



**Jim Echter**  
**‘The Sensational Skew!’**  
**March 12th**  
**8:30-12:30**



Jim is a production turner, instructor, and writer. Jim’s woodturning started as a hobby over 45 years ago and evolved into a career seventeen years ago. Jim conducts private instruction at his studio and has taught and demonstrated for over 70 woodturning groups. In 2019, Jim demonstrated at the AAW Symposium in Raleigh and was a featured live demonstrator for the 2020 Woodturners Worldwide Online Symposium where his *Sensational Skew* program received great reviews by the attendees.

Jim will take the mystery out of how to use the skew so it becomes the sensational tool in your arsenal. Utilizing a combination of images, large scale models and actual demonstrations, the use of the skew will be broken down into very understandable chunks of information. The program will overview skew profiles, edge profiles, sharpening procedures, basic cuts, advanced cuts, and learning exercises. Project ideas will be demonstrated that will help you build confidence with using this sensational tool.

*I am a production turner, instructor and writer that has developed a series of wooden tools for fiber artists that I wholesale around the world. I also specialize in architectural restoration work and turning custom and replacement furniture components. My woodturning started as a hobby over 45 years ago and evolved into a career seventeen years ago. I market my products and services through retail outlets and my True Creations Woodturning web site: [www.tcturning.com](http://www.tcturning.com). I also conduct private instruction at my studio and have taught and demonstrated for over 70 woodturning groups. In 2019, I demonstrated at the AAW Symposium in Raleigh and was a featured live demonstrator for the 2020 Woodturners Worldwide Online Symposium where my Sensational Skew program received great reviews by the attendees.*

*I was the founding President of the Finger Lakes Woodturners Association chapter of the AAW. Prior to the start of FLWT, for two different three year terms, I chaired the Woodturning Special Interest Group for the Rochester Woodworkers Society which, at that time, was the largest woodworking guild in the country. I have been an active member, board member, demonstrator and contributor to the woodturning scene for over 44 years.*

*My piece entitled “My Kick Spindle” was accepted into the Turned for Use II AAW Symposium at the Richmond, VA. It is a combination of very precise fitting spindle components and several face grain pieces. It is a specialized form of a portable spinning wheel. My drop spindles, spinning wheels and other fiber tools are sold at over 25 fiber shops throughout North America and Europe. “My Kick Spindle” was featured on the Gallery5 poster for the symposium exhibit. The “Portable Kick Spindle”, my second generation design, has been sold to customers in Japan, Australia, Europe, Canada and all over the United States.*





A CALIFORNIA NONPROFIT CORPORATION  
LOCAL CHAPTER AAW

## Club Meetings

### *Club Meetings-*

Meetings are held on the 2nd Saturday on each month by Zoom conferencing. Invitations are posted to all members: guests are welcome by request to: [membership@bayareawoodturners.org](mailto:membership@bayareawoodturners.org) who will forward an invitation to the next meeting.

Zoom sessions open at 8:30am. The meeting start time is 9:00am.

See [bayareawoodturners.org/](http://bayareawoodturners.org/) for club information.

### *BAWA Officers Meeting -*

The Association's officer meetings are held each month. Contact Steve Griswold at: [president@bayareawoodturners.org](mailto:president@bayareawoodturners.org) for more information.

## 2022 Event Schedule

March 12th	Jim Echter The Sensational Skew! 8:30-12:00
April 9th	Stuart Batty 8:30-12:00
May 14th	Phillip Greenwood
June 11th	Michael Mahoney
July 9th	Turn for the Troops
August 13th	Annual Picnic
September 10th	Alan Lacer
October 8th	Alan Straton

The Bay Area Woodturners Association is a local chapter of the American Association of Woodturners. Our purpose is to provide a meeting place for local turners to share ideas and techniques and to educate the general public regarding the art of turning. The Association usually meets the second Saturday of each month. The Association periodically sponsors exhibitions and demonstrations by local and internationally known turners.

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## Stuart Batty April Demonstrator

During the past 37 years, Stuart has taught more than 6,000 amateur and professional woodturners around the world, in 12 different countries and all 50 states in the USA.

Batty is a third-generation woodturner, following in the footsteps of his father and grandfather, both of whom completed six-year apprenticeships in the British style of woodturning. Growing up in Newcastle upon Tyne, Batty spent his Saturdays sharpening the tools that his father would sell to amateur woodturners. After watching his father labor in the dusty woodshop for years, Batty got his chance at age 10.

Untold hours of turning honed his technique to maximize efficiency. Production turners are paid by the piece. This financial reality forces one to concentrate on methods and techniques that minimize lost time and accelerate production rates.

Stuart is an advocate for the 40/40 grind, and will certainly discuss his reasoning, as well as demonstrate the sharpening technique he uses.

Sources:

<https://www.mauinews.com/news/local-news/2018/07/turning-wood-into-gems/>  
<http://chicagowoodturners.com/Newsletters/0912.pdf>



### Rockler Helps BAWA Members

BAWA members receive a 10% discount when purchasing directly at the Concord Rockler Store at:

<http://www.rockler.com/retail/stores/ca/concord-store>.

Mention your BAWA membership when checking out, to receive your discount. Rockler also donates part of the proceeds back to the club which help support our Holiday Party raffle.





# Glen Lucas

## Dublin Viking Bowl February Demonstration

Glen Lucas was our February demonstrator. Glen and his lovely wife Cornelia did a superb job with the remote demonstration. Glen hails from Ireland, and was into the early evening hours as we were starting the meeting here on the west coast.

Glen is a production turner who is very prolific in terms of the mass quantity of bowls he turns for the market. Glen was working on a 350 bowl commission the day of the demonstration.

Glen demonstrated the Dublin Viking Bowl, which originates sometime around 1100 AD. Glen discussed the challenges with turning a rounded bowl and how he approaches it. Glen discussed the grinds he uses and the three different bowl gouges based on where he is in the turning.

Glen provided a great deal of insight into his work in general and spent a great deal of time answering our questions. Glen is the consummate professional and the demonstration was entertaining as well as informative.



Glenn Lucas



Glenn's bucolic setting



Glenn's classroom



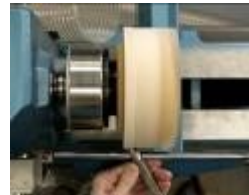
Glenn's IRD setup



Bowl blank



Discussing his grinds



Truing bowl blank



Cutting the tenon



Roughing the shape



Scraping to define bead



Disks cut from sandpaper



Sanding exterior



Hollowing interior



Shavings fly



Glenn's stance



Undercutting rim



Bottom feeder gouge



Removing tenon



Top view of bowl



Side view of bowl

# President's Letter

March 2022



Greetings everyone - As we head into Spring, here are a few updates and news items:

**COVID and our upcoming meetings** – As you know, the BAWA Board has been watching the COVID situation carefully every month and I am happy to say that we will begin meeting in person again starting with our May 14 meeting. At the beginning of April the Board will review the public health data and decide if in-person attendance will be limited or if everyone can go. We'll update everyone at that time.

**The Robust has arrived!** Our new demonstrator lathe, a Robust American Beauty, has been delivered, and a great crew of volunteers managed to remove the OneWay and install the Robust. It was quite an adventure, and the lathe is a real beauty. Make sure to check out Rick Dietrich's article and pics. As I said last month, talk about community!

**Updated Website** – I am happy to report that the complete revamping of our website is nearly done. In particular I am pleased that the site is "optimized for mobile devices" which means you can now easily use it on your phone or tablet. I will be doing a "sawdust session" on Monday March 21 at 1:00 to walk folks through of the new site, and take questions and suggestions. Meanwhile I encourage you to log on and take a look around.

Stay safe and keep on turning,  
Steve Griswold

## Call for Art

### BAWA Exhibit in Orinda, April 2022 - Call for Art

Our members continue to create beautiful works of art for the Beads of Courage Program that help children cope with serious illness. This April we have an opportunity to bring awareness to this cause and showcase these fine turned and decorated boxes.

**BAWA needs additional Beads of Courage boxes for this event!** All Beads of Courage boxes delivered to Larry Batti by March 28, 2022 will be considered for the April exhibit at the Orinda Library Gallery. Following the event each box will become a source joy for a child.

**BEAD BOWLS/BOXES GUIDELINES:** Beads of Courage members may receive thousands of beads. It is desirable for your boxes to hold them all. As a result, turned or rectangular lidded boxes need to be large. **Larger is better! Recommended interior dimensions for turned boxes are: 6" diameter (5" min.), 5" height (4" min.). Recommended interior dimensions for flatwork boxes are 4"x6"x4"**

**Box bases** should be wide enough so the box is stable and does not tip over easily. Lids for Beads of Courage boxes should be easy for small or ill children to remove or lift. Any finials should be easy for a small child to grasp and not too elaborate so they don't break. Avoid excessively elaborate designs that may easily break or be damaged; remember, hospital rooms have limited storage space.

**Finishing of boxes is extremely import!** Beads of Courage members who receive these boxes are susceptible to germs/ infections/mold. Bowls that have not been properly sealed can harbor mold. Please take the time to ensure you are using a safe finishing process that does not contain toxic materials. Also do not use finishes like linseed oil that take a long time to outgas. All kinds of wood are beautiful! Please refrain from painting Beads of Courage boxes. Instead, highlight the beauty of the wood with clear varnish, a stain, and/or burning.

And of course Larry Batti is available to answer any questions you may have - **phone 925.997.9548**

**Who should consider participating** - every BAWA member! We would like to showcase as many members as possible.

*Thank you in advance for your participation,*  
Kim Wolfe

## Holiday Show & Sale

Our 'Holiday for the Arts Show & Sale' benefits the Olive Hyde Art Gallery and other visual art projects in the Fremont community and schools.

### Exciting News!!!

**We are delighted to announce that after a two-year absence the Holiday Show is back!**

### Olive Hyde Art Guild Holiday for the Arts 2022

Friday Night Gala: October 21, Time TBA  
Show & Sale: Saturday, Oct. 22 – Sunday, Oct. 23

For more information copy and paste: <https://olivehydeartguild.org/holiday-for-the-arts-2/>



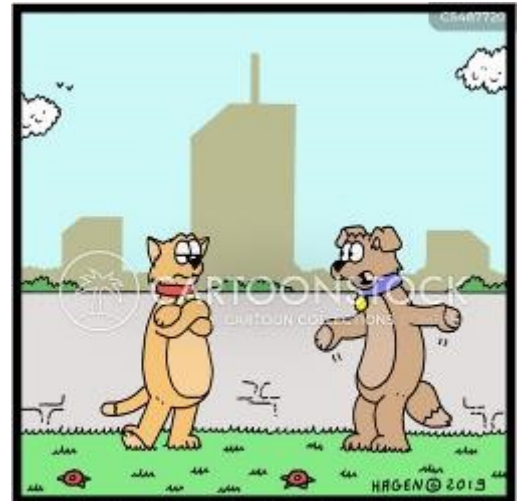
## BAWA Classified Ads



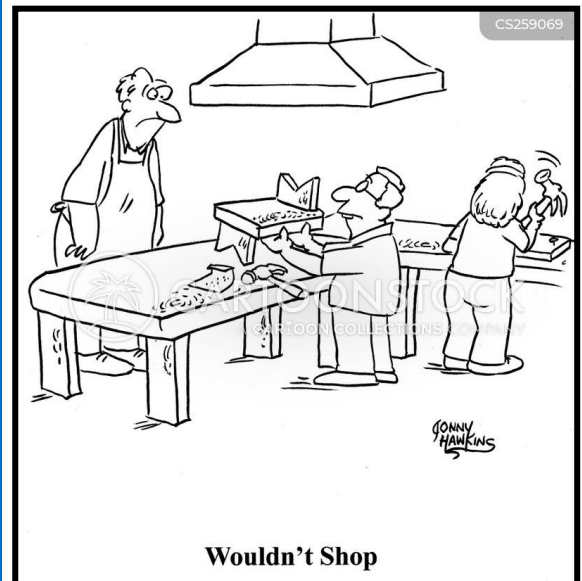
We want members and others with items to sell or trade, services to render or if you're just looking to find a specific item from fellow BAWA members.

Please send ads to Louie Silva at:  
[newslettereditor@bayareawoodturners.org](mailto:newslettereditor@bayareawoodturners.org)

You can't beat the price...FREE!!



Well, I didn't eat Young Master's homework per se,  
but I have to shamefully admit  
I did chew on his woodworking project...



Wouldn't Shop



# Changing of the Guard: A Lathe Story

By Richard Dietrich

BAWA's One-Way demonstration lathe had been in use for over a decade. Its white finish had been signed by 33 demonstrators – a veritable Who's Who of turners. However, over the years its unique features – a metric spindle thread and a #3 Morse taper tailstock – plus its power and swing limitations had lost their charm. It was time for a change.

After considering several options, the BAWA Board decided on a Robust American Beauty. It had 3 HP, a 25" swing and, most importantly, the same thread and taper as all the other full-sized lathes in the classroom. It was pricy but the cost would be mostly covered by donations and the sale of the One-Way as well as a 25% club discount from Robust.

It came fully assembled in a box which had no handles: a 700-pound block. BAWA President Steve Griswold picked it up from a depot in Hayward where a forklift loaded it onto the truck. BAWA had no forklift but had eager helpers.

On arrival of the truck at PHMS, a team of volunteers stripped down the One-Way and muscled it onto one side of the truck. Then it was time to move The Box. Using massive amounts of brains and brawn, they worked as a well-oiled machine to safely inch this well-oiled machine from the lift gate truck to the demonstration platform. Then off went the truck to deliver the One-Way to its new owner.

The American Beauty lives up to its name. Made in the USA, it has everything a demonstrator could ask for. It's smooth, silent, and strong. Instructors appreciate it; once the pandemic is behind us, demonstrators will love it. Thanks to all who made this dream a reality.



Goodbye 'Old Faithful'



Working out strategy



Sizing up the box



Orienting OneWay on the liftgate



Coaxing into the truck



Almost there



Barely budging the box



Attacking from all sides



Applying muscle



Applying more muscle



Sliding over rails



Let's look in the box



First peek



Moving into place



Welcome American Beauty

The Crew:  
John Langen, Vern Stovall,  
Jim Campbell, Tony Wolcott,  
Larry Batti, Steve Griswold,  
Jan Blumer, Louie Silva  
(not pictured-Jim Rodgers)



Autographs of former demonstrators using the One-Way lathe

# Tree Article #51 On Identifying Wood Part 1

By Tony Wolcott

Through botanical clues, we can identify trees through leaf shape, fruit type, and flower organization. We can also identify trees by their overall shape and habits, such as a weeping habit. The sense of smell is another tool for guessing what kind of tree it is. Scratch a piece of camphor (*Cinnamomum camphora*), and you know what you have. Knowing the Latin or scientific name is necessary, not the vague familiar names. The **binomial nomenclature** is the one the nurseries know.

Using various simple tools and methods to identify a wood is possible. Wood identification is not easy. First, there is a vocabulary to understand.

**Transverse** means going across. That means cutting across the log and revealing the end grain for wood.



Photo 1 shows transverse cuts across the log or the grain. Analyzing the **end grain** is one way of identifying wood. A hand lens also helps. **Radial** cuts go through the **pith**, slicing vertically through the log.

1. The exposed two faces are a result of slicing through the pith. This **radial cut** has two radii or one diameter right through the pith.



2.

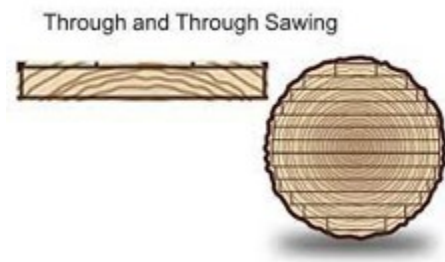
**Tangential Cuts** are similar to radial cuts except that the cuts are on a tangent and miss the pith.

This onsite action photo 3 demonstrates all three cuts. There are several transverse or crosscuts. The half log next to the chain saw is a radial cut; the straight grain goes up and down. The other half log lying on the ground is a tangential cut. Note the exciting grain patterns through this arbitrary cut.



3.

With milling logs, there are various sawing methods. **Through and through sawing** gets the most wood out of the log and the worst quality lumber. Find this wood at Home Depot.



4.

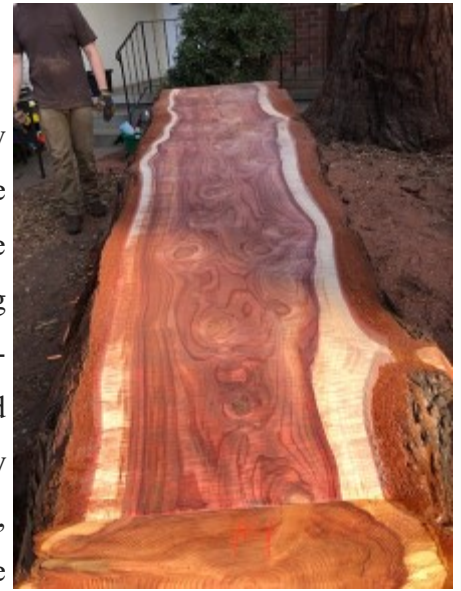
Live sawing, also known as slab sawing or through and through sawing, is when a log is sawn about halfway through on the opening face and then turned once to the opposite face for sawing until the log is finished. Can you see the one radial cut. Photo 4? All the other cuts are tangential. The diagram shows the end grain or transverse cut revealing the end grain.

*Continued on following page*



What kind of cut was this? Photo 5

To identify wood, one must know some introductory botany; you need to know what you are looking at with that hand lens. Under the various bark layers, past the **phloem** exists – a single cell-wide **cambium** (the Achilles heel of the tree). The cambium is the **secondary meristematic** tissue. Meristems are actively dividing cells. The **apical meristem** is at the tiny branch points, and root tips are also meristematic. The cambium does all the work, pushing the phloem to the outside and the **xylem** to the inside. Rigid wall cells are absent in phloem. The bark activity crushes the phloem, and the material dissolves. Since we are talking about wood, let's concentrate on the xylem and disregard the phloem and bark creation. The new xylem is actively transporting water and nutrients from the root system. We appropriately call this xylem the sapwood. But after a few years, the older xylem stops transporting fluids and ceases to be active. These cells have rigid walls and form the structural integrity of the tree. Gradually the older sapwood changes into the heartwood. This conversion is enhanced by **lignin** and **tyloses**.



5.

Lignin is a class of complex organic polymers that form key structural materials in the support tissues of most plants. Lignins are particularly important in forming cell walls, especially in wood and bark, because they lend rigidity and do not rot quickly.

Tyloses are outgrowths/extra growth on parenchyma cells of xylem vessels of secondary heartwood. Drought, infection, or aging stresses the plant, and then tyloses fall from the cells' sides and “dam” up the vascular tissue to prevent further damage to the plant. [Wikipedia](#)



The above photo shows **earlywood** -- the larger pores, and **latewood** – the smaller pores. The **rays** are the lines running left to right.

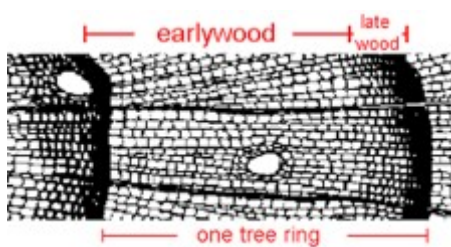
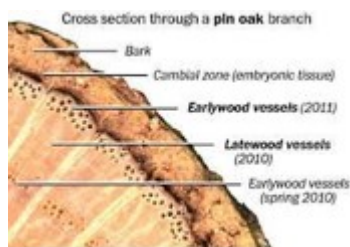


This picture is of red oak wood with visible rays expanding upwards.

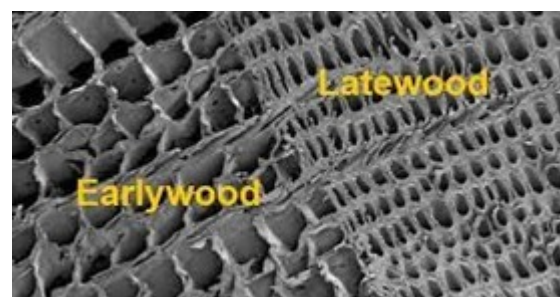
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Some trees have **medullary rays**. Medullary rays are cellular structures found in some species of wood. They appear as radial planar structures, perpendicular to the growth rings, visible to the naked eye. In a transverse section, they appear as radiating lines from the center of the log. [Wikipedia](#)

Many trees have single or solitary rays, which are challenging to see with a 10x hand lens. Medullary rays are groupings or series of rays often visible to the naked eye. These terms and some others come into play when identifying wood species. Earlywood and latewood describe the difference between early active growth and later slower growth. Earlywood shows an open structure with large thin-walled cells for good sap transportation. Latewood has smaller cells with thicker cell walls that strengthen the tree. Keep in mind that this distinction of early and late applies only to temperate growing areas with distinct seasons. There may be no distinction in the wood in tropical areas with year-round growth.



Earlywood and latewood vary in width from species to species. The example on the left has wide latewood vessels from 2010 and very narrow earlywood vessels from 2010 and 2011. However, the example on the right has just the opposite – a very wide earlywood and very narrow latewood. The telltale sign is the larger pore size for the earlywood much smaller pores for the latewood.



Confusion may be present. I apologize for that. As the salesmen and saleswomen say—hit the customer with something five times, and then it may stick. This point brings us to the end of On Identifying Wood Part 1.

The following texts provide practical help with the introductory botany and help with identifying wood. The fourth and fifth books are further advanced and read at your speed. The sixth book is a Botany book used for a college course, a good reference.

1. Gibbs, Nick, *The Real Wood Bible, The Complete Illustrated Guide to choosing and using 100 Decorative Woods*, Firefly Books, 2005
2. Meier, Eric, *Wood Identifying and Using Hundreds of Woods Worldwide*, The Wood Database. 2015
3. Porter, Terry, *Wood Identification & Use*, Guild of Master Craftsman Publications Ltd., 2017
4. Hoadley, R. Bruce, *Identifying Wood, Accurate Results With Simple Tools*, Taunton Press, Inc., 1990, ISBN-10: 0-9423191-04-7
5. Hoadley, R. Bruce, *Understanding Wood, A Craftsman's Guide to Wood Technology*, Taunton Press, Inc., 2000, ISBN-10:1-56158-358-8

[Mauseth, James D., \*Botany An Introduction to Plant Biology\*, Jones & Bartlett Learning, LLC, 2017](#)

# Virtual Show & Tell February

*Charlie Saul*



*Jay Holland*



*Continued on following page*



# Virtual Show & Tell February

*Larry Batti*



*Gary Bingham*



# Vernier Calipers

## Measure Up! Roger Zimmermann



A collection of vernier calipers, including dial and digital calipers.

A vernier caliper is an indispensable part of my woodturning toolbox. In my teaching of woodturning I have found most people are missing out on the use of this simple, but handy measuring device. There are two aspects of the vernier caliper that, once understood, will take the mystery out of the tool. Once mastered, it will become your go-to measuring device.

Vernier calipers range in price from a couple of dollars to about

\$30. Each model has its pluses and minuses, but they all perform the same measurements. Some read only in fractional inches, some have both inch and metric scales, and some will provide a digital readout in either system.

### Reading the scales

Good calipers are capable of precise readings, often to 0.001" (0.025mm), but any degree of precision requires learning to interpret the vernier scale. The \$2 plastic

vernier caliper in *Photo 1* has both English (top) and metric (bottom) scales, with an inner and outer scale for each type of readout. The bottom line of the English scale reads  $\frac{1}{16}$ " increments, while the upper scale reads  $\frac{1}{32}$ " increments. For a reading to the nearest  $\frac{1}{32}$ ", use the bottom line of the scale to measure to the nearest  $\frac{1}{16}$ ", and add to that reading any additional length in  $\frac{1}{32}$ " increments. For example, the zero mark of the short ( $\frac{1}{32}$ " vernier scale in *Photo 1* aligns just to the



right of the  $\frac{5}{16}$ " mark on the inner scale. This means the dimension is slightly more than  $\frac{5}{16}$ " (or  $\frac{7}{128}$ "). Reading along the short ( $\frac{1}{128}$ ") vernier scale again, we see the "6" mark most closely aligns with a mark on the inner scale, meaning the actual measurement in this example is  $\frac{7}{128}$ " +  $\frac{6}{128}$ " =  $\frac{7}{128}$ " or  $\frac{3}{4}$ ". The metric scale operates in the same fashion, but relies on the bottom two scale lines.

Practice a little and you will quickly find accurate measurements are easier than my description leads you to believe. Helpful resources on the Internet include Wikipedia's entry for the "vernier scale," with animated examples of caliper measurements.

Enter the digital age and you can get a vernier caliper that takes the math out of the equation and gives you a direct readout in decimal or fractional inches, or metric—just make sure to keep a spare battery on hand! I find the fractional vernier calipers to be unnecessarily difficult and recommend either a mechanical one reading in thousandths or the digital calipers, as they are relatively inexpensive.

While reading the vernier scale is a useful skill, calipers in the woodturner's shop are often used to transfer direct measurements. Sizing a tenon to fit into a pre-drilled or turned recess can be accomplished by setting the caliper opening to the diameter of the recess, and transferring the dimension to the tenon, bypassing the math altogether.

### Using the vernier caliper

Vernier calipers employ four methods to measure the following dimensions:

- The large jaws measure external dimensions, such as the

diameter of a spindle or tenon (Photo 2).

- The small jaws measure internal dimensions, such as the inside of a lidded box, mortise, or drill hole (Photo 3).
- The protruding piece at the tail end measures depth or length, such as the length of a tenon or depth of a bowl (Photo 4).
- The shoulder on the small upper sliding jaw measures the depth of a step, offset, or recess such as a rabbet or groove (Photo 5).

Both sets of jaws have sharp points—especially on metal calipers—and attempting to use the calipers on spinning stock may result in a dangerous catch when a point digs into the rotating wood. To use calipers as a sizing gauge for rotating spindles, the points must first be ground off the jaws. The calipers should never be used for internal measurements on spinning stock; friction generated between plastic calipers and spinning stock may melt the calipers. For the safest practice, turn off the lathe when using calipers.

Vernier calipers have many applications in a turner's shop, including fitting lids, turning down a pen blank to perfectly match components, making snug-fitting mortise and tenon joints, and determining the depth of bowls and boxes. Add this handy tool to your shop and watch the quality of your turnings jump up a notch! ■

*Roger Zimmermann is the president of the Wisconsin Valley Woodturners. A retired engineer, he has been turning for more than 35 years. You can email Roger at [Latheybum@aol.com](mailto:Latheybum@aol.com).*



1 Plastic calipers, set to  $\frac{3}{4}$ ".

2 The outside jaws measure external diameter.

3 The internal diameter is measured with the caliper's smaller inside jaws.

4 A depth probe is connected to the sliding jaw and cleverly provides a precise way to measure length or depth.

5 The sliding inside jaw is slightly offset, providing a step-measurement option.





### An Accurate BOWL-DEPTH GAUGE

Michael Pinto

Most bowl turners will admit to cutting through the bottom of a bowl at least once. However, equally frustrating is accurately determining the base thickness. The “T-style” depth gauges that register against the bowl rim offer some degree of accuracy, but if the gauge is not held parallel to the lathe bed or if your eye isn’t aligned at the correct angle, its accuracy can be compromised. To take the guesswork out and provide an accurate visual of the thickness of the bowl base, I use this simple gauge.

#### Depth gauge parts

The gauge comprises two parts, both of which rest on the lathe bed: (A) a fixed reference point from which to measure and (B) a movable point that registers your current bowl depth (Figure 1).

Part A can be fixed at various locations, such as the desired foot of the bowl, the desired inside base, etc. Whatever point you choose, be sure to allow for additional space for final finishing, removal of the tenon, a foot (if so planned), and/or a slight concave profile of the base. Position X is the fixed point you wish to measure from. Use a square to align X with the desired reference point on the bowl (Photo 1).

Part B’s point of contact inside the bowl corresponds vertically to position Y at the lathe bed. The gap between the X and Y indicates your current base thickness and gives you a quick read on how much more material you may need to remove.

#### Components and key points

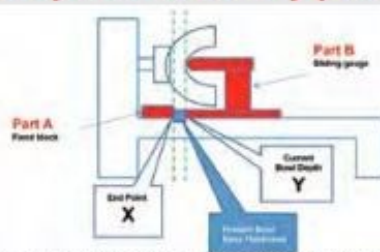


Figure 1: The gauge comprises two main components, shown in red. Part A is fixed, and Part B slides along the bed ways.

#### Jig setup



Use a square to align the front edge of Part A (point X) with the part of a bowl you want to measure from.



#### Jig construction

(2) The upright of Part B is noted (and later cut) so that the “sharpened” point will be exactly at spindle height.

(3) Both Part A and Part B have bottom runners that register within the lathe’s bedways.



#### In use

(4) The visible gap between Parts A and B represents the thickness of the bowl’s base.

(5) For a quick view, use only Part B and use a square to carry the depth up to the bowl’s exterior.

#### Construction notes

To make Part B, mount a square blank on your lathe and turn it to a point like a pencil. To ensure this point is at the same height as the lathe spindle, place Part B’s base on the lathe bed and mark where the vertical support should be cut (Photo 2). It should reach up to the bottom surface of the horizontal point piece. Ensure that the sharpened point is aligned to the front edge of the base.

To firmly secure Part A to the lathe bed, you could countersink a magnet in the base. If your lathe bed is not magnetic, use masking tape as an additional marker or a knob that clamps onto the bed ways. Photo 3 shows the underside of Parts A and B.

#### In use

A precise visual of your current bowl thickness can be determined by using the setup as shown in Photo 4. But if you want a quick glance of how far you have hollowed, you can use only Part B and a square to carry the depth up to the bowl’s side (Photo 5). Deeper bowls, boxes, and hollow forms can be measured by using a longer pointed dowel mounted on Part B.

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## Accurate diameter measurement

I often need to measure the diameter of a workpiece after it is mounted and rough-turned on the lathe. I have tried using a caliper, then transferring the reading to a ruler, but that process feels cumbersome and sometimes my workpiece is larger than my caliper. I could lay a ruler on the nose of the tailstock's live center, but the live center's diameter would keep the ruler's edge off center—not by much, but enough to make me want a more accurate measurement.

I came up with a handy solution: a customized center-finder rule with a small, half-round cutout at the rule's "0" marking. The cutout fits over the nose of my live center, allowing the rule's edge to align with the true center

of the workpiece and giving me an accurate measurement of its diameter. As my rule is made from aluminum, I roughed out the cutout at the bandsaw, then refined it with a small sanding drum in a rotary tool. You could just as easily use a hacksaw and file.



This rule modification works great for accurately measuring a tenon's diameter. It is also useful when laying out markings for a freehand-turned sphere, as you would transfer the rough cylinder's diameter to its length and add a center point. ■

—Pat Miller, Washington



(Articles courtesy of AAW)