

Shaker Berry Box

Shakers made these little, clear white pine carriers for gathering raspberries, strawberries, blueberries, and blackberries. When you're not hunting berries, you can use them around the house to hold mail, trinkets, or any small treasures. The design really lends itself to making multiples. They are fantastic gifts whether they are used to hold treasures or are the treasures themselves.



A basic box

Since the sides are all $\frac{1}{8}$ in. thick, you can easily resaw them from thicker stock, using either the bandsaw or tablesaw with a thin-kerf blade. All four corners of the box are finger-jointed, which can be tricky to set up, but once you get the hang of it you'll love how easy it is and how nice it looks.

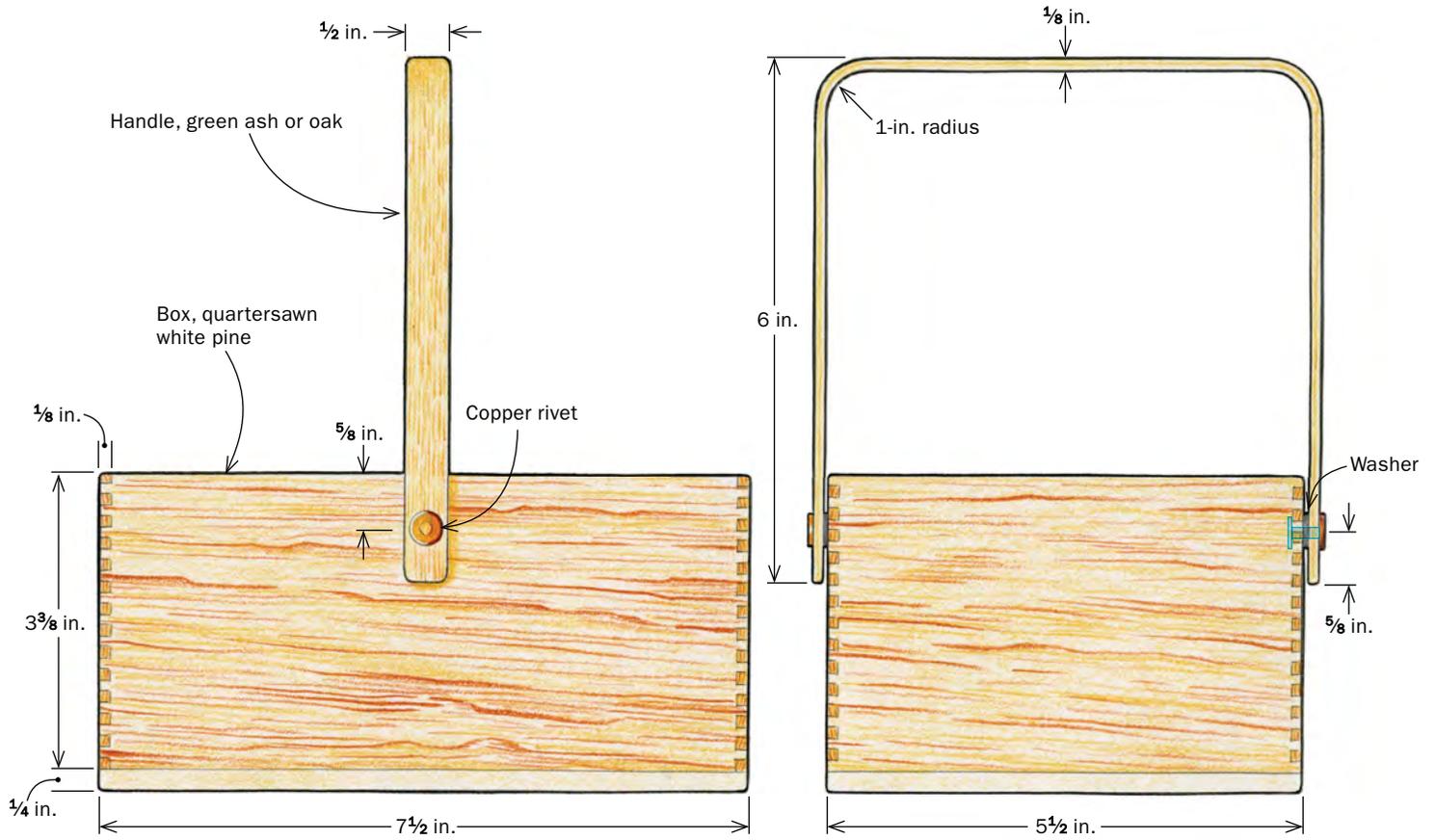
First, to make nice-fitting finger joints you should have a flat-top blade (Forrest WW10401125). Regular alternate-top-bevel blades will leave tiny cat ears on each edge of the cut. Clamp a

plywood auxiliary fence to your miter gauge, extending about 4 in. past the blade. Set the blade height to $\frac{5}{64}$ in., which will make your finger joints about $\frac{1}{64}$ in. proud. Make one cut through the fence, and remove it. Cut a piece of hardwood exactly $\frac{1}{8}$ in. thick by $\frac{5}{64}$ in. wide by $1\frac{1}{4}$ to $1\frac{1}{2}$ in. long. This will be your registration pin. Glue it into the sawkerf you just made in the fence, positioning it flush in the back and extending forward toward the sawblade. To establish the spacing between the finger-joint cuts, I place a $\frac{1}{8}$ -in. chisel between the registration pin and the right side of the sawblade tooth.

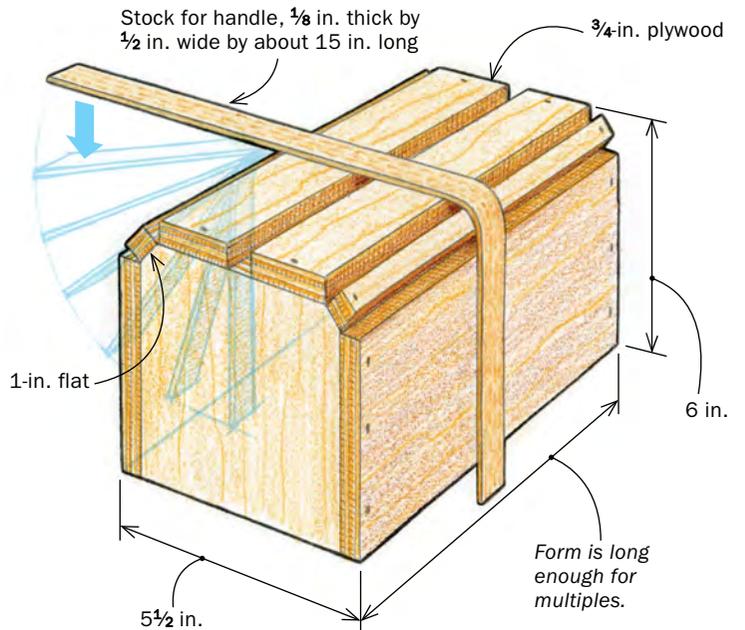
Next take two test pieces, with the grain going vertically, and tape them together. Hold them upright against the fence, slide them over to the pin, and make the first sawkerf. Now fit the sawkerf over the pin. It should fit snugly, with no play. Make the second cut, and repeat until you reach the other end of the scrap pieces. Remove the tape and see if the finger joints interlock properly. If the fingers are too loose, move the pin away from the blade a slight amount and re-clamp. If the fingers are too tight, move the pin slightly closer to the blade. Once you have it set up, you can make finger joints all day long.

A small project with minimal materials but a big payoff

BY CHRISTIAN BECKSVOORT



BUILD A BENDING FORM



Small-scale finger joints for a diminutive box

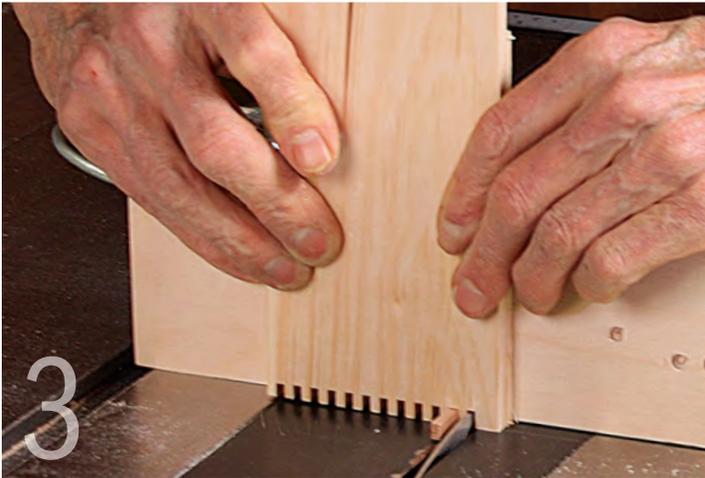
Though this box looks delicate because of its thin elements, it is quite sturdy. The finger joints create dozens of long-grain to long-grain glue surfaces, and the proportions of the tiny fingers add a beautiful and subtle detail to a spare design.



1 **Make an auxiliary finger-joint fence.** Clamp a piece of $\frac{3}{4}$ -in. plywood to the miter gauge, and use a flat-top blade to make one cut through the plywood. Glue in a hardwood pin the thickness of the sawkerf, locating it flush in the back and extending about $1\frac{1}{2}$ in. at the front.



2 **Position pin fence on the miter gauge.** Becksvoort uses a $\frac{1}{8}$ -in. chisel to align the auxiliary fence on the miter gauge. He sandwiches the chisel between the right side of the blade tooth and the registration pin in the fence. Then he clamps the auxiliary fence to the miter gauge.



3 **Do a test run.** Tape two pieces of scrap together. To make the first cut, hold the pieces vertically against the fence, butted up to the registration pin. After the first cut, slide the pieces to the right so the first cut straddles the pin. Make the next cut and repeat across the ends of the workpieces. Pull them apart and make sure everything fits correctly. There will be a $\frac{1}{8}$ -in. offset on the top and bottom.



4 **Stack and cut.** With the spacing figured out, you can quickly cut all the parts. You can do them one at a time, but for speed and efficiency Becksvoort stacks and tapes all four sides for one box together and cuts them all at once, one end at a time.

Glue the box



Glue and clamp. Run a thin bead of glue along the edges, and use a wide brush to get the glue between all the little fingers. Check for square and clamp until dry. Becksvoort applies pressure vertically rather than along the sides of the box.

You can cut each end of each side individually, but I gang all four pieces with one end flush and tape them together. Cut the kerfs in all four at once, flip, re-tape, and repeat with the other ends. If your cuts were precisely $\frac{1}{8}$ in. and if your stock was precisely $3\frac{1}{2}$ in. wide, then you'll end up with a finger at both ends. You can either glue the parts together, offset by one finger, and plane, joint, or saw off the $\frac{1}{8}$ -in. strips afterward, or you can trim the sides before you glue them.

A simple bottom

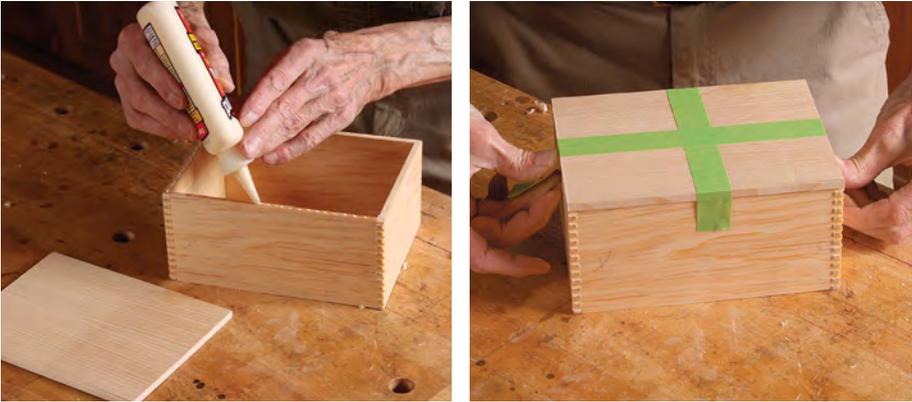
Quartersawn white pine is the most well behaved of all native American woods. The Shakers used it for most all their oval box bottoms and lids, as well as the bottoms of lap desks, which were up to 12 in. wide. And I use it for this kind of work. I glue the thin, quartersawn bottoms directly onto the bottom of the box without worrying about movement.

It's easiest to go to the lumberyard and search through the stacks for quartersawn planks, looking for pieces where the growth rings on the end are perfectly perpendicular to the face of the board. Or you can make your own. Start with a piece of $8\frac{1}{4}$ flatsawn white pine, and make marks at both ends where the growth rings are most perfectly parallel to the face. Connect those points with a straight-edge and bandsaw along that line. Plane or joint the bandsawn edge and saw off whatever



Plane away the offset. Once the box is glued together, Becksvoort planes the top and bottom so all the sides are flush.

Add the bottom



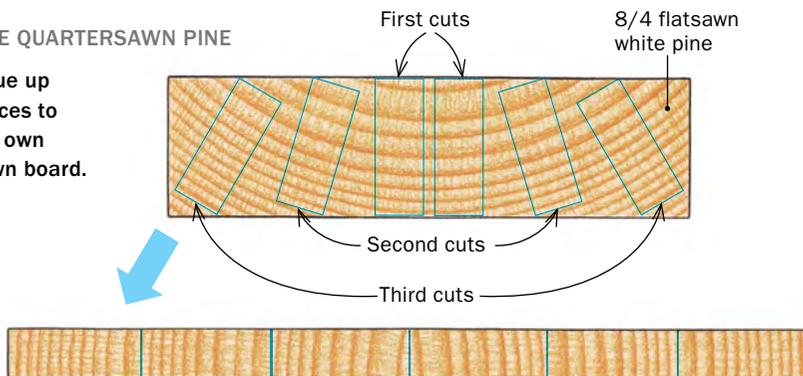
Add a bottom. Because perfectly quartersawn white pine will hardly move, you can glue and clamp the 1/4-in.-thick bottom directly to the box. Be sure that the bottom edges of the box are flush all around. Tape the bottom in place so it doesn't slide when you apply clamping pressure.



DIY quartersawn pine. Quartersawn white pine is commonly used in smaller Shaker pieces. If you don't have a good source you can make your own by selectively cutting and gluing pieces of an 8/4 board back together.

SHOPMADE QUARTERSAWN PINE

You can glue up narrow pieces to make your own quartersawn board.



thickness you're looking for. Repeat this process, and as the grain in the blank begins to curve, joint at an angle to produce another quartersawn strip. When you have four, six, or eight pieces, edge-glue them. Voila! Quartersawn white pine at minimal cost.

Now glue on the bottom. Flush all the edges. Place a thin bead of glue along the edges and clamp or tape it into place.

Bend it like Becksvoort

To make the handle, first make a bending form from scrapwood or plywood. The length of the form depends on how many box handles you plan to make at once. I batch small projects like this to have on hand, so my form is long enough to bend multiple handles.

If you have access to green ash or oak for the handle, that's great. You can cut a small sapling or branch. First, split the branch to follow the grain, then joint the face and one edge, and cut to size on the tablesaw or bandsaw.

Or you can use kiln-dried wood, soaking it in warm water for about 15 minutes to make it more pliable. Clamp one end of the handle strip to one side of the drying block, pull it tightly over the top and down the other side, and clamp there as well. You can air-dry it for a few days, place it near a heat source, or use a hair drier to speed drying. Once the handle is dry, drill 5/64-in. holes centered in each side of the box and about 1/2 in. from each end of the handle. Test the fit to see that the handle clears the corners of the box at both ends. Smooth the edges of the handle and round the ends slightly. Get two washers and a pair of copper or brass rivets, 1/8 in. by 1/2 in., from the hardware store or Lee Valley (no. 33K62.01). Place the rivet head through the basket from the inside, then add a washer, the handle, and the other end of the rivet. Place the inside of the basket over the corner of the tablesaw, jointer, or a good anvil and tap the end of the copper rivet with a hammer to peen it over. Don't make it too tight; it should swing freely. Do the same thing to the other side.

You can leave the box unfinished, apply wax only, or use your favorite food-safe finish or even your favorite furniture finish. □

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

Online Extra

Come along with Anissa Kapsales and Chris Becksvoort as they pick berries and discuss a wide range of topics. FineWoodworking.com/278.

Bend and attach the handle

Soak and form the handle. Green wood is ready to go, but kiln-dried wood should be soaked in warm water beforehand. Bend the strip over the bending form and clamp it in place to dry for a few days.



Attach the handle. Drill holes in the box and handle. Place the rivet through the side from the inside. Add a washer, the handle, and the other end of the rivet. Place the inside of the basket over the corner of the tablesaw, jointer, or anvil, and tap the end of the copper rivet to peen it over.

