PROJECT NUMBER 75

{ PROJECT *no.* 75 }

SAVOR THIS TRUE-TO-FORM SALT BOX

BY SCOTT PHILLIPS

This contemporary version of Samuel Plank's 19th-century salt box fits right in to the 21st-century kitchen, ready to store lots of things besides salt.

Back in the 1880s in Pennsylvania farm country, a quiet group of Mennonite families crafted their way into woodworking fame. Most notable among them, the Samuel Plank family, made the finest wooden items to be found in the area. Their best seller was an item used to store salt on the wall near the stove. The dry heat coming off the stove helped keep the salt granular instead of lumpy. These so-called "salt boxes" sold for one to two dollars then. Today, authentic decorated antique salt boxes go for thousands.

Over a century later I became friends with Samuel's great-great-grandson, Doug Plank. Before long we were conspiring to build a "new use" salt box, one inspired by his ancestor. New use could mean storing anything from microwave popcorn packets to CDs to fire-starting materials to whatever. But keep in mind that by making it out of basswood, it is still perfect for kitchen use. Why? Simple: basswood is just about the only wood that never imparts odors or resins to food. Plus basswood has a quality that makes it the finest of all carving woods. It cuts easily and yet holds detail well. Wayne Barton designed and carved the Swiss good luck and friendship patterns into the one shown on page 46.

I recommend that your first boxes be painted on the outside with milk paint for that antique look. The color should be personalized to match the use and the décor. Folk art additions are entirely fitting to this design. So make your mark and get creative!

Finally, you'll find this design a very easy one-day project, minus any special hand-painted or chip-carved embellishments. Note that the bottom drawer is "doubled up" to hold bigger items. The salt box originally had two smaller drawers used for storing spices and other kitchen items. To me one big drawer just works better. Here now is how to build it. You can also see the salt box online at *WBGU.org/AmericanWoodshop*.

PHOTO: KEN BRADY DECORATIVE PAINTING: VAL WHITE


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Start with the right materials

The materials list on page 17 shows you all the boards and hardware needed. So begin by carefully selecting ½"-thick S4S basswood boards that are wide enough to avoid doing glueups. Really the only necessary glueup is for the scrolled box back.

Glue up a broad back and cut it to shape

From ½" basswood, edge-join enough stock (two to three pieces) to make a 14"-wide x 16"-long panel. Joint the edges, and then edge-glue the pieces with yellow woodworker's glue to make a flat panel. (The original salt boxes relied on hide glue and 1½"-long finish nails and are still perfect more than a century later!)

Next, make two copies of the full-sized half pattern, cut them out, and tape them together to make one full-sized pattern. Then, cut a scrap piece of Masonite, hardboard, or thin plywood to 14" x 16", the same size as the blank glueup for the box back. Apply the pattern flush at one end and two edges of the scrap piece and scroll saw this "template" to shape. Now, lay the template on the back panel and scribe the pattern's outline on it. Bandsaw or scroll saw the back to shape. We used a 3/16" scrolling blade supported by Cool Blocks **(Fig. 1)**. Be sure to cut just to the outside of the cutline, and then sand to the line to remove the saw marks and establish clean, crisp, curved edges. Set this valuable template aside for making more boxes later.

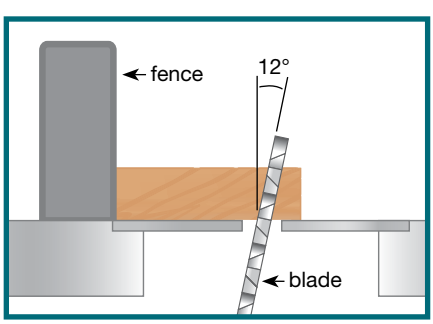
Note, too, that by transferring the pattern so the grain runs vertically (as shown on the long 16" length) you create a strong hanger when installing the box on a wall. Do otherwise, and you risk snapping off the narrow neck of the back across a grain line when hanging or loading the box. With the patterned back cut, drill the ½" hanging hole where shown on the pattern.

Make the angled box sides

Saw the box sides to the overall dimensions in the Cut List. (I used a miter sled for this; you can either build or buy one. Mine allows me to adjust the fence to make 90° and angle cuts.) Label one edge of each side the back edge and one end the top end. Now, measure 2½" in from each back edge and mark this location on the top ends of the sides. If you are not going to use a sled, then attach an auxiliary fence to your miter gauge. Then angle the fence to 12° and angle-cut the top ends of the sides, beginning at the 2½" mark or cutline **(Fig. 2)**. Hold the pieces together to see if they mirror each other. A poor match could result in sloppy fit later when the lid is added. Note: one way to ensure identical cuts is to tape the pieces face-to-face with double-faced tape and cut them together.

Machine the fixed top and beveled parts

Cut the box's fixed top, lid, and front to the sizes in the Cut List. Note that the back edge of the lid and the top edge of the front have a 12° angle. To cut these, angle the blade, adjust the table saw fence to the needed width for that part, and make the cut as shown below.



Cut the box divider and bottom

Adjust the saw fence and blade and cut the box shelf and bottom to the sizes in the Cut List. Using a ½" roundover bit, rout the top ends and top front edge of the bottom.

Assemble a true and sturdy box

Before attaching the sides to the back, make an assembly spacing jig to help hold the workpieces in place during nailing. Begin by cutting a 13"-long piece from a 2x6. Cut out a 14"-long piece from a scrap 2x10 to serve as the

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CUT LIST

A	Scrolled box back, basswood	½"	x	14"	x	16"
B	Box sides (2), basswood	½"	x	7⅛"	x	9"
C	Fixed top, basswood	½"	x	2½"	x	15"
D	Lid, basswood	½"	x	5¾"	x	15"
E	Front, basswood	½"	x	5⅜"	x	14"
F	Divider/box shelf, basswood	½"	x	7⅛"	x	13"
G	Box bottom, basswood	½"	x	8½"	x	15"
H	Drawer front, basswood	½"	x	2½"	x	12⅜"
I	Drawer back, basswood	½"	x	1⅞"	x	12⅜"
J	Drawer sides (2), basswood	½"	x	2½"	x	7⅛"
K	Drawer bottom, plywood	¼"	x	6⅞"	x	12 5/16"
L	Drawer false front, basswood	½"	x	2½"	x	14"
	Jig base, 2x10	1½"	x	9½"	x	14"
	Jig core, 2x6	1½"	x	5½"	x	13"
	Jig sides (2)	½"	x	4"	x	7"
	Jig back	½"	x	4"	x	13"

MATERIALS

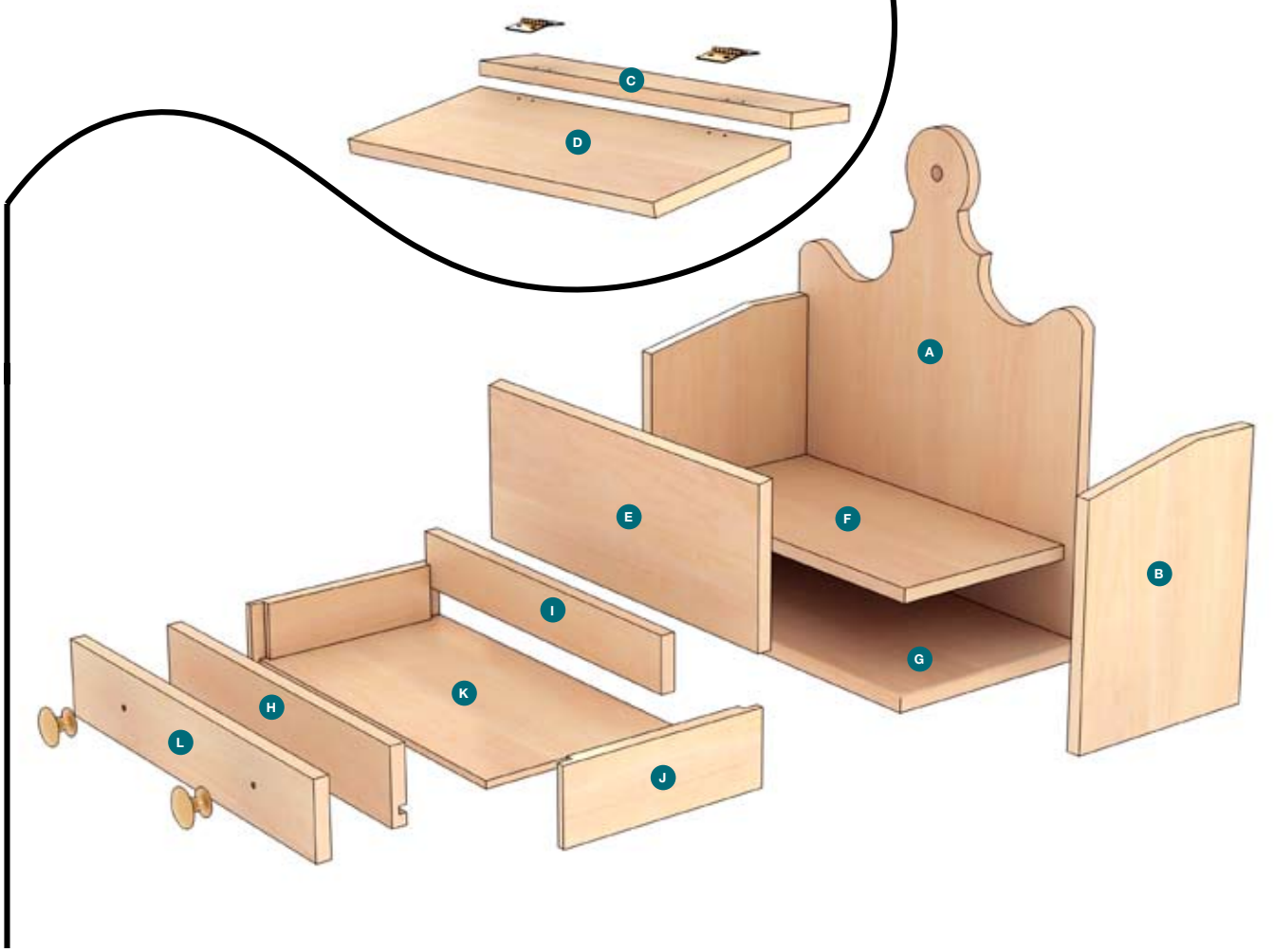
(2) Solid brass hinges, 1½" x 1¼" (#03R35, *woodcraft.com*)

(2) Porcelain/brass pulls of choice

(20) Finish nails, 4d 1½"

(2) Brads, ¾"

(2) Round-head brass wood screws, #5 x ¾"



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jig's base. Screw the top 2x6 in place onto the jig base allowing for a ½" offset along two ends and one edge. (The boards must be flat to work properly.) Also, cut two ½"-thick scrap pieces to 7" wide and one to 13" wide to "box in" the sides and back during assembly and nail them to the base. Test-fit the sides and back in the jig by wedging them in the ½" gap **(Fig. 3)**. Next, predrill through the back and into the sides to create pilot holes for 1½"-long finish nails. Now, remove the pieces, add glue along their joining edges, and slip them back into the jig to hold them in place. Drive the nails. It seems simple, but the jig really does help keep everything square. And if it does not stay square, well, you'll know, especially when the time comes to slip the drawer in place.

Add the fixed top, front, shelf, lid and bottom

Continue the box assembly by gluing and nailing on the fixed top and front. Using a small square and pencil, draw opposing guidelines on the inside walls of the box from the bottom edge of the front. These should be perpendicular to the front edges of the sides. Now, test-fit the shelf inside the box, aligning the ends with the guide lines and one edge with the bottom edge of the front. Draw a guideline along the back edge, remove the shelf, apply glue along the guidelines, then fit it back in place. Drill pilot holes and drive in a few nails to hold in place.

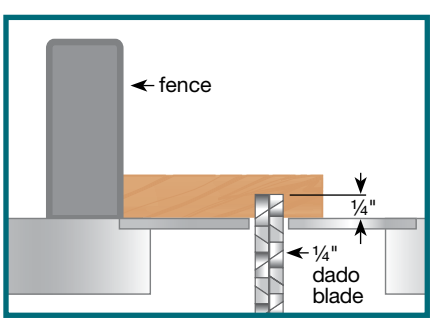
Next, apply a pair of 1½" x 1¼" hinges to the fixed top. Using business cards as spacers in the seam between the lid and fixed top, center and screw the remaining hinge leaves atop the beveled edge of the lid **(Fig. 4)**.

Finally, rest the box on its back and center the bottom on the box. You should have a ½" offset at both ends and along the front edge. If the bottom is flat and the alignment is even, you're home free with the assembly. Note that there is no offset on the back of the salt box because you want the box to hang flat on the wall for the best look. With the bottom clamped in place, drill pilot holes for finish nails. Now, apply glue to the bottom edges of the box and drive three finish nails in each side.

Build a solid drawer frame

Cut the drawer front, back, and sides to the sizes in the Cut List. Cut the ½" rabbets ¼" deep on the ends of the sides using the crosscut sled or a miter gauge with an auxiliary fence and a ½"-wide dado set. Don't have a dado set? No problem. Just mark ½" in from the end of the sides and make multiple passes with your ⅛"-wide saw blade up to the mark. This technique requires you to securely hold the drawer sides flat to the sled or saw table with the workpiece held firmly to the fence.

Now, switch to a ¼" dado blade raised ¼" high. Adjust the fence as shown below and cut the grooves on the front and sides ¾" from the bottom edge. You can also do this with a ⅛" blade by adjusting the fence as needed to "sneak" up on the needed groove width. Test the fit with the plywood you intend to use for the drawer bottom. There should be very little play.



Slip in the drawer bottom

Drill a pair of pilot holes 1" down from the top edge and 2¾" in from the ends of the front. Then, cut the plywood drawer bottom to size. Dry-fit the drawer box frame; check to see if the pieces fit in the drawer opening in the box. You should have about 1/16" clearance top and bottom. Make any fine adjustments. Then glue and nail the pieces together, checking for square. You'll find that rabbet joints are so strong when glued that one nail per corner will do the job. Once the glue cures, a drawer this size should never fail. Slip in the drawer bottom from the back and tack it in place with a brad or two.

PROJECT PHOTOS: KEN BRADY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Make the false front

Cut the false front to the sizes in the Cut List. With the drawer box sitting on a flat surface, center and clamp the false front to the drawer box front **(Fig. 5)**. Its top and bottom edges should be flush to the drawer front. Use the holes drilled earlier to drive #5 x ¾" round-head brass screws to hold the false front in place. Finally, drill centered holes through the false front and drawer front 3¼" in from each edge and add your pulls. Remove the pulls and sand the box with 220-grit in preparation for finishing.

Ease select edges to show wear

To add a rustic, used look to your salt box, break select outside edges with a low-angle block plane like the one shown in **Fig. 6**. These are must-have tools ideal for easing over any sharp edges prior to finishing. Sanding these edges often leads to dips in the edge that can be avoided if you use a hand plane.

Viola! It's done.

I only left ⅛" of play for the drawer action. Then again that's the way Mr. Plank would have wanted it. After all, he started this design over a century ago. Thanks for a fine design, Mr. Plank! Have fun!

Scott Phillips

A third-generation woodworker who earned a degree in forestry, Scott Phillips builds furniture of his own design in his woodshop in Piqua, Ohio, – much of it for "The American Woodshop" which begins its 14th season on PBS this year.