

Festive finial



PHOTOGRAPHS BY THE AUTHOR

Wood choice

Start the globe by picking a good piece of wood. Burl is always a good choice because intense grain pattern seems to add the kind of minute detail that fits the scale of an ornament. For the globe, I find that blonde woods do stand out better than dark woods in most holiday settings. When I make darker globes, I always contrast them with a lighter set of finials.

Donald Derry shares his technique and tips for creating Christmas ornaments

My life as a woodturner started back in the mid-1990s. As a newbie I stumbled across a project article by Bob Rosand and I was captivated. Among the pages was my first introduction to what has become known as the traditional style of turned wood Christmas ornament.

Featured in the article were several elegantly formed, small hollow globes, capped with a finial on top and a long icicle cascading from the bottom. Some of these ornaments were finished as wood and some delicately painted with winter scenes by his wife.

The images of these treasures sparked a couple of questions within me – I wonder if I can make them, and if I can, am I able to earn extra income?

Three months later, I entered my first craft fair. I sold out the first day and had to stay up all night making more. The reality is that if you underprice a product enough, you can be assured it will sell out. I raised my price and three years later I had made and sold 2,000 ornaments.

Design

While learning to make ornaments efficiently, I stumbled upon some principles of design and some techniques that raised both speed and quality. Design is very important, not only for the object but also for its process. An elegant process will lend itself to developing an elegant object.

The ornament globe is a good example of this. I started out by making spherical globes but found that hollow spheres could be very difficult for a turner to make efficiently. So it stands to reason that a form other than a sphere is a better choice for a speedy process. Not only did I find out that other forms are far easier to make but



1 A homemade screw chuck with a right hand threaded screw. It holds well even when reverse lathe rotation is used for hollowing



3 A heavy wire bent and attached to a 22mm ($\frac{7}{8}$ in) twist drill bit will give a quick and accurate indicator of where the cutting end of the bit is as you're drilling the hole

also tend to make better looking ornaments.

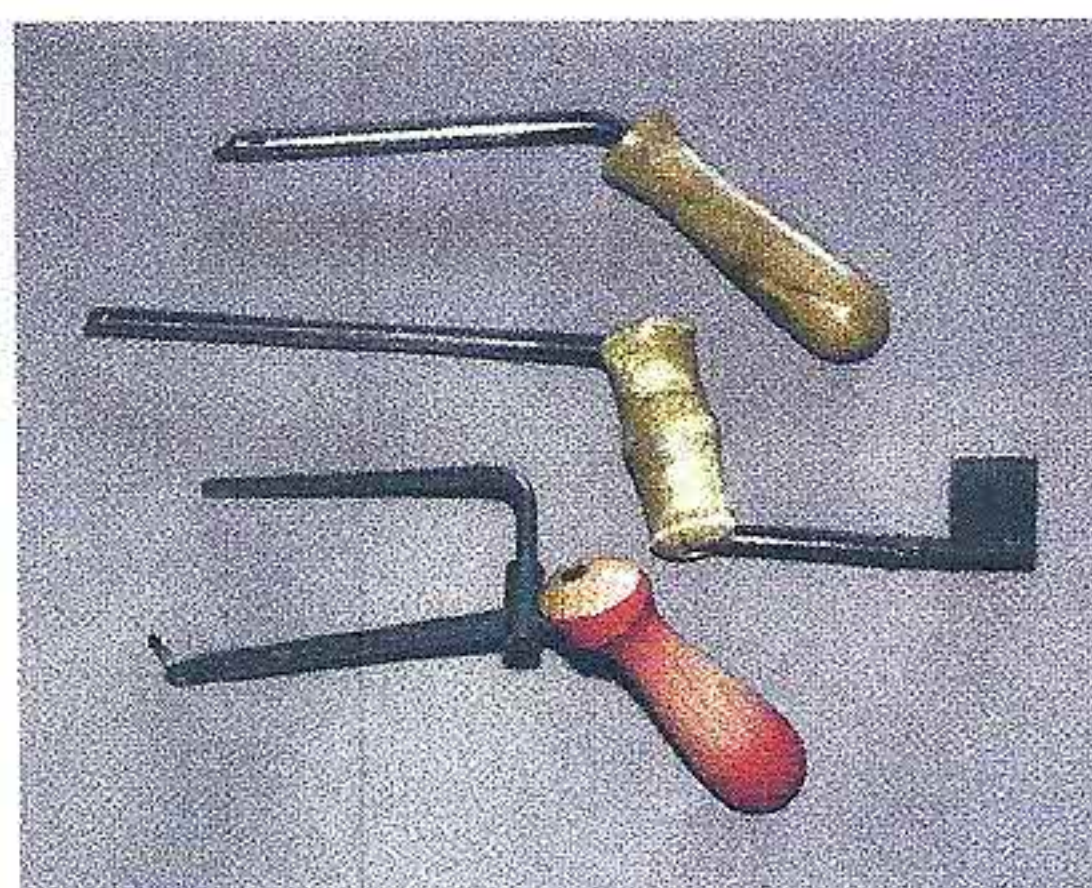
A large globe is more difficult to make light in weight and will take more time. If you wish to sell what you make, no matter how elegant it looks, if it feels heavy to a customer it will not sell. No matter how large the globe, the decorative finial and icicle will need to be of appropriate proportion. There is not a formula for this, it just needs to look good.

There are many good choices for fixing a globe blank to the lathe. I discovered that a simple, old-school screw chuck, worked well for me, photo 1. It's quick to mount and small in stature, giving excellent tool access. The right hand screw holds surprisingly well, even with the very uncommon reverse spindle rotation I prefer when hollowing. It also has the benefit of very precise re-centering of work if you ever need to take the work off the chuck before it is done.

Once mounted, it is time to put your design skills together and come up with a good form. An ornament may be small but the shape of the



2 Making a 3mm ($\frac{1}{8}$ in) groove leaving a slightly smaller than 22mm ($\frac{7}{8}$ in) stub tenon to hold the globe onto the chuck fixing



4 Several robust hollowing tools that Don has prototyped over the years

globe is very important because it will be the most prominent shape people will be drawn to. Rough down the blank to the cylinder. Then use a parting tool to define the top to bottom dimension. I would pilot the parting tool to make a groove that leaves a stub tenon slightly less than 22mm ($\frac{7}{8}$ in) in diameter, photo 2.

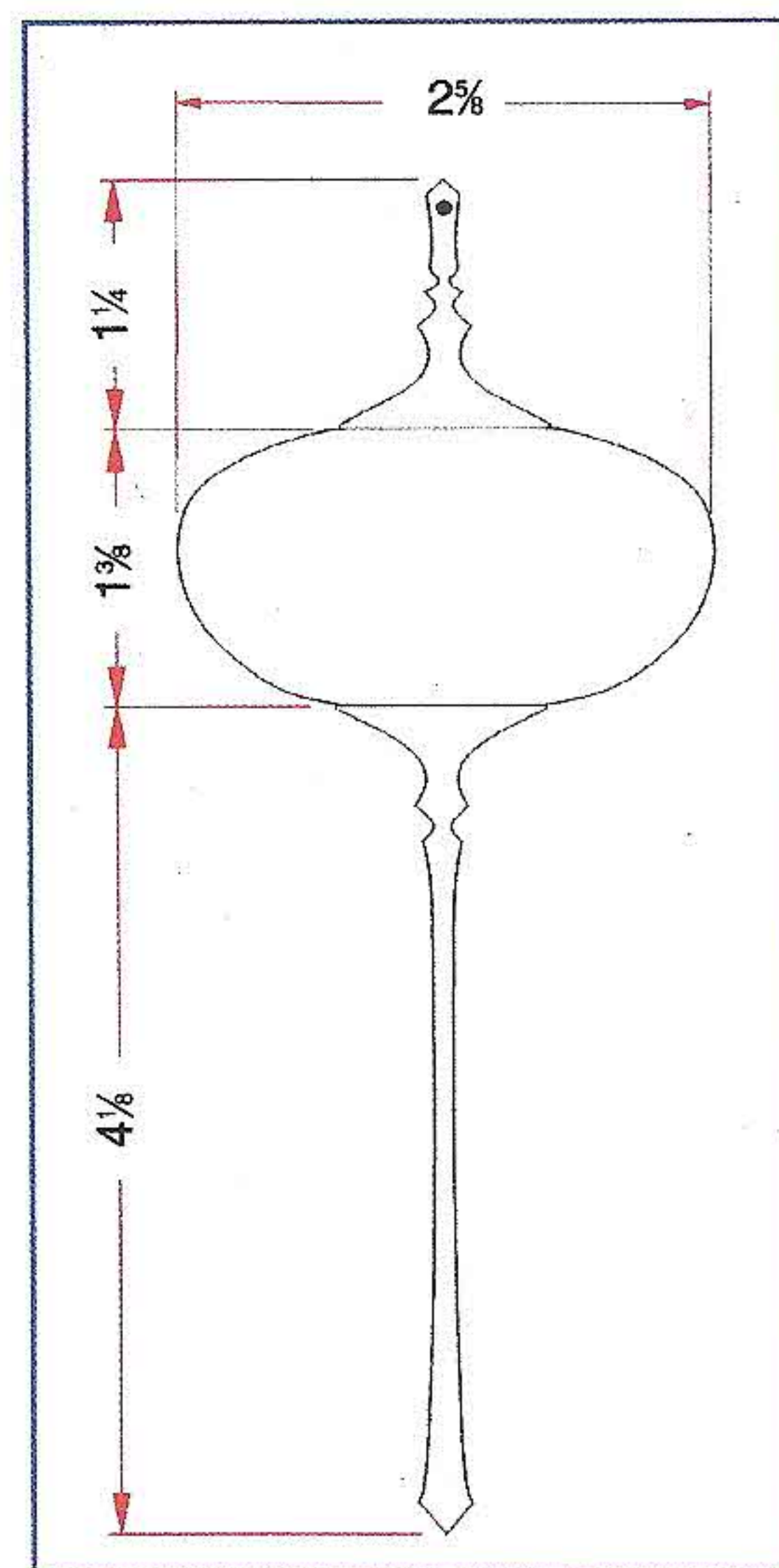
Access hole

Now it's time to drill an access hole opening up the centre of the globe. When I first started making ornaments I thought the smaller the hole the ornament was hollowed through, the better it would be. I discovered that the finial and icicle elements covering a relatively large access hole would actually flow very nicely. So as time went by, my drill bit size increased until I settled on a 22mm ($\frac{7}{8}$ in) hole. Initially, a big hole gets rid of more of the inside waste and makes the task of hollowing much more efficient.

Another technique I discovered was to jury-rig a heavy wire on to the drill bit to serve as a visual

Tools

Tools of the trade. Don's entire tool kit for making quality ornaments



depth indicator for the bottom of the hole. All I did was bend a heavy wire so it looked like a hangman's gallows, photo 3. Simply line up the 'noose' end of the wire so it points down at the leading edge of the bit.

Drill the hole to about 3mm ($\frac{1}{8}$ in) of where the outside of the globe corners with its stub tenon. Don't go any deeper. You will need every bit of the remaining ring of wood to hold the globe onto the tenon while



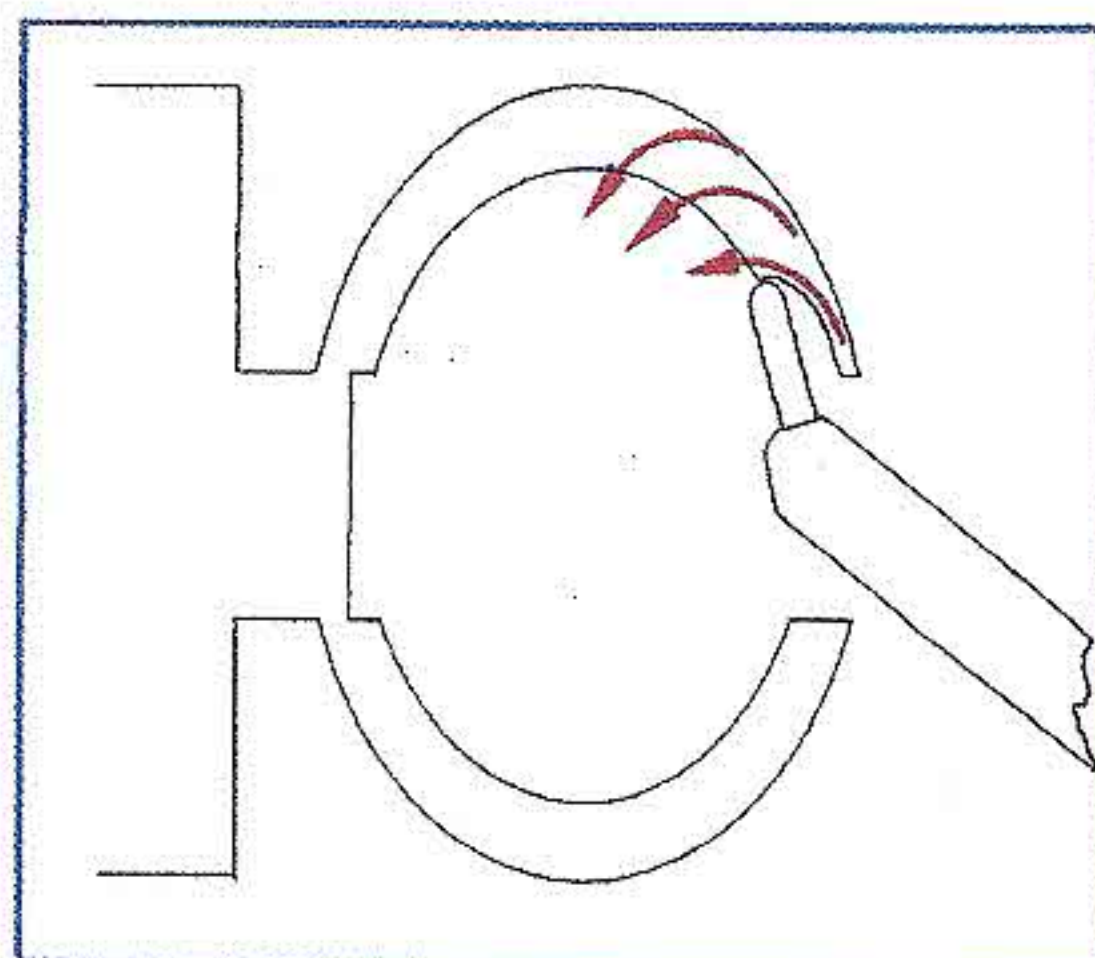
5 Hollowing is not as difficult as one might think

◀ you gut the waste wood from inside the globe.

Hollowing

When doing small scale hollowing work, you will need smaller tools but not dainty ones, photo 4. Hollowing is not as difficult as the mythology in our field would lead one to believe, photo 5. Use the most robust shafted tool you can manoeuvre within the access hole you have chosen. My original homemade boring bar used a 12mm ($\frac{1}{2}$ in) shaft and had a torque arresting pistol grip. The extra stability this tool offered served me well during my production days.

Using well-seasoned timber, start hollowing just inside the access hole. Begin with half moon cuts from front to back. Rough out most of the inside cavity leaving a confident 5mm ($\frac{3}{16}$ in) wall thickness. Then, work towards the final wall thickness in two stages. Work the front half with push cuts towards the major diameter. When the front has been reduced by 5mm ($\frac{3}{16}$ in) to a thinness of 1.5mm ($\frac{1}{16}$ in), move to



6 Cutting parallel to the wall then drifting towards the centre will lessen the possibility of cutting through the wall



8 If the tenon holding the globe is turned to be a slightly smaller diameter than the 22mm ($\frac{7}{8}$ in) drill, the globe will neatly pop off on to the drill, removing the need to make a small parting cut

progress as the wall gets thinner. I found that my fingers would fit nicely in the 22mm ($\frac{7}{8}$ in) hole and would serve as a convenient, accurate caliper, photo 7.

Finishing

Once you have hollowed the globe and sanded it to your heart's content, it's time to consider a finish. Good, one-at-a-time results can be had with good friction polish or urethane wiping oil while still on



7 Using two fingers is a fast and surprisingly accurate way to caliper the wall thickness



9 A parting tool is used to define the length of both the finial element and the longer icicle element from the same piece of timber

180mm ($1\frac{1}{2}$ x 7in) timber. This efficiently eliminates the mounting step for two separate pieces of wood and saves time. Rough the blank to a 25mm (1in) cylinder then establish the length of each element by parting down to a tenon of 22mm ($\frac{7}{8}$ in), photo 9. This tenon should fit snugly into the hole in the bottom or top of the ornament globe. Turn the icicle first.

Icicle design

The design of the icicle can be as ornate and detailed as you wish but I have found that in spindle turning of this size, less is often more, photo 10. It may need to be quite thin in order to look proportionally good.

Before parting off the icicle it is a good idea to add a bit of colour and a finish. For these small-scale spindles almost any finish routine can be used. Try experimenting with permanent markers, layered over with a friction polish or wax, photo 11.

In my continued quest for elegant

"I have found that in spindle turning of this size, less is often more"

accomplish the rear half with pull cuts. It may seem odd, but whether pushing or pulling, if you direct your cut by first paralleling the wall until the cut is established and then drift the cut towards the centre of the globe, you will always be cutting away from the potential of going through the wall, photo 6.

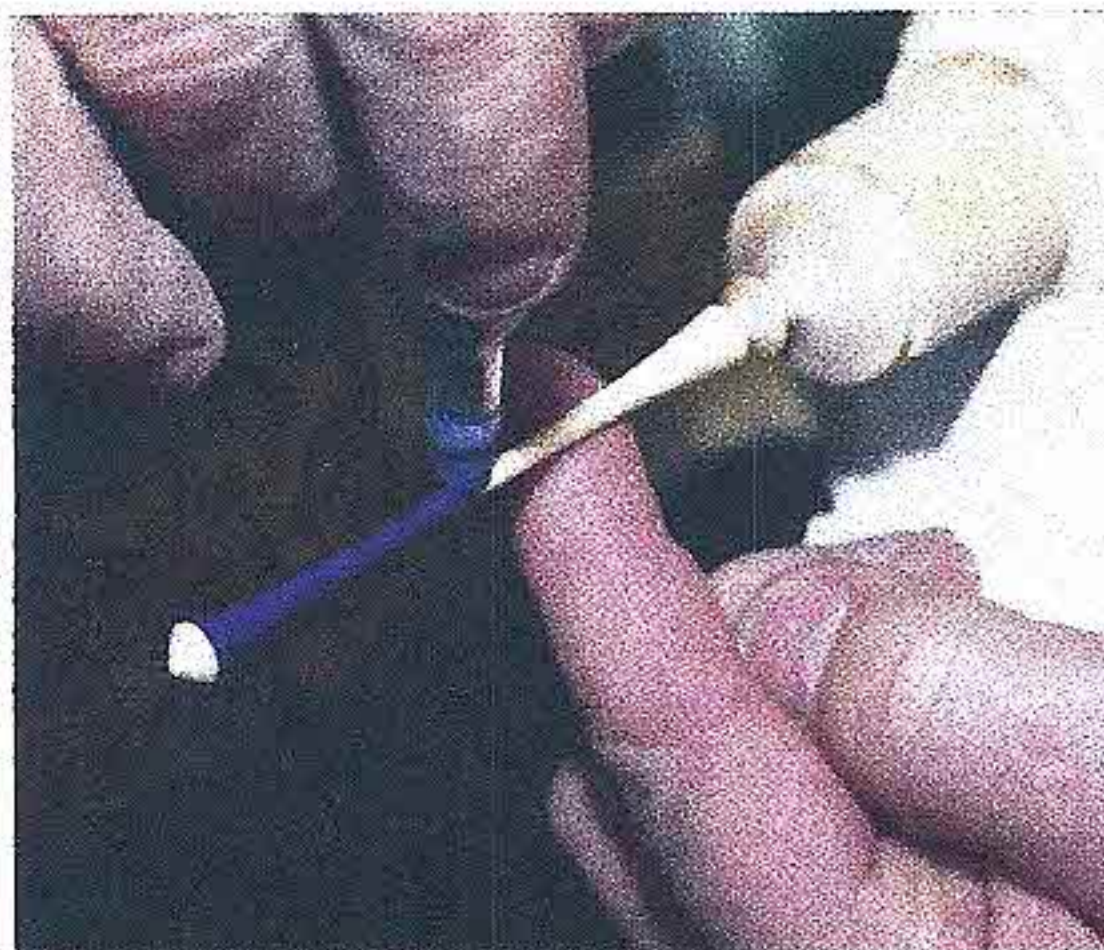
There will be a need to stop cutting periodically to check your

the lathe. When you are satisfied with the look of the globe, bring in the tailstock with the 22mm ($\frac{7}{8}$ in) drill and auger through the remaining wood that is holding the globe to the spindle. If the tenon was made a bit smaller than the drill, the globe will neatly pop off the tenon onto the drill bit, photo 8.

I like to make the finial and icicle out of the same piece of 30 x



10 Turn the icicle to any level of spindle detail you chose. Efficient design tends to dictate less is more



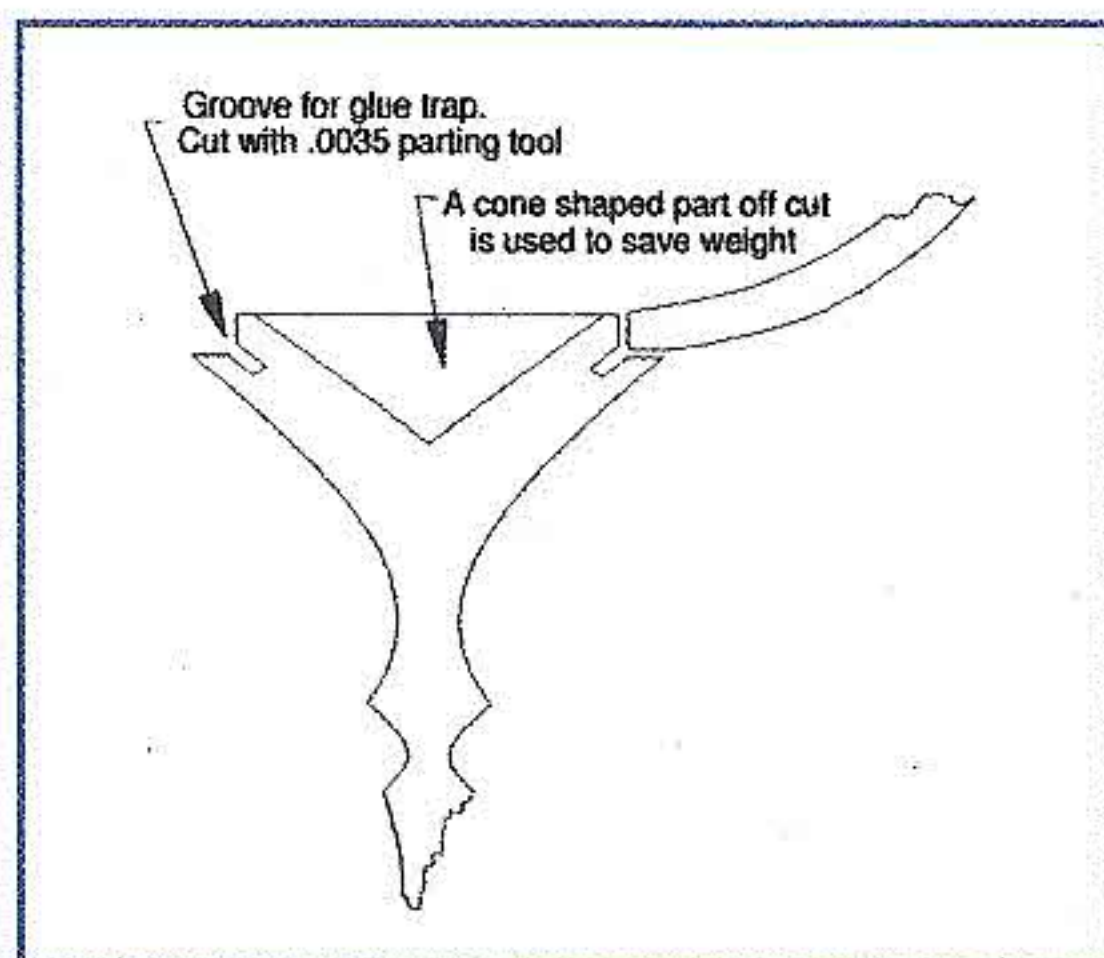
11 Adding colour to the icicle with a felt marker pen



12 A shallow 1mm ($\frac{1}{16}$ in) cut is made at 45° into the corner where the escutcheon meets the tenon. This will become a trap for any excess glue that wants to ooze between the parts during assembly



13 An angled cut is used to part off the icicle, saving a small amount of weight. A homemade micro-thin parting tool made from a 12mm ($\frac{1}{2}$ in) bandsaw blade is used for the cut



14 This is a cross section diagram highlighting the cut detail of the finials



15 Drilling a hole laterally through the finial is an easy way to add a hole for a hanger without resorting to a low quality screw eye. By drilling the hole before it is parted off, the lathe will serve as a third hand to hold it

design and process, I developed a cut that would actually only become beneficial during assembly. Just before I would part off the icicle, I would make a small angular cut directed into the corner made by the escutcheon ring and the tenon. This is a very delicate place and needs a very delicate cut, but it is worth doing.

I actually needed to develop a special parting tool made from a bandsaw blade to accomplish this cut, photo 12. I plunge the 35-thousand spear point blade to make a 1mm ($\frac{3}{16}$ in) deep groove. The groove will serve as a well that will trap excess glue when joining the parts during final assembly.

Lose weight

I like to make my ornaments as light in weight as possible, and I discovered a technique that could eliminate a perceptible amount of weight in a very easy way. Rather than parting off the finials with a straight across cut, I used a parting

cut to angle into the escutcheon cone of each element, photos 13 and 14.

Define the length of the tenon as if you are going to take it off. Then restart the cut, angling it at 45° away from the headstock, directing it to cut a cone just under the tenon. This procedure doesn't remove much weight but it's not difficult to accomplish either.

I made sure I turned the upper most finial element with sufficient length so I could drill a small lateral hole that serves to replace the need for a screw eye, photo 15. This is much easier to install than a micro-screw and will add value to the ornament.

The top finial is made like the icicle except it's shorter. It is best designed to complement the ornate qualities of the longer icicle element. Repeating some of the spindle shapes in reverse order outwards from the escutcheon is a good place to start.

Assembly is straightforward. If

your tenons fit snugly into holes of the globe, you will need a minimum amount of medium superglue. Apply the adhesive to the tenon only, not to the escutcheon. Join the parts, confirming that the escutcheon fits evenly all around the globe. Remember, no glue should squeeze from between the parts if you made the glue-well cut mentioned earlier. Let the adhesive cure, add a wire hook or perhaps a ribbon loop. And enjoy an heirloom quality ornament that may remain a treasured keepsake even by your children's children.

About the author

Don's previous life as an ornament maker has been replaced by turning wood art, tool making and teaching the craft of woodturning. He can be contacted at don@derrytools.com