

WOODTURNING

FUNdamentals

AAW
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PROJECTS

Turning a Heart Box

Jim Burt

Ballerina Top

Janice Levi

Making a Form for Casting Pen Blanks

Scott Schlossen

TIPS

Drilling at the Lathe

Mark Palma

Seated Turners

Chris Grove

Free Sources for Wood

Dave Schell

TECHNIQUES

VIDEO TIPS

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A Note About Safety:

An accident at the lathe
can happen with
blinding suddenness.
Respiratory and other
problems can build over
years. Take precautions
when you turn. Safety
guidelines are published
online at
<http://www.woodturner.org/?page=Safety>
Following them will
help you continue to
enjoy woodturning.



Cover photo: Janice Levi

WELCOME

A Note from the Executive Director

Our chapters apply AAW's mission in communities by sharing woodturning education, inspiration, and outreach locally. They offer a wealth of beneficial resources and are truly dynamic extensions of the AAW.

What's more, chapter newsletters and websites are a tremendous source of practical, technical, and instructional woodturning information.

The AAW invites its chapters to enter their newsletters and websites into an inter-chapter competition each year. These items are judged on their quality, quantity, and successful presentation of useful woodturning news and information, as well as how well they contribute to the AAW's educational mission and emphasize sound safety practices.

Blending first-class, timely, relevant woodturning information with their chapter's personality, a visually appealing layout, and sound writing skills, I'd like to recognize 2015's winners as the newest gold standard!

Website Winners

- **First Place:** Detroit Area Woodturners <http://www.detroitareawoodturners.com/>
- **Second Place:** Massachusetts South Shore Woodturners <http://www.msswt.org/>
- **Third Place:** Chicago Woodturners <http://www.chicagowoodturners.com>

Newsletter Winners

- **First Place (TIE):**
Chicago Woodturners <http://www.chicagowoodturners.com/Newsletter.htm>
Georgia Association of Woodturners <http://gawoodturner.org/Newsletter.php>
- **Second Place:** Tidewater Woodturners of Virginia
<http://tidewaterturners.net/library/nls/>

Congratulations to these exemplary chapters for their continuing excellence.

I highly recommend that you explore your chapter's website for the latest woodturning news, resources, and knowledge available to you as a club member. If you are not a chapter member, I encourage you to join one in your area. If there is no chapter in your region, many chapters have useful online content available to the public free of charge.

As always, we welcome your feedback, questions, tips, and projects!

Sharing your woodturning experiences, issues, and solutions through *Woodturning FUNDamentals* is a great way to help everyone! Please send your questions, tips, and projects to us at linda@woodturner.org.

Respectfully,
Phil McDonald
Executive Director
phil@woodturner.org



HEART BOWLS & BOXES

Heart Bowls, Boxes, and More



Figure 1: The bottom (left) and top (right) turnings needed to make a heart bowl.



Origin of the Idea

Early in my woodturning career, a friend asked me to turn a heart-shaped box. Her request was immediately dismissed as impossible. Later I read Stephen Hogbin's book *Woodturning: The Purpose of the Object* (Van Nostrand Reinhold Company, 1980) in which he described cutting woodturnings and reassembling the parts. His work inspired in me a way to make a heart-shaped box. I also learned that the concept of *impossible* applied more to my self-imposed limitations than to any reality.

Basic Idea

Basically, a heart bowl is turned in two pieces. The bottom is roughly cone-shaped. The top has a dual semi-circular cross-section. Both pieces have a uniform wall thickness throughout. The top and bottom are glued together and cut in half along their common axis to create two bowls with heart-shaped cross-sections. If desired, the two bowls can be connected by a hinge to create a heart box.

Design the Heart Bowl and Prepare the Blank

The cross-section of a heart bowl can be drawn with a straightedge and compass as shown in Figure 2. The outside diameter of the bowl is $4R+2W$. The height is slightly less than $4R+2W$. All dimensions required to turn a bowl can be measured directly from Figure 2. The templates shown in Figures 3 and 4 are made with the same compass settings used to draw Figure 2.

A blank is normally about a quarter-inch wider and two inches longer than $4R+2W$. The extra length allows one inch on each end for tenons and working room. The extra diameter allows for misalignment errors. Cut the blank in two at the appropriate place.

Figure 2 highlights three requirements to turning a pleasing heart. First, the inside and outside diameters of the top and bottom must be equal at the cut line. Secondly, the curvatures of the top and bottom must be equal at the cut line. Finally, the mating surfaces of the top and bottom must be flat.

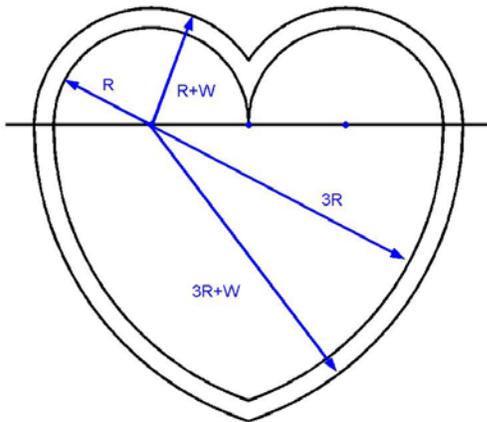


Figure 2: The horizontal cut line separates the top and bottom of the bowl. R is the radius of the semicircle forming the interior of the top. W is the bowl's wall thickness.

Turning the Top

Mount the blank for the top and turn it true. Mark the inside and outside diameters on the face of the blank. Turn the top's interior under the guidance of a template as indicated on the left side of Figure 3. A depth gauge is

also useful for judging the maximum depth. The template is intentionally undersized so it can be inserted well before the final size is reached. Turn the top until the gap between the template and top is uniform.

With the top still mounted on the lathe, carefully turn the top's exterior to a uniform wall thickness. Use calipers to judge the wall thickness. Turn as much of the exterior as your calipers will allow. Flatten the top's face by holding sandpaper backed by a flat board against the face. Cut the top off the lathe.

Reverse mount the top. Continue turning the exterior, moving the template over the surface to judge the curve. The template is shown on the right side of Figure 3. If desired, drill a hole to define the depth of the center.

Accurately measure the inside diameter of the top. Record the diameter or set your calipers or dividers to the inside diameter for future use.

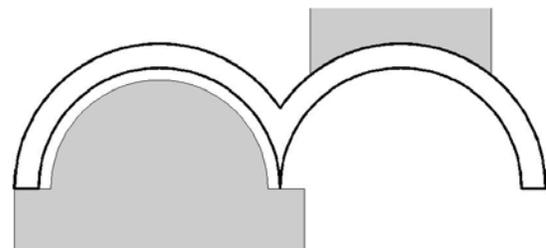


Figure 3: The shaded areas represent templates that ensure the top is turned accurately.

Turning the Bottom

Mount the blank for the bottom and turn it true. Mark the inside and outside diameters on the face of the blank. Drill a hole the depth of the interior. Rough turn the inside of the bottom to a depth of about one inch. Flatten the top's face by holding sandpaper backed by a flat board against the face. Recall, the inside diameters of the top and bottom must be equal at the cut line. Carefully widen a narrow section at the rim of the bottom until it matches the inside diameter of the top. *This is the only critical measurement, so take your time and work carefully.* If you cut too much, face off the area and try again.

Turn the bottom's interior under the guidance of a template as shown on the left side of Figure 4. Fold the template so that it will fit inside the rough turned opening. Hold the tab on the face to ensure the template is at the proper angle. Without removing wood from the rim, turn the interior until the template touches all along the surface. This ensures the top and bottom will join smoothly. Rough turn more of the interior, fold out more of the template and continue turning. If the template can't reach the bottom, fold the tab back and slide the template along the curve, removing material as necessary until you reach the center.

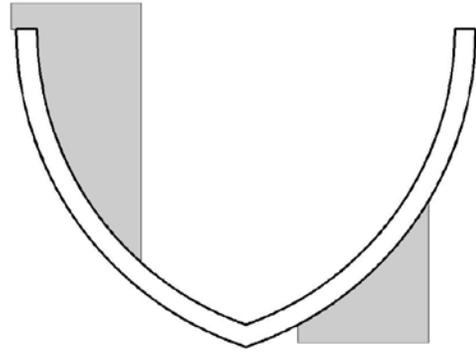


Figure 4: The shaded areas represent templates that ensure the bottom is turned accurately.

Turn the upper part of the bottom's exterior, using calipers to give the same wall thickness as the top. Turn as far as you can, then ensure the face of the bottom is flat. Cut the bottom off the lathe.

Reverse mount the bottom and turn the bottom to its final shape. Use both the template on the right side of Figure 4 and the length of the bottom from Figure 2 to guide you.

Post-Turning Procedures

Mount a scrap of wood on the lathe and turn a small conical depression to accept the bottom end of the turning. Glue the top to the bottom, ensuring the grain patterns align. Use the lathe as a clamp with the live center pressing on the top of the turning. Carefully smooth the joint between the top and bottom with sandpaper. Mark a center line all around the turning.

Remove the turning from the lathe and cut it along the center line. These turnings are awkward to hold and cut. I hold the turning on a bench hook and cut with a narrow, sharp flushcut saw. Attach a full sheet of sandpaper to a flat surface and sand away the saw marks. If you are making bowls, round the sanded surfaces. If you are making boxes, the sanded surfaces are best left flat. Use a scraper and sandpaper or gouge to clean up the glue and smooth the region near the cut line.

Turning Other Objects

The heart-shaped bowl had an exterior profile that matched the interior heart profile. Eliminating this constraint allows the creation of other objects. The Display shown below is made in the same manner as the bowl but with a supporting base turned on the bottom. The shelf is turned, halved, and glued in place to hold a cherished item. Instead of a shelf, a tea cup hook could be attached at the top to hang an item. The Log is made by turning only the interiors before gluing the top and bottom. The Angel is made by turning the interior heart, gluing the top to the bottom and spindle turning the profile of an angel. Other profiles are possible, limited only by your imagination.

~ Jim Burt
Lubbock, Texas

Jim has been turning since 1991 and is a member of the South Plains Woodturners, jaburt999@aol.com



BALLERINA SPINNING TOP

Turn a Dancing Top



The ballerina spinning top offers a change of pace for top-makers.

With the addition of tiny arms, this top creates the illusion of a graceful ballerina dancing across the floor.

Turning the Body



Photo 1

To make the top, select a hardwood such as maple. Begin with a blank that measures about 4" × 2" × 2" (10cm × 5cm × 5cm). If the blank is square, I mount it straight into a four-jaw scroll chuck. No need to turn a tenon.

Using a roughing gouge or a spindle gouge, turn the blank into a cylinder (Photo 1). Then using a pencil, mark the cylinder with lines corresponding to the bottom of the ballerina's dress, her waist, her shoulders, neck, and head (Photo 2). After turning my first two tops, I discovered that it is easy to make the dancer too top-heavy and she won't spin satisfactorily. On my third design try, I opted to keep more weight in the bottom of the dancer.



Photo 1



Photo 3

You don't need a sharp point, but rather, a slightly rounded point for her to "dance" on.

Use a spindle gouge to shape the legs of the ballerina. You don't need a sharp point, but rather, a slightly rounded point for her to "dance" on (Photo 3). Next, shape the dancer's tutu. Here is where I first went wrong. I removed wood from beneath her skirt, thus making the dancer top-heavy. Instead, turn a slightly concave curve at the bottom of the skirt toward her legs, then curve the top of the skirt toward the waistline. To reduce weight from the top portion, use the spindle gouge to give the dancer a small and delicate waist with a slight curve up to the shoulders (Photo 4).

To create the dancer's neck, I use a parting tool, then switch back to a spindle gouge to turn a round bead for her head (Photos 5 and 6). Feel free to create little hats that can be used as handles to spin the top, but be careful not to add too much weight up top. My ballerina is set to dancing by a twist of her little round head.



Photo 4



Photo 5



Photo 6

**Photo 7****Turning the Arms**

Turning the two tiny arms can be challenging as both arms must be the same size. Begin with a blank that measures $1/2" \times 1/2" \times 3"$ ($12\text{mm} \times 12\text{mm} \times 7.5\text{cm}$). Insert the square blank into small jaws, pushing it in so that only about $1\ 1/2"$ (4cm) is exposed. This will help prevent vibration. Use a spindle gouge to turn the blank into a cylinder. Depending on the height of your finished top, the arm length will vary from about $3/4"$ to $1"$ (2cm to 2.5cm). Use a ruler and pencil to mark the overall arm length and the hand position (Photo 7).

**Photo 8****Photo 9**

Tiny holes must be drilled for the eye screws that will fasten the arms to the body. A skew can be used to create a small divot in the end of the arm blank. Then using a small drill bit that approximates the size of the eye screw, drill a hole the length of that eye screw (Photo 8). You are now ready to turn the arm using a spindle gouge. When you are satisfied with the shape, sand it and part it off with a skew (Photo 9).

Loosen the small jaws and extend the blank so that another $1\ 1/2"$ is exposed and proceed as with the first arm. Use calipers to make sure that the diameters of the two arms are equal.

Assembling the Parts

You are now ready to attach the arms to the body. Begin by placing a small pencil mark on each shoulder where the eye screws/arms will be attached (Photo 10). I usually just eyeball this. If you have a Dremel and Dremel drill press, it is quick work to use a tiny drill bit and drill the two holes (Photo 11). Otherwise, you can use a full-sized drill press. Next, use two pairs of needle-nosed pliers and

open the eyes on two eye screws. Dip each end of the eye screws into wood glue, medium cyanoacrylate (CA) glue, or epoxy, then screw them into the top end of the arms and into the body (Photo 12). Slip each of the two open eyes into the eye screws that have not been opened. Use the pliers to close the eyes (Photo 13).



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14

Your ballerina top is now completed, although you may choose to paint the top with acrylics, dyes, markers, or colored pencils (Photo 14). These are wonderful birthday and Christmas gifts for children. Have fun spinning!



Photo 15

~ Janice Levi
Groesbeck, Texas

I began turning wood about 14 years ago and like most new turners, I turned every type of wood and every type of shape that I could imagine. I then began to decorate those turnings. During the past three years, I have concentrated on turning wearable art—jewelry and purses. These tiny bits of wood provide endless opportunities for shape and style and enhancement. And the best part is, I can wear them!

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A man with short brown hair, wearing a blue AAW smock, is smiling. He has safety glasses hanging from his neck and a watch on his left wrist. The name 'Mark' is visible on the smock. In the background, a white container with the 'ONEWAY' logo is partially visible.

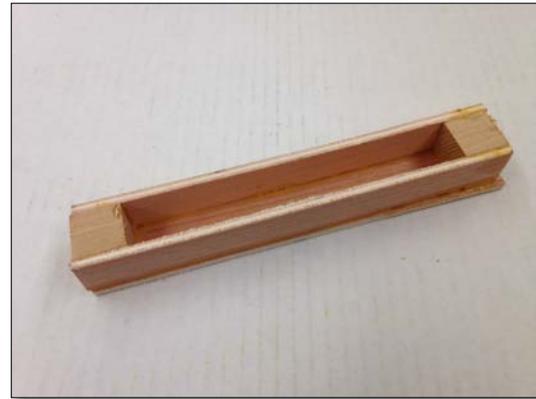
MAKING A FORM FOR CASTING

Making Pen Blanks

A form for casting pen blanks can be made from scrap materials. This form is very simple in construction, yet yields great results. I often use this type of form when adding materials to clear casting resin such as rice.

I use 5mm Luan or utility plywood to make the sides and bottom. I cut strips that are $\frac{3}{4}$ " wide for the sides and $1\frac{1}{4}$ " wide for the bottom. The strips are cut to a convenient length. I choose a length of 7" so that I could get a blank that is at least 5" long. The end pieces are $\frac{3}{4}$ " cubes that are made of any wood material. Whatever is in the scrap bin works great! All sides of the cube must be smooth enough to make a good glue joint.

Add glue to opposite sides of the cubes and attach them to the ends of the $\frac{3}{4}$ " strips. Use spring clamps to clamp the wood joint. Be sure the bottom of this subassembly creates a flat surface. Add glue to the entire bottom of this subassembly and place on the $1\frac{1}{4}$ " strip. Use spring clamps on the ends to hold the assembly together. Do not worry about squeeze-out on the inside of the form. By carefully gluing the pieces together by making sure all mating surfaces have glue on them, the form will not leak. As a precautionary measure after the glue is dry, a "bead" of wood glue could be added to all inside corners of the form.



This is a sample of a completed form. Inside dimensions are $\frac{3}{4}$ " x $\frac{3}{4}$ " x $5\frac{1}{2}$ ".



The above picture is a form with clear cast resin containing dyed rice.



The above picture is the clear cast rice blank with the form removed.

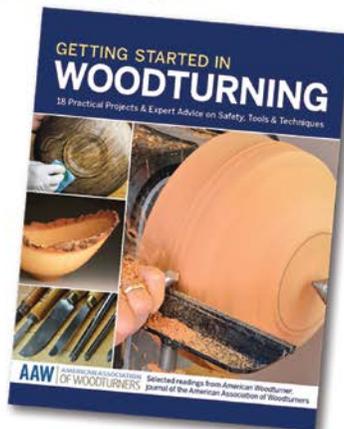
To remove the form, carefully cut along one side of the form adjacent to the clear cast blank. Repeat this procedure for the other side. Rotate the blank a quarter of a turn to cut the bottom off of the form. Lastly cut the end blocks off blank. A small section of the end piece was left on the blank in the picture above. When drilling a hole in the blank, the end piece will help avoid tearout as the drill bit exits the blank. The end piece can then be removed at the band saw.

~ Scott Schlosser
Huntly, Virginia
huntlybears@comcast.net

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DRILLING AT THE LATHE

AKA Caution! Woodturners May Be Boring



A very wise man once told me that no one buys a drill bit, they are buying a hole! Within a common shop we have many ways of achieving the goal of buying a hole. One option is using the lathe to do the work. Let's look at some tips and suggestions and share in my mistakes so that you achieve your goal of drilling¹ the hole you intended to drill at the lathe.

This article is intended to expand skills for wood turners drilling on the lathe. Topics include:

- **Drilling technique**
- **Rate of feed and lathe speed**
- **Centering the hole in the stock**
- **Types of drill bits**
- **Diagnosing when something goes wrong**

¹ Oddly, I thought there would be a clear distinction between “drilling” and “boring” that would be as riveting to readers as it would naturally be to me. My research failed to find the sought-after definitional clarity. It appears that you drill when you bore, and bore when you drill, so alas, we are in a circular logic loop.

I have migrated over time away from the use of a drill press or hand-held drill when I need a well-centered hole. So, the lathe has over time been my “go to” tool for accuracy and safety. Drill-press accidents are more prevalent than any other type of injury in a home shop. Fortunately, they are often less severe and frequently treated at home. However, the number of hand injuries, eye injuries, and “close calls” with the drill press is reason to rethink how holes are drilled by woodturners. The inherent safety in using a lathe is that the wood is secured in the lathe for drilling.² Holding work in the hand and advancing it into a spinning drill bit is the central discussion point in many articles on drill-press accidents. The lathe allows you to secure the work and drill without your hands being in the danger zone, so use that safeguard.

My typical drilling set-up is to use a chuck in the headstock to secure the work. I remove the toolrest, and put my chuck in the tailstock. My hands are away from the spinning work. With eye protection you are in a relatively safe environment.

Getting a hole centered in the work sometimes seems to come without trying and other times can be elusive. Here are a few suggestions that have helped me have better luck with drilling. First, have the end of the stock you will be drilling square and 90 degrees to the lathe bed so that the drill bit enters the work on a flat plane. If the end of the wood is not square and straight, the drill bit can be deflected at the start of the process.

² I recommend only drilling with the drill in the tailstock and the workpiece secured in the headstock. I know the chuck commonly fits in either spindle, but it's my premise that the work should be secured for safe drilling.

I also use an awl or punch to make a dimple in the end of the work. If I really want to have a good start to a straight hole, I use a machinist's center drill to start the hole. These short bits help get just the right start and are a must for small holes where drill bit deflection is a real possibility.³ It takes an extra minute to swap a center drill bit out and a drill bit in, but it's time well spent on expensive pen blanks, or holes that must be centered and round. You can also purchase short brad-point bits that work well in wood for this same task.



Center Drills

Most people have a tendency to drill too fast, both in terms of rpms and feed rate. When I drill, it is at a very slow rpm, probably 250-400 rpms. The larger the diameter of the bit, the slower the rpms the bit can be turned in the wood.⁴

So a large forstner bit⁵ in a peppermill needs to be presented into the work at a slower rpm

³ We often do not consider how much a drill bit can bend or deflect in the work. If you see your drill bit moving in a small circle, congratulations, you are drilling a wonderful ellipse, but not a circular hole.

⁴ I normally think of the bit spinning at a certain rpm, but in the case of lathe work, the bit is stationary and the work is spinning at the necessary rpms. So bear with me if I confuse the two concepts.

⁵ The forstner bit was invented by Benjamin Forstner in 1874. Mr. Forstner did not

compared to, say, a 1/4-twist drill bit. I know we all want to go fast, but speed builds up heat in the work and heat is not a good thing for wood or plastics being drilled on the lathe. So slow the rpms down and have a better result.



This is swarf!

Feed rate is also an area where speed is not your friend. The flutes or clearance area of a drill bit can only remove the swarf⁶ at a certain rate. As you progress deeper into a hole, the flutes in the drill cannot clean out the swarf. If you remove the drill bit and find the flutes packed solid with swarf, you are feeding too fast and not backing out the bit and cleaning it frequently enough. I find that very small bits clog almost instantly and must be cleaned all the time. Larger bits (say, 1/4 inch or so) seem to go a little longer, but only allow me to drill about twice the diameter of the bit before needing to be backed out and cleaned. Some materials seem to drill cleanly and sometimes the swarf seems to expand to

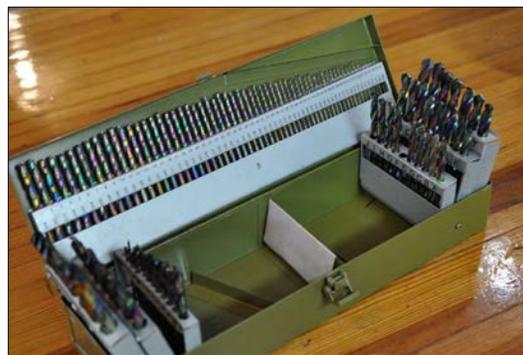
manufacture the bits himself but licensed his patent out to others. He left Beaver County, Pennsylvania, and moved to Salem, Oregon, as a very rich man.

⁶ Yes, the chips that are expelled by a drill bit have a name! (Although Microsoft's spelling verifier and I had a spirited debate as it kept putting that red line underneath the word each time I typed it and I believe secretly thought I was being recalcitrant for not catching on.)

many times its actual size when drilled⁷. The deeper you drill, the more trouble the flutes on a drill bit have in clearing swarf.

Do not try to pick the swarf out with your fingernails or a knife. I find that a small nylon bristle vegetable brush (buy your own, do not take this from the kitchen) works great to pop the swarf out of the bit. If the bristles melt and fuse to the bit, you also get an early warning you are about to start a fire.⁸

Related to swarf is impatience by woodturners when drilling at the lathe.⁹ It seems that somewhat related to sanding, drilling needs to be rushed so that you can begin turning. Avoid the temptation. When you “blow out” a pen blank or have a drilling mishap, it is usually caused by pushing through at the end, rather than backing out the bit, clearing out the swarf, and slowing down. If your drill bit is too hot for you to hold, it’s too hot to drill. You may need to shut off the lathe and wait a few minutes before you keep going.¹⁰ If you cannot wait, use two bits, with one cooling while the other drills the hole.



Drill bits come in many forms and woodturners can use most styles for drilling holes in their work. Some include:

- Twist drill bits. Commonly used for metal, these work well on the lathe. The most common fractional sizes¹¹ are from 1/16th to 1/2 inch. Bits larger than 1/2 inch are referred to as “Silver and Demming” bits and usually stop at around an inch due to price and availability, although they are made up to 1 1/2 inch in diameter through industrial supply catalogs.¹²

⁷ Some plastics in particular seem to expand into a pile of swarf that remind me of the little “snakes” that the hardware store sold to me at a ripe age of 6 around the Fourth of July (they also gave you a book of matches, as I recall) and grew into a huge pile of probably toxic material right before your unprotected eyes!

⁸ I speak only in the hypothetical here.

⁹ Maybe it’s boring in this context.

¹⁰ A few tips: do not try to put cold water on the bit, shoot it with some freezing aerosol spray, put an ice cube on it, or some other dumb idea like that, the source of which I will deny any knowledge about.

¹¹ Americans have flirted with the metric system for many years but still love our fractions. Congress passed the “Metric Conversion Act of 1975” and formed the “United States Metric Board” to convert the US to the metric system. I see that was another shining moment for Congress.

¹² Silver and Demming Bits were created in the 1870’s by Mr. Albert Silver and Mr. John Demming. Unlike Mr. Forstner, Silver and Demming did not patent their reduced-shaft drill bits and many others stole the idea from them. Depending on your point of view, we are either honoring them,

- Twist drill bits come in different tip-sharpening angles (118° and 135° are common) split tip, pilot tip, spur tip,¹³ and special tips for plastics (90°). Flutes may be a high-speed flute, twin flute, single flute, elongated flute, or some proprietary flute¹⁴. Bits may be coated in some way ranging from black oxide to TiN.¹⁵
- Brad-point Bits. Brad-point bits are twist drill bits with a point made specifically for wood. In many applications I find they cut cleaner than twist drill bits and result in less “blow-out.” However, they can give you a false sense of security that causes sloppy work. Because they initially cut well, you can over-feed them and build up excessive swarf.¹⁶
- Letter Drill bits. Although also a twist drill bit, they are so helpful and often overlooked, they deserve their own bullet! Let’s say you drill a ¼-inch hole and find it too big. The next size smaller in a fractional drill set is 15/64. A 15/64 drill bit is .2344 in decimal equivalent size. A ¼-inch drill bit is .2500. A “B” letter bit is .2380. A “C” letter bit is .2420 and a “D” letter bit is .2460. So between those two fractional sizes are three different options for making the “right” size hole. Go larger than ¼ inch and you get the same result. The next larger fractional size is 17/64 (.2656). Again, starting with ¼ inch as .2500 (which is also the size of an “E” drill bit) you have the “F” drill bit at .2570 and

the “G” at .2610. So be aware that letter bits can give the “perfect size” when fractional bits let you down.¹⁷

- Spade bits are my least favorite drill bit for drilling on the lathe, but many use them with success. I find the small shank and wide, flat bit leads to aggressive feed and often somewhat ragged cuts. I think they work great for drilling a hole in a 2x4 but do not provide the precision I desire at the lathe.
- Forstner bits are my clear “go to” bits for large diameter holes. The large shaft diameter and unique bit geometry leave clean, circular holes. Please note that all forstner bits are not made alike and many bits marketed as “forstner” bits do not have true forstner geometry. Forstner bits have a small center point that acts as a guide and they cut with the rim, which extends over most, but not all, of the diameter of the bit.¹⁸ Forstner bits must be kept clean and sharp. They also build up heat due to the rim being in constant contact with the hole, so do not over-feed them and do allow them to cool down.¹⁹
- Center drills as mentioned above are used to start a hole. Do not be tempted to drill with them as they lack sufficient flute space for swarf clearance. Center drills are fragile and you can break off the little starter tip if you drop them on a cement shop floor.²⁰

or pouring salt on an open wound by referring to all cut-down-shaft drill bits as “Silver and Demming” bits to this day.

¹³ Spur tips are commonly known as “lip and spur” drill bits, “doweling” drill bits, or “brad-point” drill bits.

¹⁴ Colt has the “twin land” drill bit flute.

¹⁵ For Titanium Nitride, not tin.

¹⁶ I “lost” a new ¼ brad-point bit when I pushed it so hard into a piece of hard maple that the two substances became one. Despite valiant efforts, both were lost in the recovery efforts.

¹⁷ Of course, you can always add the metric sizes into the mix, with the 6mm bit at .2362 if you really want a headache.

¹⁸ A clearance slot is present for chip breaking and swarf removal.

¹⁹ I won’t tell you how I know this, but you can “weld” a forstner bit into an exotic peppermill blank if you get it hot enough and build up sufficient swarf on the back side of the bit.

²⁰ Clearly, a hypothetical example.



1/4-inch drill bits in some of their many forms!

I sometimes lubricate drill bits with a little wax, but rarely do I find this necessary. In some plastics and with large forstner bits it has helped me, but it is usually a warning sign that the bit is dull. Clean any wood build-up off your drill bits. I use a stiff brass brush and some “blade-and-bit” cleaner and get great results.

Drill bits get dull.²¹ Sharpen them and take care to get it right. For twist drills I have had great luck with a Drill Doctor. It has paid for itself and makes each side of the tip the same for straight cutting. Forstner bits can be tricky, so make sure you are doing it right before you wreck a good bit with over-enthusiastic filing.

I cannot emphasize heat build-up and swarf clearance enough for successful drilling at the lathe. More times than not, they are my downfall.

So what happens if you follow all these tips and something still goes wrong? Let’s go through a quick self-help checklist:

1. If the drill bit is wandering in the hole, check to see if the work has a flat, square end.
2. Is the work parallel to the lathe bed?
3. Was the work center-punched?
4. Is the bit sharpened evenly?²²

²¹ As can my articles, but we are almost to the end, so thank you for your patience.

²² Note: long bits and small-diameter bits are very susceptible to wandering.

5. Are the headstock and the tailstock properly aligned to each other?²³
6. Sometimes it is better not to tighten up the tailstock until the bit touches the wood.²⁴ When the tailstock is first tightened, it can be slightly off center. Allowing it to “float” until the center of the bit hits the center-punched area can sometimes result in a better hole.
7. Beware of bit extensions. They can wander. I find the type with set screws the worst. Colt makes an extension for their forstner bits that locks in to a true center position, but it’s proprietary to their bits.
8. Some wood is grumpy. I have had some wood not take a straight bore no matter what. So it happens.

So may this advice help you get the hole you sought safely at the lathe!

~ Mark Palma
Cameron, Wisconsin

Mark Palma is a tax lawyer by day and a woodworker whenever he finds that “spare” time that isn’t spoken for. He thanks his family for allowing him to have a shop, a tool allowance, wood stash, and the time to pursue his addictive hobby.

²³ If you insert a drive center into the headstock and a live center into the tailstock, the two points should exactly meet when the tailstock is brought up to the headstock. If they do not, your lathe needs to be shimmed, adjusted, or somehow fixed to remedy this condition. Alternatively, you can specialize in off-center turning!

²⁴ I use the term “wood” to mean material you are drilling in the lathe. If you want to substitute acrylic, polyester resin, Corian, or whatever to make your heart sing, feel free.

SEATED TURNING

Not Just for Full-Time Wheelchair Users

Seated turning is not just for full-time wheelchair users. Others shouldn't be put off from turning sitting down, as anyone who has difficulty standing for long enough to turn could consider turning seated. It's not difficult, it's just different, and sometimes it's better.

There are effectively two types of seated turners.

Those who can use their legs to position a chair. They can use a chair with castors for stability, or a chair on a rail, and can move or brace themselves using their legs. The chair is just for support; *and* those who have little or no movement or control in their legs. They will probably use a wheelchair.

A Little About Me:

I was paralyzed at the age of 12 by a virus and have used a wheelchair since.

I have always made things with my hands, using either metal or wood, and 6 years ago I bought a cheap lathe. I like to make one-off pieces, particularly combining materials such as wood and metal, and am interested in the technical aspects of turning, such as making and using jigs.

About Disability

My view of Disability is that it's primarily a state of mind. That may be a bit controversial, but think about it for a moment. There are lots of people with profound disabilities who have achieved great things. They do generally happen to be very focused, and some have, or early on have had, good support, so there are actually few real barriers.

Yes, there may be physical or other issues to address, and it may be necessary to adapt things or processes, but fundamentally physical or other disabilities in themselves are often not a barrier to doing some or all of what you want. Determination is a great thing. There are ways around almost all perceived problems, at least to an extent. Once you get into the swing of things, you don't even notice issues that others see as problems.

Physical Issues and Solutions

OK, there are some un-alterable realities. In my case I use a wheelchair because I can't stand or walk. No amount of positive thinking will ever change that. Yes, there are various contraptions that could help me stand, but they are so cumbersome and limiting that turning while using my wheelchair is the most practical proposition for me.

Consequently, I designed and built low stands for my lathes so that I can work at a comfortable height - similar to that which other turners use: with the center line of the lathe at or near elbow height. (My demonstration and training lathe is adjustable from 27" to 46" center height so that it can be set up suitably for me or any of my students.)

A lower lathe gives rise to a couple of other issues. First, my feet and knees are between me and the lathe if I approach it head-on. The solution to this one is easy - don't try to turn face-on!

There are special lathes such as a “sit-down” lathe, however I like to use jigs, etc. on my lathe bed so this wouldn't suit me. Also, it dramatically limits your choice of lathe. And I don't like limitations!

The other issue is that wheelchairs can't move directly sideways.

As it turns out, your feet and knees getting between you and the lathe is less of an issue than you might think. I use a compact wheelchair that minimizes this. A far bigger problem is that your body gets in the way of swinging a gouge. OK, I can reach out away from my body (though that can lead to less control) and I can pull the gouge toward me, but when it gets to my body (or knees), they are immovable objects as I can't simply sway my body or step sideways like a standing turner would. Therefore it becomes more important to check that you can comfortably start and finish a cut before turning on the lathe. Where this is impractical, I simply make two cuts, repositioning my wheelchair in between to ensure I can reach and have sufficient control.

In reality, I frequently alter my position to make a particular cut and I spend much of my time seated partially side-on and turning my torso.

Consequently I turn somewhat farther from my lathe, with my arms more outstretched than your average turner. Therefore I prefer shorter tools (where practical and safe).

I simply adapt my tools and equipment to enable me to achieve what I envision... but don't all experienced turners do that?



I use a swivel-head lathe which can be a great help. However, in practice I find that I rarely swivel the head of my lathe as I often start work between centers, and for small pieces it just isn't worth the bother. I can, and do, swivel the headstock for bigger faceplate or chuck-mounted projects that do not require tailstock support.

My Experience Turning

So, there's no problem turning then? Well, that's not exactly the case.

I have a motto, "If in doubt, cheat," which also means, "Don't worry too much about rules (provided you remain safe)." My interpretation of something Douglas Bader once said is: "*Rules are laws for the timid and guidance for the adventurous.*" So if something doesn't suit, do it differently.

On to the two key issues:

- It is impractical to hold a gouge to your hip and swing your body using your legs when you use a wheelchair.
- Even keeping your hands close to your body often isn't practical.

These issues simply force you to become a better turner and develop good feel. Early on I probably had more big catches than some turners, but you soon learn. No one likes a nasty catch and what it does to your work. A wise old professional told me early on:

"Firm grip, light touch"

Once you really understand this, you can turn well irrespective of any other issues.

I have my arms stretched farther out than most turners most of the time. This is actually a great benefit when I teach, as I can reach across and show a student how to manipulate the gouge without moving them out of the way first. As a result they get to see what I am demonstrating from where they will be doing it, a positive benefit.

A mitigating strategy that I will often use is two differently-ground gouges where other turners who stand will use one. The different grinds, typically one more acutely ground than the other, and hence with a different approach to the cut, enable me to turn more comfortably. The slight downside is an interrupted cut. I often interrupt my cut in any case to reposition my body or hands. This is not ideal, I know, but it's better than over-reaching and getting into a bother that way. You soon learn how to pick up a cut so it's really not a significant issue.

Another option is that I sometimes turn with the lathe running in reverse, as it is easier to present the gouge at the correct angle and remain in a comfortable position, which leads to better control. Just make sure your chuck is secure. The added benefit is that you can actually see the cut progressing inside a bowl much better with this technique.

- Forward means awkward reach.
- Reverse means comfortable and good view.



I don't have brakes on my wheelchair, which is common with active chair users. Consequently I am regularly reminded about Newton's third law of motion:

Every action has an equal and opposite reaction.



So I can often be seen disappearing backward away from my lathe, most annoyingly when the cut is working really well and the end is in sight, but bizarrely getting farther away, and usually just out of reach! I have experimented with a horse mat, which helps as it is soft enough for the castors to sink in a bit, but it's easy enough to reposition my chair.



I am also now experimenting with a donut with a rubber base for one of my front wheels to rest in, which can quickly and easily be repositioned.



Otherwise, I often turn with some of my fingers wrapped round the toolpost, which provides a good anchor if you have strong hands. Just make sure that your fingers won't get trapped or hit by anything fast or sharp.

Turning while seated, using, for instance, an office chair on wheels, is simply somewhere between turning while standing and using a wheelchair, and some of the above techniques may be applicable.

Finally, I sometimes get help from friends, especially with big bits of timber. But doesn't everyone do that?

I now teach, demonstrate, and write about woodturning, not from the perspective of having a disability, just as a woodturner. I've learned more about turning from teaching than I ever did before. It really makes you think and articulate how to do things, and demonstrating and writing also makes you think about the various processes. All of this makes me a more efficient turner. I really enjoy making things and as for any limitations arising from my disability...? What disability?

Some examples of what I do:



A burnt bowl from a rotten oak fence post with a gravity-defying stainless steel sphere.



Geronimo, about to go for a twirl while filming for the BBC.

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Chairman of South Downs Woodturners

Woodturning Beyond Barriers

For the most part, woodturning is enjoyed by people who can hold their tools with two hands, stand, see, and hear during the turning process. Most of the instructions found in books, on the web, and in videos assume the student has all of these capabilities. What happens when one or more of these capabilities do not exist?

People with all types of disabilities have safely enjoyed woodturning. The key is to identify alternative approaches or adaptations and enable instructors to adequately describe and demonstrate the techniques.

The AAW's Woodturning Beyond Barriers program describes the process of woodturning for a person with challenges. The instructions provide alternative approaches to some of the techniques that traditionally have been described only in terms for those without disabilities.

There is more than one way to do many things in turning, whether the turner is sighted or otherwise challenged. It is hoped that a larger discussion would find various methods and effective techniques for someone with disabilities.

Learn more on the AAW website at <http://woodturner.org/?page=WBB>

SAFETY TIP

Breathing is Good

Happily, we usually do it automatically and mostly don't have to think about it. This article begins a discussion of issues woodturners should consider if they like not thinking about breathing.

The tiniest particles of wood dust cause the biggest problems. They get into the tiniest places in your body (like your mucous membranes and sinuses and the little folds on the inside surface of your lungs), and they may stay there a long time, maybe for as long as you live.

And sometimes those tiniest dust particles really annoy the cells in those tiniest places, and when those cells get annoyed, they may take it out on bigger parts of your body. If that happens, it may become very difficult for you to breathe. Some kinds of wood dust can even cause cancer.

Now here's the hard part. If a woodturner started sneezing, hacking, coughing, and sputtering for breath every time the turner got tiny particles of wood dust where they don't belong, I wouldn't have to write this article. I wouldn't have to, because we would all know immediately whenever we screwed up and got tiny bits of dust in the wrong places, and we wouldn't need some dumb safety officer to write us an article about it.

But we don't start sneezing, hacking, coughing, and sputtering for breath every time we get tiny particles of dust in the wrong places, so we don't always know when it happens. In fact, we can get a lot of dust in the wrong places and never notice... at first.

The dust that gets in those places can be just like the neighbor's dog poop on your lawn. The first few times you may not even notice. Then



you notice, and say to yourself, "Dogs will be dogs." But about the tenth time you step in it, walk into the house, and track it on the carpet, you get hopping mad. You have become "sensitized" to the dog poop.

Wood dust can sensitize cells, too. Repeated exposure to bits of dust that didn't formerly cause a problem all of a sudden can make your cells hopping mad. And those cells can't just go outside, scoop up the poop, and strangle the dog (or his owner). They just have to sit inside your body, unable to get rid of the dust that has already come in, unable to stop more from coming in, and getting angrier and angrier.

If that happens to you, you will start having to think about your breathing, and that won't be fun. And that can happen to you, even though you have never had a problem with wood dust before. Repeated exposure can sensitize you.

Bear this one thing in mind: The dust from that local walnut we all love to turn is **particularly toxic**.

~ Harvey Rogers
Portland, Oregon
Safety Officer, Cascade Woodturners
Association

FREE SOURCES FOR WOOD

Wood Budget?

When I took up woodturning as a hobby/business, I considered a budget for wood. After spending many hours researching suppliers and pricing on the Internet, I discovered that I would quickly run out of money purchasing the wood I wanted to use for the products I wanted to turn. I knew I would have to find alternative sources for my wood.

I realized that as I was “on the road” for my business meetings, I was passing several possible sources for wood. I also started to notice all the yards that had wood just sitting near the road with a “Free” or “Please Take” sign. I knew that if I turned wet wood, it would probably crack and warp as it dried, but if it was free ... **WHY NOT TRY IT?**

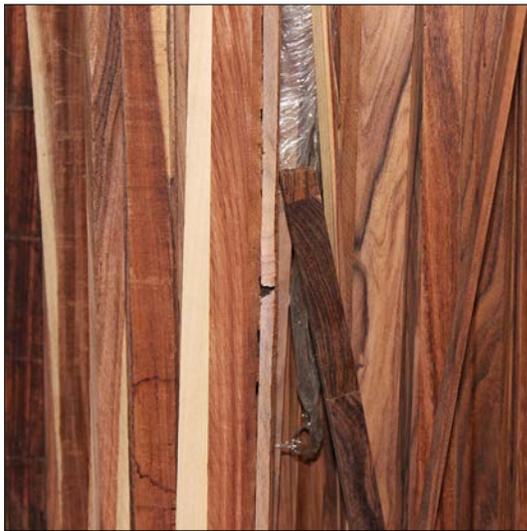


Figure 1: Some of the Brazilian Rosewood waiting to be used.

I am happy to say that I have paid only \$40 for all the wood I have used in my bowl turnings over the course of three years. I am also air drying enough wood for over 100 bowls (all free). I have collected several species of wood available in my area just by asking businesses to allow me to search through scraps and stopping along the road, picking up random pieces of wood from strangers. I have found beautiful cherry, curly maple, apple (my favorite), chestnut, ambrosia maple, sycamore, walnut, honey locust, black locust, black cherry, pear, holly, and Kentucky Coffee tree. Here is a list of my favorite places to source FREE wood. I hope this works for you!



Figure 2: Cherry and apple mega-crotch pieces I found along the road.

1. **Pay attention to yards.** In one week, I counted 42 yards with free wood available. Stop, pick it up, and go on your way. I'll usually stop if there is a sign next to the wood and look for crotch pieces or burl.

Since I have lots of wood already drying, I'm now more selective on what I pick up and bring home with me. If I don't see a sign but see an interesting piece, I'll knock on the door, explain that I can use the wood to turn bowls, and see if the wood is available. Sometimes it is there for the taking and sometimes they want you to purchase the wood. If I start to walk away, they'll usually call me back and let me take a piece or two if I want. If they are local, I may offer to make a bowl for three or four pieces of wood.

2. **Make friends with an arborist.**

Maybe there are no professional arborists in your area? Make friends with ANYONE who cuts down trees. Perhaps it is a local landscaper or a tree removal business. I am lucky to know three different arborists and two tree removal companies. Each one has a list of wood I am interested in seeing. I routinely get calls about cherry, walnut, and ornamental species. They'll call me when they are on site and it saves them money if I take a few pieces, since they don't have to haul it away and dispose of it. My favorite tree removal company just drops off pieces he thinks I'll like. I've received several burl and crotch pieces on my front porch or driveway. Pay them back by making a bowl and they'll be friends for a long time.

3. **Craigslist!** I found a 600-lb piece of maple in a yard ten minutes from my house. They cut the tree down to make room for a garden and offered

the large piece free. I called them up, took my chainsaw over, and cut it into several turning-sized hunks. I was amazed that EVERY piece is curly. They produced some of my favorite bowls.

4. **Local Compost Facilities.** My community is very lucky. We have a community compost drop-off facility where we can dispose of yard waste and purchase compost at a discount. Our facility allows wood drop-off up to 6' long and 13" in diameter. I will visit the facility once or twice each month, disposing my yard waste and scoping out the wood other community members took there. I found several ornamental trunks and fruit tree branches that can be used for smaller items.

5. **Lumber Mills, Saw Mills, Lumber Yards.** I discovered there were four lumber/saw mills around me. I stopped into the closest one and started talking about how they operate and discovered they have a scrap yard where they regularly throw out pieces they can't use. These items are perfect for pen blanks, duck calls, bottle stoppers, and other smaller items. There are times where the defects we bowl turners love (knots, staining, spalting) are found in abundance, but are not desirable for the lumber/saw mills. They now save unique woods for me and I make regular stops once a month.



Figure 3: Some cabinet scraps ready for segmented turned bowls.

6. Cabinet Companies. I wasn't expecting anything from the first cabinet builder I visited. I did not know what they did with their scraps, if they even had anything worth taking, or if they would ask me to purchase the wood to recoup their costs. I WAS AMAZED. Not only did we talk for 45 minutes about woodworking, but I was asked if I wanted a tour of their facility. It was amazing to see how modern technology merged with hand tools to produce these beautiful cabinets. I learned they focused on maple and cherry cabinets and had a scrap dumpster behind the building. I asked to go through the dumpster not expecting to find much, as I imagined they precisely cut each item to minimize the wood waste. I walked away with two beer-case-sized boxes of dried cherry wood perfect for segmented bowls.

As I was leaving, the owner of the company stopped me. I felt I was going to be in trouble because he didn't know what I was doing. Would I have to purchase what I was taking? I was in shock when he said,

"I heard about you in my office and I have something for you. Bring your car around the back." I quickly took my cherry wood to my car and drove around the back, where the owner was waiting with approximately 300 lbs of Brazilian Rosewood scraps from a project they did nearly 30 years ago. I remember the brief conversation clearly.

Me: "Wow. That's some really nice wood. How much do you want for it?"

Him: "It's yours. I had it in the warehouse for 30 years waiting to find a use for it. We have no use for it, but I didn't want to burn it. You are the first person who stopped by, asking to use our scraps for something. Make something nice."

As you can imagine, I was shell-shocked. The pieces vary in width and thickness from veneer strips to 2"x2"x10'. He helped load all the wood into my car. We talked for another 45 minutes about turning and cabinet-making. He ended up closing shop and selling the property a few months later.



Figure 4: Sycamore, ambrosia maple, English walnut, curly maple.

I visit four cabinet companies on a regular basis. Most work with oak, cherry, maple, and walnut. One company works with a larger variety of wood including mahogany, teak, and exotics. There isn't as much scrap available in the exotics, but I can find some small items for inlays (or at least, that's how I hope to use them). If I see a cabinet manufacturer anywhere I'm on the road, and it's 9am-5pm, I'll usually stop. I always have a box in my trunk. These scrap pieces are perfect for segmented bowls and are already kiln-dried and sanded smooth. All I have to do is cut them to size and glue them into rings. Be prepared to climb into a dumpster and get a little dirty. The pay-offs can be worth it!



Figure 5: Cherry burl, Bradford pear, holly.

7. **Tell Others What You Do!** I have lots of friends on Facebook and post photos of my bowls often. Several people will call me if they know a neighbor is cutting down a tree or ask what kind of wood I'm looking to turn. I was able to obtain some Flaming Box Elder and other non-common species through simple communication. My business clients know about my woodturning and hold wood for me when I am in the area and help spread the word for me.
- There was only one time I purchased wood specifically for my woodturning hobby/business. While perusing Craigslist, I saw an interesting Black Cherry burl for sale. It was about 30 minutes away and I offered less than what they were asking. Burl is a tricky thing to buy without seeing the actual item. The inside could be rotten. The buyer could be lying. In this case, the buyer accepted my lower offer and I drove over to pick it up. I didn't even have to talk with him. He put the burl on his back porch, I left the money in an envelope under his plant. It felt illegal, but the burl was heavy. I left, thinking I struck gold.
- Now that I have sold enough bowls to create a wood-purchasing account, I can justify buying wood under certain circumstances for specific items I want to create. Here is when I would consider purchasing wood.
1. **When the wood is not available free anywhere.** I know I won't find certain exotics available in my area. I know I may need sizes not readily available. Those items will need to be purchased and I'm OK with it. I'm starting to run out of free walnut sources.
 2. **When I need a certain quantity and/or quality.** My 600-lb curly maple find might not happen again for years. Ambrosia maple happens less than I want. I was lucky to find 300 lbs of apple, but it cracks like crazy, so most of it may be waste. I've been lucky to have a college fraternity brother with a fallen cherry

tree of amazing quality. I can go get as much as I want any time I want. I wish all my sources would have the same quality of wood available on a consistent basis, but as we all know ... wood is not the same from all parts of the tree. If it was, life wouldn't be as much fun.

3. **If I need it RIGHT NOW.** We have lots of sycamore around where I live. I've found only three pieces of it in three years. I would love to find more because I have someone who wants me to make them a dyed-sycamore bowl set. I patiently drive and wait. I have the chainsaw in my trunk. It's too bad chainsaws don't have silencers. Many of these sycamore trees are on farms far away from the house. It gets very dark around here.

Finding free wood is not something you can rely on 100% of the time. It depends on the time of year, weather (storms are great!), and location. I'd love to live in the south and have access to pecan, mesquite, and other species I haven't turned yet. There are times when you don't run into anything unusual and it's the same wood over and over.

I don't turn oak, pine, or poplar, but it is in abundance around me. I'm starting to get tired of non-curly, plain ole maple.

I'd encourage everyone to open your eyes as you drive around. Go to <http://maps.google.com> and put in your address. Search for "cabinet" and see how many cabinet manufacturers are close to you. There will probably be companies you didn't know existed. Search for "saw mill" or "lumber" and find other businesses. Take a day trip and knock on some doors. You never know what you'll find. Maybe you'll find some business owner just waiting to unload his hidden batch of exotic scraps to the right person! **Good luck!**

~ David Schell
Mount Joy, Pennsylvania

Dave Schell is a web designer by day, and a bowl turner by night and on weekends. Email Dave with questions at: dave@imakewebpages.com
View his work online at his Facebook page: <https://www.facebook.com/imakewebpages>



SAFETY TIP

Make Yours a Ladder of Success

Spring means maintenance, and maybe a need for a ladder. For each use, one should consider the type, length, rating and material of the ladder to be used for the job at hand. In preparation to making a climb, setting up your ladder is a major step.

1. Chose a safe location.
2. Prepare a level footing. Set the ladder at the correct angle (75 degrees). A too steep angle will endanger the climber to the ladder tipping over.
3. Ladder should extend at least 3' above upper level (extension ladders).
4. Secure the bottom. Make sure both feet are in contact with the ground.
5. Secure the top. No sliding around.

Maintain the area clear of debris.



Do not:

1. Use a step ladder in its closed position.
2. Use it from the wrong side.
3. Straddle it or sit on top.
4. Walk it to move while you are on the ladder.

Climbing a ladder

1. Face the ladder going both up and down.
2. Keep your weight centered
3. Use 3 point contact: 2 feet and a hand; 2 hands and a foot
4. Carry no loads (only small tools on a belt).
5. Only one person on ladder at a time.
6. Avoid exerting force while on ladder which could cause the ladder to shift.
7. Be very aware getting on and off, especially at the top.
8. Do not stand on top 3 rungs.

All above adapted from National Institute for Occupational Safety & Health, 2005.

I have been guilty of skipping steps five through eight of set up, step one of do not's and four and six of climbing.

I hope you have a better record.

~ Vern West
Bremerton, Washington

MORE FROM FUNdamentals

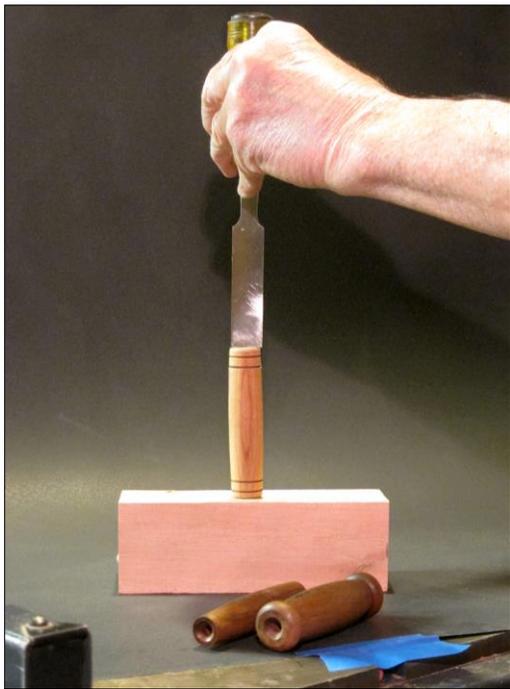
Questions and Answers

Q:

I loved the article on pail handles in the May 2015 issue by Denis Delehanty. I'd like to see a pic of splitting the two halves of the handles or read how he held the handle for splitting, i.e. vise, etc. Seems to me it may just crack unevenly. Perhaps you could forward this to him and he could email me some more info on that phase.

Thank you, Vicki

P.S. Thanks for putting out such a first-class publication with articles for all areas of expertise AND for making the archive available. It's a great teacher for a new turner like me.



A:

I used fairly straight walnut, cherry, and maple, all common to northern Virginia and free for the asking when someone is having something cut in their yard. The wood for this project is so small that I really do use shop scraps.



Here is my process for splitting the handles.

It is important to select fairly straight grain, dry material to work with. To split the handle, use a sharp chisel that is at least the width of the wood handle. Stand the handle on end and place the chisel on the top end so that the chisel cuts between two growth rings, not across grain. With a slight tap or two with a small hammer the wood usually splits through. If it is mostly split, complete the split with your hands instead of using the chisel.

If the wood splits at a slight angle, not to worry as long as the split is wide enough to get the 1/8" pail-handle wire into the opening. Remember to straighten the wire first. The handle will glue back together without any indication of where you split it. Pre-finishing the handle before splitting it makes it easy to remove any excess glue from the split line.



To date, I use Tightbond II, a good wood glue and have not had the handles come apart. It is important to use just enough glue to wet one split face of the handle. I use two rubber-faced clamps to hold the two sides together until dry to avoid marring the piece.



Picture three, my set-up on the drill press to drill the wood blanks. I did purchase a slightly longer than normal 1/4-inch x 6-inches bit so that I

could drill straight through. I drill about 3/4" at a time to remove the sawdust and to keep the drill tip from heating up and splitting the wood. The piece is clamped to a 2 x 4 with a 90-degree "V" cut in it. The sides of the "V" must be straight.



Picture four, beginning to turn an M2 taper for the next wood drive center.

~Denis Delehanty
Purcellville, Virginia

WOODTURNING FUN VIDEO

Video Chapter Turning Session



- Lighthouse for the Blind, is an AAW chapter in Tampa, Florida. At a chapter meeting, Andrea Sullivan, chapter founder and blind woodturner, teaches a new turner how to make a key chain. Produced by Jan de Camp and Steve Powell, videographer and editor. (TRT 3:13)
- Video link: <http://player.vimeo.com/video/131199998>
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

A Note About Safety

An accident at the lathe can happen with blinding suddenness. Respiratory and other problems can build over years. Take the appropriate precautions when you turn. Among the most important of these is the use of face shields, safety glasses, and dust masks. It is important to observe all manufacturers' safety guidelines. Following manufacturer's safety guidelines and information will help you continue to enjoy woodturning years into the future.

WOODTURNING FUN VIDEO

Video Tip on Lady Finger Gouge



- Enhancing your Enjoyment of Woodturning Using a Lady Finger Spindle Gouge By Theo Haralampou. (TRT 4:44)
- Video link: <http://player.vimeo.com/video/107333112>
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

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WOODTURNING FUN VIDEO

Video Tip for Bleaching Wood



- Tips for Bleaching Wood By Joe Fleming (TRT 1:33)
- Video link: <http://player.vimeo.com/video/107332028>
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

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GALLERY

Chapter Gallery

2015 Chapter Collaborative Challenge Winners

Each year, chapters are invited to create a collaborative work by a by a minimum of six chapter members for display during the Annual International Symposium. Attendees vote for “Best of Show” and their favorite pieces in each of the three categories, Artistic, Mechanical/Technical, and Fantasy. Votes are tallied and four winners are recognized during the symposium awards ceremony. Congratulations to our 2015 winners!

First State Woodturners, Newcastle, Delaware
Musical Molinology*, Winner Category: **Best in Show, Technical*



Central Ohio Woodturners, Columbus, Ohio
***Three Rivers Blast Furnace*, Winner Category: Artistic**



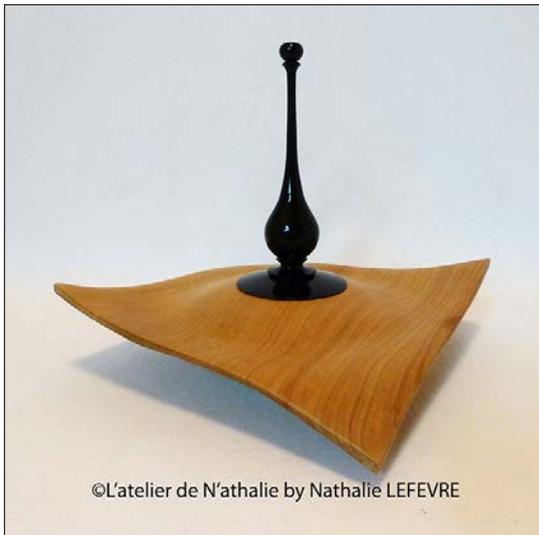
Minnesota Woodturners Association, Roseville, Minnesota
***Toys on the Move*, Winner Category: Fantasy**



Member Gallery

L'Atelier De N'athalie

I'm a French woman 47 years old who's living in Alsace near Strasbourg.
I have turned for 2 years only but my passion for woodturning is great!
A friend of mine gave me my first lathe in May 2013 and it was a revelation.
My Facebook page name's L'Atelier De N'athalie - ADN, in English DNA!
I like to say woodturning is in my DNA!!!



Joseph Herrmann

I turn most of my bowls with a recess so I usually put a cove around the rim of the bottom and add a textured button in the center--or some variation of that motif. I also incise lines that serve to highlight my signature.

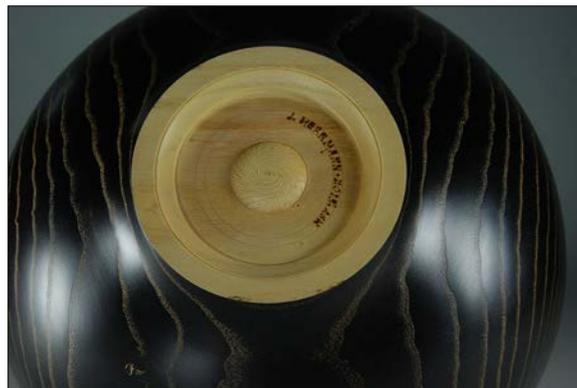
I've included photos of the bottoms of the bowls because I think it is important that folks know how the bottoms are presented. I really don't like to see remnants of the tenon or the mounting recess remain in the bowl.



Ash Bowl with Textured Black Band

12" diameter x 4" high

The black band has been spray-painted black and then textured. Gilding cream was applied to the band a la Nick Agar.



Ash Bowl, painted black and gilded

12" diameter x 4" high

The exterior of the bowl was sprayed with black gloss lacquer and then Chestnut gilding cream was applied and wiped off, which allowed the gold to remain in the grain. The exterior and bottom were left natural.



Beaded Cherry

12" diameter x 5" high

The three, 3/8" beads around the upper edge were made with a beading tool I made following directions that Bob Patros provided in the last issue of the Journal. The tool works great! And I have made a smaller, 1/4" beading tool as well.



Beaded Sassafras Bowl

9" diameter x 4" high

The beads around the upper rim were produced by the beading tools I made.



Cherry Platter with a Beaded Rim

15" diameter x 3" high

The rim of the platter was beaded using the tools mentioned earlier. There is a flat section adjacent to the beads.



Cherry Round-Bottom Bowl

12" diameter x 3" high

Someone on one of the turning forums suggested that the above bowls would look better if the bottoms were left round instead of incorporating a foot, so I tried it.



Ash Platter with Crotch Figure

13" diameter x 1-1/2" high

I had originally intended this to be similar to the Cherry Platter with the Beaded Rim (above), but it had warped so badly during drying that I had to rethink my original plan.

Joe mainly produces utilitarian pieces, as he finds making useful items more satisfying and uses mostly locally obtained wood for his work. Joe regards himself as more of a craftsman and teacher rather than an artist and strives to produce the best possible work in terms of form and finish. That said, you will notice that his work now is often enhanced by texture and color.

Joe was the former editor of Woodturning Design Magazine. He teaches workshops at his home in Ohio. Additional information can be had by emailing him at latheturner@windstream.net.

Submissions

Want to share your work in *Woodturning FUNDamentals*? Please send your high-resolution images along with title, size, and materials used to linda@woodturner.org.

Want to “pay it forward”? *Woodturning FUNDamentals* welcomes other content including tips, projects, and informational articles. Please send your content ideas to linda@woodturner.org. The deadline for submissions for the **September** issue of *Woodturning FUNDamentals* is **August 10, 2015**.

Please note: All content submitted may be subject to edit.

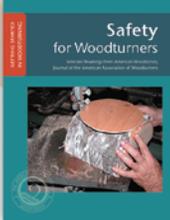
Expand your resources!



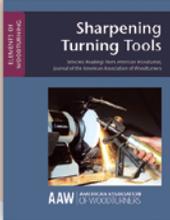
Where to turn for Woodturning

- ✓ **AAW** is the organization with global membership that professionals and hobbyists turn to for inspiration, education and information about woodturning tools, techniques, projects, safety and more.
- ✓ **We're your source for expert, shop-tested materials.** As publisher of the *American Woodturner* journal, we offer practical and reliable educational resources for woodturners written by woodturners. Our books are available individually in soft cover or digital download, and as soft cover sets.
- ✓ **Join the AAW member community** and get six issues of *American Woodturner* annually, free digital downloads of special publications, and access to the largest collection of woodturning information anywhere in the world. What's more, you'll be able to tap into the expertise of more than 15,000 members globally who share your passion for woodturning.

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