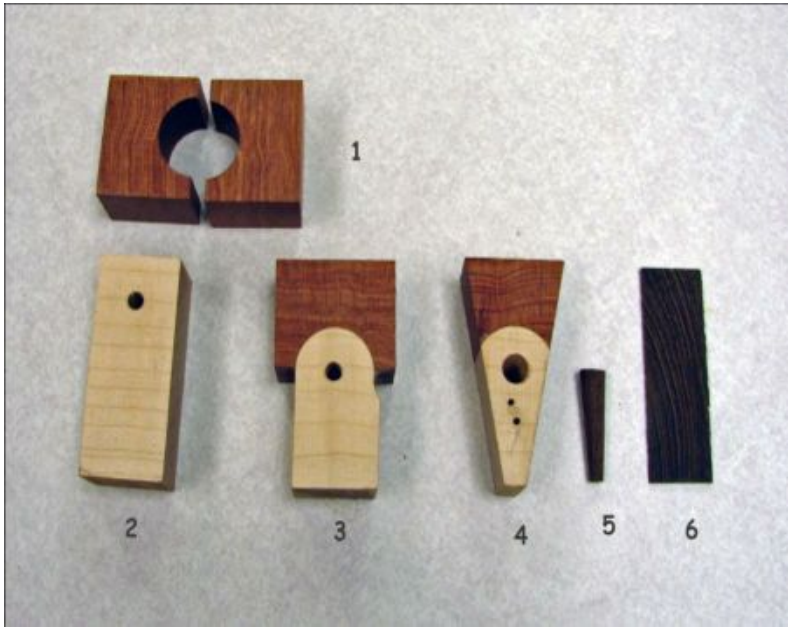
Scalloped Segments

By Craig Kirks

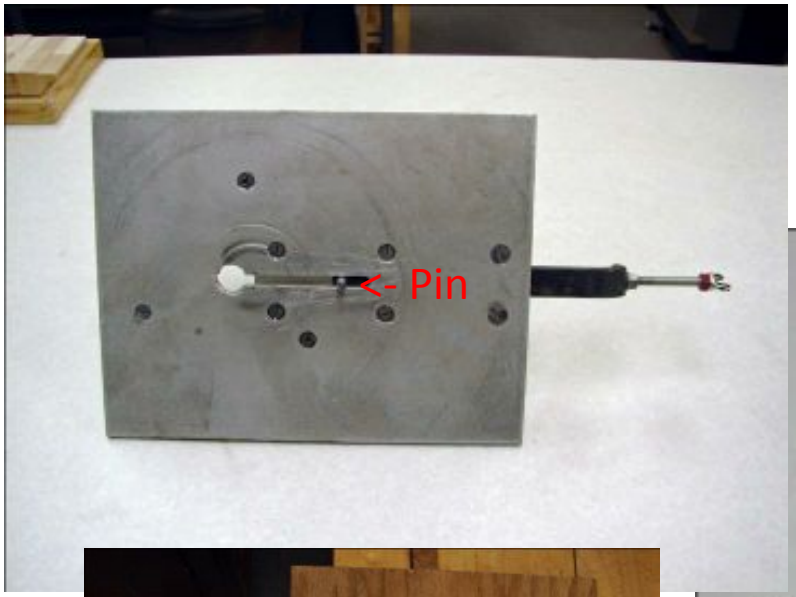
Components

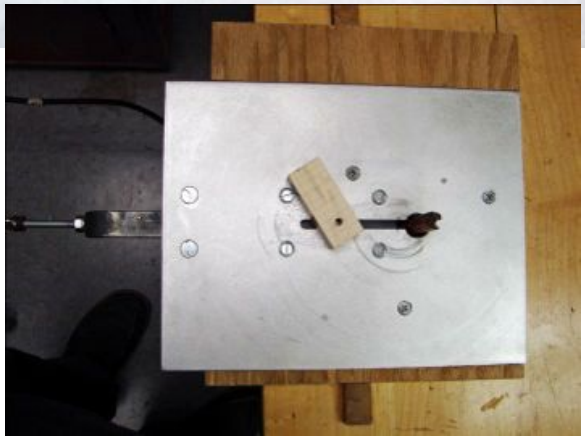


1. Hole drilled with forstner bit then cut in half
2. Hole drilled for pivot pin of router and sawing/sanding fixtures.
3. Pieces 1 and 2 assembled after routing radius.
4. Segment with angles cut and hole enlarged for tapered plug
5. Tapered plug (see earlier post called “tight fitting hole plugs”)
6. Spacer between segments.

Router Fixture

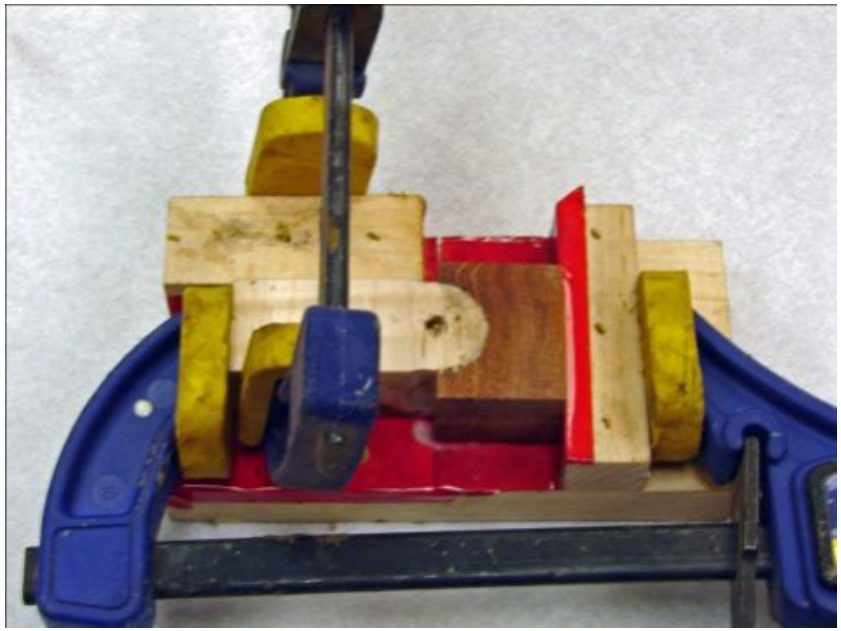
Part is placed over the pin which is threaded in the sliding bar.
Sliding bar is adjusted to achieve the required radius with a threaded rod and stop.





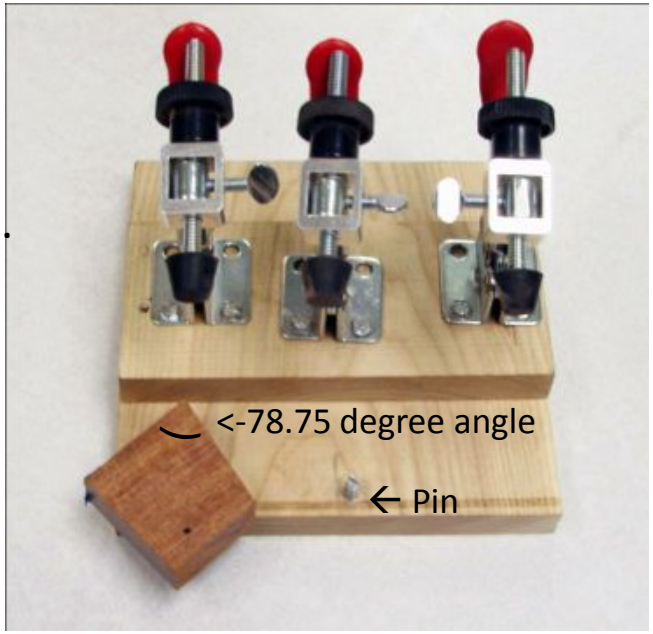
Dry fit parts

Pieces are glued using a simple fixture that holds them square.

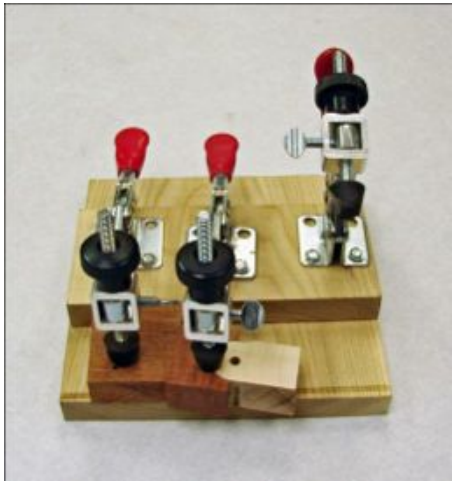


Saw and Sanding Fixture.

1. Segment is placed over the pin.
2. Movable block pushed tight against the segment and fixture in position 1 and they are both clamped in place.
3. Sawing or sanding operation is done.
4. Clamps are released, the segment is rotated to position 2. , the block is moved and they are both clamped.
5. 2nd sawing or sanding operation is done.

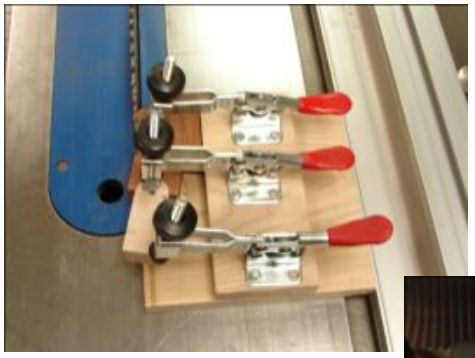


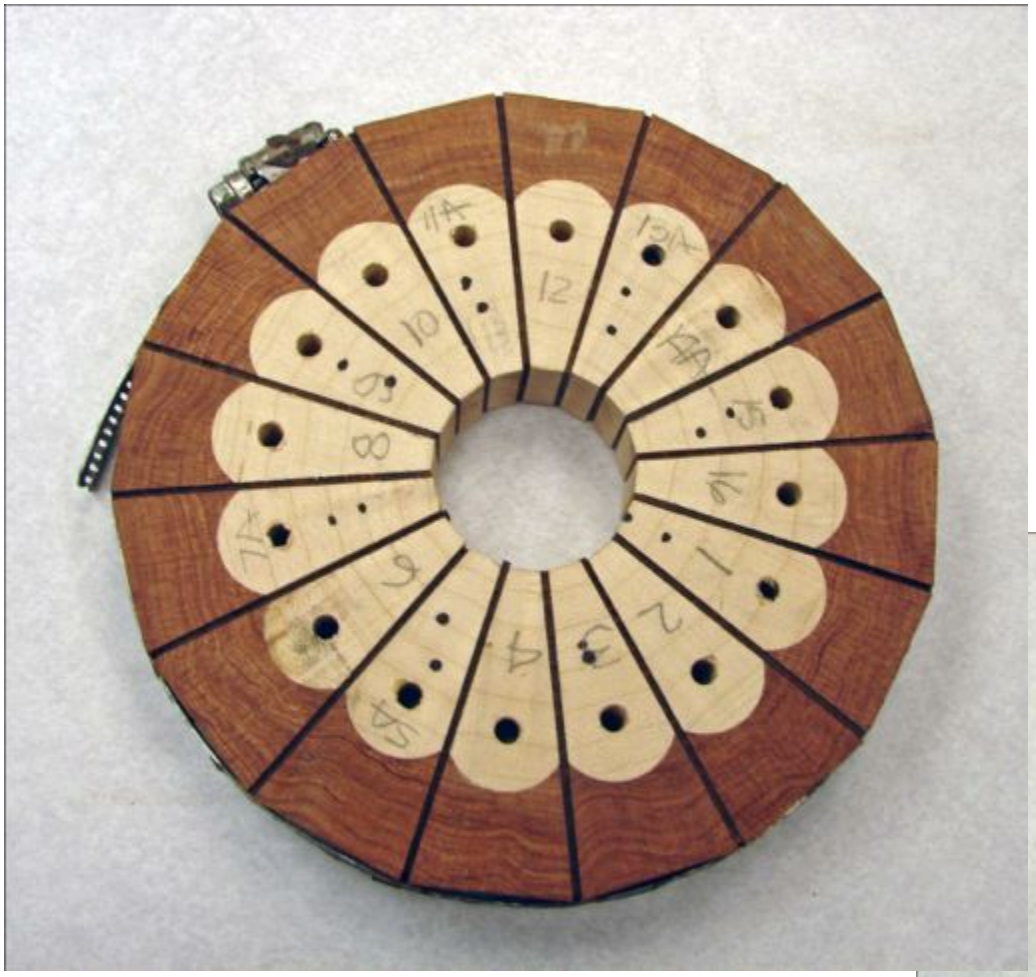
Note: Moveable block was cut at an 78.75 degree angle in this case to get an 11.25 degree cut on the segment for a 16 piece ring.



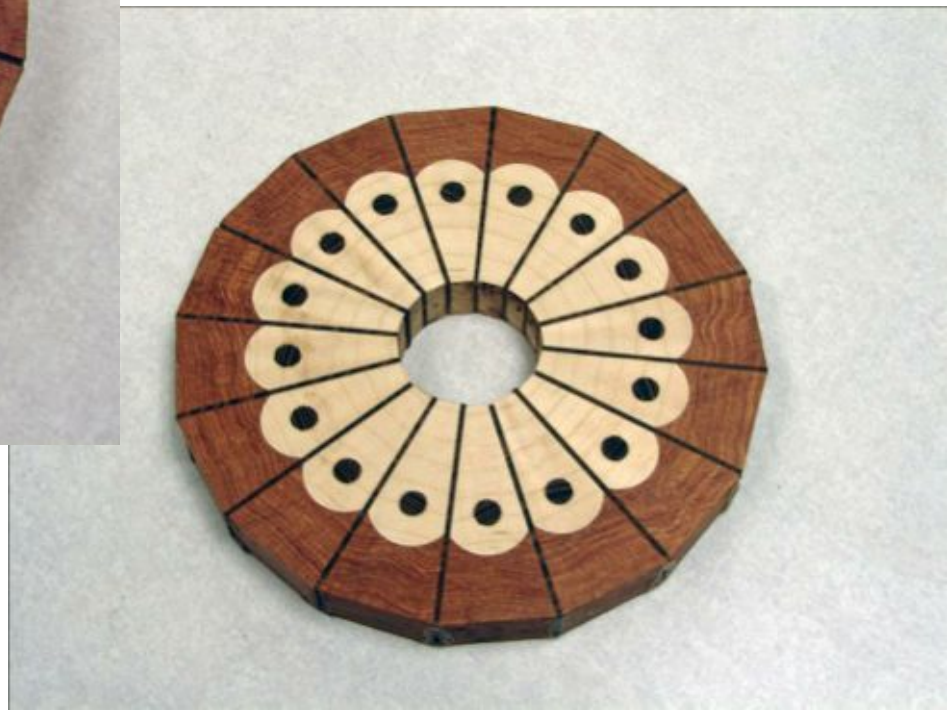
Position 1

Position 2





Ring is dry fitted, plugs are installed, segments and spacers are glued up.



Completed Ring