

# Malcolm Zander

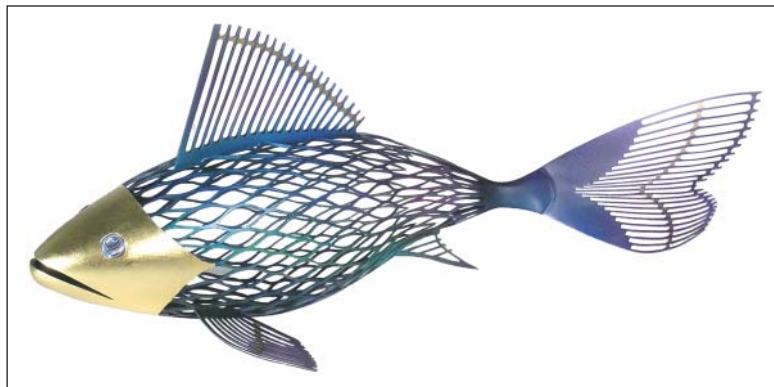
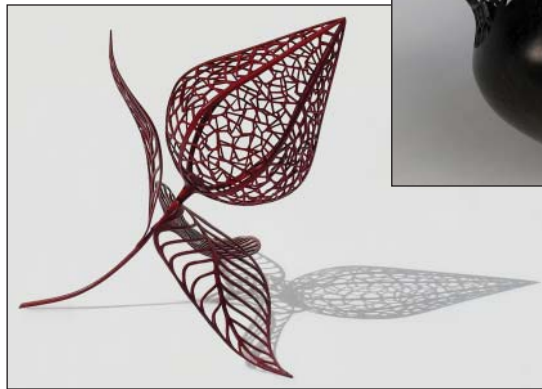
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I began turning in 2000. Obviously I have a lace fetish. This I blame on Binh Pho, whose seminar in Albany I attended in 2003, after which I immediately went out and bought a dental drill and compressor and airbrush. The lesson is to attend as many woodturning conferences as you can, because you never know where one demonstration may lead you.

I am very interested in form, seeing different manifestations of form in wood, fiber, glass, and ceramic art, and I am exploring

these differences and similarities in my turning, together with the influences of texture and color.

Woodturning for me is a very rewarding pursuit because in a relatively short period of time one can produce something of real beauty. Of course, from the sweep of the Grand Canyon to the structure of a microbe to the form of a flower, the greatest artist of all is nature. We cannot compete with nature, but we can be inspired by it.



# Form and Design

This talk looks at different aspects of form. The goal is to develop a deeper understanding of what form is and why it is important to us as wood artists. We will explore, in depth, ways in which we can find new forms and designs for our work. Illustrated with a very extensive slide show.

1. Definitions.
2. Some aspects of form.
  - Texture
  - Positive and negative space
  - Static and dynamic forms
  - Balance and proportion
  - Decoration and finish
  - Form and function
3. Curves.
4. Raffan's guidelines on form.
5. Symmetry and asymmetry.
6. Design, as it relates to form.
7. Mental libraries of forms.
8. Sources of ideas for new forms & designs.
9. Examples of turned forms.
10. Summary.

## QUOTATIONS

*John Sloan* - We learn form not from the eye, but from our sense of touch.

*Liz and Michael O'Donnell* - Wood is perhaps unique as a material, in that it seems to invite people to stroke and caress its surface. It is certainly true that to appreciate a form fully we need to explore it through touch as well as sight, feeling its contours and experiencing the different textures with our fingertips.

*Mike Darlow* - Arcs are more boring and less beautiful than varying curvature curves.

*Richard Raffan* - After the colors have faded and the grain patterns have become obscure, only the form of a bowl will ensure its survival as a desirable object.

*Henry Moore* - So perhaps you look at something and the shape registers and you probably use it; or if that shape comes up again, you like it because it has an emotional meaning for you, even though memory may not consciously make the connection.

*Bert Marsh* - Being visually aware is something we all have to work at. Many of the objects we see each day are taken for granted, so much so that they do not consciously register in our minds. Although I had lived in Brighton all my life, it was only at this stage that I began to see the domes of the Brighton pavilion. There are more shapes up there than I had ever dreamed of, and I am still finding new ones. I studied the work of potters and silversmiths and absorbed those shapes. I looked at fences and roofs and fascias and gravestones. At fuschias and tulips and roses and crocuses, all with

a new awareness. And all these shapes went into my head as I developed an appreciation of form.

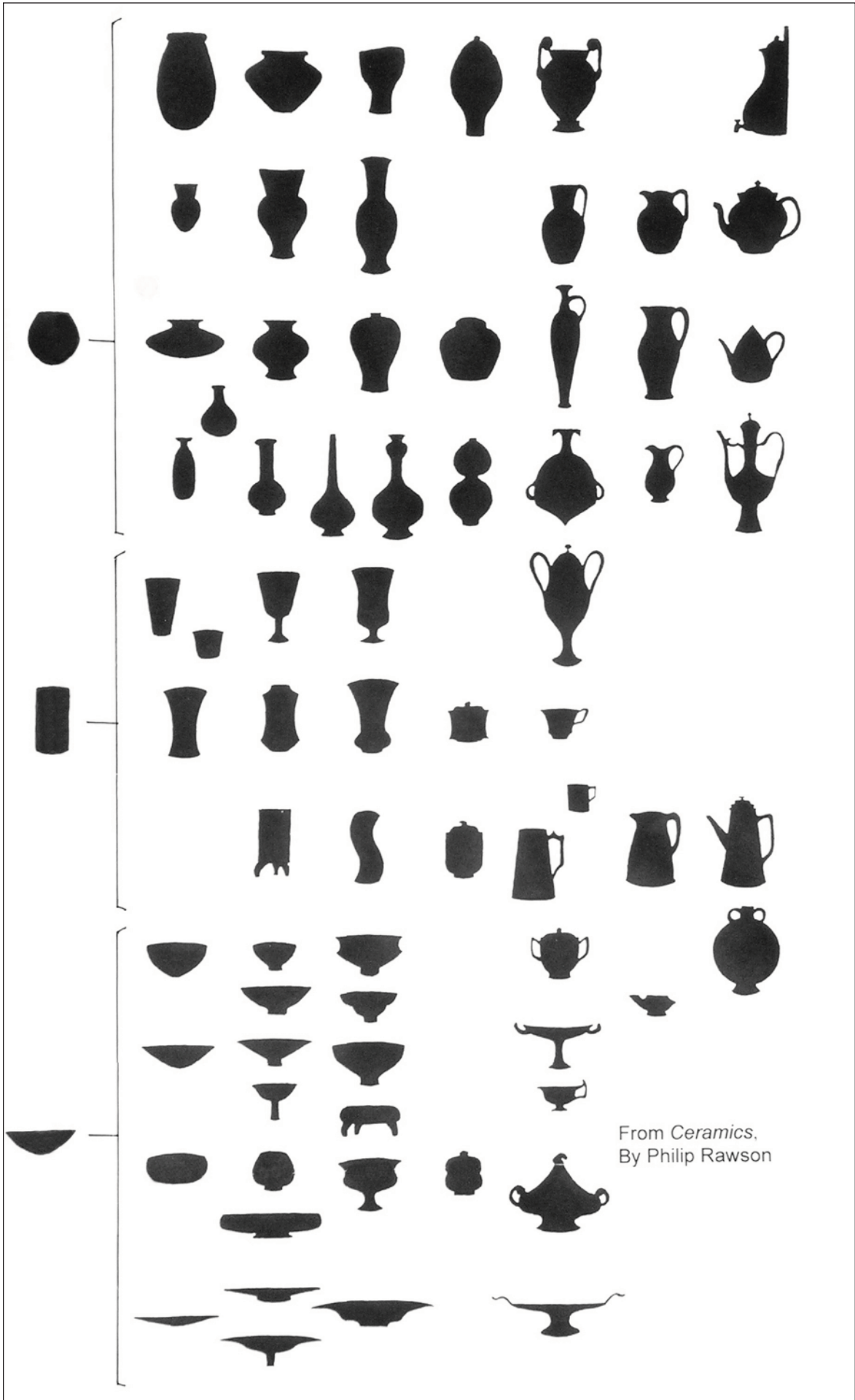
I must emphasise that, when I say these shapes give me inspiration, that is exactly what I mean. I do not look at them and go away and reproduce them. I do not copy plants, or ceramic pots, or silverware, or anything else, but I am sure that certain shapes influence the forms I make, although this is a subconscious process. My work is the result of having studied all kinds of shapes that I see around me, and what I see forms part of the reserve of knowledge about form in my memory. Unless you put something into your brain, nothing is going to come out.

## SOME SOURCES OF IDEAS

- Galleries (glass, ceramics, pottery, fiber).
- Books on woodturning, ceramics, pottery.
- Museums.
- Magazines (e.g., Craft Arts, American Woodturner).
- Meetings (club and regional).
- Symposia (AAW, Instant Gallery).
- Videos and DVDs.
- Native Art (Haida, Hopi, Pueblo, aboriginal, African, etc.).
- Nature ... forms all around. Biology books.
- Everyday items around us.
- Internet (AAW website, other turners' websites, forums).

## REFERENCES

- "The Art of Turned Bowls" by Richard Raffan, Taunton Press - design of forms.
- "Woodturning: A Guide to Advanced Techniques" by Hugh O'Neill, Crowood Press - Chapters 4 & 5 are very good on design.
- "Woodturning Design" by Mike Darlow, Fox Chapel.
- "American Woodturner," AAW journal, woodturner.org - good for ideas, tips, current work.
- "Ceramics" by Philip Rawson - Evolution of different forms.
- "Functional Pottery" by Robin Hopper - Chapter 6 about proportion is interesting.
- "Encyclopedia of Pottery Techniques" by Peter Cosentino - Has a good amount of profiles.
- Craft Arts Int'l magazine - craftarts.com.au - Good for ideas.
- "Decorating Turned Wood" by Liz & Michael O'Donnell - Good idea sources and range of coloring & texturing techniques.
- "Woodturning in North America" by Woodturning Center - Good historical overview. Pages 158-159 are very useful.
- Open Directory - [http://www.dmoz.org/Arts/Crafts/Woodcraft/Woodturning/Artisan\\_Portfolios/](http://www.dmoz.org/Arts/Crafts/Woodcraft/Woodturning/Artisan_Portfolios/)



## Thin-Walled and Pierced



**A - end grain**  
"Out of Africa"



This talk discusses the turning and piercing, from dry wood, of thin-walled pieces.

### **TURNING**

The emphasis will be primarily on the turning of thin-wall cross-grain pieces (although end-grain turning will be touched on). The turning of a thin-wall vase similar to B, using a gouge only, from dry wood, will be illustrated with a series of slides. Supplementary handouts illustrating the process are provided.

A very similar method is used for E and will be illustrated with a movie in which the key step of cutting the final wall thickness with the gouge will be demonstrated.

Additional slides will be shown illustrating the making of C, Lacemouse, my Riverglider fish (back cover of Winter 2008 American Woodturner), and Physalis.



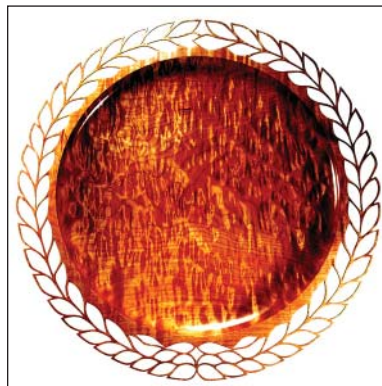
**B - cross grain**  
"Tulipa Rosa"

### **PIERCING**

Techniques for piercing fine pieces such as A and coarser pieces such as E will be discussed and shown, together with equipment, tools, and files used, in a second movie demonstration.



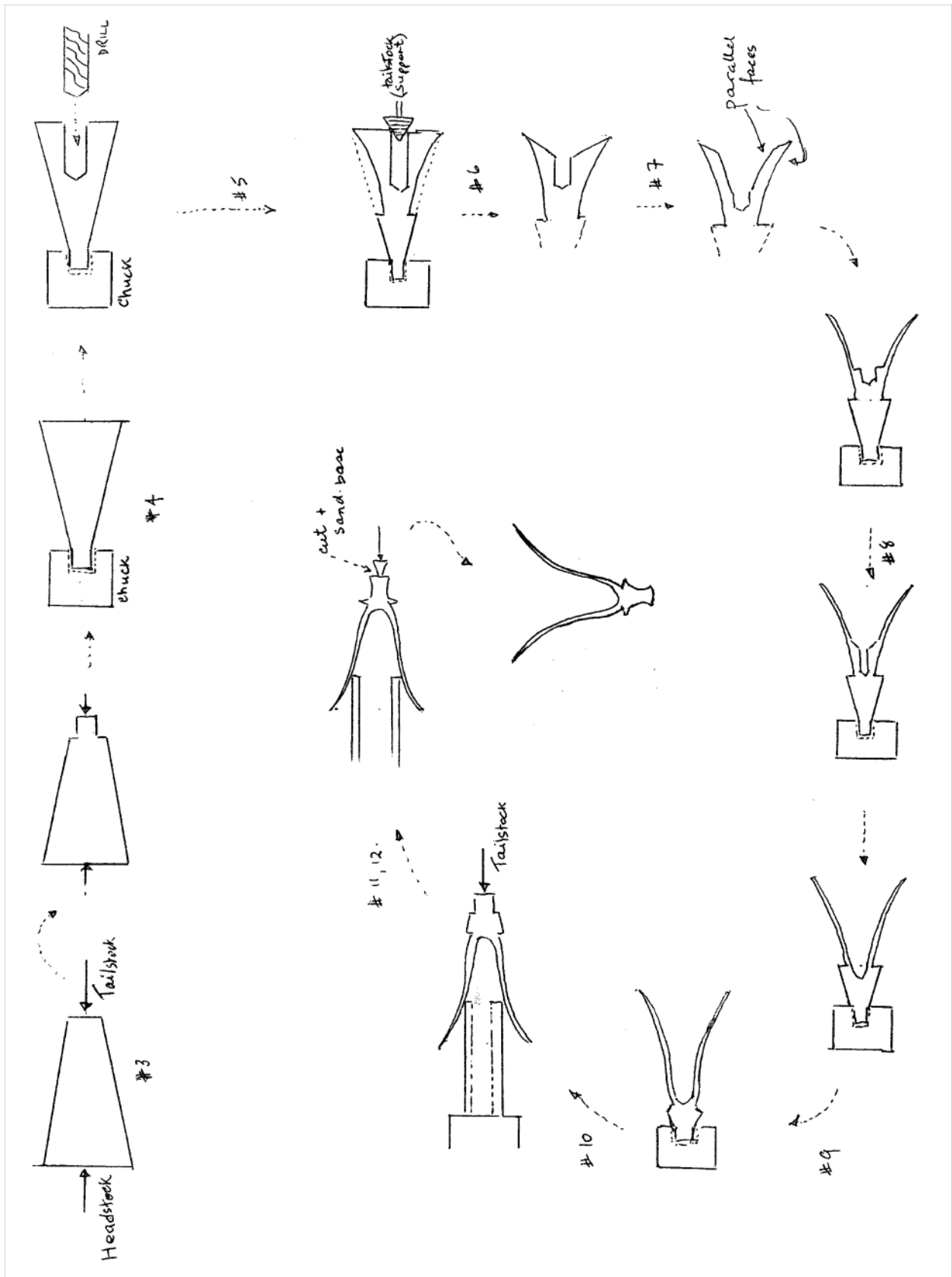
**C - end grain**  
"Lace Ruffle"



**D - cross grain**  
Quilted Maple Platter



**E - cross grain**  
"Leaves in a Golden Wind"



1. Use a dense fine-grained dry hardwood. Unless you have special tools, it will be easier to turn thin walls with cross-grain, rather than end-grain.
2. Band-saw your blank and mount it between centers. If your vase is to have a natural-edge top, adjust the orientation to ensure that at least one of the top planes is square to the lathe axis.
3. Turn a cylinder and then reduce one end in diameter so as to give a cone shape. Do not make it too thin at this point. Turn a good tenon on the smaller end (do this on the tailstock side).
4. Remove the turning and insert the tenon into a headstock collet chuck and tighten well. Drill out the top of the vase to a distance of about halfway down.
5. Refine the outside of the form, to give a smooth curve from the top end of the piece down toward where the foot will be. Do this only for the top 2/3 – the bottom 1/3 of the form will be finished later. Sand to about 180 grit to take out irregularities.
6. Take the center out, bearing in mind that nearly all the mass of the piece is in the top portion of it and if you are too aggressive you can snap the piece off the chuck. Taper the drilled hole down to make a cone, taking off just a little at a time. For this I use the 60° fingernail gouge. Shave down and expand this cone until the top outer wall thickness of the piece is about 1/4 of the top diameter. Then switch to the 45° fingernail gouge. Be very careful in using this gouge to rub the bevel first, and then slowly lower the tip into the cutting position. Otherwise you risk a catch, which will snap the turning off. There is one exception to this – if you are doing a natural-edge piece, in which case you need to enter with the sharp point, slowly, right on the centre-line of the piece, to engage the whirling erratic natural edge.
7. Continue to shave down the inner wall, ensuring that the inner wall is parallel to the finished outer wall. Use calipers to verify this. Once you have done this, you can either continue to sight down the form wall to get the correct line, or you can simply monitor the thickness of the ridge on the inside opposite wall. When you are down to 2-3 mm thick, resharpen the 45° gouge and then make your last couple of finishing cuts to reach the final thickness.
8. Repeat the process, going deeper into the vessel. Sand as much as you can. Once you are about halfway down the inside of the piece and much of the top mass has been removed, you can now complete the outside profile, down to near the tenon. Sand the whole exterior to about 180-220 grit. Sand to a higher level if you like.
9. Finish taking down the internal centre to the final depth. You may need to drill the hole deeper now. Sand now if you can reach in easily, otherwise sand later with a Dremel or Foredom and split pin flapwheel.
10. Remove piece from chuck and reverse onto a firmly cushioned support in the chuck. Bring up the tailstock into the hole left in the base of the tenon, thus ensuring that the piece is centered.
11. Reduce the tenon diameter, with a 1/2" 60° gouge or smaller 3/8" gouge, taking off only a little at a time (otherwise the friction fit on the chuck will be insufficient to hold the piece, and you will spin it on the chuck and score or mark the finished interior). Finally, use a 3/8" or 1/4" detail gouge to refine the cove and generate the final form. Shorten the foot a little. Power sand the whole exterior to the final finish.
12. With the detail gouge facing horizontally left (never upward), shave the foot base inward as far as you can go, making it slightly concave and then stop the lathe. Cut off the little nub on the base and finish the concave bottom off the lathe with a Foredom or Dremel bit, then sand. Alternatively, if you have a vacuum chuck and at Step #10 you have reversed the piece onto this chuck, you can turn on the vacuum and finish the base on the lathe. This has the advantage of also permitting the drilling of a hole in the base and installing a rare-earth magnet in the foot underneath a wooden plug so piece can sit on a magnetized stand.