

Method for Making Bracelet Blanks and Jig for Holding Blanks to Turn Beautiful and Imaginative Bracelets

By William H. Harsh

Tools you will need include: lathe and lathe tools, 3-jaw chuck, drill press with drum sander and fly cutter, router w/ router table and 1/8 inch round-over bit, sander, wood stock 3/4" thick by approximately 18 inches long, and the width is the width of the bracelet you will make plus 1/2". The length of the board is long enough so you can hold the stock away from the path of the end of the fly cutter in the drill press.

To make the bracelet blank, start with stock that is 1/2" to 3/4" wider than the outside diameter of your bracelet, 3/4" thick and long enough to make 6 or 8 blanks. The stock should be long enough that you can hold it out of the way of the flight line of the end of the fly cutter in the drill press. Set fly cutter to cut a circle equal to the outside diameter of the finished bracelet plus 1/4". Set the stop on the drill press to cut 1/8" shy of half way through the stock. Turn the stock over and using the same drill hole, drill this side. Proceed down the length of the stock. Make sure your centers are spaced so you don't cut into the previous kerf. Next set the fly cutter to cut a circle equal to the inside diameter of your bracelet. Set the stops on the drill press to just under half way through the stock. Turn the stock over and make the same cut. Now fine-tune the stop on the drill press so your cutter leaves a thin web in the middle of your bracelet. If you cut through this web you will have to stop the drill to remove the cutout pieces from the fly cutter. If you are making many blanks, this will save much time. If you listen to the cutter as it nears its correct depth, you can tell when to bring up the cutter. If you have set the drill press correctly, when you have made all the cuts in this piece of stock you will be able to pop the centers out with your thumbs. Next go to the band saw and cut through the 1/4" web you left in the outside diameter. The kerf creates the guideline for the sawing. The deep kerf makes it quick and simple to free the blank. (See Figure 1)

To make the chuck to hold the bracelet blank, start with 2 pieces of maple 3/4" X 3-1/2" square. Drill a flat bottom hole 3/4" diameter 3/8" deep in the center of the first piece. Drill a 3/8" hole through the center of the same block. Place a 3/8" bolt through the 3/8" hole so the head of the bolt will be buried in the 3/4" hole. Put a washer and nut on the outside end of the bolt and tighten. Now fasten the second block to the first block covering the head of the 3/8" bolt. Use two 1-1/2" X 10 screws. After screwing the pieces together cut the corners off to facilitate the rounding on the lathe. When you put the pieces together with screws, do not put the screws in a straight line through the center. The reason will be discussed later. (See Figure 2)

Now you have two pieces held together by screws and with a bolt through the center. Put the 3-jaw chuck in the headstock of the lathe. Chuck up the bolt in the two pieces you have just assembled. Bring up the live tailstock and turn the two pieces round. On the line created by the joint of the two pieces, use a parting tool to cut a kerf deep enough to match the inside diameter of the bracelet you are making. Reduce the diameter of the rest of the jig to approx 1/4" larger than the bottom of the narrow kerf at the center of the jig. This will allow you to shape the outside of the bracelet down to the inside diameter of the bracelet. (See Figure 3)

Remove the two screws and check for a snug fit in the bracelet blank on the kerf cut in the jig. (See Figure 4) If you have put the screws in the jig in a straight line with the center of the jig, when you put them back together to adjust the depth of the kerf of the two halves, the two screw holes may not line up perfectly. So place the second screw hole off line making it easy to realign the two pieces. When your kerf fits the inside diameter of the bracelet, separate the two pieces with the 3/8" bolt still in the 3 jaw chuck, place the bracelet blank between the two halves of the jig and bring up the live tail stock, secure the piece and let your imagination run wild with design.

Sand the outside design; finish it with spray Deft or your favorite finish, buff with carnauba wax. The inside surface will still show the line where you cut out the center. Go to the drum sander in the drill press. Hold the bracelet so as to sand the inside smooth. Now set up the router in the router table. Install a 1/8" roundover bit. Adjust the router bit to round over the inside edge of the bracelet. Sand by hand with fine sandpaper. To

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finish the inside, take a piece of piano wire 8" to 10" long, bend 1/2" of the ends 90 degrees, squeeze the wire and engage the wire on the inside of the bracelet. Now you have a way to hold the bracelet while you spray (finish) the inside. Steel wool with 4/0 steel wool dipped in a good paste wax. Buff and polish.

The outside of the bracelet may be decorated to suit your fancy or if it has an outstanding grain pattern that's enough. Enjoy.

