

Shaker Lap Desk

A challenging exercise in hand dovetailing

by Brian Considine

The Shaker lap desk may be considered the predecessor of today's briefcase. Like modern briefcases, lap desks were convenient for carrying papers. In addition, one can write on either the slanted top or on a special surface inside the desk.

These desks are fine examples of the thought, care and skill the Shaker woodcrafters put into even the smallest piece. The variety and detail of the joints in this piece make it a challenging project for the modern craftsman.

The general procedure for making these is to make and assemble the four sides and shelf, then the bottom and top, and finally the drawer.

First make patterns of the large and small ends on pieces of manila cardboard and lay out and cut the dovetails' outline on these patterns. (In making dovetail joints, I like to make the tails first.) Next, size and plane the stock from the cutting list. Cut the pieces for the front, back and ends 1/8-inch over in width so that you can plane down the top edges when it's together. Cut the angle on the top of both the ends and leave a little over.

With a marking gauge, scribe the depth lines of the dovetails on the end pieces. Now align the patterns along the bottom of the end pieces and transfer the dovetails with a scribe or awl. Then cut and clean them. Now position the four sides as they are to be and code the corners that are to be dovetailed together. Then one by one mark the lines for the

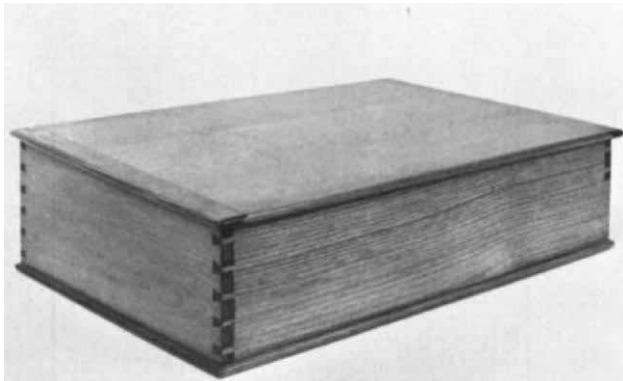
pins from the tails and proceed to cut them out. To help in the chiseling process, I like to make relief cuts with a bandsaw into the waste sections of the pins. But take care to place the piece on the saw table with the wide part of the pins up so that you don't cut into them by accident. Then fit the dovetails together, carefully paring down the pins where necessary.

Size the shelf and lay out the grooves to hold it on the inside of the four sides. The bottom of the shelf should line up with the bottom edge of the small end. Cut the groove for the shelf with a router or with knife and chisels, but be careful not to go to the outside edge and cut through the dovetails. Then glue the sides together, placing glue blocks just beyond the dovetails so that they can close all the way. Clean any dried glue off with a chisel and smooth the corners with a block plane. Plane the bottom edges so that box sits flat. Plane the top edges so that they all lie on a plane.

Size the bottom piece, round the edges and glue it on. Size the top. Glue on bread board ends (tongue should be 3/16-inch wide). Cut 1/8-inch molding to go around the mouth of the drawer. It should be rounded on the edge and protrude slightly. (The drawer will slide straight if you put extra molding behind the two sides of the opening. This should be done before gluing on the bottom of the desk.)

Now size and fit the drawer front and proceed to dovetail

This lap desk was made of 200-year-old pine (on commission), although the author prefers to use cherry for the desks. Shakers often made dovetails as shown here, but to be more correct, dovetails should have been laid out to begin and end with half-pins, not half-tails.



the drawer together. The front dovetails are of course half-blind.

Dovetail the sides to the front first, put them together and slide them in the drawer opening. Cut the sides a little long so the drawer front will protrude at first. Then measure and cut off enough from the back end of the sides so the drawer front sits flush with the side of the case.

You still have to size the drawer back and bottom and dovetail the back to the sides. First cut a groove on the inside of the sides and front to hold the drawer bottom. Note that it is essential that the bottom edge of the groove be above the bottom half-pin. Otherwise when you pass the pieces through the table saw you will cut the dovetail. After you make these grooves, size the drawer bottom to go in the grooves and bevel the edges. Then measure for the back piece. It will be as wide as the drawer front but its height will be the distance

| Desk Parts | |
|------------|-----------------------------------|
| Large End | $3/8 \times 4-3/8 \times 12$ |
| Small End | $3/8 \times 2-1/8 \times 12$ |
| Back | $3/8 \times 4-3/8 \times 18$ |
| Front | $3/8 \times 3-3/4 \times 18$ |
| Bottom | $1/4 \times 12-1/2 \times 18-1/2$ |
| Shelf | $1/4 \times 11-1/2 \times 17-1/2$ |
| Top | $3/8 \times 12-3/8 \times 18-3/4$ |

| Drawer Parts | |
|--------------|-----------------------------------|
| Front | $3/8 \times 2-1/8 \times 11$ |
| Molding | $1/8 \times 1/2$ |
| Sides | $1/4 \times 2-1/8 \times 17-1/2$ |
| Back | $1/4 \times 1-3/4 \times 10-5/8$ |
| Bottom | $1/4 \times 10-5/8 \times 17-1/2$ |

from the top edge of the groove to the top of the sides. Dovetail this back to the sides by repeating the procedure for dovetailing the case. Finally, the drawer bottom should be slid in and nailed to the back piece from its underside.

Once the drawer is completed, bevel the back edge of the lid so it is flush with the back edge of the box and hinge it.

