

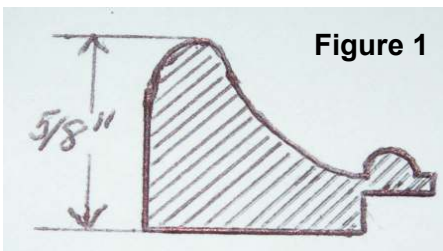
How to Make a Round Wood Picture Frame

By Bruce Gibson

I wanted to make some simple round wood frames to hold pictures of wild flowers I had photographed. I was starting with 4x6-inch



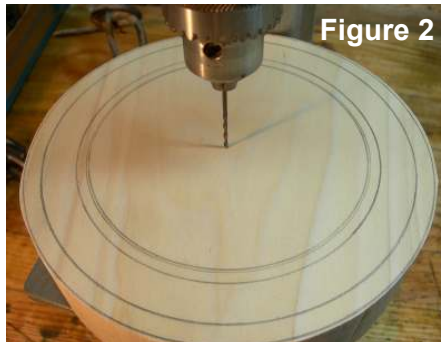
photographs, so the frames didn't have to be overly large. The dimensions I settled on were: outside diameter, 5"; inside diameter, 3 and 3/8"; thickness from back to highest point on front, 5/8". A cross-section of the frame pattern I used follows (Figure 1), and I'll describe how to make it, but there are many variations possible.



One needs to start with seasoned wood, otherwise the shape of the frame will change as the wood dries. For the frame size indicated, I started with a 3/4"-thick poplar board. On the front surface of the board inscribe the outside diameter, inside diameter and

the positions of the accent bead around the opening and the highest point on the frame using a compass.

Cut the frame blank out of the board on the band saw, leaving about 1/8" excess wood outside the line. To help align the frame blank on



the lathe, drill a small pilot hole through the board where the compass point was. This is best done on a drill press using the smallest diameter drill bit possible (Figure 2). This pilot hole will help position the drive center and the point of the tail center so that the blank will be correctly aligned for turning. [Note: If you can't drill a pilot hole, align the blank on the lathe as best you can by eye and then true up both surfaces before drawing the layout lines.]

Turn away enough of the back face of the blank to produce the final front to back thickness of the finished frame (in this case, 5/8-inch). On the back face of the trued-up and sized blank, draw a circle to define the opening to hold the picture (about 1/4" larger than the inside opening of the frame). Now mount the blank on the lathe with the front of the frame toward the

headstock and you're ready to start turning the back of the frame. (I have a One-Way Stronghold chuck and the following instructions reflect that.)

Turning the Back of the Frame

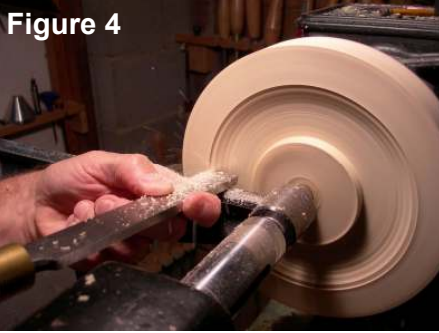
Turn the outside edge of the frame to the exact diameter using a freshly sharpened gouge. Make these cuts with minimal pressure, moving the gouge from the back of the frame towards the front. The light touch will minimize tear-out and the tool direction will put the cleanest edge at the



back of the frame (the front edge will eventually be removed anyway!). Next, start cutting the center opening at the back of the frame using a 3/8-inch spindle gouge (Figure 3). Make this opening deep enough to accept the picture, Plexiglas and picture backing (about 3/8-inch) and wide enough to accommodate the width of your scraper.

Square the outside edge and corner of the opening using a square-nosed scraper (**Figure 4**). When making this cut, be

Figure 4



sure that the upper left corner of the scraper face is slightly above center and that the length of the tool is parallel to the ways of the lathe. When the cuts are finished, sand the back and the outside edge of the frame. (Only sand to 150-grit if the frame is to be stained – see Sanding and Finishing).

Turning the Front of the Frame

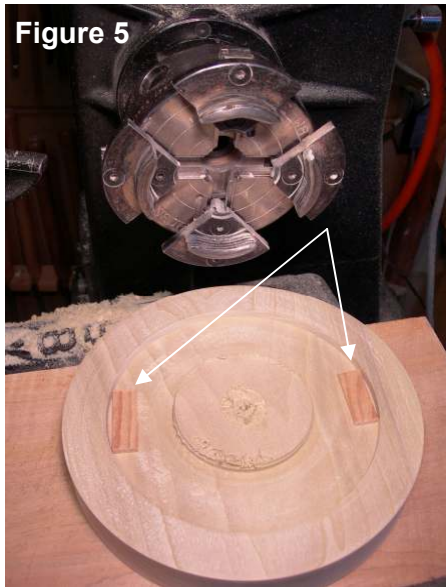
Reverse the frame on the lathe, but first remove the chuck spur (drive center) from the chuck. Mount the frame on the chuck by expanding the Stronghold chuck jaws into the picture opening you just created on the back of the frame. To make this step easier, lightly hold the frame on the front of the chuck with the tail center point while expanding the jaws of the chuck. This will ensure the frame is square on the jaws. (Caution: Don't use too much force or the frame will split!).

Once secure, remove the tail center and cut out the center portion of the frame with a 3/8-inch spindle gouge. Start your cut inside the line

defining the innermost circle on the blank and remove the wood from the center of the frame. Progress slowly, taking care to listen to the sound of the cut. You can hear when the wood becomes very thin and you are about to break through. Before you break through, stop the lathe, remove the frame from the lathe and knock out the center. (Don't try to turn this central piece of wood free with the lathe running – the loose wood can bind your gouge and nasty things will happen quickly!)

After knocking out the center, remount the frame on the chuck, but this time place a couple of small spacer blocks (thin pieces of wood; **Figure 5**) between the frame and the

Figure 5

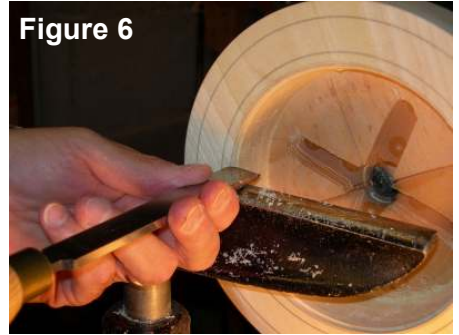


outer end of opposing jaws. These spacer blocks allow tool work on the inner opening of the frame without fear of hitting the jaws of the chuck.

Cut the inside edge of the frame opening to size with the skew as follows. Adjust your

tool rest to center and about 1/4-inch away from the surface of the frame; with the skew laid on its side, leading with the long point, gently push the

Figure 6



skew from the front to the back of the frame, using the tool tip as a scraper (**Figure 6**). Cut slowly and stop as soon as you clear the back of the frame. Sand the back edge of this cut to remove any torn wood.

Shape the front of the frame using a 3/8-inch spindle gouge. Make your cuts starting at the line defining the highest point on the frame and cutting toward the inside edge. Make the thickness at the inside edge about 3/16-inch from the back of the opening; this thickness defines the height of the accent bead. Using the point



of the skew, cut two lines to define the width of the accent bead (**Figure 7**). Remove the wood between the bead and the inner opening using the

skew on its side, as described before, but this time leave about a 1/16-inch shelf near the bottom of the bead. At the very end of this cut, tilt the skew to 45 degrees to shear scrape the final surface.

Next, finish the cut from the highest point of the frame to the outside edge of the bead with the spindle gouge. Since this is the finish cut, go slowly and make the cut uniform (use your body motion to control the cut, not your arms.) The cut should end right next to the bead and be at about the same depth as the inner shelf just created. To finish the bead, I like to use the tip of a diamond-shaped parting tool as if it were a small skew. Approach the top of the bead with the cutting edge held at 45 degrees to the direction of rotation (**Figure 8**) and simply



roll it from the top of the bead to the edge with a smooth roll of the wrist. (If you've never done this before, practice on some scrap wood before you start the frame.) Alternatively, the bead can be cut with a small gouge.

To finish cutting the frame face, remove about 1/4 of the

thickness of the outside frame edge with a spindle gouge, starting at the line marking the highest point on the frame front.

Sanding and Finishing

If the frame is to be stained, it is best to sand the surface only to 150 grit. This allows enough open wood fiber for the stain to take well over the entire surface; a finer grit makes the staining uneven. Since my frames were to be mounted in a bathroom setting, I opted for a polyurethane finish because of its durability. If the grain of the wood appears too dramatic for your needs, it can be subdued with a polyurethane finish that contains additional stain. (I used Minwax Polyshades® containing pecan stain.) After the last coat of finish dried for 48 hours, I buffed it lightly with 0000 steel wool to dampen the shine.

Mounting the Picture

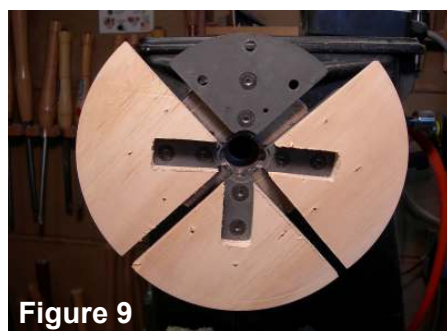
To mount my pictures, I used 3/32" thick Plexiglas and backed the picture with thin cardboard from the side of a cereal box. The Plexiglas comes with a thin plastic coating to protect the surface. I drew a circle on the plastic and cut the Plexiglas on my bandsaw (the same blade I use for cutting green wood). I ground the edge for the final fitting on my lathe using 80-grit sandpaper glued to a 3/4-inch thick MDF disc. The Plexiglas was then laid on the

photograph to obtain the best balance and a circle was drawn and cut out.

A cardboard circle was made the same way from the side of a cereal box. The Plexiglas, picture and cardboard backing were placed in the frame and held in place using hot glue.

Larger Diameter Frames

Larger picture frames can also be made using these same techniques; however since the inside opening will be larger than what expansion of the Stronghold chuck jaws can hold, a set of Flat Jaws will be required.



These jaws allow pieces of wood to be attached to the 6-inch diameter flat metal jaws with screws and then turned to the exact diameter needed for the project (**Figure 9**). I have used 1/2-inch thick plywood to make a 10-inch diameter frame successfully. In order to get these "wooden" jaws in proper position to hold the frame, one has to remove excess wood in the center of the blank with a chisel.