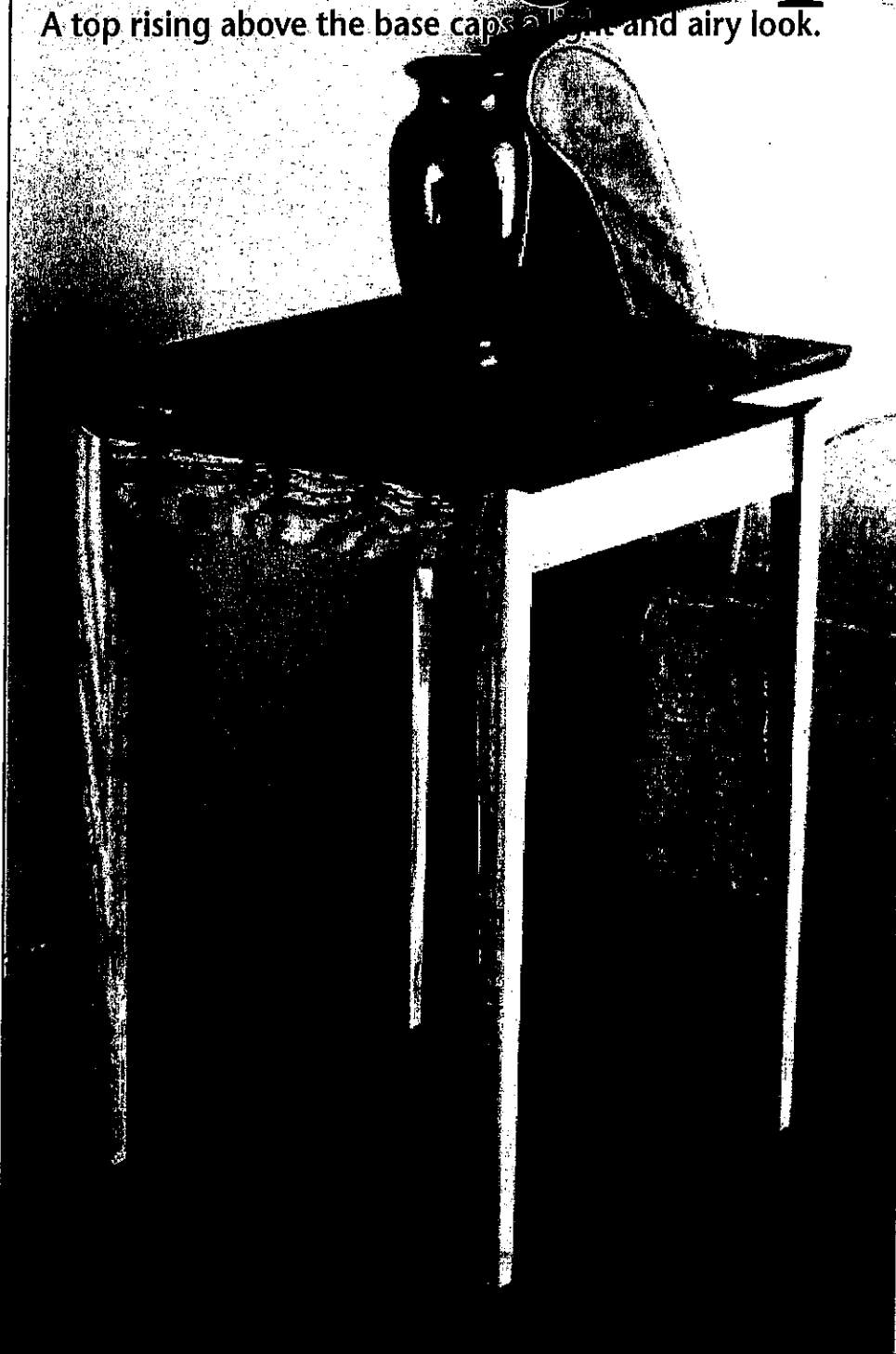




# Floating-Top Table

A top rising above the base caps a light and airy look.

Okay, the top doesn't really float. But it *appears* suspended above the legs and rails thanks to a couple of supports with elevated centers that extend between two rails.



*Kevin  
Nagle*

## PROJECT HIGHLIGHTS

- The contrast between walnut and ash emphasizes the space between the tabletop and the base.
- Approximate materials cost: \$50

## Start with legs to stand on

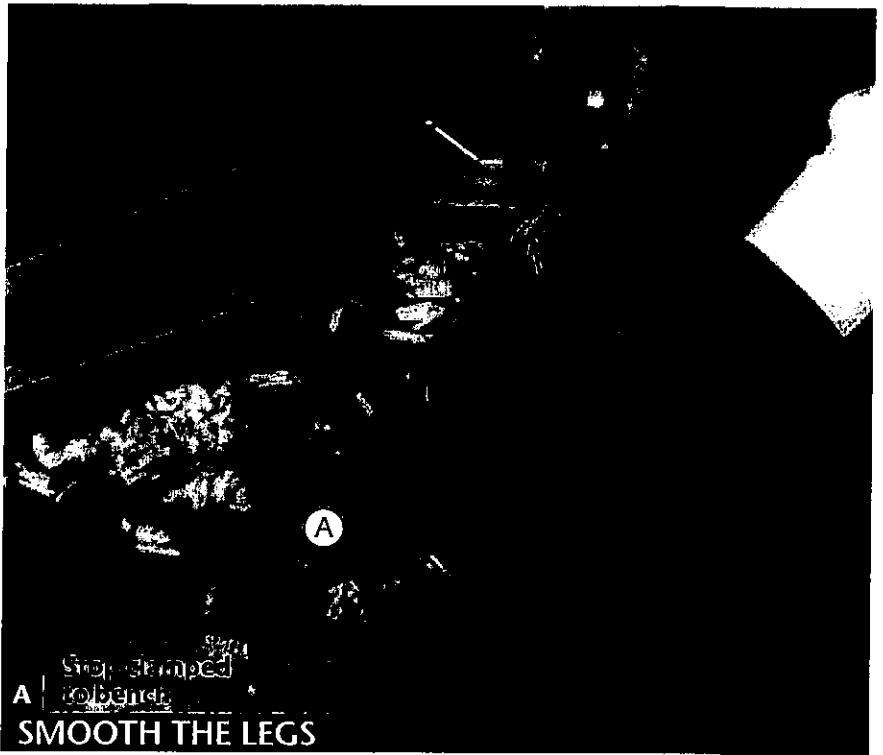
**1** From 8/4 ash (or laminated 3/4" stock) cut the legs (A) to size [Materials List, page 7]. Choose and label the two best faces for the outside faces, then lay out a 3/8" x 2 1/8" mortise on each of the two inside faces [Drawing 1].

**2** With a 5/16" Forstner bit in your drill press, rough out the mortises by drilling overlapping holes. (The bottoms of the mortises intersect.) Chisel the walls of the mortises square and perpendicular to the face of the leg (A).

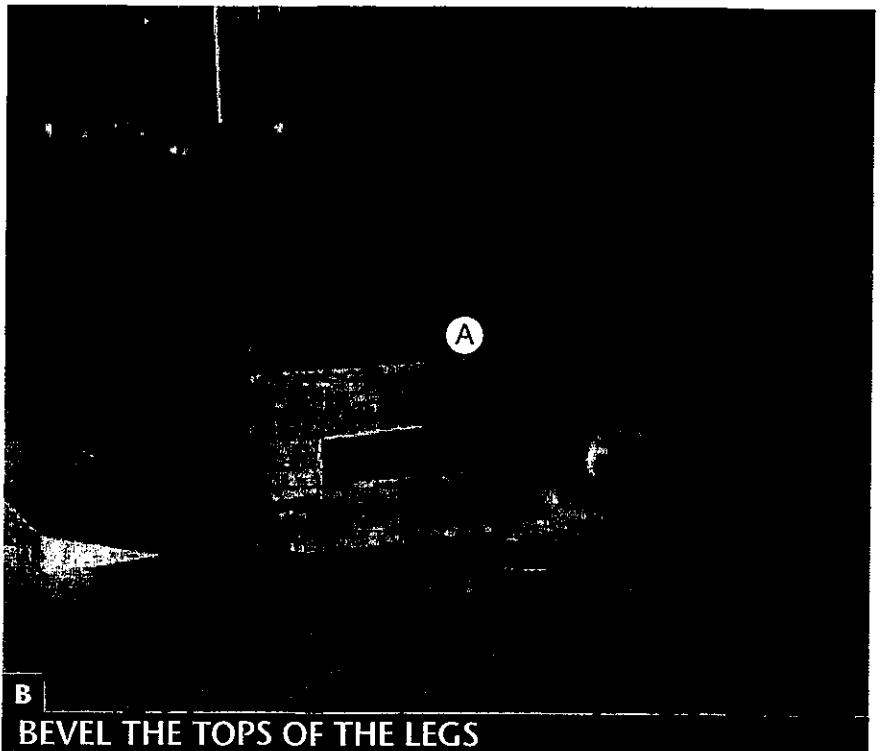
**Quick Tip!** Let a scrap be your guide. Clamp a scrap with square edges along the mortise layout line to guide your chisel straight down. Also, to create the truest edge, use the widest chisel you can.

**3** Lay out a taper on one outside face of each leg (A) [Drawing 1], and bandsaw 1/16" outside the lines. (Save the cutoffs for use later during assembly.) Lay out the second taper on the just-cut faces and bandsaw them. Smooth the tapers up to the layout lines using a block plane [Photo A], jointer, or belt sander with 120-grit sandpaper.

**4** Lay out the bevel on the top of each leg (A) [Drawing 1]. Bandsaw the bevels [Photo B] and sand the legs to 220 grit. Try to maintain crisp edges where the bevels meet and at the peak of the leg.



**SMOOTH THE LEGS**  
Scribble pencil lines on the tapered faces of each leg (A), then plane those faces until the marks disappear.



**BEVEL THE TOPS OF THE LEGS**  
Draw layout lines for the bevels on the outside faces of the legs (A). Cut as close to the lines as possible to minimize sanding.

## Aprons and supports come next

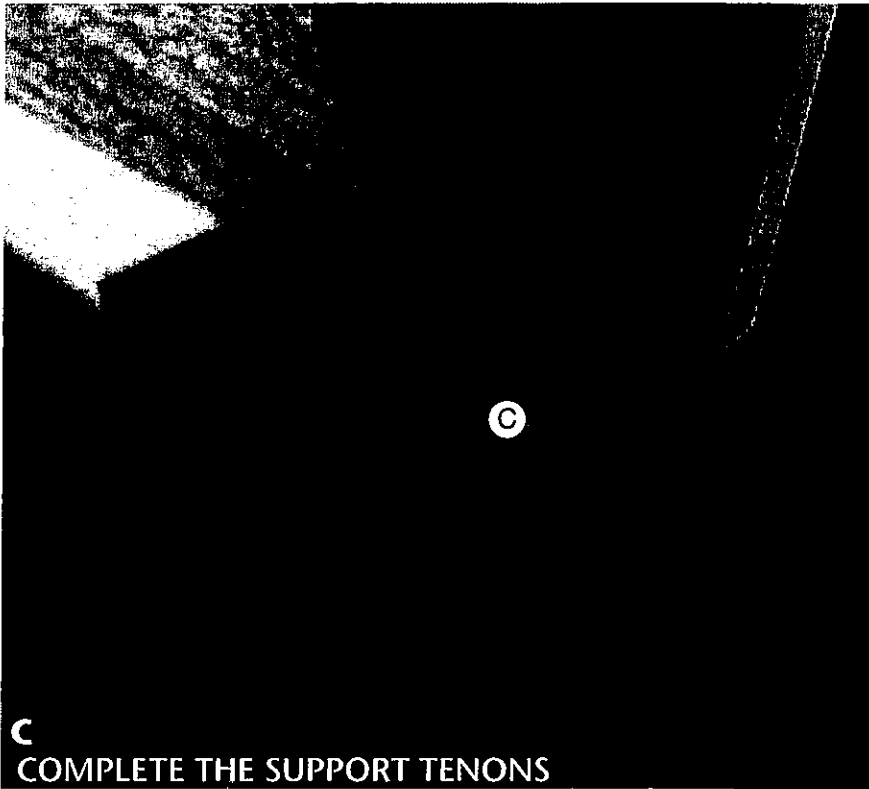
**1** Cut the aprons (B) and supports (C) to size [Drawings 2, 3]. Set the supports aside for the moment. In your tablesaw, set up a  $\frac{3}{4}$ " dado blade, attach an auxiliary face to your rip fence, and position the auxiliary fence next to the blade. With the blade set just less than  $\frac{3}{16}$ " above the table, cut a  $\frac{1}{8}$ "-long test tenon on an apron by making a pass on all four faces. Test the fit of the test tenon in a leg (A) mortise. If needed, adjust the blade and repeat the test to get a snug fit, then cut  $\frac{3}{4}$ "-long tenons on the aprons. Leave the tablesaw setup for later.

**2** Lay out the mortises on two aprons (B) as shown in the **Shop Tip** on page 9, then drill and chisel them out.

**3** With the tablesaw running, reposition the auxiliary rip fence to reveal  $\frac{3}{8}$ " of the dado blade. Retrieve the supports (C) and, as before, cut a stub test tenon to check the fit in the apron (B) mortises. When the thickness of the test tenon fits, cut the  $\frac{3}{8}$ "-long tenons on the supports [Drawing 3].

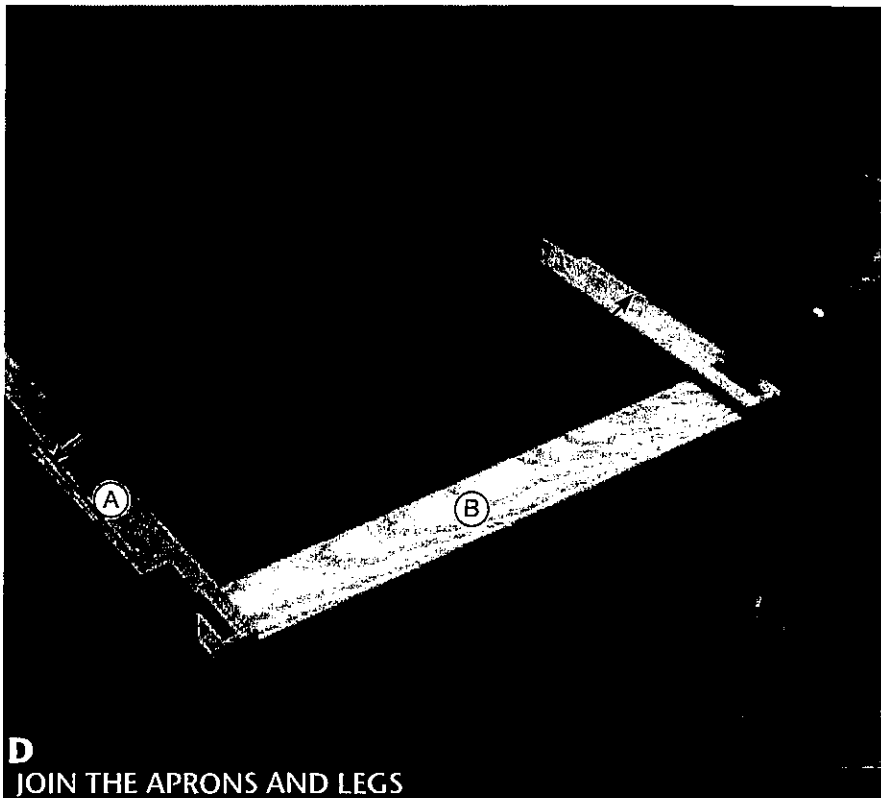
**4** Photocopy the **Support Pattern** from page 9, and use it to lay out the shoulders on the supports (C) [Drawing 3]. Bandsaw and sand them to shape. Pare the top shoulder of each tenon to fit the mortises [Photo C].

**5** Finish-sand the aprons (B) and supports (C) to 220 grit.



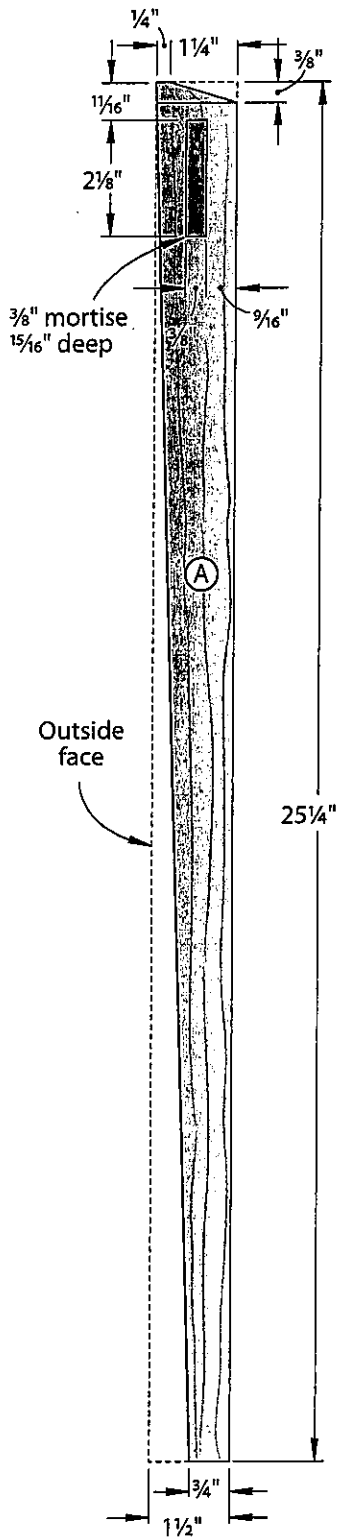
### C COMPLETE THE SUPPORT TENONS

After shaping the curved shoulders of the supports (C), recut the top shoulder of each tenon with a chisel.



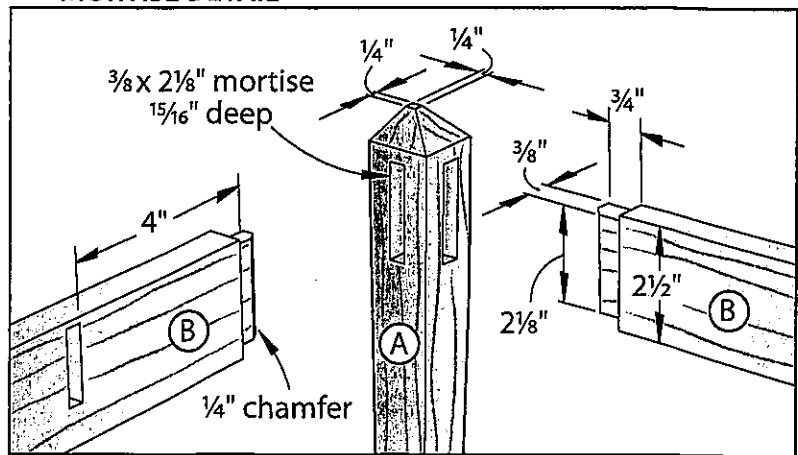
### D JOIN THE APRONS AND LEGS

Use a single clamp in line with the apron (B). Make sure the other mortise on each leg (A) faces the inside.

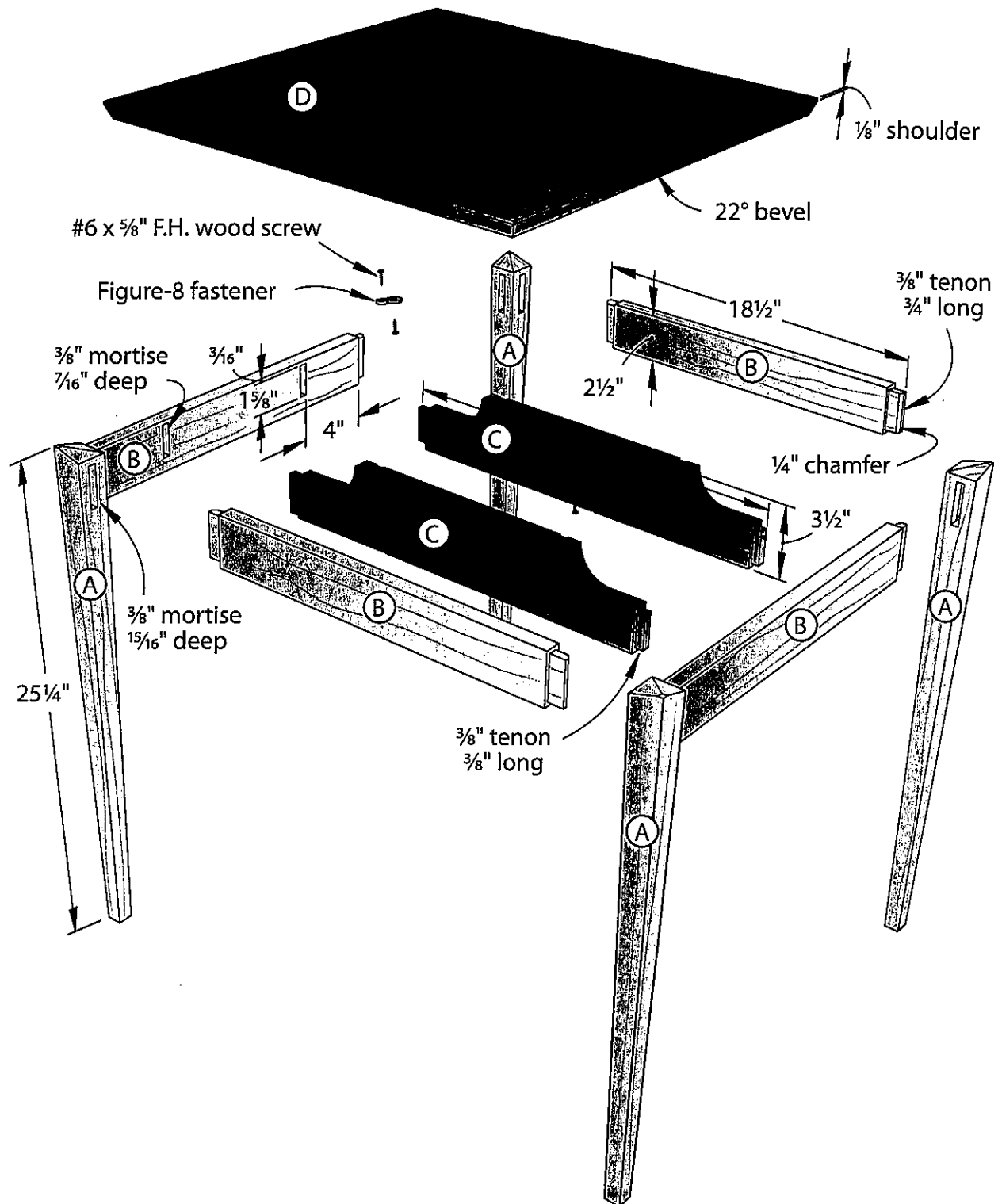


**1** LEG  
(Inside face)

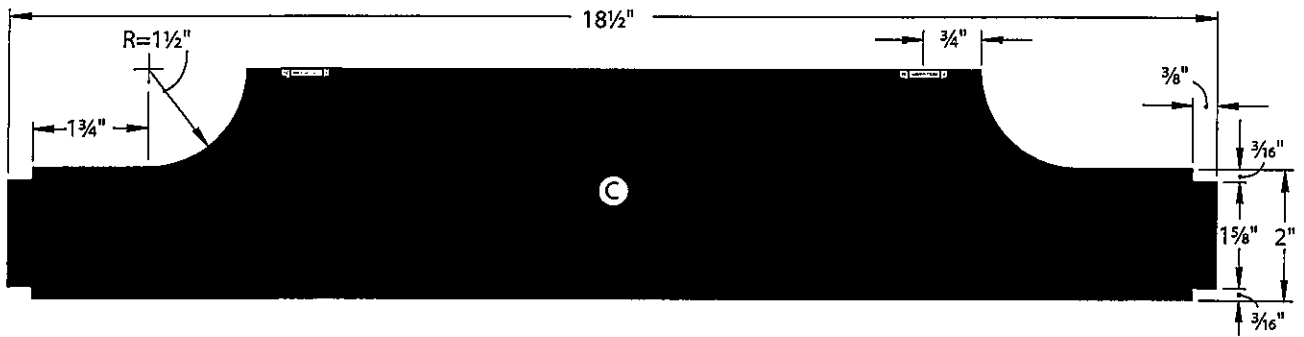
**1a** TENON AND MORTISE DETAIL



**2 EXPLODED VIEW**



### 3 SUPPORTS DETAIL



# Materials List

Part	FINISHED SIZE			Matl.	Qty.
	T	W	L		
A legs	1½"	1½"	25¼"	A	4 = 8
✓ B aprons	¾"	2½"	18½"	A	4
✓ C supports	¾"	3½"	18½"	W	2
✓ D* top	¾"	22"	22"	EW	1

*have  
to glue*

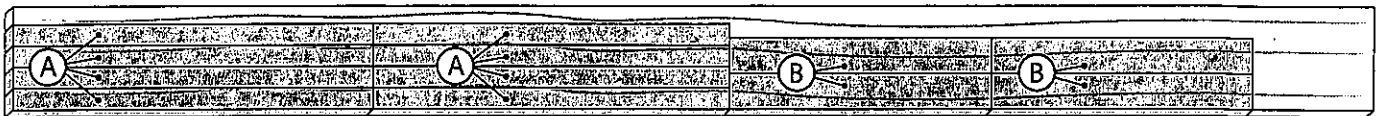
\*Part initially cut oversize. See the instructions.

**Materials key:** A—ash, W—walnut, EW—edge-glued walnut.

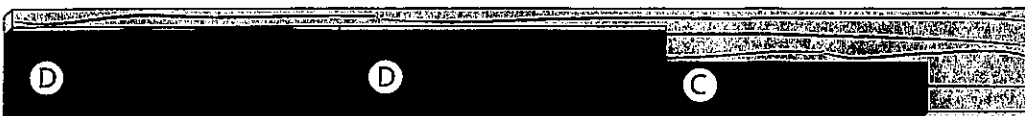
**Supplies:** #6×<sup>5</sup>/<sub>8</sub>" flathead wood screws (8), figure-8 fasteners (4).

**Blade and bits:** Stack dado blade; <sup>5</sup>/<sub>16</sub>" and <sup>11</sup>/<sub>16</sub>" Forstner bits.

## Cutting Diagram



¾ x 7¼ x 96" Ash (5.3 bd. ft.)



¾ x 7¼ x 72" Walnut (4 bd. ft.) (2 needed)

## The base takes shape

**1** Using a block plane or sanding block, chamfer the inside corner of each apron (B) tenon to create clearance [Drawing 1a]. Dry-fit the legs (A) and aprons to make sure the tenon shoulders seat tightly against the legs.

**2** Retrieve the tapered cutoffs from the legs (A) and use them to create parallel clamping surfaces as you glue each unmortised apron (B) between two legs (A) [Photo D]. Compare diagonal measurements to check for square.

**3** After the glue dries, dry-fit the leg assemblies (A/B) with the remaining aprons and the supports (C) to check the fit. Make any adjustments needed, then glue and clamp the supports between the aprons [Photo E].

**4** Complete the table base by gluing the support assembly (B/C) between the leg assemblies (A/B) [Photo F].

## Make a top and finish it

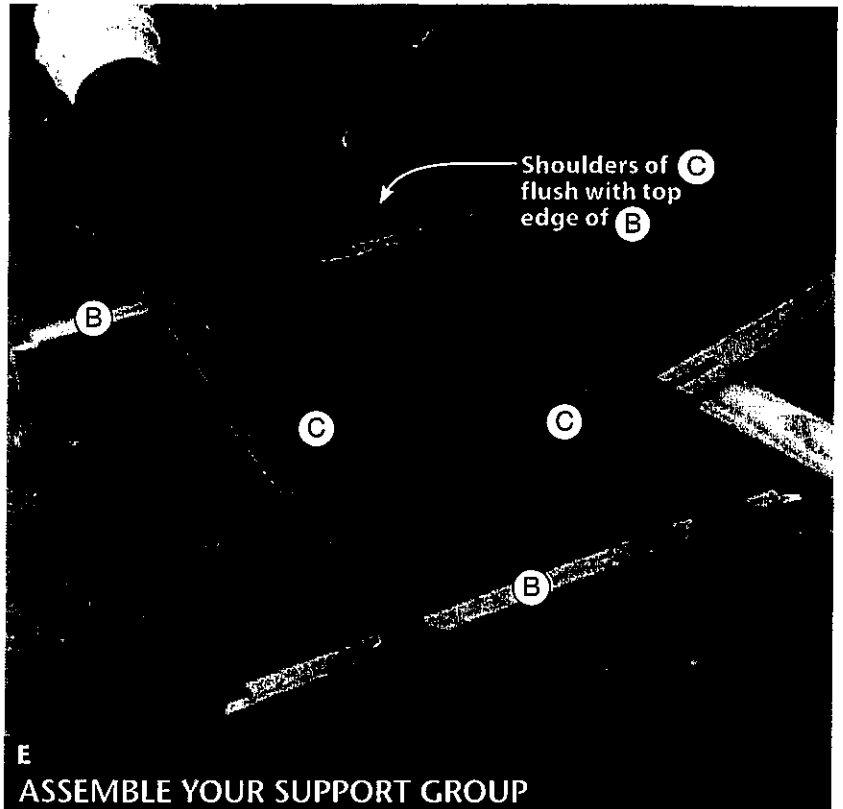
**1** Glue up a blank for the top (D) [Drawing 2]. After trimming it to size, tilt your tablesaw blade to 22° from vertical. Set your rip fence to chamfer the underside of the top, leaving a 1/8" shoulder, and cut the chamfers. Finish-sand the top to 220 grit.

**2** Using an 1/16" Forstner bit, drill 1/8"-deep counterbores in the supports (C) for the figure-8 fasteners [Drawing 3]. Screw the fasteners to the supports, then center the top (D) on the base and secure it by driving #6x3/8" wood screws through the fasteners.

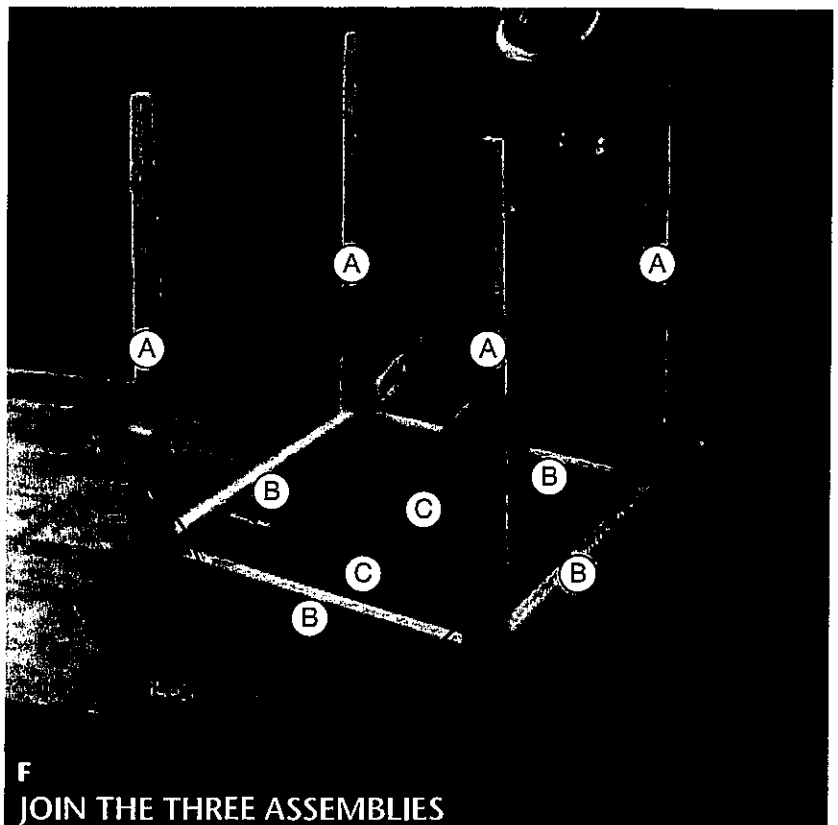
**3** Remove the top (D) and figure-8 fasteners and apply a finish. We wiped on three coats of General Finishes Arm-R-Seal, sanding lightly between coats with 320-grit sandpaper. After the finish dries, reattach the top. ♣

Written by **Craig Ruegsegger** with **Kevin Boyle**  
Project design: **Kevin Boyle**  
Illustrations: **Lorna Johnson**  
Graphic design: **Lorna Johnson**

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**E**  
**ASSEMBLE YOUR SUPPORT GROUP**  
The shoulder of the support (C) should sit flush with the top edge of the apron (B). Check for square at the inside corners.



**F**  
**JOIN THE THREE ASSEMBLIES**  
Glue the leg assemblies (A/B) to the upside-down support assembly (B/C). Flip the base right side up to check that the legs sit flat.

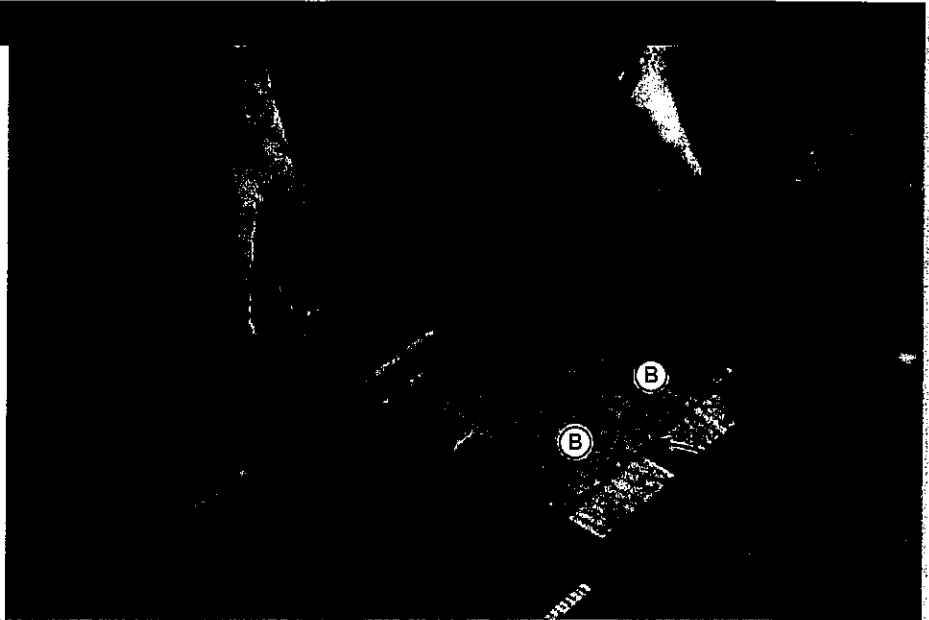


## SHOP TIP

### Mark matching mortises

Mortises cut in two aprons (B) on opposite sides of the table accept tenons cut in the supports (C). The opposing mortises must align or the supports won't fit in place.

To accomplish this, clamp the two aprons together edge to edge with the shoulders of the tenons flush. Lay a combination square across both pieces, and mark out the long edges of the mortises [Drawing 2]. Then reset the square to mark the top and bottom edges of each mortise.



## MORE RESOURCES

### FREE PLAN AND VIDEO

- A simple jig makes easy work of tapering legs:  
[woodmagazine.com/taperjig1](http://woodmagazine.com/taperjig1).
- Watch a free video on using the taper jig at  
[woodmagazine.com/taperjig2](http://woodmagazine.com/taperjig2).

### MORE PLANS

- Find more table plans at  
[woodmagazine.com/tables](http://woodmagazine.com/tables). \$

\$=Download these plans for a small fee.

