

Steve Promo: Wood Artist Bio

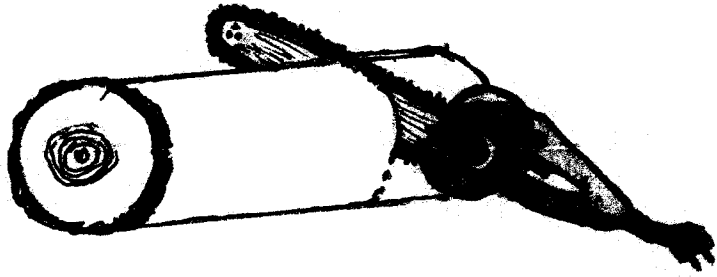


My grandfather and father were both woodworkers, so I grew up in the wood shop. Wood shop was my favorite class in high school. Later in life I supplemented teaching Medical Laboratory Technology with income from carpentry and wood art projects. I now make one-of-a-kind art pieces in wood

and am deeply involved with artistic woodturning, teaching all levels, including area high school wood shop students. I am currently president of the Hiawatha Woodturning Club, a chapter of the American Association of Woodturning.

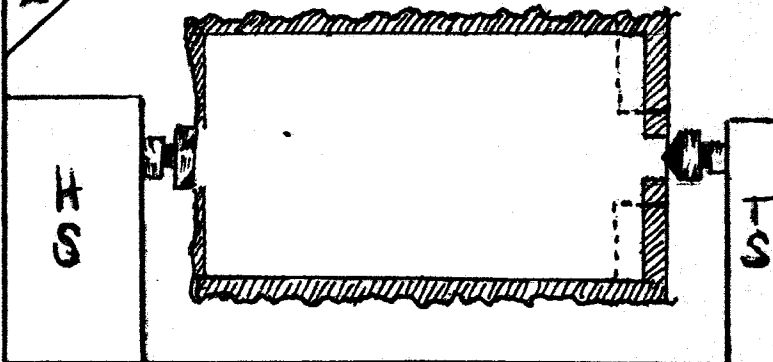


1



1. Cut the Birdhouse Blank from a Log
 - Cut to birdhouse length plus 3"
 - Do Not Use a Bandsaw for this!!!
 - Chainsaw works best
 - Try to cut @ 90deg.
 - Thick Slabwood will also work!

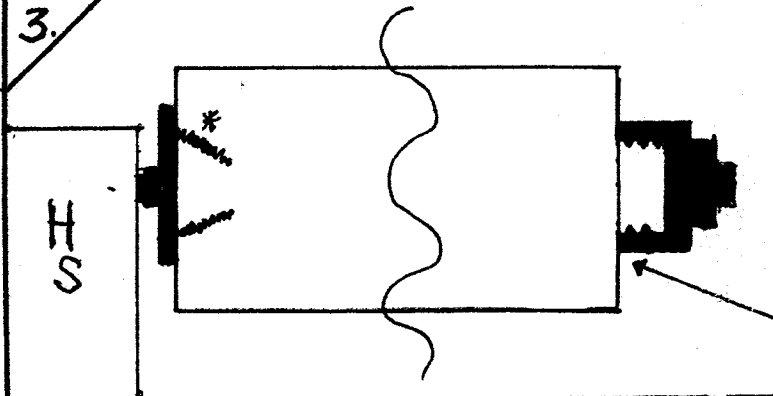
2



LATHE BED

2. Prepare the Blank for Fixin's (Optional)
 - Remove bark?
 - Mount blank between centers
 - True to a cylinder @ low speed
 - Turn one end for Fixin's
 - Leave stub to center in faceplate hole?
 - Leave big tenon for chuck to grab? - - - -
 - DO NOT USE SMALL CHUCKS
(New Powergrip jaws for Nova OK but Oneway Stronghold is Best)

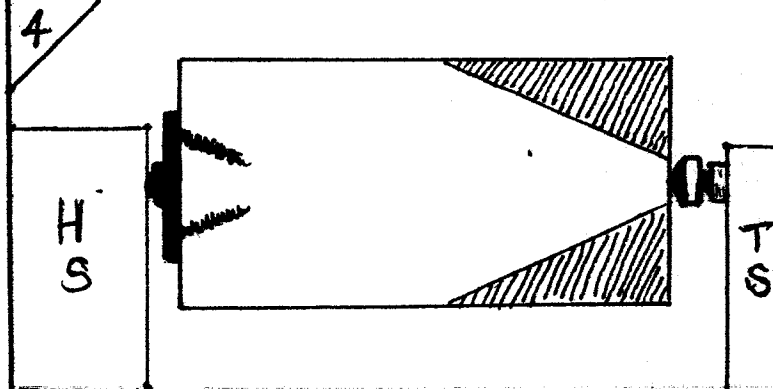
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LATHE BED

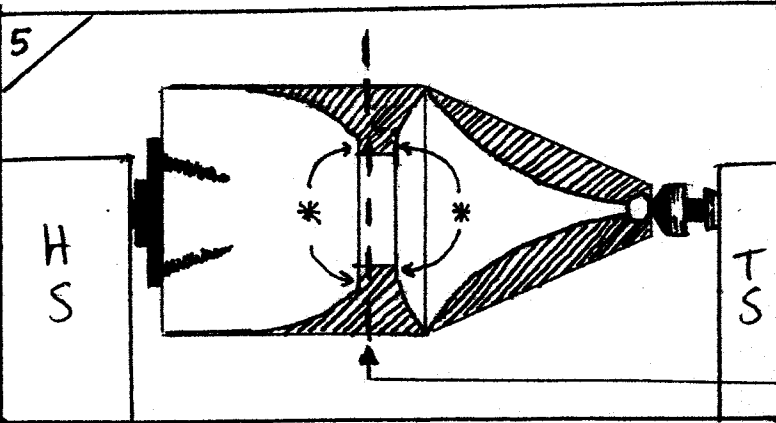
3. Mount Blank to Faceplate (or Chuck)
 - Four+ 2.5" x #14 SM screws if (wet/soft)
 - Best hold if angled to center into endgrain *
 - Use 2" long for (dry/soft or wet/hard)
 - Use 1.5" for (dry/hard)
 - Use 1" or less if Not Endgrain
 - Requires large chuck jaws!
 - Chuck jaws should touch end grain all around the tenon

4



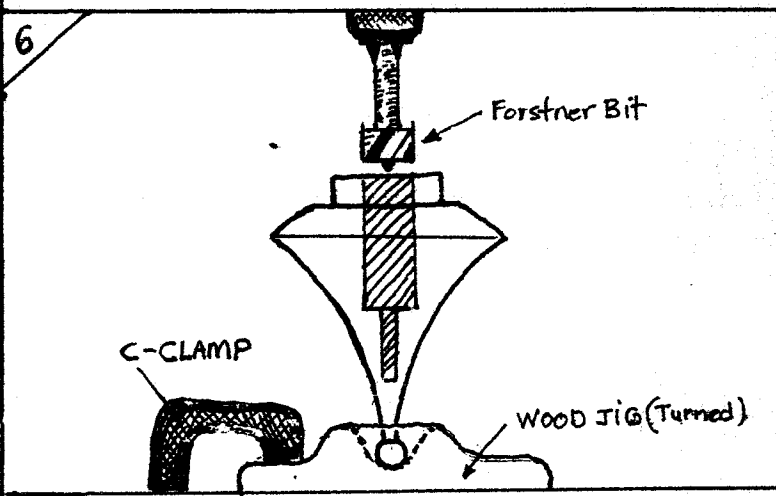
LATHE BED

4. Rough-Out Roof Section
 - Can use Bandsaw (unmounted)
 - CHAINSAW with EXTREME CAUTION!!
 - If turning off waste & Step 2 skipped, check balance @ low RPMs first.
 - If a lot of wood is to be turned off, use Large Gouge & Tailstock

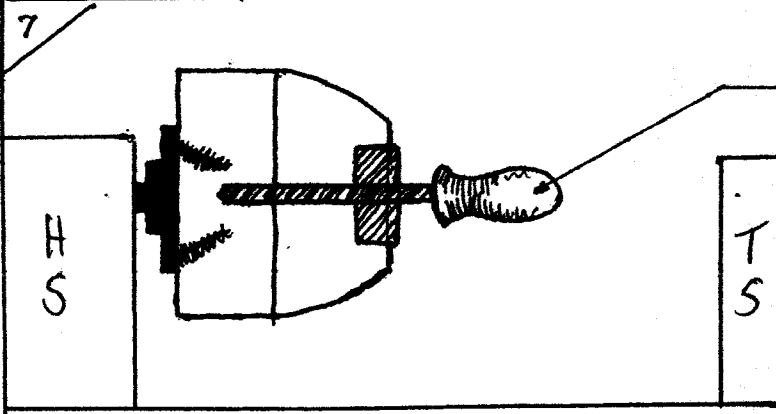


LATHE BED

5. Turn Roof to final shape & size.
 - Leave tenon on bottom a min of 5/8" long with a very slight taper, increasing in size as it goes toward the roof section
 - Leave flat mating surface (1/4") wide min. on both sections *
 - Burn Lines? Sand entire Roof well
 - turn upper half of bottom section
 - Part off Roof Section leaving a small amount of tenon on Bottom section.

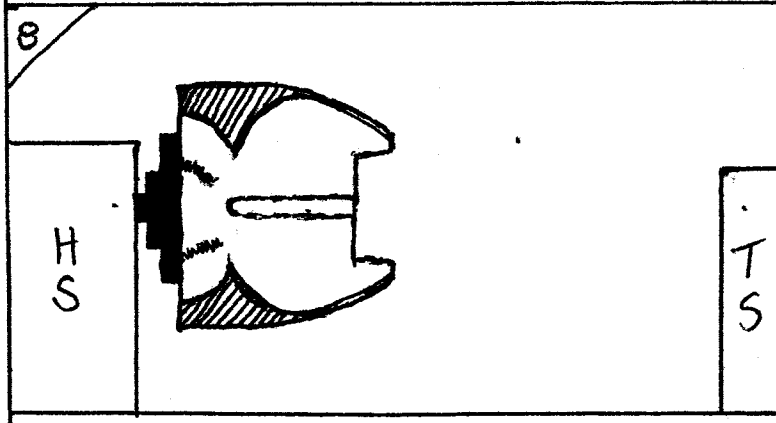


6. Drill out Roof Section Pith (underside)
 - use centering jig, 1" bit, drillpress
 - * Critical step All Hardwoods or Wet/Soft
 - suppresses checking due to rapid shrinking of very wet sapwood after sudden exposure to evaporation.
 - DO NOT DELAY THIS STEP
 - may drill further up with smaller bit
 - Hold in plastic bag if delay in sealing
 - seal all end grain with Wood Sealer ASAP!



LATHE BED

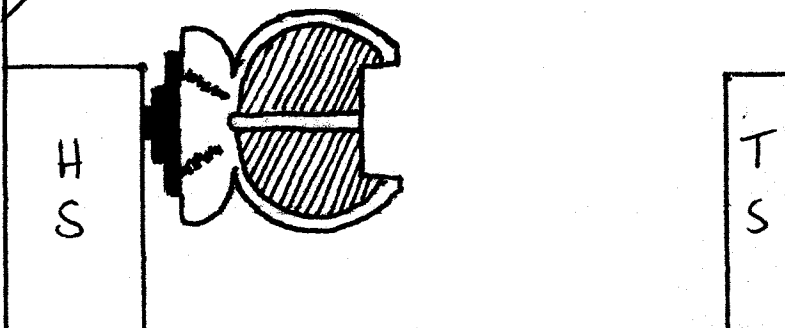
7. Turn mortise for Roof Tenon in Bottom
 - drill bottom for final depth
 - mark mortise ID with dividers or use tenon stub OD for size.
 - turn a shallow mortise for trial fit with roof tenon
 - Enlarge Mortise VERY SLOWLY
 - REPEAT FITTING w/tenon OFTEN
 - Turn a slight taper in mortise walls to match taper on roof tenon



LATHE BED

8. Refine Exterior of Bottom Section
 - final turn top of bottom section
 - reduce diameter where bottom meets the scrap block
 - leave at least 2" of wood connecting scrap & bottom until hollowed out.

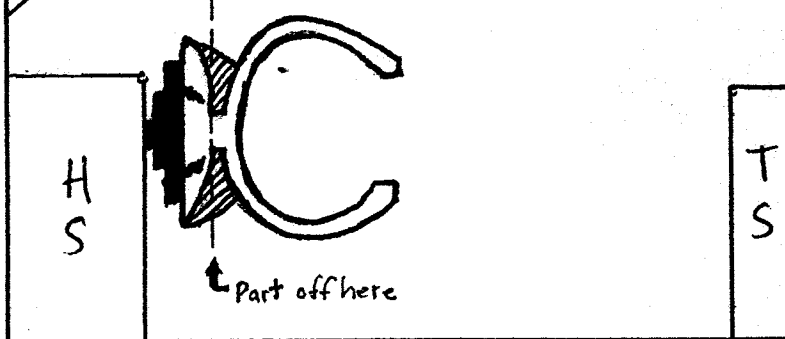
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LATHE BED

9. Hollow out Bottom Section
- cut with grain if possible
 - 1/4" wall thickness--less if Hardwood
 - Slightly thicker at rim of mortise??

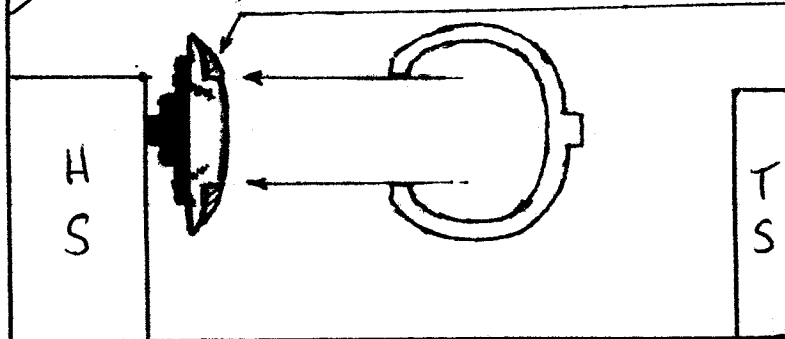
10.



LATHE BED

10. Separate Bottom From Scrapwood *
- Reduce connection, sand & part off
 - allow extra wood for finials, etc
- * can change to shorter screws if needed (replace them one @ a time - same size#)

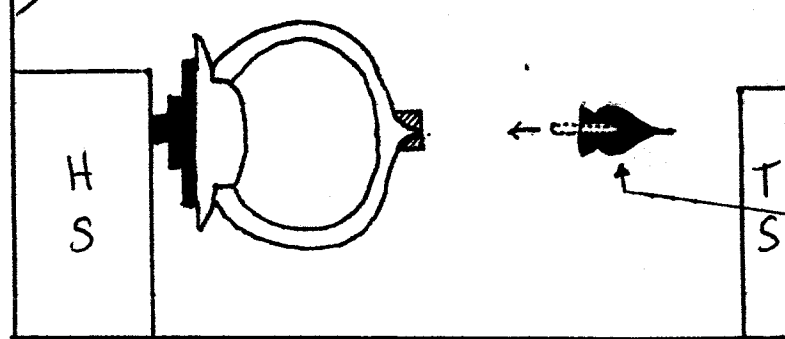
11.



LATHE BED

11. Reverse Chuck the Bottom
- turn tapered tenon on scrapwood
 - bottom should jam on snugly & create a suction fit
 - reduce OD if too tight. Turn? Sand?
 - lengthen tenon if you remove too much & jam fit becomes too loose
 - Reverse mount (jam on) the bottom
 - use a few drops of hot melt?

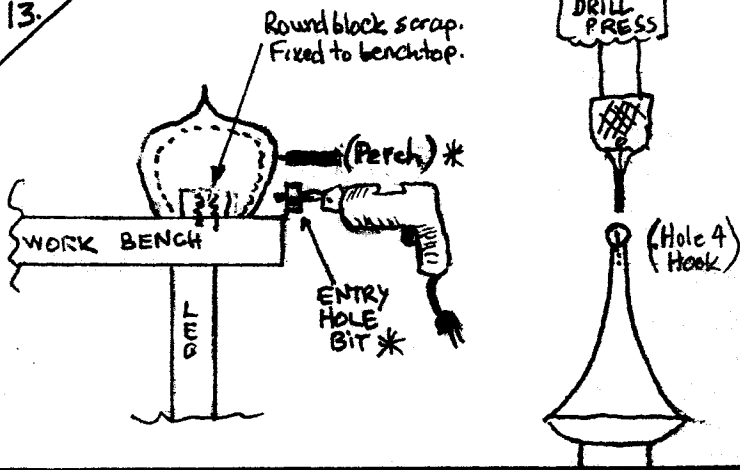
12.



LATHE BED

12. Turn Underside of the Bottom section
- This is an artistic decision!!
 - Smooth bottom? Pointed?
 - Finial from remaining wood?
 - Glue on another color of wood?
 - Contrasting colors= most impact.
 - If adding a finial, use a dowel to strengthen the glue joint to bottom
 - bottom signature?
 - Remember to turn, sand & seal or turn, sand, & bag if you cannot complete project @ this stage.

13.

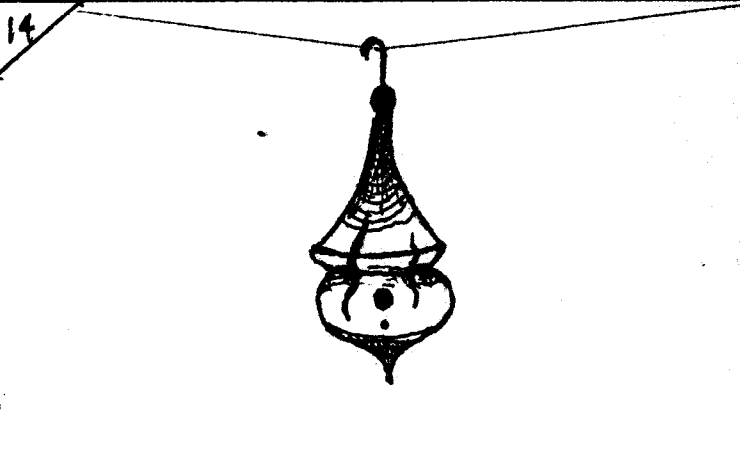


13. Drill Holes for perch, entry, & Hook

- see books for hole location & size
- match hollow size to bird species

* Brad Points & Forstner bits best for this

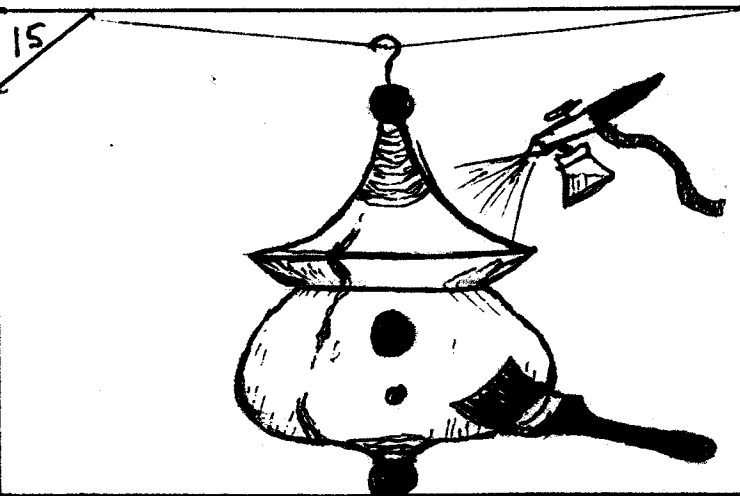
14.



14. Assemble with glue or screws

- mark for grain alignment? Apply to Tenon!
- hot melt glue works well Work Quickly!
- polyurethane glue best if loose fit
- Apply finish on lathe? (low speed)
- * seal interior if green/hardwood!

15.

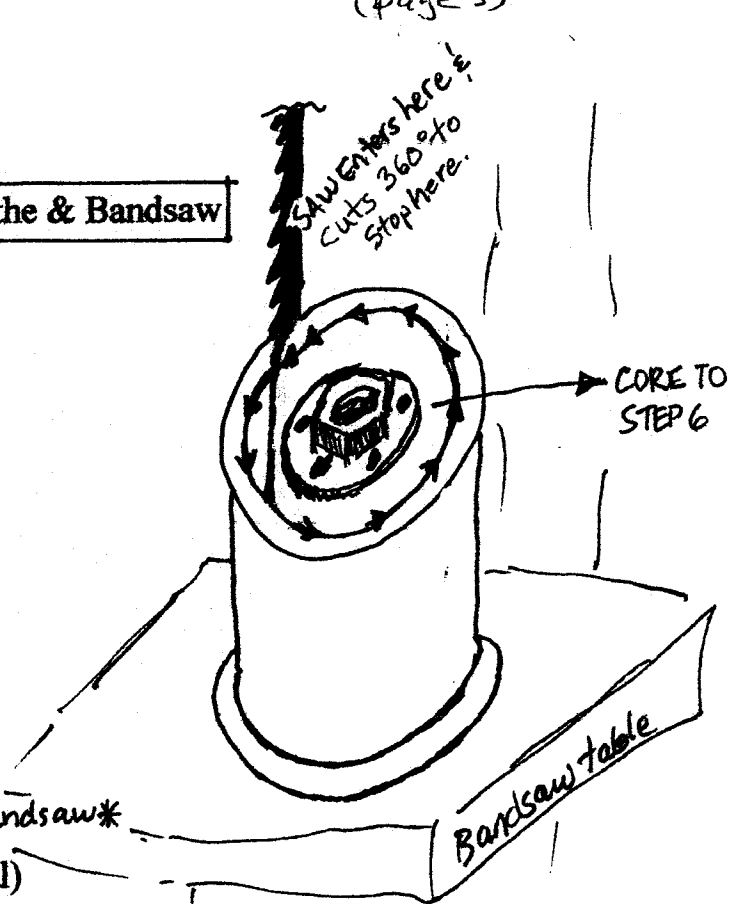


15. Install Perch, Hook & Varnish

- branches or twigs nice for perch
- brass or stainless hooks very nice
- Boat Varnish (Marine Spar) has high amts of UV blockers for best durability outdoors (Thicker is better)
- 3 to 6 coats brushed on more if thinned to spray on, sand between coats
- can also use paints (Green is best!)
- finish is time consuming.....

How to make Hollow Cylinders with Lathe & Bandsaw

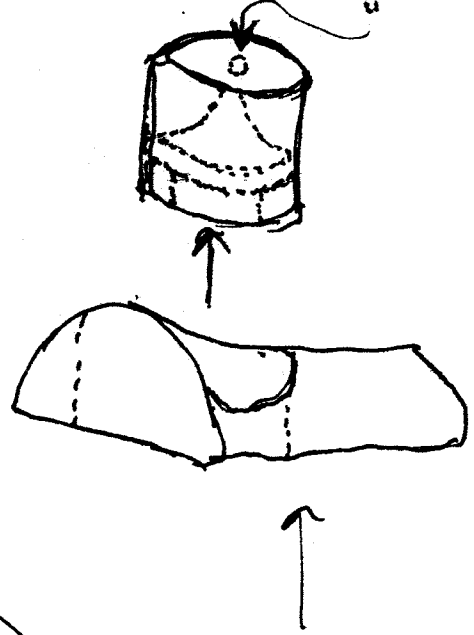
1. Cut Log to finished length + 1"
 - Chainsaw is best
 - Bandsaw should NOT be used
2. Truing Blank for Turning
 - Mount log between center
 - Remove bark as needed
 - Start lathe @ low speed
 - Turn to true cylinder
 - dress both ends as far as possible
 - leave stub to match faceplate bore?
 - leave larger stub for chuck to grab?
 - turn final outside shape, mark for bandsaw*
3. Mount to faceplate or chuck (optional)
 - Start lathe @ low speed
 - Return to true cylinder if necessary & turn to shape.
 - Dress end of blank nearest headstock @90 degrees to lathe axis as close to the faceplate as you can.
 - Dress tailstock end of blank dead flat to slightly concave (use straight edge)
 - *- Touch a pencil to end grain nearest the headstock about 1/4 inch in from the OD of the spinning blank. This will be the thickness of the cylinder walls.
4. Remove the Blank from the Lathe
 - faceplate/ chuck can be left on if it fits under the bandsaw guides.
5. Bandsaw around the core
 - Place on bandsaw table, pencil line up
 - Choose a place to enter cylinder matching a grain line or on the worst (back) side of cylinder
 - Saw into line and around circle



- Shut off bandsaw
- Spread wood @ entry cut & remove blade thru entry cut kerf.
- Glue overlap together right away

6. Return core to lathe to turn the next cylinder exterior from the core wood, repeating pencil marks and bandsawing

💡 Add on final ball



TOPS & BOTTOMS

bandsaw hollowed cylinder (seam in back) Glue seam before making roof & bottom plugs



- THICK SLAB WOOD IDEAL!
- TURN BETWEEN CENTERS OR E chuck or faceplates
- TURN TENONS TO MATCH I.D. of glued-together hollow cylinder.
- can also stack laminate woods for colored bands or paint over scrap 2x6's etc.

