

# Folding Stebbins Table

Barry Humphus

Visiting my friend Harcourt Stebbins a few months back, I admired a small walnut table in his home office. He purchased it along with three matching tables while stationed in Germany in the 1960s. I asked if I could make a measured drawing of it and he said sure and sent it home with me.

The table is such a simple design and perfect for bringing out when you have guests and need those small drink and food tables. The result is what I called a Stebbins table because Dr. Stebbins made a couple of excellent design suggestions. As designed, the table is easy to construct with minimum tools and can easily be completed over a weekend.

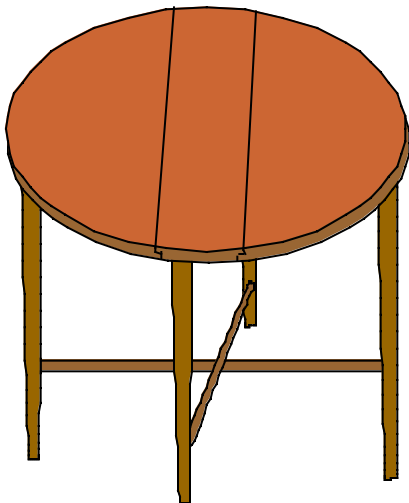


Figure 1.

Simply put, the leg frames scissor and the top outside pieces fold down, making this a collapsible table that is very compact when folded.

The wood I used for my version is Red Oak with a 1/2" thick top. The leg frames consist of 1" tapered to 3/4" square pieces for the legs and 5/8" square pieces for cross members. The table is 15-16" across and 18-1/2" tall. Four 1-3/4" x 2" butt hinges allow the top to fold down. The joinery for the original leg frames was blind dowl-in-hole construction, but many variations are possible depending on your time and interest.

Start by selecting some clear 1/2" by 8" wide hard-

wood. Cut a 3" wide by about 16" long piece and two 7" wide by 16" long pieces. Cut 1/4" rabbets along the underside length of the 3" wide piece and corresponding rabbets along the inside top of both of the 7" x 16" pieces. Assemble the three pieces so you have a large square. On the bottom of the square, install temporary cleats (see below) across the three pieces. You can do this with screws, but it is easier to do with a couple of dabs of hot glue. Be sure the

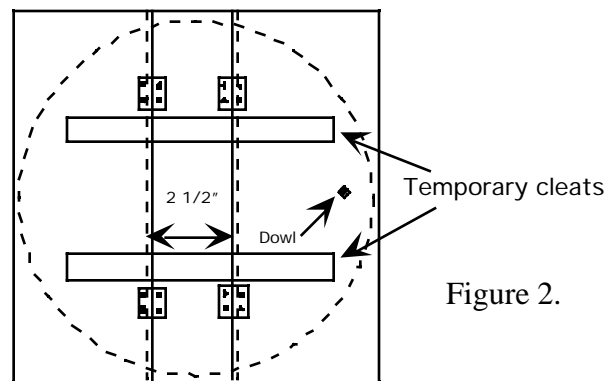


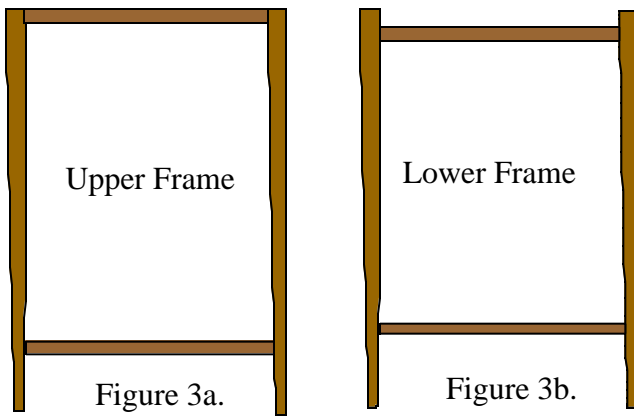
Figure 2.

three pieces are snug together when you install the temporary cleats.

With a router or bandsaw, cut a 15" to 16" diameter circle. You could now install the hinges or wait until you've finished sanding the top smooth for your finish. As the top is only 1/2" thick and most small butt hinges come with wood screws that are longer than this, you'll have to use fairly short (1/2" or less) screws. Pre-drill the screw holes after marking, run them part-way in, run them out and nip off the points. Then re-install them to avoid their peaking through the top. Note that the hinge should have holes that are greater than 1/4" apart on either side of the hinge so that a screw from the bottom doesn't peek up through a rabbet.

For the two leg frames, cut and taper the four legs (1" across the top and 3/4" at the bottom) on 3 sides. The untapered side goes inside (tapering is not required but gives the final look a bit of elegance). As the Upper Frame that is attached to the bottom of the table (Figure 3) must support the other frame, its top cross rail needs to be at the top of the frame assem-

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bly and the lower cross rail about 4-1/2" from the bottom of the legs. The other frame (Lower Frame) that scissors (Figure 3) should have its top rail about 3/4" down from the top of the legs and the bottom cross rail 5-1/4" from the bottom of the legs. At this point, sand out the top and attach the hinges to the bottom. Placement of the hinges is not particularly critical, but they should be at least 2" from the edge to provide support and clearance. You can now remove the cleats.

I recommend that you now do final sanding on all of the parts, assemble the frames and apply your final finish. The remainder of the project is assembly.

The finish I used, as this table was designed to have potentially wet glasses set upon it, was polyurethane over a light water-based walnut stain. The stain "took the red out" of the Red Oak I used giving the piece a warmer look.

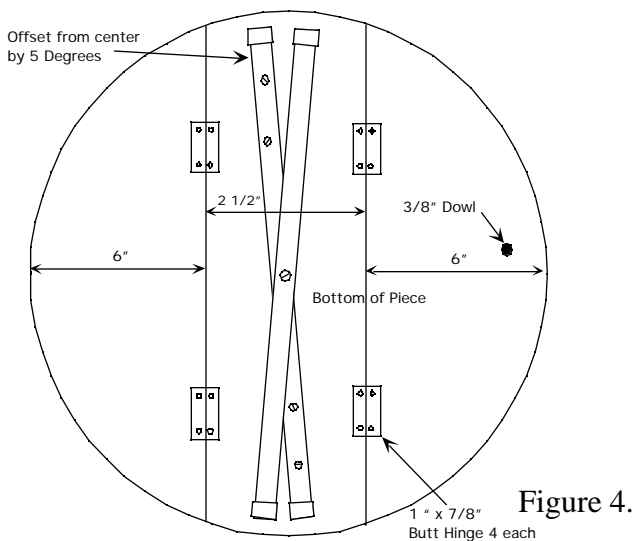


Figure 4.

## Materials and Sub-assembly

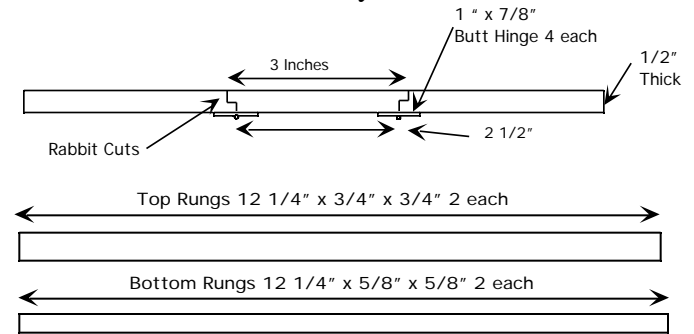


Figure 5.

The placement of the Upper Frame on the bottom is somewhat important. First center the upper cross rail in the middle of the middle piece of the top then rotate it about 5 degrees. (See Figure 4). The final item is a short 3/8" dowel, inserted into a hole about 1" from the outside edge and centered but off-set about 5 degrees. When you rotate the Lower Frame, the dowel stops the Lower Frame and this frame supplies the support for the hinged top.

Insert the Lower Frame into the Upper Frame and center them. Drill a hole for a 1-1/8" wood screw through the center of the top rail of the Lower Frame into the Upper Frame. Do the same for the lower cross rail of the Upper Frame into the bottom cross rail of the Lower Frame. Attach the Upper and Lower Frames such that the Lower Frame can rotate freely.

## Hardware

4 each 2" x 1-7/8" Brass Hinges;

Adequate number of 1/2" screws (16 to 20 depending on the style of hinge) to attach the hinges. Note that as you are attaching the hinges close to the edge of the rabbeted edges of the wood, make sure and pre-drill for the screws to avoid a split. Even with 1/2" screws, you should start them, back them out, clip off the points and then run them in. This keeps the point of the screws from coming through to the top (which happened to me on the prototype).

6 each 1-1/8" wood screws.

All you need now is three or four more of these simple tables, and you and your friends will have adequate space for your drinks and food.