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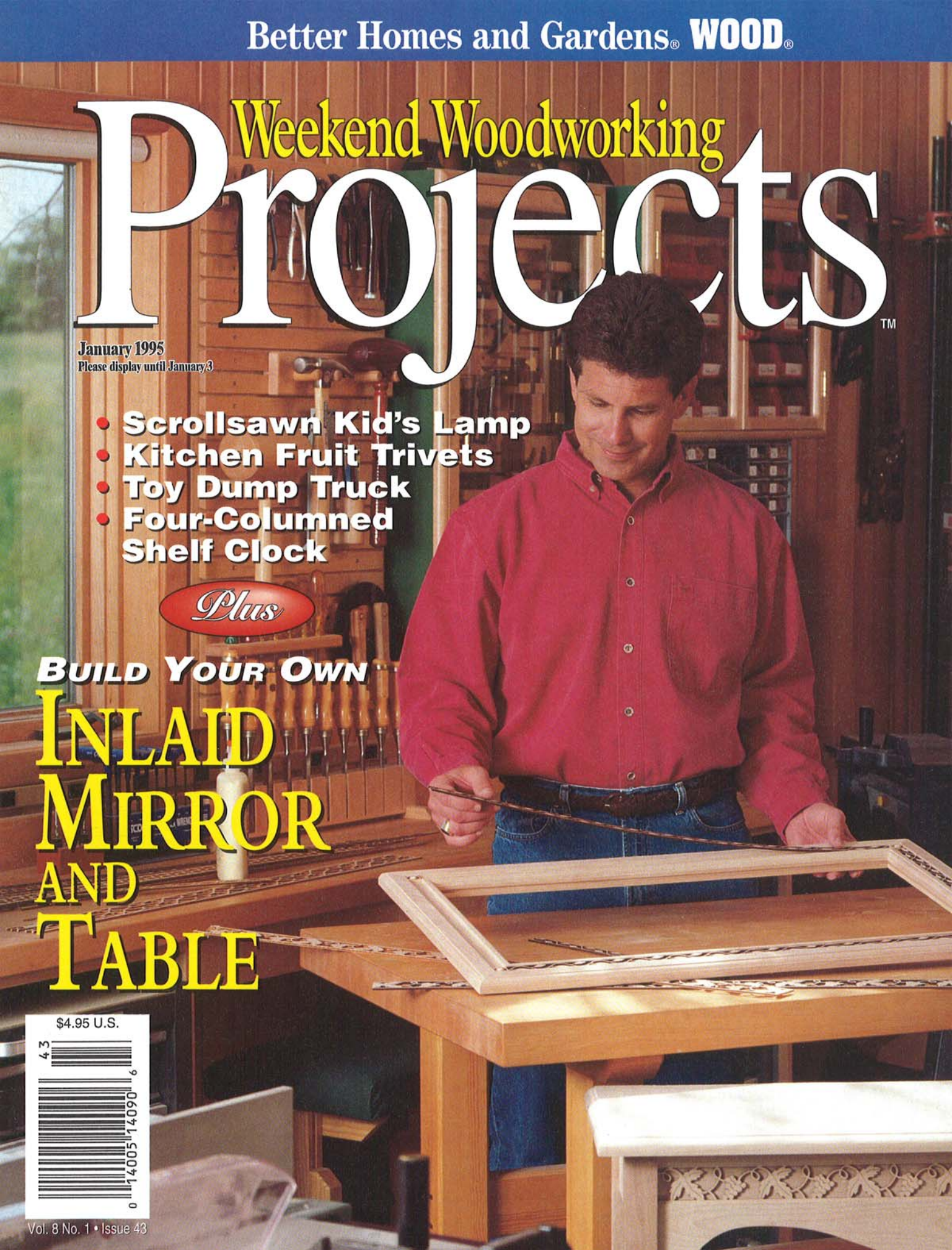

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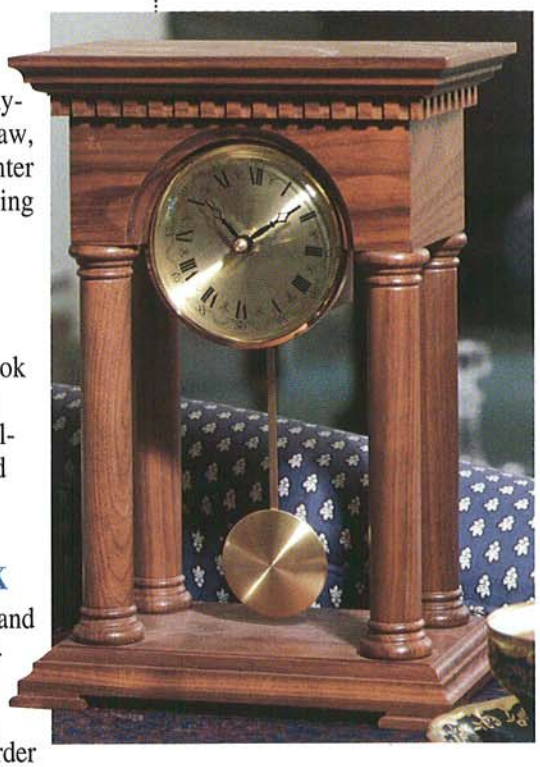


Cover photograph: King Au

Grandpa's legacy is more than a saw

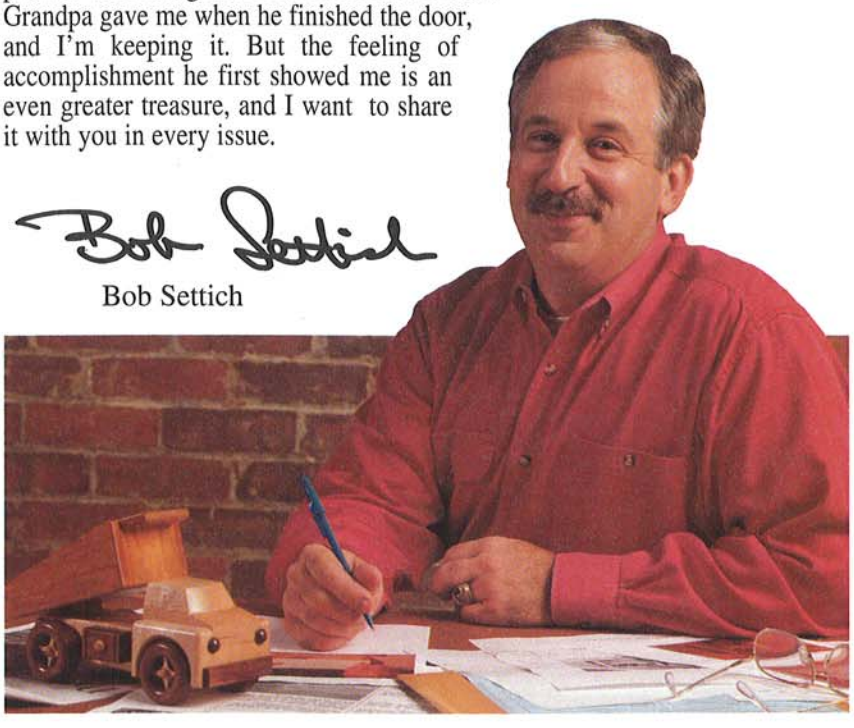
When I was 11 years old, our family joined the migration from cities to suburbs, settling in St. Louis County, Mo. Air conditioning was an unrealistic wish. The budget was so tight that we didn't even have a screen door. If you've experienced a St. Louis summer, you know that the stories about the brutal heat and humidity are no exaggeration.

As the days warmed up that first summer, my mother's parents traveled from Delaware to visit us. Grandpa Frank Siudowski was not the type of man to be intimidated by a lack of tools and materials. I tagged along as he sorted through piles of construction scrap in the yards of future neighbors. Then, we went to the hardware store and bought a saw. As I watched (and helped a little), Grandpa transformed those scraps into a screen door. It was better than watching a magician on the Ed Sullivan show. It was my first encounter with an act of pure creation. My grandfather had made something out of virtually nothing.

Grandpa did much more that day than make a simple screen door. He opened another door for me, revealing that determination and imagination are more important tools than those you plug in.

As your new Editor, my personal goal goes beyond giving you accurate directions for tasteful projects. I want to do everything possible to help you fully enjoy the process of creating in wood. I still have the saw Grandpa gave me when he finished the door, and I'm keeping it. But the feeling of accomplishment he first showed me is an even greater treasure, and I want to share it with you in every issue.

Bob Settich



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Our Pledge to You: Prior to publication, we build every project featured in Weekend Woodworking Projects step-by-step in our shop. Then, a team of editors reviews the how-to directions, technical drawings, illustrations, and Bill of Materials of each project to make sure the instructions we provide to you are clear, concise, and complete.
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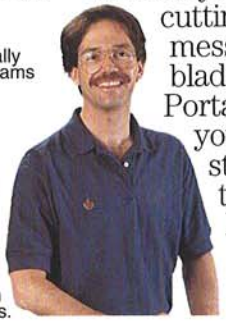

The American Woodshop with Scott Phillips.

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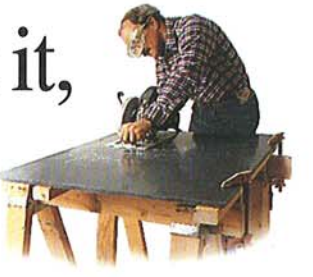

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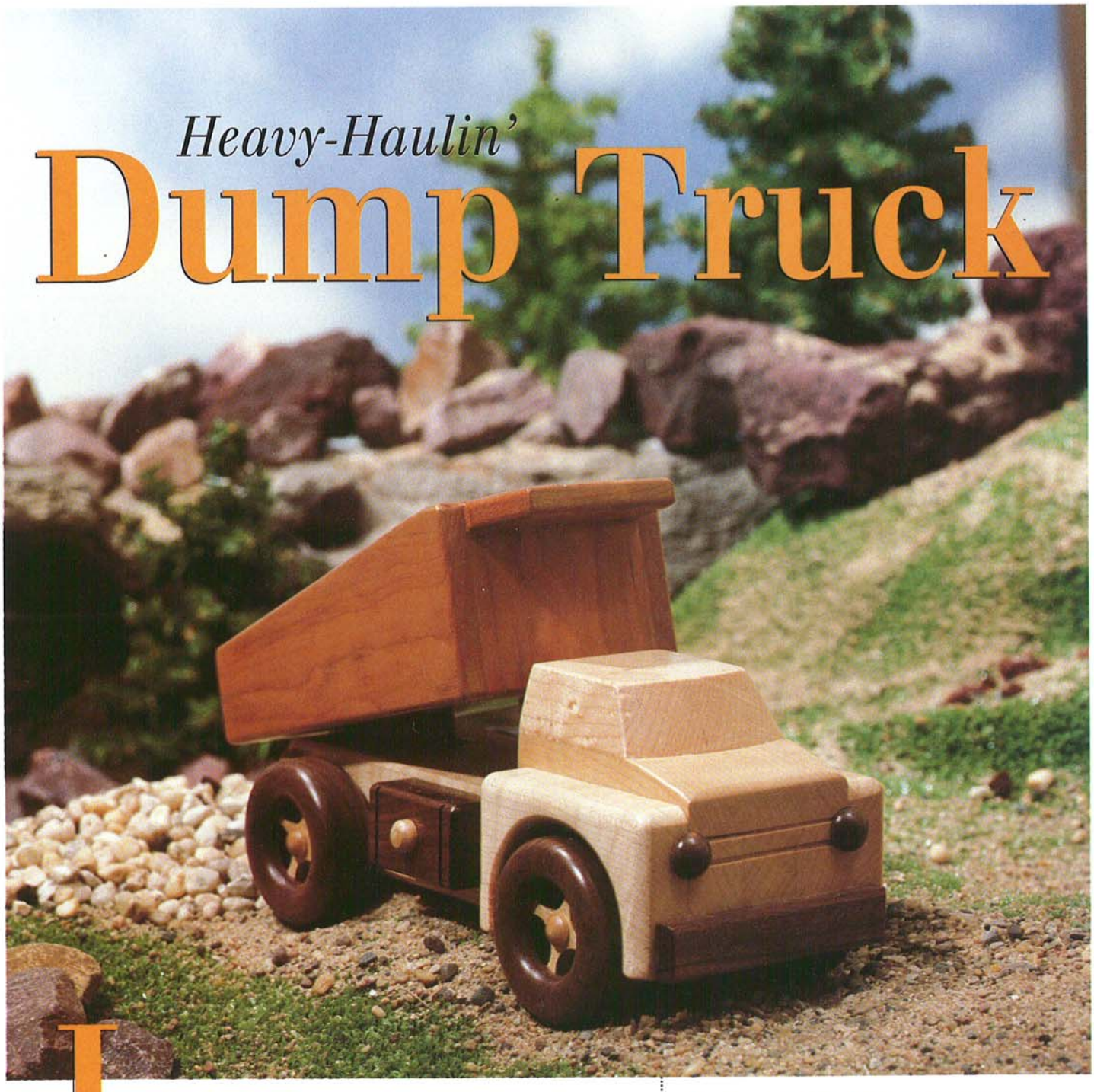
DUPONT

Heavy-Haulin' Dump Truck



Lift any child's spirits during the holiday season with this terrific little hardworking hauler. It features a working box and four classy hardwood wheels that you can easily make by following our step-by-step description and drawings.

Print this article

Start with the Body Assembly

1 To form the chassis (A), cut two pieces of ¾"-thick stock to 1½" wide by 9" long, and a third piece to 6½" long. See the Body Assembly drawing for reference.

2 Glue and clamp the three pieces together face-to-face with the edges and front ends flush. Again, see the Body Assembly drawing for reference. Later, remove the clamps, scrape

Continued

Heavy-Haulin' Dump Truck

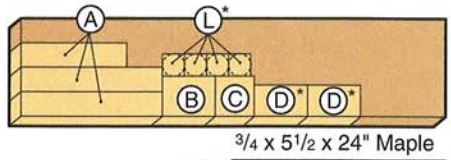
BILL OF MATERIALS

Part	Finished Size T	W	L	Matl.	Qty.
A* chassis	1⅜"	2¼"	8"	M	1
B hood	¾"	2¼"	3"	M	1
C cab	¾"	2¼"	2⅜16"	M	1
D fenders	⅝"	1¾"	3"	M	2
E bumper	¼"	⅝"	3"	W	1
F gas tanks	⅝"	1"	1¾"	W	2
G hoist	1⅛16"	¾"	1¾"	C	1
H front	⅜"	2½"	1⅞"	C	1
I bottom	⅜"	2½"	4⅞"	C	1
J slides	⅜"	2¼"	5¼"	C	2
K lip	⅜"	2½"	1⅜"	C	1
L* hubs	½"	1¼ dia."		M	4
M* tires	¾"	2" dia.		W	4

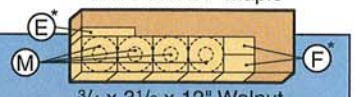
*Initially cut parts with an * oversized. Then, trim each to finished size according to the how-to instructions.

Materials Key: C-cherry; M-maple; W-walnut

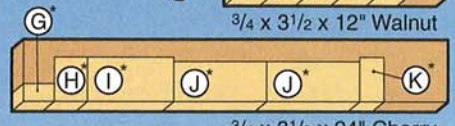
Supplies: 4–¼" birch mushroom plugs, 2–⅜" walnut mushroom plugs, 4–7⁄32×1⅛16" axle pegs, clear finish.



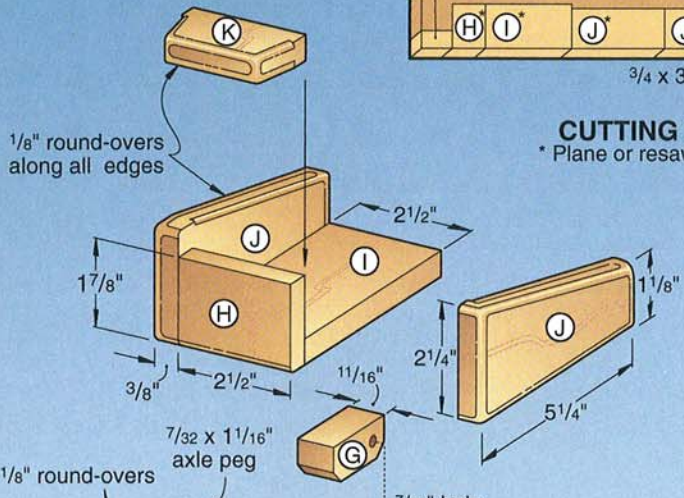
¾ x 5½ x 24" Maple



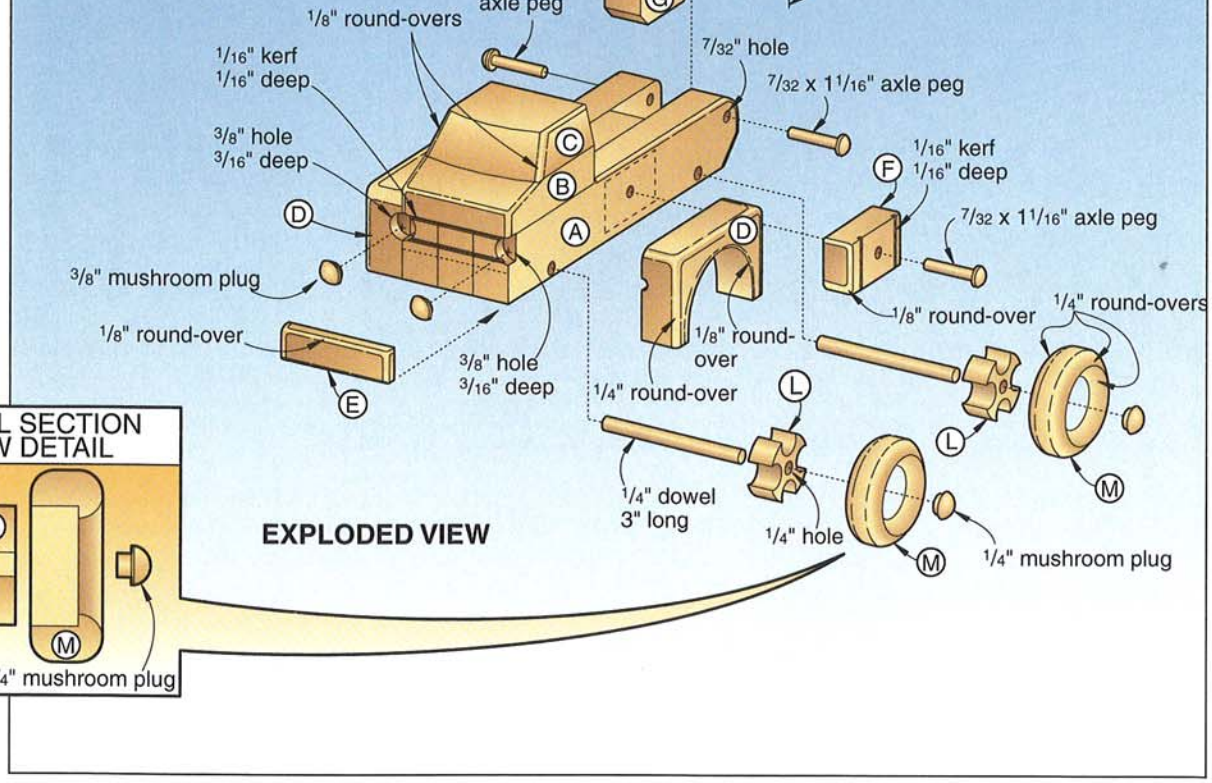
¾ x 3½ x 12" Walnut



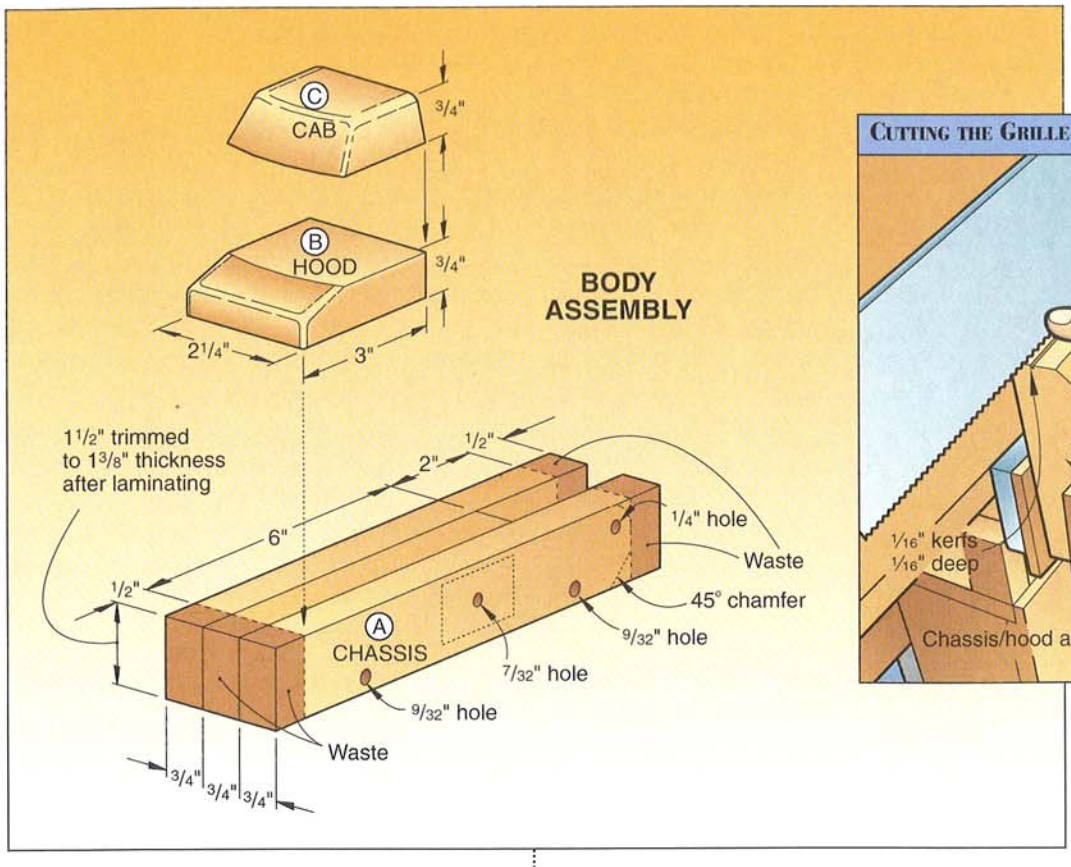
¾ x 3½ x 24" Cherry

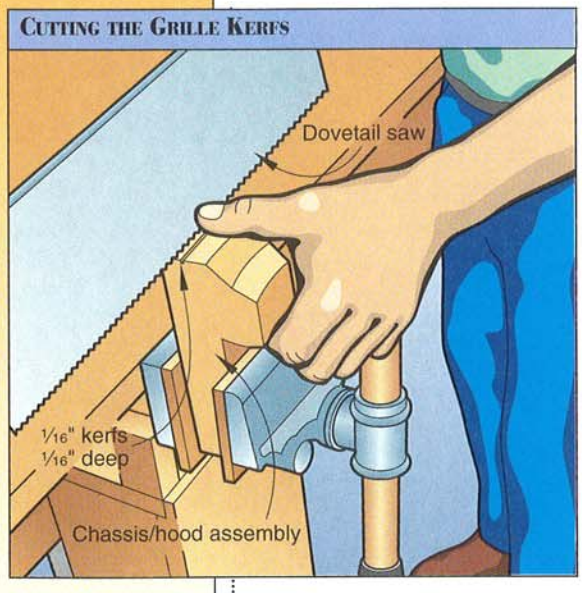


CUTTING DIAGRAM
* Plane or resaw to thickness



EXPLODED VIEW





the glue from one edge, plane or joint that edge flat, and rip the opposite edge for a 1⅜" finished thickness. Crosscut ½" from each end (it makes the ends flush) for an 8" overall length.

3 Mark the four hole centerpoints on the side of the chassis (A) where shown on the Side View drawing. Next, using the dimensions on the Side View drawing, mark the chamfer and round-over lines to the back end of the chassis.

4 Drill the holes you marked in the previous step to the sizes shown on the drawing. Then, bandsaw the chamfer and round-over.

The Contoured Cab Parts Come Next

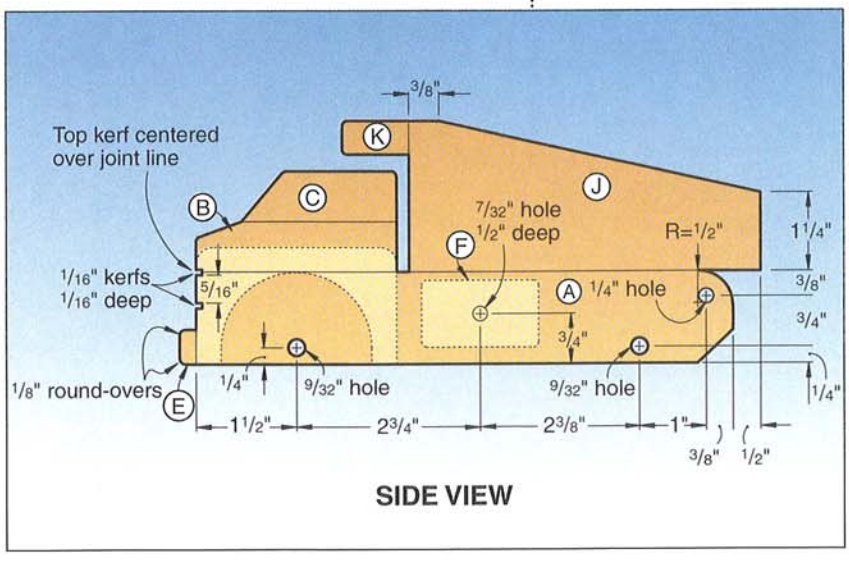
1 Cut the hood (B) to the size listed in the Bill of Materials. Then, bandsaw or belt-sand the front top end to the shape shown on the pattern insert in the center of the magazine.

2 Cut the cab (C) to shape, cutting the windshield (front of the cab) at 30° and the sides to 15° where shown on the pattern insert.

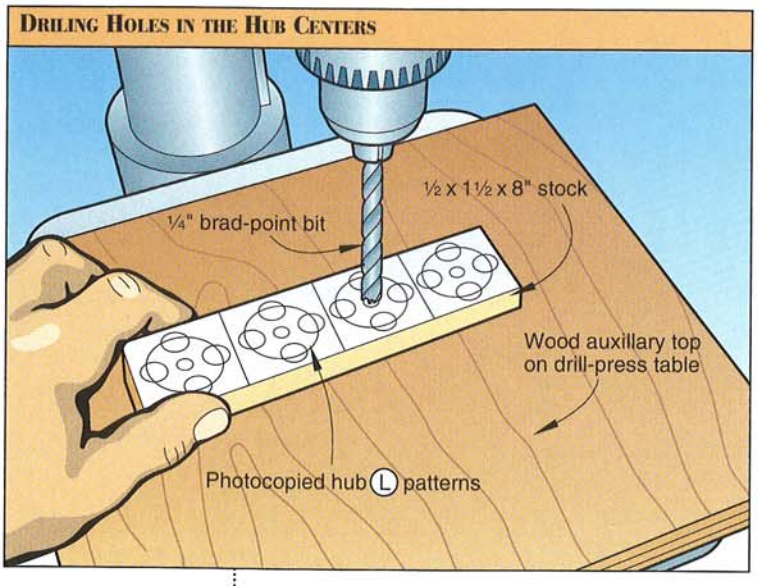
3 With the edges and front ends flush, glue the hood (B) to the chassis (A) where shown on the Side View drawing. Later, glue and clamp the cab (C) to the top of the hood.

4 Sand round-overs on the hood and cab where shown on the Exploded View drawing. (We wrapped 150-grit sandpaper around a wood block to sand the round-overs.)

5 To simulate a grille for the truck, clamp the chassis/hood assembly into a woodworker's vise, as shown in the sketch *above right*, and use a fine dovetail saw to cut a pair of 1/16" kerfs 1/16" deep across the front end of the chassis/hood where dimensioned on the Side View and Exploded View drawings.



Heavy-Haulin'
Dump Truck



Add the Fenders, Bumper, And Gas Tanks

1 Twice, transfer the fender pattern (D) to ⅝"-thick stock. Cut the fenders to shape. Sand or rout a ¼" round-over along the outside edges and a ⅛" round-over on the inside edges. Refer to the Exploded View drawing.

2 Glue and clamp the fenders to the body with the front and bottom edges flush.

3 Cut the bumper (E) to size, sand ⅛" round-overs along the front edges, and then glue and clamp it in place.

4 Cut the gas tanks (F) to size. Cut a pair of 1/16" kerfs 1/16" deep in each where shown on the pattern insert in the middle of the magazine. Drill a ¼" hole through the center of each tank. Sand ⅛" round-overs on each tank where shown on the Exploded View drawing.

5 Using a pair of toy axle pegs, glue and peg the gas tanks to the truck chassis.

6 Drill ⅜" holes 3/16" deep centered between the 1/16" saw kerfs where the fenders meet the chassis. Glue in walnut mushroom plugs to serve as headlights.

Add a Box to Carry a Big Payload

1 Using the pattern insert, transfer the hoist outline (G) and hole centerpoint to one end of a piece of 11/16×¾×6" stock (it's easier and safer to machine the hoist from a larger piece at first). Drill the ¼" hole where marked, and then cut the hoist to shape.

2 Cut the truck box front (H), bottom (I), sides (J), and lip (K) to size and shape. Glue the pieces together in the configuration shown on the Exploded View drawing. Later, remove the clamps and sand ⅛" round-overs along all edges of the box.

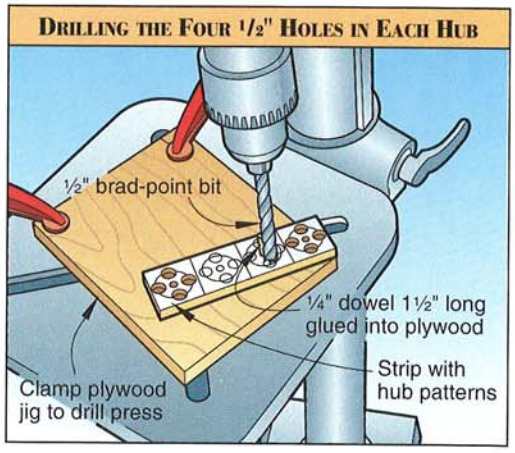
3 Glue the hoist centered from side to side and ½" from the back end of the box where shown on the Side View drawing.

Careful Drilling Makes a Set of Great-Looking Wheels

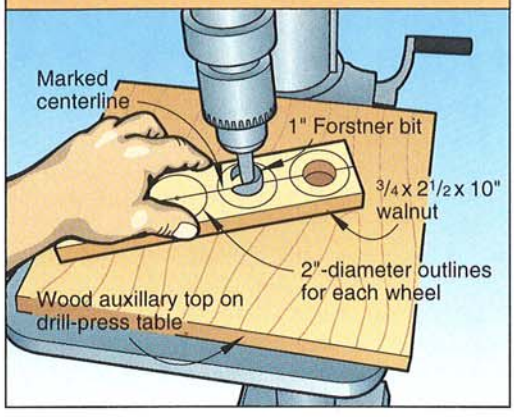
1 Cut a piece of ½" stock to 1½×8". Transfer the four hub (L) patterns to the stock. We found it safer and easier to drill the holes and cut the hubs to shape from the strip rather than four individual little squares.

2 As shown in the sketch *above left*, use your drill press to drill a ¼" hole through the center of each hub pattern. (To avoid bit wander, we used a brad-point bit.)

3 For accuracy when drilling the four ½" holes in each hub a simple jig works wonders. To make the jig, cut a piece of ¾" plywood to about 12" square. Drill a ¼" hole ½" deep about 2" from one edge in the plywood. Glue a piece of ¼" dowel 1½" long into the hole in the plywood. Then, slide the strip with the four hub patterns onto the ¼" dowel where shown in the sketch *above*. Fit your drill press with a ½" brad-point bit, position the jig with hub strip attached to your drill press table, cen-



Boring the Hub Holes in the Wheels



tering the bit over the centerpoint of a ½" hole of the hub pattern with the ¼" dowel protruding through it. Clamp the jig to the drill-press table. Drill a ½" hole through the hub, rotate the hub and drill the second, third, and fourth holes. After properly positioning the first ½" hole and clamping the jig to the table, the remaining three holes should automatically line up. Slide the hub strip off the ¼" dowel, and repeat the process to drill four ½" holes in each of the three remaining hub patterns. Bandsaw or scrollsaw the hubs to shape.

4 To make the tires (M), cut a piece of ¾"-thick stock (we used walnut) to 2½" wide by 10" long. Mark a centerline down the middle of the strip. Starting 1¼" from one end, use a compass to mark a 2"-diameter outline for each of the four wheels on the 10"-long piece.

5 Drill a ⅛" guide hole through the center of each marked tire at the centerpoint.

6 Using a 1" Forstner bit, drill a 1" hole 1 1/16" deep centered over the ⅛" guide hole into each marked tire. (We used our drill press and tested the depth of the hole and set the stop before drilling the actual tire stock.) Be careful not to drill through the stock!

7 As shown in the drawing at *right*, rout a ¼" round-over around the inside edge of each 1" hole. Keep the bit moving smoothly.

8 Turn the tire stock over so the 1" holes don't show. Using the ⅛" holes as guides, clamp the stock to your drill press, and one at a time, use a Forstner bit to drill a 1¼" hole ½" deep centered over each guide hole. Glue a hub into each 1¼" hole.

9 Rout ¼" round-overs along the outside edges of each tire. To keep your fingers safely away from the router bit, use a small handscrew clamp to hold each wheel, and then rout a ¼" round-over on all but the back inside face of each wheel. See the Wheel Section View detail for reference. You could also clamp a fence with a V-shaped notch cut out of it to your router table for supporting the stock when routing the round-overs on the wheels.

10 Glue a ¼" mushroom plug into the ¼" hole in each hub to simulate a hubcap.

Through the Paint Shop and Ready to Hit the Road

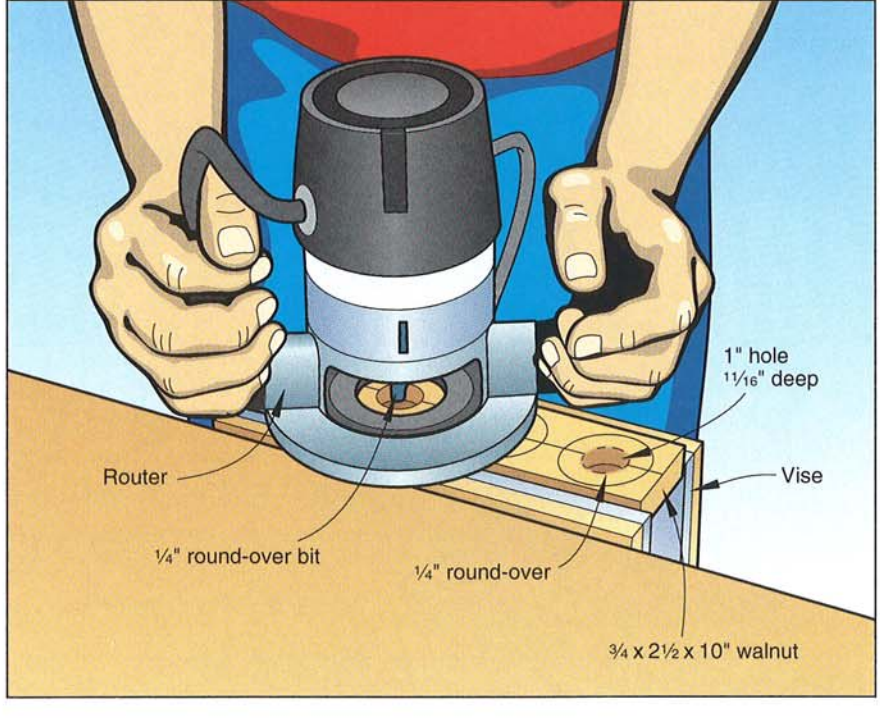
1 Finish-sand all parts. Apply several coats of clear finish (we used aerosol lacquer). Sand with 320-grit sandpaper between coats.

2 With a pair of toy axle pegs, secure the hoist/box assembly to the body. The axles slide through the holes in the chassis and glue into the hoist (G).

3 Cut the front and rear axles to length from ¼" dowel stock. Glue a wheel to one end of each axle. Slide the axles through the truck chassis, and glue a wheel to the opposite end of each axle, leaving enough of a gap (about 1/16") for the wheels to turn freely.

Project Design: Jack Rowland
Illustrations: Roxanne LeMoine, Troy Doolittle
Project Builder: Erv Roberts
Photograph: King Au

Routing the Round-overs



Print this article

High-Styled Hall Table and Mirror

Need a great way to dress up your front entry or an under-utilized area of your home? If so, we think you're going to like this hall table and the complementary mirror project shown here and explained on page 15. Purchased laser-cut filigree adds an air of sophistication to the straightforward lines of this delightful duet. And yet, because we chose simple dowel-joint construction for the table, you'll be done building in no time flat. What can be better than that?

LET'S START WITH THE TABLE
First, Make the Tabletop, Then Cut the Apron Rails

1 Rip and crosscut four pieces of ¾"-thick stock to 3×37". Edge-join the four pieces to form the tabletop (A). After the glue dries, remove the clamps and cut both ends square to a 36" finished length. Sand all surfaces.

2 Chuck a ½" round-over bit into your table-mounted router, and set up a fence flush with the bit's bearing. Rout both ends (be sure to use a backing board to prevent chipping at the rear edge), then along the front. Don't try to make the cuts in one pass; the material may chip out. Refer to the Routing the Tabletop drawing *below right.*

3 Rip and crosscut the front (B), side (C), and back (D) apron rails to the dimensions listed in the Bill of Materials.

4 Photocopy the Front Apron Rail pattern on the pattern insert in the center of the magazine. Then, with spray adhesive or rubber cement, adhere the pattern to the front apron. Bandsaw the apron rail to its finished shape, and drum-sand the curved profile smooth. Remove the pattern, and sand all surfaces.

5 To make the groove in the front apron rail to accept the laser-cut filigree, install a ¾" dado set. Raise it to cut 3/16" deep, and position a rip fence ¾" from the inner edge of the cutters. Now, with the front apron face down and its top edge along the fence, feed it through the dado set to cut the groove. Continue repositioning the fence and cutting until the groove measures 1¾" wide. Wrap sandpaper around a block of wood to sand the groove smooth.

6 Test-fit the laser-cut filigree into its groove in the table apron. Move the filigree until its pattern is centered side-to-side in the groove. Now, mark the cutlines on both ends of the filigree and bandsaw to length. As you can see in the Cutting the Filigree drawing, we used a scrap hardboard backer to reduce tearout. We also suggest that you use a fine-toothed blade.

7 To secure the tabletop to the assembled base with tabletop fasteners later, cut grooves now along the top inside edge of the aprons. To do this, fit your tablesaw with a ⅛" blade set to cut ¼" deep. Set your rip fence so that it is ⅜" from the inside edge of the blade. Make your cuts in all four aprons.

Now, Let's Machine the Legs

1 Using 1½"-thick stock, rip and crosscut the four legs (E) to 1½" wide by 31¼" long. If you don't have 1½"-thick material, you can

Continued

BILL OF MATERIALS

Part	Finished Size*			Matl.	Qty.
	T	W	L		
A tabletop	¾"	12"	36"	EJB	1
B front apron rail	¾"	6¼"	30½"	B	1
C side apron rails	¾"	4"	7¾"	B	2
D back apron rail	¾"	4"	30½"	B	1
E legs	1½"	1½"	31¼"	B	4

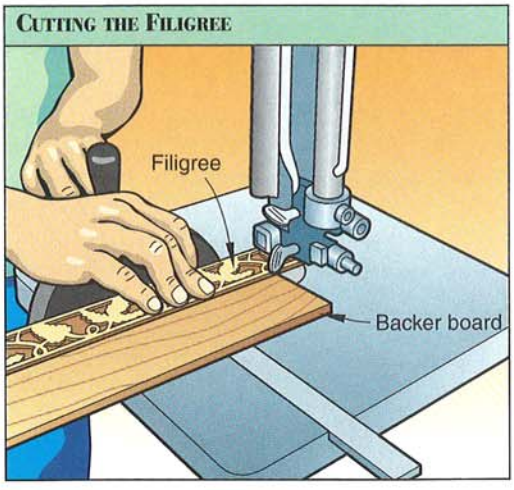
Materials Key: B—birch; EJB—edge-joined birch.

Supplies: #8×½" wood screws, ⅜×2" dowel pins, stain, finish.

Buying Guide

Filigree strip. One ⅛×1¾×36" laser-cut maple piece, style no. FIL13, $20.70 ppd. Constantine and Son, 2050 Eastchester Road, Bronx, NY 10461. 800/223-8087. Fax: 800/253-WOOD.

Tabletop fasterners.. Size ¾" with ⅜" offset, no. 96N4., $6.15 per 10, ppd. Address and telephone same as above. Save on shipping by combining orders.



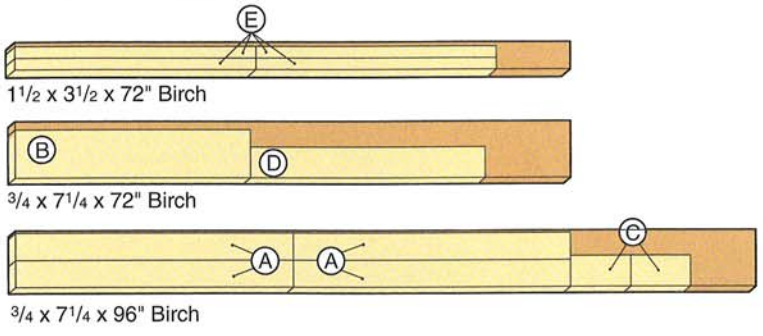
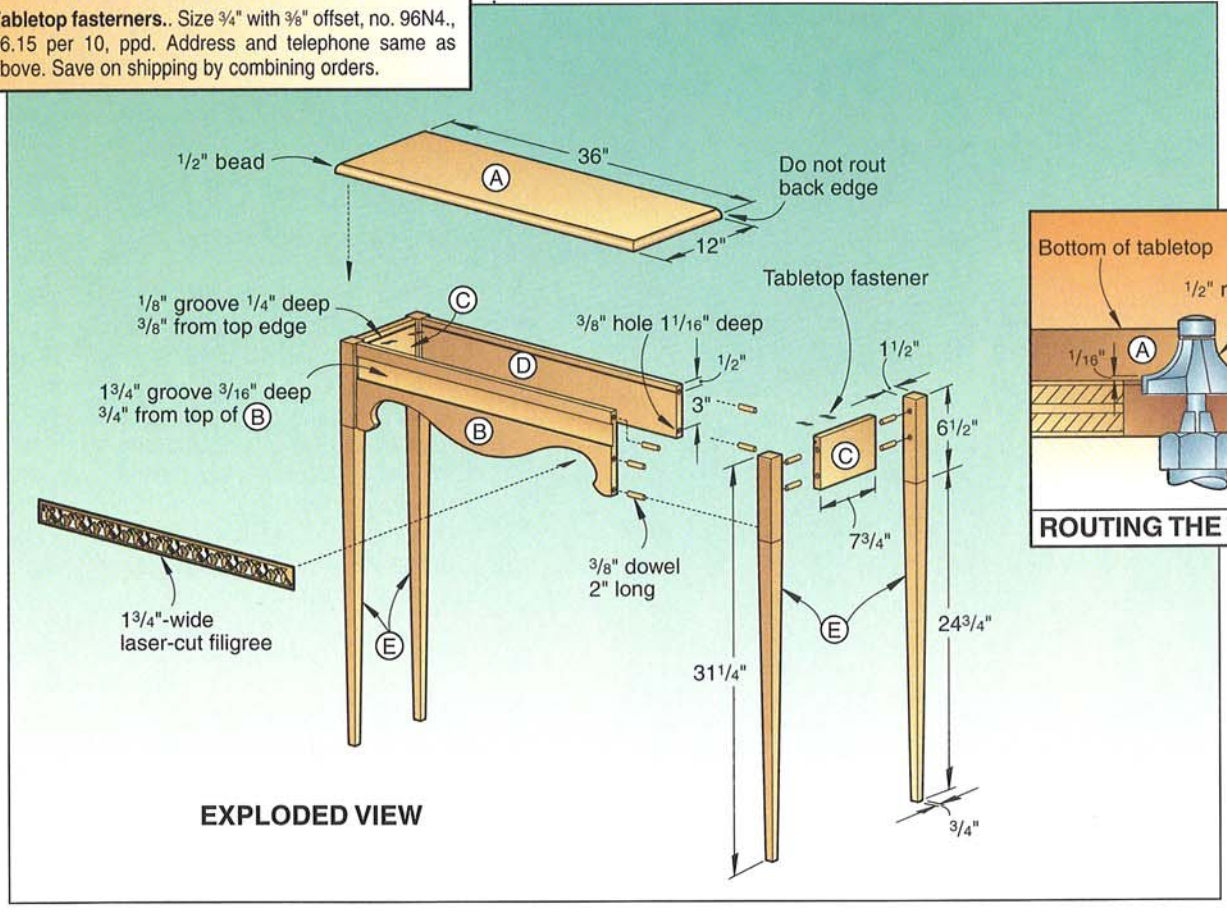


TABLE CUTTING DIAGRAM

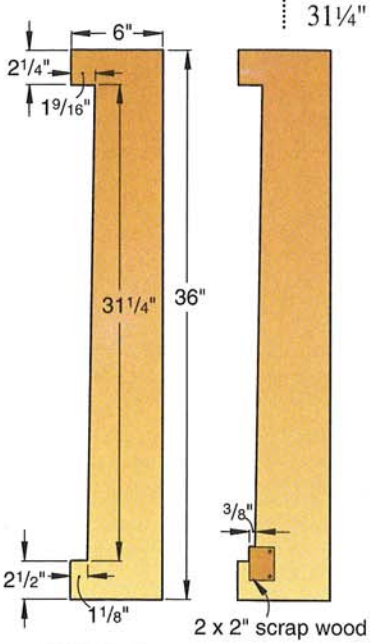


EXPLODED VIEW

ROUTING THE TABLETOP

High-Styled Hall Table

laminate two ¾" pieces face to face. If you go this route, cut the ¾" material to 32¼" long, then after gluing them up, square each end to a 31¼" finished length. *Be certain that all of your table legs are exactly 1½" square. Otherwise, the tapered cuts will be uneven.*



TAPER-CUTTING JIG

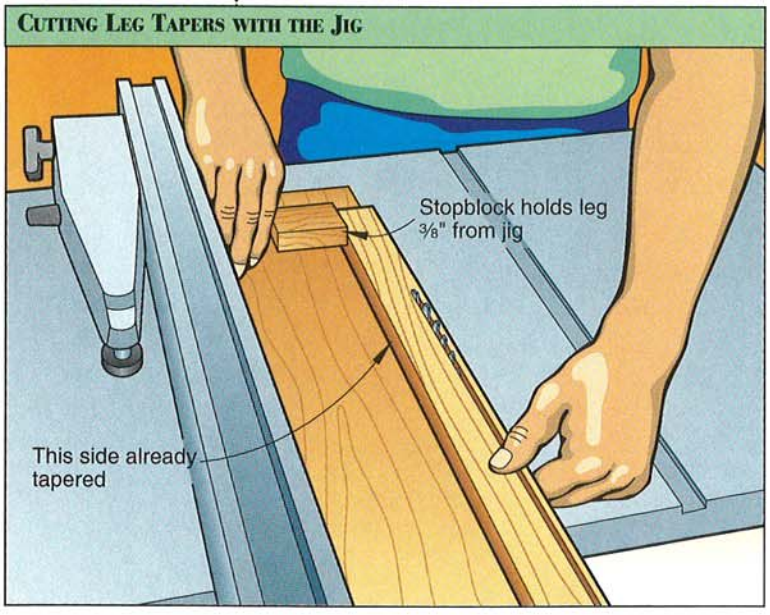
2 There are many ways to cut tapered legs, but the technique we used is one of the simplest. First, rip and crosscut a piece of ¾" plywood to 6×36". Then, using the Taper-Cutting Jig drawing for reference, cut a notch in one edge of the plywood.

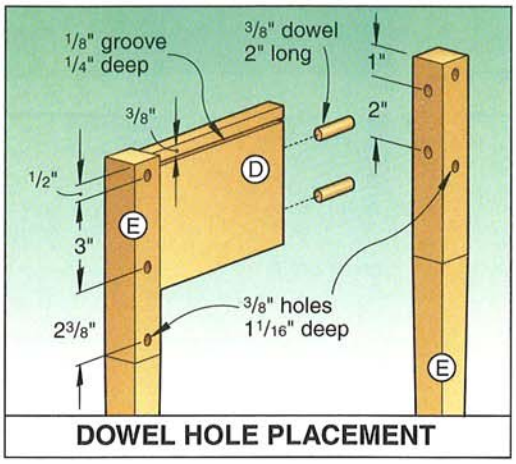
3 To make sure that you don't get the sides of the legs mixed up when you're cutting the tapers, number each side of each leg near the top end. Set the rip fence of your tablesaw 6" from the sawblade. Then, position the jig, fit a leg into the jig (with the numbered end farthest from you), and make a cut on two adjacent sides (those marked 1 and 2) of all four legs.

4 Cut a piece of ¾" plywood to 2×2". Then, nail it to the jig where shown on the Taper-Cutting Jig drawing. With the saw set up as before, make a cut on the remaining two adjacent sides (those marked 3 and 4) of all four legs.

5 Thoroughly sand the legs to remove all saw marks. We began with a random-orbit sander and finished by using a hand sanding block with the grain.

CUTTING LEG TAPERS WITH THE JIG





DOWEL HOLE PLACEMENT

Hurray, It's Assembly and Finishing Time!

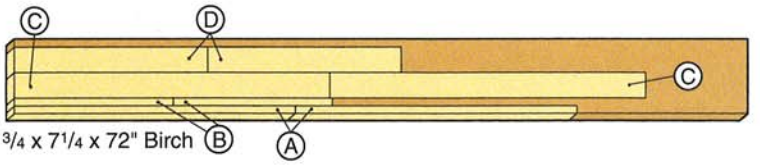
1 Using the Dowel Hole Placement drawing *above* for reference, lay out the location of the dowel holes on the legs and aprons. Then, with your doweling jig set for ⅜" dowels, drill 1 1/16"-deep holes in the ends of the aprons and then in the legs.

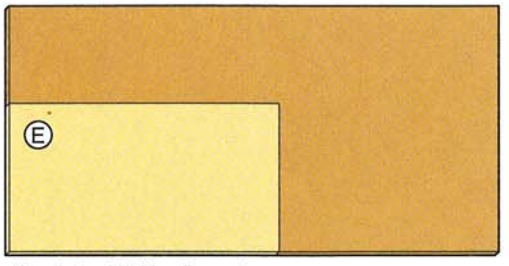
2 Glue and clamp the legs to the side rails, making sure to immediately remove any glue squeeze-out. After the glue dries, glue and clamp the front and back apron rails as you did the side apron rails. Set the legs on a flat surace for this operation. You should also check for squareness by measuring diagonally from one corner to another. When the measurements are equal, the assembly is square.

3 Cover your workbench with a blanket or pad, then lay the tabletop face down on it. Center the leg/rail assembly side to side on the tabletop, and flush with its back edge, and mark the location for the tabletop fasteners. (These fasteners allow the top to move in response to humidity changes without cracking.) We used two fasteners to secure the short rails to the top and three for the longer ones. Drill pilot holes, then secure the top to the base with #8×½" screws.

4 Stain the table and filigree to the desired shade. For an added accent, we masked the area around the groove and painted it dark green. Now, peel off the masking tape and apply several coats of clear finish (we used spray lacquer), sanding lightly between each coat. Finally, glue the filigree (we used instant glue) into the groove in the front apron rail.

Continued





MIRROR CUTTING DIAGRAM

BILL OF MATERIALS

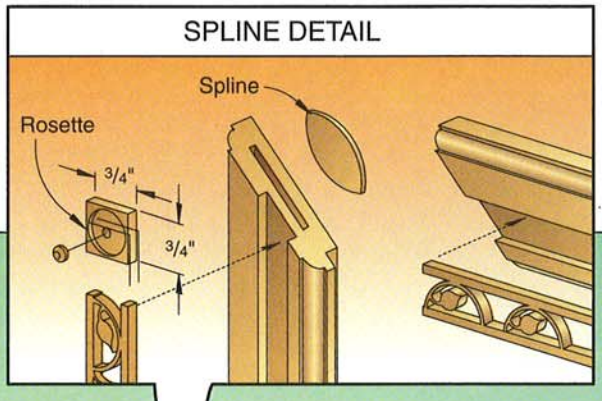
Part	Finished Size T	W	L	Matl.	Qty.
A* retainer sides	1/4"	3/4"	27 5/8"	B	2
B* retainer top & bottom	1/4"	3/4"	15 5/8"	B	2
C* frame sides	3/4"	2 1/2"	31"	B	2
D* frame top & bottom	3/4"	2 1/2"	19"	B	2
E backing board	1/8"	14 7/16"	26 7/16"	HB	1

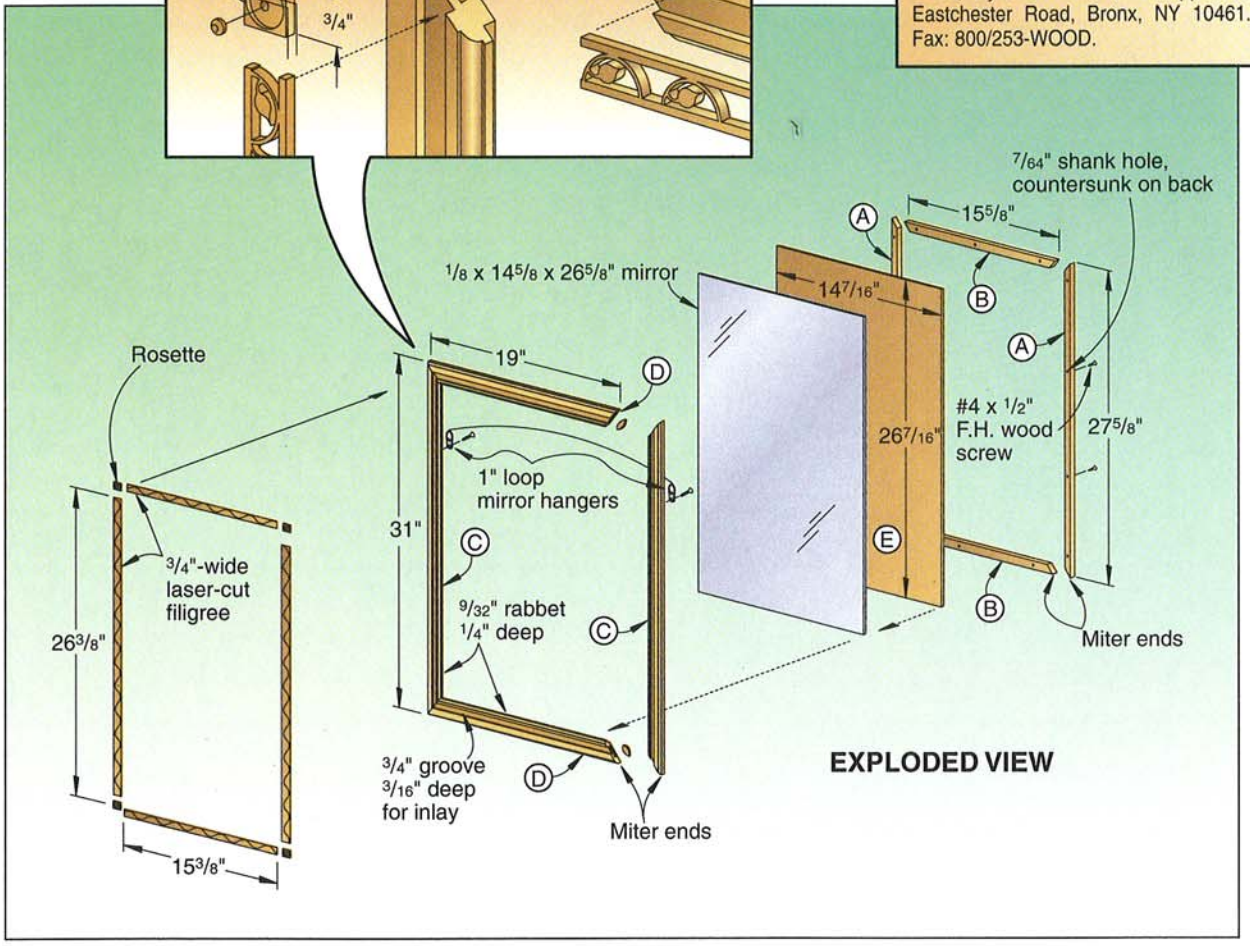
*Cut parts to final size during construction. Please read all instructions before cutting.

Materials Key: B–birch; HB–hardboard

Supplies: #4x1/2" flathead wood screws (14), mirror hangers (1" loop) with screws and wire (2), 1/8" plate mirror, 7/32x1 1/4" wheel axles, stain, finish

Buying Guide
Filigree strips. Three 1/8x3/4x36" laser-cut maple plywood, style no. FIL3. $43.45 ppd. Constantine, 2050 Eastchester Road, Bronx, NY 10461. 800/223-8087. Fax: 800/253-WOOD.





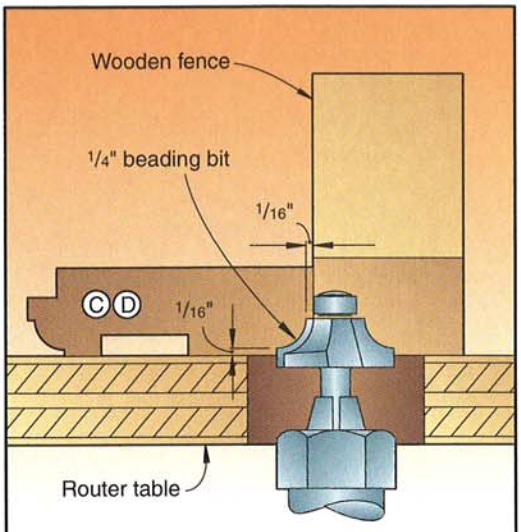
High-Styled

Mirror

NOW FOR THE MIRROR
Let's First Machine the Retainer Strips and Frame Pieces

1 Begin with ¾" thick stock that is at least 6" wide by approximately 72" long. Set your tablesaw's rip fence ¼" from the inside edge of the blade, and rip two lengths from the edge of the board for the retainer strips (A, B).

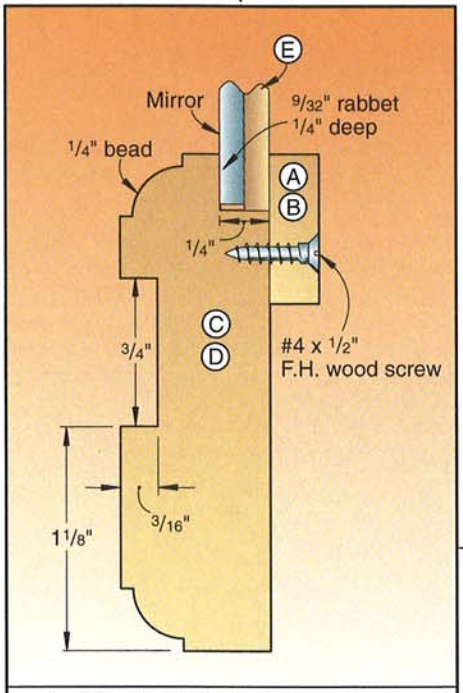
2 Reset the fence to 2½" from the blade, then rip two more pieces to make the parts for the frame itself (C, D). Crosscut two pieces to 32" and two more 20" long. Note that these parts are initally cut oversized, then reduced to final dimension during construction of the frame.



ROUTING THE FRAME

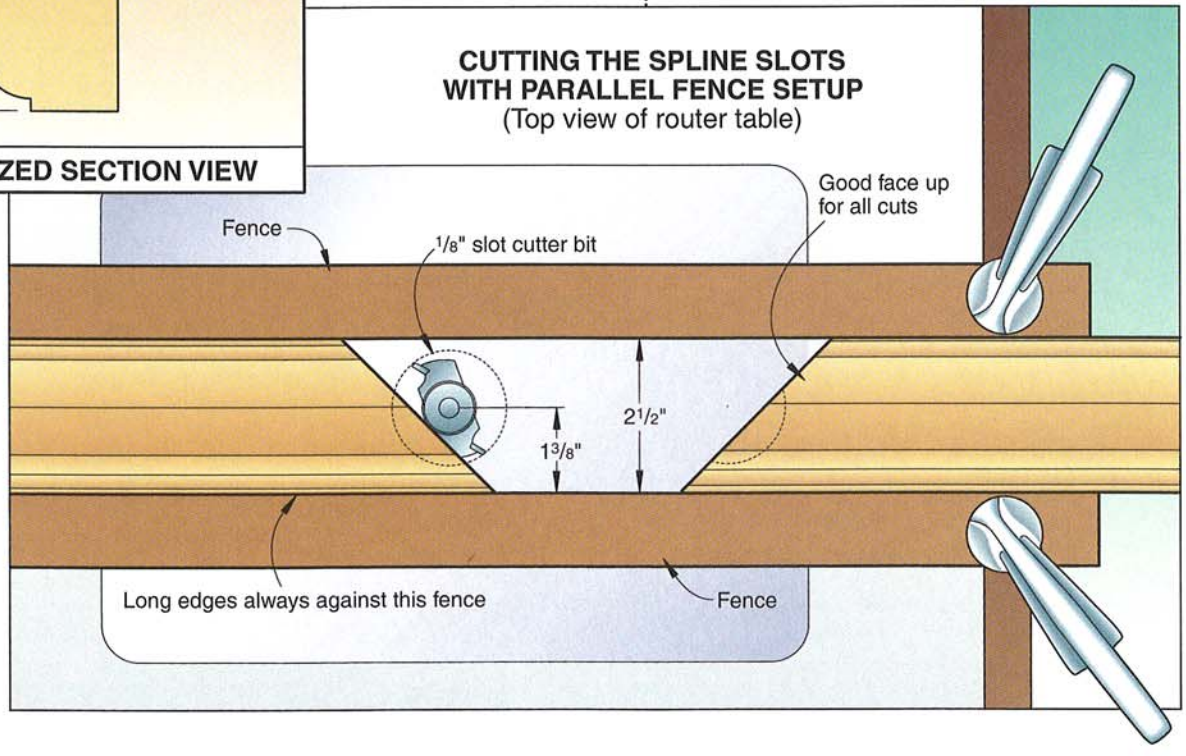
3 Fit your tablesaw with a ¾" dado set, raise the blade to cut 3/16" deep, and position your rip fence so that it is 1⅛" from the inner edge of the dado set. Now, with the frame members (C, D) face down, feed each part through the blade to cut the groove. (See the Full-Sized Section View drawing *at left.*

4 Clamp a wooden auxiliary fence to your tablesaw's rip fence. Then, lower the dado set below the table's surface and adjust the fence so that the dado cutters will make a 9/32"-wide rabbet. Turn on your tablesaw, and raise the blade so that it will make a ¼"-deep cut. Now, make a cut on the inner edge of all four frame members. (The groove for the filigree strip is offset toward the inner edge.) Refer to the Full-Sized Section View drawing.



FULL-SIZED SECTION VIEW

CUTTING THE SPLINE SLOTS WITH PARALLEL FENCE SETUP
(Top view of router table)



5 Chuck a ¼" beading bit into your table-mounted router, set to the height shown in the Routing the Frame drawing. Then, rout both front edges of each frame member.

6 Carefully miter-cut both ends of each frame member to the length specified in the Bill of Materials. Dry-clamp to check the fit.

7 Chuck a ⅛" slotting cutter into your table-mounted router. Set up parallel fences on your router table as shown on the Cutting the Spline Slots drawing. Make a cut in both ends of each frame member. Note that you must keep the long edge of the frame member next to the near fence. Next, using ⅛" hardboard and the Spline Full-Sized pattern on the pattern insert, cut four splines to fit the slots.

8 Dry-fit the frame members, then glue and clamp the frame together, checking for square. After the glue dries, remove the clamps and sand the frame smooth.

9 Miter-cut the retainer strips (A, B) to length as listed in the Bill of Materials. Next, drill 7/64" screw-shank holes through the retainer strips and countersink. Dry-fit the retainer strips, centering them on the back side of the mirror frame. Using the holes you just drilled as reference, drill pilot holes in the frame members to accept #4×½" wood screws. See the Exploded View drawing for reference.

Now, Let's Make the Rosettes

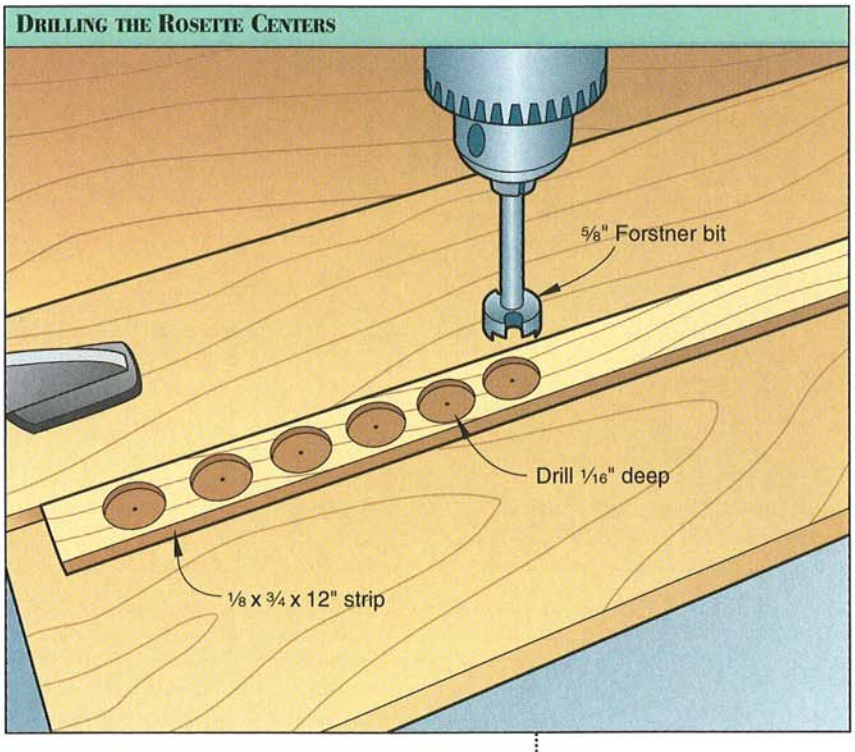
1 Rip and crosscut a piece of ¾" birch to ⅛×12". Then, chuck a ⅝" Forstner bit into your drill press, and set up a fence so that the center of the bit will hit the center of the ¾"-wide board. Next, set the quill stop to drill a hole 1/16" deep, and drill a series of holes where shown in the Drilling the Rosette Centers drawing. (It is a good idea to make a few extra rosettes in case some are damaged in later machining steps.)

2 Remove the ⅝" Forstner bit, then chuck in a 7/32" bit and drill through where the point of the ⅝" bit left a mark.

3 Set the fence of your bandsaw so that it's ¾" from the blade. Now, with a miter gauge and a pushstick, cut each rosette to ¾" square.

4 Cut the axle pegs 1/16" from the shoulder, then glue one into each rosette. When the glue has dried, glue and clamp the completed rosettes into the grooved corners of the frame.

Drilling the Rosette Centers



You're Almost Done

1 Cut the backing board (E) to fit the opening in the back of the frame (ours measured 14 7/16×26 7/16"). Allow up to ⅛" clearance between the backing board and the frame for seasonal expansion/contraction cycles.

2 Cut lengths of filigree (as described on *page 12*) to fit between the rosettes. Do not glue them in place yet.

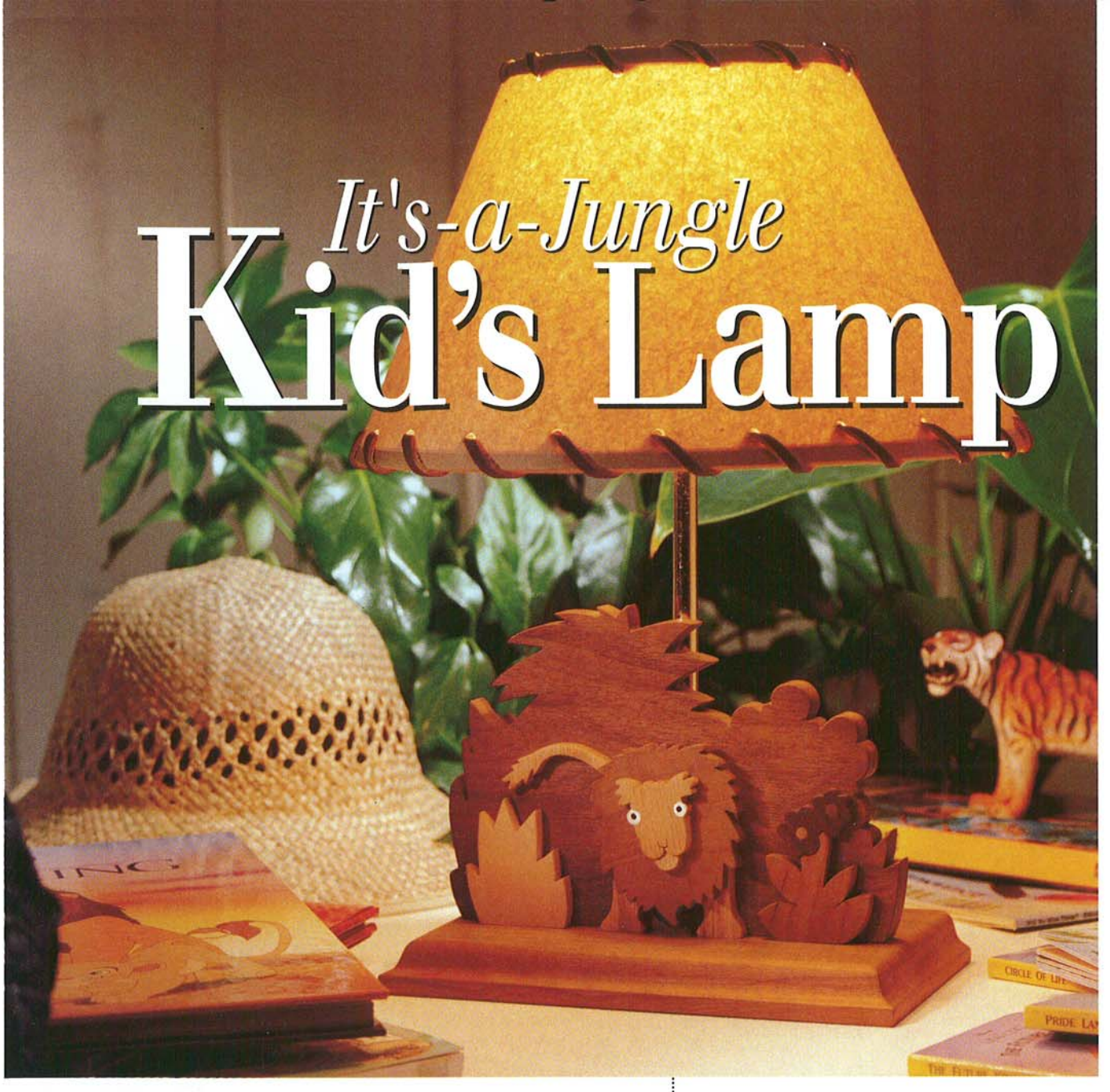
3 Sand all parts to prepare for the finish. Then stain the frame, and let dry. Note that we also applied dark green paint in the groove into which the filigree goes, using the same procedure described for the table. Apply several coats of the finish of your choice (we used spray lacquer), sanding between coats with 320-grit abrasive.

4 Using cyanoacrylate (instant glue), attach the filigree into place, then install a purchased mirror that's sized to fit the opening into place. Position and screw the retainer strips to secure the mirror.

5 Attach a pair of hanger loops to the back side of the frame, then string some picture wire between the loops. ■

Project Design: James R. Downing
Illustrations: Roxanne LeMoine, Troy Doolittle
Project Builder: Chuck Hedlund
Photograph: King Au

It's-a-Jungle Kid's Lamp



Here's a project that will be a "roaring"ly big hit in any youngster's room. Just step up to your scrollsaw and you'll quickly have all the cutouts done, and before you know it, you'll have the whole project completed! But we'll tell you something right now: when people find out that you made this delightful little lamp, they're bound to ask you to make some for their children, too.

***Note:** You'll need some ½" and some ¼" stock for this project. You can resaw or plane thicker stock to size.*

1 Make copies of the lion, bush, and flower patterns (they're on the insert in the center of the magazine), and adhere to your stock. See the Exploded View drawing for wood species and thickness. Make the flower centers with 3/16" dowels glued into holes and sanded flush before cutting the flower shape. Scrollsaw all pieces to shape. Paint the lion's eyes.

2 Rip and crosscut a piece of ¾" stock (we used cherry) to 4¾×8" for the lamp base. Lay out the locations of the lamp pipe hole, cord slot, and the centerpoints of the screw

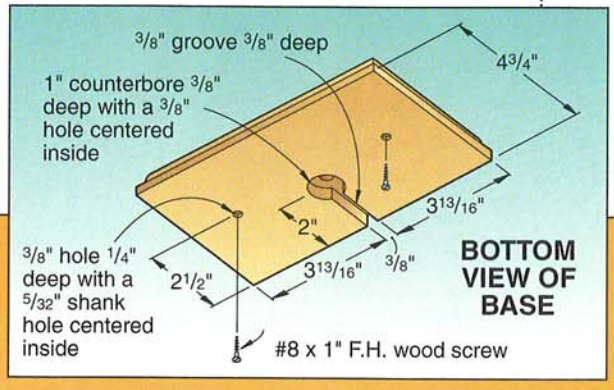
holes on the bottom of the base where shown on the drawing at *right.* With a 1" Forstner or spade bit, counterbore the lamp pipe hole 3/8" deep. Drill a 3/8" hole, centered in the 1" hole, through the base. Counterbore and drill the two screw holes. Fit your table-mounted router with a fence and a 3/8" straight bit, then cut the cord groove on the bottom of the base.

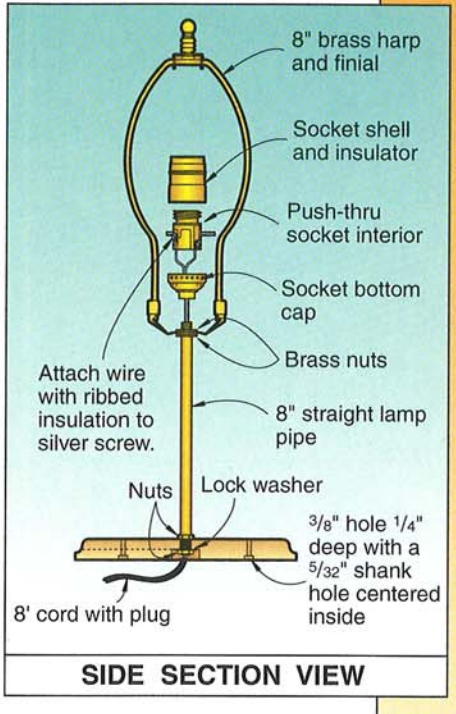
3 To make the lamp pipe support, rip a piece of 3/4" stock to 2" wide and approximately 8" long. With the 3/8" bit still in your table-mounted router, cut a dado with its edge 1 5/16" from one end of the board. Crosscut the piece to 3" long. Locate the centerpoints of the holes, then drill and countersink.

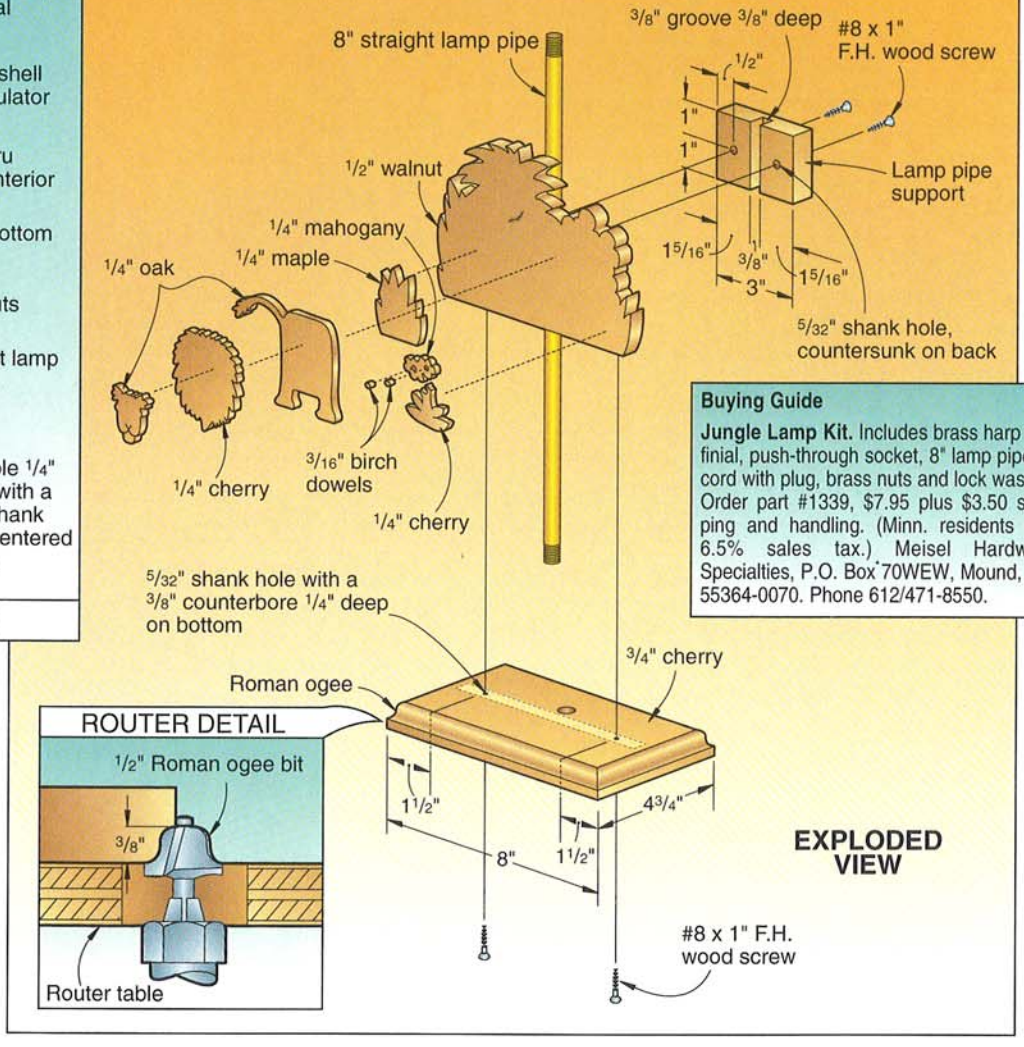
4 Fit your table-mounted router with a 1/2" Roman ogee bit with ball bearing pilot, and rout both ends and then the front of the base in order to create the decorative edging.

5 Rig up your lamp hardware as shown. Then arrange the scrollsawn pieces, gluing and clamping them to each other. After the glue has dried, set the jungle scene on the base against the lamp pipe and square with the front. Carefully tip the base forward, and mark the hole centerpoints of the two mounting screw holes. Drill pilot holes in the bottom of the scene, then glue and screw the base to the scene. Screw the lamp pipe support to the back side of the scene, approximately 1/2" above the base.

6 Complete the project with several coats of oil finish. (We used Watco Danish Oil.) ■







Buying Guide

Jungle Lamp Kit. Includes brass harp and finial, push-through socket, 8" lamp pipe, 8' cord with plug, brass nuts and lock washer. Order part #1339, $7.95 plus $3.50 shipping and handling. (Minn. residents add 6.5% sales tax.) Meisel Hardware Specialties, P.O. Box 70WEW, Mound, MN 55364-0070. Phone 612/471-8550.

Off-the-Wall FRUIT TRIVETS

Save wear and tear on kitchen counters and tabletops with this trio of wood "hot pads." Then, when mealtime is over, display your trivets on their attractive wall-hung holder.

Note: You can resaw or plane thicker stock to get the ½"-thick stock for this project.

Let's Start with the Trivets

1 Rip and crosscut a piece of ½" maple stock 5" wide by at least 16" long for the trivets (A). Then, rip and crosscut a piece of ½" cherry to 2¾" by 16" long for the fruit cutouts (B). These woods offer a pleasing contrast. (Our directions are for a single project as shown. However, if you make the cherry part for the cutouts 5" wide, you will have a second set of cherry trivets and maple cutouts with virtually no additional work. Add a maple backboard and you'll have a second complete project!)

2 Using double-faced carpet tape, put the two pieces of wood together, with the cherry centered edge-to-edge on the maple. Make a photocopy of any three of the six trivet patterns shown on the pattern insert in the center of the magazine. Using spray adhesive or rubber cement, adhere the patterns to the ½" maple.

3 Using a 1/16"-diameter drill bit, drill scrollsaw blade starter holes where shown on the patterns. Then, with a No. 5 blade (ours had 12½ teeth per inch), cut out the fruit shapes.

4 Put lacquer thinner on the joint line of the taped-together pieces to release the tape's adhesive, then gently pry apart the pieces. Next, with the paper patterns still on the maple, crosscut the trivets, then shape the corners with a bandsaw. It's best to cut just to the outside of the pattern and then sand to the lines with a stationary belt/disc sander. Switch to hand sanding, gently rounding over the outer edges of the trivets and the cut-out areas within them.

Now for the Backboard

1 Rip and crosscut another piece of ½" cherry to 2¾" wide by 20½" long for the backboard (C). Use a trivet to lay out the ¾" radius at each corner, then bandsaw or scrollsaw to shape. Sand the corners smooth.

2 Lay out and drill the wall-mounting screw holes where shown on the Exploded View drawing. Countersink both holes.

3 Place each cherry fruit cutout into its maple surround, and position the trivets on the top surface of the backboard. (See the Trivet Placement drawing on the pattern insert for positioning.) Carefully remove each of the trivets, one at a time, and trace around the fruit cutouts. Then, glue each cutout to the backboard, making sure to clean up any glue squeeze-out immediately.

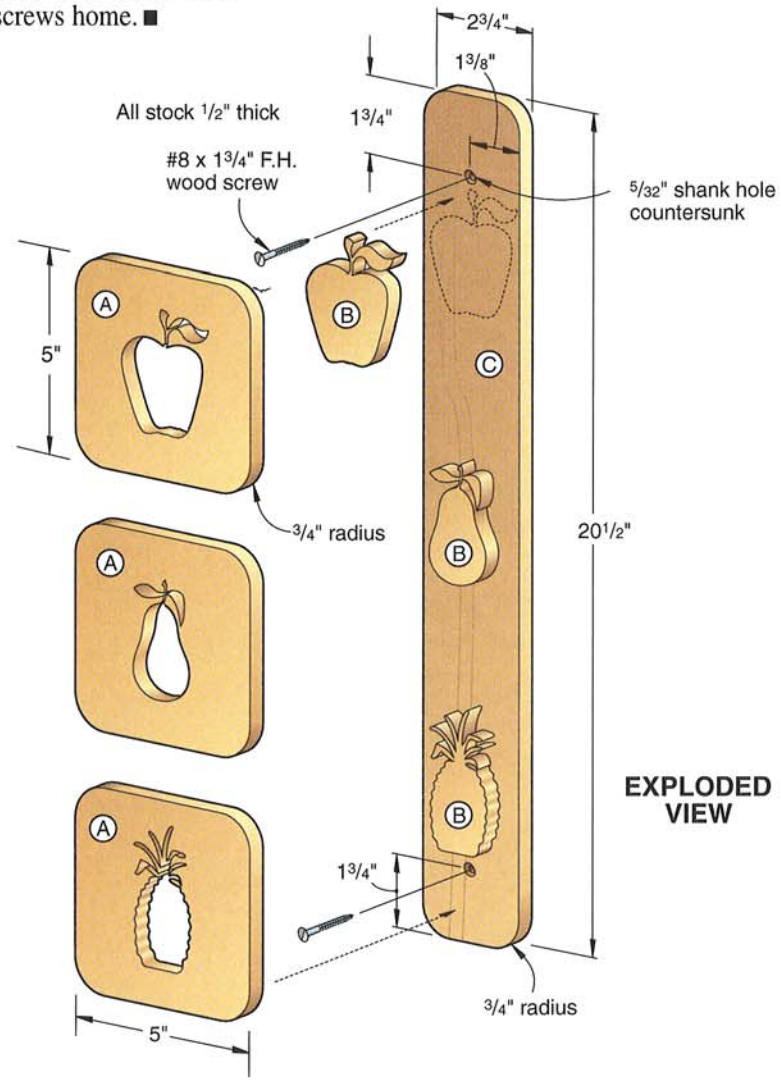
You're Down to the Finish Line

1 Finish-sand all parts, then apply three coats of danish oil, salad bowl finish or other nontoxic clear finish, following label instructions.

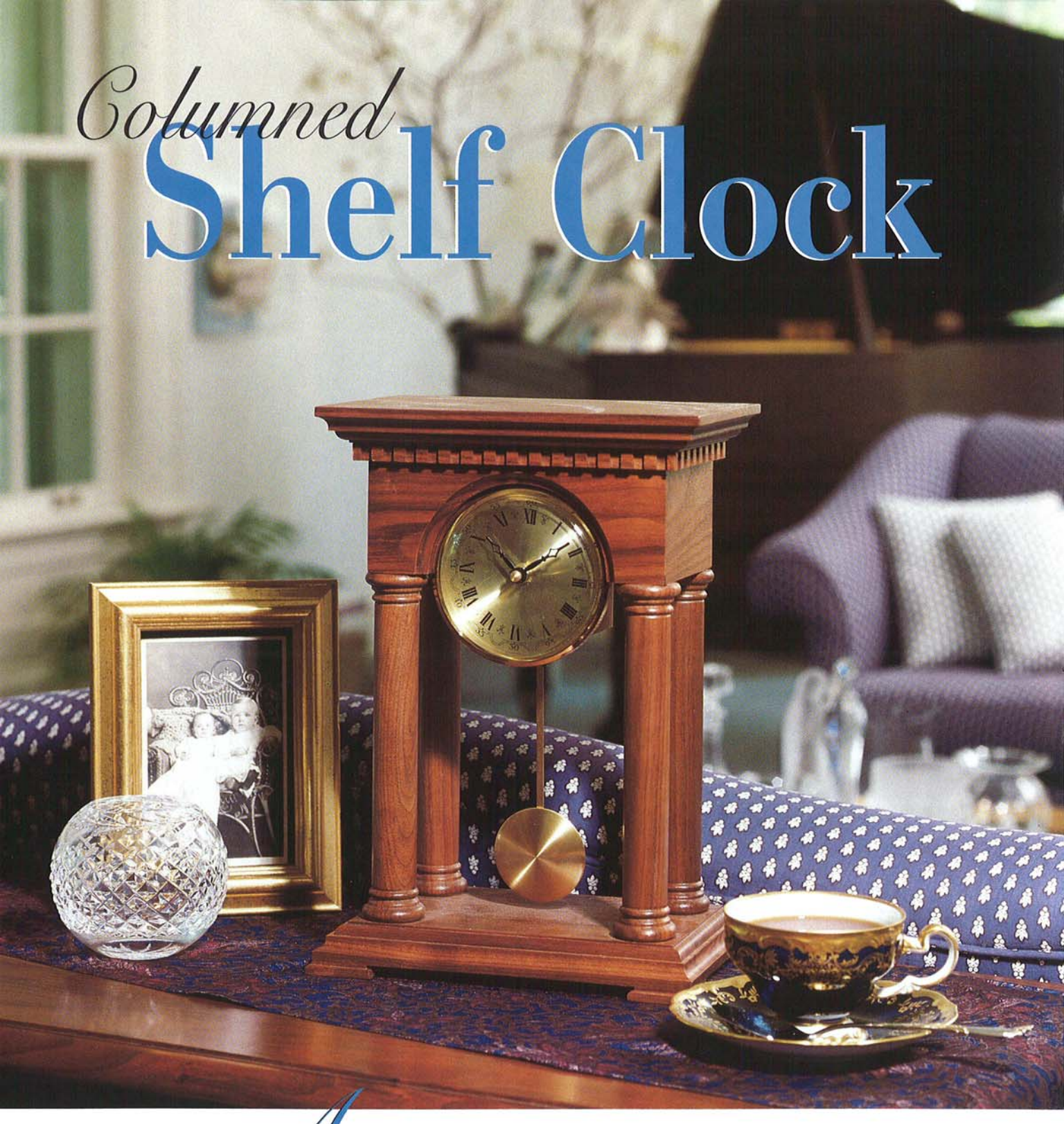
2 To hang your finished project, select a good location on your kitchen wall. Using the holes you drilled in the backboard and a level to make sure the backboard will be plumb, locate the two hole centerpoints. If the holes hit a wall stud, just drive #8x1¾" screws through the backboard and into the studs. Otherwise, install plastic wall anchors, and then drive the screws home. ■

TIP Cherry tends to burn when you're cutting it, so be sure to use a sharp blade and keep it moving steadily through the wood.

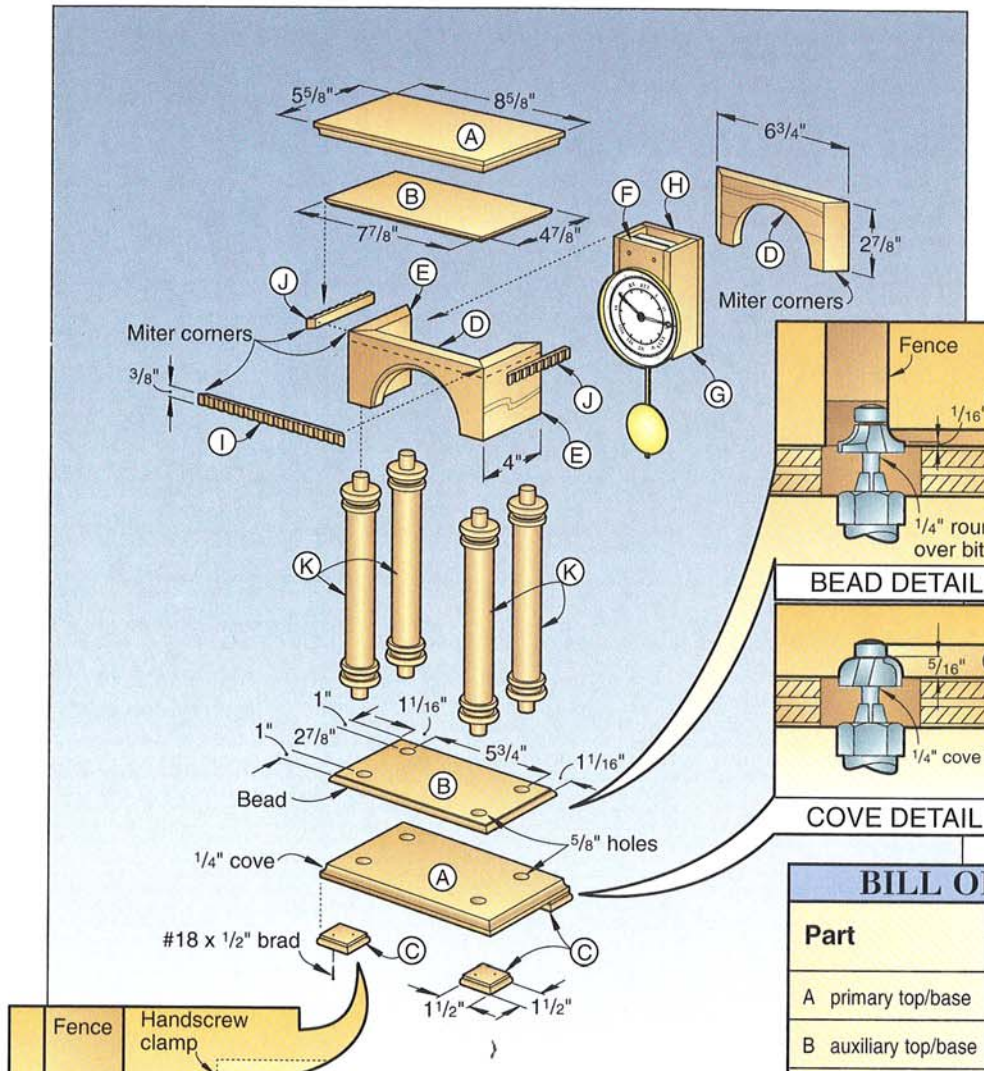
Project Design: Jim Downing
Illustrations: Roxanne LeMoine,
Project Builder: Jim Boelling
Photograph: King Au

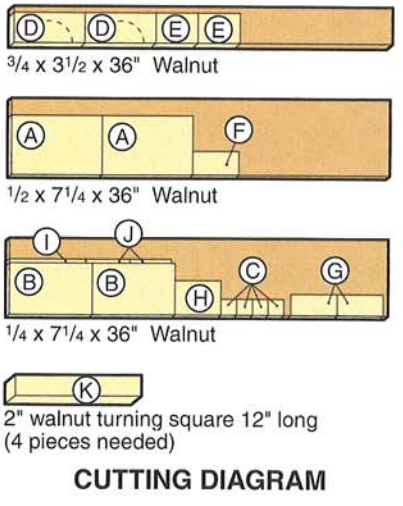


Columned Shelf Clock



A couple of years ago we published a column-supported clock in our sister publication WOOD® magazine and the response was simply overwhelming. Then, when the original designers came to us with this classic version, we knew that you, too, would enjoy building it.





CUTTING DIAGRAM

Note: *You'll need some thin stock for this project. You can resaw or plane thicker stock to the thickness listed in the Bill of Materials. For our source of the clock movement, hands, dial, and turned columns, see the Buying Guide at the end of the Bill of Materials.*

BILL OF MATERIALS

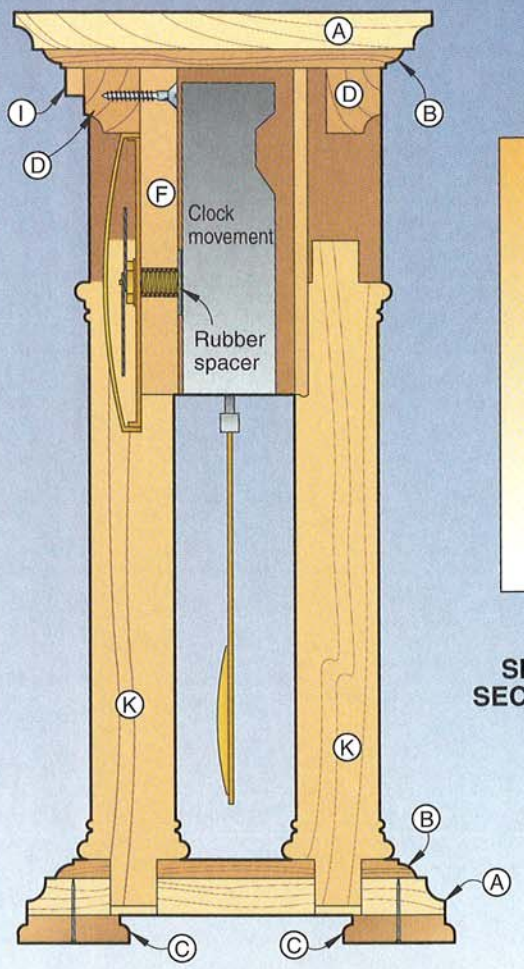
Part	Finished Size T	W	L	Matl.	Qty.
A primary top/base	½"	5⅝"	8⅝"	W	2
B auxiliary top/base	¼"	4⅞"	7⅞"	W	2
C feet	¼"	1½"	1½"	W	4
D front/rear	¾"	2⅞"	6¾"	W	2
E sides	¾"	2⅞"	4"	W	2
F enclosure front	½"	2¼"	4¼"	W	1
G enclosure sides	¼"	2"	4¼"	W	2
H back	¼"	2¾"	4¼"	W	1
I front molding	¼"	⅜"	7¼"	W	1
J side moldings	¼"	⅜"	4¼"	W	2
K columns	1½-dia.		9"	W	4

Supplies: 4–#4×½" flathead wood screws, 2–8×1" flathead wood screws, 8–#18×½" brads, clear finish.

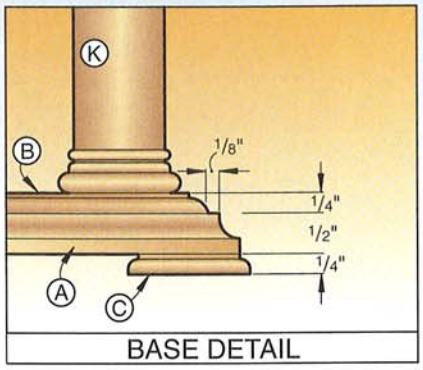
Buying Guide

Clock and columns. Quartz pendulum clock movement with bezel, hands, and dial, kit no. CLA-PEND, $23.95 ppd. Add $15 ($38.95 total) for four 9"-long columns. Columns available in walnut, maple, and cherry. Schlabaugh & Sons, 720 14th Street, Kalona, IA 52247 or call 1-800-346-9663 or 319-656-2374 to order.

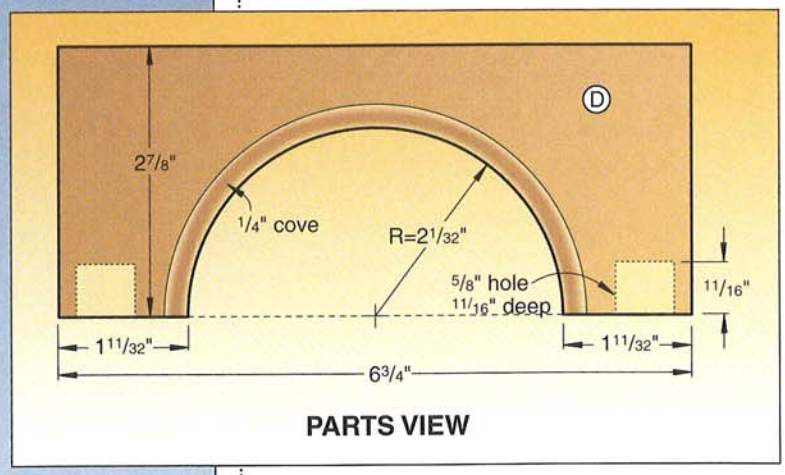
Columned Shelf Clock



SIDE SECTION



BASE DETAIL



PARTS VIEW

Start with the Top and Base Pieces

1 Rip and crosscut two each of the primary and auxiliary top and base pieces (A, B) to the size as listed in the Bill of Materials.

2 Using the Cove detail accompanying the Exploded View drawing for reference, use a table-mounted router to form a cove along all edges of the ½"-thick As.

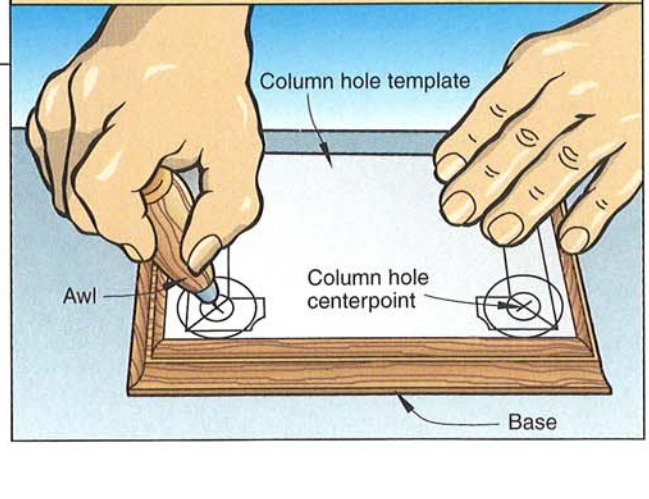
3 Switch bits to rout a bead along all edges of the ¼"-thick Bs shown on the Bead detail.

4 Center, then glue and clamp the ¼"-thick B pieces on the A pieces, referring to the Side Section drawing and Base detail.

5 Get the full-sized Column Hole Template from the pattern insert in the center of the magazine. Put the template on the base assembly, and use an awl to mark the centerpoints as shown on the sketch *below*. Drill a ⅝" hole through each of the four marked centerpoints.

6 To form the four feet (C), cut ¼"-thick walnut to 1½" squares. Fit your table-mounted router with a ⅛" round-over bit. Hold one of the feet with a small handscrew clamp (don't try to hold these by hand) to rout each edge as shown on the Foot detail accompanying the Exploded View drawing. You'll need to

MARKING THE COLUMN-HOLE CENTERPOINTS ON THE BASE



reclamp the piece in order to rout each edge. Repeat for each of the feet.

7 Attach the four completed feet (C) with glue and brads to the bottom of the base assembly where shown on the Base detail accompanying the Side Section drawing.

The Column-top Assembly Is Your Next Step

1 Cut the column-top assembly front (D) and sides (E) to the sizes listed in the Bill of Materials, miter-cutting the ends at 45°. Refer to the Exploded View drawing .

2 Refer to the pattern insert and mark a 2 1/32"-radius arch on the front and back pieces (D). (Yes, you really do need that extra 1/32" to fit the clock bezel properly.) Bandsaw and drum-sand (we used a 1½"-dia. drum) to the line to form each arch. Test-fit the bezel.

3 Rout a ¼" cove along each arch. (To prevent chip-out, we tightly taped the pieces together arch-to-arch, and routed both pieces at the same time as shown *above right*.)

Build the Movement Enclosure

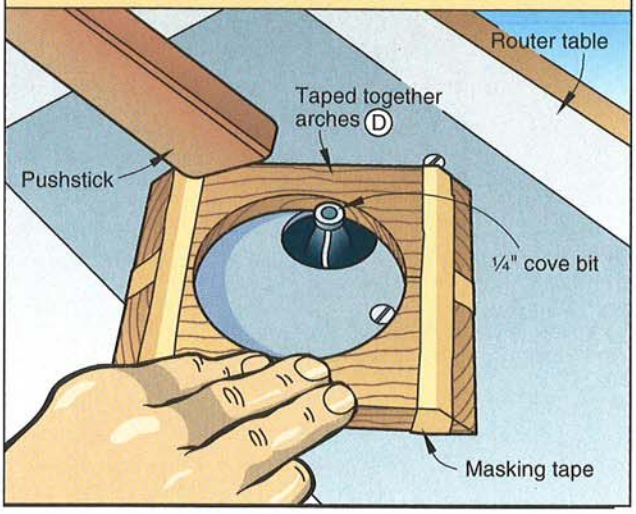
1 Cut the enclosure front (F), sides (G), and back (H) to the sizes listed in the Bill of Materials. Also see the Movement Enclosure drawing for reference.

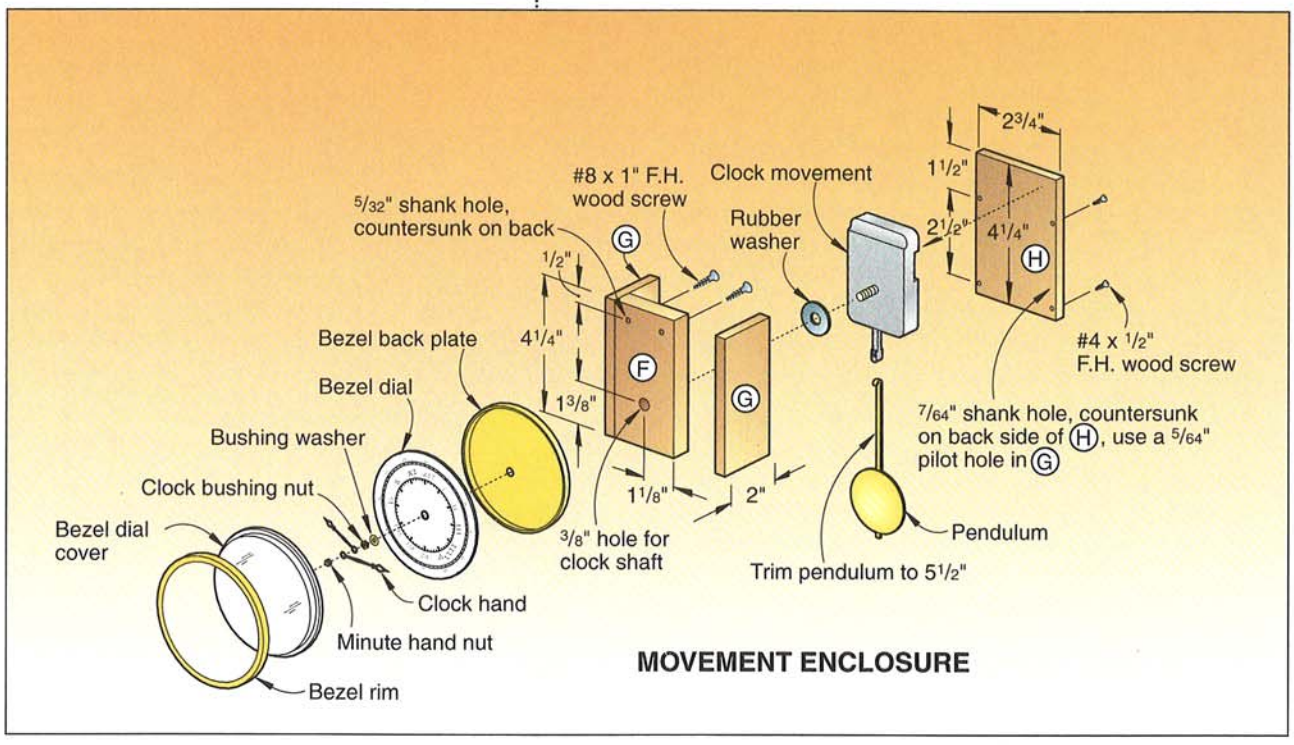
2 Drill a ⅜" hole through the front (F) for the clock shaft where shown on the Movement Enclosure drawing. To let you later screw the movement enclosure front (F) to the back side of the arched front (D), you now need to mark the centerpoints and drill two 5/32" shank holes, countersunk on the back side of the front.

3 Hold the enclosure front (F) against the back side of the arched front (D), aligning and centering the top. Using the holes in F as guides, drill pilot holes into the back side of D.

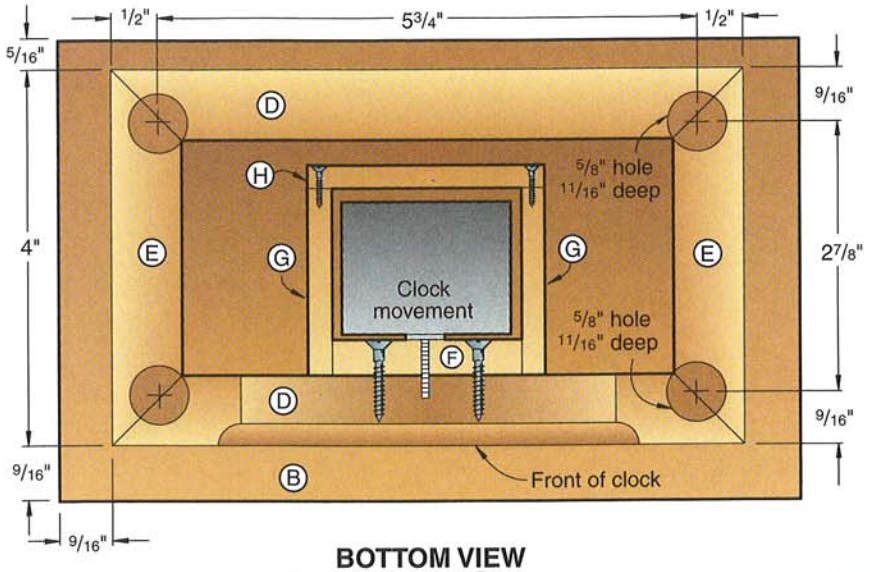
Continued

ROUTING A COVE ON THE ARCHED PIECES





MOVEMENT ENCLOSURE



BOTTOM VIEW
(Bottom side of top Ⓑ shown)

4 With the front edges and top and bottom ends flush, glue and clamp the sides (G) to the front (F) where shown on the Movement Enclosure drawing.

5 Drill and countersink four 3/32" holes through the back (H) for mounting to the side pieces (G) later.

6 Sand the movement enclosure assembly now, bringing it to final smoothness. Set the assembly aside.

Complete the Column-top Assembly Now

1 Using a band clamp, glue and clamp parts D and E to make the column-top assembly. Check that the joints are tight and that the assembly is square. When the glue is dry, unclamp and sand to final smoothness.

2 To ensure perfect alignment with the previously drilled holes in the base assembly (A, B), trim the Column Hole Template you used earlier to the shape noted on the pattern. Align the pattern on the bottom side of the column-top assembly (D, E). Use an awl to indent the column-hole centerpoints as you previously did. Drill 5/8" holes 11/16" deep at four centerpoints into the bottom side of the top assembly.

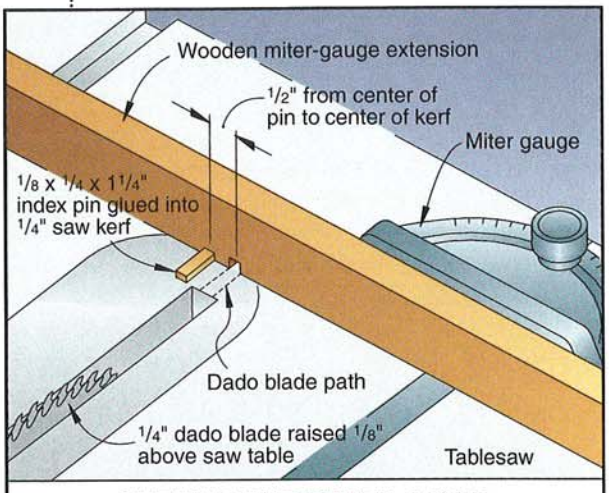
3 Position the movement enclosure so it is centered side-to-side and its top edges are flush with the top of the front arch piece (D). Attach with screws.

4 Glue and clamp the completed column-top assembly/movement enclosure to the bottom of the top assembly (A, B) where shown on the Bottom View drawing.

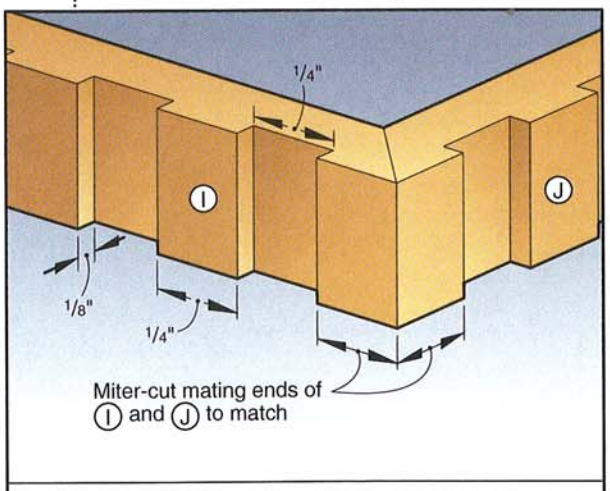
Add Dentil Molding for a Stunning Accent

1 Cut a strip of walnut to 1/4×3/8×20" long for the dentil molding pieces (I, J).

2 Construct the jig shown *below*. The edge of the 1/4" kerf in the miter-gauge extension should be 1/2" from the edge of the index pin.



CUTTING THE DENTIL MOLD



CUTTING THE DENTIL MOLDING

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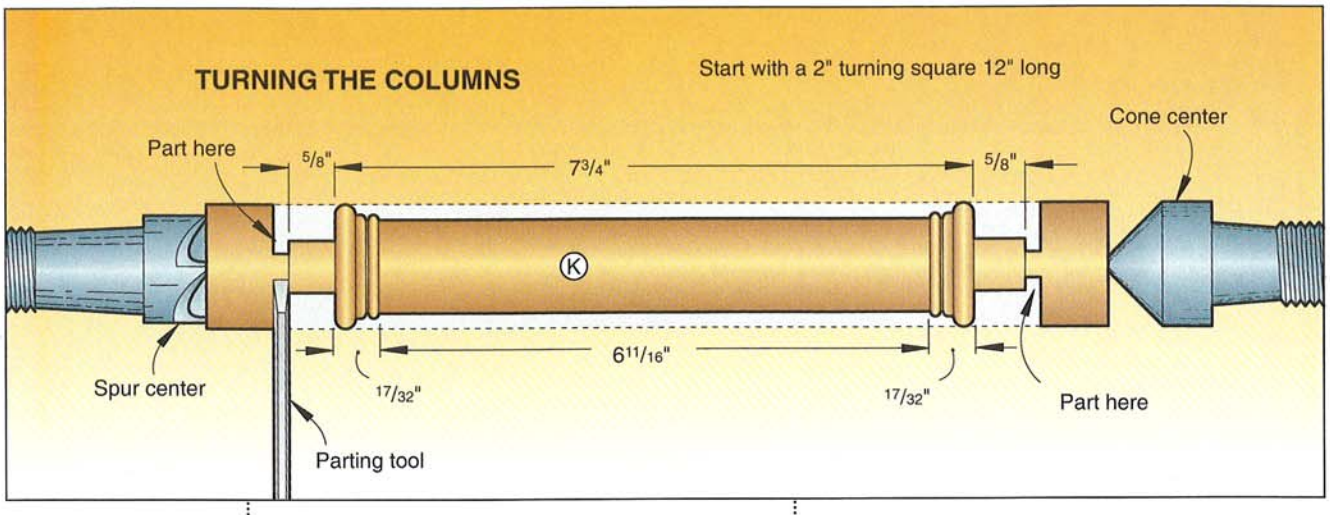
Columned Shelf Clock

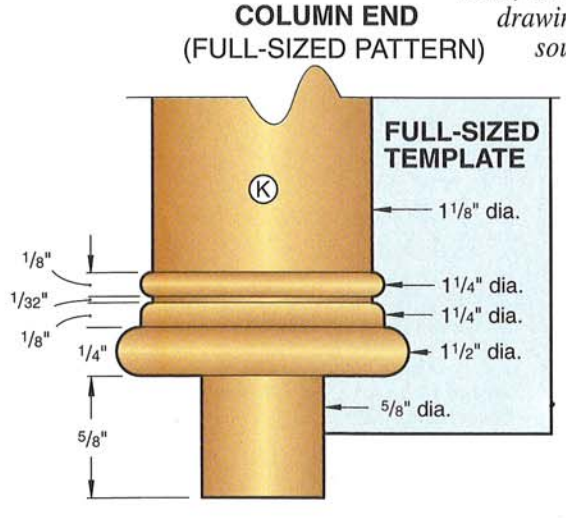


3 Make the first kerf cut near the end of the 20"-long dentil molding strip. Next, position this kerf on the index pin, and make a second cut. Repeat this process to make all the evenly spaced kerfs.

4 Miter-cut the dentil molding pieces (I, J), and glue them to the clock assembly in the configuration shown on the drawing Mitering the Dentil Molding. (The first time we cut our pieces, the dentil molding wasn't symmetrical at the corners as shown on the drawing. To remedy this, we adjusted the jig slightly, cut new molding, miter-cut it, and rechecked the ends. It took a few tries, but it was worth it.)

Turn (or Buy) the Handsome Hardwood Columns

Note: *If you love to turn and making four identical columns is a challenge you don't mind, use the full-sized template and drawings . Or, if you prefer, see our source in the Buying Guide for preturned pieces.*



1 Cut four pieces of 2" square stock 12" long for the columns (K). Mark diagonals on each end to find centers, then mount one of the pieces between centers on your lathe.

2 Create a template using the Column End drawing . Turn the column to the shape shown on the Turning the Columns drawing.

3 Sand the column smooth and apply the finish. (We prefer to finish pieces on the lathe.) Use a parting tool where shown on Turning the Columns drawing to separate the ends. Repeat for the other three columns.

4 Test-fit the four columns between the column top assembly and the base (A, B). If you have any finish on the tenoned ends of the columns, you'll need to sand it away to get a good glue joint in the next step.

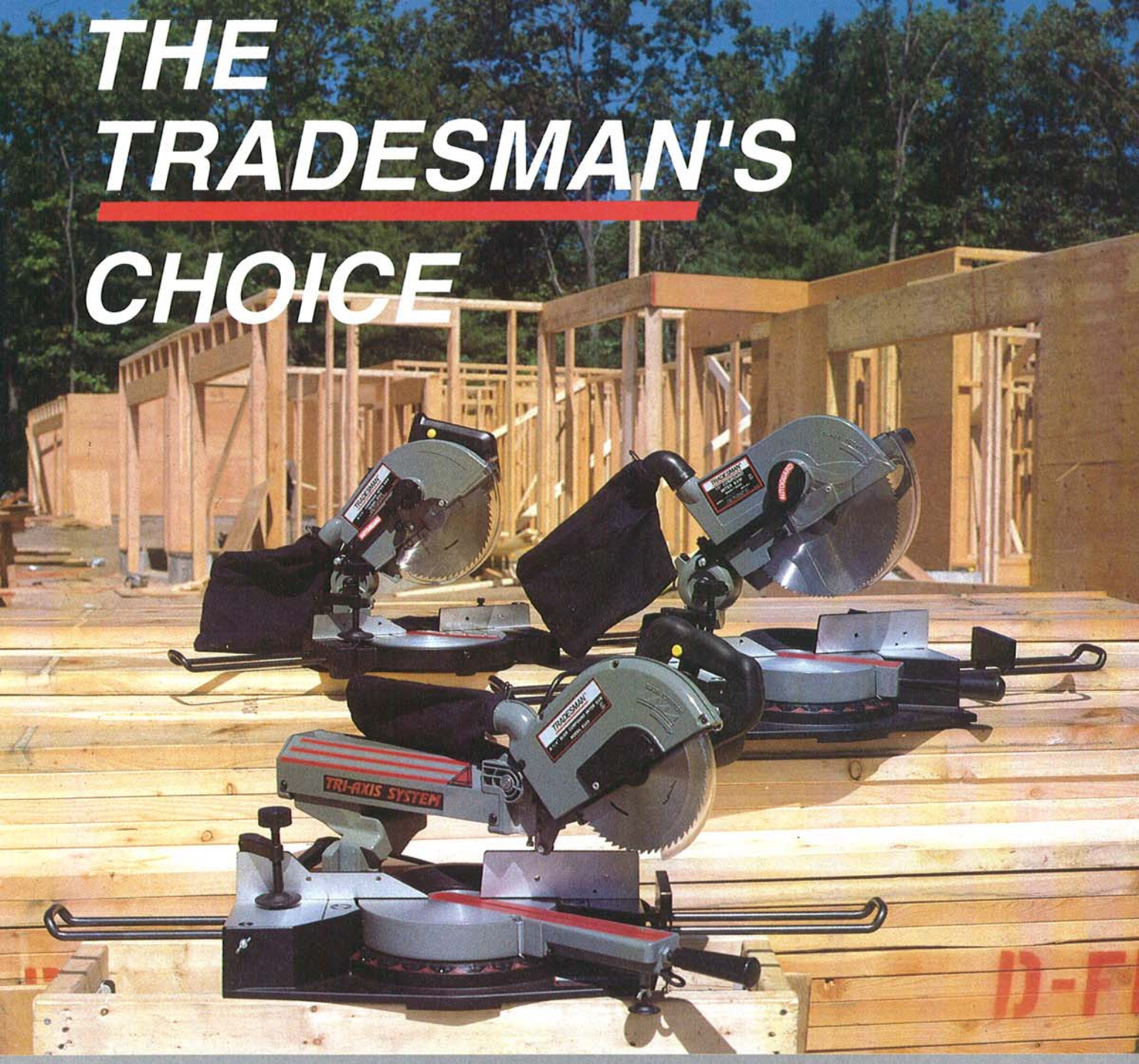
5 Glue and clamp the columns between the two completed assemblies. (We used four bar clamps and two pieces of scrap plywood as clamping blocks. The blocks help equalize the clamping pressure and also prevent marring.)

6 Finish-sand the assembly, remove dust with a tack cloth and apply a clear finish (we sprayed on several light coats of Deft).

7 Trim the pendulum shaft to 5½" long (the manufactured size is about ½" too long).

8 Remove the back (H) from the movement enclosure to install the clock movement. Place the bezel back plate and dial against the face of the movement enclosure front (F), with the 12 o'clock position directly at the top and the shaft holes aligned. Put rubber spacers between the movement and back face of the front (F). With the clock shaft through the front piece, add the nut to secure the movement. (Be careful not to overtighten the mounting nut; you could damage the movement.) Complete the project by installing the hands, battery, and pendulum. Screw the enclosure back (H) in place. ■

THE TRADESMAN'S CHOICE



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*Overstrike test conducted by striking hammer handle against metal object.

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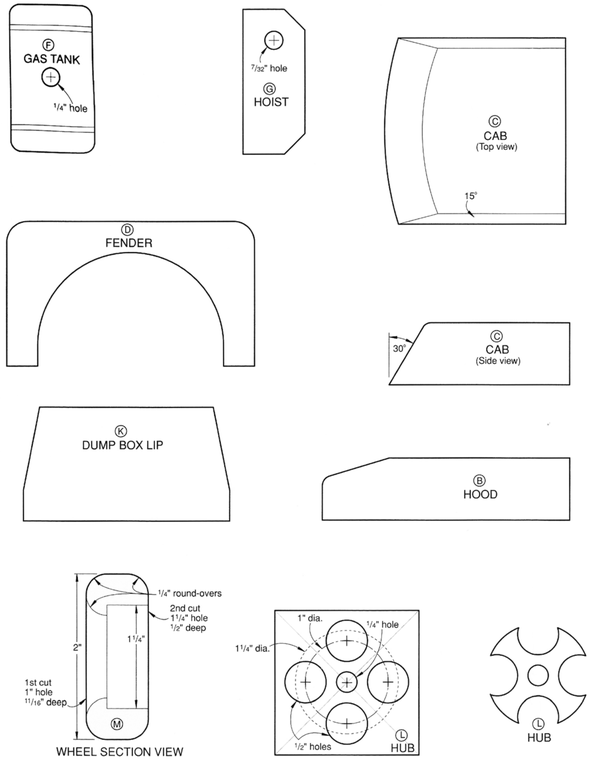
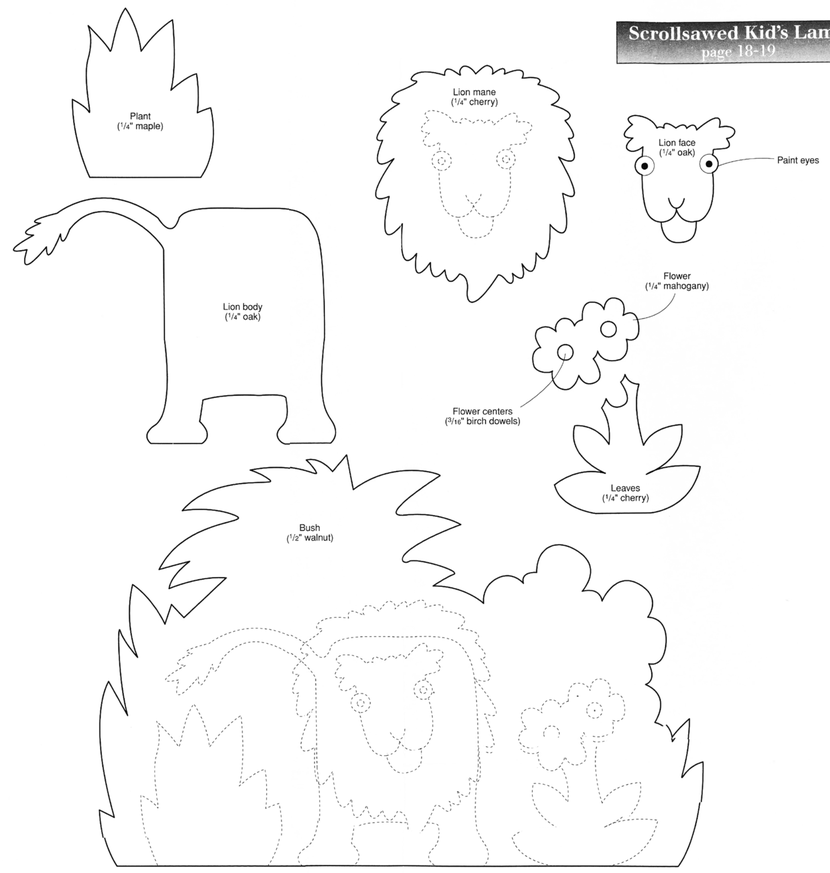
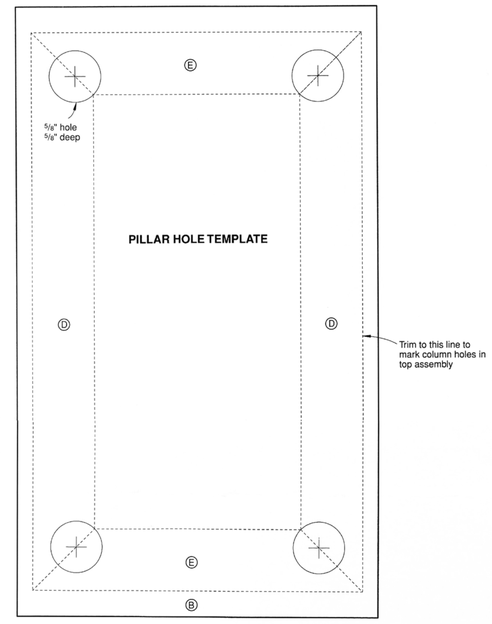
Kid's Dump Truck
page 7-11

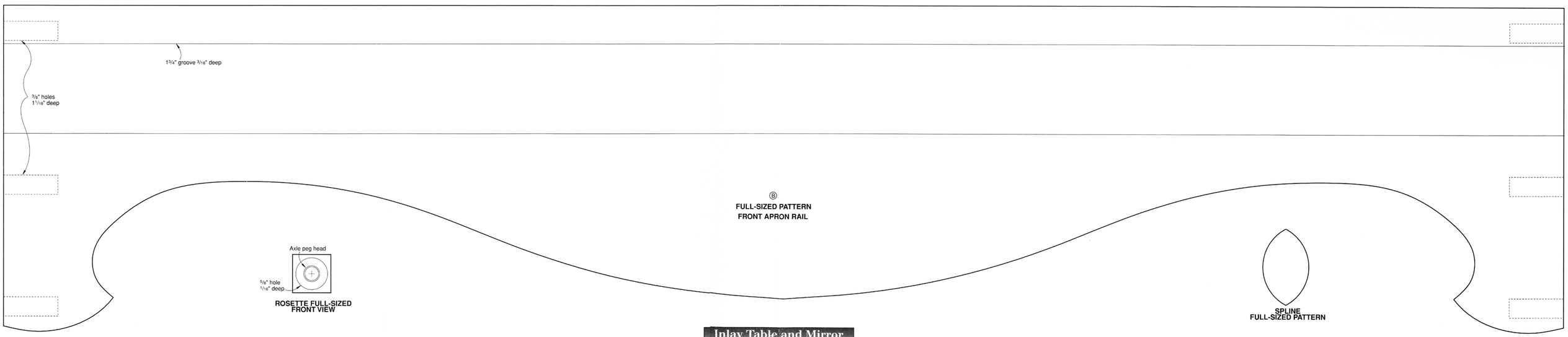


Scrollsawed Kid's Lamp
page 18-19

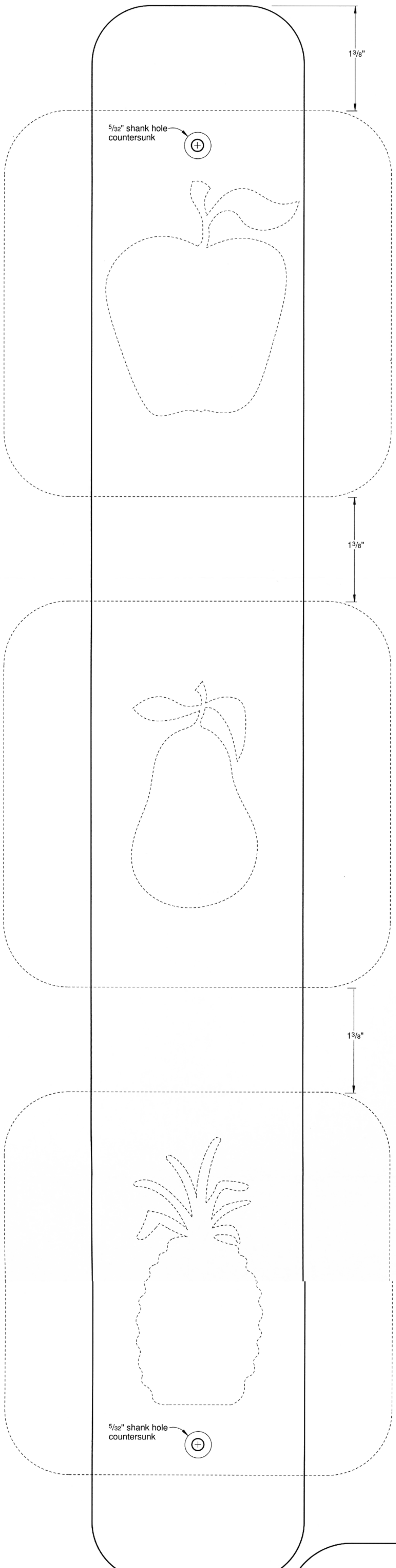


Pillar Clock
page 22-28

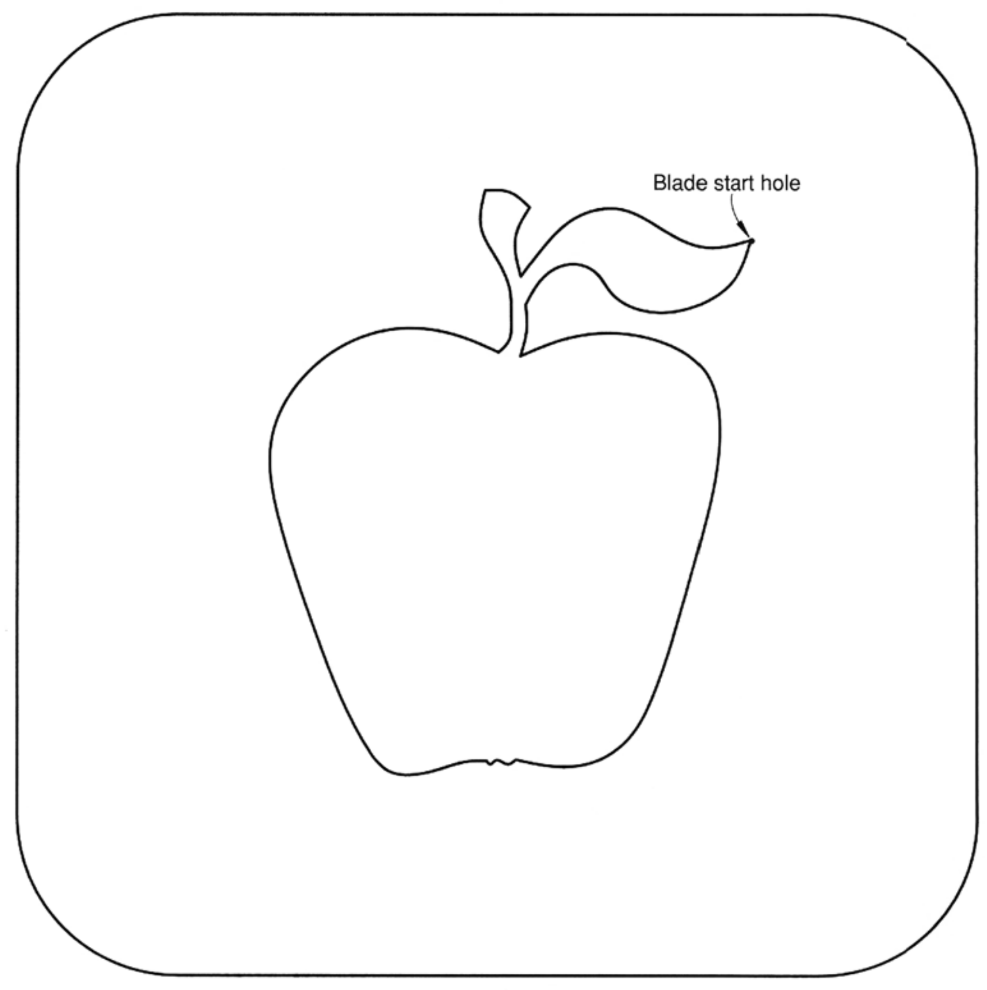


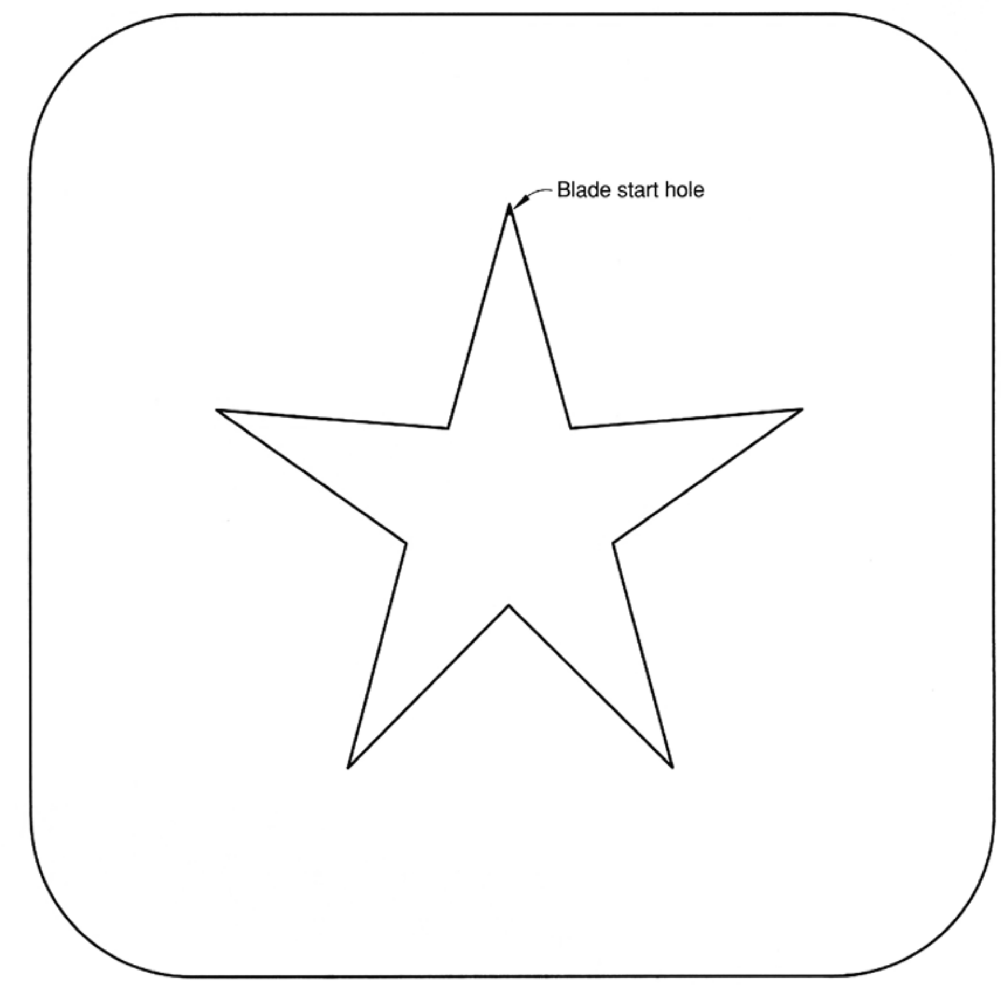


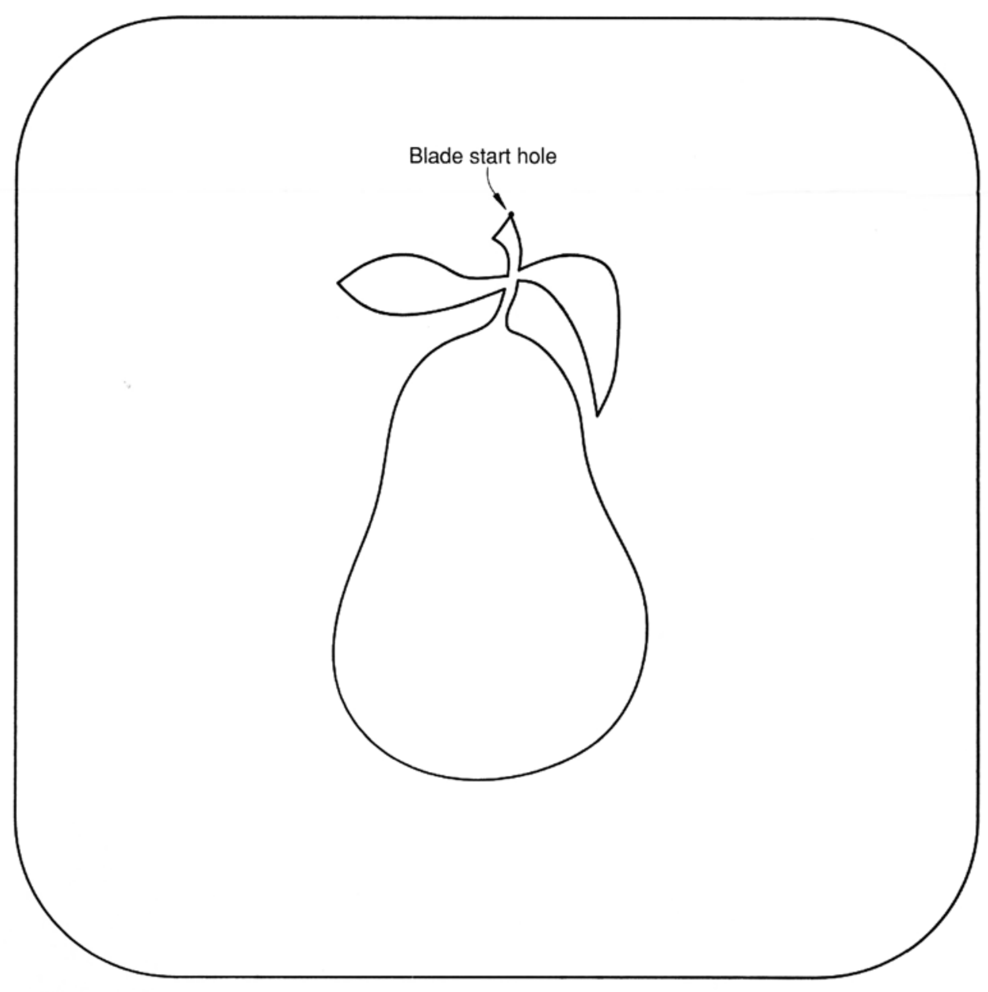
Inlay Table and Mirror
page 12-17

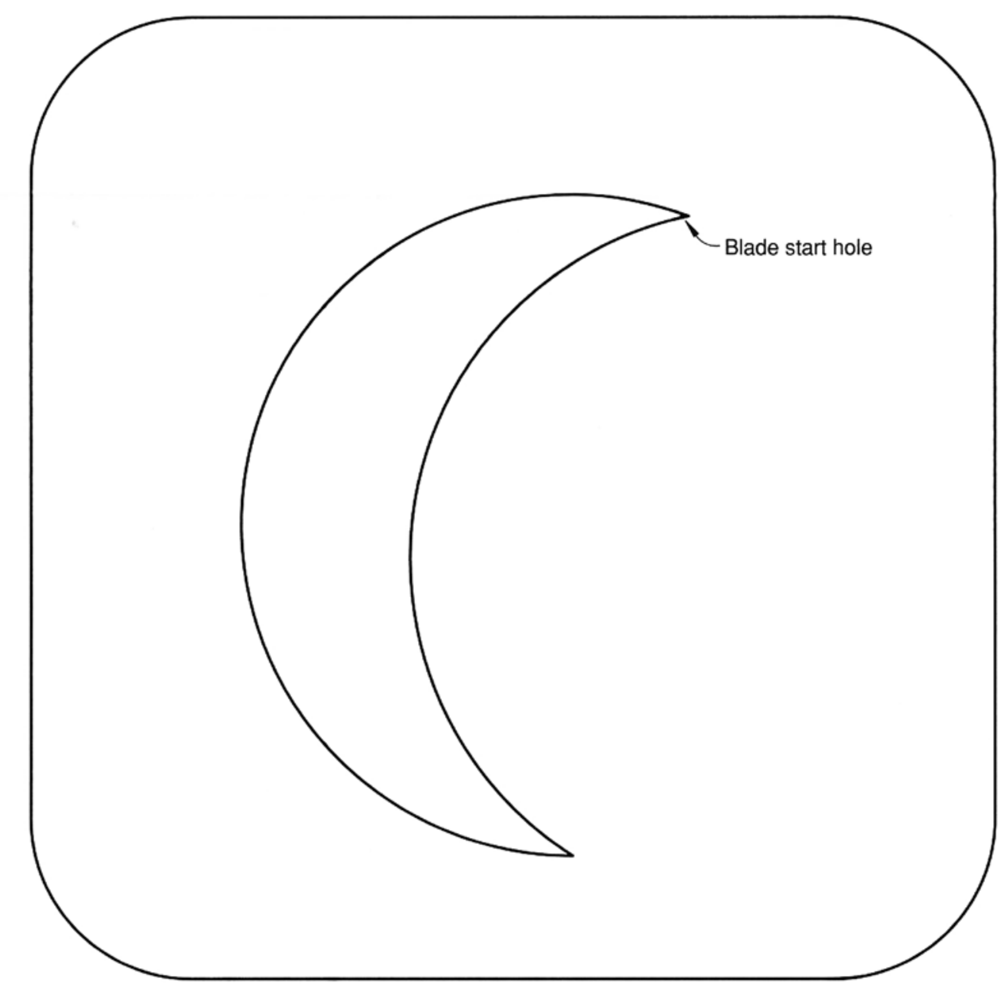


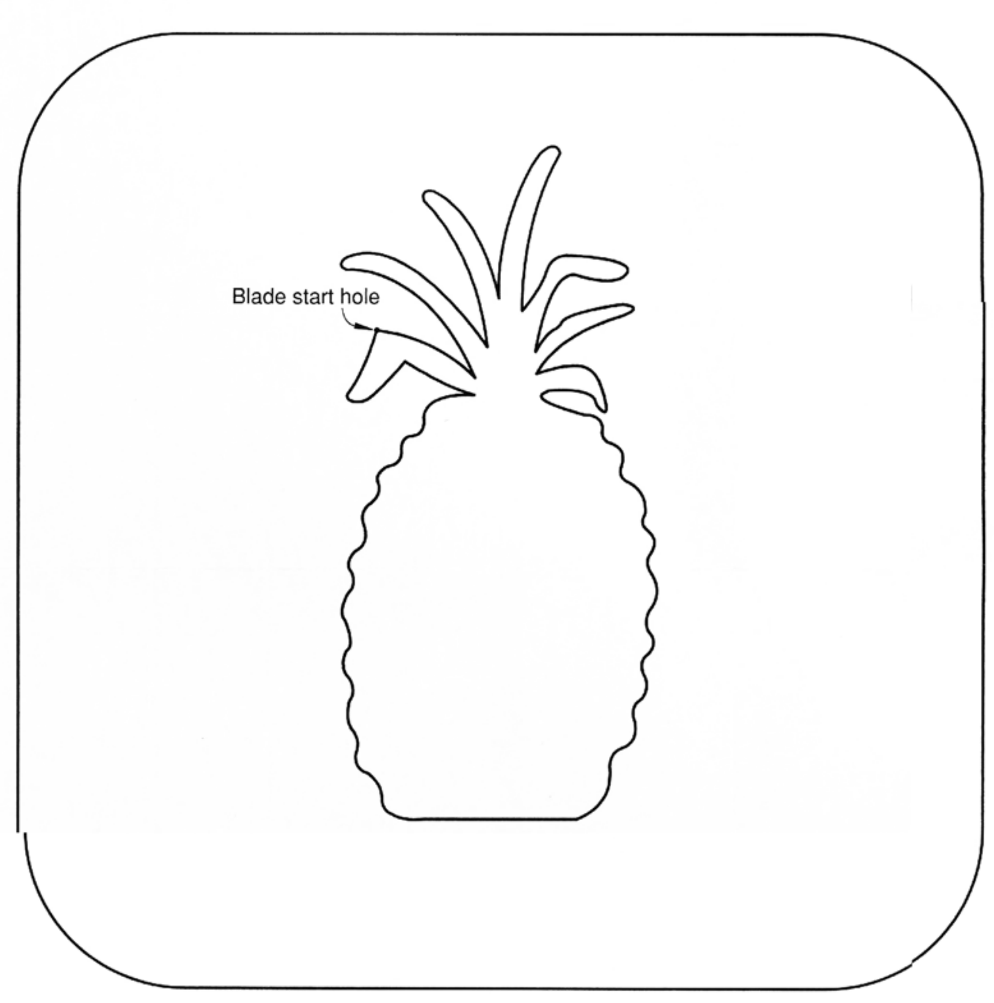
TRIVET PLACEMENT

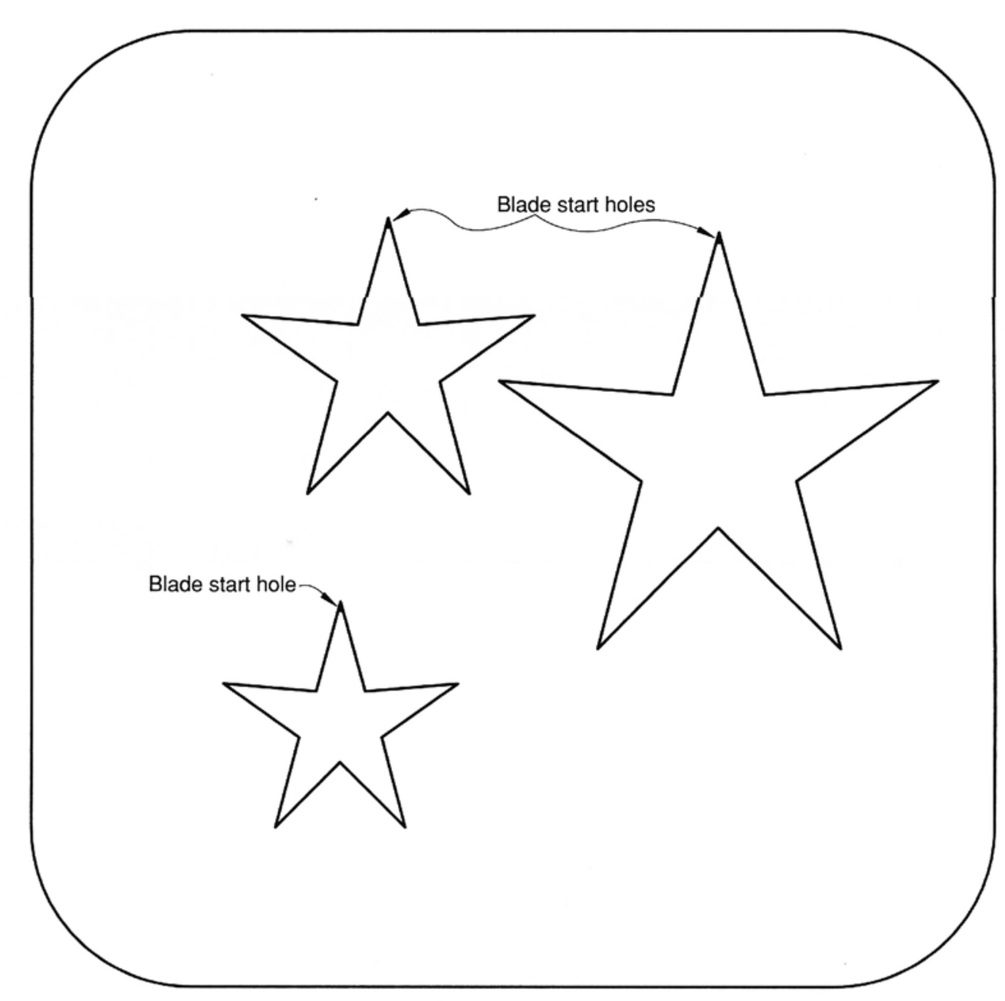












Fruit Trivets
page 20-21