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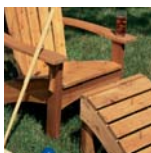
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HEIRLOOM TABLES

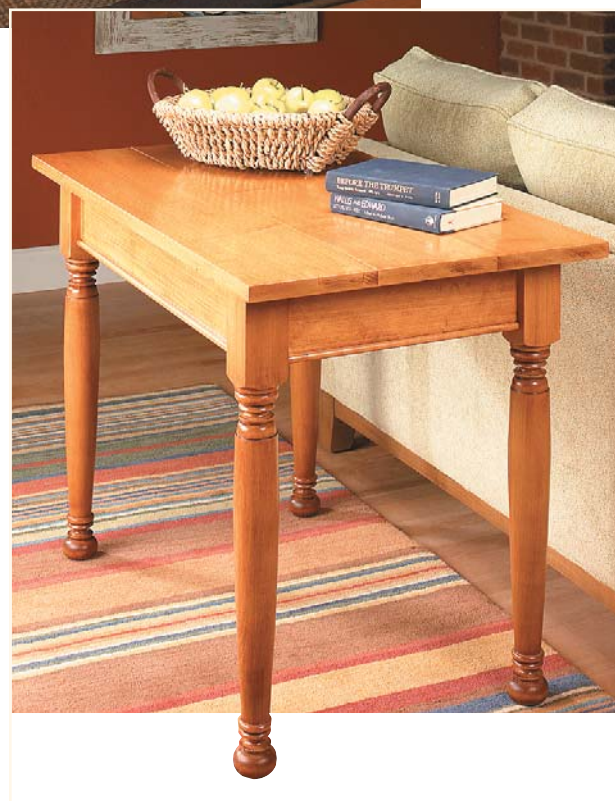
3 DESIGNS FROM ONE MASTER TECHNIQUE

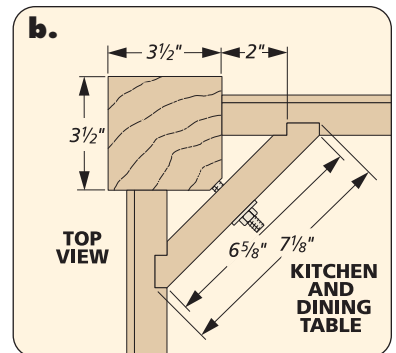
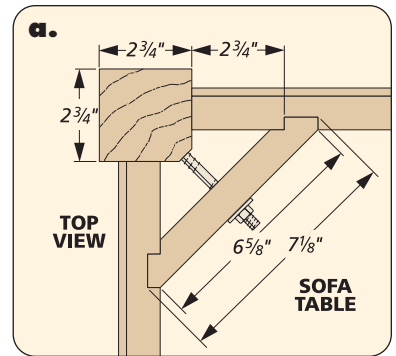
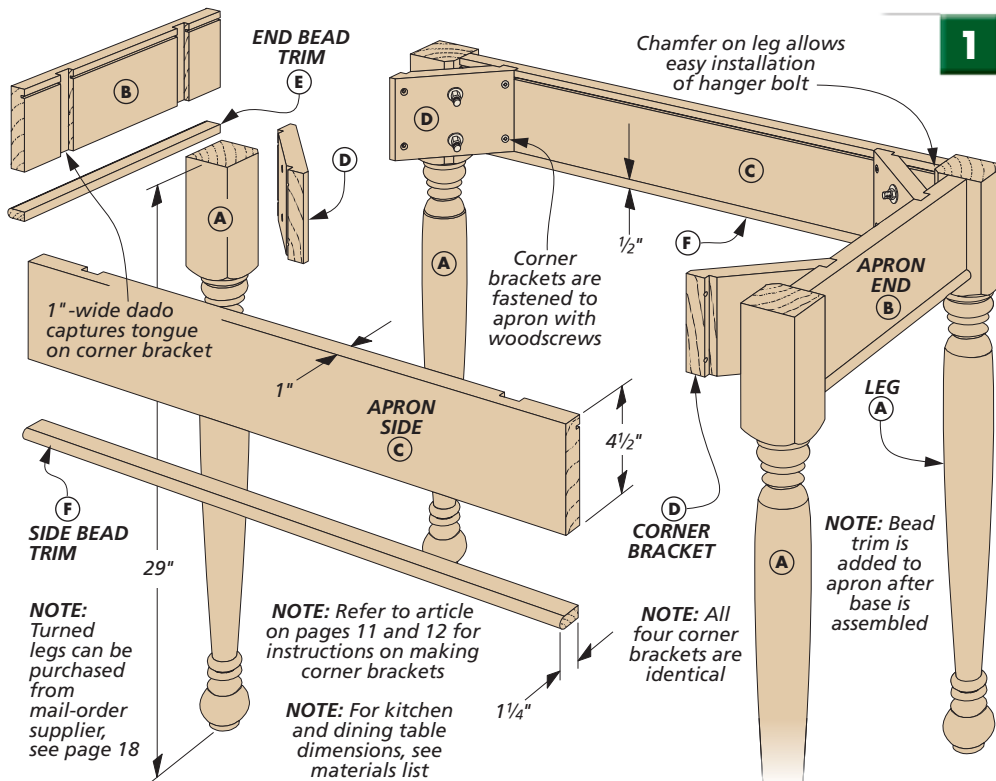


I've always enjoyed designing and building tables. With just a little effort you can come up with a table that's not only functional but attractive. And the choices can be endless. That's what helps make this three-table lineup so interesting.

All three of the tables share the same style of knock-down base. You just start with the nicely detailed, purchased legs and the rest is a snap. The technique here is so straightforward, don't be surprised if your base is assembled in a day. But you might want to slow things down a little and include a drawer. It's really only a little more work and it gives you the chance to customize a bit.

Finally, you can add a top to make each table unique. The plank and cleat top on the maple sofa table at right is about as easy to build as they come. And while the thick pine top on the kitchen table above is pretty standard, it looks right at home. The breadboard-end top on the oak dining table gives you some different challenges and a classic look. But I'm guessing you'll only have one difficulty with these tables, deciding which one to build.





1 TECHNIQUE — 3 TABLE BASES

For information on the finishes used on the heirloom tables turn to page 15.

One of the nicest things about the knock-down technique I used for these tables is that the process is so easy. And it can be used on just about any size or style of table. And as you can see from the photos on pages 1 and 2, the results can't be beat.

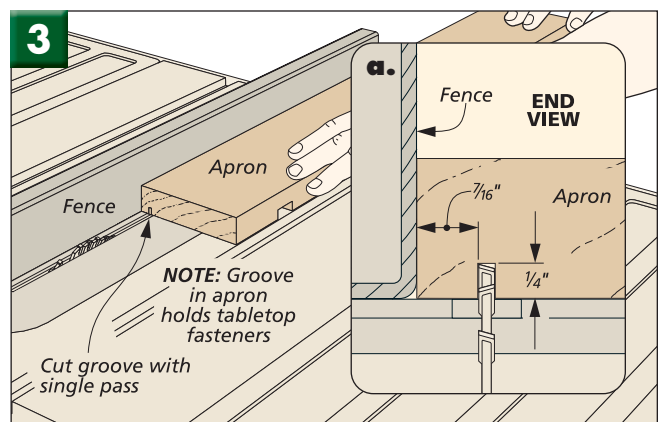
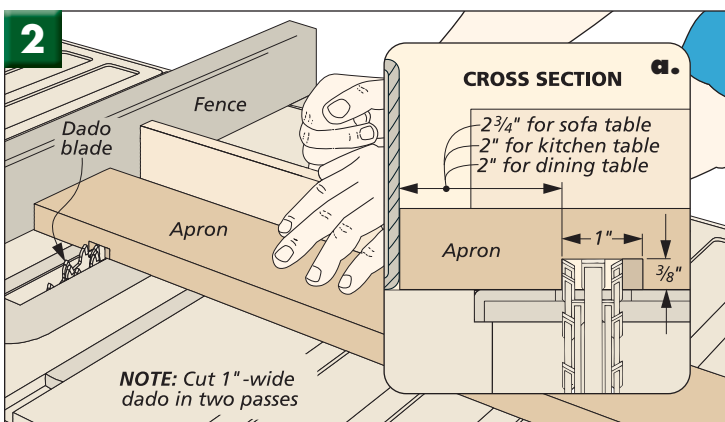
The three tables that I built using the knock-down technique have bases that are all pretty much identical in style. I just varied the sizes of the bases (and legs) and then I added a detail or two for interest. Before you get started on one of the tables, you'll want to read over the article on pages

11 and 12. This will give you all the basics on the knockdown technique, so I won't get into the construction details of each base. I'll just try to point out some of the differences and the finer points.

THE BASE. Fig. 1 shows the breakdown of the base for the maple sofa table. All three of the bases follow this same design. Only the dimensions and one minor, but important, detail are different.

DADO POSITION. If you take a close look at Figs. 1a and 1b, you'll see that the position of the dados in the

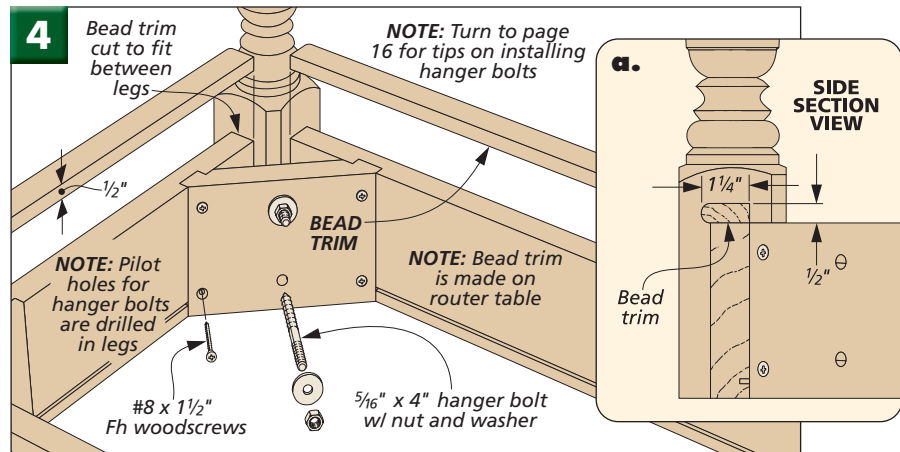
aprons is different. The reason is simple. I used nice, purchased legs for all three tables. They weren't expensive and they look great. (For information on turning the legs, see sources on page 18.) But in order to keep the legs in scale with the table, I used smaller legs for the sofa table. (The sofa table legs are 2 3/4" square while the legs for the dining and the kitchen table are 3 1/2" square.) Rather than change the size of the corner brackets for the sofa table, it made more sense to just reposition the dados in the aprons.



The dados that hold the corner brackets are 1" wide (Fig. 2a). This means you'll have to make a couple of passes with a dado blade to get the full width. You can set the fence for the first pass as shown in Fig. 2. And after each apron piece is cut with this setting, just reposition the fence to end up with a 1"-wide dado.

FASTENER GROOVE. When the time came to fasten the top to the frame, I wanted it to be quick and easy. To prepare for that, I cut a groove around the top, inside edges of the apron pieces (Figs. 3 and 3a) that will hold metal tabletop fasteners.

WOODSCREWS AND ANCHOR BOLTS. After you've made the corner blocks (refer to page 12), you're ready to put it all together (Fig. 4). About the only tools you'll need for the assembly are a drill, a screwdriver, and a wrench. The article on pages 11 and 12 gives

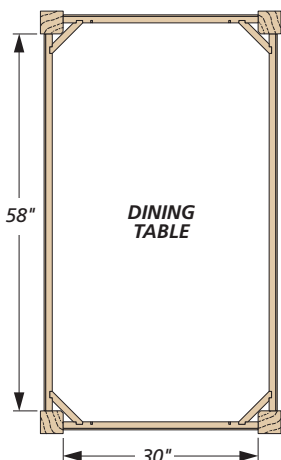
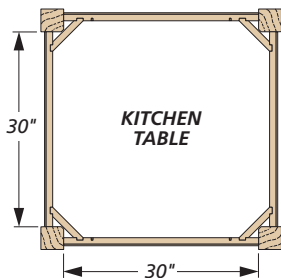
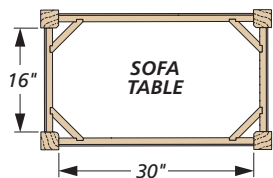


you a play by play on this. And you'll find some tips on installing anchor bolts on page 16. It's a nice sight when you tighten the nuts on the anchor bolts and the legs and the apron close up tightly.

ADD A BEAD. I thought the apron needed just a little detail and a simple

way to accomplish this was to add 1/2" bead molding around the bottom edge (Figs. 4 and 4a). You can make the bead molding with a 1/4" round-over bit in the router table. Then it's just a matter of cutting the pieces to fit snug between the legs and gluing them in place.

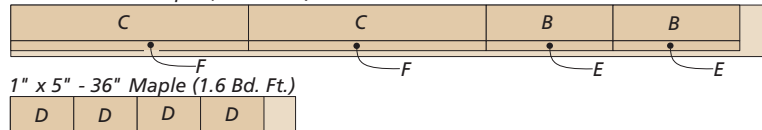
MATERIALS, SUPPLIES, & CUTTING DIAGRAMS



SOFA TABLE BASE

- A** Legs (4) 2 3/4 x 2 3/4 - 29
- B** Apron Ends (2) 1 x 4 1/2 - 16
- C** Apron Sides (2) 1 x 4 1/2 - 30
- D** Corner Brackets (4) 1 x 4 1/2 - 7 1/8

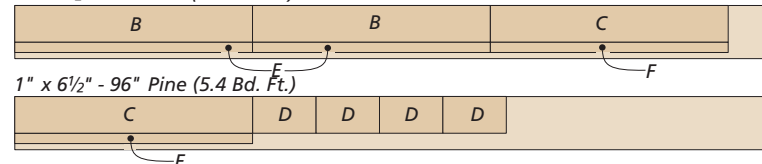
1" x 6 1/2" - 96" Maple (5.4 Bd. Ft.)



KITCHEN TABLE BASE

- A** Legs (4) 3 1/2 x 3 1/2 - 29
- B** Apron Ends (2) 1 x 4 1/2 - 30
- C** Apron Sides (2) 1 x 4 1/2 - 30
- D** Corner Brackets (4) 1 x 4 1/2 - 7 1/8

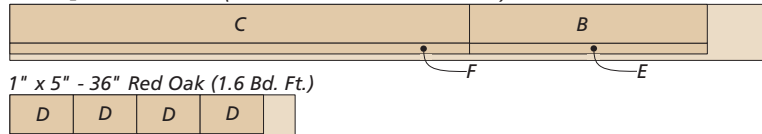
1" x 6 1/2" - 96" Pine (5.4 Bd. Ft.)



DINING TABLE BASE

- A** Legs (4) 3 1/2 x 3 1/2 - 29
- B** Apron Ends (2) 1 x 4 1/2 - 30
- C** Apron Sides (2) 1 x 4 1/2 - 58
- D** Corner Brackets (4) 1 x 4 1/2 - 7 1/8

1" x 6 1/2" - 96" Red Oak (Two boards @ 5.4 Bd. Ft. each)



- E** End Bead Trim (2) 1/2 x 1 1/4 - 16
- F** Side Bead Trim (2) 1/2 x 1 1/4 - 30
- (16) #8 x 1 1/2" Fh Woodscrews
- (8) 5/16" x 4" Hanger Bolts w/Nuts & Washers

- E** End Bead Trim (2) 1/2 x 1 1/4 - 30
- F** Side Bead Trim (2) 1/2 x 1 1/4 - 30
- (16) #8 x 1 1/2" Fh Woodscrews
- (8) 5/16" x 4" Hanger Bolts w/Nuts & Washers

- E** End Bead Trim (2) 1/2 x 1 1/4 - 30
- F** Side Bead Trim (2) 1/2 x 1 1/4 - 58
- (16) #8 x 1 1/2" Fh Woodscrews
- (8) 5/16" x 4" Hanger Bolts w/Nuts & Washers

ADD A DRAWER



▲ A nice, deep drawer is a great addition to this old-style, pine kitchen table.

For more on how to add a drawer to the oak dining table turn to page 14.

How do you make a great looking table a little more practical? Just add a drawer. For this kitchen table (or the oak dining table) it's a natural. It's an easy way to make good use of some otherwise wasted space. The work is really pretty straightforward and when you're done, I think you'll be glad you tackled it.

THREE EASY STEPS

A simple way to look at the process of adding a drawer is to break it down into three steps. First, before the base is assembled, you modify the apron to create a drawer opening. Then once the base is assembled, the guide rail assemblies are added to the base. And finally, the drawer can be put together and fit into its opening.

THE APRON. I wanted to add a drawer, but didn't want it to break up the clean lines of

the table apron. So I made a couple of design decisions. First, the drawer front is flush with the apron. And then second, I cut the drawer front and the apron ends from a single piece of wood. With a flush front and perfect grain match, the drawer blends right in.

To create the drawer opening, you'll want to start with a slightly oversized blank ($\frac{1}{4}$ " extra in length and width). First, rip a $\frac{3}{4}$ "-wide *apron top* from one edge. Then cut this piece to the final apron length. Now size the two *apron ends* and the *drawer front* (D) from the remaining piece (in sequence) of the blank (Figs. 5 and 8). When you glue the apron ends to the apron top, you'll have a perfectly-sized opening.

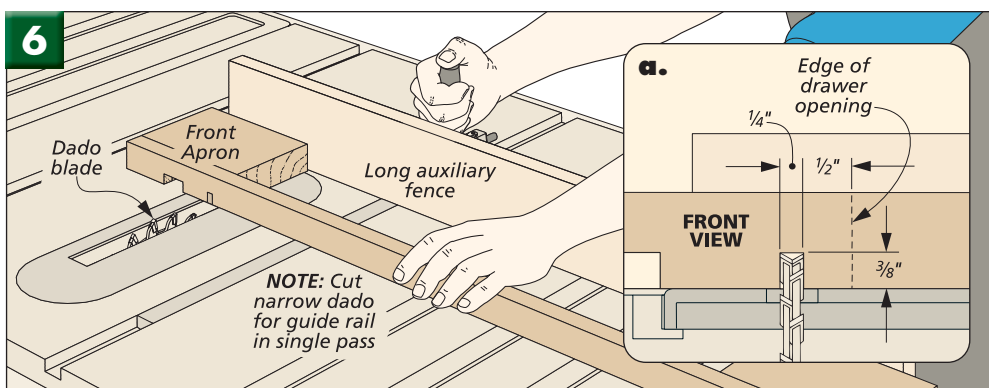
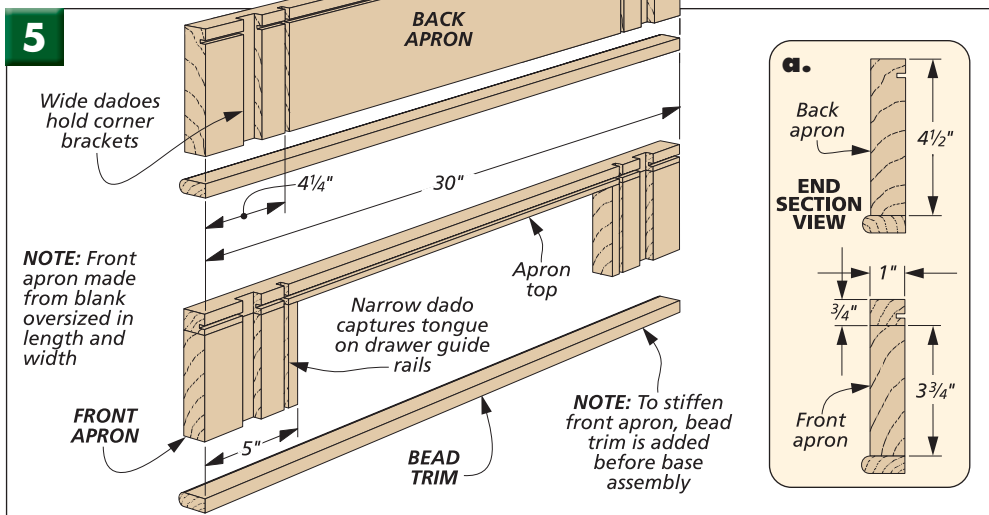
Next, you can take all the apron pieces back to the table saw to cut the dados for the joinery. You'll notice in Fig. 5 that both the front and the back aprons have a second set of narrow dados. These will hold the drawer guide rail assemblies. A long auxiliary fence will help you make these cuts in the front apron piece (Figs. 6 and 6a).

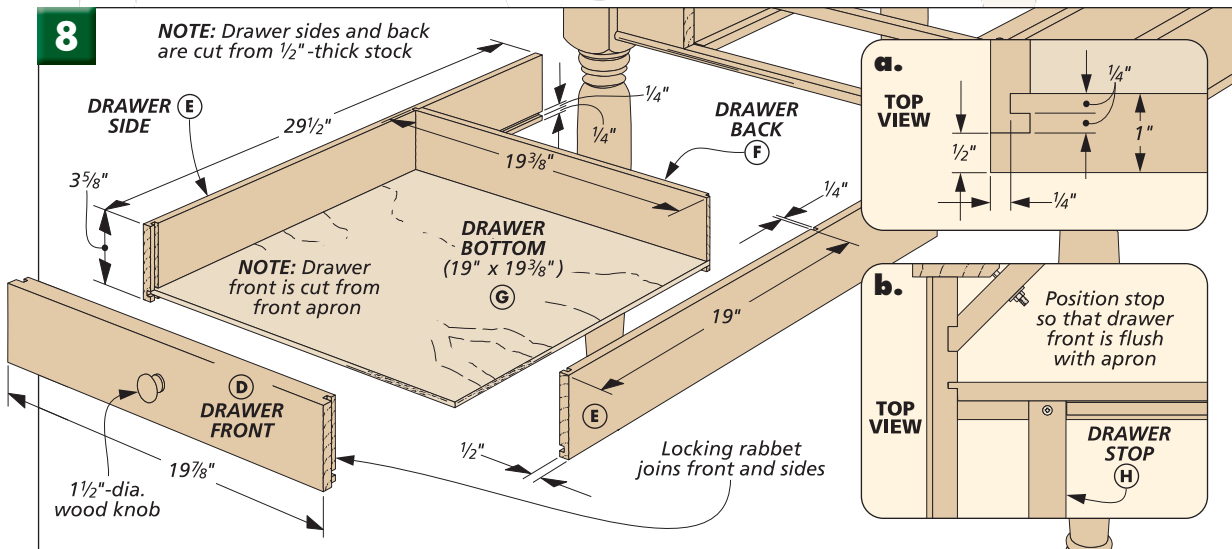
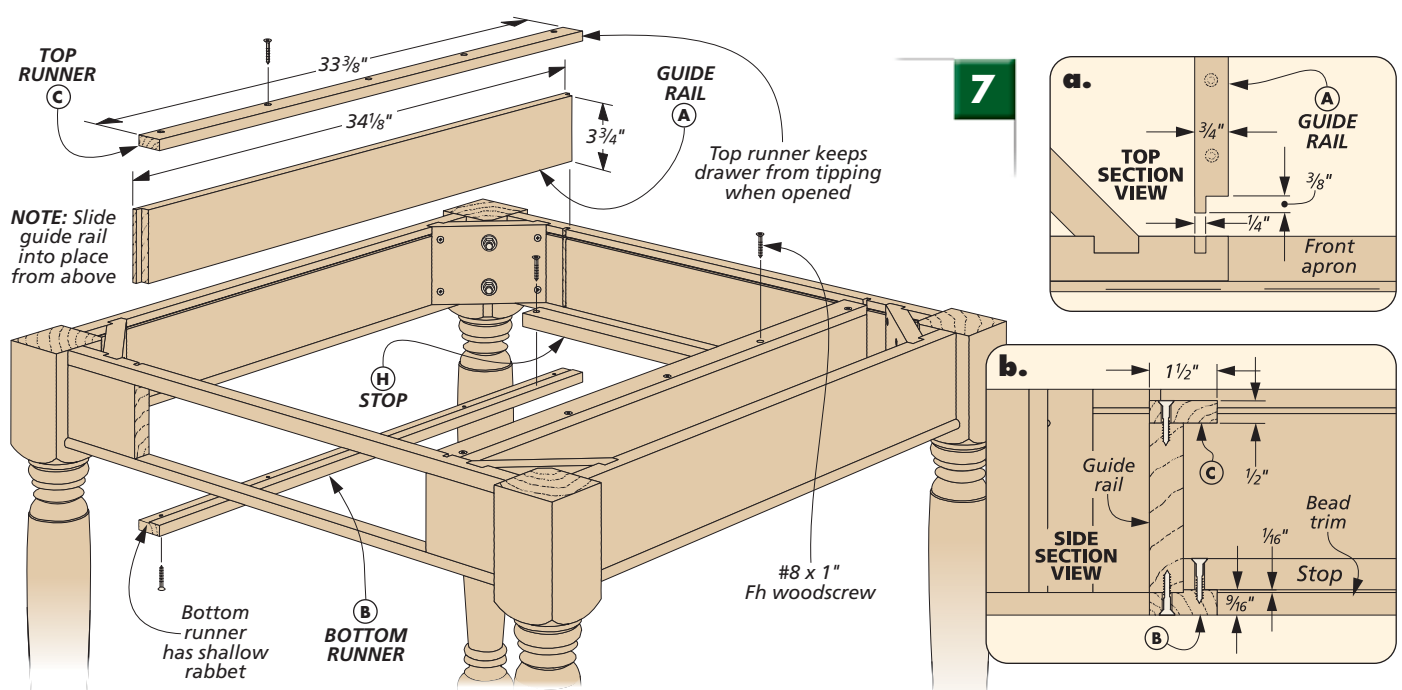
After the dados are cut, you can go ahead and add the decorative bead to the bottom edge of the apron pieces (Fig. 5a). The bead is needed to stiffen the front apron during assembly and act as a lower stop when the guide rails are added.

ADD SUPPORT RAILS. Once the base is assembled, the guide rail assemblies come next. A look at Fig. 7 shows how these three-piece assemblies are installed. Each one is just a $\frac{3}{4}$ "-thick guide rail capped with a top and bottom runner.

I started by cutting the *guide rails* (A) to size and then creating a tongue on each end to fit the narrow dados in the apron pieces (Fig. 7a). When the guide rails are ready to install, they simply slide in from above. A little glue and the bead molding will hold them in place.

Next comes the two drawer runners. The *bottom runner* (B) is





slightly thicker ($\frac{9}{16}$ "") than the *top runner* (C) and has a $\frac{1}{16}$ " rabbet that fits over the guide rail (Fig 7b). This allows the drawer to sit above the decorative apron bead and will save some wear and tear on the apron. After the runners are screwed and glued to the guide rails, you're ready to build a drawer.

BUILD A DRAWER. As you can see in Fig. 8, this drawer is a little unusual. The sides of the drawer extend far beyond the back. This is a handy trick that allows you to easily get at stuff buried at the back of the drawer without risk of it falling out.

The drawer joinery is pretty standard. A locking rabbet (Fig. 8a) joins

the *drawer front* (D) and the *drawer sides* (E). A tongue and dado joins the *drawer back* (F) to the sides (Fig. 8). The $\frac{1}{4}$ " plywood *drawer bottom* (G) fits in a groove.

After the drawer was assembled, I added a $1\frac{1}{4}$ " wood knob. Finally, position a *drawer stop* (H) across the guide rails as shown in Fig. 8b.

▲ Learn a new way to cut a locking rabbet joint on page 17.

MATERIALS, SUPPLIES, & CUTTING DIAGRAM

- A Guide Rails (2) $\frac{3}{4}$ x $3\frac{3}{4}$ - 34 $\frac{1}{8}$
- B Bottom Runners (2) $\frac{9}{16}$ x $1\frac{1}{2}$ - 33 $\frac{3}{8}$
- C Top Runners (2) $\frac{1}{2}$ x $1\frac{1}{2}$ - 33 $\frac{3}{8}$
- D Drawer Front (1) 1 x $3\frac{5}{8}$ - 19 $\frac{7}{8}$
- E Drawer Sides (2) $\frac{1}{2}$ x $3\frac{5}{8}$ - 29 $\frac{1}{2}$
- F Drawer Back (1) $\frac{1}{2}$ x $3\frac{5}{8}$ - 19 $\frac{3}{8}$
- G Drawer Bottom (1) $\frac{1}{4}$ ply. - 19 x 19 $\frac{3}{8}$
- H Drawer Stop (1) $\frac{3}{4}$ x $1\frac{1}{2}$ - 20
- (22) #8 x 1" Fh Woodscrews
- (1) $1\frac{1}{4}$ "-dia. Wood Knob w/Screw

$\frac{3}{4}$ " x 8" - 96" Pine (5.3 Bd. Ft.)



$\frac{1}{2}$ " x 4" - 96" Pine (2.7 Sq. Ft.)



NOTE: Drawer front (D) is cut from apron piece

ALSO NEEDED: $\frac{1}{4}$ " plywood for drawer bottom

3 CLASSIC TABLETOPS

One of the most noticeable parts of a table is, of course, the top. An easy way to give a table its own interesting look is with a top that's a bit unique. So for each table base, I tried a little different approach to the top.

For the maple sofa table I tried something "old" — a top made from

individual boards fastened together with cleats and woodscrews. It's a great style and it's easy to build.

A kitchen table needs a large, functional (and easily cleaned) surface that will hold up to some heavy use. A top glued up from thick stock involves a little bit of work but will

look great on this classic table and stand the test of time.

The breadboard-end top on the dining table has a more elegant look. You might think it would be a challenge. But don't worry, with a plywood center panel and simple joinery, it goes together easily.

Plank And Cleat Top

I would wager a guess that most of the earliest tabletops were made with plank and cleat construction.

And that's one reason why I chose this technique for the maple sofa table. I wanted to give this table an old "tavern" look. And I should also mention that this type of top is really appealing from a building standpoint. It really doesn't require a lot of exacting work. So making this style of tabletop look good is an easy job.

THREE PLANKS. A glance at Fig. 9 shows how this top goes together.

You can keep the glue bottle on the shelf. All you have here are three wide planks fastened together with a couple of cleats and woodscrews.

The first task is to cut the three planks (A) to size. Why three planks and not two or four? Well, traditionally wide boards were used for this type of top. It only made sense — the wider the boards the fewer the number needed and the fewer the spaces between them. So I used wide stock and the two "joint lines" give the top just the right look.

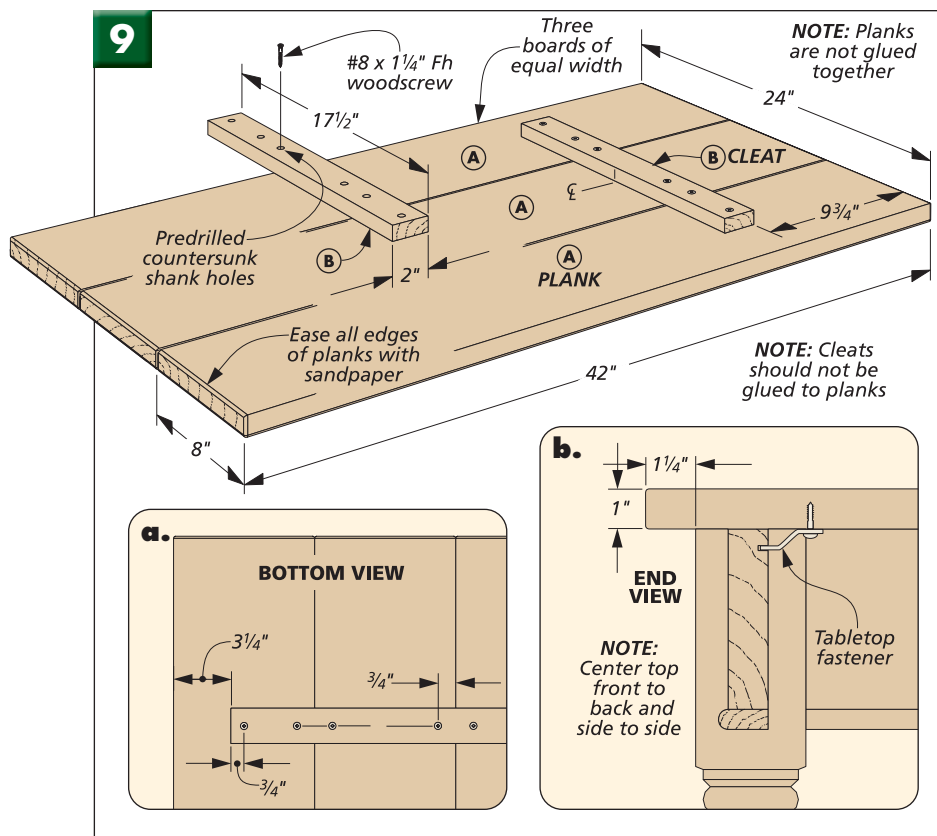
SAND AND EASE THE EDGES. Once the planks are ready, you can pick up some sandpaper. Since the planks are pre-cut to size and won't be glued together you can do a lot of the sanding before assembly. I made sure to knock off all the sharp edges and corners of each plank. I wanted the look of three individual boards, not one smooth top.

ATTACH THE CLEATS. With the planks prepared, they can be connected to make a top. The two cleats (B) can be cut to size from $\frac{3}{4}$ " stock and then the countersunk shank holes are predrilled (Figs. 9 and 9a). Now just carefully line up the planks (you might want to tighten a clamp across them) and position the cleats (Fig. 9a). Use the predrilled shankholes to drill some pilot holes in the planks and add the woodscrews. Don't be tempted to glue the planks to the cleats, they need to be able to move with changes in the humidity.

FASTEN IT TO THE BASE. That's the long and short of it. Finally I used a handful of metal tabletop fasteners to hold the top to the base (Fig. 9b).



▲ A simple plank and cleat top creates an age-old look.



A Glued Slab Top

The base that I built for the pine kitchen table has a solid, old farm-house feel to it. So it needed a top to match. The choice was pretty obvious. A solid top, glued up out of thick, pine stock (1"), would look right at home on this frame.

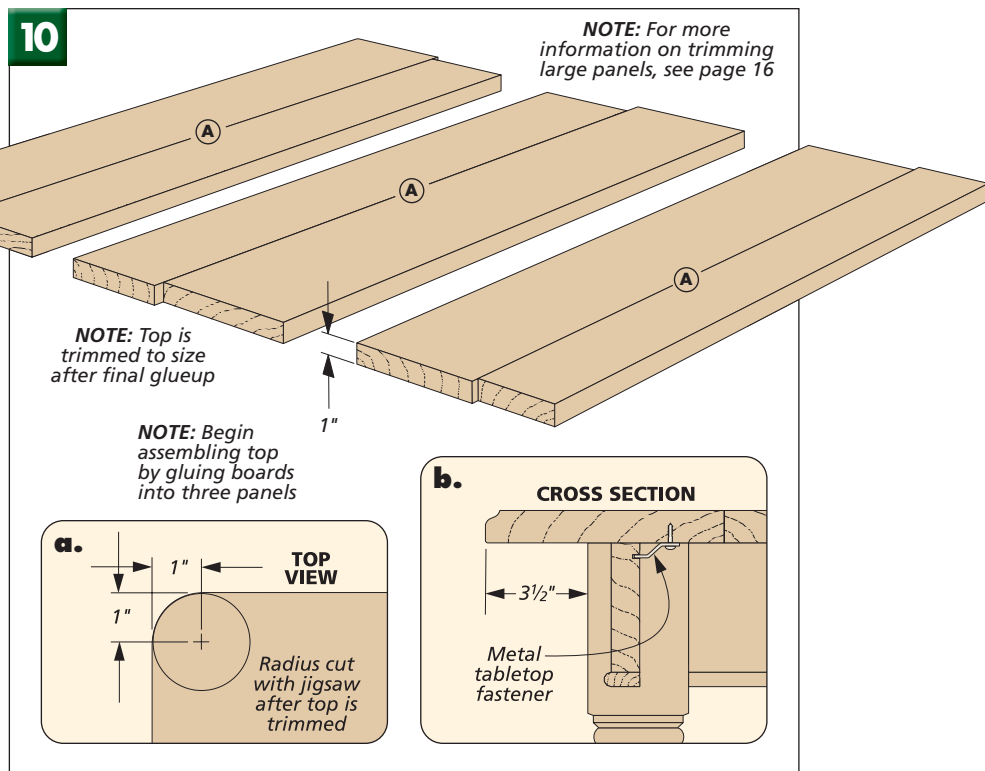
A WIDE GLUEUP IN THREE PARTS. The top that I built for this table was 44" square. Honestly, it's one of the widest glueups I've ever had to do. So to do a good job of it, I used a couple of simple tricks. Fig. 10 shows the first. I cut all the boards needed to rough length and then glued them into three narrower panels. Smaller glueups are a lot easier to handle and the process is a bit more relaxed. You only have one or two joints at a time to worry about fitting and lining up.

Once the individual sections are ready, you can complete the job by gluing them together. But keeping a large panel flat during this process takes a little doing. Fig. 11 shows a simple solution. A couple of long, wide cauls clamped across the ends of the glueup will keep it perfectly flat while the glue dries.

TRIM THE TOP. I was pleased with how my rough top turned out. After a short spell with the belt sander, it was ready to be trimmed to size. But not many table saws will accommodate a panel this size, so I resorted to a circular saw with a shop-made guide for this job. You can find more on this on page 16.

THE IMPORTANT DETAILS. Once the top is cut to size, the hard part is behind you. All you have left are a couple of simple but important tasks.

► This top, glued up from thick pine, is the perfect match for the solid kitchen table base.

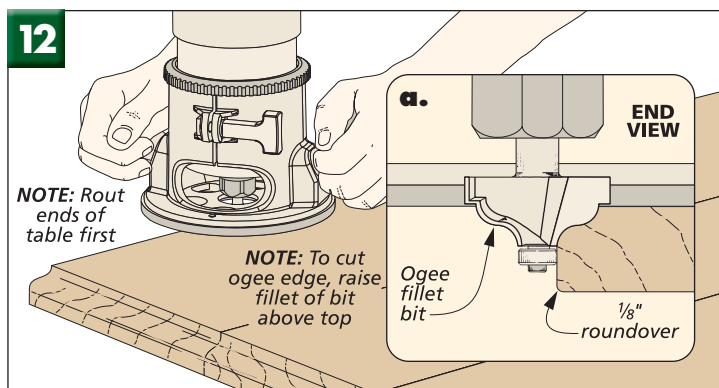
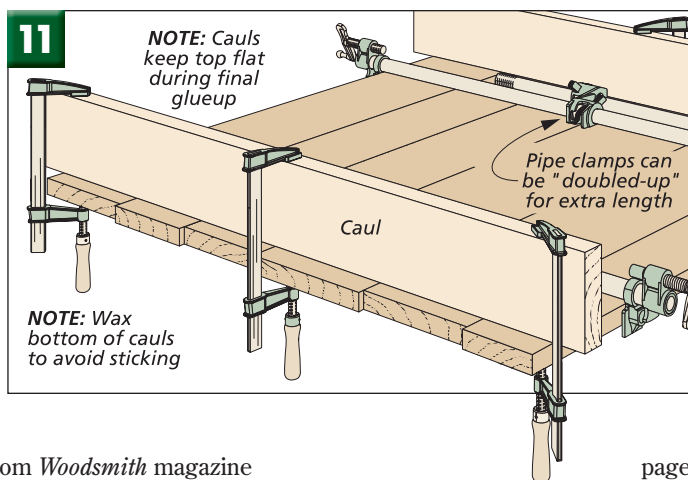


A kitchen table is certainly going to get a lot of use and abuse so any sharp edges and corners wouldn't hold up for long. You can easily solve this problem and add a couple of nice details at the same time.

First, I picked up a jigsaw and cut a 1" radius on all four corners of the top (Fig. 10a). And then after they were sanded smooth, I used a hand-held router to add a profile to both

the upper and lower edges of the top. The lower edge can simply be eased with 1/8" roundover. The upper edge gets a classic, ogee profile as shown in Fig. 12a.

Attaching the top is the last step. You should have an even overhang on all four sides of the base (Fig. 10b). And if you work with the table upside down, attaching the tabletop fasteners goes a lot smoother.





Breadboard-End Top

A large dining table needs a top with a little bit of style. Something maybe just a bit more formal, and with a little more detail than a table for everyday use. But to match the simple look of the base for the oak dining table you don't want to get carried away. I think the breadboard-end top in the photo above hits the nail on the head.

Breadboard end construction has been used on tabletops for a long

time, so it fits right in with the traditional look of the table base. A breadboard end refers to the stout piece fixed across the end of the top (it was commonly used on breadboards). The idea was that a breadboard end would help keep a wide tabletop flat over time. To me, it not only serves this practical purpose but it also gives an otherwise large, flat surface a more interesting look.

HOW TO BUILD IT

The top needed for the dining table is pretty large so I ruled out solid wood. A glueup of this size would be too difficult. A top made from a nice piece of straight-grained $\frac{3}{4}$ " oak plywood made a lot more sense. When you use plywood for the center panel of the top, you eliminate a lot of the hard work and add quality at the same time. You'll have a consistent color

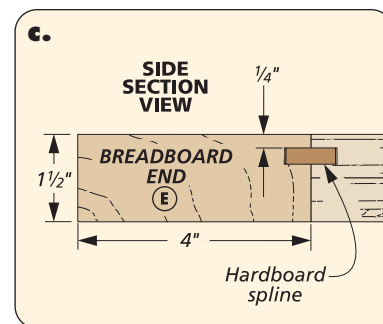
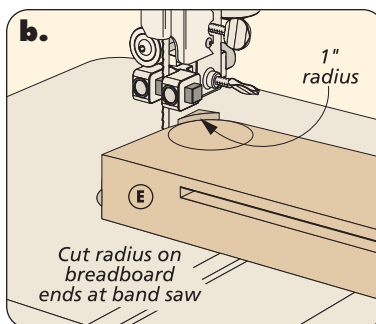
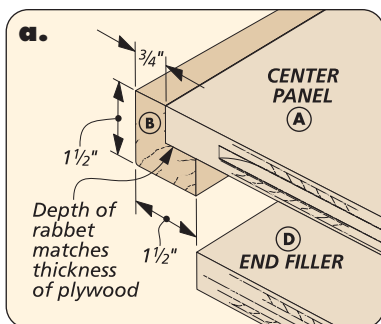
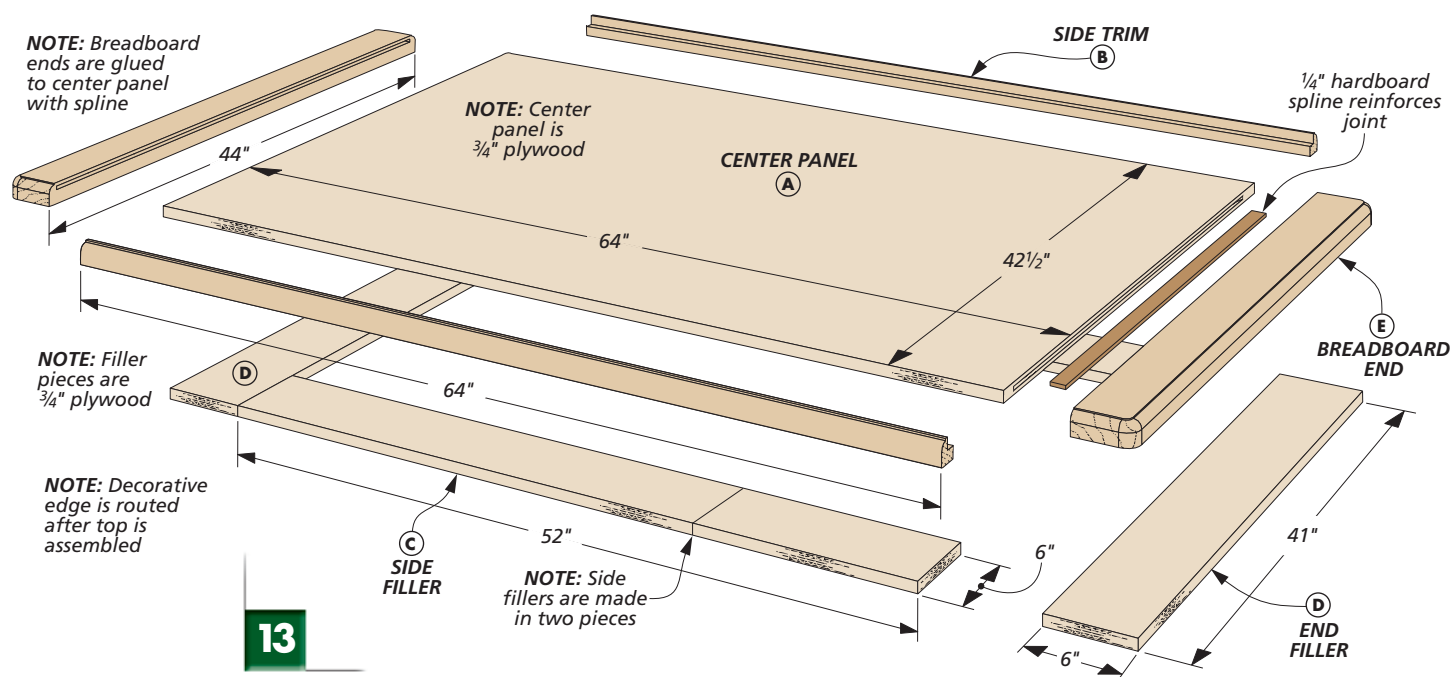
and grain pattern and attaching the breadboard ends "cross grain" won't cause a problem.

When you take a look at Fig. 13, you can see how the top is put together. You have a center panel that's trimmed on the long sides and "capped" on both ends. Some filler pieces beneath the center panel beef up the thickness. It's simple.

THE CENTER PANEL. The first thing to do is to cut the $\frac{3}{4}$ " plywood *center panel* (A) to size. You want crisp, square edges so the trim pieces and breadboard ends will fit well.

SIDE TRIM. Now you can start hiding the edges of the plywood. Fig. 13a shows how I added a couple of rabbeted *side trim* (B) pieces. The rabbet wraps around the edge of the table and provides more glue surface. But then only a narrow band of wood will show from above.

ADD THE FILLERS. Once the side trim is added, you can cut the plywood *side*

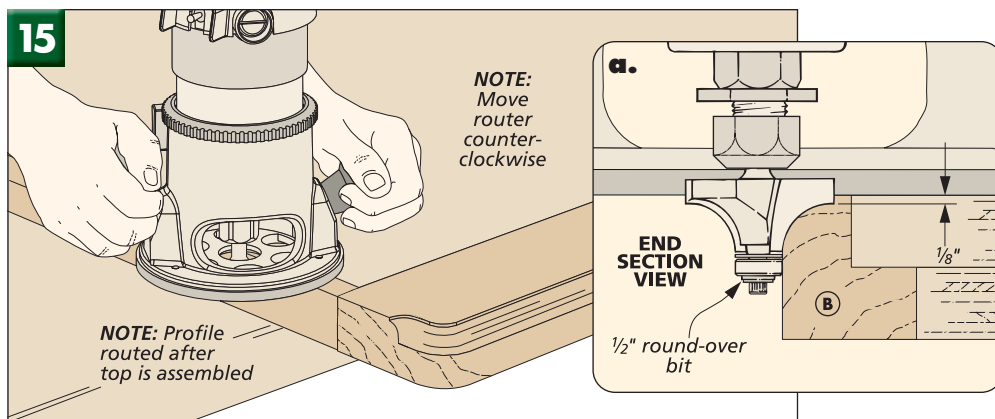
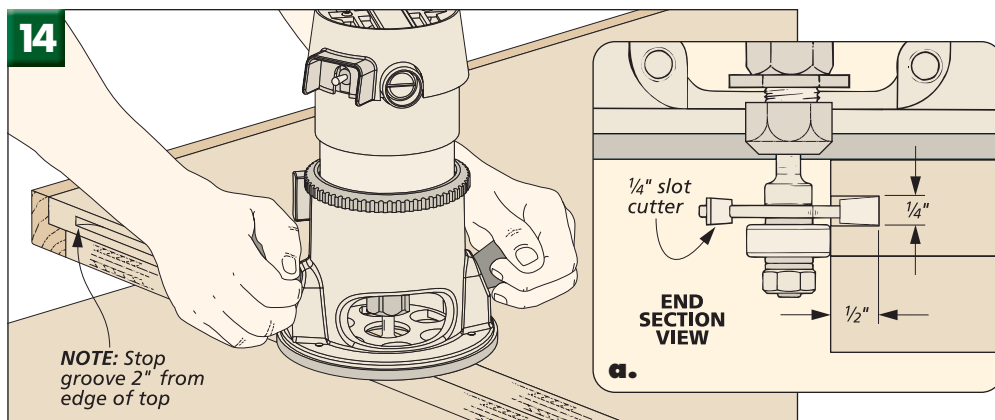


fillers (C) and end fillers (D) to size and glue them in place. Just snug the side fillers up to the side trim and then add the end fillers flush to the ends of the center panel.

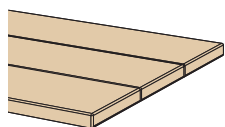
ADD THE ENDS. Now the top is ready for its breadboard end pieces. After you've cut the two *breadboard ends* (E) to size, there's some simple joinery to work on. Fig. 13c shows how I fit a "blind" hardboard spline across this joint to add strength.

A 1/4" slot cutter in a hand-held router makes cutting the stopped groove for the splines easy. You can check out page 16 for a clever way to cut the slots in the breadboard ends. And Figs. 14 and 14a show the details for the plywood center panel.

SOME NICE DETAIL. Before I glued the breadboard ends in place, I cut a radius on the outside corners (Fig. 13b). And the final detail is a 1/2" roundover with a shoulder, as shown in Figs. 15 and 15a. The completed top can then be attached and the table is ready for a finish. **W**

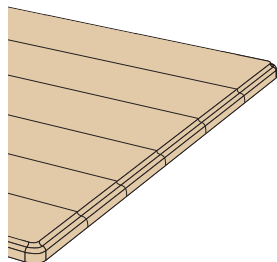


MATERIALS, SUPPLIES, & CUTTING DIAGRAMS



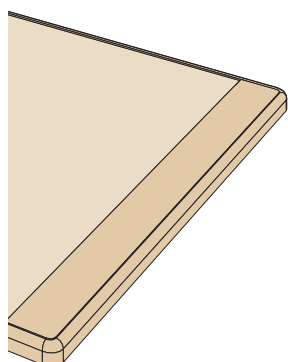
PLANK AND CLEAT TOP

- A** Planks (3) 1 x 8 - 42
B Cleats (2) 3/4 x 2 - 17 1/2
 • (6) Metal Tabletop Fasteners w/Screws
 • (12) #8 x 1 1/4 Fh Woodscrews



GLUED SLAB TOP

- A** Top (1) 1 x 44 - 44
 • (8) Metal Tabletop Fasteners w/Screws



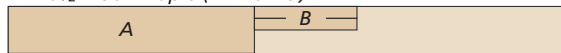
BREADBOARD-END TOP

- A** Center Panel (1) 3/4 ply. - 42 1/2 x 64
B Side Trim (2) 1 1/2 x 1 1/2 - 64
C Side Fillers (2) 3/4 ply. - 6 x 52
D End Fillers (2) 3/4 ply. - 6 x 41
E Breadboard Ends (2) 1 1/2 x 4 - 44
 • (10) Metal Tabletop Fasteners w/Screws

1" x 8 1/2" - 96" Maple (7.1 Bd. Ft.)



1" x 8 1/2" - 96" Maple (7.1 Bd. Ft.)



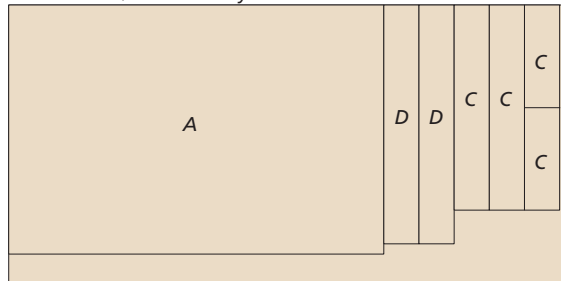
1" x 8 1/2" - 96" Pine (Three Boards @ 7.1 Bd. Ft. each)



1 1/2" x 8" - 96" Red Oak (10.6 Bd. Ft.)



48" x 96" - 3/4" Red Oak Plywood



ALSO NEEDED: 1/4" hardboard for splines

KNOCK-DOWN TABLE BASE

Traditional knock-down table construction has been around for a long time. And once you try it, the reasons become obvious. First, it can really simplify the joinery without sacrificing strength. Second, it makes the assembly of the frame a leisurely process and pretty much foolproof. And last but not least, it allows you to disassemble a table into manageable pieces for moving or storage.

HOW IT WORKS

At first glance, you'd be hard pressed to tell that a knock-down table wasn't built with mortise and tenon joinery.

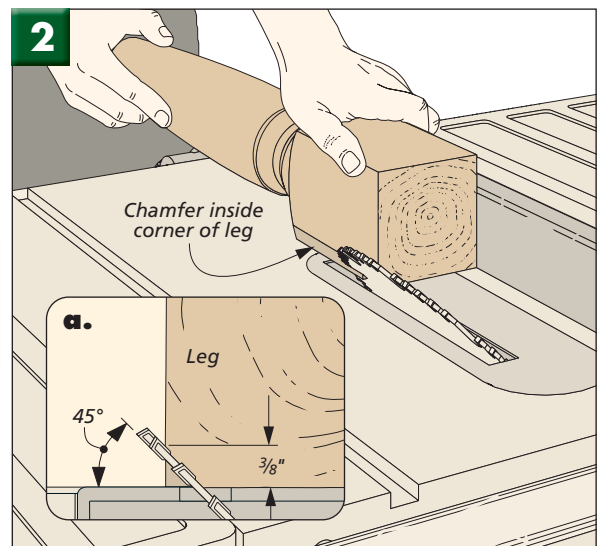
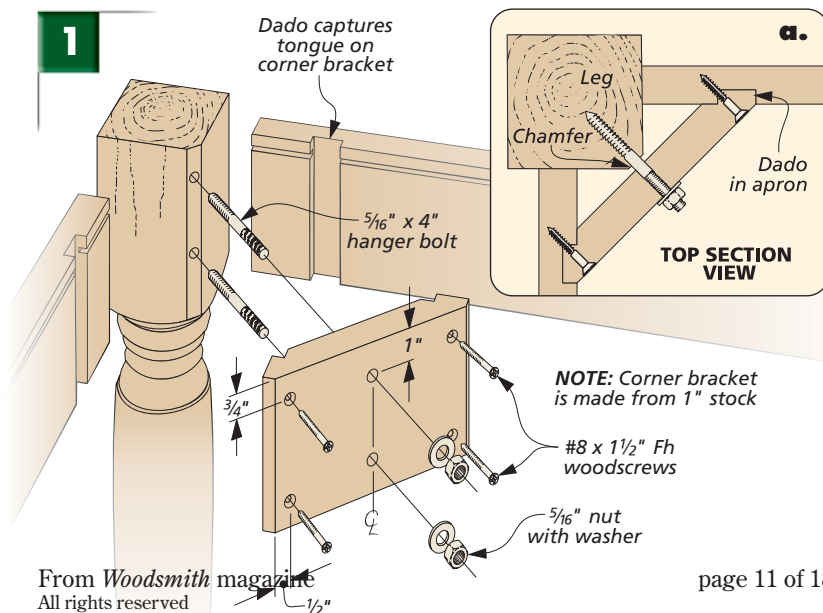
But the key here is that there isn't any joinery between the legs and the apron. On a traditional knock-down base, stout, wood corner brackets are fixed between the apron pieces to create a rigid frame. Hanger bolts inserted into the legs mate with holes in the brackets (Fig. 1). And when the nuts are snugged down, the legs and apron are pulled into a tight, square base (Fig. 1a).

THE LEGS. The usual place to start the joinery of a table base is with the legs, and in this case it's an easy job. All you need to do is to chamfer the inside, top corner of each leg as

shown in Figs. 2 and 2a. This serves a couple purposes. It'll give you clearance for the corner brackets and a flat surface in which to install the hanger bolts. That's it.

THE APRONS. The work on the aprons is almost as easy as the legs. You can get started by cutting them to width. And since you won't be cutting any tenons on the ends of the aprons, their length will be the distance separating the top ends of the legs. Just make sure the apron ends are clean and square.

To give the corner brackets a better grip on the apron, I cut a wide



dado at each end of the apron pieces. These dados capture a 1"-wide tongue on the ends of the corner brackets. The result is an extremely rigid base (Fig. 1a).

MAKING THE CORNER BRACKETS. With the work completed on the legs and aprons, all you need now are the corner brackets. And to ensure the frame ends up true and square, you want all four brackets to be identical. But with a simple step-by-step process, this isn't difficult.

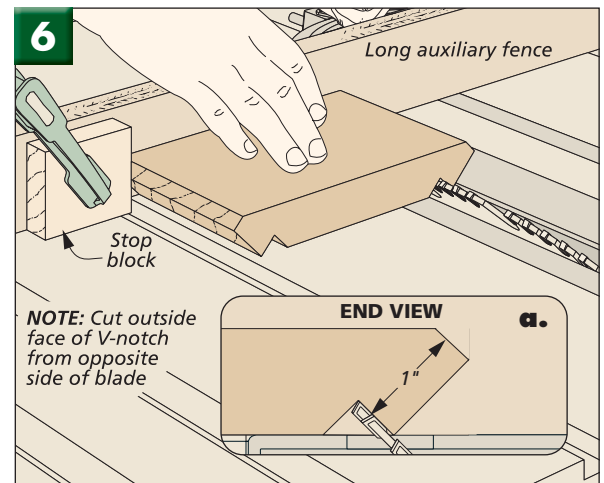
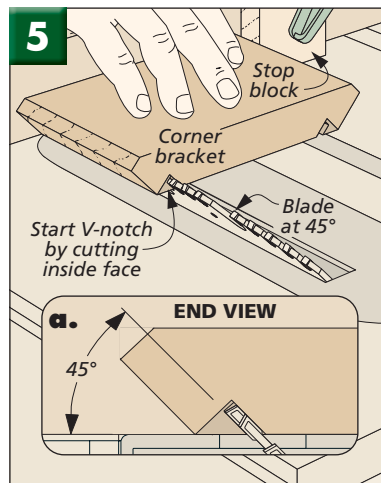
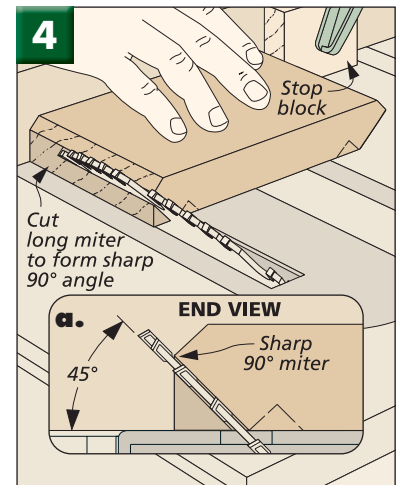
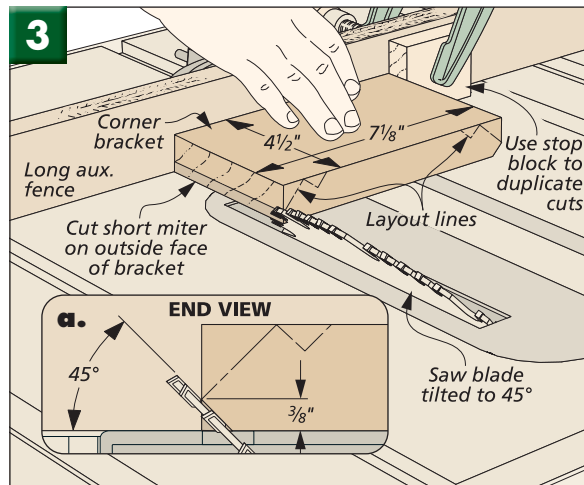
You can get started by cutting the four bracket blocks to size from 1" stock (Fig. 3). Next, lay out all the cuts on just one block — your set-up piece. You'll use this piece to make your initial cuts. A stop block on the miter gauge will make duplicating the cuts in the other pieces a cinch.

FIRST CUT. Fig. 3 shows how to get started by cutting the short 45° miter on the outside face. Just sneak up on the layout line, adjusting the stop block as you go. When your cut is right on the line, you can flip the piece end for end to make the opposite cut. Then cut the other pieces.

SECOND CUT. Now reset the stop block to make the long 45° cut on the inside face using the same steps as before (Figs. 4 and 4a).

THE TONGUE. The final two cuts on the brackets will form a V-notch and complete the tongue. Again, using a stop block I first cut the inside face of the V-notch (Figs. 5 and 5a).

Now to complete the tongue, you'll have to make the final cut from the

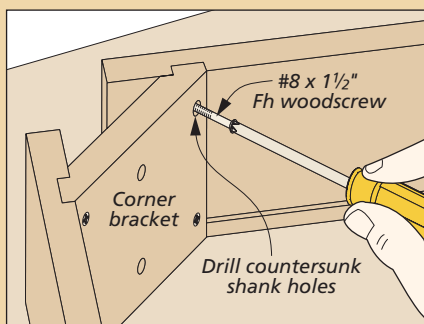


opposite side of the blade. If you take a look at Figs. 6 and 6a you'll see how I made this cut. The long auxiliary fence on the miter gauge makes it possible. Remember that the goal is a snug fitting tongue, so check the fit in the dados as you sneak up to the layout line.

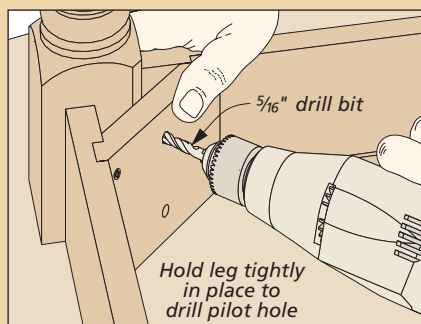
HOLES. One more task and the base is ready to assemble. Two oversized holes drilled in each corner bracket will hold the 5/16" hanger bolts.

ASSEMBLY. At this point you're ready to put the pieces together. The box below shows the simple steps to the assembly.

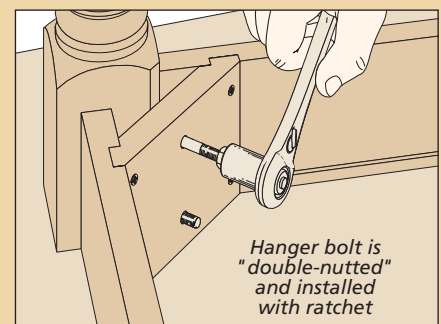
EASY UPSIDE-DOWN ASSEMBLY



1 The base can go together corner by corner. First, a bracket is fastened to the aprons with woodscrews.

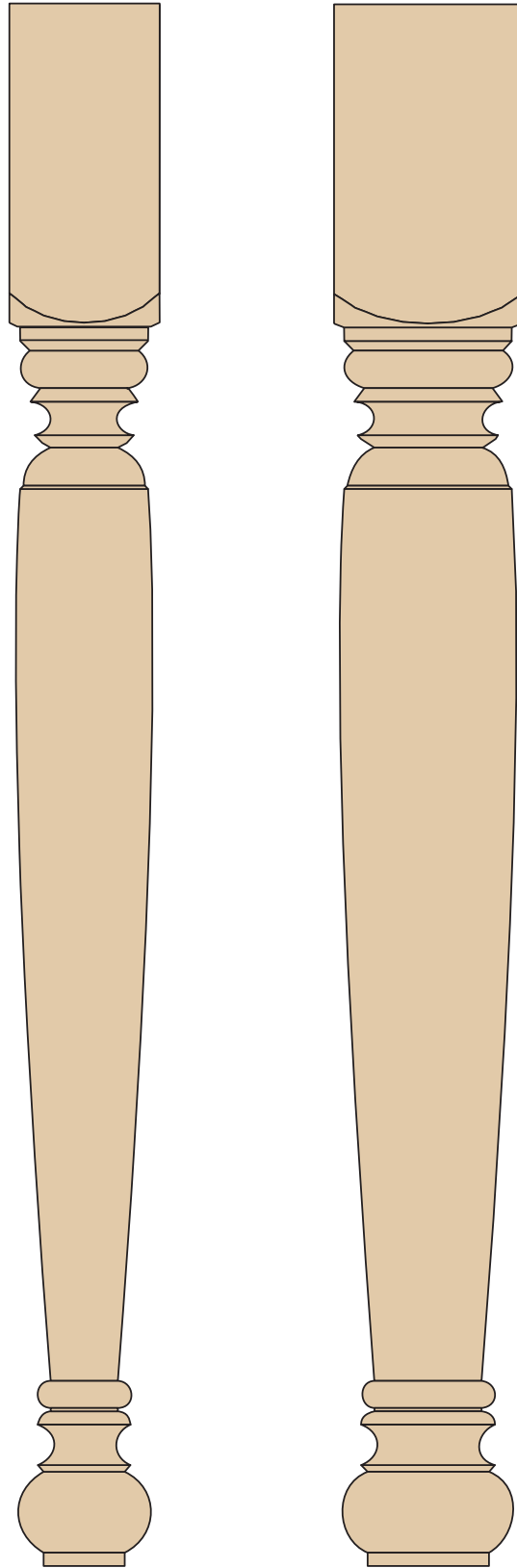


2 Next, the predrilled holes in the corner brackets are used to drill pilot holes in the legs for the hanger bolts.



3 Finally, the hanger bolts are installed. Tightening down the nut draws the leg and apron tightly together.

TURNED LEG PATTERNS



DINING TABLE DRAWER OPTION

Adding a couple of drawers to the oak dining table will make good use of some extra space. You'll have a convenient place to store placemats, linens or even serving utensils.

The process is just like that described for the pine kitchen table on pages 5 and 6. (You'll want to read over these pages before you start.) Only the dimensions of some of the pieces are different and on this table you're adding a drawer at both ends. (You can also add a drawer to just one end of the table.)

DRAWER OPENINGS. You'll begin by modifying the two apron ends to create drawer openings. I started with two slightly oversized apron blanks. Then I cut an apron top, two end pieces and a drawer front from each piece. Reassembling the apron

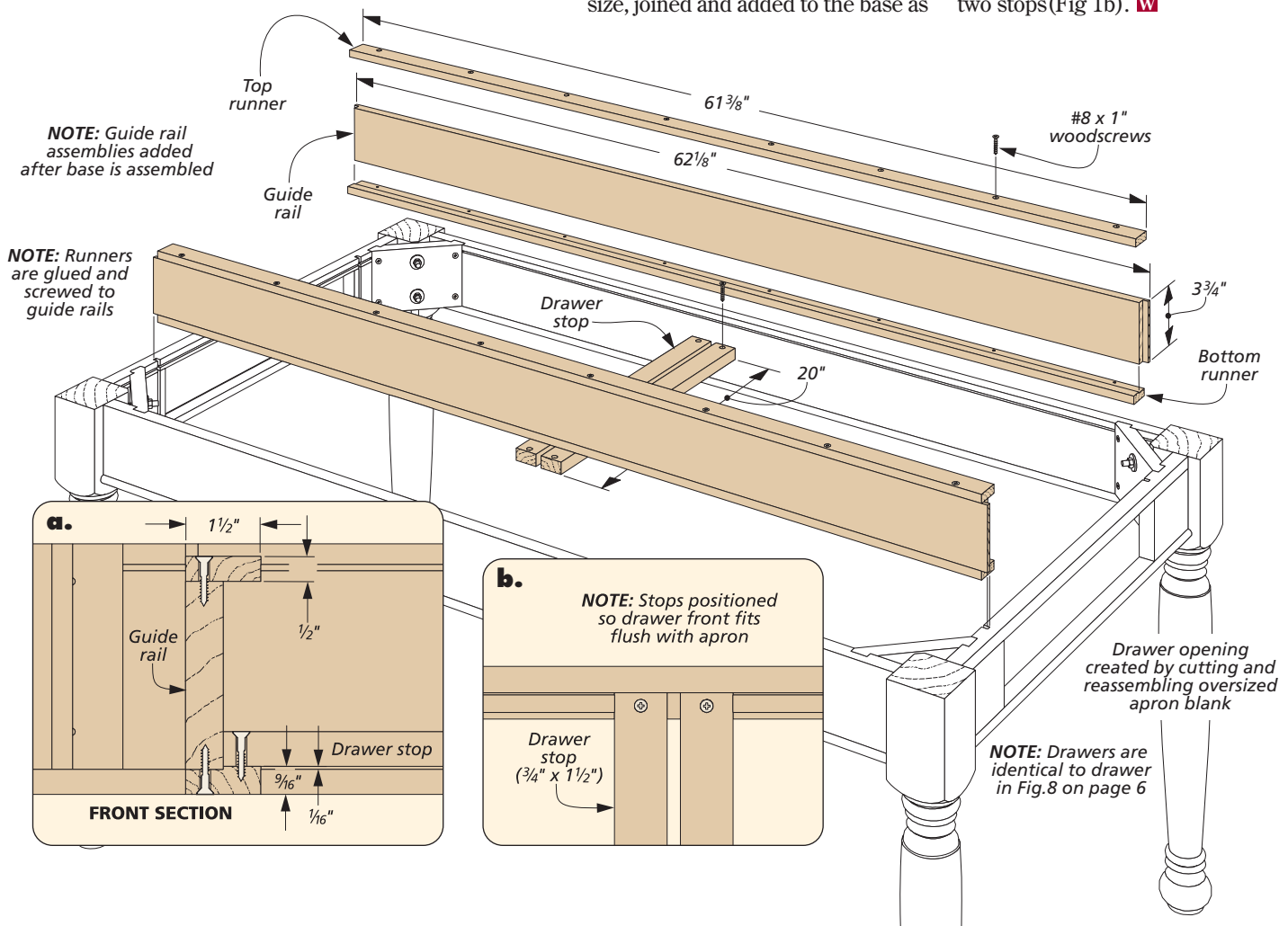


top and two ends will create the opening and the grain of the apron and drawer will appear seamless.

GUIDE RAIL ASSEMBLIES. Once the table base is assembled, the pieces for the guide rail assemblies can be cut to size, joined and added to the base as

shown in Figs. 1 and 1a.

BUILD THE DRAWERS. The final step is to build the two drawers. These are identical in size and construction to the drawer in Fig. 8 on page 6. When the drawers are completed, install the two stops (Fig 1b). **W**



FINISHING YOUR HEIRLOOM TABLE

Oak Dining Table

I wanted to keep the large, oak dining table, in the photo at right, fairly light in color. But I also wanted to blend any color variation in the wood and enhance the beautiful figure of the oak. To accomplish this, I turned to a custom-mixed stain that I've used on oak a couple times before and had very good results with.

I started by taking a trip to an art store to pick up a small tube of burnt umber artist's color. Back at the shop, I mixed 3 tablespoons of the burnt umber pigment to 2 pints of boiled linseed oil.

Once your stain is well mixed (it takes quite a bit of stirring to get a smooth mix), it can be applied just like an oil stain. Wipe or brush it on, let it sit on the surface for a short while, and then thoroughly wipe off any excess with a clean rag.

You want to let the stain dry for a good 24 hours before applying the topcoat. A dining table needs a pretty durable finish, so I followed the stain with 3 coats of *General Finishes* wiping varnish. This gave me just the right amount of build with a nice, soft sheen.



Pine Kitchen Table

I tried two different approaches for the finish on the pine kitchen table — one very traditional and one with a more contemporary feel.

TRADITIONAL. For the traditional version in the top photo at left, I started by staining the entire table with *Bartley Antique Pine Gel Stain*. The article on page 23 of *Woodsmith* No. 150 — *Antique Pine Finishing Secrets* — will give you some helpful information on successfully staining pine. Again, for a topcoat, I applied three coats of *General Finishes* wiping varnish.

PAINTED. On the second version (bottom photo at left) I went for a little bit lighter look and painted the base with an off-white satin latex paint. A painted base will tend to “scale down” the appearance of the solidly built table. This option makes a lot of sense if the table is going into a smaller space.

Before I brushed on the latex paint, I applied a coat of white pigmented shellac sealer (there are several brands). This will keep any defects (sap pockets, knots) in the pine from showing through the paint. The table top was finished exactly like the first version.



Maple Sofa Table

The choice of a stain color for the maple sofa table in the photo above was pretty easy. I wanted to give it that rich, aged maple color you find on some classic antiques.

Maple is a wood that can often look blotchy after staining. Thick gel stains are a good solution to this problem. So after some careful finish sanding, I applied a coat of *Bartley Country Maple Gel Stain*. It was the perfect color. When the stain was dry, I followed the same routine — three coats of *General Finishes* satin wiping varnish. The finish is durable but not too thick. **W**

Trimming Large Panels

One of the biggest challenges of building the kitchen table on page 8 is squaring up the table top. Ripping it to final width on the table saw is no problem since the sides are straight.

The problem comes in trimming the ends. It's nearly impossible to crosscut the uneven ends on the table saw. The table top is just too big for the miter gauge to hold.

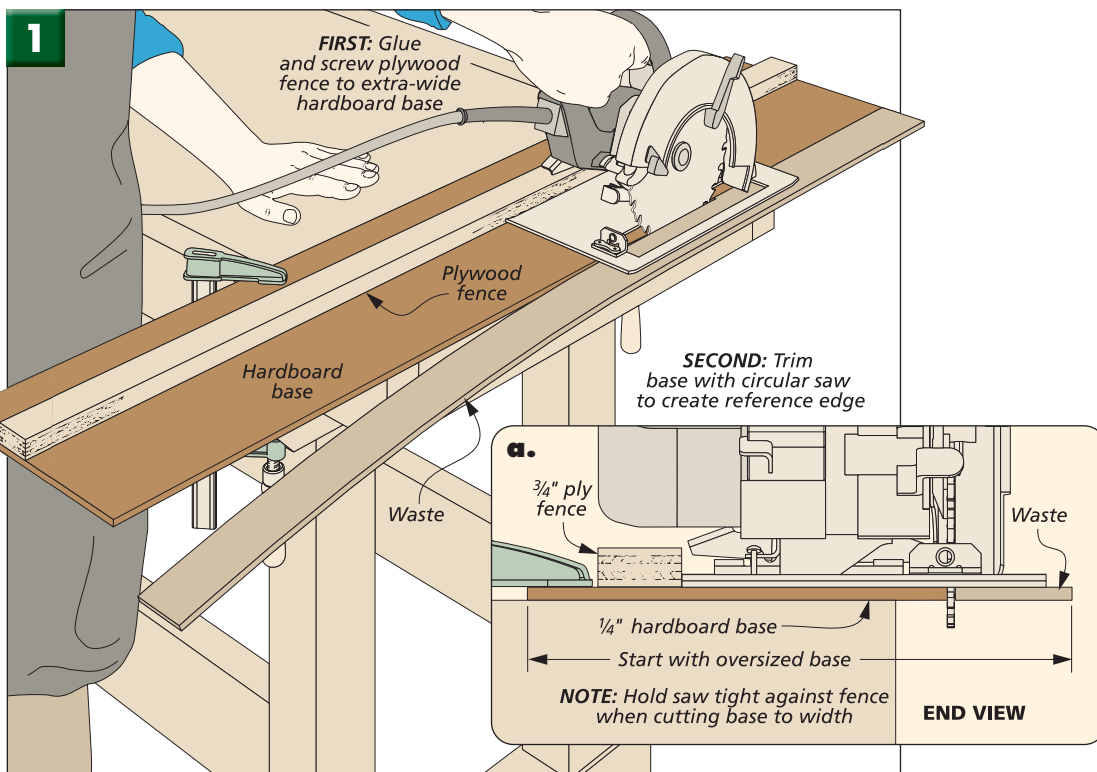
To solve this problem, I turned to a technique normally used for breaking down large sheets of plywood — a circular saw and cutting guide. One of the benefits of this method is that I don't have to muscle around the panel, I can either work on the floor or benchtop.

As you know, it can be tough to get a clean cut from a circular saw. But I've found that you can eliminate a lot of the chipout if the panel is backed up. I like to use a sheet of rigid foam insulation, as shown in the photo at right. It also helps to put the good side of the panel face down.

To guide the saw, I made a simple edge guide. It

directs the saw for cutting a straight line, and it makes a reference edge so you know exactly where the saw will cut.

To make an edge guide, start with an extra-wide base of $\frac{1}{4}$ " hardboard, then glue and screw on a plywood fence. Finally, use the fence as a guide for the saw and trim away the waste to create the reference edge (Fig. 1). **W**

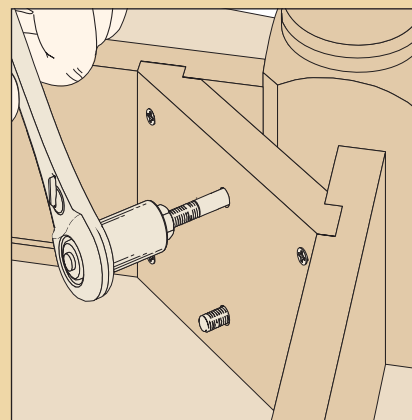


HANGER BOLT DRIVING OPTIONS

Hanger bolts are great for building knock-down table legs. The trick is knowing how to drive them in without damaging either sets of threads or backing out the bolt.

The simplest way is to use a pair of nuts tightened against each other, as you can see at the top in the photo at left. A socket wrench makes quick work of driving the bolt home, as in the drawing at right. Then you can remove the nuts with a pair of wrenches.

Another option is to use a commercial driver (shown at the bottom of the photo at left). It has a hex head that you chuck into a drill. All you do is thread it on the bolt and drive it in. Reversing the drill removes the driver.



ONE-BIT LOCKING RABBET

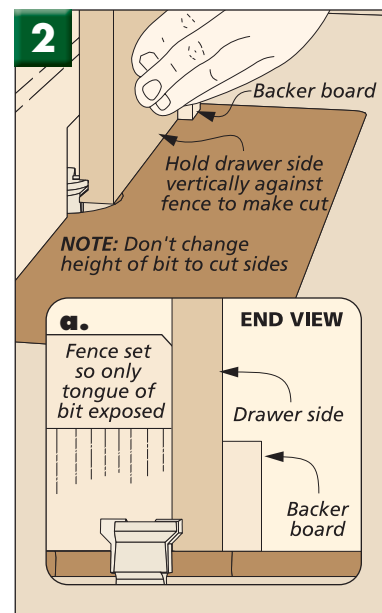
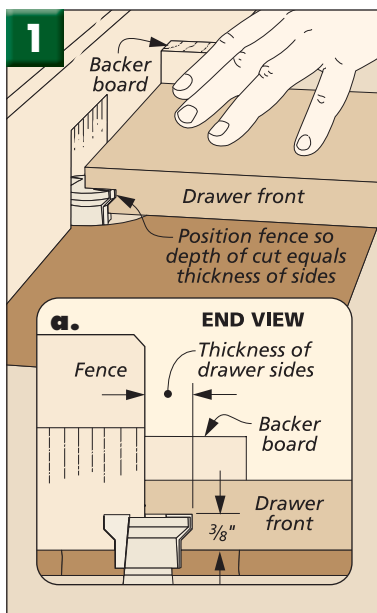
A new way to make a tried and true joint.

In woodworking it's easy to get into a rut. But often there's a reason. You tend to stick with what works.

That's why, when I have to build drawers for a project, more often than not I'll return to the trusted locking rabbet joint for the joinery. It makes a strong drawer and I've always liked the way it looks.

A dado blade on the table saw has generally been my tool of choice to cut this joint. But recently I came across a new way to make this joint — with a drawer lock router bit. Its clever design allows you to cut both halves of the joint with a single bit. And I found that it works pretty well.

THE SETUP. The key to using one of these bits is the setup. After you have the bit installed in the router table, the first step is to adjust it to the right height. In order for the joint to be a tight fit, this is pretty important. The cutting height of the bit is given by the



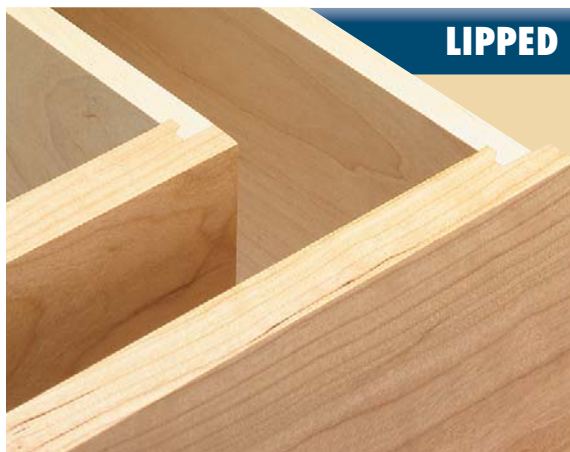
manufacturer (mine was $\frac{3}{8}$ ") and it will only work right when it is set at this particular height.

Once you've zeroed in on the correct height, you won't have to change it. Both halves of the joint can be cut using this same setting. The trick is in how you hold the different pieces as you rout the joint.

FRONT AND BACK. First you want to make the cut on your front and back drawer pieces. These pieces are routed flat as shown in Fig. 1. Just set the fence to rout the ends to a depth that matches the thickness of the sides, as shown in Fig. 1a. You can prevent chipout with a backer board.

THE SIDES. Now all you have to do is rout a matching cut in the drawer sides. But this is a little different. Don't change the height of the bit but move the fence forward so that only the "tongue" of the bit will cut (Fig. 2a). Now you'll cut the sides with the pieces standing on end.

Just hold the side tightly against the fence and make a shallow pass (Fig. 2). Again, using a backer board is a good idea. You'll want to sneak up on the depth of the cut, testing the fit as you go. When the side fits flush with the end of the drawer front, you're joint is done. **W**



LIPPED DRAWERS

Occasionally a design calls for a drawer with a lipped front as shown in the near photo at left. Kitchen cabinets and some furniture styles often call for this treatment. And the drawer lock bit will easily accommodate it. It's simply a matter of making a deeper cut in the drawer front. A couple of passes will be necessary.

SOURCES

Heirloom Tables

You really won't need a lot of supplies to build any of the three tables from this plan.

HANGER BOLTS. The $\frac{5}{16}$ " x 4" hanger bolts with nuts and washers are what hold it all together. If you can't find this size of hanger bolt locally, they can be ordered

in packages of ten (HB-3140) from *McFeely's*. This is where I also purchased the handy hanger bolt driver (HB-3199).

TURNED LEGS. I decided against turning my own legs. It was much easier to purchase them through *Rockler*. The legs are very

good quality and the price is reasonable. (If you want to turn your own legs, check out page 13 for patterns.)

You'll need $3\frac{1}{2}$ "-dia. oak legs (65943) to build the dining table, $3\frac{1}{2}$ "-dia. pine legs (65951) for the kitchen table, and I used $2\frac{3}{4}$ "-dia.

maple legs (65967) for the smaller sofa table.

TABLETOP FASTENERS. Each table requires a handful of tabletop fasteners (34215) available from *Rockler*.

KNOB. You could likely find a wood knob for the drawer locally. If you can't, give *Rockler* a try.



Drawer Lock Bit

The drawer lock bit that I tried out was made by *Amana* (55387). It also comes in a $\frac{1}{4}$ " shank (55386). Several other manufacturers make similar bits and sources are listed in the column at right.

WOODSMITH PROJECT SUPPLIES

We now feature hardware from **ROCKLER** in many of our new project kits. To order, please use our toll-free order line, see below. It's open Monday through Friday, from 8 AM to 5 PM Central Time. Before calling, please have your VISA, MasterCard, Discover, or American Express card ready.

If you would prefer to mail in an order, please call the toll-free phone number below for more information concerning shipping charges as well as any applicable sales tax.

1-800-444-7527

MAIL ORDER SOURCES

Similar project supplies may be ordered from the following companies:

Rockler
800-279-4441
rockler.com
*Tabletop Fasteners,
Turned Table Legs,
Wood Knobs*

Woodsmith Store
800-835-5084
Wood Knobs

Amana Tool
800-445-0077
amanatool.com
Drawer Lock Bit

McFeely's
800-443-7937
mcfeelys.com
*Hanger Bolts, Hanger Bolt
Driver, Router Bits*

Lee Valley
800-871-8158
leevalley.com
*Tabletop Fasteners,
Wood Knobs*

Whiteside Machine Co.
800-225-3982
whitesiderouterbits.com
*Router Bit,
Drawer Lock Bit*

Woodworker's Supply
800-645-9292
woodworker.com
*Drawer Lock Bit,
Tabletop Fasteners,
Turned Table Legs,
Wood Knobs*