

# Heirloom Ornament

Pat and Karen Miller



Our local AAW chapter sells turned pieces at a holiday craft bazaar, which helps our treasury. Ornaments are always a big seller. They are relatively quick and easy to turn, a great project for using some of those precious small pieces of stock we are reluctant to toss, and a wonderful canvas on which to hone your decorating skills. Knowing there are as many approaches as there are woodturners, Karen and I would like to show you our approach to what we call heirloom ornaments. We often collaborate on projects; with this one, I did the turning and Karen did the decorating.

Before you head to the lathe, please take a moment to review safety procedures. Are your eyes and face protected? How are you protecting your lungs and hearing? Take off jewelry that could get caught during turning; roll up loose, long sleeves; and tie back long hair. Make sure your tools are sharp, your toolrest is secure in an appropriate position, and your workpiece is securely attached. It is good to begin with a quick mental review of these important factors.

## Turning the ornament body

For the ornament body, I started with a piece of hard maple 2" square



**1** With the wood mounted in a chuck, shape the outside of the ornament globe. I use a  $\frac{3}{8}$ " (10mm) spindle gouge.



**2** Leave a good mass of wood between the globe and chuck for added stability during hollowing.



**4** A blast of air will remove the shavings from inside.

by 4" long (51mm x 102mm) mounted between centers. I use a spindle roughing gouge to round the block and a 3/8" (10mm) detail gouge (my favorite tool) to form a tenon. Of course, these steps, as with many in this project, could be completed with different tools. I am detailing here what works for me. The diameter of your tenon will be determined by the particular chuck you are using.

Mount the block in the chuck and begin to form the basic outside shape without removing too much wood on the chuck side of the work (*Photo 1*). Keeping as much wood there as possible adds strength and stability for when you hollow the orb. Work carefully until you arrive at a pleasing outside shape, but hold off on adding decorative touches at the top of the globe, such as ascending "steps," until after the hollowing. Sand the outside of your ornament globe.

Hollowing the globe will make the ornament lighter and more delicate, so it will be easier to hang on a small limb. I begin the hollowing by using a 3/8" (10mm) drill bit mounted in a wooden handle. Form a small centering divot in the end of the orb to give the bit a registration point. Slow the lathe to about 500 rpm and drill to the depth to which you will hollow. This is a good way to begin since hollowing tools work best when cutting outward from a central hole. I use a little hooked scraper for hollowing the smallest orbs and an ornament hollowing tool for larger shapes (*Photos 2, 3*). Remove enough wood to eliminate the feeling of heaviness. During hollowing, clear the chips from inside the orb periodically with a shot of compressed air (*Photo 4*) or by blowing through a straw into the hollowed space.

If you need to retouch or change the outside of the piece, bring the tailstock



5 Detailing what will become the top of the ornament.



6 Part the globe from the waste block. Turn the lathe speed down and, as the globe just starts to wobble, cup it with your right hand and catch it as it comes free. Alternatively, part it most of the way through, turn off the lathe, and finish parting with a fine-tooth handsaw.



8 A snug fit makes a good jam chuck to finish turning the top of the ornament globe.



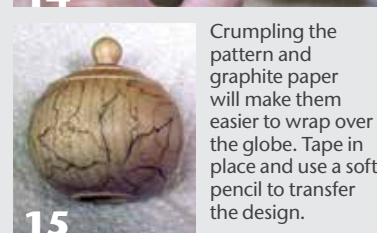
9 The tailstock live center brought gently in contact with the top will hold the globe in place as you finish the top. The small divot left by the center point can be dressed with a bit of abrasive and will leave a handy reference point to drill the hole for a screw eye.



11 Finish the bottom of the drop finial using a detail gouge and, after the tailstock is removed, a bit of abrasive to remove the small divot from the tailstock live center.



12 Hold the finial as you part it off the lathe. Note the small tenon at the base of the finial, which provides a good fit into the opening of the ornament body.



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Crumpling the pattern and graphite paper will make them easier to wrap over the globe. Tape in place and use a soft pencil to transfer the design.



up to the opening with a cone center for support. My mentor taught me to bring the tailstock into play whenever possible and I still use that advice. I usually turn short finials this way, too, using the tailstock until the finial is turned to a very small diameter, then cutting away the final bit of support and finishing with a fine abrasive.

After the hollowing is complete, turn any details you like on the

top of the orb using a spindle or detail gouge (*Photo 5*). Part off the ornament body (*Photo 6*). To finish turning the absolute top of the ornament, reverse chuck it onto a jam chuck. Make a small tenon cut on the waste block remaining in the chuck. The tenon should be sized for a snug fit into the opening of the globe (*Photos 7, 8*). With the tailstock brought up for support (gentle



**16**  
Karen uses a shading tool to highlight the flower petals.



**17**  
Rather than trying to “draw” lines with the burner as you would with a pencil, touch the tip of the stylus to the line and pull it away quickly at a ninety-degree angle. This will result in a more organic-looking line. With the low temperatures used here, burn flash should not be a problem. If you get discoloration, it is easily and cleanly removed by scraping with a small blade. Avoid sanding if at all possible.



**18**  
Geometric details, such as these accent lines, are added with a tiny ball tip stippled one at a time around the piece. Stippling provides a pleasing line without the irregularities associated with trying to “draw” on the wood.

pressure only), finish turning the design elements at the top of your ornament (*Photo 9*). Remove the orb from the jam chuck and hand sand the small area that was inaccessible when the tailstock’s live center was in place.

### The drop finial

Plenty has been written regarding pleasing dimensional relationships, and your own eye is a good judge. Some finial shapes complement the ornament body better than others, and it may be a matter of trial and error or sketching prior to turning to reach the “right” proportions. I am fortunate to live with another artist (Karen), who offers valuable insights. If in the end the object looks good to both of us, it is likely to please others as well. Of course, we do have friendly moments of “creative tension” while getting to the end result.

For this ornament’s finial, I chose a piece of padauk from my bin of “small.” I really like the color, though I know it will not last, as it ages from orange to a dark brown. I did not intend to cut intricate detail on this finial, nor did it have to provide great strength, so its softer, more open grain was no problem. And I rather like the smell of padauk when it is turned.

The finial blank started about  $\frac{3}{4}$ " square by 3" long (19mm × 76mm). I used a chuck with four small jaws to grab the workpiece on its four flats. As with the body of the ornament, bring up the tailstock for support when possible. Alternatively, the better finial turners do not use tailstock support and work incrementally from the tailstock end toward the headstock without going back toward the finished, unsupported end. It is good to practice this method, too, as thinner, longer finials will not allow for any tailstock



pressure and need to be turned with the far end free.

Once the finial is turned and finished to your satisfaction, including a tenon to fit the opening in the globe, go back to the tailstock end and carefully trim away the support wood (*Photo 10*). The final touch up on the tip of the finial, whether to a spire point or a rounded shape, can be handled with a bit of sanding (*Photo 11*). Using a couple of fingers on the finial as a steadyrest helps to support the workpiece as you part it off the lathe (*Photo 12*).

### Decorating the ornament

Now that the turning is finished, it is time to decorate your ornament. Basic burning tools can be purchased for less than \$50, but we suggest looking at models offering adjustable heat control and a selection of interchangeable tips. Early on, I bought a burning kit but never seemed to get the hang of the gentle touch needed. Karen got interested in wood burning and soon found she did have the touch. Her college art degree and natural ability gave her a good start; several demos by well-known artists added to her zeal and skills. Pyrography is an art itself and, as with lathe work, your skills will improve with practice.

One way to add a pyrographic scene or pattern to an object is to first draw the design using a pencil.

pyrography artists, including Karen, are able to do this by hand, but for this project she used a pattern from a piece of wrapping paper. Although stock images for every conceivable shape or pattern can be found on the Internet, Karen often uses fabric or wrapping paper for a template. Your chosen pattern and a piece of graphite transfer paper taped to the ornament make it easy to apply the image. Simply trace over the pattern with a pencil. This method has the advantage of leaving a mark on the pattern so you can quickly see which parts you have already completed (*Photos 13-15*). It is not necessary that every line on the globe be transferred perfectly with the transfer paper. You can easily fill in missing spots after removing the transfer paper and pattern.

Using a pyrography stylus, press along the pencil lines to burn the pattern into the wood (*Photo 16*). On this piece, the pattern is a poinsettia, and Karen used a shading tool to draw and highlight the petals. My natural tendency would be to grab a line-making nib and draw hard lines around the petals. But you can see that ▶



After burning, add some color highlights using pens and colored pencils. Artist-grade supplies are nice, but your desk may be full of capable, colorful options.



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Keep the details on the stand subtle so they do not compete with the ornament for the viewer's attention.

Karen's technique produces a much more elegant, natural-looking flower (Photo 17).

A small ball tip on the burner is used to stipple the detail rings and decorate the top knob on the ornament (Photo 18). After the burning is complete, Karen uses an assortment of colored pencils and artist's pens to add color details (Photos 19, 20).

When all the decorating is complete, drill a small hole into the top and affix a screw eye for hanging the ornament. Attach the finial to the bottom with thin cyanoacrylate (CA) glue.

Then spray a semigloss polyurethane or other finish.

### Make a stand

A final touch to complement your ornament is a suitable stand. This bit of detail serves to make the ornament a stand-alone piece easily displayed in a gallery or on a mantle. Ornament stands are commercially available, but we prefer to make our own.

The ornament stand is simply a piece of hardwood (I used maple) turned to about 1" (25mm) high and 2¾" (70mm) diameter with some simple decoration. Keep the embellishments subtle, as the stand should support the ornament, not compete with it.

With the wood mounted in a chuck, turn it to your desired outside

diameter and make a shallow recess in the bottom. Then reverse-mount the wood by expanding the chuck's jaws into the recess. In this orientation, you can shape the outside of the stand and add subtle decorations (Photos 21-23). Drill a ⅜" (2.3mm) hole into the stand to accept the brass hook.

I use ⅜" solid brass rod, available in 3' (91cm) lengths from any welding supply shop, for the hook. If you draw a template of the shape you want, it is fairly simple to hand bend the rod to this repeatable shape. If a group of ornaments are displayed, similarly sized and shaped stands are not a distraction. And the stand provides a suitable location to sign your work, if you are so inclined.

We have found that these ornaments make wonderful gifts. Family and friends will appreciate the thought and effort you put into each one. The ornaments also serve as a nice way to introduce folks to our passion for wood art. We hope you are inspired to make your own heirloom ornaments. ■

*Pat and Karen Miller are long-time makers but began their collaborative journey in woodturning/decorating in 2010. Through it, they have discovered hidden talents, a path for artistic expression, and a host of new friends. Pat is soon to retire from his career in machinery sales. The two are looking forward to becoming full-time artists—and grandparents. For more, visit [patandkarenmiller.com](http://patandkarenmiller.com).*



For those who feel a bit prickly around the holidays, perhaps fed up with the pressure of the Christmas machine, ornaments can be a creative outlet for expressing your feelings.