Molding on the Lathe.... Why not?

The job is to make these circular moldings which will be decorative trim on entry doors. This molding must match the straight molding on those same doors. Pictured below are one of the completed rings of which there are a total of eleven... 5 at 15" diameter, 4 at 12" and 2 at 10". The next two pictures are of the cutter with the shaper head it normally fits into and with it attached to the handle I made to use it on the lathe. The tool will be used as a scraper on the lathe. The reason for doing it this way is so that the profile on the rings will be exactly as the profile on the other trim.





Here are the steps I followed to accomplish this. Out of 1/8" thick plywood I cut appropriate size squares, one for each ring. The plywood will actually become the back side of the ring. Layout lines and centers are marked onto the plywood then pieces of poplar are mitered and glued to the plywood. A ¼" hole is then drilled through the center mark. This hole will serve two purposes, first as the pivot point for the circle cutting jig on the band saw and then to center the workpiece on the lathe.





Once the outer diameter has been cut at the band saw it's mounted on the lathe using double stick tape and screws. The tape is located so that it will be just enough to keep the ring attached to the faceplate once it has been parted off. Using a spindle gouge the ring is brought to the correct thickness and width and the final cutting and shaping is done with the molding cutter held in the homemade tool handle.



Cutting out the ring using the circle jig.



The ring with the waste removed.





Applying bits of double stick tape and screws. Notice the dowel in the center of the faceplate which fits the same hole used on the circle cutting jig. That hole now centers it on the lathe.



Using the spindle gouge to get the ring close to size.



The molding cutter being used to finish the profile.



Another view of the cutter in action.



Cutting the ring loose with a very thin parting tool.





The finished ring pulled loose from the double stick tape and close-up of the molding.



One more look at the completed ring.