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One Board Hall Table

In this plan you will be getting:

- Step by Step construction instruction.
- A complete bill of materials.
- Exploded view and elevation drawings.
- How-to photos with instructive captions.
- Tips to help you complete the project and become a better woodworker.

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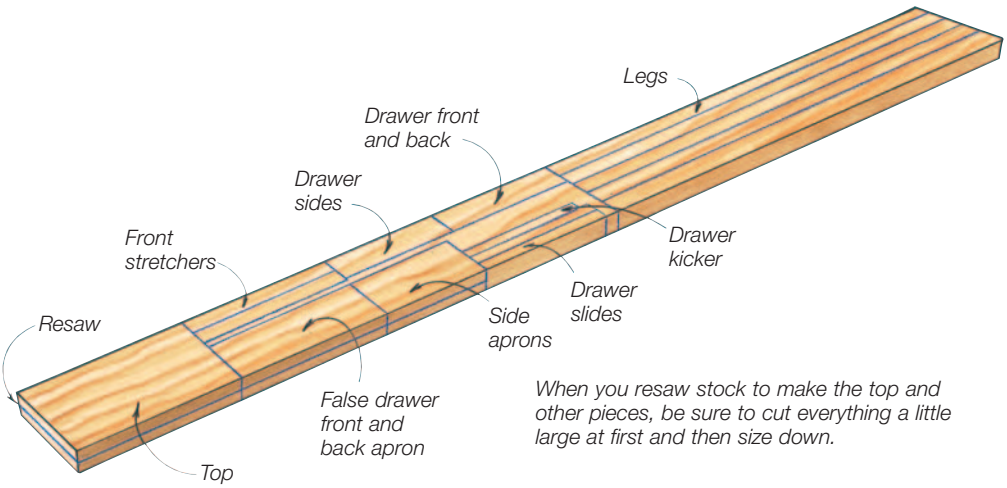


When you resaw stock to make the top and other pieces, be sure to cut everything a little large at first and then size down.

One Board Hall Table

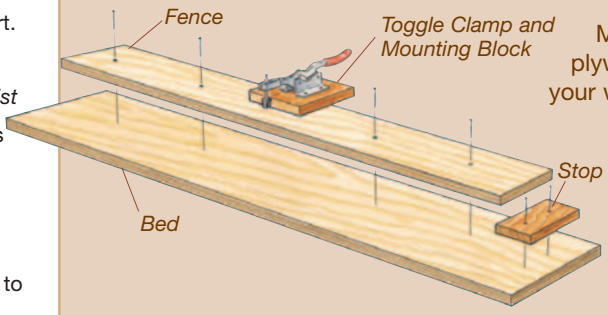
One board doesn't actually describe the style or look of this table, but it is a pretty complete description of the material that goes into it. If you haven't been hoarding special pieces of stock (maybe you're just getting started with this hobby or haven't yet become a "wood-aholic") then shopping is really simple. A seven-inch-wide, eight-foot-long piece of 8/4 stock is all you will need. This one board approach creates a beautiful table with consistent figure and color. We made our version of this project from a wonderful piece of Lake Superior flame birch.

Dividing and Cutting

Take a look at the "one board" diagram, above, and begin cutting the longer pieces of stock to their rough lengths, but a little oversized to start. Cut the legs (pieces 1) into squared-up full leg blanks for tapering later and, using the *Material List* on page 123 as a guide, cut the rest of the pieces to size. Some pieces will need to be resawn and planed to their proper dimensions.

Arrange the leg pieces so the best faces will be viewed on the table. Mark the tops of the legs to keep this orientation. Lay out and cut the mortises in the aprons and stretchers (pieces 2 through 4) and matching mortises in the legs (check the *Elevation Drawings* on page 122 for locations and placement details). Use your drill press to remove most of the waste and clean up the mortises with a sharp chisel. On your dry fit, you'll notice that the legs are offset from the aprons just a bit. Now size and cut the large and small floating tenons (pieces 5 and 6) to fit the mortises you just made.

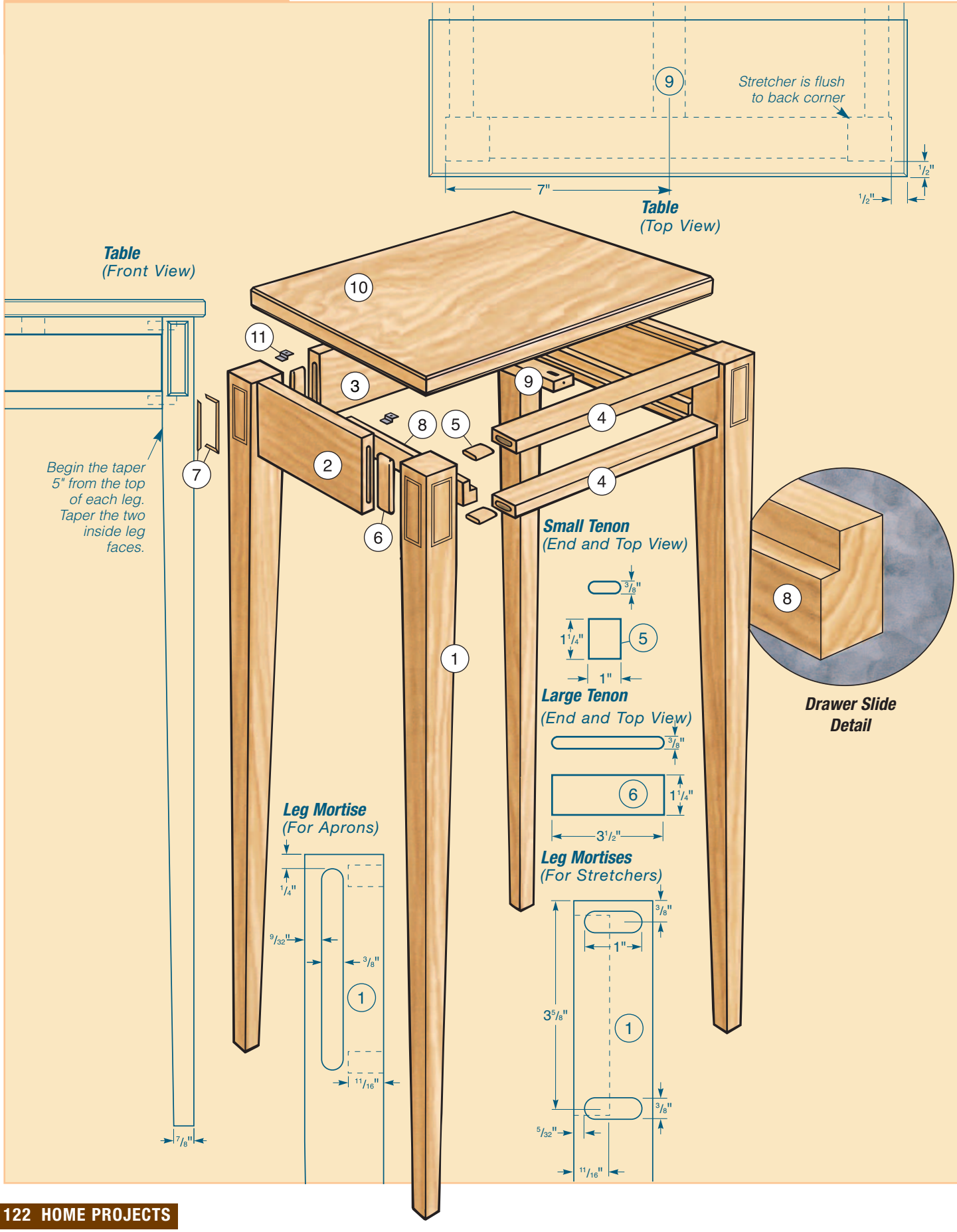
QUICK TAPERING JIG

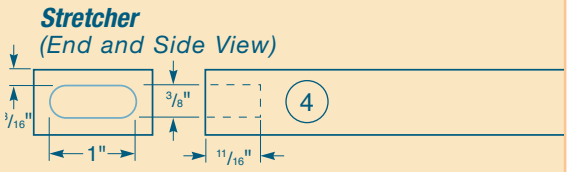


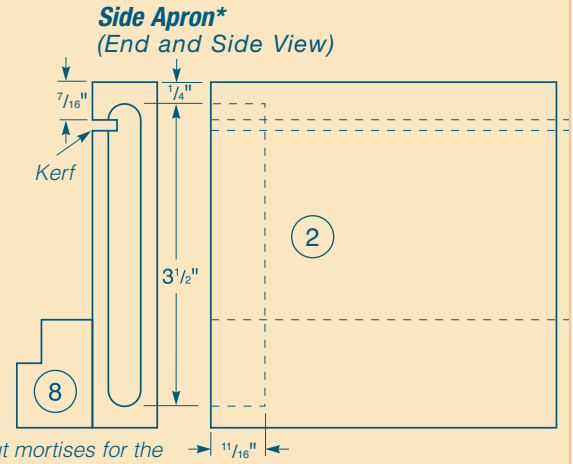
Make the bed from 3/4" plywood 10" longer than your workpiece and wide enough to accommodate a toggle clamp. Next, rip a 4"-wide piece of 3/4" ply for the jig's fence. Slice a couple of small pieces from this stock to make a stop for the jig bed and a mounting block for the toggle clamp. Lay a leg blank onto the jig bed with the side you wish to taper overhanging the edge; attach the fence and stop to position the leg blank. Position and attach the mounting block and toggle clamp so you can secure the leg stock without contacting the area to be sawn.

Use this safe, simple jig to cut accurate tapers on your table saw.

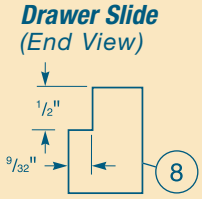
Table Exploded View







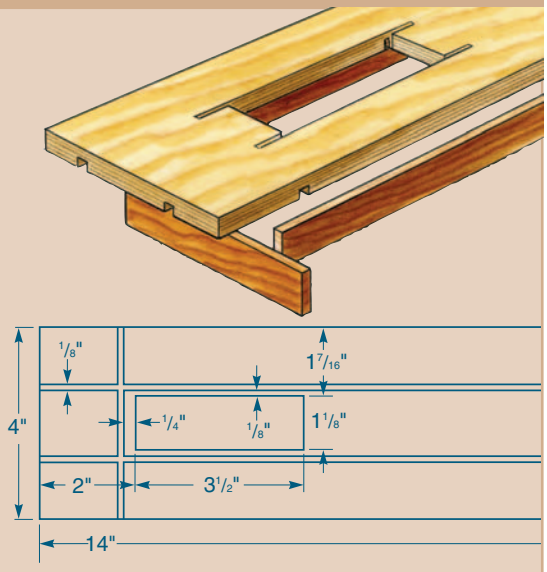
*Cut mortises for the back apron as shown; omit the kerf.



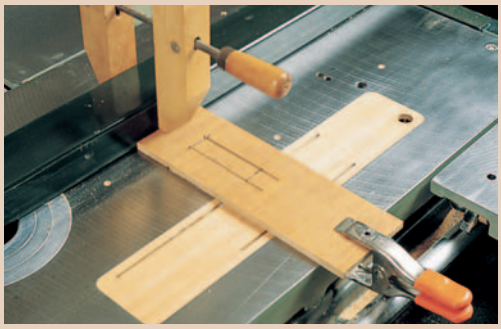
MATERIAL LIST—*TABLE*

		T x W x L
1	Legs (4)	1⅜" x 1⅜" x 35¼"
2	Side Aprons (2)	¾" x 4" x 8¼"
3	Back Apron (1)	¾" x 4" x 11¼"
4	Front Stretchers (2)	⅜" x 1 9/32" x 11¼"
5	Small Floating Tenons (4)	⅜" x 1" x 1¼"
6	Large Floating Tenons (6)	⅜" x 3½" x 1¼"
7	Inlay (1)	⅛" x ⅛" x 72"
8	Drawer Slides (2)	⅞" x 1¼" x 8¼"
9	Drawer Kicker (1)	¾" x 1" x 8 25/32"
10	Top (1)	¾" x 12" x 15"
11	Tabletop Fasteners (4)	*Steel*

LOW-RISK INLAY JIG



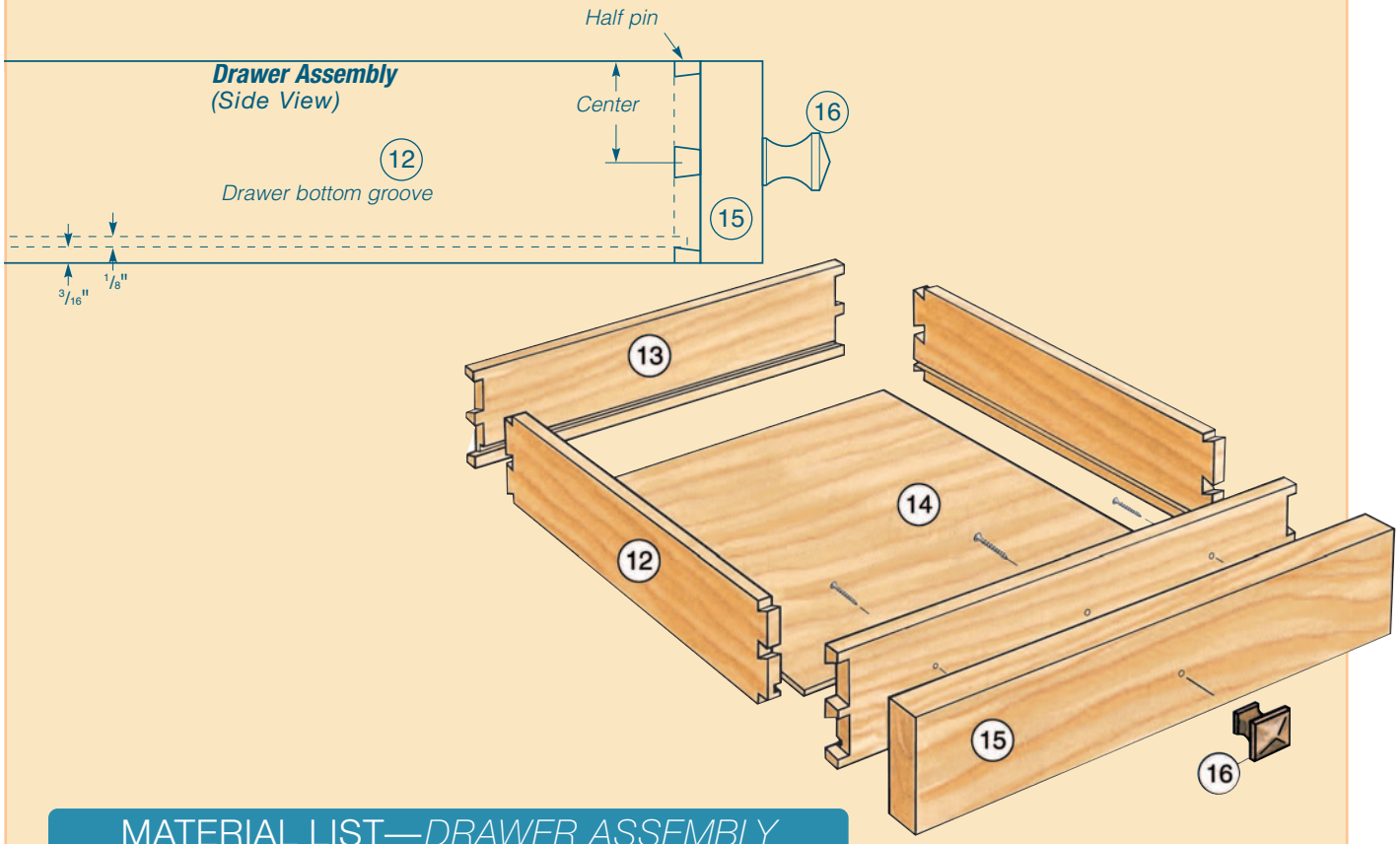
Build this jig from 1/2" inch plywood to the dimensions shown above. The opening is kept close to one end of the jig to provide room to clamp the fixture onto the leg blanks without interfering with your router movement. Cut a dado and two grooves on the underside to locate the three cleats, as shown in the elevation and exploded views above.



To cut the jig opening, position the jig blank against the rip fence on the table saw with the blade lowered below the table. Then carefully elevate the blade to form the opening.

Use a homemade jig, a 3/8" O.D. rub collar and a 1/8" veining bit to cut the inlay slots. Plunge your router and take a single lap around the jig opening. Make sure the rub collar hugs the jig constantly.

Drawer Exploded View



MATERIAL LIST—*DRAWER ASSEMBLY*

		T x W x L
12	Drawer Sides (2)	5/16" x 2 7/16" x 9 1/4"
13	Drawer Front, Back (2)	5/16" x 2 7/16" x 11 3/16"
14	Drawer Bottom (1)	1/8" x 8 15/16" x 10 7/8" *(plywood)*
15	False Drawer Front (1)	3/4" x 2 7/16" x 11 3/16"
16	Drawer Knob (1)	11/16" x 11/16" x 13/16"

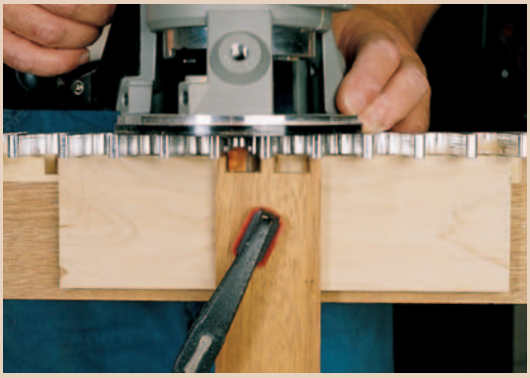
Forming Tapers and Inlays

Lay out the taper on one of the legs. The outside two faces are straight and the insides have the taper. Start the taper 5" from the top and reduce the leg to 7/8" square on the bottom. Use the jig described on page 121 to slice tapers on the inside faces of each leg. Once all the tapers have been cut, move on to the decorative inlay (piece 7) on the outside faces at the top of each leg. Again, as with the tapers, the key to success with this task is to build the simple jig described on page 123. The jig is designed to work with a 3/8" O.D. guide bushing set in a plunge router base. Install a 1/8" router bit and set the bit height to cut just shy of 1/8" deep with the router sitting on the inlay jig. Make several test cuts in scrap cut to the size of the leg stock in order to get the feel of the procedure. Now position the jig on the end of a leg with the blank held tight against the jig's cleats, using two clamps to secure it properly. Start in one corner, plunge the bit, and continue around the opening in a clockwise direction. Lift the router when you get back to the starting point. Recutting may enlarge the groove and cause problems as you are fitting the inlay pieces. Repeat the process on all the faces where the inlay appears. Use a wide chisel to square up the corners. Hold the flat back of the chisel on the wall of the groove and rock it down into the uncut area to create perfectly square corners.

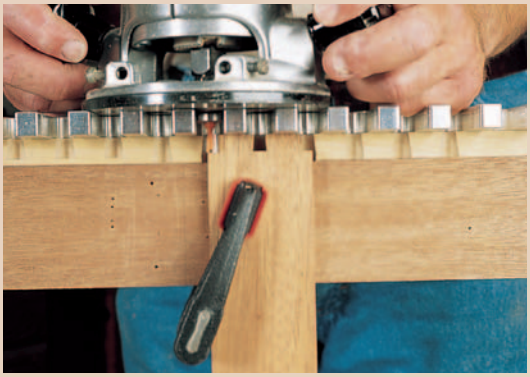
With the grooves cut, prepare some mahogany for the inlay. (You can also buy commercially available 1/8" inlay strips as well as more elaborate inlays with patterns.) Resaw your mahogany and plane it to 1/8"

MAKING DOVETAILS WITH A KELLER JIG

Some folks shy away from dovetail joints, thinking them too difficult and time-consuming. If your only option was to cut them by hand with a backsaw we'd probably agree, but with modern jigs and routers, this joint is within the scope of most woodworkers. We used the Keller Jig to cut dovetails in the drawer sides, front and back for this project. Always test your setup on scrap lumber dimensioned to the exact size of the stock used in your project. We find it useful to run the tails 1/32" long and sand them smooth.



Use the Keller Jig to machine the drawer front and back first, forming the half pins at each end and then centering a pin in the middle.



Next, machine the tails on the drawer sides. Check each side for cupping, orienting any bow to the inside to prevent separation as the drawer ages.

thick. Put a zero-clearance insert in your table saw and use a sharp blade to rip 1/8"-wide inlay strips. Dry-fit the first strip you cut to ensure the rest will fit properly. Make the inlay pieces snug enough to just barely fit into the groove. If just the slightest tap with a hammer is needed to persuade them into place, you've got a perfect fit. Mitering the inlay to length is something of a challenge. The short pieces cause you to work close to the saw blade. A small extension on your miter gauge with a stop will safely cut the parts to their exact length. To be extra safe, use a piece of scrap or length of dowel to hold the small parts during cutting.

Wrapping Up the Legs and Aprons

Grab a knife or scraper to pare a slight chamfer on the back edges of the inlays. Run a small bead of glue in the bottom of the slot and tap them home. Or press the inlays into place using a wallpaper seam roller to help reduce the chance of breaking a delicate piece. When the glue securing the inlays has cured, you may have to carefully scrape the inlay flush.

Now use a 1/8" roundover bit in a trim router or medium-grit sandpaper to break all the edges of the legs fairly heavily, then finish-sand the legs to 220 grit. Run the tapered faces of the legs over the jointer, set to a light pass, to remove the saw marks. A scraper also works for this clean-up if you don't have a jointer. Avoid using a power sander on the legs near the mortises. It can round over the surface and spoil the joint. It's better to use a scraper or hand-sanding block here.

Sand the apron and stretchers as well, and break just the bottom edges of these pieces. The ends and tops need to remain square — they butt against other parts. Now cut a kerf in the side aprons for tabletop fasteners. See the *Elevation Drawings* on page 123 for the proper kerf locations.

Starting the Assembly

Glue up the legs and aprons in two sub-assemblies: First, join the legs to the side aprons and then, when the glue has cured, attach those sub-assemblies to the back apron and stretchers. Be prudent with the amount of glue you use. It is important to avoid excess glue squeeze-out on the visible surfaces.

Machine the drawer slides (pieces 8) on your table saw by plowing rabbets as shown in the *Drawer Slide Detail* on page 123. Then turn to your drawer kicker (piece 9) and drill a pocket hole at each end of the piece.

Move to the table sub-assembly and glue and clamp the drawer guides in place against the side aprons (flush with the bottom stretcher). Install the drawer kicker (see the *Elevation Drawing* on page 122 for placement), using clamps to steady it as you drive the attachment screws home.

Topping It All Off

Glue up the top (piece 10) from the resawn pieces you cut earlier. Take care when you align the pieces to get a book-matched grain orientation. It is a great way to really show off the figure of the wood. After the glue has dried, size the top and use a belt sander to smooth the surfaces. Switch to a router and form 3/32" chamfers on the top and bottom edges. After sanding the top to 220 grit, attach it to the legs. To do this, place the top face down on a solid-padded work surface and set the leg sub-assembly in position. Fit tabletop fasteners (pieces 11) into the apron kerfs and drive the screws through their holes into the tabletop. With everything lined up, remove the top and set it aside until you've applied the finish.

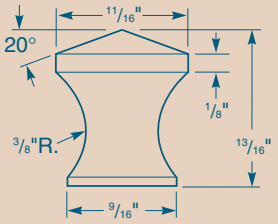
Making the Drawer

Cut grooves in the drawer sides, front and back (pieces 12 and 13) to accept the drawer bottom (piece 14). We used a Keller Jig to cut through dovetails on the drawer pieces, as shown in the *sidebar* on page 125. Dry-fit the drawer components and, once they all fit well, glue and clamp them together. Don't glue the drawer bottom in place: it must float freely. Size the false front (piece 15) to allow a 1/16" clearance all around the drawer opening. Break all its edges with sandpaper and final-sand to 220 grit.

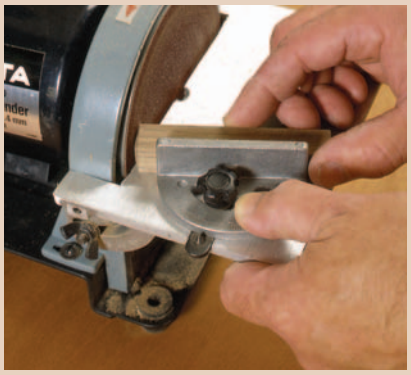
While a solid-brass knob would look good on this piece, we departed from the one board concept and designed an end grain knob from walnut (piece 16), as shown in the *sidebar* above.

SHAPING A KNOB IN TWO STEPS

You could use a nice brass pull on this project, but we made a simple yet striking hardwood knob out of walnut. It's easy to make in just two steps and a perfect accent to a stylish table like this one.

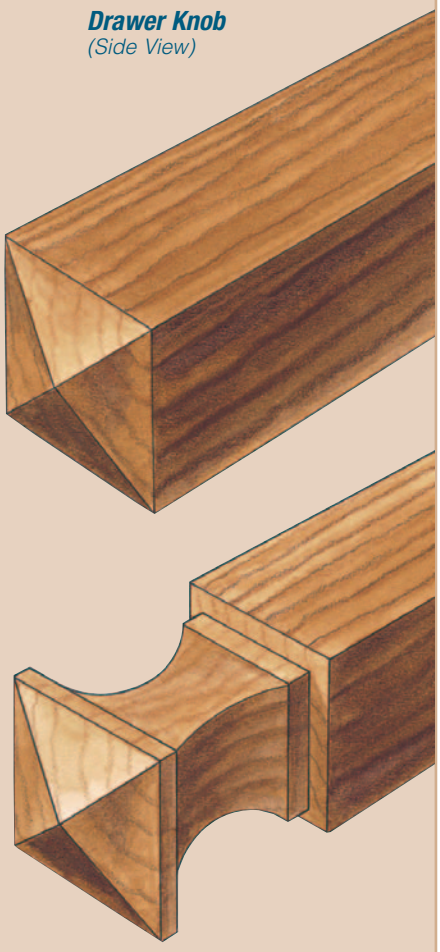


Drawer Knob
(Side View)



Disc-sand the top bevel angles holding the workpiece against a miter gauge.

Spindle-sand the the inner contours to shape, then bandsaw the knob free.



Finishing and Final Assembly

Fit the drawer in the table. Finish sand all the parts and make a final check for glue squeeze-out by wiping with mineral spirits.

Apply three coats of polyurethane varnish, sanding after the second coat with 320-grit paper. Lay down the last coat, then final-sand with 600 grit. Buff with 0000 steel wool to create a soft, satiny sheen.

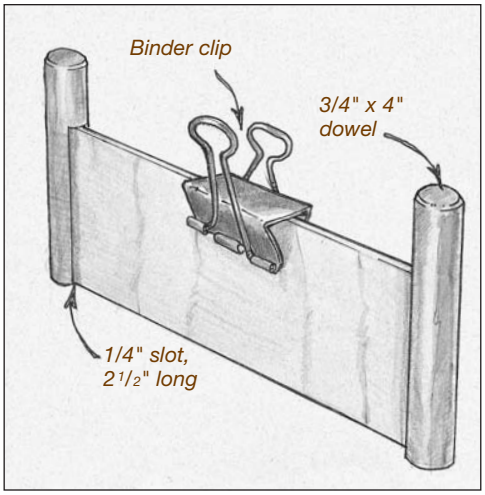
Predrill the false drawer front to center the knob. With the drawer in the table, position the false front in the opening, using shims to keep it centered. Temporarily drive a single screw through the predrilled hole in the false front and into the drawer. Open the drawer and make sure the alignment is correct. Then drive two #6 screws from inside to attach the false front. Remove the temporary screw and drive a #8 screw from the inside to attach the knob. (Be sure to predrill the knob first!) Reinstall the top and wax the drawer slides to complete this project.

This is not your normal hall table, but tucked discreetly beside a door, it makes an elegant place to set the mail or a purse while removing a coat.

Quick Tip

A Simple Scraper Holder

The sharp ends of scraper blades can be hard on your hands, but you can get some relief by mounting your scraper in a holder. This simple scraper holder design consists of two 4" lengths of 3/4"-diameter dowel joined by a flexible piece of 1/8" plywood. Rout a 1/4" slot into each dowel and glue the plywood into these slots. To achieve maximum flexibility, orient the plywood so the exterior grain runs parallel to the dowels. Slip the blade into place in the slots and secure it with a binder clip.



Keep in mind the time of year when making drawers. If you make a snug-fitting drawer during a Midwestern winter, don't expect to get it open on a humid day in August.