

CUPCAKE COOKIE JAR • BOB ROLLINGS • GILDING

AMERICAN WOODTURNER

Journal of the American Association of Woodturners

August 2013 vol 28, no 4 • woodturner.org

THE ESCOULEN
SCHOOL OF
WOODTURNING

.....

ADJUSTABLE-HEIGHT
LATHE STANDS

.....

A NOVEL WAY TO
CUT SEGMENTS



BEHOLD,
THE STREPTOHEDRON

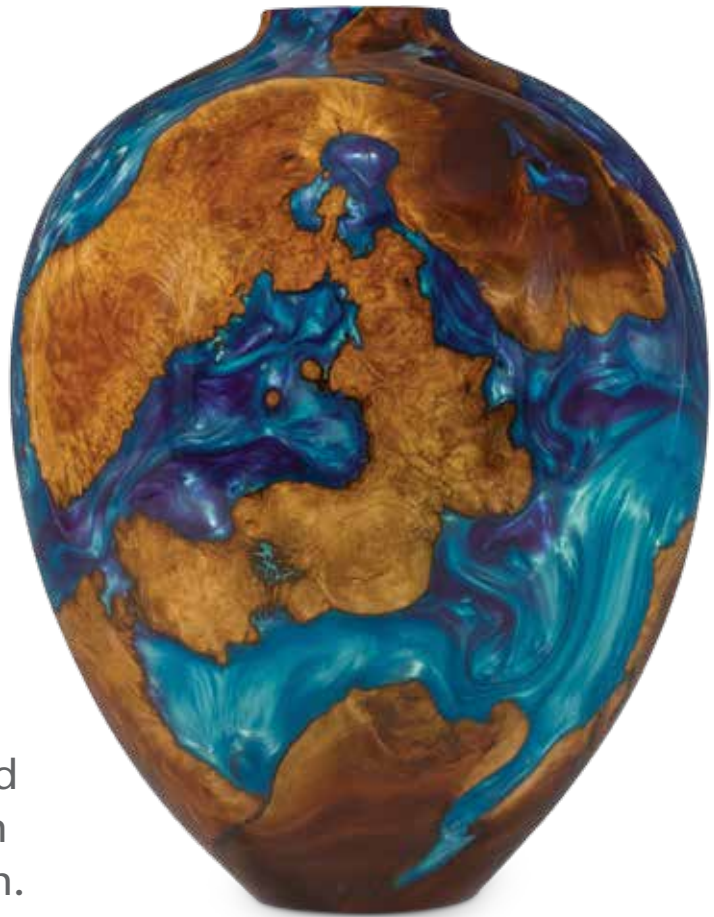
Alan Trout

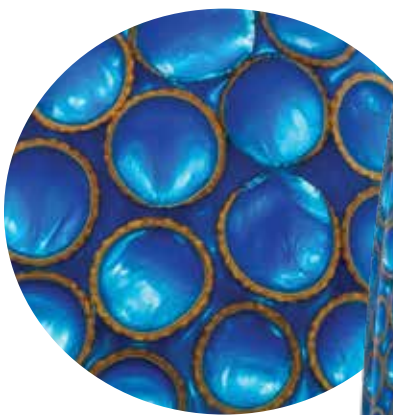
In 2007, I casually mentioned to my family that I had an interest in woodturning. Shortly afterward, my mother-in-law gave me the book, *500 Wood Bowls*, and my world changed. I studied that book for hours and it made me realize the possibilities were limitless.

I started with pens. A business relationship with Eugene Soto, a prolific pen-blank resin caster, turned into a friendship. We shared ideas on how I might cast large pieces of resin. He taught me the basics of casting and I took it from there. Casting large pieces of resin poses many challenges that still try me today—every piece presents a learning experience.

I use simple forms in my Wood Burl and Acorn-Cap Series to dramatically showcase the organic and resin mixtures. These forms are influenced by blown glass and Native American pottery.

—Alan Trout





(Clockwise from top, opposite page)

A Manzanita World, 2011, Mazanita burl, resin, 11" x 8" (28cm x 20cm)

Peacock, 2011, Live oak acorn caps, live oak burl, resin, 6" x 4" (15cm x 10cm)
Collection of Gregory and Regina Rhoa

Blue Raspberry Parfait, 2011, Live oak acorn caps, live oak burl, resin, 12½" x 4½" (32cm x 11cm)
Collection of John Hill

To Autumn, 2011, Live oak acorn caps, live oak burl, resin, 23k gold leaf, 4" x 4" (10cm x 10cm)
Collection of Jamie Donaldson

Mar Verde, 2013, Olive burl, resin, 8" x 7" (20cm x 18cm)

Acorn Tea, 2012, Live oak acorn caps, live oak burl, resin, 7" x 9½" (18cm x 24cm)



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

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Journal of the American Association of Woodturners

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The 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 and other
problems can build over years.

Take appropriate precautions when you
turn. Safety guidelines are published online
at woodturner.org/resources/safety.htm.
Following them will help you continue to
enjoy woodturning.

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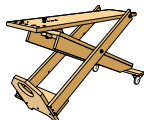


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Four-Pointed Star*, 2007, Wood, 2½"
(64mm) dia, Photo: Richard Longley

Back Cover – Michael Foster, *Blowing
Smoke*, 2013, Maple, bleach, acrylic paint,
stainless steel, acrylic rod, 11" x 9" x 18"
(30cm x 23cm x 46cm)



From the Editor



Almost daily, I work with one or two authors from the oldest generation of woodturners. Just recently, Wally Dickerman—in his nineties and still turning—invited me to participate in a new online woodturning forum. Along with two other woodturners, he critiques turned objects submitted by forum participants.

In this issue, we celebrate legendary Dale Nish's life (see page 15). More than eighty years old, he was working in his shop just before being taken to the hospital where he died. Dale's enthusiasm for woodturning sustained him throughout his long life. His shared knowledge and wisdom inspired many woodturners, and as others have said, we will miss him.

There are many elderly turners who share their knowledge. This issue contains a review

of an online book recently "published" by Claude Lethiecq from Canada. His masterful Chinese balls are the result of years of investigation into the possibilities of this art form. Anyone may download the free book. A profile article about Bob Rollings and his exploration of the streptohedron reveals his inquisitiveness, which no doubt is similar to Claude's. Both woodturners are advanced in age, are still actively working, and freely share the results of their research.

Of course, I also work with younger authors who are carrying on the rich tradition of sharing knowledge, spreading enthusiasm, and simply having fun. I'm fairly sure that all of these turners, if given the choice, would want to be working in their shops up until the end of life. I do.

Betty Scarpino

—Betty Scarpino

Please Vote! AAW Board Election

Photos and statements of the six nominees running for election to the AAW Board of Directors appear on pages 6–7. Please read the statements and then vote for up to three candidates.

There are two options for voting: (1) by electronic ballot, available on the AAW website at woodturner.org/BoardVote or (2) by paper ballot, included in the plastic bag with this journal. The ballot contains your name and membership number. Tear off the ballot where instructed, put it in the enclosed envelope, affix a stamp, and mail it. Ballots must be cast electronically or received in Saint Paul no later than midnight CST, October 18, 2013.

We encourage you to participate in the voting process and hope that you take the time to help make this election turnout significant.

President's Letter



The AAW is an association of like-minded individuals who share a love of woodturning. The whole field benefits and grows because individual turners share their knowledge.

By the time you read this, the Tampa symposium will have wrapped up. On average, about 10 percent of our membership attends this annual "sharing" experience. The AAW members who demonstrate share their ideas and techniques. Turners gather in the Instant Gallery to learn how others created their pieces. The friendships that result lead to an even broader sharing of experiences. In this spirit, I encourage you to find a way to share:

Share your knowledge. Our members share their time by volunteering at

the symposium. The benefits of connecting with other woodturners continue to spark lifelong friendships. *Share your time.* New members of local chapters have a hunger for learning to turn. Take the time to show a new turner how to safely mount wood, and sharpen his or her tools. By teaching or explaining something to someone else, you become a better turner. Many chapters have programs to teach veterans. Consider stepping up and volunteering to run your local chapter for a year.

Share your wood. I have been in too many shops where the turner cannot bring himself to part with wood he is never going to use. It is unlikely any of us will run out of wood, and space is valuable. Pass on a few chunks of wood to the new turners in your chapter or donate some to the monthly auction or raffle that supports your chapter. Ironically, the more wood you give away, the more you will end up with.

Share your artwork. Every community has fundraisers for charitable causes, and organizers are always looking for artwork to auction. Where I live, there are several organizations supporting families in crisis, and their annual auctions help fund their programs. Your turnings will be treasured—and, your generosity will also help spread the fun and joy of woodturning.

I want to close by saying we will greatly miss our friend Dale Nish. Dale founded and then directed the Utah Woodturning Symposium for thirty-four years. To quote his obituary: "Dale was a man who genuinely loved to teach and loved to help others find joy in working with wood." Dale shared all his life. Share your love of woodturning.

Dale Larson

Dale Larson,
AAW Board President

Letters to the Editor

Send letters to editorscarpino@gmail.com. Letters may be edited for length and clarity.

Cupcake icing

I want to thank Jeff Kieserman for his article on making vacuum chuck seals (vol 28, no 2). I have been searching for two years for the right combination of substance to make the icing for my cupcake boxes. When I read Jeff's article, I knew instantly that oogoo might work. Sure enough it did.



It's amazing what you might learn from what someone wrote, which is why I read each article whether I'm interested in the topic or not. There is almost always something to learn if you let yourself be open to it. Sharing our knowledge makes our turning community wonderful.

—John Lucas, Tennessee

A plea for millimeters

This pitch for using the so-simple metric system will probably fail to change long-established habits, but perhaps a few readers will consider the many advantages of using a single-scale measuring system.

American Woodturner and *Woodturning* report measurements in metric, as well as in the variable-scale cumbersome system, which is used only in the United States.

Everything I do in my woodturning shop involves measurements between 3 and 300 millimeters. One scale. Period. No shifting around between $\frac{3}{8}$ ", $\frac{9}{16}$ ", $\frac{23}{64}$ ", $\frac{1}{2}$ ", $\frac{3}{16}$ " or struggling to add a column of variable fractions, which easily could be accomplished by adding a column of millimeters.

Complicating the issue of linear measurement is a movement by some manufacturers to establish the decimal inch as a compromise between the traditional system and metric. With the compromise system, the inch would be divided into tenths and hundredths, resulting in measurements such as 1.25", 6.47", 12.18". It would seem that if we are going to learn and implement a different system, we might as well adopt the simple and cross-linked metric system.

For woodturners, the advantage of using millimeters is overwhelming.

—Emmett Manley, Tennessee

Chapter Collaborative Challenge 2014



For AAW's 28th international symposium in Phoenix, Arizona, the chapters and membership committee will again sponsor a Chapter Collaborative Challenge (C³).

Each AAW chapter is invited to submit one collaborative work created by as many chapter members as possible, with a minimum of six participants.

The complete rules for entry can be found on the AAW website at woodturner.org/sym/sym2014.

The pieces will be prominently displayed during the symposium in an area near the Instant Gallery. During the symposium, attendees will be invited to select, by ballot, their choice for Best of Show and their favorite piece in each of the three categories. Votes will be tallied prior to the banquet, during which the winners will be recognized.

This year, in addition to plaques awarded for the winner in each category, the AAW will provide one free symposium registration to each chapter that wins an award.

AAW Annual Financial Statement for 2012

Revenues and Expenses

Income

Annual Dues	\$657,727
Grants & Contributions.....	216,731
Publications & Products.....	223,041
Symposium	401,276
Exhibitions Investment.....	236
Other Income.....	5,905

Total Income \$1,504,916

Expenses

Publications & Products.....	\$468,398
Symposium	518,393
Gallery & Exhibitions	136,426
Scholarship Grants.....	92,486
Professional Outreach	36,632
Other Programs	6,705
Administrative	301,669
Fundraising & Member Development.....	112,022

Total Expenses \$1,672,731

Net Income \$(167,815)

Balance Sheet (as of 12/31/12)

Assets

Checking & Savings	\$440,053
Accounts Receivable.....	24,409
Grants Receivable	25,602
Inventory	35,745
Prepaid Expenses	77,105
Equip & Furniture-Net.....	60,452
Memorial Endowment	135,912
Osolnik Endowment.....	59,528
Permanent Collection	207,115

Total Assets \$1,065,921

Liabilities

Accounts Payable	\$44,237
Accrued Expenses	12,652
Deferred Revenue	713,770

Total Liabilities \$770,659

Net Assets

Unrestricted	\$(245,971)
Temporarily Restricted	292,347
Permanently Restricted	248,886

Total Net Assets \$295,262

Total Liabilities &

Net Assets \$1,065,921

2014 Board Candidates

The Nominating Committee is pleased to present the following six candidates to the AAW membership for their consideration. There are two ways to vote: (1) by electronic ballot, available on the AAW website at woodturner.org/boardvote or (2) by paper ballot, included with this issue of the journal, along with a self-addressed envelope.

We encourage you to participate in the voting process and hope that you take the time to help make this election turnout significant.

Your vote must be cast electronically or received in Saint Paul no later than midnight, Central Standard Time on October 18, 2013.

—Binh Pho, Chair, Nominating Committee

Jeff Brockett, Tennessee



I would bring to the AAW more than forty years of woodworking experience in various media. I am currently a member of the Tennessee Association of Woodturners (TAW), the Duck River

Woodturners and the Mid South Woodturners Guild. During my time as a member of the TAW I served as newsletter editor, secretary, and president. I understand the importance of running a nonprofit organization with a business model that is designed to best serve the membership. As a member of the TAW symposium committee I helped implement

new strategies and a best-methods approach to increase attendance for our regional symposium from 100 to more than 370 in the past five years. My driving passion is to help new and inexperienced woodturners become successful in their woodturning endeavors.

Two years ago, I was involved with helping the Narrow Gate Foundation get a woodworking shop up and running. Several fellow TAW members helped develop a turning curriculum to teach woodturning skills to rotating classes of young men. I have helped introduce the concept of “learn one, do one, teach one.” This has proven to be a successful program in that two of the original students are now qualified to teach the beginner classes in woodturning. In addition, I assist with the TAW monthly Saturday Turn In sessions, which are

designed to give new turners an opportunity to work with experienced instructors.

The vision I have for the AAW would be to continue its growth and influence to improve the craft of woodturning through continued partnerships with regional woodturning activities. The education of woodturning is a key component of the AAW; we need to continue to draw in new and younger members to grow a strong and vibrant organization. I would explore opportunities to develop and share best methods of successful AAW chapters.

My forty years of retail management experience, negotiating contracts, opening new markets, corporate trainer, and being involved in regional and corporate committees would be of value to the AAW. I respectfully ask for your support and vote.

Denis Delehanty, Georgia



As a longstanding member of AAW, as well as an active leader in the Georgia Association of Woodturners (GAW), it would be an honor to serve as a member of the AAW Board of Directors.

Over the years, I have served on a number of nonprofits boards, as well as participating in a Project Leadership role for Habitat for Humanity. Most recently, I served two years as the treasurer for the GAW. Now that I am retired, I divide my time between volunteer work, remodeling, fitness training, and woodturning.

I particularly enjoy supporting the Atlanta club’s activities, working on the annual symposium “Turning Southern Style,” teaching, and turning to support local nonprofits. I look forward to serving on AAW committees to better serve and expand the international membership and to promote the introduction of woodturning to more students and young adults.

With more than thirty-five years of experience in procurement and project management, I have completed large-scale construction projects, which required creative solutions, steep learning curves, strong business acumen, and a solid track record of complex contract development and negotiations. Additionally, I have managed the corporate departments of facilities management, office

services, security, travel, printing and dining. While working fulltime, I graduated from the Executive MBA Program at Wake Forest University, qualified for NAPM’s Purchasing Manager Certification, and earned my certification as a Licensed Commercial and Residential Contractor in North Carolina. I hope to bring this same experience and learning orientation to serve AAW’s growing organizational and business needs.

I will commit the time, energy, and effort to be an integral member of the organization and I would be pleased to work in any capacity where my broad base of experience would further the goals of AAW. I ask for your support and vote so that I may contribute to the leadership team in these exciting times.

Philip Hauser, New Jersey



Last fall, I became a member of the AAW’s Finance Committee. This position gave me insight into the financial challenges of the AAW and if elected, I would be interested to serve as the treasurer.

The AAW is looking for an individual with a financial background to fill the treasurer’s position, and I believe that my background and business experience would be well suited to serve in this function.

I have been an AAW member since the early 1990s. Since 2005, I have been the

president of the DelVal Woodturners in South Jersey. During my tenure, the club has grown from about twenty-five members to more than sixty. I believe that good programming, social interactions, and an attractive meeting venue are key to signing up and retaining members. For instance, a program I introduced a few years ago is an open shop at my place once a month. Participants bring their woodturning problems to the meeting to discuss, and often get hands-on instructions on how to solve them.

After retiring from my job in 2002, I joined the Wood Turning Center in Philadelphia, now called the Center for Art in Wood. I was the treasurer of the Center and a board member

for close to five years. The Center’s activities have given me a much broader perspective of the woodturning field, its history, and its evolution. The Center is a nonprofit organization, and I gained firsthand knowledge of the differences in nonprofit accounting and reporting compared to the business world.

Prior to my retirement, I was the chief financial officer of the U.S. holding company of a Swiss-based corporation. During my thirty years with the subsidiary in New York City, we acquired numerous companies throughout the U.S. I was strongly engaged in the acquisition process, the negotiation of contracts, and the financial analysis of strategic and business plans.

Art Liestman, British Columbia, Canada



I started turning wood in 1997 and quickly became an enthusiastic turner, wanting to learn everything about it. In 1998, I was one of the organizers of the Greater Vancouver Woodturners Guild, founded specifically to be an AAW chapter. I served for five years as the chapter's first president. I have continued to be involved with my local chapter, primarily organizing visits by traveling demonstrators.

My interactions with the AAW have touched on many aspects of the organization. I have

served on two AAW committees. I appreciate the AAW's grant programs (having received an EOG in 2000) and the journal (having written four articles). I value the annual symposium, having attended every one since 1999 and demonstrated at six of them. I have also demonstrated and taught hands-on classes at numerous AAW chapters. As a traveling demonstrator, I have met many woodturners and have a good overview of the concerns of the AAW's members—both hobbyists and professionals. Living in Canada, I have an understanding of the challenges that the AAW faces in recruiting and retaining members who live outside of the U.S.

Professionally, I have just retired as a university professor, a position that I held for

thirty-two years. I served as chair of one of the largest departments in my university for five years and held other positions in my department and within the university. In the larger academic world, I helped organize several international conferences and workshops and served on the editorial board of a major journal.

I believe that my professional background and AAW experience provide some of the skills necessary for a board member. As a board member, I would strive to ensure that the AAW continues to provide value to all of its members while continuing to expand as an international organization.

Byron E. Rosbrugh, North Carolina



When I began turning in 1965, I designed and built a simple lathe. That experience marked the beginning of a lifelong passion for woodturning and a model for overcoming obstacles.

Transforming a chunk of wood into a beautiful object is still exciting after all these years, and finding solutions to achieve goals is central to my life.

I am serving a third term as president of Wilmington Area Woodturners Association. When I was first elected, our club had thirty-five members and few activities. Now, we

have more than 110 members with a high level of participation in projects and community outreach. We developed a demonstrator-training program, and every year we contribute hundreds of canes to the Wounded Warrior Project.

I am a strong believer in the benefits of the Chapter Collaborative Challenge (C3). Our club is participating for the third time, and I have experienced the benefits of people with different talents working together to achieve a common goal, while getting to know each other. Our award-winning entry at the Hartford symposium opened many doors in our community, allowing us to display our creation at museums and fairs. As a Board member, I will refine and develop the C3 into a major symposium event.

Currently, I am chair of AAW's Fundraising Committee. We are developing programs focused on grant writing, corporate sponsors, and estate planning. If elected, I will continue to pursue this endeavor.

I am interested in creating a better working relationship between the AAW and local chapters and will explore ways to extend additional benefits to chapters to help strengthen the organization by providing more cohesion among chapters, the main office, and regional symposiums.

I have a strong business background in development, sales, and marketing and an enormous enthusiasm for AAW's mission to provide woodturning education. It would be an honor to serve and to give back to our woodturning community.

Jim Swift, Washington



I appreciate the opportunity to let you know a little about myself and why I am running for the AAW Board.

I discovered woodturning just over five years ago and was immediately

so interested in turning that I quit a job and started turning almost fulltime. I also joined the local turning club. Through my association with the local club, I learned to use the lathe and tools safely and effectively. Also,

it was amazing to me how much everyone shared their knowledge and was willing to help a new turner like me. So, after being in the club for two years, I agreed to act as the club president and served in that capacity for two years. After leaving that office, I have continued to be active in the club, helping with fundraising activities and programs. I worked hard to serve all the members of my local club in all its activities. Not long after discovering woodturning, I also joined AAW.

My background is in law and government contracts, finance, and personnel issues. I am also a retired Air Force Reserve

officer. In my early life, I was involved with plastic modeling and was president of the International Plastic Modelers Society for two years. Because of my prior experiences, I believe I can help the AAW Board with whatever legal and any other issues might arise in the future. I would also like the opportunity to serve all AAW members and would like to help make AAW more relevant to its individual members and local clubs. Finally, AAW appears to be ready to take advantage of opportunities to provide more benefits to local clubs and members and I would like to be a part of that push to the future.

Call for Entries 2014 Juried Member Exhibit

The theme for the 2014 AAW juried exhibition is "Rising" in honor of our symposium host city, Phoenix, Arizona. Although the name of the city was inspired by the phoenix, a mythical bird that is reborn from the flames, many things rise—prices, sap, tempers, tides, sun and moon, balloons, and bread—so let your imagination fly! We encourage you to interpret the theme and use any definition of rising for inspiration.

Two awards will be given: Masters' Choice, \$300, and People's Choice, \$200.

All AAW members are eligible to enter this juried exhibit.

"Rising" will premiere in June at the AAW international symposium before

traveling to the AAW Gallery of Wood Art in Saint Paul and other possible venues.

This is a touring exhibition; work must stay with the show until its conclusion.

Sales: A 45% commission will be charged on sales made during the exhibition.

Entry Dates: Entries will be accepted on the AAW website, woodturner.org, from November 1 until February 3, 2014. All applicants will receive email notification by March 31.

Entry Fee: \$30 for up to three submissions.

You may submit up to three pieces, but no more than one piece per artist will be accepted for the exhibition.

Winners of the 2013 Best Chapter Newsletter/Best Chapter Website Contests

Congratulations to the following AAW local chapters for winning the newsletter contest.

- **First Place:** Tennessee Association of Woodturners, tnwoodturners.org, Randy Thompson, editor
- **Second Place:** Silicon Valley Woodturners, svwoodturners.org, Mike Lanahan, editor
- **Third Place:** Detroit Area Woodturners, detroitareawoodturners.com, Roger Meeker, editor



Congratulations to the following AAW local chapters for winning the website contest.

- **First Place:** New Mexico Woodturners, nmwoodturners.org, David Stein, webmaster
- **Second Place:** Central Oklahoma Woodturners Association, okwoodturners.net, Phil Lokken, webmaster
- **Third Place:** Alaska Woodturners Association, akwoodturners.org, Kristine Chase, webmaster



More information about these contests can be found on AAW's website at woodturner.org/chapters/contests and woodturner.org/chapters/rules.



Guidelines

- Work must be created at least in part on the lathe.
- Work must have been created in the past twenty-four months.
- There is no size limit, but only a few oversized pieces will be accepted due to space and shipping limitations. *Oversized* is defined as shipping in a box that exceeds 108" (207 cm) in overall dimension (2 × width + 2 × depth + length).
- The symposium venue does not accommodate wall-hung pieces.
- An artist statement describing how the piece fits the theme is required. Entries may be edited for length and clarity.
- You may upload up to three images per piece. Include one view of the overall piece. Additional detail images or alternate views are optional.
- Uploaded images must be in JPG format and 2100 pixels on the longest side.
- A full-color exhibition catalog will be available. Artists whose entries are selected will receive a complimentary catalog.
- Shipping or delivery to the Arizona venue is the artist's responsibility. The AAW will pay return shipping fees. Work will be insured while in the exhibition and during return shipping.

Questions? Contact Tib Shaw at the AAW Gallery of Wood Art, tib@woodturner.org.

Call for Demonstrators

AAW Symposium 2014
Deadline: October 15, 2013

The AAW's 28th annual international symposium will be held in Phoenix, Arizona, June 13-15. Visit the AAW website at woodturner.org/calendar for instructions on how to submit an application for demonstrating.

For additional information, call the AAW office in Saint Paul, 651-484-9094, or email, inquiries@woodturner.org.

Olympia High School Recipients of a 2013 EOG

Olympia High School in Olympia, Washington, has a strong industrial arts program with classes offered in sports medicine, material science, visual communications, arts, auto repair, robotics, and woodworking. The wood shop has two 4224 Powermatic lathes and five JET mini lathes servicing fifty students over two periods. Head shop teacher, Cris Violette, and assistant teacher, John Dally, do a terrific job managing classes where students make a variety of projects, some of which rival anything found in quality showrooms. Neither teacher, however, had much lathe experience.

As a result of interest shown by students during a bowl demonstration, and after discussion with the teachers, I started volunteering two days a week, helping students with woodturning projects. I discovered two things: (1) many of the lathes were broken and others needed tuning, and (2) lathe tools and equipment desperately needed upgrading. In addition, there were no lights around the lathes and no grinder to sharpen tools. They did have good faceshields, which I was pleased to see being used.

A few local club members spent most of a Saturday repairing and tuning the lathes. After putting out a call to club members, we got a few more tools and

a usable grinder. From another youth program that our club sponsors, we were able to temporarily loan two full sets of quality turning tools, plus a grinder with sharpening jigs. With this equipment, plus chucks, calipers, and other tools I brought from my shop to the volunteer sessions, students were able to improve their woodturning projects and work more safely. The shop, however, still didn't have its own equipment.

To fill this void, we applied for an Educational Opportunity Grant (EOG). Our application was successful, and we purchased three chucks, live centers, lights, sharpening jigs, a set of Adjusta-jaws, two bowl gouges, two spindle gouges, a skew, a parting tool, two spindle-roughing gouges, two scrapers, and a detail tool.

The teachers report an increased interest in woodturning and an improved quality in projects. Bowl bottoms are nicely finished with decorative touches and less sanding is required. In the five months I have volunteered, students have made drum sticks, bowls of all sizes, clocks, rolling pins, pens, goblets, and cups.

The EOG is a terrific program that can help ensure development of future woodturners. I highly recommend working



The first period shop class with their new woodturning equipment purchased by means of an AAW EOG.



Students in first period woodshop, Olympia High School, with some of their projects and the equipment purchased with an AAW EOG. From left to right: Isaiah Fugii, Spencer Mallory, John Dally, assistant shop teacher, Alex McGoldrick, Cris Violette, shop teacher, Caitlin Chamblee, Adam Carter, and Logan Bridges.

with young students—it is immeasurably rewarding and I guarantee you will get more out of it than the students. ■

Larry Miller is president of the Woodturners of Olympia, coordinator of the AAW Symposium Youth Program, and teaches turners of all ages, including homeschooled students, in his well-equipped shop.

Prize Drawing for AAW Members

One of the many benefits of membership in the AAW is our monthly prize and year-end grand prize drawings. Thank you to the vendors who donated this year's prizes, which include tuition scholarships, \$100 certificates, sanding supplies, DVDs, chucks, grinding jigs, symposium registration, and lathes! Contact Linda Ferber if you would like to contribute a prize, linda@woodturner.org.

When you patronize our vendors, please thank them for their support of the AAW. Visit our website at woodturner.org/org/mbrship/drawings_winners.htm to see each month's prizes and winners.

At the end of 2013, we will draw another name from our membership roster to give away a Powermatic 3520B lathe. That winner will name a local

chapter to win either a JET 1642 or five JET mini-lathes. The Powermatic and JET lathes are donated by Walter Meier Powermatic/JET. Included is free shipping in the continental USA, or up to a \$500 allowance for international winners.

2013 Donors

(Others may be added during the year.)

Anderson Ranch Arts Center, andersonranch.org
 Arrowmont School of Arts and Crafts, arrowmont.org
 Craft Supplies, woodturnerscatalog.com
 David Ellsworth, ellsworthstudios.com
 Easy Wood Tools, easywoodtools.com

Hunter Tool Systems, hunterwoodturningtool.com

John C. Campbell Folk School, folkschool.org

Mike Mahoney, bowlmakerinc.com

North Woods - Figured Woods, nwfiguredwoods.com

Oneway Manufacturing, oneway.ca

Tennessee Association of Woodturners
 symposium registration

Thompson Lathe Tools, thompsonlathetools.com

Totally Turning/Showcase Symposium, totallyturning.com

Trent Bosch, trentbosch.com

Walter Meier Powermatic/JET,
powermatic.com and jettools.com

Woodturning Design magazine, woodturningdesign.com

A Sense of Community and Patriotism Help a Local Chapter Grow

Grand Valley Woodturners (GVWT): a big name for a club consisting of a small group of woodturners who share a passion for turning wood into works of art. We grew because of this passion and a desire to make a difference.

In the beginning, the group met at members' shops in the small town of Cedaredge in western Colorado. Several turners from nearby Grand Junction made the forty-five-minute drive to join the Cedaredge group. As the number of members grew, a Grand Junction member offered to host on alternate months. This soon became the primary meeting place.

In 2007, the club began meeting in Grand Junction every month—a start toward becoming an official club. We joined the AAW in 2008 with only twelve members.

Community activities

The new club became involved in educating others about woodturning and started growing with new members. Activities included demonstrations at the local library for other clubs and all-day demonstrations at the Mesa County Fair, where turned tops were given to children. We accepted donations for the hospice in Grand Junction and members also donated turned items for local charitable events. Slowly, the GVWT was getting noticed in the community.

Eagle cane project

Our fledgling club was looking for a meaningful way to give more to the community when then president Keith Kollasch brought to our attention an article about a club in Oklahoma and their Eagle Cane

Project, which provided eagle-head canes to veterans. It didn't take much discussion to decide this was a project members could get behind.

We needed help with carving the eagle heads and fortunately two members were carvers and belonged to local carving clubs. In a joint effort, the carving groups agreed to provide the carved heads. Thus began GVWT's Eagle Cane Project.

After advice from the Oklahoma group, the club decided to provide canes to disabled veterans, regardless of when they served. To end up with a manageable number, the group would accept applications and present canes to veterans whose home state was Colorado.

With the help of my wife, Betty, I spearheaded the project. I am a wood carver and a woodturner, and I hosted club meetings once a month from 2007 through 2012. With everyone working with enthusiasm, we presented canes all over the state.

The canes

Club members individually turn each cane, which is personalized with the recipient's name, years of service, rank, unit, and military branch. I assemble the canes and also add a transition ring of purpleheart for recipients who have received a Purple Heart. Betty and I



(Clockwise from top l)
Eagle canes ready to be presented.

Club members demonstrate at the Mesa County Fair.

Fred Pahler (former club president), Dave Ellsworth, Buck Taylor (club treasurer)

Veterans with their canes.

keep track of all the applications and do the setup for presentations. Each cane is presented with a card containing the recipient's name and military information. Betty creates a memory page for each recipient that includes a picture, duplicate information card, the recipient's hometown, and other pertinent information. She places these in an ongoing album. Currently, a third album is in the works.

Veterans from World War II and other wars share stories that even family members had not heard—receiving the cane brought back memories. The presenters watched tears form in veterans' and family members' eyes as veterans were recognized for their sacrifice. Time and again, club members felt tears in their own eyes as they watched the emotional effect this gift had. Honoring veterans in Colorado was the right community project.

Local media attention

After articles in newspapers and a few presentations on television, GVWTs were kept busy taking applications and making canes. The local living museum published an article on the project that was distributed to several states. The response was overwhelming, and soon, GVWT could not keep up with requests. The club adopted new guidelines: only applications from western Colorado veterans would be accepted.

After a presentation of more than twenty canes at one time in Montrose, the GVWT, Grand Valley Woodcarvers, and Black Canyon Woodcarvers knew they had grown beyond what they could handle. The three clubs lobbied the newly formed turning group in Montrose to join forces with their carving group and take over Montrose County and the surrounding area. The Montrose group



Colorado Veteran's Cane Project



An album shows some of the veterans who have received canes.

took up the challenge and started making and presenting canes in 2012.

There are now two groups providing eagle-head canes for veterans of western Colorado. The Grand Valley club alone has presented 221. With every presentation, club members' hearts fill with pride. As patriotism grew, so did the club.

New club activities

Changes were afoot in 2012. Club president, Fred Pahler, helped set up GVWT's first demonstration and class with a professional turner, David Ellsworth. As membership grew to about thirty, the club outgrew my shop. Fred and the advisory board looked for

and found a new location, the Mesa County Fairgrounds, where the club held its first meeting in January, 2013. Additionally, the club purchased a lathe and tools for demonstrations.

The love of wood and woodturning brought this club together; community service and patriotism helped it grow. The Grand Valley Woodturners brought multiple clubs together and created a network of woodturners and woodcarvers who are making a difference in western Colorado. ■

—Buck Taylor, treasurer,
Grand Valley Woodturners

Adjustable-Height Lathe Stands Rise to the Occasion

Pat Peckham

Sometimes it just takes the right person walking into a room for a good idea to take shape. Sometimes two people see the same need and they each come up with a winning idea.

A dozen volunteers from the Wisconsin Valley Woodturners had worked with youngsters in settings such as the local Boys & Girls Club. Two of those volunteers, Tony Kopchinski and Bob Stavran,

independently saw the benefit of having height-adjustable lathe stands—kids come in lots of sizes.

Tony, a retired power plant shift supervisor, devised a scissor-action stand. Bob, a retired teacher, made a valiant effort to make wooden gears work, but ended up with an automotive-type jack at the core of his stand.

Both members of the AAW chapter in Wausau, Wisconsin, realized the have-them-stand-on-a-box method for shorter youngsters was not ideal. Tony's and Bob's goal was to find a way to put the JET mini lathes at the students' height instead of vice versa.

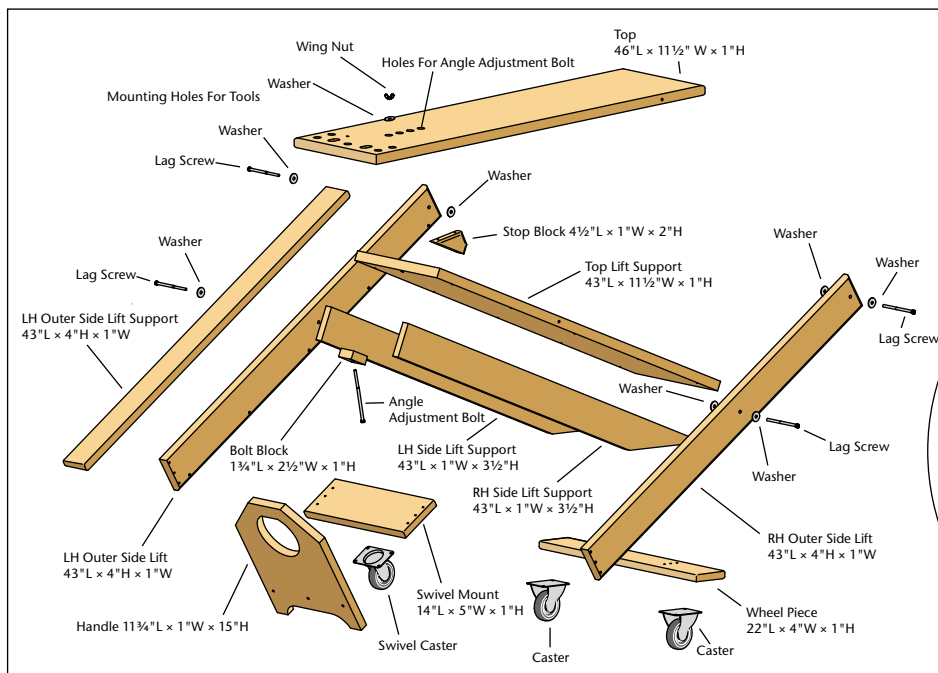
Tony Kopchinski's design

Tony was aware of adjustable-height lathe stands that use variations on threaded rods, but he wanted something simpler. He pursued a scissoring design not too far removed from that of an



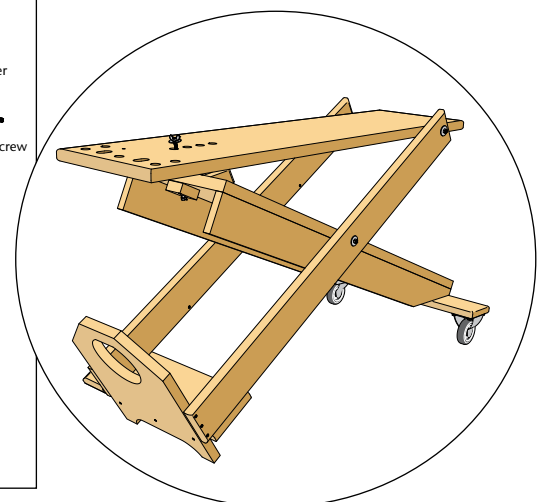
Tony's lathe stand collapses for easy transport.

Photo: Roger Zimmermann



Exploded view of Tony Kopchinski's adjustable-height lathe stand.

Illustrations: Jon Drew



ironing board, but with a row of holes in the top.

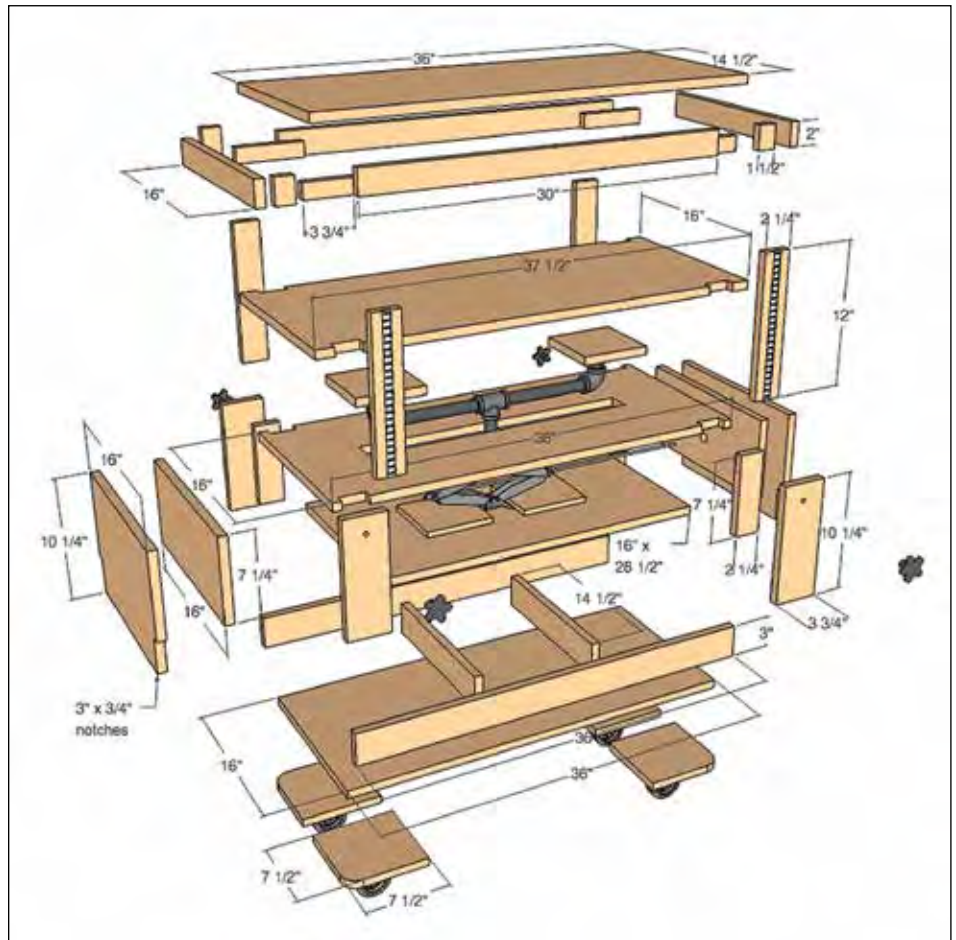
With a lathe the size of a JET mini—popular as a first lathe or for smaller projects such as pens and bottle stoppers—an adult of average strength can place one foot on the base of the stand, lift the tailstock end of the stand and position the proper hole over a $\frac{5}{16}$ " (8mm) bolt that then holds the stand at one of four available heights. The bolt toggles into place and is immediately secure. The top measures 11" \times 42" (28cm \times 107cm). For added safety, a wing nut on the bolt, where it comes through the top, is spun into place.

Portability was a big consideration, so Tony put two 3" (8cm) non-swiveling wheels on one end of the stand, which allows it to be wheeled in and out of a building. He has since added a third wheel—one that swivels. It only touches the floor when the stand is collapsed for transport, so with a short rope, the stand can be pulled like a wagon. Another design feature is a lip on one end. Onto that, secured by a bungee cord, a toolbox rides along nicely.

Bob Stavran's design

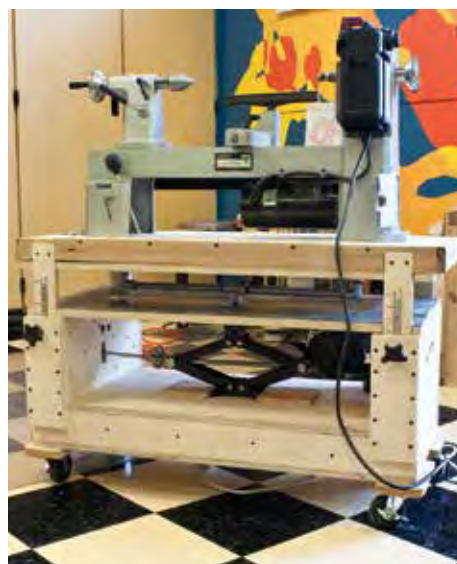
Bob initially took a different tack, intrigued by something he had seen on the Internet, a lathe stand using wooden gears to raise and lower a mini lathe. Bob had a lot of fun making the gears, axles, and sliding mechanism for the first version, but after the teeth of the gears broke off, he went back to the drawing board.

The second version was enjoyable, too, as were the third and fourth versions. After that much fun, "It ►



Bob Stavran's design for an adjustable-height lathe stand.

Illustration: David Heim



A crank raises and lowers the height of Bob's stand.

Photo: Pat Peckham

Bob Stavran's lathe stand.

Photo: Pat Peckham

became personal,” Bob says. When he thought the stand was up to the task, he set a Delta midi lathe on it. With the added weight, the design “failed miserably.”

Giving up on the wooden gears, he sorted through other ideas involving threaded rods, chains, metal gears, an electric motor, and even a foot-operated hydraulic jack. Instead, he found a scissor jack at Harbor Freight for \$15. Placed on a sturdy shelf below the level of the lathe, Bob had his solution.

Still to be resolved was how to equally spread out the lifting force from the jack. Bob solved that with a length of iron pipe. “It’s not pretty,” he says, “but it works.” A knob at each corner locks the height and stabilizes the deck. Locking casters allow for easy positioning and secure placement while in use.

Bob plans at least one more version, promising this one will look less like Rube Goldberg revisited. He welcomes suggestions at rjstavran@yahoo.com.

Turning club volunteers who work with the youngsters are happy to have the stands. Mary Bowden, a retired educator, says children at that middle school age can range from just over four feet tall to nearly six feet. She recalls one girl having to stand on a toolbox; the adjustable stands are considerably safer.

Used everywhere

Members of the Wisconsin Valley Woodturners believe that



Showing no favoritism, Tony Kopchinski found himself teaching woodturning on a lathe positioned at the correct height by the stand designed by Bob Stavran.

Photo: Pat Peckham



Tony’s lathe stand accommodates short turners.

Photo: Roger Zimmermann

when knowledge is shared, the collective ideas can lead to creative solutions. With that in mind, they are pushovers when invited to do a demonstration or participate in a special appearance at an event.

Members of the six-year-old club teach woodturning at their Boys & Girls Club. Most of the learners there are in grades six through eight, and adjustable-height lathe stands are essential.

When the Leigh Yawkey Woodson Art Museum had a nine-week exhibition that included woodturnings, they invited the club to submit items for a concurrent exhibition and to provide opportunities for museum visitors of all ages to try their hand at

woodturning. Mostly youngsters took up spots in the row of five lathes and they turned dozens of items while proud parents and grandparents snapped photos. Other club members have exposed the public to woodturning at other fundraisers, on the city square, and on the street during downtown gallery nights. Our lathes, stands, and volunteers are a big hit in our community. ■

Pat Peckham is vice president of the Wisconsin Valley Woodturners.

Dale Nish: A Tribute 1932–2013

In the early 1950s, a man Dale had never met before told him that he would be known throughout the world for the work of his hands. That was a bold statement to make about a young man raised in obscurity on a small farm in southern Alberta. Then, his only assets were a loving wife, good parents, a strong extended family, a keen intellect, tenacious curiosity, and unusual determination.

It has been a remarkable journey. Our father expanded his views and reached ever outward until he could welcome the world into our home. In turn, you became our friends, colleagues, and extended family. You have enriched our lives, broadened our perspectives, and given us a glimpse into the potential brotherhood of mankind.

Dale's legacy is only partly found in the furniture, homes, cabinets, and wood-turned objects found in Utah and throughout the world. His greater legacy will be in the lives he touched as a son, husband, father, teacher, and friend. We are all privileged to have been part of that circle of love. We are deeply grateful for the many kindnesses shown us through the years and especially, during these last difficult days. God bless you always.

—Nish Family

I was fortunate to know Dale Nish not only from the perspective of a woodturning friend, but also as a student at Brigham Young University, and later as a faculty colleague.

Dale was generous with his time and resources. In 1991, my wife, Kim, and I began building a new home. We were on a tight budget and I was trying to put in all the sweat equity I could. One Saturday, we had arranged a crew to do some framing and to my surprise Dale showed up with his carpenter's apron. I said, "Dale, certainly you have better things to do on a Saturday morning than frame a house." His response was, "You can't afford to pay me, and I won't let you fire me, so let's go to work."



Dale Nish in his workshop, a few days before his death.

Photo courtesy of Mark Baker, *Woodturning Magazine*

As a student, I sought out Dale as a mentor, and while that relationship later evolved into a close friendship, over the years I continued to seek his advice in matters both personal and professional. He has had significant positive influence on my life. I count it as a great privilege to have been so closely associated with Dale for more than thirty-five years.

—Kip Christensen

If you spent any amount of time with Dale, you know he was always looking for something witty to say—and usually succeeded. At a local club function years ago, someone made a platter from quarter-sawn sycamore and labeled it as black locust. The maker insisted on calling it locust even though many of us told him he was wrong. Dale settled the matter by saying, "Heck, he made the piece, let him call it whatever he wants."

Dale was often the first person in and the last person to leave Craft Supplies. I met him at the business early one morning. When we unlocked the workshop, it was almost ready to catch fire because an employee had left a paraffin heater on all night. Then, we went to unlock the front door, but found that it had been left open all night. Dale, steaming by now, looked at me and

said, "Heck, if we don't burn the place down, we're going to give it away."

If it weren't for Dale, our craft would probably never have amounted to much. As the shock of the news of his passing lessens, his absence in our life will become more profound.

—Mike Mahoney

In 1982 at Brigham Young University, I watched Dale explain to a group of embryo industrial arts teachers that if you want to remove a finger, the table saw probably does a better job than a bandsaw, the latter tending to rip the skin a bit more. He warned that either way hurts, that blood tends to stain the machines and wood, and there's a mess to clear up. Delivery was deadpan, as was Dale's way, but it sure got the message over that saws are dangerous.

—Richard Raffan

Dale jump-started my career in the early 1980s during show and tell at the Utah symposium, when he literally pushed me, and my Klein lathe, out in front of the group and said, "Show them what you do!"

Other special memories of a wonderful man: trips down into Dale's workshop, dessert at his home after the conferences, and especially his Rude Osolnik stories.

—Bonnie Klein

Tips

Storing varnish

I like to use varnish as a finish on my bowls. Storing it can be a problem: A skin can form on the top of the varnish if there is air in the storage container, which will render the varnish gummy and difficult to use.

My solution is to use the Vacu Vin wine saver, an inexpensive vacuum pump used to keep wine fresh after the bottle has been opened. I gathered up a few empty wine bottles, dried them out, and began storing varnish in them. The pump removes the oxygen and the varnish stays fresh. As an added benefit, it is easier and neater to pour varnish out of a wine bottle than it is from a can.

—Joshua Friend, Connecticut



Sawdust saver

I save and label sawdust from every kind of wood I use, and then by mixing it with five-minute epoxy, I can repair small cracks and fill voids so the fix is nearly invisible.

—Paul Kaplowitz, South Carolina



Share your turning ideas!

If we publish your tip, we'll pay you \$35. Email your tips along with relevant photos or illustrations to editorscarpino@gmail.com.

—Betty Scarpino, Editor

Interchangeable key

While turning one day, I needed to use my three-jaw drill chuck. Without conscious thought, I grabbed the Oneway Talon chuck key and tightened the jaws. Now I know that a Oneway Talon key can be used for several brands of three-jaw drill chucks.

Realizing my attention was not focused, I made the proper decision to end that turning session.

—John Kaner, Alaska

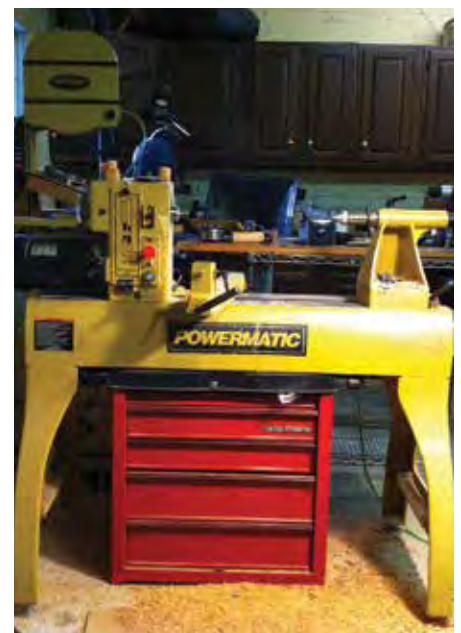


Under-the-lathe toolbox

I have read articles about building a cabinet under the lathe. A couple of years ago, I learned from one of the demonstrators at the Saint Paul symposium about using a mechanic's rolling toolbox for lathe tools and accessories. If you take the wheels off of a standard-size toolbox and lower the leveling screws all the way down, it just fits under a Powermatic lathe.

However, don't adjust the screws the way I did. I used a fulcrum and lever with my wife as the counterweight. After I adjusted the screws, while also holding my foot on the lever, I told my wife to step off, but I removed my foot before checking to see if she was off. The next thing I knew, she was catapulted up into the air, like at the circus. After I apologized profusely and gave a few back-rubs, I was forgiven. I recommend using a hydraulic jack.

—Dave Zurek, Virginia



Allen wrench

Cut 2" (50mm) from the Allen wrench that came with your four-jaw chuck. Put the cut-off portion into your electric drill, set the slip clutch to the drill setting to remove the screws and about four settings lower to install them. This will cut your time installing screws by at least half. When installing the screws, start slowly to make sure the threads are not cross-threaded.

—Paul Kaplowitz, South Carolina



Three Tormek improvements

First, mark an X on each of the two aluminum rollers on Tormek's gray plastic Turning Tool Setter. These marks will then easily indicate when the rollers are turning. The Universal Support rod is correctly adjusted when both rollers turn as the grinder wheel is rotated by hand. Only one roller will turn if the rod is too close or too far from the wheel. This is an easy and more precise method of positioning the rod than awkwardly trying to sight across the grinder wheel.

Second, attach two stop collars to the Universal Support rod so that the support can be shifted between its two possible positions (close and far) without requiring the use of the Turning Tool Setter. Lock the collars in place with setscrews. This will work for the close setting of the rod with a new grinder wheel. It will take several dressings of a new wheel before there will be enough rod protruding for a collar to fit at the far setting. This collar may need to have a flat ground on the underside so it will slide over the top of the grinder. Regularly check the two positions of the collars.

Third, use a magnet to collect iron shavings in the water trough. Place a rare-earth magnet into the corner of a plastic sandwich bag. A second magnet goes into another corner of the bag. Immerse half of the bag into the water trough, and hold the other half outside the trough using the second magnet. Position the bag away from the wheel.

The magnet in the bag will collect tool-steel particles, keeping them away from turning with the wheel and scratching the tools. Periodically remove the plastic bag from the trough. A wet clump of metal will come with it. Hold the bag over a trashcan and take the magnet out of the corner of the bag. Most of the clump falls into the can and the rest is easily wiped off. Newer machines have a magnet, but it is harder to remove the iron.

—Ed Youtz, Pennsylvania



Chuck-jaws knuckle protector



When the jaws on a chuck are opened, the danger of smacking a knuckle or finger is present. Some tips have recommended filing off the jaws' sharp corners, but while this might help a bit, it's really not effective. Instead, buy a strip of 2"- (5cm-) wide hook-and-loop material.

After tightening the chuck's jaws onto the workpiece, wrap the jaws. Make sure the wrap is trailing away from you so that the edge of the wrap does not catch and unwrap the strip.

This method is simple and effective—I can hold my knuckles against the spinning chuck without discomfort, let alone injury.

—Eric Freedus, California ►

TIPS

Drill perpendicular holes in a disc

In order to drill a hole on the center-line of a disc and have the hole straight and perpendicular to the center of the disc, try this: With the disc mounted onto the lathe, mark the disc. In this case, mark six places evenly spaced. Lock the lathe spindle with a mark at top-dead-center (TDC). Clamp a self-centering doweling jig to the disc with the drill hole lined up with your TDC mark. Use a small level to level the doweling jig. Drill the centered, straight and perpendicular hole. Repeat. ■

—Bob Gerenser, California



Woodworm Screws

Mike Peace

Many turners do not take advantage of one of the easiest and quickest ways to mount some projects on a lathe—the woodworm screw. This is basically a large screw chuck.

While you can buy a dedicated screw chuck, most scroll chucks come with a woodworm screw. This is a machined screw held within the jaws (*Photo 1*). A woodworm screw is cylindrical rather than tapered like a typical wood screw and has sharp, deep threads. These threads are designed to bite into the workpiece with a minimum of damage to wood fibers. The screw has a base that fits beneath and against the underside of the jaws to prevent it from being pulled from the chuck.

Woodworm screws also have four grooves or flat areas for the jaw slides or chuck jaws (or both) to fit against, to prevent the screw from twisting and coming loose. Some, like the one that came with my Super Nova 2, have a channel that the jaws close around.

The woodworm can speed up the process of getting the exterior of small bowls formed and a tenon turned for a chuck to grab onto. Another advantage is that you can remove and remount the piece with a good chance of it running true.

How to use

Insert the screw into the #2 jaws and start to tighten the jaws. Pull the screw forward so the base fits against the

Small projects

Sometimes a woodworm screw is just too big or long for your project. You can easily make a screw chuck for small projects of a production nature. Mount a scrap of wood onto a faceplate (or use a threaded glue block screwed onto a woodworm screw).

A #10 machine screw will hold well for small projects where you are only taking light cuts. With the faceplate and wood scrap mounted onto the lathe, drill a center hole for the screw. The hole should be small enough in diameter for the threads to hold the screw firmly in place. Remove from the lathe and screw the screw in from the back.

Remount and turn a taper to match the bottom of the project. You can use this taper as a visual reference to size your project without the need for calipers. This is a great

technique for small production-style projects like knobs or chessmen.

A small amount of thin CA glue applied to the screw threads before screwing the workpiece onto the screw will provide additional holding, yet the piece can still be removed easily.



Smaller-size shopmade screw chucks provide fast and easy mounting of small projects such as chessmen (right). Use a lag bolt if more support is needed, as shown in the example on the left that uses a faceplate and a scrap of plywood.



1 The screw on the left projects $\frac{3}{4}$ " (20mm) beyond the jaws. The one on the right projects $\frac{5}{8}$ " (16mm).



2 A large hardwood washer greatly strengthens the hold.



3 Use a plywood spacer when a smaller-depth hole is required.

back of the jaws, and then finish tightening. This will prevent any tendency for the screw to creep forward when it is being used.

Ensure that the workpiece has a flat surface where it will touch the top of the chuck jaws. Pre-drill a hole into your workpiece slightly smaller in diameter than the screw size, and about $\frac{3}{4}$ " (20mm) deep. Teknatool says drill a $\frac{5}{16}$ "- (8mm-) diameter hole for their woodworm screws. Oneway specifies a 9mm- or $\frac{1}{2}$ "-diameter hole for their Stronghold and Talon chucks. Check the instructions that came with your chuck for hole diameter.

A woodworm screw has its best hold in face-work such as a platter or small bowl, but can do well with small endgrain projects. Most of the holding strength comes from the large jaw surface that is pulled against the wood. One way to strengthen the grip even more is to make a large-diameter hardwood washer of side-grain flat stock that fits around the jaws when closed and is even with the top of the jaws (Photo 2).

Woodworm screws are not suitable for hollowing projects or other work where the workpiece tends to project out from the chuck toward

the tailstock more than about 4" (100mm). Longer projects tend to cause leverage problems that require a stronger holding method than a screw chuck.

Tips

- Use tailstock support as long as possible.
- Keep the rpm at a safe speed for the size of the piece, but probably no more than 600 rpm.
- Do not use this chucking technique with punky or otherwise unsound wood.
- When using on softer woods or green wood, you can strengthen the wood fibers by adding thin CA glue to the walls of the drilled hole.
- Do not leave green wood on a screw chuck overnight. Rust can make it extremely difficult to remove.
- If you cannot remove the piece with two hands, remove the screw from the chuck with the piece attached and try unthreading the screw with a wrench.
- After threading on the blank, try rocking it side to side to ensure there is no movement.
- Rub a little candle wax on the screw threads to make it easier to remove

the work. Keep in mind that when turning, the workpiece can actually get tighter.

- Sometimes the standard hole is too deep for the wood. An example would be when turning a plate from $\frac{3}{4}$ " (20mm) stock. Simply add a spacer made of MDF or plywood, $\frac{1}{8}$ " to $\frac{1}{4}$ " (3mm to 6mm) thick, to shorten the amount of screw that is exposed (Photo 3). The woodworm for the Super Nova2 or Nova G3 projects about $\frac{5}{8}$ " (16mm) while the one for the larger Titan chuck projects $\frac{3}{4}$ " (20mm) beyond the jaw surface. A hole only $\frac{3}{8}$ " (10mm) deep can securely hold a 12"- (300mm-) diameter platter. ■

Mike Peace started turning shortly after retiring and enjoys a wide variety of turning from ornaments to hollow forms. He is active in three woodturning chapters in the Atlanta area. You can see pictures of Mike's work and read his published articles on his website, mikepeacewoodturning.blogspot.com.

Calendar of Events

October issue deadline: August 15

Send information to editorscarpino@gmail.com

Ireland

September 27–29, Irish Woodturners' Guild National Woodturning Seminar, Radisson Blu Hotel & Spa, Sligo, west of Dublin. Featured demonstrators include from Ireland: Joe Laird and Robert O'Connor; from England: Dennis Keeling, Joey Richardson, Les Thorne; from Holland: Marcel van Berkel. More details are available from irishwoodturnersguild.com.

California

August 31–September 29, Artistry in Wood, Sonoma County Museum, Santa Rosa. The exhibit showcases work by woodworkers from northern California and includes turning. For more information and entry forms, visit sonomawoodworkers.com.

Colorado

September 13–15, Rocky Mountain Woodturning Symposium, held at The Ranch, Larimer County Fairgrounds. Demonstrators include David Ellsworth, Kip Christensen, Kirk DeHeer, Jason Schneider, Michael Blankenship, Rick Orr, John Giem, Ashley Harwood, Binh Pho, and Dale Bonertz. For the latest information, visit rmwoodturningsymposium.com.

Connecticut

May 17–August 18, "Conversations with Wood: Selections from the Waterbury Collection," Yale University Art Gallery, New Haven. artgallery.yale.edu

Georgia

September 20–22, Turning Southern Style XIX, at our new location, the Northwest Georgia Trade and Convention Center in Dalton. Demonstrators include Cindy Drozda, Stuart Mortimer, Jerry Kermode, David Nittmann, Nick Cook, and Kirk DeHeer. Our larger vendor area will feature discussions and demonstrations by Mike Hunter, Lyle Jamieson, John Jordan, JoHannes Michelsen, Tom Steyer, and Doug Thompson. Activities include a hands-on area, Instant Gallery and critique session, banquet and auction, and a spouse lounge and optional spouse outing. Information is available at gawoodturner.org.

Massachusetts

Through September 15, "Across the Grain: Turned and Carved Wood," Fuller Craft Museum, Brockton. For more information, visit fullercraft.org.

Minnesota

Ongoing exhibit: "Touch This!" featuring fascinating facts about wood and woodturning, as well as pieces you can touch. For more information, visit galleryofwoodart.org.

Montana

September 21, 22, Great Falls Woodturners Club symposium, Great Falls College, MSU, Great Falls. Featured demonstrator is Mike Mahoney. For more information, visit gfturners.org.

September 28–29, Yellowstone Woodturners Symposium, Billings. Demonstrator is Rex Burningham. For further information, call Dr. Van at 406-245-9945, or visit yellowstoneturners.org.

North Carolina

November 1–3, North Carolina Woodturning Symposium, Greensboro Coliseum Special Events Center. Featured demonstrators include Jimmy Clewes, Douglas J. Fisher, Bob Rosand, Avelino Samuel, Keith Tompkins, and Molly Winton. Seven regional demonstrators will also present. Visit northcarolinawoodturning.com for developing information.

Ohio

October 11–13, Ohio Valley Woodturners Guild's Turning 2013 symposium, Cincinnati. Demonstrators include Ray Key, Christian Burchard, Steve Kennard, Glenn Lucas, Michael Hosaluk, and Nick Agar. For more information, visit ovwg.org.

Tennessee

January 31–February 1, 2014, Tennessee Association of Woodturners 27th woodturning symposium, Marriott Hotel, Cool Springs, Franklin (just south of Nashville). Featured demonstrators include Trent Bosch, Barbara Dill, Douglas Fisher, and Kurt Hertzog. Details can be found at tnwoodturners.org. For vendor information, email mike@tds.net.

Texas

August 23–25, Southwest Association of Turners (SWAT) Symposium, Texas Convention Center, Waco. Fifty-four rotations will feature lead turners Jimmy Clewes, Ashley Harwood, Marilyn Campbell, Donald Derry, Dixie Biggs, and J. Paul Fennell, plus regional demonstrators. Vendors, hands-on areas, Instant Gallery, and lunches are included. Beads of Courage boxes will be accepted for distribution to regional hospitals. For more information and to register early, visit SWATurners.org.

Robert Lyon, *Chasing Memory*, Ash, pencils, erasers, 9¾" x 8" (25cm x 20cm)

Robert Lyon of Columbia, South Carolina, has been named an Individual Artist Fellow in Craft by the South Carolina Arts Commission for FY2014. Lyon receives an unrestricted \$5,000 award.

The S.C. Arts Commission board approves fellowships based on recommendations made by out-of-state review panelists, who select fellows based solely on a review of anonymous work samples. Visual arts and craft panelists were Michael Sweney, program manager for Art in Public Places at Washington State Arts Commission; Diem Chau, a visual artist from Seattle; and Deborah Paine, curator and collections manager, City of Seattle's Office of Arts and Culture.



Book Review

Tour de Force Wood Turning by Claude Lethiecq



Claude Lethiecq, 2010

Photo: Andi Wolfe

In the Pitti Palace, Florence, Italy, the Green Vault, Dresden, Germany, and scattered in collections around Europe are the finest examples of sixteenth-century ivory *tour de force* turnery,

which has been unsurpassed for centuries. Claude Lethiecq, drawing from his engineering background and using his imagination and skills, has developed this form of turning to an even higher level.

So often craftsmen who have spent time developing almost magical skills and techniques are reluctant to pass on their knowledge. In this electronically published book, Claude Lethiecq explains all, which makes this document historically significant. Turners now, and in the future, will benefit from the time he has devoted to documenting in such detail his tools and methods.

Claude's meticulous approach begins, most importantly, with the meaning of *tour de force* (feat of strength). He goes on to discuss the importance of suitable woods and the benefits of wood stabilizers. He explains polyhedrons and provides the calculations, which he has developed, for setting out these forms. He goes on to explain how he makes his ingenious jigs, tools, and chucks to hold the pieces securely while they are being worked.

Claude provides detailed instructions and precise diagrams for turning ten projects, beginning with the classic Chinese ball. He continues

with ever more breathtaking pieces. In order to produce this intricate, complex work, Claude developed highly ingenious solutions to apparently impossible problems. The diagrams clearly explain the inner complexities of each piece, which are impossible to appreciate when simply viewing the finished work.

In an impromptu interview video made by Andi Wolfe at the 2010 AAW symposium, it is a delight to see Claude enthusiastically explain the finer points of some of these pieces. The video link is included at the end of the book. Lethiecq's depth of knowledge is

apparent and the viewer cannot help but be impressed by his enthusiasm.

By making his methods so publicly available (with the help of his son, Jacques), Claude Lethiecq will surely receive the recognition he so fully deserves. *Tour de Force Wood Turning* is an excellent book, in every respect. ■

—David Springett, author of
Woodturning Wizardry

Tour de Force Wood Turning is available free online at sites.google.com/site/tourdeforcewoodturning/



Claude Lethiecq, *Genesis*,

1999, Boxwood, walnut, 7¼" (183mm). Twelve- and twenty-point stars sit inside a mother sphere with twelve smaller spheres interlocked onto it. Made from one piece of wood (except for the stand and tips).

Claude worked on his masterpiece for six months and first displayed it at an international symposium in France in 2000. It is currently in his possession.

Photo: Andi Wolfe

EOG Helps Launch a Club's Youth Programs

A grant given, a club in action, young lives changed....

In early 2011, a long-time club member asked: Why are we not doing something for youth? The question bounced around in my mind until I brought the idea to a board meeting where everyone supported the idea of working with young woodturners. When asked if I would coordinate the programs, I accepted the challenge. Mary Carol Meinken, club treasurer, agreed to co-chair the events.

It was a big challenge! Plans had to be made, materials acquired, equipment obtained, and coaches solicited. The big questions: When and where? Our biennial symposium was just a few months away, so it seemed appropriate that the youth program be launched then.

Mary Carol applied for and our club was awarded an AAW Educational Opportunity Grant. With these funds we were able to purchase everything we needed.

We held our first youth event Friday evening at our October symposium, and it went off without a hitch. With all of the compliments and encouragement we received, we knew we could move to the next level.

Program expands

In 2012, Mary Carol and I developed a series of classes for April, May, and June, and publicized them with flyers, ads, and group solicitations, and on our website and by word of mouth. We had no trouble filling the classes—students had to be put on waiting lists. Parents recognized the value of a unique experience, which was also free of charge. We accepted youth, ages 10 to 17, into the classes, which were

hosted at Rockler Woodworking and Hardware in Cincinnati.

Another board member, Ralph Hirshberg, organized a series of youth turning classes at St. Rita's School for the hearing impaired. He used the structured guidelines provided by the AAW for a complete program, which proved successful—thank you, Ralph.

Some students continued to develop their skills at home under the supervision of parents or grandparents. Two such youth were Jacob and Joshua Hartman, who at the time were ages 14 and 10. I received photos of their turnings several times throughout the year and could see their progress. We decided that Jacob and Joshua should be involved in promotion of our final youth event of 2012, an ambitious undertaking.

We wanted to have a pen turn-a-thon, the results of which would help supply everyone aboard a 300-crewmember military ship with a handcrafted pen in time for Christmas. This would be a joint effort with Len Cribb's annual pen-turning event held earlier in the year. We needed to produce an additional 200 pens!

We did all of the usual promotion locally, but went one step further. A friend of mine is a local TV news producer/anchor, and she thought it would be a terrific idea to get us on the morning news. Enter Jacob and Joshua. They, along with Mary Carol and me, appeared on the local news broadcast early in November, a special moment for everyone.

Rockler hosted again: twelve lathes, more than fifty students, and about

Testimony from a Navy Seaman

Thank you very much for your pen and the kind words given to me. I am a Seaman Apprentice in the United States Navy. It means a lot to me personally to receive a nice gift from someone your age. I am nineteen years old and have never received anything like it. Thank you for making my day brighter and for supporting the military.

fifteen coaches. The open house lasted from opening to closing and included a continual flow of youth and parents. The lathes kept humming, and we exceeded our goal by more than twenty pens.

My local UPS assisted in the shipping. The gifts were well received aboard the USS Barry, a destroyer in port at Virginia Beach. We received an abundance of email from crewmembers expressing their deep appreciation for our efforts. A fellow club member and his son, who is stationed aboard this ship, made the connection possible.

A new idea

Watching the interactions of the children and their parents during the pen-turning event spawned a new idea: an intergenerational program, where youth and their parents or grandparents can work together. Jacob Hartman will become one of our mentors, and it doesn't get any better than that. Many thanks to the AAW for supporting club activities through the EOG program.

Who asked the original question that led to our youth program? Autrey Parker—thank you, Autrey!

—Gary C. Webster, Sr., Ohio Valley Woodturners Guild



Jantje Wingo shows off his completed pen.



Our moment of stardom! (L to r) Rob Williams from Fox 19 News, Joshua, Gary, Jacob, Sheila Gary from Fox 19 News, and Mary Carol.



Coach Arn watches a young turner.



Turning a pen for the troops!

Roy Underhill's Woodwright's School Curtis Turner

Like many, I have enjoyed Roy Underhill's PBS television program, *The Woodwright's Shop*. He has inspired many woodworkers with his engaging personality and ability to make working with hand tools look possible for mere mortals.

A few years ago, Roy opened The Woodwright's School, in Pittsboro, North Carolina, transforming a sleepy corner storefront into what is becoming a Mecca for woodworkers and woodturners who appreciate working with hand tools and learning traditional methods.

I was fortunate to spend an amazing week at the school, building a spring pole lathe with nine other students. In the shop, music from the 1930s played, helping complete the ambiance in a space filled with vintage metal lathes, hand planes, and frame saws.

Upstairs from the school is a vintage tool store, eye candy for tool fanatics. The shelves and tables were loaded with

chisels, gouges, handplanes, saws, and just about everything you would ever hope to find in a vintage tool store.

Class starts

My classmates and I arrived at the school on Monday and picked out our own bench, which was stocked with southern yellow pine for our project. Soon we were watching Roy turn on his spring pole lathe while he explained safety procedures and shop rules.

Underhill provides all the materials and tools for the class. While some students brought a few of their favorite tools, I opted to try out other tools. A "new" favorite is the *slick*—a very large chisel, useful to trim the large tenons for the lathe. We used only hand tools during the entire week. This meant that long rip cuts, carving large mortises, and drilling operations were completed by muscle power.

After our brief orientation, we began scribing layout marks for mortises and

tenons. I began to wonder if I could manage to transform this stack of hard yellow pine into a working lathe by the end of the week.

The atmosphere was relaxed and informal. Roy would demonstrate a technique or a new tool to the group, and then send us back to our benches. He spent each day floating between student benches, checking on progress, answering questions, and dispensing advice and tips. He was approachable and was quick to help clean up or to grab someone's camera and take a few shots while they worked.

By Wednesday, I was beginning to see that having a functioning lathe was possible by Friday. I observed an interesting development of teamwork among students as we helped each other with aligning brace and bit drill operations and assembling and disassembling our lathes.

On Friday by mid-afternoon, the first completed lathes were taking their first spins. All students had completed their lathes by the end of the day on Friday.

The highlight of the trip for me was turning on my spring pole lathe outside of the Woodwright's School in downtown Pittsboro. The entire week was truly an experience working under the instruction of one of the most influential characters in modern woodworking. I hope to return someday. In the meantime, I look forward to demonstrating my spring pole lathe at a turning club meeting.

More information about The Woodwright's School can be found at woodwrightschool.com. ■



The author turning on Roy Underhill's spring pole lathe.



Roy Underhill turning on his spring pole lathe on the sidewalk in front of his school.

Curtis Turner is past president of Central Texas Woodturners and a member of Fine Woodworkers of Austin. He teaches and demonstrates nationally for Lie-Nielsen Toolworks and also in his own studio. He can be reached through his website, curtisturnerstudio.com.

CUPCAKE *Cookie Jar*

Don Pettit

One day as I was moving wood around, I happened to stack a piece of white burl cap on top of a chunk of walnut (*Photo 1*). I thought I heard the wood say “cupcake” and I saw that the burl looked like frosting on a cupcake. I like my creations to be functional as well as beautiful and a cookie jar was a natural fit.

Wood selection

The wood essentially selected itself. The cake is claro walnut and the frosting is bigleaf maple burl cap. The cherry on the top is mountain mahogany. All three grow where I live in California.

Claro walnut is a bit like a box of chocolates in that you never know what patterns will emerge until you start turning the inside. I examined this piece carefully and believed I would find something interesting inside. I had used bigleaf maple burl as whipped cream in a previous



project with great success (*see sidebar Last-Minute Cake*).

The wood was dry at 7 percent moisture content. If you choose to turn green wood, follow your own recipe, but make sure moisture is not greater than 8 percent before turning. Do not guess.

I drilled a 2"- (5cm-) diameter hole into the bottom of the walnut 3" (8cm)

deep, and then placed a moisture meter inside. This step ensured that the wood was stable and would not move when matching the lip and rim of the cookie jar.

Size

To make my larger-than-life-size cupcake to scale, I first measured a



1 The burl cap stacked on top of a chunk of claro walnut said, “cupcake.”



2 After turning a cylinder, I sloped it to the correct angle for a cupcake.



3 I initially hollowed out the bowl to about 1½" (38mm) deep with a ⅝" (16mm) wall thickness.

paper baking cup: $3\frac{1}{4}$ " (8cm) diameter on the top, 2" (5cm) diameter on the bottom, and $1\frac{3}{4}$ " (4cm) tall. I multiplied these dimensions by four and drew a plan for a finished cupcake measuring 13" (33cm) diameter on the top, 8" (20cm) diameter on the bottom, and 7" (18cm) tall. (The completed piece was actually 9" [23cm] tall because of the curve of the burl.) These are overall measurements. For the ratio of frosting to cake, I referred to my childhood memories: Make cupcakes with half the batter, which will leave more room for frosting.

The final measurement of the cookie-jar cupcake was 11" (28cm) diameter on the top, 8" (20cm) on the bottom, and 5" (13cm) tall with 2" (5cm) of frosting in the paper cup and another 2" of frosting above that edge (Figure 1). If you change the overall size of your cupcake or the ratio of frosting-to-cake, draw it to scale first.

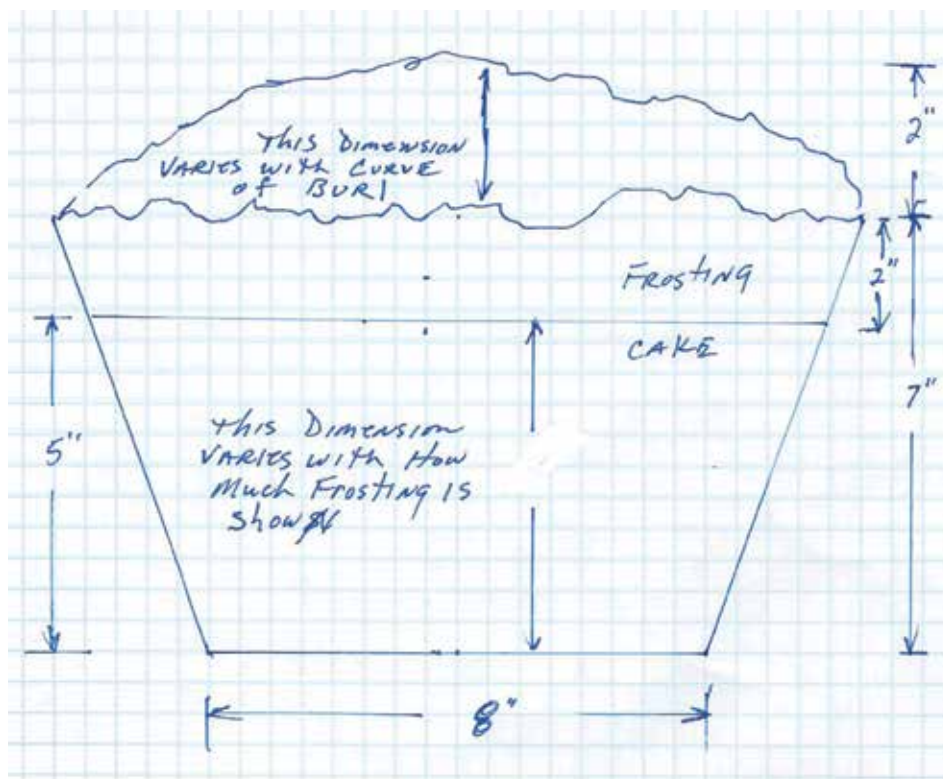


Figure 1.

Bowl for the cake

For ease of future processes, I flattened the bottom of a bowl blank so a faceplate could be mounted. I added an additional 6" (15cm) depth to the bowl blank to allow space for the router during the grooving process. I started with a block

measuring 14" × 14" × 13" (36cm × 36cm × 33cm).

First, I turned a cylinder. Then, to achieve the proper slope and dimension of the bowl, I turned the top to $11\frac{1}{8}$ " (28cm) diameter, the bottom to $8\frac{1}{8}$ " (21cm) diameter, and defined a height of $5\frac{1}{4}$ " (13cm). I continued the

angle of slope on the additional 6" (15cm) (Photo 2).

To begin turning the interior, I allowed a $\frac{5}{8}$ " (16mm) wall thickness (Photo 3) so that grooves could be cut later. I initially hollowed out the bowl to about $1\frac{1}{2}$ " (38mm) deep. I placed a straightedge across the ►



The burl cap has a flange in the center to which a faceplate-with-standoffs will be attached.



This faceplate accommodates standoffs that allow the inside of a burl cap to be hollowed out and its thickness measured.



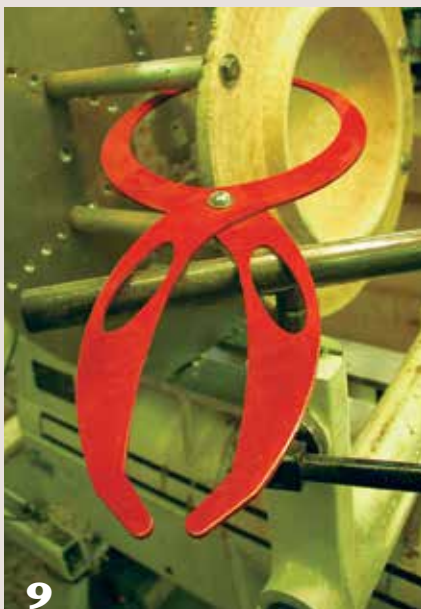
Pointed setscrews impale marks onto the flange.



7 After drilling holes, the burl cap is attached to the standoffs.



8 Test-fit the bowl onto the lid.



9 A double-ended caliper effectively measures thickness.

rim to make sure it was perfectly flat before removing the bowl from the lathe, leaving the faceplate on. I ended up letting it sit for three weeks because of my work schedule, but during that time, the wood did not move.

Burl frosting lid

A thin lid on a cookie jar is necessary for it to be lightweight enough for practical use; therefore, the lid must be hollowed out. I also wanted

to protect the exterior of the burl cap from damage during turning, which meant mounting the burl onto a custom jig. For that, I added 4" (10cm) to the burl's finished diameter for a flange, which meant that the blank needed to be 17" (43cm) in diameter. I examined the burl and decided to attempt 2½"- (6cm-) thick wood for the frosting above the cake.

I attached the wood to a faceplate, centering it on the burl's flat side,

and then threaded the faceplate onto the lathe.

To create a flange for mounting purposes, I turned a 1"- (25mm-) wide tenon to 12½" (32cm) in diameter on the faceplate side of the burl. On the tailstock side, I turned another tenon 14½" (37cm) diameter, ½" (13mm) thick (*Photo 4*). This left a flange in the center to which I would attach a faceplate.

There are many ways to hollow out a burl cap, such as turning between centers, mounting in a jam chuck, or using an insulation-foam jig. I needed a method that would allow me to measure thickness everywhere on an uneven surface while leaving the wood on a jig. I used a 24" (60cm) faceplate that had been manufactured to my specifications and used successfully on previous projects.

This faceplate accommodates standoffs. I mounted eight 6" × 1" (15cm × 25mm) standoffs to the faceplate with ⅜" (10mm) bolts (*Photo 5*). To determine their positions on the faceplate, I measured the centerline of the flange.

Next step was to locate where the standoffs would be attached to the flange. I screwed ⅜"- (10mm-) diameter pointed setscrews with hex nut stops into the ends of the standoffs. Their center points would locate where the holes need to be drilled



10 I left the bowl a bit thicker in its bottom to ensure that the beautiful caramel coloring would remain.



11 Press the lid onto the bowl and secure it with a revolving center in the tailstock.



12 A straight line can be achieved using a straightedge to locate highs and lows.

in the flange. I mounted the faceplate with attached standoffs onto the headstock.

I inserted a chuck-reversing adaptor into the faceplate holding the lid and seated the adaptor onto the tailstock. Then, I pushed the lid hard against the standoff jig, which caused the pointed setscrews to impale a dimple on the flange at each standoff's location (*Photo 6*). I drilled a $\frac{1}{2}$ " (13mm) hole at each dimple and mounted the lid with $\frac{3}{8}$ " (10mm) bolts onto the standoff jig (*Photo 7*), and then removed the faceplate from the lid.

The tenon, turned earlier, can be turned into a lip that fits inside the bowl. A measurement from the bowl indicated a $9\frac{3}{4}$ " (25cm-) diameter opening, so I turned the outside of the lip to the same diameter as well as followed the taper of the bowl. I made the lip $\frac{3}{4}$ " (19mm) wide and began to hollow out the lid.

The outside shoulder of the lip needs to be flat to match the rim edge of the bowl. To test the fit of the bowl and lid, I installed the chuck-reversing adapter to the bowl's faceplate, attached the bowl onto the tailstock, and pushed it toward the lid for a test fit (*Photo 8*). After achieving a snug fit, I finished turning the inside of the lid and decreased the thickness of the lip to $\frac{1}{2}$ " (13mm). A double-ended caliper effectively measured all points of rough burl (*Photo 9*). I then sanded the interior and lip to 440 grit.

Match the bowl and lid

I remounted the bowl onto the headstock and held the lid firmly against the rim. The lid was a bit loose because, while fixed to their respective faceplates, which were both mounted onto the lathe, the fit of bowl and lid was not easy to determine. I removed $\frac{1}{16}$ " (1.6mm) of bowl wall height, decreasing the ►

Last-minute cake Don Pettit

After volunteering to help with our club's entry for the 2012 AAW symposium's Chapter Collaborative Challenge (C3), I let time slip away and could not decide what I was going to contribute. The club had plenty of ideas once we decided on a picnic theme and many members already started their pieces.

With time running out, I ended up looking around my shop at all the piles of wood from current and past projects. I was in the middle of working on my cupcake cookie jar and it seemed that the idea of "baking and cake" took over. I began to "shop" for ingredients.

Leftover maple and cherry boards from turning dinner plates became the layers of the cake. A pre-turned claro walnut bowl was just the right size for the frosting cover. For the whipped cream topping, I dug through a couple of boxes labeled "raffle" and came across a small piece of maple burl. As the pieces piled up, I felt a sense of relief. A smile emerged. Not only did I have an idea that would fit with the picnic theme, I could also use what some turners call firewood: I am known for bringing boxes of smaller wood chunks to our club's monthly raffles.

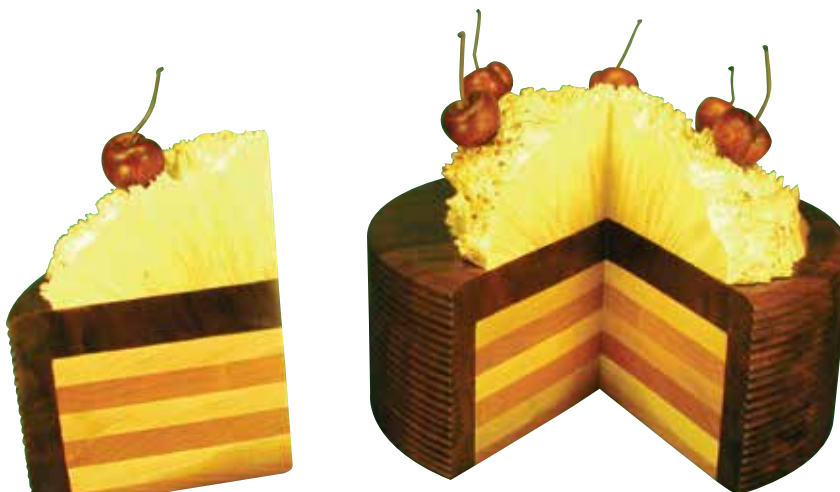
Since I waited so long to decide what to make, I ended up working on it over the entire Memorial Day weekend. First, I glued the cherry and maple boards together (cake layers) and turned them into a cylinder. I would slide that into the claro walnut bowl

(frosting), which I turned so the cylinder would fit tightly.

Unfortunately, the fit was so snug that I could not even force the cylinder all the way into the bowl. I was shy about $\frac{1}{2}$ " (13mm). I measured several times and the math worked—even the angles on the cylinder and bowl bottoms were correct. I was hesitant to turn the opening of the bowl larger or to make the cylinder smaller—I have had unwanted results in the past. My experience told me to trust the math.

I suspected the problem might be air trapped within the bowl by the tight-fitting cylinder. As an experiment, I drilled a hole through the bowl bottom where a cherry would be located on top of the cake. The air within was released and the cylinder now seated nicely in the bowl. I drilled a total of six holes in the bowl so when I applied a generous amount of glue, the excess (and any trapped air) would ooze out the holes. I was hoping to end up with a tight glue line, but wouldn't know until I sliced the cake when it was completed. I aligned the holes with the cherries that would decorate the top of the whipped cream.

With the cake complete, I cut a generous slice on the bandsaw. The glue line was tight and the cherries were nicely centered. I glued stems into the tops of the cherries and applied a final coat of finish, just one day before the cake needed to be transported to the symposium.



The cake from the Wine Country Woodturners' entry, *A Picnic in the Woods*, 2012, Maple, cherry, claro walnut, maple burl, bloodwood, 9" x 10" (23cm x 25cm)



13
The router bit just touches the top of the frosting as the cut tapers out.



14
Each new groove is started in the same direction, bottom to top.



15
An indexing system allows for equally spaced grooves to be cut around the circumference.



16
The "frosting" lid and the "cake" bowl are finished and the bowl is ready to be parted off the lathe.

diameter and creating a tight fit. A tight fit is important so the lid does not move independently of the bowl while cutting the grooves.

At its base, I cut a line with the parting tool to determine the finished height of the bowl, and then turned away some wood between the bowl bottom and the faceplate to make space for a router (bit) and a jig. From there, hollowing the bowl went quickly. I left the bottom thicker than usual to keep from turning away the beautiful figure and color appearing in that area: a caramel filling in my chocolate cupcake (Photo 10)!

I sanded the interior of the bowl to 440 grit, and with the interiors of both the bowl and the lid complete, I pressed the lid onto the bowl and secured it with a revolving center in the tailstock (Photo 11).

Using a bowl gouge, I turned away the flange and cut the entire edge of the lid so it aligned with the slope of the bowl. Holding a straightedge along the cut ensures a straight line, free of curves and voids (Photo 12).

Add grooves

A jig I used before to rout flutes worked well for cutting V grooves into the sides of the cupcake cookie jar (see sidebar, Jig for Cutting Grooves). This jig sits in two banjos (because of the long lengths of flutes done on a previous project). A router sits in the jig and slides back and forth, at the centerline of the headstock.

I set up the jig to follow the angle of the bowl and lid, but then shifted the angle to create a tapered depth. I left a ¼" (6mm) gap between the router bit and the bottom edge of the bowl and slid the router to the top edge of the frosting, so that the bit would just be touching (Photo 13). With the angle set, I moved the router back toward the headstock so

it sat below the bottom of the bowl, in the area where the wood was cut back. I pushed the router's carriage toward the bowl ¼" and cut the first groove. The router moved toward the tailstock and then returned in the same groove, actually cutting each groove twice. I started each new cut in the same direction at the bottom of the bowl because of the rotation of the router bit (Photo 14).

I used an indexing system within the headstock of my lathe to cut 96 equally spaced grooves around the circumference. Securely tightening the system is important so all cuts are even. I sanded all of those pesky grooves, which took longer than cutting them, but the end result was well worth it (Photos 15, 16).

With the routing and sanding finished, I adjusted the fit of the lid to make it easy to remove, and then parted off the bowl.

Cherry handle

Most Bing cherries measure ½" to ¾" (13mm to 19mm) in diameter. If I used the same multiplier that I used for the cupcake (four), the handle would have been 3" (76mm) in diameter. This seemed overly large, so I decreased the diameter to 2½" (54mm), making it easier for smaller hands.

I turned two beads between centers so I could have a spare to experiment with for adding deeper color. I cut the beads off and carved the dimple on top and the growth seam down the side. After a good sanding, they were ready for stain.

With the staining complete, I used a dowel to attach the cherry to the lid securely. I drilled two holes, inserted a length of dowel, and glued the dowel with hide glue.

I turned a few stems, but they broke off when the handle was grabbed; I decided to sleep on it—more later.

Jig for cutting grooves

Don Pettit

Multitasking capability drives the design of the jigs and tools I build, so for my lathe's banjo, I made both left and right support posts, which would hold many different jigs. They are held just like a toolrest. I welded a ¼" (6mm) thick by 3" (76mm) angle iron to a 1" (25mm) post at 90 degrees, clipping part of it off for clearances (*Photo a*). Holes drilled into the top are for securing a variety of jigs. I put adjustable stop collars on posts so that once the centerline of router bit and headstock

was found, collars could be set and the jig could be removed and set back without having to find center all over again.

I mounted a board to both the left and right support posts to act as a carriage (*Photo b*). This board held a second board so it could slide toward and away from wood in lathe (*Photo c*). The second board had aluminum rails attached to allow a ⅛"- (3mm-) thick stainless steel plate to slide side to side, parallel with the lathe bed (*Photo d*). The ends of

this board had grooves to fit the thickness of the angle iron for guidance. A handle and router, attached to the metal plate, slid rather nicely in the rails, with the help of a little wax.

Setscrews mounted underneath the carriage secured the router support board once it was adjusted (*Photo e*). The router bit is adjusted to the centerline of the headstock and tailstock (*Photos f, g*), the alignment accomplished just like any toolrest.



Finish

The yellow hue of the burl cap was not quite the color I wanted for a white cream frosting, so after some experimentation, I bleached the burl. Wear protective gloves

and goggles while mixing bleaching solution—wood bleach is strong and corrosive. (For tips on bleaching wood, see *AW*, vol 11, no 2 and vol 28, no 1.)

Both the lid and the bowl received four coats of sealer and four coats of pre-catalysed lacquer. I sanded with 320 grit between each coat.

across some sprinkler valves with brown wires sticking out of them. Perfect! The copper wire had a brown plastic coating, which I left intact. I removed some of the wire and burned the extra plastic at one end with a match and ended up with a sturdy, flexible stem that I glued into the cherry. My cupcake cookie jar was ready to receive goodies.



Stem

I am sure many of you have a place where you store the excess material it takes to run a household. Some call it the garage, so that is where I headed to solve my stem problem.

Going through boxes of paint, rags, nuts, bolts, and various assorted households bits, I came

Mister Don has worked with wood for the past forty years and is currently owner/operator/partner of WNT Design, Earthwise Cabinetry, and DNB Tool. His small hobby shop at home is dedicated to lathe work. Don opens his cabinet shop to the Wine Country Woodturners club for their monthly meetings and enjoys the lighthearted title of "landlord" because it's the easiest job he's ever had: Collecting zero rent.

Skyhook *A new slant on an old toy*

Roger Zimmermann

Peter Rand's article on kinetics (vol 27 no 1) got me thinking about a toy many of us played with as children. A skyhook toy for balancing objects was one of those magical devices that piqued the imagination: How could it hold a heavy object with no visible means of support? Just the name *skyhook* is the stuff dreams are made of.

How does it work? The principle is simple: A skyhook uses center of gravity and a belt is an integral part of the illusion—it must be made of stiff leather. Once a belt is placed into the slot, it forms itself into a long sweeping arc and its center of gravity is then under the point where the hook meets the finger. Equilibrium forces the hook into a near-horizontal position, but the observer doesn't see this subtle shift of the center of gravity. The mind is tricked into thinking the belt and skyhook should fall.

The original skyhook (or belt hook) was shaped like a pipe or a musical quarter note and was cut out of a thin, flat board. I decided to adapt the idea for woodturning. This three-dimensional design can incorporate beads, coves, grooves, and tapers.

There are two critical dimensions: (1) The angle of the slot for the belt relative to the axis of the hook must be 45

degrees. You can vary this, but when you do, it will force the belt hook to tilt itself above or below horizontal. (2) The distance from the base of the belt slot to the point where the finger will support the apparatus is 3" (76 mm). If this distance is varied, it will also affect the angle at which the skyhook will rest. You can experiment with these as you wish, depending on how you would like to see the hook position at equilibrium.

Constructing the skyhook

- Start with a block of wood about 1" × 1" × 6" (25mm × 25mm × 150mm). Pen blanks are perfect.
- Saw the belt slot while the blank is still square. The slot should be at 45 degrees and penetrate between one-half to two-thirds the way into the height of the blank.
- Chuck the end of the blank that has the saw cut into a scroll chuck, and bring up the tailstock.
- Turn the blank round and shape the skyhook. In the area of the slot, take light cuts to avoid chip-out.
- The end where the skyhook will balance on the finger should be smaller to give the illusion that there is nothing there to keep the belt from falling. But, rules are meant to be broken. The head of the skyhook can

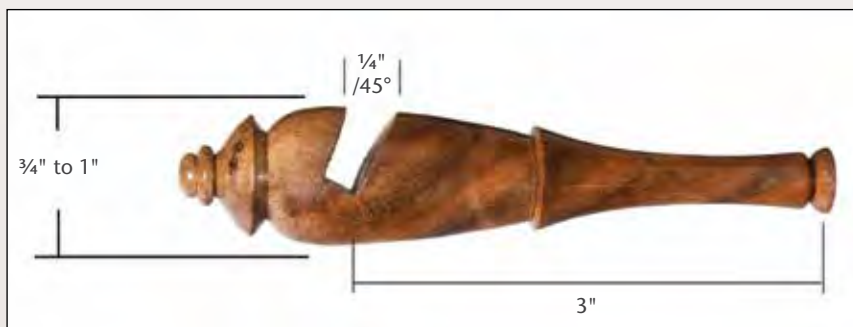
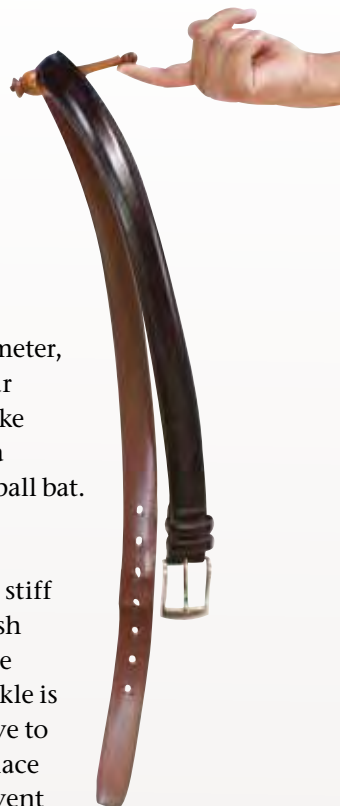
be any shape, diameter, or length. Use your imagination—make it look like a fish, a torpedo, or a baseball bat.

Use

Find the center of a stiff leather belt and push it into the slot of the skyhook. If the buckle is heavy, you may have to adjust where you place the skyhook to prevent the weight of the buckle from rotating the skyhook sideways. Balance the skyhook on the end of your finger.

Skyhooks are quick and easy to make. Take one to a party. Make them for craft fairs, gifts, and classes. They can be used as a means of drawing customers into your booth. Carry one wherever you go and create some fun! You never know when you might need one to start up a lively conversation or make a new friend. ■

Roger Zimmermann is the president of the Wisconsin Valley Woodturners. A retired engineer, he has been turning for more than 35 years. You can email Roger at LathyBum@aol.com.



Dimensions for a successful skyhook design.



Use your imagination to personalize your skyhook designs.

SHAWL Pins

Jim Meizelis

Fresh ideas can be hard to come by, and I never know where inspiration will surface. This shawl pin-and-ring set, suggested by a knitter in Minnesota, was ideal for woodturning. It is a two-part project that can help develop expertise in turning spindles, coves, beads, and rings. Scrap wood and small cutoffs from flooring can be used.

Pin

Turn the shawl pin first. The aim is to have a thin—but dull-pointed—shaft that is at least as long as the outside diameter of the ring and has a decorative end to grasp. You can mount the wood onto the lathe using a spur or safety center, but I like to use a scroll chuck with 1" (25mm) jaws.

The shawl-pin blank—roughly $\frac{3}{4}$ " \times $\frac{3}{4}$ " \times 7"—needs to be straight-grained wood, otherwise the pin might break when side pressure is exerted while turning. Support the workpiece as long

as possible with a live center and don't over-tighten the tailstock. Doing so will cause flexing and possible breakage as the pin's diameter gets smaller.

Take a moment to mentally go through the steps (*Photo 1*). As you work, don't try to be perfect. If you are learning how to make clean cuts, use sharp tools, and practice techniques, but in the end, abrasives can do the final shaping. Turn at a speed of about 1200 rpm.

Begin by rough-turning the entire blank round, and then remove wood from the point end down to approximately $\frac{1}{4}$ " diameter, leaving enough material to keep the live center engaged. Work toward the tip in short sections (*Photo 2*).

Turn the next two quarters of the pin's length to roughly $\frac{1}{4}$ " diameter. Take light cuts.



1 Follow the various stages of the shawl pin project, starting from the left.



2 After turning to a cylinder, begin shaping the pin at the tailstock end. Take light cuts.



3 A sacrificial ring and the covers of the chuck's jaws provide a buffer between your gouge and the scroll chuck.



4 Mount the flattest side of the blank facing the shim so that the wood around the hole is proud of the chuck jaws. You may need more than one shim.



5 Finished shawl ring on scroll chuck.



The idea for this project came from Teresa Baumann's shawl pins.

For your first shawl pin, make a simple rounded head. After turning the head of the pin, sand the entire pin. If there is any tearout or rough grain, start with 100-grit abrasive and the lathe speed at about 500 rpm. A good progression of grits is: 100, 150, 220, 320.

Part off the small nub at tailstock end, move the toolrest out of the way, and sand the point to a dull end. Apply a coat of finish.

Use a saw to cut the pin off the lathe, lightly sand the head by hand, and apply finish.

Shawl ring

First, I made a sacrificial ring and covers for the jaws of my scroll chuck (*Photo 3*). (The idea came from a tip in *AW*, vol 27, no 5.)

I wanted thin rings so I re-sawed flooring, and then drilled a $\frac{1}{4}$ " or $\frac{1}{8}$ " hole, trimmed the edges, and mounted the blank onto the lathe (*Photo 4*). The outside diameter of the ring is variable, but keep in mind the length of the pin.

Turn the face to the desired shape and sand. Flip, and then shape the second side (*Photo 5*). Sand and apply finish.

As I made the examples for this article, I started thinking about using my new skills to make finials, mobiles, hairpins, and music-director batons—I think I will be busy!

Since leaving corporate life in 2006, Jim Meizelis has made woodturning his primary retirement activity. He can be reached at jim_954@frontier.com.

Individual tiles or staves—the components of a segmented turning—are usually cut from a board. The cuts must be accurate to one-tenth of a degree or better; even then, the pieces often need to be planed or sanded so they fit together precisely. I have developed a technique that automatically cuts pieces with a high degree of accuracy and that needs no fine-tuning.

My method cuts a cylindrical blank into segments (*Photo 1*) using a sled that slides on a bandsaw table. Because all the segments are cut from a single piece, the sum of their angles equals 360 degrees—so, when the segments are assembled in a circular array, there will be no visible gaps between them. (If the blank sways on the bandsaw table or the blade wanders, the segments may not be uniform. But if you number the segments and assemble them in the order in which they were cut, they will still fit together tightly.)

Set up the bandsaw

From an aesthetic point of view, the quality of cut is paramount. The bandsawn faces must be straight, with minimal surface irregularities.

Four things determine the quality of cut: a well-adjusted bandsaw; a sharp blade; a slow, uniform feed rate; and a workpiece firmly secured for cutting.

A well-adjusted bandsaw has the proper blade tension, the table perpendicular to the blade, and a blade that is not bent. I have obtained good results with a $\frac{3}{4}$ "- (19mm-) raker-type blade, 0.035" (0.9mm) thick, with 10 teeth per inch. Be sure the weld joint equals the blade thickness; hone it flush if necessary.

The speed and uniformity of feed largely determine the accuracy of cuts on a bandsaw. The speed can be faster with a sharp blade, but must be slower as the

A Novel Way to Cut Segments

Robert Jerzy Gryglaszewski Craig



Cutting staves from a single piece requires careful setup but yields highly accurate results.

blade dulls. Fortunately, there is a simple way to produce a uniform, variable feed. The sled is pulled across the bandsaw table by a rope attached to a weight, in this case two hammers that weigh about 7 lb (3.2 kg). (Exercise weights would work equally well.) Rather than drop freely, the weights slide down a piece of plywood angled against the back of the bandsaw (*Photo 2*). Changing the angle of the board

changes the feed rate—the steeper the board, the faster the cutting.

As a rule, I use enough weight to produce a feed rate of 5" (127mm) per minute with all the weight hanging free. Then, I adjust the angle of the board to give me a feed rate of about 2" (51mm) per minute.

Prepare the blank

Whenever possible, use a single block of wood. If that is not

practical, glue up several precisely machined blocks or boards with matched grain (*Photo 3*). Use quartersawn wood, alternating segments with radial and tangential grains. (To minimize the look of mismatched grain, use either a large number of segments, slip pieces of contrasting veneer between the segments, or both.) If you plan to make a box with a tight-fitting lid, be sure the blank's face grain follows the lathe axis. And, if you have glued up a blank from unmatched blocks or thick boards, store it in a plastic bag or cut it as soon as the glue has dried to help prevent splitting.

Be sure the ends of the blank are flat and parallel. I use an overarm router to machine the ends (*Photo 4*).

I drill a $\frac{19}{64}$ " (8mm) reference hole through the blank at the intersection of the glue lines (*Photo 5*). If the blank is too tall to drill in one pass, I will drill as deep as I can in one end, and then mount the blank onto the lathe to mark the center of the opposing hole. This way, I am sure the two holes will not be offset.

Fit the drilled end of the blank over the T-nut in a backing plate (*Sidebar, page 35*). I move the toolrest behind the tailstock and put a point center in the tailstock. Then I slide a short length of plastic plumbing pipe over the tailstock, so the end of the pipe extends past the point center (*Photo 6*). I bring the tailstock up so the pipe touches the blank. You can push the tailstock by hand so the pipe presses uniformly against the blank, holding it in position. I prefer to wedge a bolt with a hex coupling nut in between the tailstock and toolrest, and then turn the nut to push the tailstock. Once you have the blank held by the plastic pipe, advance the point center so it marks the blank.

After drilling the blank, I usually slice off its corners to make it easier to turn the piece round.

I remount the blank onto the backing plate, run a length of $\frac{1}{4}$ " (6mm) threaded rod through the hole, and screw it into the T-nut. A hex nut on the other end of the rod presses the cylinder against the backing plate (*Photo 7*). To steady the blank, advance a point center in the

tailstock to press against the end of the threaded rod.

Once I have turned the blank to the desired diameter, I remove it from the lathe and take it to the bandsaw.

Make the bandsaw sled

The bandsaw sled is basically a plywood rectangle that rides between the saw's fence and an auxiliary rail (*Photo 8*). I sized the sled ►



(1) Because all the segments come from a single blank, they are virtually guaranteed to fit together precisely.

(2) A few pounds of weight pulling on a rope is a low-tech way to get a uniform feed rate for the bandsaw.



Orientation matters

The segments must be arranged properly to minimize the effects of seasonal wood movement caused by changes in humidity. For bowls, and for boxes with a tight-fitting lid, cut the segments with the grain. Alternate the segments containing transverse growth rings with those containing radial growth rings.

In an open bowl or vessel, distortion from wood movement is not very important, provided the moisture content of the piece when it is glued up can remain more or less constant through the life of the piece. Consequently, you can take full advantage of the beauty of wood grain by cutting the segments along the radial or tangential growth rings and assembling them in the order they were cut. I term this type of construction Craig's Wood Flowers.



You can take advantage of strong wood grain by cutting segments along the growth rings and assembling the segments in order.



3 You can use a single block or glue up a blank from pieces of quartersawn stock.



4 Use an overarm router or a sander to make two opposing faces of the blank flat and parallel.



5 Drill a hole through the center of the blank, which you will use to center the piece on the lathe and bandsaw.



6 This setup ensures that you can mark the blank so that a second hole at the center aligns with the first.



7 A threaded rod through the blank keeps it centered while you turn it to the diameter you want.

to fit my Delta bandsaw, making it 12" x 10" (305mm x 254mm). I used ½" (12mm) marine plywood, but you could use ¾" (19mm) Baltic birch plywood instead. A short dowel holds the rope tied to the weights. By shifting the rails left or right, I can either align the center of the blank with the blade or shift the sled to make off-center cuts (*Photo 9*). These produce some interesting results (*Photo 10*).

I attach a T-nut to the underside of the sled and align it so the nut is centered on the blade. Likewise, I center a paper pattern on the T-nut; the guidelines on the pattern are the same width as the blade kerf, for accurate and clearly visible indexing. As with the lathe fixture, the T-nut serves as a centering pin; a nut and threaded rod hold the blank onto the sled.

I make the first cut between the pattern lines, with a glue line on the cylinder aligned with the blade. Before cutting, I use a knife to mark the edge of one of the pattern lines. Once I make the first cut, I rotate the blank until the knife mark registers with the corresponding edge of the next pattern line. I use the pattern lines to align the blank for all remaining cuts as I rotate the blank clockwise.

To set the gap between the sled and the fences, I slip pieces of paper between the sled and the auxiliary rail. Then I push the rail toward the fence, clamp it securely to the table,

and remove the pieces of paper. This allows the sled to move freely without binding.

Cut the segments

To keep the blank stable and anchored to the sled, clamp a block to the bandsaw table so the cuts stop a predetermined distance away from the center and the segments do not separate from the core. This "stop distance" can be calculated using the equation below or determined with a couple of test cuts.

Use a scrap block to set the stop distance and check the quality of the cut. Drill a hole in the block and hold it onto the sled with a nut and threaded rod (*Photo 11*). Make the first test cut as close to the T-nut as possible. The second cut should come within ¼" to ⅛" (0.75mm to 1.5mm) of the first cut. Turn off the saw. Move the stop block forward to contact the sled and clamp it firmly in place.

Check the test segment for flatness, surface finish, parallelism, and angle. To gauge flatness and surface irregularities across and along the segment, use a thin straightedge to which you stick a piece of ¼"- (6mm-) wide tape, which is typically .005" (0.13mm) thick. Any gap between the straightedge and the surface of the segment, as seen against a light, should be less than the thickness of the tape (*Photo 12*). The angle of the

How to calculate the stop distance

Use this equation to calculate the amount of space between the outside of the T-nut and the blade:

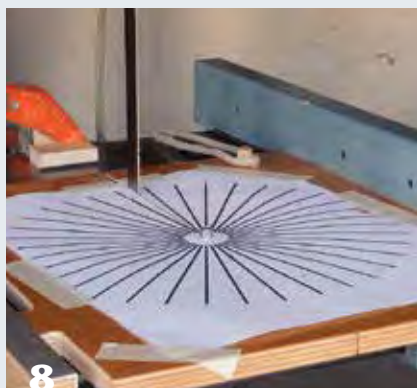
α = segment angle

D_t = outside diameter of T-nut

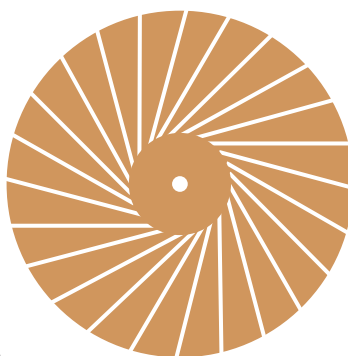
k = width of kerf

T = thickness of segment at the core

$$\text{Stop distance} = \frac{k}{2 \tan \frac{\alpha}{2}} + \frac{T}{2 \sin \frac{\alpha}{2}} - \frac{D_t}{2}$$



8 A plywood sled sliding between two fences controls the cuts. The pattern orients the blank for successive cuts.



9 Shifting the position of the blank allows you to make off-center cuts instead of cuts aligned with the center of the blank.



10 Cutting off-center staves produces segments that create a spiral pattern. Untitled, 2013, Unknown wood, 2½" × 3¼" (6cm × 8cm)

segment should be within one half a degree of the nominal angle (9.5 to 10.5 degrees for 36 segments, for example); you can check that with a dial indicator, as follows.

Position the segment so its wide end touches the dial indicator's base, set the dial to zero, and record three readings along the segment. Then put the 1"- (25mm-) wide ruler from a combination square in between the blank and the base and record another set of three readings (*Photo 13*). Calculate the segment angle and its parallelism error, using the method outlined on page 36. If the segment angle is off, that probably means you did not follow the pattern for the test cuts. If the parallelism error is too great, it usually means that the blank leaned on the sled when you made the cuts. To help keep the wood in place, I use a four-arm spider cut from scrap (*Photo 14*). Layers of tape on the spider legs separate it from the surface of the blank. Tightening the nut causes the spider arms to deflect and apply the holding force equally.

Drill out the core

The last step is to separate the segments by drilling out the core. I wrap the cylinder with hose clamps ►

A shopmade backing plate

The blank for the segments must be precisely centered on the lathe, drill press, and bandsaw, using the reference hole in the center.

To mount the blank onto the lathe, I made a backing plate from a piece of metal rod, 2¼" (57mm) long and ⅝" (16mm) in diameter; a wood cylinder about 2" (50mm) in diameter and 1¼" (32mm) long; a 3¼" (83mm) disk made from ½" (12mm) marine plywood; and a T-nut.

I turn the cylinder and drill a ⅝" (16mm) hole through its center. Then I drill a ⅜" (2mm) hole through the metal rod about 2" from the top and hammer a nail into it so that it protrudes about ¼" (6mm) on each side.

I epoxy the rod into the cylinder, using an arbor press to force the two pieces together

so the nail is well embedded in the cylinder. (If you don't own an arbor press, squeeze the parts together in a bench vise.)

Turn the plywood disk to rough size and drill a counterbored hole in the center for the T-nut. Insert the T-nut, making sure about ¼" (6mm) protrudes.

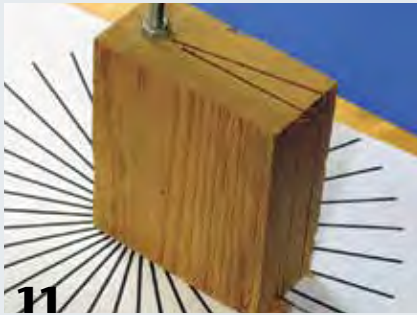
Grip the metal rod in a three-jaw chuck and apply epoxy to the exposed face of the attached cylinder. Insert a drill chuck into the tailstock and use it to grip the T-nut sticking out of the disk. Advance the tailstock to hold the disk and cylinder together until the epoxy cures. Remove the drill chuck and true the edge of the plywood disk. Finally, turn a shallow flat recess in the center of the disk.



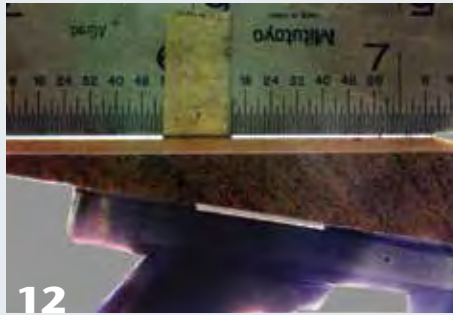
A shopmade backing plate centers the blank and helps hold it on the lathe.



Epoxy the pieces of the backing plate. Use pressure from a Jacobs chuck in the tailstock to clamp them until the adhesive sets.



11 A pair of cuts in a test block helps determine where to stop the sled when cutting the actual segments.



12 A piece of tape on a ruler makes a simple gauge for flatness. If the segment is flat, the gap between it and the ruler will be uniform.



13 You can determine if the angle of the segment is correct with a series of readings from a dial indicator and some math.



14 A spider cut from a piece of scrap helps to keep the blank from shifting on the bandsaw sled.



15 With the segments secured with hose clamps, use a succession of Forstner bits to drill out the center.



16 Once the center of the blank is removed, the segments should fit together snugly, with no need for sanding or trimming.

to hold the segments together. To prevent damage to the thin edges of the segments, I slip strips of plastic laminate into the saw kerfs. As a further precaution against damage, I use progressively larger Forstner bits to remove the core (Photo 15).

A finished set of segments should fit together tightly, held in place by only a couple of rubber bands (Photo 16).

Glue up the segments, either alone or with contrasting strips of wood separating the segments. Then turn the finished object.

Robert Jerzy Gryglaszewski Craig, a retired aerospace industry scientist, began turning with a piece of burl that yielded not even enough solid wood to make a thimble. He then set out to study wood's properties and gravitated to segmented turning as a way to control seasonal movement. He can be reached at 1rjgc1@gmail.com.



Contrasting strips of veneer add an interesting element to a design. Untitled, 2013, Unknown wood, 7½" × 6½" (19cm × 17cm)

How to determine segment angle and parallelism error

1. Label the three dial-indicator readings with the ruler in place (see article) as H1, H2, and H3.
2. Label the three dial-indicator readings without the ruler as H4, H5, and H6.
3. Calculate $H = (H1+H2+H3 - H4-H5-H6)/3$.
4. Calculate the segment angle using this equation: Segment angle = $\tan^{-1}(H)$.
5. Calculate the Parallelism Error = $(H1-H4 + H3-H6)/2$.

The segment angle error should be less than ± 0.5 degrees from the nominal angle.
The parallelism error should be less than .01" (0.3mm).

TAKE A GILT TRIP

Tom Terrell

When I was about nine years old, I got my first chance to try gilding. My grandfather, who owned a sign shop with my father, let me apply gold leaf to the letters carved half an inch deep in a six-by-ten-foot sign.

That is all it took to get me started. Over the years, I have applied gold leaf to everything from wood to glass to plastic to chocolate. Then I watched Emmet Kane deftly apply gold leaf to one of his “cone of gold” pieces at the 2011 North Carolina Woodturning Symposium.



Gilding can be a prominent feature on a bowl or yield a subtle addition of texture and color.

(L) Sugar maple, copper leaf, 2½" x 8½" (6cm x 22cm);
(R) Black walnut, 23k gold leaf, 3½" x 6" (9cm x 15cm)

Photo: Sally Terrell

Traditional gilding techniques, the kind I learned from my father and grandfather, can be tedious, time consuming, and difficult to master. For example, I needed three years' practice before I felt comfortable with one of the oldest gilding techniques, which uses an adhesive made from rabbit-skin glue, water, and a solvent.

Kane had none of that. He sanded his piece to 320 grit, painted some oil-based sealer on the recess turned in one end, hit it with a hairdryer for a minute, then used his finger to dab on a sheet of gold leaf. He burnished it with the piece of wax paper that held the sheet of leaf. The process took no more than 20 minutes and was a huge hit.

Why try gilding?

Gilding offers new ways to express yourself through your turned pieces. It is beautiful. It is relatively easy to find the tools to get started. It is not terribly expensive, and it is not difficult to learn.

The impact of metal leaf lies in the sharp contrast between the elements of wood and metal, of hard and soft, of warm and cold.

Keep in mind, too, that leaf is not limited to shiny yellow metal. For example, copper leaf takes on a beautiful green patina as it ages. A number of turners use variegated leaf, which is chemically treated to develop a random pattern of different colors (*Photo 1*).

When combined with other surface treatments, gilding produces dramatic

effects. You can use a texturing tool, a rotary wire brush, a chatter tool, or even a propane torch and gild over the resulting raised grain. Each of these texturing techniques yields a different but interesting result when gilded (*Photo 2*).

Leaf basics

Kane's demonstration made it clear that gilding does not always have to involve techniques handed down from medieval monks, expensive materials, or a supply of specialized tools.

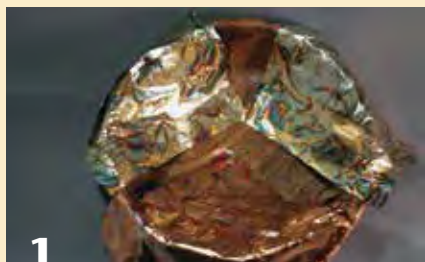
There are two essentials for gilding: *leaf* and *size*. *Leaf* refers to the extremely thin pieces of metal, which can be gold, silver, copper, or a base metal imitating the real thing. (Despite its name, Dutch gold is just a high-quality imitation gold leaf.)

Size is the glue that binds the leaf to wood, plaster, metal, or glass.

Metal leaf is typically sold in packets, or books. Genuine precious-metal leaf comes in sheets 3⅜" (86mm) square, 25 sheets to a book. Imitation gold and silver leaf comes in sheets 5½" (140mm) square, also in books of 25 sheets. A single book of imitation gold leaf costs less than \$10. You can easily find books of genuine gold leaf for less than \$100.

There are two types of leaf books:

Patent leaf has a sheet of leaf pressed onto a piece of paper. To apply it, you remove the leaf and its paper backing from the book and put it leaf-side down onto the size. Lightly press the leaf in ►



1
A chemical bath produces the random pattern of colors on variegated leaf.



2
Gilding a textured surface can enhance the effect of that detail.

place by rubbing with your fingers, then peel away the tissue. Patent leaf is the easier type for beginners to use (*Photo 3*).

Loose leaf uses tissue paper to separate the pieces of metal. The leaf is applied either by carefully folding back the protective tissue and pressing the leaf onto the size, or by picking up a sheet of leaf with a special brush known as a gilder's tip. I think loose leaf is only for the most determined beginners. The leaf is only about 0.5 microns thick (0.00002"), so it is incredibly easy for loose leaf to crumple while you try to apply it (*Photos 4, 5*).

Size is a varnishlike liquid. Traditionally, size was oil-based and needed hours to set. But recent innovations in size have made leafing much easier. Water-based size needs only one to two hours to set. You can also find spray-on size these days. There are even size pens, which allow you to draw a design that the leaf will adhere to (*Photo 6*).

Applying size is a critical step. Let it develop the proper amount of stickiness, or tack, so the leaf will adhere well. The package instructions will help you estimate how long to wait; however, it is best to test the surface and listen for

the results. If you touch a knuckle to the size and pull it away, you should hear a "thwack," like the sound your tongue makes when you try to get peanut butter off the roof of your mouth. Or, if you drag a knuckle lightly over the surface, you should hear a faint squeaking (*Photos 7, 8*).

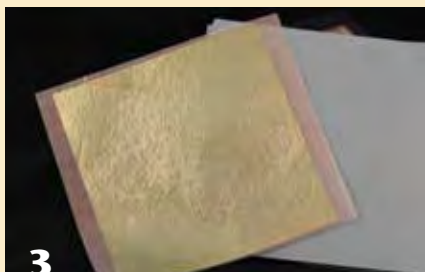
Gilding over wood sometimes entails an added step: coating the surface with a primer (*See sidebar*).

The primer seals the wood and helps create a smooth, flat surface for the gilding. A colored primer (terra-cotta and black are typical) adds an undertone that affects the color of the leaf. Terra-cotta primer makes the leaf seem warmer, while black primer heightens the contrast between the gilding and the wood.

Specialized gilding primers are widely available. But you can also use Japan colors or tinted lacquer.

Gloss without loss

Once you have applied the leaf, burnish it with a very smooth tool, a brush, or a pad to bring out the shine and smooth the surface. Burnishing



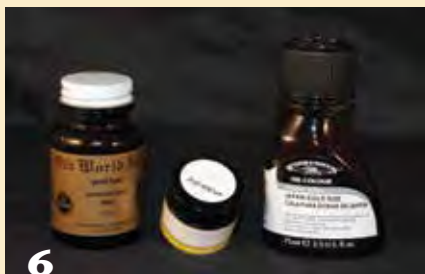
3
Patent leaf is fairly easy to apply because the thin metal is attached to a backing sheet.



4
Loose leaf pieces must be carefully lifted with a special brush.



5
A slip-up with loose leaf produces a piece of crumpled metal.



6
Size, the varnishlike adhesive that holds leaf to wood, is readily available. The Japan color, in the bottle at right, is used as a primer over bare wood.



7
Size looks milky when first brushed on. Here, it is applied to a primed area on a black walnut bowl.



8
To tell when the size is ready, tap a knuckle on the piece and listen for the right sound.



9 Use a soft brush or a cotton ball to smooth the leaf and remove any stray bits.



10 You can also burnish with an artist's tool known as a *blending stump*.



11 A few light coats of polyurethane or shellac protects the fragile leaf.



12 A skew chisel is the best tool for cleaning up the edge of a gilded area. It is safest to do this with the lathe off.

smoothes the leaf and helps hide ridges where sheets of leaf overlap.

Most modern burnishers are made from agate or hematite. Many turners use a tempered-glass rod polished to a dull gloss on one end. Others use a dowel of extremely hard wood sanded to 2000 grit. Still others use either a cheesecloth pad or a rolled paper tool called a *blending stump*, found with the pastels at art supply stores. The stump will not make the leaf as glossy as other burnishers, but it is less likely to damage the leaf (Photos 9, 10).

Whatever you choose, make sure that you use a very gentle touch so you do not score the wood underneath or tear the leaf away from the size.

Final touches

All types of leaf are fragile and need a protective coating to preserve them.

Sealers and varnishes made just for gilding are not ideal for protecting wood. I get the best results with several light sprayed-on coats of polyurethane or shellac. If you use anything other than clear gloss polyurethane, it will make the gilding appear duller than the wood: semigloss becomes matte and matte becomes low-gloss. At the same time, the reduced gloss makes the gilded surface appear smoother. Some even say that less gloss makes the gilt color seem warmer (Photo 11).

It is always a good idea to apply gilding to a scrap of the same material as the finished piece and use it to test varnishes.

Finally, never try to clean up the edge of a gilded area with a parting tool! The gilding will tear and become terribly uneven. Instead, very gently score the line with a sharp knife or a

skew chisel, holding the tool upside-down on the toolrest, so the edge of the piece rotates onto the upturned and absolutely perpendicular edge (Photo 12). When I do this, I *only* turn the lathe by hand. You can then clean up and shape the line with a parting tool. ■

Tom Terrell is a high school librarian by day and a professor of information science by night and a member of the Woodturners Guild of North Carolina. He has been teaching for 30 years, but before that, he worked with his father and grandfather building displays, scale models, and signs for the advertising industry. He started gilding in elementary school, which was also about the time he began serious woodworking. He and his wife opened Havenhill Studios in Durham, NC, in 2011 and he intends to pursue full-time woodturning after retiring from academia. He can be reached at tom@tomterrell.net.

Gilding the old-fashioned way

There are two traditional gilding techniques: water gilding and oil gilding. The two are similar, but water gilding is by far the harder technique to master. Here are the basic steps involved in oil gilding.

Sand and prime. Sand the surface to at least 220 grit, then apply several coats of gesso. This will make the surface smooth enough to gild. On top of the gesso, brush on a couple of coats of terra cotta gilding primer or red Japan color (Photos a, b).

Brush on the size. If you have used oil-based primers, use an oil-based size. With water-based primers, use water-based size. Hold the piece up to the light to see whether you have missed any spots.



a In traditional gilding, you first apply several coats of gesso to the wood.



b Several coats of primer go over the gesso, followed by a coat of size.



c To apply patent leaf, turn the sheet metal-side down and gently press down.



d Patent leaf is easily trimmed with scissors.



e Overlap the pieces of leaf as the area to be gilded is filled.



f Skewings, the leftover loose bits of leaf, are carefully brushed away and saved.

Apply the leaf. Patent leaf is easier to apply than loose sheets of leaf. If you are gilding a large area, overlap the sheets slightly. If you have to cut the leaf, use scissors with patent leaf (Photos c, d, e). Loose leaf is best cut by laying the sheet on a leather gilder's pad, then trimming with a gilder's knife.

Brush away any pieces of stray leaf, known as *skewings* (Photo f). Use them to fill any gaps in the initial gilding. Save all the leftovers for another gilding session.

Buff and burnish. Once you have applied all the leaf, gently rub it with a cotton ball to help press it into the size. Then continue to burnish the surface, using the tool of your choice. Finally, apply a protective coating of varnish or shellac.

A GILDED GALLERY



Keith Tompkins, *Dawn*, 2010, Bigleaf maple, gold leaf, acrylic paint, 21¼" × 6" × 16" (6cm × 15cm × 41cm)



Emmet Kane, *Crock of Gold*, 2009, Ebonized oak burl, gold leaf, 3½" × 5" (9cm × 13cm)



Dennis Hales, *Bejewelled Beach*, 2006, Beech, copper, silver, gold, imitation leaf, 2" × 15¾" (5cm × 40cm)



Warren Aut, *Patina Lacquered World*, 2012, Sycamore, California ironwood, lacquered metal leaf, 15" × 8" (38cm × 20cm)



Dewey Garrett, *Lifeforms*, 1998, Oak, metal, variegated leaf, acrylic paints, 20" x 12" x 6" (51cm x 31cm x 15cm)



David J. Marks, *Turned Wood Vessel*, 2000, Black walnut, ebony, silver leaf with chemical patina, 10½" x 5" (27cm x 13cm)



Cindy Drozda, *Lurlina*, 2010, Gilded sea urchin, African blackwood, 7" x 3½" (18cm x 9cm)



Michael Scarborough, *Qing Dynasty Bowl*, 2012, Maple, gold leaf, glaze containing gold powder, 3" x 5½" (8cm x 14cm)



Ric Romano, *Ocean Lava*, 2011, Maple, gold and silver leaf, 10" x 7" (25cm x 18cm)

Behold, THE STREPTOHEDRON

Precise Turning Yields an Alluring Form

Bob Rollings, with David Heim
Photographs by Richard Longley

For most of my working life, I made hexahedrons—the cubes that are a cabinet shop's stock in trade. Once I retired, I began to explore other geometric forms, turning them whenever possible. I can thank our shop manager for starting me down this path because his retirement gift was a copy of *Beyond Basic Turning* by Jack Cox. It showed how to produce segmented turnings as well as the five Platonic solids—the tetrahedron, hexahedron, octahedron, dodecahedron, and icosahedron—shapes with four to twenty faces.

My interest in creating these forms from wood led me to meet two influential individuals in the realm of mathematics and art.



A split turning is the basis for the streptohedron.

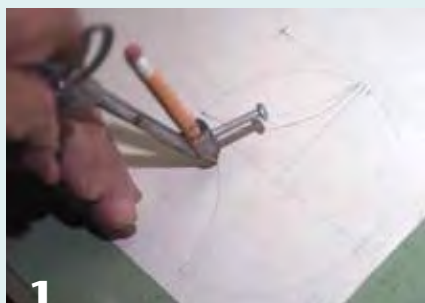
Several years ago, I had the pleasure of spending three days with David Springett, author of *Woodturning Wizardry*, sharing designs and turning techniques. He

asked me to contribute to his second book, *Woodturning Full Circle*, and included fifteen of my pieces in the book's gallery section.

David's books are worth a look.

David also encouraged me to contact George Hart, then a professor of computer technology at Stony Brook University, in New York. George makes wonderful mathematical art installations and is also one of the prime organizers of the annual Bridges Math Art conference. This is a global meeting that explores the interrelationship of art and mathematics. With George's encouragement, I did a presentation on my turnings at the 2009 Bridges conference. I have attended most of the subsequent conferences, and won the award for best craftsmanship at the 2012 conference. Not bad for someone who left school at age fourteen.

Over the years, I have turned any number of geometric forms. One of the most intriguing is the streptohedron. Unlike, say, a cube or a pyramid, the streptohedron has compound-curved faces that seem to flow smoothly into each other. As a turning, however, the streptohedron is surprisingly straightforward. If you have made any sort of split turning, you should have no difficulty with this form. Be advised,



1 Use a ruler and compass to lay out the cross-section of the streptohedron.



2 Carefully cut a cardboard template for the streptohedron's curve.

though, that it requires careful planning and precise work at the lathe.

The shape I explain how to turn here—also known as a sphericon—is not the only one you can make on the lathe. The sidebar “Shape Shifting” explains how to create a few alternatives.

Deconstructing the shape

In cross-section, the basic streptohedron is a four-pointed cross, inscribed in a circle. Arcs connect the points of the cross. The shape of the arc is the shape you turn on the lathe.

The streptohedron has what is known as *rotational symmetry*. That is, if you split it down the middle, from pole to pole, and rotate one half by 90°, it will align with its mate—but in a way that creates the unique compound curves. When you turn a streptohedron, you make it as a split turning so you can rotate the pieces and reassemble them. Where you locate the axis of rotation determines not only the curves you cut at the lathe but also the finished shape of the piece (*see sidebar*).

Begin the turning at the drawing board, using ruler and compass to inscribe the cross shape in a circle. Let the size of the wood you have determine the size of the circle. For example, for a 3" (75mm) streptohedron, begin with two pieces 1½" × 3¼" × 4" (41mm × 83mm × 102mm). The blank will be oversize in every dimension, to allow room for chucking and roughing it to size. Draw a circle 3" (75mm) in diameter and lay out the remainder of the shape. Make the four ends of the cross at least ¼" (6mm) across, and connect the endpoints with identical arcs (*Photo 1*).

Cut a template to match the arc—use cardboard or illustration board. Take the time to make the curve as smooth as you can, because you will use the template to gauge the progress of the turning (*Photo 2*). ►



3 Square the ends of the glued-up blank.



6 Define the first curve with a series of shear-scrape cuts.



4 Hold the blank between centers and rough it to a cylinder.



7 Use the template to check your progress.



5 With the toolrest at center, mark the midpoint and endpoints of the curves.



8 With the first curve nearly complete, begin an identical one at the headstock end.



9 Get the curves as close to the shape of the template as you can.



10

Sand at least up to P220 grit, or finer if you prefer.



11

Use a stiff, thin knife to separate the halves. Taps from a hammer will help move the knife through the joint.



12

Once the joint begins to open, pry it apart by hand.



13

Sand the joint faces smooth and flat, removing any stray newspaper in the process.



14

Rotate one half and bring the pieces together to check the fit.



15

Apply glue and rub the pieces together to make a suction joint.



16

Do the final shaping to blend the pieces once the glue has dried.

Glue up and begin turning

You can use almost any sound, dry hardwood for a streptohedron. This is not a piece to turn from green wood.

Cut your turning stock to the desired width and length. Use a jointer or handplane to flatten the faces that will be glued together. Do the glue-up, using newspaper in the joint. When the glue dries, trim the ends square (*Photo 3*).

When your turning blank is ready, drill $\frac{1}{8}$ " (3mm) holes about $\frac{3}{16}$ " (4mm) deep at each end, centered precisely on the glue line. These holes relieve stress from the points on the centers so they do not loosen the glue joint. Mount the blank between centers. I like to use a step center in the headstock and a cup center in the tailstock.

Rough the blank to a cylinder (*Photo 4*). You can either leave the blank between centers or, if it is long enough, turn a tenon at one end for a scroll chuck.

Position the toolrest exactly on center, aligning it with the glue line. Use a pencil to mark the midpoint of the blank and the beginning and end points for the curves (*Photo 5*). Mark whatever width you used for the ends of the cross, centered on the midpoint of the blank.

Take shear-scrape cuts with a spindle or detail gouge to begin defining the curve at the tailstock end (*Photo 6*). As the curve takes shape, stop frequently to check your progress against the template (*Photo 7*).

With the first curve complete, cut an identical one at the headstock end (*Photo 8*). Take the time to make the turning as accurate as you can (*Photo 9*). If you don't, you will face lots of sanding later to blend the halves into a harmonious whole. At this point, the piece will look something like a large two-headed spin top.

Separate and twist

Sand the turning at least to P220 grit (*Photo 10*). Remove it from the lathe and tap a thin knife with a hammer on the glue joint to pry the two halves apart (*Photos 11, 12*). Scrape or sand away the bits of newsprint and glue that remain—work carefully here to keep the faces dead flat. I put a sheet of coarse abrasive on a flat surface and carefully remove any residue (*Photo 13*).

Now you are ready to make the streptohedron. Take one of the halves and rotate it 90°, so that a point that began at either the headstock or tailstock is now aligned with the part that separates the arc shapes. If all has gone well, the faces should align smoothly; if not, get them as close as you can (*Photo 14*).

Glue the halves together. This shape is not easily clamped, so rub the two glued faces together to make a suction joint (*Photo 15*). When the glue has dried, do any necessary sanding to blend the edges (*Photo 16*). Finish the piece with several coats of lacquer or dewaxed shellac. ■

After Bob Rollings retired as the supervisor in a cabinet shop, he began a second career exploring ways to create complex geometric shapes in wood. He lives near Toronto, Canada, and can be reached at bobsturn@bell.net.

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Richard Longley is a maker of science and history documentaries for television and radio. He is also a keen hiker and snowshoer; it was through those activities that he met Bob Rollings more than thirty years ago. He can be reached at longley_fovea@sympatico.ca.

Shape shifting

For the basic streptohedron described here, the axis of rotation is the same as the lathe axis. But if you change the axis of rotation for one of the halves, you create a different sort of streptohedron (*Figure 1*). To make the second shape shown in the drawing, you have to turn two blanks—one with the axis of rotation aligned with the lathe axis, one with the axis of rotation shifted 45°. And, if you do the turning so that the points of the cross fall at a 45° angle from the axis of rotation, you can create yet another shape.

But you need not stop there. If you begin with a split turning that resembles a set

of stepped pulleys, you can create various streptohedrons with a decidedly Art Deco style (*Photo a*). Here, too, changing the angle of rotation alters the appearance of the finished piece.

You do not need to limit your designs to four-pointed crosses. Any shape that has rotational symmetry and that can be turned will form the basis of a streptohedron. For example, a design based on a hexagon, with three flat and three curved faces, yields another type of complex curve (*Photo b*). You can also make streptohedrons with five or six points.

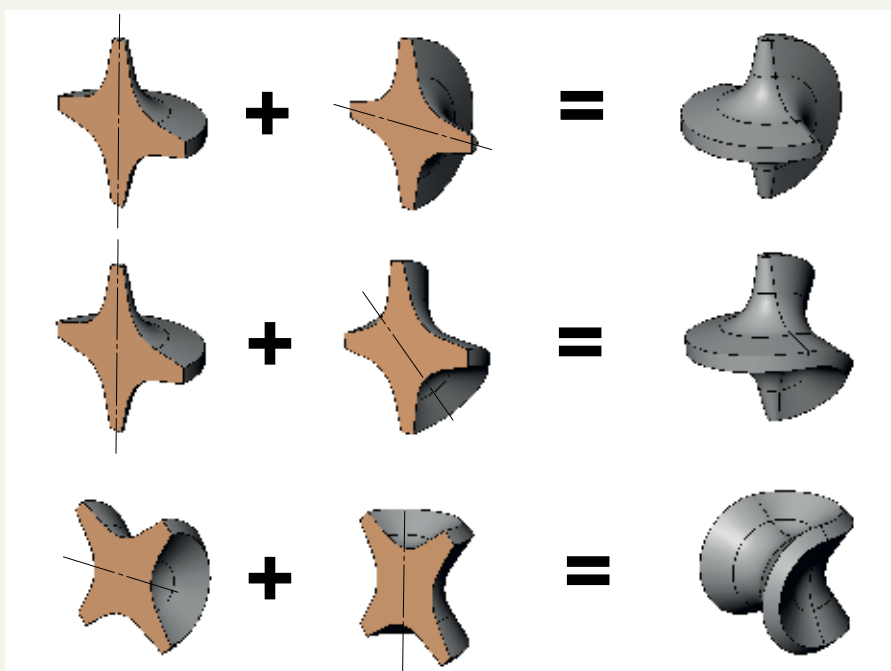
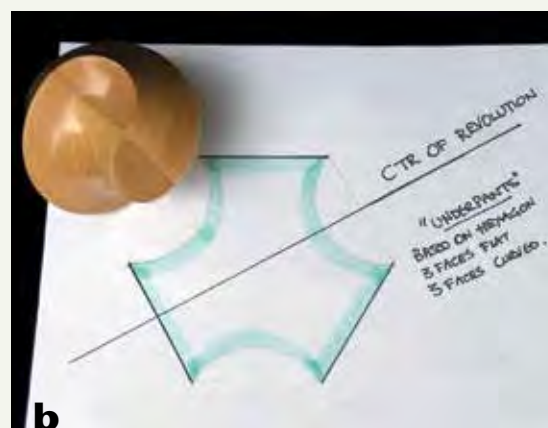


Figure 1. Shifting the axis of rotation on one or both halves of the streptohedron will change the finished shape dramatically. Shown here are three variations for a four-pointed streptohedron.



a A different turned shape, like the stepped piece shown here, produces very different streptohedrons.



b You can create streptohedrons based on a hexagon or a pentagon, not just a four-pointed cross.

STREPTOHEDRON

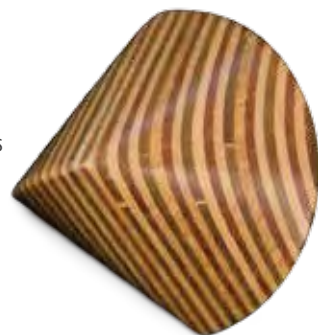
Gallery



*Lathe-Turned Stellated Icosahedron, 2005,
Madrone burl, 7" (18cm) dia*



*Six-Branched Streptohedron
with Bone Inlays, 2007,
Walnut, 2½" (64mm) dia*



*Flat Faces, 2007,
Alternating species
of veneer, 2½" (64mm) dia*



*Five-Branched
Streptohedron, 2007,
Cherry, 2½" (64mm) dia*

*Variation of Twisted
Four-Pointed Star, 2007,
Wood, 2½" (64mm) dia*



Nested streptohedrons. The largest is 12" (30cm) dia. It holds one 4" (100mm) in diameter, which holds one approximately 2" (50mm) diameter, various woods and rare-earth magnets.



*Edges Only of Twisted
Cone (Conicon), 2005,
Mulberry, walnut
inlay, 12" (31cm) high,
small piece is maple,
4" (10mm) high*





*Twisted Cone
(Conicon), 2007,
Walnut, aluminum,
2½" (64mm) dia*



*Inspirational Variation on a
Sphericon, 2010, Maple and
bloodwood, 6" (152mm)
high, small one is maple, 3½"
(89mm) high*



*A Group of Sphericons,
2010, Maple, each 3½"
(89mm) dia*



*Kepler Theory, 2004, Cocobolo,
boxwood, 16" (41cm) dia*

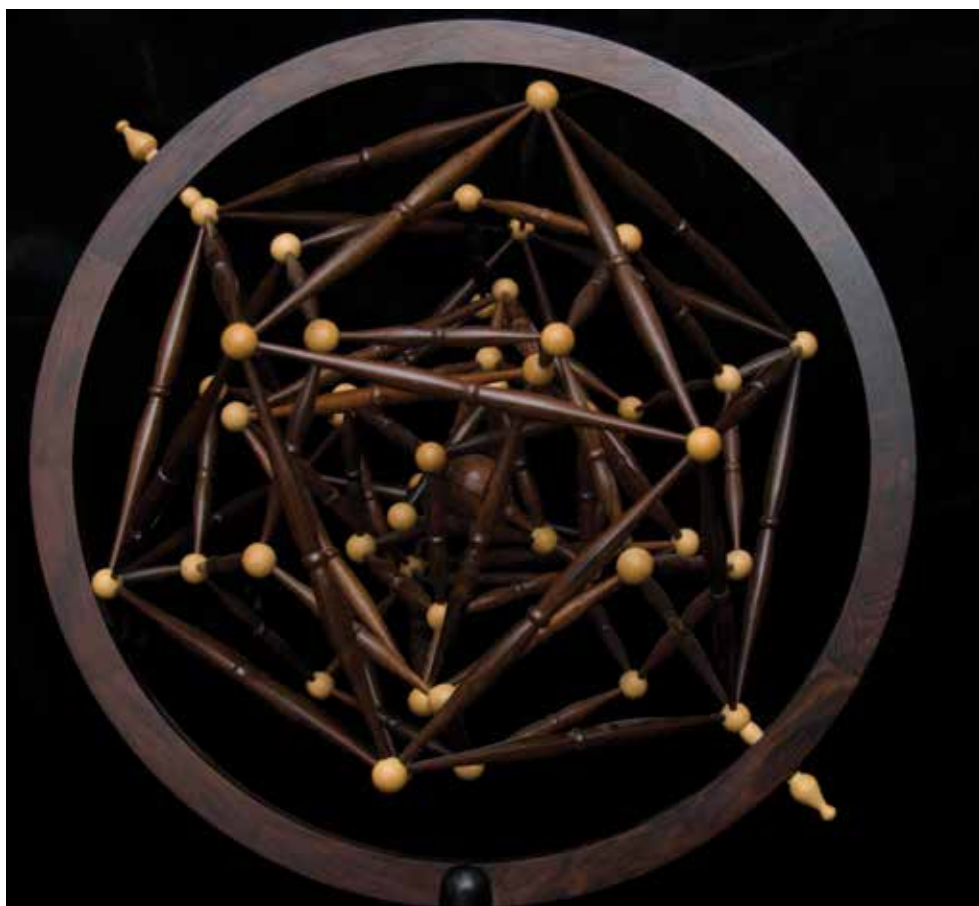
Ninety spindles form the five
Platonic solids, each of which
rotates independently within the
ring. This piece celebrates Kepler's
laws of planetary motion.



*Five-Branched Streptohedron,
2007, Maple with oak and
blackwood inlaid dowels,
2½" (64mm) dia*

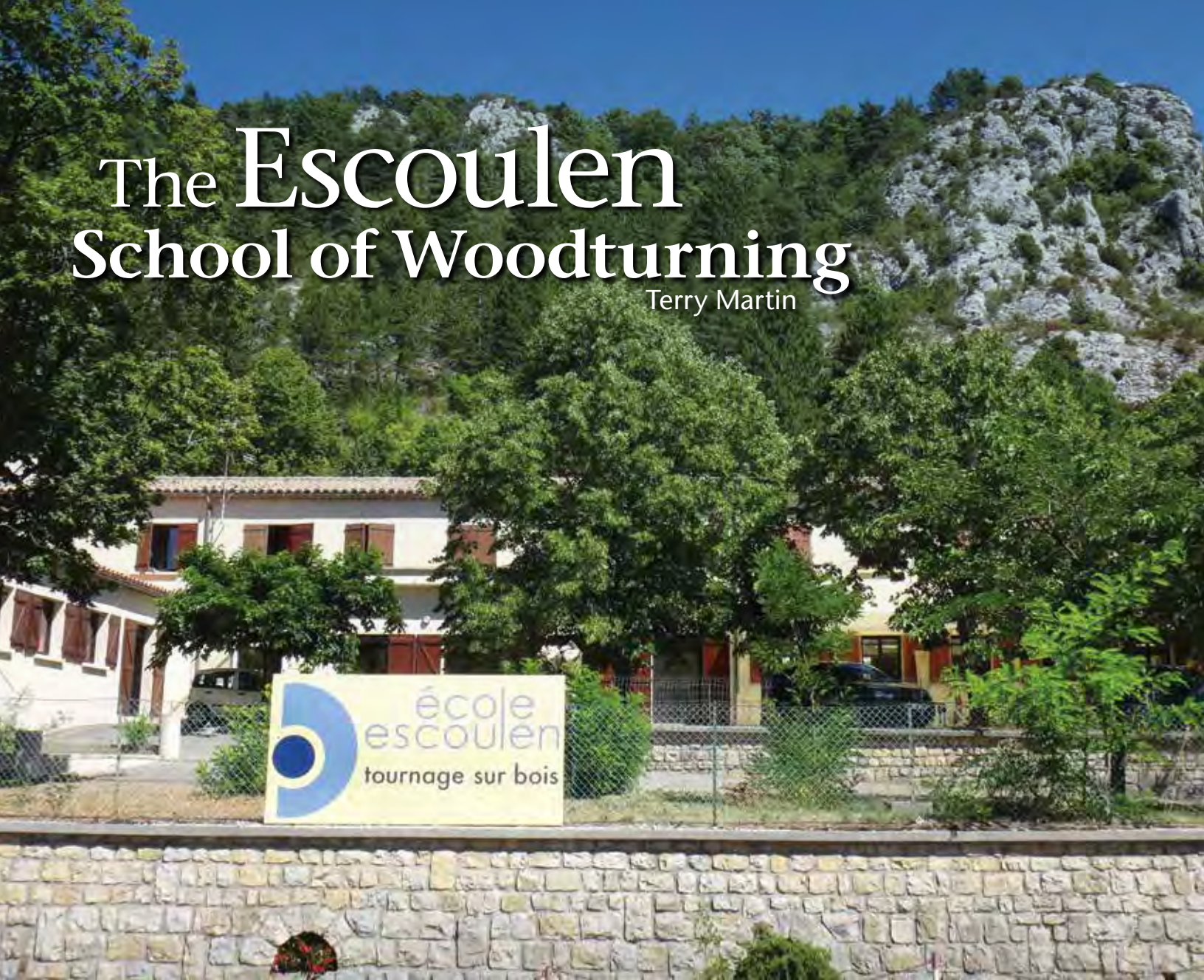


*Twisted Four-Pointed
Star Streptohedron,
2007, Maple, 2½"
(64mm) dia*



The Escoulen School of Woodturning

Terry Martin



L'école Escoulen in the village of Aiguines.

This is a story of the decline of a turning village in the south of France. The passing of the trade of woodturning was a tragedy for the local villagers who depended on it for their livelihood, but it was also typical of what happened all over the world during the twentieth century. Woodturning, once a vibrant trade that had thrived for centuries, was dying out. However, this story has a happy ending because the village rediscovered its turning identity, which has injected a new energy and optimism into its future.

The past

In the years after World War II, woodturners across the world who worked in an already declining industry were starting to lay down their tools. Unhappily, an ancient profession was in the process of disappearing, largely because new fashions, including plastics, austere Scandinavian designs, and other modernistic trends, spelled the end for the functional and decorative wares that trade turners had produced for generations.

All of this was particularly true of the small mountain village of Aiguines in the Provence region of southeastern France. Among the many turning regions of France, Aiguines was unique. The area immediately surrounding the Gorge du Verdon, an enormous and precipitous ravine, was known for the best boxwood in France. Boxwood is one of the most prized turning woods, and based on the ready local supply, a strong local industry had grown. Almost the whole village was engaged in turning-related activity and even as early as 1789 a census listed fifty-six turners working in the village. Many of these early turners worked in basic workshops using foot-powered lathes. It was simple work and fitted well with the rhythms of rural life. The long cold winters were just right for the indoor work of turning, while the dry summers were perfect for the long and difficult climb to the bottom of the gorge to collect boxwood.

In 1880, the Industrial Revolution arrived in the village of Aiguines when the Doze family established a woodturning factory. They introduced steam and diesel power, making it impossible for the traditional turners to compete, so many of them abandoned their foot-powered lathes and went to work in the new factory (Photo 1). Turning in Aiguines flourished until World War I, and they produced an amazing catalog of wares (Photo 2). A total of 288 different objects were made in three categories: objects for play, such as balls and

croquet sets; kitchenware, such as salad covers, spoons, and salt and pepper shakers; and professional items such as mallets, taps, and tool handles.

Their products were sold across France and around the world. The most famous product was the balls used for the French game of *pétanque*, or *boules* (balls or bowls), something that is still popular across the country. It remains one of the most quintessential Gallic scenes: The evening light slants across a village square, broken up by the broad leaves of the ubiquitous sycamore trees. Friends laugh and brag as they compete to see who can lob their ball closest to the white marker ball. Each of the players carries their own set of *boules*, often in a personalized case.

For generations these balls were made in Aiguines from boxwood root, hardwon from the depths of the gorge by men who carried it up to the village.

The roots were turned into balls using traditional lathes and tools. The balls were then given to the women who sat outside and, using sections of tree trunks as benches, hammered hundreds of nails into the balls in spiralling patterns until the wood was completely enclosed in an armadillo-like surface of tightly packed nails (Photo 3). These *fer-reuses*, as they were called, were remarkably skilled and even today many of the balls they finished are as usable as the day they were made. Sometimes the initials of the owners were spelled out in nails of different materials, objects of pride used in the daily games between friends, or in regional competitions.

The start of World War I struck an enormous blow to the village. Many of the men left to fight and the factory was turned over to the production of reamers for cleaning cannon barrels. After the war, some turners returned, ►



Workers outside the woodturning factory (date unknown).

Photo courtesy of the Aiguines Office of Tourism



This brochure produced by the woodturning factory lists "bowls with or without nails, pestles and mortars, pastry wheels, taps, rolling pins, boxwood tool handles."

Photo courtesy of the Aiguines Office of Tourism



3 The *ferreuses* of the village hammered nails into the wooden balls to produce the distinctive Aiguines *boules*.

Photo courtesy of the Aiguines Office of Tourism



4 The old woodturning factory is now a restaurant and hotel catering to the summer tourist trade.

but the old vitality of the industry was lost and the factory finally closed. The building still survives in Aiguines, reincarnated as a hotel and restaurant serving the summer tourist trade (*Photo 4*), but there is no indication of its earlier identity. By 1926, the number of turners in the village had fallen to thirteen and most of them survived only by making the distinctive Aiguines *boules*.

The last turner in Aiguines

In 1924, cast bronze *boules* were introduced to the market and they spelled the end of turning in the village. In 1936, there was a brief respite when the arrival of electricity allowed a few turners to compete by electrifying their lathes, but this last spurt of production was short and the next few years saw the end of the long tradition of turning in Aiguines. By the end of World War II, only one turner was still working, Albert Rouvier. He had commenced turning at the age of eleven and continued turning until he was seventy-five. M. Rouvier struggled on until 1978, the

last turner in Aiguines, by gradually changing production to souvenirs for the increasing tourist trade.

Today it is possible to find echoes of the turning past in Aiguines. Here and there old *boules* are used to decorate handrailings around the village (*Photo 5*), and some shop curtains containing



5 This decaying *boule*, decorating a stair railing, shows how accurately the densely packed nails were driven into the wood.

thousands of hand-turned boxwood beads are still in use (*Photos 6, 7*).

Over the ensuing years, a few belated attempts to preserve the turning identity of the village were made. M. Rouvier's workshop was preserved in a small museum, which I visited in 2002. The museum contained old lathes and samples of turning, but although it was a good, honest effort, it was not *alive*. My memory of that visit is feeling sad that so much had been lost.

Ironically, because of what was to come, in 1985 there had been one important attempt to recreate some of the old atmosphere of the village. Jean-François Escoulen, who had been working as an independent turner since 1979, came to the village to work in the transplanted old Rouvier workshop for five weeks. "The idea was to spend time in Aiguines and see if I could find a house for my family and open a woodturning workshop," he said, "but it didn't work out." Jean-François moved to a more viable location, not knowing he would return.

The future

In 2009, the mayor of Aiguines, M. Mordelet, decided it was time to build on the turning heritage of the village. He explains: “We in the village council knew it is not possible for Aiguines to survive only through tourism. In summer we have about 700 residents in the village, but in winter it falls to around 200. About eight years ago, a local woodturning group started holding exhibitions here and that revived some interest in turning. We had obtained a former youth camp at a reasonable cost and were searching for a way to use the buildings, so I spoke to Jean-François. When he saw the building, he suggested we could create an international woodturning school. Later, he agreed to be director of the school.”

In July 2012, I visited the newly opened school, *L'école Escoulen*, to watch the students learn from Jean-François and to learn more about the importance of this school. The buildings have been extensively renovated and upstairs there are thirteen bedrooms that can accommodate more guests than the classes will bring. This means the school can host other events and in 2013, the French Association for Artistic Woodturning (AFTAB) held a collaborative event there.

Jean-François showed me the timetable and already the school was booked for many months in advance. There are one-week courses for beginning,

intermediate, and advanced turners, as well as longer fifteen-week professional development courses. While I was staying at the school, there were five beginners and one returning student. It was delightful to watch them arrive on the day before the classes commenced—just as excited as the children must have been when the school was a summer camp.

Didier is from Alsace in the north-east of France. He came in a van with his wife and two sons, who also stayed in the school. They spent the week swimming, biking and hiking. I asked Didier why he wanted to learn turning: “I have been a joiner by profession,” he said, “but, I wanted to know what it is like to go by myself into the forest and find a piece of wood, then to discover what is inside. At first I tried to learn by myself, but I made a lot of mistakes, so now I’m here to learn.”

Guidot, from Berlin, came to the school for a particular reason. When



This shop curtain contains thousands of hand-turned boxwood beads.



he emerged from the car and practically leapt up the stairs with the aid of crutches, I was impressed with the strength and dignity of this young man. He told me why he was there: “I’ve been handicapped since birth. I was always told I could never compete in physical activity, so I became a computer scientist, but in recent years it has become a personal quest to find a new, more physical profession and I want wood to be an important part of that. I have been turning a little by myself for about a year, but I never ►



8 Jean-François demonstrating a project to the class.



9 Jean-François guides absolute beginner Philippe through an early exercise.



10 Lunch on the patio in the summer air.



A view of the village of Aiguines from just in front of L'école Escoulen.

had any lessons. I need to know if I can do this every day, both physically and mentally."

Jack is originally from New York, but he lives in Paris now. He used to be a ballet dancer, a profession that took him to Paris, and when he retired from the stage, he remained there and learned to be a cabinet-maker. "I teach cabinetmaking in Paris," he explained, "and we have lathes in the shop. The only experience I've had was twenty years ago when I had one week of training, so I need to learn more."

Philippe, from the south of France, had never touched a lathe before, so I was amazed with his explanation: "My wife wanted to buy me something special for my fortieth birthday, so she gave me a lathe and this turning course!" Philippe's wife was also staying at the camp.

Marie-Françoise came from Belgium because she wants to make jewelry. "I think I will make earrings, pendants, and rings," she said. "I love form and

texture, and I hope turning will be one way to discover my own style."

Patrice is from Marseille and he was the old-timer of the group: "I am sixty-three and although I am happy to be in this group, I suppose I'll work independently because it is not my first course. I was turning on my own and I realized I needed to learn the right way. This will be my third week here and I am very excited because I am so much more confident now."

I was impressed that the six people represented four countries. It was clear they were a very happy group and everyone went to bed that night full of anticipation for the next day.

Starting turning

The facilities at the school are excellent. The newly built classrooms are well lit and spacious, and all the tools and equipment required for modern turning are provided. There are sixteen lathes, including eight donated by Oneway, a fully equipped carving

room, a wood machining room, a library, and a computer with Internet access for student use.

The teaching followed a traditional format: Jean-François started each day with an explanation and demonstration of projects (*Photo 8*). At the beginning of the week there were simple exercises designed to help students develop tool control, such as roughing to round between centers, and simple beads and coves. Some of the students were visibly nervous, and once they started turning there were many white-knuckled fists. That was when Jean-François showed what a good teacher he is. He walked from lathe to lathe, gently encouraging in his soft voice and guiding nervous hands to the right positions (*Photo 9*). By the time the first coffee break was called, they all had to be practically dragged away from their lathes.

The week passed quickly in a blur of shavings and happy pauses when all the students learned more about each other and became friends. Turning will do that. Mealtimes are always important to the French and lunch-times were particularly pleasant. A local restaurant delivered food and we sat under a patio roof outside the school (*Photo 10*).

Of the many highlights throughout the week, the best was watching Guidot gain confidence as he learned that, despite his inability to move freely in front of the lathe, he was able to turn and to do it well. During a break, he told me he was very excited: "I'm going to do this for my future," he said confidently. "The work can be done without the need to walk around, which is important for me. After this short course I'm planning to do a long course here, which I hope will be the starting point to become a professional woodturner. I know it will be tough, but I won't only be learning about turning, I will also be discovering



11 Guidot turning the outside of a hollow vessel.



12 By the end of the week, Didier's tool control was superb.



13 Marie-Françoise learned many of the skills she needed to start making jewelry.



14 After three weeks' training, Patrice was turning eccentric pieces in the style of Jean-François.

myself. I like the idea that one day I might say, *I'm a woodturner—that's what I do in life!* (Photo 11)."

Not surprisingly with his wood-working background, Didier rapidly developed his skills. By the end of the week his tool control was far better than the others (Photo 12). He enjoyed telling me about his experience: "Jean-François is like a father, permissive, but also gently strict. When you are getting into the technique, he comes and shows you, *It should be this way*. I know a lot about furniture making, but I'm amazed that in turning there seems to be no limit. It's great!"

Toward the end of the week, everyone was excited. Philippe was looking forward to creating a workshop in his home. Marie-Françoise, a tentative beginner, was gaining confidence. "I was little bit afraid, but Jean-François is very humble and teaches in such a simple way that it is all a pleasure" (Photo 13). Patrice was enthused: "Now I'm learning eccentric turning (Photo 14)! I have done a whole week on that subject and now maybe I can say I know just a little!"

At the end of the final day, the students did their regular cleanup and then posed for a group photo (Photo 15). That evening we all gathered at one of the fine restaurants in the

village square for a final meal. Under a clear night sky, we sat around a long table drinking local wine, eating delicious food, and sharing stories. In a quiet moment I found myself wondering, and not for the first time, how woodturning can give so much more than any of us ever expect.

Every year Jean-François will invite other teachers such as Jacques Vesery, Yann Marot, Thierry Bertheas, and other professionals to teach at the school. Also, for the first time, Jean-François will be holding two classes taught in English. In 2013, a new museum opened in the center of the village and it contains the once-more relocated workshop of Albert Rouvier,

the last turner in Aiguines—except that is no longer true. Aiguines is now a destination for turners from around the world. While there, they can browse the weekend antique market and, if they are lucky, they can find wonderful examples of the products turned in Aiguines for generations—treasures for the discerning turner. These pieces link the past with the present of Aiguines—still a turning village. If you want to know more, visit escoulen.com. ■

Terry Martin is a wood artist, writer, and curator who lives and works in Brisbane, Australia. He can be contacted at eltel@optusnet.com.au.



15 (l to r) Jean-François, Philippe, Jack, Patrice, Didier, Marie-Françoise, Guidot.

Ken Newton

I am an Australian citizen now living in New Zealand. My interest in woodworking was sparked by my grandfather and his neighbor, both tradesmen with home workshops, and to some extent by my father. As a youngster I always wanted to make things with my hands and often worked with my mother, making craft items. I took manual art classes at school, and followed those with an engineering patternmaking apprenticeship. For my career, I was diverted to management positions, which I held until retirement in 2005, after forty-three years.

A few months into retirement, my wife suggested I join the local woodturning club in Mackay, Queensland. It has been a learning experience I could not have imagined. We have attended six TurnFest symposiums, and I attended the last two AAW symposiums, the 2010 Ornamental Turners International (OTI) symposium (ornamentaltturners.org), and I recently attended my first national

symposium. These events offered excellent opportunities to see firsthand the world's best turners.

From these events, I developed the inspiration and skills to create objects similar to those made by nationally known artists. I have also had the opportunity to pass on to others the disciplines I have learned.

Ornamental turning

Ornamental turning came into my life four years ago following a visit to the (Bob) Lynn Woodwork Museum in Ashburton, New Zealand (lynnwoodworkmuseum.org).

In 2010 at the OTI symposium, I acquired a wealth of information and knowledge passed on by many, in particular Gorst Duplessis and John Edwards. After returning home, I completed my own custom-built rose engine lathe.

The spoon

Part of the New Zealand symposium (Malcolm Zander, "New Zealand Symposium," *AW*, vol 28, no 3) was a competition to make spoons for possible purchase by a collector. Although I was disappointed that my spoon was not purchased, I am pleased with the outcome: This spoon represents a combination of my interest in woodturning, ornamental turning, and the connections I have made with many from attending international events. ■



Untitled, 2012, Purple heart, 7¼" (185mm) long

MEMBERS' GALLERY

Peter Schwenkmeyer

I have been a sculptor—primarily in stone—for many years and share a studio at the Pendleton Art Center in Cincinnati. About six years ago, I decided to try woodturning and, after familiarizing myself with woodturning fundamentals, I have been focusing on open- and closed-segmented turnings.

Visitors to the Pendleton seemed to be as interested in my turnings (which I do at home and sell at the center) as in my sculptures. For this reason, I was inspired to combine the two art forms. My first turned and carved sculpture is this owl, which I titled *First Flight*. Initially, I turned a twelve-inch sphere, and then sculpted that into an owl, successfully retaining the essence of the original sphere.



First Flight, 2013, Cherry,
12" (30cm) sphere



Jerry Gilman, Tennessee

Salt and Peppermills, 2013,
Old growth pine, paint, 12"
and 9" × 2¾" (30cm and 23
cm × 7cm)



From "Scratching the Surface: Contemporary Wood Sculpture" exhibit at the Craft and Folk Art Museum (CAFAM), Los Angeles, January–May 2013. The exhibit featured the work of Christian Burchard, Todd Hoyer, William Hunter, Art Liestman, Pascal Oudet, George Peterson, Michael Peterson, Merryll Saylan, and Jack Slentz. For more information about the CAFAM, visit cafam.org. ►

Pascal Oudet, *Noeud Papillon*, 2012, Oak, 3½" × 2¾" × 6"
(9cm × 7cm × 15cm)

Marco Berera, British Columbia, Canada



Our Pacific Wood Workers Guild hosts an annual 2" x 4" (5cm x 10cm) challenge with a new theme each year. The participants are required to build a project out of one piece of 2" x 4" x 8' (5cm x 10cm x 243cm) lumber using no fasteners. This year's theme was "motion."

I started my research by looking on YouTube and came across a marble game titled *Fisch Leiter*, made by Paul Grundbacher. After contacting him and receiving permission, I proceeded to build a version with no drawing, but using some photos from the video.

I turned the dowels and round parts on the lathe and made the entire project from a piece of maple left over from an old bench.

When the marbles are traveling up and down the fish ladder, the action and noise brings smiles to young and old alike as they view the marbles climb up the steps and traverse down the zigzag pass, which activates the waterwheel. To watch *Fish Ladder* in motion, search the Internet with: myrmac2000.

Fish Ladder, 2013, 15" x 12" x 14½"
(38cm x 30cm x 37cm)

Guilio Marcolongo

Emerging Box, 2012, Australian blackwood, dye, 3½" x 3½"
(90mm x 90mm)



Richard Spellenberg, New Mexico

Inside-Out Natural-Edge Bowls

While checking out a woodpile at a wood-fired oven pizza restaurant, I noted some concave pieces of local Arizona oak, split from sections of a hollow tree. I also found smaller lengths of post oak in a supermarket's firewood bundles. In both instances, the wood came from hollow trees, and was about 2" (5cm) thick, with hard, dark semi-rotted wood on the concave surface. I wondered how the wood might look when turned into bowls and am pleased with the results. ■



Untitled, 2012, Arizona oak, 2" x 9" (5cm x 23cm)



Jim McLain, New Mexico

I draw inspiration from my surroundings: rock formations, ancient architecture, nature, and events in time. I am attracted to their light, colors, and textures.



Low Tide, 2012, Ash, curly bubinga, 6" x 10" (15cm x 25cm)

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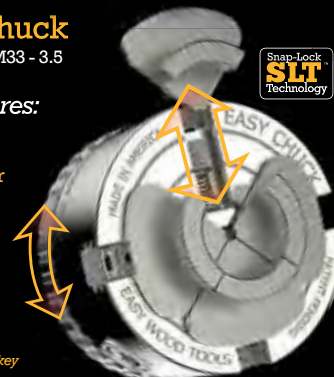
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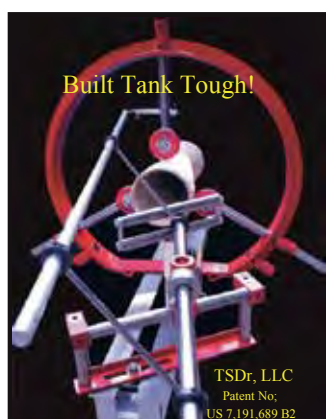
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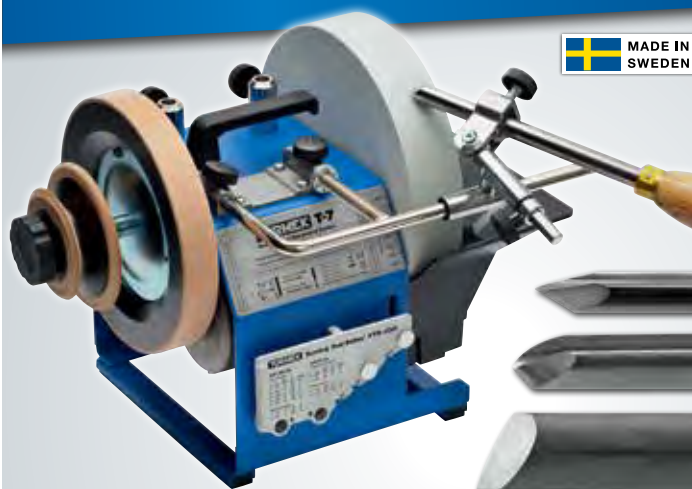
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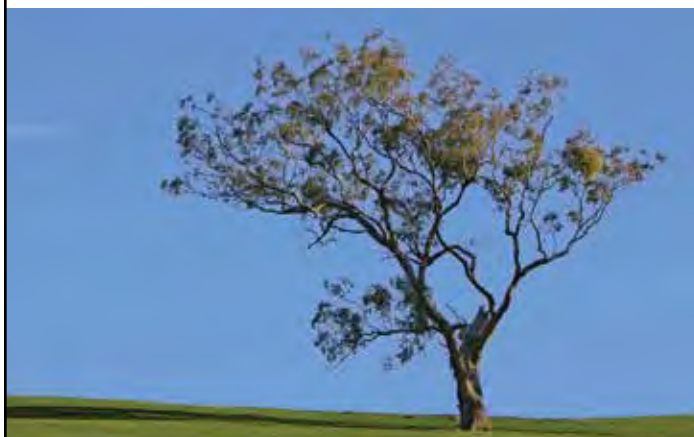
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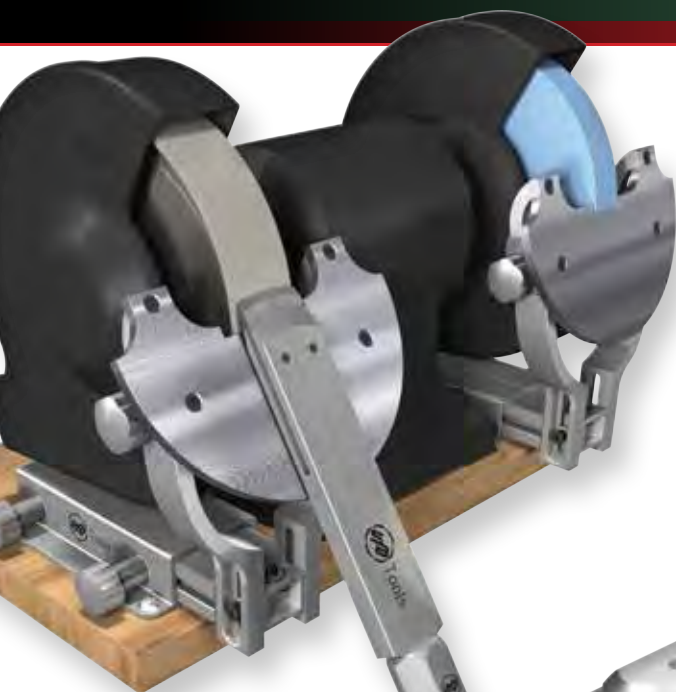
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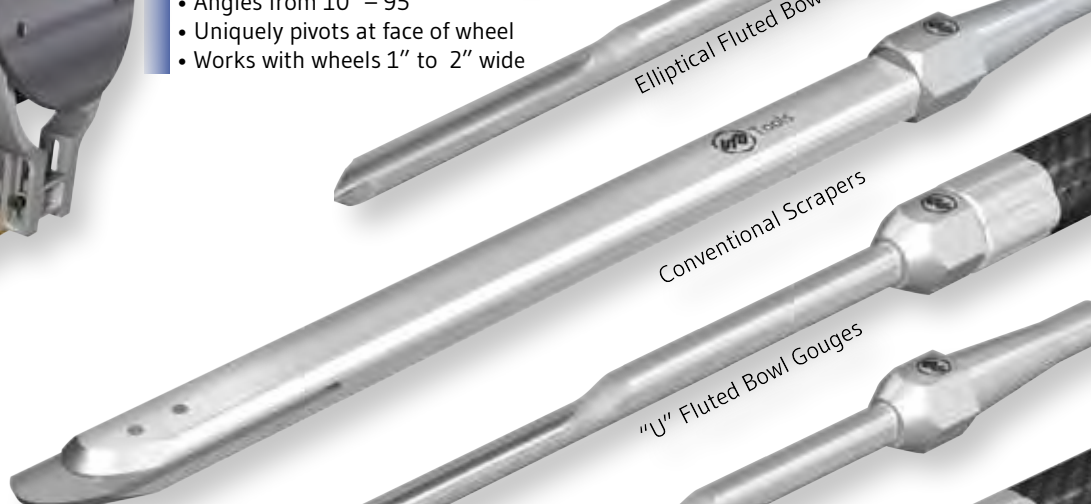
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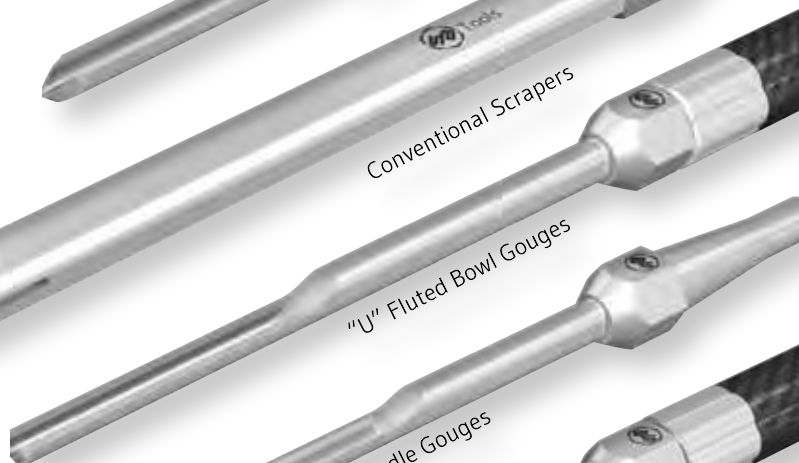
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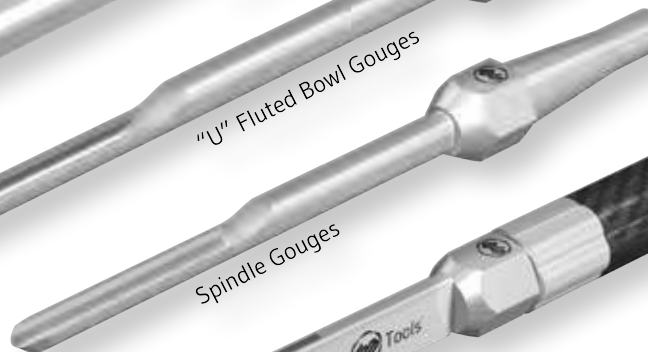
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"U" Fluted Bowl Gouges



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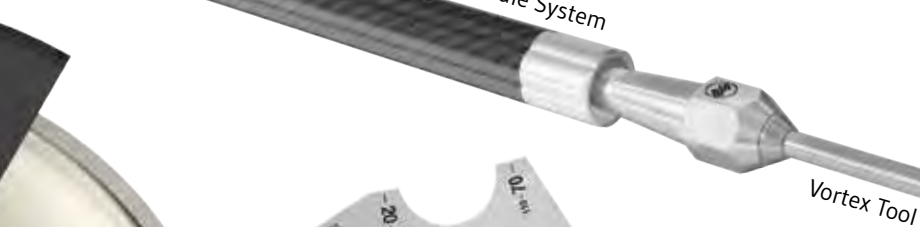


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MICHAEL FOSTER

I have been exploring a class of forms that are derived from what mathematicians term *torus knots*. Tracing one edge of a smoke ring reveals a continuous line, which, if transformed into string, would become a knot. The surface that results from joining the edges is continuous, similar to a Möbius strip. The edges all lie on the surface of a torus (donut), hence the class of forms is known as torus knots.

Mathematicians have a naming convention for torus knots in which the first number denotes the number of times the edge passes through the center of the torus and the second number denotes the number of times the edge circuits the torus.

The inspiration for this piece came from comments I received about similar pieces I made that the form looked like a smoke ring. An image formed in my mind and I just had to make it come to life.



Blowing Smoke, 2013, Maple, bleach,
acrylic paint, stainless steel, acrylic rod,
11" × 9" × 18" (30cm × 23cm × 46cm)