

# Shaker Hanging Cabinet



Diminutive in size but large on techniques

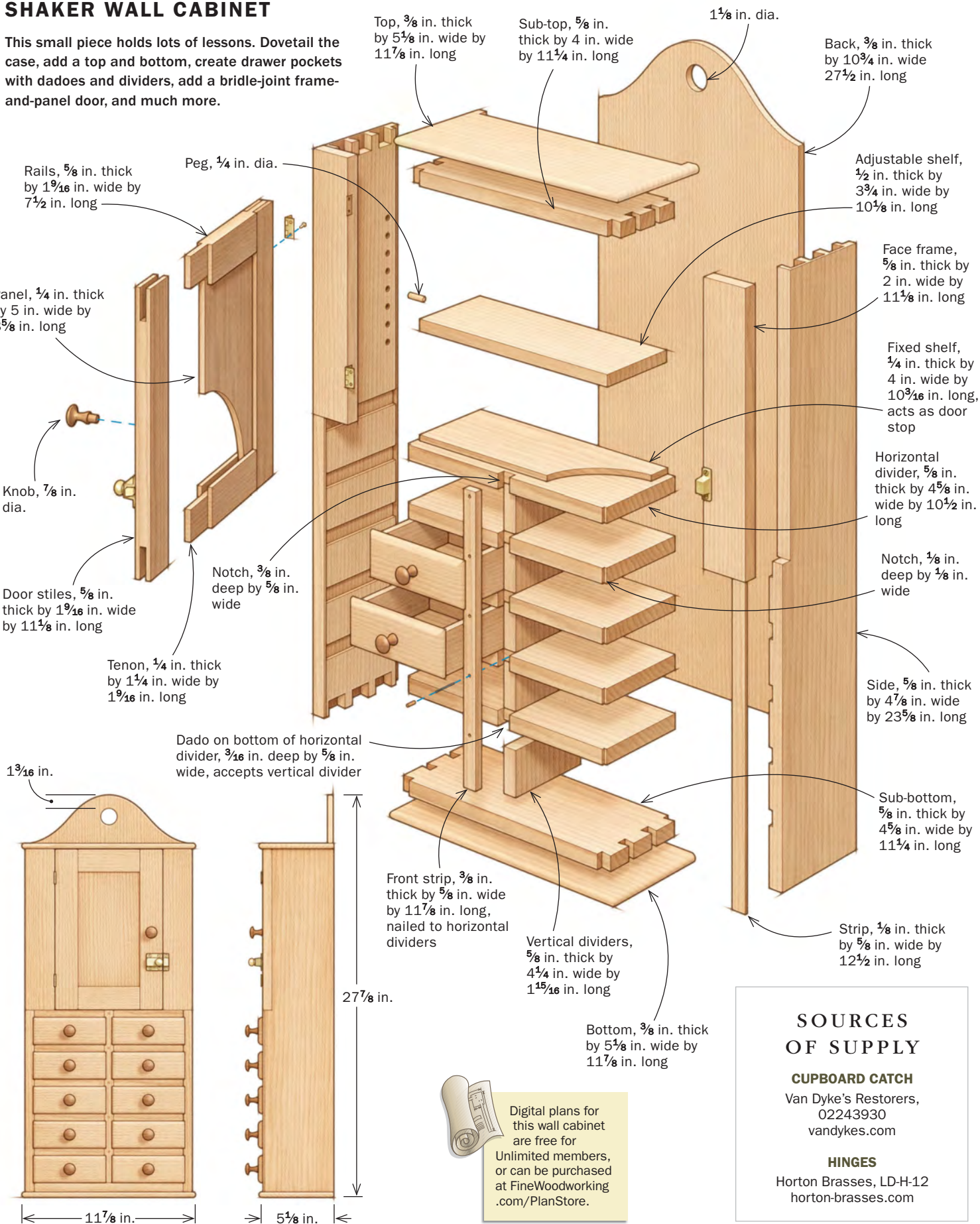
**BY CHRISTIAN BECKSVOORT**

I first saw this little Shaker wall cabinet on the cover of the book *Shaker Design: Out of This World* by Jean Burks back in 2009. It was reportedly made in Canterbury, N.H., somewhere between 1860 and 1880. There is no indication of what its intended use was. Years later, I tracked down the owner, who graciously gave me the overall dimensions. He also mentioned that the small drawers were nailed. That and the photo were all I had to go on when I started building. When working from a photo to decide how to build a piece, it's always a toss-up between best practices and a guesstimate of how the original was actually made. For this project, I used a combination of both.

Its manageable size and variety of techniques make this cabinet a great project for learning new skills and honing old ones. In one small piece you will cut dovetails, tackle case construction, add drawer dividers and face frames, build drawers, and construct a frame-and-panel door with bridle joints.

# SHAKER WALL CABINET

This small piece holds lots of lessons. Dovetail the case, add a top and bottom, create drawer pockets with dados and dividers, add a bridle-joint frame-and-panel door, and much more.



## SOURCES OF SUPPLY

### CUPBOARD CATCH

Van Dyke's Restorers,  
02243930  
vandykes.com

### HINGES

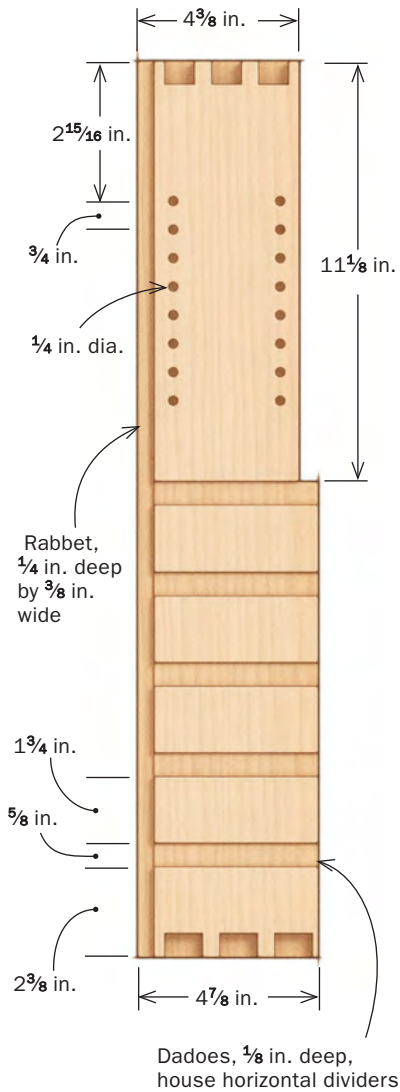
Horton Brasses, LD-H-12  
horton-brasses.com



Digital plans for this wall cabinet are free for Unlimited members, or can be purchased at [FineWoodworking.com/PlanStore](http://FineWoodworking.com/PlanStore).

# Case work

The infrastructure of this carcass is a sub-top and sub-bottom dovetailed to the sides, with a notch and dados cut into the sides.



## Connecting two sides to a sub-top and sub-bottom

After I milled the two sides and the sub-top and sub-bottom to size, I cut the notch in the sides to hold the upper face frame. Then I cut a rabbet in the sides to hold the back. I moved on to the half-blind dovetails that secure the sides to the sub-top and bottom. The last thing I did before I glued up the case was cut the dados for the drawer dividers. I did this on the table saw with a dado blade.



**Notch it off.** The notches at the top of the sides house the vertical face frames that flank the door. Create the notch with two cuts on the table saw, one ripcut and one crosscut.



**Rabbet for the back.** Two more ripcuts on the table saw yield the rabbets in the sides that the back will be set into.



**Half-blind dovetails.** Connect the sides to the top and bottom with half-blind dovetails. Becksvoort cuts tails first on the top and bottom, and then transfers that pattern to the sides and cuts the pins.

**Dadoes galore.** With the dado stack in the table saw use a miter gauge to cut five dadoes in each side for the horizontal dividers. Cut straight through the front of the sides; you'll cover the front of the dadoes later.



Finally, I glued the carcass together and glued thin face-frame strips on the lower half of the sides to cover the dadoes.

### Five horizontal and five vertical dividers

After sanding and assembling the case, I milled the five horizontal dividers (taking final dimensions directly from the case), dadoed them for the vertical dividers, and notched them for the front strip. On all five, both front corners were notched for the face-frame strip. I slid the horizontal dividers into position and installed the front strip over them.

Next, I measured for the five short vertical dividers. Then I cut and installed them from the back. For both the horizontal and vertical dividers I used a friction fit. Feel free to use glue if the parts are a bit loose. I drilled and pinned the horizontal divider to the verticals. Then I glued on the two wider, upper face frames, and planed and sanded the entire front.

### Add the top and bottom

The actual top and bottom both get a roundover profile on the front and sides. I shaped the profile by hand with a block plane and sandpaper. You also could cut the profile at the router table with a roundover bit. Glue the top and bottom onto the sub-top and sub-bottom. The way the cabinet is built, the sub-top acts as a door



**Glue up the box.** Glue the sub-top and sub-bottom to the sides. Be sure to check for square by measuring corner to corner. Both measurements should match. If they don't, adjust, reclamp, and recheck.



**Cover the dadoes.** Glue a thin strip of wood to the front of the sides where the dadoes ran through the front edge. Use stretchy green tape to apply pressure to the edging while the glue dries.



**Glue in the face frame.** The door attaches to a face frame, two vertical pieces that fit into the long notch at the top of the sides. Glue and clamp those in place.

# Divider and conquer

Five vertical dividers slide into dadoes in the five horizontal dividers to create 10 drawer pockets. A front strip locks the horizontal dividers together; the vertical dividers butt up against the strip.

## Horizontal dividers

**first.** Take the side-to-side measurements from the case. From the back, slide the horizontal dividers into dadoes in the sides. Each horizontal divider has a centered dado to accept the vertical divider below it, a notch in front to receive the continuous front strip, and notched front corners to fit around the thin face-frame strip.



## Front strip.

From the front of the case, measure, cut, and pin or nail and plug the front strip that locks all the horizontal dividers together.

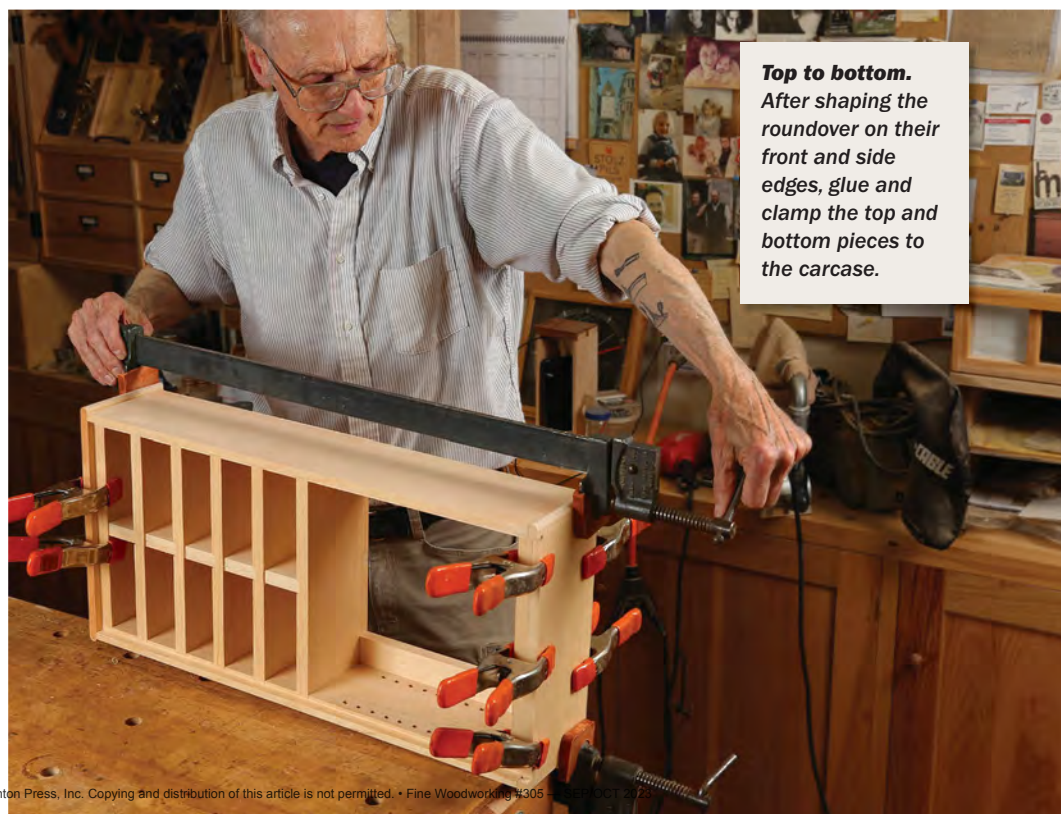


## Bridle joint your way to a frame-and-panel door

The small door at the top of the cabinet is frame-and-panel. I decided on full bridle joints in all four corners and cut them on the table saw. Once the door was glued, fitted, sanded, and hinged (Horton Brasses, LD-H-12), I added the small cupboard catch (Van Dyke's Restorers, 02243930). I had to remove the clear coat finish on the catch, and, as I did with the hinges, darken it with Antiquing Solution (Constantine's Wood Center).



**Add vertical dividers.** From the back of the case, slide the vertical dividers into place in the dadoes in the horizontal dividers. Be sure the vertical dividers butt tightly up to the front strip.



**Top to bottom.** After shaping the roundover on their front and side edges, glue and clamp the top and bottom pieces to the carcass.

# A petite door

Becksvoort used bridle joints and a flat panel to create the door at the top of the cabinet.

## Easy bridle joints.

At the table saw, Becksvoort cuts the shoulders of the rail tenons with a miter gauge, then cuts their cheeks with the workpiece held upright in an over-the-fence jig. He uses the same jig to cut the slots in the stiles that receive those tenons. He rips the panel grooves on the table saw also. Once all the joinery is cut, he'll glue up the frame with the panel in place.



**Hinge the door.** Locate the hinges where you want them on the door, score the location with a knife, and cut the mortise.



**Transfer the hinge location.** Set the hinged door in place on the case. Transfer the hinge location to the face frame. Cut the mortise and screw the hinged door in place.

The original cabinet had a small metal hanger. I decided on a more traditional approach, making a curved wood hanger that is incorporated into the back with a hole for hanging on a peg. I used quartersawn pine for the back. I installed the back into the rabbets in the sides, and attached it with screws.

## Lock in the drawers

As I mentioned previously, the original drawers were merely nailed together. I prefer lock corner

# Back panel does double duty

The back panel sits in the rabbet in the sides, top, and bottom. A curved top with a hole protrudes above the case and is used to hang the cabinet on a peg board.



**Cut the curve.** Becksvoort uses a template to trace the curved top shape onto the quartersawn pine back panel. After he cuts the shape on the bandsaw, he drills the hanging hole on the drill press.

## Install the back.

Fit the back into the case, hand planing to sneak up on the fit if necessary. Then predrill and screw the back to the case.



sawkerf joints, using  $\frac{5}{16}$ -in. stock for all four pieces. The sides have a sawkerf, while the front and back are rabbeted to create a tongue that fits the kerf. It takes a bit of figuring and adjusting at the table saw but it works well and looks good.

For the drawer bottoms, I ran a  $\frac{1}{8}$ -in. groove along the inside lower edges of the sides and fronts. Instead of grooving the back and trapping the bottom in the glue-up, I reduced the height of the back so it stops where the groove in the sides and front start. This allows me to slide the bottom in from behind and tack it in place with a bit of glue. Once the drawers were glued and fitted, I added false fronts with quarter-round edges and an overhang on the top and both sides.

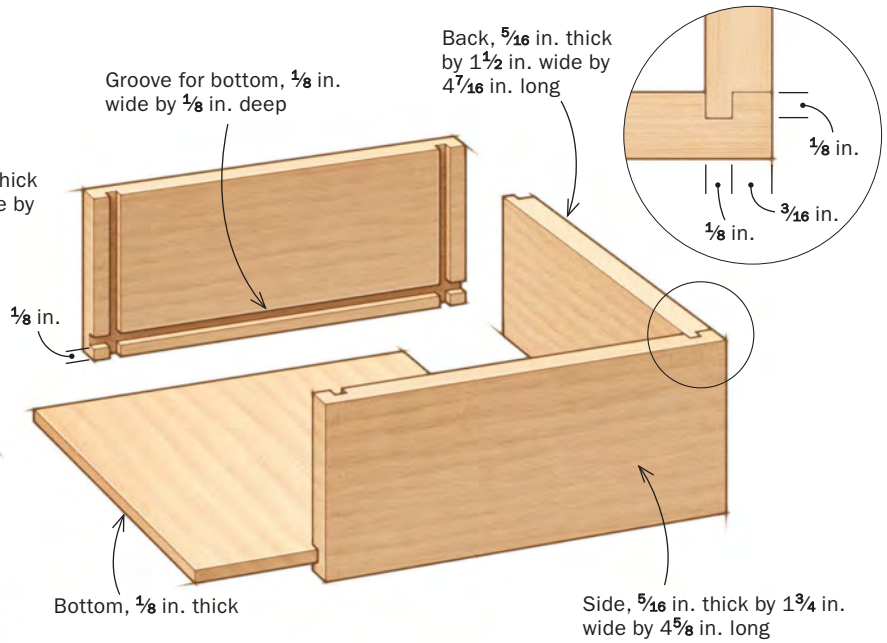
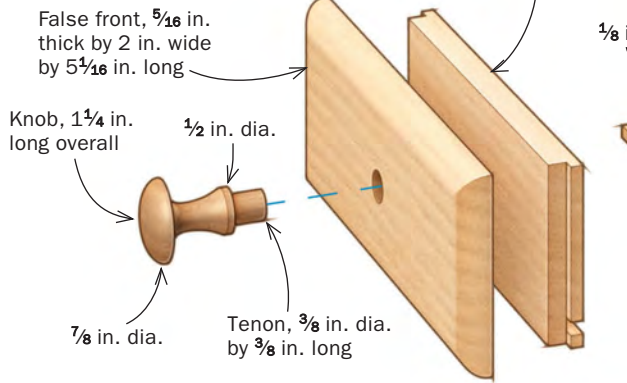
After turning eleven  $\frac{7}{8}$ -in.-dia. cherry knobs, drilling and installing them, I finished the entire exterior with Tried & True Varnish Oil. A few months in the sun, and the pine will begin to darken. □

*Christian Becksvoort is a longtime contributing editor and expert in Shaker furniture.*



# Ten tiny drawers

While the drawers in the original Shaker piece were nailed together, these drawers employ lock corner sawkerf joints, using  $\frac{5}{16}$ -in. stock for all four pieces.



## Online Extra

To watch how Becksvoort turns traditional Shaker knobs, go to [FineWoodworking.com/305](http://FineWoodworking.com/305).



**Sawcuts galore.** The drawer sides have a sawkerf, while the front and back are rabbeted to create a tongue that fits the kerf. This system, once you have it down, makes easy work of building 10 drawers.



**Add false fronts.** After the glue has dried on the drawer box assemblies, glue the drawer fronts to the boxes. Your clamps can do double duty if you gang up two boxes at a time and clamp them face to face.



**Attach the knobs.** Use a Forstner bit at the drill press to drill the mortise for the drawer knobs (right). Glue and clamp a knob onto each drawer (above).

