

## Mark Sfirri Hands-On Class (September 12–14, 2008)

### Squiggle

1. Use blank 2"x2"x9".
2. Draw a centerline perpendicular to the front face on one end.
3. Mark the center on this centerline. Label it 1.
4. Mark a center on this centerline 1/3 of the way in from the front surface. Label it 2.
5. Mark a center on this centerline 1/3 of the way in from the back surface. Label it 3.
6. Repeat steps 2 – 5 on the other end. Be sure to label the centers correctly.
7. Using a spring loaded cup center for a catch free drive and a live cup center in the tailstock, mount the blank on centers 1 – 1 and turn off corners.
8. Remount on parallel centers 2 – 2.
9. Leaving 2" on each end, turn a cove, bead and cove looking at the profile on the top of the piece.
10. Using the bowl gouge, touch the bevel, hold the tool firmly on the tool rest and make light cuts. See Figure 1 for the resulting profile.
11. Remount on parallel centers 3 – 3.
12. Using the previous profile as a reference, turn beads in the center of the coves and a cove in the center of the bead. Cut to the same depth as the original curves.
13. See Figure 1 for the ghost profile of the second curve.
14. Turn off the lathe and inspect the shape. Additional turning can be done on either of the offset centers to refine the shape.
15. See Figure 2 for the final shape.
16. Remount on centers 1 – 1 and turn the ends.
17. With the lathe off, but still mounted on the lathe, tweak the shape using "non-creative carving".
18. Use pattern maker wood rasp 50 (Lee Valley or Woodcraft) and/or files to remove any tool marks, sand (100-400) and finish (see later).
19. For design variation, consider using center 1 on the headstock and 2 and 3 on the tailstock to get a tapered shape.



Figure 1 Profile of Swiggle Curves

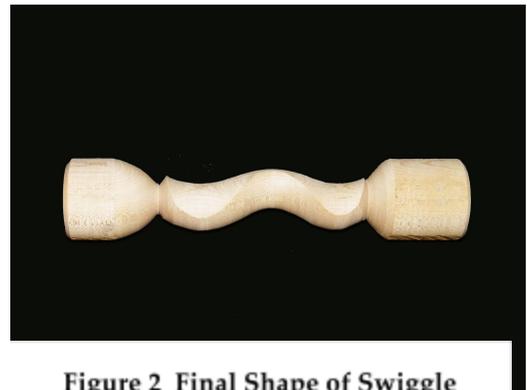


Figure 2 Final Shape of Swiggle

### Shaping, Sanding and Finishing

1. See separate article on Mark's details of shaping, sanding and finishing.
2. The finish he uses is Sutherland and Wells medium luster wiping varnish (very thick) mixed 50-50 with Waterlok.
3. After drying sand with 2000 grid wet or dry paper, lubricated with mineral oil.
4. Bring up the luster using Renaissance wax applied with 0000 liberon steel wool.

## Wall Hanging



Figure 3 First Profile Shape



Figure 4 Second Profile Shape

1. Glue (2) 1-1/2" x 3" x 10" pieces together, using paper and carpenter's glue to form a 3" x 3" x 10" blank. Let dry over night.
2. Turn the shape, adjacent half beads and a cove, as shown in Figure 3.
3. Split the shape in half, on the paper centerline, using a chisel.
4. Mount one of the half pieces on the half piece centerline.
5. Turn the adjacent half beads over the cove and the cove over the adjacent half beads to the same depth as the first profile. See Figure 4.
6. See Figure 5 for the final shape compared to the whole shape.

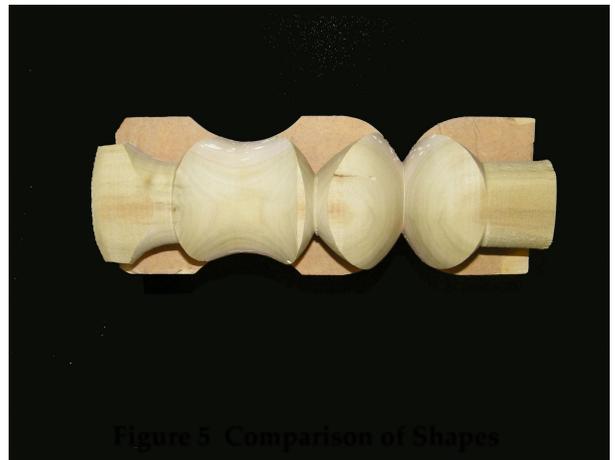


Figure 5 Comparison of Shapes

## Candlestick

1. Using the attached "Candlestick Blank" drawing, draw all lines and centers on the blank.
2. Drill a 7/8" x 1" deep hole, shimming the blank to make the line through the center of the top of the candlestick and the base vertical.
3. Make a fairly tight fitting plug 7/8" x 2" to fit in the hole.
4. Leave 1" on tailstock end and turn into base using the bowl gouge.
5. Cut to the headstock to form a solid taper.
6. Lightly turn the middle of the blank until it is round.
7. Mark the center of the disc. This is the largest part of the candlestick.
8. Clear wood from the headstock end to the disc, using a shallow curve. See Figure 6.
9. Turn the egg shape using the bowl gouge, finishing with the spindle gouge.
10. Sand the egg and disc, since this will be the last chance to sand under power.
11. Change to 2 - 2 centers.
12. Using the bowl gouge cut the backside of the second disc.

13. Using the roughing gouge, turn the foot to a cylinder.
14. Using the bowl gouge, turn the top of the base to a bead shape.
15. Using a parting tool, cut the base height to 1/4" at the narrowest point.
16. Turn a slight cove in the bottom of the base, leaving adequate support to finish turning.
17. Using the roughing gouge, turn the top end of the candlestick to a cylinder.
18. Using the bowl gouge, turn the top of the candlestick to a cigar shape. See Figure 7.
19. Make the final cuts with the spindle gouge.
20. With the lathe off, but still mounted on the lathe, tweak the shape using "non-creative carving".
21. Turn on lathe and finish power sanding this section.
22. Do any necessary hand sanding and apply a finish.
23. Reduce the waste on the tailstock end and cut off with a Japanese saw.
24. Carve of the waste on the base and sand.
25. Remove the plug and apply a finish. See Figure 8 for the finished candlestick.

### Award Statue

1. Mark the lines and centers on the blank as shown in the attached "Award Statue" drawing.
2. Mount the top at the headstock.
3. Mount on the 1 - 1 centers to turn the front of the figure first.
4. Cut shape shown in Figure 9 using the bowl gouge, cutting down 1/2" at headstock end and a tight cove at the tailstock end.
5. Lightly turn the highest point until you touch the front surface. This is the point for the bellybutton. Mark this point with a pencil.
6. Shape both ends to meet this point.
7. Figure 10 shows the relative position of this profile compared to the next profile to turn on 2 - 2 centers.
8. Remount on 2 - 2 centers.
9. Use the roughing gouge to remove excess wood on corners of block.
10. Use the spindle gouge to shape the shoulders.
11. Cut slightly in below the butt to form a line
12. Shape the butt to be the high point (5/8" below the flats plane).
13. Shape this curve as shown in Figure 10.

Figure 6 First Profile of Candlestick

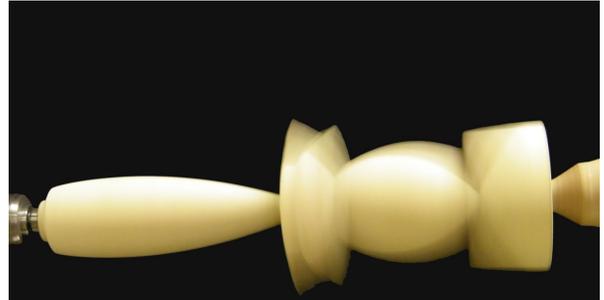


Figure 7 Second Profile of Candlestick



Figure 8 Finished Candlestick

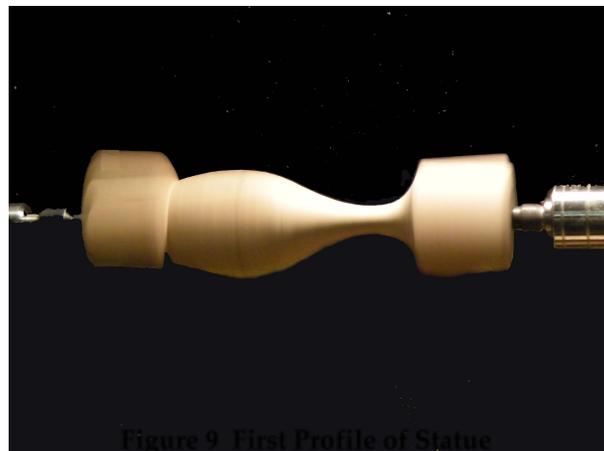


Figure 9 First Profile of Statue

14. Use the center point on the base and center 3 on the head end to turn the side of the head and the shoulder.
15. Repeat this step using center 4 on the head.
16. Use the center point on the base and center 5 on the forward top of the head to turn the top of the head.
17. With the lathe off, but still mounted on the lathe, tweak the shape using "non-creative carving".
18. Finish shaping and sanding between centers.
19. Turn the waste portion of the head down and cut off with a Japanese saw.
20. Carve and sand off the waste stub. Finish as desired. See Figures 11 and 12.

**Figure 10 Profiles Compared to Master**



**Figure 11 Front of Award Statue**



**Figure 12 Side of Award Statue**