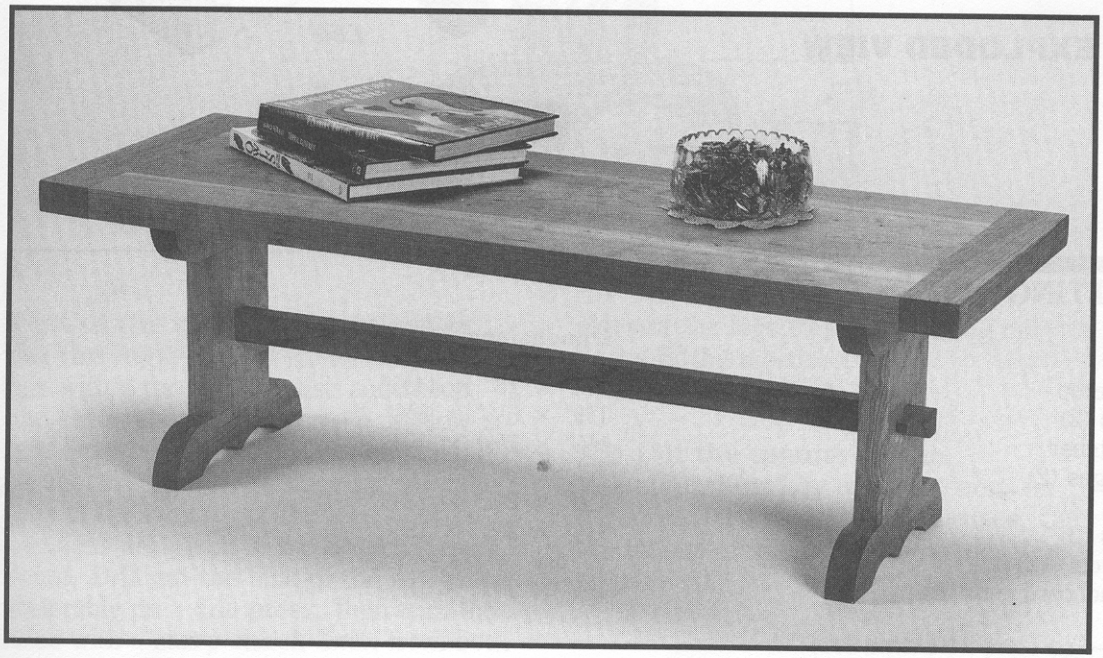
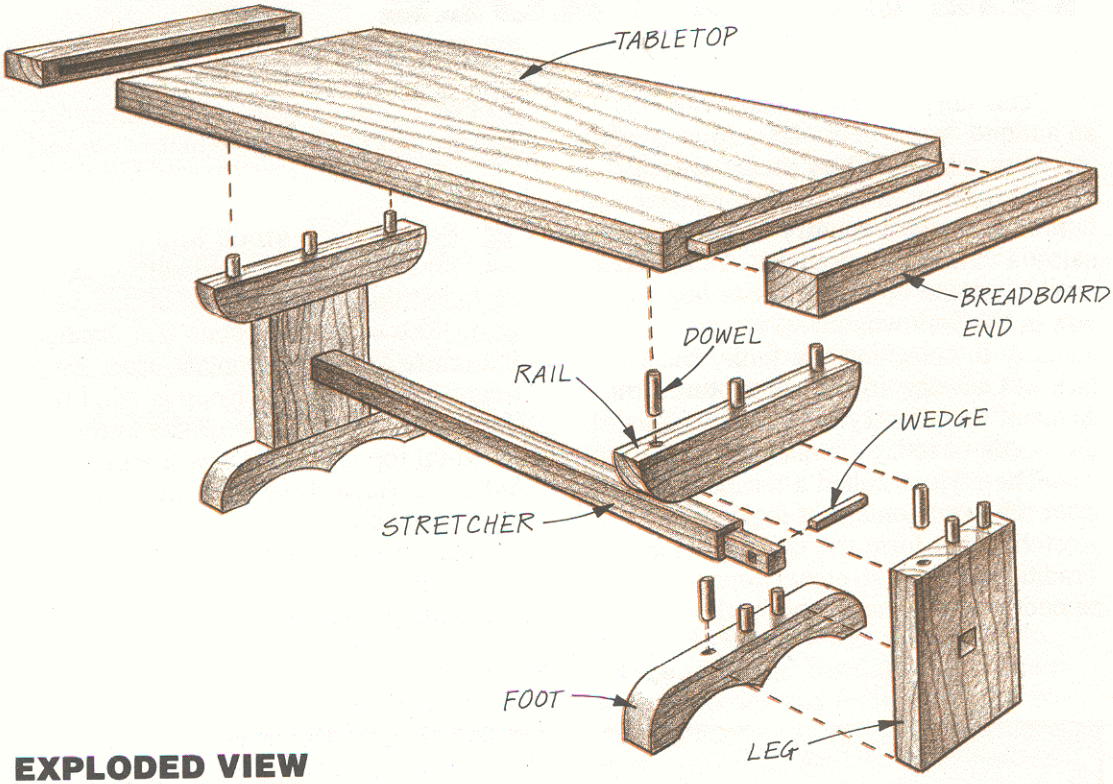
TRESTLE TABLE

This cherry coffee table, while not an antique, borrows its lines from country work tables. Tables meant strictly for dining were of less robust construction but the usual country table had to serve a variety of purposes. A table that wouldn't stand up under a side of pork was in the way when it was most needed. In designing this table, Darwin Jack of Oelwein, Iowa, has captured the flavor of the country table while suiting the needs of today's home.

The style is called a trestle table from the arrangement of legs and stretcher that form the understructure. Traditionally, the stretcher tenon was pinned to the leg assembly with a wedge so that the table could be disassembled and put out of the way when not in use.

1 Select your stock and cut it to size. Hardwoods and softwoods are both appropriate for a table of this design. With careful selection and planning, the entire table can be made from 8/4 (eight-quarter) stock. Keep in mind that if necessary the middle planks in the glued-up top can show saw marks on the bottom surface. Edge-glue the tabletop as described on page 6, then plane all of the parts to the required thickness and cut them to the dimensions specified by the Cutting List.

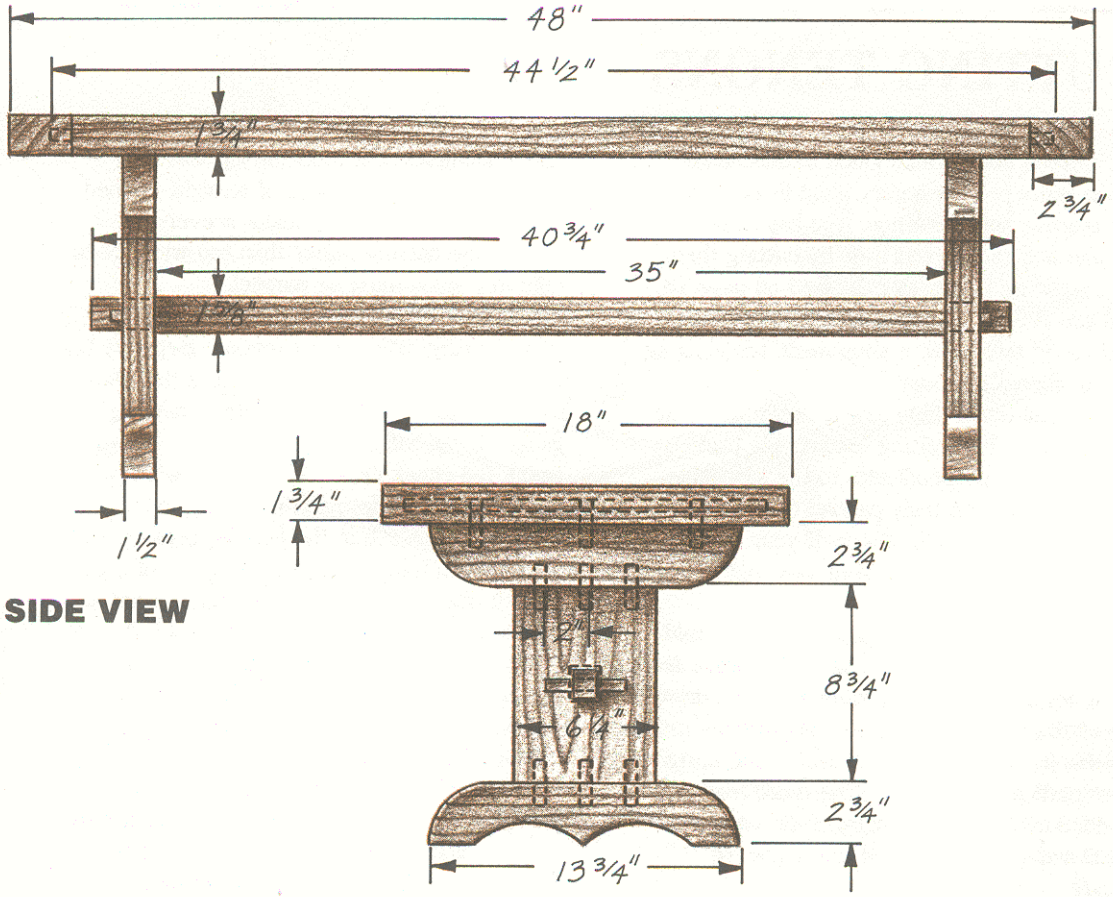




EXPLODED VIEW

CUTTING LIST

Part	Dimensions
Tabletop	1¾″ × 18″ × 44½″
Legs (2)	1½″ × 6¼″ × 8¾″
Stretcher	1¼″ × 1⅝″ × 40¾″
Wedges (2)	½″ × 9/16″ × 3¼″
Feet (2)	1½″ × 2¾″ × 13¾″
Rails (2)	1½″ × 2¾″ × 13¾″
Dowels (18)	½″ dia. × 1⅞″
Breadboard ends (2)	1¾″ × 2¾″ × 18″



2 Cut the stretcher mortises in the legs. The stretcher joins the legs with a through mortise and tenon. The tenon shoulders are quite shallow so care must be exercised to avoid making the mortises too large. Lay out the mortises in the centers of the legs. The dimensions are given in the *Stretcher Joint Detail.* Drill out the bulk of the mortises, preferably on a drill press, then trim the sides with a sharp chisel. Trim from both sides of the legs to avoid splitting out edges of the mortises.

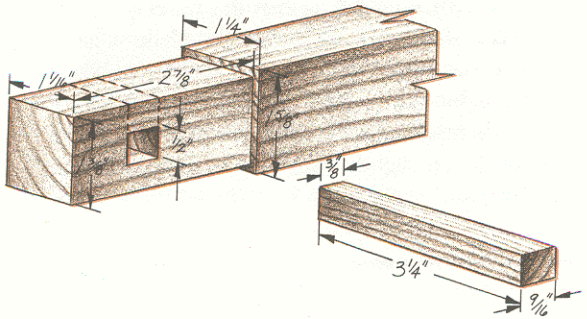
3 Cut the tenons on the stretcher. Lay out the tenons on the stretcher to match the mortises. Cut the tenons on the table saw as described on page 60.

(continued on page 62)

4 Cut the wedges and their mortises. Since the wedges taper slightly, the mortises must have one slightly angled side. Make the wedges first, to the dimensions in the *Stretcher Joint Detail.* Fit the tenons through their mortises in the legs. Mark where the tenons protrude from the outside surfaces of the legs, then lay the wedges on top of the tenons, tight against the legs. Mark where the outer edges of the wedges cross the tenons. These marks will be slightly angled because of the taper of the wedges. Disassemble the stretcher from the legs, then square down the sides of the tenons from your marks on the top surface. Complete the layout as shown in the *Stretcher Joint Detail.*

Drill out the wedge mortises from the smaller end, where the wedge will exit, and then widen the other side while squaring up the corners and smoothing the sides.

5 Shape the feet and rails. Lay out one of the foot scallops on a piece of stiff paper, then trace it onto the feet. Lay out the rounded ends of the feet and rails in the same way. You can cut these curves with a coping saw and patience but a band saw would be a lot easier, especially if you're building the table out of a hardwood. Smooth the cuts with a rasp and sandpaper.



STRETCHER JOINT DETAIL

6 Assemble the legs, feet, and rails. Lay the parts out flat on the workbench and center the rails and feet on the legs. Mark the edges of the legs on the rails and feet. Lay out centers for three ½-inch dowel holes on both ends of both legs. One hole should be centered in the end, the other two should be 2 inches away. Transfer these locations to the rails and feet. Bore all of the dowel holes 1 inch deep.

Sand the legs, rails, and feet. Saw 12 dowels, 1⅞ inch long each, from a length of ½-inch dowel stock. Chamfer the ends of the dowels and saw or plane a groove or flat on the side of each so air and excess glue can escape. Glue the dowels into the legs, spread glue on the ends of the legs, and assemble the rails and feet to the legs. Clamp the assemblies and let the glue dry.

7 Attach the breadboard ends. Breadboard ends on a tabletop are quite traditional but seldom stay glued for very long. With changes in humidity, the top expands and contracts across its width more than the breadboard ends change in length. It is therefore important that the mortise and tenon fit quite well; when the glue comes unstuck, you want the parts to stay well aligned.

Rout the mortise in the breadboard ends first. Use a ½-inch-diameter

SHOP TIP: You can transfer hole positions with commercial dowel centers. You can also do it with small finish nails. When using dowel centers, you bore one dowel hole first, place the appropriate size dowel center in the bored hole, bring the two parts together, and press them so the points on the dowel centers mark the second piece.

To transfer centers with small finish nails, you must transfer the centers before boring either hole. First cut the heads off of the nails. Select a bit the same diameter as the nails. Drill holes in one of the pieces to a depth slightly less than the length of the nails. Insert the nails, blunt end first, into the holes. Bring the two parts together and press them so the points on the nails mark the second piece. Remove the nails and bore the dowel holes.

straight or spiral upcut bit and rout the mortises 1 inch deep. Stop the mortises 1 inch from the ends.

Cutting the tenons on the table saw would be awkward because of its size. It would be easier to cut them with a router. This is done by routing rabbets from both top and bottom surfaces of the tabletop. Clamp a straightedge across the tabletop to guide the edge of your router. Position it so the bit can come no further than 1 inch from the end of the tabletop. Set the depth of cut to just a hair under ⅝ inch; you want to be able to trim the tenon to fit the mortise. Rout both sides of both tenons, then cut the shoulders at the ends with a back saw. These shoulders should be at least 1⅛ inches wide so the tenon has some expansion room in the mortise. A shoulder plane is quite handy for trimming the tenons to a perfect fit in the mortises but you can do as well with a sharp chisel and a little more time.

Sand the top and breadboard ends, then glue and clamp them together. If (or when) the glue bond eventually breaks, secure the breadboard ends by installing a single ¼-inch-diameter dowel locking the tenon into the mortise. Installed blind from the bottom surface, it will never show.

8 Assemble the table. Wedge the stretcher to the leg assemblies. Lay the tabletop upside down on a padded work surface. Position the trestle assembly on the underside of the top and mark the location of the rails. Lay out dowel holes in the rail and tabletop the same way you laid out the holes in the legs and rails. The dowel locations are shown in the *End View.* Bore the dowel holes 1 inch deep.

Sand all the parts, then glue the trestle assembly to the tabletop.

9 Apply your finish. Remember that this is a coffee table when selecting a finish. Use a finish such as polyurethane that resists water and alcohol. Apply as many coats to the bottom of the tabletop as you do to the top so that moisture content change in the wood will be uniform on both surfaces.