole machined for a #4 Morse taper. The 3-foot tool rest mounted on two posts had the convenient feature of wooden cam-type levers, by which it could be tightened in a jiffy. The tailstock was a rough casting—no match for the headstock—so it is dubious that this was a part of the original metal lathe. Furthermore, the tailstock center was a $\frac{5}{8}$ -inch bolt sharpened at one end and held fast by washers and large square nuts, making for a rather wobbly, clearly retrofit feature.

We began working on the headstock, the smaller problem. We discarded the large flat pulley, as it did not run true. We fitted the #4 Morse taper with an adapter so it would accept #2 tools. To hold tools, such as a spur center, chuck, or sanding disk, in the adapter, we inserted a flange in the outer end of the spindle to center a $\frac{3}{8}$ -inch draw rod. For larger work we removed the backplate from the large four-jaw chuck, and fitted it

with a center and four $\frac{1}{2}$ -inch spurs spaced symmetrically. These are removable so the backplate can also be used as a faceplate.

The tailstock did not have any two sides parallel, nor was the existing 1-inch hole centered. Machinist readers will recognize the difficulty this presented. With patience and skill we drilled a 1 $\frac{1}{4}$ -inch hole fairly parallel with the base. We fit this hole with a hollow sleeve (the quill), machined at the inner end to receive a #2 taper, and inside-threaded at the outer end to receive the thrust axle of the handwheel. The top of the quill was slotted to receive a T-handled clamp-bolt threaded through the top of the tailstock. We now had a serviceable tailstock able to receive various fixed or live centers or a drill chuck; and we could drive the quill firmly up against the stock. Our project began to look promising.

What should we do about the woodwork? The 2x6 ways, obviously quite old, were surprisingly straight and sound. We decided to dismantle the wooden parts and re-plane them. Then we reinforced each way by gluing a $\frac{3}{4}$ -inch oak plank on the sides, making beams about 3 $\frac{1}{2}$ inches thick. Along the inner edge of each way, both top and bottom, we rabbetted and fit a $\frac{1}{4}$ -inch-thick brass strip, 1-inch wide, to ensure the smooth movement and reliable positioning of tailstock and tool rest. We reassembled the ways, legs, and braces.

As we hoped to use the lathe for bowl as well as spindle turning, we had to increase the swing. We shaped and recessed two large, solid blocks of oak, one to match the headstock and the other to fit the tailstock. On the bottom a 2x2 rabbet cut on each side left a center tenon to

rebuilding it for a bigger shaft or bearings, as the lathe would still be no more rigid than the rest of it you hadn't souped up. The "weakest link" principle should also be kept in mind in fabricating a lathe.

The mounting of the stock on the lathe is another area that should be checked for play. If it's faceplate turning you're doing, first make sure the faceplate sits securely on the spindle—check for bright spots on the mating surfaces that will indicate only point contact. Next, make sure the mating surfaces between faceplate and wood blank are perfectly

flat and free of particles. Chamfer the holes in the stock into which the screw or screws will be driven, so the screws raise no splinters that will keep the faceplate and blank from meeting flush. Looseness can also be caused by voids sometimes found in plywood glue blocks. After the blank is mounted, grip it and test-pull it in several directions, checking for movement between the work and the faceplate. Solid mounting is critical for smooth cutting.

In spindle work check the spur center to see that all four spurs are sharp and the same length and that

the point extends no more than $\frac{1}{8}$ inch beyond the spurs—if it's too long, it will prevent the spurs from making solid contact. I use a small Dremel grinder to true up the spurs while the lathe is turning. Wear safety glasses and grind no farther than the shortest spur. Then take the center to the bench grinder and get the spurs sharp. Thin spindles will be remarkably less flexible if all four spurs are in solid contact. If you have a ball-bearing center, check it with a spindle in place and replace the center if there's play.

The weakest part of most lathes is

fit snugly between the ways. At one end we ran four 1/2-inch bolts through the ways, through the riser block, and into the base of the headstock. The added height yielded a 14-inch swing. For the tailstock we ran an even longer 3/4-inch bolt through the center of the iron base, through the riser, between the ways, and through a fitted cross-piece under the ways; there a washer and a nut with a crank could handily tighten the tailstock to the ways.

Despite our work on the wood ways, we could not assume that the tailstock would be in alignment with the headstock. In fact, not even the headstock itself was aligned with the ways. We proved and corrected this using a beam of light through the hollow spindle. We fit the inner and outer orifices of the spindle with thin disks, each with a pinhole in the exact centre. Carefully measuring the distance between the light beam shown through these disks and each of the ways indicated the need to loosen the headstock bolts and insert a thin aluminum shim on one side. Similarly, we used a beam of light through pinholed disks to shim the tailstock into alignment.

In its first life, the back-geared lathe had been powered by a line shaft and a flat belt to the 4-step flat pulley. In its second incarnation, the power was via a large pulley on the outer end of the spindle. Due to the large sleeve-bearings and the heavy pulley assembly (an adjunct of the back-gearing), it took a fair amount of power—a 2-hp 220-volt motor—just to rotate the spindle. The motor was mounted on a wood platform hinged

with rings on a 2-inch pipe attached to the headstock frame. The V-belt was thus easy to shift from any position on the (3- to 6-inch) 4-step V-pulley on the motor, to the 4-step flat pulley on the headstock. We decided to stay with this flat pulley. The arrangement worked fine until we tried to turn larger stock: we had to save the lathe from self-destructing by turning it off before it reached full speed. To get a range of lower speeds, we mounted a jackshaft on arms hinged on the same 2-inch pipe on which the motor platform hung. The jackshaft has a 2-inch and a 12-inch V-pulley. The belt from the motor drives the larger pulley; the smaller one drives the flat pulley of the headstock. Since both the motor platform and jackshaft can easily be shifted laterally on the pipe, it is no problem to line

up any combination of motor and headstock pulleys. The lowest speed is now about 96 rpm.

The largest piece we've turned so far is a 12-inch-diameter, 24-inch-tall flower stand which began as an ugly stump on a front lawn, had been unsuccessfully burned out, then cut at ground level to become a blackened eyesore in the woodshed, a challenge to any would-be woodsplitter for many years. Our reincarnated lathe metamorphosed this stump into a satiny conversation piece, complete with flowers. The lathe is indeed living a productive third life.

Otto Regier, a retired social worker, turns in Leamington, ON.



Otto Regier's friend, Lloyd Crumb, with the lathe they rebuilt.

the tool rest and tool-rest base. To test yours hold one end of the tool rest and press down firmly. If it gives, it will give also under a heavy cut, causing dig-in or chatter. If possible, get a heavier model tool rest and base than is standard for your lathe. For years I had to use a lathe whose tool rest wasn't rigid. I adapted by staying away from using the end of the rest and by applying considerable pressure down on it when cutting. It also taught me to take a lighter, more careful cut, an advantage after all. If necessary, you can place a support under the tool-rest wing.

Nicks in a tool rest make smooth travel across the workpiece impossible. They are caused by chatter and other impacts, but also by sharp edges on a skew chisel cutting a groove as it is pushed into the work. Check all turning tools for sharp edges and round them over with a stone. Also file the tool rest smooth, then wax it. Be sure the bearing surfaces between the tool rest, its base and the lathe bed are smooth and that they can be tightened together securely. Use a longer wrench for more leverage, if necessary.

If you understand the principles,

you can make most lightweight lathes a good deal better than they come straight from the manufacturer. I still use a small Rockwell (with timber base) for most of my spindle and faceplate work. If you decide to stick with a sheet-metal base, do a lot of bracing to stop flexing and add weight, at least 100 pounds.

Del Stubbs now builds log homes in Eagle River, WI., and occasionally gives turning workshops. This article is adapted from one he wrote for Fine Woodworking in November, 1980.

CLOSE-TOLERANCE NESTING

Witness-marking with sandpaper

JIM HUME

IN MY ARTICLE "Segmented Urns" (*American Woodturner*, December 1994), I demonstrated the techniques I use in constructing my segmented, turned, and carved vessels. After completing about a dozen of these, I began experimenting with close-tolerance nesting as a means to more completely integrate the carving with the turning. This technique allows portions of one section to overlay another and be sculpted, pierced, textured, or whatever. It affords design freedom not possible with other styles of turning.

The process photos on the facing page cover the steps for nesting the segments in one of the pair of pieces pictured above. First, using the basic glue-up and turning practices as before, I assembled the center section using 9/4 Pacific yew with the grain running horizontal. Between each segment of yew I placed a piece of contrasting black-dyed veneer. The top and bottom sections, or *caps*, are spalted Western maple with the grain running vertical.

The nesting procedure begins after the center section has been turned and sanded following a pattern (Photo 1, facing page) taken from my detailed working drawing. I leave a wall thickness of $\frac{3}{16}$ inch. The simplified diagram on the facing page shows the cross section that I am after. I take an inside pattern from this drawing and use it for the primary turning of the cap (Photo 2). I then take a pattern from the outside of the center section, the portion that will nest into the cap (Photo 3), and I make a complement of it (Photo 4). I follow this exact pattern when re-



Nested urns of Pacific yew and Western maple, 13 $\frac{1}{2}$ " high.

moving material from the area into which the center section will fit (Photo 5), leaving a step for the center section to meet.

I now have a reasonably close fit. However, when I cut away portions of the cap while carving, the entire fit will be exposed and any irregularities between the mating surfaces will be painfully obvious. So for a final fit, I attach a strip of adhesive-backed sandpaper to the area of the center section that will nest into the cap (Photo 6) and make pencil marks on the corresponding inside surface of the cap. With the lathe off and the chuck secured, I insert the center section into the cap and gently rotate it back and forth by hand (Photo 7). The sandpaper will leave witness marks on the pencil lines showing high spots in the cap where material must be removed (Photo 8). I am very careful during this procedure, as any grit between the two pieces will leave scratches on the exposed surface of the center section. For better control I use 80-grit sandpaper instead of my scrapers to finish-fit the inside surface of the caps, often stop-

ping to repeat the procedure in Photo 8, reapplying pencil lines each time. When the sandpaper attached to the center section smears the line from the step to the rim of the cap, the surfaces are perfectly matched.

With this fitting complete, the adhesive sandpaper removed, and the center section resting on the step in the cap, the clearance will be a little much, due to the thickness of the re-

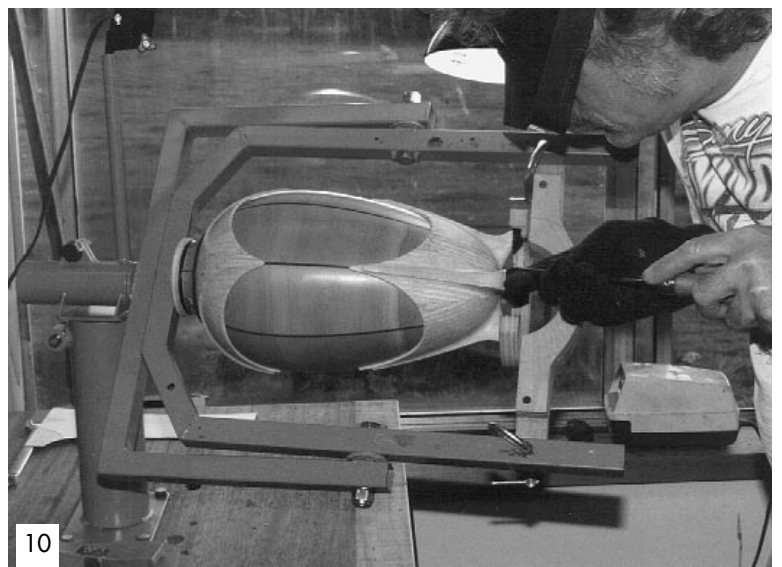
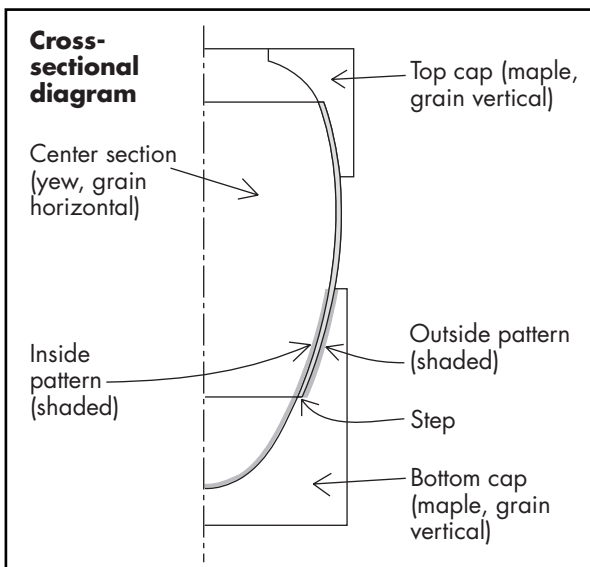
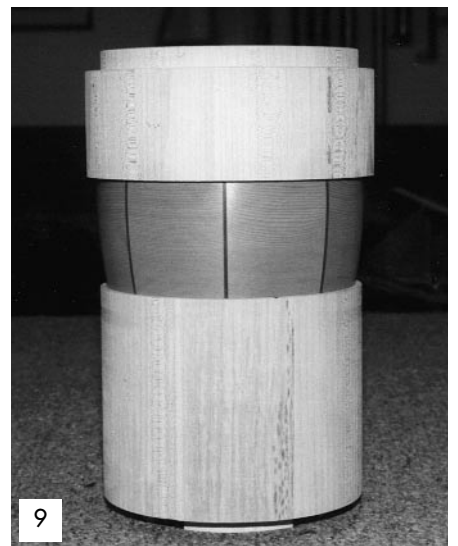
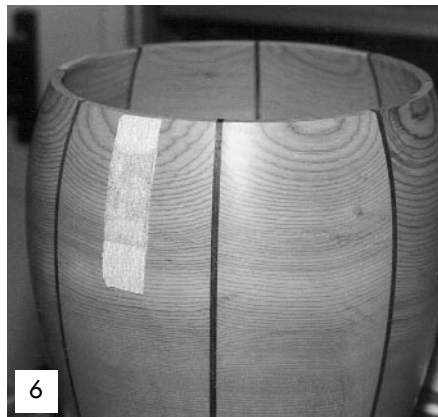
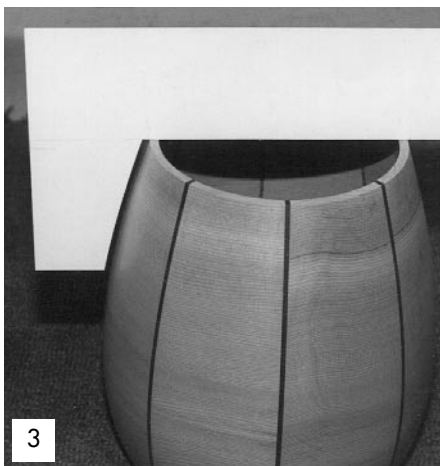
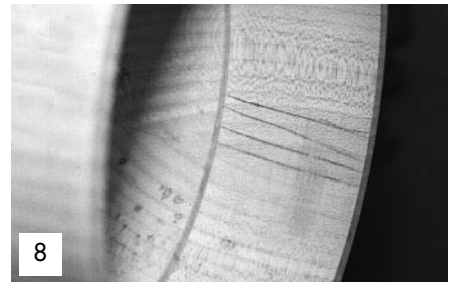
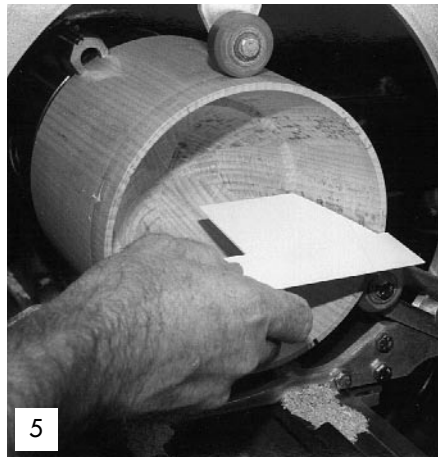
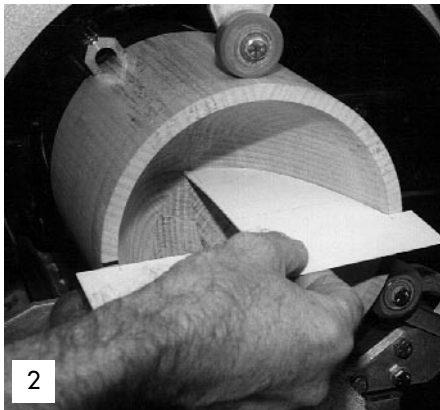
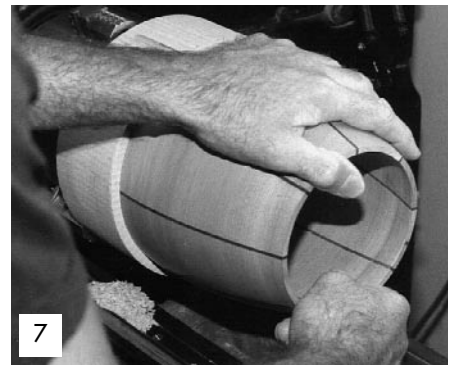
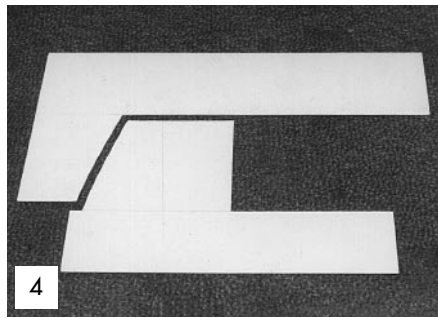
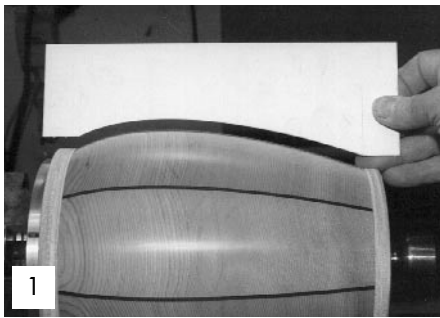
moved paper. To eliminate the excess, I turn the step down ever so slightly, lowering the center section further into the cap until, because of its tapering shape, the unwanted clearance is eliminated.

With the nesting of the center section complete (Photo 9), I can now turn the outside shapes on the top and bottom caps and begin carving. I use the carving fixture I discussed in my last article, since modified to include another axis of rotation—at the top of the post on which it's mounted (Photo 10).

After the carving is complete, I return the center section to the lathe for final sanding. I apply three coats of Flecto Varathane and one coat of Johnson's Paste Wax and assemble the three sections.

This pair of pieces was my second project using this procedure and is in the Challenge V show now touring the country. My first and more recent nested pieces appear on the back cover.

Jim Hume fabricates turnings and race cars in Sedro Wooley, WA.



HERCULEAN TURNING

Hurricane unearths giant challenge

PHILIP C. HULTGREN

The bowl pictured on the facing page began with hurricane Hugo five years ago when a West Indian mahogany tree toppled, lifting up a rather sizeable, flat root ball. I cut the trunk free and carted both away, the root in one piece. I figured I would cut the root into smaller blocks one day. For three years it lay upside down in the very hot Caribbean sun, looking like a an ear on the earth. Who would have thought it would become a bowl, all of one piece.

I constructed the lathe I use by welding together 3-inch angle-iron legs and a 5/8-inch plate-steel top. I mounted a 5-hp motor to the lowest shelf and a truck transmission to the middle shelf (see photo, facing page). The shaft is 2-inch solid steel riding in ball-bearing pillow blocks anchored on top of the 20x20-inch table and centered 4 feet off the floor. The faceplate is 1/2-inch tool steel with a 1/2-inch collar and a keyway attachment rather than a threaded end.

The lathe is lagged to the 2x10 floor joists under my 2x6 flooring and has two 4-inch angle-iron outriggers. My tool rest is not attached but supported by a square pipe creation with a plate-steel platform. The tool-rest itself is 1-inch flatstock tapered at one end and welded to the square pipe at the other.

I made my chisels from round tool stock I ordered from the States. I was astonished when I bent the 3/4-inch tool steel and had to resort to full 1-inch stock. The chisels range in length from more than 6-foot to just under 3-foot.

A local flatbed crane picked up the stump from the field where it had rested and lowered it into my backyard, thirty feet from my shop. Sliding down the steep hillside, the stump came to rest on its side, at about the angle of a plate on a plate

shelf, the underside looking slightly up. I sighted its center and drove a post in at the point. Using a piece of line tied to the post and a can of spray paint at three feet, I approximated a circle. I began to chainsaw off the excess roots. Cutting, however, was difficult. The roots had grown around and engulfed a number of chain-dulling rocks. These rocks (and even half of a brick!) proved to be a nuisance the whole time I was turning the stump.

Once it was somewhat rounded, I rolled, dragged, levered, jacked, hoisted, encouraged, pleaded, and finally wrestled this half-ton of root burl into the back corner of my shop. As it was resting on the lathe that would eventually spin it, I noticed for the first time the large area of rot in the middle of the trunk.

The faceplate of my lathe is 1/2-inch thick steel, 12 inches in diameter, with sixteen 1/2-inch holes around the edge. With the amount of rot where I was planning to fasten the faceplate, I could plan on nine or at most ten lags holding solid wood. Following a few fleeting thoughts of many small bowls, I chiseled out rot, actually through the bottom of the stump in places, to get a good epoxy bond for a 3-inch thick piece of solid mahogany. Once the epoxy cured, I began drilling the holes. To ensure a tight fit with the lags, I made the holes slightly undersized. They *were* tight; I broke one of the 1/2-inch lags. Now, with the faceplate attached (fifteen lags holding very tightly), I hoisted the root and for the first time felt some apprehension.

I have a 1-ton chainfall and an 8-inch steel I-beam located above the lathe. The hoist was not exceeding its capacity, but there was considerable resistance. I felt more apprehension. Nevertheless, the faceplate slid on

easily and the wood rotated, finding the heavy side down.

Looking at the center of the root, close up, a foot or so away, my peripheral vision was filled by the root. Rocking it, testing to see how stable the lathe was, made me nauseous, as if I were seasick. After days of looking at it, rocking it, rotating it, then pushing it harder to see how it would spin, I flipped the switch. I couldn't tell if the belts were slipping so much that the power was having no effect on the speed. It was a very short period of uncertainty. It *was* going faster. And faster. And very fast. Too fast. It was the slowest speed I had, but it was too fast. I had visions of this colossal wheel crashing through my shop wall, bounding down the hill, slowing slightly as it sliced our neighbor's house in half on its way to yet-unrealized carnage and destruction. I slammed the switch off but it kept right on turning hardly missing the 5-hp motor's pull. After a small eternity the spinning became a pendulum swing, and I was finally able to stop it. After several more trial runs, it was time to get out the chisels.

My faceshield and leather gloves proved painfully inadequate as I began to work the outer edge. Even with a 150-rpm speed, at 3 feet out it was very fast. Chips flew off forcefully enough to be propelled out the shop doors and windows 30 feet away and to cut the skin of my arms on the way. And so, I purchased a welder's cape with sleeves, a heavy leather apron, and welder's gloves. I felt like a knight suiting up in armor to do battle with the wooden dragon every time I put my gear on.

In working the shape that I felt appropriate to this root, holes began to appear as the chisels cut through the bottom of the buttress curves.



Hultgren's lathe, upper left, is constructed of 3" angle iron and 5/8" steel plate, and the 2" spindle is powered by a 5-hp motor geared down with a truck transmission. At 150 rpm, left, the speed at the perimeter of the root blank sent chips up to 30' away. The finished piece, above, includes holly inlay and is 5'9" across and 18" deep.

This was disconcerting, as I had not yet been able to reach a large part of the root with the first cut. As it turns out, there is a certain beauty to the combination of solid and vacant areas. But I was particularly devastated when a large area of the outside edge dropped out—largely rotted wood incapable of being glued back in place. Up to that point there was a visible circular edge, obviously a large bowl. Without this chunk of wood, however, the shape was interesting but not a circle and not a bowl. It was then that I began thinking of inlay.

What I wanted was a visual circle—an obvious, clearly defined, visual aide that left no doubt that what one was looking at had no beginning or end, no starting point or conclu-

sion, but was in fact a complete circle. Furthermore, I wanted the visual circle to be in high contrast with the mahogany. Holly fit the need nicely. It steam-bent fairly well and fit into the routed groove I cut around the outer edge of the mahogany. The second, smaller circle required lamination. All that was left was the finishing and the mounting. All that was left...

I sanded the bowl with the lathe off. I worked from 60 grit on my grinder to 220 grit on my random-orbit sander. The finish is sprayed lacquer, sanded between coats and rubbed out with 0000 steel wool after the final coat.

I wanted this piece to be seen from all sides. Mounting, then, had to be vertical, not horizontal. It had

to be freestanding, not wall-mounted (not at 350 pounds). The base was, therefore, constructed to be strong enough to hold the piece firmly in a breeze and plain enough not to distract from it. The 1-inch tool-steel rod I used, painted flat black to be as unobtrusive as possible, bends slightly under the weight of the bowl.

This piece was a delight to do. It presented challenges and thrills I have never experienced before. While it was standing in my shop (and dominating it), it was very easy to get lost in the beauty and the intricacies of the wood. I look forward to my next Herculean saucer, with its giant demands and rewards.

Philip Hultgren lives on St. Croix, USVI.

NORTHWEST SHOW

Turning the lathe onto other worlds

CONNIE MISSISSIPPI

THERE'S MORE GOING ON IN OREGON than clearcutting and fighting for the habitat of the spotted owl. At the Maude Kerns Art Center in Eugene last November, a group show featured five provocative woodturners. Entitled "Northwest Woodturners," it exhibited the work of Christian Burchard, Charles Forster, Bill Moore, Michael Peterson, and Dennis Stewart. Upon entering the gallery, a large windowless room with high ceilings, the viewer was transported into another reality.

Bill Moore's monumental "Basin," (photo below) standing almost four feet tall, was the pivotal piece in the show. Moore has taken a huge

madrone burl cut square and turned it to a shallow golden orange dish. Lengths of curly maple, seemingly hacked from a single log, have been fashioned into a tripod to hold the large basin. The contrast between the rough assemblage and the silken smoothness of the basin's interior creates a strong, compelling tension.

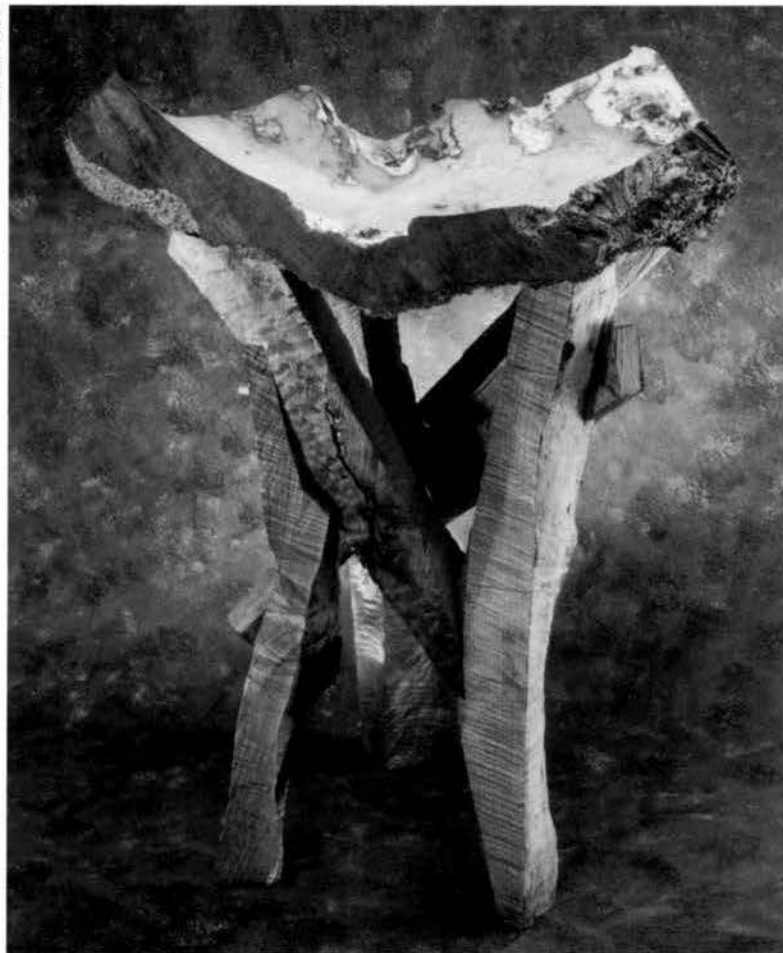
Moore's other pieces, turned and treated with spun bronze overlays (as in his "Nike," below right), are a display of refined craftsmanship and in-depth planning. Moore says of his recent pieces: "The use of rotational metal spinning in copper or brass combined with turned wood forms has greatly expanded my palette of

surface texture and color....I am trying to create vessels which go beyond function, that mine the fertile ground of the metaphorical and historical content found in the vessel form."

Also mining metaphor, Christian Burchard's "Sacred Boat" looks as though it were about to embark on the River Stix. A double-tapered cylinder turned green and allowed to warp and seemingly tear itself apart as it dried, it recalls dugout canoes or Viking ships. The boat is suspended, as if in dry dock, from an elaborate scaffold, making mysterious the purpose and ancestry of the vessel.

Another boat evocation by Bur-

Harold Wood



Harold Wood

Left, William Moore's "Basin," of madrone burl and maple, centered the show and stands 43" tall. Moore's graceful "Nike," above, is spun bronze over rhododendron burl, 15" tall.

chard was "Up from the South" (pictured below), three shapes similar to "Sacred Boat," each poised on the apex of a fingerlike base. The bases are black, solid forms with a routed line following the contours of each. Burchard describes his process as "excavations of his unconscious," a statement which validates the archetypal musings his work inspires.

"Untitled Mysterious Pod Study #1 (photo right) and #2" were two tall assemblages by Charles Forster that connote a surreal landscape. Forster used gold paint to shift the focus away from technique and the innate attributes of wood, and towards concept and intention. The pieces were an attempt to disclose the spiritual impulse which directs the artistic process, and Forster suc-

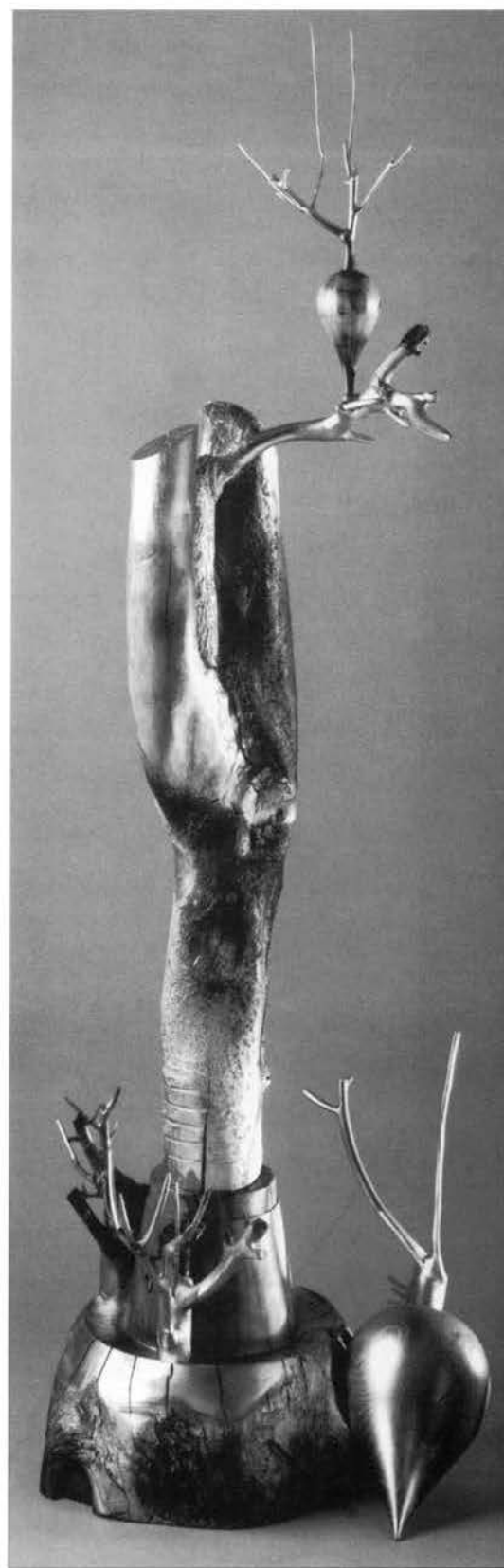
ceeds in this. Combining pieces of apple, holly, locust, walnut, and plum (some disguised, some enhanced, and some in their original branch form), the work impresses on the viewer how versatile can be the message from turned, checked, unaltered, and painted wood. Skillfully using branches still attached to a limb or adding them to a turned gilded pod form, Forster has put together a haunting landscape. I imagined myself walking in a forest full of these splendid, other-worldly forms.

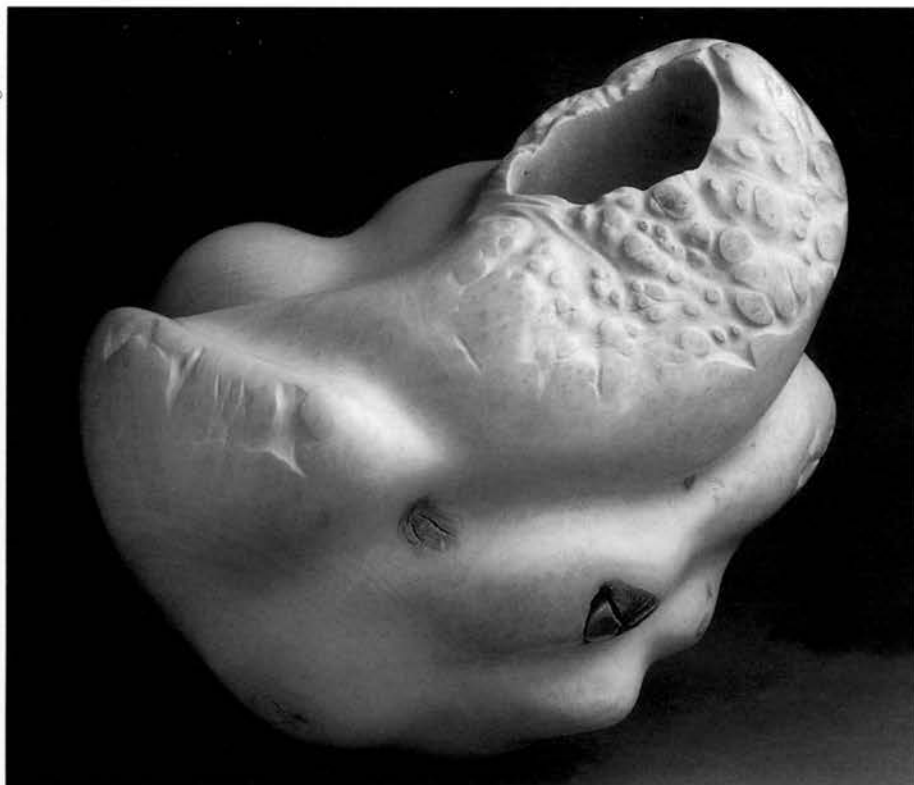
In "Coastal Vessel," "Skagit Vessel," and "Arctic Dancer" Michael Peterson has enhanced the natural characteristics of madrone burl by sandblasting, bleaching, grinding and hand-carving. Again, landscape is evoked. Perhaps in Forster's forest

Bob Jaffe



Above, Christian Burchard's "Up from the South" places turned fragments on pedestals and orients them toward the metaphorical. Arriving at the surreal, Charles Forster's "Untitled Mysterious Pod Study #1," right, is made of apple, holly, locust, walnut, and gold paint, and stands 78" tall.





Top, Michael Peterson's, "Arctic Dancer," looking as if formed in deep space, is made of bleached madrone burl and stands 9" tall. Above, Dennis Stewart's vessels of found materials, including "Fish Skin Goblet," center, 5" high.

one would stumble upon Peterson's "Arctic Dancer" (pictured at top) and think it had arrived with Halley's Comet via the Solar Wind. What is so appealing for me is how Peterson's work allows us inside his head, into his thoughts and his dreams. What he won't put into words, he tells us with his eyes and his hands.

After rowing down the Stix in Burchard's vessels, freshening up in

Moore's "Basin," walking through Forster's surreal landscape, and stumbling upon Peterson's magical objects, we by now might welcome a drink from Dennis Stewart's "Fish Skin Goblet" or a meal from his "Danish Squash Bowl with Pink Ivory Egg." Stewart's interest in found objects grows out of activities other than turning. Fishing for carp with a bow and arrow, Stewart

would take the carp home to use as bait for catching crayfish. The crayfish would eat everything except the bones of the carp, and Stewart began experimenting with these. It wasn't long before he began using the skin as well, forming it around a turned base and saturating it with lacquer. Thus he arrived at "Fish Skin Goblet" (pictured below left).

Always playing with scale, Stewart works on 20-foot carved wood sculptures as well as pieces no larger than $\frac{1}{4}$ inch in diameter. Recently, because of economic issues as well as a desire to make the pieces more precious and personal, he has been working smaller, where the market is broader. Fascinated with primitive cultures, he has concocted a culture of his own, using a conglomeration of ideas to create his own ceremonial objects and artifacts.

Rich in imagery and striving for new levels of expression using the lathe, this show demonstrated the diversity and excellence of the work being done in the Northwest. Regional shows are important for our field. More shows like this are needed. They fulfill a vital role in documenting and promoting the art as well as educating and enlightening the public.

The art center that mounted this show was named after its founder, Maude Kerns, who was herself an Oregon artist of some note. She headed the Art Education Department of the University of Oregon for twenty-six years and established the Maude Kerns Endowed Chair in Asian Art History at the university. The Maude Kerns Art Center is a non-profit community facility that holds exhibitions, also providing adult and children's education to hundreds of people throughout the year.

Connie Mississippi turns sculptural forms in Topanga, CA.

BALUSTERS OF YESTERYEAR

Treasures of a hundred-year-old catalog

WILLIAM L. STEPHENSON

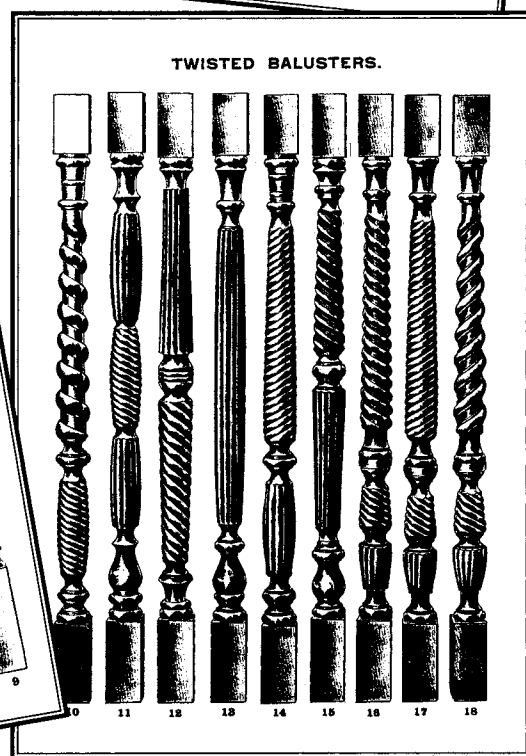
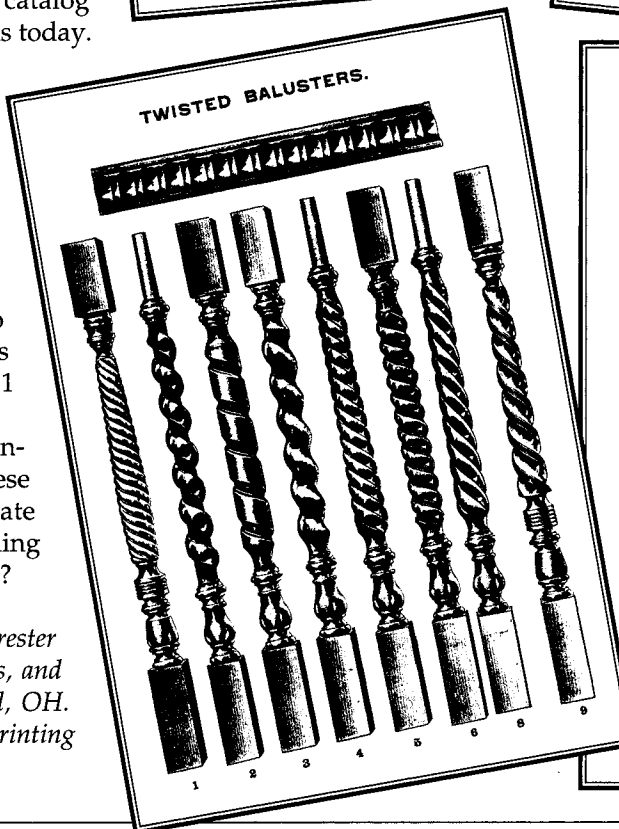
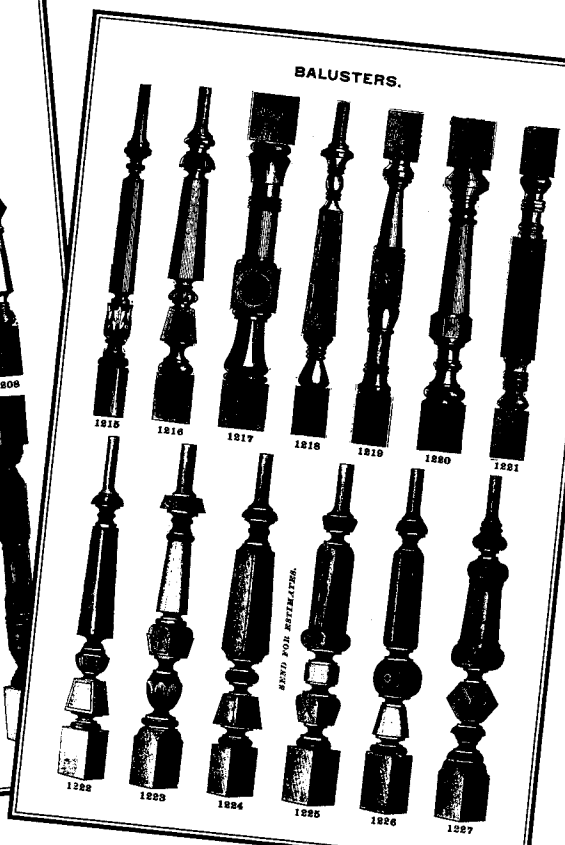
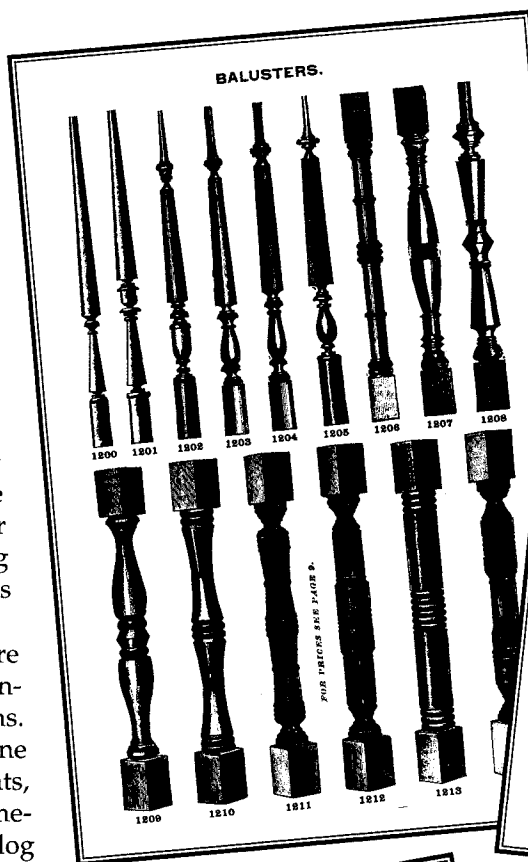
IN 1893, THE BLUMER & KUHN STAIR Co. of St. Louis, Mo., had recently completed an expansion of their facilities, installing the latest and "most approved" machinery and employing "only the best" competent and skilled workmen. With "great pleasure" they presented to the trade a copy of their new catalog together with designs for their work. At least one copy of their catalog has survived, having retrieved it myself from an attic that was being cleared out prior to the sale of the property. Reproduced here are four pages from the catalog, illustrating these elegant and eloquent balusters of yesteryear.

All of the stair balusters were turned 2 ft. 4 in. and 2 ft. 8 in. long, unless custom-ordered in other lengths. Most designs could be ordered in one of five sizes in quarter-inch increments, typically from 1½- to 2½-inch diameters. The prices listed in the catalog would not buy the basic materials today.

Prices ranged from 9 cents for a small oak or ash baluster, No. 1200 or 1201 (11 cents in walnut or cherry), to 35 cents for a large oak or ash octagon baluster, No. 1205 (48 cents in walnut or cherry). Design Nos. 1215 to 1227 required a quotation. Customers were also encouraged to write for prices for the twisted balusters, Nos. 1 through 18.

The forms and the craftsmanship are inspiring; recreating these turnings would be a consummate challenge. Is there really anything new under the woodturning sun?

Bill Stephenson is a professional forester and woodturner who turns, teaches, and writes from his studio in Loveland, OH. He is exploring the possibility of reprinting the Blume and Kuhn catalog.



FIFTH ANNUAL FUND-RAISING FOR THE DIRECTORY

There are some very nice items in this year's auction. If you wish to participate, please follow these instructions:

Identify the item you wish to bid on by number and name of the item. Get your bid to the auctioneer by phone or by mail before April 15, 1995. Do not send money at this time. The winning bidder will be notified by May 5, 1995. The winning bidder will then mail a check to the auctioneer. The donor will be notified of payment and will ship the item(s) to the winning bidder. The winning bidder will reimburse the donor for any shipping costs upon receipt of the item(s).

All mailed bids must be received by April 15, 1995. Telephone bids will be accepted until 9:00 PM MST on April 15. In the event of tie bids, the earliest postmark or phone call will win.

Mail your bids to:

Stephen R. Garavatti, Auctioneer
6833 Pine View Circle
Salt Lake City, UT 84121

Or phone bids to: (801) 943-4273

Let's make this a successful auction with some generous bidding!

1. Moradillo, 3" x 3" x 30" (dry), Alan Lacer, Norman, OK.

2. Persimmon log, 8" diameter x 8" length (cut 6 months), Alan Lacer, Norman, OK.

3. Plantation teak, 7 1/2" x 5" x 12", No checks, figured with dark lines, 5 lbs., Charles Alvis, Nashville, TN.

4. West coast bigleaf maple burl, basketball-size, fresh-cut/green, 20-25 lbs., Nick Cook, Atlanta, GA.

5. West coast bigleaf maple burl, basketball-size, fresh-cut/green, 20-25 lbs., Clay Johnson, Choice Wood Distributing, Louisville, KY.

6. Spalted holly, 6" dia. x 20" long, 3 years dry, Palmer Sharpless, Newtown, Pa.

7. Fancy walnut, 7" x 7" x 2 1/2" thick, Mary Redig, Shoreview, MN.

8. Apple, 9 1/2" x 9 1/2" x 2 1/2" thick, Mary Redig, Shoreview, MN.

Items 9-15 were donated by Michael Zartun, Island Park, NY. All pieces air-dried indoors in an unheated garage.

9. European mountain ash, 3" x 3" x 10", spalted, no defects, air-dried since 8/93, 2 lbs.

10. Black cherry, 2" x 2" x 12", no defects, air-dried since 2/93, 1 1/2 lb.

11. Maple, 2 1/2" x 2 1/2" x 13", air-dried since 5/93, no defects, 2 1/4 lbs.

12. European mountain ash, 2" x 8 1/2" x 8", bark-to-bark plank, heavily spalted, some checking, 3 lbs.

13. Apple half-log with bark, 7" dia. x 3" thick, air-dried since 5/93, minor checks one end.

14. Soft maple half-log with bark, 5" dia. x 2 1/2" thick, no defects, air-dried since 5/89, 1 1/2 lbs.

15. Hickory, half-log with bark, 5" dia. x 3" thick, air-dried since 10/91, 2 1/2 lbs.

BOOK REVIEW

Turning Lathes by James Lukin. Reprint of the 1894 edition; includes the 1896 Britannia Company Catalog. *The Astragal Press, 5 Cold Hill Road, Ste. 12, Mendham, NJ 07495. Paperback, 432 pp., \$24.95.*

TURNING LATHES RECEIVED HIGH PRAISE from the practical press when it first came out in 1894, and rightly so: it is a sprightly and lucid book.

The scope of the work is broad by today's standards, for the Victorians seem to have made little distinction between turning wood, ivory, or metal. Even so, the lathes described and shown in precise line engravings are all treadle-powered. They range from the simplest spindle machine to complex screw-cutting

lathes and contraptions for ornamental turning. Unusually for a work of this era, the engravings include not only tools and equipment but also some step-by-step procedures.

Here is Lukin on getting started: "The gouge is now to be used thus: grasp the handle firmly with the right hand, palm upwards, and lay it on the rest with its hollow side up, and the whole tool not horizontal but inclined somewhat by lowering its handle. The blade is to be grasped by the left hand with knuckles upwards, and very near the rest, upon which it can thus be held down tightly, while at the same time it is shifted along the rest as the work proceeds. And here will the tyro's

first difficulty be met with.

"The wood as it revolves will strike the gouge, and cause it to jump about on the rest, and, when trying to prevent this, he will forget about the treadle, and the lathe will stop or run backwards. But it is a case of 'Never say die!' Keep cool. Do not push the gouge too forward, and presently you will get the knack requisite..."

By the time he is done, Lukin gives advice on buying a lathe, on chasing threads in metal, on metal-spinning, and on learning the basics of ornamental turning. He closes with "a few handy receipts and wrinkles," mostly about finishing with "hardwood lacker" or French

AAW AUCTION BY MAIL

Items 16 through 20 were donated by Weston Thorsen, Brookings, OR. All pieces have been stored in a shed for at least two years, trimmed off all waste and are 95–98 percent useable.

16. Myrtlewood, large single block, 8" x 8" x 18", tight grain, some wave, 40 lbs.
17. Myrtlewood, three slabs approximately 1 1/2" x 7" x 16", multi-color grain, 17 lbs.
18. Myrtlewood, two pieces, 4" x 8" x 13" and 4" x 6" x 16", lace grain, multi-color, 24 lbs.
19. Myrtlewood, two pieces, 4" x 8" x 18" and 4 1/2" x 4 1/2" x 18", nice grain, 30 lbs.
20. Myrtlewood, two pieces at 2" x 8" x 18" and one piece at 2" x 6 1/2" x 18", multi-grain and color, 23 lbs.
21. Soapstone (talc), 2" slab will make a 6" dia. turning. Light

green/white, 8 lbs, Bud and Bob Pearson, Pearson Brothers, Bozeman, MT.

22. American elm, air-dried, chain sawed, 12" square x 3 1/4" thick, Rodney Swain, Darien, CT.
23. Chinese (or Siberian) elm, air-dried, 10" dia. x 4 1/4", the two sides parallel to the grain cut at 45° with a bottom width of 6", Robert Swain, Darien, CT.
24. *Fine Woodworking* magazine, issues 1–4 (Winter 1975 to Fall 1976). Includes articles on checkered bowls, split turnings, ornamental turnings, and green bowls. Collector's items! Stephen R. Garavatti, S.L.C., UT.
25. *Turning Projects* by Richard Rafan, autographed by the author, Stephen R. Garavatti, S.L.C., UT.
26. Craft Supplies USA gift certificate: \$100 for anything in the catalog, Darrell Nish, Provo, UT.

Items 27 through 30 were donated by Mitch Talcove, Tropical Exotic Hardwoods of Latin America, Carlsbad, CA.

27. Cocobolo log, dead, no sapwood. 1/2" deep split running down the side, 7" diameter x 37" long, 67 lbs.
28. Koa square, semi-green, one small split at the side of one end, nice figure and color, 5 1/2" x 6" x 20", 19 lbs.
29. Bocote crotch, one small split at end, dried for three years, 5 1/2" x 8 1/2" x 10", 16 lbs.
30. Mexican kingwood, squared log, some splits, 7 1/2" x 8" x 12", 33 lbs.
31. Eleven woodworking books and videos, various titles, all like new, total original prices exceed \$200, Rick Mastelli, Montpelier, VT.

Many thanks to our donors. Some of your auction proceeds may be tax-deductible. See your accountant.

BOOK REVIEW

polish, "a solution of one or more gums, of which shellac is the chief, in spirits of wine....Lightness of hand is also necessary and quickness, but it is all a matter of practice, and if the result is not very tip-top as a performance it will very likely turn out presentable." Indeed.

The second half of the book is a reprint of the 1896 Britannia Company catalog of engineer's tools, 190 pages of engravings of lathes and every other kind of machinery for working wood and metal. These are both treadle machines and line-shaft machines, powered by "petroleum-oil engines," which the catalog includes. Back then, Britannia would sell you their very fine "improved

foot lathe No. 5," a heavy-duty machine with a four-foot bed, for twelve pounds sterling, a "No. 10 cheap wood-turning lathe" for four pounds 10 shillings, or "the Lukin lathe for ornamental turning" with all accessories for about fifty pounds—that's maybe \$80 today.

The reprint publisher, The Astragal Press, has taken pains to make a clean edition, although the decision to append the Britannia catalog strikes me as quirky, since it's only partly relevant to turners and would have stood well enough on its own.

Unhappily, Astragal did not include a history of the original works. This shortcoming, typical among reprinters, is mighty annoying, be-

cause it casts us adrift without context. We don't learn who these books originally were published for, how wide their audience was, how many editions and revisions they went through, nor when they finally went out of print. Lukin himself writes with such evident personality that I would like to know his story as well. It's no surprise when a mass-market reprinter like Dover doesn't bother about historical context. But Astragal, because it specializes in histories of tools and trades, should do better.

—John Kelsey

John Kelsey, former editor of *Fine Woodworking*, now works with *Guild of Master Craftsmen Publications* in England.

HOW TO HAVE MORE FUN...LEGALLY

WOODTURNING CAN BE EXTREMELY REWARDING or totally frustrating. I can not make you a better turner with this short article, but perhaps I can steer you along a path that is more likely to be successful. I have been turning for eight years and teaching much of that time. Nothing can take the place of time and experience. In five, ten, and twenty years from now I plan to be a better, and smarter, teacher and turner, but I believe I will still tell beginners these same things.

The brightest thing to do first is something you are already doing. You are reading the AAW journal. Here you will find plenty of things you might begin producing right now—in your mind's eye. This is where it starts. Equipment is secondary. You must have a picture of yourself surrounded by objects that you have turned. The journal gives you the stuff on which such dreams are made, as well as instant access to the best turning minds. Avail yourself. Chances are you found out about the AAW through a local chapter. Ask questions at chapter meetings, especially if you see an object that you would like to try. Find out from the source what you need to know.

Watch Richard Raffan hollow a 6-inch bowl in six smooth passes, and you could swear that the material just jumped out of the way of his gouge. "All I want to do is make a bowl!" I hear my high school kids groan. How hard can it be? Instant gratification makes turning wood so attractive. Compared with cabinetry, which often requires weeks to finish a project, turning is instant. Unfortunately, we tend to underestimate the experience that makes it so. The hardest lesson I have to teach is to get students to practice the simple cuts, with gouge, skew, parting tool—mastery through repetition. Make rows of beads, mow them

down, and do it again, and again, until there is no more wood. Reg Sherwin says; "It's not repetitive turning, it's repetitive learning." You are teaching your body. The object is to assimilate the movements so completely that you do not have to think about them. Practice and repetition are key. Later, when you don't need to think about a hundred details, you will be able to focus on design.

The wood you should be using is located all around you, and the price zero. It is in your firewood pile or your neighbor's and usually free for the asking. There is nothing wrong with bought wood. Most of my turning stock today is bought material. But the beginner doesn't need the price of ruining stock added to his or her concerns. If you need to think about lathe speeds, hand position, tool-rest height, and a hundred other details, you are not ready to turn objects. Your first project should be five barrels of chips. Practice on free stock. When the gouge catches and your first bubinga bowl is now your first bubinga plate, you will understand the difference.

Many people spend thousands of dollars for home video equipment, golf clubs, or a computer, yet balk at the price of a decent lathe. Not many of those people can earn the price of their camcorders or golf clubs by learning how to use them. You don't have to be a particularly good turner to make a lathe pay for itself. You shouldn't expect to make \$25 an hour on it, but in a year or two your capital equipment investment can be paid. Turn spinning tops, bottle stoppers, honey dippers, replacement porch spindles, whatever. Don't forget to mark down \$50 to \$100 for each bowl you give away as a gift. Turning is also good for your mental health and can reduce life's stresses. How much is that worth to you?

But before plunking down \$1,500

to \$4,000 to equip yourself, consider what turning will likely turn you into. Unlike other basic woodworking machines, lathes are sneakily complex machines to operate. Lathes are really hand tools in machine-tool guise. They provide spin and a place to rest tools; you provide everything else. Not everyone can match the demands of a tool so full of potential, not without some support. There are some turners who learned with a book in one hand and a chisel in the other, and after many failures have mastered what to do for each particular challenge. These turners are in the minority. There are all sorts of pitfalls. Tools, for instance, must be sharp, really sharp, and maintained so. Grinding geometry ranges from simple to incredibly complex. And tools are not sent out to the local grinder when dull. The results can be shown in a book and the procedures on tape, but most of us (me included) need to be shown how to do the dance and told why by someone who we can connect with.

I highly recommend reading about woodturning. Books by Child, Pain, Raffan, Nish, and Sherwin all provide valuable insight. But they will not, by themselves, teach you how to turn or sharpen or recognize the right tools for you. You will use the information in your own way when you are ready for it. Refer back to it regularly.

But there is no substitute for personal connections. Turners meet in other turners' shops all over the country. There is a tremendous volume of information that needs to be understood, as well as practiced, to turn well. If free help is not available in your area, consider private woodturning instruction. Consider it an investment, not a cost.

And don't forget...rub the bevel!

—Mark G. Krick, Doylestown, PA,
with Dave Hardy, Sellersville, PA

PHOTOS FROM THE MAILBAG



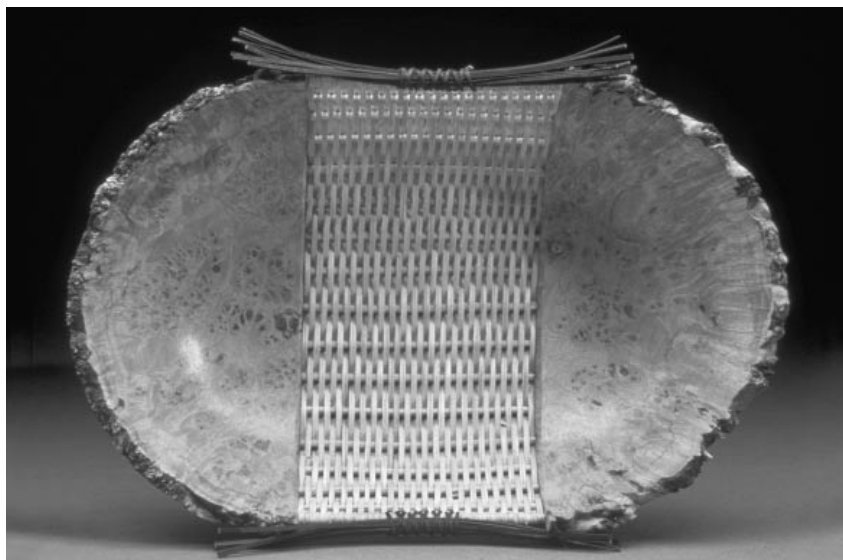
These photos show a 7" dia. "Reversible Hollow Form" that I had in the Instant Gallery at the Osolnik Conference. Open on both top and bottom, it has 1,154 pieces of zircote and birch.

—Gary Johnson, Bridgeton, MO



Here's an 8" wide teapot turned from spalted hackberry.

—David Ramsey, Des Moines, IA



This was a first collaboration between basketmaker Darryl Arawjo of Bushkill, PA, and myself. It is approximately 12" wide and 6" tall.

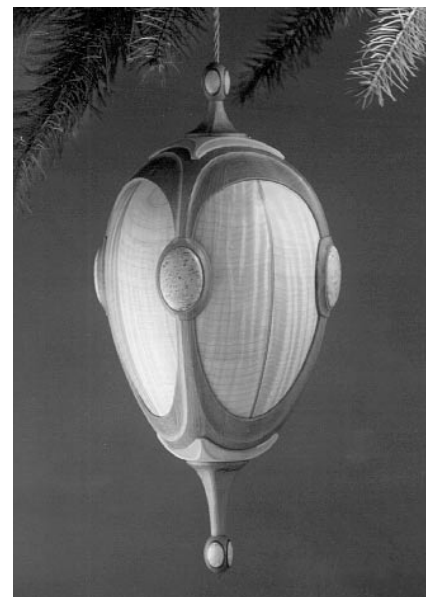
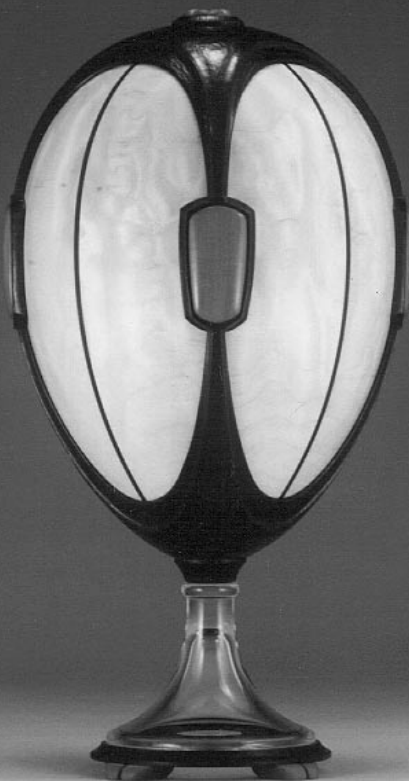
—Bob Rosand, Bloomsburg, PA



My background is in the arts—glass and clay sculpture. This piece is of spalted wood (I don't know the species) with honey locust thorns and legs of brass.

—James Tracy, Fridley, MN

Nested Segments



Once you've made segmented, turned, and carved urns that surpass the Neo-Classical designs of Sheraton and Hepplewhite, what next? Jim Hume, of Sedro Woolley, Wash., took on the challenge of nesting the segments. His first exploration was the pair of Grecian pitchers at top and detailed at center, in white oak, black walnut, and quilted maple. The lower ends of the handles slide freely behind the carved flowers to allow for any movement between the cross-grained sections. The next step, in the 14-inch-high ornament pictured at right, finds the fingers of the top and bottom caps sliding behind a medallion that is doweled and glued to the center section. This piece of bleached fiddleback maple, Pacific yew, and holly is in the Christmas Tree Ornament collection of the White House. The 12-inch high egg, left, of bleached quilted maple, ebony, pink ivorywood and hand-turned acrylic, is Hume's most recent piece. For more on his nesting procedures, see the article beginning on page 28.