



barrister's bookcase

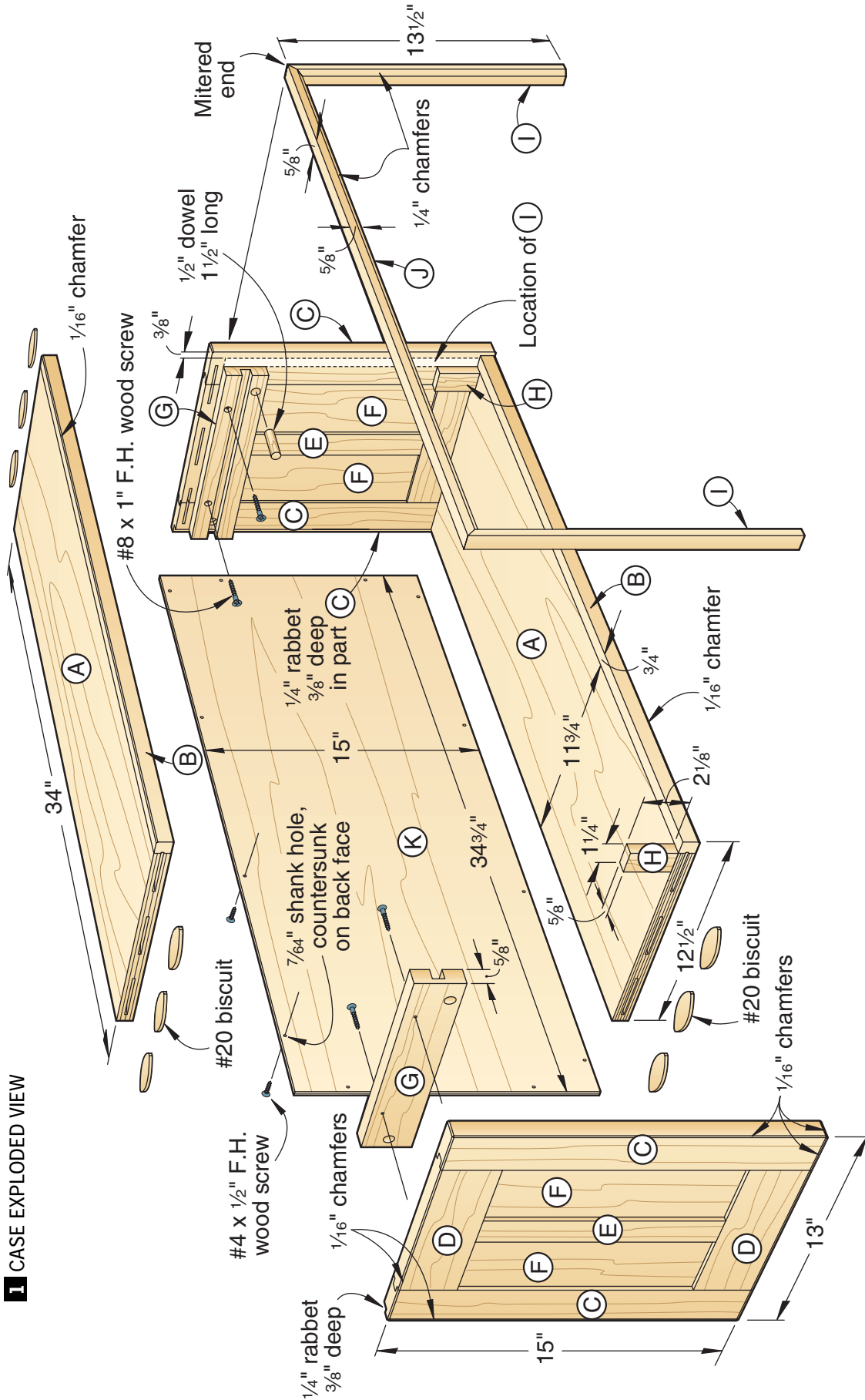
This early
example of
modular
office furniture
still makes it
case.



You may stack the bookshelf
units up to five high. With
two units, as shown *above*
your barrister's bookcase
does double duty as a side-
board or hall table.



1 CASE EXPLODED VIEW



Build a base, a top, and as many bookshelf cases as you wish to go in between. All the parts simply stack up and screw together. You'll make your own wood door guides, and, aside from wood screws in various sizes, the only hardware needed is the knobs.

Note: The Materials List and Cutting Diagram show the number of parts needed for a one-bookshelf-case bookcase. Multiply the number of case parts and door parts by the number of bookshelf cases you wish to make.

Build the case

1 Cut the upper and lower panels (A) to width, but about 1" longer than listed in the **Materials List**. Rip the banding (B) to width, but about 1" longer than listed. Glue and clamp the banding to the panels. With the glue dry, sand the banding flush with the panels, and cut the assemblies to length, trimming both ends.

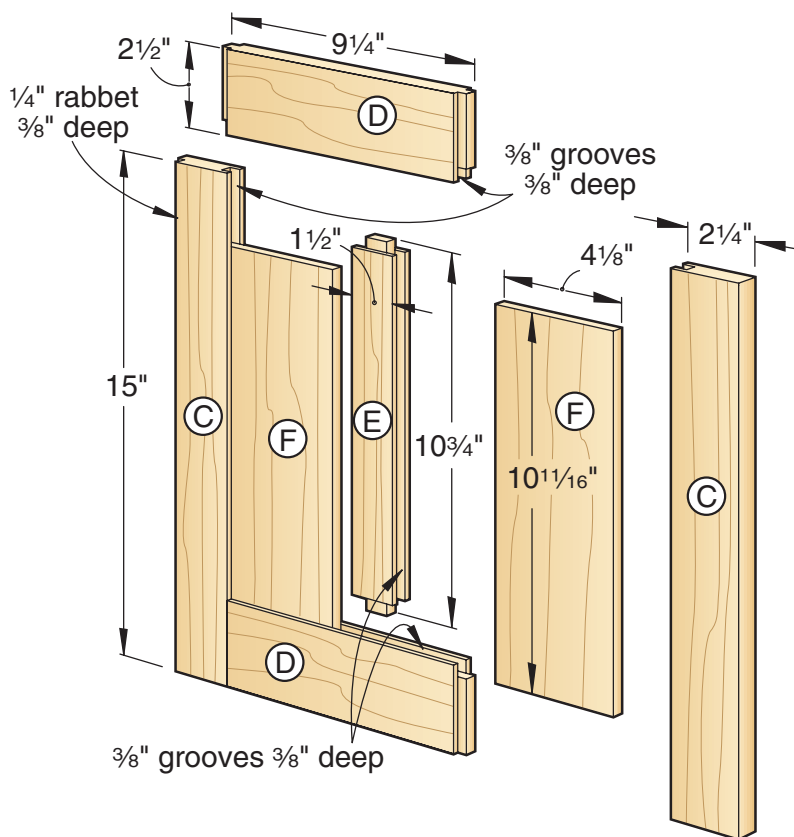
2 With the panels oriented so their good sides will face into the case, rout $\frac{1}{16}$ " chamfers on the banding, where shown on **Drawing 1**. Finish-sand the assemblies to 220 grit.

3 For the case sides, cut the stiles (C), rails (D), and mullions (E) to the sizes listed. Install a $\frac{3}{8}$ " dado blade in your tablesaw, and cut the centered grooves, where shown on **Drawing 2**.

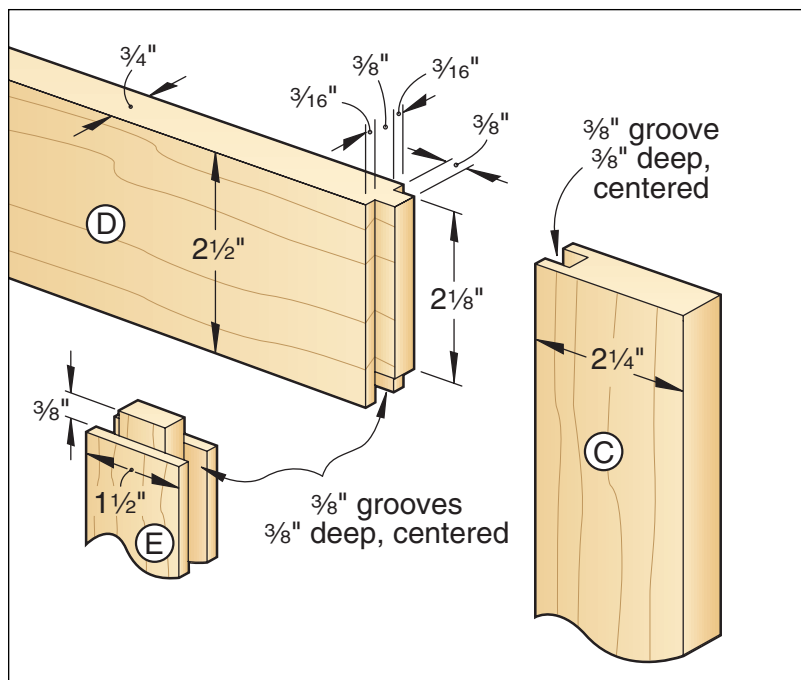
4 To form the tenons on the ends of the rails and mullions, switch to a $\frac{1}{4}$ " dado blade. To set the tenons' length, position the fence to the right of the blade, and $\frac{3}{8}$ " from the blade's left side. Attach an auxiliary extension to your miter gauge so it just grazes the fence. First testing your cuts in scrap, form the tenons, where shown on **Drawings 2** and **2a**, making two passes over the blade.

5 Resaw and plane stock for the side panels (F), and cut them to size. So seasonal wood movement won't expose unstained wood after the project is complete, finish-sand the panels and apply stain. We used ZAR no. 114 Provincial.

2 SIDE (Inside face shown)



2a TENON DETAILS (Case side shown)



6 Before assembling the case sides, apply pieces of masking tape to the rails (D), and mark on them the centered location of the mullions (E). Guided by the marks, glue and clamp the mullions between the rails. Add the stained side panels (F) and stiles (C), as shown in **Photo A**.

7 With the glue dry, cut rabbets along the case sides' inside back edges, for the back (K). Rout $\frac{1}{16}$ " chamfers along the sides' outside edges, and the front top and bottom corners of the front stiles (C), where shown on **Drawing 1**. Finish-sand the side assemblies.

8 Adjust your biscuit joiner to center a slot in the thickness of the $\frac{3}{4}$ " plywood. Mark their centerlines, and plunge slots for #20 biscuits in the ends of the case top and bottom assemblies A/B. Aligning the back edges of the top and bottom assemblies with the edges of the rabbets in the case sides, transfer the biscuit centerlines to the case sides. Plunge the slots in the sides. Glue, biscuit, and clamp the case together, making certain it is square.

9 Plane stock to $\frac{5}{8}$ " thick for the door guides (G), and cut them to size. Cut the grooves on your tablesaw with a dado blade, where shown on **Drawing 3**. Chuck a $\frac{1}{2}$ " Forstner bit in your drill press,

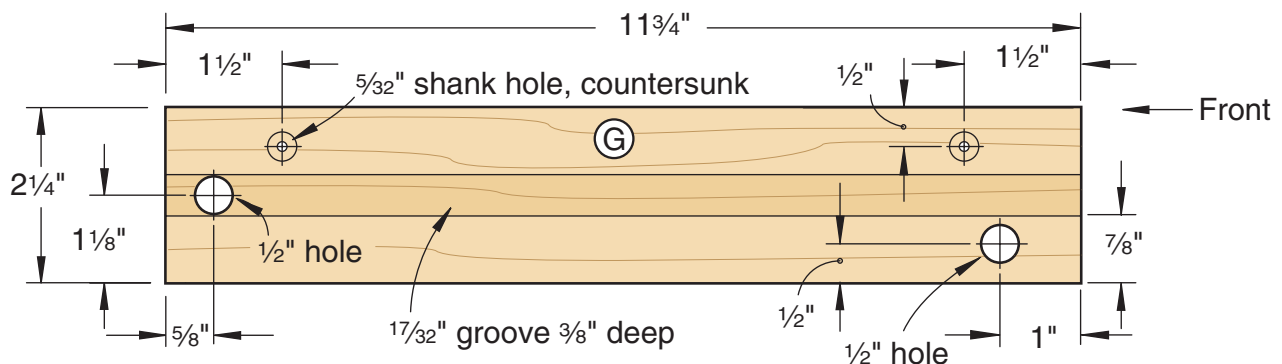


With the mullion and rails assembled, slide in the panels without glue. Glue and clamp the stiles to the rails, keeping them flush at the top and bottom.

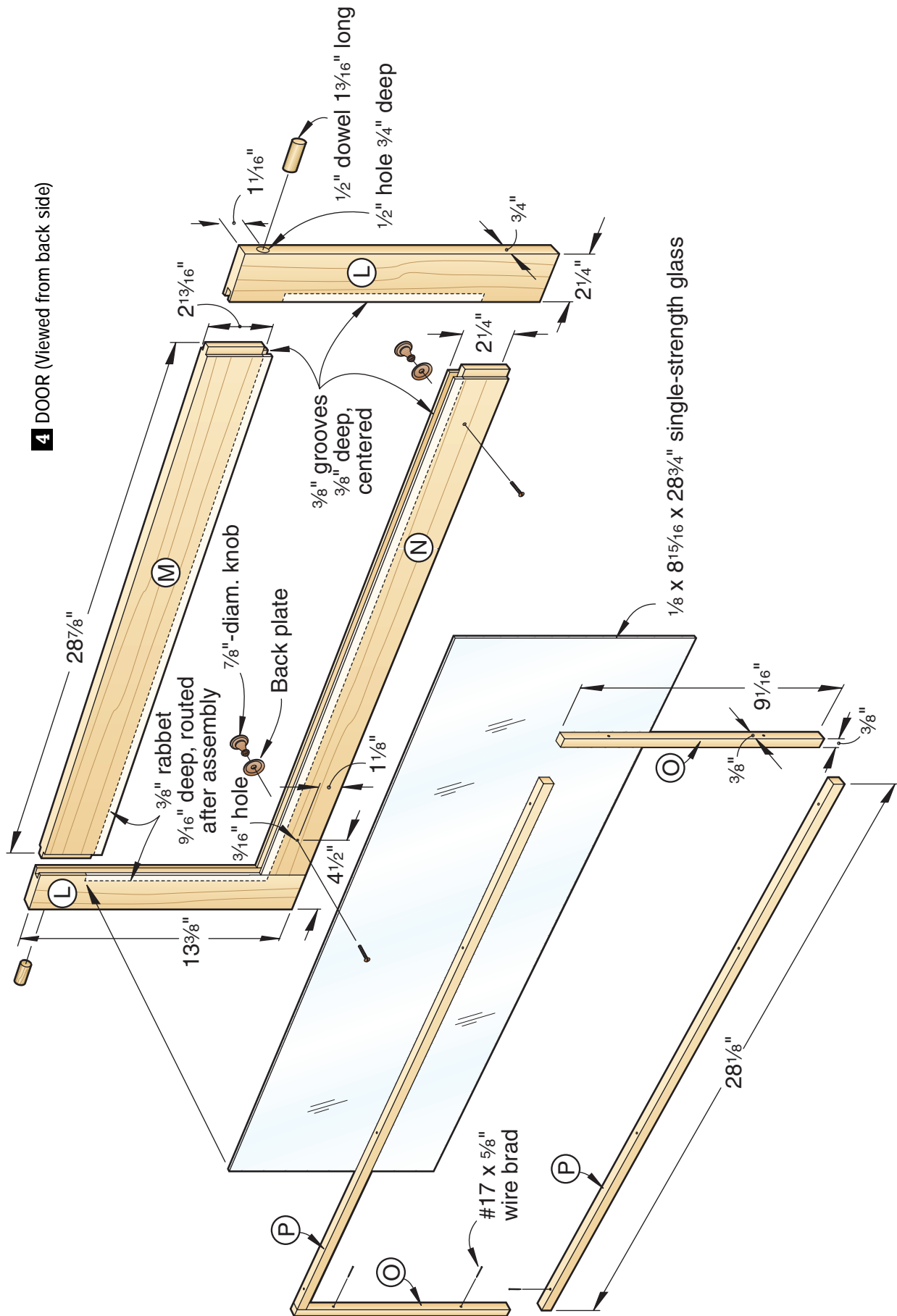
and drill the holes. Drill the countersunk shank holes. Make certain you have mirror-image parts. Finish-sand the guides, and clamp them in place, where shown on **Drawing 1**. The ends of the guides are flush with the edge of the sides' back rabbets. Using the shank holes as

guides, drill pilot holes into the case sides, and drive in the screws. Cut four $1\frac{1}{2}$ "-long oak dowels, and glue two of them in the guides' front holes. Set the other two aside for the stops that will later be installed in the rear holes.

3 DOOR GUIDE (Inside face shown)



4 DOOR (Viewed from back side)



10 Plane stock for the bumper blocks (H), and cut them to size. Finish-sand the blocks. Glue and clamp them in place, where shown on **Drawing 1**.

11 Cut blanks for the side trim (I) and the upper trim (J) about 1" longer than the sizes listed. With a chamfer bit in your table-mounted router, rout the chamfers, where shown. Miter-cut the side trims to length. Finish-sand the trims, and glue and clamp them in place tight against the end of the door guides (G) and the front sides of the bumper blocks (H). Miter-cut the upper trim to length. Finish-sand the trim, and glue and clamp it in place, aligning it with the side trims.

12 Cut the back (K) to size, and drill countersunk shank holes, where shown on **Drawing 1**. Finish-sand the back, and set it aside.

Build the door

1 Cut the stiles (L), upper rail (M), and lower rail (N) to size. In the same manner as in making the case sides, cut the centered grooves, where shown on **Drawing 4**. Drill the ½" holes in the stiles for the dowels.

2 Form the tenons on the ends of the door rails in the same manner as in making the case sides. Glue and clamp the door frame together, making sure it is square and flat. With the glue dry, cut the ½" dowels to length, and glue them in the stiles' holes.

3 To make the rabbeted opening for the glass, chuck a ⅜" rabbeting bit in your handheld router. With the bit's pilot bearing riding on the groove's outside lip, rout away the groove's inside lip, forming a ⅛"-deep rabbet. For best results, see the **Shop Tip** below. Square the corners with a chisel.

4 Mark the knob locations, where shown on **Drawing 4**. Drill the screw holes, and finish-sand the door.

5 Resaw and plane stock for the vertical stops (O) and horizontal stops (P). Cut them to size. Clip the head off a #17 wire brad, and use it to drill pilot holes in the stops, where shown. Sand the stops to 220 grit.

On to the base and top

1 Plane down thicker stock or laminate thinner stock for the feet (Q), and cut them to size. Rout ⅛" chamfers on their bottom edges.

2 Cut the front and back rails (R) and the side rails (S) to size. Mark the ends and centers of the arches, where shown on **Drawing 5**. Bend a fairing stick to these points, and draw the arches. Bandsaw and sand them to shape.

SHOP TIP

Climb-cutting avoids tear-out

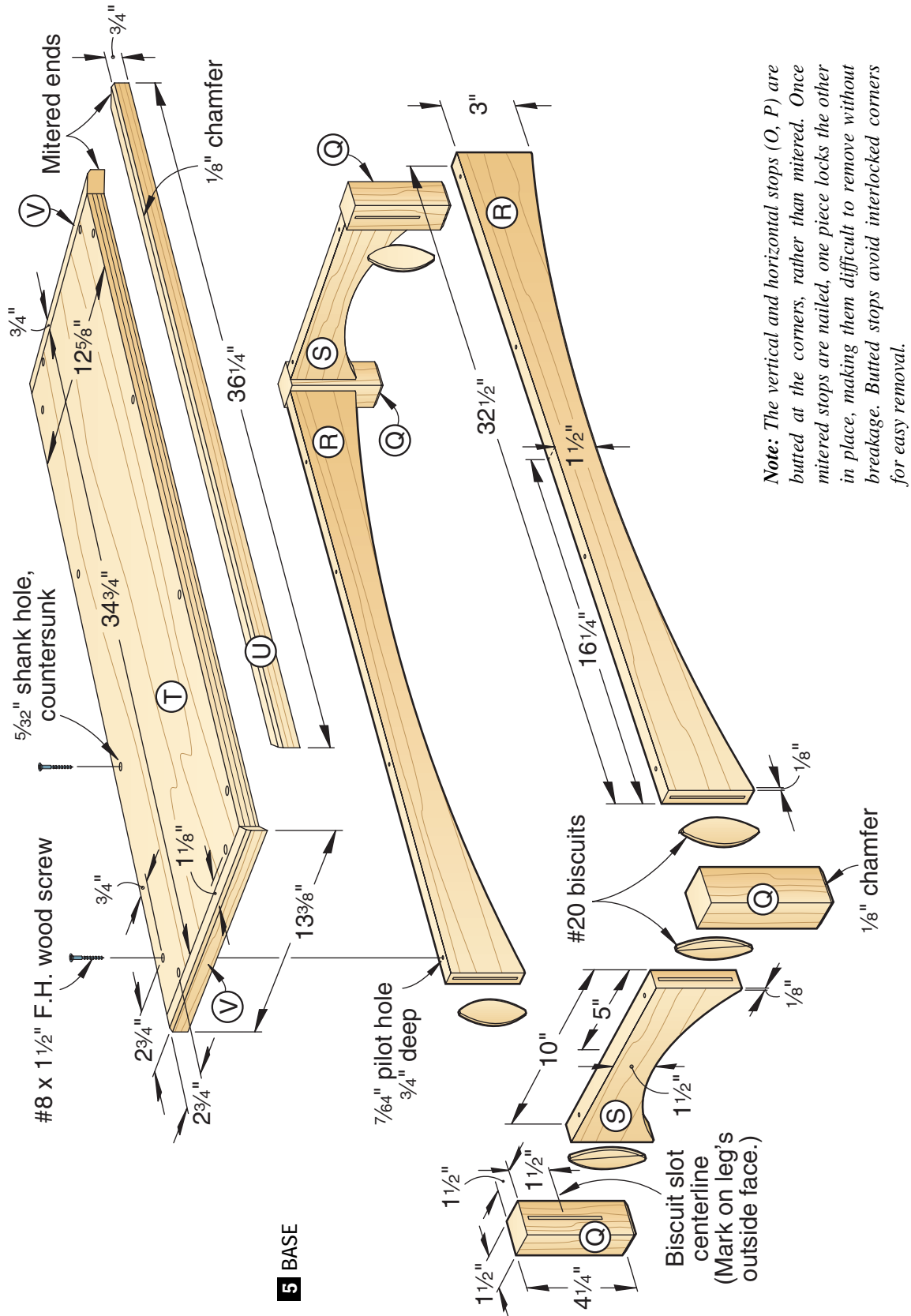
When creating a rabbet for the glass by removing the door frame groove's ⅜"-thick inside lip with a rabbeting bit, it is all too easy to tear out long splinters, ruining your frame. To avoid this, employ a routing method called "climb-cutting."

First, to provide clearance for the router bit's pilot bearing, insert scrap spacers between the frame and the workbench, as shown in the photo, *right*. Then clamp the door frame securely to your workbench. You'll have to stop routing several times, shifting your clamps as you work your way around the frame.

Holding the router firmly, ease the bit into the frame until the pilot bearing contacts the outside lip. Slowly move the router in a counterclockwise direction around the inside of the frame. You'll have to resist the bit's tendency to grab the wood and pull the router along. Because the bit's clockwise rotation pushes the wood fibers toward the frame members as it cuts, rather than trying to pull them away as in normal routing, tear-out is eliminated.

Once you've worked your way around the frame, make a second counterclockwise pass to clean up the edge.





Note: The vertical and horizontal stops (O, P) are butted at the corners, rather than mitered. Once mitered stops are nailed, one piece locks the other in place, making them difficult to remove without breakage. Butted stops avoid interlocked corners for easy removal.

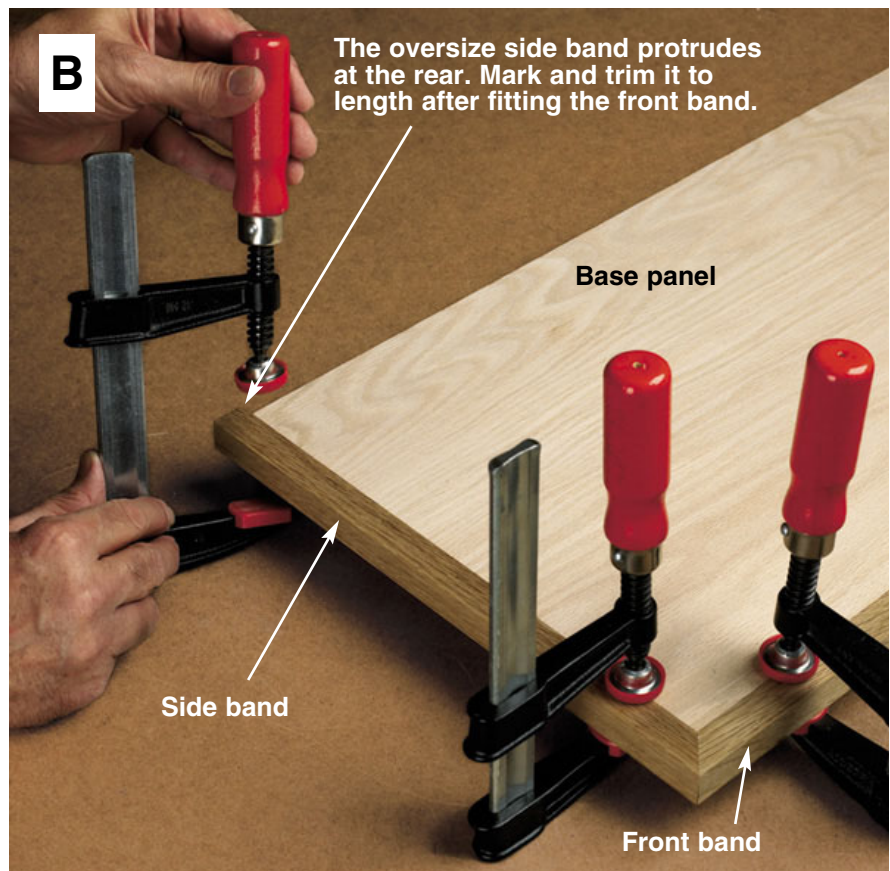
3 Adjust your biscuit joiner to center a slot in the thickness of the feet. Mark the slot centerlines on the outside faces of the feet, where shown on **Drawing 5**. Plunge the slots. Align the rails with the feet, keeping their top edges flush, and transfer the slot centerlines to the outside faces of the rails. Readjust your biscuit joiner to center a slot in the thickness of the rails, and plunge the slots. Finish-sand the feet and rails.

4 Glue, biscuit, and clamp a pair of legs to the front and back rails. With the glue dry, form a frame by gluing, biscuiting, and clamping the side rails in place. Make certain the feet/rails assembly (Q/R/S) is square and flat.

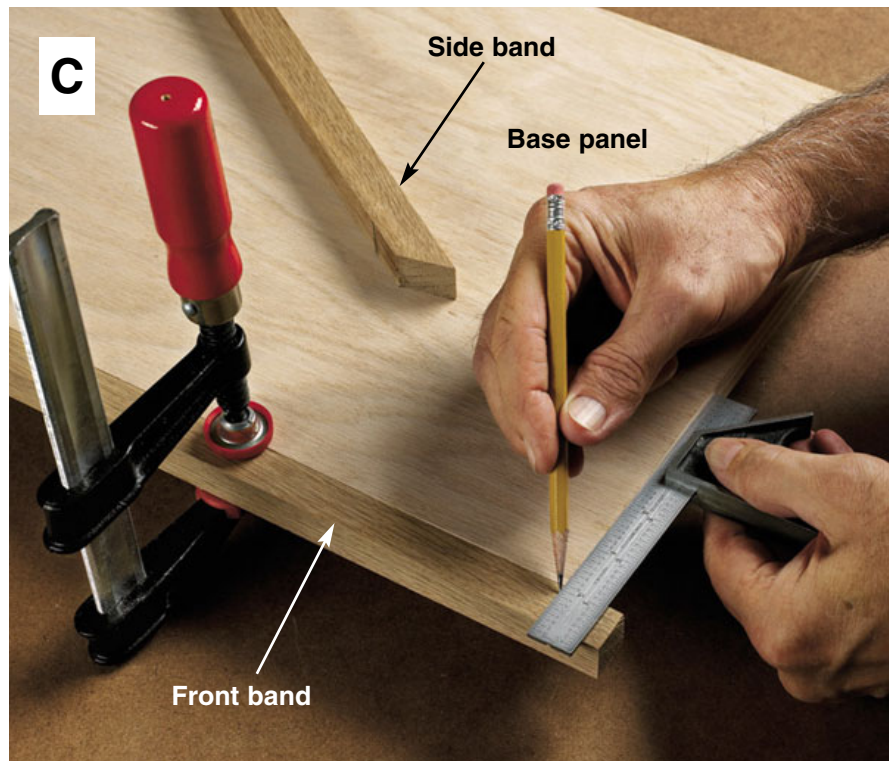
5 Cut the base panel (T) to the size listed. Rip the front banding (U) and side bandings (V) to width, but about 1" longer than listed. Miter one end of each band. Fit and mark the front band, as shown in **Photos B** and **C**, and miter-cut it to length. With all three bands clamped in place, mark the side bands flush with the back edge of the base panel (T), and trim them to length. Glue and clamp the bands to the base panel. With the glue dry, sand the bands flush with the panel, and rout chamfers, where shown. Finish-sand the base panel assembly.

6 To complete the base assembly, mark the centerpoints of the countersunk shank holes in the base panel, where shown on **Drawing 5**, and drill them. Clamp the base panel assembly (T/U/V) to the feet and rails assembly (Q/R/S), flush at the back, and centered side-to-side. Using the shank holes in the base panel as guides, drill pilot holes into the rails, and drive in the screws.

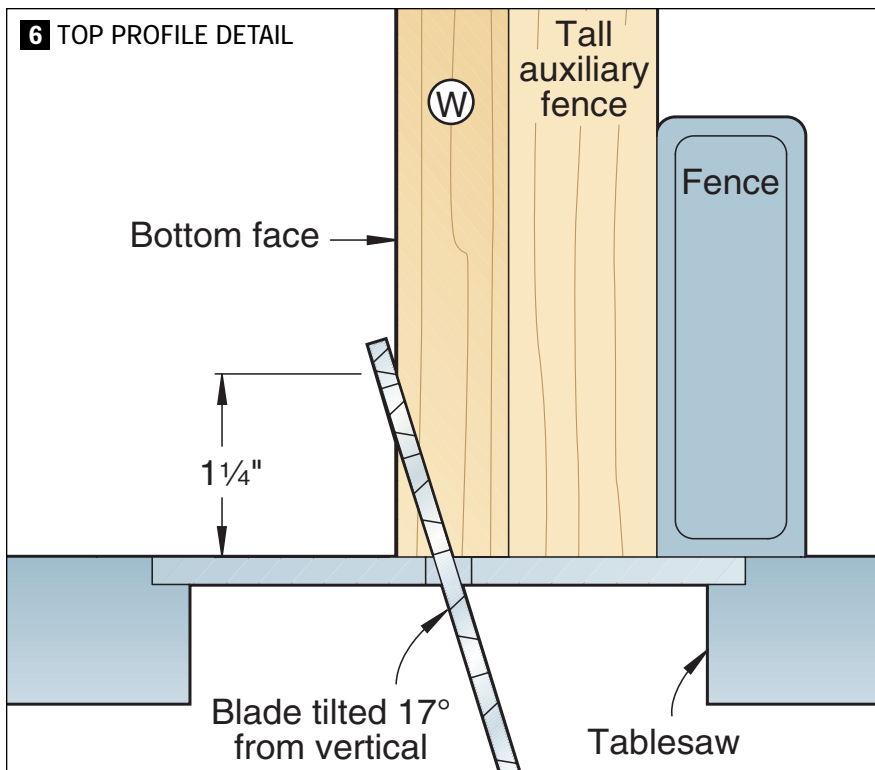
7 Edge-join an oversize blank for the top (W). With the



Fit the mitered ends of the side and front bands around the panel's first corner, temporarily clamping them in place...



...then using a sharp pencil and a ruler, mark the miter's heel on the front band at the panel's second corner.



glue dry, cut it to finished size. With your tablesaw set up as shown on **Drawing 6**, cut bevels along the bottom of the top's ends, then front edge, where shown on **Drawing 7**. Sand away the saw-blade marks, backing your sandpaper with a firm block to keep the bevels' edges crisp. Rout chamfers along the upper front edge and ends, where shown. Finish-sand the top.

8 Cut the crest (X) to the size listed. Make marks at the center of the top edge and 1 3/4" up from the bottom at the ends, where shown on **Drawing 7**. Connect the marks with a straightedge, and draw the top profile. Draw the radii at the ends. Bandsaw and sand the crest to shape. Rout the chamfer. Finish-sand the crest.

9 Glue and clamp the crest (X) to the top (W), centered, where shown on **Drawing 7**. Drill pilot and countersunk shank holes through the top into the crest, and drive in the screws.

Apply the finish, and assemble

1 Examine all the parts and assemblies, and resand any areas that need it. If you wish, apply a stain, and let it dry. We used ZAR no. 114 Provincial.

2 Apply a clear finish. To add an amber tone to the stain's color, we brushed on oil-based satin polyurethane.

3 Lay the bookshelf case on its back on your workbench. Clamp the base to it, flush at the back and centered side-to-side. Drill pilot and countersunk shank holes through the base panel (T) into the case's lower panel (A), where shown on **Drawing 7**, and drive in the screws. Clamp the top assembly to the case, flush at the back and centered side-to-side. Drill pilot and countersunk shank holes through the case's upper panel (A) into the top (W), where shown, and drive in the screws. Stand the assembly upright.

4 Have single-strength glass cut 1/8" smaller in width and length than the door's rabbeted

opening. Lay the door face-down, and install the glass. Position the stops (O, P), and drive brads through the previously drilled pilot holes. Set the brads, and fill the holes with a matching color putty stick.

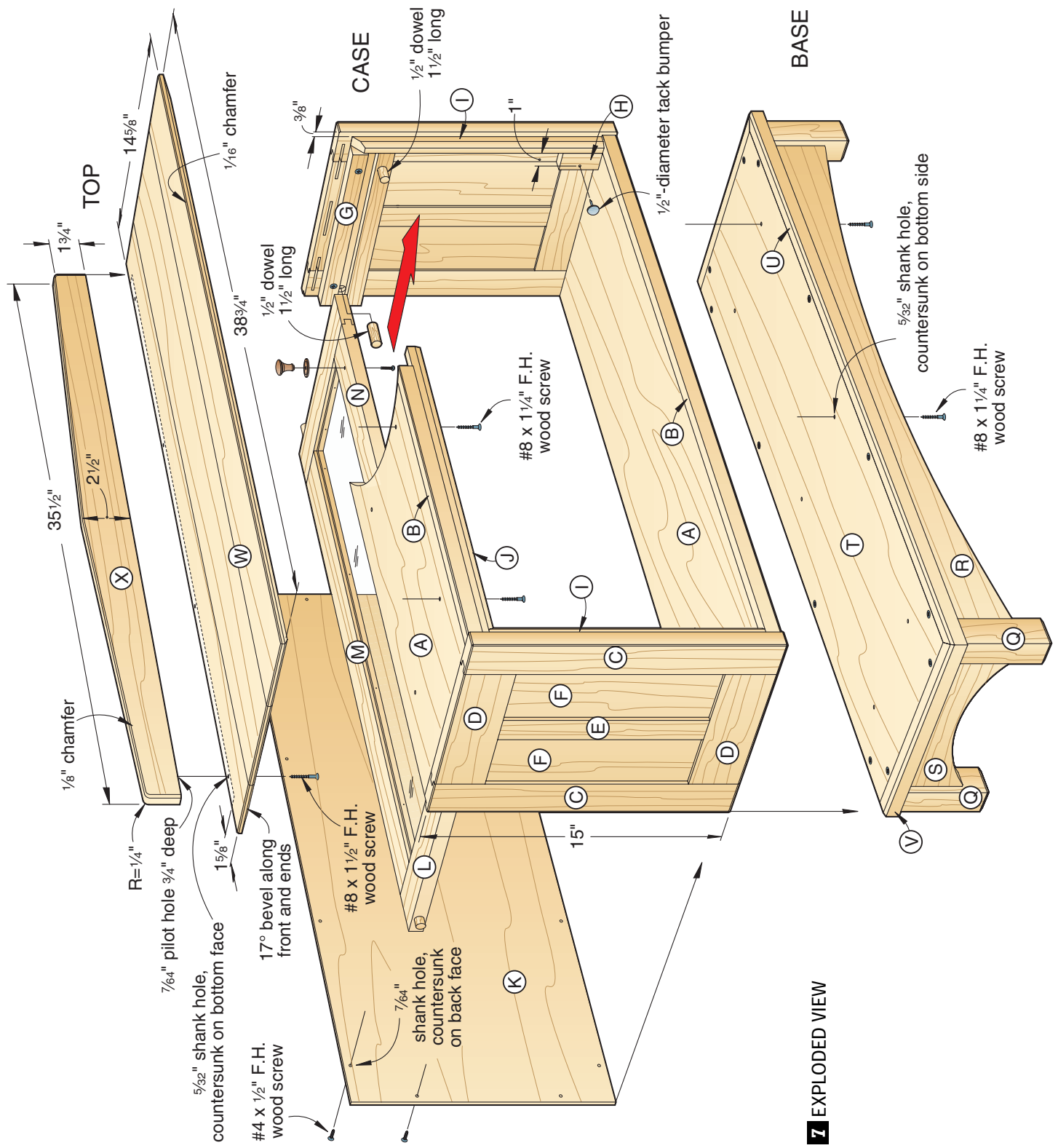
5 Apply wax to the grooves in the door guides (G) and their dowels. Install the door from the rear, sliding it over the door guide dowels at the front, and engaging the door's dowels in the guides' grooves. Retrieve the two door-stop dowels, and tap them into the guides' rear holes. Do not glue them in.

6 Clamp the back (K) in place. Using the previously drilled shank holes as guides, drill pilot holes into the case. Drive in the screws.

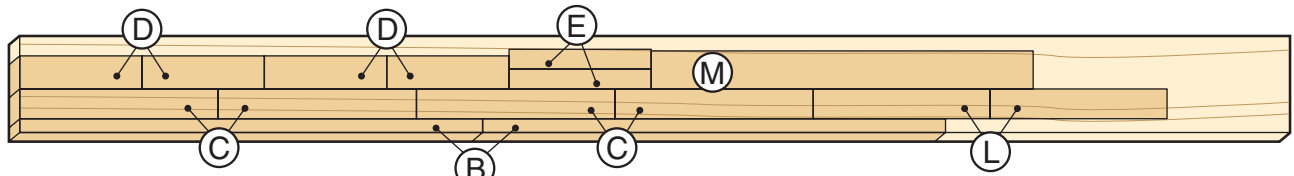
7 Install the knobs. Drill pilot holes for the tack bumpers, positioning them to leave 3/4" between the bumpers and the bumper blocks' front edges. Tap in the tack bumpers. ♣

Produced by **Marlen Kemmet**
 Written by **Jan Svec** with **Chuck Hedlund**
 Project design: **Kevin Boyle**
 Graphic Design: **Jamie Downing**
 Illustrations: **Roxanne LeMoine**
 ©Copyright Meredith Corporation 2003

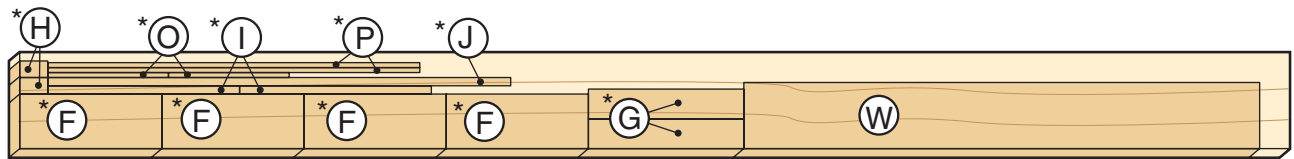
The purchase of these plans does not transfer any copyright or other ownership interest in the plans, the design, or the finished project to the buyer. Buyer may neither reproduce the plans for sale nor offer for sale any copies of the finished project.



Cutting Diagram

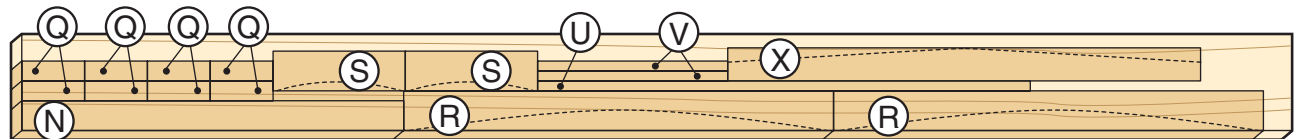


3/4 x 7 1/4 x 96" Quartersawn white oak (5.3 BF)



3/4 x 7 1/4 x 96" Quartersawn white oak (5.3 BF)

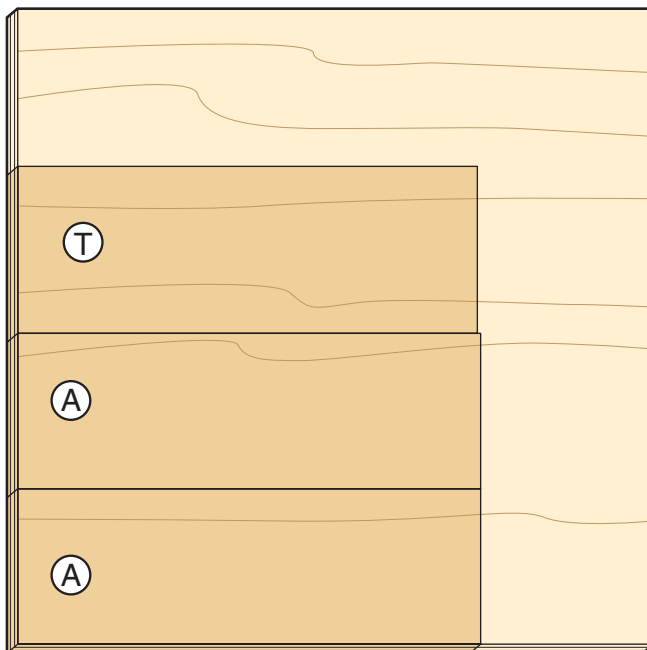
*Plane or resaw to the thicknesses listed in the Materials List.



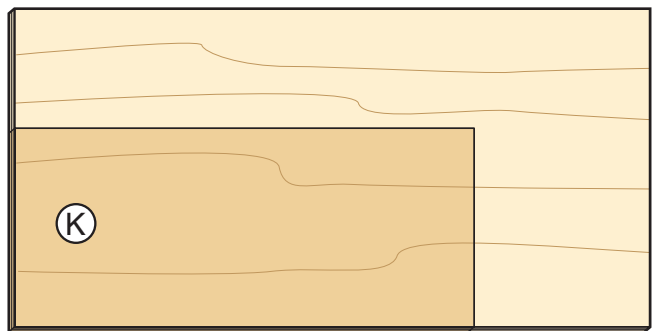
3/4 x 7 1/4 x 96" Quartersawn white oak (5.3 BF)



3/4 x 5 1/2 x 96" Quartersawn white oak (4 BF)



3/4 x 48 x 48" Oak plywood



1/4 x 24 x 48" Oak plywood

Materials List

Case	FINISHED SIZE			Matl.	Qty.
	T	W	L		
A* upper and lower panels	¾"	11¾"	34"	OP	2
B* banding	¾"	¾"	34"	QO	2
C stiles	¾"	2¼"	15"	QO	4
D rails	¾"	2½"	9¼"	QO	4
E mullions	¾"	1½"	10¾"	QO	2
F side panels	¾"	4⅛"	10 ¹¹ / ₁₆ "	QO	4
G door guides	⅝"	2¼"	11¾"	QO	2
H bumper blocks	⅝"	1¼"	2⅛"	QO	2
I* side trim	⅝"	⅝"	13½"	QO	2
J* upper trim	⅝"	⅝"	34"	QO	1
K back	¼"	15"	34¾"	OP	1
Door					
L stiles	¾"	2¼"	13¾"	QO	2
M upper rail	¾"	2 ¹³ / ₁₆ "	28 ⁷ / ₈ "	QO	1
N lower rail	¾"	2¼"	28 ⁷ / ₈ "	QO	1
O vertical stops	¾"	¾"	9 ¹ / ₁₆ "	QO	2
P horizontal stops	¾"	¾"	28 ¹ / ₈ "	QO	2
Base and Top					
Q feet	1½"	1½"	4¼"	LQO	4
R front and back rails	¾"	3"	32½"	QO	2
S side rails	¾"	3"	10"	QO	2
T base panel	¾"	12 ⁵ / ₈ "	34¾"	OP	1
U* front band	¾"	¾"	36¼"	QO	1
V* side bands	¾"	¾"	13¾"	QO	2
W* top	¾"	14 ⁵ / ₈ "	38¾"	EQO	1
X crest	¾"	2½"	35½"	QO	1

*Parts initially cut oversize. See the instructions.

Materials key: OP—oak plywood, QO—quartersawn white oak, LQO—laminated quartersawn white oak, EQO—edge-joined quartersawn white oak.

Supplies: #20 biscuits; ½" oak dowel; #8×1", #8×1¼", #8×1½", and #4×½" flathead wood screws; #17×⅝" wire brads; single-strength glass; ½"-diameter tack bumpers; putty stick; paraffin wax.

Blades and bits: Stack dado set, ½" Forstner bit, chamfer router bit, ⅜" rabbeting router bit.

Buying Guide

Knobs. Antique brass ⅞"-diameter knobs with 1" back plates no. MS-8, \$4.75 each (2 per door). Horton Brasses, call 800/754-9127, or go to www.horton-brasses.com.

WOODMALL® The Internet's Largest Source for Woodworking Tools and Accessories

<http://www.woodmall.com>

Thanks for your order!

Now that you've got a detailed plan to build that perfect project, visit the WOOD MALL for the internet's largest source for woodworking tools and accessories. The WOOD MALL offers:

- Over two dozen woodworking-related stores
- More than 50,000 tools & accessories
- 24-Hour shopping
- Special sales & closeouts
- Nearly 40 tool comparison charts
- **FREE** monthly woodworking seminar

Visit Today! <http://www.woodmall.com>



Current issue not shown

Like no other magazine, WOOD helps you make the most of your shop time ... takes your skills to the next level. Every issue of WOOD is jam-packed with ...

- Smart tips, tricks, secrets and shortcuts that save you time, effort and money
- Valuable tool reviews with at-a-glance information charts that give you helpful product comparisons
- Giant full-size pattern pull-outs
- Crystal-clear step-by-step instructions, exploded diagrams, finishing secrets and techniques for that professional look – everything you need to bring out your woodworking genius!

- 2 years (14 issues) just \$44 **SAVE \$39.30 off single-copy rate!**
- 1 year (7 issues) just \$26 **SAVE \$15.65 off single-copy rate!**
- Payment Enclosed Bill Me

Fill out information below and mail to: WOOD® Magazine P.O. BOX 37439, Boone, IA. 50037-0439 or Subscribe Online at <http://www.woodmagazine.com/subscribe>

My Name (please print) _____

Address _____ **Apt. #** _____

City _____ **State** _____ **Zip** _____

Canadian Orders: Fill in the form above. Your rate will be 1 year (7 issues) for \$41 – SAVE \$14.65, or 2 years (14 issues) for \$67 – SAVE \$44.30. Prices include postage; 7% GST or 15% HST is added. #12348 2887 RT

U.S. and Canadian subscribers: You also may order by credit card. Call toll free 1-800-374-9663 weekdays from 7 a.m. to 10 p.m. Central Time; Saturdays, 8 a.m. to 3 p.m.; Sundays, 9 a.m. to 3 p.m.

Other International Orders: 2 years for \$89 U.S. or 1 year for \$49 U.S.; prices include postage. To order by credit card call 515/246-6952 during the same hours as listed above (toll charged). Or complete this form; mail with US funds to: WOOD® Magazine, P.O. Box 37439, Boone, IA. 50037-0439 USA.

Your Money-Back Guarantee: You must be satisfied with your subscription or you can get a refund for all unmailed issues.

WOOD® Magazine is published 7 times a year. Savings are based on \$5.95 U.S., \$7.95 Canadian single-copy rate. The first issue mails in 8-12 weeks. Subscription prices subject to change.