Historic Butternut Tree Project • Sharpening Jig Safety • Shaving Brushes

American Woodturner

The Journal of the American Association of Woodturners

Upgrade Your Lathe

William Moore Profile

Musical Tappers

The Spiral

Winter 2009 Vol. 24, No. 4
woodturner.org
$7.50

Women in Wood

"This exhibit is an integral element in Arrowmont School of Arts and Crafts' exhibitions programming," Karen Green, Arrowmont's gallery coordinator, comments. "The aim is to present artworks that feature women artists working in wood and their contributions to wood media." The exhibit is on display in the Sandra J. Blain Gallery (Arrowmont, Gatlinburg, TN) from October 16—January 2 and was jointly facilitated by AAW's WOOD (Woodturned Objects On Display) exhibitions committee and Karen Green.

Jennifer Shirley,
Watch Over Me,
2009, Dyed pecan,
walnut, maple,
12" × 17" × 4"
(305mm × 430mm × 100mm)

Photo: Randy Batista

Dixie Biggs, *Ebb & Flow,*
2009, Bleached maple, ebony,
13" × 4½" × 7"
(330mm × 115mm × 180mm)

Katie Hudnall,
Pirate Stool, 2005,
Wood, metal,
upholstery, paint, finish,
16" × 16" × 12"
(406mm × 406mm × 305mm)

Photo: Taylor Dabney

Photo: Jennifer Moller

Beth Ireland, *Jellystone Park,* 2009, Dyed poplar, mahogany, sycamore, 9" × 12" × 4" (230mm × 305mm × 100mm)

Barbara Crockett, vessel, 2008, Spalted maple, 13" × 11" (330mm × 280mm)

Photo: Jerry Anthony

Andi Wolfe,
Parturition No. 2, 2009,
Afzelia burl, 6½" × 5"
(165mm × 127mm)

Photo: Jerry Anthony

Kimberly Winkle, *The Cat's Meow Tiger Stripe Pedestal Tables,* 2009, Poplar, maple, prisma, graphite, polychromed, 36" × 18" (91cm × 46cm)

Photo: John Lucas

Brenda Stein, untitled, 2006,
Magnolia, 6" × 10" (152mm × 254mm)

Photo: John S. Cummings

Dedicated to providing education, information, and organization to those interested in woodturning

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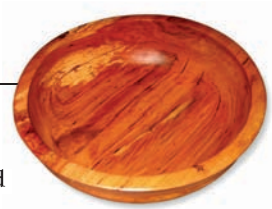
FEATURES



American Woodturner

The Journal of the American Association of Woodturners

ASSOCIATION NEWS AND NOTES

WOODTURNERS CHATTER

GALLERY

ON THE COVERS

Cover – William Moore, *Seed Pod,* 2003, Oak burl, copper, 6½" × 15" (16cm × 38cm) David and Ruth Waterbury collection, photo by Harold Wood, (story, page 43).

Back Cover – *Magical Marble Maze,* Chapter Collaborative

woodturner.org

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AAW does not endorse any product featured or advertised in this journal.

A NOTE ABOUT 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.

From the Editor

In July, a 52-year-old Canadian woodturner died from a blow to his head. While no one knows exactly what happened, the evidence of a broken chisel and stray piece of wood, the smaller portion still attached to the lathe, suggests a major catch and no faceshield.

Recently, I taught a hands-on workshop. One man showed up with the most strangely ground bowl gouges I had ever seen, and I've seen some odd ones. He said he learned how to sharpen from watching a video. (I seriously wondered which one.)

After editing an article for an upcoming issue, I realized what went wrong with this turner's interpretation of how to sharpen a bowl gouge. He had performed only step one, which was to reshape the profile by holding the tool with the flute upside down on the grinding wheel. The short length of his bowl gouges amazed me . . . he had spent a lot of time grinding and turning.

I'm fairly certain I got him and the gouges straightened out, but what about other woodturners who do not know much about turning? The Gulf Coast Woodturners Association's spring retreat offers a perfect solution. This annual two-day, hands-on workshop provides turners with the skills they need to be safe and to enjoy turning. Read more about it on page 7.

I encourage *everyone* to participate in some form of hands-on woodturning lessons, either to share knowledge or to receive instruction. Most turning mishaps don't result in death;

however, enjoyment of woodturning is enhanced when proper techniques are used.

– Betty Scarpino

President's Letter

The Board of Directors' primary objective is to provide more value to the AAW membership. The following initiatives have been implemented just this year to give our members more value for their money:

- *Adoption of a health care insurance arrangement that offers significant savings to some.* While this benefit will not apply to those who receive Medicare or who have preexisting conditions, it has been a significant cost improvement for some members. One member said, "My savings in health insurance costs, resulting from switching to AAW's new program, was enough in the first 12 months to pay my AAW dues for the next 42 years."
- *Expansion of AW journal to six issues per year in 2010.* This means more articles on a wider range of woodturning topics that are of interest to beginning, intermediate, advanced, and professional turners. There will also be more information on a timelier basis for such things as events and chapter activities.
- *Launching of a new online sales venue where members can list their work for sale.* With only two months of operation, this venue has been highly successful. Over 240 pieces of work have been listed, with a total value approaching $1 million. Sales have already exceeded $60,000. Since the inauguration of this sales venue, AAW website hits have grown significantly. In terms of site visits, our website ranks in the top 1/10 of a percent of the total global Internet.
- *Exhibitions abound!* The WOOD (Wood Objects On Display) exhibits started this year with three exhibits, and there are four more planned in subsequent years. These exhibits offer AAW members more opportunities to showcase work in fine galleries while exposing more of the public to woodturning.
- *Distribution of a comprehensive handbook of symposium demonstrator handouts and symposium program information to all attendees.* This four-color handbook was received with much acclaim.
- *Implementation of a monthly electronic chapters newsletter.* This newsletter, in a new easy-to-read format, provides information that is timelier and more pertinent to local chapters. Chapters are encouraged to forward the newsletter to their members, and many do.

The purpose of the AAW is to foster a wider understanding and appreciation of lathe turning as a traditional and contemporary craft and a form of art among the general public, hobbyist turners, part-time, and professional turners. This is to be accomplished by providing education, information, organization, technical assistance, and publications related to woodturning. This fall, we will conduct a survey of the membership to get their input, which will help us to gauge the membership's opinion on the association's success in meeting these goals. We value your feedback and look forward to your response.

We are a vibrant and growing organization that is a worldwide leader in the woodturning field and an invaluable resource for our members. Our membership continues to grow and our programs continue to expand and offer more to our members.

Bill

Bill Haskell
bill@woodturner.org

Join Us in Hartford in June!

The AAW's 24th annual symposium, June 18–20, will be held at the Connecticut Convention Center (CCC) in historic downtown Hartford where floor-to-ceiling vista windows overlook the revitalized riverfront of the Connecticut River.

We've chosen Hartford, not only because it is a vital, thriving city, but because it is easily accessible by car, train, and plane. Bradley International Airport is only 12 miles from the CCC (ctconventions.com)

Skyline of Hartford showing the Connecticut Convention Center.

and there is ample parking nearby in an eight-story parking garage.

While in Hartford, visit historic Asylum Hill where you will find the Mark Twain House, Harriet Beecher Stowe Center, and the Hartford Children's Theatre. Take in the impressive collections at the nation's oldest public art museum, the Wadsworth Atheneum Museum of Art. Hartford ranks in the top 6 percent in North America for its arts and culture!

Of course you won't want to miss the fantastic woodturning demonstrations we have planned. Registration information will be online (woodturner.org) starting January 1. A full lineup of demonstrators and events will appear in the February issue of *American Woodturner*. For now, imagine "Maple Medley: An Acer Showcase," "Teapots," and an impressive collection of wooden spoons. ■

Host hotel
Marriott Hartford Downtown, 200 Columbus Blvd., 860-249-8000 or 800-228-9290. Mention group code American Association of Woodturners. Rate is $139 for a single or double.

Alternate hotels
Hilton Hartford, 860-728-5151. Mention group code American Association of Woodturners. Rate is $119 for a single or double.

Crowne Plaza Downtown Hartford, 860-549-2400. Mention group code GHCVB, American Association of Woodturners. Rate is $118 for a single or double.

Jim Vogel and Steve Humus.

Salad Bowls and Cutting Boards

Club Collaboration

In 2008, the Tidewater Turners of Virginia and the Tidewater Woodworkers Guild collaborated on a project to help raise money for two worthwhile charities. Meals on Wheels (mowaa.org) and Project Concern International (projectconcern.org) will both receive checks for $524 to be used for programs dealing with hunger, locally and internationally.

The idea for this collaboration came from discussions on how best to use our talents to help those in need. We teamed up a woodturner and woodworker to create complementary salad bowls and cutting boards. Members worked together on design and wood choices to create a variety of interesting, creative sets. We displayed the sets at our local Woodcraft store for sale to the public. Our two clubs will produce another collection of sets in 2009. ■

Albert Kiebert, President of Tidewater Turners of Virginia

Corrections

The Chicago Woodturners and the Montgomery County Woodturners (Maryland) *tied* for First and Second places in the chapter newsletter contest.

Eli Avisera's DVDs are available at Canyon Studios' website, canyonstudios.org.

A Dream Comes True

John Hill

Fifteen-year-old Manon Delétraz came to the United States with her family to attend the AAW symposium in Albuquerque. Manon, her 13-year-old sister, Cécile, and her father, French wood artist Pierre Delétraz, are all woodturners. Manon participated in the AAW youth turning sessions and was one of the lucky young people to win a JET mini lathe and stand donated by WMH Tool Group, along with a chuck from Teknatool, turning tools from Crown Tools, and a faceshield from Woodcraft. She was able to take the tools, chuck, and faceshield home to France in her luggage, but the shipping cost of the lathe was prohibitive. And it had U.S. wiring, not European.

As he often does, Barry Schwaiger, marketing director of WMH Tool Group, came to the rescue. He arranged for a JET mini lathe and stand to be shipped to her home in France from the European distributor. Manon eagerly awaited the lathe's arrival and as soon as it was assembled, she began turning.

Faced with what to do with the lathe that had been used in the youth classes at the symposium, Barry agreed to donate it to the New Mexico Woodturners AAW chapter for the wonderful job they did to make the Albuquerque symposium a success.

Congratulations to all and huge thanks to WMH Tool Group for going the extra mile (or was that kilometer?). ■

Manon Delétraz wins one of the twenty-five lathes from the youth turning program at the Albuquerque symposium.

Grant Opportunities

The AAW's Educational Opportunities Grant (EOG) fund continues to be strong thanks to the wonderful generosity of donors and buyers at our annual symposium auction. Funds are available for worthy proposals. **To be eligible, entries must be postmarked by January 15, 2010.** You can download the application form and guidelines at woodturner.org/resources/eog/ or contact the AAW office.

Following are tips to help you with your application. The committee will not consider submissions that are incomplete, illegible, or vague. Please take care when applying.

- Download the application form in Microsoft Word format, complete the form electronically, print it, and mail it to the AAW office. If you must submit a handwritten application, it should be neatly printed.
- Provide sufficient information so EOG committee members can clearly understand what you are requesting and how you intend to use the funds. Please be as concise as possible to make your points direct and clear.
- Include details of how you will use the funds. Specific needs should be itemized. Funds will not be granted for miscellaneous, incidental, or unspecified expenses.
- Explain your educational goal or experience you wish to offer. Keep in mind that these grants are for educational purposes.

Grants are limited to $1,000 for individuals and students and $1,500 for local chapters, schools, and nonprofit organizations. Your budget may exceed these limits; however, your request should not exceed EOG limits. For special situations, at the discretion of the EOG committee and the AAW Board, grants are available in larger amounts.

If you have questions, contact the EOG committee chair or the AAW office. The AAW Board encourages you to take advantage of this membership benefit. ■

Malcolm Tibbetts, EOG committee chair
malcolm@woodturner.org

AAW Board of Directors Election Results

Congratulations to Warren Carpenter, Kurt Hertzog, and Jean LeGwin for being elected to AAW's Board of Directors. Each person will serve a three-year term.

Texas Big

The GCWA Spring Retreat

Larry Zarra

Where can you find more lathes turning at the same place and time than any other event in the woodturning world? No, it's not a *Guinness Book of World Records* attempt; it's the annual Gulf Coast Woodturners Association (GCWA) annual spring retreat, near Houston. The retreat is a two-day, hands-on workshop organized and staffed by the club for the benefit of its members, and is aimed at acquiring new skills and making new friends.

The May 2009 retreat featured two three-and-a-half hour sessions, both Saturday and Sunday, with each time slot having ten to fourteen different classes. The hands-on emphasis means *everybody* turns. Most classes have an instructor's lathe plus six more lathes, one for each student. Recent retreats have had up to eighty lathes running at the same time in multiple sessions and more than ninety participants in total.

The first GCWA retreat, held in 1996, was inspired by the Texas Turn or Two regional symposium. It was held at the Montgomery County fairground, which has been a consistent and popular venue. Early retreats had twenty to thirty lathes on site, before the advent of mini lathes. The initial mission was to have club members teach club members, a philosophy that continues to the present. Our retreat has grown to be a "Texas Big" event, but it is still true to its core mission, getting experienced and novice club members together for two days of hands-on learning.

A view of the workspace at the Texas retreat showing some of the workstations. The dining area seats 120 for family-style lunches. Adjacent areas (not shown) accommodate administration/reception, show and tell, and nonturning demonstrations.

An event this large requires incredible planning. The backbone involves the program and equipment chairpersons. The program chair solicits demonstrators and sets the schedule. In 2009, twenty-four instructors taught thirty-eight different classes, ranging from beginner projects to advanced turning techniques. There were also several nonturning sessions including topics as diverse as computer design, photography, and tool sharpening.

Every time slot also has an open lathe station staffed by a club mentor. Here, members can get individual help with problems and techniques from some of the club's most experienced turners.

The latest addition to the program is a four-session (twelve-hour) hands-on turning fundamentals course for new turners. This program is geared to new club members, many of whom join GCWA after seeing club demonstrations at the early spring Woodworking Show. This program gets brand-new turners started off with good skills in a class taught by a cadre of seriously experienced club members. This class fills up fast.

The equipment chairpersons have equally complicated tasks: procurement and setup. They have to arrange for ▸

Work area A: Steve LeGrue and Barbara Gaynor discuss techniques for turning beads on spindles in Steve's skew workshop. The three-hour, interactive demonstrations provide ample time for discussion and hands-on mentoring.

around seventy privately owned lathes to appear at the retreat, and get them set up and ready to run before the first class starts. Each lathe needs to be equipped with a stand, light, chuck, spur drive, and whatever else is required to turn all weekend. Each of the turning stations also has a grinder and appropriate electric outlets, 110 and 220 volt.

Turning stations are arrayed around the perimeter of a more than 35,000 sq. ft. (3,250m^2) air-conditioned building at the Montgomery County fairground in Conroe, Texas. There's also a bandsaw station. Chainsaws are available for cutting up logs outside. Of the eighty lathes, about twenty-five percent are full-sized, and while most class participants are on mini lathes, some classes have a full-sized lathe for every student. There are easily fifty people or more who contribute to make this massive effort happen.

There are other key players at the retreat. The club president makes opening and closing remarks and keeps everyone on track. The raffle chair consistently obtains a high-quality assortment of tools and accessories. Recent raffles have offered dozens of stock- and custom-made tools, gift certificates, glue and abrasives, and demo pieces from visiting turners. There has also been a mini lathe for the grand prize. The club funds a substantial part of the raffle items, but there are also donations from tool manufacturers, local and national vendors, and club members. We are reminded throughout the retreat, "*the more raffle tickets you buy, the more stuff you win*."

The raffle helps to keep the retreat fee below $50.00. Registration includes catered lunches. The refreshment chairperson makes arrangements for lunches, organizes breakfast for those who overnight at the retreat, and makes sure there are cold drinks, coffee, and enough potluck snacks to fuel attendees.

Other members organize the appearance of a huge pile of wood for use in classes, and cut turning blanks to order. Still others manage registration, cleanup (a huge task), first aid, gallery, and photography. All retreat participants must be club members, and all demonstrators must be AAW members. Guests and occasional reporters are escorted, for both safety and insurance purposes.

GCWA hosts nationally known turners throughout the year, but this retreat is entirely powered by local talent (some of whom have demonstrated at AAW and SWAT symposiums). Included in the thirty-eight classes offered were: off-center turning, lidded boxes, miniatures, platters, goblets, spheres, various topics on tools, techniques, and sharpening, and several different approaches to turning bowls.

With more than 180 members, GCWA has a good share of folks willing to do their part to make our spring retreat a success. We believe that our retreat is unique in the turning community, both in scope and size. It is Texas Big, after all. We also believe that our spring retreat is a best practice that could be adapted to a club of just about any size. All it takes is a critical mass of willing hands, enthusiastic spirit, and lots of planning. ■

Online Sales Venue

The AAW has added an online sales venue for woodturners, galleries, and collectors to its website. Go to woodturner.org and click on Online Sales Venue on the upper left-hand corner.

From the Artists/Gallery Market Place or Collector/Museum Corner links, users are directed to a web page that lists artists who have posted pieces for sale. Click on their name, and you will see all of their pieces. Viewers can be directed to the artist's email address, website, and/or a gallery, where work can be purchased. The cost is $10 per item listed, with two pictures of each piece allowed. Images will remain online for 24 months, unless we are notified of a sale.

Consider listing the work in the Collector/Museum Corner if it is from the estate of a deceased family member. There are galleries that can help you determine fair value for turned-wood objects.

With over 40 million hits on our website each year, this venue provides AAW members with a powerful tool for connecting woodturners, galleries, and collectors with each other. ■

John Hill, Wood Sales Venues Committee, Johnhill6@verizon.net, 828-645-6633

Grant Awarded

The American Association of Woodturners (AAW) is pleased to announce that they were awarded a grant in the amount of $29,893 from the Minnesota State Arts Board, through an appropriation by the Minnesota State Legislature, a grant from the Wells Fargo Foundation Minnesota, and a grant from the National Endowment for the Arts. The grant will provide support for operating funds and enable the creation of a book to document the history of woodturning. State grants are awarded through a competitive process. This grant indicates that the AAW provides a high level of quality in its programs, community outreach, and administration.

Young Turners Program

Central Ohio Woodturners and AAW

Chuck Kemp

What is more fun than learning to turn a new wooden object? I remember my first thin-stem goblet. Boy was I proud and happy—I was one of the few students in the class who didn't blow out the side of the goblet. Just this year I have found out that it is even more fun teaching and helping young turners create their first honey dippers, spin tops, and goblets. Their excitement and enthusiasm are contagious.

Almost a year ago, Dave Bowers wrote a proposal for an AAW grant to start up our Young Turners Program. As a result of his proposal, the AAW gave us $1,200 to help get the program started. I am retired and have always enjoyed working with kids, so I volunteered to coordinate the classes. Little did I know how much work it would be and how much enjoyment I would get out of the program.

Our first step was to create an application so that young people could enroll in the program. Initially, we opened up registration to our club members' children and grandchildren. But there were still many slots to fill so we contacted church groups, schools, and the Boy and Girl Scouts. The enrollments were slow at first, but eventually we had twenty-four young people ready to start. Most of the enrollment process and communications with the students were handled via email.

Our club had four new JET 1220 lathes and a couple of older JET mini lathes. Our goal was to have twenty-four young turners in our program, so we used our AAW grant to buy two more 1220s. We divided the kids into groups of eight and held three separate classes. Additional sets of tools, chucks, and faceshields were ordered. Our club has had the good fortune of fantastic support from two local woodworking stores, Woodcraft and Wood Werks. They furnished the new equipment required at their cost. It also helps that the storeowners, Jim Baumgardner and Ron Damon, are members of our club.

Jim Burrowes, Bruce Kerns, and I agreed to be instructors for the program, and a host of club members volunteered to be mentors at the sessions. Wood Werks agreed to let us use their classroom area at no charge. The last item to be completed was building wooden platforms, which would allow the kids to turn at the proper height. Our program was ready to start.

Each class consisted of three, three-hour turning sessions. In the first session, we emphasized safety, lathe

Photos: Sharon Bierman

The author and Elizabeth Swanson making a top.

Bruce Kerns and Tom Ozello.

Jim Burrowes and Nathan Smith.

Back row (l to r): Jim Burrowes, Chuck Kemp, Booker Brooks, Craig Wright, Barb Crockett, Nelson Meyer, Noah Laird. *Front row (l to r):* Nick Debolt, Logan Lewis, Mike Lipster, Cameron Addington, Samuel Laird.

Back row (l to r): Jim Burrowes, Craig Wright, Barb Crockett, Chuck Kemp. *Front row (l to r):* Alex Doan, Isaac Sanders, Rachel Schwanekamp.

nomenclature, and tool usage. I put together an outline for the class so we didn't forget anything.

We had each student work on turning beads and coves and then had them turn a honey dipper. Nick Cook gave us permission to use his article, "Honey Dippers" (*AW*, vol 21 no 2), as a teaching aid. The kids had a great time turning the honey dippers, but they had the most fun coloring them with felt-tip markers.

The second of the three sessions was devoted to turning a spin top. We used Dave Bowers' article from the AAW website (woodturner.org/community/youth/) as our guide. At the start of this session, we reviewed lathe safety and again practiced beads and coves, reinforcing turning fundamentals. The young turners especially enjoyed using chatter tools and markers to add an extra flair to their tops.

Our final session was the turning of endgrain goblets. Jim Burrowes led the final session. Again, we reviewed safety, lathe and tool usage, and practiced beads and coves before making a goblet. By sticking with spindle projects, we were able to limit the tools required to a roughing gouge, spindle gouge, parting tool, and chatter tool. Last year's club president, Barb Crockett, put together a booklet containing all the handouts for our program.

For various reasons, only fifteen of our twenty-four students were able to complete the program. At the end of the first two sessions, we gave each student a Woodturning Student Certificate; at the end of third session, we awarded them with a Woodturning Journeyman Certificate. They also received a free one-year membership in our club, The Central Ohio Woodturners. When they complete the requirements outlined in the AAW Young Turners Program, we will recommend them for a free membership in the AAW. Several of the students are well on their way to completing that program.

At the end of the program, we held a drawing for one of our JET mini lathes.

We are very pleased with the success of the program and will seek to refine it next year when we again offer our version of the AAW Young Turners Program.

Thanks to all the members of the club who helped with the program, the AAW for its grant to get us started, and the support of our local stores Woodcraft and Wood Werks. Special thanks to Sharon Bierman for all her help in taking pictures and providing articles for our club newsletter. Visit woodturner.org/community/youth/ to learn about AAW's youth programs. ■

Back row (l to r): Walt Betley, Jim Burrowes, Trevor Askins, Don Lehman, Barb Crockett, Chuck Kemp. *Front row (l to r):* Elizabeth Swanson, Katie Rondot, Nathan Smith, Nathan Knueppel.

A Tribute to Tom Cross

Brittni Pozza

Of the many people who have influenced my life, Tom Cross has to be one of the most supporting and loving of them all. I met this gentle giant when I was about three years old. I'm now fifteen and there hasn't been one time when I've needed him that he wasn't there. I know that no matter what, he will always be there for me.

Tom has been woodturning since way before I met him, and over the years I've witnessed his craft and skill improve tremendously. He is out in the shed in his backyard almost every day working on his lathe and let's just say he spends way more time out there than his wife would prefer. He is a retired fireman and is an all-around great guy, always doing something to help other people and is great with kids.

All of the kids in the neighborhood want to turn a bowl after seeing Tom work on his lathe and he tells them all the same thing, "When you turn ten, I will teach you how to turn your own bowl." Sure enough, on my tenth birthday, I turned my first bowl. It was an experience that I will never forget. The act of turning my first bowl with Tom felt like a rite of passage and felt like I was really growing up. This was it, I thought, I was finally partaking in the experience that the ever-present father figure next door so enjoyed. For now, my venture into the art of woodturning has ended, but the love and companionship that Tom and I share has not. As I shaped that wood into a bowl, I was also beginning to shape my self. And, as always, Tom is right beside me, guiding my way. ■

Website Contest Winners

Congratulations to the winners of the summer website contest! The theme was "closed bowl/hollow form."

First, Joe Landon

Second, Ed Koenig

Third, Curtis Fuller

Fourth, George Guadiane

Fifth, Charles Henderson

Joe Landon, vessel, 2009, Maple, dye, 5¾" × 5" (146mm × 127mm)

Congratulations to the winners for the fall contest! The theme was "hollow eggs."

First, Pascal Oudet

Second, Kurt Hertzog

Third, John Beaver

Pascal Oudet, *Egg,* 2009, Oak, bleach, 4¾" × 3½" (120mm × 90mm)

To enter the latest contest, go to woodturner.org and click on Forum, then select the Main Forum.

Turning Boxes with Threaded Lids

Dennis J. Gooding

In this 80-page, heavily illustrated book, Bill Bowers concentrates on boxes that both are unusual in design and have hand-chased threaded lids. Most of the unusual designs have been borrowed (with due credit) from other turners, and his contribution has been to adapt these designs to include threaded lids while retaining the charm of the original. In this endeavor, he copes with the problem that many woods, otherwise desirable for box making, are not suitable for thread chasing. He presents three solutions to this problem in the six projects he covers. A secondary theme of the book is the use of a shop-built rose engine lathe to decorate turnings. Four of the projects include this innovation.

Bill's first project is a threaded box made from off-cuts derived from a laminated peppermill project. He avoids the problem of trying to cut threads in laminated wood by casting an epoxy ring into the base and into the lid to produce a medium that can be hand chased.

Project Two is a cube box with base and top at opposite corners of a maple burl cube. Bill describes the construction of a special jig to hold the cube for turning. He avoids the difficult problem of threading maple burl by gluing in a boxwood insert, which does thread well.

Exhibit Entry Reminder!

Entries for "Maple Medley: An Acer Showcase" are due February 8, 2010. "Maple Medley" is AAW's themed exhibit which will be displayed at the symposium in Hartford. Entry guidelines can be found in the fall issue of *American Woodturner*, page 17 or on AAW's website, woodturner.org.

Project Three is a spherical box of olivewood with a separate pedestal. In this case, Bill fortifies the wood before thread chasing by saturating it with CA glue. He later decorates it using the rose engine lathe.

Project Four is a small box with rotating rings in the lid. This requires a simple shopmade tool to undercut the rings. In this case, the wood is suitable for direct hand chasing. Rose engine engraving is applied to the turned box before finishing.

Project Five is a box in the form of a bolt, nut, and washer. This project is similar to boxes originated by Allan Batty and the only innovation is to apply rose engine engraving. The material used was suitable for direct thread chasing.

Project Six is a threaded box with a pierced-through lid similar in concept to the slip-fit boxes originated by Hans Weissflog. Endgrain stock is desirable for thread chasing, whereas face-grain stock has more strength for piercing. Bill solves the problem by insetting thin disks of face-grain material into the endgrain lid. He embellishes the completed box using the rose engine lathe.

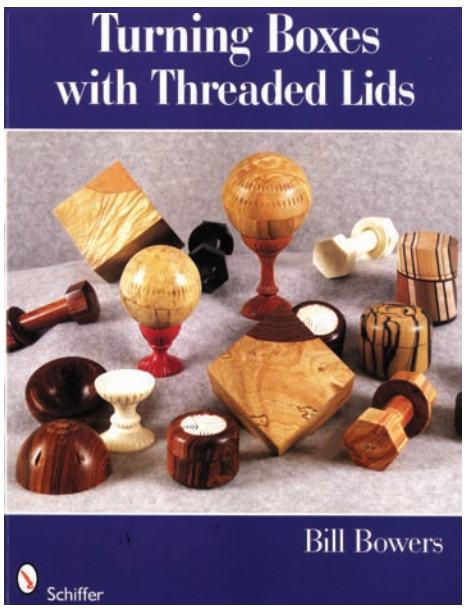
The final chapter of the book is a gallery of several examples of the preceding projects plus a few instances of other boxes with threaded lids.

For each of the projects described, Bill provides a generously illustrated step-by-step procedure covering the turning operations and any special tooling or jigs required. However, these descriptions are mainly confined to legends that accompany the photographs and are often rather sketchy. Readers attempting to reproduce the projects will have to work out some of the details on their own. Also, despite the fact that the major theme of the book is hand-chased threaded boxes, the description of the hand chasing itself is limited and anyone unfamiliar with the process might want to seek additional help before proceeding. The discourse on the rose engine lathe will provide inspiration to anyone potentially interested in ornamental woodturning, but it offers little guidance on how to build and use one. ■

Don't forget to renew your membership!

It's going to be a great 2010 for the AAW. The journal is going to six issues a year and other new member benefits are being added. Renew online by visiting our website woodturner.org. It's easy!

If you renew before December 15, you will receive the first volume in February, which will contain your 2010 membership card.



POP News Fellowship recipients for 2010

After considerable deliberation of the grant applications in Albuquerque, the POP committee has awarded the 2010 fellowship grants to Sharon Doughtie from Hawaii ($5,000) and to Keith Holt from Maryland ($1,000).

Sharon Doughtie plans to take the free-form Celtic knot patterns she presently uses in her work to a new level. She will be traveling to Ireland where she intends to investigate Celtic art on stone carvings and in ancient architecture. In order to refine her carving skills, Sharon will also take a class with Irish artist, Ben Russell, who is well versed in carving Celtic knots. In addition, she will spend some time with Irish turners who are fellow AAW members.

Sharon believes this opportunity to expand her horizons and to experience her own Scottish/Irish culture firsthand will provide inspiration and present a new sense of direction for her work. She plans to come away with the beginnings for her next body of work, which will be Celtic knots with more layers and crisper carving, as well as larger pieces with architectural elements. Sharon plans to write an article about her experience after she returns.

Keith Holt has been exploring the creation of lathe-turned masks, which are turned on multiple axes using a wooden sphere and a laser to replicate the various planes of a human face. Keith has applied for this grant to help him develop a "sphere" faceplate that will allow him increased precision and provide more possibilities. Keith would like to demonstrate this process, and the faceplate he develops, at a future AAW symposium.

Sharon Doughtie

Photos: Gerry Meekins

Keith Holt, *Split Form,* 2009, Ebonized cherry, 6½" × 4" (165mm × 102mm)

Keith Holt, *Cleansed,* 2009, Cherry, 8½" × 5½" (216mm × 140mm)

New POP chair

Trent Bosch will be taking over as chair of the POP committee beginning January 1. We truly appreciate Jacques Vesery's dedication and hard work over the past two years. Jacques will continue on the committee in an advisory capacity for the remainder of 2010 and help with the "Teapot" exhibit at the Hartford symposium. ■

POP committee members:
Barbara Crockett, David Ellsworth, J. Paul Fennell, Jerry Kermode, Bonnie Klein, Binh Pho, Betty Scarpino, Jacques Vesery, and Trent Bosch, chair.

The Wood Turning Center in Philadelphia announces the five residents for their 2010 International Turning Exchange (ITE) program. For more information on this eight-week program, visit woodturningcenter.org.

Luc De Roo, Belgium, Irene Grafert, Denmark, Julie Heryet, United Kingdom, Won Joo Park, South Korea, and Derek Weidman, United States.

Luc De Roo,
untitled, 2008,
Oak, 10" × 9"
(254mm × 229mm)

Julie Heryet,
Double Lobe, 2002,
Sycamore, acrylic paint, texture,
4" × 10" × 4" (102mm × 254mm × 102mm)

Calendar of Events

Vol 25 no 1, 2010 Deadline: December 10

Send information to editorscarpino@gmail.com

Australia

March 23–25, 2012, "TurnFest Australia," 10th anniversary conference to be held at the Sea World Resort, Gold Coast, Queensland. Over 50 past presenters, both international and Australian, will be featured. Contact ddrescher@bigpond.net.au for more information.

British Columbia, Canada

September 10–12, "West Coast Roundup," Richmond Inn and Conference Center, Richmond, sponsored by the Greater Vancouver Woodturners Guild. Visit gvwg.ca for more information.

California

October 16–January 3, "Michael Peterson: Evolution/Revolution," San Francisco Museum of Craft + Design. More than 30 distinctive sculptural works trace the evolution of Peterson's work from his early turned-wood bowls to his current abstract sculpture. More information is at sfmcd.org.

Connecticut

June 18–20, the AAW's 24th annual symposium, Connecticut Convention Center, Hartford. For more information, go to woodturner.org.

Vic Wood, lidded vessel, undated, Walnut, 2¾" × 8" × 5¾" (70mm x 200mm x 145mm)

"Among Friends" exhibit at the AAW Gallery, St. Paul.

Florida

January 15–17, "Florida Woodturning Symposium," Lake Yale Baptist Conference, Eustis, a 30-minute drive north of Orlando. Featured turners include Nick Cook, Larry Hasiak, Al Hockenbery, Alan Leland, Rudolph Lopez, Michael Mocho, Paul Pouliot, and Dale Nish. Register at floridawoodturningsymposium.com

Hawaii

March 5–26, 12th Annual Big Island Woodturners Exhibit, Wailoa Center, Hilo. Opening reception, March 5. Hands-on woodturning demonstrations on Saturdays. For more information, call Dennis Hakes at 808-961-5631, the Wailoa Center at 808-933-0416, or visit bigislandwoodturners.org.

Idaho

February 27–28, "Artistry in Wood," Holiday Inn Convention Center, Boise. Woodworkers from all levels are invited to submit work. Registration is February 26. For information contact treasurevalleyscrollers.org, swiwt.org, or Douglas Rose, 208-387-0492 or roseboise@yahoo.com.

Illinois

August 20–22, "Turn-On! Chicago 2010," symposium, Mundelein, just north of Chicago. Demonstrators include Jimmy Clewes, Don Derry, Cindy Drozda, David Nittmann, Binh Pho, Dick Sing, and Malcolm Tibbetts, with more to be announced. Events include hands-on pen turning, trade show, and banquet. For more information, visit chicagowoodturners.com.

Maine

December 4–February 12, "Maine Wood 2010 Biennial Exhibition," Messler Gallery, Center for Furniture Craftsmanship, Rockport. For information, visit woodschool.org

Minnesota

January 12–February 14, "Among Friends: Selections from the Frank Sudol Collection" and "Regional Spotlight: Works from Ohio and Texas Turners," AAW Gallery, 222 Landmark Center, Saint Paul. For more information, visit gallery@woodturner.org.

New York

March 27–28, "Totally Turning," Hilton Hotel, Saratoga Springs, in conjunction with Showcase 2010, the largest woodworking show of its kind. Presenters include David Ellsworth, Graeme Priddle, Marilyn Campbell, Jean-François Escoulen, Giles Gilson, Kurt Hertzog, Steve Sherman, and John Franklin. For more information, visit totallyturning.com.

North Carolina

January 2–May 15, "With Lathe and Chisel: NC Wood Turners," Gregg Museum, North Carolina State University, Raleigh. Exhibit will feature work selected by Dale Nish from members of the North Carolina AAW chapter. Also included are wood pieces from the permanent collection of the Gregg. For more information, go to ncsu.edu/gregg.

Ohio

January 31–March 28, "Be Our Guest: A Progressive Invitational," Ohio Craft Museum, Columbus. In conjunction with the AAW's WOOD program, this exhibit focuses on wood-turned forms created by established and emerging artists. For more information, visit ohiocraft.org.

Pennsylvania

October 9–December 19, 2009, "Steve Madsen: A World in Wood," Wood Turning Center, 501 Vine St., Philadelphia. For more information, visit woodturningcenter.org.

January 8–April 24, "Magic Realism/Material Culture," showcasing artists' perceived notions of material: clay appears as carved wood, leather simulates the surface of wood, and glass is fabricated to appear as wood. A second exhibit, "WoodInPrint," showcases original printmaking by traditional woodturning artists. Wood Turning Center, 501 Vine St., Philadelphia. For more information, visit woodturningcenter.org.

Tennessee

October 16–January 2, "Women in Wood" exhibition at Arrowmont School of Arts and Crafts, Gatlinburg. The work of 27 wood artists will be featured. The exhibition is partially facilitated by the AAW's WOOD (Woodturned Objects On Display) committee. For information, visit arrowmont.org.

January 29–30, "22nd Annual Symposium," at Opryland in Nashville. Featured demonstrators include Trent Bosch, Frank Penta, Tania Radda, and Mark St. Leger. For more information, contact info@tnwoodturners.org or 615-300-0363.

Michael Lee, untitled, 1998, Koa, 5" × 9½" × 8" (127mm x 241mm x 208mm)

"Among Friends" exhibit at the AAW Gallery, St. Paul.

Utah

May 6–8, Utah Woodturning Symposium, McKay Center, Utah Valley University, Orem. Featuring over 20 premier woodturners, demonstrations, instant gallery, manufacturers' showcase, pen turners' rendezvous, educators' lecture series, swap meet, and much more. Visit utahwoodturning.com for information and registration. ■

Your Opinion Counts!

The AAW Board of Directors wants your help! One of the goals that we established at our June meeting was to reach out and gather the thoughts and opinions of our membership. To achieve that goal, we are asking that you take ten minutes of your time and respond to our new membership survey.

The purpose of the survey is to obtain information about a number of strategic issues facing our organization and to examine opinions concerning members' needs, perceptions, awareness levels, knowledge, and potential usage of current and future services of the AAW. Your answers will help set our direction for the coming years. The survey addresses topics such as members' satisfaction with AAW membership, the vision and mission of our organization, communication, and services for members. A final section asks for your overall opinions and perceptions of the AAW.

You can participate in the survey in one of two ways: (1) online with SurveyMonkey (preferred), or (2) by paper at your local chapter meeting.

For the online survey, go to the AAW website (woodturner.org) and click on the direct link provided. This link will take you to the survey and provide directions for completing it. The online survey will be active November 15–January 31, 2010.

For those who wish to submit a paper version, a copy of the survey, along with directions, will be sent to each chapter president by email, copies to be distributed at club meetings during December or January. Your chapter representative will collect the completed paper surveys and mail them to the AAW office in St. Paul.

The Board will take the results of this survey into consideration as we evaluate future member services and educational materials. Your survey answers are confidential and will not be shared with any outside entities; however, general results will be shared with our members once tabulated and reviewed.

In advance, we thank you for participating in our survey. Your feedback is important!

A huge thank-you to the survey committee members for their hard work: Jerry Wright, Central New York Woodturners; Emmet Manley, Mid South Woodturners Guild; Dale Larson, Board member and Cascade Woodturners; Jean LeGwin, Board member, Publications Committee Chair and Wilmington Area Woodturners; Bill Haskell, AAW President and Glendale Woodturners Guild, Orange County Woodturners, and Inland Woodturners; and Ed Davidson, AAW webmaster and Pikes Peak Woodturners. ■

—Cassandra Speier, Survey Committee Chair, Board Treasurer, and Mid South Woodturners Guild

When a Tree Falls in the City

A view of the gallery shows the variety of products donated for the exhibit.

Photo: Nancy Borger

Nancy G. Borger

She was destined for the wood chipper in Tomahawk, Wisconsin, to be pulped for cardboard. It was like a bad dream, when your heart sinks, and you shout, "Wait, wait. Not the chipper! Look at those color variations. We can do something amazing with her." "She" was a century-old butternut tree that lived on the grounds of the Marathon County Historical Museum in Wausau, Wisconsin, wherein hangs a picture of her when first planted. She saw eighteen U.S. presidents come and go, but now, as a result of a massive restoration of the museum, and the fact that the tree was structurally weak, it was deemed necessary to have her removed.

Mary Forer of the Historical Society put the tree's chipper-trip on hold while she contacted local woodworker Mark Duginske. He immediately envisioned a project like that outlined in the book, *Onetree*, by Gary Olson and Peter

Toaig, in which they describe the conversion of a historic British tree into artful and utilitarian products.

While the idea was not a new one, the process for us was. Mark presented the idea to our AAW club, the Wisconsin Valley Woodturners, of which he is a member. Mark and Roger Zimmermann (club president) planned extensively with the Historical Society and the Wausau Center for Visual Arts (CVA) personnel. Woodturners from our club, the Northwood Turners, and other wood-related artisans were invited to donate their work. Together, we did some amazing things with that 26"-diameter tree.

Forty-seven people contributed 170 pieces to the project, entitled "If a Tree Falls in the City" (aka, the "Butternut Project"). Katie Crotteau, Executive Director of the CVA, and others helped arrange a special dispensation for the event as a nonjuried show. The seven-week show, dedicated to this single tree, proved to be unique and phenomenal. Two-thirds of the $6,899 raised went to the Historical Society for restoration work on the museum; one-third went to the CVA as their commission. The Gallery Gala reception, sponsored by the Ministry Health Care group, had one of the largest turnouts of any such event at the CVA.

Detail-oriented Roger graciously took on the daunting task of overall project coordination. He said it was like herding cats! Mark bore the brunt of preparing the tree and supplying butternut wood to the artisans. The project's logistics included:

- A bulldozer that had to be brought in to safely take down the tree with root ball intact. The tree was then sawn for transport to Mark's shop for further slicing and dicing with his portable sawmill equipment. Even though Mark was aware of stones, nails, and cement encased within, sparks flew several times. Two chainsaw blades needed to be replaced, and the portable mill also needed attention. Mark now owns a metal detector for future work with urban trees.
- Wood storage, drying, and distribution was ongoing.
- A list of items to be contributed and their completion dates was needed. This seemed to be ever-changing.
- Delivering and labeling the pieces needed careful attention, as did forms for gallery insurance purposes.
- The show was professionally arranged by the CVA staff.
- Since this was a unique fundraiser, the pricing respected all income levels. Many buyers just wanted a little piece of history.
- Mark developed a PowerPoint presentation of the whole process to play during the gala reception. Almost two years of planning and working went into the event, ▸

Photos: Mark Duginske

Sectioning the felled butternut tree for transport.

Shaking out the root ball.

Photo: Mark Duginske

The tree, sliced, stickered, and stacked.

requiring everyone to keep up their creative energy and enthusiasm. In the end, there was a time for celebrating our best efforts.

Our Butternut Project connected beautifully with several other related events. One was a Saturday morning program for children in grades K–8. Roger gave a short talk on tops, then demonstrated how they're turned on a lathe. He had preturned twenty wooden tops, one to be decorated by each participating child. The kids then took an educational tour of the Butternut Project.

Another link occurred at our public library where Mark discussed the move toward urban green possibilities and realities. He noted that one-third of all the hardwoods cut in the United States are urban trees, and that the biggest hardwoods are city trees. When they need to come down, most end up in the pulp yard as mulch or in a landfill.

The third delightful connection to our project was the annual May "Exhibitour" in downtown Wausau when twenty businesses opened their doors to local artists for celebrating their work. The Butternut Project was included.

Our historic tree proved to be an amazing lady, indeed, providing education, utilitarian and artistic turnings, tables, benches, carvings, boxes, and some very funky art from her roots all the way to her branches. All it took was vision, leadership, coordination, passion, and an urban tree headed for the chipper. ■

Nancy G. Borger is a member of the AAW as well as two AAW chapters in Wisconsin. She received an EOG from the AAW to attend the symposium in Louisville, which proved to be pivotal in escalating her turning enthusiasm. She exhibits and sells her works through galleries. Nancy donated nine turnings to the Butternut Project.

Photos: Nancy Borger

Roger Zimmermann demonstrated the making of tops to local school children.

The Gala Gallery night gathering was one of the largest openings of any show ever offered by the Center for Visual Arts in Wausau.

Turning Wood and the Common Good

Toby Fulwiler

2009, Spalted sugar maple, 13" × 4"
(330mm × 100mm)

I've grown up believing it's important to give back. For thirty-five years, the last twenty at the University of Vermont, I taught college students to think critically, write clearly, and appreciate literature. I felt socially useful. However, when I retired from full-time teaching six years ago, I spent much of my time pursuing distinctly private pleasures—motorcycling, hiking, gardening, cross-country skiing, dog walking. I knew these activities didn't much benefit the commonwealth, except, perhaps, by keeping me out of trouble.

Then halfway through retirement, I discovered woodturning: the art of making bowls on my shop lathe from different woods in a multitude of shapes for various purposes. Once again I came to feel, in some meaningful way, like a maker and doer and contributor to society. I have practiced other arts (photography) and crafts (woodworking) in the past, but never with the addictive passion of woodturning nor, in my view, the social relevance. Whether this need to feel useful springs from some remote Protestant training or genetic predisposition, I cannot say, but following are some of the reasons that make me feel especially good about what I now do.

Toby working at his lathe.

Woodturning as *raison d'être*

A sometimes carpenter all my life, I built bookshelves and tables, as well as picture frames and tie racks, because I needed them. Once a table was put into service, a bookshelf stocked, pictures framed, and ties hung, that was the end of it. I didn't make another simply for the pleasure of the making or to display as art or sell for profit.

Woodturning, however, is different. As soon as I finish one bowl, I'm already planning the next: black cherry instead of sugar maple, in ▸

the shape of a vase or platter instead of a salad bowl, 12" (300mm) in diameter instead of 9" (230mm) or 6" (150mm). Bowl making became an integral part of my life, something to do and to dream about. As such, it provides an ongoing focus and contributes to my physical and mental health: physical, because I roam my woods in search of interesting wood; mental, because each bowl turned from a rough log is, essentially, creative problem solving.

Woodturning as practical craft

Wooden bowls are useful. They hold fruit for breakfast, chips for salsa, salad for dinner, and casual jewelry on my wife's dresser top. Like reed baskets and clay pots, bowls have served a utilitarian function for many centuries, helping keep people and cultures alive. Unlike purely decorative art, wooden bowls can be stacked and stored as well as displayed. They don't need to occupy wall space or match slipcovers or colors of paint. In short, a well-turned bowl serves the human community.

Woodturning as art

Lathe-turned bowls are handmade, one-of-a-kind, and pleasing to both view and touch. Well proportioned and finely finished, they enter the world of art. In order to be exhibited in art galleries, craft shows, and on websites, bowls are juried by peers, displayed with aesthetic care, and collected by patrons—which, to the bowl maker, confirms their quality and value. In addition to being useful, handcrafted, sometimes-ornate bowls contribute directly to our aesthetic culture.

Woodturning as "green"

Bowls turned green from sugar maple, black cherry, and white ash, created from wood found on my own land, have an extra appeal. This wood is culled from dead, decaying, deformed, and overcrowded trees otherwise destined for firewood or decomposition. With rare exceptions, I do not cut healthy trees for turning. Nor do I turn bowls from rare, exotic, or endangered tree species that originate in distant and fragile rain forests. Turning bowls from native species affirms, for me, the special value of all trees for food, shelter, service, oxygen, and beauty. My own woodturning is also "green" because the wood is recently harvested, not kiln dried. I return sawdust and shavings to the compost bin, garden, and forest floor to decompose naturally—wood to wood.

Black cherry burl bowl, 5" × 10" (125mm × 250mm)

Woodturning as sustenance

In a small but important way, I make some money from my woodturning business. Perhaps because I spent so much of my life doing head work, I am pleased to be valued for my hand labor, pleased to have moved from full-time academic to part-time hand-crafter and entrepreneur. I currently sell bowls at four galleries, on the Internet, and in selected craft shows to generate a small but helpful income that pays for tools and materials, as well as augments Social Security. What began as a hobby has now become a useful player in my economic health and even contributes, in some small way, to the larger economy.

While I expect many readers of this journal will agree with my reasons for placing such a high value on this woodcraft we mutually pursue, others will have more and different reasons. I invite interested readers to join the conversation to share your own discoveries about the special joy of woodturning with me. ■

The large branch on this storm-damaged sugar maple tree will be harvested for its spalted maple. There are many such harvesting opportunities in my 92-acre woods in Fairfield, VT.

Toby Fulwiler can be contacted at toby@fairfieldfarmbowls.com.

Dream Machines

Upgrade Your Lathe

Kurt Bird

Powermatic 3520B lathe

Woodturners are fortunate because for the past fifteen years, lathe manufacturers have listened to our suggestions for redesign and have subsequently produced a wonderful array of machines. New ideas are showing up on a regular basis, allowing turners and artists to design and produce lathe-turned objects with few limitations.

Buying a high-end machine today is all about choices. No longer is it a case of one-machine-fits-all. Now you have the option of selecting a lathe that fits your style of turning with all of the capabilities you require.

To narrow our review, we chose to include lathes from two categories: dual-purpose lathes that can handle spindles and bowls, and dedicated bowl lathes. The lathes that are included are 20" (50cm) swing and larger. (The Robust Sweet 16 was included because it can turn up to 32" [80cm] inboard.) All of the lathes reviewed have common features you would expect to see in machines of this price: beefy construction, higher horsepower (HP) ratings, reverse drive, variable speed, heavy-duty bearings, and torsional rigidity. In addition, the list of options is extensive throughout the study.

VB 36 lathe

Bayonet mount for the VB36.

The categories

Swing and between-centers lengths

A lathe's capacity to turn larger pieces inboard is one of the main measuring tools turners use to judge the usefulness of a particular lathe. And while many of us will not typically use that full capability, there may be enough occasional use to warrant its consideration. The center-to-center length is typically the maximum length piece that can be turned. Bed extensions are options available from many of the manufacturers.

Spindle size

The best time to consider spindle size and thread is when replacing your old lathe with a new one. Many turners have multiple accessories already threaded for their present lathe; the purchase of spindle adapters and chuck inserts to adapt to a new size may require a significant investment. While the most common size is 1.25"/8tpi (32mm), other sizes are sometimes used. In the case of the VB36, the triple bayonet spindle mounting system is unique, and may offer some significant advantages *(Left)*.

PM3520B optional bed extension.

Horsepower

Although a couple of the lathes are offered with a 1.5HP motor, we chose to review all of the lathes based on a minimum of 2HP. Where 3HP is standard, it is listed as such.

Weight

For turners who like to turn large, out–of-round pieces, lathe weight becomes a significant feature. As expected, the beefier construction methods increase the ▸

Headstock positioned for turning large-diameter bowls.

Robust 25 lathe

Oneway 2436 lathe

weight of lathes significantly. In the case of the Serious lathe, weight is a major design feature. Its 1,500-plus pounds (680kg) is unique among the group.

Indexing

The ability to accurately index a piece for secondary operations is desirable. The majority of these lathes offer 24- or 48-position indexing. The Oneway 20" (50cm) and 24" (60cm) offer 48-position as standard, and 96 as optional.

Quill travel

This feature becomes useful for a couple of reasons. The length of a lathe's quill is a measure of capacity, and when the quill has a graduated scale on it, drilling becomes accurate. But in many cases, the length of the quill may be simply an indication of how far away from the piece you can get, allowing more working room with the tools.

Sliding headstock

Only two machines offer a sliding headstock: the Powermatic 3520B and the Robust American Beauty 25. The design allows the user the increased turning capacity of outboard turning when a headstock-mounted motor does not allow outboard use. The 3520B, with the optional bed and toolrest post extensions, will allow up to 36"-diameter (90cm) turning with an onboard toolrest *(Page 21, right)*. The Robust lathe has an outboard turning attachment option that securely attaches to the lathe to provide a toolrest in the outboard position allowing turning up to 60" (152cm) *(Above left)*.

Digital readout

While the debate still rages on about whether anyone needs this option, it is appearing on more and more lathes. Typically used as a reference point, the digital readout may not be the same from one machine to the next, so caution may be in order.

Stainless steel ways

Most of the lathes in the group rely on the mass of cast iron to maintain torsional rigidity. The Robust and Oneway lathes, using square and round tubular construction, build their ways onto the body of the lathe. The Robust lathes offer stainless steel ways as standard. This is unique. The Oneway lathes offer the stainless steel ways as an option *(Above right)*.

Adjustable height

Recognizing that turners are not all the same height, most of the lathes offer some type of height adjustment: from optional factory preset heights, to onsite adjustment. Although the general rule of thumb for spindle height is your elbow height, Trent Bosch recommends 2" (50mm) higher. Being able to adjust the height may be the difference between a sore back or hours of pain-free turning.

Dynamic braking

A number of the lathes slow down more quickly than simply coasting to a stop. This may be of interest to production turners.

Safety spindle lock

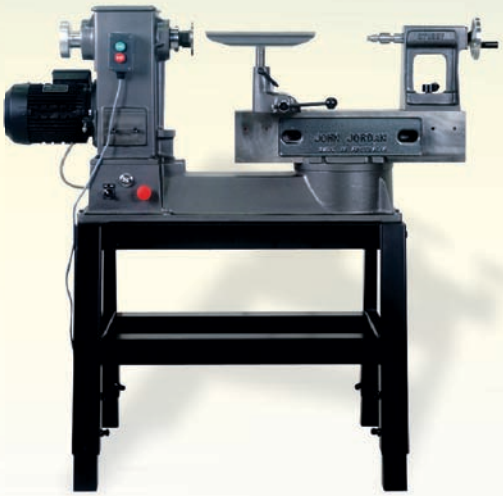
Some of the machines have the ability to disengage the motor when the spindle lock is engaged. This would prevent turning on the lathe with a locked spindle, creating, as John Jordan calls it, the smoke signal.

Reverse turning

All of the lathes in this article operate in reverse. This feature comes with a caution: determine whether or not the lathe you purchase has some sort of positive lock to keep chucks and faceplates from unscrewing when the lathe is in reverse. Some chucks have setscrews for this; make sure that the lathe has a spindle groove or smooth area for the screw to securely fasten the chuck or faceplate in place.

Speed ramp up/down

The variable frequency drive (VFD) on lathes with variable speed can be reprogrammed for different time delays for speeding up or down. Both the VB36 and the Oneway lathes come



Stubby 750 lathe

Vega 2600 bowl lathe

Vega tailstock

EBO, Inc. Bowl Elephant lathe

with a toggle-type switch that allows the user to choose slow speed ramp or fast speed ramp. Please review the VFD owner's manual or contact the manufacturer of your lathe before making these adjustments.

General comments

Bowl lathes are inherently different in design with regard to their stated purpose. As mentioned earlier, the VB36 has a number of unique features. The bed design of the Stubby 750 is singular, with a patented sliding and rotating bed and an auxiliary bed that can be attached in different locations with various orientations. When combined, the Stubby can be set up in a variety of configurations to suit *(Above left)*. The Vega 2600, with its concrete-filled headstock, is a different design that is well liked by many turners. It has a relatively small footprint *(Above middle)*. The Vicmarc VL300 lathe is made in Australia, and is available in long- and short-bed versions. Craft Supplies sells the Vicmarc VL300CS lathe made to their specifications, with slight differences between it and the Vicmarc VL300 that is directly imported. If you are considering purchasing a Vicmarc lathe, it would be in your best interest to compare the two versions. The Oneway lathes are also available in long- and short-bed configurations. New to the market is the Bowl Elephant lathe by EBO, Inc. The basic model is a bowl lathe, but with optional accessories it can be changed to a spindle lathe with up to a 96" (245cm) capacity. As a bowl lathe, the onboard swing is 40" (100cm). With spindle accessories, the swing is 25" (65cm) *(Above right)*. The Laguna Pinnacle lathe has optional attachments that greatly increase its capabilities, appealing to production and architectural turners. The Grizzly is the only lathe in the group to have an outboard toolrest supplied as standard.

Conclusion

The choice of a lathe, perhaps more so than other pieces of machinery, can be subjective. The options are extensive and warrant your investigation. Above all, try to find a turner who has the lathe you want and is willing to let you try it out. Or visit one of the larger symposiums that have lathes on display with a factory representative on hand to answer questions. Whether based on many years of turning experience, or the desire of certain features above all, the selection of a lathe is critical as a result of the interaction between the turner and the lathe. For many turners, buying a lathe from this category will satisfy most, if not all, of their turning needs. This material is presented with the hope that it will help you zero in on the lathe that might be your "last lathe."

Thanks to Mike Mahoney, John Jordan, Keith Burns, Trent Bosch, John Lucas, Brent English of Robust Tools, Greg Jensen and Roger Buse of VB Manufacturing, Roger Durst of Craft Supplies, Scott Trumbo of Serious Lathes, Norman Frampton of General, Gary Herrman for his photo, Gary Wassing of Oneway, Ray Peck of EBO, Inc., and the technical staff of Powermatic for their assistance in presenting this article. ■

Kurt Bird is president of the local AAW chapter, Stateline Woodturners in northwest Arkansas, and is a volunteer moderator on the AAW forums.

Manufacturer's websites:

oneway.ca
turnrobust.com
general.ca
grizzly.com
hegner.co.uk VB36
wmhtoolgroup.com Powermatic
vicmarc.com
woodworker.com Woodtek
seriouslathe.com
http://omega.2pp.in/ Stubby, (USA Rep is johnjordanwoodturning.com)
vegawoodworking.com
lagunatools.com
eboinc.net

A metric chart is available on AAW's website: woodturner.org/products/aw/lathe_metric.pdf

The Dream Machines Features Comparison Chart

Dual Purpose Lathes Spindle/Bowl

	Swing	Centers Length	Spindle In/Out	HP	Weight	Indexing	Quill Travel (inches)	Sliding Headstock	Digital Readout	Stnls. Steel Ways	Warranty	Adjustable Height	Dynamic Braking	Safety Spindle Lock	Street Pricing (USD)	Comments
EBO, Inc. Model 40-25x48	40	48	1.25/8	2	630	OPT.	4	N	Y	N	1.5 Electric 2-Material	N	Y	N	6999	Unique design allows conversion to spindle lathe with optional accessories.
General 26020VDR	20	38	1.25/8	2	562	N	2	N	N	N	2	N	N	N	5099	
Grizzly G0694	20	43	1.25/8	3	578	24	3.5	N	Y	N	1	N	Y	N	2650	Outboard floor supported tool rest included.
Laguna Pinnacle MTP105	24	52	M45/4.5	3	1500	24	6	N	N	N	1	N	Y	N	9175	Optional copy and spiral attachments. Spindle adapters available.
Oneway 2036	20	36	M33/3.5	2*	800	48 96 Opt.	4	N	Y	OPT.	5	Y	Y	N	**5825	Tailstock removal option. Extensive options.
Oneway 2436	24	36	M33/3.5	2*	850	48 96 Opt.	4	N	Y	OPT.	5	Y	Y	N	**6153	Tailstock removal option. Extensive options.
Powermatic 3520B	20	35	1.25/8	2	630	48	4.5	Y	Y	N	5	Y	Y	N	3300	Optional bed and tool post extension will allow 36" turning. After market tailstock removal option.
Powermatic 4224	24	42	1.25/8	3	848	24	4.5	N	Y	N	5	Y	Y	N	4825	
Rikon Woodfast 70-500	20	36	1.25/8	2	596	24	4	N	Y	N	2	N	N	N	2800	
Robust 25	25	28	1.25/8	2	628	48	4	Y	N	STD.	7	Y	Y	Y	5995	Tailstock removal option.
Robust 16	16/32	40/52	1.25/8	2	480	48	3.5	N	N	STD.	7	Y	Y	Y	**5020	Unique bed design allows turning up to 32".
Serious SL2542	23.6	42	1.5/8	3	1530	48	6	N	Y	N	2	Y	Y	Y	6975	Spindle position digital readout.
Vicmarc VL300LB	23.6	24	1.25/8	3	850	24	3	N	N	N	1-Electric 2-Material	N	N	N	4999	
Woodtek No. 1	20	20/38	1.5/8	3	750	48	5	N	Y	N	1	N	N	N	4489	

Bowl Lathes

EBO, Inc. Model 40	25	NA	1.25/8	2	620	OPT	4	N	Y	N	1.5 Electric 2-Material	N	Y	N	4799	Unique design allows conversion to spindle lathe with optional accessories.
VB36	36	24 or 36	Bayonet	3	689	24	6	N	N	N	2-Electric 10-Material	N	Y	Y	7999	Unique bearing design and bayonet spindle mount. Tailstock removal method standard.
Vega 2600	26	17	1.25/8	2	500	N	9	N	N	N	1	Y	Y	N	3095	Compact footprint.
Stubby 750	30	34	1.25/8	2	600	24	4	N	Y	N	2	Y	Y	N	5975	Unique bed design allows multiple placement options. Compact footprint.
Oneway 2016	20	16	M33/3.5	2*	600	24	4	N	Y	OPT.	5	Y	Y	N	**5684	
Oneway 2416	24	16	M33/3.5	2*	650	24	4	N	Y	OPT.	5	Y	Y	N	**5996	

*Reflects 2HP Pricing.
**Based on 2HP.
Note: Prices may or may not include shipping.

Sharpening Jigs and Safety

Jim Rodgers

As the use of sharpening jigs increases, so, too, do the instances of sharpening accidents. Injuries that result from fragmented grinding wheels and tools and holders that have slipped have sent woodturners to the hospital with serious injuries to hands and/or eyes.

Sharpening jigs were developed so that we could quickly and repeatedly produce a tool shape, bevel, and edge. When using these jigs, however, woodworkers need to be aware of some potential dangers. Tools can slide off the face of the grinding wheels and wedge between the wheel and the frame of the grinder; the arms of sharpening jigs can slip outward away from the wheel, causing the tip of the tool to move down the surface of the grinding wheel until the tool grabs at the wheel's equator and instantly wedges itself, fracturing the wheel and potentially injuring the operator's hand; tools can slip forward in the tool holder itself causing similar problems.

While mechanical failure of sharpening jigs contributes to some injuries, human error is usually the cause. Here's why:

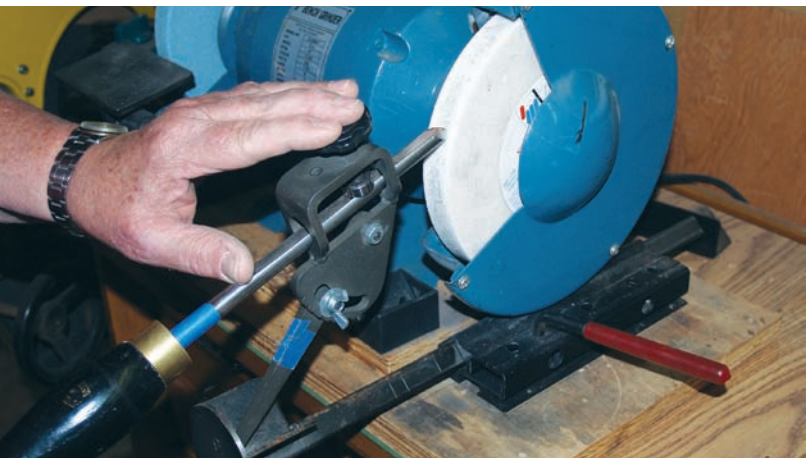
- The person sharpening the tool is distracted and the tool no longer rides on the wheel. A quick turn of a person's head can easily cause the movement of a tool off a 1"-wide grinding wheel, jamming it between the wheel and the body of the grinder.
- An improper handhold on the jig can cause fingers to be driven into the still-running grinding wheel.
- Too much pressure is applied to the tool causing mechanical slippage of the jig's arm.
- Improper grinding-jig geometry is set, placing the tip of the tool too close to the maximum diameter of the wheel (the equator).
- The process of sharpening tools is hurried.
- Small-diameter tools are improperly placed in jigs not meant to handle their smaller size.

Proper use of grinding jigs

- Firmly lock the jig's extension arm and recheck it by pushing or pulling on it.
- Establish a more acute bevel angle on your turning tool. Placing the tool high on the sharpening wheel's surface reduces the possibility of an accident.
- Reduce the amount of downward pressure applied during sharpening; this will save tool steel and reduce heat buildup. ▸

Using a simple shopmade template to set up your sharpening jig for repeatable distances saves time and tool wear.

Wrong way! If the sharpening jig slips, fingers will contact the rotating wheel before the jig does.



A safer way to hold the jig is on the top. If a slip occurs, the hand is protected.

Potential danger: Using a long fixture arm and a blunt sharpening angle brings the tip of the tool too close to the wheel's equator. If the arm of the jig slips or too much pressure is exerted, it could cause the tool to jam against the wheel.

Wear safety gear

A faceshield or safety glasses should be worn while at the sharpening station. Eye injury is possible while sharpening as a result of flying debris. When dressing a wheel for cleaning or reshaping, wear a dust mask. The aluminum oxide dust from a grinding wheel is potentially damaging to lungs.

Proper hold

When holding the sharpening jig, never place your hand between the jig and the grinding wheel. Place one hand on the handle of the tool and the other on top of the jig. Accidents occur when the hand hits the rotating wheel during a slippage.

Light touch

Sharpening should be done with a light touch; this reduces the amount of metal being removed and the heat buildup during the sharpening. A light touch also allows the operator to react quickly when a slippage occurs, perhaps saving a finger.

New sharpening jigs

Until recently, most sharpening jigs managed the sharpening geometry well, but still allowed for uncontrolled side movements that contributed to most accidents. Currently two manufactures, Sharp Fast and Oneway, have introduced jigs that eliminate the accidental sideways movement while maintaining the proper sharpening geometry. As a teacher of woodturning at both high school and adult levels, I would not be without such a jig! ■

Jim Rodgers is past president of the Bay Area Woodturners and director of the turning programs for Mt. Diablo Unified School District. He can be contacted at jlrodgers@aol.com or jlrodgers.com.

Better: Create a more acute bevel angle on your tool, which will place it higher up on the wheel in a safer position when sharpening.

Consider learning how to hand sharpen turning tools. This allows you to place a toolrest close to the grinding wheel, eliminating many potential dangers.

Mobile Lathe Cabinet

Jon Mihalick

Before building a portable cabinet, I had three objectives: It had to be lightweight, mobile, and capable of storing all of the lathe's accessories. A small Carba Tech lathe was donated to our local club with several attachments and a motor. I designed the portable cabinet so that one person could set it up quickly for club demonstrations and workshops and transport it to different locations, such as our community library exhibit demonstration.

First, I blocked up the lathe over the motor to determine how high it would have to be so that the belt would stay tight when in operation. The motor had to be mounted underneath the lathe spindle inside the cabinet and there needed to be free access to the drive belt for changing speeds.

I used a 6" × 6" × ¾" (150mm × 150mm × 20mm) oak board to mount the motor. A handle protrudes out the side of the cabinet so that the motor can be raised and the pulley belt can be moved in order to change speeds on the lathe *(Photo 1)*. This board was secured to the cabinet with two 3" (75mm) hinges *(Photo 2)*.

To maintain a lightweight unit, the cabinet is made of ½" (13mm) Baltic birch plywood. I screwed 1" × 2" (25mm × 50mm) solid oak runners to the inside of the side, front, and top panels. These pieces were assembled with flathead screws and white glue. I also used runners on the top and bottom of the cabinet back, leaving openings for the motor and a drawer *(Photo 3)*. A vertical panel was installed to the right of the motor to aid in the installation of the tool drawer. I decided to let all the cabinet screws show for convenience sake but I filled the screw heads and sanded them smooth.

The tool drawer is also made of ½" (13mm) Baltic birch and is divided into two sections. The left side has two bottoms spaced about 1" (25mm) apart. I drilled and sanded holes in the upper bottom to organize the lathe accessories, such as toolrests, faceplates, live centers, and a chuck. Accessories stay in place when the lathe cabinet is transported. The right side of the drawer, lined with ½" (13mm) Styrofoam and a ¼" (6mm) sliding cover with finger hole, stores hand tools such as pliers, screwdrivers, Allen wrenches, a drill chuck, and ▸

A handle allows easy lifting of the motor to change the pulley belt.

Motor is mounted on a board that is secured to the cabinet with two hinges.

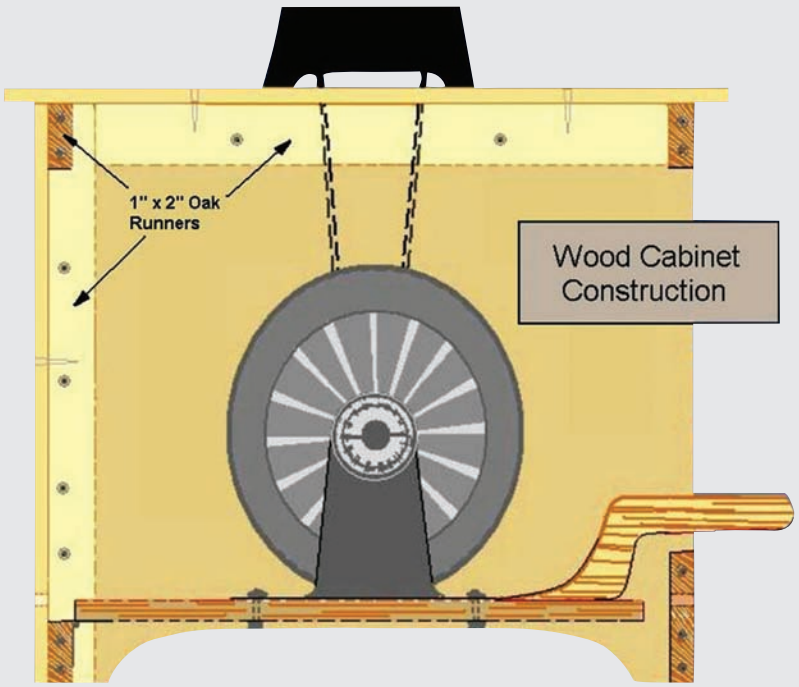


Diagram of the mobile lathe cabinet.

a spare drive belt. The Styrofoam helps keep the tools in place and silent when moving the cabinet *(Photo 4)*. A brass knockout bar is stored inside the front of the drawer through drilled holes. The drawer is installed into the cabinet with 10" (250mm) full-extension drawer slides. I made the drawer front out of ¾" (20mm) solid oak and a drawer pull from ¾" × ¾" (20mm) aluminum channel and solid oak. A 2" (50mm) brass barrel bolt, mounted to the front of the drawer, slides into a hole drilled through the top to keep it secure while moving *(Photo 5)*.

The lathe didn't have a power switch, so I drilled a hole in the front of the lathe and mounted a toggle switch *(Photo 6)*. A piece of oak was used to make a power cord

A two-section tool drawer with full-extension drawer slides is installed.

Drawer with sliding cover in place.

A brass barrel bolt is mounted to the front of the drawer to keep it secure while moving the stand.

storage bracket that I bolted to the outside opposite the left of the motor *(Photo 7)*. The power cord comes into the cabinet on this left side below the motor where I wired the cord, toggle switch, and motor together.

To make the unit mobile, I drilled a ½" (13mm) hole through the bottom corner of the heavier end of the cabinet that houses the motor to accept a steel axle and installed two 7" (180mm) wheels *(Photo 8)*. Placing the hole 1½" (40mm) in from the end and 1¾" (45mm) up from the bottom raises the cabinet up off the floor about 1¾" (45mm).

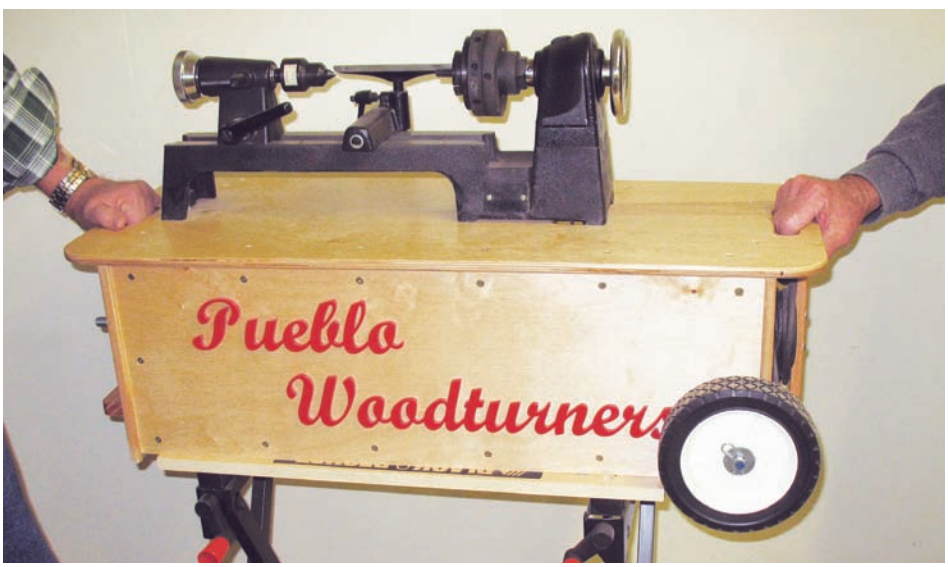
The axle needed to be out of harm's way when not in use so I found a place for it on the other end of the cabinet underneath the drawer. It fits nicely into a ½" (13mm) hole drilled in the cabinet corner and a small block of oak glued to the bottom brace, securely pinned in place with a spring pin *(Photo 9)*. The wheels are also stored on this end out of the way and above the main tote handle. Two ½" (13mm) carriage bolts with wing nuts and washers hold them in place *(Photo 10)*.

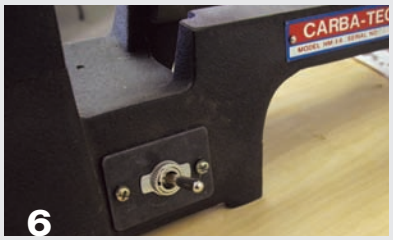
The handle for the cabinet, made of solid oak and held in place with two long ¼" (6mm) carriage bolts, is sturdy enough to lift the cabinet up and roll it around similar to a piece of luggage. There are also a couple of hand holes in the cabinet top for two people to lift it. Depending on how long a person's arms are or how tall one is, you have the option of toting the cabinet with either handle.

On the final step, I cut out letters for our club name, Pueblo Woodturners, from a piece of MDF, painted it red, and glued it to the front of the cabinet. I then applied three coats of lacquer.

This cabinet can be modified slightly to accommodate almost any mini lathe. Most new mini lathes will not need the motor inside the cabinet, so there would be plenty of room for more tools or supplies. A cabinet designed to contain everything one would need for pen-making or maybe miniature birdhouses is quite imaginable. ■

If you have any questions about this project, please send an email to Jon Mihalick at jonmihalick@comcast.net. Photos, illustrations, and editing by Dan Miller.





6
A toggle switch is mounted to the front of the lathe to provide a power switch.


7
A power cord storage bracket is bolted to the outside.


8
Wheels are attached at the heavier end of the cabinet.


9
The axle for the wheels is stored on the other end of the cabinet underneath the drawer when not in use.


10
The wheels can be stored out of harm's way when not in use. Two carriage bolts with wing nuts and washers hold them in place.

A Bowl with Wire

Why "Free" Green Wood Ain't Free

Clarissa Spawn

Having turned green wood exclusively for the past five years, I greatly appreciate the attention given to the subject in *AW* (vol 23, no 3). My bowls typically range from 15"–30" (40cm–75cm) in diameter and their design often depends on the warping that occurs in the drying process. Turning large bowls from green wood and letting them warp requires substantial chunks of freshly cut wood. Size, design, and sustainability are three good reasons to turn green wood. Cost isn't one of them.

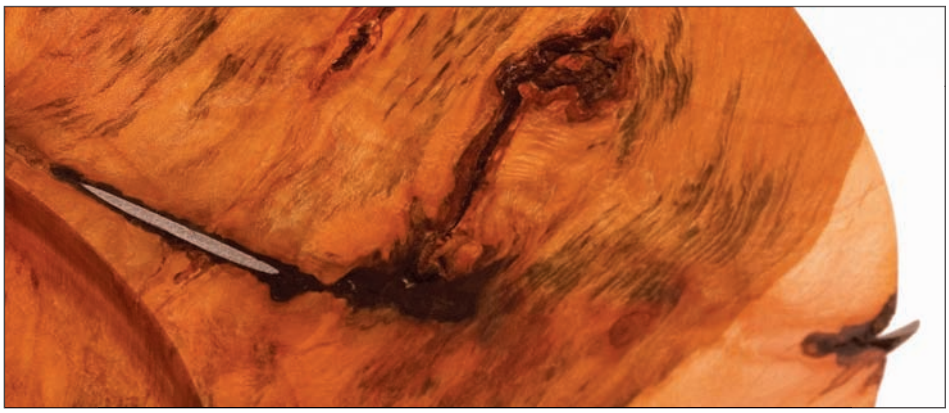
Bowl with Wire, 2008, Maple, 5½" × 21" (140mm × 53cm)

The wood used to turn *Bowl with Wire* originated from a tree in my neighbors' yard. While my husband and I were attending a Christmas party at their home, Tom commented that he was going to have a large maple removed in order to build an addition to their home. Lacking in wood, but abundant in holiday spirits, I made my usual offer, "If you bring me your fallen tree, I will make you a bowl in return. If I have to come get it, I'll let you buy a bowl for half price." I have since then revised my offer. Harvesting wood from my neighbors' tree ended up being an expensive proposition.

"Sure enough, we did hear back from Tom. In his view, he had something of value lying in his yard. In our view, he had a problem."

Eighteen months later, Tom called my woodlot manager (a/k/a my husband Alex) to let him know the tree was down and the trunk was lying in the yard. All the branches had been removed and hauled away. Since this was a treasured tree, Tom planned to make his wife Jane a table out of the lumber milled from the trunk. He wanted to know if we would we like the stump. "Well, no," my woodlot manager replied, "but let me know if you change your mind about the log."

At this point, I was flush with wood and did not want maple, which rots quickly once felled. But we knew we would be hearing from Tom in the near future because he had failed to consider two important points: who would mill his lumber and how he would transport it.



A close-up view of the 10½"-long (27cm) wire embedded in the wood.

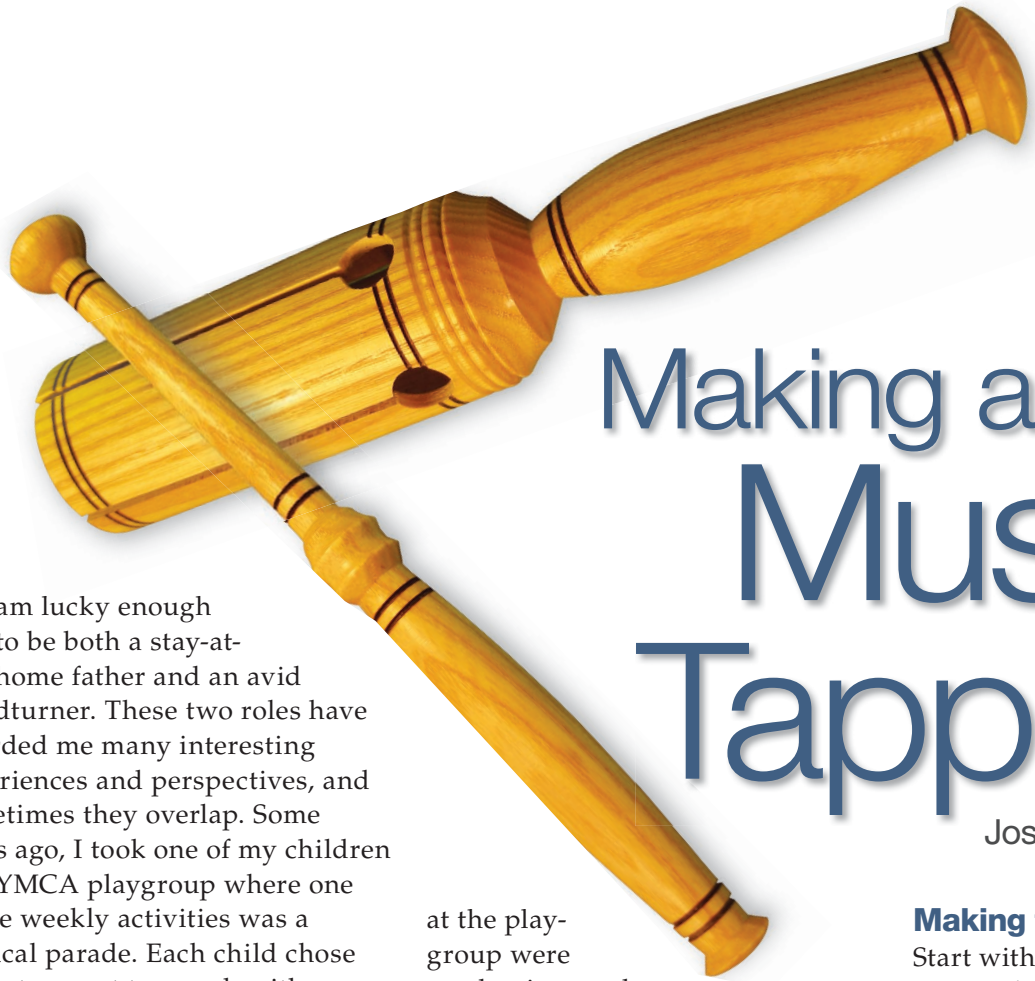
Lumber mills do not want yard trees because they tend to be full of foreign material, usually metallic in nature. Past finds include a turnbuckle, nails, buckshot, and a metal sign. Although sawyers with portable sawmills will often tackle yard trees, with an agreement that the log owner replace any damaged blades, there are currently no portable sawmills operating in our area. And if one were to be found, the log would have to be cut in half lengthwise to fit on a portable mill. In either case, additional large equipment would be required to load and/or transport the log.

Sure enough, we did hear back from Tom. In his view, he had something of value lying in his yard. In our view, he had a problem. Besides removing the log, he had the additional burden of having promised his wife a keepsake. So, Alex agreed to help him cut up the log. I decided to stand by my offer of a half-price bowl.

Early on a Saturday morning, we showed up at Tom and Jane's house with the thousands of dollars of equipment required to render large felled trees: a Stihl chainsaw with a 36" (90cm) bar, safety gear, cant hook and spud bar, chains and come-along, and our pickup truck. Thirty hours of labor later (five people for six hours), we had two, too-large chunks of wood in the truck and Tom and Jane had a pile of firewood in their yard.

There are costs and hazards associated with making offers to friends such as the one I made: Tom and Jane did not want to spend over $100 for a bowl, the wood contained wire, and Alex later developed poison ivy. Other options for collecting green wood (from tree service companies and burn lots) come with their own set of problems. It is important to recognize that there are costs involved with harvesting "free" wood. Weigh those costs carefully against your need and desire for the particular wood being salvaged. And, as in any business deal, be careful about entering into agreements with friends. Sometimes purchasing a log for cash can be a whole lot cheaper. ■

Clarissa Spawn lives and works in the bluegrass region of Kentucky. She has participated in invitational exhibits at the Kentucky Museum of Art and Craft in Louisville and the gallery at the Kentucky Artisan Center in Berea. Initially self-taught and assisted by woodturning friends, she furthered her skills through courses at Arrowmont.



Making a Musical Tapper

Joshua Friend

I am lucky enough to be both a stay-at-home father and an avid woodturner. These two roles have afforded me many interesting experiences and perspectives, and sometimes they overlap. Some years ago, I took one of my children to a YMCA playgroup where one of the weekly activities was a musical parade. Each child chose an instrument to march with—maracas, tambourines, drums, and triangles. One of the instruments was a musical tapper, or tone block.

Each section of the striking area of a musical tapper is a different size and, therefore, makes its own tone when struck with the ball of the tapper stick. The ones I saw at the playgroup were production-made and were quite sufficient, but always having part of my mind in the woodshop, I decided before the parade even ended that I'd try to make one. Turns out they are great fun for music makers of all ages. And what I like is that this toy doesn't require batteries.

Making the body

Start with a block of dry wood, measuring about 2½" (65mm) square and 10" (250mm) long. I used ash that was glued up to reach the required thickness. Mount the block between centers of your lathe *(Photo 1)*. Form a tenon at the tailstock end *(Photo 2)*.

Remount the piece, grabbing the tenon with the jaws of a chuck. Using a 1½" (40mm) Forstner bit

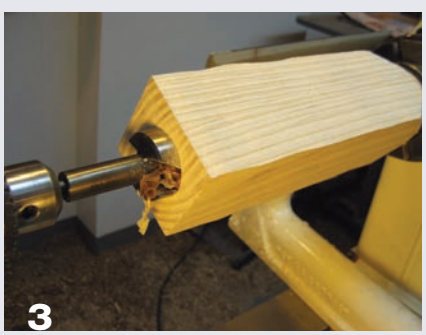
Making the body – drilling the tone chamber

1

Mount the block between centers.

2

Form a tenon at the tailstock end.



3

Using a 1½" (40mm) Forstner bit chucked in the tailstock, drill a hole 3"–4" (80mm–100mm) deep.

chucked in your tailstock, drill a hole about 3"–4" (80mm–100mm) deep (the actual depth measurement is not critical) *(Photo 3)*.

Insert a cone center into your tailstock and advance it into the just-drilled hole. This will supply additional support for turning the body of the tapper *(Photos 4, 5)*.

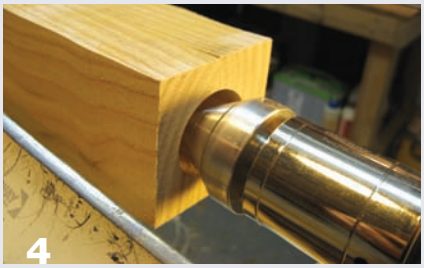
Beginning at the tailstock end, turn the striking area of the tapper to a wall thickness of about ⅛" (3mm). You can see (and measure) the thickness of the walls where the wood meets the cone center *(Photo 6)*. Once you reach the desired thickness at the end, proceed down the blank, toward the headstock, forming a cylinder, keeping the same wall thickness. I used a roughing gouge for this, but a spindle gouge or skew chisel would work well too *(Photo 7)*.

Pull the tailstock away temporarily so that you can measure the depth of the interior space, or tone chamber. Measure the depth and then transfer that depth to the outside of the chamber to find the bottom. I took this measurement simply by inserting a stick to the bottom and digging my fingernail into the stick where it coincides with the end of the chamber, then laid the stick on the outside. Mark the depth with a pencil. Draw another line about ½" (15mm) to the left of that depth line—this is where you'll start the handle *(Photo 8)*.

Advance the cone center back into the drilled hole, and turn the rest of the handle area to a cylinder; however, do not turn away the pencil lines just yet *(Photo 9)*. At the left-most pencil line, begin to step down to your handle *(Photo 10)*. Finish forming the handle *(Photo 11)*.

At this point, I sand the tapper to 150 grit, add burn lines (if the mood strikes me), and apply a friction polish at the lathe. This is a ▶

Making the body – turning with the cone cylinder



Use a cone center inserted in the tailstock for additional turning support.

Here the piece is mounted, drilled out, and supported with the cone center.

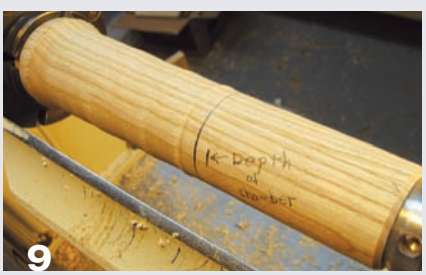
Making the body – forming the cylinder

Begin at the tailstock end and turn the walls to about ⅛" (3mm) thick.

Form a cylinder keeping the same wall thickness.

Making the body – creating the tone chamber

Measure the depth of the chamber to determine where to begin turning the handle.



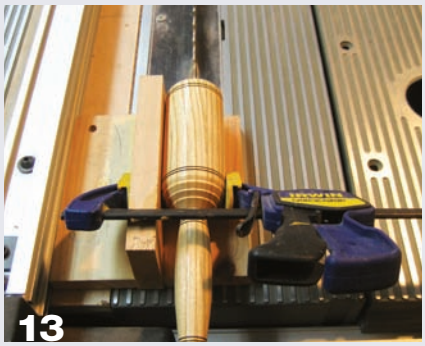
Turn the handle area to a cylinder but do not remove the pencil lines.

Begin shaping the handle at the left-most pencil line.

Form the handle and sand the tapper.

Cutting the tone sections – cutting the slots

Make a simple jig for holding the tapper while cutting the slots in the tone chamber.



Clamp the tapper to the jig. Raise the table saw blade only high enough to cut through the jig and *only one side* of the tapper. The cut should stop a bit short of the bottom of the tone chamber.

project that will receive some abuse, so I don't sand to a high grit, nor do I spend much time with a fancy finish. Part off the tapper and hand sand the end of the handle.

Making the tapper stick

Now that you have the body almost finished, let's make the tapper stick using the same species of wood. The photo below shows some tapper sticks I've made. They are turned between centers, sanded to 150 grit, finished with friction polish, and parted off. You can make the tapper stick as fancy or plain as you like, but I recommend putting a small striking ball at the end.

Cutting the tone sections

Make a T-shaped jig for holding the tapper to cut the tone sections *(Photo 12)*. You will need to use a table saw for cutting these sections. Secure the tapper to the jig with a clamp. Raise the table saw blade just enough to cut through the jig and through *only one side* of the tone chamber *(Photo 13)*.

Use a stop block or mark your rip fence to indicate how far to cut so that each cut is the same length. The cut should stop just short of the bottom of the tone chamber. Be careful here: Since a table saw blade is circular, the end of its kerf will have a curve also, with the outside of the tapper being cut further than the inside. I learned this the hard way!

I make three cuts to the chamber and place them so that each section ends up being a different width. Each section will have its own tone—for kids, this is the magic of the instrument!

Using the same jig to hold the tapper, drill a ⅜" (10mm) hole at the end of each cut line. Make sure the hole is centered on the cut line and that the bottom edge of the hole coincides with the bottom of the tone chamber *(Photo 14)*.

Hand the tapper and its stick to a child and enjoy the music! ■

Joshua Friend is a stay-at-home father of three and owner of J. Friend Woodworks. For information about his work, see jfriendwoodworks.com.

A variety of tapper sticks.

Cutting the tone sections – drilling the holes

Drill a ⅜" (10mm) hole at the end of each cut line.

Two Bits for a Shave

Anthony Turchetta

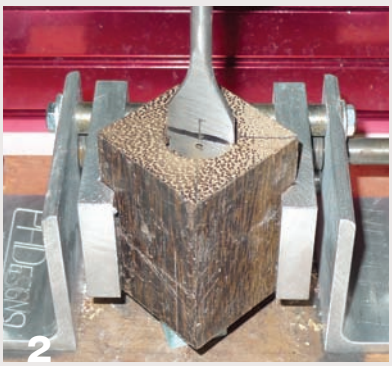
About three years ago I was brainstorming about making a new item. I had hit the wall turning pens every day and was looking for something different. About the same time, I was becoming interested in wet shaving . . . you know dad's ol' brush, safety razors, straightedge razors, all the nice soaps, creams, and oils to play with. So I set my sights on making shaving brushes.

To start, you need a nice badger hair knot. There are several grades of badger hair: silvertip is the highest grade, followed by best badger, finest badger, and pure badger. Also available are synthetic knots and boar-bristles knots. There are different-size knots as well, and they range from 18mm–30mm in diameter. The different grades of badger hair represent what part of the animal the hair is taken from, how soft the hair is, and the color. Knots with extra hair may have some initial shedding. This is completely acceptable because of the density of the knot. Badger is a protected species of North America, so 90 percent of the badger hair comes from China. For additional information on badger hairbrush grades and wet shaving, go to en.wikipedia.org/wiki/shaving_brush.

For this article, I made two brushes. The first is made out of black palm wood for the handle and a finest badger hair knot because I like the look of the two-band finest badger. The dark stem and the creamy white top match up nicely with the black palm. The diameter of the knot is 24mm, the approximate size of the plug at the base. The total length of the knot is 67mm from the base to the tips. The other brush is made from an acrylic block, using a 24mm × 67mm best badger hair knot, the same size as the other knot.

Before drilling a hole for the knot, there are some considerations such as the *loft* of the brush. The loft is the length of the bristle from the top of the handle to the tips. The longer the loft, the more floppy the brush will be; the shorter the loft, the more firm your brush will be. The diameter of the hole affects the firmness of the brush: squish the hair together in a small-diameter hole to make a somewhat firmer brush, or let the brush fan out in a hole with a larger diameter for a ▸

Jig for testing the loft of a brush.



Drill the first hole in the handle using either a spade or Forstner bit.

Drill the pilot hole for the tap.

Drill bit, tap, and mandrel.

less firm brush. The depth that the knot is seated in the hole of the handle also affects the firmness of the brush; a deeper hole will result in a stiffer brush, and a hole that just covers the knot gives the same firmness of the brush. If you are unsure of what your brush will look like, drill various-size holes in a piece of wood and test the loft *(Photo 1)*.

Badger hair knots come in a variety of grades.

Drilling a hole in the handle

Use either spade bits or Forstner drill bits to drill the hole in your handle blank *(Photo 2)*. I drill my holes using the drill press because I usually make handles in batches of six or twelve, so it is easier to drill all the holes at the same time. I then have blanks with predrilled holes in varying depths. This makes for quick assembly work for whatever size I happen to need. Obviously, the depth of the hole should be enough to cover the base plug of the knot; however, if you want to vary the loft of the brush, depending on the overall length of the knot, you can drill your hole from ⅜"–1" (10mm–25mm) deep.

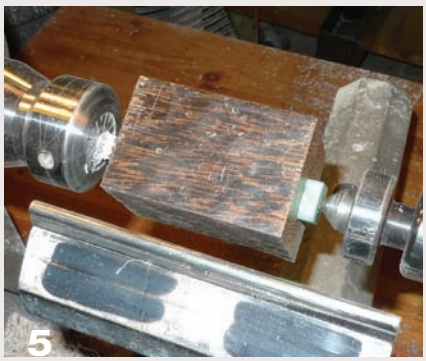
I chose a 1"-diameter (25mm) spade bit for the hole. This diameter will result in an average loft and not pinch the brush hair together. I mark the depth of my cut on my spade bit for easy reference. I drill my hole about ⅛" (3mm) deeper, so that I can square the end of my stock on the lathe and still keep the proper depth for the hole. After drilling the initial hole, I leave the blank in my PHD (Paul Huffman Designs) drill vise and change drill bits to a #7 (0.198") and drill a pilot hole for my tap. Leaving the blank in place ensures that the pilot hole will be centered *(Photo 3)*.

Now that the blanks have been drilled, I use a ¼" × 20tpi tap to cut threads into the pilot hole so that I can screw the blank onto the mandrel *(Photo 4)*. You may want to use a shot of WD-40 on the tap to make tapping the acrylic blank a little easier. I use a bottle-stopper mandrel held by a Beall chuck. This holds my blank securely and square for turning. You could also use a collet chuck to hold your mandrel.

Turning the handle

Thread the blank onto the mandrel and slide the tailstock forward to provide support while turning the handle *(Photo 5)*. I release the tailstock when it is time to square up the bottom of the shaving brush handle. I make the majority of my handle bottoms flat or slightly concave. The others I make round. Flat or concave bottoms are more user friendly, as most shavers will soap up and stand the brush up,

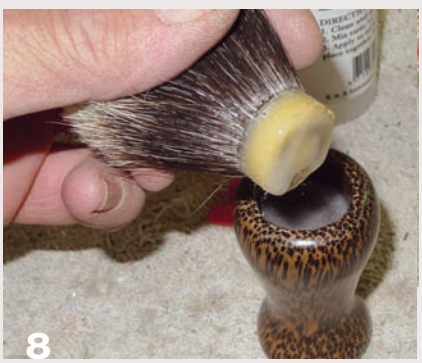
Anthony Turchetta is a semiretired insurance agent who owns and operates a pen boutique in Carefree, AZ. His one-of-a-kind custom-made pens are marketed under the name "Penchetta" and have been featured in Stylus *and* Pen World *magazines. Anthony is a member of the AAW, Arizona Woodturners Association, The Pen Makers Guild, and the International Association of Penturners. He sells badger hair knots on his websites penworks.us and thegoldennib.com.*



5 The handle blank is mounted on the lathe and ready to turn.

6 I apply CA glue to my brush handles as a finish; however, you can use any good quality finish.

7 After a dry fit test, the handle is ready for the knot to be glued in.



8 Fill the pilot hole, spread epoxy into the larger hole, and coat the bottom of the knot.

The acrylic and palm-wood brushes are finished.

then go back to the brush and resoap. The round-bottom handles are simply more nostalgic looking.

Turn, sand, and apply finish to the brush handle *(Photo 6)*. Handles can be made in any shape and size you desire so let your imagination go wild! When applying a finish, remember that the wood will be taking a beating with soap and water daily, so make sure you use a good-quality, waterproof finish.

Gluing the knot into the handle

After also turning and finishing the acrylic handle, both handles are ready to accept the bristle knots. I do a dry test fit to make sure the depth is still proper. I use two-part epoxy to set my knots. I have used 5-, 30-, and even 60-minute epoxy and they all work well *(Photo 7)*. Mix a small amount of epoxy and fill the pilot hole in the handle, spread some into the larger hole and coat the bottom of the knot as well *(Photo 8)*.

I want to use as much epoxy as possible without the epoxy oozing out of the handle and on to the badger hair. Oh, this is going to happen occasionally, that's how I get all my personal shaving brushes!

Let the epoxy set up overnight. In the morning, give the brush several firm tugs to make sure the knot will not come out. That's it; you're finished. Now comes the fun part: throw away that can of shaving gel, buy some nice rose, lemon, or whatever your fancy is for cream or soap, and start enjoying the art of shaving. ■

Care for your shaving brush

1. Brushes come already sterilized; they should not be boiled.
2. Lather lightly without pressure. Excessive pressure will break the hairs and cause shedding.
3. After use, rinse thoroughly and remove moisture. Leave in the open to air dry. Never enclose a damp brush.

Lather up your brush and enjoy a real shave!

Loose Change

Timothy Horner

Photo: Brother Mark Kammerer, OSB

Made from cherry wood, the diameter of the medallion is 1⅞" (22mm) and it is about ⅛" (3mm) thick. The coin is from Chile. This medallion has been worn for some time.

When I return from visiting foreign countries, my pockets often contain loose change. Most banks will not exchange these coins, but because they are sometimes quite attractive mementoes from my trip, I have incorporated the more interesting ones into jewelry.

Turn a cylinder

Turn a cylinder of any wood with a pleasant endgrain to a diameter of 2"–3" (50mm–75mm). The diameter should be about twice that of the coin, perhaps a little more. The length of the spindle can be whatever you can hold steady in the headstock alone. You will not be using the tailstock for support.

Mount the cylinder into a chuck. Measure the diameter of the coin and, with a parting tool, make a cavity in the center of the end of the spindle of the same diameter and depth as the coin. The sides of the cavity must be vertical. Ideally, there should be a jam fit of the coin into the cavity, and with patience, this can be done. Use a rubber-headed mallet to tap the coin into place. If the fit is at all loose, use epoxy.

You now have the coin in its cavity and a border all around it. Decorate the border by turning a pleasing pattern of concentric grooves around the coin.

The thickness of the disc-to-be should be about twice the thickness of the coin so that you can insert a small eye screw into the rim at the top. Measure the thickness you want, round off the edge of the disc, and part through the cylinder about halfway. Sand and finish the front to taste before parting completely through the cylinder. Sand and finish the back of the disc off the lathe. If you are using just one side of the coin, you may wish to bore a small hole in the center of the disc so that you can tap out the coin using a small rod.

Most coins are more interesting on one side than on the other, but if you want to have the option of seeing either side of the coin, then you need to make a similar cavity on the back of the disc. Its diameter must be a little smaller than that of the one on the front, so that the coin does not fall through the hole. A small part of the edge of the coin will not be visible from the back because of this difference in diameter. Make a jam-fit chuck to hold the disc for turning the other side.

Pass a chain through the eye screw or attach the chain to the eye screw using a link. Findings for jewelry can be found at craft stores or from a quick search of the Internet.

You are now ready to repeat the process with the next coin until there is no more usable cylinder or no more coins. ■

Timothy Horner was born in what is now Pakistan on August 24, 1920, but he is English. He was educated in England, served in the Royal Artillery for six years in WWII in England and Burma (now Myanmar). After that, he joined the Benedictine Abbey of Ampleforth in Yorkshire, England, and remained there until he was sent in 1955 to the United States to found Saint Louis Priory School in Missouri. Among his many hobbies are cricket, woodturning, and photography.

Crush-Grind Peppermill/Saltshaker

All-in-One

Ron Browning

I tried to duplicate a peppermill/saltshaker that I received as a gift years ago, but the mechanisms that have a shaft just didn't work properly. I recently found a nonshaft crush-grind mechanism that would allow me to make a single-unit peppermill/saltshaker (visit packardwoodworks.com). Rather than use the directions provided with the nonshaft mechanism, I use a design intended for a crush-grind mechanism.

There are three sections to the mill/shaker: top, middle, and bottom. The grinding mechanism for peppercorns fits between the middle and bottom sections, which are connected with a tenon. The top section is for salt and it fits on the middle section with a tapered tenon.

Before making the mill/shaker, you will need to turn a "pusher jig" in order to assemble the mill when you are finished turning *(Photo 1)*. Turn a cylinder out of scrap wood that is about 1" (25mm) tall and almost as big around as the bottom of the mechanism. Hollow out one end so that the adjusting nut of the grinder will not hit the inside curve of the pusher during assembly. Make the bottom of the pusher flat and parallel with the face of the pusher, and you have finished. Part off the pusher and clean up the little nub in the middle so the pusher will sit flat on the bench.

1

Make a pusher jig for seating the grinder mechanism at the end of the project.

Turn a cylinder

Select an attractive piece of wood 3" × 3" × 12" long (75mm × 75mm × 300mm). Mount the blank on your lathe between centers and turn it to a cylinder. Now that you have a cylinder, you need to consider the length of the three sections, plus the tenons for holding each section in a chuck, as well as the length needed for separating the three sections. Mark the length of each section *(Photo 2)*. The top and bottom sections are approximately 3" (75mm) plus tenons. The leftover length in the middle will be for the middle section.

Begin to part the sections to form tenons for mounting each section in a chuck *(Photo 3)*. Turn a tenon at both ends of the bottom and middle sections and a tenon at the top of the top section. The diameter of the tenons should match your chuck requirements. The tenons shown in the photo are for a Nova chuck with 50mm jaws.

It is now time to separate the sections. Part down to about ⅜" (10mm), then mark each section (top, middle, bottom), and draw an arrow to help you align the sections later. Break (or saw) the sections apart. Don't worry about torn grain—that will be cleaned up later. ▶

2

Measure and mark the three sections of the peppermill/saltshaker: top, middle, and bottom.

3

Begin parting the three sections to create tenons for mounting in a chuck.

4

With the bottom section mounted in a chuck, clean up any torn grain, then drill the first hole.

5

Sand and apply finish to the inside of the hole that is drilled on the other end of the bottom section.

6

After drilling a 1"-diameter (25mm) hole, mark a line about 1/16" (1.5mm) outside the hole and enlarge the hole so that it has a slight taper.

Turn the bottom section

Mount the bottom section in the chuck using the bottom tenon. Turn the face of the cylinder to clean up torn grain, but take care not to remove the tenon. Then, drill a 1½"-diameter (40mm) hole about 1½" (40mm) deep with a Forstner bit *(Photo 4)*. Sand the inside of the hole slightly to remove any rough wood.

Turn the piece around and mount it in the chuck by the other tenon. Clean up torn endgrain and slightly undercut the surface. The edge of this surface will be the bottom of the mill/shaker and a slightly concave surface will allow the peppermill to sit on the table correctly.

In the bottom section, drill a 1¾"–diameter (45mm) hole ¾" (20mm) deep to accept the mechanism. Use a Forstner bit. Then, using a 1½" (40mm) Forstner bit, drill completely through the bottom section. Apply finish to the bottom and to the inside of the 1¾" (45mm) hole *(Photo 5)*.

The middle section

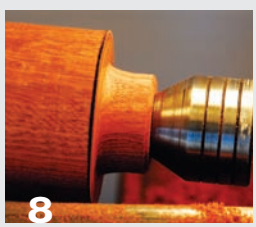
The next step is to chuck up the middle section by the bottom tenon and face off the torn grain. Drill a 1"-diameter (25mm) hole with a Forstner bit halfway through the middle section. Mark a line about 1/16" (1.5mm) outside the hole *(Photo 6)* and turn a taper that is about 1" (25mm) long inside the 1" (25mm) hole (slightly enlarging the hole). Sand this taper lightly to remove any rough grain. Turn the middle section around and mount by the top tenon and face off the parting tool tear out as before. Then finish drilling through the middle section with the 1" (25mm) Forstner bit.

Turn a tenon on the middle section

Now we will have to do a little measuring *(Photo 7)* to determine the length of the 1½"-diameter (40mm) tenon on the middle section, which will be turned and sized so that it will fit inside the bottom section. First, take a measurement from the bottom section: measure the distance from the top of the 1¾" (45mm) hole to the top of the bottom section (the total depth of the 1½" hole). This distance is 2.223" (57mm). Next, take a measurement from the mechanism. Measure the distance from the flange to the top of the 1½" (40mm) section. For the one I'm using, the length is 1.412" (36mm). Subtract the second measurement from the first measurement, 2.223" – 1.412" = 0.811" (21mm). This is the length of the tenon that you need

7

Measure the total depth of the 1½"-diameter (40mm) hole drilled in the bottom section in order to determine the length of the tenon that will be turned on the middle section.



8

Use the rotating cone of the live center to steady the wood while turning the tenon.

9

Test-fit the bottom section onto the tenon just turned on the middle section.

10

A small groove will be turned inside the middle section's tenon to accept the "ears" of the grinder mechanism.

11

The author's shopmade tool that is used to cut the groove for the ears of the grinder mechanism. A small-profile round-nose scraper can also be used.

to turn on the center section. (Yes, those are thousands of an inch. I got a new digital caliper!)

Use the rotating cone of the live center to steady the middle section while turning the tenon on the tailstock end *(Photo 8)*. When you have the tenon started and it is almost the correct diameter, cut a chamfer on the end and test-fit the bottom section over the tenon *(Photo 9)*. When the chamfer will go partway into the 1½" (40mm) hole, put a little pressure on the chamfer and turn the headstock by hand about one-eighth of a turn. This will leave a shiny mark on the chamfer and will serve as a guide for the size that fits. Turn the tenon down to this size and test-fit the bottom section using the live center to help align the bottom section. It should be a tight fit.

Finish turning the tenon to the correct length and then sand to create a fit that turns nicely. The tenon should not squeak when the two sections are rotated, but the fit should not be loose either. Additionally, the joint where the two sections meet should be flush. If there is a gap, you can correct this by making the face of the middle section's angle the same as the top of the bottom section.

Seat the "ears" of the mechanism

A small groove needs to be turned inside the tenon. This groove will accept the "ears" of the grinder mechanism *(Photo 10)*.

To determine where to locate this groove, measure the distance from the top of the 1½" part of the mechanism to the bottom of the little ears that are molded on the top. The length is 0.694" on the one I'm using. (Or instead of measuring, you can simply transfer this distance using a toothpick, cut to the proper length.)

To make the cutting of the groove easier, I made a special tool *(Photo 11)* that is ground to the shape of the ears on the top of the mechanism. Use masking tape to mark your measurement on the tool. Line up your mark with the bottom of the tenon and make the cut inside the middle section. Cut the groove about 1/16" (1.5mm) deep.

The middle section is now finished.

The top section

Mount the top section in the chuck and make layout marks for a 2"-long (50mm) ball that will become the top *(Photo 12)*. Measure from the end of the tenon where the wood is attached in the chuck. Insert a ¾" (20mm) drill bit in your Jacobs chuck mounted in the tailstock. Drill into the top section to a depth that will leave about ¼" (6mm) thickness on the top of the ball.

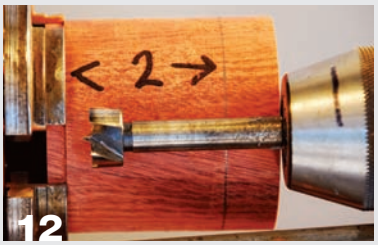
Turn a tenon that will fit in the taper hole in the top of the middle section *(Photo 13)*. Measure the diameter of the top of the taper hole in the middle section. That diameter should be about 1 1/16" (27mm). Turn the tenon down to this diameter. Taper the rest of the tenon so that it will fit into the hole *(Photo 14)*. (The tenon will be about 1" [25mm] long.)

Turn the tenon on the top to fit snugly into the taper hole in the middle section and make sure middle section and the top section fit flush. If they don't, now is the time to fix it.

The inside of the ball where salt will be stored needs to be hollowed out. I use a small set of curved hollowing tools for the job. Remember that you are turning endgrain. I leave the wall thickness fairly heavy, about ¼" (6mm).

Turn a shallow groove inside the tenon, located about 1/16" (1.5mm) from the end of the hole inside the taper. This groove is used to engage the ¾"-diameter (20mm) nylon hole plug that will keep the salt inside the top section.

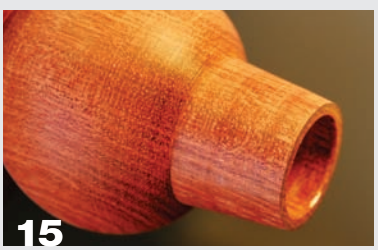
Begin shaping the outside of the top *(Photo 15)*. When the lower part is shaped and sanded, you can apply finish.



With the top section mounted in a chuck, mark the length for the top of the mill/shaker. Drill a ¾" (20mm) hole to a depth that will leave about ¼" (6mm) thickness on the top.

Turn a tenon on the top section that will eventually fit into the tapered hole in the top of the middle section.

Taper the tenon so that it fits into the tapered hole in the middle section.



Shape the outside of the top. Sand and apply finish to that part before later reversing it.

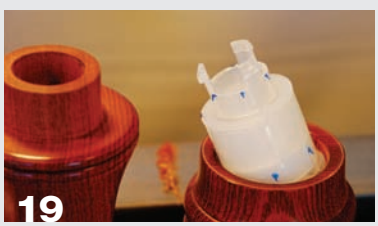
Shape and finish the body

Assemble the middle and bottom sections together and put them on the top section. Place this assembly between centers using a large revolving cone center in the tailstock *(Photo 16)* and turn the whole assembly to a pleasing shape *(Photo 17)*. Where the ▸

Mount the middle and bottom sections to the top section, using a large revolving cone center in the tailstock.

Turn the assembly to a pleasing shape. Then, sand and apply finish to the middle and bottom sections.

Using masking tape and a compass, mark a circle where the holes for the salt will be drilled.



Apply blue marker to the ends of each little "fin" of the grinder mechanism. The blue ink will be transferred onto the inside of the hole on bottom of the bottom section and onto the inside of the hole in the bottom of the middle section.

Carve small V-grooves at all the marked locations. The grooves will lock the fins in place when the mechanism is inserted.

sections meet, use a sharp fingernail gouge, skew chisel, or V-tool to cut a slight V-groove to hide the misalignment of the grain when the mill/shaker is in use. Sand and apply finish to the middle and bottom sections.

To finish the top part of the top section, make a jam-fit chuck that will fit the tenon. With the top section in the jam chuck, turn between centers to finish shaping it. Sand and apply finish.

Holes for the salt

Use the tailstock to put a very small dimple in the middle of the top. Remove the top from the jam chuck and place a piece of masking tape about 1" (25mm) long on the top, with one edge lined up with the dimple. Then put another piece of tape on the other side of the dimple. Using a compass, draw a circle about 1" (25mm) in diameter on the masking tape *(Photo 18)*.

Using the compass at this setting, place the point at the intersection of the two pieces of tape and the circle, and then make a mark on the circle on either side of the center point. Move the compass point to the intersection of the circle and the mark you just made and make another mark intersecting the circle. Do the same on the other side. Use a center punch or awl to make a small dimple at the intersection of the circle and the marks and where the tape edge meets the circle. Drill 5⁄64" (2mm) holes at each of the dimples, plus the one in the middle. There will be a total of seven holes, six in a circle and one in the middle. The salt will shake out of the container through these holes.

Carve V-grooves

Look at the grinder mechanism. See those little "fins" sticking out around the bottom and the top? Each of those fins needs a small groove to seat into. The larger diameter of the mechanism fits into the bottom of the mill/shaker and the smaller diameter fits into the middle section of the mill/shaker.

You will have to mark the location of the fins on the inside bottom of the bottom section and on the inside of the tenon of the middle section. You can do this by inking some magic marker on the very top of each of the fins *(Photo 19)*. Place the mechanism into the bottom of the bottom section. It will not fit all the way in because of the fins, but when it bottoms out on the fins, give it a little push then remove the mechanism. See those marks? Enhance them with a pencil on the inside. Follow these same steps for the middle section.

Use a veining tool to cut little V-grooves at all of the marked locations *(Photo 20)*. The grooves only need to be deep enough for the fins to lock into. Use the pusher to seat the mechanism into the bottom section. Remember to align the fins with the V-grooves. Next align the fins on the mechanism with the V-grooves on the middle section and press it in place. You should feel and hear a slight click as the "ears" seat into the groove you turned inside the tenon of the middle section.

Put a nylon hole plug, available at hardware stores, into the ¾" (20mm) hole of the top section to keep the salt from leaking into the peppercorns, then put the top in place and you have a finished peppermill/saltshaker. ■

Ron Browning is an active member of the Florida West Coast Woodturners chapter of AAW. He served as vice president and president of the chapter and was named a "Chapter Sage." He founded the local Hands-on Woodturners club and held sawdust sessions in his shop every Sunday evening for years. He learned woodturning from his dad, Sumner H. Browning.

William Moore

Spinning Metal and Turning Wood into Gold

Ted Gaty

William Moore in his studio.

Bill Moore's artwork is a masterful combination of spun metal and turned wood. He is both an accomplished metalsmith and a woodturner. Although Bill has an MFA and has taught sculpture at the Pacific Northwest College of Art in Portland since 1972, he thinks of himself as much as a woodturner as he does a wood sculptor. He is equally comfortable in the world of fine arts as that of craft. Indeed, his work is a striking combination of metal and wood, of fine art and fine craft.

Bill combines wood, metal, and occasionally stone; however, one element never dominates the other. When I consider his work I don't think, "There is a beautiful wood piece with a little metal decoration," or conversely, "there is an outstanding metal sculpture decorated with wood." The elements are balanced and they exist in harmony. As Bill says, "The piece is the sum of the parts."

The manner in which Bill works is fairly straightforward. He starts with a visual idea, and then he makes a drawing, frequently experimenting with the concept on paper before making the piece. His forms tend to be simple and his compositions are combinations of those simple forms. Some of his pieces he likes to imagine could have been revered ceremonial objects from ancient cultures, such as *Caldera*. *Balancing Act* has a simple elegance that feels both ancient and modern at the same time; it would not seem out of place in a collection of contemporary art.

This artist, however, is not limited to the ceremonial or to elegant simplicity. In his piece *Lidded Orb,* he creates a whimsical combination of metal and wood, executed with his usual superb craftsmanship.

In his most recent work, Bill is exploring the sculptural potential of recombining simple turned forms to create dynamic compositions that have a strong sense of movement and gesture, and *Twist* is an excellent example.

Bill's early life

Bill's introduction to woodturning and creativity came early in his life. While in junior high school in the late 1950s, he learned how to use a lathe from his mother. On a family vacation she saw a woodturning demonstration, liked ▸

Caldera, 1994, Manzanita burl, spun copper, 6" × 14" (152mm × 355mm)

Collection of the State of Oregon

Photo: Harold Wood

what she saw, and upon returning home bought a ½-HP Craftsman lathe with an 8" swing. She taught Bill how to turn on this lathe. Bill still has that lathe, which he used for many years; however, it now resides in his attic. His mother also taught him how to work with metal to make jewelry. Bill talks fondly of both his mother's creative energy and her passion for making things. Thanks to her, Bill learned early in life not only how to work with metal and wood, but to love the creative process.

Bill graduated from the University of Michigan in 1971 with an MFA. While pursuing his studies part time, he worked full time as an art teacher in a small rural school district close to Ann Arbor. He was the only art teacher for all the students in a K–12 school. Needless to say he was very busy. As he reflects back on those times, Bill credits his hard-earned work ethic for enabling him to have a full-time job, raise a family, and also fulfill his artistic goals. Bill has enjoyed his teaching career, and has never regretted being a teacher first, then an artist. One of Bill's former students, Ron Burris, is now a well-known wood artist.

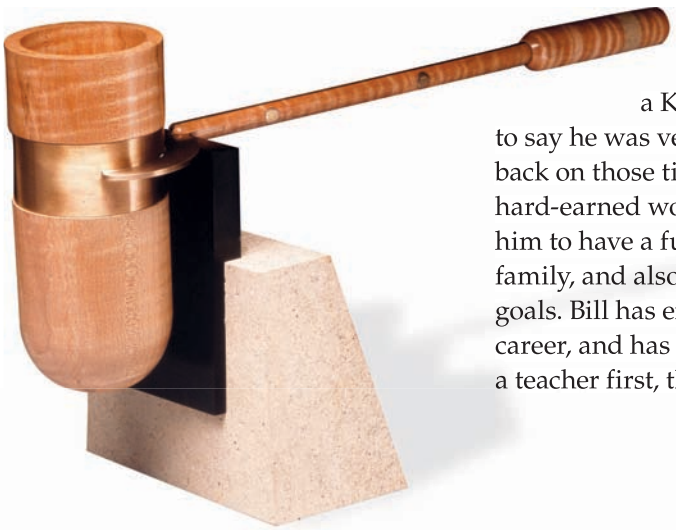
Influences

During his college years in the 1960s and '70s, the main influences on his work were by the famous British sculptors, Henry Moore (no relation) and Barbara Hepworth. Over the years he has been influenced by several historical design styles, such as Art Nouveau and the Arts and Crafts Movement. The Art Nouveau influence is evident in *Dreaming of Cradles in the Sea,* a collaboration with Christian Burchard. Likewise, the Arts and Crafts influence is obvious in *Newcastle.*

The 1988 World Turning Conference in Philadelphia, which Bill attended, had a major influence on his artistic development. Bill remembers fondly how he was warmly welcomed by the community of woodturners at that event. He felt a strong connection to the group and has come to identify with the woodturning community. The fifteen years previous to that conference, Bill had considered himself primarily a wood sculptor who occasionally used the lathe as a

Balancing Act, 2004, Maple, ebony, bronze, limestone, 10⅞" × 19" × 7¼" (276mm × 483mm × 184mm)

Photo: Harold Wood



Twist, 2008, Madrone burl, copper, 16" × 27" × 14½" (41cm × 69cm × 37cm)

Photo: Dan Kvitka

Lidded Orb, 2006, Mahogany, ebony, bronze, copper, brass, 10½" × 11" × 12" (267mm × 279mm × 305mm)

Photo: Dan Kvitka

tool. As a result of what he heard, saw, and felt at the conference, a whole new direction for his work opened up. The lathe became his primary tool and the vessel form a primary design element.

Metal spinning

Bill is not simply a woodturner. He is also a metal spinner. The addition of spun metal to turned forms is one of the unique contributions Bill is known for in the field of woodturning. During my interview with Bill, he gave me a demonstration of how to spin metal on a lathe. I discovered that metal spinning can be learned by woodturners with the addition of a few new tools, some patience, and practice.

The primary tool for metal spinning is the lathe, and a woodturning lathe works just fine. A large burnishing tool is used to bend the metal disc while it spins. The burnishing tool is placed on one side of a metal fulcrum post, which helps provide the force needed for the burnishing tool to shape the spinning metal on a mold. The molds are turned ahead of time and are generally made from hardwood.

A complete description of metal spinning can be found in the book *Metal Spinning* by James Regan and Earl Smith (Lindsay Publications).

It was clear to me from Bill's demonstration that the basic skills of metal spinning are not difficult to learn; however, it *was* obvious that it would take some time and practice to master the process. The results would be well worth the effort. Bill's piece *Valsetz* shows what beauty can be created from combining spun metal and turned wood.

Bill is now near retirement from his 37-year-long teaching career. He plans on easing away from his professorial duties, dropping down to one class per term before retiring completely. He is looking forward to spending more time in his own studio doing what he loves best: creating gold from turning wood and spinning metal. ■

Ted Gaty is a retired schoolteacher from Salem, OR. He began his woodturning career, like many others, making bowls and candleholders. His work has evolved into creating multimedia abstract wall hangings and art pieces that utilize turned wood forms.

Dreaming of Cradles in the Sea, collaboration with Christian Burchard, 2000, Madrone burl, copper, 13¾" × 6" × 4½" (350mm × 152mm × 114mm)

Collection of University of Michigan Museum of Art

Photo: Rob Jaffe

Pea Pod Flute, 2005, Blackwood, boxwood, copper, 6½" × 3" × 2¾" (165mm × 76mm × 350mm)

Photo: Harold Wood

Valsetz, 2001, Maple, copper, 6" × 4⅞" (152mm × 124mm)

Photo: Dan Kvitka

Newcastle, 1993, Quilted maple, bronze, copper, 14" × 12" × 12" (355mm × 305mm × 305mm)

Photo: Harold Wood

The Spiral
Nature's Masterpiece

Neil Kagan, *Floating Spiral,* 2001,
Poplar, turned, carved, and bleached
2⅛" × 6⅞" (55mm × 175mm)

Neil Kagan

The appearance of the spiral in nature has fascinated and mystified mankind for centuries. Philosophers, artists, and mathematicians have pondered nature's perfection but none have yet unlocked the secret of why a spiral galaxy, a nautilus shell, and an unfurling fern share the same shape. Raging hurricanes, crashing waves, a ram's horns, and even the tail of the crested chameleon all personify the beauty of the spiral. The spiral shape, a building block in the universe and the human body and a mystical symbol of life across all cultures, is truly nature's masterpiece. The spiral's striking beauty—the smooth eye-pleasing flow of its curves—has inspired a rich tradition in art and architecture and now in contemporary woodturning.

Photo: NASA and The Hubble Heritage Team (STScI/AURA)

Whirlpool galaxy

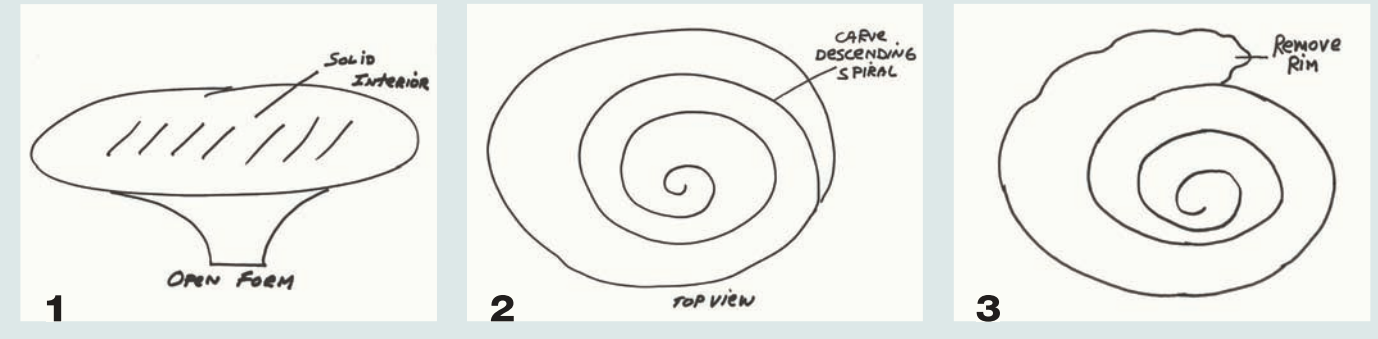
Photo: Neil Kagan

Million year-old fossilized nautilus shell

Photo: Phil Jordan

Fiddlehead fern

Rose



Two-dimensional spirals

In mathematics, a spiral is a curve, emanating from a central point, moving progressively farther away as it revolves around the point. A two-dimensional spiral is typically flat like the patterns carved into early burial stones by the Celts. These spirals are among the most ancient symbols found throughout the world—most likely representing the "life-death-rebirth" cycle commonly associated with burial sites. The beautiful, contemporary piece, *Nurture*, created by Sharon Doughtie, continues this Celtic tradition using dramatic descending spirals etched into a classic bowl turned from Norfolk Island pine.

Three-dimensional spirals

Three-dimensional spirals, or helixes, add height to the equation. A helix is a three-dimensional coil that runs along the surface of a cylinder like a screw, a spiral staircase, or the spiral growth of a vine. The most famous example is the intricate double helix model of a DNA molecule considered to be the secret of life. DNA consists of two spiral-shaped strands that wind around each other. During reproduction, one strand splits away and pairs with a single strand from another molecule creating a copy of the original. William Hunter's *Converging Helix* is a brilliant interpretation in wood.

Adding movement to turned objects

The following examples show how a spiral design can be applied to common woodturning shapes to add movement, making the form come alive.

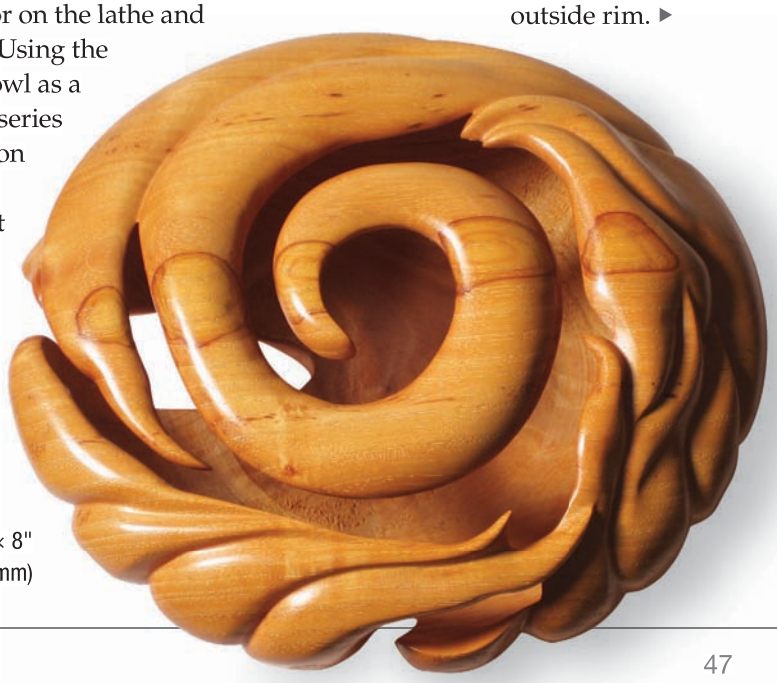
The open form

The best place to start adding a spiral design to your work is with a simple open bowl. I created *Floating Spiral* by turning a horn-shaped bowl out of poplar. The exterior shape is designed to act as a pedestal for the finished sculpture. Do not turn the interior of the bowl—leave this solid so you have ample wood to carve the descending spiral *(Figure 1)*.

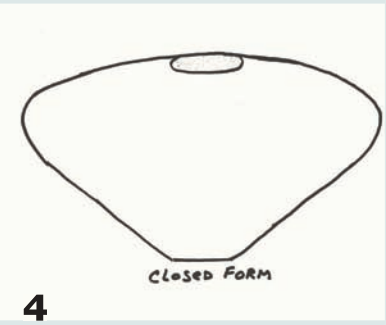
Sand the exterior on the lathe and remove the bowl. Using the diameter of the bowl as a template, create a series of spiral sketches on paper. Select the sketch that is most pleasing to your eye and use a pencil to transfer the design to the wood. At this point your spiral design is two-dimensional, with the center of the spiral at the center of the bowl *(Figure 2)*.

Now you are ready to transform the design by carving the three-dimensional spiral. I use a flexible-shaft rotary carving tool with carbide burrs to sculpt the wood. Using a carving technique I learned from artist Michael Lee, I held the bowl in my left hand while carving with my right. Starting on the outside of the bowl I defined the spiral curve, making each revolution deeper and deeper until I reached the center point of the spiral. I then carefully shaped each curve so that everything flowed together in one continuous form.

Finally, after studying numerous drawings and photographs of shells, I decided to carve away part of the outside rim. ▸



Neil Kagan, *Evolution,* 2003, Maple, turned and carved, 4½" × 9½" × 8" (115mm × 240mm × 200mm)



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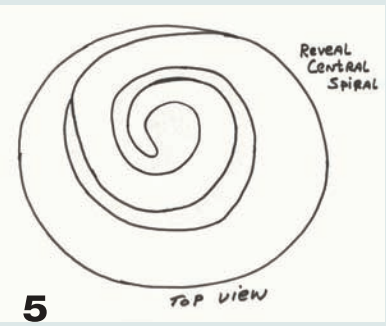

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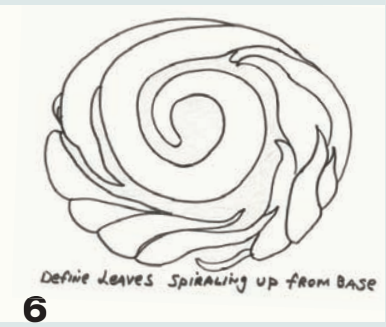

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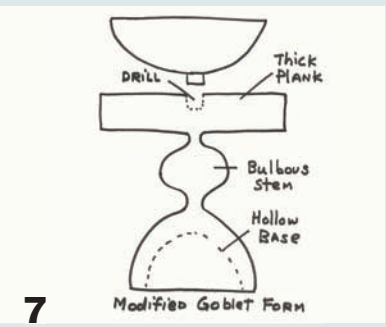

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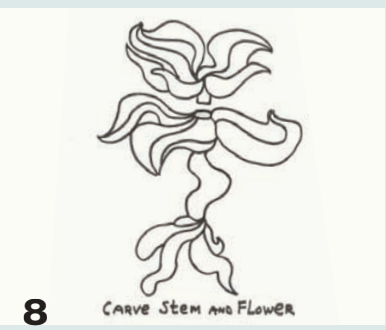

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By removing part of the rim, I discovered that I had magically transformed a carved bowl into an asymmetrical sculpture *(Figure 3)*. Upon completing the carving, I sanded the piece to remove tool marks and to refine the movement of the spiral design.

The closed form

Working with a hollow vessel *(Figure 4)* creates unlimited possibilities for spiral-inspired designs. *Evolution (photo on page 49)* was turned from green maple into a classic Southwestern shape and hollowed through a 1½" (40mm) opening. As the wood dried, the shape of the piece moved substantially. No longer attractive as a vessel, it became the perfect carving template for another spiral experiment, thus the title *Evolution*. This time my inspiration was the plant world—how leaves grow and unfurl toward the sun.

Using the diameter of the piece, I created a sketch in which a central leaf spirals up from the base of the vessel and revolves around the opening. When I carved the leaf, I pierced through the top of the vessel, essentially popping the spiral form free *(Figure 5)*.

The effect of the spiral floating 3" (75mm) above the bottom of the vessel was dramatic, yet not complete. First, I realized that to make the spiral shape come alive, I had to eliminate any flatness. I shaped the leaf by using every bit of the ½" (13mm) wall thickness to create depth—high points and low points—and visual movement: the leaf curling in and tapering to a point at the end of the spiral.

To complete the composition, I carved a series of complementary leaves evolving from the base and moving in harmony around the central spiral-shaped leaf *(Figure 6)*. It is important to note that thicker-walled vessels are more desirable than thinner ones for this type of sculpture. Although more difficult to carve, they yield much more interesting shapes and movement.

The goblet form

As your carving skills increase, your imagination will begin to run wild! *Dancing in the Moonlight* transforms a basic turned goblet into a dancing flower. First, I sketched a modified goblet form designed to give me ample wood for carving and animating the flower *(Figure 7)*. The stem, turned out of maple, consisted of a hollow cone at the base for the flower roots, a bulbous stem in the center to create the spiral growth of the flower, and a plank of wood at the top to be carved into three leaves. While

Neil Kagan, *Dancing in the Moonlight,* 2008, Maple, maple burl, turned, carved, and bleached, 7" × 5½" × 5" (180mm × 140mm × 130mm)

the piece was on the lathe, I drilled a hole in the stem that would allow me to center the goblet bowl, which was turned out of maple burl and designed so that it could be carved into a five-petal flower.

Working on the stem first, I carved three leaves out of the wood plank, each designed with left-to-right spiraling movement. I then sculpted the stem, removing wood to create a spiral growth pattern. The roots were carved next, pin-wheeling from the base of the stem to mirror the movement of the stem and the leaves. Finally, I carved the goblet bowl into five twirling flower petals, refined all the curves through hours of hand sanding, glued the pieces together, and bleached the flower to better show off the dancing profile *(Figure 8)*.

The vase form

See How Our Love Grows began as a 13"- (330mm) tall cherry vase with a diameter of 3¼" (80mm) and a wall thickness of ⅜" (10mm). I hollowed the vase to a depth of 9" (230mm), leaving the bottom 4" (100mm) thick. At the base of the hollow portion, I drilled a hole in preparation for a small insert *(Figure 9)*.

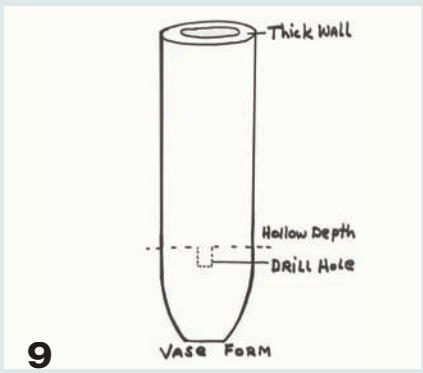
On a sketch pad, I created a design that involved three leaves emerging from the base and intertwining as they spiraled toward the sun. The key to the design is the helix-like movement of one of the leaves in a full circle around the circumference of the vase, acting as the connecting element for the three leaves. Once I carved away the walls of the vase to reveal the three leaves, I quickly realized the need to open up the bottom of the leaves creating "legs" for the sculpture and letting light through to balance the openness of the top *(Figure 10)*.

To complete the piece, I turned a small insert out of the same cherry log, 4" (100mm) tall with a diameter of 1¾" (45mm). To facilitate the carving, I drilled two holes, one through the side and the other through the top. These holes created the space I needed to carve two small leaves spiraling around each other as they grew *(Figure 11)*. I carefully positioned the small piece within the larger sculpture to create the effect of the five leaves spiraling together.

For me, the spiral is truly nature's masterpiece; its mysterious, ethereal beauty will always intertwine with my imagination as I go forward creating new forms out of wood. ■

Neil Kagan (NKagan1@aol.com) is an editor and photographer living in Falls Church, VA. He has been working with wood since 2000 and is a member of the Capital Area Woodturners.

Neil Kagan, *See How Our Love Grows*, 2005, Cherry, turned and carved, 13" × 3¼" (330mm × 80mm)



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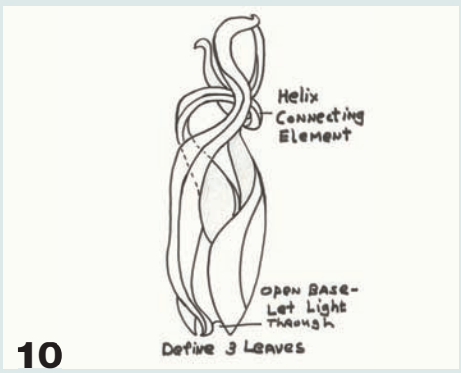

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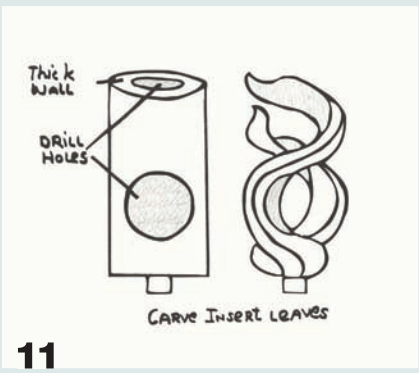


11

Spiral Gallery

One Form, Many Voices

Artists who work in wood have long been captivated by the beauty of the spiral. In the words of Sharon Doughtie, "I think that we humans have a primal recognition of spirals; they make us feel good. They are a soothing, familiar part of life. As we go through our journey on this earth, we are always expanding or contracting, growing or withering, looking outside ourselves or within. Spirals speak to that process." Here, twelve artists share their work and perspectives on the spiral form.

William Hunter, *Converging Helix,*
1999, Cocobolo, turned and carved,
10" × 18" × 23" (25cm × 45cm × 60cm)
Collection of David and Nancy Trautenberg

"These pieces as art objects represent a microcosm of the universe, and their purpose in my life is fundamentally meditative. Being able to devote time, emotion, intellect, and physical energy to the successful completion of a single piece is like rebirth. The released elements of the *Tangled Helix* series have an openness and freedom—the pieces invigorate space, defy gravity, and allude to infinity. They are a reflection of my spirit."

John Macnab,
Compound Conical Column #3,
2000, White pine, turned, carved, and painted,
66" × 12" (170cm × 30cm)

"The organic quality of my sculpture, like a train of vortices rising from a steaming cup of coffee or a vine rising from seed, is the surprising result of a handful of elementary movements. The large-scale spiral geometries come from mechanical decisions made before work begins, while the finer patterns and textures are generated in the moment, traced by hand and eye responding to the wood piece simultaneously rotating, oscillating, advancing, and receding, and by the overriding harmonics set up between a spinning tool and the movement and grain of the material."

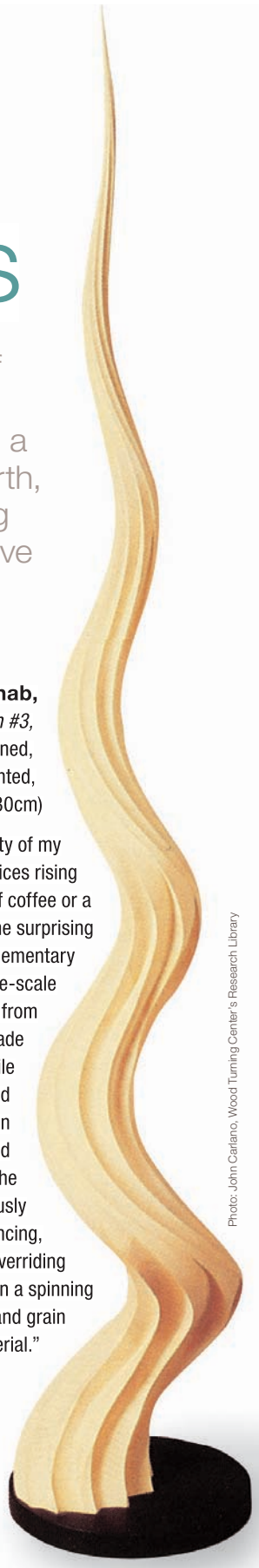


Photo: John Carlano, Wood Turning Center's Research Library

David Nittmann, *Canary in a Coal Mine,* 2006, Tupelo, turned, burned, and dyed, 14" × 5" (355mm × 130mm)

"I am a runner and a dancer. In my history as a woodturner, I have created many pieces of kinetic art. I love the movement. The spiral design in my signature 'basket illusion' work creates that spirit of movement for the critical eye. The two opposing spirals in *Canary in a Coal Mine* dynamically interact to create the fluttering path of this little yellow bird."

Photo: Tim Benko

Jacques Vesery, *Primordial Orb of the Pemaquid Rock People,* 2008, Cherry, turned, carved, textured, 23K gold leaf, acrylics, 3" (75mm) sphere
Collection of David Datwyler

"I never considered working on a round form prior to the challenge presented by 'The Sphere' Professional Outreach Program exhibit. Although nature as inspiration may seem obvious, my vision comes from the way nature is repeated within the 'golden mean' or 'divine proportions.' Inspiration is from pattern and form more than reality itself. Complements in balance, color, texture, and proportion become important, even if the object itself is not. For me, this creates a unique spirit and soul from birth—material and technique then become irrelevant."

Photo: Neil Kagan

Spiral aloe

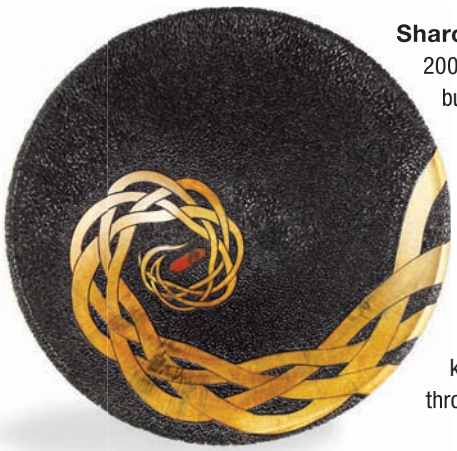


Photo: Pat Kramer

Sharon Doughtie, *Nurture,* 2009, Norfolk Island pine, turned, burned, and ebonized, 6¾" × 2¼" (170mm × 60mm)

"Spirals have always been compelling to me. I was excited to find that there is a spiral pattern formed in clouds, driven by moving air that encounters land masses. They are called the von Karman vortices. Simple Celtic knot-type patterns are also wind-woven through those clouds."

Gary Stevens, *Vortex #27,* 2009, Buckeye burl, turned and carved, 22" × 43" × 39" (55cm × 110cm × 100cm)

"In Vortex #27 I am experimenting with the idea of movement within a seemingly motionless form. Like a distant waterspout, it appears stationary, yet its hovering form portrays the powerful, yet directed motion of natural forces. Vortex #27 expresses my wonder at the contrasting processes of nature at work. From the slow methodical growth that produces the solidity and beauty of wood, to the continual fluctuation, disappearance, and reorganization of the forces that move air and water to create fleeting forms of unbelievable power."

Jerry Bennett, *Serenade,* 2008, Mahogany, maple, ebony, brass, steel, constructed with strings created from turned segmented rings, 6' × 3'5" × 3'5" (180cm × 105cm × 105cm)

"The body, neck, and headpiece of *Serenade* are sawn and carved individually from a large glue-up of mahogany. The fret board is ebony with nickel alloy frets, set with traditional luthier methods. The strings consist of approximately eight hundred individually turned and tapered segmented rings. Each ring is sized and tapered for its location on an internal brass armature. Our innate biology has an affinity for external rhythms in music, dance, and art. The visual depiction of rhythm is the wave, which is simply a spiral, stretched out. In *Serenade*, the guitar strings are exaggerated waves, modulated to make them asynchronous, and given a suggestion of movement by changing the diameters. Just as a musician's interpretation is made more interesting by the nuances played that are not written in the music, my deviating from a simple pure wave to a series of spirals makes this piece more interesting."

Virginia Dotson, *Spiral Vessel Pair,* 2002, Italian poplar plywood and graphite, turned and carved, 9" × 10¾" × 10" (variable) (230mm × 275mm × 225mm)

"My spiral sculptures reduce the traditional vessel form to its essential structure, which then takes up the energy of the spiral line. Like a dancer or skater, the spiral starts out small and tightly curled, and extends gradually outward to include the wider space around it."

Jon Sauer, *Spiral Bottle,* 1992, African blackwood, Paca wood, turned on an ornamental lathe, 6" × 1½" (150mm × 40mm)

"This spiral bottle was inspired by architecture like the Saint Basil Cathedral on Red Square and turned on an antique ornamental lathe made in 1868 by the Holtzapffel Company. The ornamentation is done manually by indexing the work and carving it with a small revolving cutter. The beauty of the spiral moves your eye to the sensuous form at the top of the bottle. The spiral also invites the viewer to hold the bottle in his or her hand and rotate it."

Photo: Peggy Bennett

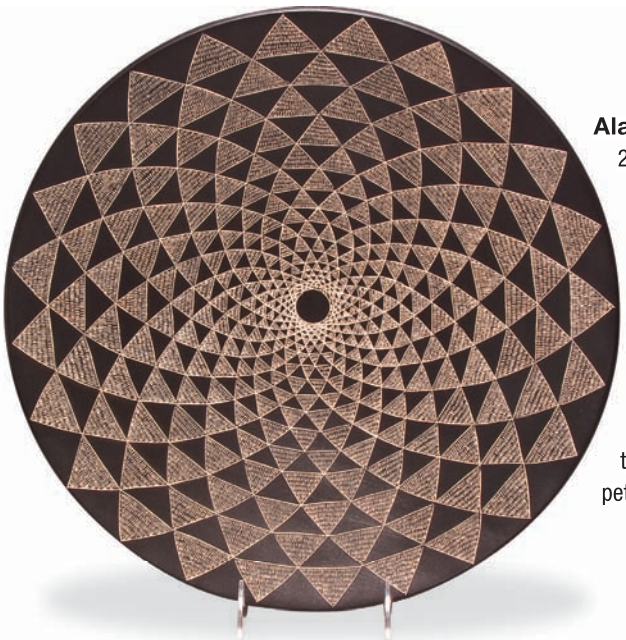
Photo: David Peters

Leon Lacoursiere, *Phoenix Rising,* 2008, Curly maple, turned and carved, 5" × 6½" (130mm × 165mm)

"I've always been fascinated by the motion and power of whirlpool-like formations—whether they be in water, over the water, or over land—and I've always wanted to try to capture that power in my work. After creating *Tsunami* and *Katrina* to commemorate the events of 2004 and 2005, I wanted to do something a little more uplifting. Despite these tragedies, we continue and we prevail. We are not crushed. And so I created *Phoenix Rising*, a symbol of hope and the enduring human spirit."

Typhoon Imbudo approaches the southern coast of China, July 23, 2003.

Photo: Courtesy Jacques Descloitres, MODIS Rapid Response Team at NASA GSFC



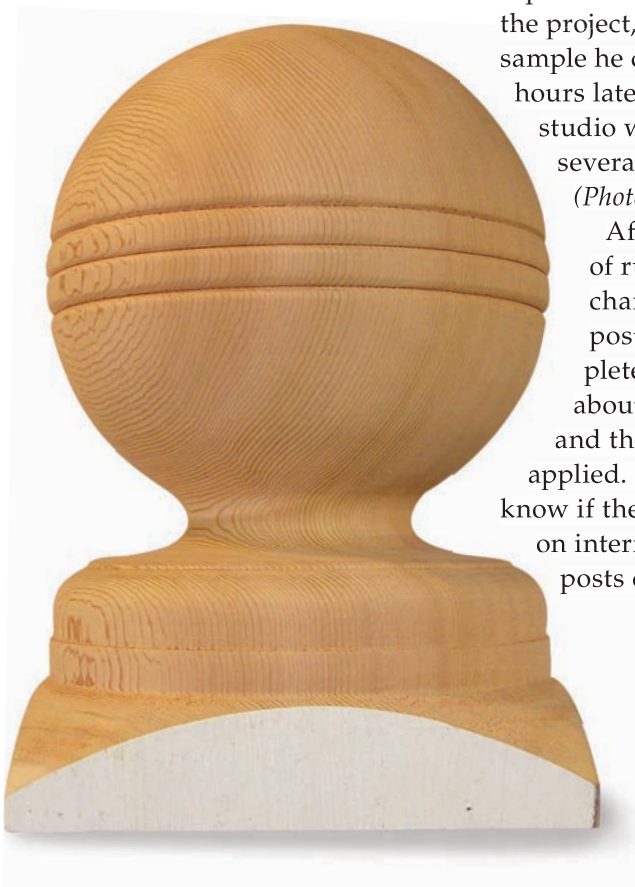
Alan Stirt, *St. Mark's Variation Platter,* 2002, Sugar maple, turned, carved, and painted, 2¼" × 16" (60mm × 405mm)

"The design is loosely based on the intersecting logarithmic spirals found in the florets of the sunflower. The first piece I made with this pattern had just the intersecting spiral lines. I didn't feel that it was successful, but it had possibilities. It sat in the shop for about a year when some friends sent me a postcard showing part of the floor of St. Mark's Cathedral in Venice where similar spiral patterns were made of triangular pieces of colored stone. That inspired me to create triangles where the curves intersected. I filled in half the triangles with a series of very fine dashes. The result was the appearance of petals, which seem to move and overlap each other."

Tania Radda, *Bountiful,* 2005, Basswood, compressed maple, turned, carved, and painted, 14" × 23" × 30" (35cm × 60cm × 75cm)

"*Bountiful* is one of my earlier pieces. At the time, I was looking closely at tropical flowers and became intrigued by their intricacies. I was interested in mimicking the liveliness of plants and flowers in nature—I wanted to create pieces that gave the impression that they were still alive and growing. I was able to re-create the idea of movement by curling and adding spirals to the tips of the vines. The function of the spiral is to draw the viewer's eyes beyond the piece, providing balance and suggesting that the plant lives on as it continues to extend beyond the central seedpod."

Photo: Ken Manicki



Newel Post Caps

How to Approach a Turning Job

Jim Echter

An individual contacted me wanting to know if I could turn two newel post caps. We talked by phone about the project, and I asked if he had a sample he could show me. A few hours later, he stopped by my studio with a bag containing several rotted pieces of wood *(Photo 1)*.

After looking at the pile of rubble, I asked if by any chance he had another newel post cap that was complete. Yes he did. We talked about what wood he wanted and the type of finish to be applied. At the time, I did not know if the caps were to be used on interior or exterior newel posts or if they were to be stained and varnished or painted. How should a turning job like this be approached—not just the techniques, but the analysis of what needs to be done and the steps followed to accomplish the task? I will outline how I analyzed this project, discuss the steps I took, and share some tips in the hope that you will be better prepared to tackle your own custom turning job.

The original newel post cap and a new one.

Analyzing the job

The original cap was about 5½" (140mm) square at the base and about 8" (200mm) high. The new caps would need large-diameter timber or would have to be made from glued-up wood. The customer told me that he was going to replace the posts and asked if I could possibly use the wood from the old posts. I provided an estimate for labor, assuming I could use the old wood. The customer left and returned a few days later with an intact sample and the old posts. Better informed after our discussion, I was ready to make two new newel post caps.

First, I measured and drew a template of the original cap. This can be done on graph paper or by using a simple 2D CAD system, which is my preference. I used 80 lb. card stock for the template. Since this project had large-diameter balls on the top, I needed a template for checking the profile. I cut the template out of the card stock and printed another one so I could set my calipers and reference all the key dimensions *(Photo 2)*.

I needed to cut into one of the old posts that the customer provided, to see if the wood was sound and to try to identify what type of wood it was made from. When handling large timbers like this, I mark my dimensions and use the bandsaw instead of a pencil to mark the cut lines—saw marks are easier to see

Original newel post cap, rotted.

than pencil lines on some types of wood. I rotate the timber 90° and follow the cut line to cut the blank to length. The post turned out to be made of cedar, which meant that I would have to take precautions with the dust. A dust mask, a dust collector, and an air filter were all in order as cedar really makes me sneeze.

On a job like this, when the blank may not be perfectly square, I find the centers on the ends employing two methods. First, I mark corner to corner with a pencil, the method used by most turners. I also use a small try-square to mark lines parallel and equidistant to the sides and near the center to create a small box. The centers are then located using an awl.

Mounting to the lathe

A major decision point for a project like this is how to mount the turning blank to the lathe. Since this project has a tenon on the bottom and a relatively thin cove section, I decide to turn the majority of the project between centers and just finish the very top of the ball with the blank mounted in a 4-jaw chuck.

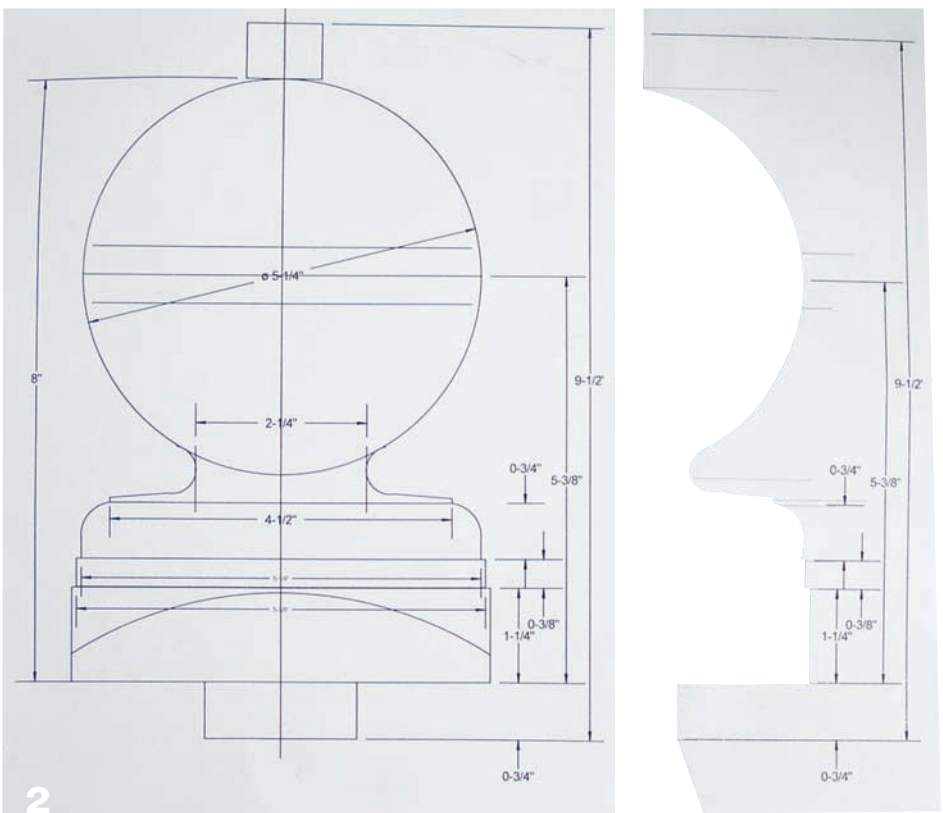
The original post cap used a 2" (50mm)-diameter tenon on the bottom to locate it on the top of the post. Next to that there is a square section that eventually gets rounded over on top to make the transition to the round sections of the cap. To mark these elements, draw lines on the blank to indicate the top and bottom of the square section. Since the wood is cedar, I knew it would be prone to chip out. I also knew that because of the large diameter, the square section had the potential to be a real knuckle buster, so I wrapped the square section with red painters' tape. The tape helps prevent chip out on the square areas, as well as providing a visible warning to stay away from the knuckle-busting corners *(Photo 3)*.

Begin turning

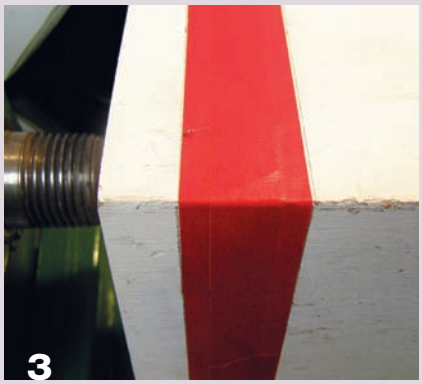
I always like to get the feel for each piece of wood so I begin making some simple cuts in a waste area. In this case, the waste area is on the bottom where the tenon is located. I begin to turn the bottom and the tenon. For the square shoulder, I use a skew chisel to step over into the flat shoulder. I start about ¾" (20mm) to the left and make my cuts with the right bevel of the skew chisel parallel to the shoulder *(Photo 4)*.

I make these shoulder cuts at a fairly high rpm, as I get less bounce with the tool and achieve a smoother finish with less tearout.

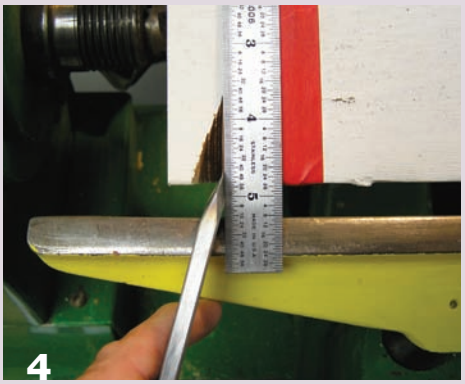
Once the shoulder cut is finished, proceed to turning the tenon *(Photo 5)*. Begin by using a parting tool to size the very end of the tenon. Be careful, as the parting tool will be substantially extending out over the toolrest. My hand holds the tool handle on the very end to provide as much leverage as possible. Cut the tenon to just slightly oversized. Measure just the end to the 2" (50mm) diameter ▸



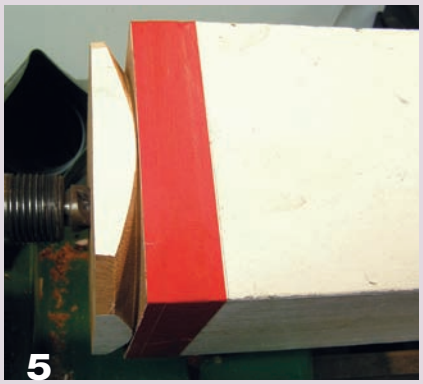
Drawing and template cutout.



Affix red painters' tape to the square shoulders to help reduce tearout of the wood and to provide a warning sign.



Cut with the skew chisel's right bevel parallel to the shoulder to create a square shoulder.



The shoulder is finished and it's time to turn the tenon.

using calipers *with the lathe off*. It is just too dangerous to take this measurement using calipers with the blank spinning—the cedar is rough and you can easily catch the caliper on the square section *(Photo 6)*. Once the end is sized, turn the rest of the tenon to that same diameter.

To complete the bottom section of the post cap there are two more steps, both important. The first is to slightly undercut the bottom of the square section. This is to ensure that the cap will fit tightly to the top of the post. The second step is to put a groove about ⅜" (10mm) up the tenon. This groove will be used later when the blank is moved to a 4-jaw chuck. (The tiny teeth on my Nova chuck fit into this groove, and because I will only take a light finishing cut, a shoulder isn't needed.) The groove also holds excess glue when the cap is installed onto the newel post. Slightly round over the bottom of the tenon to make it easier to insert into the posthole. Little details like these are what the customers appreciate *(Photo 7)*.

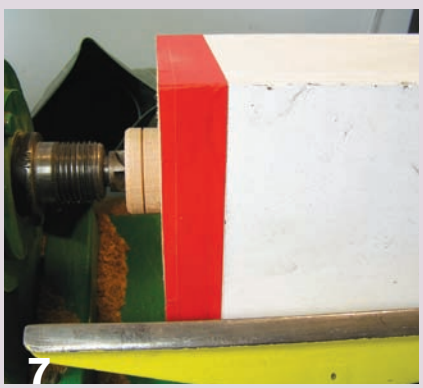
Turn the top section

Now it's time to turn the top section of the post cap. Turn a square shoulder the same way as before; however, this time step from the right to the left up to the shoulder. Once you score completely around the blank, then it is time to rough turn the top section. You can use your favorite spindle-roughing gouge or swept-back bowl gouge *(Photo 8)*. I use a skew chisel to smooth this section after turning it to a cylinder so that I can easily mark my layout lines. Again, watch out for the square knuckle-busting section.

Using the template, mark all the transition points and carry the pencil marks around the blank *(Photo 9)*.

Proceed to turn the post cap in the same manner as any spindle project. Use the parting tool to cut to all the key dimensions (slightly oversized) *(Photo 10)*. Rough turn the top tenon to about a 1" (25mm) diameter. Rough turn the ball shape and the large cove. I like to use detail gouges for these cuts. The added thickness of detail gouges helps eliminate tool vibrations. Round over the corners of the top of the square section using a skew chisel or a detail gouge *(Photo 11)*. This cut is mostly in air until you get to solid wood.

Use calipers to size the tenon. Make sure the lathe is off when measuring next to a square shoulder such as this.



The tenon is finished and slightly rounded off at the bottom and there is a slight undercut to the shoulder.

Using the template and the drawing, set your calipers to actual dimension and part to all the key transition dimensions. Then make all your finish cuts, checking the profile with the template as you go. Very minor changes can have a huge visual impact on the finished product so take your time and make very light cuts *(Photo 12)*.

Once you are satisfied with the shape, add the decorative beads around the center of the ball. Sand the base, coves, and the ball. Because this cap will be used on an exterior railing, it is going to be painted. For painted projects, I only sand to 150 grit. Any finer than that is not only a waste of time, but it makes the surface too smooth for paint to adhere (which would not please the customer).

It is now time to remount the cap in a 4-jaw chuck *(Photo 13)*. Use the tailstock center to ensure it is running true. Turn away the top tenon *(Photo 14)*, check the profile one more time, and finish-sand the top of the ball.

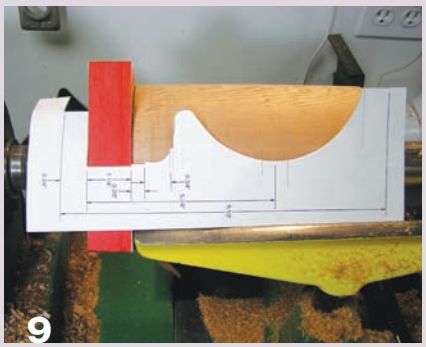
The second newel cap

Now you can start on the second one. The real challenge comes with making two that look alike, but you can do it now that you have developed all the steps and processes that let you break this project into little chunks.

When you are finished, step back, admire your efforts, and call your happy customer! ■

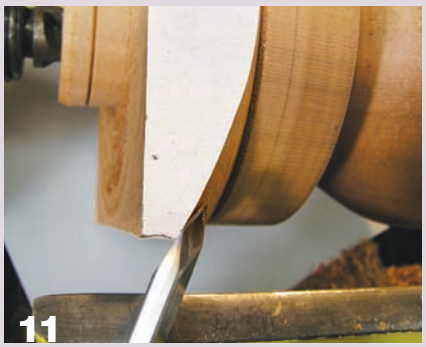
Jim Echter lives near Rochester, NY. He is a professional turner who specializes in making tools for fiber artists, turning custom architectural pieces, and teaching all aspects of woodturning. Jim is the current President of the Finger Lakes Wood Turners chapter of the AAW, a position he has held before. Contact him at jim@truecreations.biz or visit his website at truecreations.biz.

Rough out the top section of the newel post cap.



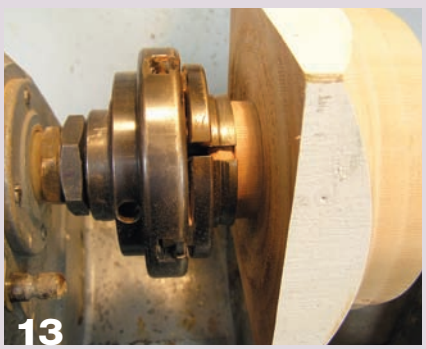
Use the cutout template to mark where each element transition line will be drawn.

Layout lines are marked and the first key dimension is created using a parting tool.



Round over the square shoulder.

The cap is rough turned and ready for decorative beads and sanding.



Remount the tenon of the newel post cap into a 4-jaw chuck using the turned groove as a marker for the teeth of the chuck.

Cut away the tenon from the top part of the newel post and sand that area.

From Garage to Gallery

Terry Martin

Sometimes I think the most innovative and highest quality work in the woodturning field is produced by nonprofessionals. A stroll through the Instant Gallery at the 2009 AAW symposium in Albuquerque confirmed this impression. There was just too much good work to absorb in one viewing, so I had to return again and again to see what I had missed.

Ron Fleming, *Great Blue Heron,* 2009,
Hackberry, bleach, acrylics, 15" × 11" (380mm × 280mm)

The quality of finish and design, as well as the complexity of much of the work tells us many things. There are obviously a lot of very talented people out there who are not well known, but who produce outstanding work. Also, some of the people who create this work have a lot of time on their hands. It also seems that a large number are not sure how to price their work. Prices tend to fall into two categories: "super prices" and "bargain prices." The motivations for both will vary, but they may include fingers-crossed optimism, lack of awareness, simple stabs-in-the-dark, or misplaced humility. My suspicion is that most people just don't know how to deal with pricing, and that includes many professionals.

Not surprisingly, a topic that is often raised at gatherings of woodturners is how to price work and how to get the kinds of prices that we see "name" turners putting on their work. However, in many ways this question puts the cart before the horse. Before you can experience the luxury of deciding how many zeros to add to the end of your prices, you need to be part of the market where such prices are acceptable, and that probably means being accepted into a quality wood gallery.

Kevin Wallace and I gave a presentation at the 2009 symposium that was aimed at helping nonprofessional woodturners who are interested in turning professional and selling work through top-end galleries. We named the presentation "From Garage to Gallery." I was aware that my own opinions would be limited by my own experiences, so I decided to write to some of the apparently successful turners

Peter Hromek, peppermills.

I know and ask what advice they would give to aspiring artists. We often hear advice from such role models when they speak as individuals, but it is rare to hear so frankly from so many together.

I asked the following questions:

1. How would you describe the development of your career? Do you think it has been successful?
2. What has been the best decision you ever made in your turning career?
3. What mistakes would you advise newcomers to avoid?
4. What are the best strategies to follow?

I was delighted by the humility and honesty of the responses, which confirmed that turners are a remarkably generous group. I realized I had a wonderful resource, so I thought it would be good to share their thoughts with *AW* readers who were not able to hear our presentation. I had to abbreviate these quotes, but I have tried to capture their essence.

We need to remember that most people would understand a "professional" to be somebody who pays their bills by selling their work. In fact, not all of the artists I wrote to are full-time professionals, while others earn every dollar they get by selling the work they create with their hands. They don't have the luxury of super pricing their work in the blind hope of success.

It is interesting that some of the advice offered here flatly contradicts what others say. On the other hand, there are common threads that emerge. I'll leave it up to you to choose what you take to heart.

Jean-François Escoulen

"I started with a traditional French apprenticeship and was able to very quickly turn exactly what I wanted. After many years of repetition, I started a second more creative career. Because of my long experience of traditional woodturning it was easy to connect tradition and creativity in my own way.

The best strategy is to develop good technique first, then try to do something special. First you should learn what wood is, then study art and forms. Try to copy shapes and designs from the past. Participate in the maximum number of exhibitions you can. Show your pieces and develop your own personality little by little.

I exhibited first in my local area, then in the wider region, then in Paris, and then I exhibited and taught all over the world. I chose what I wanted to do and made a living with it. Isn't that the best success? Don't try to be the best and stay humble. You are a woodturner."

Binh Pho

"The best decision I ever made in my turning career was to keep my day job and not have to rely on sales to make a living. That's why I can make what I love and don't necessarily make what will sell. Make what you love, not what others want you to make.

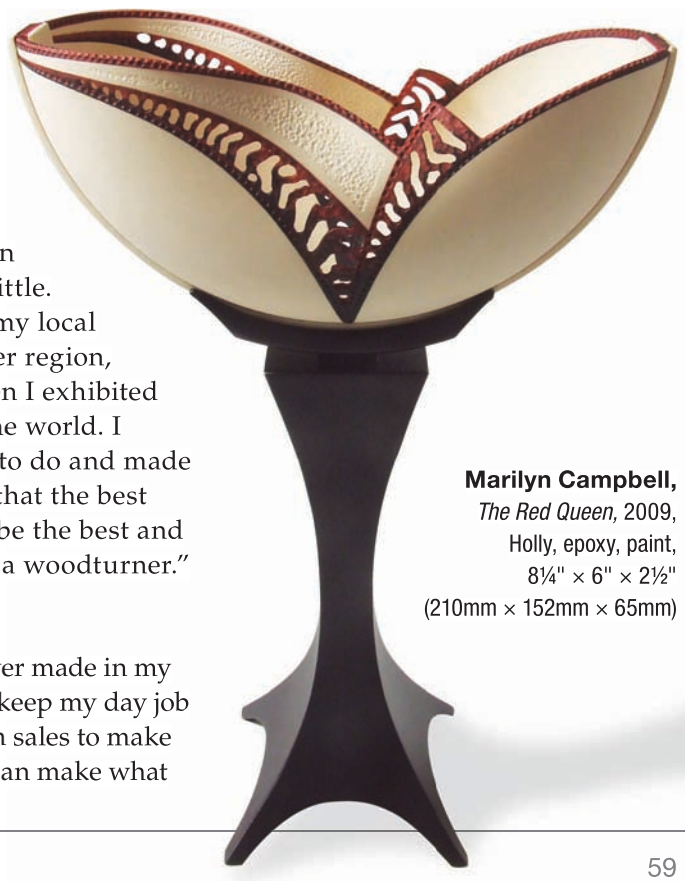
I advise newcomers not to buy expensive wood to turn. Also, don't let a piece of wood determine the form of your piece and don't let a beautiful piece of wood intimidate you.

When you start to be creative and think you can make it on your own, focus on just one or two styles of work so the collector and the field can recognize it and it will become your body of work. It's easier to say than to do because woodturners always like to do many things."

Marilyn Campbell

"I put my early successes down to my desire to create different work, something that stood out visually from the sea of brown and round. I was never content to let the wood 'speak' to me . . . all it ever said was 'I dunno, what d'you wanna do?'

I'd also say it has been more about understanding what creates an ▸



Marilyn Campbell,
The Red Queen, 2009,
Holly, epoxy, paint,
8¼" × 6" × 2½"
(210mm × 152mm × 65mm)

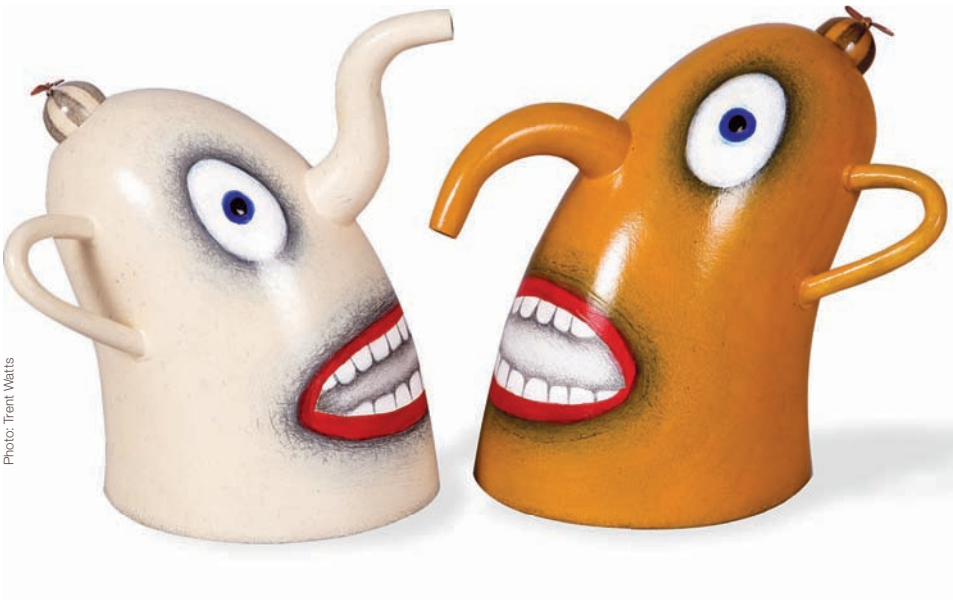


Photo: Trent Watts

Michael Hosaluk, *The Conversation,* 2009, Wood, paint, copper, 7" × 12" × 4½" (180mm × 300mm × 115mm)

interesting and desirable object than about 'purity of form' and technical perfection. Technical perfection is just simply expected now and is only the first rung on the ladder.

I would advise newcomers not to jump from lily pad to lily pad, but to give one approach a chance to develop. I have discovered that an idea is much like an onion—there are layers and layers to explore. Don't quit before you've uncovered them; repeat each 'theme' at least six to ten times. Quite often, improvements are accidental rather than planned and just because the improvement is subtle doesn't make it unnoticeable.

Several years ago, after I'd made some inroads into the turning world, I suddenly changed to 'sculptural' turnings. They were interesting forms to me, but apparently unappealing to buyers. I realized the sculptural forms just had no presence; there was nothing that made them desirable. They were just funny-shaped stuff. The moral of the story is don't switch lanes midstream because you'll interrupt the flow."

Peter Hromek

"My artistic work would not be possible without my production of peppermills. I live off those and have become known through the other stuff. I developed my peppermills over a long time and created machines to make them.

I recommend newcomers to work at one task for a long time and play with it till you don't have any more ideas. Often you will get a new idea even if you think you are finished with it. This is the stage where you start to develop your own ideas instead of copying somebody else's. We should play more. . . like children do."

Mike Hosaluk

"The best strategy is to give more than you take. Share knowledge openly, and help others to get ahead. Never be afraid to try new things in work and education. Find your passion in life and everything will take care of itself. That is our greatest wealth in life. I could have pursued monetary wealth, but the wealth of friends, family, and lifestyle cannot be bought.

What mistakes have I made? Maybe with marketing strategies. I could have capitalized on making more of a series for the dollars rather than being all over the map with new ideas. A big mistake was not buying that Hunter piece when it was $100–$200!"

Neil Scobie

"I feel that if you don't have a passion for being a woodworker, then you probably should go and get a real job.

Watch as many other turners as you can, ask lots of questions, have an open mind, and be humble enough to soak up what they are telling you. It won't take you long to sort out the good and bad advice. Be persistent and passionate about improving your work and don't be put off by a few rejections."

Neil Scobie, *Suspension,* 2009, Rose mahogany, aluminum, acrylic paint by Liz Scobie, 8" × 3½" (200mm × 90mm)

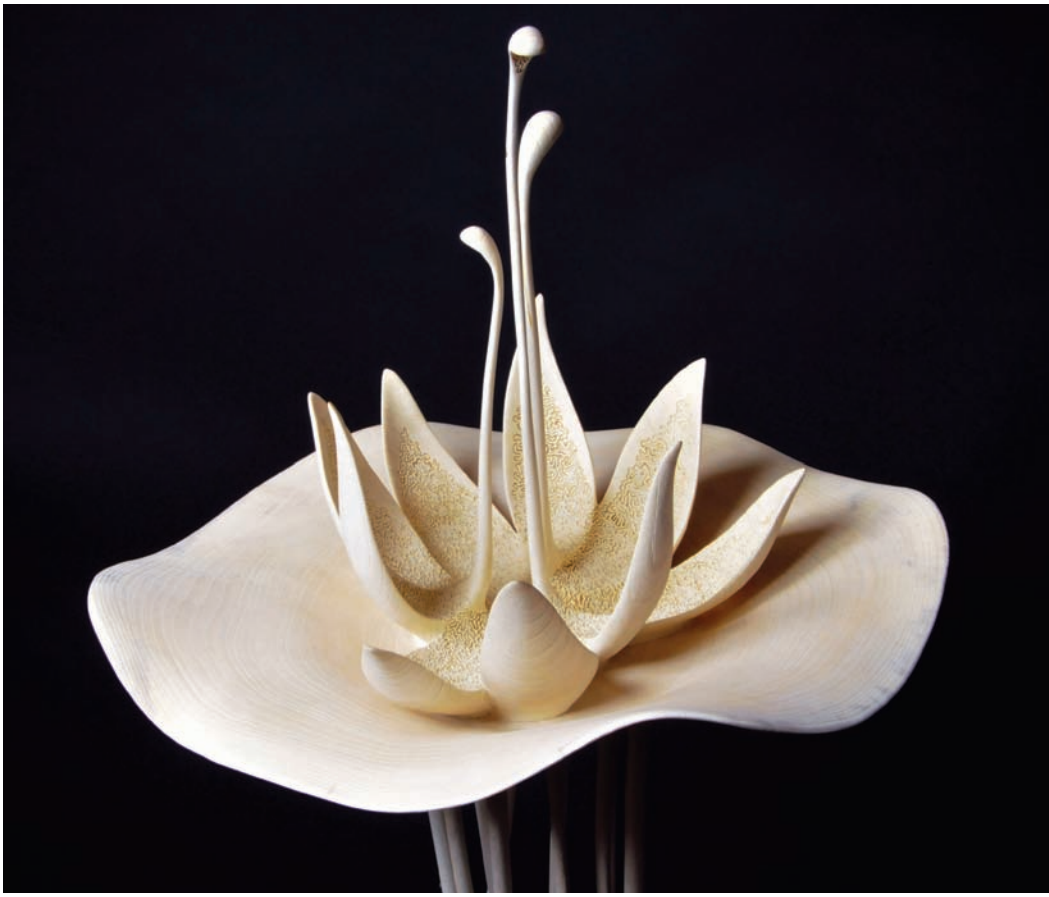
David Ellsworth

"My career developed through a combination of hard work, determination, and luck. The best strategies are to study objects that are not made of wood; follow your own desires and directions, not those of others; always reach beyond what you already know; and do 'good work.' I advise newcomers to stick your ego in your back pocket every time you step up to the lathe."

Alain Mailland

"I feel successful because I only do what I want. I would be more successful if I could sell better, but I make a living.

You must be hooked on this job. If you aren't, you should do something else. If you don't have passion, you'll do it badly. Follow your dreams and the rest will follow: technique, market, and money. Don't forget to share as much as you can with your friends. Share as much as you would like to receive, and then even more."



Alain Mailland, *Rituel* (detail), 2009, Hackberry, 55" × 16" (140cm × 40cm)

Dewey Garrett

"I don't believe I could ever make a living just turning wood, but it has been very rewarding in many other ways. The additional skills needed for a career can include teaching, demonstrating, writing, and marketing. It takes a special person to be an artist and pursue the additional activities too."

(Author's note: Dewey has brought up a very good point. If you look in the AAW Resource directory, or the back pages of any issue of *American Woodturner* and other magazines, you will see the names of many famous wood artists advertising classes, tools, accessories, lathes, and so on. Some, myself included, write books and articles for magazines. The truth is that many so-called successful wood artists are as poor as church mice and can only survive by marketing their name attached to other products as much by selling their art.)

Mark Lindquist

"As a young fledgling artist, I quickly found out I couldn't make a living and began to literally starve. My father Mel talked me into going to a craft fair and the rest, as they say, is history.

I think I have been successful in the sense of having been at the forefront of creating what is known today as the studio woodturning movement, but my involvement in the art world proper has been less successful. I set out to achieve art world acceptability for my woodturning, and in many ways that has happened, but are those works in the major New York art world galleries? Not so much. The major museums? Yes and no. They are still relegated to the back of the bus of the art world, reserved for 'decorative arts.'

The best decision I ever made in my turning career was to stop turning at high revolutions, and to pursue sculpture as an artist, using the lathe as a tool, the way painters use the easel. The very best decision was to thumb my nose at doubters and unbelievers.

I have two kinds of advice. The serious advice is to learn from the work of masters but never, never, never plagiarize! Also, don't accept criticism as final pronouncement of your work. The less serious advice is don't thumb your nose at buyers.

The best strategy is to spend years to become utterly proficient, mastering turning in every sense, then spend the rest of your life forgetting everything you learned. If you want to break ground and become known for ▸

David Sengel, vessel, 2007, walnut, locust thorns, 12" × 10" (305mm × 250mm)

innovation, create controversy, then learn to duck and hide."

Marc Ricourt

"My 'career' has been like the teeth of a saw: 'good–not good, good–not good, good.' It hasn't been a big success, but I hope after my death it will be better.

The best strategies are, first you need to have a spouse with a good job. After that, work, work, work hard and play with the wood. And don't forget the wine and cheese."

Betty Scarpino

"I suspect that being a 'successful' artist for most people means becoming well known and making money. I believe there's so much more to artwork than that. If I've created something that I'm thrilled about, that's success. I let my inner self dictate how and what I make. Whenever I've strayed from this, I've not been pleased with myself or with what I've made.

At a nuts-and-bolts level, sending a detail slide of a piece for AAW's 'Growth Through Sharing' exhibit in 1996 was a pivotal point in my career. Because I took the trouble to have a detail slide taken of my entry and I sent in that slide along with the full image, the detail shot ended up on the cover of AAW's first exhibit catalog. So, send more images than are asked for, but only the images you would want someone to select. That way you control the process yourself!

Now that I've become editor of *American Woodturner*, I have firsthand knowledge of how well some artists present themselves and how badly some come across. I'm always surprised that some artists are not as creative with their promotional endeavors as they are with their work."

Virginia Dotson

"Probably the one thing that has helped my career the most is always having high-quality images of my work. Learning photography was partly a happy accident. When I wanted to return to school full-time to study wood art, the course was full, so I signed up for beginning photography. The next semester, the wood course was again full, so I took photography as an art form. Next time, same story, and I took commercial photography. By the time I realized that that particular wood course would never be open to me, I had a valuable education in photography."

Tony Hansen

"The development of my career has been dictated by two things. The first was to make exhibition work that was technically difficult to impress people and build a reputation. The second was to make work that the general public would purchase so that I could support my family.

The greater part of my career has been manufacturing production stock that can be made quickly and sold quickly. I guess that by a woodturner's standards, my career has been successful. My gross turnover for the last 15 years has been anywhere between $100,000 and $250,000 per year, but this is not indicative of profit.

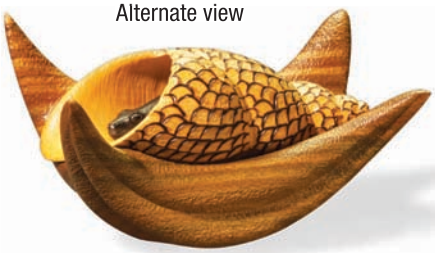
It's simple really. If you want to make money, you have to make products that the public will buy. You need to be constantly trying

Virginia Dotson, *Vanishing Act #4,* 2003, Birch plywood, 4½" × 11" × 5" (115mm × 280mm × 130mm)

Photos: Hugo De Vries

Mike Lee, *Refuge,* 2008, Boxwood, Gabon ebony, Palo Santo, 5¾" × 2¾" × 3" (145mm × 70mm × 75mm)

Alternate view



Marc Ricourt, *Vessel,* 2006, Walnut, ferrous oxide, 18" × 6" (460mm × 160mm)

new products, making new prototypes and trying them in someone's store. If a retailer has a great idea for a new product, only make a few and see how they go, as generally only a couple of new products out of a hundred will succeed. The best strategy to follow is to work hard, then kick yourself and work harder."

David Sengel

"My primary definition of 'success' has always been whether I am enjoying what I do while making enough of a living to support my very modest lifestyle. It hasn't always been easy. The stress of getting together a body of work for a show deadline, the stress of unknown income, the ups and downs of inspiration or lack of it—all of these have convinced me that the work of creating objects should mainly be either a hobby or a labor of love that is not confused by the need to survive financially. I have finally come to that happy destination by combining wood with an unlikely second career I love, which is farming. The seasonal aspect of growing vegetables and flowers allows for substantial time in the studio. Even in the height of the harvest season I can find time to work on an idea that demands my attention."

Mike Lee

"Success in woodturning to me isn't climbing into my Rolls Royce to pick up my kids from their elite private school before returning home to our mansion. It's more like blowing off the shavings and hopping into my rusty old '86 pickup truck and driving over to the nearby public school to get my kids and returning to my garage/studio to finish roughing out that bowl before I need to go inside and start cooking dinner. Woodturning has 'successfully' allowed me to do this for the past 15 years as a stay-at-home dad. Along the way I was able to make a few things that people liked and responded to. By balancing my production woodturning with my carved work, I was able to scrape out a lifestyle that best suited the needs of my growing family and along the way I was able to surf some really good waves. If that ain't success I don't know what is.

If you want to become a famous woodturner with your picture in the magazine and make a lot of money without the work to back it up you're probably doing it for the wrong reasons. Make work that is important to you first. If someone else likes it and wants to buy it, that's great."

Ron Fleming

"I think I've been successful in a lot of ways except one and that is making a living from what I do. I only hope to inspire others' feelings for my ▸

work. If I can do that, it would be my greatest achievement.

Don't ever think that your work is the best thing out there. Keep striving to make it among the best. It is a terrifying pleasure to work in wood."

Vaughn Richmond

"There is more to success than selling a small piece of wood for a large sum of money, such as whether your peers judge you a success, or if other woodturners and collectors speak highly of your work, your attitude, and your skills.

The quality of your work and design must be exceptional. It must be the very best you can do because top galleries and curators are not interested in representing artists who offer substandard work. Develop themes that are recognizable as 'your work,' and never ever plagiarize. Your reputation will be shattered and you will spend the rest of your life turning old fence posts for the craft shops, under a pseudonym. Never ever have a 'fire sale' of your gallery work. The people who have previously collected your work will be extremely displeased and you will spend the rest of your life making pens for local craft shops.

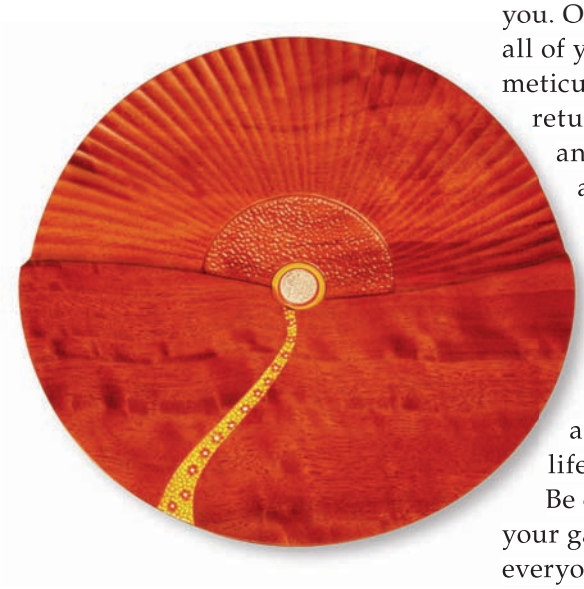
Mark Lindquist's turned sculptures at the rakovaBRECKER Gallery booth at SOFA (Sculpture, Objects & Functional Art) Exhibit, Chicago, 2008.

You are running a business and time is money! Develop a viable business plan, and stick to it. Insist on signed contracts or agreements before you supply your work. Query anything you don't fully understand. Make your lawyer proud of you. Open and maintain files on all of your business contacts. Be meticulous in recording payments, returns, consignment details, and commissions. Make your accountant proud of you.

On the other hand, always look for an opportunity to donate a small amount of your time or a piece of suitable work to a worthwhile charity. It's good for the soul and it helps to put your busy life back into perspective.

Be cordial to the people who run your galleries, and that includes everyone from the owners to the shelf stackers. Remember they are the salespeople for your work, and that saves you a lot of time and effort. Conversely, if they aren't selling well, your work is not being displayed correctly, your work is 'in storage,' or the payments don't come promptly after a sale, then find another outlet.

Finally, the best strategy of all is to enjoy yourself!"



Vaughn Richmond,
fluted dish, 2009, Jarra, 23K gold, acrylic, pewter, 1¾" × 6" (45mm × 150mm)

Giles Gilson

Q: What has been the best decision you ever made in your turning career?
A: I don't know . . . I haven't made it yet.
Q: What mistakes would you advise newcomers to avoid?
A: All of them . . .

I'd like to thank the turners who responded to my request for advice, including those we could not find space for here. The advice given by these makers may not be fully comprehensive, but much of what they offer will make sense to those who are ready for it. Good luck! ■

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Members' Gallery

"I often look to other media and nature for inspiration. I search intently, leaving no stone unturned. Usually, it's hiding in plain sight.

A small, chipped ceramic crucible resides on a friend's windowsill and my visit isn't complete until I've taken the time to admire that vessel. It's a relic found at a long-abandoned gold miners' camp. It seems to contain quite a profound story.

Strictly utilitarian, the lines of the piece are elegant in their simplicity. Its heft and texture beg anyone who notices it to hold—no, fondle—the piece. Subtle variations in color from its ordeal by fire play themselves out in different ways. Only time has been able to bring all these qualities together in such a satisfying fashion. This crucible embodies the phrase, 'less is more.'

When it finally occurred to me to attempt to replicate the crucible's qualities in wood, I almost injured myself rushing to my shop. This first edition was from memory. I've since taken images of the original crucible and am working on a second attempt to capture the vessel's mystery. It's going to be a journey, but that little crucible definitely has my attention." ■

Ed Pretty became a woodturner at a young age when his father taught him the basics, but he didn't become proficient until thirty years later when he helped form a guild in 1988. Recently, he has been able to devote more time to his journey into the realm of art.

Most people comment, "It doesn't even feel like wood," so I got that part right.

The original chipped, broken, discolored crucible unearthed from a gold miners' midden.

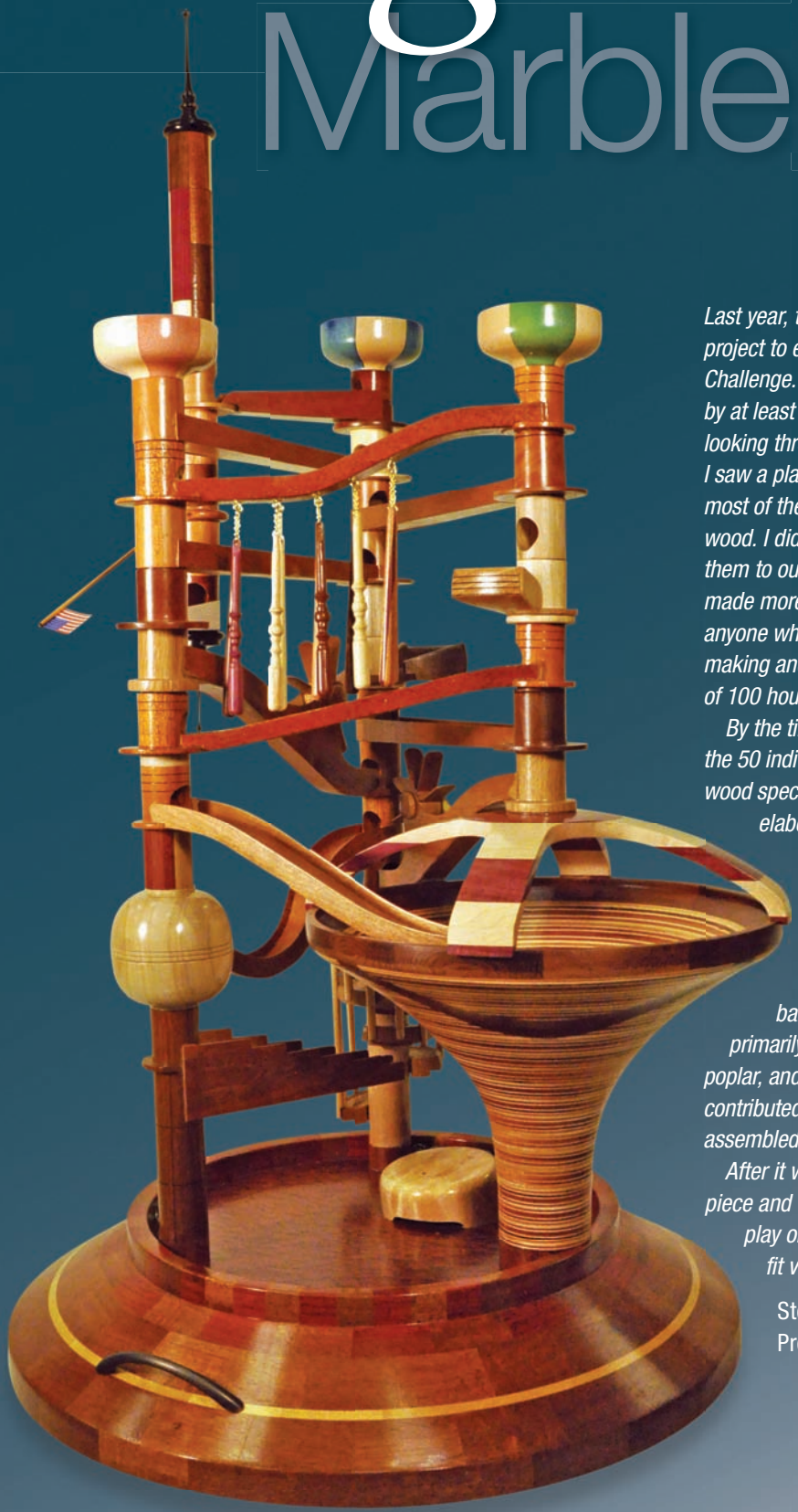
Laurence Skendzel, Walnut,
2½" × 4½" (65mm × 115mm)

A wooden dowel serves as the hinge. Dowel hinges are rarely used today. The placement of the drill to hold the dowel is something that has to be learned by trial and error.

Laurence Skendzel, Walnut,
3" × 11" (75mm × 280mm)

I textured and painted the sapwood because the discoloration of the sapwood detracted from the piece. I was pleased with the outcome.

Magical Marble Maze



Last year, the First State Woodturners were looking for a project to enter in the AAW's annual Chapter Collaborative Challenge. The rules state that the project must be made by at least six members of the group. One evening, while looking through one of my wife's school supply catalogs, I saw a plastic marble maze. I immediately realized that most of the components could be turned on a lathe from wood. I did some preliminary drawings and presented them to our club. Everyone seemed to like the idea so I made more detailed AutoCAD drawings that I handed out to anyone who wanted to participate. I spent quite a bit of time making and revising the drawings, probably close to a total of 100 hours.

By the time we were finished, 13 members helped to make the 50 individual parts of the maze from dozens of different wood species they had on hand. The pieces range from the elaborate 19¾"-diameter segmented base, *glued up from mahogany and several other wood species, to many fairly simple-appearing* drop-throughs *that turned out to be not quite so simple to make after all. Other challenging parts were the 11⅝" diameter* vortex *made from laminated baltic birch plywood, the 7½" tall* stair drop *made primarily of oak, the two-piece* marble catcher *made from poplar, and the* flag raiser, *made from mostly teak. Members contributed parts of holly, maple, and walnut. Two members assembled the 22" by 30" piece in about 24 hours.*

After it was completed, we brainstormed names for the piece and finally settled on "Magical Marble Maze," sort of a play on the Beatles' Magical Mystery Tour. It seemed to fit very well.

Steve Childers
Project Coordinator