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The Journal of the American Association of Woodturners
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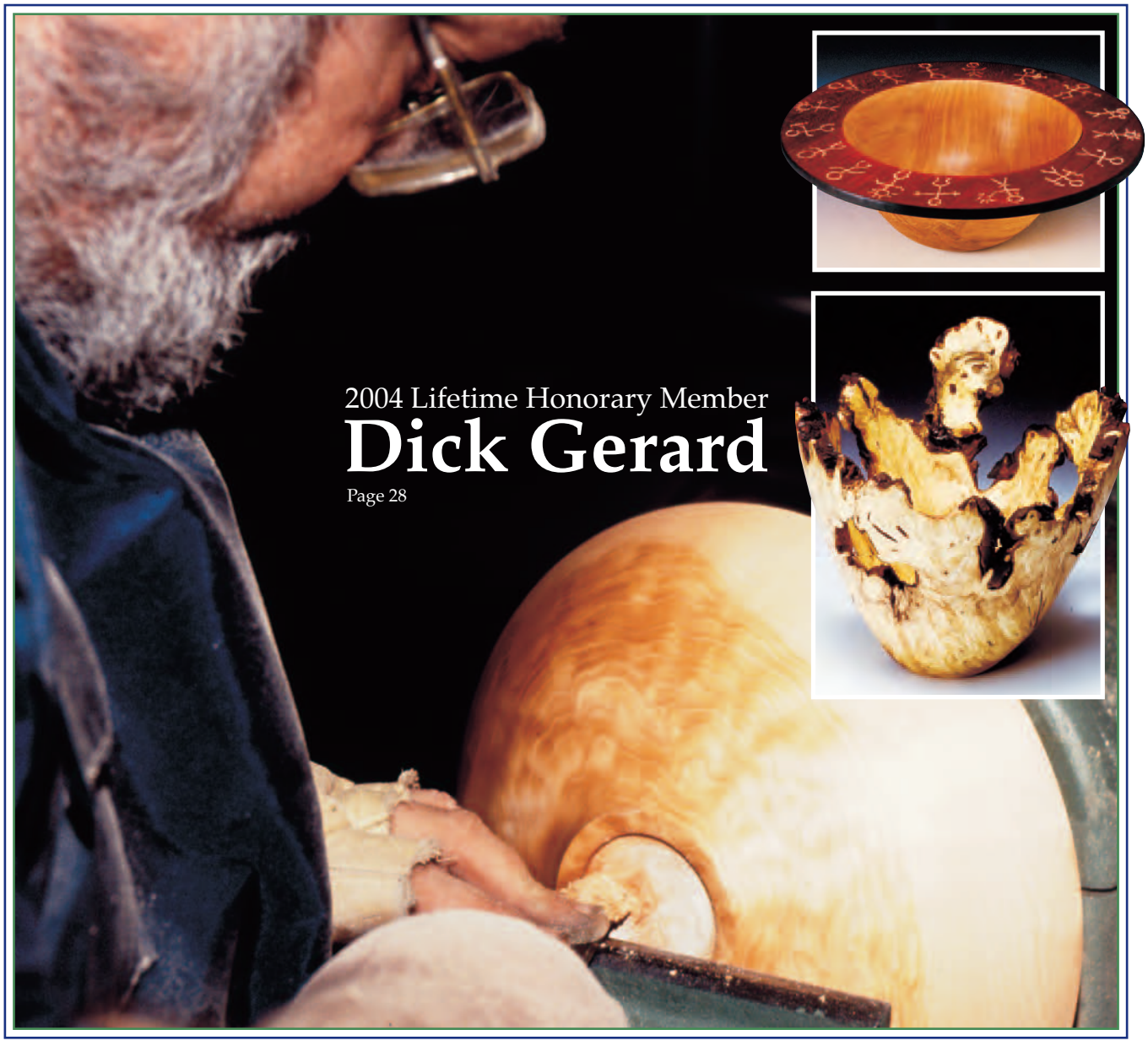

2004 Lifetime Honorary Member

Dick Gerard

Page 28

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Join us in Orlando Page 49

Chips will be flying at this year's AAW National Symposium in Orlando. Don't miss 30 world-class turners, 130-plus demonstrations over three days, and more than 40 exhibitors.

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Chatter, news, & notes

Cover photo: Nancy Gerard

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What's going on at your lathe?

Anything interesting in your chapter of AAW?

Have you visited any turners, shops, or museums of interest?

Do you have a tip or technique you'd like to share?

Please send article ideas to:
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For tips on article submission and photography requirements, visit:
www.woodturner.org/articles.html

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For rates and specifications, please contact the administrative office at 651-484-9094 (fax 651-484-1724), or email woodturner@qwest.net

A NOTE ABOUT SAFETY

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

SUBSCRIBERS

If your issue arrives damaged through the mail, please contact the Administrator.

Turning off the Main Highway

Make a side-trip into Southeast Oklahoma for a turning treasure

Photos: Bob Hawks

Oklahoma Forest Heritage Center near Broken Bow

Tucked into southeast Oklahoma in a region affectionately called the "Little Smokies," Beavers Bend Resort Park is far off the beaten track. The rugged terrain—home to towering 100-foot trees—also claims the tallest mountain between the Appalachians and the Rockies.

Attribute much of the charm of Beavers Bend to the Civilian Conservation Corps (CCC), which began building the park in 1937. Well-preserved cabins, staircases, and park offices are a testament to the CCC's solid workmanship.

There's good reason for woodturners to invest a half tank of gas to explore this region near Broken Bow that supports a thriving timber industry. The Oklahoma Forest Heritage Center contains a world-class collection of woodturnings assembled by Quintus Herron, a forester who once managed 40 square miles of his family's pine tree farm.

For six weeks last fall, the Echinata Gallery at the Oklahoma Forest Heritage Center featured 40 pieces from Ron Fleming and the late Patti Fleming of Tulsa. Shown above is Ron's bleached mahogany piece (12" x 14") titled "Debona." The Center, a part of Beavers Bend Resort Park in southeast Oklahoma is about 200 miles from Tulsa, 225 miles from Dallas-Fort Worth, and about 250 miles from Shrevesport.

Herron collected more than 400 pieces over 35 years. His collection is regularly rotated through display space in the Echinata Gallery (*echinata* is the botanical name for the shortleaf pine). The collection includes turnings by Todd Hoyer, Phil Moulthrop, Kelly Dunn, and Malcom Tibbetts.

The Center also hosts two annual wood exhibits. Previous shows have featured Oklahoma turners Jerry Brownrigg, Bob Hawks, and Patti and Ron Fleming plus Clay Foster (Texas), Ted Bartholomew (Washington) and AAW chapters from Oklahoma and Texas. The East Texas Woodturners Assocation will be featured in an exhibit opening March 6, 2005.

Dioramas painted by Harry Rossoll (the Smokey Bear artist) show the history of forest development that abounds in this corner of Oklahoma. On the one-mile Tree Identification Trail, you'll find 50-plus species.

The Forest Heritage Center and Echinata Gallery are open seven days a week. For more infor-mation, contact the Forest Heritage Center Museum at 580-494-6497 or fhc@beaversbend.com.

President's Letter

Since the start of the new year, the AAW Board of Directors has been busy with many changes.

In March, Board member and past president Bobby Clemons tenured his resignation due to health reasons. We offer our prayers and best wishes to Bobby for a speedy recovery. The board appointed Angelo Iafrate to serve out the remainder of Bobby's term.

Angelo Iafrate

When the Board of Directors met in Atlanta in late April, five board members—all who had served less than four months—arrived with fresh ideas and bundles of energy. I was impressed by the group's thorough and thoughtful approach to issues and its "get it done attitude."

Already, projects are underway that will move the AAW forward. Besides routine administration and the business of 10 committees, here are highlights of our 2004 board meetings and e-mail exchanges:

- For a streamlined, consistent exchange of ideas with chapters, communications now flow through the Chapters Committee rather than chapter liaisons. John Hill (johnrhill@charternet) chairs this important committee.
- We have re-doubled our efforts to strengthen 210-plus chapters and provide chapter officers with the tools to support local members. We pledge to regularly communicate information and updates directly to chapter presidents. For example, John recently sent an e-mail to all chapter presidents, asking volunteers to assist on AAW projects and committees.
- By encouraging member participation on all AAW committees (exclusively composed of AAW board members in the past), we believe talented members will help the board make informed decisions and address the needs of our growing organization.
- We affirmed the AAW's need for balanced support of diverse levels and interests of turning—from educational opportunity grants to new chapter programs. Fresh concepts include chapter best practices (see page 11 for details), web site and newsletter contests (for rules, see www.woodturner.org), and a program to nurture studio turner's development.
- Board members Steve Ainsworth and John Hill presented the results for a long-overdue by-law review and update.
- Other tasks underway include forming an Ethics Committee, developing an executive director job description, and reviewing AAW policies and procedures.
- The AAW web site has introduced a new feature for members to share photos of turnings and techniques. This gallery resource has great promise for education, inspiration, and reference.
- The AAW board appointed Mark St. Leger to serve as vice president. Congratulations, Mark!

The Japanese exchange program continues to move forward, as does this year's symposium planning. *From Sea to Odyssey*—our newest juried show—will premiere in Orlando during this year's symposium.

By now, you should have received your 2004 *Resource Directory*. Inside the front cover is a list of board members, their e-mails and phone numbers. If you have a concern, idea, or just want to say hi, give us a shout!

As we move into summer and closer to the Orlando symposium, the board and all the other volunteers eagerly await what is shaping up to be one of the best symposiums ever. We invite you to join us there! See symposium details beginning on page 49.

Phil

Phil Brennion
philb@northlink.com

Two-for-One Raffle

A new approach for woodturning symposiums

By Gerald Whitaker

Texas-sized changes in the popular regional turning symposium in Wichita Falls went deeper than a new name. The former Texas Turn or Two (TTT) was renamed SouthWest Association of Turners (SWAT). But perhaps more impressive were two innovative events that drew praise from a record 458 attendees.

The most significant change was our "2-for-1" raffle. This change proved to be so positive that we believe other regional symposiums might want to try this approach with their event.

This year we added an optional banquet on Saturday night (nearly 90 percent chose to attend.) We considered incorporating an auction with the banquet, but rejected it for several reasons. Auctions at regional events have notoriously been plagued by fine pieces going for paltry prices, greatly embarrassing the artist who donated the piece. In addition, bidding all too frequently was by a relatively few wealthier attendees, limiting the interest of many turners. Finally, we didn't want to get into peoples' pockets this year because of some financial issues early on in the planning stages.

However, we had a sizable group of top wood artists who were willing to donate beautiful pieces. More than 30 top turners in our region—including all four of our featured lead professionals—contributed pieces. Our challenge was to get these pieces into our woodturners' hands without the difficulties outlined above.

What we came up with was to expand our tool and wood raffle to include the donated wood art. To help market the raffle, photos were posted on our web site (www.swaturners.com) well in advance of the symposium, and the pieces were on a special Instant Gallery exhibit table.

Sales of the one-dollar tickets were brisk and excitement was high. Stacey Hager of Austin found his true calling as a ticket salesman; rumor has it that he was still selling tickets at half

About 90 percent of the turners chose to attend the optional Saturday night banquet and the first part of the "2-for-1" raffle. Lead demonstrators presented a short slide show of their work before critiquing several Instant Gallery favorites.

Lead demonstrator Trent Bosch from Fort Collins, CO, praises a mesquite piece turned and carved by Gene and Peggy Kircus from Bullard, TX.

price after both parts of the raffle were over!

At the Saturday banquet, each donor came to the podium, drew a ticket from a huge drum built especially for the event, and personally presented his or her piece to the lucky winner. This personal touch was well received.

At the conclusion of the raffle, all the winning tickets were tossed back into the drum, making them eligible to win another prize in the Sunday raffle of tools, turning blocks, and equipment. Hence the name "2-for-1" raffle: Every ticket had a chance to win on Saturday and again on Sunday.

We sold more than $6,000 in tickets and more than 400 people stayed glued to their seats at the banquet, waiting to see if one of their numbers was drawn.

One other banquet event provided much interest. After dessert, each of the four lead demonstrators selected two or three Instant Gallery pieces to critique. A few deserving turners were honored to have their work praised by the professionals.

Our 2004 Symposium, now renamed Southwest Association of Turners (SWAT), will take place October 1 through 3 in Temple. Y'all come and join us!

Gerald Whitaker (gwhitabmw@aol.com) is the SWAT publicity chairman. He lives in Edinburg, TX.

Opinions abound on 2½-hour demos

When the Ohio Valley Woodturners Guild (OVWG) rolled out its popular bi-annual symposium last October, they decided to take a longer approach to the demonstration time slots. Instead of the 90-minute sessions, the organizers rolled out 2½-hour sessions.

"Personally," demonstrator Mike Mahoney reported, "they were better. I have some complicated projects that are hard to accomplish in 90-minute sessions.

"There are turners of all abilities in sessions. With a longer session, you can include remedial info along with advanced ideas—providing you can do it in an entertaining way.

"If the session is shorter, some things have to be left out. In other symposiums with 90-minute sessions, I see presenters with back-to-back demos and the second one is the conclusion of the first. So they need extra time to accomplish the project."

Al Stirt admitted to having problems with the longer demos. "My gut feeling was that this was just too long, given the setting (at a church camp). The demos seemed too long for me because I'm used to working at a higher energy level in a conference setting, as opposed to the more relaxed pacing of a class.

"But I could get used to giving these longer demos if I thought the attendees valued them."

"I think the attendees find it hard to sit for that long," Bonnie Klein said. "A day with four demos is a good workable plan. The demonstrators can work three demos and maybe have one off each day. One of the important parts of these symposiums is the exchange of ideas between the demonstrators. We like to watch each other also. There was no time to do that with the 2½-hour schedule."

John Wake, OVWG member and symposium attendee, said that the feedback surveys he saw generally embraced the 2½-hour demos. "This kept the demonstrators from hurrying up and enabled most to finish the featured piece without glossing over steps.

"I think Bonnie Klein effectively used the break to change from turning to surface finishes. She also had ample time to answer questions as her presentation went forward.

"On the negative side, I felt the longer sessions really needed two 10-minute breaks to allow the demonstrators to recharge their voices. The attendees had a little trouble with sitting on metal chairs for the longer period.

"My vote would be to stay with the longer sessions, add two breaks, be sure the demonstrators know ahead of time the length of the sessions and use an audible signal to start and end breaks."

The chapter will have a full year to evaluate the changes before it organizes a symposium for October 2005.

Committee approves $17,462 in EOG awards

In March, the Education Opportunity Grants (EOG) committee awarded $17,462 to 22 applicants. The winners, chosen from 37 applicants, included 17 chapters, four individuals and one school program.

The 2004 Winter EOG Grants were awarded to:

- Apple Ridge Woodturners, Ellijay, GA
- Artistic Woodturners of NW Florida, Pensacola, FL
- Barbara Berger, Elma, NY
- Capitol Area Woodturners, Springfield, VA
- Dakota Woodturners, Bismarck, ND
- Detroit Area Woodturners, Troy, MI
- Deryl Duer, Franklin, TN
- Allan Fredrick, Napa, CA
- Gold Coast Woodturners, Oakland Park, FL
- Gulf Coast Woodturners, Pasadena, TX
- Kawartha Woodturners, Cavan, Ontario
- Nebraska's I-80 Woodturners Guild, Lincoln, NE
- New Mexico Woodturners, Albuquerque, NM
- Palm Beach County Woodturners, Jupiter, FL
- Pulaski County High School, Nancy, KY
- Quaid State Bodgers, Grantsville, MD
- Rocky Mountain Woodturners, Laporte, CO
- Tidewater Turners of Virginia, Virginia Beach, VA
- Tuckessee Woodturners, Clarksville, TN
- West Michigan Woodturners, Portage, MI
- Woodturners of Southwest Missouri, Springfield, MO
- Lynne Yamaguchi, Tucson, AZ

The AAW welcomes your Summer EOG applications. The AAW awards grants up to $1,000 to individuals and chapters for the purpose of sharing and providing woodturning education. Entries must be postmarked no later than July 15. For complete information, follow the links on the AAW web site (www.woodturner.org) or call 651-484-9094 to request an application.

AAW Annual Financial Statement for 2003

Revenues and Expenses

Income

Annual Dues	$ 395, 913
Contributions	43,351
Publications & Products	117,904
Symposium	198,945
Exhibitions	10,317
Interest	7,853
Other Income	2,903
Total Income	**$ 777,186**

Expense

Publications & Products	$ 346,272
Symposium	216,422
Gallery & Exhibitions	43,924
Scholarship Grants	33,578
Other Programs	8,726
Administrative	171,678
Member Development	11,058
Total Expenses	**$ 831,658**

Net Loss . . . .$(54,472)

Balance Sheet

(as of 12/31/03)

Assets

Checking & Savings	$ 167,981
CDs	290,078
Interest Receivable	3,746
Inventory	83,575
Prepaid Expenses	8,181
Equip & Furniture-Net	2,056
Osolnik Endowment	43,421
Permanent Collection	800
Total Assets	**$ 599,838**

Liabilities

Accounts Payable	$ 18,372
Accrued Expenses	4,860
Deferred Revenue	35,720
Total Liabilities	**$ 58,952**

Net Assets

Unrestricted	$ 348,284
Temporarily Restricted	149,181
Permanently Restricted	43,421
Total Net Assets	**$ 540,886**

Total Liabilities & Net Assets . . . . . $ 599,838

AAW introduces brass buckle

A high-quality brass buckle is the newest addition to AAW logo items. The 2 1/2"-diameter buckle features the highly polished AAW logo in deep relief. This USA-made buckle retails for $20. See the AAW web site (www.woodturner.org) for more details. "Whenever I wear this to symposiums," says AAW board member John Hill, "I get so many compliments. It is really beautiful."

AAW Financial Statement Explanation

Our financial loss for 2003 is due in part to expenditures for transitioning to a new editor and journal format.

Expenses exceeded income for the "Put a Lid On It" exhibition. Revenue generated by the 2003 symposium did not meet budgeted goals.

Linda Everett
AAW Treasurer

AAW names NC student for Japanese exchange

The AAW has selected North Carolina high school senior Lucas Hundley for a one-month exchange this summer with Japanese woodturners. As part of an exchange between the AAW and the Far East Woodturning Society (FEWS), Minako Suzuki will spend a month attending turning classes and visiting American turners and turning schools.

Lucas, 18, will enroll in a professional wood art program this fall at Haywood Community College in Clyde, NC. Lucas learned turning from Rodger Jacobs and then started working part-time in Alan Hollar's shop when he was 14 years old.

Lucas will study at the Japanese Traditional Woodturning Center in Tokyo and visit renowned Japanese turners. His tentative schedule calls for him to attend the Orlando symposium and then fly to Japan with Naoto Suzuki, FEWS president.

FEWS selected Minako Suzuki to study turning in the USA. Minako graduated from a College of Arts & Craft and studied at the Japanese Traditional Woodturning Center.

In addition to attending the Orlando symposium, Minako will study with Bonnie Klein and Trent Bosch, attend an Alan Lacer class at the Marc Adams School of Woodworking,, meet with the Capital Area Woodworkers chapter (Washington, DC), and attend a Christian Burchard class at the Arrowmont School of Arts and Crafts.

Look for details about the student experiences in the Winter issue of *American Woodturner*.

The Quizzical Woodturner

By Ernie Newman

Think you know something about woodturning? Test your woodturning IQ, then check answers below.

1 Which species was frequently used by European and North American shipwrights for ship's bearings in the 17th, 18th and 19th centuries: English Oak, Lignum Vitae or Balsa?

2 How can we generate burls on a tree?

3 The world's oldest living organism is a tree. In what country is it found? Clue: Richard Raffan, Vic Wood, and the platypus live there.

4 Tools made from high-speed steel give off orange-red sparks during grinding. What color are the sparks given off by carbon-steel tools?

5 Which of the following were woodturners: Peter the Great of Russia, Louis the Sixteenth of France, Martin Luther of Germany?

Ernie Newman (ernienewman@hotmail.com; ernienewman.cjb.net) lives in the Blue Mountains west of Sydney, Australia. He previously taught a 700-hour course for apprentice woodturners.

ANSWERS:

Lignum Vitae was imported from the Caribbean and tropical America for ship's bearings because of its hardness and capacity to self-lubricate.

1 Eucalyptus (gums) are native to Australia, Balsa is native to tropical America, and ebony is native to South East Asia and to Africa.

2 One way to make burls on a tree is to imitate the South American pygmy marmoset. These tiny monkeys, only three times the size of a mouse, sometimes create dozens of burls on a single tree by chiselling holes in the bark with their sharp teeth. As the tree attempts to heal the wounds, gum is produced—a feast for the monkeys. Because they return regularly to keep the holes open and keep the supply of gum flowing, small burls are formed around the holes.

3 The oldest living organism in the world is a Huon Pine tree in Tasmania, Australia. It sprouted at least 10,500 years ago, around the time that humans began to grow crops and well before the invention of the wheel. Its snow-laden branches have been forced to the ground, taken root and spread so that it now covers 2 square acres. Every leaf, root, and branch in the stand has identical DNA, which means that it is one organism.

4 Carbon-steel tools give off whitelish sparks during grinding. It is important to keep carbon-steel tools cool when grinding because once they tur blue with heat, they lose their temper. High-speed steel tools are much more forgiving.

5 Peter the Great of Russia, Louis the Sixteenth of France, and Martin Luther were all woodturners. Peter the Great spent several months in Dutch and English shipyards in an attempt to discover the key to naval supremacy. The shipyard turners gave him lessons and he became a skillful woodturner.

Woodturning Magic

By Jim Bentley

5,000 wands and still going strong

We all know that there's magic in woodturning. Not many of us know there is profit in the magic of turning. Here's the story of Dennis Smith—who knows both.

Dennis, a woodturner since 1990, retired from civil service in 2001. About a year later, he learned through friends that a new business venture in New Jersey—Alivan's Master Wandmakers—was looking for a woodturner to make wands. Dennis, shown *below*, stepped forward.

The Alivan's contact led Dennis to turn more than 5,000 wands in 2003. Last year, he regularly worked 72-hour weeks to keep up with the demand. His wife, Jann, did the finishing and worked nearly as many hours.

Dennis turns wands from ebony, rosewood, black walnut, cherry, maple, red cedar, oak, maple, mahogany and holly. Alivan's wands (www.alivans.com) sell for $35 to $65 and are packaged with a collector's box, a velvet bag, and a certificate of authenticity.

Dennis confirmed that holly was one of the biggest sellers. (Harry Potter, as some of you must know, has a holly wand.) "Even though the specialty woods are more expensive," Dennis noted, "they're really selling well today. Some people are buying all varieties and there's even talk of bringing out a shadow box to display wand collections."

The demand for magic in wand form keeps Dennis from turning artistic bowls, but he hopes to return to that type of magic soon. To keep up with the Harry Potter craze, Alivan's has contracted with two additional turners.

With another movie set to debut in June—*Harry Potter and the Prisoner of Azkaban*—Dennis will no doubt need a little magic to keep pace with the demand.

Dennis Smith (sawdustmkr@knology.net) lives in Panama City, FL, and is a member of the newly formed Emerald Coast Woodturning Guild. Jim Bentley (jmbentley@frontiernet.net) lives in Fairfield Glade, TN, and is a member of the Cumberland Woodturners.

A new family

Arrowmont's totem poles are looking for more neighbors to join the family.

Two totem poles have served as beacons to countless turners attending classes at Arrowmont School of Arts and Crafts in Gatlinburg, TN. Twenty-four of the AAW's original chapters created the totem pieces in 1990 to commemorate Arrowmont as the birthplace of this turning organization. Many of the original chapters replaced or refurbished their totem pieces in 2003.

Arrowmont now invites each of the AAW's 210-plus chapters to add to the totem collection. The totem poles are built on 4" steel pipe that tower 20 feet

Visit the new

If you haven't recently visited the AAW's web site—www.woodturner.org—you're in for a pleasant surprise. The site reflects the AAW's growth and the explosion of web-based information.

Improvements include:

- Completely redesigned and reorganized menu
- AAW event calendar, searchable by region and date
- On-line galleries of AAW events including every symposium, special exhibition, and Collaborative Challenge
- Easy-to-access chapter information (see related article at right)
- Search button

# of totems at Arrowmont

above the ground. As chapter totem sections arrive at Arrowmont, a crew and bucket truck from the local power company will install the pieces. Arrowmont has agreed to furnish enough poles for all of the AAW's chapters.

Your chapter's segment should measure not more than 21" in diameter and 21" high with a centered vertical hole capable of sliding over the 4" steel pole. Several chapters have used a section of 4" ID schedule 40 PVC pipe as a stabilizing sleeve. Build your contribution from wood and finish capable of withstanding Tennessee's weather extremes. Totem pieces should be strong enough to endure the weight of other totem pieces.

Many chapters incorporated stainless steel fasteners in the construction of their section. Creativity reigns at Arrowmont and your chapter entry should reflect your chapter's creativity. Have fun and get your chapter to turn and build a totem section. It should be properly boxed and sent to: Arrowmont School of Arts and Crafts, Attn: Wood Studio, 556 Parkway, Gatlinburg, TN 37738.

And on your next trip to Arrowmont, you, too, can look proudly at your chapter's contribution to the turning community.

For additional details, contact AAW board member John Hill (Johnrhill@charter.net).

Photos: Jill Greene/Arrowmont School of Arts and Crafts

The Florida West Coast Woodturners contribution, below, was recently added to an Arrowmont totem pole.

AAW web site

Members are just becoming aware of new features, including a restructured forum and a photo gallery for recent turned work.

Jeff Jilg, a member from Austin, TX, is the AAW's new webmaster. Assisting Jeff are Chris Wright, Saugus, CA, and Paul Vonk, Mountain City, GA.

AAW members who helped in the redesign include Mike Nelson, Yellow Springs, OH, and Eric Tompkins, Farmington, ME.

Chapter Best Practices added to web site

Chapter Best Practices is a new, dynamic feature added to the AAW web site. Chapters that have had a successful event or found a creative way to run an on-going administrative function will be asked to document their success in a one-page statement. These will be posted on the web site to help new chapters and new chapter officers get started on the right foot—and encourage existing chapters to try new ideas.

Topics to be added in coming months include chapter structure, bookkeeping, membership, communications, meetings, and demonstrations.

Bill Small, president of the Bay Area Woodturners (Danville, CA), chairs the Chapter Best Practices sub-committee of Chapters and Membership.

Other members include: Danny Luttrell, Woodturners Anonymous (Richmond, VA); Hershel Miller, Mid-South Woodturners Guild (Memphis); Tom Reiman, Northwest Woodturners (Portland), and Bill Stephenson, Emerald Coast Woodturning Guild (Santa Rosa Beach, FL).

If you would like to submit a write-up or request more information on specific topics, please see the AAW web site or contact Bill Small at williamsmall@comcast.net.

Turners embrace Freedom Pen Project

Since January, custom-turned pens by the thousands are being shipped to USA servicemen and servicewomen stationed in Iraq and Afghanistan. Through the Freedom Pen Project, penturners from around the country are making pens and donating them to military personnel as their way of saying thanks.

The project is the idea of Keith Outten, administrator of the Sawmill Creek online woodworking forum (www.sawmillcreek.org). With the help of his wife, Jackie, and forum moderator Ken Salisbury, they are collecting as many pens as they can get to send to our troops. U.S. military branches have endorsed the Freedom Pen Project and several companies have signed on as corporate sponsors.

"The idea was an offhand comment in a casual conversation with our forum moderator, Ken Salisbury," Keith recalls. "It struck us both as a really positive thing we could do to give something back to these wonderful people who are over there defending our liberties. I mentioned it in a post on the Sawmill Creek forum that morning, and it kind of just exploded."

Dave Bonde, a teacher at Riverbend Middle School in Iowa Falls, IA, helps Kaleb Baier turn a pen. Riverbend students have donated more than 300 pens to the Freedom Pen Project.

Within days the Freedom Pen Project (FPP) had a name, a web site, and pens were streaming into the Virginia headquarters. A note from the penturner accompanies each pen, telling how it was made and why it was donated. So far, more than 3,300 pens have been donated.

Several AAW chapters and retail stores have sponsored a "Turn-a thon" to support the Freedom Pen Project, which has drawn people without previous turning experience.

One soldier wrote about the Freedom Pen he received, "I'm stationed in Qatar with the Central Command Forward Headquarters, and received a lovely handmade mesquite pen as a gracious gift from Rex Davis in Odessa, TX. It's a beautiful and functional piece, and the fact that it's made of mesquite brings back memories of home which are more precious as this deployment stretches on."

Another soldier wrote "It really makes a difference to us out here that people besides our own families remember that we are here and care."

If you would like to become involved in the Freedom Pen Project, you can turn pens, provide wood or other supplies, or even donate money by visiting the Freedom Pen Project web site, www.freedompens.org or call 757-591-5300.

—Scott Greaves, Blackfoot, ID

Regionalization study committee affirms AAW at-large representation

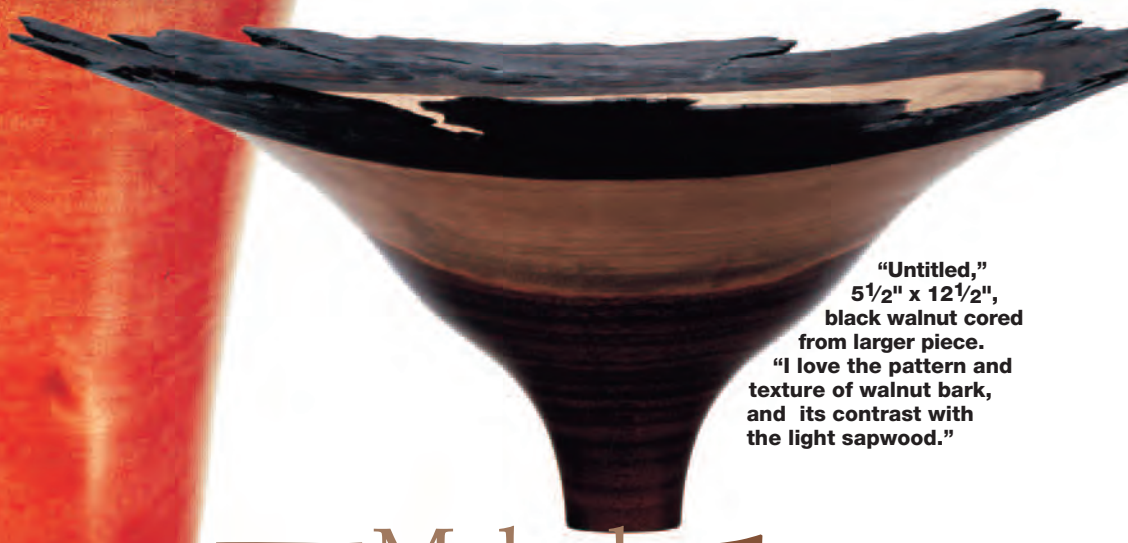
A regionalization study committee has unanimously recommended continuation of the AAW's at-large representation.

The committee affirmed the current procedure of electing three at-large board members to three-year terms. Board members may be re-elected for a second three-year term. The committee, formed in January 2004, reviewed representation on similar non-profit boards before unanimously recommending continuation of the AAW's current at-large representation. The AAW board approved the committee findings.

Board members John Hill (North Carolina) and Gary Lansinger (Ohio) chaired the committee. Other members included Gorst duPlessis (Louisiana), Art Fitzpatrick (California), Larry Genender (Texas), Larry Hasiak (Florida), Angelo Iafrate (Rhode Island), and Art Liestman, (British Columbia).

Pieces from African blackwood series, 2½" to 7" tall.

"Pink Lingerie," 8" x 4½", pink ivory, clear and gold acrylic lacquer finish.



"Untitled," 5½" x 12½", black walnut cored from larger piece. "I love the pattern and texture of walnut bark, and its contrast with the light sapwood."

Malcolm Zander

New Zealand-born Malcolm Zander, a recently retired biochemistry professor, lives in Ottawa, Ontario. He began turning four years ago, and is now an active studio turner.

"I feel very fortunate to have found woodturning," Malcom says. "The range of current and potential new activities in woodturning is exciting.

"There are so many new ideas to explore. Moreover, at the end of just one day, you can have something of beauty to show for your efforts. How many others in the world can say that?"

For more examples of his work, see www.malcolmzander.com.

Aiming for Quality Design

Jim Christiansen and
Gerrit Van Ness

Once you reach a point of mastering the basic turning skills, you're capable of turning out high-class work. Yes, you! It is a natural step, then, to make the attempt to develop new styles and to find ways to personalize work.

Design work of this sort is not an easy task. Producing work that is only slightly different from previous efforts takes a lot of thought and experimentation. A number of woodturning books are available that try to provide ideas and even *rules* to guide the woodturner in finding his or her *voice*. There is, however, no agreed upon path or method that leads to becoming an effective designer.

It is helpful to listen to the experts who give guidance. However, when you attend as many conferences and read as many design books as we have, conflicting information and opinions are evident. From our perspective, there is no organized scheme to develop a personal philosophy or approach to design.

We are proposing a list of design concepts or principles that the turner can embrace to assess the quality of a particular design. It is our hope that by looking critically at a piece of work while considering each item on the list, you will produce better work.

Before we present the list, we would like to provide an operational definition of the word *concept*. It might be helpful to define concept as an idea that cannot be defined adequately using words. For example, try defining the color *black*. Or try defining a *good curve*. The truth is, we know many things that can't be described using words.

Just as a child learns the difference between a dog and a cow by experience, woodturners learn design concepts the same way. To learn the concept of balance, a teacher asks us to hold and feel a large number of bowls and points out which have better balance. After numerous examples, we develop the sensitivity to make better discriminations and assess what good balance actually *feels* like.

Assessing the beauty of a particular curve also requires that we have a guided experience learning how to make more precise judgments. We need to be exposed to many examples of good curves and curves that are not so good. There may be some mathematical formulae that describe a good curve but likely a formula has not been devised that describes all good curves.

Use the list that follows as a guide to help you look systematically at your work to discover all the strengths, weaknesses, and possibilities.

Concepts related to good design

1. Thematic coherence

Good design usually has a goal. The individual elements of the piece should all support the design goal. Choose the size of the parts, the shape, texture, and color to support your designer's intent. If the "theme" of the work is organic, the parts should in some way express that focus or idea. The design of every part should make sense and show some consistency in style. Important ideas related to this concept also include repetition, rhythm, variety, and balance.

2. Pleasing curves

Pleasing curves generally contain no flat spots. Curves that vary are generally considered to be more beautiful. Given that even seemingly simple curves can vary a great deal, selecting the best option for a piece of work can be a lifetime quest. We recommend that turners save examples of their work so they can compare earlier pieces with

Photos: Bill Luce

PLEASING CURVES: Bill Luce of Renton, WA, turned both of the pieces above. He prefers the curve of the example on the left. Selecting the "best" curve among samples requires that we learn to see subtle differences.

more recent ones. Sometimes work produced even six months ago will be quite different.

Consider the work of Bill Luce. Bill is a turner who has expended a great deal of effort to produce a "perfect" bowl. Of the two examples shown, which have great curves, Bill prefers the curve in the example on the left. Both are very good—one is better.

3. Scale and size

Scale the elements of a piece (base, opening, lid, decorations, etc.) so the parts compliment each other and support the unity of the design. Size does make a difference. Sometimes, making a piece larger or smaller really impacts the quality of the design. In the following example, Sterling Sanders made two slightly different examples of the same basic design. He varied the size of the elements. Although the two are very similar, the top one works better as a unified design.

Continued

Photos: Sterling Sanders

SCALE AND SIZE: Sterling Sanders of Sandpoint, ID, varies the size of elements in these similar pieces, titled "Nature's Revenge." Most agree that the subtle difference in size and shape of individual parts in the top example make a better design.

4. Transitions

Transitions are those design elements that occur where parts are joined together or where the piece touches the shelf. If the transition is a joint, then the selection of the style of joint should work well visually. Usually transitions should be consistent and support the design statement. A poor transition may be due to an inappropriately shaped part or one that does not fit style-wise. Jim's pedestal box on the right has several problematic transitions. The top of the pedestal has too much mass and an almost abrupt ending and does not resemble the more developed transition to the base. The example on the left reflects a more appropriate and consistent style in the transitions.

5. Sensory elements

We experience woodturnings through our senses. The weight and balance of a piece can alter how it is perceived. Color can enhance a form by calling attention to a particular feature. Certain colors can heighten the emotional impact—or have the opposite effect. The texture choice also can have significant influence on the overall design. You can enhance your work with natural features such as grain patterns, colors, and flaws including knots, voids, and bark inclusions.

The effective designer develops a knowledge base about manipulating sensory elements. This comes about when we have the opportunity to look at a lot of examples where sensory design elements enhance the work—and examples where sensory elements are not used effectively. This allows us to develop the ability to select sensory elements that add to the final impact of the work. We chose the two pieces *opposite* to illustrate sensory impact.

Photos: Will Simpson

TRANSITION BETWEEN ELEMENTS: Jim Christiansen turned these lidded boxes. The box on the left displays a more appropriate and consistent style in the transitions between the parts than the box on the right.

6. Use and function

Turners should always be mindful of the practical aspects of a piece. When we select design elements, we must be conscious of how the object is to be used or displayed. For example, if you turn a salad bowl, you should design a stable base that allows it to be used without tipping over when tongs lift the greens from the bowl.

You don't want to produce a work that is too large to sit on a shelf if that is its intended purpose. The more experience you have, the better judgment you'll make about what is appropriate.

Summary

At one point or another, most woodturners strive to create new designs. Sometimes this is the direct result of the turning materials. To get the best result, we often consider grain patterns, natural "flaws" such as knots, insect damage, spalt, and so forth. We also work with the absence of such characteristics by adding color, burning, texturing or carving. Sometimes we are forced into a complete redesign due to "accidents." How many of us make that one final cut and have a catch that ends up having a dramatic influence on the final design? Like it or not, we are all designers.

In order to design well, we believe that it is helpful to first understand the six major design concepts outlined here. Further, it is important to understand that concepts are essentially ideas that can only be adequately learned through direct experience. Exposure to work that reflects effective use of the particular concept and also to work that is not so well executed is essential.

For example, if the teacher hands a series of bowls to a student and says, "these bowls have good balance," it is likely that no real learning will take place. The learner must also be given numerous examples of bowls that do not have good balance. Conceptual learning requires that we look carefully at how we teach design.

We believe that using the "example-non-example" approach enables us to effectively move design to higher levels. Teachers who attempt to use this method should have had sufficient exposure to the concepts to have an appreciation and understanding of a wide variety of methods and techniques. Teachers should not be too "rule bound" regarding what constitutes good work—and what isn't good work.

As there are only a few who fit this strict requirement, we can develop our own ability by seeking feedback from a variety of sources and carefully evaluating what we receive. The important thing is that we use actual examples in our teaching and learning.

Photos: Chuck Finn and Will Simpson

SENSORY ELEMENTS: "Funnel of Love," left, by Gerrit Van Ness incorporates color and familiar objects to make a strong visual statement. Jim Christiansen's fossil vessel "Love Lost Long Ago," right, emphasizes tactile elements as well as telling a story to enhance the sensory impact.

Jim Christiansen (jimchristiansen@moscow.com) of Moscow, ID, and Gerrit Van Ness (www.gerritvanness.com) of Anacortes, WA, collaborate on many turning-related projects and articles. This article is their first attempt to present design ideas to a wide audience. Jim and Gerrit welcome your comments and suggestions.

'We don't collect woodturnings, We collect friends'

–Dale Nish

Dale and Norene on the front porch with their "Welcome" sign.

By Kip Christensen
Photos: Don Dafoe and Kip Christensen

Every corner and every shelf in Dale and Norene's Provo home is filled with turned pieces collected over the years.

Dale and Norene Nish aren't typical collectors of woodturnings. Their collection of contemporary turning is extensive and one of the most comprehensive among both private and public collections. Yet it has never been cataloged, documented, or appraised. Dale estimates that it includes approximately 1,000 pieces from over 300 different artists. But currently, there is no list of who those artists are, what pieces they produced—or when.

This may sound like a very unorganized way to go about assembling a major collection of turnings, and Dale and Norene would probably not argue with that assessment. I have several times heard Dale remark, "We don't collect woodturnings, we collect friends."

The Nish collection has never been about the pieces. It has always been about the people who created them. In the AAW video *Dale Nish - The Woodturner's Mentor*, Dale noted, "What I do is I collect people who make woodturnings. With the exception of two or three probably, there's not a piece in this house that I do not know the maker, or that I haven't met the maker or I haven't sat down and discussed things with them."

To travel with Dale is a memorable treat, as many pieces were acquired during his extensive travels. You won't find Dale spending his spare time hanging around the motel staring at the television. Rather, he is visiting galleries, gift shops, wood suppliers, or even more likely visiting a friend or seeking out new ones.

Dale is comfortable meeting new people and has received particular satisfaction in making opportunities for young people who are new to turning. When traveling, he seeks out young turners and visits them in their studio. Of these visits Dale said, "I never leave their shop until I buy a piece or two. That says I like their work and encourages them to do better."

As a result of this unorthodox method of collecting, Dale has acquired a significant collection of early work from people who were relatively unheard of at the time. Some of these pieces are

quite ordinary yet represent an important snapshot in the historical development of a particular turner or of turning in general. Other pieces are exceptional and rare because the artist later moved away from an early body of work which included only a few pieces. A particularly good example of this is an extraordinary claro walnut bowl turned by Del Stubbs.

In 1978, Dale started the Utah Woodturning Symposium, which grew into an annual event that he coordinated for its first 19 years. During that time, he invited scores of prominent woodturners to Utah as presenters. He also kept his ear to the ground for potential rising stars and extended them the same invitation.

For several newcomers, the Utah symposium was their first experience presenting at a major forum. Whether they were well known or not, Dale acquired at least one piece from nearly all of these presenters.

Today, a significant portion of Dale and Norene's collection consists of work produced by those who presented at the Utah symposium. Many of these presenters have been invited back from time to time and in many cases the collection shows an artist's progression through several stages. In some cases, Dale's favorite pieces are still from a woodturner's early eras.

For years, Bill Giese's "Flower Bowl" has held an esteemed position on top of the Nish television. "You can't imagine what it's like to have someone like Dale Nish praise your work in front of the Provo audience," Bill remembers of the day when Dale purchased this zircote and maple piece eight years ago when he was 72 years old. "I brought it to Provo, but never thought anyone would buy it. After Dale said he had to buy it, I had to tell him it was promised for a show in Eureka I entered. After the bowl won first place, I sent it back to Dale."

Each year, Dale invites the presenters to autograph a designated page in a special copy of his book, *Creative Woodturning*. To consider these many signatures, collected on a few pages over two decades, gives a person the sense that this book itself contains an important piece of woodturning history. It is certainly a treasured element of Dale and Norene's collection.

Dale and Norene acquired nearly all of the work directly from the people who produced it. Much of the collection has been purchased, but some pieces were traded. As Dale explains it, "I trade my $4,000 bowl for their $4,000 bowl. Otherwise neither one of us could afford the other's work."

If you asked Dale to pick out his favorite turnings, he is likely to answer in terms of people

Continued

rather than pieces. Each piece has a story, and it is as much the story he values as the work itself. He speaks of woodturning friends from earlier days when almost all woodturners worked in relative isolation. He also speaks of former students he has mentored or others he has encouraged along in formative years.

Although Dale has been primarily responsible for filling their house with woodturnings, Norene has always been very supportive of the collection and welcomes turners into their home. She is a gracious hostess who keeps their home spotless and inviting for the many guests who come, often on little or no notice. Norene has her own interest in woodturnings and other art and fine craft and regularly collects pieces for herself. Like Dale, she has her own display cabinet filled primarily with smaller pieces that are easy to incorporate into her decor.

The Nish collection represents a who's who in woodturning during the past three decades—many of whom Dale profoundly influenced along the way. For Dale and Norene, each piece they have collected provides a link to memories past and recent, reminding them of places traveled, friends made, acquaintances renewed, and turnings acquired to help keep the memories fresh.

Kip Christensen is a professor of Industrial Design at Brigham Young University in Provo and an *American Woodturner* contributing editor.

"This is the prettiest piece of carob I've ever seen," Mike Mahoney says of his nesting set now part of the Nish collection. "They're one of three sets I made for a show in 1998. When Dale walked into my studio, he said, 'These have to come with me.' When I saw the set at Dale's house recently, I thought, 'Wow, how did I let those go?'"

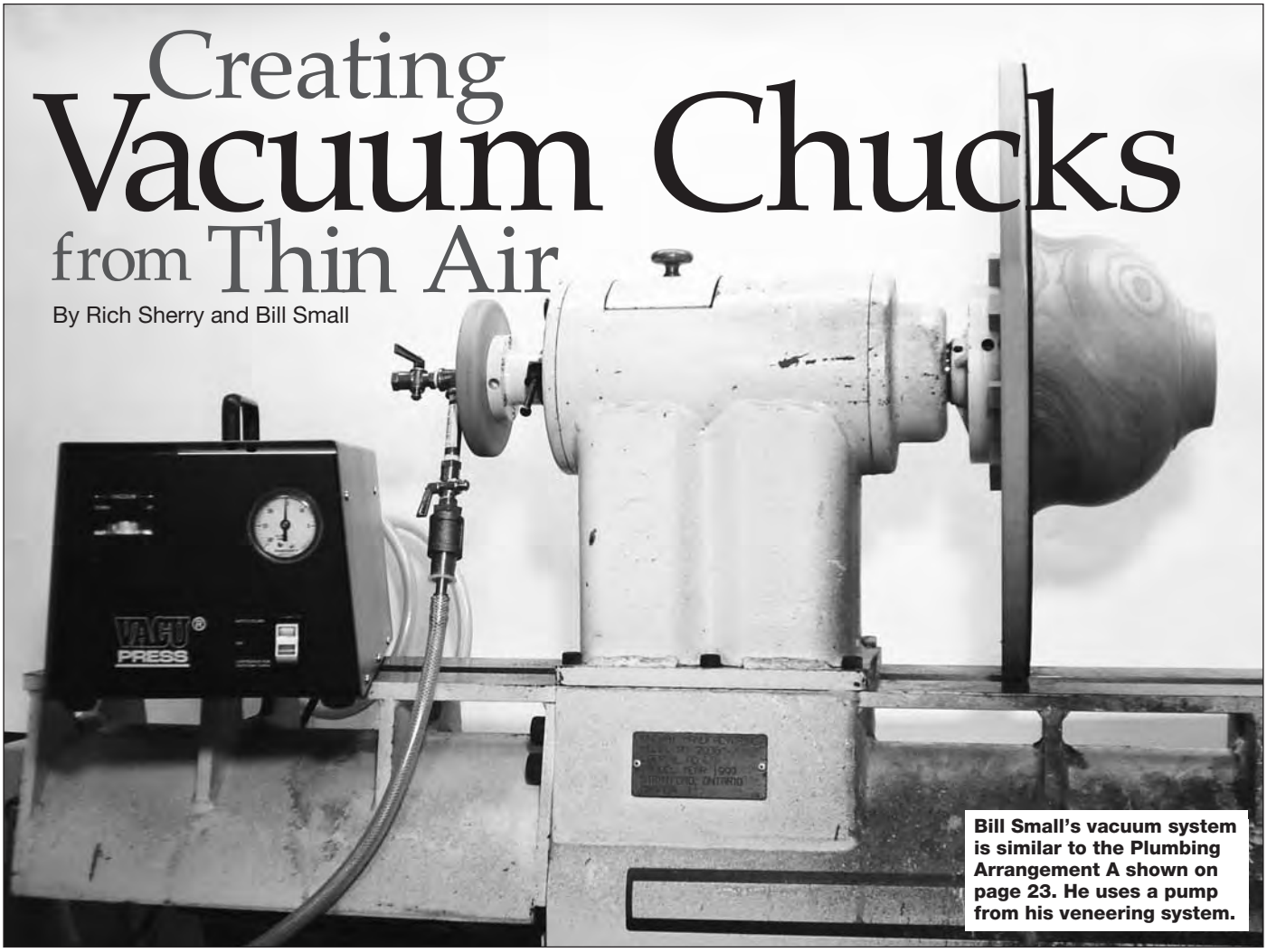
J. Paul Fennell remembers the evening well when Dale Nish and Rude Osolnik got in a bidding war over his vessel at the 1991 AAW symposium benefit auction in Denton, TX. "I made this piece from bleached curly maple I obtained from a tree removal company's lot of discarded logs. The entire log had curl as tight as corduroy, and stands out as the best all-time find in my life as a woodturner."

"Before the auction, I marked down three pieces I wanted to buy," Dale remembers, "and Rude out-bid me on the first two. I wasn't going to let him get the third one. I think between what Rude and I donated and what we bought, we had a third of the auction proceeds that night."

"Dale eventually won out to the tune of $850," Paul adds, "a high price at that time for a piece from a not-too-well-known turner."

Creating Vacuum Chucks from Thin Air

By Rich Sherry and Bill Small



Bill Small's vacuum system is similar to the Plumbing Arrangement A shown on page 23. He uses a pump from his veneering system.

Photo: Bill Small

Vacuum chucks provide an easy way to hold your turnings under a variety of challenging circumstances, including reverse-chucking a bowl to turn the inside of a decorative foot.

Although you can buy systems for $600 to $900, you can make your own for much less, and in the process, tailor it to fit your individual needs.

All vacuum chuck systems consist of three major components: a pump, plumbing, and chucks of various sizes and shapes. The latter two—plumbing and chucks—are easy and inexpensive to make. Typically, the pump is the challenge. If you already have a vacuum pump or don't mind shelling out the money for a manufactured one, you're nearly home free. However, making a pump from parts or using an alternative vacuum source is also possible.

Before undertaking the design and construction of any of the components, it's helpful to understand the physics behind a vacuum system. There are three basic principles: air pressure, air leakage, and contact area.

Air pressure is commonly measured by the height of a column of mercury it can support. Air pressure at sea level will average about 29.9 inches of mercury (expressed as 29.9 IN Hg). This equates to slightly less than 15 pounds per square inch (psi) and means that 2 IN Hg is about the same as 1 psi. A vacuum pump creates low pressure within the chuck/turning piece assembly.

Continued

Atmospheric pressure then exerts a force on the outside surfaces holding them together. The greater the difference in pressures, the greater the holding force per square inch.

Air leakage occurs in all vacuum chuck systems. A good vacuum pump can keep up with a moderate amount of leakage and maintain adequate vacuum. However, too much leakage reduces the vacuum to the point where your turning piece is no longer secure. Therefore, vacuum systems should minimize leakage.

Contact area is the area of the circle created where your turning piece touches the chuck. The force holding your turning piece on the chuck is the product of contact area and vacuum pressure.

Here's the holding force formula: piece's radius squared x π x psi = lbs. of holding force. Therefore, a 2" diameter bowl with 10 psi has a holding force of 31 lbs.—probably too little for most turnings. However, a 20"-diameter bowl with 10 psi has a holding force of 3100 lbs.—enough to crush many bowls. The challenge is to find the happy balance between these extremes.

Assume that where your bowl is touching the chuck, it has a radius of 5 inches. Then the contact area between the chuck and the bowl is 78.5 in^2 (5 in^2 x π = 78.5 in^2). Additionally, assume that your vacuum gauge reads 10 IN Hg, which equates to about 5 psi. Finally, 78.5 in^2 x 5 lb./in^2 results in 393 lbs. of force holding your bowl against the chuck.

Small pieces, big pressure

Small turning pieces (3" or smaller diameter) require a high vacuum pressure to generate adequate holding force. The system requires low leakage to maintain a high air pressure difference. On the other hand, you can hold a large turning pieces in place with lower vacuum. In fact, with a high air pressure difference, you can crush a large, thin-walled bowl.

With experience, you will learn how to adjust the vacuum pressure to ensure sufficient pressure to hold your pieces securely, but no so much as to risk damaging your small pieces.

With these principles understood, let's address the design and construction of the three components.

Pump. The table *opposite* presents a summary of vacuum pump options. Note that the table is only a guide and you may experience different results. Turners who own a high quality shop vac or moderately powerful air compressor may wish to consider those options. Ensure that your pump has a filter to protect it from dirt and excess moisture drawn from the turning piece. An automobile fuel filter assembly is a workable option.

Plumbing. Drawing 1 presents a schematic of the required parts. They include:

- 1/2" inside diameter sealed bearing (KSK 1321RS is a possible choice and costs about $7).
- Fittings and perhaps hose. The 1/4" NPT brass parts work well (about $20). Reinforced hose should be used so it doesn't collapse.
- Vacuum gauge. If your vacuum pump doesn't contain one, an automotive fuel pump gauge (about $25) works well. It's important to know how much pressure you are working with.
- Two valves: one to isolate the pump; the second to reduce the amount of vacuum pressure when turning larger pieces and when mounting/demounting pieces.

Drawing 1 shows two plumbing solutions. Because the options in the figure incorporate a heavy vacuum gauge, most of the hardware is mounted on a fixed board. The arrangement in the photograph on page 21 is cantilevered from the spindle, in this case, because the gauge is incorporated into the pump.

Chucks. You will want to have several chucks to capitalize on your system's possibilities. Drawing 2 shows a flat chuck made from 3/4" MDF and 1/8" closed cell foam rubber that works for turning pieces with a finished edge. Also shown is a cup chuck made from a PVC pipe connector and 1/16" reinforced rubber sheet that works with turning pieces with an irregular rim. Connectors of different diameters accommodate a range of turning piece sizes and can share one base plate.

Additional resources

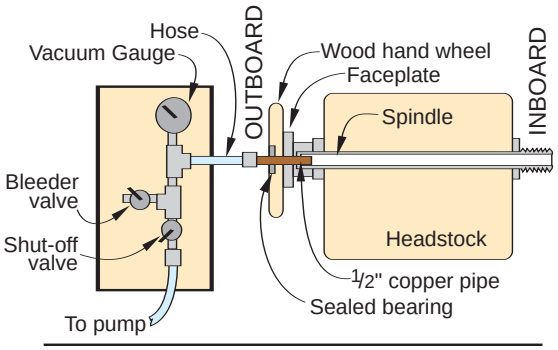
For more information, check your *American Woodturner* index or visit these web sites:

- www.snmp.labridge.com/~wnoble/.
- www.beaverpondstudio.com (look under jigs)
- www.ovwg.org (look under techniques)

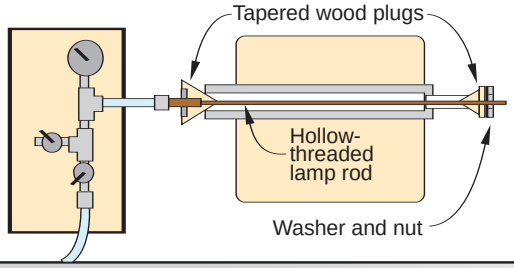
Rich Sherry (rmtds@comcast.net) and Bill Small (williamsmall@comcast.net) are members of the Bay Area Woodturners Association.

DRAWING 1: TWO PLUMBING OPTIONS

Arrangement A
With threaded outboard spindle

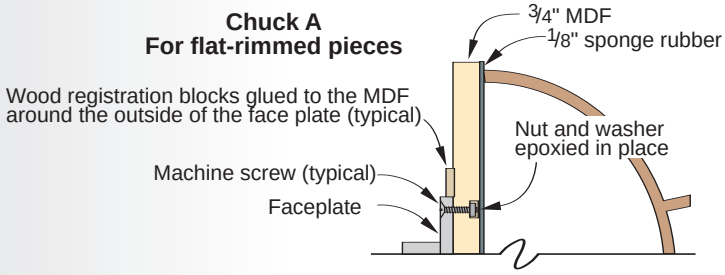


Arrangement B
Without threaded outboard spindle

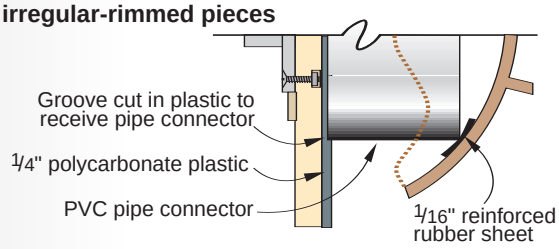


DRAWING 2: TWO CHUCK OPTIONS

Chuck A
For flat-rimmed pieces



Chuck B
For irregular-rimmed pieces



Notes:

1. Cut a hole at the center of the chuck to access the vacuum. If lamp rod is used, it may be extended into the chuck and bolted air tight to avoid possible air loss at the faceplate.
2. Glue the rubber sheet to the PVC with E6000 crafts adhesive or equivalent.
3. Glue the sponge rubber to the MDF with spray adhesive.
4. Glue the polycarbonate to the MDF with epoxy.
5. Pick two or more pipe connectors to match various size turning pieces.

VACUUM PUMP OPTIONS (use only as a guide)

Pump Type	Vacuum Pressure (IN Hg)	Minimum Chuck Contact Area (in²)	Authors' Comments (based on tests)
Shop Vacuum	**6**	**5**	The small Fein model 9.53.13 was used (about $225). Shop vacuums have modest vacuum pressure (IN Hg), but high flow rates (cfm) and are therefore best suited to holding larger bowls.
Air Compressor	**18**	**3**	Connecting the vacuum chuck to the intake side of an air compressor works. The Norita model 35071 (2 hp, 4 gal.) rated at 6.6 cfm at 90 psi was used (about $100 at auto parts stores).
Venturi Pump (attached to an air compressor)	**25**	**3**	Venturi pumps are effective, but very inefficient. Ensure that your air compressor has a sufficient flow rate (cfm) or you will lose vacuum as the compressor's tanks empty. Venturi pumps cost about $15.
Recycled Refrigerator Compressor	**28**	**3**	Very quiet. Used refrigerator compressors are available from salvage yards. Release of refrigerant gas into the atmosphere is illegal. Ensure that your compressor has been rendered inert by a certified specialist. A word of caution, these compressors have a very low cfm rating and can't tolerate much system leakage. The used compressor typically costs only $15, but you will need a filter, gauge, fittings and electrical parts. Some add tanks to their system to help with the very low cfm.
Commercial Vacuum Pumps	**16 to 25**	**3**	Pumps can be purchased ready to use ($350+). Alternatively, you may save money by purchasing the compressor, gauge and filter separately and assembling yourself ($100+ from machinist supply houses).

Note: Household vacuum cleaners are not a safe alternative. They typically produce very low vacuum pressures (only 1 to 2 IN Hg).

Oval Traditions

By Alan Lacer

A visit to the oldest continuously operating mill in North America

We are so obsessed with turning round objects with our lathes that we forget there are long traditions of doing shapes other than circles. For instance, there is the process of off-center turning between the centers to produce such objects as simulated cabriole legs or as you might see in Mark Sfirri's turnings.

But with face work, there has been a parallel tradition of varying the central axis to produce ovals or ellipses. Turners could accomplish this by remounting a piece on different axes, although some find this method unrewarding because it requires considerable handwork to blend the different turning operations.

Another option is incorporating a chucking system that performs this operation during each revolution of the lathe. Such chucks have been mentioned in literature even in the early 1700s. An amazing shop located just outside of Boston still employs that method.

The Old Schwamb Mill in Arlington, in continuous operation since 1864, has specialized in oval frames for 140 years. Although the mill doesn't produce the volume it once did during its heyday of the late 19th and early 20th centuries, it still turns out the same high-quality oval picture and mirror frames that brought it considerable notoriety decades ago.

Water-powered origins

Besides producing about 50 frames annually, Old Schwamb is a time capsule of a bygone era. First, the shop's power system is intriguing. Originally power came from a 19-foot-diameter water wheel, then a steam engine, then a water turbine that assisted the steam power, and finally a pair of centrally located electric motors installed in 1954. What all of these power systems had in common was driving a series of line shafts and flat leather belting that powers virtually every machine in this sizeable wood shop.

This is a shop that performs virtually all aspects of frame making. This involves cutting lumber to size, joining and gluing four pieces of wood as the basis for turning, the actual turning, and in many cases, final finishing. A massive bandsaw, sliding-top tablesaw with ingenius jigs, and and specialty lathes still work today to turn out the frames.

Whirr of activity

The four lathes of different sizes are of special interest. These are essentially faceplate lathes supported by heavy timbers, sizeable spindle shafts, and extra bracing. As you can image, there will always be an issue of "out of balance" when doing oval work—hence the need for such features.

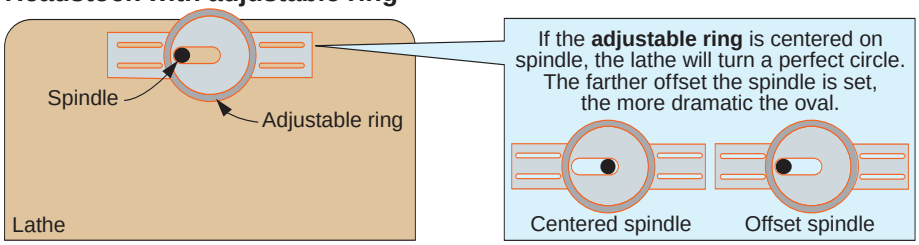
Continued

The "secret" to oval turning lies in this moving chuck, above left. Three lathes, shown above right, are on the main floor.

The mill's turner, David Graf, shapes the outside of a small oval frame. All steps—from raw stock through finger-jointing and turning—are performed at the mill. In the mill's historically accurate setting, eye protection isn't worn.

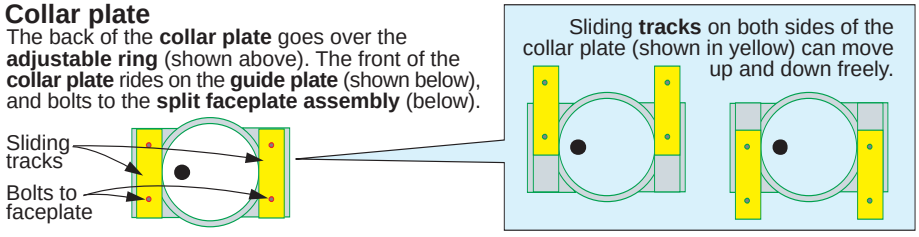
SCHWAMB MILL'S ECCENTRIC LATHE (Looking at end of spindle.)

Headstock with adjustable ring



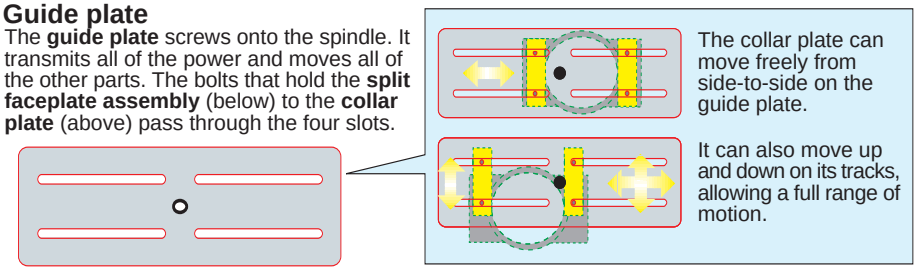
Collar plate

The back of the **collar plate** goes over the **adjustable ring** (shown above). The front of the **collar plate** rides on the **guide plate** (shown below), and bolts to the **split faceplate assembly** (below).



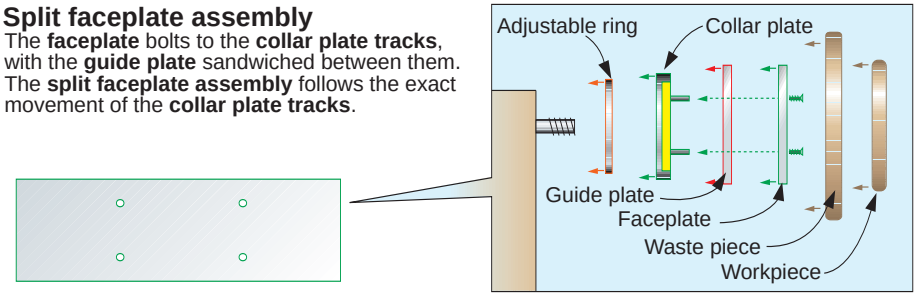
Guide plate

The **guide plate** screws onto the spindle. It transmits all of the power and moves all of the other parts. The bolts that hold the **split faceplate assembly** (below) to the **collar plate** (above) pass through the four slots.



Split faceplate assembly

The **faceplate** bolts to the **collar plate tracks**, with the **guide plate** sandwiched between them. The **split faceplate assembly** follows the exact movement of the **collar plate tracks**.



But it's some ingenious German-made chucks that really make the oval turnings possible. Constructed of several sliding plates, these chucks allow the turner to make circular objects or ellipses. The amazing phenomena that occurs is that these chucks allow every part of the ellipse to be turned on each revolution of the lathe—something not possible by simply remounting a piece to a different axis. One tool rest and one position does it all.

As you watch the turning proceed at speeds well under 1,000 rpm, you are amazed by the "normalcy" of the turning that is occurring on the left side (where turners normally cut in any face-grain operation) where your turning tool would be located. But to the right of the lathe's axis, there's a tremendous blur of activity and the sound of the chuck's sliding metal parts.

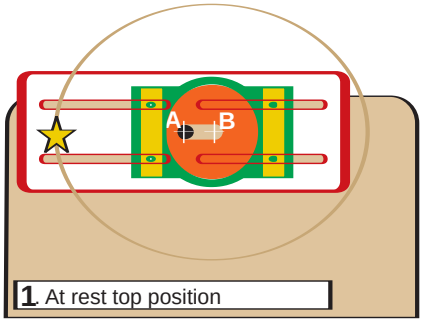
Let's set the parts into motion

Orange=Adjustable ring
Green=Collar plate
Gold=Collar plate tracks
☆=Tooling position
Red=Guide plate
Tan=Lathe Headstock
●=Spindle

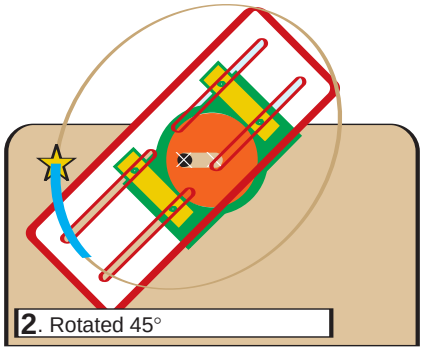
There are two axis points to know about.
A. The spindle (solid black) is connected to the guide plate, and spins it on Axis A.
B. The other axis (B) is at the center of the adjustable ring (orange). The collar plate (green) also follows this axis.

The collar plate tracks (gold) are the most important players in this spinning game. Connected on one side to axis point A, and the other to axis point B, they slide to form a compromise between the two rotating forces–an oval.

Note: The workpiece follows the arc of the collar plate tracks. It is shown as a tan line, with a blue line representing the path of the arc.



Note that the collar plate tracks (gold) are centered horizontally on the collar plate (green). Also note their position on the slots in the guide plate (red).



As the spindle rotates, the collar plate tracks slide to adjust for the differing axis. The result moves the workpiece closer to the tool rest center.

Most of the tools are unique to this operation also. Many of the tools are shop made, including the special rabbeting tool to cut the groove for the picture or mirror.

Most of the tools are scrapers. What struck me most in watching David Graf, the shop's turner, was that this turning is very much still a hand process with hand tools that require considerable skill and steadiness to produce a museum-quality frame.

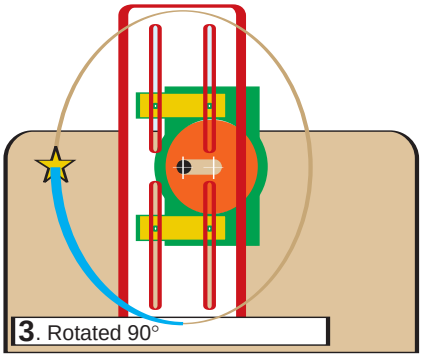
History that lives

If you have even a small interest in history or different turning methods, the Schwamb Mill just northwest of Boston is a "must see" for individuals or as a woodturning club outing. Guided tours last about 45 minutes. You can find information on the mill by calling 781-643-0554 or at www.oldschwambmill.org.

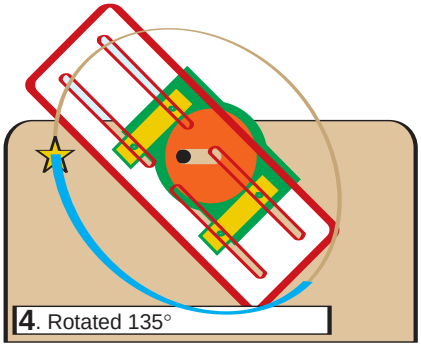
Note: We have it on good authority that a major chuck manufacturer has a modern version of the oval chuck under development.

Alan Lacer (www.alanlacer.com) is an *American Woodturner* contributing editor. He lives near River Falls, WI.

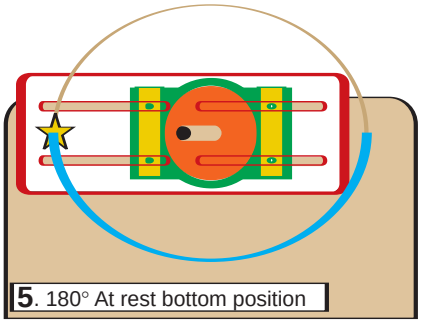
The frames produced on this lathe require a chuck almost 6½ feet across—and it moves several directions while turning. The middle of three posts is 12½" x 7".



At 90 degrees, the collar plate tracks have slid as far as they will travel. (The same distance as between the two axis points.) This will be the narrowest point of the arc.



As the motion continues the collar plate tracks slide back toward their resting position, forming a gradual arc.



At 180 degrees, tne side of the arc is complete. The collar plate tracks will now slide the opposite direction to continue forming the arc.

Dick Gerard

2004 Lifetime Honorary Member

To get a true picture of Dick Gerard's contributions to the AAW, you must turn back the clock to the days when there were fewer than one hundred members in a fledgling, struggling band of turners.

By chance, Dick was just getting excited about woodturning when his wife, Nancy, noticed an ad for "Woodturning: Vision and Concept," an event David Ellsworth put together at the Arrowmont School of Arts and Crafts in Gatlinburg, TN. The October 1985 gathering drew 200 or 250 woodturners from around the world.

"As I was preparing to give the welcoming address," David remembers, "Dick came up on stage with an arm full of papers to pass out to participants on how to start an organization. And the rest, as they say, is history."

"I made a nuisance of myself," Dick recalls. "I must have bothered David Ellsworth every other hour the whole week with a new idea.

"That trip to Arrowmont in 1985 was actually my introduction to the woodturning community. I got excited about woodturning in 1981 after reading an article in *Fine Woodworking*. I immediately realized how many things you could do with wood.

"I was interested in networking, but couldn't find any guild for turners. I wasn't a polltaker, but I worked up a survey before going to Arrowmont to see if there was any interest in starting a group."

Opening photos: Nancy Gerard

There, Dick stumbled into a mother lode of interested turners. On the porch of the Arrowmont's Red Barn, discussions percolated into the evening about forming some type of woodturner's group.

When the AAW incorporated in 1986, the original AAW board members were assigned numbers 1 through 9. Dick Gerard—the Indianapolis newcomer with a survey—was assigned #13.

Just a year later, Dick was invited to join the AAW board. He later served as treasurer through the "crazy hard effort to grow the organization." For a snapshot of the financial hard times, board rules dictated that every AAW check over $50 required the treasurer's okay.

When Dick retired from the board in December 1992, he devoted more time to exhibiting at local and regional shows and other aspects of his turning-addiction career.

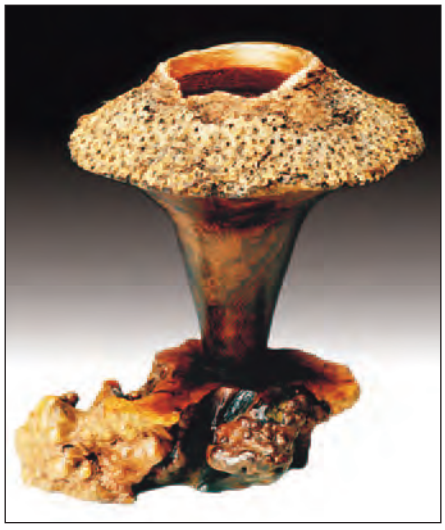
"By 1995, I starred cutting back on the number of shows," Dick reflects. "I was doing more what people wanted to buy and not what I wanted to do. After thinking things through, I started to do experimental work—woodturning series that pleased me. This is what I should have been doing all along."

Remembering a Clay Foster suggestion to keep a notebook of ideas, Dick started to fill pages with sketches of profiles, textures, notes, and thoughts that popped into his head. He now draws heavily upon his notebook for ideas and inspiration.

In less than two years, Dick will retire from 32 years of civil service duty (he currently writes and maintains Department of Defense computer programs). He looks forward to spending more time in his shop. With Nancy, he plans to travel to visit turning friends.

See the AAW web site for photos of Dick's recent work.

"Hedge Hog III," maple burl, 18" x 7".



"Vortex I," Australian grass tree, manzanita burl, copper leaf, 13".

"Father and Son," maple burl bowl tops on ebonized maple.

"Dancing Men," painted and carved sycamore, 8" x 3¼".

Turning photos: Jerry Anthony

Pictures to be proud of

Tips on taking digital photos of your pieces for publication

By Bob Hawks

Photos: Bob Hawks

Much has changed in photography since I started working full-time as a commercial photographer in 1948. Even though I spent most of my career shooting transparencies (slides), I've now embraced digital photography as a marvelous advancement.

Recently, I helped the Northeastern Oklahoma Woodturners Association set up a simple lighting system for our Tulsa-based chapter. After two or three hours of coaching, Bob Galloway, a member of our chapter, has now taken over photography duties for the chapter.

Bob, an amateur photographer, also photographs each "Show and Tell" piece at our meetings and then posts them to our chapter web site (www.wneo.com).

Just because a photo looks good on a computer screen doesn't mean that it will measure up for publication, photo prints, and gallery standards. This lighting system may help you and your chapter make a leap into professional-quality digital images you all can be proud of.

Set up your studio

This basic set-up (known as tabletop photography) works for photos of most turned pieces. By using photoflood bulbs, you can see exactly what each light source is doing and make adjustments accordingly. The lighting set stores compactly.

I set up my tabletop studio in my garage where I can shut out all other light sources. You may have the ideal space in your basement where you can control other light sources. Yes, turn off all the other lights in the room.

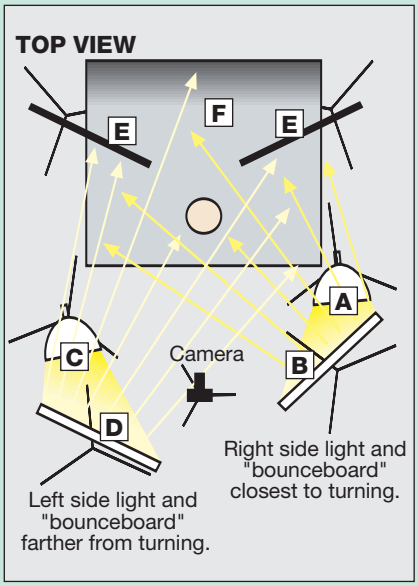
The background is seamless neutral gray photo paper, and available at most good camera stores in 53"-wide x 12-yard rolls. Roll it out and tape it to a wall (a height of about 6 feet works for me). The front edge of my drafting table (a card table also works fine) is about 4 to 5 feet from the wall. This distance creates a smooth sweep from front to back. Be careful not to put bends or creases in the paper, as it will show in your photographs. With sensible use, a roll should last through many photo sessions.

The lights I use are standard 10" photoflood reflectors with 250-watt 3200k medium screw-base quartz halogen lamps, which will last for about 100 hours. You can purchase your reflectors and bulbs from a camera store. Workshop or painter's lights available from home improvement stores are not satisfactory.

Continued

Are you ready for a tabletop photo studio?

Bob Hawks, a mostly retired commercial photographer, set up his Tulsa chapter with this lighting kit. Unless noted, you can buy the pieces at most photography stores. Tom Lottinville at Camera Gallery in Tulsa (918-252-3652) helped Bob put together this kit and has agreed to work with AAW chapters and individuals on a similar package (excluding the foamcore).

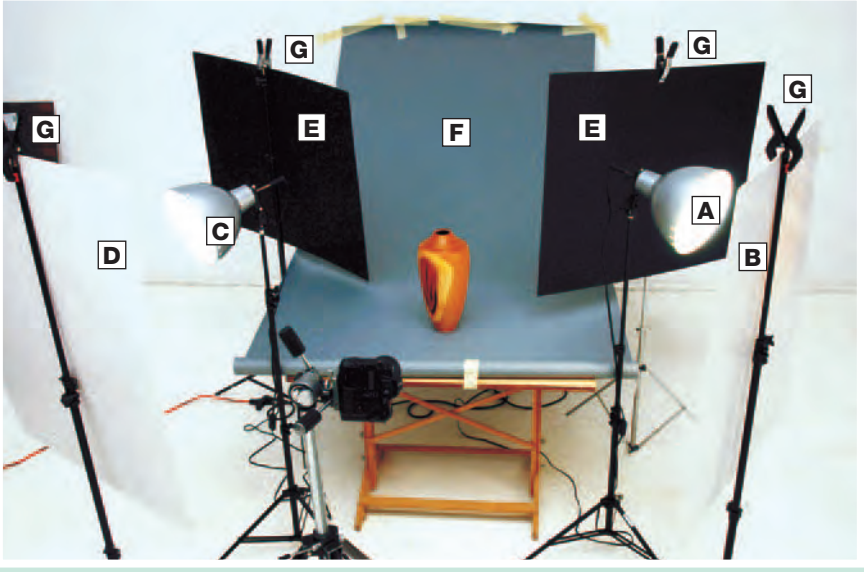


Bob's setup

- 2 10"-diameter reflectors and 2 telescoping stands ($135)
- 4 additional telescoping stands ($60)
- 2 250-watt quart halogen bulbs ($30)
- 53"-wide x 12-yard roll of neutral gray seamless paper* ($36)
- 4 1/4"-thick foamcore board sheets, (2 white, 2 black) from art supply store, each 2'x 2' ($20)
- 4 spring clamps ($17)

Total price: $298

*The seamless paper is available from several manufacturers and in many colors. The photos shown here were shot on Pursuit Gray by Superior; Slate Gray is similar. For ease of handling, cut the background roll with a handsaw to about 40" wide.



A: Right side photoflood and telescoping stand. B: Right side white foamcore board and telescoping stand. C: Left side photoflood and telescoping stand. D: Left side white foamcore board and telescoping stand. E: Black foamcore board (gobo) on telescoping stands. F: Seamless paper. G: Clamp.

Set up your lights on stands as shown in the illustration on page 31. Then place your stands for the bounce boards as shown. Finally, position your camera and tripod where shown on page 31.

Now, for the camera

The first thing to consider is the color balance of the light source you are using. Most cameras have an auto setting, but your digital camera should have a manual white balance capability that renders the image much more accurately. If you've seen photos that have a green or yellow cast, the white balance—or lack of white balance—played a role in the appearance.

I like to raise the camera just high enough to define the opening in the top of the piece. If the camera gets too high, it will foreshorten the image and make it look squatty.

I've had best results with a lens between 90 and 120mm focal length. The longer the focal length, the farther your background can be from the turning, which gives more control over the background.

Your digital camera should have several selections for resolution. Use the highest available (or the next step below RAW if that's among your settings). If your camera has a manual focus available, use it because sometimes the autofocus has trouble focusing on the surface of a smooth turning.

Exposures will probably run a little more than 1 second. If your camera has a cable release socket, use it. If not, use the delay self-timer to avoid shaking the camera when you release the shutter. If your camera has an aperture (f-stop) control, set it at 1 or 2 stops from the widest aperture, which is the smallest number. This will keep the front and back of your piece in focus.

If your camera has only auto exposure capability, it will shoot at the widest aperture. This is adequate except for small pieces.

The digital camera

Here's what you'll need to get the job done:

- Digital camera with 3 megapixel or higher capability.
- Zoom lens that will go to 80mm or longer. If you photograph tiny pieces, you'll need a lens with macro capability.
- A sturdy tripod.

Set the first light

Bounce one light into the white foam board and watch how it adds shape to the turning. This first light should cast a soft shadow. The light should be 45 to 65 degrees from the camera. Your eye will tell you what looks best.

Never ever turn the light directly onto the piece or use the flash on the camera!

Add a second light

Turn on the second light and it will cast a second shadow. Instead of a round shape, your turning will look flat like the photo at left. See how the shadows on each side of the base are nearly equal? To give your turning shape, you want one shadow to dominate.

Processing your digital images

If you have a photo program in your computer, download the photos. Before you begin correcting an image, open the file and immediately resave it in a tiff format. Unlike the default jpeg format, the tiff format doesn't attempt to compress the image each time you save, so you'll end up with better images down the road. If your original photo was a jpeg, it will be saved at a resolution of 72dpi (dots per inch); I like to convert them to 150dpi (this size prints nicely).

You'll no doubt want to rename the photo something other than the number assigned by your camera. Then make a copy of your original image and add "Rev" to the file name. By establishing this routine, you can always go back to your original unaltered image if you get lost in the correction options.

If you submit photos of your work for a gallery or competition, be sure to read the requirements carefully. Many publications—including the *American Woodturner*—require high-resolution images (file size should be 750 KB to 1.5 MB).

If you need to convert a digital image to a 35mm slide, most camera stores will know a resource to make conversions (about $8 per slide).

If you're not interested in photographing your own work, perhaps you and a turning buddy can send a batch of pieces to a commercial photographer. Take a copy of the journal to show the photographer examples of well-photographed woodturnings.

Balance the lighting

Back off the second light until its shadow just disappears as shown in the photo at left. I think one shadow is desirable because it helps define the shape of the piece.

Except for very dark woods, I like the background to be darker than the piece. This sometimes is not possible with very small or flat pieces. Place another card behind the light and reflector on each side as shown on page 31. Photographers call these gobos and they block as much light as necessary behind the piece to get the best separation possible between the turning and background. Black cards (made from black foamcore board) work well here.

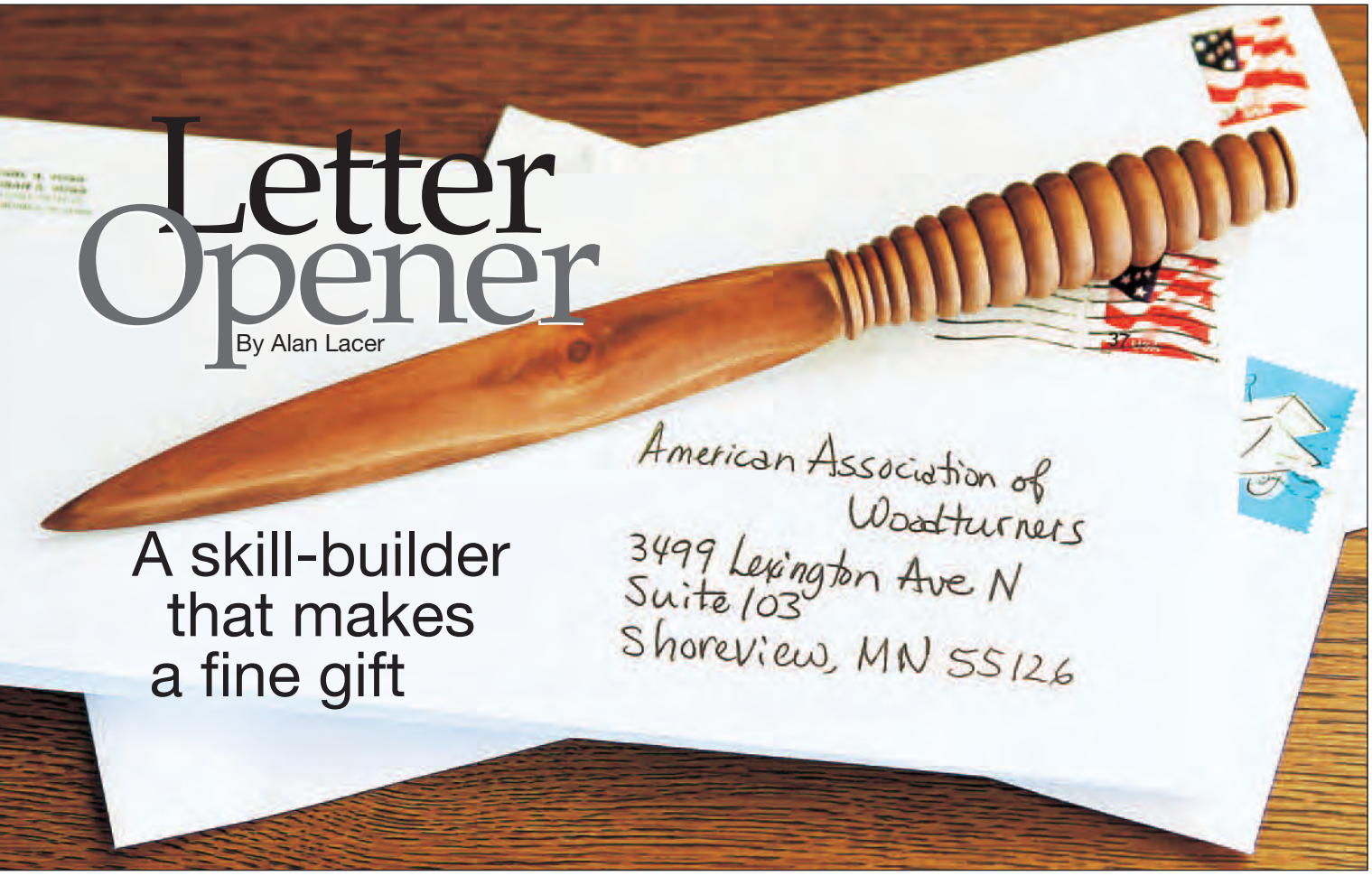
The outside studio

An alternate for studio lighting is to set up outside in the shade or on a cloudy day. All you have to do is make the same set-up without the reflectors and lights. This will give you a very soft flat light; however, you will not be able to darken the background. The obvious hazard to this set-up is the weather.

Bob Hawks (bobhawks@sbcglobal.net) has belonged to the Northeastern Oklahoma Woodturners Association since 1988. In addition to shooting the photographs for AAW juried competitions, Bob has taught photography at Arrowmont. His turned vessels are sold through www.guild.com and several galleries.

Letter Opener

By Alan Lacer



A skill-builder that makes a fine gift

A letter opener is a favorite project in beginner classes I teach. And because it's an ideal project to develop skew skills, I encourage turners to detail the entire beaded handle using only a skew chisel.

For turning stock, I look for a closed grain wood that takes a good edge. Hard maple (plain, birdseye, or curly), cherry, apple, pear, plum, Osage orange and dogwood make good choices from domestic stock. Among exotic woods, fine options include cocobolo, boxwood, goncalo alves, tulipwood, and kingwood.

The size is somewhat a design question of proportions as well as a preference for what would feel good in the hand of the user. Turn several prototypes to work out the balance, look, and feel. I have settled on a 9" overall length and 7/8" at its greatest diameter. The rough blank should be slightly larger in diameter and about 10" in length.

Turn the opener

After making a cylinder (using either a roughing gouge or skew chisel), determine the handle length. I normally fit it to my hand, so the handle in this case was about 4" long. The handle detailing is what moves this project from simple to challenging.

Design the handle with an arching form—probably with a bead at the blade end and some finishing detail for the end of the handle. For added handle detail, try adding a series of beads or coves with either a 3/8" detailing gouge or 1/2" skew chisel. It is often more interesting to vary the size of these details rather than making them all exactly the same.

Finalize the handle area by

sanding to at least 220 grit. For the blade area, I usually turn with a greater diameter in the middle and taper towards the handle and the tip, which adds visual interest.

Shape the blade

Rather than rough-shape the blade on a bandsaw, I prefer the safer route of sanding the blade into its final shape using the lathe. A small disc sander works quite well for this operation. A 5" plywood disc mounted on a faceplate or in a chuck makes for a quick sanding system, as does a 5" hard rubber disc mounted in a Jacobs-style chuck in the headstock.

I initially shape the blade with 80 grit, followed by 100, 120, 150, 180, and 220 grits. The basic shape is one of being thicker in the centerline of the blade and tapering to the two cutting edges. Strive for a sharp edge but one that is not so fragile and prone to chipping. The end of the blade needs to taper to a point that is easy to insert into the end of an envelope. Complete the final sanding by hand.

With a ½" skew, roll large beads with the short point and ¼" or smaller beads with the long point.

To shape the blade, the lathe becomes a sander. Mount a 5"-diameter plywood disc in a chuck or on a faceplate.

Now, apply finish

Again, several options are possible depending on the desired look and level of durability. For a film-type finish, pre-catalyzed lacquer (sold as melamine in turning-supply catalogues) produces a tough finish. If using this finish, apply to the handle area on the lathe, then finish the blade by hand after the forming and sanding process.

For an oil finish, be sure and choose one that dries thoroughly. Good choices include pure tung oil, Watco, Deftoil, and Nordic oil. I recommend avoiding these oil finishes on light-colored woods unless you don't mind the amber color that the finish imparts.

On the Osage orange opener shown, I applied a coat of 100 percent pure tung oil every other day until I had completed four coats (light coats, short soaking time, dried off completely, and sanded with 320 grit between coats). After about one week, I lightly buffed the opener with a cotton wheel on a lathe arbor.

Alan Lacer (www.alanlacer.com) is an *American Woodturner* contributing editor. He lives near River Falls, WI.

Pear

Osage orange

Glendale Woodturners

The Glendale Woodturners Guild, organized in 1993, draws 180 members from the Los Angeles area. For additional examples of members work, see the Chapter Spotlight link at www.woodturner.org.

Photos: Dick Lukes

Bill Nelson

"Charmed," bloodwood, boxwood, and African blackwood, 2½" diameter. "Instead of a sliding fit," Bill notes, "this ball box has an unusual fit that snaps together. All the shaping was done with files and sandpaper." Bill, a turner for 14 years, works by day as a telecommunications technician.

Don Comer

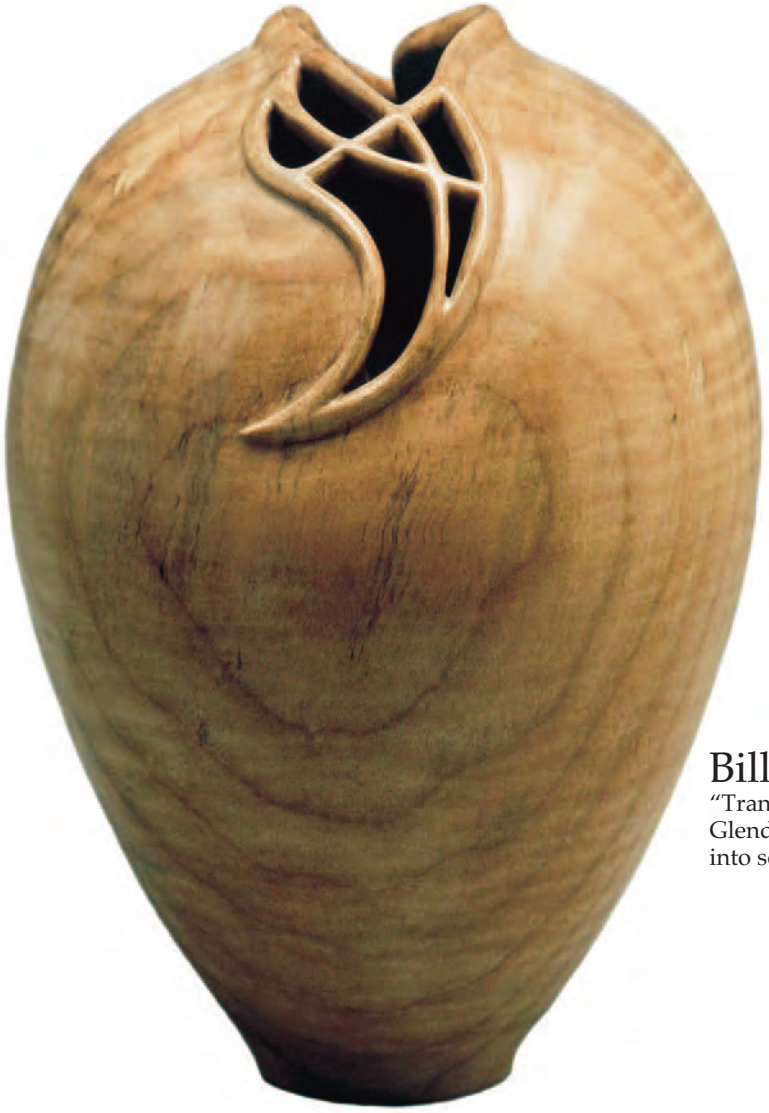
Spiral-carved cocobolo, 12"x 4". After turning the outside shape, Don hollowed the vase to about ⅜" thick. He then hand-carved ¼"-deep spiral grooves. Don, a former chapter president, was an aerospace manager of small satellite programs.

Put your chapter in the spotlight

Chapters selected for this "Chapter Spotlight" feature receive three AAW backlist symposium videos to add to your turning library. See the AAW web site for submission details.

Dick Lukes

Bleached maple with red sphere and stainless steel, 17½"x 6"x 3½". He turned this off-center piece in a four-jaw chuck. Dick, a retired advertising and fashion photographer, is one of the Glendale charter members. He's been a woodturner for 24 years.



Dan Hogan

Grapefruit wood, 11"x12"x10". "This is an unusually large piece of grapefruit," Dan notes. "It came from one of the last groves of citrus trees in the San Fernando Valley." Dan has turned for 25 years.

Bill Haskell

"Tranquility," fiddleback big leaf maple, 11"x4". Bill, a former Glendale chapter president, now incorporates extensive carving into some pieces. He's a retired aerospace finance manager.

Michael Kane

"Square Peg in a Round Hole," ash, 9½"x6". Michael has turned for five years. "Once confident with my ability, I sought guidance of members—many of whom are represented in this gallery."

Art Fitzpatrick

"Waves of Red," curly red gum eucalyptus, 14"x7½". "This piece had a lot of figure and I anticipated it would be troublesome to turn," Art recalls, "but it cut like butter." Art is a retired aerospace engineer.

David Holzberger

Black walnut, 9"x7½"x3½". David turned each side to form the disc; the top has an engraved design. He joined the chapter eight years ago and has been featured at several local galleries. David is a former property manager.

One Turner's Guide to Finishing

By Peter M. Smith

There may be nearly as many ways to finish a turning as there are turners, since it is such an important and individual component to the process. Finishing also is a large part of the work—accounting for anything up to one-third of the time spent on a piece.

I use a five-step process: sand, seal, sand, oil, and buff. Everyone sands and oils, but I believe the key is the sealing step.

Over the years, I have experimented with various methods and would like to discuss the approach I have come to use on just about all of my work. It is relatively straightforward, general, and usually effective. I hasten to add that although this isn't the only way to finish a turning, many turners use variations of this approach. I would be happy if this article stimulates a discussion on finishing and other turners write about their successful techniques.

I use a five-step process: sand, seal, sand, oil, and buff. Everyone sands and oils, but I believe the key is the sealing step. Sealing the wood prior to final sanding provides three major advantages: It exposes rough grain and tool marks; it stiffens the grain so sanding is more effective; and it fills the surface pores—more or less—to produce a smoother surface for the final sanding and finish coats.

Step 1: Initial sanding

Often called "rough sanding," the idea is to finalize the surface shape and get it to a preliminary smoothness. Power-sanding works best for me; I use 3" Powerlock sanding disks in an electric drill (Photos A and B). The spin of the disk against the

Power-sand your turnings with 3" disks.

revolving piece on the lathe reduces swirl lines. Grits 80 and/or 100 are hard and aggressive. Some subtle shaping of the curves is possible, but the emphasis is on cleaning up tool marks and preparing the surface for sealing. Many turners use foam-backed pads with 5" or 6" PSA disks rather than the stiff resin paper of Powerlocks. If you are not after subtleness, I believe foam disks are unnecessary.

A couple of observations: The lathe speed should be slow to avoid the sandpaper skating over the surface. In addition, power-sand carefully at the edges so you don't sand them too sharp or blunt the details with too coarse of an action. Some turners progress through finer grits and move to the oil finish, but I recommend the next step of sealing the wood.

Step 2: Sealing

Apply a liberal coat of sealer (Photo C), then wipe off the excess. If you've overlooked tool marks, rough areas, nicks or bumps, they're certain to reveal themselves. I prefer this to wiping with solvent because sealer doesn't disappear immediately.

Of all the sealers on the market, I prefer shellac. I've also had good luck with lacquer-based sealers such as Deft, which dries quickly and penetrates well.

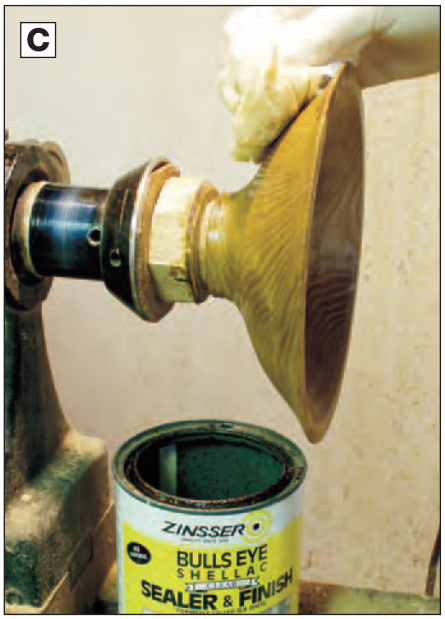
The disadvantage of shellac as a sealer is that it can be gummy when sanding off and seems superficial in its penetration. I have tried water-based sealers and like the advantage of raising the grain of the wood. One disadvantage of a water-based sealer is that it requires extra drying time.

Step 3: Final power-sanding

After about 30 minutes or when the sealer is dry, it's time to remove it by more power sanding. I first use some 100-grit sheets of paper, cut into quarters, to remove most of the sealer by hand sanding (Photo D), which rapidly clogs the sandpaper. I then switch to Powerlock disks (100 or 150 grit), even if they quickly become filled. One trick is to lightly coat the disks with blackboard chalk before sanding the surface; the chalk makes it easier to remove the gunk with an abrasive cleaner.

Concentrate on the tool marks and rough grain, removing most blemishes and feathering in the sanding with the rest of the surface. This is done with the piece fixed in place with the lathe index pin (if available), and moving the piece round notch by index notch,

Even on the interior, 3" disks are nimble.



With shellac, seal the grain.

After the shellac dries, sand again.

Continued

and working each area. If you sense you've reached bare wood, reseal and repeat. Finally, turn on the lathe and sand the piece all over with 150-grit paper. Use chalk and sanding cleaner to keep the disk surface fresh.

Step 4: Oiling

After the 150-grit power disks, the surface should be almost bare wood—but it is sealed bare wood! The difference is at once apparent with the next step when you apply finishing oil (Photo E). The sealed surface comes up smooth and easy, whereas unsealed wood will soak up oil and look patchy.

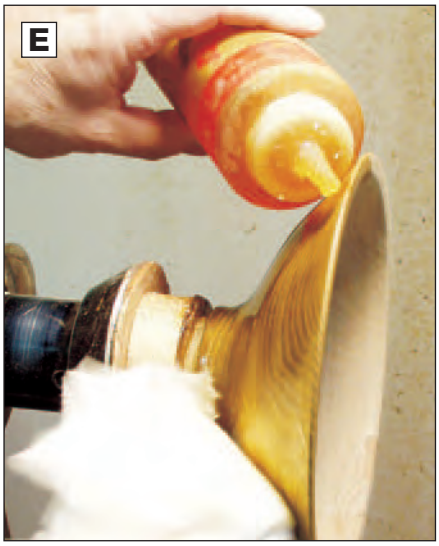
I am a great fan of Danish oils. I'm sure many of the other oils out there will do. It is easy to mix your own penetrating oil varnish from 1 cup of any brand of polyurethane varnish, 1 cup of naphtha solvent, and 1/3 cup boiled linseed oil. Mix and store in a plastic squeeze bottle (e.g. shampoo).

Don't worry about building up a finish since the sealer has gone some way to make this unnecessary. However, there is more sanding required by hand—first with 150-grit, then 220- and 400- or 600-grit paper (Photo F). The oil acts as a lubricant, thus is applied liberally. The sandpaper sheets quickly clog up with mud, which is wiped off the wood.

These oils are amber colored in general and give a rich glow to darker woods. On light woods—particularly maple—the oils often give an unsatisfactory grayish tinge to the wood.

I have recently experimented with water-based polyacrylic finishes at this stage. These dry quickly and are crystal clear, and leave the wood pale. Water-based finishes, which do seem to be improving all the time, are a viable alternative for some woods, although the "mud" is missing (water evaporates). This finish also works at the sealing stage.

After the 600-grit paper, the wood surface should be sensually smooth. Stroke it and feel for yourself. Inspect the piece under a bright light and look for the telltale scratch marks. You can usually remove these with lots of oil, 220-grit paper, and a circular action. You can feather out anything really bad with the power sander and 150-grit disks, although the oil and mud will make this only effective in small areas. Follow this with 220 and then 400 grit to match the rest of the surface. Part the bowl and finish the foot with the same look as the rest of it, then polish the whole piece at one time.



Apply the oil finish directly to the piece.

Use oil as a lubricant with sandpaper.

Step 5: Polishing & buffing

The oil takes about 1 week to dry. After a day or two, you can rub a second coat of oil into the wood if there are any dry patches (on end grain usually). Now is the time to hand-sand and touch-up if required. When dry, the wood has a nice smooth matte finish, which might be suitable for some pieces. In the Winter 1996 isue of *American Woodturner*, Alan Hollar discusses film finishes and why gloss is not always advisable on large spreading bowls (the reflecting light over-emphasizes the different surface planes).

However, for many bowls, hollow vessels, and small pieces, polishing is the mark of distinction. Polish—so hard to get right, so easily lost—indicates additional preparation whether it is on shoes, nails, or silverplate.

A coat of gloss varnish is rarely satisfactory. First, it is hard to get an even coat on the work piece since the varnish will run and sag on the slopes. Some turners would agree that it's the gloss varnish that looks artificial on a small object. From my observations, a gloss coat seems to obscure the wood grain and texture.

Polyurethane (oil- or water-based) makes a great tough film on tables and floors, but on turnings it looks like plastic (see Hollar's article). Some finishers recommend using a gloss varnish for its clarity, and then "knocking down the gloss" with fine steel wool and a lubricant (such as Murphy's oil soap) to produce a more subtle sheen.

Carnauba wax—widely used in furniture polishing—is a hard natural wax from the South American carnauba palm. Although not very serviceable as a work surface, the shine it produces is much admired.

Experienced turners often suggest that a wax polish be applied to the work while it is turning, using the lathe rotation for buffing. This works fine for spindles, but the problem with applying wax—or any finish—to a bowl while still on the lathe is that the polish can't reach the area of the parting cuts.

The popular Hut Polish, a mixture of wax and fine abrasives, is applied while the work is rotating, and then pressing a cloth against the spinning piece brings up the shine. This makes it superb for pen barrels, but since it does not reach the cut-off areas, not for other turnings. Moreover, any oil finish will not be dry and will disturb the final surface. So rather than apply one fine shine over 90 percent of the piece and complete the remainder a week later, leave the final polishing until later when the oil is dry.

For final polishing, the Beall System attracts many turners, and is my favorite. It includes three separate cloth wheels on a 1,750 rpm motor for three specialized polishes. The first polish is tripoli, a fine grit, which produces a dull shine. Next is white-diamond—a finer polish on a softer wheel. The third buffing—solid carnauba wax on a cotton wheel—is the final act. The heat of the turning melts the wax to a uniform film. The carnauba produces a semi-gloss surface with a deep shine that brings out the best of the wood. To restore the luster, rebuff the wax.

The science of sanding and polishing

Shine on a surface comes from reflected light, and light is reflected from a uniform, smooth surface. Non-uniformity breaks up the light and disperses the light rays; light rays lose their coherence and thus the reflection diminishes.

A gloss varnish will cover a smooth surface with an even smoother film that is highly reflective when dry. To make that varnish matte, finely ground sand is added to the gloss base, which is what we stir from the bottom of the can, and the fine particles disperse the light rays. (These particles are much finer than can be sensed by touch.)

Sanding from 100 to 150 to 220 to 400 grit produces increasingly finer surface scratch marks that go beyond tactile sensations and provide increasingly uniform light reflections. This is why sanding down to these levels is so critical: No amounts of gloss varnish will coverup a poorly finished surface. But even 600-grit sandpaper is not enough for an unaided gloss. The Micro-mesh ultra-grits (6,000 and 12,000) add enough uniformity to the surface to provide shine.

Polishing goes beyond sandpaper by using finely ground minerals—rouge (iron oxide), diatomaceous earth (microscopic sea shells), ground pumice stone, and rottenstone (fine dust). These abrasives are by definition harder than the surface they abrade. They progressively produce a smoother and smoother surface to reflect light. The finest of these powders can gloss up a matte surface by reducing all non-uniformity and leaving scratch marks so fine they do not interfere with light rays. Often these powders are managed in a liquid medium to provide lubrication and ease of use. Cream polishes, for example, suspend the abrasive in a wax/water emulsion.

Conclusions

So there we have it—both the practice and the theory. Although by no means the only approach, these five steps produce predictable and satisfying results. I continue to follow this process after many years and several flirtations with alternatives.

Peter Smith (peter@sandsmith.com) is a 14-year AAW member who lives in Princeton, NJ.

Turner and teacher Del Kramersmeier may have the use of only one hand, but that's just an opportunity for

Creative Solutions

Del Kramersmeier spends his days turning in a sun-bathed shop that would be the envy of most. A monster dust system keeps the spacious 20 x 32 foot surroundings spotless—just what you'd expect from a semi-retired pharmacist.

And yet, projects awaiting attention—an antique table needed a replacement spindle, a nearby shed stacked with bowl blanks—are tip-offs that this is anything but a showcase shop. Classroom demonstration models and a calendar marked with classes scheduled at a nearby Woodcraft Supply store confirm to visitors that a real woodturner lives here.

Yes, a real woodturner who makes magic at his lathe with the use of just one arm. Only when you shake left-handed with Del do you realize that this upbeat

Photos: John Hetherington

Clamping a piece into a chuck is one of the many challenges Del Kramersmeier faces. While holding the piece with his left hand, Del uses his chin and neck to tighten the chuck the critical first quarter turn. "I approach this slowly and check carefully before I begin turning," Del reassures.

With a magnetized ruler on his tool rest, Del easily lays out a spindle turning. After cutting 1/4" spacing notches in the ruler with his bandsaw, he created a pencil slot with a spiral cone-tipped Dremel bit.

Tool builder Dale Robbins of Omaha created Del's diamond-shaped steady rest, which he uses in hollow turning. "When I do happen to get a catch," Del says, "this stops the tool from flying off wildly."

To catch parted pieces, Del built a 13"×9"×8" box from 1/2" plywood, which rests on the lay bars. He lined the box with pieces cut from his wife's exercise mat.

turner doesn't let his physical challenges keep him away from the lathe.

When he was 8, Del fell victim to polio. Since then, his right fingers have never moved; his arm provides little more than a convenient place to rest a tool blade. His family and friends—and of course his circle of turning buddies—will tell you that Del regards polio as more of an inconvenience than a disability.

In fact, there's evidence that polio hasn't slowed Del much. In high school, Del batted .300 and played first base and right field on the school's baseball team. "I got pretty good at driving with my knees, too," Del confesses of his youth.

Del began woodworking nearly 20 years ago when he bought his first shop tools. Shortly after selling his Eagle Grove, IA, pharmacy and moving to Prescott, AZ, in 1990, Del bought a Sears lathe. Three semesters of woodturning instruction from Dick Marcusen and Chuck Rhoades at the Yavapi Community College solidified his woodturning skills. Before moving back to Iowa in 1999, Del was president of the Prescott Area Woodturners.

He now embraces woodturning in a major way. For nearly two years, Del taught bowl and spindle turning at Woodcraft Supply in West Des Moines (about a 90-minute drive).

On occasion, a two-handed student will step in to help Del by demonstrating a proper tool-handling technique to a struggling "newbie"—like how to grip with

Continued

one hand around the tool rest and a second hand on the tool handle to steer.

"Del gets glowing evaluations from every one of his students," reports Pat Lowry, owner/manager of the Woodcraft store which recently closed its doors. "He makes it look so easy with one hand that some of the beginners think 'I should be able to do that with two hands.' Del will do anything to help the students—even the weeks after a class finishes. He always goes that extra mile."

Around Eagle Grove (population 3,700), he's known as a go-to woodworker for projects of all description. Del averages about 30 hours a week in the shop, about half that time at the lathe. Del also provides relief work in nearby communities when a pharmacist needs a hard-earned vacation.

Turning despite physical challenges

"Even with only one good arm," Del assures, "there's a lot you can do to make woodturning enjoyable." He offers several tips for anyone with physical challenges who wants to turn:

• "A lathe with a variable-speed control motor is an absolute must."

• "I keep my tools razor sharp because it gives me such better tool control," Del reports. "There's no way I could approach sharpening without a grinding jig."

• "To learn control, start turning small items. Then work your way up in size."

Del's tips read like a solid foundation for all turners.

17 Tips from a wheelchair woodturner

By John J. Trifiletti

After an accident four years ago, John Trifiletti had to relearn woodturning—this time from a wheelchair. Now he shares what he's learned along the way.

1. When purchasing or building lathe tool stands, make sure there is room for your legs (when sitting in the wheelchair) to be positioned between the legs of the tool stand. The leg stand for the Jet mini-lathe is a good example.

2. Adjust machines and power tools to a comfortable height when sitting in the wheelchair.

• You can cut down table legs to lower the tool height.

• Make inexpensive tables from 3/4" plywood and supported on sawhorses.

• Shorten posts for grinders and drill presses.

3. Keep the bed of the lathe slippery for easy sliding of your tailstock and tool rest.

• Sand rust from the bed of the lathe with 400-grit sand paper or steel wool.

• Keep the lathe bed lubricated with candle wax or beeswax.

4. Place tools such as sanders, buffers, and planers on mobile bases. This makes it easy to reposition tools when needed, and provides space for wheelchair movement when not in use.

5. Use a boat winch to roll a heavy lathe to and from the shop and driveway. (Because of Florida climate, I can turn outside.) Make sure the crank for the winch is on the correct side for your wheelchair access.

6. Provide a stable base by choosing a sturdy wheelchair with armrests and wheel locks.

• A cargo net under the wheelchair will hold your cell phone, which you should keep at hand. AdaptAble Designs sells a good cargo net for wheelchairs (www.adaptabledesigns.com).

7. Build a ramp to roll up to a heavy lathe. My woodworking friends built a ramp to raise me up 10 inches higher to a comfortable turning height at my Delta lathe.

• Ramp incline should be 12 to 1.

• Ramp should have 4" sides to prevent rolling off the ramp.

• Shelves at the top of the ramp can hold tools.

8. Group tools for accessibility and functionality. Several of the members of my chapter have been to my workshop and have helped me become organized.

9. Build tool holders for the lathe, or use magnetic tool holders for

"The main thing I have to share with other turners who are in wheelchairs is that where there is a will, there will be a way. You just have to be creative about things and learn to adapt your environment to your needs. You are still blessed when you have your hands and arms to do things."

—John Trifiletti

Photo: Lynn Armstrong

turning tools, chucks, and so forth. This will minimize wheelchair movement to retrieve turning tools. It also cuts down on trips up and down the ramp.

10. Use a magnetic pick-up tool to retrieve dropped tools, screws, and other metal objects. Harbor Freight sells extendable tools with a 3" magnet on the end.

11. Position power outlets within reach. If possible, move wall outlets to 3-foot height. If outlets cannot be moved, use 6-foot plug strips with reset breakers.

12. Don't be embarrassed to ask for help from others. Ask for help when wood is too heavy to safely lift. Ask for help when tools are too heavy to safely move. Ask for help when a two-person operation would be the safest move.

13. Use a lawn blower (remove the tube) to blow chips and sawdust from your body and from the wheelchair.

14. Organize wood for your easy accessibility. Use shelves and bins to organize wood within reach.

15. Wear a full-length smock which extends from neck to toes when seated in your chair. Cut off the sleeves at the elbows to keep the fabric from catching in tools or in the lathe.

16. Position fans to blow fumes away from you. Avoid breathing fumes from CA glue and fixative, paints, aerosol finishing materials, Xylol, and all other toxic vapors.

17. Clean the workplace frequently so you can roll about easier. Today's dust collectors make this easier. Good use of the skew tool reduces sanding and raises less dust.

More resources for wheechair turners

- Ron Hampton, an AAW member from Texarkana, TX, has a free plan available for a wheelchair turner's lathe stand. For information about the plan, see www.woodturningplus.com.
- Nichols Enterprises (541-449-1464) designs custom lathes for wheelchair turners.

John J. Trifiletti, Ph.D, is the instructional program manager for Computer Information Systems and Office Systems Technology at the South Campus of Florida Community College at Jacksonville. He has been a woodturner for seven years and belongs to the North East Florida Woodturners Association.

From top: 3/4" mahogany, 3/8" oak, 3/4" cherry, and 7/16" Osage orange.

Napkin Rings

A basic project that makes a Great Gift

By Jerry Hubschman

In an evening, you can turn a variety of napkin rings to restock your family's gift inventory. With Jerry Hubschman's versatile expansion chuck, you'll have plenty of room for creativity in the ring designs.

Prepare the stock

The neat feature of this project is that it doesn't require thick turning stock. I treasure stock left over from furniture projects for these gift items. Boards of different thickness are ideal for rings of random widths.

With a compass, lay out circles roughly the intended diameter of your finished rings. An inside diameter of about 1 1/4" to 1 3/8" seems fitting; I've settled on 1 1/4" for my rings because I have a good Forstner bit that size.

In order to produce a nice clean hole, drill a 1/16" pilot hole through the center of the ring. Then break the surface with a

Forstner bit on one side before reversing and entering the other side. The shallow pre-boring essentially scribes the back and prevents tear-out. If you pre-bore deeper than 1/16", you will create a ridge where the borings meet, complicating internal finishing. After center boring, cut the blanks free and remove the corners with a bandsaw (Photo 1).

Make the expansion chuck

The essential feature of the mounting chuck is that it's a cylinder turned slightly undersize for the rings. The cylinder is then center-bored and cross-sawed with a bandsaw. Pressure applied by a live center in the tailstock will spread the quadrants enough to grip the previously bored stock as shown in the drawing directional.

The dimensions of the chuck will depend upon your lathe, the width of the rings, and your own turning style. Through several trials, I've found that the dimensions shown on page 48 work for me. The diameter of the headstock-mounting end should be large enough to provide a sturdy base. The body should be sufficiently long (shown as 6") to allow the gripping surface to expand when pressure is applied by the tailstock. The ring width dictates the diameter of the gripping surface. The 1/2" center bore works with a 60-degree x 3/4" cone found on many live centers.

If you plan to reuse the chuck, select straight-grain hardwood; I chose ash because it is tough and flexible. Mount this stock on a small faceplate or in the jaws of a scroll chuck. I prefer the scroll chuck because I can easily re-center my expansion chuck with the tailstock live center in place before tightening the jaws.

Otherwise, this expansion chuck will require a dedicated faceplate for long-term use. If repeatedly remounted on a faceplate, it's unlikely that the gripping surface will run true. The snug fit at the business end of the wooden chuck does not lend itself to returning.

Turn the rings

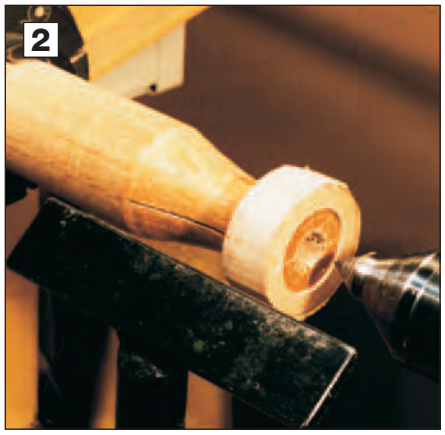
The orientation of the grain suggests that you follow the traditional rule of faceplate turning. That is, use bowl-turning tools. In real life, the rings are small and spindle speeds high so that you can use any tool that you like (except a roughing gouge).

My plan starts with stock in the form of planks—not billets. If you are more comfortable with the spindle-turning techniques, then start with square stock bored end-grain. Everything else will follow the same procedures.

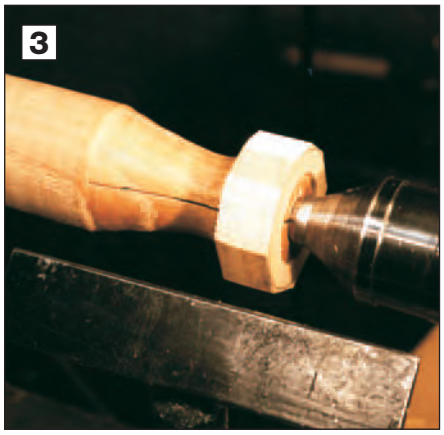
Mount the blank on the jaws of the expansion chuck (Photo 2). Bring the tailstock live center up to meet the chuck and apply pressure to expand the chuck quadrants (Photo 3).

Continued

Maple stock in steps of preparation. Note the shallow pre-bore (about 1/16" deep) in the top row.



The rough blank is shown mounted on the expansion chuck.



The tailstock live center, now snugged up, expands the chuck quadrants.

I suggest roughing the blank to approximate finish size with a 3/8" bowl gouge (Photo 4). Turning the final shape is then up to you. I'm sure that you will quickly identify your own style and preferences. I favor napkin rings 1/2" to 1" wide. With relatively wide rings, I usually stop the lathe, release pressure by the tail center and move the ring so that it overhangs the end of the chuck. In this case, I reverse the ring on the chuck to finish the near side.

If you prefer narrower rings, make the bearing surface of your chuck narrower as well. This will allow you to turn with a very slight undercut on each side.

With a 3/8" bowl gouge, true up the napkin ring.

Apply finish

The simple turning of napkin rings usually requires little sanding. A light touch with the finer grades works for me. Depending on how clean you bored with the Forstner bit, you may want to sand the inside surface with a spindle sander.

Your choice of wood species will influence the final finish. I finish my mahogany, Osage orange, and walnut rings with Mylands™ friction polish. (Some light colored stock such as white oak, ash, maple, or sassafras benefit from staining.)

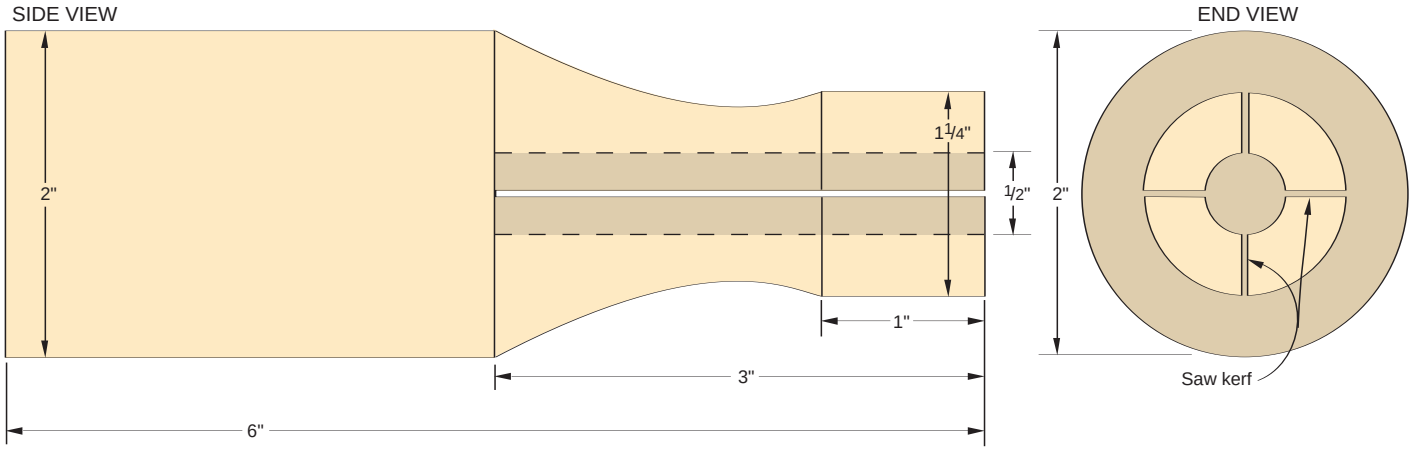
Rings dry on bent wire hooks after staining or slow-drying finish coat.

7/8" ash, left, and 7/8" ash with milk paint band, above.

For finishing, I reverse the ring on the chuck halfway through, allowing a deep overhang so I can polish the edge. Off the lathe, I apply the same finish to the inside using a cotton swab applicator. There is no need to polish the inside surface of the ring. When I anticipate heavy use, I apply a final coat of thinned satin polyurethane varnish.

For drying after staining or varnish, I hang the rings on shop-bent hooks made from coat hangers (Photo 5). Mine is an adjustable jig made from 1/4" all-thread that I use for numerous applications around the shop.

Jerry Hubschman, a retired biologist, lives in Put In Bay and Yellow Springs, OH. He is a member of the Central Ohio Woodturners. Jerry teaches sign carving at the John C. Campbell Folk School.



Tips

Got a Great Idea?

Share your turning ideas!
If your tip is published, you'll earn $35. Send your tips with relevant photos or illustrations along with your name, city, and state to:

John Lucas
PO Box 1292,
Cookeville, TN 38503
jlucas@tntech.edu

Powermatic 3520 copy attachment

To simplify copying of spindle patterns, I bored out the guard bracket hole in my Powermatic 3520 lathe to fit a 1/2"-diameter water pipe. Then I threaded the guard locking pinhole for 1/2-20 to accept a set screw.

Now, I can install a 1/2" pipe clamp parallel to the bed and then clamp a spindle pattern within easy sight and measuring reach.

Bob Vaughan
Roanoke, VA

Quick chip clean up

When I got my new Powermatic lathe, I started producing lots of shavings. The lathe arrived in a large cardboard box, so I cut a large piece that would fit between the legs of the lathe and sit on the floor. The cardboard sticks out on both sides of the lathe and the shavings fall on top of it. When I get tired of walking on all the shavings, I simply slide it out from under the lathe. After I bend the cardboard into a U shape, it's easy to dump the shavings into the garbage can. The corrugations allow the board to curl up and "funnel" the chips into the can.

Bill Kram
Somersworth, NH

Router planing box

With my limited equipment, I need a way to flatten one or both sides of turning stock to help align the grain and make it easier to install the faceplate. My solution was to build a router planing box—basically a box with a sliding lid. The lid supports the router and the box controls the thickness. You can place a spacer under the wood to change the thickness or elevate one side to control the grain orientation.

Chuck Ludwigsen
Memphis, TN

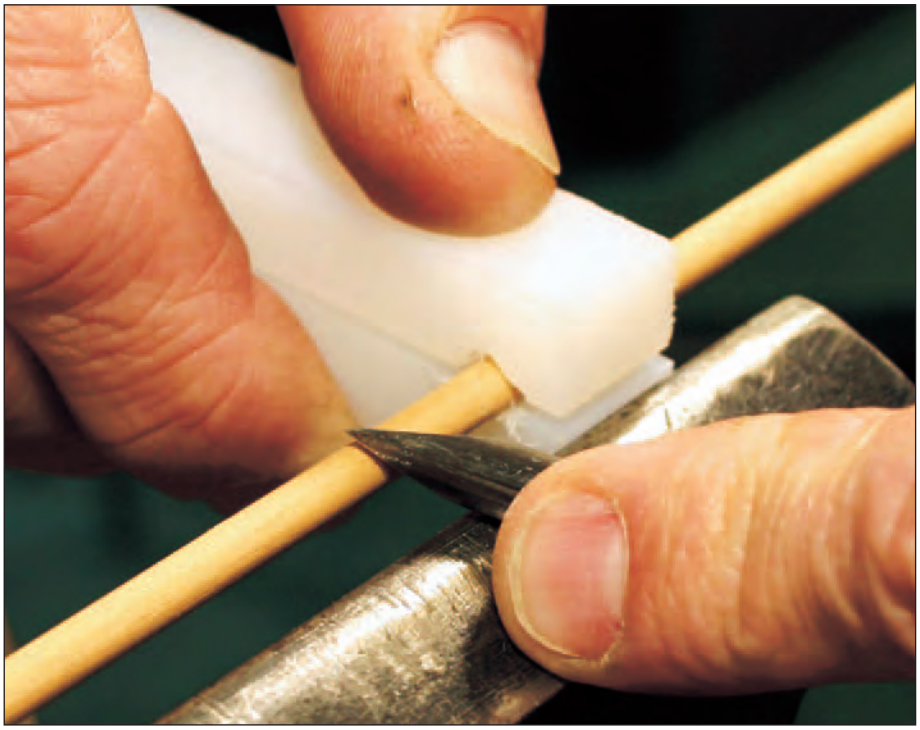
Steady rest alternative

This is a quick alternative to keep from burning your finger when trying to steady a thin spindle. I use 3/8"- or 3/4"-thick Ultra High Molecular Weight Polyethylene (UHMW-PE), available at Woodcraft and other suppliers. With a strip about 4" long, cut a 3"-long slot at one end.

Then cut aligned V-notches about 1/4" from the end on the inside faces as shown in the photo. Slip the strip over the spindle and use your fingers to squeeze it around the spindle.

This lets you apply more pressure to suppress chatter without burning your fingers.

David Reed Smith
Hampstead, MD



Garden chemistry for spalting wood

If you've ever had the desire to spalt your own wood, here's a recipe that has worked for me.

This is not an exact science. Variables include wood species, temperature, dimensions of turning, and thickness of wall. I've also had successful results by applying the mix to just a portion of a turning.

Rob Ketchmark
Burr Ridge, IL

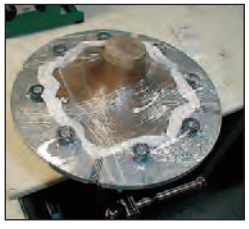
Spalting Mix

- 1 12-ounce can of beer
- 11/2 tablespoons ammonia
- 2 teaspoons of Miracle Grow nitrogen rich fertilizer dissolved in a cup of water
- 1 handful of dried leaves
- 1 handful of fresh grass clippings

Blend all ingredients in a food processor or blender until smooth. Then brush the mix (should be a paste consistency) on a rough-turned bowl. Place the turning for about two weeks in a sealed plastic bag or plastic container with a tight-fitting lid.

Plastic wrap aids reverse turning

When I reverse turn my bowls, I use stretchable plastic wrap from the kitchen to hold my bowls on the faceplate. It holds extremely well and doesn't leave a sticky residue on any surfaces. I've had good luck with a really solid hold on delicate turned pieces.



Mike Schwing
Baltimore, MD

In defense of your favorite Skew

Alan Lacer, left, and Nick Cook, right, have differing views on the best skew. Both are contributing editors to the *American Woodturner*.

Nick Cook and Alan Lacer are well known in turning circles as master skew practitioners. Wherever they teach classes or demonstrate, they spread the gospel of a turning foundation based on skew skills. And do these long-time friends embrace the same skew profile? Not exactly.

Nick Cook's view Why oval skews are best

Is the skew evil? No, not really—it just seems that way to most beginning woodturners. I even thought the skew was an evil tool at one time. I blame that on Rude Osolnik, the grand old man of woodturners. As a student of Rude, he told me to "Throw that damn thing away, you can do everything on a spindle with either a big roughing gouge or the 1/2" spindle gouge." So he was not very helpful when it came to learning to use the skew.

I wasn't convinced that it was really that bad, so I decided to learn it on my own. I soon discovered that it really wasn't that bad. It even feels good when you learn to use a skew properly.

When I first started using the skew, the only ones available were the standard, rectangular shape made of carbon steel. I think my first was either a Buck Brothers or Craftsman. It had a fairly short handle and an even shorter bevel, maybe 45 degrees or so. It required constant sharpening because carbon steel really does not hold an edge very well. So, I started exploring other possibilities. I tried every size and shape I could find.

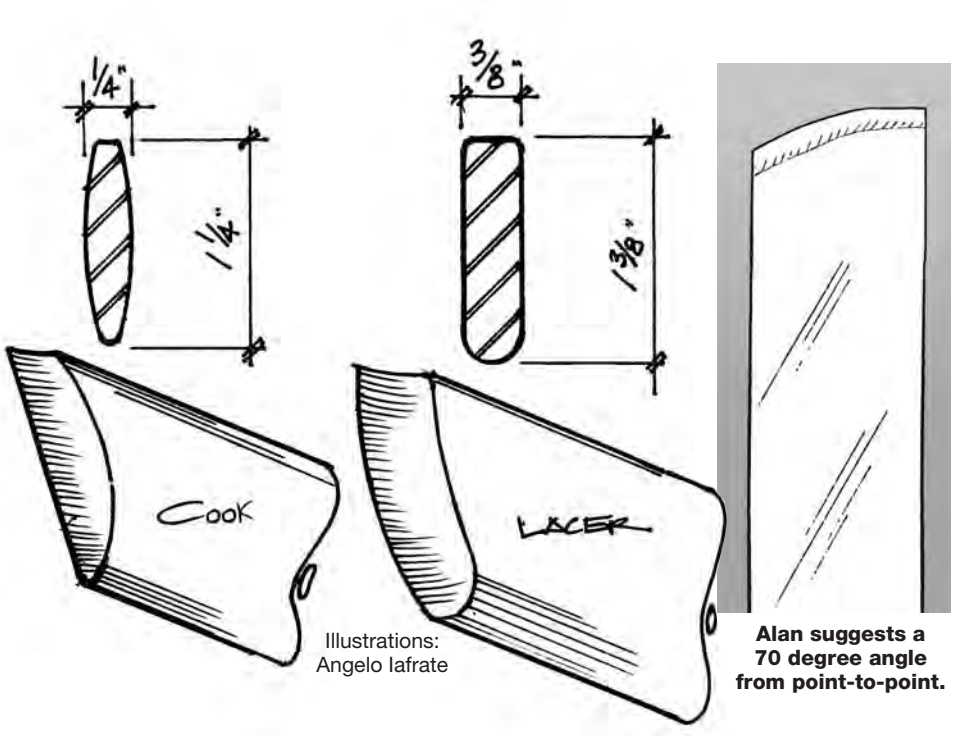
I now have more than a dozen different skews. They range from 1/4" (flat and round), 3/8" round, 1/2" flat (round and oval), 1/2" (flat and oval), 1" flat, oval and curved), 1 1/4" (flat and oval) and one 2" flat.

I also have several sizes of the spindle master. I have found that it is a good alternative to the skew. It is very user friendly in both sharpening and cutting.

Of all my skews, the 1 1/4" oval is my personal favorite. It's the one I recommend for my students and the one I use most often. I even insist that students learn to use the skew first before going on to other tools. I think the larger size (1 1/4") and the oval profile make it much easier to learn than the traditional rectangular shape.

The oval skew was also the first to have a rounded edge on the short side. Many of the newer skews on the market now come with this edge rounded. This alone makes it easier to move across the length of the tool rest. I also like the lighter weight of the oval skew. I find it better balanced and easier to manage on stock up to about 3 1/2" to 4" diameter. I prefer a larger, heavier skew for stock larger than 4".

As for the skew angle, the basic 70 degree angle works best for me. I also like this angle to be straight



Illustrations:
Angelo Iafrate

Alan suggests a 70 degree angle from point-to-point.

rather than curved like the signature Richard Raffan skew. I have a curved oval skew—it works well for roughing and smoothing a cylinder. The curved edge places the center one-third working area out ahead of both the toe and the heel. This makes it fairly aggressive and less likely to get a catch. This also helps to keep both the toe and heel of the tool from digging into the workpiece. At the same time, the curved edge makes cutting V's and rolling beads more difficult.

When it comes to sharpening and honing, I like the longer bevels that are standard on the oval skews. The bevels are between 20 and 22 1/2 degrees. I prefer to use the Tormek sharpening system and the specially designed skew jig for grinding my skew. The large 10" wheel, ultra slow speed (90 rpm) and the water bath render a uniform hollow grind that is razor sharp. Between grindings, I use the leather strop charged with 6000-grit honing compound to refine the edge.

When a Tormek is not available, I use a fine oil stone or diamond hone to keep my skew sharp. I never sharpen my skew with a standard grinder—even one that turns at 1800 rpm is much too aggressive for me.

Even though most beginners are intimidated by the skew, I usually start them out with it. It is not all that bad once they get over the initial shock. Beginners usually find that it is a very versatile tool. They soon discover that it leaves a surface that requires little sanding. I think that is reason enough to learn to use the skew.

Alan Lacer's opinion

Traditional skews are best

I love my traditional skew. But before I explain why, let me tell you what's wrong with the oval skew.

1. Hard to sharpen. The oval profile "rocks" on the rest or your fingers. It's very hard to keep it in one grinding plane for each side, let alone get two planes parallel. Solutions: Get a grinding jig or firm pressure in the middle of the tool.

2. Flimsy. You can flex the small oval skews in your hand. This translates to more bouncing of the tool when doing cuts other than light finishing cuts, requires more pressure on the tool rest to reduce this problem, and can lead to ribbing in denser woods when making a long planing cut.

3. Changing presentation. Andy Barnum first pointed out to me that when rolling a oval skew (and rubbing the bevel) the presentation or relationship of the edge to the work changes as you roll the cut. I find you must add one more action to what is already a complex series of moves. Generally this rolling cut gives turners the most difficulties; the oval section does not improve the chances for consistent success.

4. Impossible peel cut. Almost impossible to do a "peeling" cut as you do not have

Continued

a flat plane with the tool's cross-section to establish the cutting angle. This is a very important cut for removing the corners (roughing) on smaller length and diameter projects, rapidly removing waste material, or cutting tenons for preparing a block for a chuck.

5. Unstable with long point down. The tiny flat area along the top of the tool and behind the long point is insufficient for stability on a broad number of cuts with the long point down.

Embrace the traditional skew

Here are reasons why I like a traditional skew chisel made from rectangular steel. I prefer a heavyweight version of the traditional skew—at least 5/16" thick and preferably 3/8" thick.

1. The rectangular cross section makes this one of the very easiest of all turning tools to sharpen. For a straight grind, set the angle of the grinder's rest, place the cutting edge 90 degrees to the face of the wheel (or parallel to the grinder's axis), and sharpen. No jig is required. For the curved edged skew, I add a pivoting action to follow the tool's shape.

2. The increased heft of a thicker skew aids in heavy cuts and in working denser hardwoods. This translates into more power, less force is required to hold the tool on the rest, and ribbing or chatter work is reduced.

3. A cut I use on almost every project is the peeling cut. This is performed by using a portion of the edge (not the entire long cutting edge) much like a veneer peeler working on a log: It is not a scraping cut nor is it a finishing cut. It is using the skew much like a large parting tool—but with a wider cut, more support and much more control than a regular parting tool. It is particularly effective in removing corners on woods that are "chippy" like red oak or cocobolo. It works far better on those woods than using a planing approach as it virtually eliminates the riving action associated with the planing cut.

4. Because many of the cuts (shoulder, Vee, pommel, saucer, and parting cuts) are often done with the long point down, the tool rest bears most of the tool's weight. Thus, increased weight is not generally a problem.

5. The rectangular cross-section of the tool makes for a more consistent action when rolling a convex shape (beads, balls, egg form). The cut often begins just below the center line of the tool and finalizes with the long cutting edge in a vertical position. The consistent cross section allows for a smooth pivoting action that little changes the relationship of the resting point to the cutting edge—even when cutting at different sections of the edge.

6. Here's how to achieve the oval skew's primary aim—a tool that maneuvers easily along the rest—but without the tradeoffs. (A growing number of skews are sold with this profile.) Round the short point (or heel) side of the skew all the way back to the ferrule, and soften or chamfer the corners behind the long point (or toe) back to the ferrule. I find this is most easily done with a belt sander or grinder--and must only be done once in the life of the tool.

"Rockabye Song Bird," 2003. Collaboration by Hans Weissflog and Jacques Vesery. Sycamore and pigment, 3" x 7".

Collaborative Effort

and the art of teamwork designs

At the AAW symposium in Orlando, you won't want to miss "The Need for Seeds: Collaborating with Other Artists." This lecture by Mark Sfirri and Jacques Vesery focuses on the energy and ideas which come out of collaborations—and the many ways to approach teamwork.

The turned pieces shown here represent Jacques' collaborations with Hans Weissflog, *above*, and Michael Lee, *right*.

Photos: R. Diamante

"Kaihaina U'hane" (Sister Spirits in Hawaiian), 2003. Collaboration by Michael Lee and Jacques Vesery. Carved and textured cherry, gold leaf and pigment, 3" x 6¼" x 3½".