



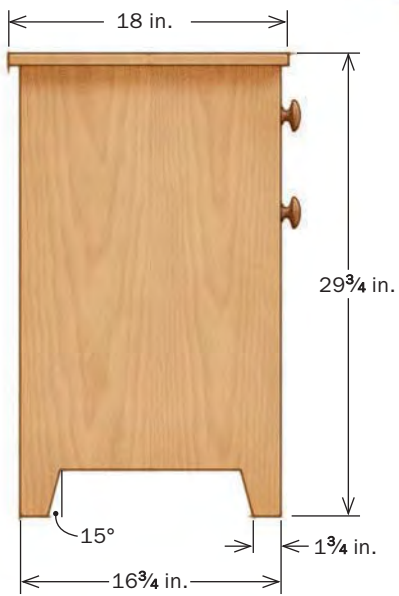
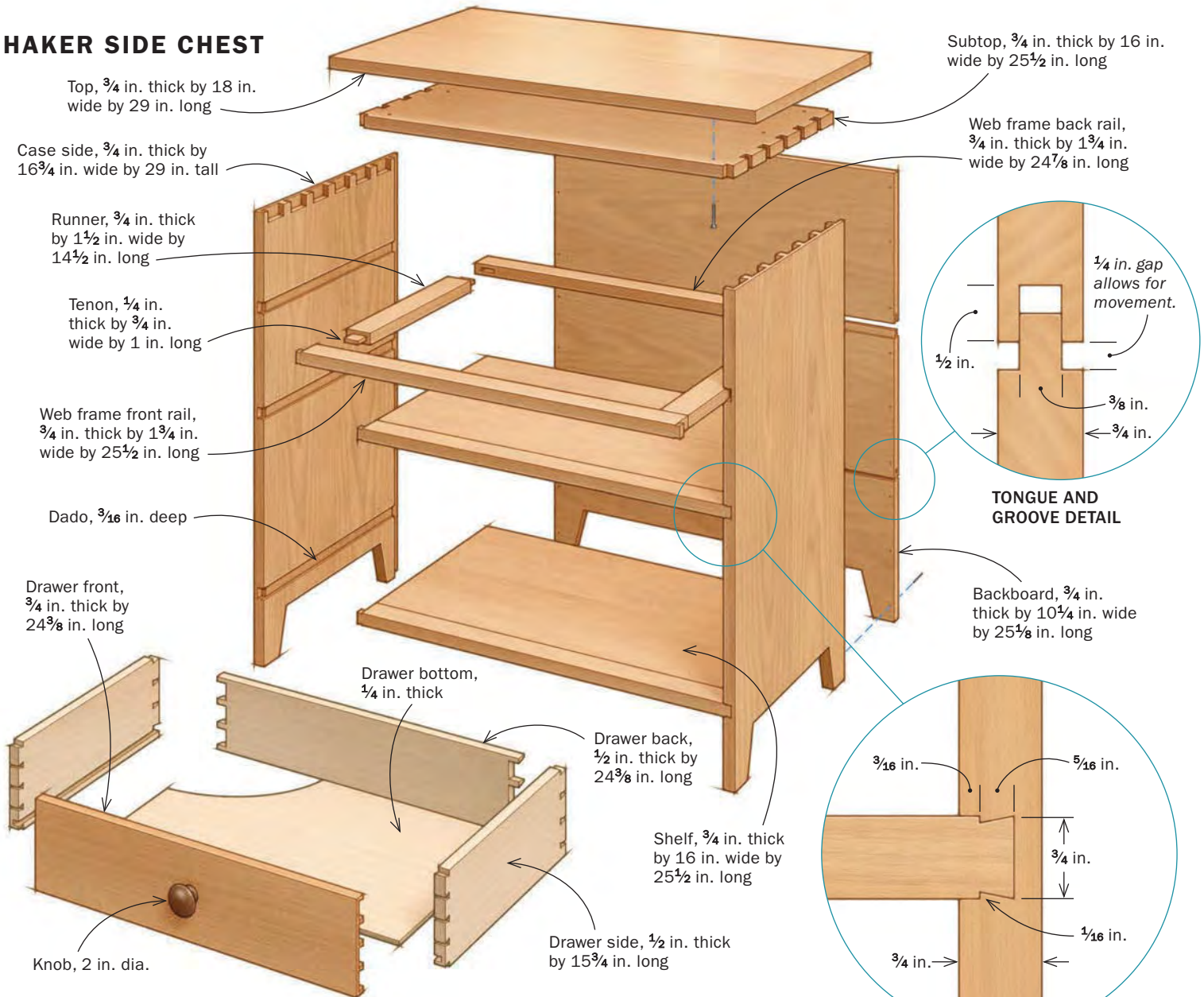
The original version of this pine side chest was made in the Mt. Lebanon Shaker community, probably in the mid to late 19th century. It's a small, easy-to-build piece, just right for next to the couch, next to the bed, or in the hall. Looking at the photo, the construction seems fairly straightforward: nails, dadoes, and dovetailed drawers. However, as with any piece re-created only from a photo, it's a guessing game choosing between what is known, what is visible, and current best

Shaker Side Chest

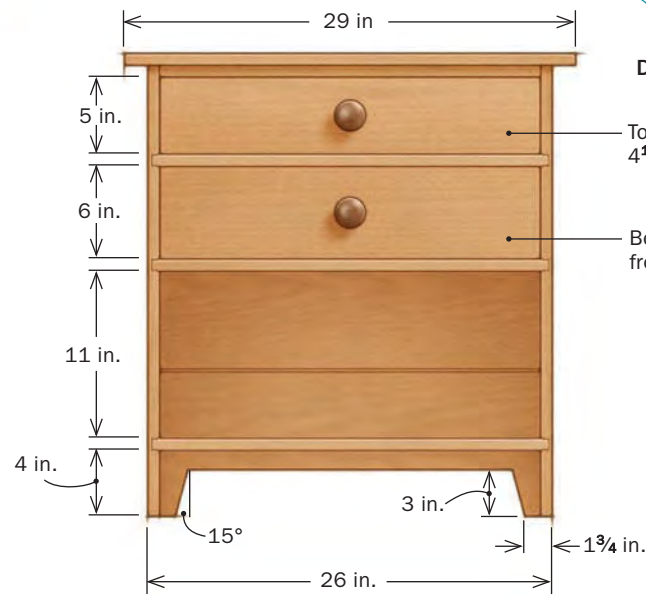
Bottom shelf adds interest and utility to a classic design

BY CHRISTIAN BECKSVOORT

SHAKER SIDE CHEST



SIDE VIEW



FRONT VIEW

Top drawer front, $4\frac{15}{16}$ in. tall

Bottom drawer front, $5\frac{7}{8}$ in. tall

Digital plans for this side chest are free for Unlimited members, or can be purchased at FineWoodworking.com/PlanStore.

Prepare the sides

This solid-wood case piece lies somewhere between a table and a chest of drawers. The two sides house the joinery for the drawer dividers, shelf, back, and subtop. Once that has all been cut, glue the subtop to the sides, and you are well on your way.

Wide sides. The sides are almost a foot and a half, so more than likely you'll have to edge-glue your stock to get that width. Set up on a flat surface, use a thin layer of glue, and clamp the boards together tightly. Use clamps at the ends of the boards to keep the boards flush with one another.

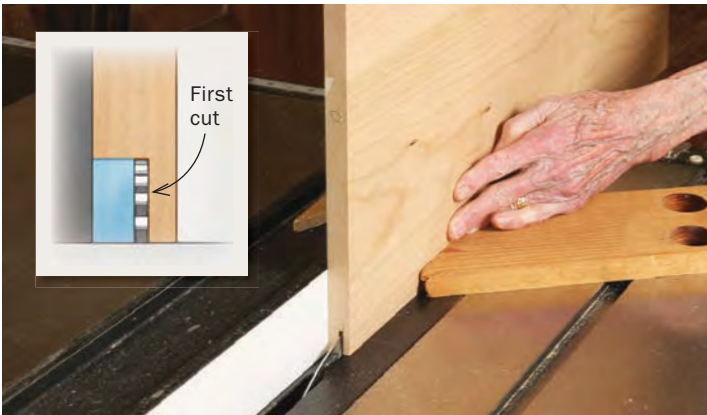


practices. I made this version out of cherry, using my usual construction techniques. Though it's not in keeping with the original Shaker design, I decided to make the piece even more useful by adding a shelf under the drawers. Perfect for that stack of books in your reading queue.

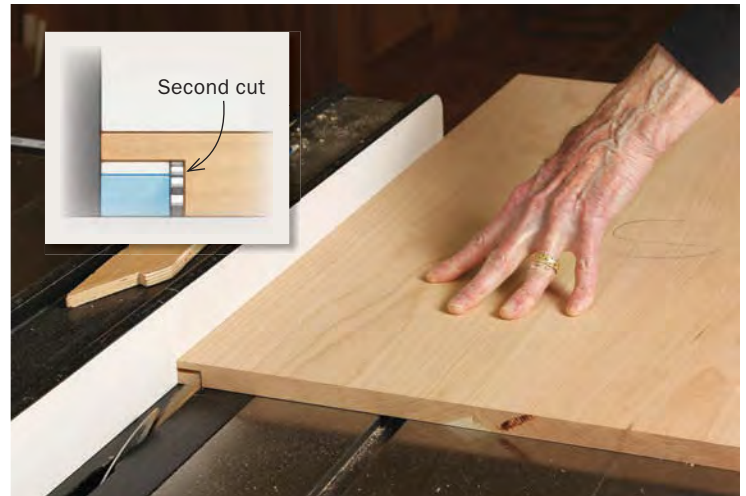
Side panels

The side panels are where the action is in this piece. They have integral legs cut into the bottoms, they hold all the joinery for the case, and they are nice wide panels that show off the grain you choose.

The top, sub-top, shelf, and side panels are each edge-glued from two boards. After gluing them up—matching grain as best I could—I cut them to size. To cut the rabbets in the sides for the back, I made a vertical and a horizontal pass over the table saw. A router, dado blade, or even a rabbet plane will also work. Then I made the cutout at the bottom of the side to create the legs, laying out the angles with



Rabbets for the back. Two cuts on the table saw are all it takes to create the rabbet on the back edge of the sides to accept the tongue-and-groove backboards.



Integral legs. After laying out the legs on the bottoms of the sides, carefully cut them out on the bandsaw.



Triple dados. At the table saw, with a dado blade, cut the three dados on each side. One dado for the web frame between the drawers, another for the divider beneath the two drawers, and a third for the shelf. Shallow dovetail sockets will be cut later at the front of each dado.



Clamping block does double duty. With spring clamps, attach a block across the dovetails at the top of the sides. This protects the surface of the work while acting as a clamping caul.



Side to subtop connection. Apply glue to the pins and tails and set the subtop onto the sides. Hand-screw clamps on the floor hold the sides upright during assembly.

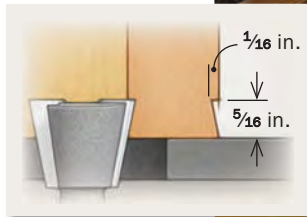
Dovetailed stretchers add strength

For structural integrity at the front of the case, Becksvoort adds narrow dovetailed stretchers to the shelf and the dividers. To simplify making them he dovetails one wide stretcher and rips it into three narrower ones. Two get glued to solid panels, the third becomes the front rail of the web frame.

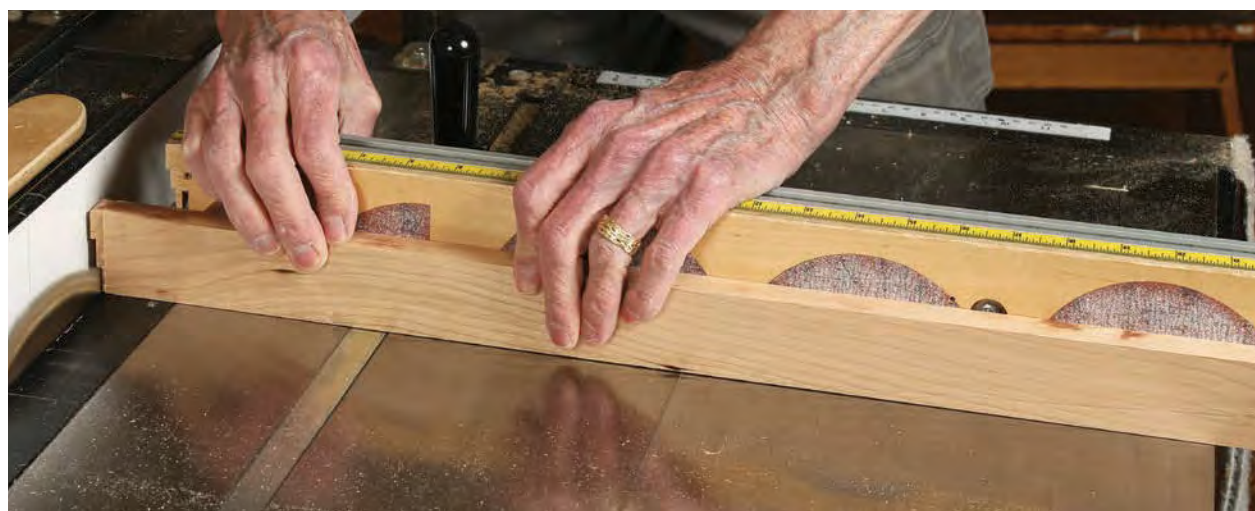
Measure off the carcass. To make the dovetailed stretchers, start by putting a dovetail layout line on the case sides, just outside the dado. Set the stock (wide enough for three stretchers plus the sawkerfs to cut them apart) on the carcass. Rest one end at the dovetail layout line and mark the distance at the dovetail line on the opposite side. Also transfer the marks where the dados end.



Cut the dovetail. At the router table, with the stretcher stock held upright, cut dovetails on both ends.



Separate the stretchers. With the dovetails cut you can rip the stock into three separate pieces.



Cut the notches. Still at the table saw, notch back the dovetails. Cut the shoulders of these notches on the dado layout line.

Sockets are next



Mark in place. Place the stretchers into the dados. The shoulder-to-shoulder distance of the stretchers should fit nicely between the dados, and the dovetails should overlap the front edge of the case sides. Knife around the dovetails to transfer their location to the sides.

a bevel gauge and cutting on the band-saw. Next, I routed the three dados across each case side for the drawer dividers and the shelf.

I used half-blind dovetails to connect the sides to the subtop and give the case maximum strength and stability.

Drawers and case

The upper and lower drawer dividers and the shelf are set in dados, and at the front edge all three have shallow dovetails that lock them to the case sides. I made the dovetailed portions of them by dovetailing the ends of a wide blank, which I ripped apart into three narrow strips, adding one to the front of each member.

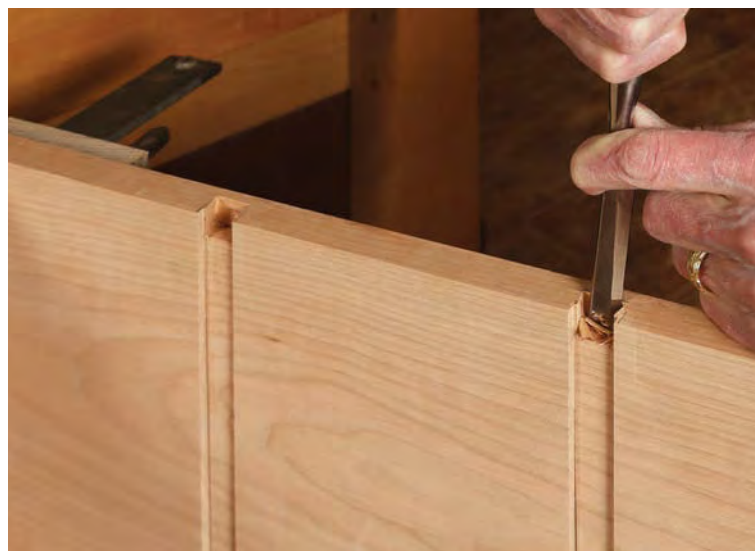
The divider beneath the lower drawer is a solid panel like the shelf. For both of them, I made a solid panel and glued a dovetailed strip to the front. After sliding the panel into the dados I traced around the dovetails. Then I removed the panel and cut the sockets to house the dovetails.

The divider between the two drawers is an open web frame; its front rail is one of the dovetailed strips. The frame is mortised and tenoned on all four corners but I used glue in the front only. This allows for wood movement on the sides of the case, as the non-glued tenons are able to telescope in and out, depending on the seasons.

Assemble the case from the top down. The half-blind subtop gets glued to the



Clean out the socket. Waste away most of the socket with a trim router, by eye. Clamp a block to the case side to create more support for the router. Chisel to the line to clean out the dovetail socket.



Divide and conquer

With the half-blind dovetails connecting the subtop and sides glued up and cured, assembly proceeds with the two drawer dividers: first the open web frame, then the solid panel. And last comes the shelf.



Chop the mortises. The front rail of the web frame is dovetailed at the ends. Before you glue it to the sides you must cut the mortises for the side pieces of the web frame. Waste away most of the mortise on the drill press, and then clean up with a chisel. Once that's done, glue the stretcher in place in the front of the case.



Tap the web frame together. After gluing the web frame's dovetailed front rail to the sides, turn the case face down and tap the rest of the web frame together, but don't glue it. This allows for wood movement. With the back in place the web frame won't go anywhere. A spacer at the bottom keeps the sides from tipping inward.

Stretcher meets panel.

panel. Glue the dovetailed stretcher to the front of the divider. Use green tape to apply pressure. A spring clamp at the joint keeps the two pieces flush with each other.

PANELS



sides first, followed by the web frame, the solid divider beneath the drawers, and the shelf. I made sure the case was square, and then sanded the sides.

Add the lower divider. From the front of the case put glue in the dovetail sockets and slide the solid divider into place. Apply clamping pressure to the front where the dovetails are glued in.



Add the back and top it off

I used horizontal tongue-and-grooved boards for the back, like the original. The bottom board was cut out to match the sides. The top board was glued to the subtop, while the other boards were nailed into the back rabbets.

I cut the case top to size, eased its edges, and attached it with screws through the subtop. Both drawers were dovetailed and set flush with the face. My version has walnut knobs, like the original, for just a hint of authenticity. I finished the piece in oil, my usual. □

Christian Becksvoort is a furniture maker in New Gloucester, Maine.



Add the shelf. Apply glue to the dovetails, then use a block to tap the shelf into place until it's flush with the sides. Apply clamp pressure across the sides over the dovetail joint.

