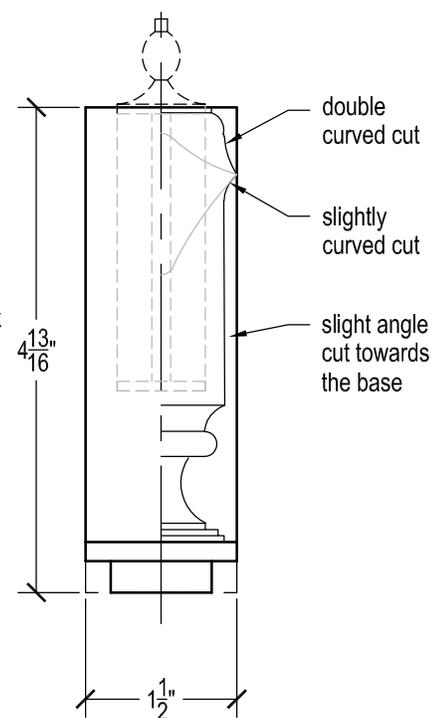
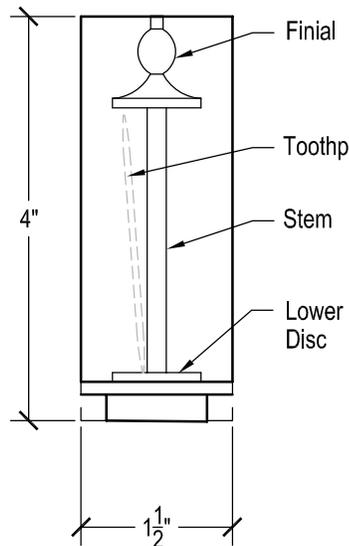
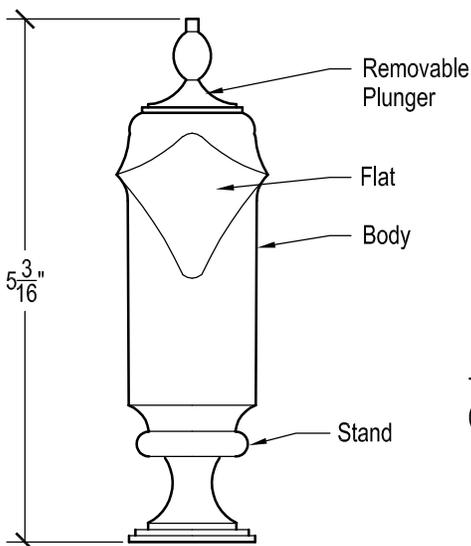
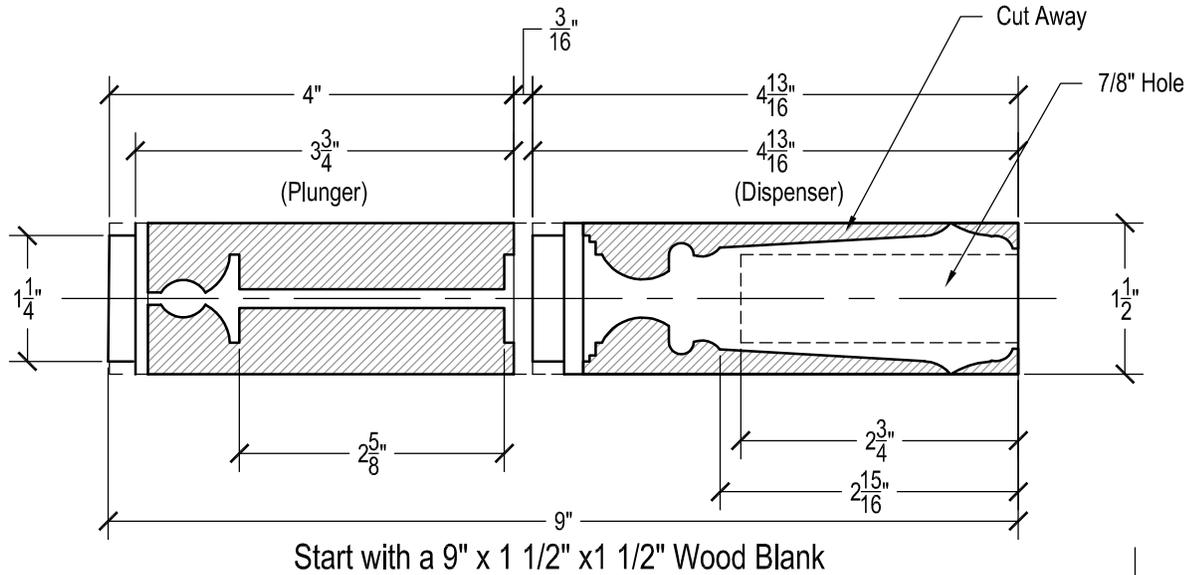


Square-to-Round Toothpick Dispenser



'Square-to-Round' Toothpick Dispenser

What you need:

Wood blank w/ square corners and nice flat sides – 1 ½" x 1 ½" x 9"+ long

7/8" Forstner Drill Bit

Jacobs chuck for drill bit

Chuck w/ small jaw set (aprox. 1" dia +)

Drive Center

Live Center + screw on 'cone'

Cut-Off tool

Spindle gauge

Roughing gauge (optional)

Thin blade saw

1. Mark the centers of each end of the wood blank and secure between centers. Turn a 1-¼" dia tenon on the live center end of the blank (leaving the remainder of the blank square). Remove the blank and put the chuck on the lathe.
2. Tighten the tenon end of the blank in the chuck and clean up (square off) the right end of the blank. Using the Jacobs chuck with the 7/8" Forstner bit, drill a 2 ¾" deep hole in the center. Put the cone on the live center and tighten into the drilled hole.
3. Markoff the overall length of the toothpick dispenser (4 ½" from right end of blank) and use the cut-off tool to turn a 1" dia tenon to the left of that mark. Cut off the dispenser portion of the blank on the left side of the tenon. I use a saw to cut the very last bit of the cut, allowing the live center to stay engaged the whole time. This is the Dispenser part of the project. Set it aside for now.
4. Clean up (square off) the portion of the blank that is remaining in the chuck. Remove the cone from the live center and engage it against the blank. This is the Plunger portion of the project.
5. Turn the plunger blank to round and down to about 1" dia.
6. Using a cut-off tool, turn the right end of the blank slowly down to the 7/8" dia of the hole drilled into the dispenser blank. Back off the live center and test the fit using the dispenser blank and trying to get a nice tight fit as you slide it onto the dispenser hole. Re-engage the live center after checking.
7. Once the first 1/8" of the plunger blank is turned to fit the hole, slightly round off or chamfer the far right edge of the blank so it enters easily into the hole in the dispenser.
8. Use the cut-off tool and cut to the left of that 7/8" dia portion, turning it down to just over ¼" diameter, leaving an approx. 1/8" thick disc on the live center end (bottom of plunger).
9. Before cutting the stem too far to the left, trim the bottom plunger disc down to a 1/16" thickness. Now, work your way to the left with the cut-off tool, cutting the stem of the plunger to ¼" dia and working slowly to the left until the overall stem is 2 5/8" wide. Use a spindle gauge and sandpaper to smooth out the stem. Check to see that a toothpick fits within the open stem space turned into the plunger.
10. To the left of the stem portion, turn down the diameter to 7/8" so that it will fit into the hole in the dispenser. Back off the live center and check to see that the plunger fits correctly at both the bottom and at the top when pushed all the way into the dispenser.
11. Now, using the spindle gauge, it's time to turn the decorative top (finial) onto the plunger, shaping it carefully towards the chucked end. Once the desired shape is established, sand the plunger piece before parting it off on the left end. At this point you should be able to test the plunger fit into the hole in the dispenser piece. Set the plunger aside.

12. Tighten the square dispenser piece into the chuck and return the live center (with the cone) into the drilled hole.
13. Make a mark on the blank that is about 3" down from the right end of the blank. This mark will be about ¼" past the bottom of the drilled hole. Then make a mark that is about 1/2-3/4" down from the right end of the blank. This mark will be where the 'points' that are left will be.
14. Use the cut-off tool and make a dado cut at the mark 3" down, deep enough to leave about a 15/16" dia. This will identify where the dispenser stand will meet the body.
15. Use a spindle gauge and cut to the right of the other mark, establishing the double curve that makes up the top of the dispenser. Shape the dispenser top slowly towards the live center leaving a slight rim around the drilled hole and near the live center cone.
16. Use the spindle gauge and cut to the left of that mark. Starting with a curve and ending with a slow straight angle cut to the left towards the stand dado in the blank. There will now be 'points' left behind where the mark was. Slowly shape the dispenser base, maintaining the point, tapering down to about a 1" dia at the dado cut made that identifies the top of the stand. When you turn off the lathe, there should see four shield-shaped flats and four points.
17. Turn the remaining portion of the blank to round (where the stand will be), to about 1 1/4" dia. Make a line to identify the bottom of the stand, leaving enough space between this point and the chuck jaws to allow you to cut the piece off safely.
18. Carefully shape the stand to your desired shape. I like to make it like the base of a stem on a wine glass, with a bead in the center. Once you have the shape you want, sand the entire dispenser piece.
19. With the cut-off tool start the plunging cut that will be the bottom of the stand, then before you cut all the way through, back off the live center and use the cut-off tool to cut the piece off of the lathe. Be careful to make either a flat bottom or a slightly inward angled cut. The dispenser is now complete.
20. This is the time to sand down the flat, shield-shaped faces that remain on the dispenser.
21. Add a finish to both pieces. I typically simply add a sanding sealer, sand lightly with a high grit and then buff it with wax. About any kind of finish should work, however.
22. Add toothpicks and BOOM, you are done!