

# SWEDISH WALL SHELF

By Dave Munkittrick



**H**ere's a charming shelf that's small enough to fit on any wall and can be built in an afternoon. It makes a great gift and it's easy to make a bunch all at once. While the design is based on a 19th-century Swedish-American clock shelf, its use today is limited only by your imagination. Kitchen spice shelf, photo display shelf, knickknack shelf—it's great for just about anything, except maybe encyclopedias!

## GETTING STARTED

You'll need a scroll saw to cut out the parts for this project. In a pinch a bandsaw could do the job, but you'll have a lot more sanding to do on the edges. Because the parts for this shelf are small enough to fit around knots and defects, you can save some money by ordering a lower grade of wood called #1 or #2 common. We used #1 common butternut for our shelf and paid \$1.98 a board foot versus \$3.24 for select grade. Plan on three board feet per shelf.

Photocopy the templates in Fig. B, then transfer the pattern to your blanks with a hot iron (Photo 1).

## MAKING THE PARTS

Lay out the shelf pieces on your wood (Photo 2). If you're thinking of making several shelves at once, stack up to three of your blanks using 1/2-in. square pieces of double-stick tape (see Sources, p. 54). Be careful when taking the stacked pieces apart after sawing because the double-stick tape is strong enough to take some wood with it. To avoid any problem, dribble some mineral spirits between the layers to dissolve the adhesive before separating them.

Cut out the shelf parts on a scroll saw (Photo 3). Finish-sand all your pieces before assembly. It's a lot easier to sand flat pieces now rather than trying to get into a bunch of small corners later. Begin with 120-grit paper and work your way up to 320-grit.

## PUTTING IT ALL TOGETHER

For maximum strength, the brackets (C in Fig. A) are held onto the wall panel (B in Fig. A) with screws. Nails are used to fasten the shelf (A in Fig. A) to the brackets because their holes are easily filled. Take care when nailing, drilling or driving screws because the shelf parts are thin and delicate. Go slow and use a light touch to prevent splits.

Assembly is an exercise in small-part management. Trying to do without clamps may seem quicker, but you'd have to be built like an octopus to pull it off. The entire assembly can be done with the wall panel lying flat on your

bench and using a simple 2x4 as a clamping aid. Here's how:

1. Square up the edges of a 2x4 and cut to 7 7/8-in., then clamp the brackets to the ends of the 2x4 (Photo 4).
2. Use a tape measure to center the brackets on the *back* of the wall panel, then mark their location (Photo 4).
3. Turn the wall panel over and center the bracket assembly on the *face* of the back panel. Place the shelf on your bench so that one bracket overhangs the edge (Photo 5).
4. Drill two 3/32-in. pilot holes and fasten with two #6 x 1-in. screws (Photo 5). To avoid stripping out the holes, drive the screws by hand.
5. Turn the piece around and repeat step 4 for the other bracket.
6. Slide the wall panel assembly back onto your bench. Center the shelf, top-side down, on the brackets. Then, trace the bracket's outline onto the shelf.
7. Turn the shelf right-side up and re-center the brackets. Then, use a clamp to secure the shelf to the 2x4 block (Photo 6).
8. Use the bracket outlines as a guide and drill two 1/16-in. pilot holes through the shelf into each bracket. Be sure to place the holes where the brackets are wide enough to accept the screw. Drill three holes along the back edge of the shelf for nailing the top to the wall panel.
9. Run a small bead of glue along the top edge of the back panel and nail the top to the brackets and wall panel (Photo 6).
10. Attach the valance (Photo 7).

## FINISHING TOUCHES

Use 320-grit sandpaper to do a little touch-up sanding and ease the edges. Now you're ready to finish. We used Watco medium walnut oil for the finish and Behlen Fil-Sticks to fill the nail holes (see Sources, p. 54).

Now, attach a couple wall hangers to the back and you're ready to hang your shelf! You just need to find the perfect spot, "...a little to your left...a little lower...try more to the right..."

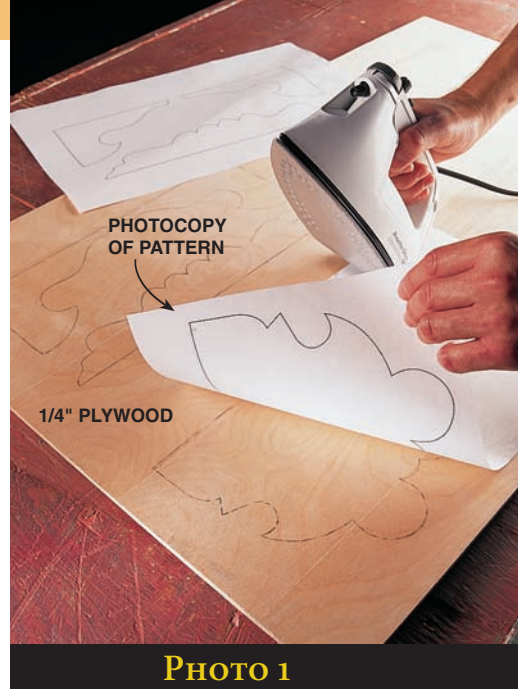


PHOTO 1

IRON ON A PHOTOCOPY of the patterns using a household iron set on high with no steam. If you're building several shelves, transfer the patterns onto a piece of 1/4-in. birch plywood to make reusable templates. Or, for a single shelf, spray some low-tack mounting adhesive (#SL66; \$6.45; Constantine's, (800) 223-8087) on the back of each paper pattern and stick it right onto the wood.



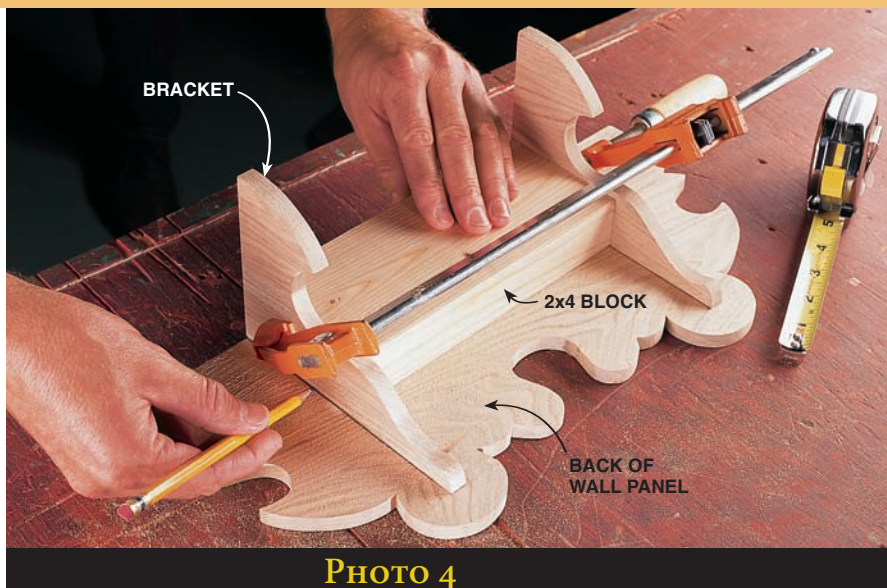
PHOTO 2

TRACETHE OUTLINE of your template onto the wood. Take advantage of grain patterns around knots that follow the shape of your piece.



**PHOTO 3**

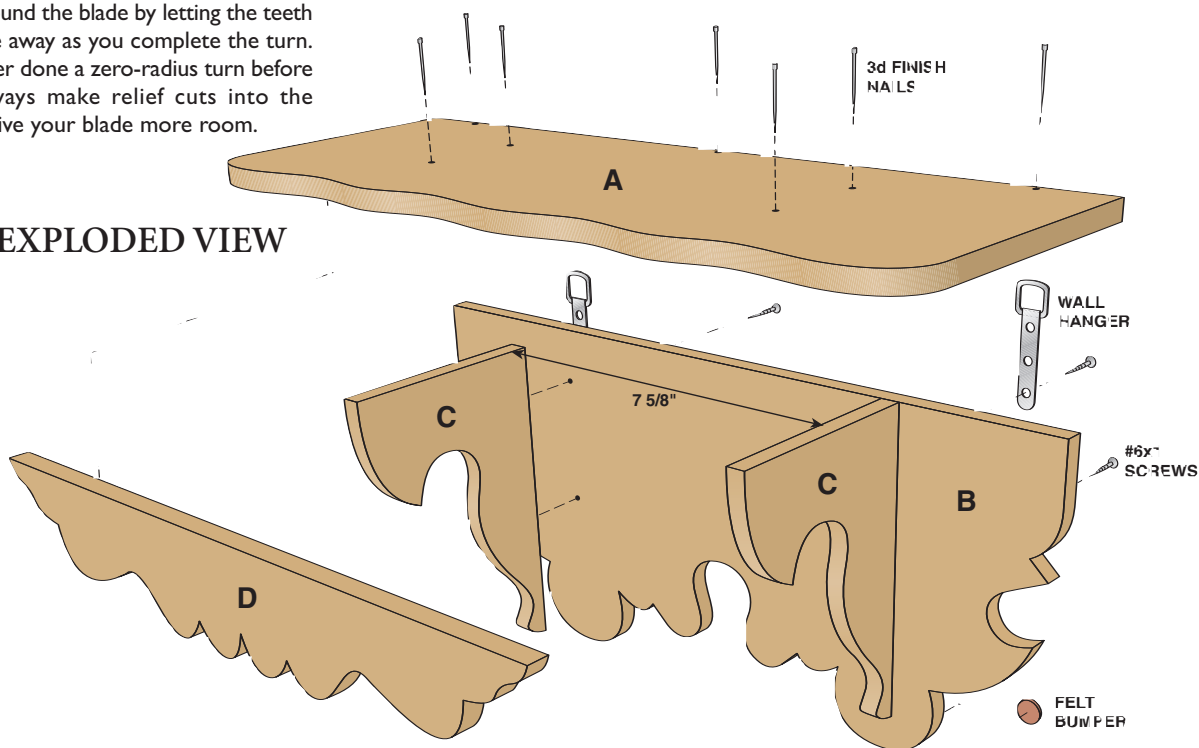
CUT OUT THE PIECES on the scroll saw. For tight inside corners like this use what's called a "zero-radius" turn. Here's how to do it: Cut all the way into the corner, then rotate the piece around the blade by letting the teeth slowly nibble away as you complete the turn. If you've never done a zero-radius turn before you can always make relief cuts into the corners to give your blade more room.



**PHOTO 4**

OUTLINE THE SHELF BRACKETS onto the **back** of the wall panel. This will show you exactly where to drill the pilot holes for the screws.

**FIG. A EXPLODED VIEW**



<b>CUTTING LIST</b>			
<b>OVERALL DIMENSIONS: 7 1/8" H x 16" W x 6" D</b>			
Part	Name	Qty.	Dimensions
A	Shelf	1	7/16" x 6" x 16"
B	Wall Panel	1	7/16" x 7" x 15"
C	Brackets	2	7/16" x 4 1/4" x 6 1/4"
D	Valance	1	7/16" x 2 1/8" x 12 3/4"
Materials: 3 board feet #1 butternut, approx. \$6.			

**SOURCES**

Double-Stick Turning Tape, 15D25; \$14.99; Wall Hangers, 27K03; \$2.75; Woodcraft Supply, (800) 225-1153. Watco Danish Oil, 19.31.49; \$7.99; Highland Hardware, (800) 241-6748. Behlen Fil-Sticks, FLS25; \$2.45; Constantine's, (800) 223-8087.

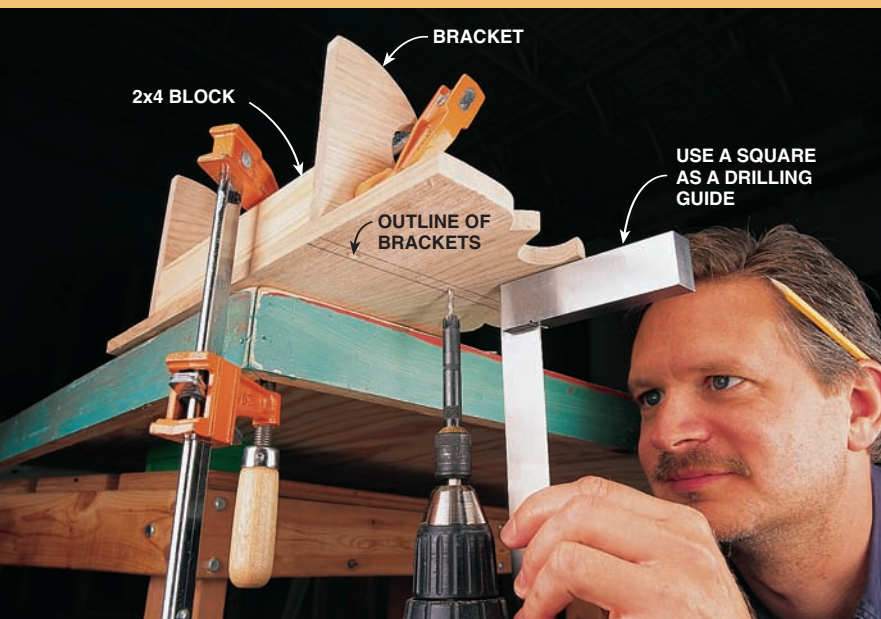


PHOTO 5

DRILL AND COUNTERSINK pilot holes through the back panel and into the shelf brackets. Use a second clamp to hold the assembly onto your workbench. Use a square to help guide your drill and place the holes where the brackets are widest (see Fig. A).

## FIG. B TEMPLATES

MAKE A PHOTOCOPY of these templates at 200 percent enlargement (you'll need a copier that handles 11 x 17-in. paper). Then, take the enlargement and cover one of the images with a piece of white paper and photocopy again at 200 percent (400 percent total enlargement). Remove the paper, cover the other image and photocopy. Set the tone scale as dark as it can go without causing gray shadows on the white background. This will ensure a heavy coat of toner for transferring onto your template stock.

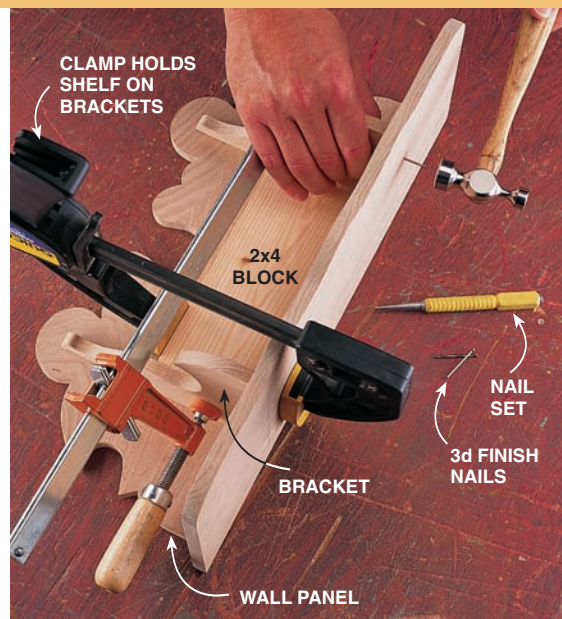
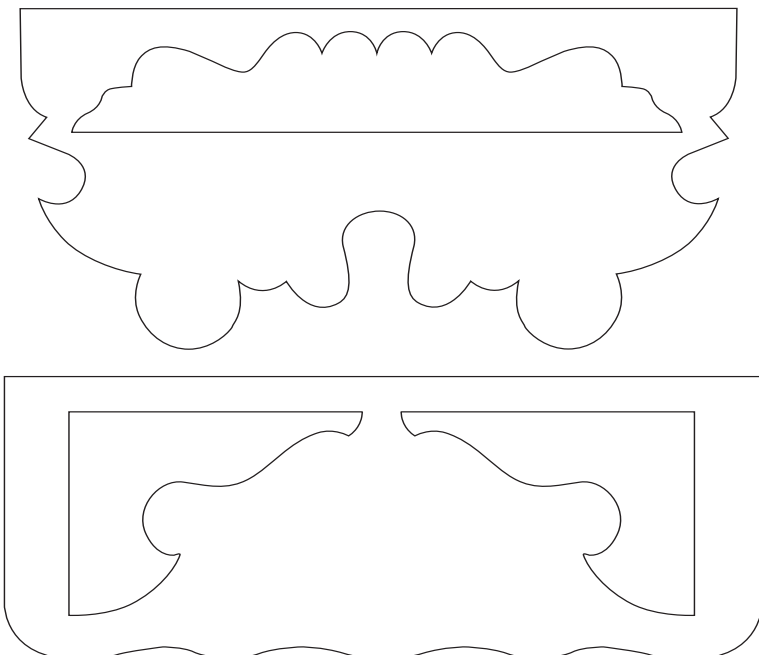


PHOTO 6

NAIL THE TOP to the brackets with 3d finish nails. Use a small hammer and tap (don't drive) the nail into the bracket. Use a nail set to countersink the nail heads.



PHOTO 7

CLAMP THE VALANCE onto the underside of the top with spring clamps. Use a thin bead of glue to minimize squeeze out. A damp cloth can be used to wipe away any excess glue before it sets. **AW**