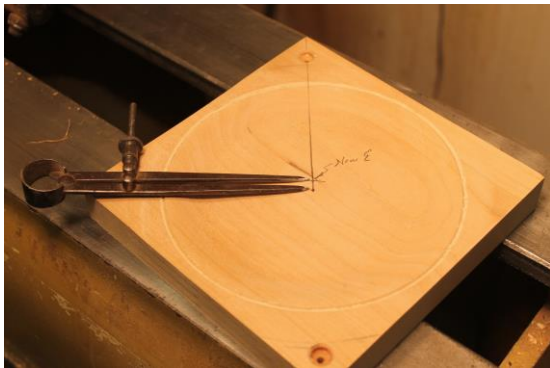


**Spiral Illusions** --- This unique decorative four center turning creates a spatial third dimension, revealing depth as the lighting and viewing angle change. This basic design allows for much more complicated and fascinating possibilities. Designs can be the same cuts on both sides, just offset as shown here, or a more complicated design can be achieved with 12 or more centers involved. The pieces are drawn first to get precision and accuracy.

The square stock 6" x 6" x 1" is mounted on a flat faceplate with two screws seated at opposite corners. The piece starts out mounted on center, dished down 1/4" and sanded. See photo. Bring the tailstock up, mark center, and drill a 1/16 hole all the way through. This references center on the other side for later.



The piece is then removed from the lathe. Draw a line from one corner with a screw hole, to the hole in the center of the piece. Mark this corner for reference later. Then locate the new offset center 1/4" from the center hole towards the corner. Remount the piece on the face plate using the tailstock point placed on the new center.

Turn the lathe on slow speed. Using sharp dividers held flat on the tool rest, mark the inside of the first ring. Set dividers to 7/16" and from the new center scratch the first ring. Open the dividers to 9/16" and do the same operation.





Now set dividers to  $\frac{1}{2}$ ". Scratch rings from the inside of the first ring to the inside of the second ring. Step out to form the three rings and one extra space.

Turn the lathe off and be sure the ring design is exactly what you want. Next, with a narrow parting tool remove the area between each ring. Usually the rings are  $\frac{1}{8}$ " wide by  $\frac{1}{4}$ " deep so all cuts are made  $\frac{1}{4}$ " deep. The spacing between these rings is  $\frac{3}{8}$ ".

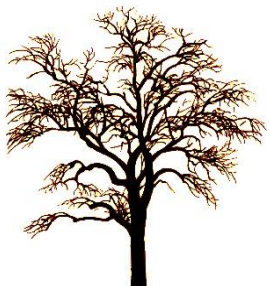


When these rings are complete, carefully sand and repeat the procedure on the other side with one exception. After dishing the surface down  $\frac{1}{4}$ ", locate the new design center away from the marked corner  $\frac{1}{4}$ " away from the  $\frac{1}{16}$ " center hole. Use extreme care cutting out these rings. Only the small rings on the other side are holding things together.

Sand carefully and remove the piece. Trim off the two corners with screw holes. A combination square can be used for the 45 degree corner and a one pound coffee can works well for the opposite corner. Final sand and finish as desired.



A completed four center Spiral Illusion



# *ELEGANT CREATIONS*

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