15

WALL BOX

Hard Maple

MAKING THE WALL BOX

After the material has been dimensioned, lay out the scrollwork on the back. Once the location of the top circle is established but before the scrollwork is cut out on the band saw, cut a dado across the grain on the back side of this circle. This dado should extend well below the narrow throat on which the top circle is resting. Fit a strip of vertically grained wood into that dado and fasten with 3/8″ no. 4 wood screws. Then, cut out the scrollwork.

After establishing the angle for the two sides, cut the top edge of the front to match. You can do this on the table saw by ripping the piece to width on a blade canted at the proper angle, but I find it quicker to create that angle with a few strokes of a hand plane. Use a bevel gauge to check progress during this operation.

Remember that the angle on the box's front piece is not cut to match the height of the sides at their front most point because the highest point of the angle on the front piece will join the sides 7/16" back from the frontmost point. The 7/16" measurement allows 3/8″ for the thickness of the dovetail joint, plus a 1/16" surplus which will be sanded away to make the joint flush.

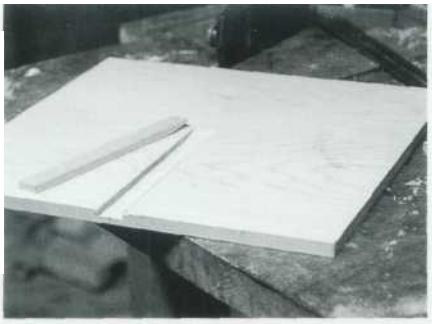
Cut the dovetails at each of the box's corners. After sanding these flush, give the bottom of the box and the lid shaped edges on a shaper or a table-mounted router. Install the bottom with wood screws passing through oversized holes in the bottom. These holes are oversized to allow the part to expand and contract in response to seasonal changes in humidity.

The narrow top, to which the lid will be hinged, is the next consideration. Form the angled front edge, which will abut the angled back edge of the lid, with a hand plane. Then fasten it to the case with several screws passing through the back of the box. Although 1 felt it unnecessary because of the top's narrow width, this part might be more securely fastened by installing some short glue blocks underneath the joint between the top and the sides of the case.

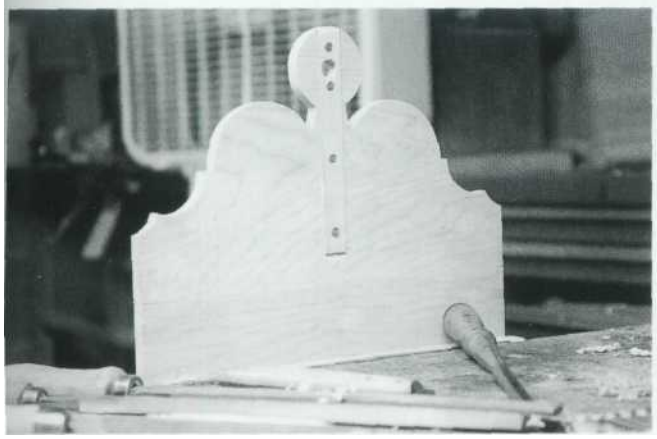
Using a hand plane, fit the back edge of the lid to the angle already established on the front edge of the box's top. Do this gradually so that it can be fit against the front edge of the top without gapping at the ends.

Next, install the hinges. The pair shown in the photo are Brainerd antique brass hinges from which the tails on the upper leaves have been cut to allow those upper leaves to fit on the narrow width of the top of the box.

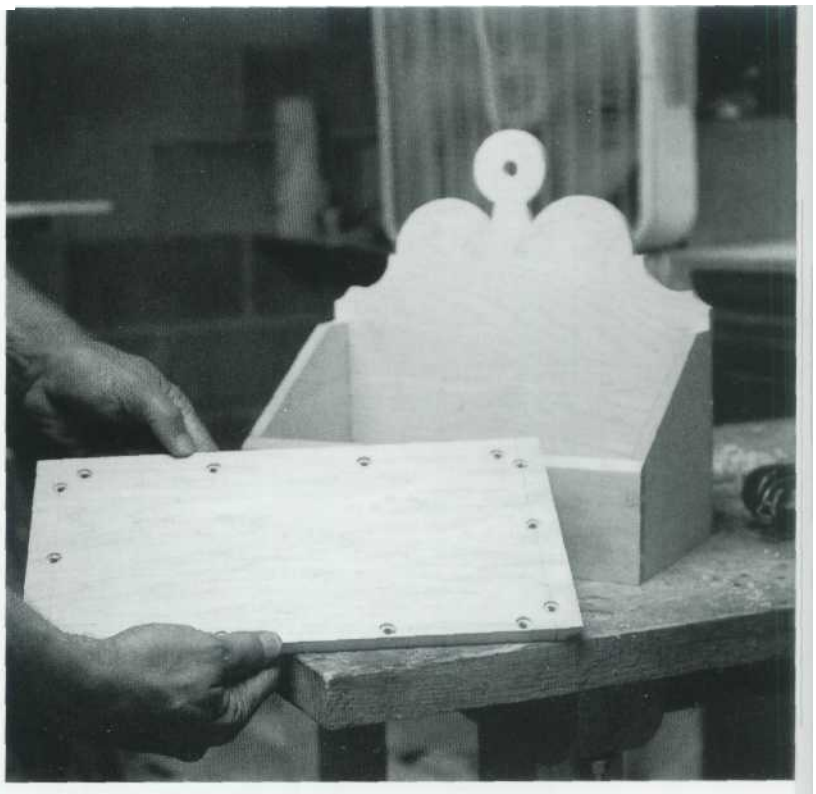
Remove the hinges and give the box a final sanding and several coats of finish.



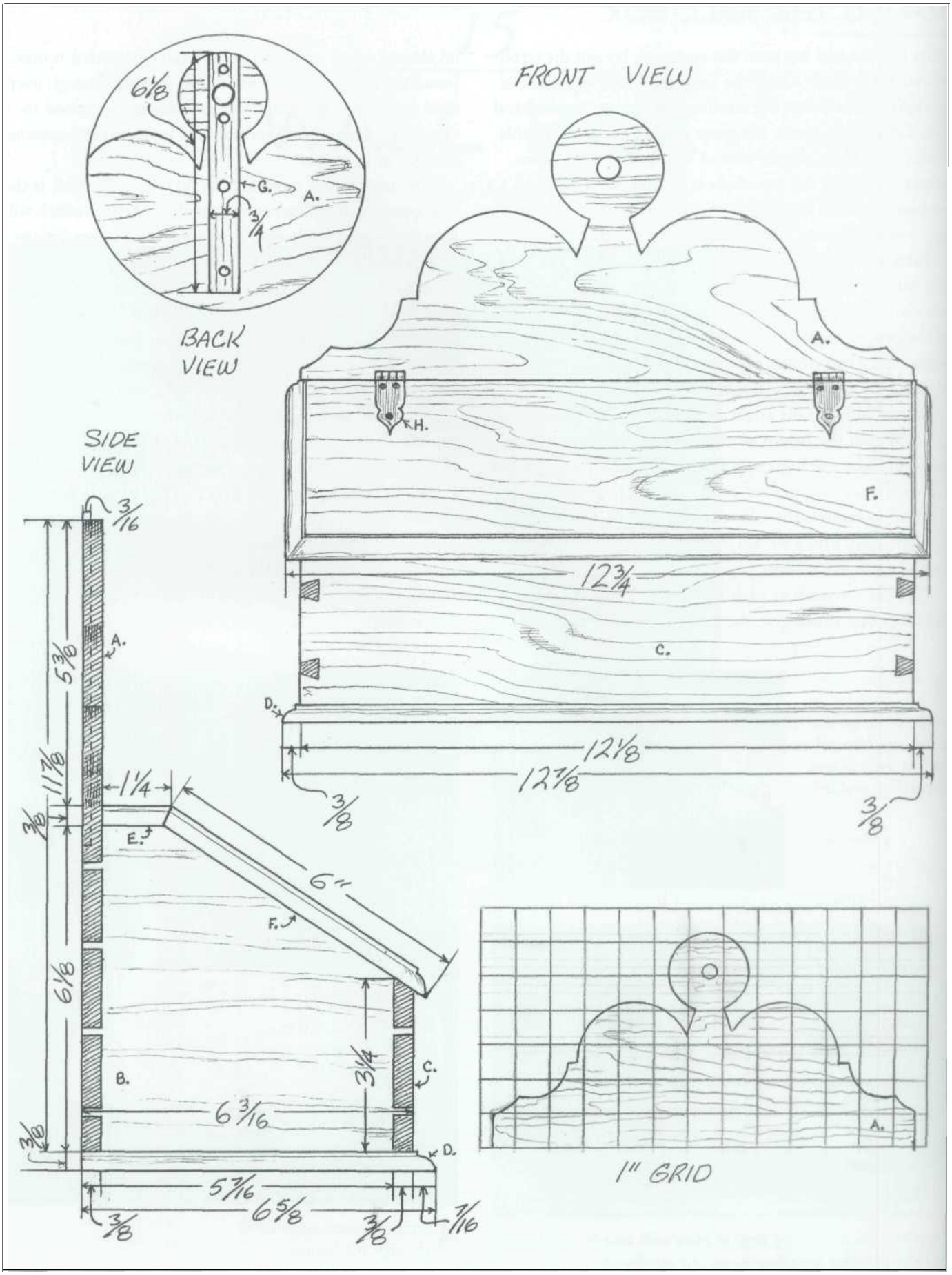
1 Butt this wide, straight edge up to the fence on the radial arm saw and | cut the dado before the back is profiled.

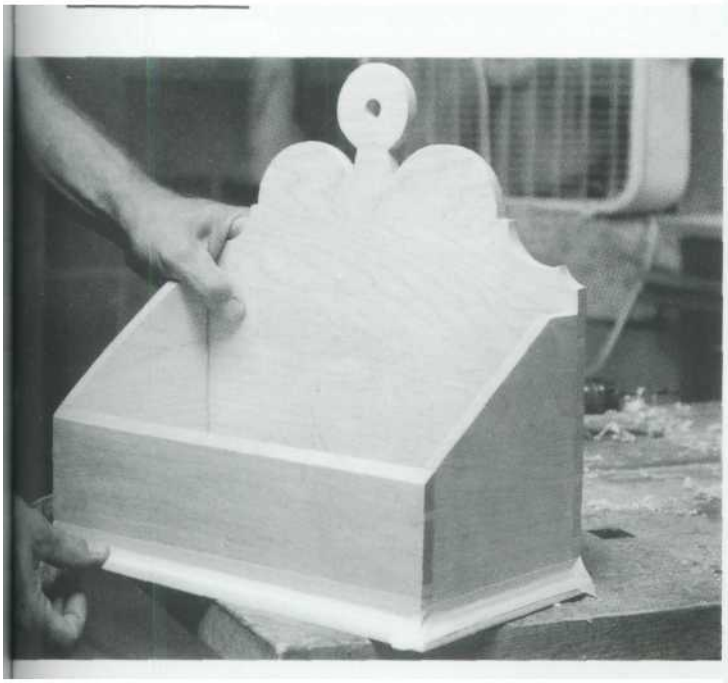


2 Hold the reinforcing strip in place with four 3/8" no. 4 wood screws. After installing it, cut the scrollwork.



3 Drill oversized screw holes through the bottom.


FRONT VIEW
6 1/8
G.
A.
3/4
BACK VIEW
A.
H.
F.
12 3/4
C.
D.
12 1/8
12 7/8
3/8
3/8
SIDE VIEW
3/16
5 3/8
A.
1 7/8
3/8
1 1/4
E.
6"
F.
6 1/8
3 1/4
C.
B.
6 3/16
3/8
D.
5 7/16
6 5/8
3/8
3/8
7/16
1" GRID
A.



4 Hold the bottom in place with masking tape while driving the screws up into the box's frame.

5 With the box held upside down in a vise, fasten the bottom.

6 Check frequently to ensure that the top and the lid will come together without gaps.

MATERIALS LIST

A	Back	1 pc.	⅜ × 11⅞ × 12⅛
B	Side	2 pcs.	⅜ × 6⅛ × 6³⁄₁₆
C	Front	1 pc.	⅜ × 3¼ × 12⅛
D	Bottom	1 pc.	⅜ × 6⅝ × 12⅞
E	Top	1 pc.	⅜ × 1¼ × 12¾
F	Lid	1 pc.	⅜ × 6 × 12¾
G	Reinforcing strip	1 pc.	³⁄₁₆ × ¾ × 6⅛
H	Hinge	2 pc.	3¼ × ½
I	Screws	14 pcs.	¾″ no. 6

**These are net measurements. A surplus should be added to dovetailed parts to allow them to be sanded flush.*