HISTORY OF A MULTIAXIS HAT FORM • A LOOK AT CAIRO'S MASHRABIYA • TRADITION IN TRANSITION: ITE UNDERGOES CHANGES

AMERICAN WOODTURNER

Journal of the American Association of Woodturners
April 2023 vol 38, no 2 • woodturner.org

TURN A HOLLOW FORM

TURNING DUPLICATES

J. PAUL FENNELL: 2023 POP MERIT AWARD RECIPIENT

MIKE MAHONEY
2023 AAW HONORARY LIFETIME MEMBER

Friedemann Buehler Germany

Fascinated by the diversity of wood and the craft of turning, I started my journey over twenty-five years ago. This wealth of experience allows me to push the boundaries of traditional turning techniques and approach every piece of wood with the respect it deserves, highlighting its natural defects and uncovering a rich depth of grain and texture.

I turn my pieces from a single block of green wood taken from the trunk of a tree. Because of their size, they give the impression of being heavy, and yet they are remarkably light. To me, their beauty lies in their simplicity of form, highly stylized yet completely natural. More recently, I have become interested in experimenting with oils, waxes, and stains to create a variety of finishes. The result is a palette of colors and surface finishes—some with a soft sheen, some more muted—that add aesthetic, stylistic features that transcend the material itself, creating a work that I hope defies expectations. ■

For more, visit Friedemann's website, buehler.studio, or find him on Instagram, @buehler.studio.

Left: Vessel, 2017, Oak (bleached, brushed, and sandblasted), oil with pigments, wax, 19" × 18" × 20" (48cm × 46cm × 50cm)

Right: Vessel, 2017, Oak (blackened, brushed, and sandblasted), oil with pigments, wax, 16½" × 12½" × 13" (42cm × 32cm × 33cm)

Vessel, 2021, Oak (blackened, brushed, and sandblasted), oil with pigments, wax, 12¼" × 10¼" × 9½" (31cm × 26cm × 24cm)

Bowl, 2021, Oak (brushed and sandblasted), oil with pigments, wax, 8" × 20½ (20cm × 52cm)

Bowl, 2021, Ash (bleached, brushed, and sandblasted), oil with pigments, wax, 6¾" × 16" × 16½" (17cm × 41cm × 42cm)

Vessel, 2021, Ash (brushed and sandblasted), oil with pigments, wax, 13¾" × 16½" × 18" (35cm × 42cm × 46cm)

AAW | AMERICAN ASSOCIATION OF WOODTURNERS

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

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Journal of the American Association of Woodturners

ASSOCIATIONNEWS

WOODTURNERSCHATTER

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Back cover – Robert C. Henrickson

woodturner.org

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For tips on article submission and photography requirements, visit tiny.cc/AWsubmissions*.

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DIVERSITY STATEMENT

The AAW strives to cultivate an organization built on mentorship, encouragement, tolerance, and mutual respect, thereby engendering a welcoming environment for all. To read AAW's full Diversity Statement, visit tiny.cc/AAWDiversity*

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 tiny.cc/turnsafe*. Following them will help you continue to enjoy woodturning.

*Web address is case sensitive.

Editor's Note

As AAW members, we are lucky to have professionals in our ranks who are dedicated to the betterment of our organization and the woodturning field in general. In this issue of the journal, we have written articles by pros eager to share the benefit of their experience. Their willingness to share knowledge is a critical part of helping along new turners so that our beloved craft will continue to thrive into the future.

Each year, the AAW recognizes individuals whose achievements and character are exemplary. Recipients of the Professional Outreach Program (POP) Merit Award and the AAW Honorary Lifetime Member Award are held up as stalwart examples. This year, J. Paul Fennell, an artistic turner, will receive the POP Merit Award. And Mike Mahoney, a production turner, will receive the AAW Honorary Lifetime Member Award. The fact that these two professionals take vastly different approaches to their work seems to me a testament to the reach of the AAW, whose large tent continues to host an impressive breadth of woodturning-related interests.

Joshua Friend

—Joshua Friend

From the President

As I write this, the AAW Board is gathering in Saint Paul, Minnesota, for a face-to-face meeting, in large part to receive a report from a consultant in nonprofit management regarding our future organization and business plan. This report is timely, as we move through a leadership transition of the AAW staff from Phil McDonald, who has been our executive director for more than ten years, to Jennifer Newberg, our new ED. We are looking at everything: our status and mission as a 501(c)(3) organization; our Board, staff, and committee structure; our defined mission toward our members, the larger community of woodworkers, and those who appreciate art; and our business plan for the next several years. We expect there will be initial changes in some programs, but most changes will require a several-year transition, since we do not want to "drop the ball" with many of our ongoing activities.

Although it is quite cold and snow-covered in Saint Paul right now, I am optimistic and excited as spring approaches with the portent of change for our organization and woodturning in general. Our affiliated chapters have resumed in-person meetings for the most part. My own club has several new members, many of whom are brand new woodturners. The Chapter Leadership Forum, open to chapter leaders, is full of messages regarding techniques for better chapter management and programming. Another forum, dedicated to hybrid meetings that accommodate both in-person and online needs, offers excellent examples of meeting setups strategies. (Check in with AAW staff for access to these forums.) The collaboration between chapters as best practices develop is just one example of what makes us woodturners special.

For many of us, the winter has been a time to spend in our shops making shavings and refining our techniques. Even though outside activities may draw us away from the shop—especially for those of us who live in four-season climates—symposium season is picking up. Regional events are reporting registrations similar to pre-pandemic numbers. The AAW International Symposium in Louisville, Kentucky (June 1-4), will be only a few months away as you read this. It will be our second post-pandemic Symposium, and we have been working hard to ensure we provide an excellent experience for attendees, vendors, demonstrators, collectors of wood art, and spouses. There is no substitute for this in-person experience. I always come away with new ideas and inspiration for my turning, and there is usually some new tool that I had a chance to touch and buy that gets added to my checked luggage.

Lastly, I recently had an interesting conversation with some members of my local chapter who are not members of the AAW. They did not see the value of our very affordable membership fee. If you are reading this, you are probably already an AAW member, but take a look at the list of member benefits on our website (visit tiny.cc/tearsheet). It is useful to print this list of membership benefits and bring it, along with copies of the *American Woodturner* journal, to your chapter meetings. You could also bring some printed copies of our *Woodturning FUNdamentals* publication for the new turners in your group. By the way, don't forget the benefits of AAW affiliation for chapter liability insurance, grants for needed equipment or tuition, and potential chapter discounts for Symposium attendance in Louisville.

Keep turning, stay involved, and stay tuned as the year unfolds.

MHS MD

Mike H. Summerer
President, AAW Board of Directors

JUNE 1-4, 2023
LOUISVILLE, KENTUCKY
Details at woodturner.org

AAW'S 37TH ANNUAL INTERNATIONAL SYMPOSIUM

THERE'S A PLACE FOR YOU...

...at AAW's International Symposium, at the Kentucky Expo Center, Louisville, Kentucky, June 1-4, 2023. We'll have a place for you where you are in your woodturning journey. You'll leave with newfound insights, techniques, and knowledge to help you become a better woodturner.

▶▶ Registration Open

DEMONSTRATORS AND PANELISTS

The latest information and rotation titles can be found at www.woodturner.org.

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NICK AGAR
HELEN BAILEY
JOHN BEAVER
JASON BREACH
SALLY BURNETT
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DEREK WEIDMAN
KIMBERLY WINKLE
STEVE WORCESTER
TIM YODER

Photo: Andi Wolfe

PANEL DISCUSSIONS

Artist Showcase Panel Discussion
- David Ellsworth (moderator)
- Sally Burnett
- Elizabeth Weber
- Nicole McDonald

Turning with Physical Limitations
- Andi Sullivan Miller (moderator)
- Brent English
- Steve Worcester
- Tim Yoder

Photography: Smartphone, Video, and for Social Media
- John Beaver (moderator)
- Rudolph Lopez

Business Brass Tacks
- Gwynne Rukenbrod Smith

Developing Signature Work that Is Uniquely Yours
- Andy Cole (moderator)
- Jacques Vesery
- Kristin LeVier
- Derek Weidman

Pricing Your Work
- Sally Burnett (moderator)
- Andy Cole
- Phil Irons
- Gwynne Rukenbrod Smith

How to Be a Better Demonstrator, Including IRDs
- Mike Mahoney (moderator)
- Keith Gotschall
- Nick Agar
- Dale Larson

Using Social Media to Sell and Promote your Work
- Kimberly Winkle (moderator)
- Emiliano Achaval
- Gwynne Rukenbrod Smith

Ask Us Anything
- David Ellsworth (moderator)
- Melissa Engler
- John Beaver

BE AMAZED AND INSPIRED IN THE INSTANT GALLERY

An attendee and public favorite, the Instant Gallery is one of the largest displays of woodturned objects in the world! Every attendee is encouraged to participate by bringing up to three turned items to display. Pieces can be for sale, and all skill levels of turners are welcome.

Register your Instant Gallery piece to receive valuable feedback through one-on-one **Intimate Critiques** with an expert. Expect encouragement, tips, suggestions, and a positive experience. Sign up for a critique when you drop off your pieces in the Instant Gallery Thursday or Friday morning.

Select pieces will be identified Saturday for Sunday's **Instant Gallery Critique**, another Symposium highlight.

Instant Gallery awards in Youth and Adult categories will be featured in *American Woodturner*.

SPECIAL INTEREST SESSIONS

Connect with other woodturners who have the same interests and specialties as you start the weekend. Special Interest Sessions are open to all attendees and guests Thursday June 1, 7:00-8:00 p.m. This year's sessions include Women in Turning, Chapter Youth Programs, Segmented Woodturners, Gizmos and Gadgets, and Rethinking Meetings and Demonstrations.

THANK YOU, JPW INDUSTRIES!

Our heartfelt thanks to JPW Industries (JET/Powermatic) for the use of lathes in the Symposium demonstration rooms. JPW has supported woodturners through donations to the Symposium for many years, and we continue to be very grateful and appreciative.

As in prior years, JPW Industries is donating a Powermatic and JET lathe and stand for the Symposium Raffle; proceeds support the local Louisville chapter. Be sure to buy your raffle ticket in Louisville for a chance to win a new lathe!

Photo: Andi Wolfe

TIPS FOR FIRST-TIME ATTENDEES

- Attend the First-Time Attendee orientation, Thursday, June 1 at 4:30 p.m. ET.
- Bring up to three pieces of your turned objects to display in the Instant Gallery. All are welcome to show your work!
- Contribute a bowl to the Empty Bowls fundraiser and bring Beads of Courage boxes.
- Plan to attend a Special Interest Session, Thursday, June 1 at 7:00 p.m. to meet woodturners with similar interests.
- Volunteer! Volunteering is a great way to meet other woodturners and get the most from your Symposium experience.

WOODTURNING TRADESHOW

Vendor list current as of Feb 21, 2023.

Shop at the largest woodturning tradeshow experience in the world – featuring state-of-the-art lathes, tools, accessories, finishing supplies, and wood. Take in a range of ongoing live demonstrations and take new tools home! Bring an empty suitcase or even an empty truck!

Advanced Lathe Tools, LLC
Airbrushing Wood
Alumilite Corporation
Arrowmont School of Arts and Crafts
AZ Carbide
Big Monk Lumber Company
Carter and Son Toolworks
Cindy Drozda Woodturning
Clark's Arts Beyond
Starbond Adhesives
Curt Theobald Studios
Easy Inlay
Easy Wood Tools
Hunter Tool Systems
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John Jordan Woodturning
Powermatic / JET
Woodturners Wonders, LLC
Klingspor's Woodworking Shop
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Niles Bottle Stoppers
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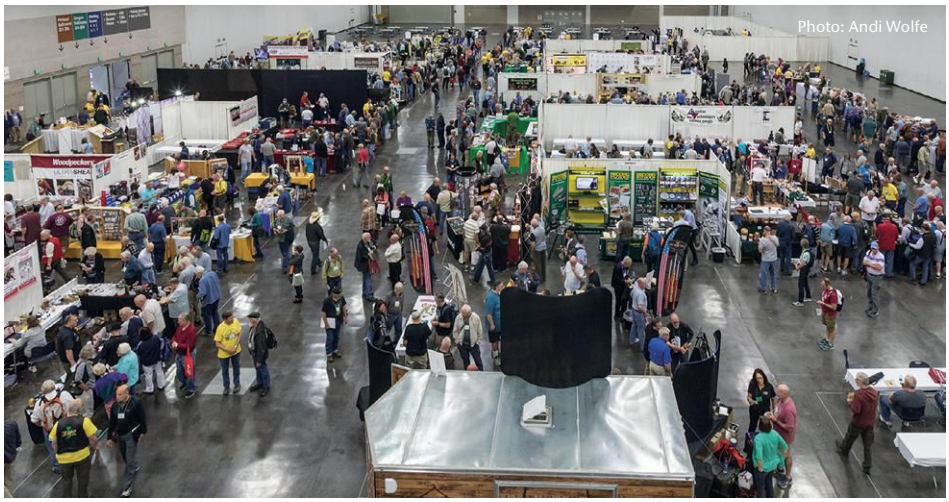


Photo: Andi Wolfe

Planet Plus, Ltd
Real Milk Paint Co.
Robert Sorby, Ltd
Robust Tools
Rockler Woodworking and Hardware
Spiracraft
Stainless Bottle Stoppers
Stuart Batty Tools
Teknatool USA
The Clean Breeze Collection
The Walnut Log, LLC
Thompson Lathe Tools
Tom's Tools
Trent Bosch Tools
Turningwood.com, LLC
VINCESWOODNWONDERS
Woodturning with Tim Yoder

RETURNING

Tradeshow Preview Reception and Special Exhibition Opening

Thursday, June 1, 6:00-8:00 p.m.

Take advantage of early shopping, mingle with your favorite vendors, and preview the special exhibitions.

NEW

Make a Pen in the Tradeshow

Symposium and public attendees are invited to turn, finish, and assemble their own souvenir pen in the Tradeshow pen-turning area. Volunteers will be available to take new turners through the process to make their own pen, as well as give experienced turners a chance to show off their talents. Participants will learn the basics of mounting a pen on a mandrel, turning, tool control and stance, and finishing, and will receive a certificate of achievement on completion.

SPONSOR A DEMO ROOM

Express your support of woodturning by sponsoring a demonstration room during the Louisville Symposium. Whether as an individual woodturner, an AAW vendor, or as a local chapter, you can publicly show your support of woodturning and woodturners who have had an impact on you and the craft with your sponsorship. Some opportunities still available.

For more information, contact Jen Newberg, Executive Director, at 651-484-9094 or jennifer@woodturner.org.

LEARN TO TURN YOUTH PROGRAM

Photos: Andi Wolfe

Again this year, we'll offer special **hands-on turning classes free of charge to youth** ages 10-18 (with a registered Symposium attendee). Register your youth attendee at www.woodturner.org.

If space allows, classes will open to new turners of any age, so if you, a spouse, or friend are interested, stop by the Learn to Turn room to check availability.

Learn to Turn Youth instructors include Sally Ault, Kailee Bosch, Kip Christensen, and Andi Sullivan Miller.

Youth registered in the program will have a chance to win a lathe package.

Youth Classes include a variety of fun projects:

- Ring Stand
- Lighthouse Tree Ornament and Ornament Stand
- Egg-leidoscope
- Twist Pens
- Honey Dippers
- Spinning Tops
- Brushes
- Cupcake Box
- Yo-Yo

Our heartfelt thanks to the businesses and individuals who generously donated tools and materials in support of the AAW Youth Program and the Turning with Physical Limitations Visually Impaired program.

WE NEED YOU!

Symposium volunteers say they have the most fun at the Symposium. Volunteer for a shift or two in your favorite Symposium area to meet new people and help make the event run smoothly. Spouses and companions are welcome to volunteer, too! Sign up online at woodturner.org.

PARTNERS IN CHARITY: YOUR CHANCE TO GIVE BACK

CONNECTING HURTING CHILDREN WITH RESCUED HORSES FOR HEALING...

Empty Bowls recipient Stormhaven Youth Ranch, Shelbyville, Kentucky

Bring a bowl (or two or three!) to contribute to the Empty Bowls fundraiser–then purchase a bowl to bring home! All profits directly benefit **Stormhaven Youth Ranch**, a local nonprofit selected by the Louisville Area Woodturners.

Stormhaven Youth Ranch rescues horses and provides a safe haven for families with children who are struggling, whether physically, emotionally, or behaviorally.

Volunteers from Stormhaven will be available in the Empty Bowls booth to talk with you about their incredible program.

BEADS OF COURAGE

Celebrating 20 years of **Beads of Courage** and improving the quality of life of children coping with serious illness.

Donate and display your Beads of Courage boxes.

Photo: Andi Wolfe

Beads of Courage is a perennial favorite of Symposium attendees. A national representative from Beads of Courage will be available to talk about the program, the new Carry a Bead program, and how you or your chapter can continue to be involved and have a positive impact on children undergoing treatments for serious illnesses.

Through the Beads of Courage program, children receive unique beads that represent procedures or treatments during a serious illness. Their collection of beads becomes a tangible record of their journey. Each turned and donated box becomes a beautiful and sacred vessel for children to safely store their Beads of Courage.

CALL FOR DEMONSTRATORS: AAW SYMPOSIUM 2024

Application period: May 1 to August 1, 2023

The AAW's 38th Annual Symposium will be held in Portland, Oregon, May 23-26, 2024. To apply to be a demonstrator, visit tiny.cc/Calls between May 1 and August 1, 2023. For more information, call the AAW office in Saint Paul, 877-595-9094 or 651-484-9094, or email memberservices@woodturner.org.

FROM THE EDITOR'S INBOX

Send emails to editor@woodturner.org

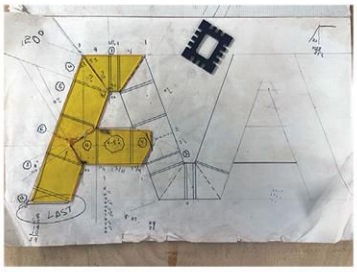
This photo shows just some of the fifty bowls turned by members of the Blue Water Area Woodturners and donated to a fundraiser for Mid City Nutrition Program, a soup kitchen in Port Huron, Michigan, that serves less fortunate people in the community. Patrons of the fundraiser took home a bowl as a thank you for their financial support. Other local artisans also donated a number of ceramic bowls, and the 2022 fundraiser raised more than $30,000.
—Bob Forbes, Blue Water Area Woodturners

I've been a member of the AAW for more than twenty years and am a member of New Jersey Woodturners and the Palm Beach Woodturners. I always look forward to receiving the *American Woodturner* journal and was inspired when I saw the feature on levitating spheres in the August 2022 issue (vol 37, no 4, page 28). This really captivated me. The author, Ken Conte, wrote a clear and concise article on how to achieve levitation. I was inspired to apply his concept to a work of my own. Hence, *Flying Saucer Spotted in Florida*, made of walnut and maple. The saucer measures 3½" × 4½" (9cm × 11cm).
—Marvin Cohen, Florida

I have recently been doing *kumiko*, the Japanese art form of making *shoji* screens. It's similar to the processes used in making a log cabin (interlocking notches) and requires the skills and patience used in segmented turning. While *kumiko* is basically a two-dimensional technique, I have been experimenting with armatures to create 3D objects. Some weeks ago, when I received the AAW journal, the vision of combining the letters "AAW" appeared. Multiple issues needed to be resolved: angles, joints, colors, and finally, how to make it all work. Sketches and mockups (but not CAD drawings) followed.

The key to the processes turned out to be the armatures. Previously, I had been making them on my table saw, but the precision required was beyond my ability, so I had them cut with a water-jet.

The final sketch and mockup comprised just three shapes. The materials include Plexiglass (the armatures and one leg of the "W"), walnut, mahogany (back), padauk, and yellowheart. The whole piece measures 7" × 19" × 2" (18cm × 48cm × 5cm).
—Harvey Fein, New Jersey



I am sending a picture of a bowl turned by Steve Childers. He titled it, *The Eight Foot Bowl*. It came about because of our club's 2nd-quarter 2022 President's Challenge, which was to turn any object as long as it had feet. Not one foot or pedestal, but multiple feet. This was Steve's winning contribution. The bowl also won a ribbon at the Delaware State Fair for Arts and Crafts, as did a number of other pieces by our chapter members.
—Tom Sloan, First State Woodturners

Your Generosity Matters

On behalf of the AAW, we express our deep appreciation for the generosity of supporters and AAW chapters who gave to AAW during 2022. Your donations fund our charitable nonprofit mission, including Women in Turning, Educational Opportunity Grants, and so many other programs.

Also, a gracious thank you to members who contributed artwork to support the AAW Live Benefit Auction and Professional Outreach Program (POP) Auction during the year.

And finally, we are grateful to all of our volunteers, whose collective contributions of thousands of hours are essential to the fulfillment of AAW's educational mission.

AAW membership dues cover only a portion of the expenses for member programs and services, and your contributions matter immensely. Thank you for your personal expressions of support for the AAW and our nonprofit mission.

—Jennifer Newberg, AAW Executive Director
—Mike Summerer, President, AAW Board of Directors
—KC Kendall, Chair, AAW Fundraising Committee

AAW Live Benefit Auction Contributing Artists

Virgil Aurand
Dixie Biggs
Kip Christensen
Jim Christiansen
Andy Cole
Rebecca DeGroot
Barbara Dill
Cindy Drozda
Kathleen Duncan
David Ellsworth
J. Paul Fennell
Clay Foster
Dewey Garrett
Vivien Grandouiller
Michael Hosaluk
Beth Ireland
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Mike Jackofsky
John Jordan
Michael Kehs
Dale Larson
Art Liestman
Eric Lofstrom
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Joe Meirhaeghe
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Merryll Saylan
Mark Sfirri
Jay Shepard
Steve Sinner
John Underhill
Holland Van Gores
Hans Weissflog
Jakob Weissflog
Andi Wolfe
Donna Zils Banfield

AAW POP Auction Contributing Artists

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Benoît Averly
Kailee Bosch
Max Brosi
Zina Burloiu and Terry Martin
Jim Christiansen
Luigi D'Amato
Rebecca DeGroot
J. Paul Fennell
Roberto Ferrer
David Fisher
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South Puget Sound WT
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Woodturners of Olympia

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Amazon Smile
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Jim Chandler
John Chapin
Glen Chappell*
Michael Cherry*
Roger Christy*
Moon Civetz*
Weldon Clement
Marvin Cler
Chuck Cohen
Brian Comolli
Kevin Conley
Paul Courtright
David Edward Cox
William Cyr*
George D'Andrea
Denis Delehanty*
Ludovic Deplanque*
Pam Dergins*
Donald DeVeny
Tony Di Lorenzo*
Angel Manuel Diaz*
Kerry Ditchey*
Richard Dlugo*
Michael Dodgin*
Graham Dolby
Boris Dolin*
William Dowling III*
Timothy Draayom
John Drake*
Daniel Drecksage
Dennis Duligall*
David Edenfield*
Valerie Edward*
William R. Edwards, Jr.
Roland Ekstrom*
Gabriel Escobar*
Richard Evans
Steven Fairbairn
Mark Fairchild
Ross Farrugia*
Tarn Faulkner*
Harvey Fein
Shaun Fies*
Alan Fisher
Rick Fishman
Patrick Fitzgerald*
Neil Flate
Tiprin Follett
James Forbes
Carl Ford
Francis James Forster*
Gerald W. Fritz
Jean-Marc Gallion*
Ronald Gellatly
Christopher Gern*
Terrence Lee Gildred*
Lloyd Glenn
Phillip Glick
James Goergen*
Roseanne Gold
Gary Goodman*
Phillip Gooley
Robbie Graham*
Ralph Grande
Patricia Gregorio*
Brian Grimm*
Karen Grogan
Scott Grossman
Tom Guffin
Andrew Hale
Ken Hallberg*
Don Halstead*
Scott Handy
Jeff Hart*
Adam Hartzke
Christie Hauck*
Mark Hazlewood
John Hehre*
Phil Heinz*
Matt Held*
James C. Helm*
Michael Henretta
Suzan Hernandez*
Eric Herr*
Franz Xaver Hiergeist
Michele Higgins*
Gwen Himbury*
Ethan Hoff
Gabriel Hoff
Griff Holmes
Jim Howe*
Garry Hubbard
Christopher Hughes*
Michael Hughes*
Bill Jackson
Joe Jackson*
Michael Jacobs*
Ben Johnson*
Gary P. Johnson
Woody Johnson
Jacob Jones*
Jason Jones*
Daniel Joyce*
Mike Kaess
Doug Kamen*
Margaret Kelly*
Geraldine Kelter*
Jeffrey Kessler
Elizabeth Keville
Todd Kinsfather
David Post Kirby
Milton Kirkland*
Jan Kneule*
Jerry Knight
Stan Knutson*
Joseph Kopec*
Glenn K. Kramer
Sabine Kramer
Herbert (Barry) Kuntz
Bruce Lamb*
William Lamond*
Brett Lance*
Victoria Larson
Dan Lathrop*
John Lauletta*
Ken Lawless
David C. Lee*
Ernest Leep*
Brian Lensink
Ashley Leonard*
Jake Lerner*
Alan Levin
Michael Loebenberg
George Lomas
John Lombardi
Warnie Lore
Janet Low*
Patricia Lucido*
Steve Maieli*
Stephen Malpass*
Bill Manwiller
Louis Marsh*
Bill Martin*
John Maxwell*
Mark McBride*
Michael McCall*
John S. McClure*
Ted McKee
David McMillan
James Jay McMillan
Sandra McMillan
Russ Mendenhall
Maarten Merman*
Michael Merriman
Ben Meyer
Ken Meyer
Elizabeth Michaelis
Jo Miller
Wayne Miller
John Morton*
Cyril Moyher
Brian Muck*
Robert Mulholland*
Bill Neff
Paul Newton
T. Richard Nichols
Henry Norwell*
Mike Obuchowski*
Kelvin O'Dell*
Anne Ogg
Randy Olander
Joe Olmoz*
Adrian Olsen*
Jon Olson*
Leon Olson*
Jason Olszewski
Matthew Opgenorth
Randy Papineau*
Rick Patrick
Bob Patros
Geoff Payne
Guy Pepin*
Nicholas Pesut*
Noah J. Peters
Amos Peterson
Don Pohlman*
Dimitris Psilopatis*
Tom Puskar*
Ed Quesnell*
Ryan Rawhoof*
Ron Reif*
Chris Rinehart
Steven Ringer
Jean-Pierre Riquet*
Ned Roberts*
Jorge Luis Rodriguez*
Evan Rogers
Charles Ronco*
Jean-Claude Roy
Faust Ruggiero
Jake Rutherford
Jim Ryman
Martin Saban-Smith*
Heidi Saleh
Sharon Salive
Philip Sanchez*
John Sanders*
Jim Sannerud
Brian Saunders*
Raymond Scesa*
Martin Schmidt
Jay Schulz
Lori Sears*
John Sestric
Joe Shanaphy
Cat Shirley*
Jonathan Shull*
Rick Simi
David Lee Smith*
Lynda Smith-Bugge
Trevor Snow*
Marcis Sodums
Alan Stickel
Michael Stickney*
Darrell Stokes*
Rick Stone*
Doug Stowe
Victoria Stuart
Dennis Swartout
Shawn Tackaberry*
Julie Taft*
Sharon Thelen*
Jay Thompson
Mich J.S. Thwaites
Paul Tiefel
Christopher Todd
Paul Tolar*
Michael Trader
David VanErt*
Alfred Vanrillaer*
Reynolds Vaughan
Anthony Vilgiate
David Vizard*
Michael Volkert*
Curtis Vose
Richard Wait
Sam Warren
Alida Wasmith*
Cynthia Weger*
Peter Wells*
Linda Werner*
Dan Whelchel*
John White*
Leigh White
Jim Williams
Bruce Winters
Ivan Witt*
Stephen Wohlgemuth
Edward Wolfe
Michael T. Wolford
Robert Wolfskehl
Jerry Womacks*
Ted Woodkey
Russell Woodward
Larry Wright*
Anthony Yelapi*
Gregory Zajdel*
Steven Zawalick*
Mark Zeglen*
Andrew Zelenetz
John Ziegler*
Ken Zuckerman*

*Supported AAW's future with a gift of $10 or more when renewing their annual AAW membership.

CAW Rebrands as Museum for Art in Wood, Receives Windgate Endowment

Over the last four decades, Philadelphia's Center for Art in Wood (CAW) has enhanced the public's understanding of contemporary art in wood through its extensive collection, programming, exhibitions, and documentation. The organization has officially rebranded itself as the Museum for Art in Wood (MAW) after undergoing an intensive and diligent planning process. The move allows the Museum to be further recognized by an international community of artists, scholars, and collectors as a critical resource in studying art, craft, and design in wood. It also reinforces the MAW's mission to stimulate and nurture creative engagements surrounding wood, an organic, shapeable, sustainable, and conceptually inspiring material.

In addition to the rebranding, the organization announced a historic and transformative $10 million endowment from the Windgate Foundation, designated to strengthen the future of the Museum and allow the organization to expand its mission, programs, and plans for growth. A portion of the endowment, $3.5 million, is held as a named, designated endowment at the Arkansas Community Foundation, with the remaining invested by the MAW. The Windgate Foundation, which provides critical funding for contemporary craft and visual arts education in the United States, previously awarded the Museum smaller endowment gifts supporting its general operating fund and renowned international residency program. *(See D Wood's article on page 41 of this issue for more on the history and future direction of this program.)*

Museum for Art in Wood

Jennifer-Navva Milliken, Museum for Art in Wood's Executive Director and Chief Curator, noted, "We look forward to engaging the public with new and exciting opportunities and experiences under a name that encapsulates all we do. The name change clarifies our work and mission, while the impact of the extraordinary and unprecedented support from the Windgate Foundation helps to stabilize our footing as we envision an exciting future." ■

For more, visit museumforartinwood.org.

Cumberland Woodturners Continues Outreach

The Cumberland Woodturners (Crossville, Tennessee) prides itself on giving back to the community by utilizing special projects and events. In 2022, we continued to team up with Dogwood Exchange, Village Green, and the First National Bank as sales locations for our turned Christmas ornaments. We are happy to report that we broke our past ornament sales record, selling more than 700 custom ornaments and generating over $15,000 in local sales.

Tom Neckvatal presents donations to, *left*, Denise Melton, Regional Director of the House of Hope, and *right*, Pam Buris of Kids on the Rise.

We consider our Christmas ornament project a club hallmark and are proud to donate all proceeds to our local community. The 2022 recipients from those sales were House of Hope and Kids on the Rise, which help hundreds of children in need throughout the year.

Other outreach

To support our outreach efforts, our club offers special woodturning challenges to its members. Last year, a unique challenge was salvaging some prime walnut from a four-poster bed, contributed by a local resident. All of the wood was designated for use in the Christmas ornaments our club made.

We also challenge our club members to make boxes for Beads of Courage, a national organization that provides milestone beads for children who are going through medical treatments. The boxes that woodturners provide are given to the children as a special place to store their beads.

The Cumberland Woodturners also made wig stands for both children and adults suffering from hair loss during cancer treatments. And several of our members, entirely on their own, make many turned items that are sold in local markets, with proceeds going to charities of their choice.

This is the thirteenth year Cumberland Woodturners has served our community with projects dedicated to supporting local charities. For more information, including how to join us, visit cumberlandwoodturners.com. ■

—Thomas Neckvatal, President, Cumberland Woodturners

MSSW Turns *Usu* for New England Kenjinkai

In January 2021, I received a request from Courtney Goto, a practical theologian professor at Boston University and committee member of the New England Kenjinkai, for a special woodturning project. She explained that *kenjinkai* is a Japanese term meaning association of people from the same prefecture or region. The group comes together once a year to observe the Japanese New Year, or *Oshogatsu*, sharing food, friendship, and stories. Courtney explained, "The centerpiece of our celebration is the making of *mochi* in a wooden *usu*, a large mortar used with a pestle called *kine*. In the *usu*, we pound steamed rice into a sticky mass to produce *mochi*, a traditional food for the Japanese New Year. Making and distributing *mochi* strengthens the group spirit."

She explained that their beloved *usu*, made by a former member, was cracking. So she was seeking help from woodturners to replace this important cultural item.

Turning the *usu*

Massachusetts South Shore Woodturners Past-President Steve Wiseman and I were intrigued by the project because of the *usu's* role in tradition and community, as well as by the challenge of turning a functional object of this size. Our research showed that an *usu* is usually carved from a log or stump. We decided to turn one that would weigh substantially less but still be fully functional. We started with a 500-lb. oak log.

With the help of a hydraulic lift and four able bodies, we mounted the log between centers. After truing up the log into a cylinder, we began turning the hourglass profile, which reduced the weight and facilitated the use of a steady rest for support when hollowing the top and bottom "bowls."

Once the base was hollowed, we repeated the process to hollow the top "bowl" using a jam-chuck. At this point, the *usu* weighed about 96 lbs. We coated the surfaces with a wax sealer to slow the drying process and minimize cracking and checking. Then the *usu* sat in my shop for almost a full year before we remounted it and "tuned it up." After drying, the *usu* weighed only 56 lbs.

MSSW members Steve Wiseman and Joe Centorino participate in the ceremonial *mochi* pounding using the new *usu* made for the New England Kenjinkai.

We decided to coat the inside of the top bowl with a clear epoxy finish for durability and ease of cleaning. I adapted a rotisserie motor to my lathe to rotate the *usu* at about 3 rpm to allow the epoxy to flow evenly.

Dedication

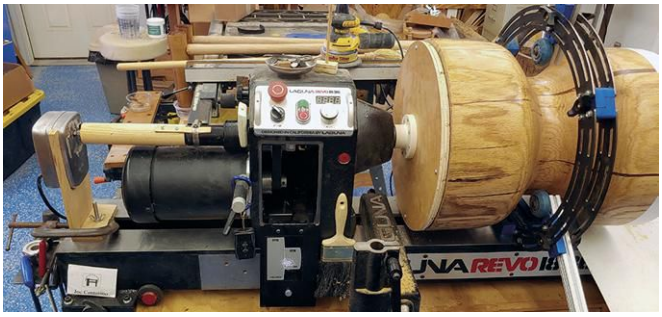
On January 14, 2023, the New England Kenjinkai held their 45th annual *Oshogatsu*, celebrating the Year of the Rabbit. The assembly listened to the story of the new *usu* and watched a short video about the project. *(You can view this video at tiny.cc/usu.)* The new *usu* was enthusiastically and graciously accepted by the Kenjinkai and dedicated in a ceremony involving anointing it with sake and honoring the tree from which the wood came.

The Kenjinkai presented us with a check for $2,000 as a donation to the MSSW. The money was raised through donations by the members of the Kenjinkai in appreciation of the new *usu* and in memory of past members. The MSSW applied this windfall to our Memorial Scholarship fund to promote the advancement of woodturning and further the education of our members. ■

—Joe Centorino, Massachusetts South Shore Woodturners

MSSW Past President Steve Wiseman trues up the large oak blank.

Current MSSW President Joe Centorino hollows the base of the *usu*.



The author adapts a rotisserie motor to slowly turn the *usu* during epoxy coating.

CALENDAR

Calendar of Events

Send event info to editor@woodturner.org. June issue deadline: April 15.

Colorado

September 15–17, 2023, Rocky Mountain Woodturning Symposium, The Ranch Larimer County Events Center, Loveland. Demonstrators to include David Ellsworth, Yann Marot, Mark Gardner, Graeme Priddle and Melissa Engler, Laurent Niclot, Keith Gotschall, Kailee Bosch, Martin Christensen, Jessica Edwards, John Giem, Dave Landers, Don Prorak, Tod Raines, Pat Scott, and Jeff Wyatt. Event to include hands-on learning, tradeshow, instant gallery, and auctions. For more, visit rmwoodturningsymposium.com.

Illinois

April 21, 22, 2023, The Midwest Pen Turners Gathering (PenMakers International Annual Symposium). Two full days of pen making—from beginner to advanced. Numerous social activities, chance to win a lathe, door prizes, vendor area. For more, visit midwestpenturnersgathering.com.

Michigan

September 30, 2023, Detroit Area Woodturners 2nd Annual One Day Symposium, Rising Stars Academy, 23855 Lawrence Ave., Centerline. Event to include sixteen demonstrations, instant gallery, tradeshow, door prizes, and more. For the latest info, visit detroitareawoodturners.com.

Minnesota

Multiple 2023 exhibitions, AAW's Gallery of Wood Art, Landmark Center, Saint Paul:

- February 26–May 19, 2023: *Form | Content* (2023 POP exhibition)
- July 1–December 31, 2023: *Out of the Woods* (AAW's 2023 member exhibition)
- Ongoing: *Touch This!; Around the Hus—Turning in Scandinavian Domestic Life*; vintage and historic lathes and turned items

For more, visit galleryofwoodart.org or email Tib Shaw at tib@woodturner.org.

North Carolina

November 3–5, 2023, Biennial North Carolina Woodturning Symposium, Greensboro Coliseum, Greensboro. For more, visit ncwts.com.

North Dakota

April 21–23, 2023, Hands-on Spring Symposium, Career Center at Bismarck State College. Demonstrators to include Sally Ault and Mark Kielpinski. For more, visit dakotawoodturners.com.

Ohio

October 13–15, 2023, Turning 2023, Ohio Valley Woodturners Guild's 12th biennial Woodturning Symposium, Higher Ground Conference & Retreat Center, West Harrison, Indiana. Featured demonstrators to include John Jordan, Ashley Harwood, Roberto Ferrer, Nick Cook, and Helen Bailey. The pastoral setting has an onsite lodge, dormitories, and dining hall. Event to feature five stations and eleven rotations, instant gallery, wide range of vendors, and Saturday evening live auction. For more, visit ovwg.org.

Pennsylvania

March 3–July 23, 2023, *Seeing Through Space*, a mashrabiya exhibition, The Center for Art in Wood, Philadelphia. A multidisciplinary exhibition as part of the CAW's Mashrabiya Project, featuring never-before-seen works from six international artists. For more, visit centerforartinwood.org.

September 22–24, 2023, The Mid Atlantic Woodturning Symposium, Lancaster Marriott Hotel and Convention Center, Lancaster. Featured demonstrators to include Eric Lofstrom, Neil Turner, Kristen LeVier, Simon Begg, Roberto Ferrer, and Jason Breach. For more, visit mawts.com.

Puerto Rico

May 7–16, 2023, GreenWood's Puerto Rico Artisan EcoTour and workshop. Sharpen your woodworking skills while you explore the roots of Caribbean culture during a deep dive in the tropical rainforest. Learn about the fragile connections between our environment, our craft, and our economy—and the role woodworkers can play in helping to preserve forests. Includes a workshop led by Michael Fortune and René Delgado, focused on the design and construction of a counter-height chair—including steam-bending, turning, and hand-tool use. GreenWood is a nonprofit that trains artisan woodworkers to produce high-quality products from well-managed forests, and helps connect those products to good markets. Learn more at greenwoodglobal.org/eco-tours.

Tennessee

January 26, 27, 2024, Tennessee Association of Woodturners' 35th Anniversary Woodturning Symposium, Marriott Hotel and Convention Center, Franklin. Featured demonstrators to include Ashley Harwood, Nick Agar, Pat Carroll, Eric Lofstrom, and Sammy Long. One of the longest-running and most successful regional symposia in the U.S., the 2024 event will feature a tradeshow, instant gallery, People's Choice award, and Saturday night banquet with auction. For more, visit tnwoodturners.org, or email David Sapp at symposium@tnwoodturners.org. Vendors contact Grant Hitt at vendorinfo@tnwoodturners.org.

Texas

August 25–27, 2023, SWAT (Southwest Association of Turners) annual symposium, Waco Convention Center, Waco. This year will be the 31st SWAT symposium. Demonstrators to be announced. For more, visit swaturners.org.

From AAW's Permanent Collection

David Ellsworth, *Figured Ash Vessel*, 2001, 10¼" × 3¾" (26cm × 10cm)

Photo: Tib Shaw/ AAW

AAW Permanent Collection, donated by Lois Laycraft in memory of Frank Sudol

VIRTUAL EVENTS

AAW Presents

View AAW-sponsored interactive remote demonstrations (IRDs) from the comfort of your own home. Visit tiny.cc/AAWPresents for more details and to register for upcoming sessions.

2023 DATES:

- April 15: Derek Weidman, Sculpting with the Lathe

Tips

Handy pencil holder

When working in my shop, I would invariably misplace my pencil and other small tools. They never seemed to be available when I needed them. I found that a small container with a custom-made tool holder solved this problem.

To make the holder, I drilled holes sized for a pencil, felt marker, and a small round file into a small wood block. Then I used double-sided tape to attach the block inside a small plastic container, leaving room around the edges for other small, flat items such as a sharpening card and spindle diameter gauge. When finished, I attached the unit (again with double-sided tape) to the inverter (behind its air vents) on the back of my lathe. Any flat surface convenient to your work can be used to host the unit. With this tool holder installed, I no longer lose my pencil and small tools, and they are always readily available.

—Mark Heatwole, Virginia

Position camera screen with ease

As I get older and find it harder to see my hollowing camera's monitor, I came up with a cheap solution for repositioning it for better viewing—mounting it on a desk lamp frame. Now I can position the monitor wherever I want.

—Jay Attwell, British Columbia, Canada

Help with stuck chuck screws

The screws that hold my chuck jaws to the chuck body are often difficult to remove. They seem to get "stuck" in place, and this makes changing jaws a challenging task. It hurts my hands when I try to muscle the screws loose using a hex wrench. Gloves help to protect my hands, but I found it was still difficult to crack the screws loose. I found a simple solution: grip the hex wrench T-handle with a small one-handed bar clamp. The clamp is easier to hold than the T-handle, and it offers more leverage, making it easier to loosen the jaw screws.

—Joshua Friend, Connecticut

DIY gaiters keep shavings out of socks/shoes

Whenever I wear short pants while turning, I find that wood shavings accumulate in my socks and shoes. My wife and I solved this problem by making gaiters from the legs of an old pair of running pants. Cut off the pants at the knee and rotate the cut-off so the knee end is now at the bottom (this makes for a larger flare to cover your shoes). Slit the cut-off from top to bottom, leaving a small section uncut at the bottom where your foot will slide in. (This step is not necessary if the pants have a leg zipper.) Next, attach a hook-and-loop strip around the top end.

To use the gaiters, insert your foot into the bottom end, rotate the slit so it is at the back of the leg, and attach the top end around your calf using the hook-and-loop strip. My wife hemmed the ragged edges to make the gaiters look nice.

—Ron Giordano, Texas

Share your turning ideas!

If we publish your tip, we'll pay you $35. Email your tips along with relevant photos or illustrations to editor@woodturner.org.

—Joshua Friend, Editor

PRO TIPS FOR TURNING DUPLICATES

Jim Echter

You want how many to look alike?

Do you break out in a sweat if you have to make two or more turnings the same? Have you turned down project requests because you don't know how to turn duplicates or copy a broken spindle? If so, I will take the mystery out of the process by introducing you to story sticks, the measuring and layout tools used, and the "point-to-point" turning process. With the right knowledge, you can take the stress out of turning duplicates, whether it is one or 100 identical parts.

Why turn duplicates? Maybe you need one duplicate turning to replace a broken item such as a baluster or chair stringer. Or you may have a project that requires more than one identical part such as table legs. Turning duplicates is a good way to develop new skills, it's fun, and you can make money in woodturning if you know how to do it.

Turning duplicates is easy if you break down the steps and keep it simple. This begins with an understanding that there are ultimately only three shapes in woodturning: straight (flat), convex (bead), and concave (cove). These shapes are combined to create more complex forms. Duplicate turning can be applied to both spindle and cross-grain work, as shown in *Photos 1 and 2*.

Story sticks/templates

Story sticks, or templates, are necessary in turning duplicates. I make them out of everything from paper, cardboard, chipboard, plastic laminate, wood sticks, laser-cut plastic, and sheet metal (*Photos 3-5*). I determine the material by the size of the job. Is it a one-off project? Do you need ten or 100 pieces? The higher the volume, the harder the template

SYMPOSIUM DEMONSTRATOR IN LOUISVILLE!

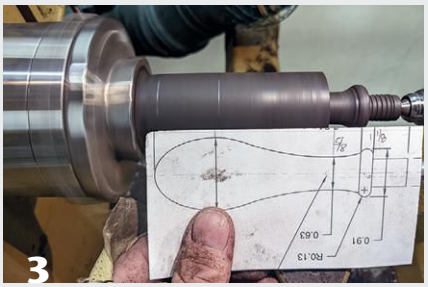
Jim Echter will be a demonstrator at AAW's 2023 International Symposium in Louisville, Kentucky, where he will share his insights on a variety of turning topics. Don't miss this chance to learn from a pro, live and in person! For more, visit woodturner.org.

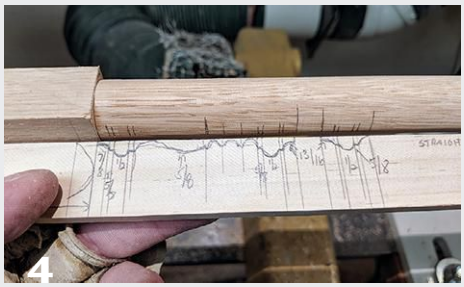
Spindle or crossgrain duplicates

Duplicating spindles such as balusters is a common practice, but the same principles and methods apply when duplicating crossgrain projects.

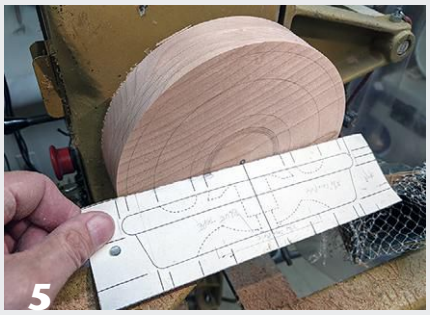
Our eyes don't tend to notice slight differences in diameters, say on a set of balusters or table legs. However, variances in vertical distances stick out like a sore thumb.

Story sticks





Story sticks, or templates, indicate key transition points and are essential when turning duplicates. They can be made from a variety of materials, depending on the number of duplicates to be turned. A thin strip of wood makes for a durable template.



A template is used for accurate repeatability on crossgrain work, too.

material. If it is a long spindle project like a porch column, I will make a printout of the full post, plus small templates for detailed areas (*Photo 6*).

Be aware of scale issues when printing out templates. I recently printed out the computer-aided design (CAD) drawing of a screwdriver handle that was supposed to be 4" (10cm) long. But when I measured the handle on the printout, it measured about ⅛" (3mm) short. So I did the math, scaled up the drawing on a photocopier, and reprinted it at the correct (full) scale. Always measure your story sticks before you start turning. As the old saying goes, "Measure twice, cut once."

Design

Simpler is often better when you are creating a design that requires duplicates. If you examine most balusters, you will find that there are only two to four different diameters. The fillet, or flat, transitions between details are often all the same diameter. Beads and other convex shapes on one spindle often have the same diameter. Coves of course will represent the smallest diameter. *Note: I generally turn coves last to keep as much supportive material in the blank as possible until the very end.*

When it comes to designing with a CAD system, just because you *can* doesn't mean you *should*. I was contacted by a local custom ▸

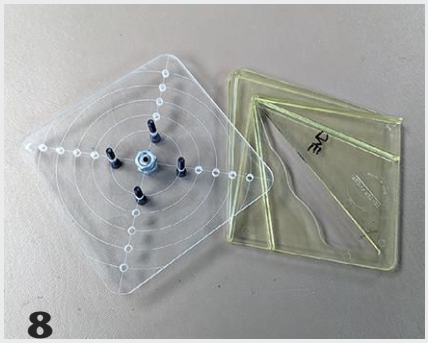
Full-size and detail templates

The author tapes both a long, full-sized and smaller detail templates behind the lathe for easy visual reference while turning.

Layout and center-finding tools

7

An assortment of good layout tools, such as calipers, rulers, squares, and diameter gauges, is essential for making a good story stick.



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Two styles of center finders, useful when marking multiple blanks for turning duplicates.

furniture maker. He had an initial design of some bed posts laid out on a CAD system. The posts featured about fifteen different diameters! After I consulted with the furniture maker, he redesigned the posts with only four different diameters. The new design was more pleasing to the eye and easier for me to turn in multiples, resulting in lower costs and a very happy customer.

Be aware that our eyes don't tend to notice slight differences in diameters, say on a set of balusters or table legs. However, variances in vertical distances stick out like a sore thumb. That points to the importance of using a good story stick to position transitions consistently from one spindle to the next.

Google images is a great resource for design ideas. Also, there are some wonderful books on woodturning design and architectural shapes. If you are looking for inspiration and design ideas, I highly recommend *Classic Forms*, by Stuart E. Dyas (Stobart Davies Ltd, 2008), and *Turned Bowl Design*, by Richard Raffan (Taunton Press, 1987).

One last thing to consider when designing a project for a customer or to sell is to think about how you will pack and ship the item. Will it fit easily in a typical post office box? Can you reduce the length to fit in a box with a known size, rather than having to potentially pay more for a longer box? As a production turner, I care about shipping costs for my customers.

Layout tools

Accurate layout of design elements is an important early step in making duplicates at the lathe. I use a variety of tools when laying out my design and making story sticks (*Photo 7*). The story stick material is selected for the job at hand. It could be paper, cardboard, wood, or plastic. Rulers and tape measures

Customized workholding

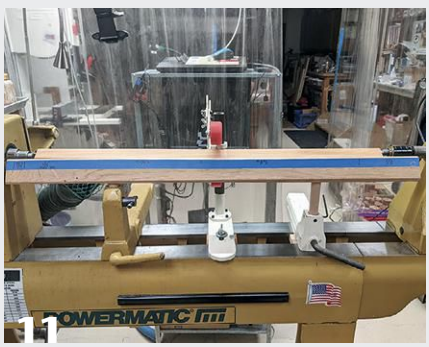
9

10

At left, a purchased point-and-cup drive. *At right*, the author's shopmade version made from wood and a short length of nail that registers in a hole in the end of the blank. Both act as safety drives that allow the wood to stop spinning in the event of a catch.

Tailstock live center tips. *At left*, the author's modified tip for mounting thin spindles; the standard 60-degree tip can split thin turning blanks.

Long toolrest



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The author's shopmade long toolrest, made from a hard, dense wood. A long toolrest, mounted in two banjos, makes duplicating long spindles more efficient and accurate. A strip of blue painter's tape with key locations and diameters marked on it acts as a kind of in-situ story stick.

Steady rests

Left photo, a purchased steady rest, and *right photo*, a shopmade version using rollerblade wheels. Both prevent "whip" when turning long thin spindles. Steady rests are a common tool for turning duplicates, which in a production shop are often stair spindles or similar.

Duplicate a stool leg

When making a duplicate from an existing spindle, such as this stool leg, gather up your layout tools to make a story stick.

are used to lay out vertical, or long, dimensions. A variety of calipers and other gauges are used to measure diameters. I use a small engineering square to mark key transition points on the story stick and a triangular file to cut notches for a pencil point to lay in, which improves accuracy.

I also use two types of center finders. If I am duplicating just a few spindles, a plastic center finder or a ruler marks the ends of the blanks by spanning from corner to corner. But if I have many pieces to turn, my shopmade center drill gauge is used to quickly locate the center for drilling a ⅛" hole to be used with a friction safety drive (*Photo 8*).

Drives

An old-fashioned cup center is my preferred drive center, as it allows the blank to stop spinning if I get a catch or cut too aggressively when roughing a square blank to round. If I'm turning several identical parts, I use a shopmade friction safety drive. It is made of wood and has a short metal pin made from a nail that fits into a centered, pre-drilled hole in the end of the blank (*Photo 9*).

Live rotating centers with interchangeable tips are preferred at the tailstock end. I modify the tips to be smaller in diameter for thin projects, as the standard 60-degree tip can split your turning blank (*Photo 10*).

Toolrests and steady rests

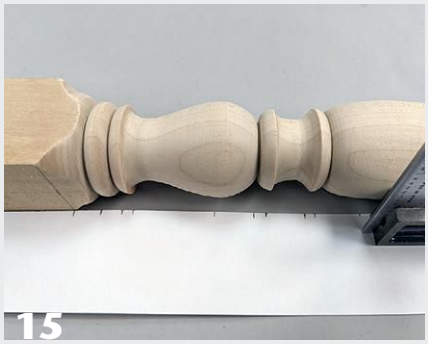
If you are turning long projects such as balusters, a long toolrest is very helpful. A long toolrest will require having a second banjo for your lathe and can be made from metal or a strong wood such as oak. *Photo 6* shows a long metal toolrest, and *Photo 11*, a wood toolrest. I've used wood toolrests several times when I had a short-run job of long spindles. The main advantage of having a second banjo and long toolrest is that you won't have to move the toolrest as often (or at all). Another advantage is that when using a steady rest, you won't have to remove everything from the lathe to move the banjo to the other side of the steady rest and then remount everything.

Depending on the projects you have made, one lathe accessory you may not own is a steady rest. Steadies are used when turning balusters, porch columns, or anything long and thin that could flex during turning. Recently, I had a job of turning 30" (76cm) balusters out of ¾" (19mm) square white oak. Needless to say, without a steady rest, it would have been like turning a jump rope! Steady rests can be purchased or homemade (*Photos 12, 13*). I've used two rollerblade wheels mounted on a post that mounts in a spare banjo. Some turners use a simple stick with a V-notch. *(Editor's Note: As an example, see Beth Ireland's article on page 22 in this issue.)* Remember, you are just using a steady rest to prevent whip and flex. It just has to capture the blank lightly.

Duplicate a stool leg

Let's look at duplicating a stool leg as an example. I find that a point-to-point approach helps when making duplicates because it breaks the project down into manageable steps. When you simplify the sections of a turning, repeatability gets easier, and the overall project becomes less daunting. If I were duplicating a stool leg with a square top section, I would follow this process: ▸

Make a story stick



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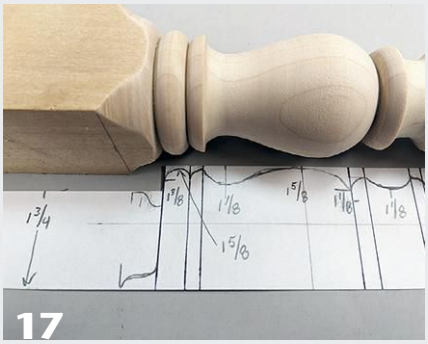

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Use a square to transfer key transition points from the existing spindle to the story stick. Extend those points as lines across the story stick.

Draw the beads, coves, and fillets onto the story stick, and note specific diameters.

Preparation

1. Select the material for a story stick, mill your stock to size, and grab your layout tools (*Photo 14*).

2. Using a square, locate and draw all the transitions on the story stick. (*Photos 15, 16*). Then mark the diameters of each detail on the story stick, sketching the design from one transition point to the next (*Photo 17*).

3. I use multiple calipers, each set to a different diameter. To make it easy to identify which caliper to use where, mark each one with a piece of tape (*Photo 18*). At this time, I usually draw the layout lines on the spindle blank where the elements transition from square to round (called a pommel). Now you have your blank, story stick template, and calipers all set, so you can start turning.

Point-to-point turning

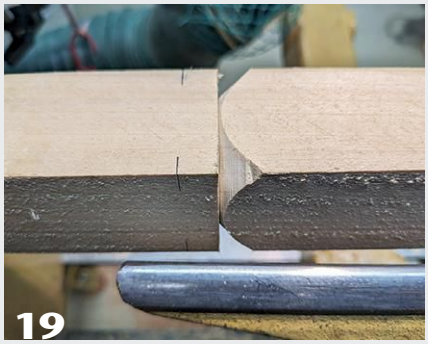
1. Using a skew chisel, work your way in from the waste side of the pommel (tailstock side) until you have completely cut around the blank (*Photo 19*). Then using a spindle roughing gouge, turn the blank round and size it to the maximum diameter needed. At this time, use your story stick and mark each of the transitions on the blank (*Photo 20*).

Ready to turn

18

With the story stick, or template, ready to go, the author sets calipers to the various diameters. Having more than one caliper at the ready improves efficiency when turning multiples.

Lay out the blank



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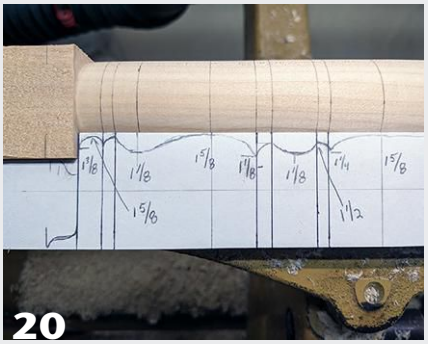

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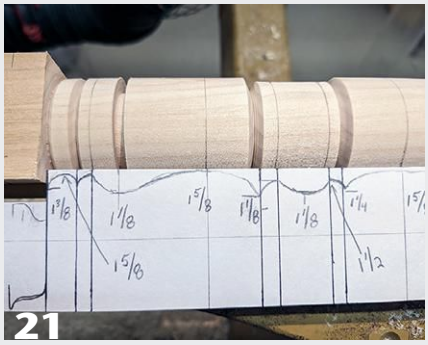
The author begins by establishing the pommel location, then rough-turns the leg to the largest diameter and lays out key locations from the story stick.

2. Using a parting tool and diameter gauge, establish all of the required diameters on the spindle. I use a skew to make V-cuts between beads and round details. Note that on this design, the top of the cove diameter is smaller than the maximum diameter. I have sized that section and redrawn the two transition lines (*Photos 21, 22*).

3. Now that the transitions have been marked and the different diameters and V-grooves turned, I now focus on rough-turning the details, going from one point to the next. By breaking down the project into little elements of straight, convex, and concave shapes, it becomes easy and much less daunting (*Photos 23, 24*).

4. Now that the stool leg's features are rough-turned, begin refining the curves and shapes. Holding the original up for comparison will show where to make minor adjustments (*Photo 25*). Because this is a stool leg, the last step is to turn a small chamfer at the bottom. This helps to prevent chipping when the stool is slid across the floor.

Establish diameters, V-grooves



21
Part down to key diameters, and form V-grooves at transition points.


22
A diameter gauge is used to quickly confirm the diameter at the bottom of the stool leg.

Summary

Remember there are only three shapes—straight, convex, and concave. It helps to recall these shapes as you lay out the various elements on a story stick. Mark the transitions and work from the largest diameter to the smallest, using the point-to-point method. You'll be amazed at how your work production increases as you become familiar with each step by repetition. ■

With more than 45 years' experience in custom woodturning, writing, demonstrating (Live and IRD), and teaching, Jim Echter specializes in production turning and makes products for spinners and fiber artists around the world. He is well known for his custom and architectural restoration work. Jim was the founding president of the Finger Lakes Woodturners Association, an AAW chapter. For more, visit www.tcturning.com.

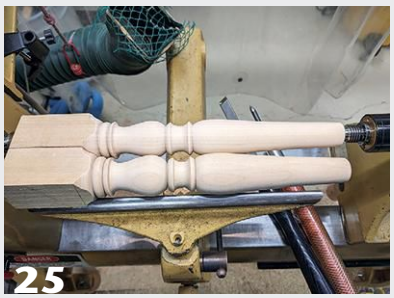
Point-to-point turning


23


24

The author roughs in the stool leg's design elements—a combination of beads, coves, and fillets. Turning one small section at a time leads to more accurate repeatability.

Compare to original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After turning the pommel (the transition from the square section to the turned elements), the author compares the new leg with the original to see where adjustments might be necessary.

Pro Tips for Turning Long and Thin

Beth Ireland

I started turning as part of my woodworking business in the mid 1980s. By the 1990s, turning had become a major part of my business. My first lathe was from Harbor Freight; it cost about the same as a good drill, but it allowed me to play around with turning without a major investment. My first turning job happened when a client asked me if I could reproduce twenty-five balusters. I said yes, knowing that the only way for me to learn was to jump in with a deadline. Needless to say, I ended up making sixty balusters to get twenty-five good ones, and there was no profit on that job. But the lessons learned and skill acquired propelled my turning career. Architectural turning is about developing strategic ways of approaching work and developing jigs that help in seeing those strategies through.

Wood

The first thing I look for when starting a job is the proper wood. It must be free of checks and knots and appropriate to the object you are making. This is especially true if you are making long thin spindles.

To turn something long and thin, the wood you choose must be at least a medium hardness with the straightest grain possible. Grain plays a big role in the stability of a piece as it turns. Angled grain in a long piece can cause a short-grain break; this can happen when the grain does not run continuously the entire length of your spindle. Look to see whether the grain has an angle that causes it to end anywhere along the length. This is sometimes called runout.

Not having straight grain can also contribute to the piece flexing when you apply pressure between the drive spur and live center. The pressure causes the piece to flex and, when turned, mimic a jump rope. Of course, it is not always possible to get perfect wood, and if you are turning many pieces, this is where the gadgets and skill come in.

The glove

When you have a spindle on your lathe that is running true at both ends but vibrating or jumping out of center in the middle, you need to come up with a strategy to control the piece. I always begin with "The Glove." I buy cheap leather gloves and cut the index and middle finger off at the top joint of one of them. The thumb and other fingers are cut at the middle joint. I use the index and middle finger to pull the workpiece to the tool when the wood flexes (*Photos 1, 2*). Leaving two fingers longer protects my hand as I touch the spinning wood, allowing me to "feel" the piece when necessary.

I know some people turn with gloves without cutting the fingers off, but I believe this is risky business. If the tip of the glove gets caught between the toolrest and spinning piece, it can pull your hand into your work. It's the equivalent of wearing loose dangling clothing.

I only wear the glove on my non-dominant hand. The glove allows me to anchor my thumb on the toolrest, put my hand over the top of the piece, and pull the work into my tool. My gloved hand acts as a human steady rest. Depending on the size of piece, I may sometimes come from underneath to pull the work into my tool to stop any whipping action caused by pressure or grain orientation.

Now the strategy comes into play. It is difficult to hold a square spinning object, even with a glove. So I turn a section of the spindle round, just to be able to hold it as it spins. I always do this at the ends, where the wood is not whipping and can usually

1

2

The glove

One method of controlling flex, or whip, in long thin spindles mounted between centers is to apply pressure with a gloved hand. The author cuts off the fingers of the glove to avoid getting the leather caught between the wood and toolrest (a dangerous scenario).

The hook—design

3

4

(*3*) To make a shopmade hook steady, first measure for the required length, noting the distance from the top of the mounted spindle to the space under the bed ways.

(*4*) The hook and wedge are laid out on 8/4 material, prior to being cut out.

be turned easily into a cylinder. I am right-handed and usually work my way from the headstock toward the tailstock, so the cylindrical section is held by my gloved hand. But I have found that each object I turn is different, requiring a different strategy. Some long pieces have required me to work from both ends toward the center.

The hook

My main lathe is 9' (2.7m) long, and at times I have rigged it to 13' (4m) long. In the 1990s, I had a job to turn an architectural detail 9' long and 2½" (6cm) in diameter. This job was really challenging. It was so long and thin that the jump rope action in the middle became very pronounced.

I tried using a store-bought steady rest to hold the work in the middle but found it not only did not work, but caused damage to the bed of my lathe. I pondered this problem for a week and came up with "The Hook." You can make one using scraps readily found in your shop. My store-bought steady required me to remove the tailstock and sometimes the banjo to get it into the necessary position. This is cumbersome and time-consuming. A shopmade hook steady can be positioned and repositioned easily.

I had already observed that I could round a long piece successfully by working slowly from headstock to tailstock with a glove. So I fabricated a hook-shaped piece of wood with a V-notch cut in it. With the help of a wedge, I could secure the hook right next to the toolrest and slowly move it as I turned my way down the spindle.

The hook is something I have used quite often through the years. If I am making a bigger piece, I make a bigger hook. It is totally adaptable and easy to use. When making a hook, approach the workpiece at the rounded section near the headstock. Measure from the top of the spindle to below the split in the lathe bed (*Photo 3*), adding an extra 6" (15cm) or so that will get trimmed later. Four of those inches remain above the workpiece, adding mass.

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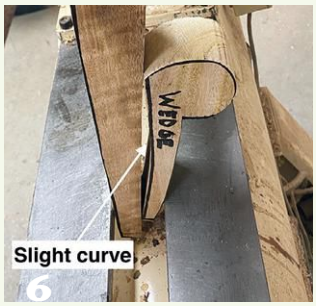

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The hook—setup

(*5*) A small area is turned on the spindle to accept the hook's V-notch.

(*6*) A wedge with a slight curve in it is tapped in to secure the hook in the gap between the bed ways.

I usually use a scrap of hardwood in 8/4 thickness, 3" to 4" (8cm to 10cm) wide. The actual width will depend on the piece you are turning. I am most often using the hook for balusters that are about 1½" (38mm) square and 30" to 40" (76cm to 102cm) long. My lathe measures 12" (30cm) from bed to center height, so a hook blank for a typical spindle might be 18" (46cm) long and 4" wide. The V-notch in the hook surrounds the spinning workpiece, and a tapered wedge between the bed ways holds the hook in place.

Start by making a V-notch 3" or so below the top of the scrap block, as shown in *Photo 4*. After cutting out the V-shape, drop the hook over the workpiece, which is mounted between centers, until the taper drops below the bed ways but does not touch bottom anywhere. Ensure the V-notch surrounds the turning. Trim the length of the hook until it hangs easily with a taper that allows about ½" (13mm) between the bottom of the hook and the slot of the bed ways (*Photo 5*). This space will be taken up by a wedge that presses the taper tight into the ways slot.

I have discovered that the wedge works better if it has a little curve in it, so it holds the taper of the hook at the top and bottom (*Photo 6*). The wedge's thinness allows it to flex a little, which helps hold the taper more solidly. The wedge also should feature a bump or handle on the back, so it is easy to pull out and tap down in the next position.

In use

With the spindle turning slowly, drop the hook onto the workpiece so it touches the spindle in the back and front. Then slide the wedge in and tap it down until you see that the piece is spinning true, without wobble or whip. If you tap it in too tightly, the hook can rub against the workpiece, causing friction, which causes heat and possibly a burn mark. I position the hook in unfinished areas of the spindle, so it won't matter if I get a burn mark. Also, a little beeswax goes a long way in reducing friction.

With the hook securely in place, increase the lathe speed and turn a section of the spindle (*Photo 7*). Slow the lathe speed while repositioning the hook for turning adjacent sections. ■

Beth Ireland, a professional architectural woodturner and sculptor with more than thirty years of experience, lives and works in St. Petersburg, Florida. She teaches the two-month Turning Intensive at The Center for Furniture Craftsmanship in Maine, as well as workshop classes at major craft centers around the country. For more, visit bethireland.net.

The hook—in use

7

The author turns a long baluster, using the shopmade hook to steady the flexible work. The hook can be slid along as the work progresses, which is much easier than repositioning some commercially available steady rests.

Turn a HOLLOW FORM

Pat Carroll

What is a hollow form? Some define it as a turned form with a closed rim; I view it as any vessel with a small opening. So for me, a bowl with an undercut rim is not a hollow form. Although hollow forms are predominantly artistic pieces, they are also useful as urns or storage containers. When I think of hollow forms, David Ellsworth is usually the first name that comes to mind. David's groundbreaking work in this genre of woodturning has created so many avenues for us to explore.

Key considerations

Hollow forms have been created in many shapes over the years. I like to aim for the rule of thirds on my forms. As we all know, rules are made to be broken, so I use the word *rule* loosely. I divide my forms into three sections and aim for the widest point to be approximately one-third from the top or bottom, depending on the desired shape (*Photo 1*). This is generally a good proportional guideline. The base size is usually dictated by the curve I aim to create, so for me there is no ratio I adhere to.

The level of difficulty in hollow forms as opposed to bowl turning is increased by the use of a small opening in the form. The smaller the opening, the more restricted the tool is on the interior. Plus, we cannot see what is actually happening inside the vessel with the naked eye.

SYMPOSIUM DEMONSTRATOR IN LOUISVILLE!

Pat Carroll will be a demonstrator at AAW's 2023 International Symposium in Louisville, Kentucky, where he will share his woodturning expertise. Don't miss this chance to learn from Pat, live and in person! For more, visit woodturner.org.

Wide forms with a small opening are even more difficult to access, and great care must be taken when using small-diameter bars on such forms. Smaller-diameter bars can vibrate when there is too much of an overhang over the toolrest. Vibration causes chatter on the piece, and thin-walled pieces can break easily with this vibration.

Timber selection

The hollow forms I have made over the last few years have been made for piercing and pyrography. So the wood I prefer is sycamore (*Acer pseudoplatanus*). Irish sycamore is generally featureless, but the grain structure lends itself well to piercing, carving, and pyrography. So, for hollow forms with a wall thickness 1⁄16" to 5⁄32" (1.5mm to 4mm), I want a wood I can depend on as much as possible.

I turn most of my hollow forms in endgrain orientation, which means the grain is running parallel to the bed ways and you are hollowing *into* the endgrain. But there is no reason you cannot use sidegrain if you prefer. In sidegrain orientation, the grain runs at ninety degrees to the bed ways. Be aware of the different techniques for cutting with each grain direction and the tools recommended for each. I predominantly use my bowl gouge to shape the outside of large hollow forms, but a large spindle-roughing gouge works, too. *Never use a spindle-roughing gouge on sidegrain forms.* Most spindle-roughing gouges are made with a small tang, which could snap with a catch.

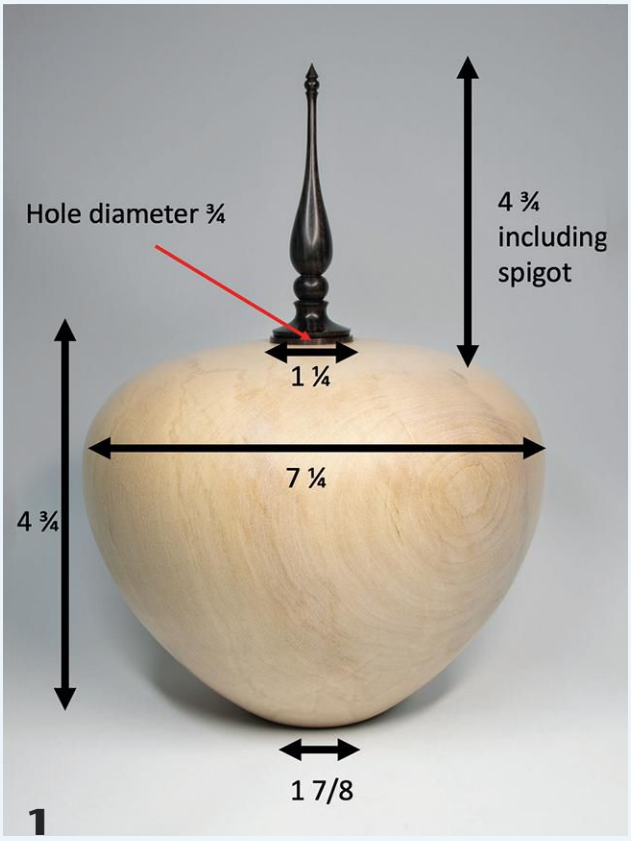
I inspect every piece as much as possible for defects and the presence of alien objects such as nails, spikes, or gate hangers, which the tree may have grown around. Iron objects hidden inside a tree for many years usually cause a discoloration that makes them easier to detect. Having a metal detector would be a great advantage, but as I don't have one, I use magnets if I suspect metal in the wood. I have come across bullets, which are made of lead. The lead turns away easily, but it's the hole left behind that may be the issue. In some cases, this can be an interesting part of the vessel, with possibly a great story to match its uniqueness.

A question often raised with all aspects of woodturning is whether to use seasoned or unseasoned timber. For hollow forms, you can use both. As with bowls, if you have a piece of wood with a very high moisture content, you can rough-turn it to a suitable wall thickness for drying. Or you can turn the piece to its final thickness, completing it in one session. Thin-walled pieces are usually artistic due to their fragility. Pieces that are twice-turned tend to be more durable for regular use because the wall thickness can be a little thicker.

Mounting and shaping

For this project, I initially mounted the work between centers to true it up and form a chucking tenon. I like to remount the piece in a chuck as soon as possible, as I feel it is always safer and more secure. The chuck I used for this project has straight serrated jaws. I know some turners prefer a faceplate, but I figure if I get a catch on a faceplate, it would be more difficult to realign the piece. Once the work is mounted in the chuck, I maintain tailstock support for as long as possible. Lathe steadies are a great addition to securing the workpiece when possible.

To form the outside shape of a hollow form, I prefer to use a bowl gouge. I first concentrate on truing up the piece after it is mounted in the chuck, so it is balanced and safer on the lathe. I start with the tool's flute oriented so as to engage bevel contact as much as possible and begin with a minimal cut. When I am confident of how the wood is responding, I open the flute more to increase the ▸



Pleasing proportions

General guidelines for pleasing proportions. The widest point should be situated approximately one-third from the top or bottom.

level of cut. I personally prefer a long handle, which I support against my hip, aiming for as much of a shear cut as possible.

Once the piece is balanced, I stop the lathe and inspect the wood for hidden defects or alien objects, as noted earlier. I then mark the piece into three sections, which provides a good visual from the outset. First, I turn a collar on the top (*Photo 2*). This collar is a vital part of thin-walled vessels. If there is chatter from a thinner tool or too much pressure on the rim, the collar adds stability. The majority of the collar will be removed later.

After shaping the hollow form's shoulder, I turn my focus to the lower section. To reduce vibration and maintain the integrity of the piece during hollowing, I keep some of the bulk of the wood intact at the base (*Photo 3*). Once the initial shape is established, I use the lower wing of the tool to refine the shape further. Constant refining can take place, as every little bit of wood that is removed can impact the shape of the form.

Drilling

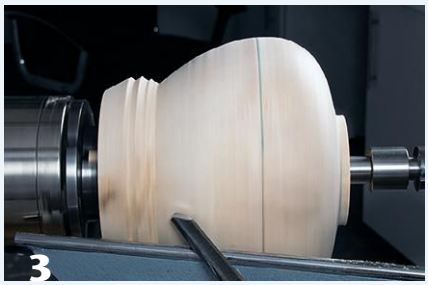
Drilling is an essential part of the hollowing process. It helps in a number of ways. For one, it establishes the exact depth of the form's interior. And the hole provides a useful starting point for hollowing.

Drilling straight is very important. If the bit wanders off center, it can cause vibration when the hollowing tool comes in contact with the wall of the hole. I often use a stepped drill bit, which has a morse taper for mounting directly in the tailstock (*Photo 4*). I create a V-shape on the surface of the vessel to help center the drill bit for drilling straight.

A piece of masking tape on the bit indicates the exact depth. Using a ¾" (19mm) bit, I drill in small increments of about 1" (25mm) at a time. My aim is for the base to be the same wall thickness as the walls of the vessel. The higher the moisture content, the thinner I aim for if I am turning the piece to its final thickness. But if I am roughing the form for drying and finish-turning later, I aim for a thicker wall; the extra wood allows the piece to be trued up after becoming distorted while drying.

I use a brush to clean the swarf off the bit (*Photo 5*). Care must be taken, as the drill bit can get very hot. For deeper forms, I use extensions for my Forstner bits. But before I use a bit extender, I drill as deep as I can without it. Once again, I do this to maintain straight drilling. Slow speeds help reduce friction heat when drilling. If you find there is a loud shrieking noise from the drill, try a little wax on the drill bit.

Shape the outside



After rough-turning the work between centers, the author remounts it in a chuck and maintains tailstock support. A bowl gouge is used to first shape the top and shoulder, then the base. In both areas, extra wood is left intact for added support during hollowing.

Drill depth hole

Drill a centered hole to the desired depth of hollowing, retracting the bit often to clear the chips. The author uses a brush to help keep the bit clean.

I recommend practicing with your hollowing tools on open forms first, before attempting to hollow a closed form with a small opening. This will give a good understanding of how the tools work.

Hollowing

There are so many hollowing tools on the market today, it can be confusing for those who are just learning to hollow. I recommend practicing with your hollowing tools on open forms such as bowls first, before attempting to hollow a closed form with a small opening. This will give a good understanding of how the tools work.

As with any turned object, the bulk or surplus wood is removed first and then the shape is refined. The inside of a hollow form is no different. Then the wall thickness is refined, gradually working from the top to the base of the piece. An important part of turning a hollow form is maintaining an even wall thickness. *See Gauging Wall Thickness sidebar.*

With the piece shown in this article, I started off with a straight bar hollowing tool to remove the bulk as far as possible into the vessel, being sure to leave a structurally sound wall thickness (*Photos 6, 7*). To reach the shoulder of the vessel, I used swan neck tools (*Photo 8*). The size of the opening dictates the diameter of the tool used. To access under the shoulder of the vessel, I used a smaller tool to gain the required access.

Caution should be taken the deeper the tool goes inside the vessel; I am very conscious of taking lighter cuts the deeper I go. I also position the cutting tip in a "trailing" position, which means I am cutting just below center; if the tool catches, it has a better chance of going into negative space without ruining the vessel. It is also important to cut in a way that favors grain direction. I often use a pencil and utility knife as an example. Think of a pencil as the fibers in the wood and the utility knife as the cutting edge of your tool. You would not sharpen the pencil from the tip down. You would work *towards* the tip so you wouldn't be cutting into endgrain. In a hollow form, this often means cutting from larger to smaller diameter.

After I hollowed the vessel to its final shape, I completed the exterior. I used a ½" (13mm) spindle gouge to refine the lower part of the vessel. The long bevel of the 30-degree grind provides good support, so I ▸

Gauging Wall Thickness

It is important to maintain an even wall thickness when hollowing. This is done predominantly with a caliper (*Photo a*), testing the thickness as you go. There are also laser guidance devices and camera systems available. Many calipers cannot reach under the shoulder of a form or deep inside a vessel. For these areas, I use a device called SpeXor, which accurately measures wall thickness using a ball bearing and a magnet held in a probe (*Photo b*). It will measure up to ¾" before losing magnetic contact.

Learn more about calipers and the SpeXor product in my YouTube video at tiny.cc/SpeXor (the URL is case sensitive). You can also learn more at the SpeXor website, spexor.it/en. I also sell this product through my website, patcarrollwoodturning.com.


a


b

Hollow the form


6


7


8

First a straight hollowing bar is used, then a swan-neck tool to reach the areas directly under the top. Take lighter passes the deeper you go into the vessel.

could follow the shape of the form nicely (*Photo 9*). The extra wood at the collar was valuable during hollowing, but once I completed the shaping and hollowing, I turned it away and refined the shape of the top (*Photos 10, 11*).

Sanding

With full respiratory protection and dust extraction in place, I power sanded the vessel (*Photo 12*). Keep the lathe speed low when sanding, as this helps avoid heat cracks and allows the abrasive to cut rather than burnish. Using a 3" (8cm) sanding arbor, I started sanding with a 120-grit disk. I use a soft brush to clean off the dust between each grit. I proceeded with the sanding through the grits, up to 600.

Turning the base

To complete the base of the hollow form, I used a scrap piece of wood as a jam chuck (*Photo 13*). I created a center spigot, or tenon, to fit into the hollow form's opening and formed a concave area to support the top. I applied tailstock pressure to support the piece, creating a friction drive. Using a small spindle gouge, I took several light cuts to refine the shape of the base (*Photo 14*). The remaining center stub was cut away and the bottom sanded with the piece off the lathe.

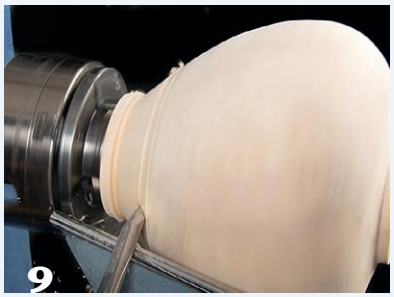
Turning an insert

When the form was completed, I turned my attention to an insert, or collar, that would fit into the opening of the form. Turning an insert is not necessary, but it is something I have always done with my hollow forms. I find the look aesthetically pleasing, as a collar serves as a transition from the body of the hollow form to the finial. For this project, I chose ebony for the insert.

With the wood secured in a chuck, I used a Forstner bit to drill a hole to later accept a spigot on the finial (*Photo 15*). If you use ebony, drill at a slow speed, as ebony is known for splitting with excess heat.

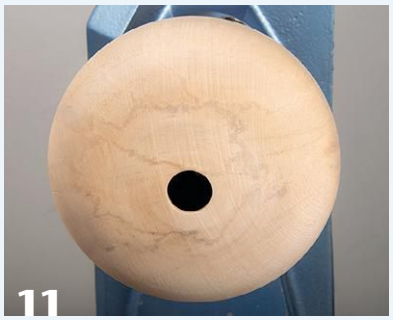
Once the hole was drilled, I focused on the part of the insert that would fit into the hole of the vessel. I used a caliper to measure the opening and transferred that measurement to the ebony (*Photo 16*). I used a parting tool to sneak up on the correct diameter, taking light passes and testing frequently with the caliper. I then sized and shaped the top of the collar. The hollow form's top hole was drilled with a ¾" drill bit, so the

Refine base shape



After the hollowing is complete, the author refines the shape of the base using a spindle gouge.

Refine top



The author uses a spindle gouge to remove the excess wood at the top, which was left temporarily for support during hollowing.

Sand the form

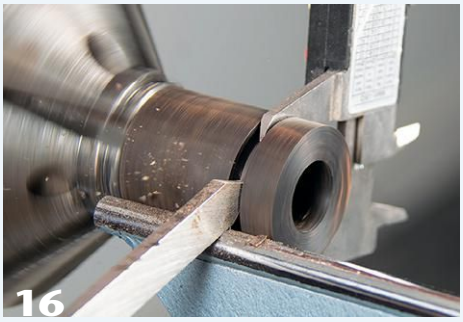
Power-sand the form using sanding disks. The author starts with 120-grit abrasive and proceeds up to 600.

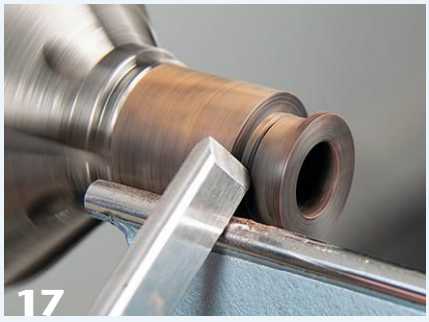
Reverse mount, complete bottom

To turn the base, reverse-mount the work, driving it with a jam chuck made from scrap wood. A center spigot aligns the hollow form, and tailstock pressure holds it in place.

Turn a collar insert


15
While not absolutely necessary, the author chooses to include a collar insert, which acts as a transition between the hollow form and the finial. First, a hole is drilled with a Forstner bit.


16
The insert portion is carefully sized to fit in the hole at the top of the hollow form.


17
The author parts off the collar using a skew chisel.

lip of the collar needed to be only 1/16" (1.5mm) wider than that. Once the sizes were established, I sanded the insert and applied a wax finish. I then used a skew chisel to part the collar off (*Photo 17*). A light sanding refined the underside of the insert.

Turning a finial

I found I did not have a piece of ebony large enough to make the finial for this hollow form in one piece, so I made it in two sections. I could have used a wood like sycamore and dyed it, but I wanted the finial to be the same as the collar insert.

When I turn pieces with small detail, I wear jeweler's magnifying glasses so I can see the details better. To start, I turned the top portion of the finial. I used a spindle-roughing gouge to true up the ebony blank. An important part of turning a finial is to inspect the point, or tip, as this can sometimes be chipped. Once I was sure it was intact, I proceeded with the turning.

I formed a spigot on the base of the top segment of the finial, sized to fit into a hole drilled in the bottom section. I then sanded the top section up to 2500 grit. Sanding ebony with very fine grits is beneficial to its finish. As with the collar, I applied wax as a finish on the finial (*Photo 18*).

The base of the finial was made from a larger-diameter piece of ebony. With the work secured in a chuck, I drilled a hole to accept the tenon I had formed in the top part of the finial. I then shaped the finial and formed the bottom spigot, sized to fit into the collar at the top of the form. The base of the finial was then sanded and waxed in the same way as the upper portion (*Photo 19*).

Finally, I glued the two finial sections together before gluing the whole finial into the collar. ■

Turn a finial


18

19
A finial in two sections. First, the top section is turned, sanded, and waxed, leaving a tenon at the bottom. The bottom section features a hole to accept the top of the finial and a tenon sized to fit in the collar insert.

After working as a builder/carpenter, Pat Carroll learned woodturning in 2001, when he took a class with Willie Stedmond, one of the founding members of the Irish Woodturners Guild. Pat has since published several articles in Woodturning *magazine and offers interactive remote demonstrations (IRDs) with the help of his daughter Chloe and friend Helen Bailey. They also run the online "Meet the Woodturner" program, where they interview woodturners from all over the world. For more, visit patcarrollwoodturning.com.*

MORE HOLLOWING RESOURCES

EXPLORE! The AAW's online archive includes several articles covering various aspects of hollowing. Log on at woodturner.org and use the Explore! search tool to find these and other articles:

- "Turned and Carved Hollow Vessel," by John Jordan, *AW* Spring 2009 (vol 24, no 1, page 52)
- "Hollowing a Simple Form," by Walt Wager, *Woodturning FUNdamentals* November 2018 (vol 7, no 4, page 18)
- "Insights on Very Deep Hollowing," by Lyndal Anthony, *AW* June 2018 (vol 33, no 3, page 42)
- "Low-Cost Hollowing for the Novice," by Jim Rinde and Bryan Rinde, *AW* October 2014 (vol 29, no 5, page 28)
- "Shopmade Hollowing Tools," by Lyle Jamieson, *AW* October 2014 (vol 29, no 5, page 35)

A Gallery of HOLLOW FORMS

John Jordan (1950-2023), Tennessee

Cherry Jar, 2017, Cherry, fossil ivory, 12" × 9" (30cm × 23cm)

Rosewood Vessel, 2018, Florida rosewood, 11" × 13" (28cm × 33cm)

Editor's Note: Shortly before the publication of this issue, we learned of the sad news that John Jordan died February 28, 2023, following an extended illness. John was an integral part of the AAW from the beginning and will be sorely missed. Please look to the AAW's In Memoriam webpage (tiny.cc/AAWInMemoriam) for a short tribute and to the next issue of *American Woodturner* for a more extensive commemoration.

David Ellsworth, North Carolina

Redwood Lace Burl, 1986, Redwood burl, 10" × 8" (25cm × 20cm)

Black Pot, 1996, Ash (burned and burnished), 15" × 12" (38cm × 30cm)

Ash Pot, 1984, Ash, 5" × 9" (13cm × 23cm)

Kevin Jesequel, Oregon

Untitled, 2022, Silver maple, two-part bleach, fixative, 8¼" × 5½" (21cm × 14cm)

Portland Heritage Tree No. 182, 2022, American chestnut, 7" × 8" (18cm × 20cm)

Lyle Jamieson, Michigan

Cherry Burl Sphere, 1995, Cherry burl, walnut, 7" (18cm) diameter

Cherry Burl Hollow Form with Voids, 2008, Cherry burl, 9" × 10" (23cm × 25cm)

Pat Carroll, Ireland

New Lease on Life, 2017-2021, Sycamore, beech, Chroma Craft Rustina™ metallic paint, 14" (36cm) tall

Diminish (Erosion Series), 2021, Elm, pyrography, Chroma Craft Rustina™ metallic paint, 11" × 9" (28cm × 23cm)

Marco Bellini, Italy

Acer Negundo #1, 2020, Boxelder maple, two-part bleach, charring, 12½" × 11½" (32cm × 29cm)

Photo: Weronika Makowska

Hugh Mackay, Australia

Untitled, 2022, Camphor laurel, 5" × 5" (13cm × 13cm)

Dave Landers, Colorado

Sliced Hollow Form, 2022, Ash, wenge, 4" × 7½" (10cm × 19cm)

Derrick A. Te Paske, Massachusetts

Desperate Measures 6, 2022, Black walnut, hardware, 27" × 8" × 10" (69cm × 20cm × 25cm)

Clifton Chisum, Virginia

Black and White, 2007, Black walnut, oak, each: 3" × 3⅝" (8cm × 9cm)

The vessels comprising *Black and White* were hollowed through the bottom. Then the spouts were turned "off axis" and the surrounding areas sandblasted.

The History of a Mid-19th-Century Hat Form: A Multiaxis Mystery

Ted Maust and Mark Sfirri

(*Left, middle*) Original 1840s hat form turned by Harman Baugh of Philadelphia using multiaxis techniques (side and front views).

Photos: Mark Sfirri

(*Right*) *Poke Bonnet*, 1830-40, silk

This 1830s bonnet serves as an example of what would have been made on forms similar to the one discussed in this article.

The Metropolitan Museum of Art, Gift of Mrs. Bernard H. Cone, 1937

This article is divided into two parts. First, Ted Maust discusses the history of Elfreth's Alley, a national historic landmark in Philadelphia's Old City neighborhood, and one of its residents, Harman Baugh, who made the hat mold discussed herein. Then, Mark Sfirri offers a seasoned woodturner's perspective on how the hat mold was made. It's a somewhat rare historical example of multiaxis turning.

Part I—Elfreth's Alley
Ted Maust

Today, Elfreth's Alley is a beautiful residential street popular with tourists and photographers. In the 18th and 19th centuries, it was home to artisans and laborers alike, as the slightly smaller lots (compared to nearby streets) provided affordable living and workspaces. While some of the artisans who lived and worked on the street left behind detailed records in the form of account books, many left only fleeting traces. I was delighted when a friend of the Elfreth's Alley Museum offered us a more tangible piece of the street's artisan history: a wooden bonnet form. Stamped on the bottom of the form was the name and address of the maker, "H. Baugh, Elfreth's Alley, Philad," leaving no question about the provenance of the piece. Researching this item, I have learned more about the working life of one of the 19th-century residents of the street, as well as bonnet-making technology of the era. ▸

Elfreth's Alley

(*Left*) Elfreth's Alley is a National Historic Landmark and has been a residential street since the early 18th century.

(*Right*) Close-up of the hat form's bottom with the stamped signature: "H. Baugh, Elfreth's Alley, Philad."

Photo: Mark Sfirri

The name was already familiar to me; Harman Baugh bought two lots along Elfreth's Alley in 1836 and lived on the street until shortly before his death in 1876. During that time, newspaper clippings show he was an active member of the Masons and ran for public office several times, coming within 150 votes of state office. From city directories and United States Census records, I knew Baugh was a turner but had little record of his work.

Around the time I first saw this bonnet form, I found an 1843 newspaper advertisement running in the *Louisville Journal*:

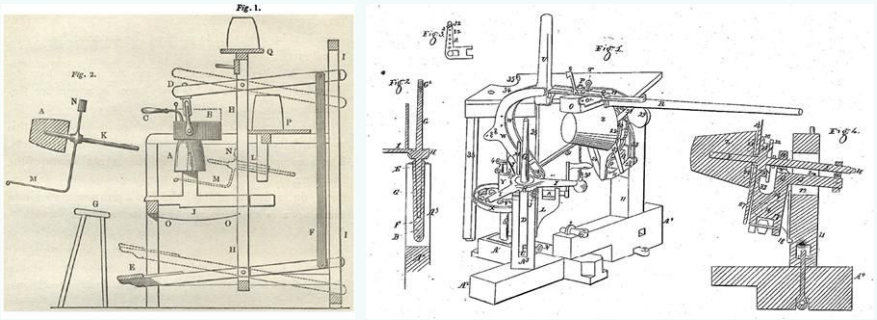
> TO MILLINERS
> The subscriber has now on hand and for sale at his old establishment, No. 10 Elfreth's Alley, running from Second to Front, and between Arch and Race streets, Philadelphia, a supply of newly-invented pressing machines, for pressing Ladies' Bonnets, which he offers for sale at reasonable prices, and which surpass anything of the kind ever to be offered to the public, for utility and convenience; he, therefore, respectfully solicits the patronage of those persons who may want such an article; and he flatters himself that after they have given his machines a fair trial, they will pronounce them far superior to any other. N.B. Hat and Bonnet Blocks, made to order, and carefully and promptly sent to any part of the country. Harman Baugh[1]

This ad helped me roughly date the bonnet form by showing that Baugh was making and selling bonnet blocks by 1843, but I was also left with more questions: how exactly did milliners make bonnets on these blocks and what did a "pressing machine" look like? I knew that similar molds were used to stretch and shape felt into hats with the use of steam, but I wasn't sure if that same method was applicable with this form and with other bonnet materials such as woven straw.

I began looking for more information about this "newly-invented" machine and found that in fact there were at least two bonnet-pressing machines invented in 1842, a year before Baugh's ad.

In March, the transactions of the Society, Instituted at London, for the Encouragement of Arts, Manufactures, and Commerce record that a prize was issued to a Vincent Price who had recently invented a machine for blocking straw bonnets. The contraption can be thought of as a workstation, where a blocker would apply heat to a straw blank onto a wooden block. Price himself was motivated to create this mechanism because he lived with a disability that made it

Early hat-pressing machines



Nineteenth-century hat-pressing machines, by Vincent Price (left) and Richard Murdoch (right).

[1]Baugh, Harman, "To Milliners," *Louisville Journal*, Louisville, Kentucky, 16 March, 1843, page 3.

difficult to stand for long periods of time.[2]

In October 1842, a United States patent was issued to Richard Murdoch of Baltimore, Maryland. Both designs feature an essentially rectangular iron hanging from a boom that can be shifted up or down. Price's design allows the bonnet blocker to manipulate the height of this hot tool with a foot pedal, while Murdoch's uses a long wooden handle.

That iron is applied to the exterior of the bonnet material where it sits on a bonnet form. Both designs mount these forms at roughly a 90-degree angle, slid onto dowels. The blocker then uses one hand (or in Price's case, foot) to control the height of the hot iron, while using the other to rotate the bonnet form so that the entire circumference comes into contact with the iron. The physical exertion of this act is mitigated by the use of counterweights.

An additional patent was granted in 1844 to another Baltimore resident, Caleb Merritt, who refined Murdoch's design by adding gears that allowed the blocker to rotate the bonnet form at a variety of angles.

All of the illustrations of these contraptions in patent records feature essentially conical bonnet forms, but they must have been able to accommodate more complex shapes such as the Baugh form. The shifting spur marks suggest that the process of creating this bonnet form was iterative, a collaboration between Baugh and a bonnet maker as they worked to create a fashionable bonnet shape in wood, primarily with a lathe.

My research shows that during Baugh's tenure living in Elfreth's Alley, there were at least five hat makers, or milliners, who also called this street home, and many more in the surrounding blocks and the greater city with whom he may have collaborated. This could have been a one-of-a-kind form, or the first of many, if Baugh received orders for them. Ultimately, we don't know how many bonnet forms Baugh created.

While the bonnet form today appears to many visitors to the Elfreth's Alley Museum to be a dirty, roughly-finished block of wood, Mark Sfirri's experimentations have shown that in fact it is a finely engineered tool.

While Baugh's advertisement does not include a price, we can look at other turners' account books to get a sense of the going rate for such work. For instance, if we look at the account book (dated 1835 to 1843) of Daniel Danner, a turner working in Lancaster County, we see that he produced spinning wheels, tool shafts, and other products. Danner's accounts also contain records of his work for hatters. Indeed, there is even a record of Danner producing a couple of bonnet blocks. He charged thirty-seven cents for one bonnet block, and one dollar for a bonnet block "with screws." For various repairs of hat blocks and bonnet blocks, he typically charged between eight and thirteen cents.[3] Prices for these services would have varied geographically, but Danner's account books give us a rough sense of what Harman Baugh might have charged for producing a bonnet block.

While the bonnet form today appears to many visitors to the Elfreth's Alley Museum to be a dirty, roughly finished block of wood, Mark Sfirri's experimentations have shown that in fact it is a finely engineered tool. It is an artifact that offers an entry point into considering a wide variety of historic topics—not only woodturning but the changing fashions of the 19th century, and the trade networks facilitated by newspapers of the time. Harman Baugh himself gives us a central character who not only was engaged in the working life of an artisan, but also threw himself into the Masonic order and into the political arena. As such, I think this is a fascinating object.

Following my research, I worked with American Hats, LLC, of Philadelphia to make a bonnet using this historic block. See process photo at left. ▶

Modern-day milliner

In 2022, milliner Sydney Strickler of American Hats, LLC, makes a felt bonnet using Harman Baugh's 1840s-era multiaxis-turned hat form.

[2]Price, Vincent. "NO. III. Machine for Blocking Straw-Bonnets." *Transactions of the Society, Instituted at London, for the Encouragement of Arts, Manufactures, and Commerce* 54 (1843): 55–58.

[3]Thanks to Valerie Seiber and Jake S. Dunnigan at The Hershey Story Museum for their research assistance, and to historian James McMahon, Jr. for his work on Danner in the Autumn 1993 issue of *Pennsylvania Folklife* magazine.

Part II—A Multiaxis Mystery

Mark Sfirri

When Ted Maust and I began corresponding, he was interested to know how the hat mold was made. My first thought was that it was a spindle turning on a single axis and that the turning was then hand carved to create the asymmetry from the side view. But when I visited Ted and got to see the mold in person, that theory went out the window. Seeing the marks of the large 2¼" (6cm) two-pronged spur center in five different positions on the bottom was a big clue; another was that the top portion was 5" (13cm) tall in the back and only 4¼" (11cm) in the front. Had it been turned on a single axis, those dimensions would have been the same, which is to say that the outside corner of the top of the hat would have been parallel to the inside corner below it.

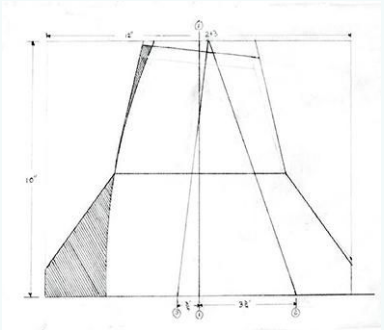
The mold was made of a close-grained hardwood, likely poplar or maple. The maker needed to glue up stock to make a block 12" (30cm) square and about 10" (25cm) long.

I was so intrigued with this object and how it was made, I decided to make a scale model of it to see if my understanding of it was correct. This was followed by a full-sized reproduction of it. I did not have the original mold as a reference when I was turning, but I did have photographs and had taken careful measurements. I also made a drawing of the bonnet mold to get the centers laid out and to draw the arcs of the turning. You can see the process photographs of it.

On the bottom of the mold, there is a ½" (13mm) hole, probably to fit on a stand, that corresponds with the center of the initial turning. The overall dimensions of the initial turning were 12" in diameter and 9" (23cm) in height. The other spur center marks are all in a line, which means that whichever of them were used would result in a finished piece that was bilaterally symmetrical from the front or back view.

There are three marks, potential centers, in a line in front of that first enlarged center. I could envision Baugh's thought process determining which center worked best for the design of the hat. By using a compass, I was able to figure out which of these was actually used to turn the back of the mold (the one furthest from the center). Likely, the one closest to the hole, about 1" (25mm) from it, was the first to be tested. It wasn't actually turned on that center but hand rotated while

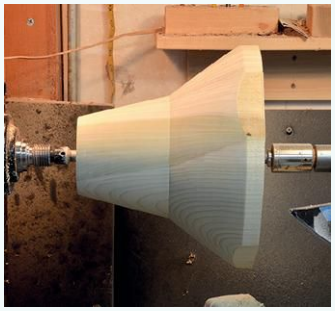
Multiple turning centers

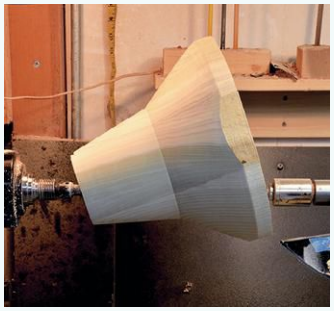


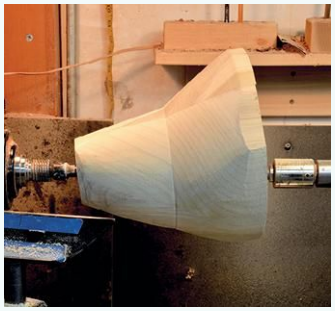
In studying the original form, the author determined that although a number of turning centers were evident on the bottom, only three were ultimately used to make the hat form. A subsequent drawing is made in preparation for turning a reproduction on multiple axes.

Photos: Mark Sfirri

Turning a hat form







The author turns a reproduction of the hat form using poplar on three sets of centers.

Photos: Mark Sfirri

Detail of top of hat form showing curved line in the back of the hat. The front and sides are straight lines.

Photo: Mark Sfirri

positioned on it to see what arc it would make; perhaps the turner used a pencil to scribe the arc. If that one were used, the curve would have extended the secondary form almost all the way around to the front and would not have achieved the desired effect. The curve was too similar to the radius of the initial turning. Baugh then probably tried the next center, about 1" farther away. This was better but still not the proper shape. The fourth mark, the second center that *was* used, is 3⅜" (9cm) away from the first center.

The turning of the mold on these two sets of centers created an unwanted outside corner edge that required hand-shaping to blend the form from the back to the front. The shaping detail needed to be done on both sides of the hat in the back. Interestingly, one side has a shaped transition that is smoother than the other. Likely, the maker took time with the first one to get it right and rushed the second one because it was taking too long. I now understood the lower portion of the hat.

One thing continued to perplex me as I made my first, small-scale model: the top portion has a straight symmetrical tapered cone shape on either side and in the front, but not the back. The side view of the back is a continual curve that runs from the bottom to the top. It became clear that that portion of the top was turned on both sets of centers. What's odd is that the very top of the hat mold is perfectly round, 4" (10cm) in diameter. I realized that I needed to turn it to about 4½" (11cm) on the first set of centers. After I turned the curve on the second set of centers, the top was no longer a circle. Since there is only one center toward the back of the hat at the bottom, it was clear that it was the center used to make the top of the mold tilt forward and was used for the top of the hat only. I also kicked the top center forward about ⅜" (9.5mm) to center the circle at the top a little better. After turning it, I needed to draw the 4" circle at the top and then hand-shape it entirely, in order to make it perfectly round and to re-establish the straightness of the form on the front and sides.

I decided to make a full-sized version out of poplar. After it was completed, I took it to the Elfreth's Alley Museum and Ted Maust and I compared it with the original. The original weighed 8.2 lbs.; mine weighed 8.4 lbs. I chalk up the added weight to moisture content and the copy's absence of a hole in the bottom. Looking at a chart of weights per board foot of different possible woods, there just aren't any that are close to poplar, at 2.58 lbs. per board foot, that can be considered real possibilities. I'm convinced that the original was made of poplar.

Baugh likely used a large lathe that had the capacity to turn architectural columns. I base this assertion on the enormous size of the spur center and the fact that the necessary swing was 16½" (42cm) above the banjo for the toolrest for the first part of the turning, and 18½" (47cm) for the main offset center. While a 20" (51cm) swing on a lathe is more common nowadays, I doubt that it was back then. Even as recently as the 1970s, a 12" swing was more or less the standard for a commercial lathe.

When I began exploring multiaxis turning in the mid-1970s, I thought that it was a new thing. It wasn't, although I have not seen a lot of examples in wood. Legs for a cane-back chair, jigged to allow the tops and bottoms to be angled to one another, date to the 1660s. The pad foot leg, which appeared in 1700 in North America and in England, was basically a poor person's ball-and-claw foot. It's an example of turning part of the form on two sets of centers, and it's an amazing design. What surprises me is why whoever designed and engineered it didn't expand on that idea to create other forms. Fast forward to 1840, Baugh's use of multiaxis turning was a subtle, effective, and apparently innovative achievement. While I was working on the models, I felt that I was channeling the mind of a turner from 175 years ago. ■

Ted Maust is the former Director of the Elfreth's Alley Museum in Philadelphia.

Mark Sfirri has been experimenting with multiaxis turning for nearly fifty years. He maintains a wood studio near New Hope, Pennsylvania.

Original vs. reproduction

Comparison of the original and Sfirri's full-sized reproduction. Note the consistent negative space between the objects.

Photos: Mark Sfirri

Bayt al-Suhaymi, an Islamic heritage site in Cairo, Egypt, features the common architectural element of mashrabiya. Bayt al-Suhaymi is one of the best preserved Ottoman-era (1517–1867 CE) structures in Cairo, having endured a devastating earthquake in 1992 and extensive restoration in 2000.

Photos: Jennifer-Navva Milliken

THE EVOLVING CULTURE OF CRAFT BEHIND CAIRO'S MASHRABIYA

Jennifer-Navva Milliken

The Mashrabiya Project

Museum for Art in Wood

The Museum for Art in Wood's Mashrabiya Project comprises a variety of elements: a communal making effort; an exhibition of commissioned art responding to the societal and cultural concepts evoked by the mashrabiya; an immersive augmented-reality "gallery," transporting viewers into the restored historic interiors of Bayt al-Suhaymi and other Islamic heritage sites; a gallery-sited līwān for hospitality and discussion; and a publication examining mashrabiya in word and image.

An onsite woodturning workshop will offer visitors the opportunity to try spindle turning under expert guidance. If you are interested in participating, please email the Museum for Art in Wood at info@museumforartinwood.org (include "mashrabiya workshop" in the subject line). For more, visit museumforartinwood.org.

A defining cultural element

A mashrabiya is, simply put, a scalable lattice-screen that can be affixed to windows or installed in interiors. It simultaneously offers protection and ventilation, as well as privacy from public view. It is an ancient device that forms the original premise for modern-day air conditioning: jars of drinking water, placed in deep windowsills, facilitated the passive, evaporative cooling of air brought by breezes entering the interior space. The etymology of the word *mashrabiya*

At the NADIM workshop in Cairo, a woodturner creates small spindles that will comprise large, complex mashrabiya.

Photos: Jennifer-Navva Milliken

attests to the multi-functionality of the object: *sharaba* in Arabic means "to drink," while *sharafa* means "to see." Whether the original word is *mashrabiya* or *mashrafiya* remains unclear; what we do know is that this woodturned form evolved over time to serve a number of purposes, including providing shade from the sun and serving as a decorative element to otherwise austere building facades.

Mashrabiya became a framework for artisanal and decorative skill as Islam spread throughout West and Southwest Asia, across North Africa and South Asia. The artful geometry and elaborate perforated designs became a defining element of Islamic visual culture and ornament, due in part to the prohibition of representational imagery in some traditions of the religion. As the typology and design spread, it took the form of local building vernacular—from carved or turned wood to carved stone. And its function expanded as well, from an architectural element providing a barrier between exterior and interior to boundaries within interior spaces that were divided into public and private, often meaning that the domestic life of the household occurred behind the screen.

The mashrabiya of North Africa are fabricated from turned wood, which can expand and contract in response to the region's intense climate. They are found in residential and sacred spaces alike. Comprising thousands of simple, small lathe-turned spindles, they are assembled into patterns without glue or fasteners to create large, scalable elements and furnishings that are complex and ornate in design. They are commonly made from imported woods such as zan (beech, typically from eastern Europe), pine, walnut, or even ebony.

The state of woodwork in Cairo

Mashrabiya are found throughout the Islamic world (from Morocco to Indonesia and beyond), bear many names (among them *shanashil*, *rushan*, and *jali*), and are made from various materials (including stone, cement, and carved wood). Yet the focus of the Museum for Art in Wood's Mashrabiya Project is the woodturned latticework of Cairo, Egypt. It is believed that woodturning developed in Cairo over 3,000 years ago, so the fact that the craft is still practiced in this bustling metropolis today is a wonder and source of investigation into craft enterprise across generations.

During my visits to Cairo, I was privileged to meet the *Osta* ("master") proprietors of two workshops—those of *Osta* carpenter Khaled Abdel Hamid and *Osta* woodturner Mamdouh Abdelaziz Salem. I was also able to tour the legendary NADIM furniture company (see nadim.org). Our project coordinator, a Cairo-based historian named Ahmed Abdelazim, also visited *Osta* Mostafa Hassan 'Ali, whose arabesque workshop has supplied some of Egypt's most venerable sites with his fine woodworking. (This workshop also collaborated with artist Susan Hefuna to help construct her work for the MAW's mashrabiya exhibition, *Seeing Through Space*). ▸

Like all Egyptian woodturners, Mostafa, Khaled, and Mamdouh learned woodworking from their fathers and uncles. They began at a very young age—some as young as 12 years old. The first years of apprenticeship involve the performance of menial tasks and are meant to familiarize the neophyte with the rhythms of the work, as well as its dangers, its demands, and the discipline required not only to master a skill, but to run a competitive business. This process of education is grueling and punishing but represents a succession plan that has supported the sustenance of the craft in a family over many, many generations.

Mostafa himself inherited the business from his father. He possesses documentation attesting to the quality of work his father, grandfather, and ancestors performed for Egyptian elites. He himself worked closely with Hassan Fathy, the legendary twentieth-century architect who endeavored to integrate the Egyptian vernacular with Modernism. It was common for writers in Egyptian culture to document in literary styles the craftsmanship commissioned and witnessed at festivals or in built structures—their words, which were treasured by craftsmen who were often illiterate, live on for historians to study. Meanwhile, Mostafa's success means the end of his workshop; he has sent each of his sons to university and they have pursued careers in academia, a source of pride for him. There is no one to take over his workshop, so it will close when he retires.

Even as this heritage skill disappears due to generational attrition, there is a growing movement among professional youth in the cities. Cairo's Workshop (cairosworkshop.com) is one of many small schools in the city that offers courses in furniture making, joinery, carving, and design, with skills offered in the workshop's popular "Zero to Hero" classes. Its strong social-media presence and outreach in fluent English demonstrate its commitment to urbanites (as well as to Cairo's international community), making it similar to the maker-space movement in the Western world.

Woodturning proprietor Mostafa Hassan 'Ali in his arabesque workshop, Cairo.

Photo: Ahmed Abdelazim

The NADIM workshop, a family enterprise established by a historian, not only fulfills large-scale commissions such as architectural restorations, but also runs a furniture division that produces high-quality handmade furniture in traditional styles. It trains and employs many craftsmen from the region, while its recently established foundation is actively building a library of materials and documentation that will soon be available to the wider, international public.

Non-governmental organizations (NGOs) in Upper Egypt are working to educate village youth in craft practices that could result in sustainable businesses in the near future. Even as ornamental traditions, including mashrabiya, are increasingly viewed as elitist and anachronistic and disappear from the public space, new forms of local craft, partnered with a national interest in new ways of living with beautiful objects that resonate with tradition, are emerging. Whether through weekend woodworking, committing to a trade, or following a family tradition, community through craft is alive in Cairo. ■

Jennifer-Navva Milliken is the executive director and chief curator at the Museum for Art in Wood (formerly the Center for Art in Wood).

Museum for Art in Wood

TRADITION IN TRANSITION:
International Turning Exchange Undergoes Changes

D Wood

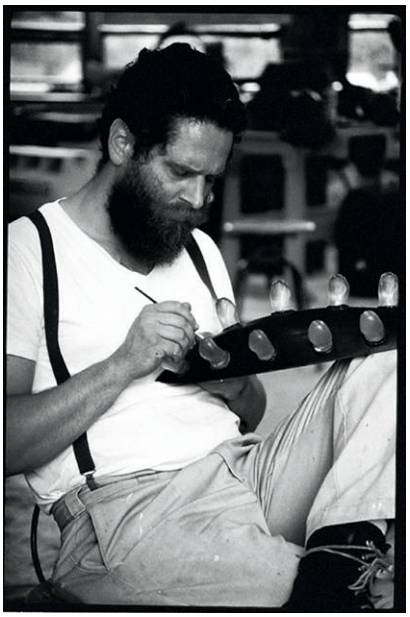
In 1993, international participants at the World Turning Conference held at the Hagley Museum & Library in Wilmington, Delaware, sparked an idea. They lamented that the camaraderie that inspired and excited the attending woodturners on such occasions dissipated all too soon. Albert LeCoff, Co-Founder and Executive Director of what was then called the Wood Turning Center (which became The Center for Art in Wood and then, recently, The Museum for Art in Wood, or MAW), heard their chagrin and took steps to enable an event that has lasted twenty-five years. That event, the Windgate International Turning Exchange (ITE), has undergone changes over the years, including a change of name in 2022 to the Windgate Arts Residency Program in Wood. Yet the spirit of the annual gathering continues to attract applicants. The silver anniversary warrants a look back.

The beginning

The first ITE took place at the George School in Newtown, Pennsylvania, where five artists and a journalist spent seven weeks turning and sightseeing. Todd Hoyer (Bisbee, Arizona), Hayley Smith (Isle of Anglesey, Wales), Bo Schmitt (Kendenup, Western Australia), Timothy Stokes (Cardiff, Wales), Richard Hooper (Liverpool, England) and Judson Randall (journalist, Tigard, Oregon) had responded to a proposal call that asked about "aesthetic concerns" and how the turner's practice would be "explored and enhanced" by attending. In addition to creating thirty-five objects that were displayed at the end of the residency at the Philip and Muriel Berman Museum of Art, the group visited collectors, toured Winterthur Museum, and enjoyed the hospitality of regional clubs.

At the end of ITE 1995, the first *allTURNatives* conference was held. Connie Mississippi, who attended the Conference, wrote a summary of her impressions of what had been produced for *Turning Points*, the Wood Turning Center's quarterly journal. She concluded, "I can say that it was hypnotic to watch those six individuals interact. There was exhaustion, excitement, respect, humor, and wonder at what had just befallen all of them. They all went home changed for the better, yet unsure of exactly what form that change would take in them as people and in their work as wood turners."

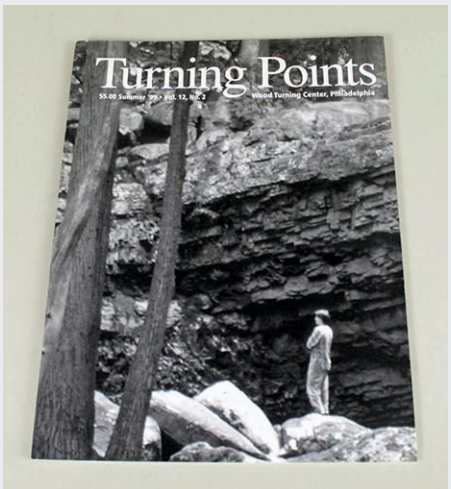
In 1996, four turners took up residence in a 100-year-old farmhouse on the campus of the George School. Terry Martin (Brisbane, Australia), who in this instance attended as a turner (he also attended in 1999 as a writer), described their midnight wandering on arrival: "Outside the locked woodshop, they line up at the window and press their noses against the glass, faces framed in their hands—just like children outside a toy store." Jean-François Escoulen (Puy-Saint-Martin, France), Michael Brolly (Hamburg, Pennsylvania), and Hugh McKay (Gold Beach, Oregon) were anticipating their making and collaboration. They were somewhat concerned about the necessity of making work for and facilitating an exhibition at the end ▸



Furnituremaker Fellow David Rogers at work during the 1999 Windgate International Turning Exchange (ITE) Residency.

Photo: Terry Martin, ITE Artist and Photojournalist Fellow

Turning Points



Cover of the Summer 1999 *Turning Points*, the publication of The Woodturning Center, featuring an image of ITE resident Remi Verchot taken by Terry Martin.

Gord Peteran, *Two Bracelets*, created during the 2002 Windgate ITE Residency. Gord mounted a pencil sharpener on a lathe to produce a single long ribbon.

of their sojourn in Newtown. Albert allayed their worries: "If you only have a pile of sawdust at the end of eight weeks, that's okay. We want to show not just art objects, but how artists come to it—the different steps to an idea." Edward Cooke, who attended for one week as the scholar, learned about the world of woodturning and also learned by doing.

Carrying on

Description of the first two ITEs provides an idea of the international nature of the event, content, participants' enthusiasm, and the effect of attendance. The early ITEs were written up in *Turning Points* and as the years passed, recording the event changed from hard copy to digital. Over 160 people have had ITE residencies, and their names are available on the MAW website, at museumforartinwood.org/windgate-ite-history.

Changes in the program since 1995 are worth noting. David Rogers, the first ITE furniture maker in 1999, was told he was a "guinea pig, part of an experiment to see if there is any value in bringing in a furnituremaker." David was only there for a week but quickly gained attention and friends by casting his big toe in resin and making a multi-toed bowl. He reflected on his experience: "A person's life is always full of other things than just getting up and working, but here that's all I had to do. I was provided with money to buy materials and a place to live and work. I was able to try stuff I'd never done before. Another great thing is to just be with your peers to sit around and have conversations that aren't forced.... Here you talk for a few minutes, go back to work, look at what others are doing ... it's an ongoing thing and a really enjoyable aspect of the ITE. I think you won't really see the value of that until you're away from it."

In 2001, the ITE moved to the University of the Arts in central Philadelphia, and residents were housed in dormitories that had been vacated for the summer. The city, instead of a rural setting, gave access to distractions (pubs, restaurants, night life), yet the final exhibition did not suffer. The following year, Gord Peteran, the furniture resident, created a bracelet by mounting a pencil sharpener on a lathe and turning a long single spiral. The bracelet is in the collection of the MAW and was exhibited in the 2021 exhibition, *Wood + Body: Expressions of Contemporary Jewelry*, curated by Jennifer-Navva Milliken.

The tenth anniversary in 2005 provoked a touring exhibition, *Connections: International Turning Exchange 1995-2005*, and hardcover catalog. In the same year, "*Connections Plus* invited International Turning Exchange fellows from the past ten years to submit a piece that reflects the impact of this residency program on his/her artwork. Artists report that the ITE experience radically transformed their outlook on life and work."

Winifred Helton-Harmon, photojournalist for 2015, called Albert's bluff regarding a sawdust outcome for eight-week's work. She created *Sounds of Wood, 2015 ITE Installation: Sawdust from ITE Fellows Woodworking Processes*, consisting of two parts: a DVD and a pile of shavings gathered from under the lathes. The shavings sat on a maple tray accompanied by a Japanese hake brush, lest the exhibition floor get too messy.

In 2016, an all-female ITE took place, although the residency always welcomed applications from women. Approximately 30% of attendees have been female, including turners Betty Scarpino, Merryll Saylan, and Louise Hibbert and furniture makers Jo Stone, Ashley Eriksmoen, and Amy Forsyth. Linette Messina, the photojournalist in 2004, reflected: "I entered the residency with little knowledge of woodturning. Now, after eight fabulous weeks with the artists, I have a broader knowledge

Gallery talk for 2016 *allTURNatives: Form + Spirit*

Left to right: Rebecca Kolodziejczak (USA), Student Fellow; Crie Michaela Stone (USA), Artist Fellow; Katie Hudnall (USA), Artist Fellow; Nucharin Wangphongsawasd (Thailand), Artist Fellow; Betty Scarpino (USA), Photojournalist/ Artist Fellow; Ashley Eriksmoen (Australia), Artist Fellow; Amy Forsyth (USA), Artist Fellow; Albert LeCoff, Executive Director Emeritus and Co-Founder.

Photos: Katie Sorenson

of what woodturning is about. ... The creative process is an ongoing journey, or battle, for each of us. During my ITE experience, I was able to refine my creative process and tried to faithfully represent theirs. It was essential to show each artist working with their hands and tools to shape and design wood into pieces that would represent themselves."

2023 and beyond

The Wood Turning Center became the Center for Art in Wood and moved from its Vine Street location to North 3rd Avenue in the Old City in 2011. The new location and new name not only meant a new venue for the ITE end-of-residency exhibitions, but brought the event into the cultural center of Philadelphia. In May 2018 Jennifer-Navva Milliken, while not entirely replacing Albert LeCoff, took over the reins. As a curator, she was anxious to broaden the media of attendees at the ITE and it will be noticed that individuals increasingly identified themselves as artists.

As mentioned, the attendance of the first furnituremaker was for one week. This expanded to two weeks and now all residents from a range of wood-related media—carvers, furnituremakers, turners—attend the residency. The visual documentarian nominates, in their application, how they will record the event; their output can be in any medium—sketches, videos, photos—plus text that is posted to a blog running concurrent with the residency. The scholar attends for one week in the middle of the eight-week session.

In 2020, just weeks before the residents were to assemble in Philadelphia, COVID-19 reared its devastating head, forcing the cancellation of the twenty-fifth ITE. The selected residents were deferred until 2021, when the event had to be cancelled again. By 2022, the on-the-ground situation had improved sufficiently to hold the ITE, but airport and visa restrictions made it difficult for international travelers to contemplate the journey. As a result, the residents were five Americans, three of whom lived in Philadelphia, and the scholar was Canadian. Also in 2020, the University of the Arts suspended its craft programs, thereby eliminating the ITE's usual workshop facilities and dormitories. It was a devastating blow, quickly ameliorated by the use of NextFab premises in South Kensington as workshop space and the renting of an Airbnb for out-of-town participants. As of this writing, the residents for 2023 and 2024 have been chosen, but facilities for the sessions have yet to be determined.

In the coming years, the ITE will be different. The loss of the University of the Arts facilities, global viruses, international travel falderol, and sustainability concerns will all affect this valuable program. As can be seen from the anecdotes included herein, participants greatly benefit from the concentrated commitment to work, proximity to other artists for exchange and collaboration, opportunities to visit renowned wood-related sites, museums, and collectors in the Philadelphia region, and exhibition in a respected North American gallery. For many, the experience has been described as "life-changing." ■

D Wood designed and made furniture to earn a Diploma in Crafts and Design at Sheridan College in Canada and an MFA at the Rhode Island School of Design. In 2012, she earned a PhD in Design Studies from University of Otago. D is the editor of Craft is Political *(Bloomsbury Visual Arts, 2021).*

The cover of *Connections: International Turning Exchange 1995 – 2005*, the exhibition catalog for the retrospective of the first ten years of the Windgate International Turning Exchange.

Photo: John Carlano

Installation image of 2015 Photojournalist Fellow Winifred Helton-Harmon's *Sounds of Wood*.

Apply for a Residency

You are encouraged to apply for this unique residency opportunity, now titled the Windgate Arts Residency Program in Wood. Mark your calendars; applications will be available in the Fall of 2024 for the 2025 and 2026 residencies. For more, visit museumforartinwood.org.

J. Paul Fennell

2023 POP Merit Award Recipient

Terry Martin

The AAW's Professional Outreach Program (POP) grants the Merit Award to individuals who have shown exceptional development in their careers as artists and whose artworks have directly influenced or had a significant impact on other artists within the field of woodturning. This year, this prestigious award goes to J. Paul Fennell. To learn more about the POP, the Merit Award, and past recipients, visit tiny.cc/AAWPOP.

The Fennell "Family"

An inspirational career

There are several reasons a woodturner might be given the POP Merit Award. It could be because of a lifetime dedicated to teaching, or because the awardee has created an influential body of work that has inspired a generation of turners. That element of longevity is significant because the kind of knowledge and credibility required can take a lifetime to build, so most awardees are elders of our community. J. Paul Fennell's turning career spans fifty-two years, and he has been a constant at symposia in the U.S. and around the world, both as a presenter and a demonstrator. He attended his first woodturning symposium in Philadelphia in 1980, became AAW member #297 in 1986, and has missed only one AAW symposium since then.

Equally significant for the selection of Merit Award recipients can be the kind of work that sometimes goes unrecognized, such as working on committees that benefit the turning community. Paul served on the POP committee for fifteen years and even served as chair for some of those years. He is particularly proud of originating the Artist Showcase, a POP-sponsored program that offers an opportunity for lesser-known woodturners who are creating important work to be given appropriate recognition. He cites Helga Winter as a significant example.

Because of his many years on the POP committee, Paul has a deep understanding of the Merit Award selection process. He explains that in addition to giving appropriate recognition to

Service to the AAW

(*Left*) J. Paul Fennell offers feedback for Donna Zils Banfield during an intimate critique session at the 2011 AAW Symposium, Saint Paul, Minnesota. At this year's Symposium in Louisville, Paul will be a juror for the instant gallery awards and for the critique session that follows.

(*Right*) Representing the POP Committee, Paul presents the POP Merit Award to Jacques Vesery, 2015, Pittsburgh, Pennsylvania.

Photos: Andi Wolfe

certain individuals, the award also "enhances the perception of the aesthetic of wood as a legitimate art form." It must be a source of great satisfaction to Paul that he has now been recognized by another group of committee members for the very same reasons.

But there is another reason Paul has been selected—his integrity and modesty. Paul is the AAW's champion for these qualities. He never speaks without pausing to reflect on what impact his words will have, and he is only ever spoken of with respect among the many whose life he has influenced. He can best be described by that word that is not much spoken these days—a gentleman. This is evident in his response to this year's award: "The past awardees are very prominent people, and it's such a wonderful group that I feel honored to be included." To be listed among the company of artists such as Mark Lindquist, David Ellsworth, Michelle Holzapfel, and Richard Raffan is about as good as it gets.

Background

Paul's selection could be justified only on the basis of his remarkably cohesive body of work. In the opening photo, he sits in his home with seventeen pieces that embody years of creativity. The first piece of turned woodwork Paul ever made, in 1970, is the small table in the background. He also made the large table his pieces are sitting on from what he calls "spectacular bubinga." The turned works are similar in that they tend to have the most common ovoid shape of hollow vessels in contemporary turning, courtesy of David Ellsworth's pioneering work. But the collective impact of Paul's work is that, despite this connection between all of the pieces, they are each unique. His turning is as skilled as it gets, but it is the astonishing variety of post-turning work that distinguishes his work as that of a creative and engineering genius.

I wrote about Paul in 2015, and that article says much about his amazing professional background and development as an artist. Reading that story now also highlights just how much his work has evolved in the eight years since then, both creatively and technically. The timing of Paul's 2023 POP Merit Award coincides nicely with his recently published process article in the February 2023 issue of *American Woodturner*. I don't need to describe just how technically brilliant he is, as you can hear about it from Paul himself. The word *master* is often misused, but I am in no doubt Paul should be acknowledged as an undisputed master. *See Explore! sidebar for article references.* ▸

Creativity with technical expertise

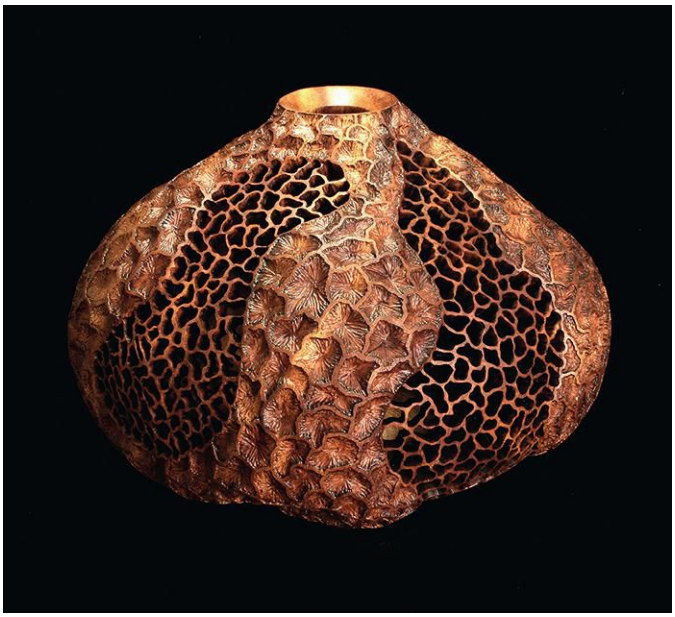
Taking inspiration from patterns, Paul also has the technical expertise to pull off his creative visions.

MORE ON J. PAUL FENNELL

EXPLORE!

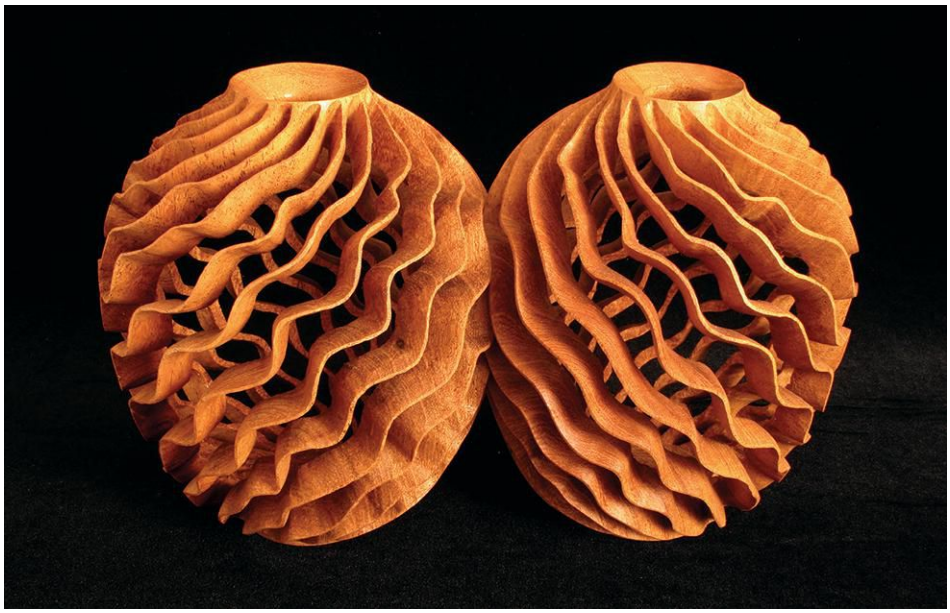
Log on at woodturner.org and use the Explore! search tool to find these and other articles by and about J. Paul Fennell.

- "Engineering the Craftsmanship of Risk: The Creative Life of J. Paul Fennell," by Terry Martin, *AW* February 2015 (vol 30, no 1, page 46)
- *"Les Sept Mers (The Seven Seas)*: An Expressive Approach to Hollowing," by J. Paul Fennell, *AW* February 2023 (vol 38, no 1, page 40)
- "Make an Index Wheel for Precision Division," by J. Paul Fennell, *AW* Spring 2004 (vol 19, no 1, page 18)



(*Left*) *Acacia Waves (La Mer series)*, 2021, Acacia, 10" × 7" (25cm × 18cm)

(*Right*) *Coral Sea*, 2021, Indian rosewood, 6½" × 8½" (17cm × 22cm)



Canoodling, 2014, Mesquite, each: 5¾" × 4½" (15cm × 11cm)

Paul's recent article is an example of how generous he is in sharing his methods. He also offers demonstrations, PowerPoint presentations, and one-on-one tutelage for anyone who asks. Even if he is copied, he doesn't mind because by that time, he will have moved on to new ideas: "I get bored really quickly unless a piece is challenging," he says. "Also, I like the idea of mystery and intrigue, and a lot of work involves new techniques, so when people look at some of these pieces, they can't understand how it's done. The market for this kind of work has significantly declined, so now I am more interested in the creative and technical challenge of doing unique pieces every time."

A remarkable body of work

Paul's creative thinking is just as fascinating as his technical expertise, and it always reflects his breadth of knowledge, thoughtfulness, and deep appreciation of aesthetics. As only one indicator of how his work is valued outside the woodturning community, he has the rare distinction of having five of his pieces in the permanent collection of the Renwick Gallery of the Smithsonian Museum of American Art in Washington, D.C.

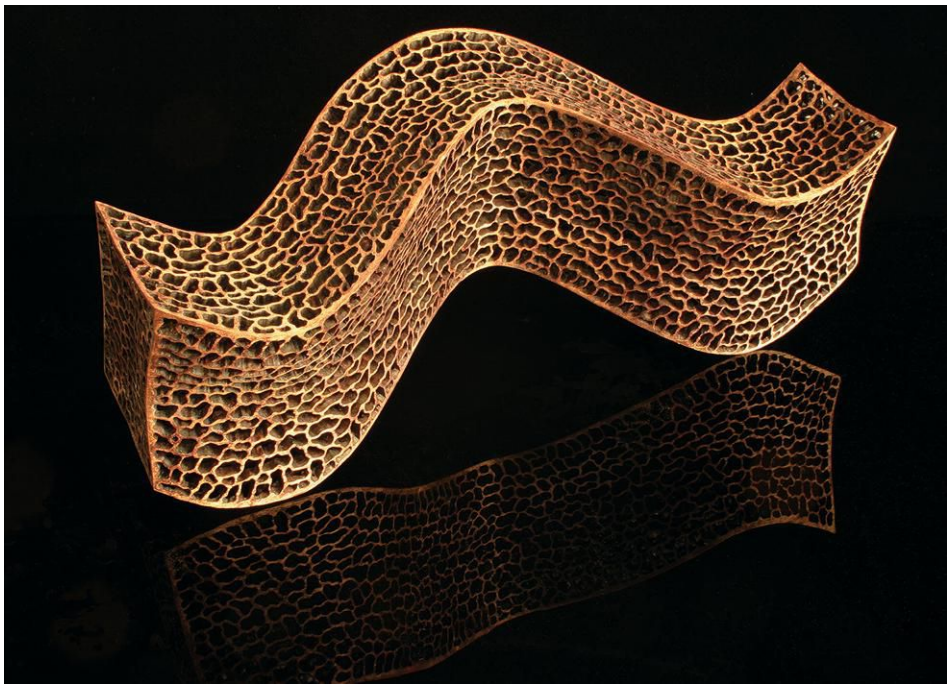
There are many directions from which we can analyze Paul's work, and what I write here can only skim the surface of his prodigiously innovative work. For example, anyone who has ever tried to stretch the limits of hollowing will recognize immediately that *Acacia Waves*, which is part of Paul's *La Mer* series, is full-risk work, cut through from top to bottom to allow full exposure to the interior. Even knowing that it was not fully pierced when it was being hollowed, the removal of strips of wood leaving only two binding circles at the top and bottom is a testament to how well Paul understands his medium. Unlike more conventional hollow forms, there is no guesswork about what is going on inside because

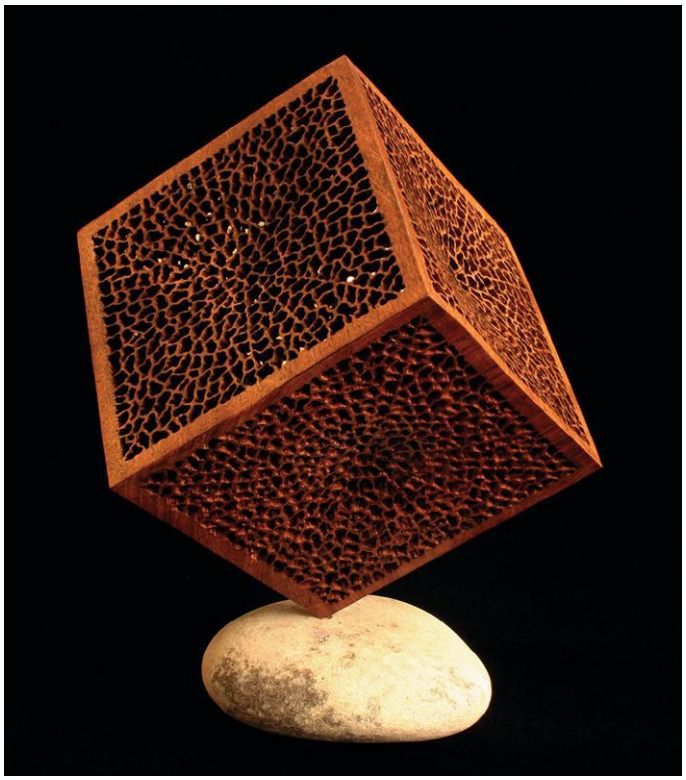
we see the whole interior with its uniform thickness. This is the work of a hollowing master who has invited us inside to see what he has done. Paul explains, "Stretching the limits is a great way to energize your work because if you stay in your comfort zone long enough, it can become boring and frustrating."

Apart from the technicalities, there is a charming romanticism to much of Paul's work. For example, with *Canoodling* he has taken the technical mastery of *Acacia Waves* to a new conceptual level by taking two of these vessels, one right-twisted and one left-twisted, then brought them together in an intimate embrace. The guidelines Paul gave for the piece made his intention very clear: "Any intended display should show that the two pieces are 'intimate.'" As a measure of how this resonated with many who saw it, Paul told me the piece was acquired by married couple Allen Miller and Andi Sullivan: "Allen was once the team physician for the New York Yankees, and Andi is a blind woodturner who *teaches* pen making to other sight-impaired individuals." Who wouldn't be proud to have touched the lives of such amazing people?

Maiandros: A Journey is another example of just how brilliant his work can be. It was part of the 2018 *New Horizons* exhibition in Richland, Washington, that went on to be shown at the AAW Gallery of Wood Art in Saint Paul, Minnesota. Paul explains that the aim of the exhibit was to push established artists to explore new work: "I wanted to consider eliminating the use of the lathe, as well as raising the level of personal difficulty. I found myself *meandering* through many possibilities; then it dawned on me that the idea of meandering itself could be a metaphor for my experience of the process of creating. I believe this piece is a step towards the quest for idea fluency and creativity." For those inclined to understand the process, Paul's February 2023 article about *Les Sept Mers*, noted above, offers some hints to how he created *Maiandros*. Rather like a cryptic crossword, the hints are all there, but you need to remove your own blinders to see them.

When you have done that, you might want to consider *Suspended Intimation*. This piece was in a 2018 Collectors of Wood Art show ▸

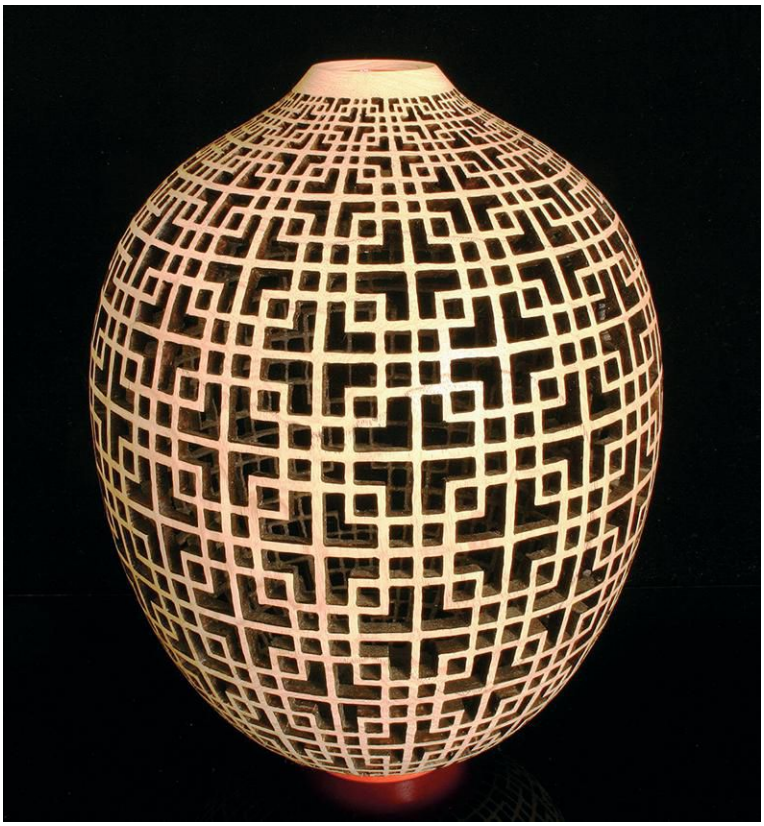




(*Above*) *Maiandros: A Journey*, 2018, Butternut, black acrylic (base), 5½" × 13" × 6" (14cm × 33cm × 15cm)

(*Left*) *Suspended Intimation*, 2018, Mesquite, granite cobble (base), 6" (15cm) cube, overall: 12" × 9" × 9" (30cm × 23cm × 23cm)

Suspended Intimation was partly turned on the lathe. Can you tell which parts?



IN-OUT Lattice, 2021, Unknown wood, 9" × 7" (23cm × 18cm)

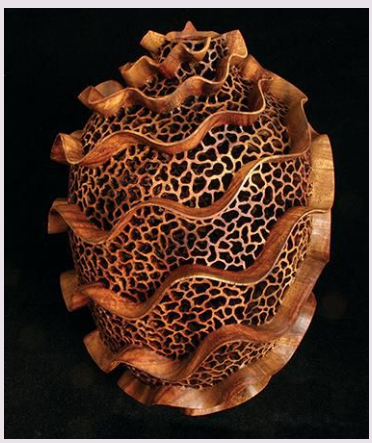
of international artists at SOFA Chicago, and there was only one condition—that part of it had to be turned. It's hollow, it's pierced, and yes, it's partly turned, but where? If you look carefully, the hints are there. Talking about this piece, Paul explains, "I wanted to avoid the cliché of what the resultant piece is 'supposed' to look like. I wanted to be sure that, as a maker of turned wood art of familiar iconic work for more than forty-five years, the piece for this special exhibit would not be just more of the same." Incidentally, Paul found the stone that forms the base in a dry creek behind his house—more lateral thinking.

When it comes to influences on his designs, Paul says that patterns are at the heart of much of what he creates. It can be patterns from nature, such as his ocean-inspired *La Mer* series, or even architectural patterns. A good

Sissoo Cycles: A Complex Process

When I asked Paul which of the pieces on his table most represented his recent achievements, he immediately indicated *Sissoo Cycles*, a compellingly intricate piece. "Making this piece was challenging because it involved many techniques," says Paul. "I had to turn a fine hollow form out of beautiful rosewood, then I indexed a horizontal/vertical grid pattern around the surface. After that, I had to offset a new grid pattern so that the cyclic lines spiraled upwards. After I drilled depth holes between the cyclic lines, I carved away the depth holes to create a secondary surface, but then I had to drill a new set of depth holes in the secondary surface for establishing a specific wall thickness. Then I mounted the piece back on the lathe and hollowed it to the point where a light inside showed through the depth holes.

"After carving the cyclic lines sufficiently thin, I pierced the surface between them to create more open holes that also removed the depth holes, and finally I sanded and cleaned it up and applied an oil finish. If there is a *tour de force*, this is the one." It sounds amazingly complex, and it is, but by the time you read this, Paul will almost certainly be working on his next idea, which will make this piece look easy.



Sissoo Cycles, 2017, Indian rosewood (Dalbergia sissoo), 9" × 6½" (23cm × 17cm)

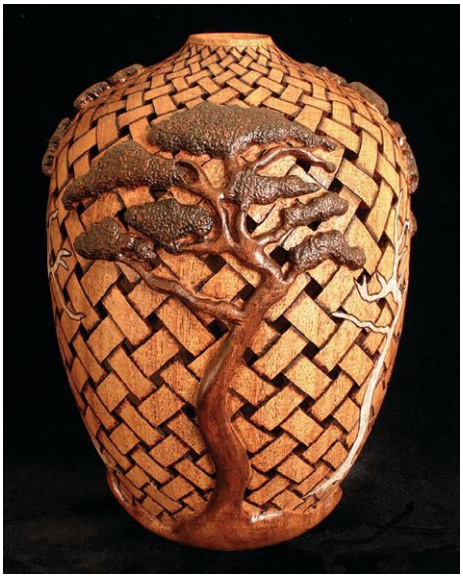
example is *IN-OUT Lattice*, inspired by architectural decorations in the Chao Jo monastery, in Szechwan Province, China. Such work is only produced with painstaking preparation and buckets of patience. One reason Paul has been able to produce such amazing work is that he is a master draftsman. In this piece, Paul has adapted work that was flat, or two dimensional, into a three-dimensional piece that warps the pattern as it converges at the top and bottom. For those with a geographic inclination, this is the reverse of Mercator projections for maps of the earth's surface, and perhaps this comes easily to Paul, whose first career was as a rocket scientist.

Paul once told me that he volunteers as a tutor in physics and math at a local high school. Usually, he works one on one with students in the school library, but one day the physics teacher invited him to talk to the whole class. He said that when he started explaining various theories and laws of physics, he could read the look on the students' faces: "How does this old guy know all this?" One day they will realize it takes a lifetime to accumulate the kind of knowledge that Paul has, and it takes a generous spirit to selflessly share it with anyone who wants to learn. J. Paul Fennell embodies all that is good in the AAW. His POP Merit Award is exceptionally well deserved and comes as no surprise. ■

Terry Martin is a woodturner and writer working in Ipswich, Australia. Visit his website, terrymartinwoodartist.com, or contact him at tmartin111@bigpond.com.

Chengtu Offering Vessel, 2013, African sumac, 6" × 7½" (15cm × 19cm)

Architecturally elaborate "entrance" gates are common around ancient cities in China and in other cities that have prominent Chinese populations. These gates can be thought of as a portal through which transitions occur, such as rites of passage, or movement from one social, cultural, spiritual, or religious state to another.



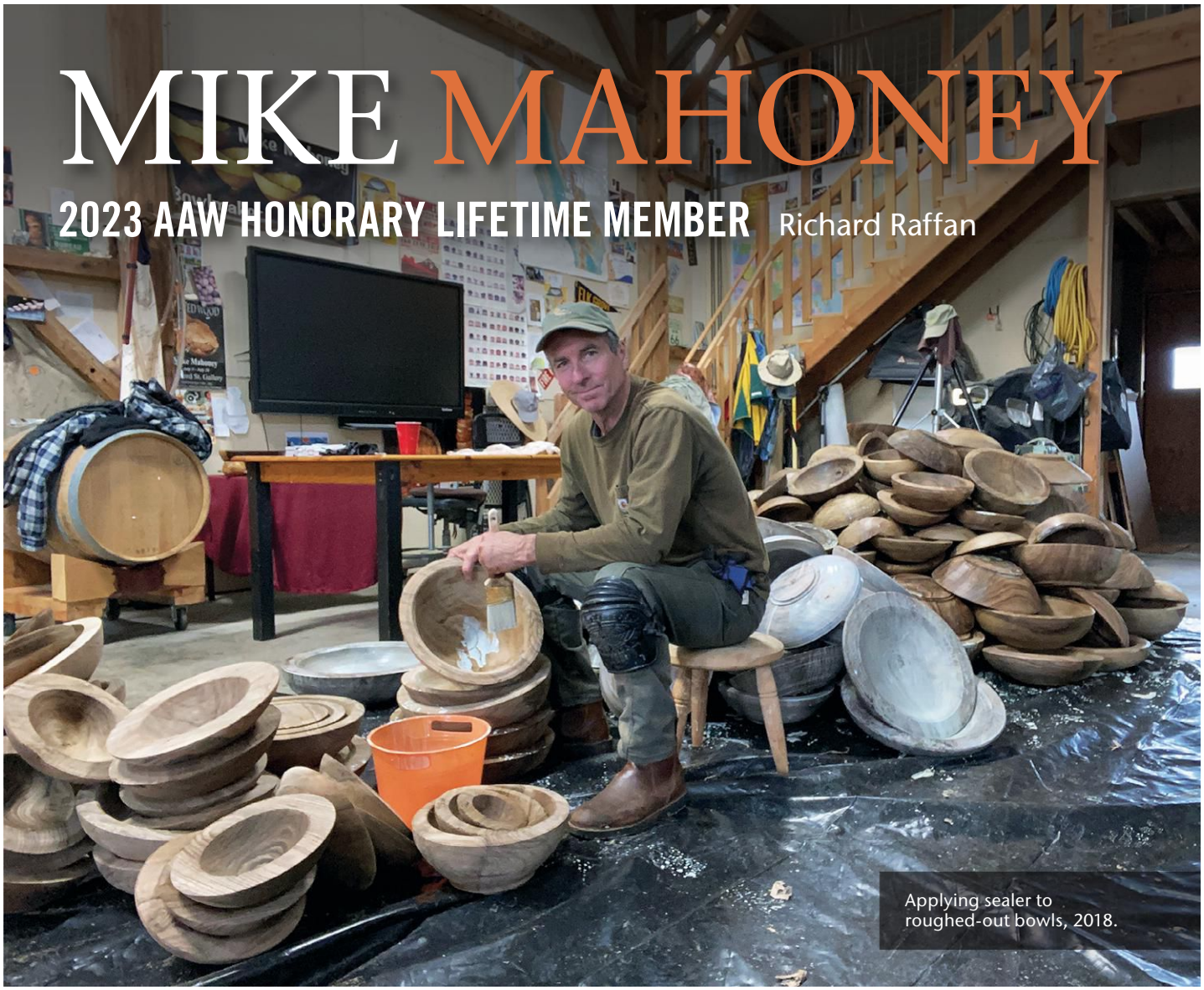
Ghosts of the Rainforest, 2016, Mesquite, 9" × 6½" (23cm × 17cm)

Ghosts of the Rainforest focuses on the consequences of exploiting the rainforest without regard for any resultant deleterious effects.

MIKE MAHONEY

2023 AAW HONORARY LIFETIME MEMBER

Richard Raffan



Applying sealer to roughed-out bowls, 2018.

The AAW Board of Directors, at its discretion, confers honorary lifetime membership to persons who, in its judgement, have made extraordinary contributions to the American Association of Woodturners and the advancement of woodturning. This year, the honor goes to Mike Mahoney, in recognition of his ongoing commitment and exceptional service to the AAW, as well as to the woodturning field in general.

Incidental renown

Many hobbyists dream of turning wood for a living, some desperately wanting to be internationally famous woodturning artists. Mike Mahoney attained this dream, but it was not a goal he intentionally set out to pursue.

Mike has never really been a hobby turner. Since attending his first craft market as a university student and novice turner, he's been able to make a living selling his turned work. He could have been just another successful small manufacturer making a good living, completely unknown in woodturning circles. But fate, circumstance, and Mike's ability to capitalize on opportunities led to international renown as a bowl turner, and an interesting, creative, lucrative, and fulfilling life for him and his wife Jenni, who has been a major part of his success.

Mike first turned wood in 1978 at the age of 14, playing around on a Yates-American lathe with his father. They turned everything between centers and made only one bowl from a three-piece poplar glue-up. They hollowed it with a spade bit, chisel, and belt sander.

While at San Diego State University (SDSU), from which he graduated as a teacher, Mike discovered the school had a woodshop. Wandering through, he came across Jim Young hollowing a bowl. For Mike, this was a revelation, a eureka moment. First, there was no tailstock and, second, Jim did it all with a gouge. Mike hadn't realized SDSU offered a degree in woodworking. Totally seduced by the shavings, he signed up and got some formal instruction on using traditional gouges, skew chisels, and scrapers. This was 1982, when turning tools were still carbon steel and bowls were turned using a range of long-and-strong shallow gouges, now largely regarded as strictly for spindle turning. In North America, gouges milled from high-speed steel (HSS) round bars were still something of a novelty.

When SDSU decided to get rid of its old Oliver lathes, Mike was able to buy one for a dollar. He set up his new lathe on his back porch alongside a small bandsaw. Mike was soon spending all the hours he could turning plates, bowls, and boxes, accumulating cartons full of finished items. All of his work was smaller than 12" (30cm) in diameter (limited by the swing of his lathe) and sold each weekend at craft markets at a time when the handcrafts revival was well under way. What sold one weekend had to be replaced for the next. Making a range of items repetitively meant Mike became very familiar with all the traditional turning tools. Mike figured he was doing okay and getting pretty skillful until he went to the Utah Woodturning Symposium in 1987.

At the 1987 Utah Symposium, Mike saw professional turners for the first time. Watching Ray Key, Vic Wood, Allan Batty, and me, he reckoned he learned more in three hours than he'd taught himself in three years. Mike returned home, knowing what was possible, and set about achieving the same efficiency as the pros he'd just seen.

An early attempt at a vase in 1985 stands in stark contrast with the refined results achieved in 2007, when Mike made hollow forms for a Park City (Utah) craft show.

About the same time, Mike watched David Ellsworth turn, then cut in half, a hollow form. Blown away by the thin and even wall thickness, Mike knew he had to give *that* a go. His first attempt, using only gouges, was rather clunky, resulting in a form more like an enclosed bowl than a hollow form. Mike invested in a Stewart System Hollower and was soon creating more elegant and lighter-in-weight forms with small openings and drastically undercut rims.

For many years, one of Mike's regular demos has been turning a full-sized urn complete with a threaded lid. He has no problem completing an urn within the typical ninety minutes of a demonstration session. By now, Mike has made so many urns, he doesn't need calipers to measure wall thickness.

Mike graduated from SDSU in 1986, then for eighteen months taught science and physical education classes, despite making more money on the weekends doing craft markets. When he sold an olive burl vase to an interior decorator for $200, a very good price at the time, Mike began thinking seriously about turning wood full time.

Establishing the business

In 1990, having decided Mike should go pro, the Mahoneys moved to Provo, Utah, attracted by the lower cost of living and much cheaper property.

One of Mike's early market stalls, Cherry Creek Arts Festival (Denver, Colorado), 1995. *From left*: Mike Mahoney, Jenni Mahoney, and Stuart Batty.

They rented a workshop in which Mike set up his lathe and bandsaw and got turning. And they bought a dilapidated 1870s brick house and set about restoring it, "doing all the sweaty equity" themselves. Their intent was to become debt free within a few years, eventually living on a few acres where they could grow things. So began a decade of long days at the lathe, with many evenings and weekends spent restoring houses. In between were a few craft shows. As if they didn't have enough to do, the Mahoneys purchased two more run-down houses and restored them. Mike reckons they've always been lucky with property, but that belies the astuteness and hard work that in 2001 got them into another fixer-upper, this time on 2½ acres in Orem, Utah, with superb views. They created a gem of a property, ▸

Redwood Burial Urn, 2010, Redwood, 10" × 10" (25cm × 25cm)

Madrone Burl Canister, 1995, Madrone burl, 10" × 8" (25cm × 20cm)

which they sold in 2010 to buy a farm in California just east of Sacramento—and another house to restore.

In the early 1990s, Mike did a few juried craft shows in Washington and Philadelphia, alongside well-established turners such as David Ellsworth, Alan Stirt, and John Jordan. There was lots of money around and he was successfully selling pieces for around $1,000. The shows did Mike well, not least because he's easy and engaging to talk with, which is essential when selling your own work. However, craft shows are a lot of work and expensive to attend. You need excellent photos for the jury (professional photos are expensive, so Mike learned to take his own), and your stand costs a small fortune, as does the fit-out. Then there's travel, accommodation, and shipping costs. Up-front expenses soon run well into four figures. The main benefit is that you get to meet potential buyers and sell to them directly. There's no commission. The downside is that you need to accumulate pieces you might otherwise sell immediately, and sales are not guaranteed. There are times when little or nothing sells, so these shows are something of a gamble.

Kitchen Set, 2001, Mormon poplar

The wholesale route

When you go into business, it pays to have a business plan, but after a couple of years, Mike was still dithering over whether to concentrate on artsy stuff and being a famous "collectible" artist or sticking with the utilitarian bowls and giftware he had been turning. He was advised to take the utilitarian and wholesale route.

Dale Nish was a regular visitor to Mike's workshop and a mentor. "Dale was always telling me things I never wanted to hear but were true," Mike explains. "He told me all the green-turned bowls were never going to be marketable, that I needed to start roughing them out [and twice-turning them]." It was good advice that Mike took, although later he found a ready market in other woodturners who wanted to buy rough-turned bowls.

Initially, Mike found wholesaling a tough pill to swallow. He was used to selling direct at craft markets, so selling at half the price seemed counterintuitive. But he soon learned he could make more money because he didn't have to go out and deal with customers. As a wholesale manufacturer, you turn what's been ordered, you deliver the order on or before the requested date, and you're paid within 30 days. You don't accumulate much in the way of inventory.

To establish connections with retailers, Mike attended a few wholesale shows, offering only bowls 11" to 16" (28cm to 41cm) in diameter and hollow forms. Each show yielded months of work. I recall Mike being somewhat amused by the abuse from rival exhibitors who thought his bowls too cheap and that he should raise his prices. His response: "I'm making $100 an hour. Few pro turners make that today." The rivals thought he was lying, that nobody could turn

a 12"-diameter bowl in an hour, let alone faster.

To calculate a wholesale price for a bowl or urn, indeed any job, Mike has an hourly rate to which he adds the cost of timber (currently $10 per board foot) plus a small amount for overhead expenses. If Mike sells retail, he roughly doubles the wholesale price, but this varies based on what the market will pay. Mike sees no reason he shouldn't earn the same as a lawyer, especially as he's making objects that should outlast the lot of us.

To cope with the volume of orders, Mike employed someone to do the sanding. He'd turn a bowl and hand it to Tiz, who sanded and finished it on an adjacent lathe before handing it back to Mike to complete the foot. They averaged forty bowls a day. All bowls are now sanded to 400 grit, whereas it used to be 180 grit. The finish was always Mike's own Mahoney's Oil Wax Finish.

By the mid-1990s, Mike had narrowed and honed his bowl designs to a few basic forms, like his Mormon Poplar and Heirloom bowls, each with detailing that identified them as Mahoney bowls. For Mike, the most important aspect of any bowl or hollow form is its proportions. Trusting his eye rather than working slavishly to any universal rule, he finds his most satisfying forms are usually very close to the golden ratio.

The constant stream of orders from around sixty retailers meant Mike had no need to do any craft shows, and the business was going nicely. New customers paid up-front on a pro forma invoice, then got the standard 30 days in which to pay on subsequent orders. As a wholesaler, Mike avoided the uncertainty of consignment typically demanded by galleries.

Most spindle orders were declined until, in 2003, Mike was offered a contract making high-end lamp parts and desktop items in buckeye burl. It was difficult to cut cleanly and demanded accurate repetition, but it was a lucrative and regular income for fifteen years. Mike preferred to concentrate on bowls, so eventually he handed the contract to another turner.

Silver Maple Pioneer Nested Set, 1994, Silver maple, largest: 9" × 24" (23cm × 61cm)

Mormon Poplar Nested Set, 2007, Mormon poplar, largest: 5" × 14" (13cm × 36cm)

Mormon Poplar Bowl, 2008, Mormon poplar, 8½" × 23" (22cm × 58cm)

Wood

Mike has mostly sourced his wood locally, often through arborists, recycling trees removed from streets, parks, and gardens due to age, size, or disease, and all due to be dumped or become firewood. Such wood is never free, as it always involves either time or money and often both. The great advantage for Mike is that he has total control over how a log is cut. Mahoney bowls are defect free with a lifetime guarantee ▸

As part of his production career, Mike turned buckeye burl lamp parts for a New York City company for nearly ten years.

Mormon Poplar Platter, 2008, Mormon poplar, 2" × 24" (5cm × 61cm)

against splitting. As Mike breaks down logs to liftable lumps, he takes particular care to eliminate all defects. Mike doesn't embellish his bowls, preferring simple classic utilitarian forms, but he does cut for interesting grain patterns, preferably with impressive figure.

Ancillary products

It's always useful to have several sources of income, especially when running a business based on the output of one person. These days, Mike has four other income streams connected to turning, each producing enough on which to survive: Mahoney's Finishes, his videos, some tool royalties, and teaching/demonstrating.

As a student in San Diego, Mike met some Italians crushing walnuts, extracting oil for gunstocks. He realized the oil would be good on bowls and then learned that the allergens within walnut oil are easily removed by heat, making it a food-safe oil—and making it dry faster. Mike's background in chemistry helped develop his finishes, which are now sold largely through Amazon, Woodcraft, Rockler, and Craft Supplies USA. Mike's finishes now comprise a stand-alone business.

Teaching/demonstrating

Mike's first turning demonstration was at the Utah Woodturning Symposium in the mid-1990s. Within minutes of completing his demo, Mike was asked if he would consider doing club demos and hands-on workshops. He would. Long ago, Mike lost count of both the clubs he's been to and the symposia at which he's been a lead presenter. Woodturning has taken him all over North America, to Europe, Australia, and New Zealand.

The annual Utah Woodturning Symposium impacted Mike's life in many ways, as did Dale Nish who initiated and ran the symposium at Brigham Young University. When he set up shop in Provo, Mike soon got involved with the symposium, first as a helper and then as a regular paid presenter until Dale persuaded him to run the event.

Mike was the Utah Symposium Director from 2007 to 2010, a time-consuming and *pro-bono* job that occupied several weeks each year. He still had to churn out bowls to meet orders, so he expanded the organizing board of the symposium. Together, the leadership selected presenters, while Mike handled the finances, paid the bills, and oversaw the move away from BYU to Utah Valley University. He remained on the board until 2017. For seven years, Mike was Master of Ceremonies at the symposia, and for several years the Mahoneys accommodated demonstrators and hosted the wind-up party in their garden in Orem.

The Mahoneys have never offered classes at home, citing the hassles of increased bookwork, preparing meals and blanks, and finding accommodation for students. Yet Mike was always ambivalent about travel, so he was not unhappy when the Covid pandemic put a stop to traditional club demos. Instead, he went online and offered several demos a week, sometimes two in a day. These demos have been so successful, he no longer travels to

Large-scale production

Mike produces bowls on a grand scale, working from logs delivered to his California property.

Giant Clam, 2007, Madrone burl, largest: 9" × 14" (23cm × 36cm)

Giant Clam was made for a Smithsonian themed show, *The Great Barrier Reef*, and was sold at the associated craft show.

Jarrah Burl Nested Set, 2004, Jarrah burl, largest: 7" × 11" (18cm × 28cm)

clubs, only to major symposia and to Craft Supplies for his annual hands-on workshop.

Mike is an ardent ambassador for utilitarian woodware: he wants his bowls to be used. In his demos, he'll often show exhibition-quality bowls (not all his) that have been well-used day to day, fervently hoping to persuade more turners to use the bowls they've made. Then at markets he educates the wider public.

And now...

For a dozen years, the Mahoneys have lived on that small farm they purchased 50 miles east of Sacramento, close to where both were raised. They restored yet another house, this time a 1904 Sears kit home that most people would have bulldozed, and built a couple of barns and a workshop. In addition to Mike turning a few hundred bowls each year, they now harvest around 2 tons of pistachios from trees they planted, press oil from their own olives, and grow flowers.

The farm keeps them busy and contented, but in March 2022 the Mahoneys did take a vacation, the first in five years. Then 58, Mike reckoned age might be catching up with him, finding he can't roll logs like he used to. He claimed he could barely lift his arms—which wouldn't be so surprising when in the previous three months he'd converted 80,000 lbs. of curly English walnut into roughed-out bowls. The walnut comes from nearby ranches, where elderly trees are routinely up-rooted and burnt. Fortunately, some orchardists are happy to sell truckloads of logs and stumps for a few thousand dollars. Mike marks what he wants, negotiates a price, then transports the logs back to his wood lot for processing.

On YouTube, you can watch Mike shape a bowl profile in about two minutes, then core out the center in about the same time using a McNaughton Bowl Saver. Inside five minutes, he has at least three roughed bowls with highly figured grain. So each can be guaranteed flawless and devoid of splits, all the bowls are seasoned for nine months before being sold. Mike is ▸

Hollow Peppermills, 2009, Various woods

AAW demonstrator

Mike demonstrating bowl coring with the McNaughton system at the 2022 AAW Symposium, Chattanooga, Tennessee.

Photo: Andi Wolfe

Battle of the Bowls

Over the years, a constant crowd-pleaser has been the Battle of the Bowls, where Mike has gone head-to-head in a playful "competition" with friend Stuart Batty.

Photos: Andi Wolfe

old-school in that a split is a split and in no way artistic. "Wood that has cracked over time is usually due to poor wood selection by the craftsperson," he says. Mike's bowls come with a lifetime guarantee that covers normal use. Some were featured in a movie for which Mike was a consultant: the script called for someone to hurl bowls against a wall in fury, shattering them. Problem was Mike's bowls bounced off the wall and floor, barely damaged, so he had to break up and reassemble a few so they'd fall apart when they hit the wall.

Increasingly, Mike is selling rough-turned bowls, which means less time turning. And it frees up time for working his land; he enjoys planting and grafting trees as he develops his nut groves—hopefully to provide wonderful timber for future woodworkers.

As they ease into what many regard as retirement years, Mike and Jenni still attend markets in the summer because they enjoy interacting with people as they sell their pistachios, olive oil, Jenni's flowers, and quite a few bowls. An assistant now manages all online orders, packing up and shipping finishes and roughed bowls. And young muscle is employed part time to help with the heavier tasks and harvesting. Life couldn't be much better, and there's time for pastimes like searching out huge trees, hiking, birding, and hobby turning in the form of pepper mills. Mike has always called himself a woodturner, quipping that he's not starving, so he can't be an artist. ■

For more on Mike Mahoney, visit bowlmakerinc.com.

Richard Raffan is a semi-retired professional turner living in Canberra, Australia, now best known as author of classic woodturning books and videos. For more, visit richardraffan.com.au and his YouTube channel, Richard Raffan Woodturning.

Serving the Woodturning Community

Mike's experience running the Utah Woodturning Symposium helped him recognize the dedication that went into teaching woodturning. He explains: "Dale Nish, Albert LeCoff, David Ellsworth, Kip Christensen, and many others were dedicated to helping American woodturners be safe and become better craftsmen. I saw that the AAW was committed to that mission and wanted to help the process along. I attended my first AAW Symposium in 1995, and I have only missed one since then. I have been a demonstrator many times. I have been involved with the POP Committee for many years and also helped on the Demonstrator and Awards Committees. I would not trade my AAW service experiences for anything. In what art or craft can you mingle with and learn from the best makers in the world?"

Left: *At the 2016 AAW Symposium in Atlanta, Georgia, Mike served as a panelist in the Instant Gallery Critique program, along with Jeffrey Bernstein, Kip Christensen, and Dale Couch.*

Right: *Mike offers an intimate critique for attendees during the 2022 AAW Symposium in Chattanooga, Tennessee.*

Photos: Andi Wolfe

Members' Gallery

Paul Hilton-Tapp, England

Originally, I trained in furniture design/making but ended up following another career path. Eventually, I felt frustrated that my creativity was trapped inside me, and I needed a way to let it out. Unfortunately, space and money to make furniture were limited. I remembered I once had a go on a lathe while I was at art college and loved it, so I decided to try woodturning. I bought a used Record Power lathe and a Sorby tool set and taught myself to turn.

Working predominantly from green wood or reclaimed bits of furniture, I like to think my work has some honesty about it. The majority are one-off pieces that focus on form over function, while exploring different textures and finishes that don't disguise the wood. I always try to feature what some would consider defects in wood as a positive element. This approach means my pieces vary between decorative and functional, but I feel it makes each piece more visually appealing.

Follow Paul on Instagram, @selftapped.

Untitled, 2019, Yew, 4" × 9" (10cm × 23cm)

Untitled, 2022, Lilac, purpleheart, 4" × 3" (10cm × 8cm)

Untitled, 2020, Laburnum, 6" × 11" (15cm × 28cm)

Andy Goldman, California

I have enjoyed working with wood since my high school days and have sold woodworking equipment and supplies for almost forty years. Over the years, I completed simple woodworking projects. Eventually, I acquired an old lathe from a friend who encouraged me to try woodturning. I started out making stave-, or close-segmented, bowls but then took a break from turning. About six years ago, I met some turners who make open-segmented forms, and after talking with them, my interest was rekindled.

A question I am often asked is, where do I find the inspirations for my designs? I constantly take photos of things that look interesting to me—paintings, wall hangings, sweaters, and even designs in rugs. I then transfer these designs from the photos to design pages and color them based on the colors of the woods I have on hand.

(*Left*) Untitled, 2022, Canary, maple, Peruvian walnut, 10" × 11" (25cm × 28cm)

(*Right*) Untitled, 2022, Pau amarello, satine, 7½" × 12" (19cm × 30cm)

Anne Ogg, North Carolina

In 2020, a collector of miniatures asked if I could replicate treen, 18th- and 19th-century wooden kitchen objects, in a 1' to 1" (30cm to 25mm) scale. Having grown up in a home filled with antiques as well as a period dollhouse, this challenge appealed to me. Now, three years later, I am a member of the International Guild of Miniature Artisans (igma.org). I love browsing auction houses and museum websites for antiques that can be replicated in miniature on a lathe. It also helped that one of my early mentors started me out by turning a toothpick. Considered by many to be a mindful exercise, woodturning requires intense concentration. Removing tiny amounts of wood at a time in a miniature forces me to focus on tool control.

Recently, I began making tools in small sizes to enable me the same advantages in turning as full-size tools. If a full-size negative-rake scraper can produce a finish cut inside a bowl, why not produce the same for turning miniatures? ■

Various lidded dishes atop a full-size negative-rake scraper, alongside a miniature negative-rake scraper.

18th-Century Spice Jar, 2022, Mahogany, shown next to a dime for size reference

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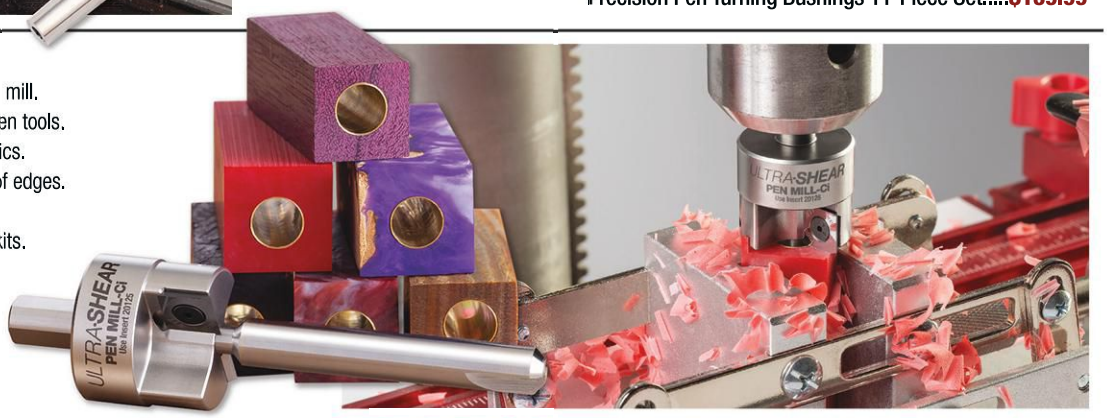

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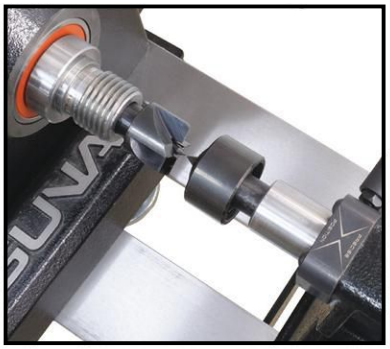

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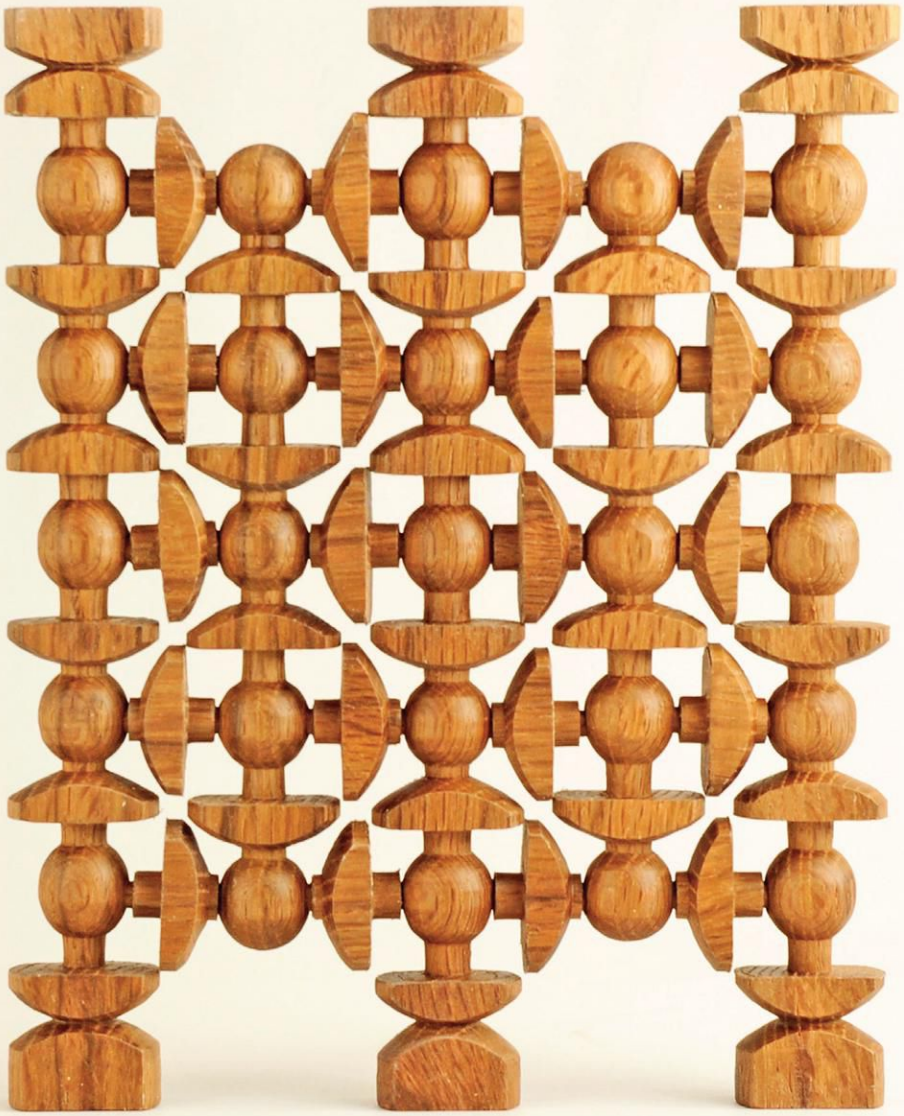
Mashrabiya-Inspired!

A long time ago, in a city far away... While a grad student in Near Eastern archaeology at the University of Toronto, I constantly walked by a mashrabiya in the museum department. The geometric intricacy of this panel, made by an unknown turner in Cairo several centuries ago, intrigued me and piqued my interest in turning. Although years passed before I was able to buy a lathe and begin turning, the fascination remained.

At my first turning lesson, I brought pictures of mashrabiyas to show my initial stimulus and a concept I wanted to work with. Nonetheless, many bowls, plates, and hollow forms came first. The intrigue remained, and I finally began exploring the possibilities of these complex yet simple panels. Since mashrabiyas are primarily window screens, they produce striking patterns both in silhouette and face-on, yielding positive and negative images. When I create a design, the open spaces defined by the turnings are as important as the shapes of the spindle elements themselves. I use both square and hexagonal lattices, and expand these to three-dimensional geometric forms. I also enjoy working out multiaxis approaches to creating in two- and three-dimensional forms entirely on the lathe.



Untitled, 2020, White oak, 10" × 8" × ¾" (25cm × 20cm × 19mm)
Photo: Jamie Donaldson

Inside This Issue!

Learn more about turned mashrabiya work on page 38. Jennifer-Navva Milliken of The Museum for Art in Wood (formerly The Center for Art in Wood) shares insights about Cairo's mashrabiya, as well as the details and opportunities surrounding The Museum's Mashrabiya Project.