WOODWORKER'S JOURNAL
"America's leading woodworking authority"™

Classic Project

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.

Old-Fashioned Farm Table

Published in *Woodworker's Journal* September/October 1993

$1.00
WJC183

Old-Fashioned FARM TABLE

This country classic seats the whole family

Large, sturdy tables like these are found in many American farmhouses, from the New England coastline to the expansive plains of the great Midwest. This handsome version features a spacious 36 in. by 72 in. top—big enough to allow eight hungry people to sit pretty comfortably.

A good size drawer on each end provides extra storage space for a variety of tableware. The extra long drawer sides allow each drawer to be pulled out far enough to expose the entire contents, yet an easy-to-make retainer system keeps them from pulling out too far.

Early farm tables were likely to be made from lumber supplied by a local sawmill, so you can find them made out of a variety of woods. Most often, though, they were made from pine, poplar, maple, cherry, or some combination thereof.

The Legs: You'll need 3 1/2 in. thick stock for the four legs (A). Since it's not easy to find such thick stock, there are a couple of options to consider. You can face-glue several thinner boards, like maybe a 3/4 in. board sandwiched between a pair of 1 1/2 in. boards. Although this will give you enough thickness, the glue lines will show, looking rather unsightly, unless you paint the legs.

Even though we planned to paint the legs and base parts on our table, we took a slightly different approach. For about $20, we purchased a 10 ft. length of clear western red cedar 4 by 4 stock (which measured 3 1/2 in. by 3 1/2 in.) at our nearby lumberyard. This stock is generally used to make outdoor decks. While cedar is not a traditional wood for a farm table leg, using it enabled us to get the exact 3 1/2 in. square size we needed without having to glue up any stock—and at a pretty good price to boot. Plus, we found that the clear cedar turned rather nicely on the lathe. The 10 ft. length provided enough stock for all four legs.

Once you've got 3 1/2 in. square stock, cut it to about 29 3/4 in. long and mount it between centers on the lathe. Turn the four

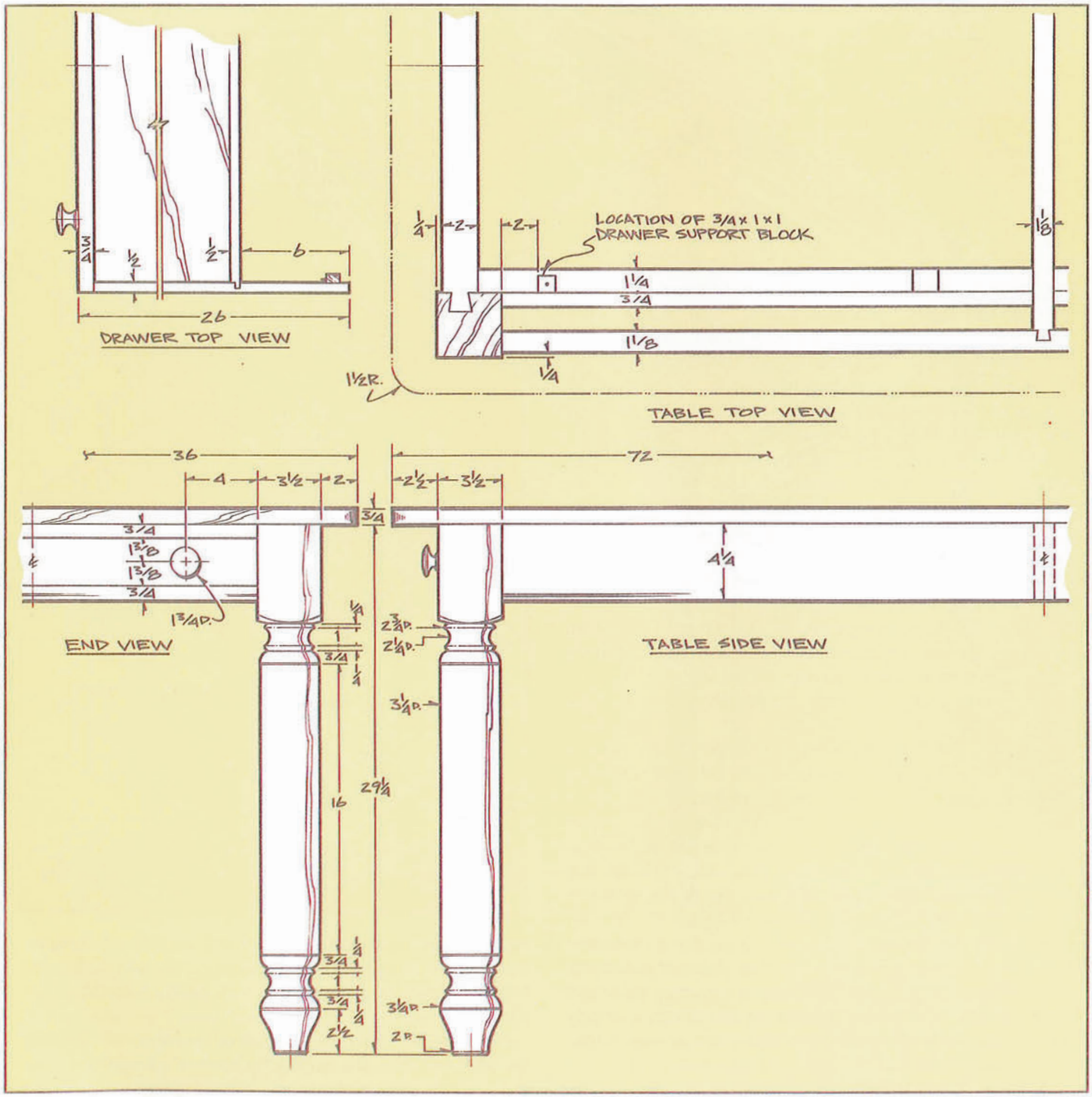
legs to the dimensions shown in the end and side views, sanding them while on the lathe. The table saw and miter gauge can be used to trim the legs to the final length of 29 1/4 in.

Aprons and Stretchers: Cut the two aprons (B), the two top stretchers (C) and the two bottom stretchers (D) to the dimensions shown in the Bill Of Materials, then use the molding head equipped with a 3-bead cutter to cut the bead along the edge of the aprons and bottom stretchers as shown in the Tenon Detail. Also, cut the center stretcher (E) to size, but leave it an inch or two long for now.

As shown in the Exploded View, the inside edge of the bottom stretcher has a 1/4 in. wide by 1/4 in. deep groove cut along it's entire length. The center stretcher (see Center Stretcher Detail) has the same groove along each side. Later, when the table is assembled, the drawer runners will fit in these grooves. We used a dado head cutter in the table saw to make each of these grooves

The tenons on each end of the aprons can be cut using the table saw in conjunction with the dado head and miter gauge. Because the aprons are more that 5 ft. long, you'll need to clamp a long auxiliary fence to the miter gauge in order to provide enough support for each apron as it's passed through the cutter.

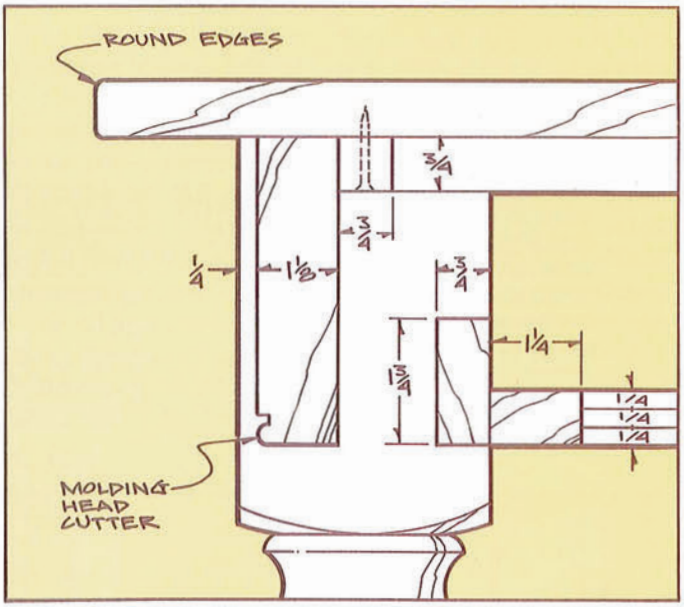
Referring to the Tenon Detail, lay out the dovetail on each end of the top stretcher as shown, then cut each one with a dovetail saw. The double tenons on each end of the bottom

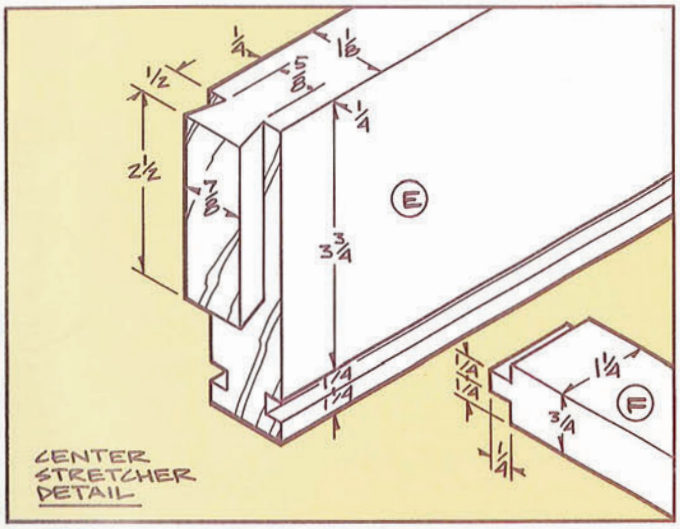


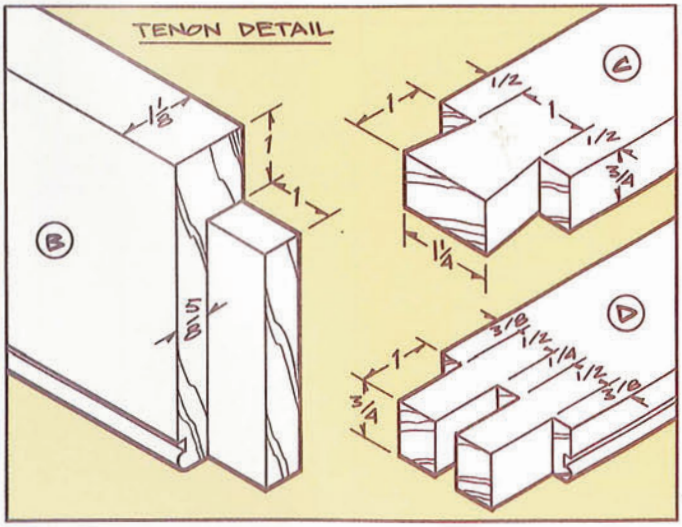
Bill of Materials
(all dimensions actual)

Part	Description	Size	No. Req'd.
A	Leg	3 1/2 x 3 1/2 x 29 1/4	4
B	Apron	1 1/8 x 4 1/4 x 62*	2
C	Top Stretcher	3/4 x 2 x 27**	2
D	Bottom Stretcher	3/4 x 2 x 27*	2
E	Center Stretcher	1 1/8 x 4 1/4 x 30 1/4**	1
F	Drawer Runner	3/4 x 1 1/4 x 31 3/16*	4
G	Drawer Guide	3/4 x 1 3/4 x 29 7/16	4
H	Cleat	3/4 x 3/4 x 2 1/2	18
I	Drawer Support Block	3/4 x 1 x 1	4
J	Top	3/4 x 36 x 72	1
K	Drawer Front	3/4 x 2 3/4 x 25	2
L	Drawer Side	1/2 x 2 3/4 x 25 3/4	4
M	Drawer Back	1/2 x 2 1/4 x 24 1/2	2
N	Drawer Bottom	1/4 x 19 1/2 x 24 1/2	2
O	Drawer Knob	See Detail	4
P	Drawer Retainer	1/2 x 3/4 x 2 3/4	4
Q	Drawer Stop	3/4 x 1 1/4 x 1 1/2	4

* Length includes tenons
** Length includes dovetails.







stretcher can be cut using a dovetail saw and chisel.

Cut the Apron and Bottom Stretcher Mortises: Next, on each leg, lay out and cut mortises for the aprons. Note, as shown in the top view, that the aprons are inset 1/4 in. from the edge of the leg. You can chop each mortise by hand, but you'll save time if you remove most of the waste stock by boring a series of holes with a 1/2 in. diameter drill bit, then use the chisel to clean up what remains.

Also, at this time, you can lay out and cut the double mortises for the bottom stretchers. Like the aprons, the stretchers are inset 1/4 in. (see Top View). Again, you can chop them out with a chisel or, to eliminate most of the grunt work, bore the series of holes.

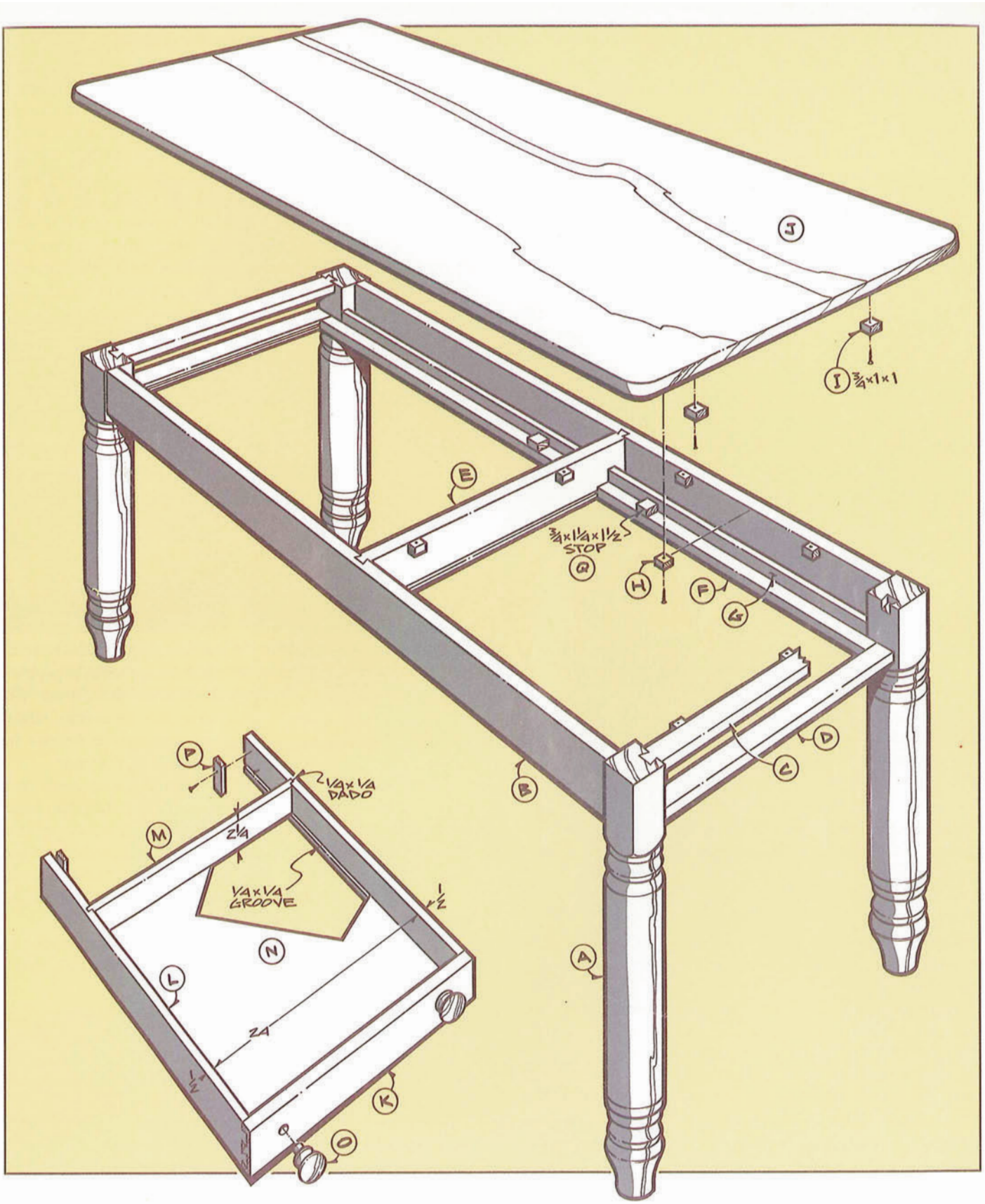
Make the Dovetail Cutout for the Top Stretcher: Next, lay out the dovetail cutout for the top stretcher in the top of each leg. Note that the top stretchers, like the aprons and bottom stretchers, are inset 1/4 in. as shown in the Top View. Hold the top stretchers in their exact position on the legs, then trace the dovetail shapes. Use a chisel to cut the dovetails to a 3/4 in. depth.

Assemble The Legs and Stretchers: Begin the assembly of the table by gluing up two subassemblies, each one consisting of a pair of legs along with a top and bottom stretcher. Add a thin coat of glue to the top stretcher dovetails, the bottom stretcher tenons and also to their mating joints in the legs. Assemble the bottom stretchers first, then add the top stretchers. Clamp firmly and make sure everything is square before setting the two subassemblies aside to dry.

Assemble the Aprons: Add a thin coat of glue to the apron tenons and their mating leg mortises, then assemble and clamp. Since our pipe clamps are only 4 ft. long, we connected two of them together with a pipe coupling (sold at plumbing supply houses and most hardware stores) in order to get enough length. Check squareness and, if all looks okay, set aside to dry.

Add the Center Stretcher: This part was cut slightly long earlier in the construction. Now, you'll want to establish the final length dimension by measuring the actual distance between the inside of the aprons, then adding 1 in. (1/2 in. for each dovetail).

Next, cut the 1/2 in. by 1 3/4 in. notch on each end. We used the table saw to do this, setting the blade to a height of 1 3/4 in. and, with the stock supported by the miter gauge, passing it on



edge through the blade. About four or five passes will remove the waste material. With the notch cut, layout the dovetails on each end and cut them out with a dovetail saw and chisel.

Assemble the Center Stretcher: Using the center stretcher dovetails as templates, scribe the dovetail profiles on the top edge of the aprons, then chop them out with a chisel. Once cut, add glue to the mating surfaces and assemble.

Drawer Guides, Runners and Cleats: Cut the four runners (F) to size, including the 1/4 in. by 1/4 in. tenons on each end. To assemble, apply glue to the tenons, then angle the runners in the stretcher grooves and slide them into position. Use a framing square to check that the runners are square to the bottom stretchers. Allow to dry.

Now, cut each of the four drawer guides (G) to fit snugly

between the inside of the leg and the center stretcher. Apply a coating of glue to each runner edge that mates to a drawer guide, then use a few C-clamps to clamp the runners and guides together.

Make the 18 cleats (H), then glue and screw them to the inside edges of the aprons and stretchers. We attached six along each apron, two to each top stretcher and two to the center stretcher. Be sure to slot the cleats to allow the top to expand and contract with changes in humidity.

The Top: You'll need to edge glue several narrow boards in order to get the 36 in. width needed for the top (J). We used eight boards, each one measuring about 4 1/2 in. wide. When cutting 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 pipe clamps and set aside to dry. There is no need to add dowels or splines here, as this joint matches long-grain to long-grain, a joint that is as strong as the wood itself. Since it was somewhat unwieldy for us to work with eight boards, we glued up two 18 in. wide sections (four boards in each section). When the sections dried, we edge glued the two of them together.

The edges will tend to slide out of alignment, so it's a good idea to clamp two or three waxed hardwood cleats across the boards. The cleats keep the boards flush, while the wax prevents the cleats from sticking to the glue.

Once glued, the top will be too large to easily trim on most table or radial-arm saws. We clamped a straightedge across the top and used a portable circular saw to trim the ends. Another straightedge, only longer, was used to trim the top to final width.

To complete work on the top, use a saber saw to cut the 1 1/2 in. radius on each of the four corners, then sand the edges smooth.

The Drawers: Measure the opening for the two drawer fronts (K) and cut them to fit. Also, cut the drawer sides (L) and backs (M) as shown. Layout the half-blind dovetails that join the sides to the fronts and cut them out. Also, using a router or the table saw, cut the 1/4 in. by 1/4 in. rabbet on each end of the back, the 1/4 in. by 1/4 in. dado in the sides and the 1/4 in. by 1/4 in. groove along the inside face of the fronts and sides.

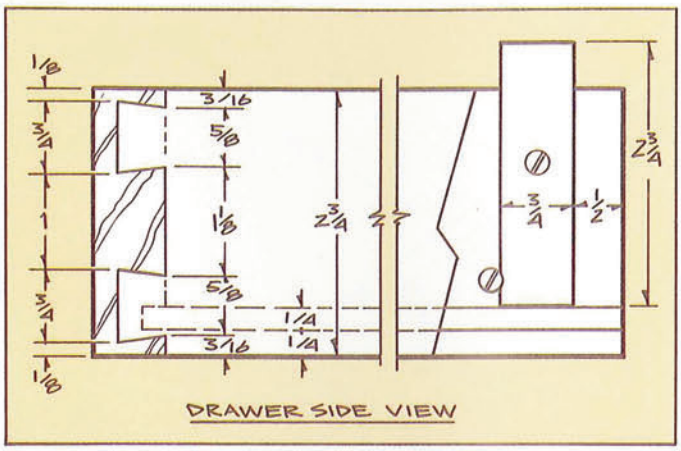
Assemble all the drawer parts with glue and clamps. When dry, cut the bottoms (N) to length and width and slide them into place from the back. Secure them in place with a couple of small screws driven up through the bottom and into the lower edge of the back.

The knobs (O) can turned or, if you prefer, they can be ordered often carry wooden knobs in a variety of styles.

Install the drawers on each end, locating their front faces flush with the front edges of the stretchers. With the drawers in their proper position, cut the four drawers stops (Q) to size and glue them to the guides and runners, positioning them so that they butt up against the back end of the drawer sides.

The drawer retainers (P), which are secured to the drawer sides, and the drawer support blocks (I), which are secured to the underside of the top, provide a couple of worthwhile benefits. The drawer support blocks help keep the drawers from tipping down as they are pulled out. And the drawer retainers, which stop against the support blocks, prevent the drawers from accidentally pulling all the way out and crashing on your big toe.

The drawer retainer system is as simple as it is clever. The four drawer retainers are secured to the inside of the drawer sides with 3/4 in. long by no. 8 flathead wood screws as shown in the Drawer Side View. The retainers must be free to pivot. A second wood screw (same size) attached to the drawer side acts to stop the retainer.



To insert the drawers in the table, pivot the retainers to a horizontal position. Once the retainers are past the drawer support blocks, pivot them to the vertical position to lock in the drawer. Reverse the procedure whenever you want to remove the drawer from the table.

Temporarily Add the Top: Place the top upside down on a blanket or other protective surface, then place the table frame upside down on the top. Locate the frame in its proper position and mark the mounting hole locations in each cleat. When marked, bore 1/2 in. deep pilot holes for no. 8 flathead wood screws. Add two or three 1 1/4 in. long flathead wood screws to temporarily hold the top in position.

Now, with the top in its final position, mark the location of the four drawer support blocks. Attach each one with a single flathead wood screw.

Finishing: Remove the top and drawer support blocks, then give the entire top a thorough sanding through 220-grit. Once sanded, add a thin coat of glue and reattach the support blocks, again using the wood screws. Also, sand the legs, aprons and stretchers through 220-grit.

The entire base is painted with two coats of flat latex red paint, the color typically called barn red.

Two coats of Minwax Golden Oak Wood Finish were applied to the top, followed by two coats of water-based satin polyurethane. When dry, mount the top to the base with the 1 1/4 in. long flathead wood screws driven up through the cleats and into the pilot holes previously drilled in the top.

You may also want to check your local lumberyard, as they

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