



Woodsmith **PLANS**

CRAFTSMAN LIBRARY TABLE



CRAFTSMAN-STYLE LIBRARY TABLE

This classic project offers Craftsman design at its best. It's practical, simple in details, and features solid, straightforward construction.



Craftsman-style furniture is always easy to recognize. That's because it's based on a well-established design philosophy. In a nutshell, the basic principles are that furniture should be simple in design, highly practical, and built to pass down from generation to generation. And one look is all you need to tell that the classic library table in the photo above hits the mark.

The Craftsman heritage of this table is unmistakable. It starts with

a solidly built frame that supports a beefy top. The square, gently eased edges create clean lines. Minimal details like the through-tenon joinery and the gracefully shaped corbels beneath the upper rails define Craftsman simplicity.

The possible uses for this table are wide open. Its classic look compliments most decor. The spacious top provides plenty of display space or a comfortable worksurface, and when you consider the accomodating

drawers, the library table is also a good candidate for a desk.

But all this aside, what appeals to me most about this project is the time spent building it. As it should be, the construction is very down to earth — just traditional joinery and straightforward techniques that will give your woodworking skills a good workout. And in the end, you'll have a treasured heirloom that looks great and will serve you well today and far into the future.

Construction Details

Overall Dimensions: 54" x 28" x 30"

NOTE: Sturdy base is built with mortise and tenon joinery

Large top is glued up from 1"-thick stock

NOTE: Main parts of table are quartersawn white oak

NOTE: Drawer support system designed for easy installation after base is assembled

Figure-eight fastener

Side-mount drawers slide on hardwood runners

Craftsman-style drawer pulls complement simple design of table

Shallow drawers add versatile storage

Routed profile on drawer sides softens edges and adds traditional detail

Gently curved corbels lighten the appearance of large table

NOTE: Drawer sides and back are maple, bottom is plywood

Stretcher strengthens base

Drawers use rigid half-blind dovetail joinery

Stretcher joint reinforced with screws

FRONT SECTION VIEW

Decorative profile routed on top edges of drawer sides

Top is easily fastened to base with figure-eight fasteners

Maple plywood drawer bottom

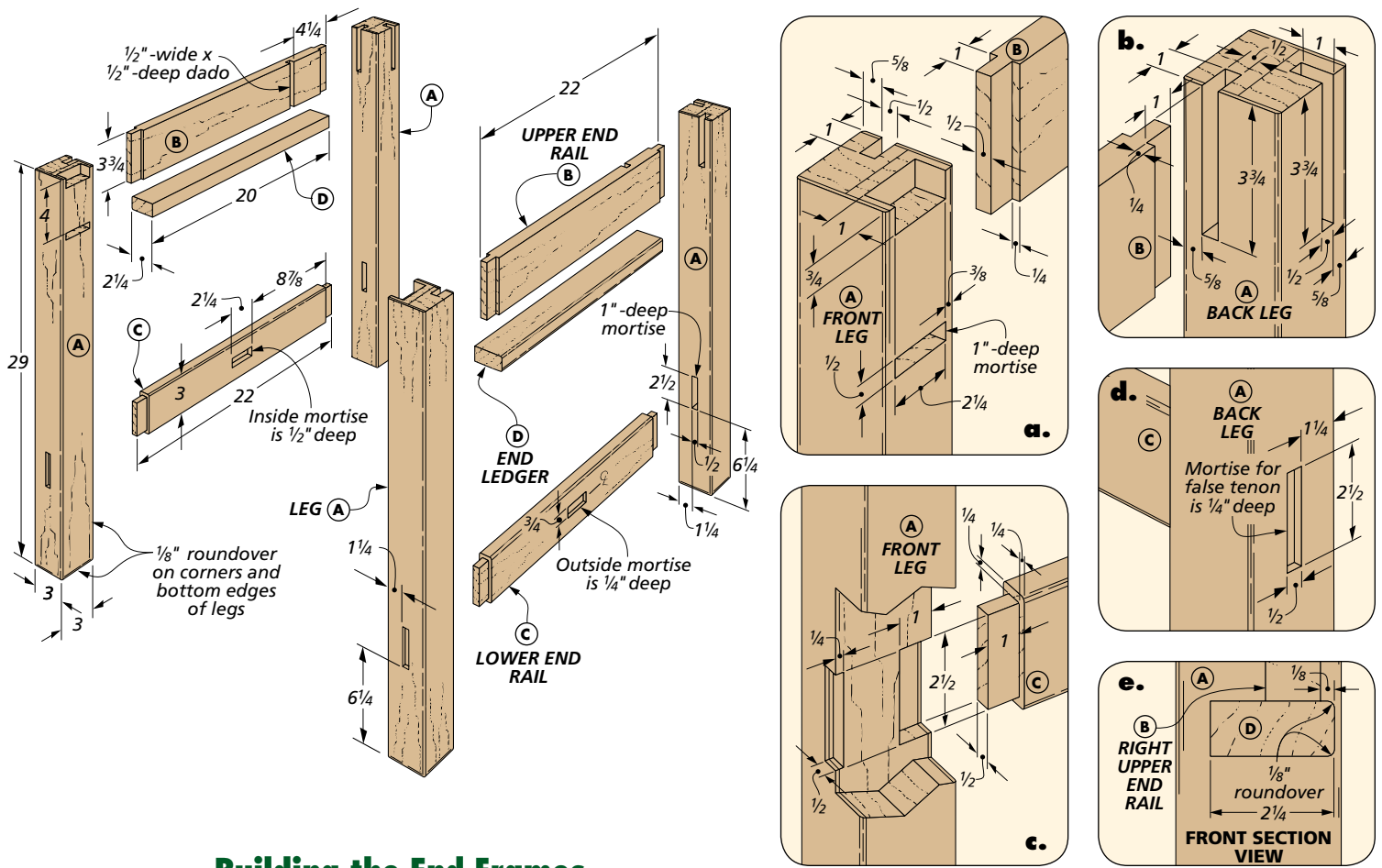
Ledgers stand proud of base rails

Corbels attach to base with dowels and glue

False tenon

False tenon hides screws and creates appearance of through-tenon joinery

Legs use glue-up technique that creates quartersawn appearance on all four faces



Building the End Frames

I decided that the easiest way to build the library table was to start by assembling the two basic end frames. Then you can quickly complete the sturdy base by adding the front and rear rails, the center stretcher, and all the details.

LEGS FIRST. Each end frame consists of two legs, a two-piece upper rail, and a lower rail, as shown above. To begin, you'll need to make the four stout, 3"-square legs. As you

can imagine, this requires gluing up blanks from thinner stock. But this also gives you the opportunity to make a better-looking leg. I used a traditional Craftsman technique to make leg blanks that show quarter-sawn figure on all four faces with no noticeable joint lines.

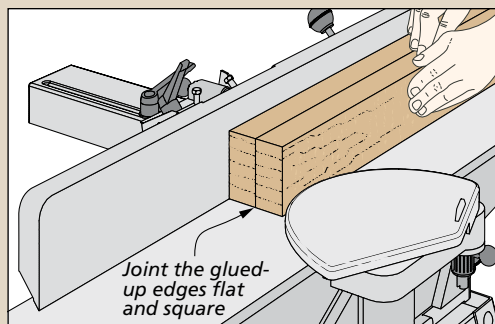
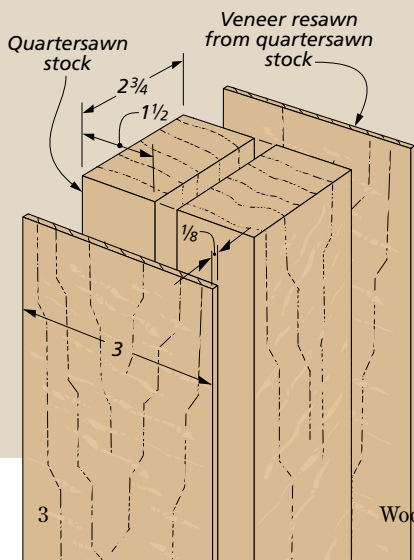
The simple process is laid out in the box below. In a nutshell, you're going to glue up a two-piece blank and then "skin" the joined sides with

thin facings. The result is definitely worth the extra effort.

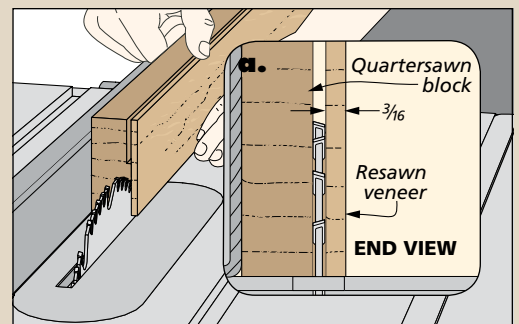
MORTISES. Once the leg blanks are completed and cut to final length, you can work on the joinery. The end rails and the front and back rails are all connected to the legs with mortise and tenon joints. Cutting the mortises in the legs is the first step.

If you take a look at the drawing above, you'll see that each leg has multiple mortises.

HOW-TO: MAKE A CRAFTSMAN LEG



Size the Blank. After gluing up an extra-wide blank from 1/2"-thick quartersawn stock, rip and then joint the blank down to 2 3/4" wide.



Resaw the Veneers. Now you'll need to resaw veneers from quartersawn stock. They should be slightly over width and over thickness.

Even though you're just working on assembling the end frames at this point, you'll want to lay out and cut all the leg mortises now. This includes the mortises for the front and back rails that are added later.

THE WORK. The goal is to end up with two mirror-image pairs of legs (front and back). So your first concern is laying out the mortises correctly and accurately. After that, drilling them at the drill press and cleaning them up at the bench will be easy and straightforward.

Before getting started, let me give you a rundown of what needs to be done. As you can see in detail 'b' on the previous page, the end rails and back rail fit into off-center, open-end mortises. The drawings at right offer a tip for making these.

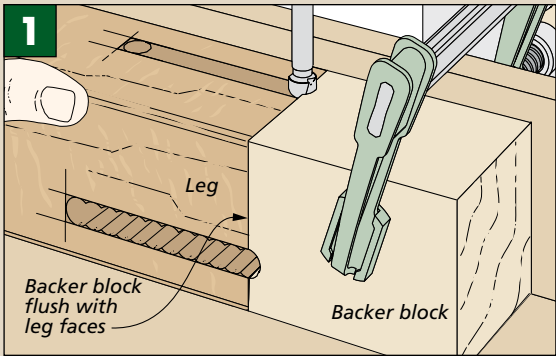
I created a classic, through-tenon look on the lower end rails by using a false-tenon technique. This requires cutting a 1"-deep mortise centered on the inside face of the leg and a shallow mortise on the opposite face that holds the false tenon (detail 'c').

Finally, the front legs each need two "horizontal" mortises on the front inside face for the upper and lower drawer rails (detail 'a').

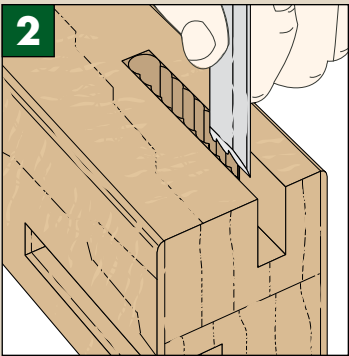
THE END RAILS. After completing the mortises, you'll be ready to make the upper end rail assembly and the lower end rails. This work is pretty straightforward, but there are a few things to explain.

As you know, both rails are tenoned into the legs. The upper rail

SHOP TIP: TWO STEP MORTISES



1



2

Drill Out the Waste. Start the mortises at the drill press by drilling out most of the waste. Use a backer block at the open end to keep the drill bit on track.

Cleanup. Sharp chisels complete the job. Pare away the remaining waste and square up the ends.

gets a two-shouldered tenon, and the lower end rail needs a four-shouldered tenon (details 'a' and 'c'). A dado blade in the table saw will handle the job. And while the dado blade is on the saw, you can cut a 1/2"-wide dado across the inside face of both upper end rails (drawing on page 3). Later, this will hold an interior rail that supports the drawers.

You also need to make separate horizontal ledger pieces that fit beneath the upper rail (detail 'e'). The ledger sits proud of the rails to create added visual interest. After the legs and rails are assembled, it will be cut to fit between the legs and then glued in place.

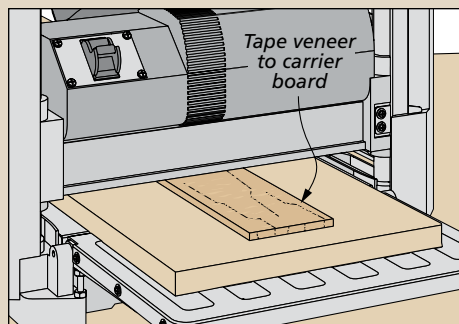
A FEW MORE MORTISES. Completing the lower rails will take you back to the drill press and bench for a few more

mortises (main drawing on page 3). These mortises are for the long center stretcher that connects the two lower end rails. I again used a simplified through-tenon technique. A 1/2"-deep mortise on the inside face captures the stretcher tenon, and a separate 1/4"-deep mortise on the outside fits the false tenon.

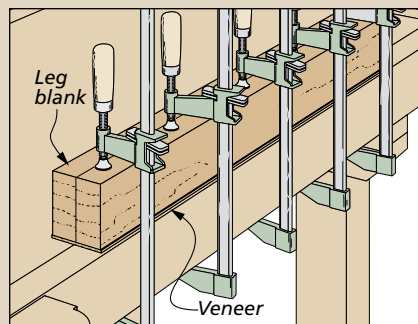
EASED EDGES. There's just one more thing before you begin the assembly. I rounded over all the edges of the lower rails and the outside edges of the ledger blanks.

ASSEMBLY. According to the plan, all the end frame parts should be ready to assemble. First, I glued two legs and the upper and lower rails into a frame. Then, you can cut the ledger to fit the frame and glue it in place, as in detail 'e' on the previous page.

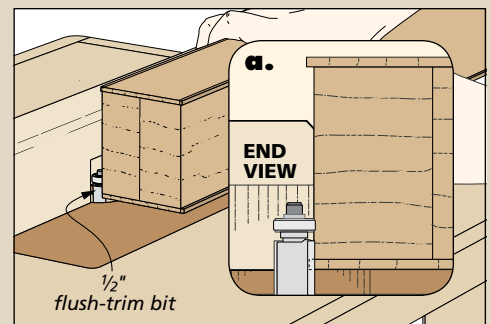
HOW-TO: MAKE A CRAFTSMAN LEG



Plane the Veneers. Plane the veneers to 1/8" thick by attaching them to a carrier board with double-sided tape.

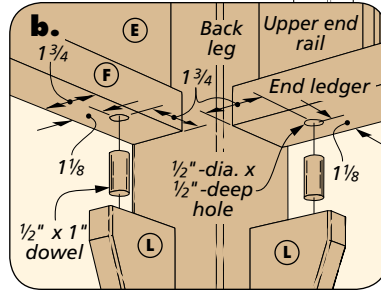
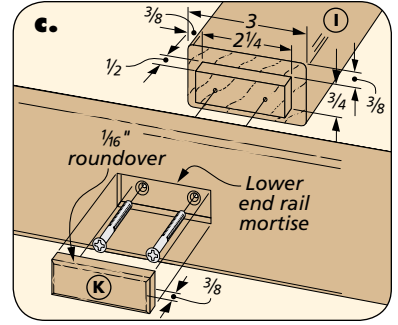
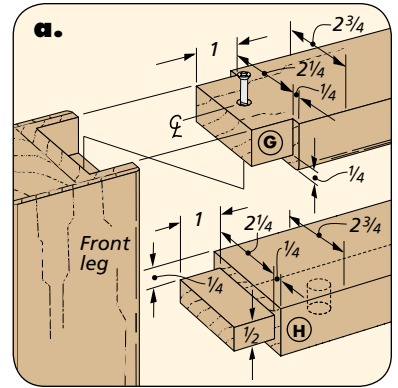
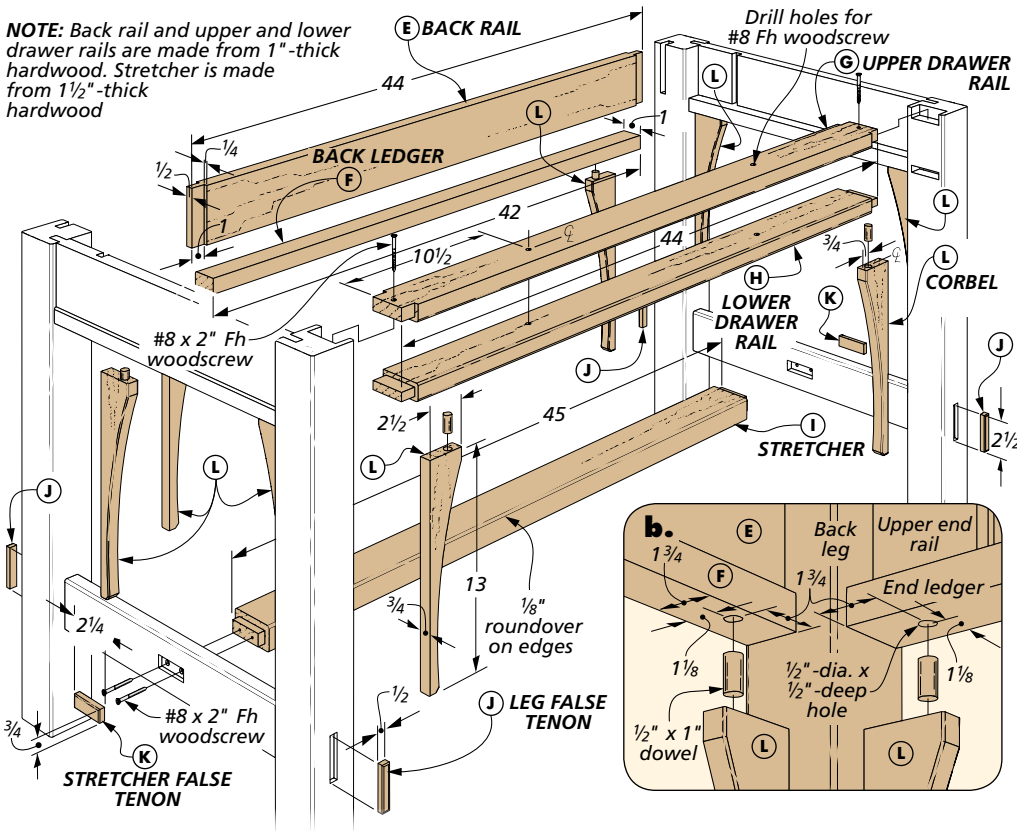


Glue Up. Glue the veneers to the joined edges using your workbench to distribute the clamping pressure.



Flush Trim. To complete the legs, trim the veneers flush with the blanks, and then rout a 1/8" roundover on all the long edges.

NOTE: Back rail and upper and lower drawer rails are made from 1"-thick hardwood. Stretcher is made from 1½"-thick hardwood



Completing the Base

With the end frames assembled, you can start on stage two of the construction: making and installing the miscellaneous parts that complete the base. You'll add the back rail and drawer rails, the long center stretcher, the corbels, and the false tenons.

DRAWER RAILS & BACK RAIL. Fitting the back rail and the drawer rails to the end frames is the first step. Since the mortises in the legs have been

completed, you're already halfway home on this task. The only minor complication is that the tenons on each piece are slightly different. Take a look at the box below.

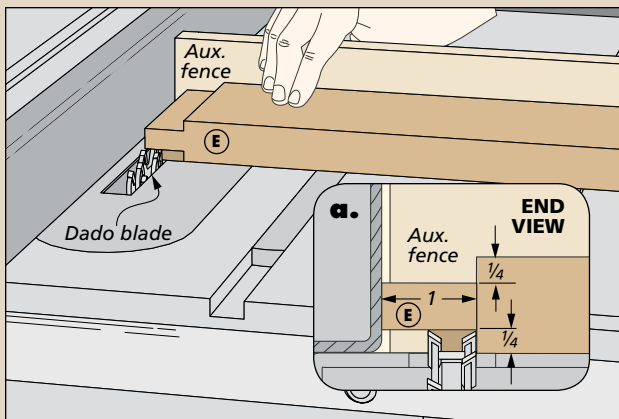
The back rail has the same two-piece design as the upper end rails. First, cut the back rail to size. Then cut a two-shouldered tenon on each end (first drawing below). The ledger is cut to width and rough length, and the edges are rounded over.

The two drawer rails are also easy to fit. But as I mentioned, the tenons

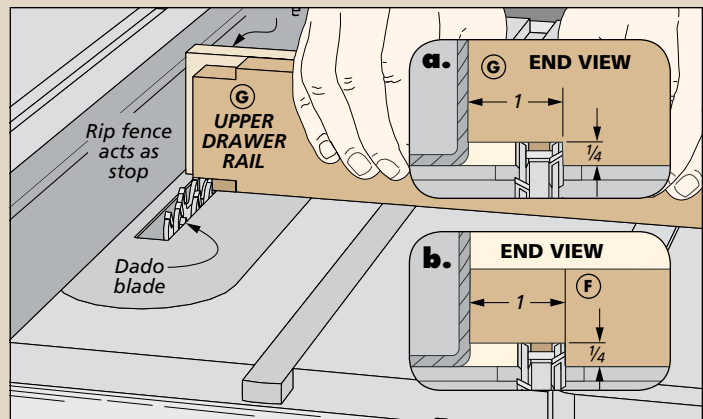
you'll cut on each one are a little bit different. The upper drawer rail has a three-shouldered tenon while the lower rail has a standard, four-shouldered tenon (detail 'a').

SCREW HOLES. Later, you'll add the interior support system for the three drawers. This includes two vertical divider/support rails that fit between the drawer rails. They're fastened with screws installed through the rails. So it would be a good idea to drill the countersunk screw holes in the rails before assembly.

HOW-TO: CUT THE TENONS



The Back Rail. The back rail requires a two-shouldered tenon. After setting the rip fence to gauge the length, raise the blade between passes to sneak up on the thickness.



Upper Drawer Rail. The upper drawer rail has tenons with three shoulders. Here, I cut the front and back shoulders first. Then I cut the thickness of the tenon to match the depth of the mortise.

THE CENTER STRETCHER. Next comes the center stretcher. Again, this part simply gets a tenon on each end. But since the stretcher fits between the lower end rails, rather than the legs, the trick is getting the shoulder-to-shoulder length right.

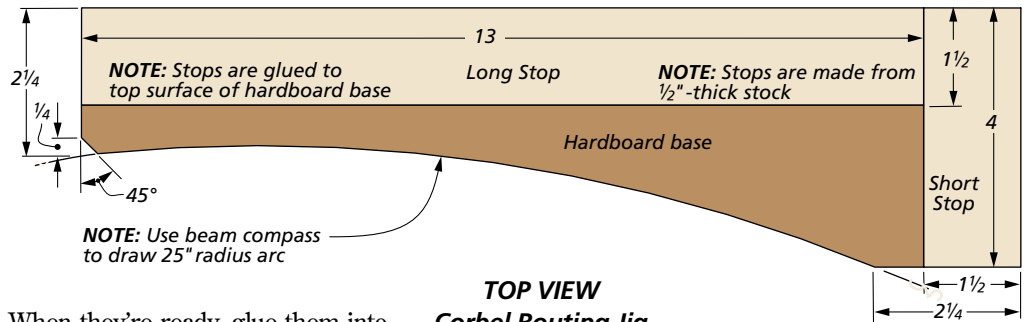
To do this, dry fit the back rail and the drawer rails between the end frames, and take a measurement. Then when you cut the tenons on the ends of the stretcher, simply sneak up on a tight fit, testing the shoulder-to-shoulder length to the dry-fit base.

ROUND-OVER. With the stretcher fit, return to the router table before assembling the base. All the edges on the stretcher, as well as the outside edges of the drawer rails and the back ledger, need a $\frac{1}{8}$ " roundover.

ASSEMBLY. The assembly will be easier if you do it in small bites. I glued the rails and stretcher to one end frame and then the other. The last step is to reinforce the upper drawer rail and the stretcher joints with screws (details 'a' and 'c', page 5).

CRAFTSMAN DETAILS. Structurally, the base is complete. But you still need to finish up the "period" details — the false tenons and the corbels.

FALSE TENONS. The false tenons for the legs and those for the stretcher are different sizes, but otherwise, making them is easy. You can learn all about the technique on page 12.



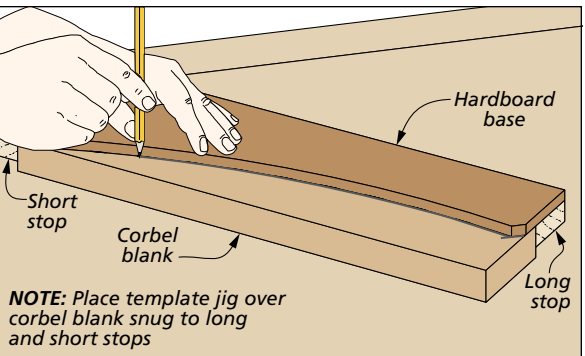
When they're ready, glue them into the mortises, leaving them $\frac{1}{8}$ " proud.

THE CORBELS. The gracefully shaped corbels I added to the base are a distinctive feature of Craftsman furniture. They help lighten and soften the heavy look of the table.

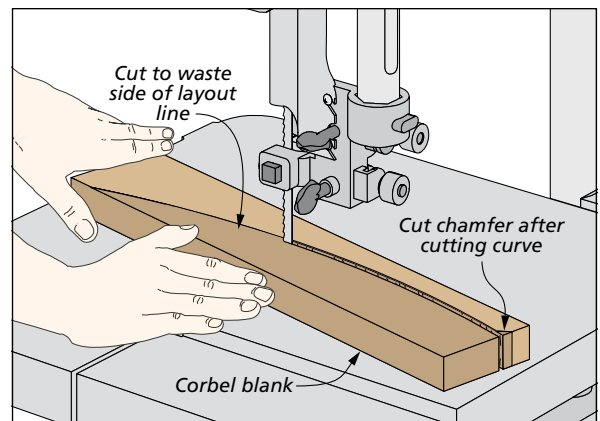
The base requires eight identical corbels. And being a focal point, I wanted them to be smoothly shaped and consistent. So rather than shape each corbel by hand, I made a template routing jig.

The corbel jig is illustrated above. It's just a simple sled that's used to both lay out the profile and rout it to shape. The steps for using it are shown at right. Before adding the corbels to the base, you'll rout a roundover on all the outside edges.

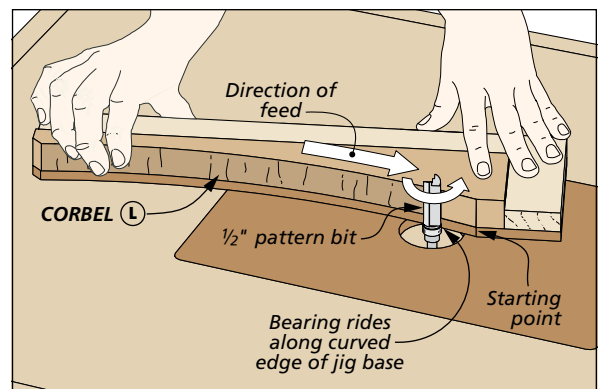
THE FINISHING TOUCH. When you attach the corbels, you want to center them on the thickness of the leg. The long edge can simply be glued to the legs. The top end needs to be doweled to the ledger or drawer rail (detail 'b,' page 5). You'll find more information on this on page 11.



1 Trace the Shape. After cutting the eight corbel blanks to width and length, use the template jig to trace the finished shape onto each blank.

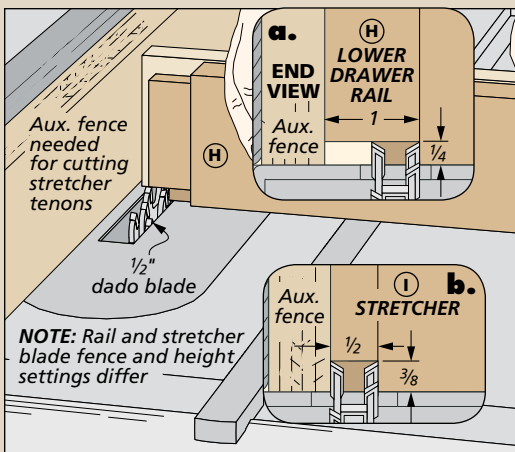


2 Rough Cut Each Blank. Next, take the blanks to the band saw, and cut them to rough shape. Stay about $\frac{1}{16}$ " to the outside of the layout line.



3 Flush Trim. Finally, I secured the blank in the jig with double-sided tape and trimmed the rough edge using a pattern bit. Rout "downhill," starting at the wide end.

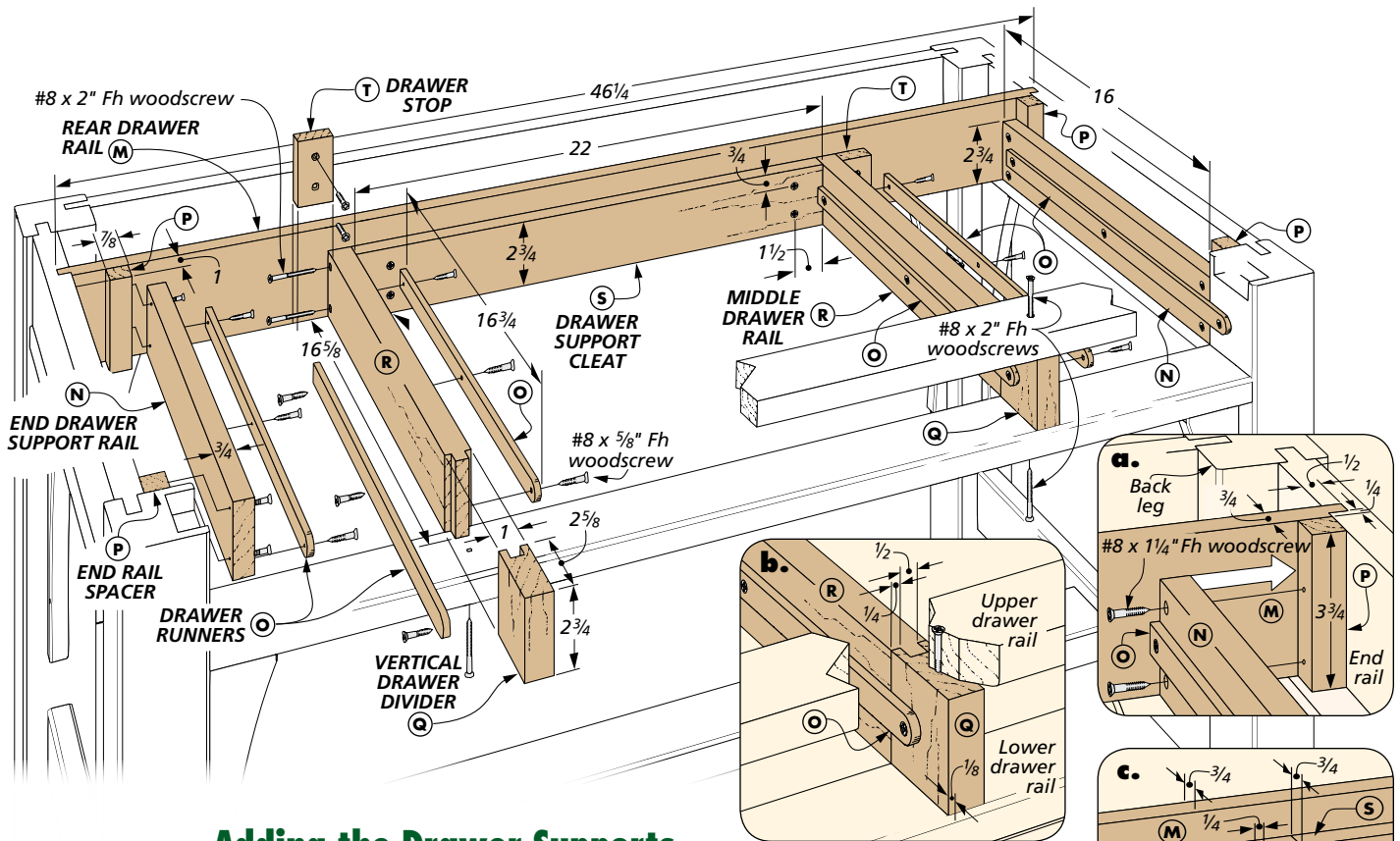
HOW-TO: CUT THE TENONS



Four Shoulders. The stretcher and lower drawer rail need four-shouldered tenons. Cut the cheeks, and stand the pieces on edge to cut the shoulders.



▲ False tenons create a traditional through-tenon look.



Adding the Drawer Supports

Now that the exterior is complete, you can turn your attention to the interior of the base. You'll need to create the three openings and a support system for the drawers.

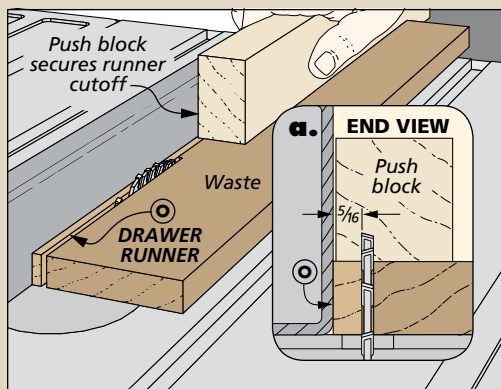
OVERVIEW. The partition/support system has a fair number of parts, but it's designed to go into the assembled base very easily. The side-mount drawers slide on thin runners installed on a sturdy, interior framework. No bottom support is needed. If you take a look at the

drawing above, you'll get the picture, and I'll introduce all the parts as they come up.

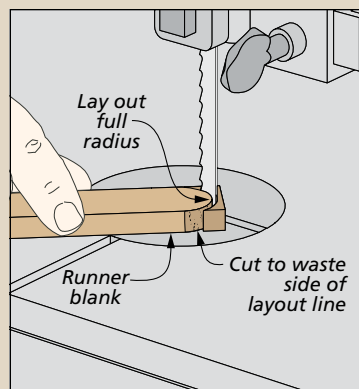
REAR DRAWER RAIL. The first part to make and install is the rear drawer rail. This piece stretches between the upper end rails to anchor the drawer support system. A short tongue cut on each end fits the dadoes you cut earlier in the end rails. You can simply apply glue to the tongues and then slide the rail into the dadoes from the top.

SUPPORT SYSTEM. With the long rail in place, you can start adding the drawer support rails and runners. You'll need to install a rail at each end and a middle assembly that forms the drawer openings.

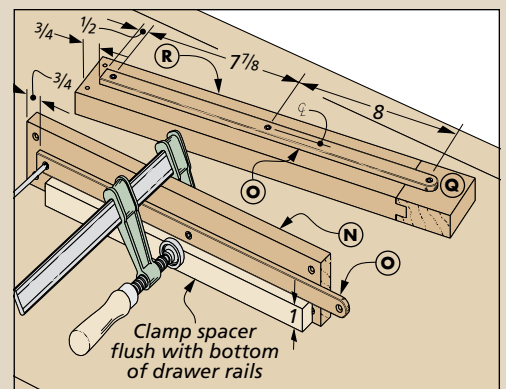
HOW-TO: DRAWER RUNNER DETAILS



Rip to Size. To begin making the drawer runners, rip them to rough thickness from $\frac{3}{4}$ " stock. Then plane them to $\frac{1}{4}$ " thick.



Round the Ends. After cutting the runners to length, round one end at the band saw. Sand it smooth.



Attach the Runners. A spacer clamped to the rail will help position the runner while you install screws through pre-drilled, countersunk holes.

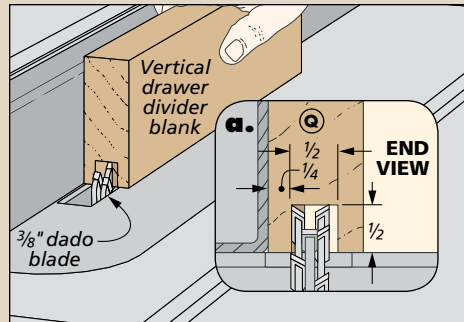
SHOP TIP: CENTERED TONGUE & GROOVE

I worked on the two end pieces first. These are simply cut to fit between the front leg and the rear support rail. They're attached by screwing them to spacers glued to the upper end rails (detail 'a' on page 7). They should sit flush to the inside edge of the leg.

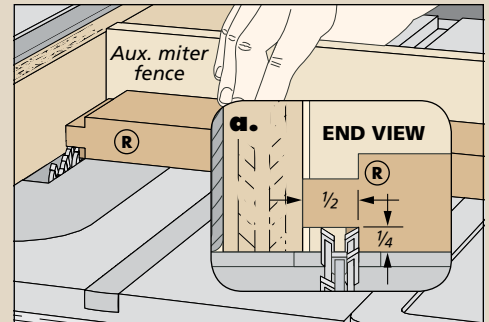
RUNNERS FIRST. Before attaching the rails to the frame, I made the drawer runners and pre-installed them. This is much easier than trying to accurately position and screw them in place afterward.

The runners are $\frac{1}{4}$ "-thick by $\frac{3}{4}$ "-wide strips that are rounded on the front end. You'll need six in total, so make them all at once. The box at the bottom of page 7 shows how. Note that the runners are positioned $\frac{3}{4}$ " away from the back end of the rails. They'll lap onto the front legs so they can be screwed to them.

MIDDLE SUPPORTS. The middle rail assembly is a little different. Starting at the front, you have a pair of vertical dividers screwed between the drawer rails. The middle drawer rails are joined into the back edge of the dividers. A runner is attached to either side of this assembly (detail 'b,' page 7). The drawer rails are sized to butt up to the rear support rail and are held fast by screwing them to the ends of a support cleat. This cleat doubles as a drawer stop.



First, the Groove. I used a dado blade to cut a centered groove on the divider blank. Flip the blank end for end between passes.



Next, the Tongue. Use the same dado blade to cut a mating tongue on the rails. The rip fence will gauge the length of the tongue.

THE CONSTRUCTION. The nice thing about this design is that the whole thing can be preassembled and then added to the base. I built it just as I described it, from front to back. The vertical dividers start out as an extra-long blank. This makes it easier to cut a groove in the back edge, as shown in the Shop Tip above. Once the groove is complete, you can cut two dividers to length.

I cut the support rails to width, but left them extra long. Once a tongue is cut on the front end (drawing above) and the rail is glued to the divider, trim each assembly to final length. Note: The dividers are recessed from the edges of the drawer rails.

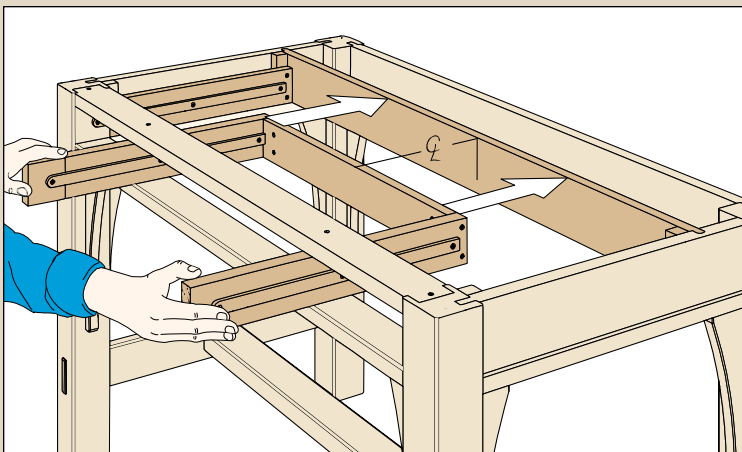
Now, add a drawer runner to each side of the assemblies. Be sure to

space the runner away from the rear end (details 'b' and 'c'). Finally, cut the support cleat to size and screw the assemblies to either end.

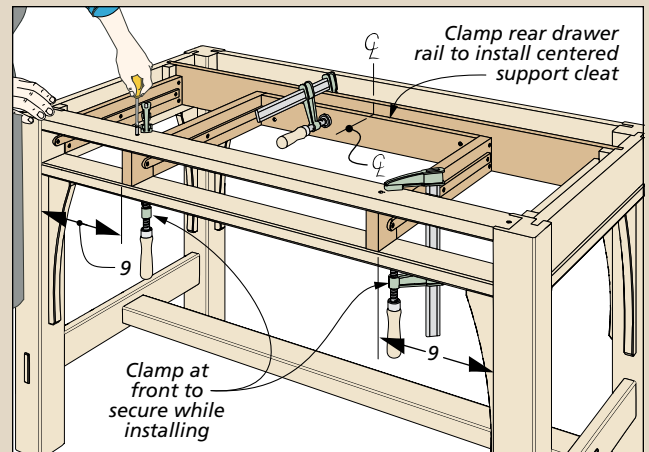
THE INSTALLATION. The drawings below will help you understand the support installation. The key is to position it correctly. The small drawer openings should be equal, with the rails square and aligned in the base. Take a few minutes to check, adjust, and double-check before installing the screws in the vertical dividers and the support cleat.

There's one more task before moving on. The small drawer openings need stops. These are just small blocks that butt up to the middle drawer rails and are screwed to the rear support rail (detail 'c').

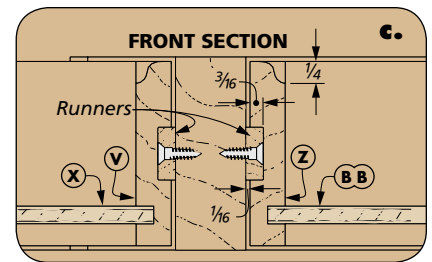
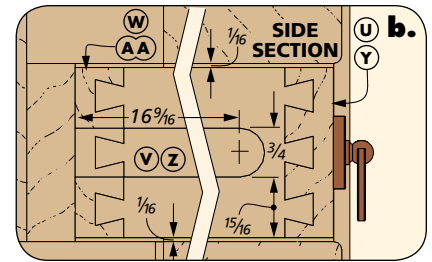
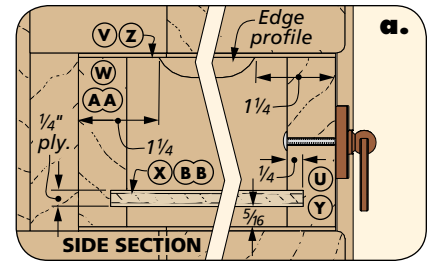
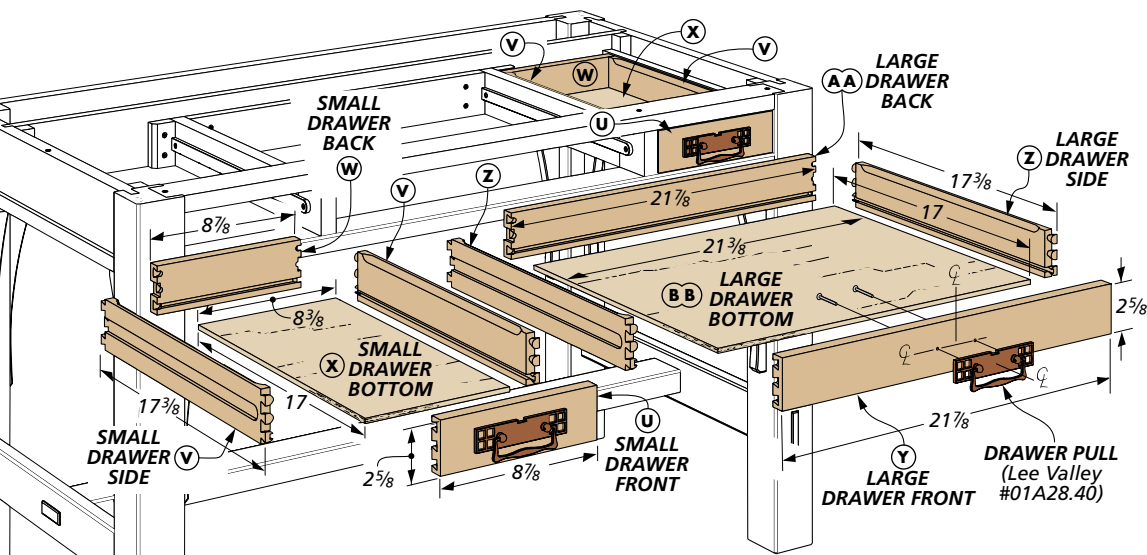
INSTALL THE MIDDLE SUPPORT



Slide It into the Base. After attaching the two rail assemblies to the support cleat, the entire assembly can be inserted between the drawer rails and temporarily held in place with a clamp or two.



Adjust & Fasten. Before installing the screws, you'll want to carefully adjust the position of the assembly and make sure the drawer openings are square and level.



Finishing Up Drawers & Top

With the base complete, you're down to a few important details. Making the three drawers and the top will wrap things up.

THE DRAWERS. The drawers have three features that guide the work. First comes the half-blind dovetail joinery used to build the boxes. Second, I added an authentic period detail by routing a profile on the top inside edge of the drawer sides. Finally, you'll rout grooves in the sides to fit the runners in the base.

DOVETAILES. Before getting started on the dovetail joinery, cut all the parts to size. I sized the drawers to have a 1/16" gap on all sides and to sit flush with the vertical dividers.

Once the parts are ready, set up your jig and create the dovetails.

As shown at left, they're laid out with a standard spacing (1/8" on centers).

PROFILE. After cutting grooves for the plywood bottoms at the table saw, I took the sides to the router table to add the decorative profile.

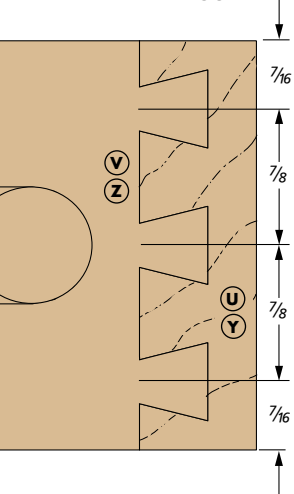
The profile is routed using a small, two-flute ogee bit (Amana Tool #54120) and is "stopped" short of the ends. To do this, I set up the router table with stop blocks clamped to the fence (box). This allows you to make the cuts without trying to rout to a line. You'll avoid the burning that often occurs during a slow cut.

RUNNER GROOVES. After sanding the profiles, assemble the drawers, and rout runner grooves in the sides.

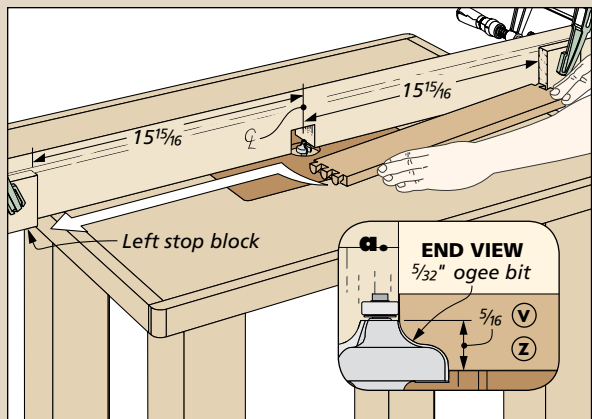
I routed the stopped grooves with a single pass using a sharp 3/4"

straight bit. The goal is centered grooves that are consistently positioned from side to side. I trapped the drawer between the fence and a straightedge and made the two cuts feeding in opposite directions (center and right drawings, box below). This way, the cuts on both sides can be referenced from the top edge. Rout a test piece to check the accuracy of the setup before routing the drawers.

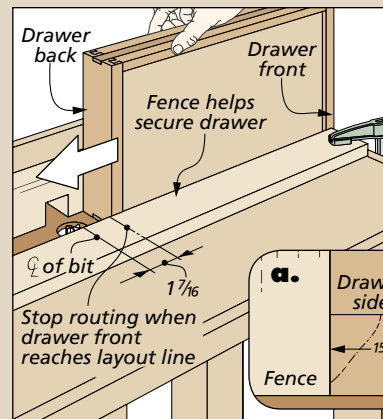
DOVETAILE LAYOUT



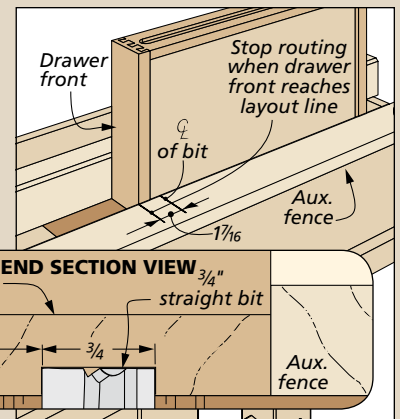
HOW-TO: DRAWER DETAILS



Stopped Edge Profile. To rout the stopped ogee profile, butt the drawer side up to the right stop block, plunge into the bit, and rout to the left stop block.



Routing the Grooves. Feed in the usual right to left direction to rout the groove on one side.



Opposite Direction. To rout the groove on the opposite side, you'll need to feed from left to right.

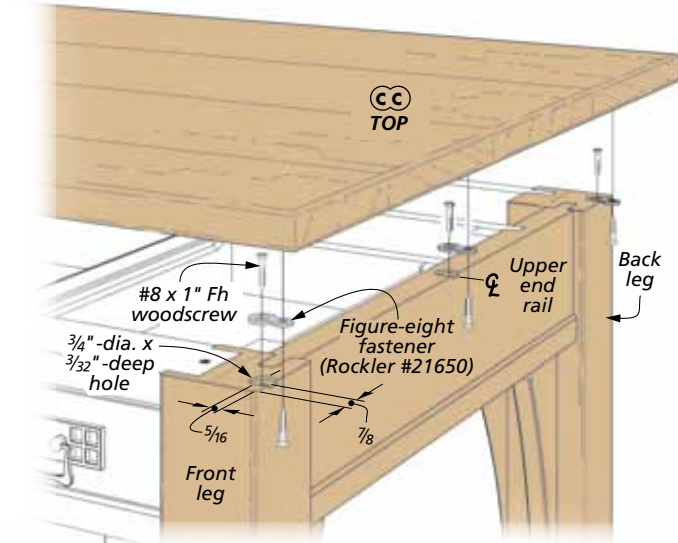
When the drawers are fit to your satisfaction, the pulls can be installed. And this leaves just one thing to do — make the top.

THE TOP

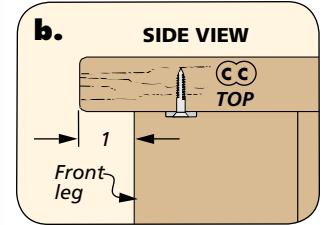
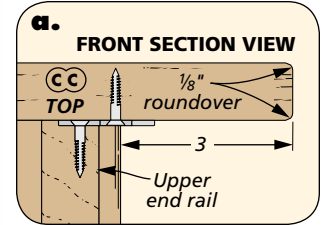
Adding the top is a relaxed way to finish up the table. You can start by gluing up an oversized panel from 1"-thick stock. Then take some time to clean up and smooth the top before cutting it to final size.

CUT TO SIZE. The heavy panel was too large for my table saw, so I took a different route. First, I cut it to rough size with a circular saw. Then I used a router, a straightedge, and a flush-trim bit to trim it to finished size. Finally, I switched to a roundover bit to ease the edges.

THE LAST TASK. Now you can install the top on the base. The inside of the base has limited access, so I mounted the top with figure-eight fasteners positioned around the



NOTE: Top is glued up 1"-thick hardwood and cut to 28" x 54" size



perimeter, as shown above. I mortised one into the top of each leg and one in the center of each end rail (details 'a' and 'b'). The mortise is just a shallow hole drilled with a Forstner bit (main drawing).

After screwing the fasteners to the legs, you can position the top on the base and mark for pilot holes.

The top should be centered with a 3" overhang on each side and a 1" overhang on the front and back.

Once the top is screwed down, you're ready to apply a finish. I suggest using a high-quality stain. (I chose *Varathane's Early American.*) After all, your library table will be around for a long, long time.

MATERIALS, SUPPLIES & CUTTING DIAGRAM

A	Legs (4)	3 x 3 - 29
B	Upper End Rails (2)	1 x 3 ³ / ₄ - 22
C	Lower End Rails (2)	1 x 3 - 22
D	End Ledgers (2)	1 x 2 ¹ / ₄ - 20
E	Back Rail (1)	1 x 3 ³ / ₄ - 44
F	Back Ledger (1)	1 x 1 ³ / ₄ - 42
G	Upper Drawer Rail (1)	1 x 2 ³ / ₄ - 44
H	Lower Drawer Rail (1)	1 x 2 ³ / ₄ - 44
I	Stretcher (1)	1 ¹ / ₂ x 3 - 45
J	Leg False Tenons (4)	1 ¹ / ₂ x 2 ¹ / ₂ - 3 ³ / ₈
K	Stretcher False Tenons (2)	3 ³ / ₄ x 2 ¹ / ₄ - 3 ³ / ₈
L	Corbels (8)	3 ³ / ₄ x 2 ¹ / ₂ - 13
M	Rear Drawer Rail (1)	3 ³ / ₄ x 3 ³ / ₄ - 46 ¹ / ₄
N	End Drawer Support Rails (2)	3 ³ / ₄ x 2 ³ / ₄ - 16
O	Drawer Runners (6)	3 ³ / ₄ x 1 ¹ / ₄ - 16 ³ / ₄
P	End Rail Spacers (4)	1 x 7 ¹ / ₈ - 3 ³ / ₄
Q	Vertical Drawer Dividers (2)	1 x 2 ⁵ / ₈ - 2 ³ / ₄
R	Middle Drawer Rails (2)	1 x 2 ³ / ₄ - 16 ⁵ / ₈
S	Drawer Support Cleat (1)	3 ³ / ₄ x 2 ³ / ₄ - 22
T	Drawer Stops (2)	3 ³ / ₄ x 1 ¹ / ₂ - 2 ³ / ₄
U	Small Drawer Fronts (2)	3 ³ / ₄ x 2 ⁵ / ₈ - 8 ⁷ / ₈
V	Small Drawer Sides (4)	1 ¹ / ₂ x 2 ⁵ / ₈ - 17 ³ / ₈
W	Small Drawer Backs (2)	3 ³ / ₄ x 2 ⁵ / ₈ - 8 ⁷ / ₈
X	Small Drawer Bottoms (2)	1/4 ply. - 17 x 8 ³ / ₈
Y	Large Drawer Front (1)	3 ³ / ₄ x 2 ⁵ / ₈ - 21 ¹ / ₈
Z	Large Drawer Sides (2)	1 ¹ / ₂ x 2 ⁵ / ₈ - 17 ³ / ₈
AA	Large Drawer Back (1)	3 ³ / ₄ x 2 ⁵ / ₈ - 21 ¹ / ₈
BB	Large Drawer Bottom (1)	1/4 ply. - 17 x 21 ³ / ₈
CC	Top (1)	1 x 28 - 54

- (14) #8 x 2" Fh Woodscrews
- (16) #8 x 1¹/₄" Fh Woodscrews
- (12) #8 x 1" Fh Woodscrews
- (18) #8 x 5¹/₈" Fh Woodscrews
- (3) Dark Bronze Bail Pulls w/Screws
- (6) Figure-Eight Fasteners

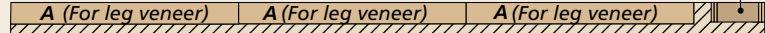
1³/₄" x 6" - 60" Quartersawn White Oak (Two boards @ 5 Bd. Ft. each)



1³/₄" x 4" - 48" Quartersawn White Oak (2.7 Bd. Ft.)



1" x 4" - 96" Quartersawn White Oak (3.3 Bd. Ft.)



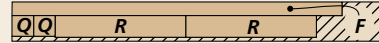
1" x 4" - 96" Quartersawn White Oak (3.3 Bd. Ft.)



1" x 7" - 96" Quartersawn White Oak (5.8 Bd. Ft.)



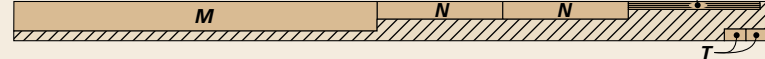
1" x 5" - 48" Quartersawn White Oak (2.1 Bd. Ft.)



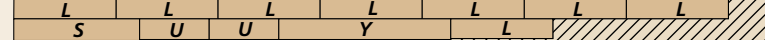
1" x 7¹/₂" - 60" Quartersawn White Oak (Four boards @ 3.9 Bd. Ft. each)



3/4" x 5" - 96" Quartersawn White Oak (3.3 Bd. Ft.)



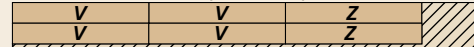
3/4" x 5¹/₂" - 96" Quartersawn White Oak (3.7 Bd. Ft.)



3/4" x 3" - 48" Hard Maple (1 Bd. Ft.)



1/2" x 6" - 60" Hard Maple (2.5 Sq. Ft.)



ALSO NEEDED: One 24" x 48" sheet 1/4" Maple plywood

SHOP NOTEBOOK

Dowel Joinery

When it came to adding the corbels to the library table, I decided to use dowels to reinforce the joint between the end of the corbel and the rails (drawing at right). This created a couple of challenges.

DRILL HOLES. The first was drilling holes for the dowels in the ends of the corbels. Drilling into hard end grain isn't easy, especially in oak. The drill bit tends to wander off course.

The solution was to clamp each corbel in the vise on my workbench and use a doweling jig and a handheld drill to drill the hole (Figure 1). The doweling jig guides the drill bit and prevents it from wandering.

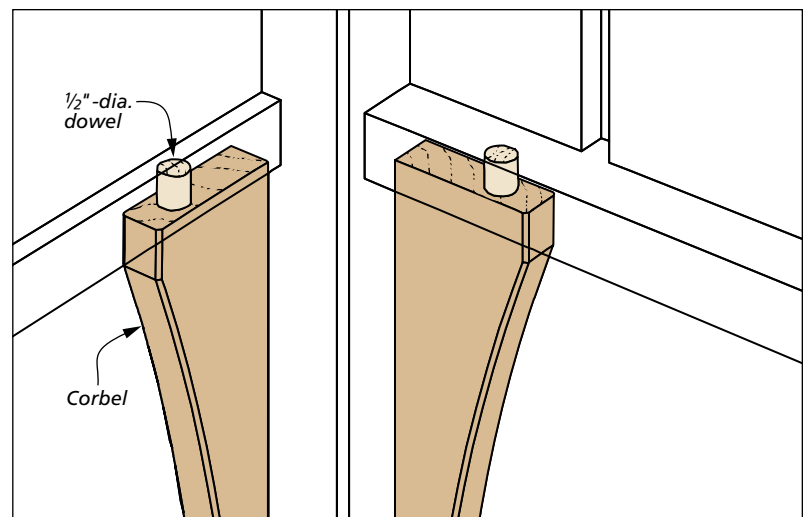
TRANSFER LOCATIONS. The second challenge was to come up with a way to accurately transfer the location of the holes from the corbels to the bottom of the rail or ledger.

To do this, I simply placed a dowel center in the hole I just drilled in

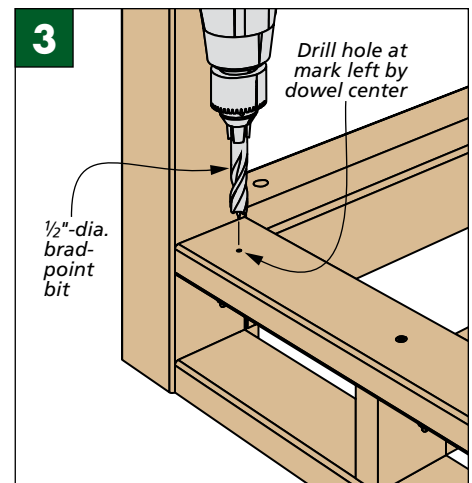
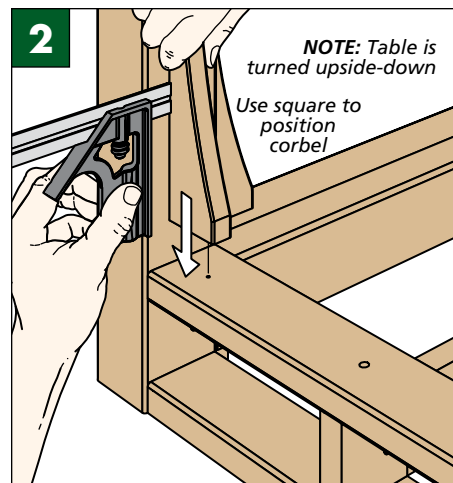
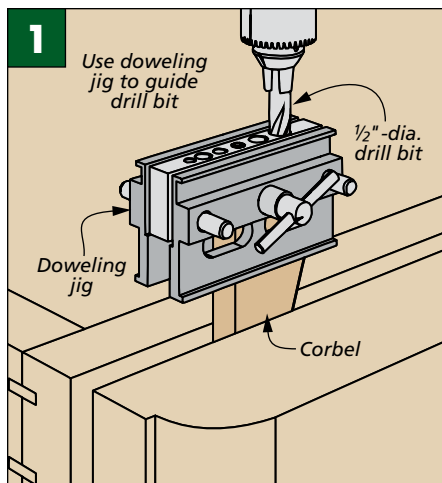
the end of the corbel. Then, using a combination square to help position the corbel, I pressed it in place against the ledger. The dowel center presses into the wood, creating

a dimple on the rail or ledger. This is illustrated in Figure 2.

Finally, you can drill matching holes in the rails for the dowels (Figure 3), and glue the corbels in place.



Dowel Joint. Dowels are used to strengthen the joint between the end of the corbels and the rails of the library table.



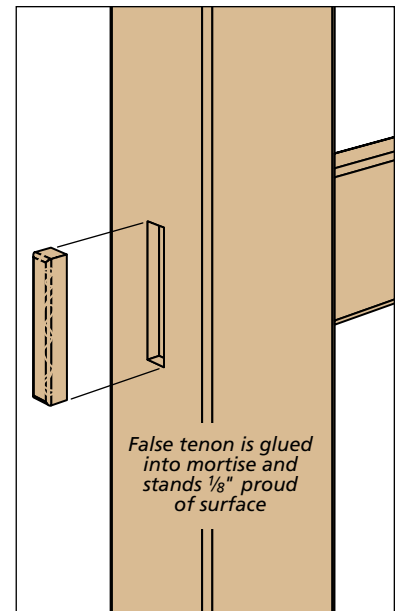
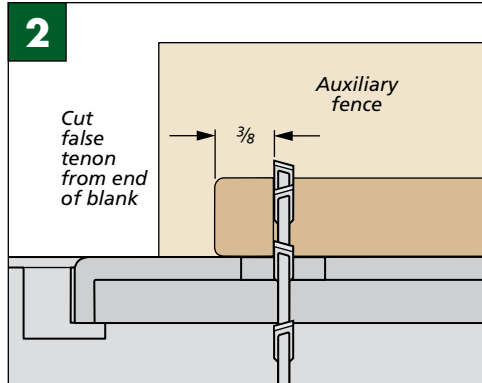
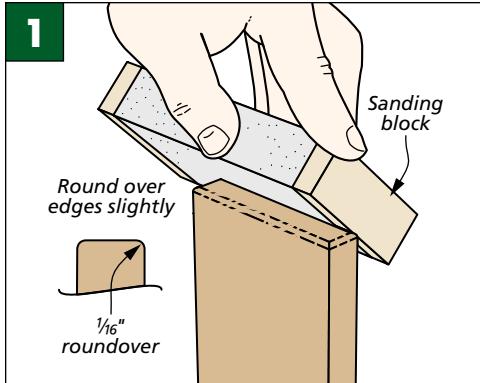
False Tenons

Making the false tenons for the Craftsman library table posed a bit of a challenge. Because the false tenons are cut from end grain, you can't just simply cut them from a long, narrow strip of wood.

The solution is a simple one. I planed down a blank to match the

width of the mortise and ripped it to match the length of the mortise. Then, using a sanding block, I rounded over the ends (Figure 1).

After cutting the false tenon free at the table saw (Figure 2), simply round over the ends of the blank again to make the next tenon.



False Tenons. End grain plugs give the library table the look of through tenons without all the work.