

## STEPS FOR TURNING A FANCY BOX WITH FINIAL AND CONTRASTING INSERT

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### Wood Blanks:

1. Globe blank— $2\frac{1}{2}$ " X  $2\frac{1}{2}$ " X 5", maple, poplar, or other light colored wood
2. Finial blank—1" X 1" X 6", cherry, mahogany, pear, or other darker colored wood (closed-grain wood)
3. Box insert— $1\frac{3}{4}$ " X  $1\frac{3}{4}$ " X  $\frac{3}{8}$ " (remove corners on bandsaw)

### Process:

1. Attach the insert chip to a wasteblock or to the box blank with double-sided tape and turn it round (to approximately  $1\frac{3}{8}$ "). Measure the diameter and make note of that dimension. Remove wasteblock. (An option is to pressure mount the blank between centers)
2. Mount box blank between centers, turn the blank round, and turn a tenon at both ends.
3. Part off the lid section.
4. Mount the box section and begin shaping the top  $\frac{2}{3}$ " of the exterior. Sand this portion.
5. To make hollowing easier, drill a  $\frac{1}{2}$ " hole to the depth of the box interior.
6. Use a parting tool to create the opening in the top of the box. Proceed slowly and keep matching the insert chip with the size of the hole. About  $\frac{1}{8}$ " of the chip should remain above the upper surface of the box.
7. When the insert chip fits snugly, create a small shoulder upon which the chip will rest.
8. Turn away some of the waste wood from the center of the box.
9. Use medium CA glue and glue the chip into place, matching the grains.
10. Use a parting tool and remove the center of the chip. It should be about  $\frac{3}{4}$ "-1" wide. Set aside the tiny chip as it will be used as the base of the box.
11. Begin hollowing the inside of the box. When you have about  $\frac{2}{3}$  of the box hollow, begin shaping the outside. You are going for a base diameter of  $\frac{5}{8}$ ". Complete the hollowing and sand the inside and the outside. Apply finish to both inside and outside.
12. Leave the tenon on the box then remove the box, with tenon intact, from the lathe.
13. Mount the lid blank and turn the inside profile to slightly dome-shaped. Measure the opening of the box and carefully match that dimension to the lid diameter. Keep checking for a snug fit. You may wish to adorn the inside with beads or grooves. Sand and apply finish.

14. Remove the lid and re-mount the box. Insert the lid into the box and bring up the tailstock. Remove as much of the tenon and excess wood as possible. Let the lid stand a bit "proud" of the box.
15. Sand and apply finish to as much of the lid as possible.
16. Remove tailstock and finish turning the top of the lid (you may have to tape the lid onto the box)
17. Drill a hole in the top of the lid about 1/8" deep and 1/4" wide for the finial tenon. (I do this on my drill press if the lid is not snug enough to allow drilling on the lathe.)
18. Sand the rest of the top and apply finish. Remove the lid from the box.
19. Finish turning the side of the box to 5/8" diameter at the base. Sand and apply finish.
20. Part off the box with very little undercut. (You will later be gluing the tiny chip of contrasting color to the base of the box.)
21. Change your chuck to small jaws, if you have them. If not, insert the finial blank into the center of the jaws and bring up the tailstock. Turn the outside 2" of the blank round and begin removing wood at the end of the blank to a diameter of about 3/8". Now remove the tailstock, but take very light cuts.
22. Turn the finial, sand, and apply finish. Turn the tenon, using plenty of undercut, to 1/4" then part off the finial and attach it to the lid with medium CA (or wood) glue.
23. Remount the box by expanding the jaws into the box opening. True the bottom, line up the grain, and use medium CA glue to attach the contrasting wood chip. Turn the wood chip to about 1/8" thick. The outer diameter of the wood chip will be slightly larger than the base of the box. Shape the outer edge into an off-center bead. The bottom of the contrasting wood chip can be enhanced with tiny beads or grooves.
24. Sand and apply finish.
25. Remove the box from the lathe and put the finial lid into place.

## SMALL FANCY BOX WITH FINIALS

### TOOLS/EQUIPMENT NEEDED:

- Roughing gouge
- Spindle gouge
- Detail gouge (if you have one)
- ¼" - ½" skew (not too large)
- Small hollowing tool
- Parting tool
- Spring calipers
- Vernier calipers
- Sandpaper, 120-600 grit
- Medium CA glue (if you have it)
- Quick finishes, such as wax, Woodturners Friend
- ½" drill bit or Forstner bit (optional)
- Double-sided tape
- Chuck
  - Regular jaws (to turn box)
  - Small jaws (to turn finial)
- Dust, eye protection

### EQUIPMENT FOR CLUB TO FURNISH:

- Electric drill
- Drill bits, 1/4"
- Medium CA glue
- Wood glue
- Whiteboard with markers
- Blue painters tape
- Wood blanks (for each student and a few extras)
  - Box—2 ½" X 2 ½" X 5" (medium-density wood or dense wood—maple, cherry, mahogany, mesquite, poplar, pecan, ash, walnut, etc.)
  - Finial—1" X 1" X 5" (dense wood—maple, mahogany, cherry, pecan—not open grain woods)
  - Insert chip—1 3/4" X 3/8", endgrain contrasting color