

In this plan you'll find:

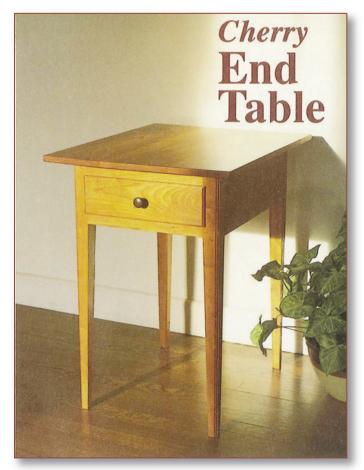
- Step-by-step construction instruction.
- A complete bill of materials.
- Construction drawings and related photos.
- Tips to help you complete the project and become a better woodworker.

To download these plans, **Reader** You will need **Adobe Reader** installed on your computer. If you want to get a free copy, visit: **http://adobe.com/reader**.

Having trouble downloading the plans? Right click on the download link and select "Save Target As..." or "Save Link As..." (depending on the web browser you are using) to download to your local drive.

Copyright *Woodworker's Journal* © 2011 This pattern is copyrighted by *Woodworker's Journal*. Purchasers of this plan may make three copies for personal use in the shop. The pattern itself, however, is the property of *Woodworker's Journal* and is not to be reproduced for distribution or resale. Doing so, including via any electronic methods, is a violation of copyright law.

Cherry End Table



Published in Woodworker's Journal January/February 1993

arly American country cabinetmakers were often influenced by the well-known designers and furnituremakers of their day. As highly-skilled craftsmen in Boston, New York and Philadelphia were turning out ornate, high-priced masterpieces, visiting country cabinetmakers couldn't help but notice.

Country craftsmen soon built their own versions of the big-city pieces, with the design simplified to reflect both the builder's skill and the ability of his rural customers to pay. This lovely end table, with its nicely tapered legs, is in the general style of tables by George Hepplewhite, the now-famous 18th century furniture designer. Shaker furnituremakers also felt the influence of Hepplewhite, as his style is common to many of their tables and case pieces.

The table shown is from the Wayland, Massachusetts workshop of Gene Cosloy. The drawer sides and back are poplar, while the bottom is birch plywood. The rest of the table is made of solid cherry, a favorite wood of early country cabinetmakers.

Make the Legs

The legs (A) can be made first. You'll need four pieces of stock, each one measuring 11/2 in. square and 251/4 long. Lay out and mark the locations of the leg mortises. Size them to fit the tenon dimensions shown in the Tenon Detail. Note that the two side aprons (B) and the back apron (C) have identical tenons.

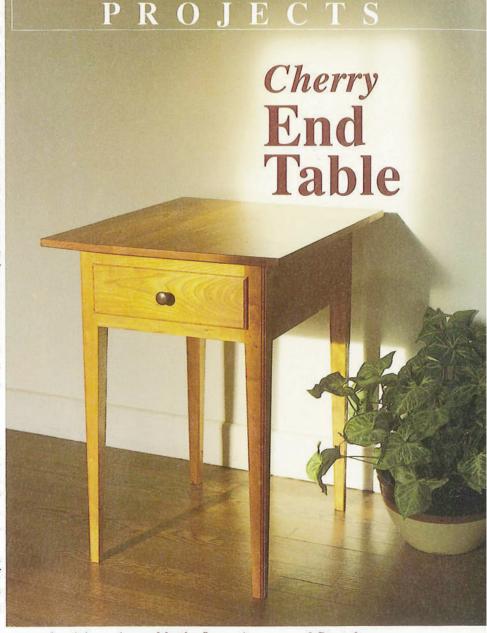
Cut the mortises using the drill press and a 3/8 in. diameter drill bit. Bore a series of holes, one alongside the other, to remove most of the stock, then use a chisel to clean up the remaining waste material.

The bead can now be added to the outside corner of each leg (see Bead Detail). A router table with a 3/16 in. beading bit will cut each bead in short order. As shown in the front and side views, the legs are tapered on the two inside surfaces. Note that the taper starts at a point $6^{5}/8$ in. from the top of the leg. A table saw tapering jig, if you have one, will come in handy here. If not, lay out and mark the tapers on each leg, then hand plane the stock to the marked line. After the tapers are cut, use a hand plane to cut a 10 in. long chamfer on the inside of each leg as shown in the Chamfer Detail.

Make the Aprons and Stretchers

Next, make the two side aprons (B), the back apron (C), the upper stretcher (D) and the lower stretcher (E). Begin by cutting these parts to the lengths and widths shown in the Bill of Materials.

The tenons can be cut using the table saw and a tenon jig. As always, it's a good idea to check your jig set-up by first making some test cuts on scrap stock. Keep in mind, though, that for the test to be accurate, the scrap stock must be the same thickness as your project stock.



Assemble the Legs, Aprons and Stretchers

After a thorough sanding, the legs, aprons and stretchers can be assembled. Before starting, though, dry-assemble all the parts to make sure everything fits to your satisfaction.

The assembly is best done in two steps. In the first step, the legs are joined to the side aprons. Start by adding a thin coat of glue to the leg mortises and the apron tenons, then fit the parts together and apply pressure with bar or pipe clamps. Check the parts for squareness and make any needed adjustments. Once all looks okay, let the pair of leg/side apron sub-assemblies dry.

In the second step, the back apron and the upper and lower stretchers are joined to the two leg/side apron sub-assemblies. The procedure for gluing and clamping is the same.

Lay out and mark the centerline location of the 1/4 in. diameter tenon dowel pegs. Once marked, bore 1 in. deep holes to accept them. Cut the pegs slightly on the long side, then add a coat of glue and tap them in place. Trim the protruding ends flush to the surface with a sharp chisel and sand smooth.

Add The Cleats and Spacers

The four cleats (F) are made from stock measuring 3/4 in. thick © 2011 Woodworker's Journal 41

January/February 1993

by $1^{1}/2$ in. wide. Cut them to length so they fit snugly between the stretchers and back apron, then notch the corners to fit around the legs.

The cleats are attached to the side aprons using glue and $1^{1/4}$ in. by number 10 roundhead wood screws, but you first need to counterbore a 1/2 in. diameter by 3/4 in. deep hole for each screw.

At the bottom of the counterbore, drill a ¹/₈ in. diameter hole to accept the screw shank.

Since the two upper cleats are used to attach the top, you'll need to bore three 1/8 in. diameter holes in each one to accept $1^{1}/4$ in. long by number 10 wood screws. Note, as shown in the exploded view, that the holes are elongated to allow the top to expand and contract across its width as the moisture content in the wood changes.

The two spacers (G) are added next. Start with 3/4 in. thick stock that's a bit wider than necessary and cut it to a length that allows for a snug fit between the legs. Now, rip the stock to final

width, keeping in mind that for the drawers to operate smoothly, the inside edge of the spacers must be flush with the inside edges of the legs. Once you are satisfied with the fit, glue the spacers in place.

Now, cut the two glueblocks (H) to size and bore a $\frac{1}{8}$ in. diameter screw shank hole in each one as shown. These blocks, along with the upper cleats, serve as a means to attach the top to the base. Glue the blocks flush with the top edges of the back

apron and upper stretcher as shown in the exploded view.

Make The Top

You'll probably need to edge-glue a few boards in order to get the 19 in. width needed for the top (I). When cutting the boards for the top, it's best to cut them so that the glued-up stock will be a bit wider and longer than necessary. After gluing, the top will be trimmed to final size.

To edge glue, apply a thin coat of glue to the mating surfaces, then clamp firmly with bar or pipe clamps and set aside to dry. There's no need to add dowels or splines here, as this joint matches longgrain to long-grain, a joint that is as strong as the wood itself. If the edges start to slide out of alignment, clamp two

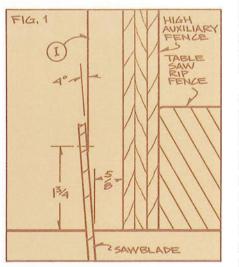
or three waxed cleats (made from hardwood that measures about 1 in. square by 20 in. long) across the boards. The cleats keep the boards flush while the wax prevents the cleats from sticking to the glue.

When dry, remove the top from the clamps and scrape away any glue that may have squeezed out of the joint. Use the table saw to trim the top to the final length and width dimensions.

To give the top a lighter look, all four edges are beveled as shown in the front and side views. Since the top overhangs the front, back and sides by 2 in., we made the bevel $1^{3}/4$ in. wide.

Bill of Materials (all dimensions actual) No. Req'd. Description Part Size A Leg 11/2 x 11/2 x 251/4 4 B Side Apron 3/4 x 53/4 x 171/2* 2 C **Back Apron** 3/4 x 53/4 x 131/2* 1 D **Upper Stretcher** 3/4 x 11/4 x 131/2* 3/4 x 1 x 131/2* Ε Lower Stretcher 1 F Cleat 3/4 x 11/2 x 171/2 4 G Spacer 3/4 x 3/4 x 16 2 Glueblock 3/4 x 3/4 x 2 2 Η 3/4 x 19 x 23 Тор **Drawer Front** 3/4 x 33/4 x 121/2 J **Drawer Side** K 1/2 x 31/2 x 17 2 **Drawer Back** 1/2 x 3 x 12 E M **Drawer Bottom** 1/4 x 111/2 x 163/4 N **Drawer Knob** see detail * Length includes tenons

The bevel can be cut in short order with a sharp hand plane. Keep in mind, though, that the bevels on the front and back edges run "across the grain," while the bevels on the side edges run "with the grain." Across-the-grain planing will tend to splinter the wood at the ends. To minimize this, cut the front and back bevels first—starting the cut from the ends and work



toward the center. Once the front and back bevels are complete, cut the bevels on the side edges. By cutting the side bevels last, you will clean up any splintering from the across-the-grain cuts.

You can also cut the bevels using the table saw. To support the top, you'll need to add an auxiliary fence to your rip fence. The auxiliary fence should be at least 10 in. high. Raise the table saw blade to a height of about 2 in., tilt it to 4 degrees, and locate the auxiliary fence so that the bevel starts ⁵/₈ in. from the edge (Fig. 1). Now, with the saw running, hold the top firmly against the fence and pass one edge over the blade. The splintering problems associated with hand planing

also apply to table saw cuts, so you'll want to do the front and back edges first, then the side edges. After the bevels are cut, a bit of sanding or some work with a scraper will smooth any rough edges.

Make The Drawer

The front (J) is made from 3/4 in. thick stock, while the two sides (K) and the back (L) use 1/2 in. thick material. The bottom (M)

is 1/4 in. plywood.

Cut the front to overall length and width, then use the table saw and dado head to cut the 1/4 in. by 1/2 in. rabbet on the top and side edges. The router table and a 3/16 in. beading bit is then used to add the stepped roundover.

The dovetail layout is shown in the side view of the drawer. Once cut, assemble the drawer as shown. The bottom is secured to the lower end of the back with a few 1/2 in. long by number 6 flathead wood screws.

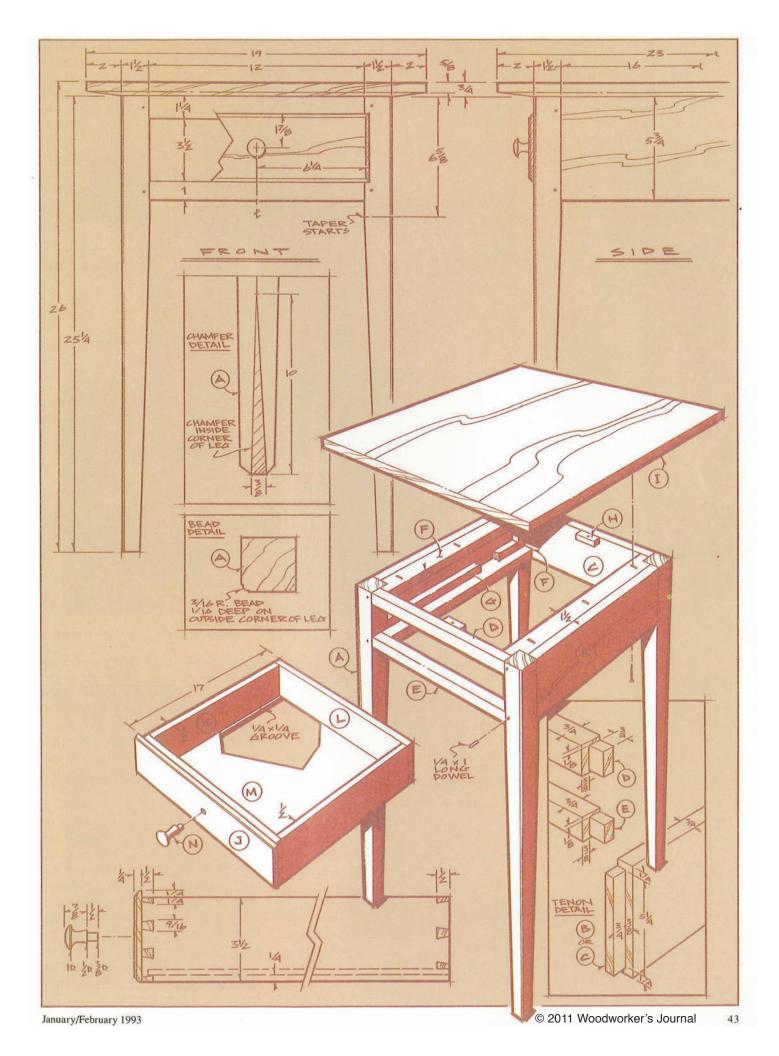
Turn the cherry knob (N) to the dimensions shown or, if you prefer, purchase one from your local hardware store. If the store doesn't stock cherry knobs (and many don't), you can add a coat or two of cherry stain to one of their

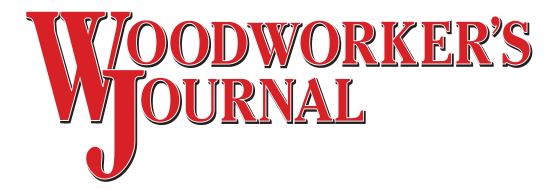
standard birch knobs.

Finish Up

All the parts can now be given a thorough final sanding, finishing with 220-grit. Use a vacuum cleaner to remove most of the dust, then a tack rag to pick up what remains. Once the dust is removed, apply a couple of coats of penetrating oil.

Finally, mount the top to the base by driving 1¹/4 in. long by number 10 roundhead wood screws up through the holes in the upper cleats and glueblocks.





Thank you for purchasing this Woodworker's Journal Classic Project plan.

Woodworker's Journal Classic Projects are scans of much-loved woodworking plans from our library of back issues. Please note that specific products and sources cited in a plan when it originally appeared may no longer be available.

If you experience any problems with this plan, please contact: info@woodworkersjournal.com

or

Attn: Classic Projects Woodworker's Journal 4365 Willow Drive Medina, MN 55340

Thank you again for your purchase, and happy woodworking!

Matt Becker Internet Production Coordinator