

18th-Century Pipe Box Provides Elegant Storage

Simple construction makes
this an easy project

BY LONNIE BIRD

Smoking was a popular social custom in the Colonies. As a result, Colonial craftsmen fashioned small, detailed boxes for holding long-stemmed clay pipes and tobacco. Today, these boxes are a great way to store items such as candles and matches.

Curly maple is authentic for this reproduction piece, but you can use any wood. Here's an opportunity to practice resawing, dimensioning and routing small parts, scrollsawing, and drawer making.

Cut the parts and assemble the case

The drawer front is $\frac{3}{4}$ in. thick, and the base is $\frac{3}{8}$ in. thick, but the rest of the stock needed to build this project is only $\frac{1}{4}$ in. thick.

After milling and sizing each part to its rough dimensions, rip $\frac{1}{4}$ in. from the forward edge of each side of the box, stopping at the drawer location. Then crosscut the ends of the stopped cuts to square them up. The front of the box will fit in these notches.

The next step is to lay out the scalloped shapes in the front, back, and sides. Cut the shapes on a scrollsaw, making relief cuts to each inside corner to avoid trapping the blade. To cut a smooth, fair curve, leave enough wood to support the blade on both sides. To cut the hole at the top of the back, use a $\frac{1}{2}$ -in. Forstner bit.

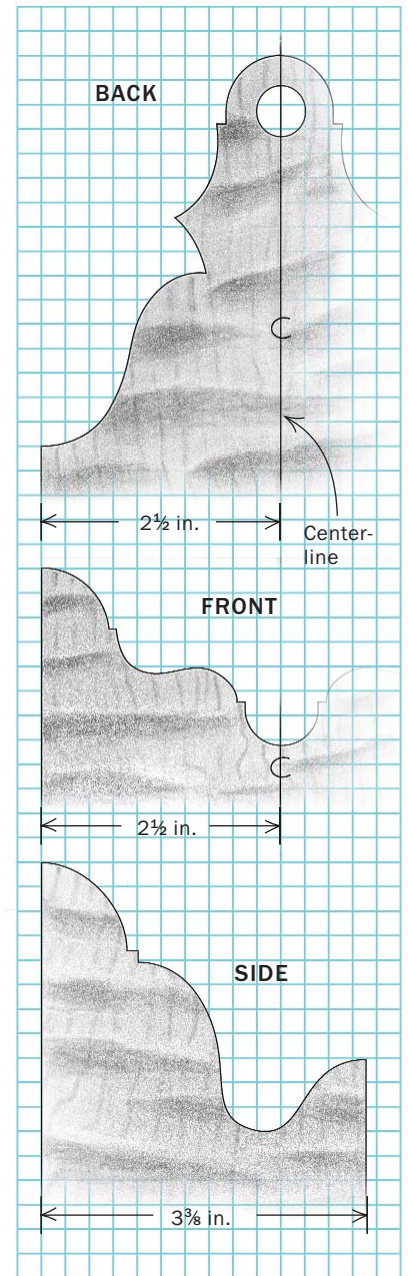
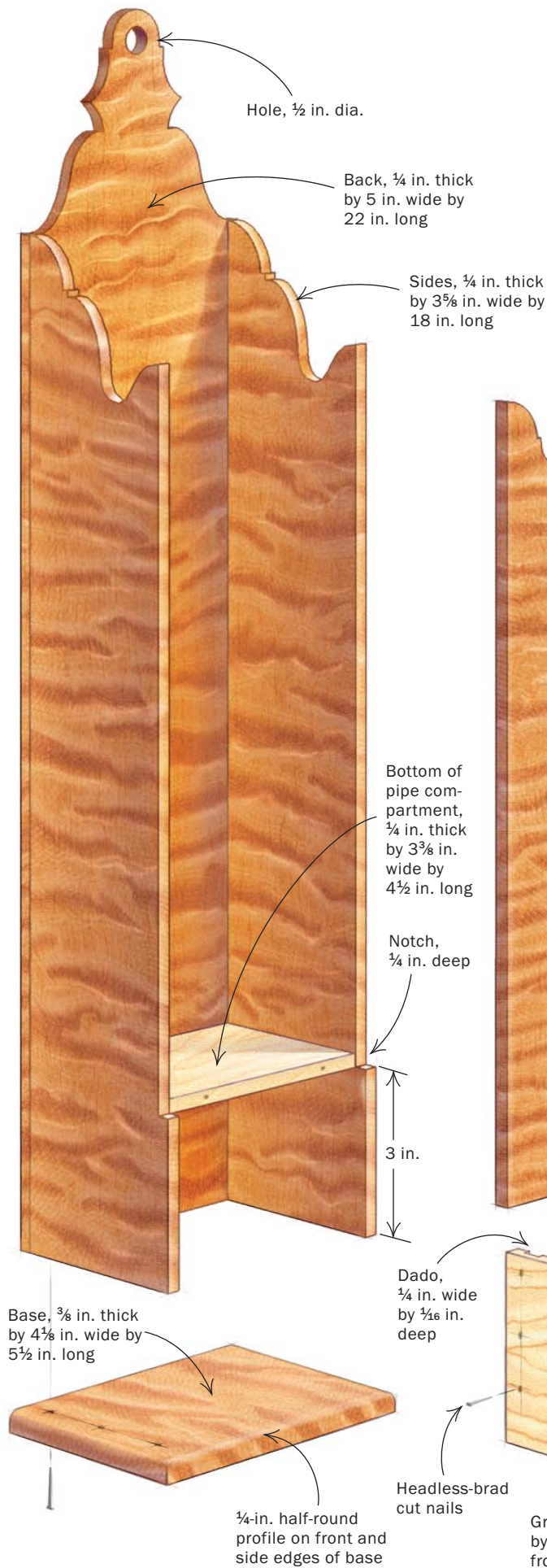
Now cut a $\frac{1}{4}$ -in. half-round profile along the side and front edges of the base. Leave the back edge square so that it can be mounted flush to the back of the case and hung flat against a wall.

Be gentle during assembly—Assemble the box by gluing the back and front to the



PIPE-BOX CONSTRUCTION

The primary wood for this pipe box is curly maple, and the secondary wood is poplar. Use templates to lay out the scalloped shapes on the front, back, and sides of the box. The patterns here are drawn on a ¼-in. grid.



CUT THE SCROLLWORK AND ASSEMBLE THE CASE



With a scrollsaw and files, prepare the curves. Make relief cuts to the inside corners of the pattern, then cut each sweeping curve to the relief cut (left). Clean up the sawmarks with half-round bastard and smooth files (above).



sides, and clamp with light pressure. The face-grain joints where the sides meet the front and back are strong enough with glue alone. Trim the sides flush to the front and back using a card scraper. Then glue the base to the bottom of the case and drill pilot holes on the underside of the base for $\frac{7}{8}$ -in. headless brad cut nails.

Next, install the bottom of the pipe compartment. Dab a little glue above the drawer opening and then slide the bottom into place. To keep the compartment bottom square and perpendicular to the case sides while the glue sets, place $\frac{1}{4}$ -in.-thick plywood spacers along the inside walls of the drawer opening that are as high and deep as the opening. Once the compartment bottom is flat and in the right spot, drill two pilot holes in the front and back and then drive in the cut nails.

Build the drawer

The drawer is assembled with simple but long-lasting glue-and-nail construction. The front has a $\frac{1}{8}$ -in. lip on the top and sides (but not on the bottom) that covers the reveal around the opening.

Carefully measure the opening and add $\frac{1}{4}$ in. to the length of the drawer front and $\frac{1}{8}$ in. to its width, and cut the piece to size.

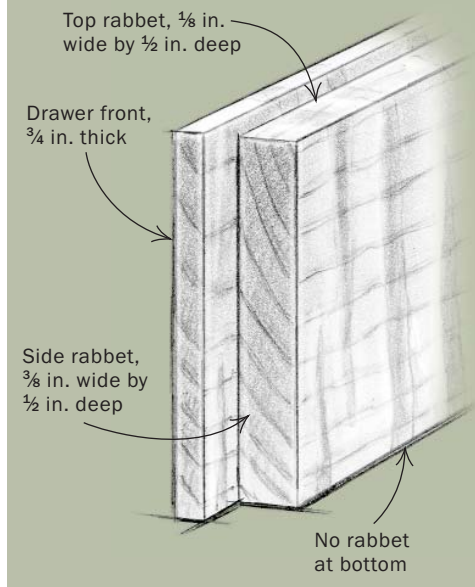
Use a router to cut the rabbets along the sides and top of the drawer front. Allow for clearance by cutting the top rabbet a little wider than the lip thickness, and the side rabbets a little wider than the overall thickness of the drawer side and lip: $\frac{1}{32}$ -in. clearance above and $\frac{1}{4}$ -in. clearance on each side of the drawer will leave enough



Gentle glue-up. Light clamping pressure is all that's needed for the front and back side joints (left). When installing the compartment bottom, use spacers to hold it square while the glue dries, then reinforce with nails set below the surface.

BUILD THE DRAWER WITH RABBETS AND CUT NAILS

The lip on the drawer front covers the top and side edges of the opening. The side rabbets are deep enough to accommodate the thickness of the drawer sides, and the thumbnail profile on the drawer front complements the one on the base.



Route the rabbets and profile. Use a straight bit to rabbet the sides and top of the drawer front (left). Next, use a 3/16-in.-radius roundover bit to rout the thumbnail profile on the drawer face (above). Start with the left edge and work in a clockwise direction to remove any crosscut tearout. A zero-clearance fence helps reduce tearout.

space for a drawer this small. Next, with a 3/16-in.-radius roundover bit, cut the profile, with a 1/16-in. step, on all four sides of the drawer face.

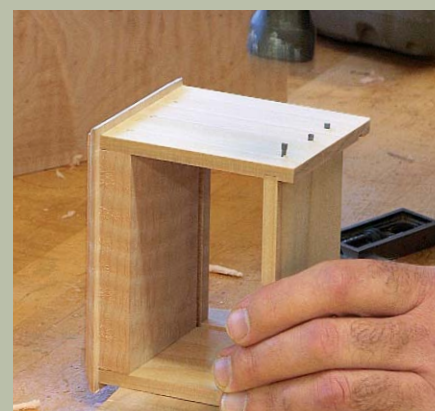
Once the drawer front has been fitted to the opening, cut parts for the sides and the back. The width of the side and back parts matches the long edge of the side rabbet, and the length of the back matches the length of the top rabbet plus twice the depth of each dado. To prevent the drawer from striking the back of the pipe box, cut the back end of the drawer sides 1/16 in. shorter than the depth of the opening.

Cut 3/16-in.-wide by 1/16-in.-deep grooves in the sides and the front for the drawer bottom. Then raise the blade slightly and rip the drawer back. The width of the drawer back matches the distance between the

top of the side and the top of the drawer-bottom groove. Finally, cut 1/4-in.-wide by 1/16-in.-deep dados into the sides for the back of the drawer.

After the drawer has been assembled, bevel the front and side edges of the drawer bottom, slide it into position, and drive a cut nail from the bottom into the drawer back. Glue the front edge and the first 1/2 in. of the sides of the bottom to force the wood movement to the back of the drawer. Finally, cover visible nail heads with wood putty that will accept stain. Finish the box with an aniline dye, followed by several coats of amber shellac, and install a brass drawer pull to complete the project. □

For more information on Lonnie Bird's woodworking classes, visit www.lonniebird.com.



Pilot holes prevent splitting. Drill pilot holes after gluing and before nailing the sides to the front. Glue the back to the sides, drill pilot holes (top), and nail (bottom).



A traditional option

If you want a challenge, you can build the drawer for the pipe box using dovetails and add a Massachusetts shell carving. For more on making a dovetailed drawer, see *FWW* #157, pp. 78-83; for more on making a shell carving, see *FWW* #119, pp. 52-58.