

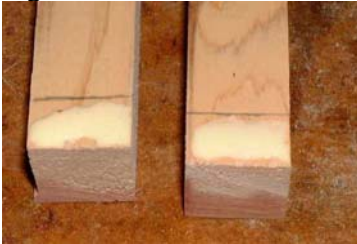
Inside Out Ornament

By Curtis Fuller

4 pieces of 1"x1"x 8" for the 'inside layer'
4 pieces of 1 1/2" x 1 1/2" x 8" for the 'outside layer'
1 piece of 1/2" x 1/2"x 8" for the inner spindle and finials
1" of 1/16" brass rod or small brad nail

Inside Layer....

Make sure the 4 pieces are exactly 1" x 1" and sanded flat on one side. Glue 2 pieces together on the sanded flat sides gluing just 1/2" in from each end.



Glue the other 2 pieces the same. After the glue is set, sand one wide side flat on each of the 2 pieces and glue them together gluing just 1/2" in on each end. Be careful not to glue any further than 1/2" in from the ends. Now sand all four sides flat. You should have a piece that's approximately 2"x2"x8".



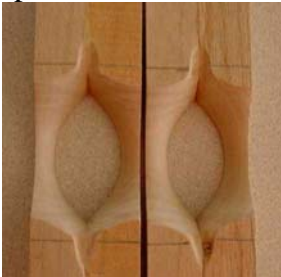
Mount the piece on the lathe between centers being careful not to align the spur drive with the glue joints. If you do it will split the piece apart when you put pressure from the tailstock. Be careful not to apply too much pressure on the tailstock or the revolving center might split the piece also. Mark the center of the piece lengthwise and mark it again 1 1/2" out from the center in both directions. Turn a radius between the two marks (approx 3") leaving about 3/4" to 1" diameter in the deepest part of the radius. This will be the inside curve in the ornament. Finish sand it.



Remove this piece from the lathe and cut the glued $\frac{1}{2}$ " from each end. It should fall apart into 4 pieces now.



Now glue two pieces together, backwards or 'inside out', to make a half of the ornament. Glue the other two to make the other half. After the glue is set, use a small round file or a woodcarving gouge to cut a pocket in each end of each half of the ornament for the spindle to rest in.



Now cut 5" off of the $\frac{1}{2}$ " x $\frac{1}{2}$ " x 8" piece of wood for the spindle. Save the remaining piece for the finials. Measure the distance between the ends of the pockets that the spindle will sit in. That is how long the spindle will need to be. Turn the spindle to whatever design you like, tapering the ends. Finish sand the spindle.



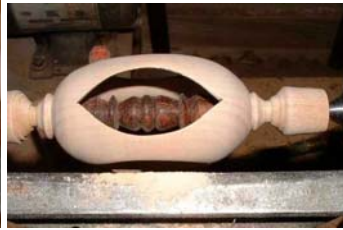
Remove the spindle from the lathe and cut it off to the length you measured for the pockets. Sand the ends of the spindle to a point so that they rest in the pockets. Do any finish sanding you need because once the two halves are glued together it will be difficult to sand inside it. You can also apply a lacquer finish now, but I found it was easier to finish it when it's completed because it's hard to get the dust out of the inside of the ornament.



When you're sure the spindle fits in the pockets and the two halves of the ornament fit tightly, glue the two halves together with the spindle inside.



Now mount it back on the lathe between centers and turn the outside of the ornament. Be sure to use a very light touch, especially near the center because there's not much wood and it can break easily if it catches.



Turn whatever design you like into the outside of the ornament. Leave 3/8" diameter at each end and cut it off square with the ornament. At this point I spray it with a couple coats of a quick drying lacquer like Deft.



Outside Layer....

Repeat the same gluing process with the four 1 1/2" x 1 1/2" x 8" pieces. You should have a piece 3" x 3" x 8". Mount this on the lathe between centers, again being careful not to split it apart. Mark the center lengthwise. Hold the Inside Layer up to it and make a mark at each end just slightly shorter than the length of the Inside Layer.



These marks will need to be plenty dark so you can see them as the piece is turning. Turn a radius like you did on the Inside Layer leaving the same $\frac{3}{4}$ " to 1" diameter in the deepest part of the radius. Be careful not to go beyond the marks at the ends of the radius. Hold the Inner Layer piece in the radius to see if it fits inside the curve.



Now mark the ends of the Inside Layer and use a Skew to cut a recess for the Inner Layer to sit in. The recess should be deep enough that the ends of the First Layer sit down in slightly more than half way.



Once you're satisfied with how it fits, cut the $\frac{1}{2}$ " glued ends off so it falls apart into 4 pieces again. Turn them inside out and glue 2 pieces together again to make two halves.

The Inner Layer will turn on an axle within the Outer Layer. To make the axles, use a small $\frac{1}{16}$ " diameter piece of brass rod or something like a small brad nail. They should be about $\frac{1}{2}$ " long. Drill a hole just slightly larger than the diameter of the axle in each end of the First Layer and insert the axle, making sure it turns freely. Then, using a knife, cut a small "V" into each end of each half of the Outer layer pieces and lay the Inner Layer, with the axle in place, in the "V".



With the Inner Layer in place, glue the two halves together. Make sure not to get glue on the axles. Spin the Inner Layer to make sure it turns freely. After the glue has set, remount it on the lathe between centers and complete the turning of the finished ornament.



Turn each end of the ornament to $\frac{1}{2}$ " diameter and cut off the waste from each end. Now drill a $\frac{3}{8}$ " hole in each end about $\frac{1}{4}$ " deep for the finials.

Using the remaining 3" piece of the $\frac{1}{2}$ " x $\frac{1}{2}$ " from the spindle, turn a finial for the bottom and top of the ornament. Leave a $\frac{1}{4}$ " tenon on the finials to glue them into the ends of the ornament. Drill a small hole through the top finial for a string to hang it from. Do any finish sanding to touch it up and spray the ornament with several light coats of lacquer.

