

# Making a Segmented Pencil Holder



Sunland Village East Wood Shop

# SVE Wood Shop

SVE (Sunland Village East) has one of the nicest, best equipped retirement-community woodshops in the East Valley of Phoenix. It's also air conditioned all summer long.

The Woodshop has power and hand tools. If we don't have it, you probably don't need it. And if there is a new demand, we usually fulfill it.

The Woodshop provides supplies, such as glues, sandpaper, screws, bolts and nuts, nails, finishes, stains, dowels, paint brushes, and other woodworking and woodturning supplies.

Email Address: [WoodShopSVE@gmail.com](mailto:WoodShopSVE@gmail.com)

[SVE Wood Shop Website](#) The shop location, open times, and an overview of the shop can be found at the shop's website.

# Overview of a pencil holder

Top - solid wood, cut square matching the size of the top ring.

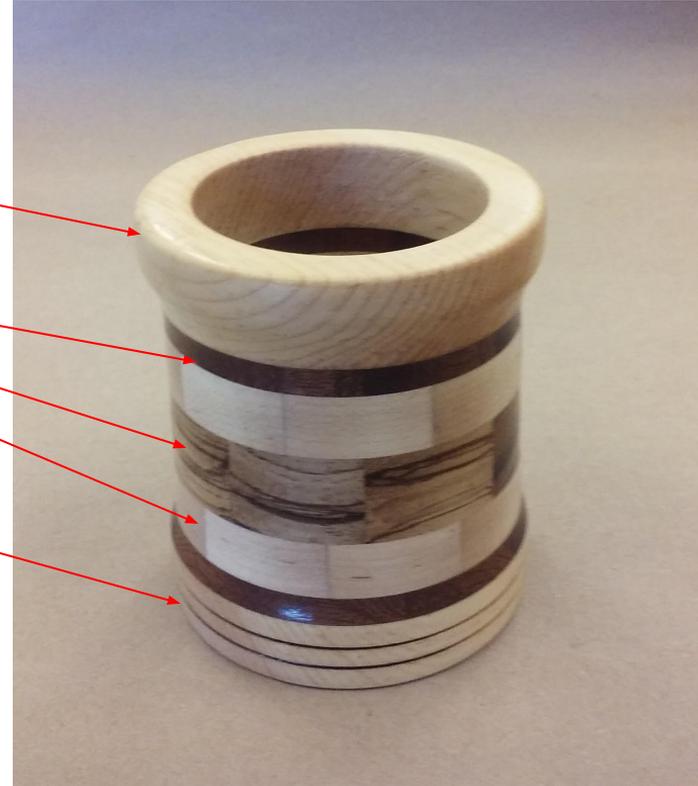
Segmented Rings - various woods and thicknesses to meet the artist's concept.

Bottom - solid wood, cut square to the ring's size. Not necessarily the same wood as the top.

Exterior size approx. - height 4 1/2", diameter 3"

Interior diameter - 2 1/8"

Wood seen here: Pine, walnut, cherry, tigerwood.



## Select The Wood

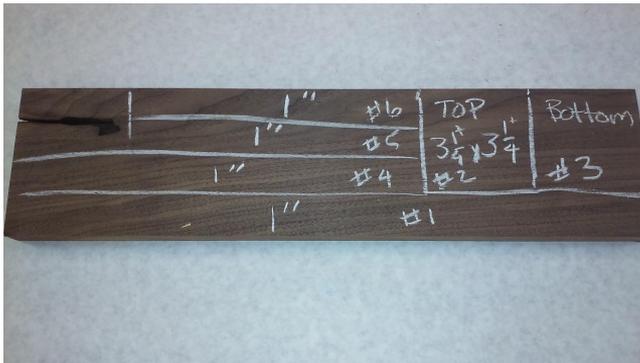
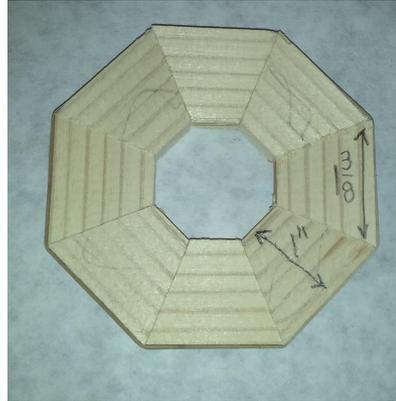
Various grain patterns and colors.

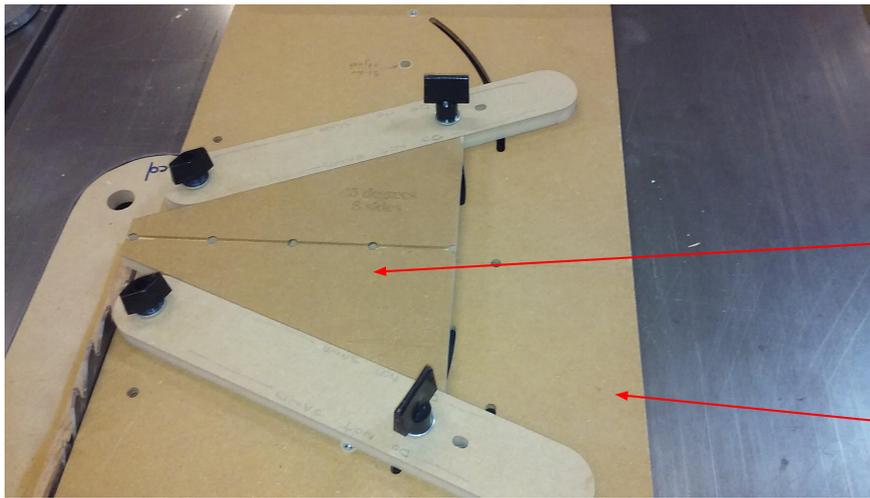
The ring segments are 1" to 1 1/2" wide, 1 3/8" long, and usually between 1/4" and 3/4" thick.

The top and bottom are made of solid wood, not a segmented ring.

Create a cutting plan that maximizes the use of the board.

Before the boards are cut into segments, mark the top side of the board. Done here with chalk on walnut.

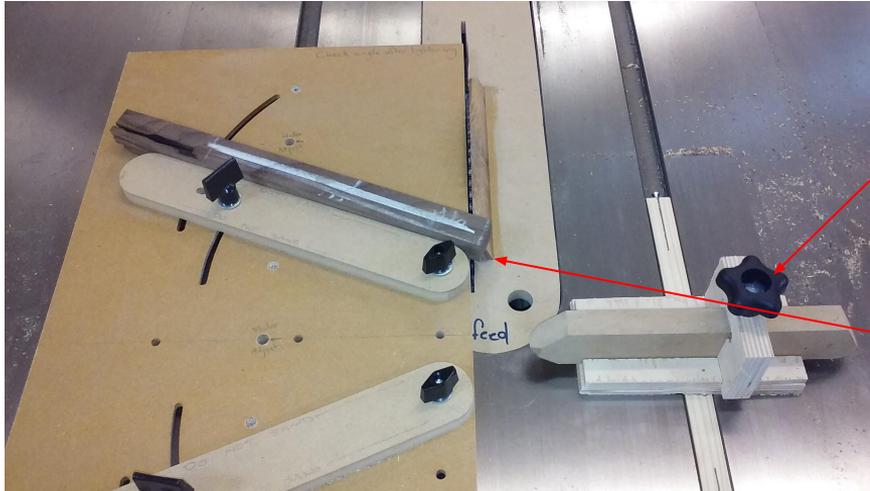




Set up the “Wedgie” Sled and the segment stop

Use the “wedge” for 8 segments per ring. Note the top picture is taken from the outfeed side.

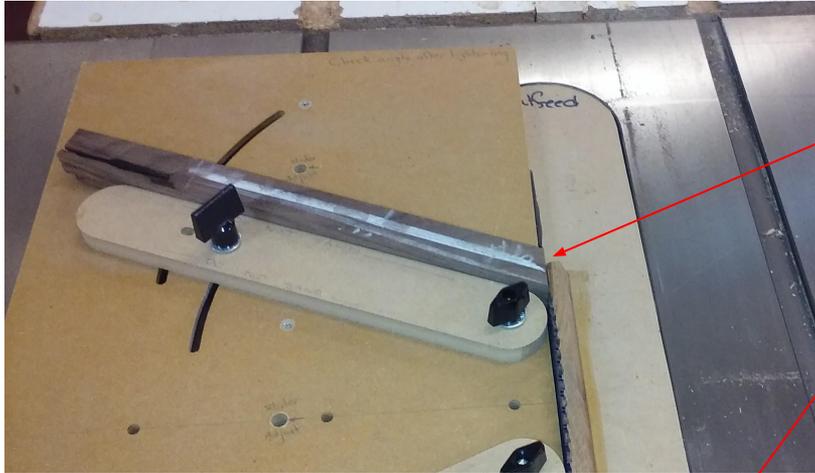
Wedgie Sled



The “stop”

Set the stop to measure 1  $\frac{3}{8}$ " from the blade. Make sure the top of the board is marked.

The first cut on the board has not been made.

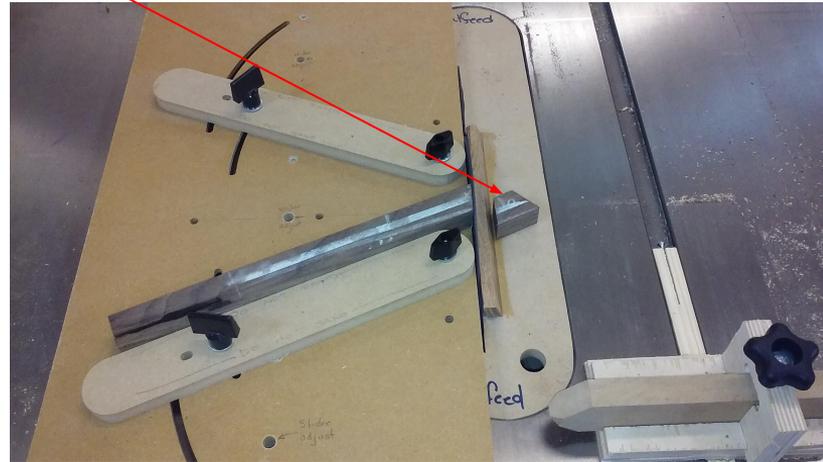
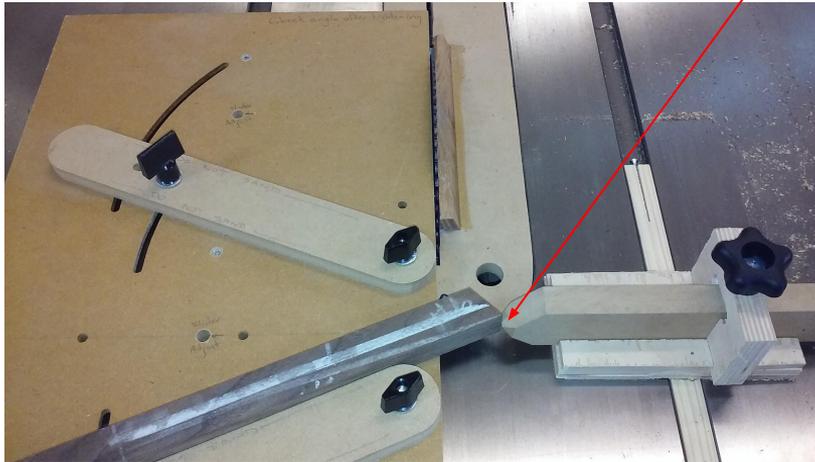


Begin with the sled near you. Put the board on the top angle guide.

Push the sled and board thru the blade and discard the off cut.

Pull the sled back. Move the board down to the lower angle guide and touch the boardit to the stop.

Make the cut. The first segment has been created.

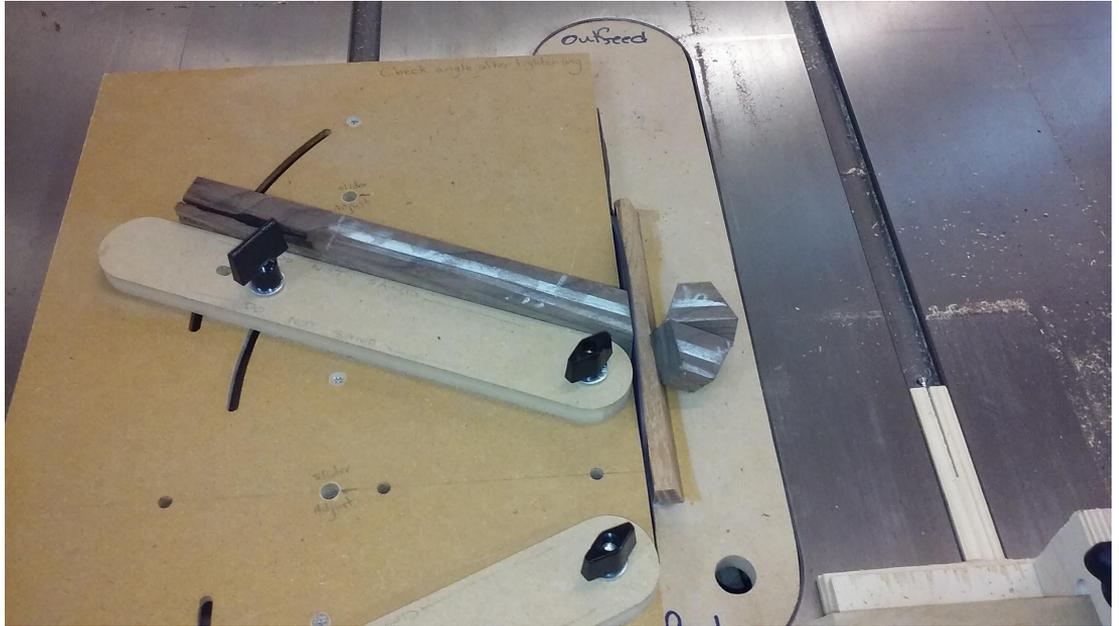


# Make the second cut:

With the sled near you, move the board to the top position on the sled. Make sure the board doesn't touch the blade when moving it.

Touch it to the stop.

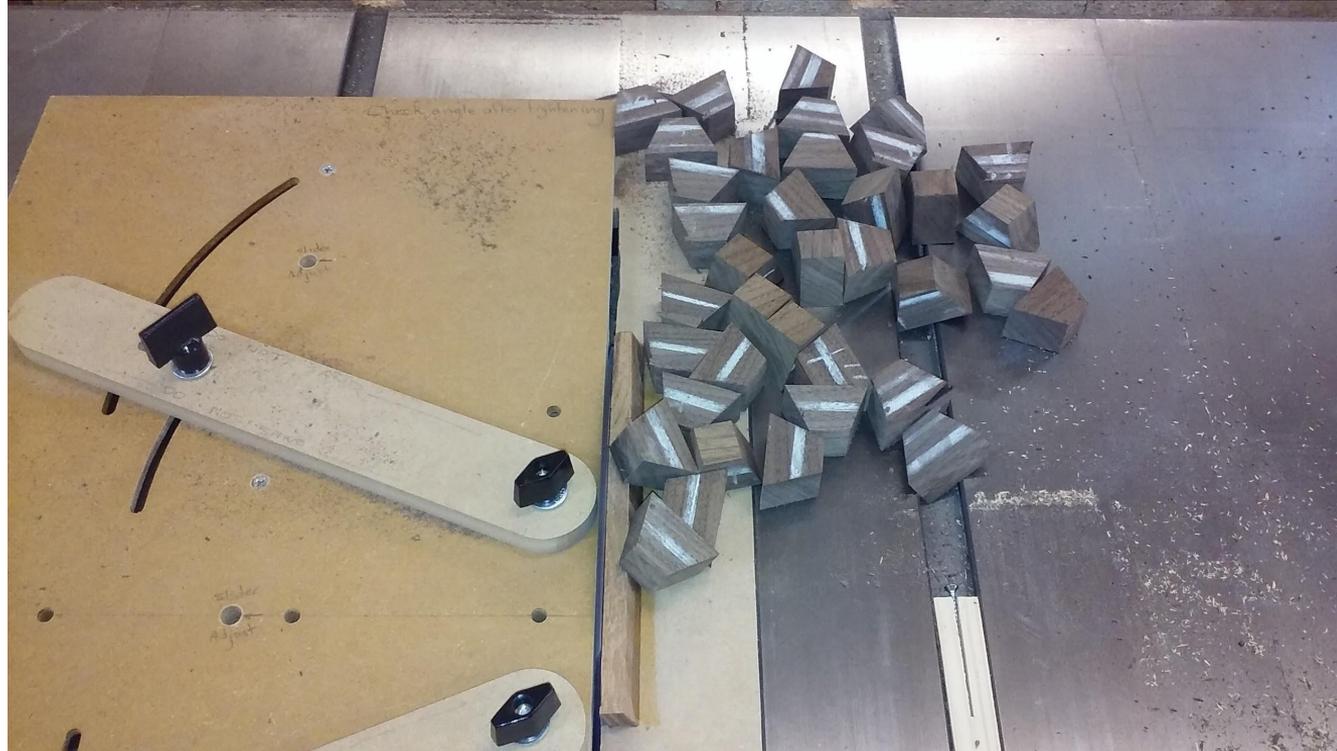
Push the board thru the blade. The second segment just falls away.



# Lots of segments

If the segments bunch up, turn off the saw, clear the segments, and begin cutting again.

Put the segments into a container when done cutting.

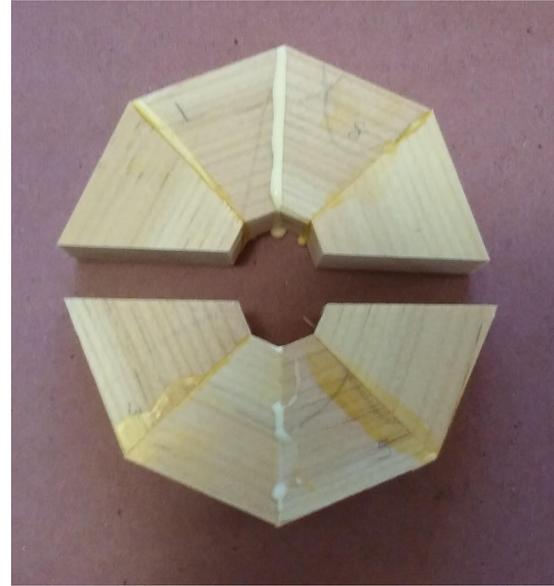
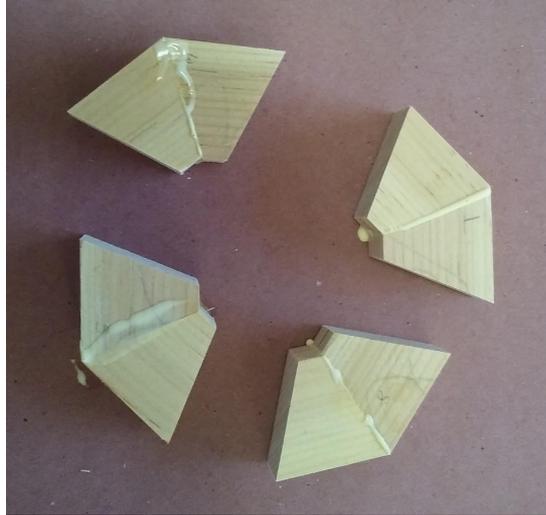
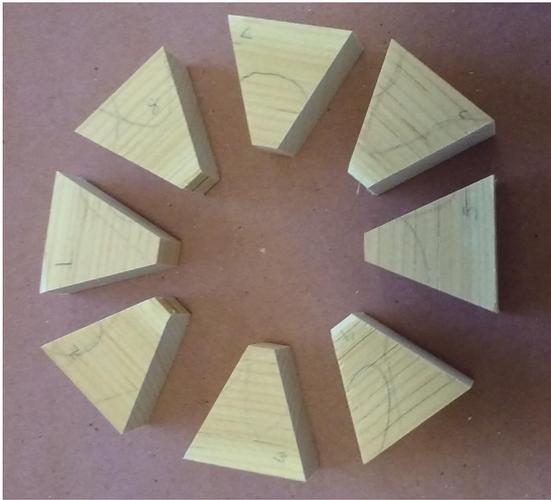


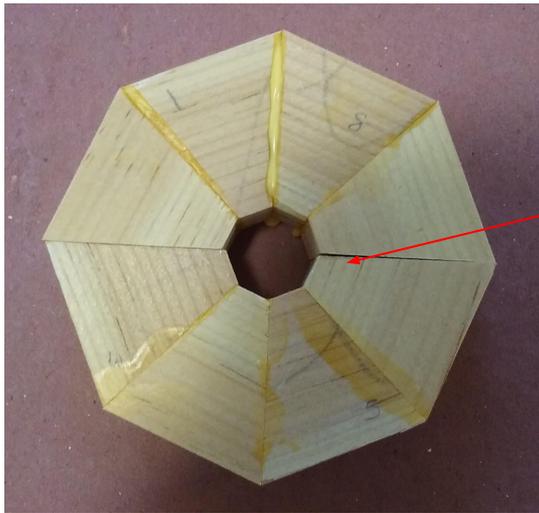
## Glue up a ring

Lay out 8 segments to make a ring. Alternate the top and bottom for each segment.

Glue up the segments in pairs.

Then glue the pairs into half circles.





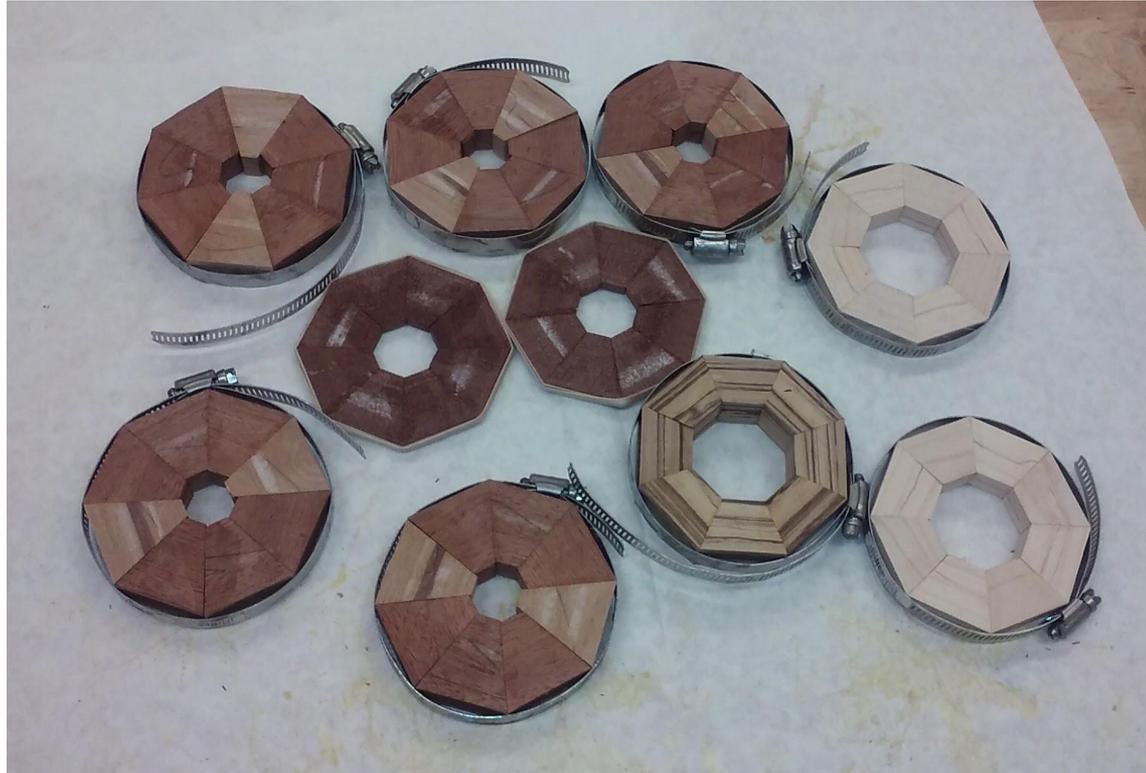
## Fit and Finish the Ring

Sometimes the two halves don't fit. Sand the halves for a good fit. Apply glue and clamp. Make sure the clamp screw is on a segment flat.

Sand both faces flat. This will assure the rings will stack and glue properly.



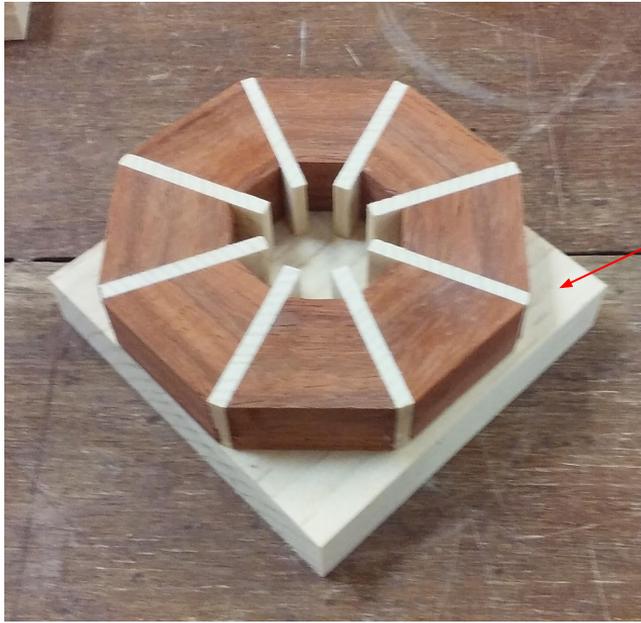
# Make lots of rings



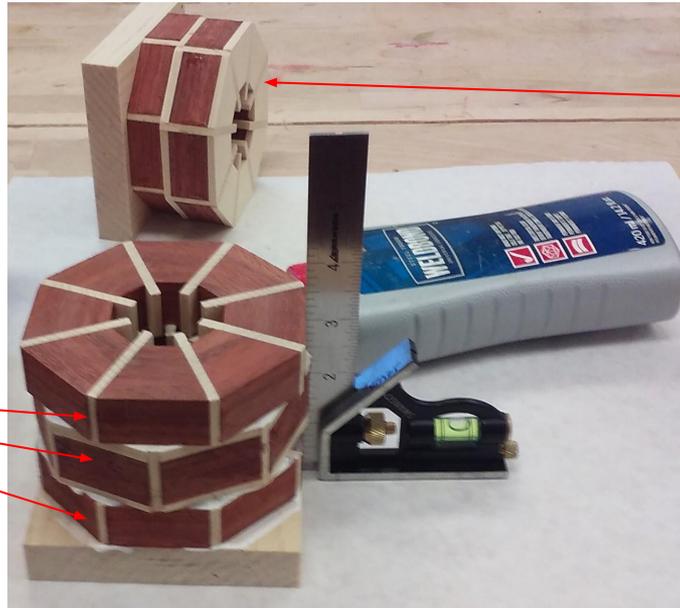
## Create the Stack of Rings

Cut the solid wood bottom to the size of the first ring.

Quick example of a simple addition to a ring. Different colored thin rectangles of wood are glued between each segment.



Stack the rings with a brick laying pattern.



Rings and top to be glued onto the stack.

A square helps keep the stack vertically aligned. Or just use your fingers.

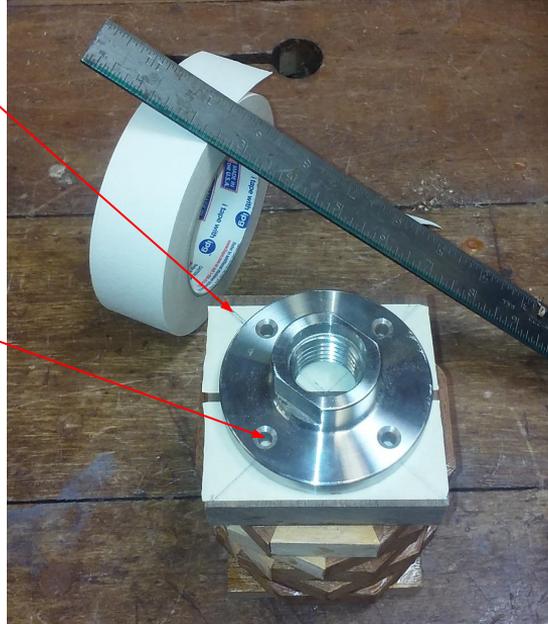
Use a press while the glue dries.

## Mount Stack On Lathe Face Plate

Draw diagonal lines to find the center of the bottom.

Apply double sided tape to the face plate and center it on the stack using the holes and the diagonal lines.

Trim off the corners of the top and bottom using the bandsaw. Optional but helpful.



Put the stack onto the headstock, and bring up the live center.





## Have a Plan and Check Your Work

It's hard to add wood, so make a plan. This is the fun part. Check your work so you don't over cut the stack.



## Sand and Then Drill Out the Center

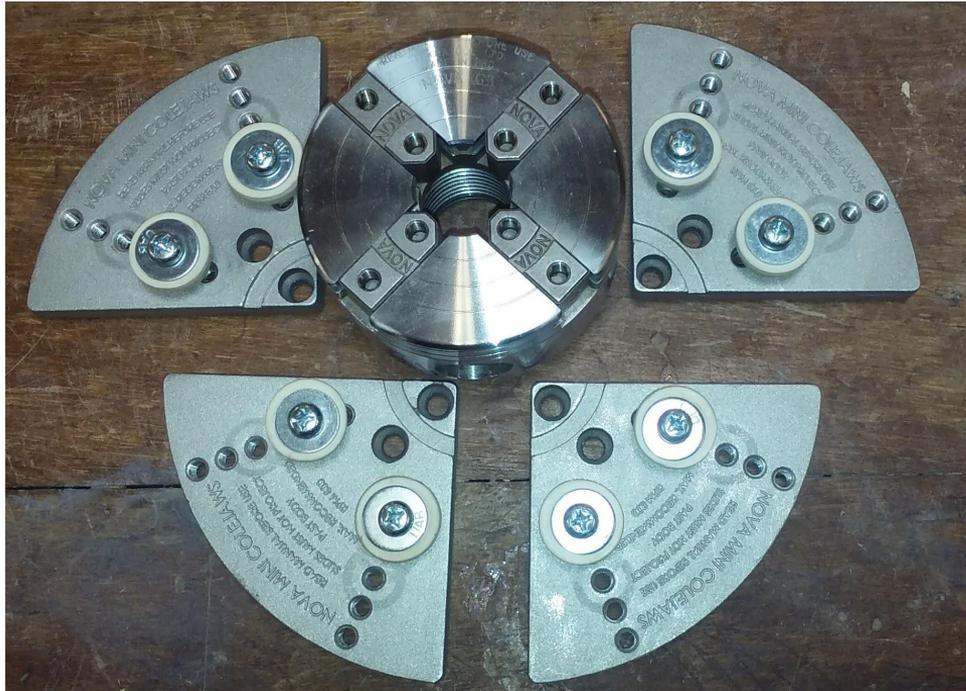


Once the shape is acceptable AND the outside is sanded, drill out the center. Use a 2 1/8" forstner bit

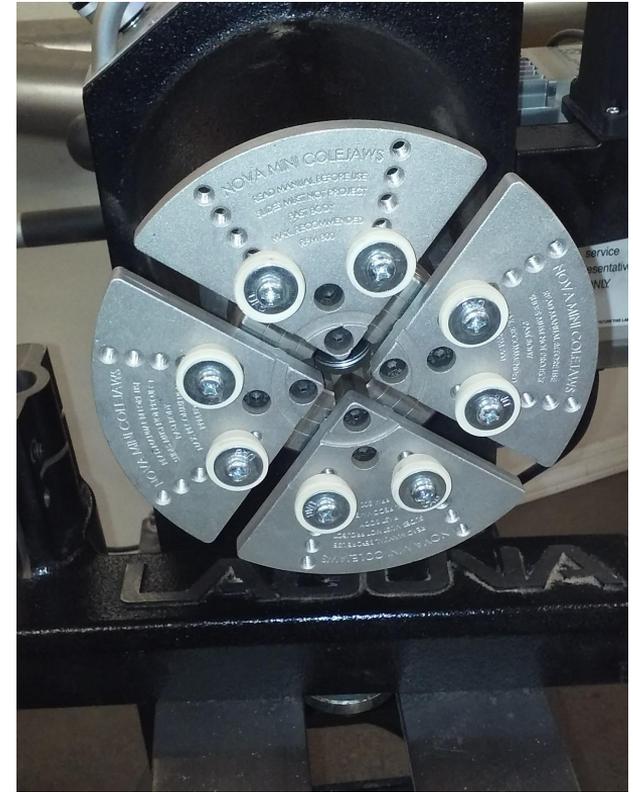


Drill, remove shavings, and check the depth.

# Cole Jaws

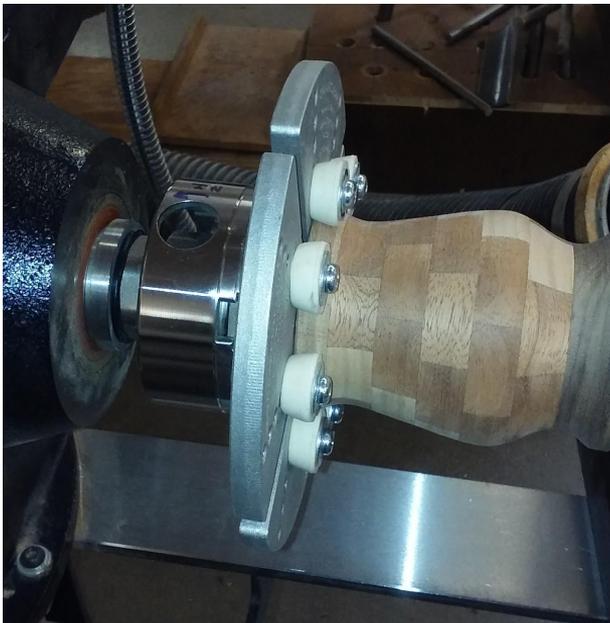


Cole jaws are used to mount the pencil holder with the top next to the head stock. The rubber pads will vary in color.



Jaws mounted on the head stock of the lathe.

## Mount the holder and finish the bottom



Put the top of the holder into the cole jaws and tighten with the wrench specially designed for those jaws.



Shape and sand the bottom.

## Remove the Pencil Holder and Finish



And it's just that easy.