

William D. Kandler

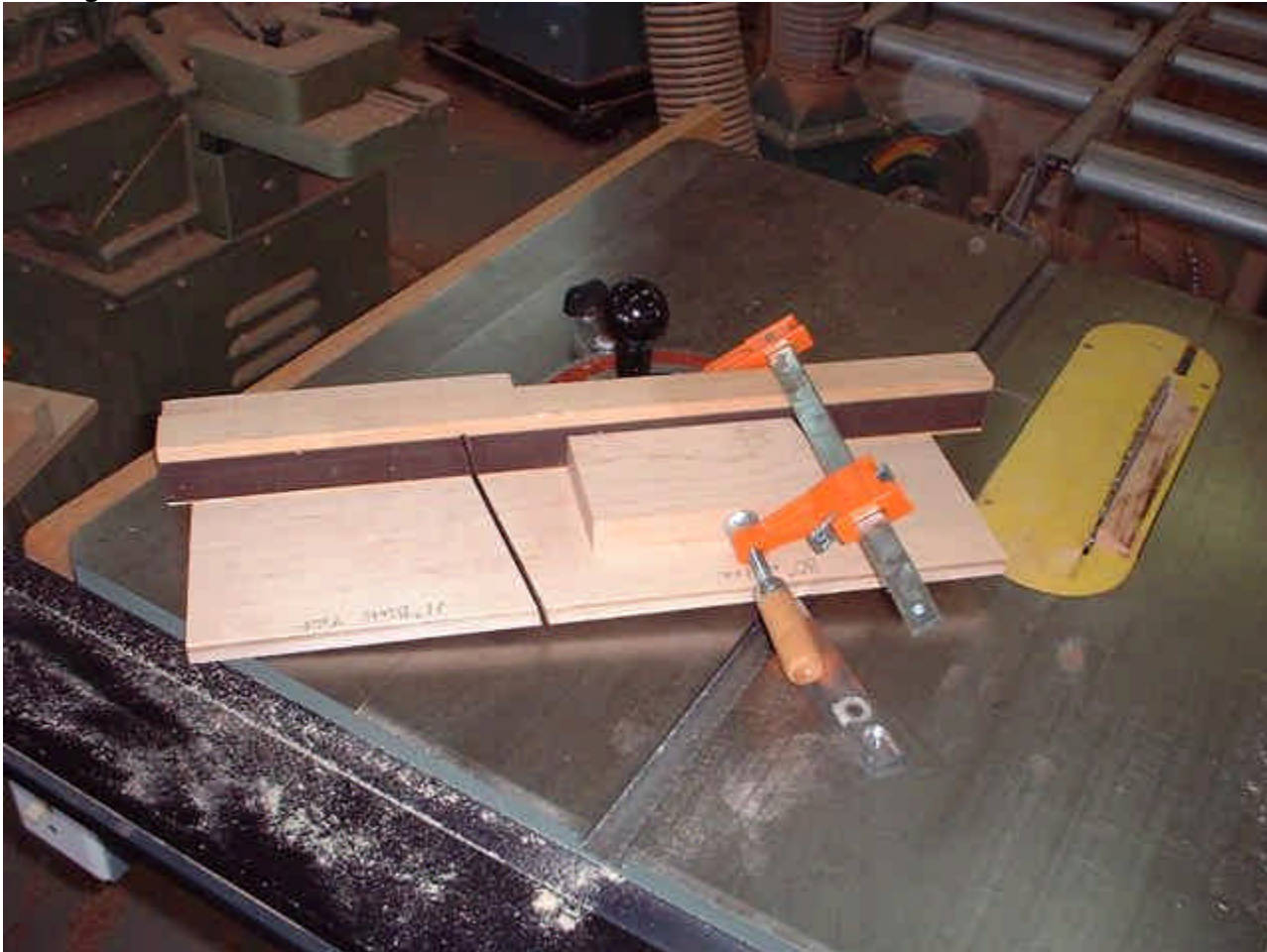
From: "bill" <bstehmy@cox.net>
To: <Undisclosed-Recipient;:>
Sent: Sunday, December 05, 2004 9:18 AM
Subject: Fw: compound staves 12 sided.

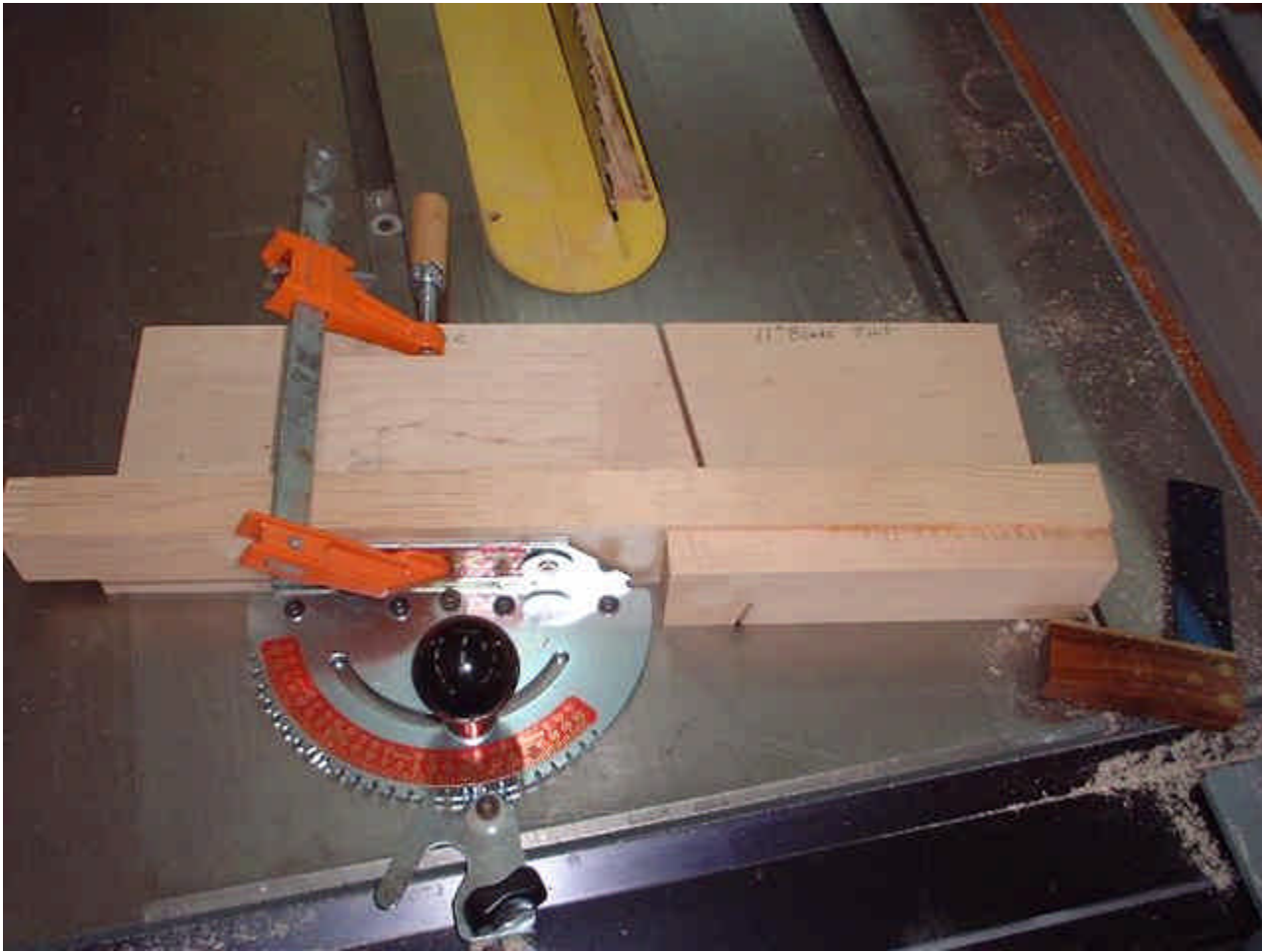
Enjoy...

A simple approach to compound staves. I sought to find easily repeatable settings without making difficult jigs.

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1. Make an auxiliary fence for your miter. Mine is 18" wide and extends at least 4" out to the blade. I recommend 1 1/2" piece for the back rail and if you look close I also glue an additional piece behind that so I don't cut thru the fence. I also like sand paper glued to it as that keeps segments from moving.





2. Cut some pine or other scraps to about 1 1/2" width and 2" length. You will need at least 12.
3. Set your miter for 10 degrees(80 on some miters).
Set your blade tilt to 11 degrees.
4. Cut 6 test segments... you can see how I cut them a little further down.
5. Glue pieces together with a simple rub joint. let set a few moments then glue 3 pairs together.
6. When you have 1/2 ring glued, (6 pieces) test the flatness of the 1/2 ring on a flat surface.



7. notice the gap on the left half ring, if you encounter this, adjust your blade just a little either way and keep trying until a half ring sits flat. Mark that blade adjustment on your saw for future reference. They do not have to be absolute perfect.... I cover that later.



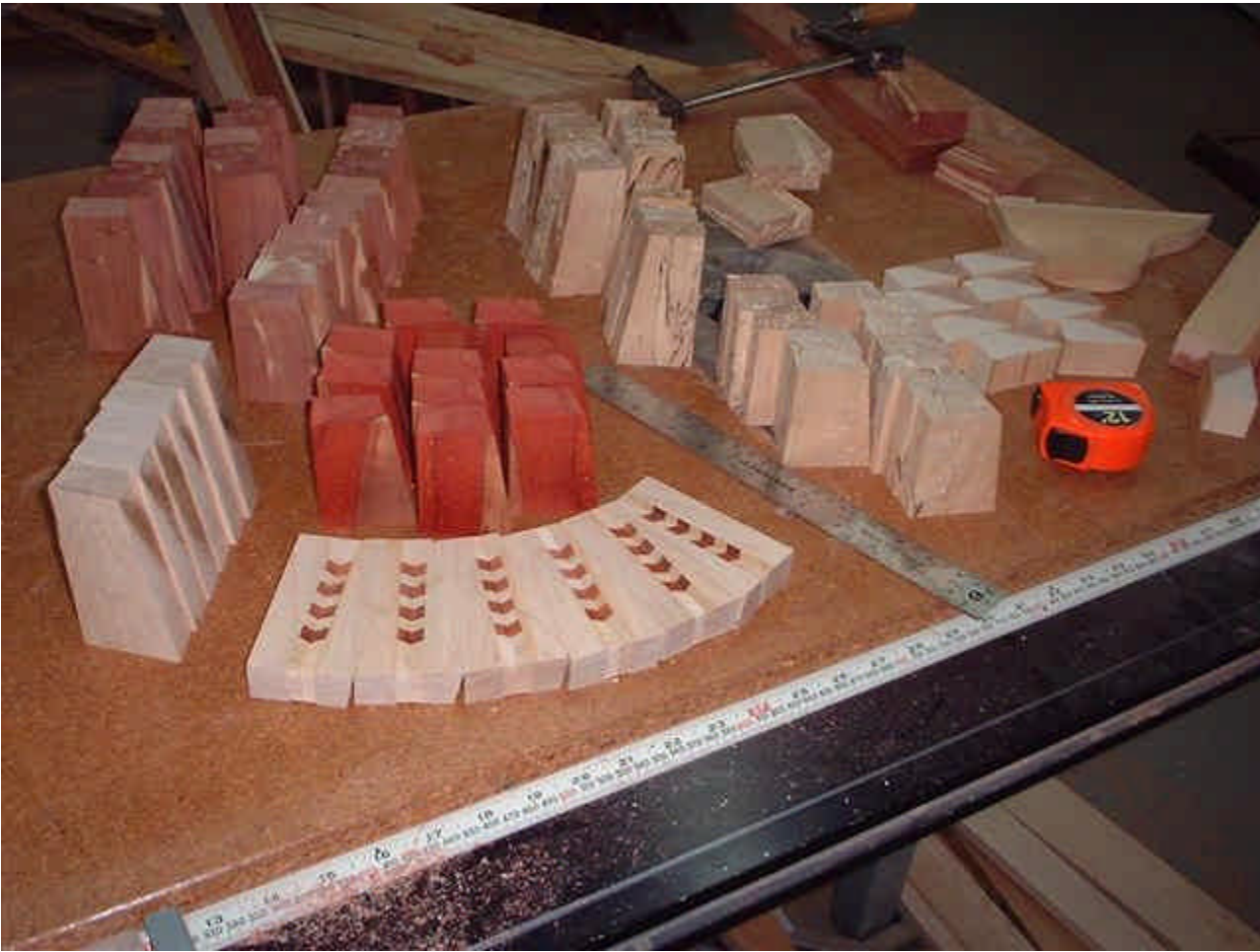
8. Cut 12 pieces 2" wide x 3 3/4" for the top and 12 pieces 2" wide x 2 3/4" for the bottom. (size can vary different size bowl) 2" wide will give you a 7" x 7" bowl.
9. the following photo shows pieces for 3 bowls.



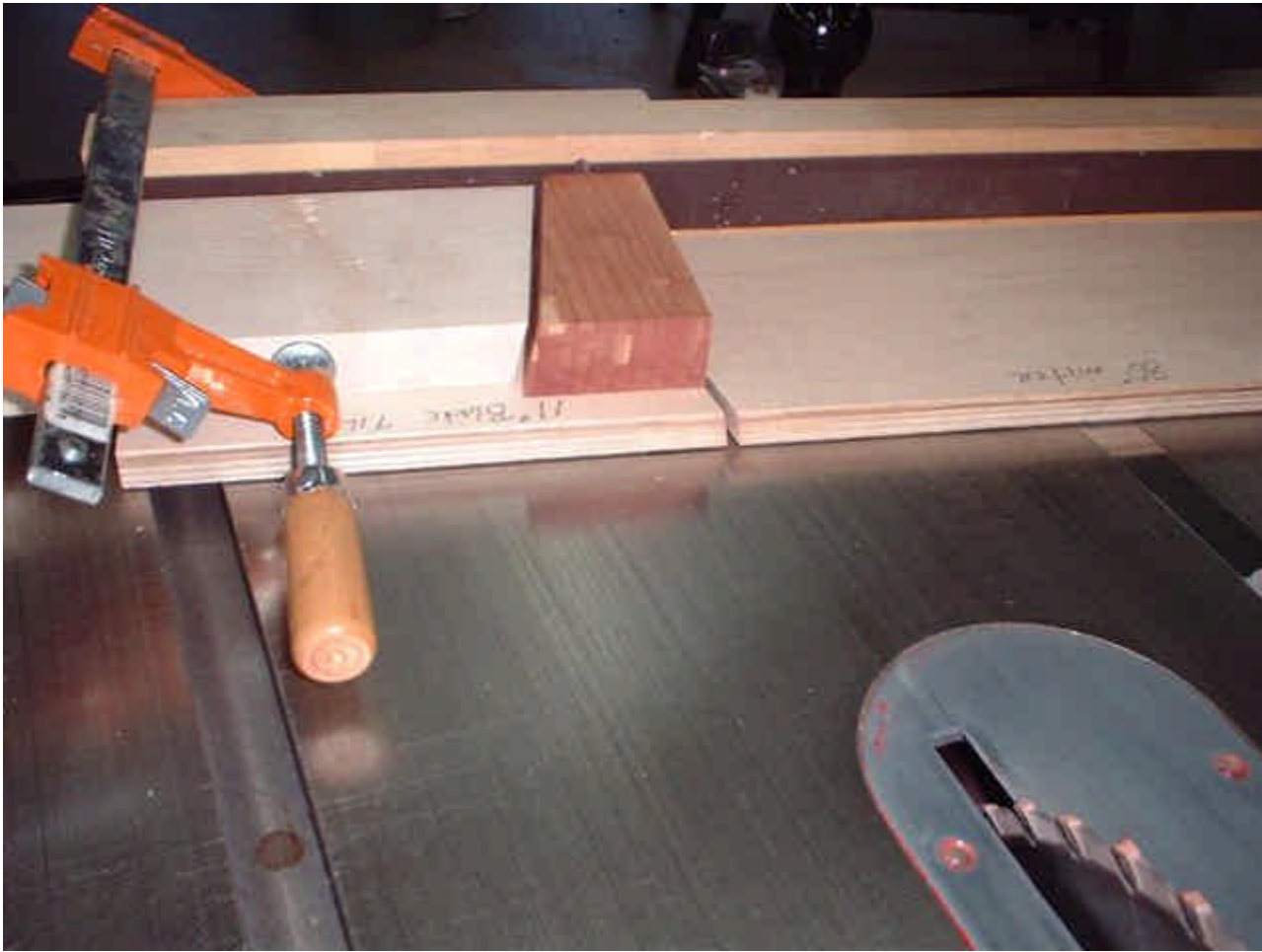
10. Cut a square stop block and clamp so that the corner of the piece will be cut. A note of safety! Make the first cut so that the narrow piece is under the tilted blade... this piece will fall away from the blade and not jam into the kerf of the fence.



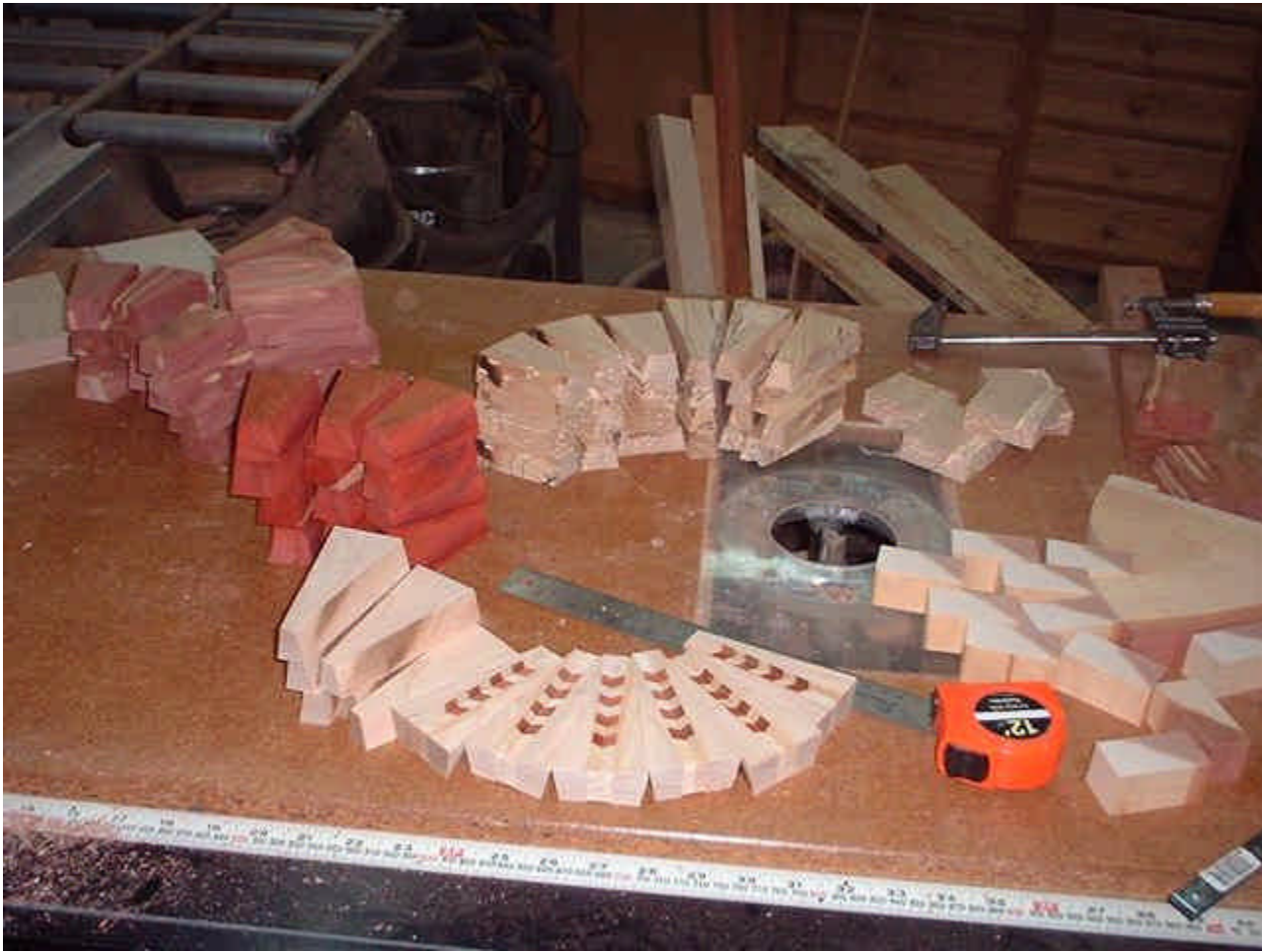
11. Make that same cut on all 24 pieces...



12. Now cut your stop block on the other side so that angle of the segment fits under it... this keeps it from moving... and the blunt of the cut piece will safely rest against the fence... see following photos.







13. I now use a block with sand paper glued to it and run and piece over to remove any burrs.



14. Glue up pieces into pairs using a simple rub joint, rub together spreading the glue until you feel the friction increase, at this point make sure you align them as accurate as possible.. as this affects the flatness of the half ring. I then wrap several rubber bands around the pairs. In the following photo you can see in the background how I apply veneer by using a piece of plastic and rubberbands.

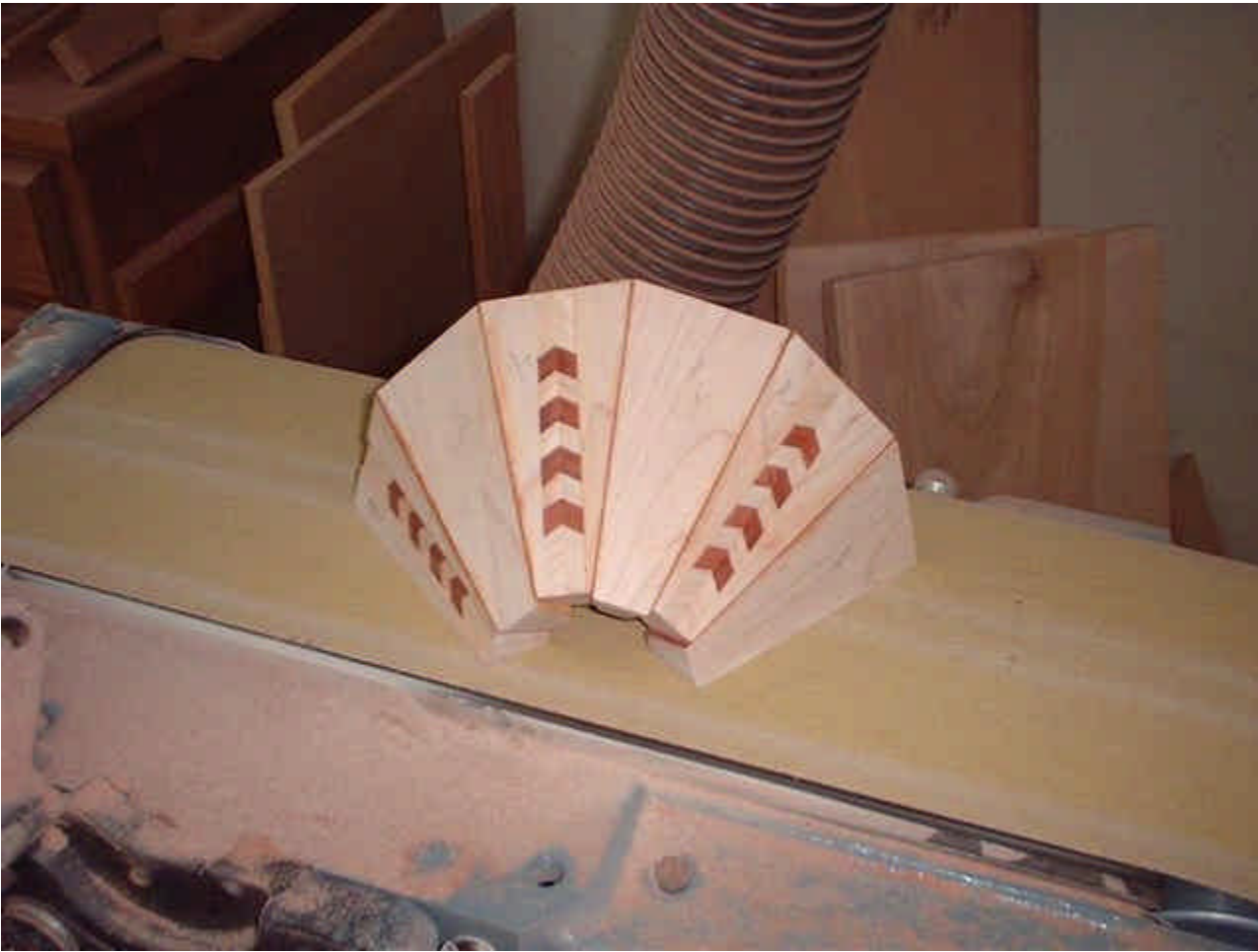


15. Using the same rub joint glue pairs to pairs and hold for a few moments then set aside for about 20 mins.

16. Then glue up to create two half rings.



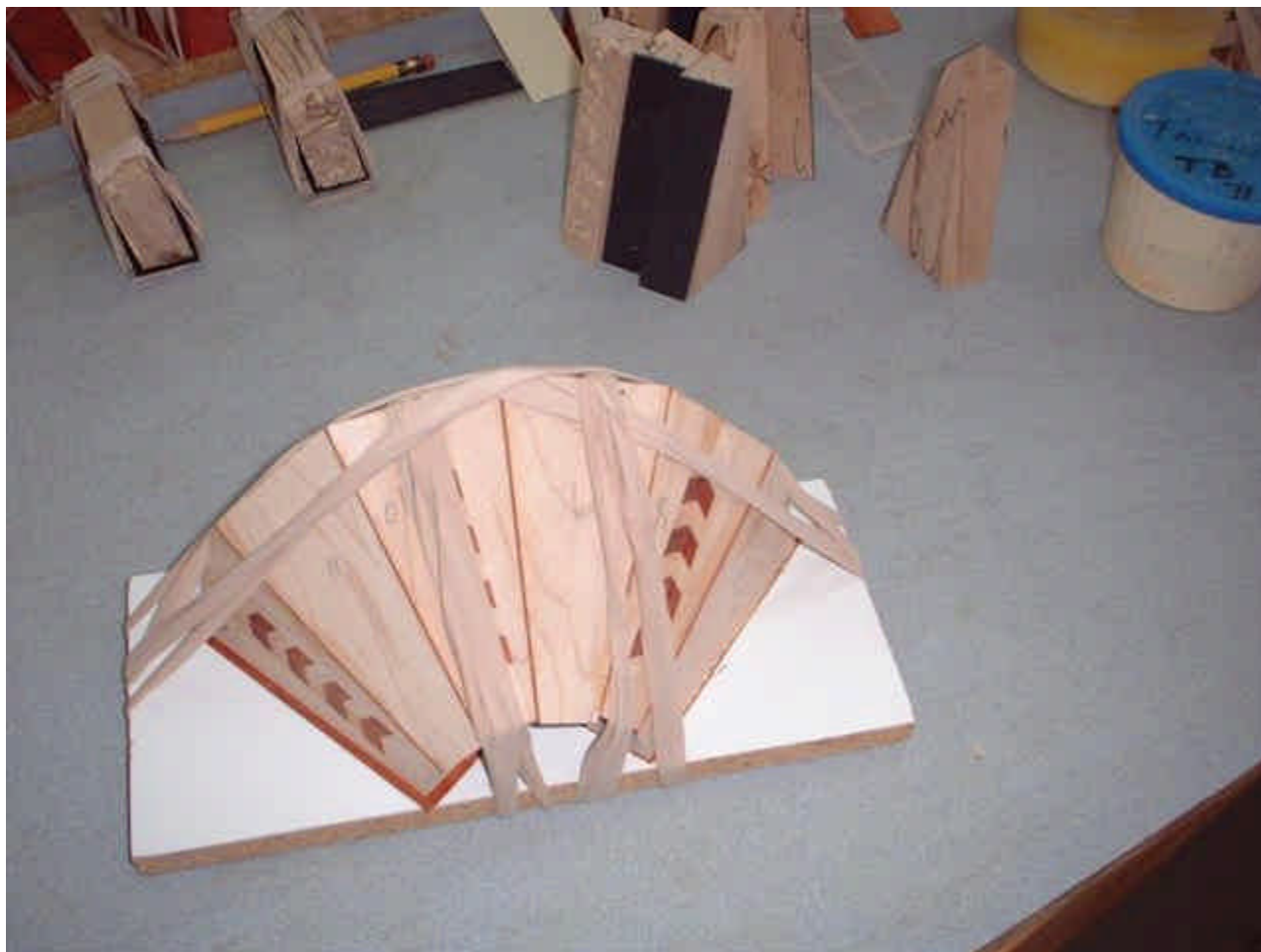
17. Half rings are never totally flat so I sand each half lightly until the two fit perfectly. If you don't have a 6" belt sander maybe you could use a friends.



18. *Glue the two half's together using the same rub joint then rubberband and let set at least an hour.*



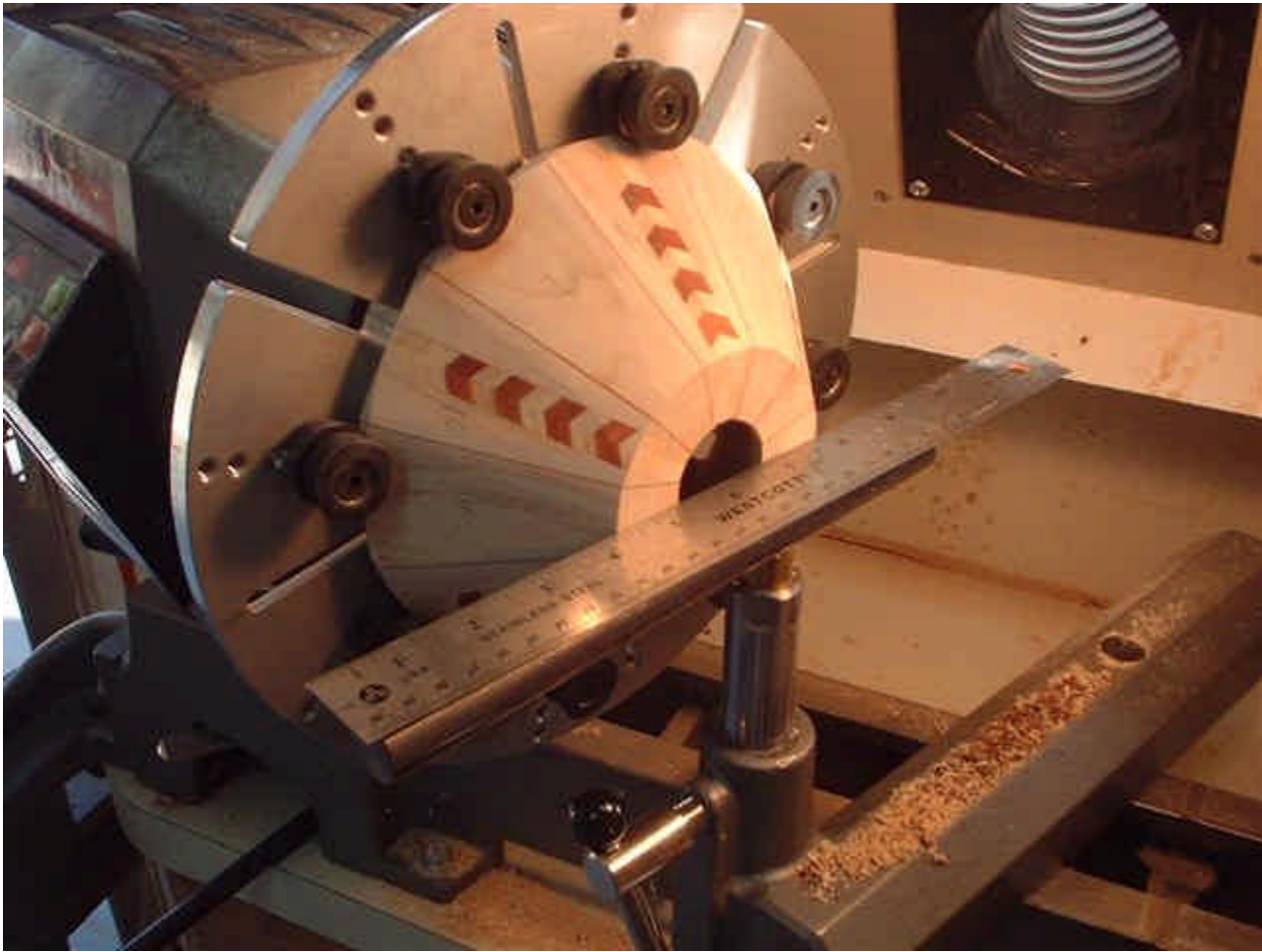
I include a photo of how I glue veneer to one half.



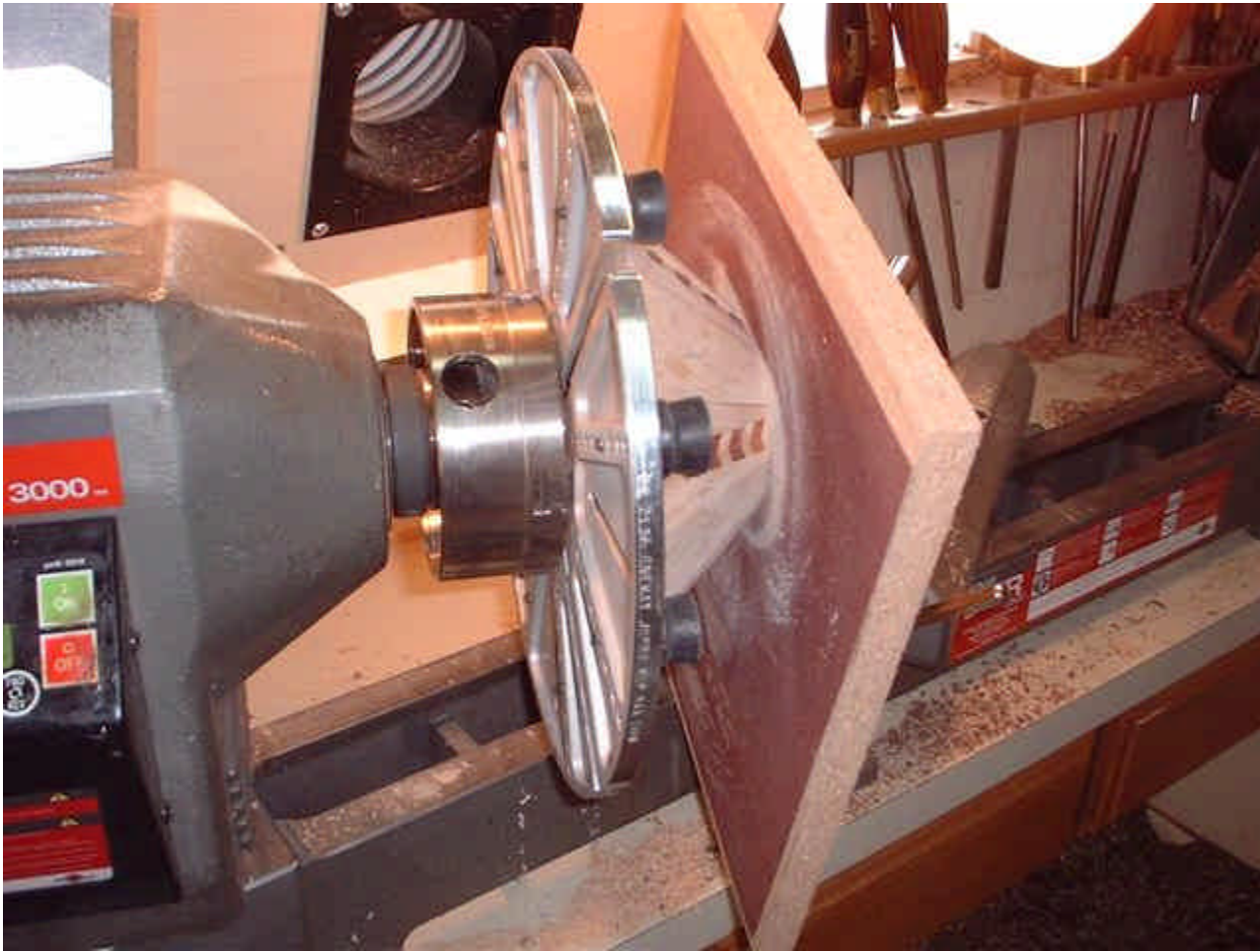
19. Now sand the half rings so they will fit flat on the chuck.



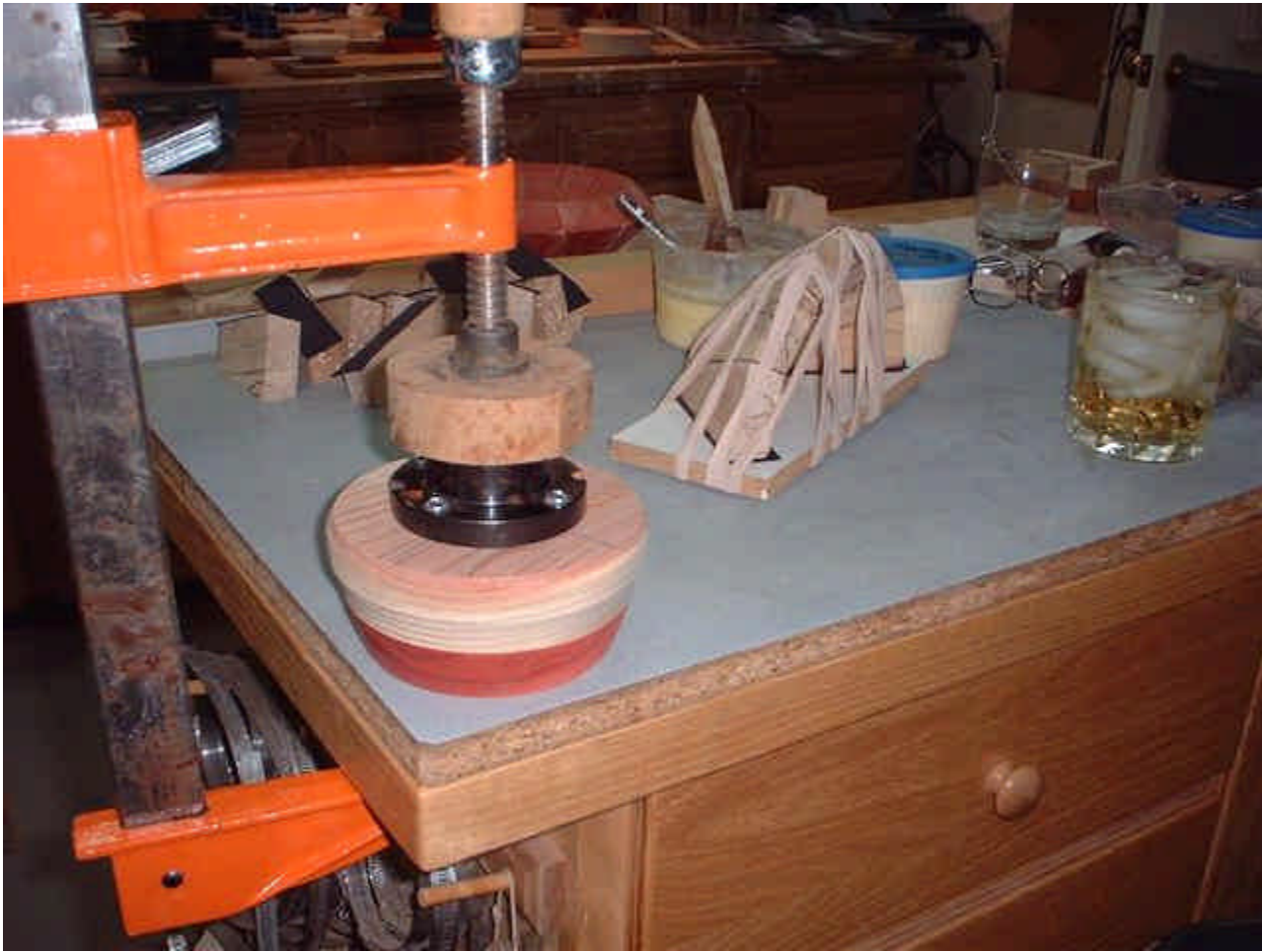
20. True up the ring on the lathe and make sure it is completely flat.

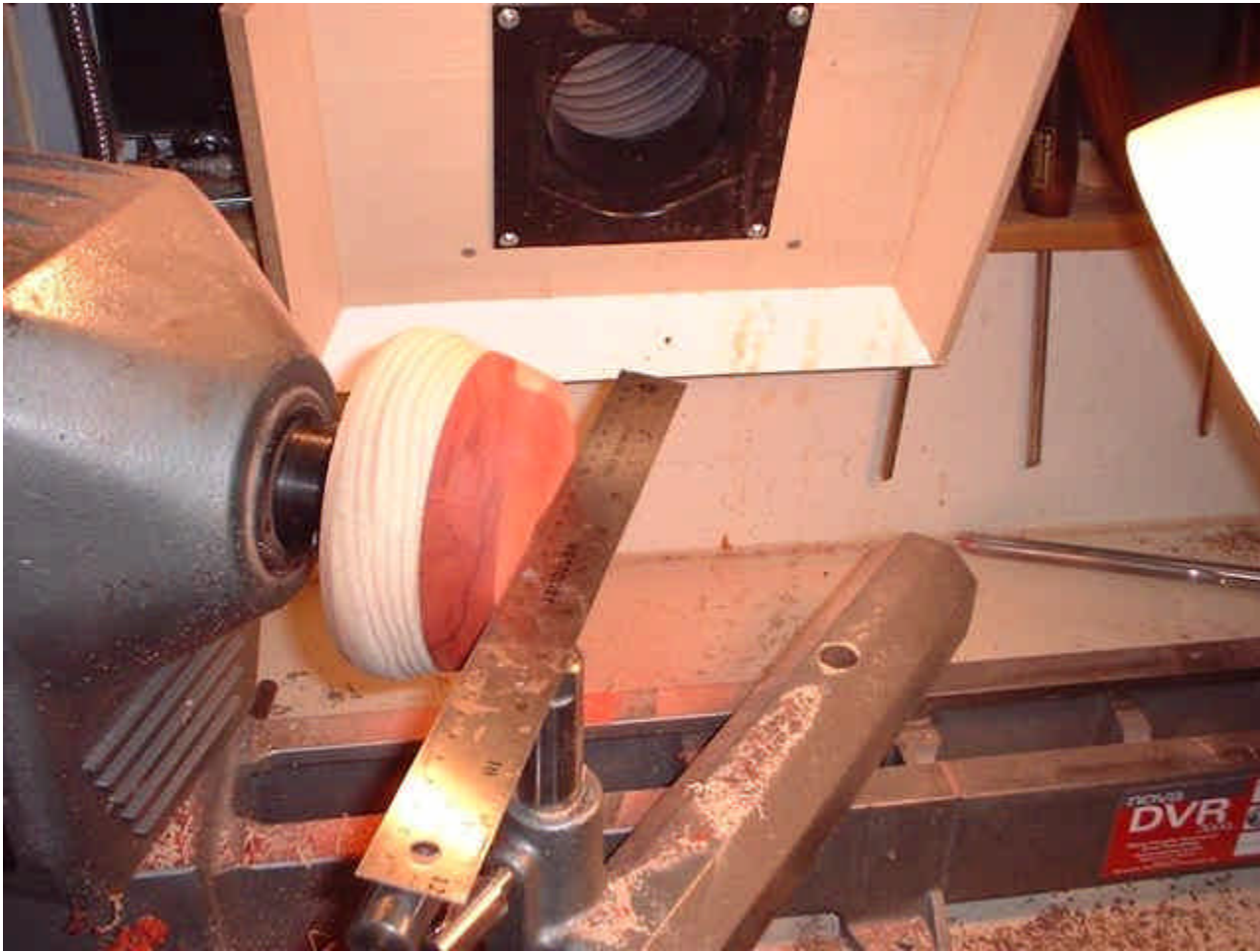


I use a piece of plywood with 80 grit for final flatness.

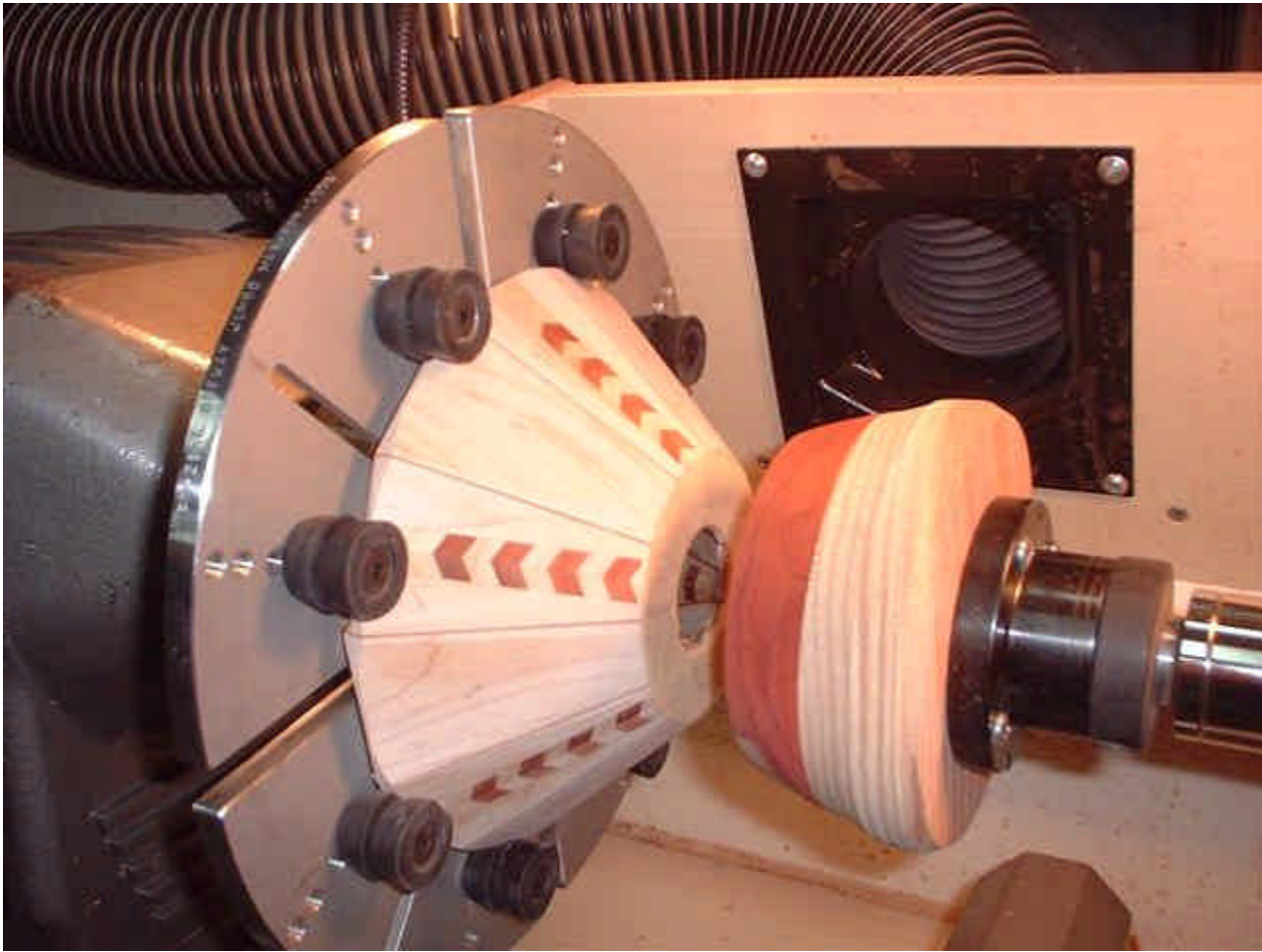


21. I use the following method for to glue up the neck and base then true those on the lath.

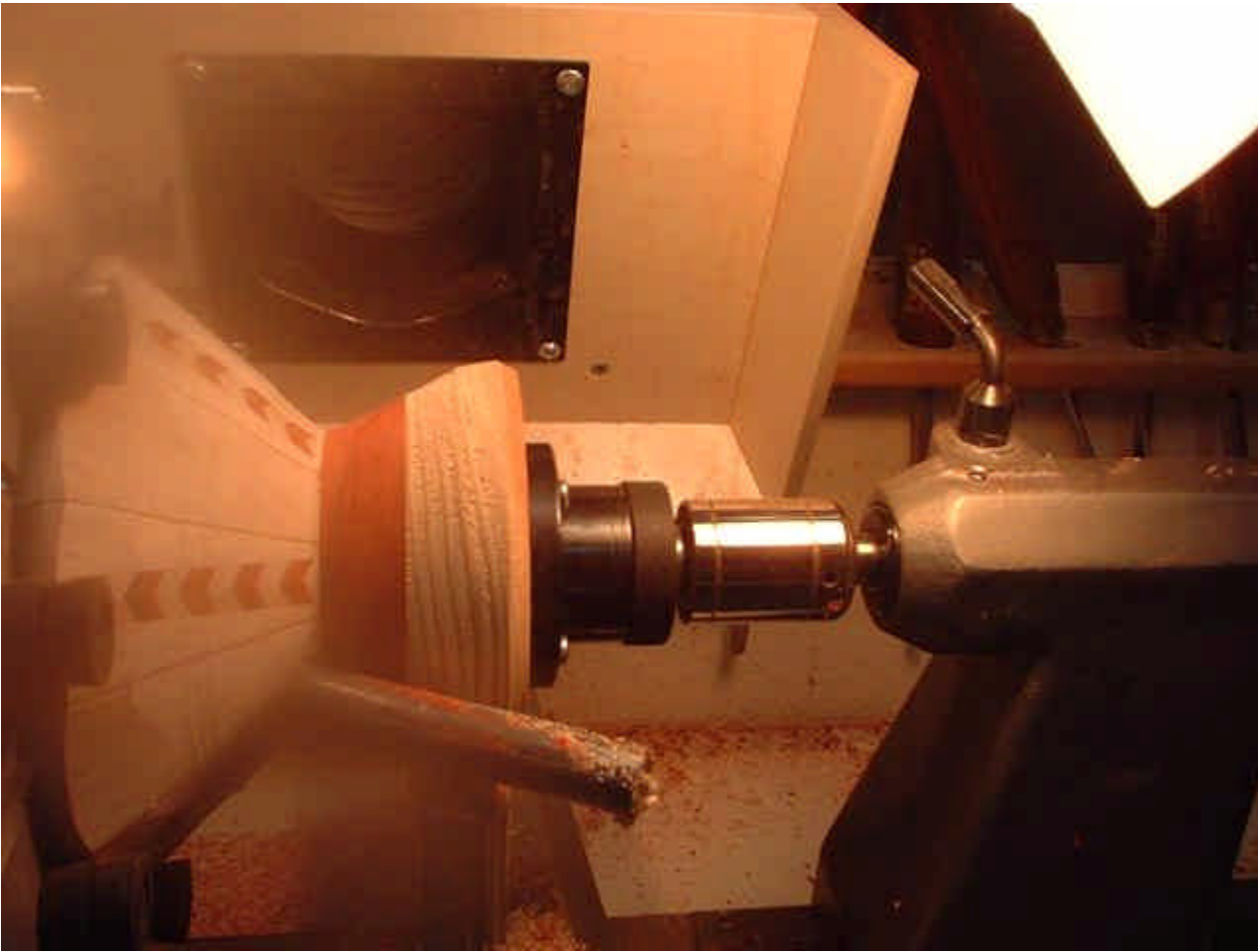




22. I do not remove the compound ring from the chuck so it doesn't move but now glue the neck to it on the lathe and after about an hour I true up the neck (or base) then release the chuck.



from here on photos are smudged on the left side???



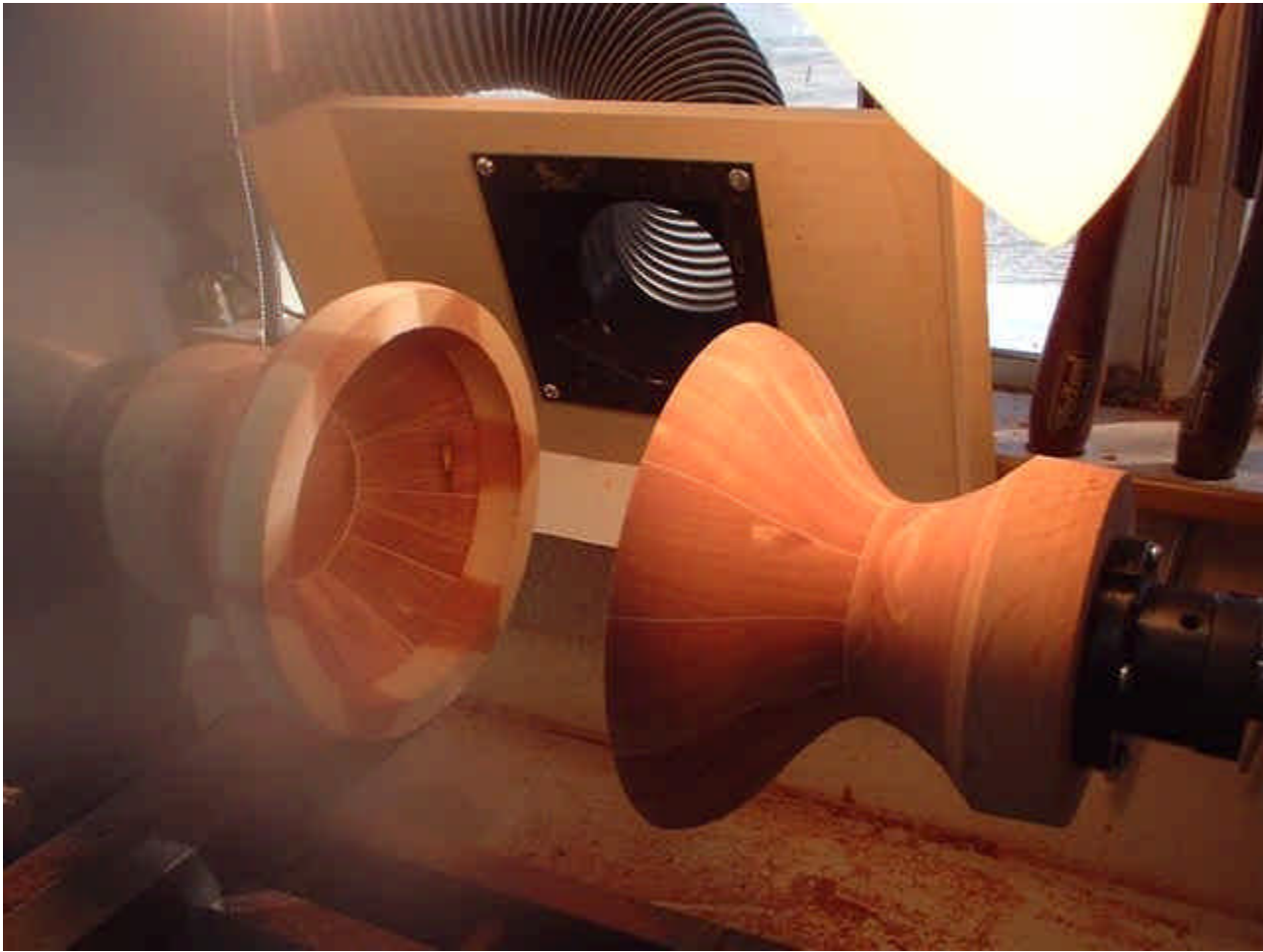
23. do the same for the base. I then rough turn the top and bottom and true and flatten each.
24. I now make a center flat segment ring and glue it to the bottom.

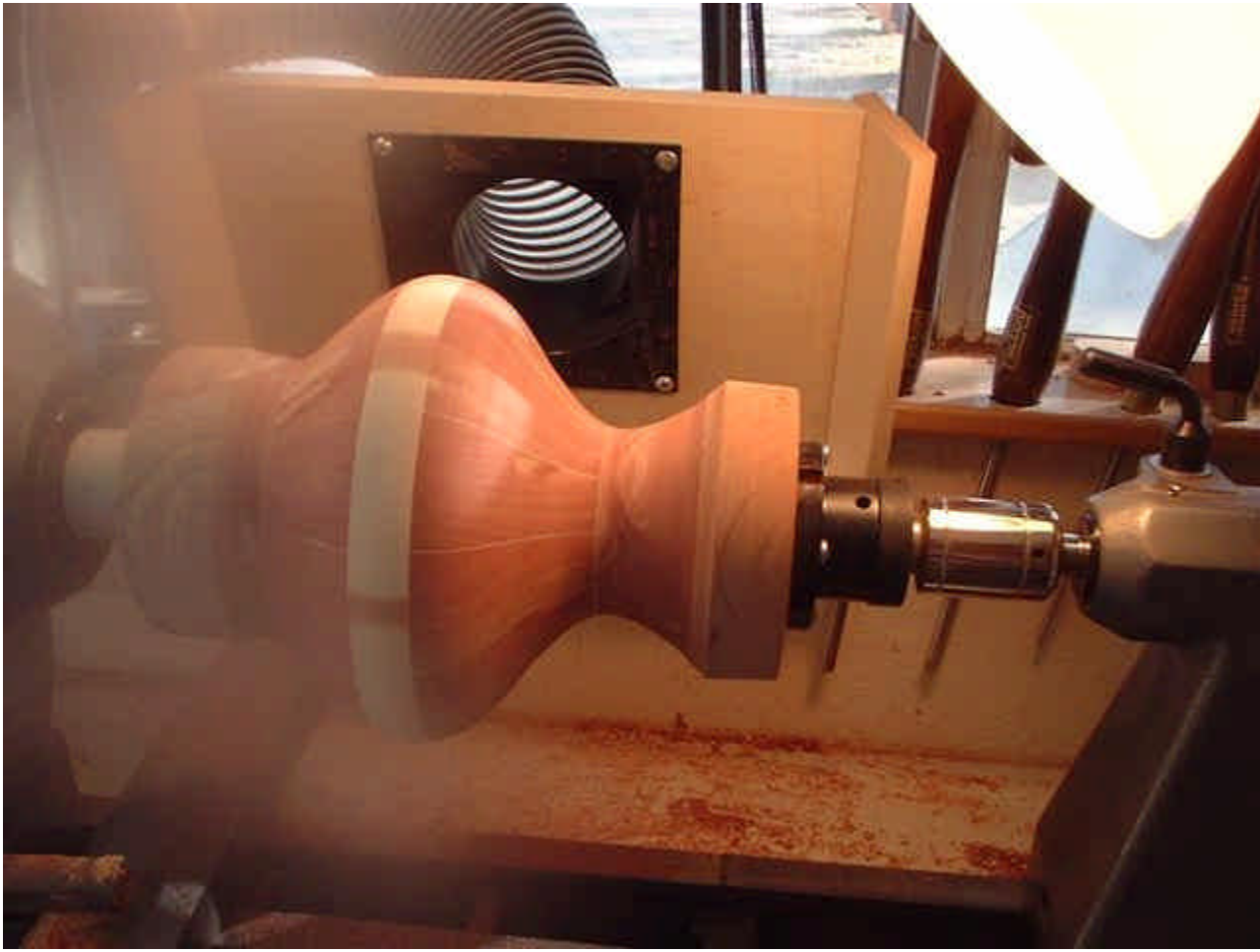




25. True and flatten this additional ring on the lathe.

26. I now put both pieces on the lathe together and rough shape the bowl. This allows me to then turn the inside of each piece to the outside shape. I sand and apply finish to each and let dry.

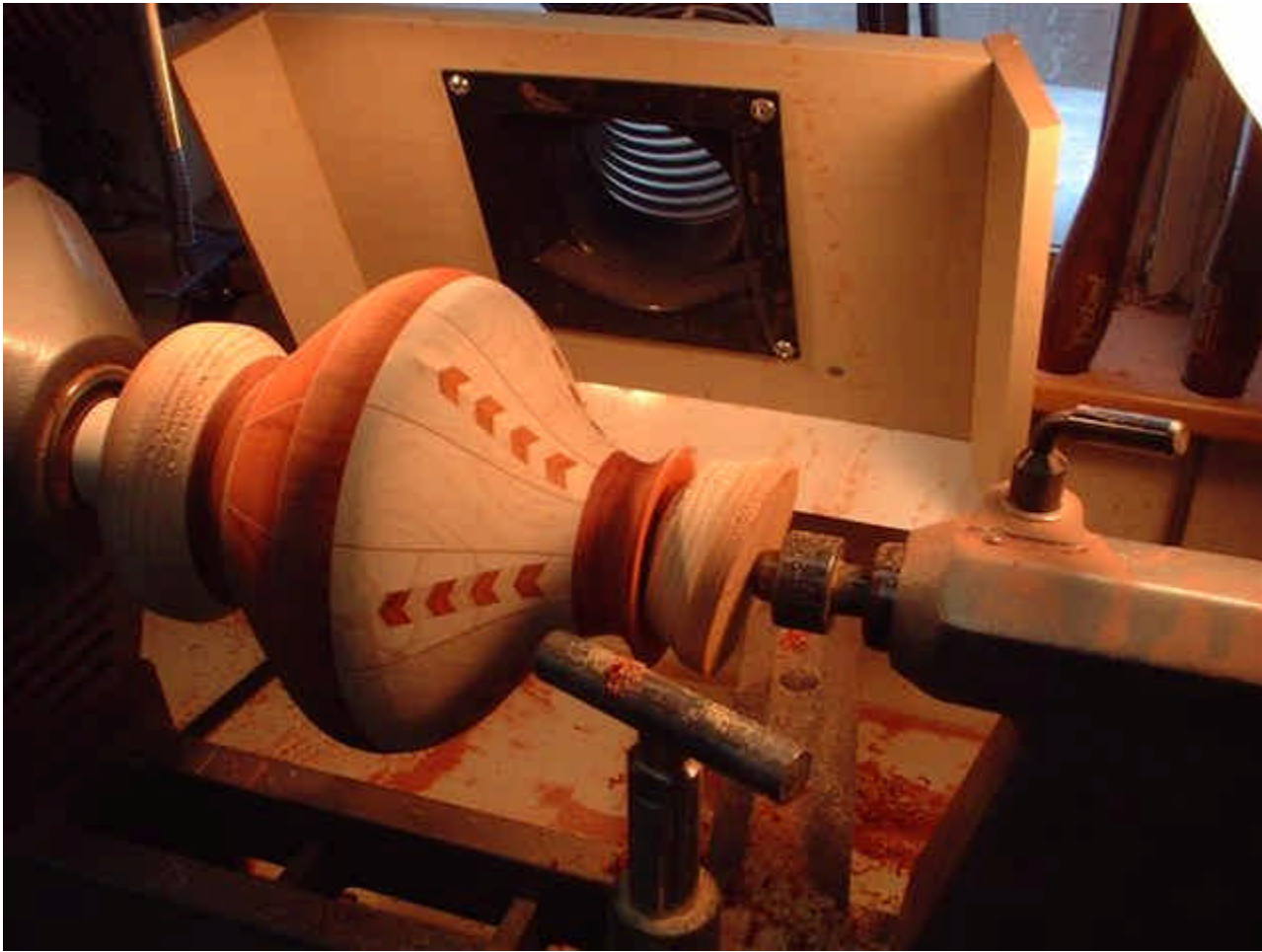






27. I now re-sand each piece flat because finish will slop over. Apply glue to one of them and re-mount to the lathe and glue together using the tail stock as the clamp.

28. I now cut off the neck glue block using a parting tool and finish fine turning the bowl.





If this is as plain as mud shoot away...

bill