



From the Original Woodworker's Notebook

By
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HOSTESS TRAY

A NOTE ON SAFETY

*Safety is the responsibility of all woodworkers. Do not attempt any project or procedure without all safety devices intact. Any deviations in stock dimensions and/or any change in project will affect the end result of any project. When circumstances require the use of different materials, alter project dimensions as required.
Read all instructions for any project before starting the project.*

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HOSTESS TRAY

A New Problem

At first glance this little tray seems to be pretty simple, but it is far from it. The angled sides presents us with something new. Angled dovetails are not unusual when hand cut, but they are not usually covered in handbooks for dovetail cutting machines.

The tray is loosely based on a Shaker design for a table tray. The major differences are the blind dovetails, sloped sides and plywood bottom (I did say loosely).

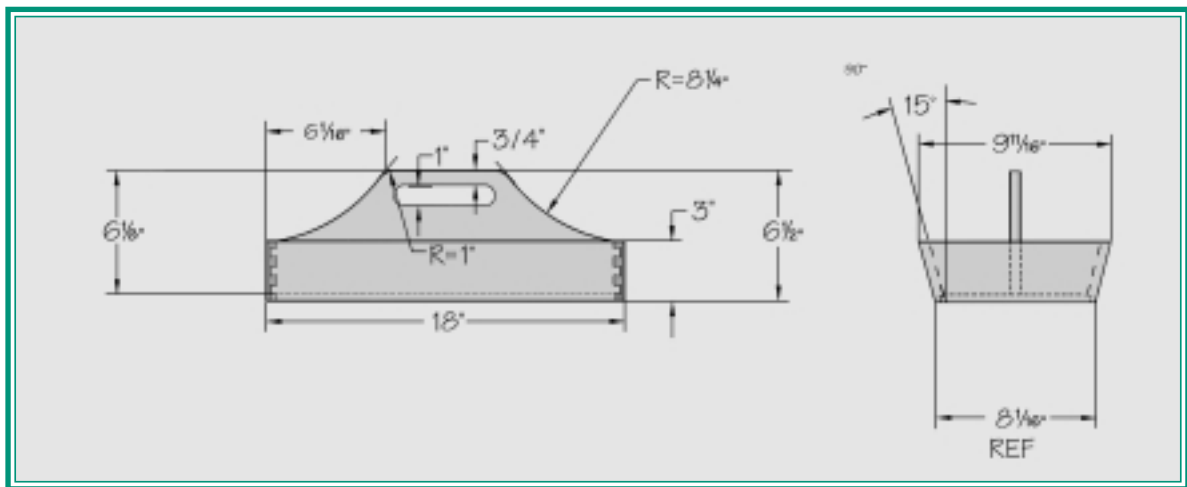
Material Selection

Almost any wood will work for this project, but I think that in keeping with the Shaker style it should be constructed of 1/2" cherry or maple. Pine would be acceptable but it is harder to find clear kiln dried pine.



Construction

All the parts for the box are constructed of 1/2" hardwood. The bottom is 1/4" hardwood plywood. Begin the construction by cutting the two ends to the dimensions shown on the drawing below.

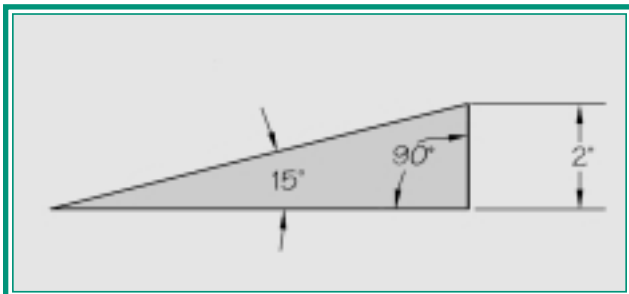


The 15 degree angle of the end requires that the side pieces be wider. Because the sides get trimmed asymmetrically they must be made a little wider than the calculated dimension as shown in the drawing. The actual dimension I used was 3-5/16". After the sides are dovetailed, dry fitted to the end pieces, and rabbeted I hand planed the edges as shown.

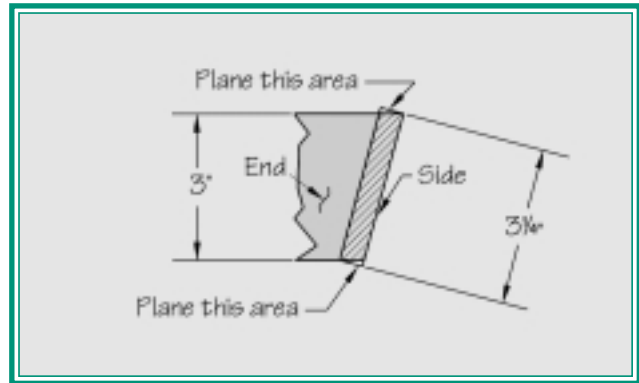
This project is a lot easier to do if you use the absolute zero setup (see *Basic Woodworking*) for **IPM-1**. **CLINCHER** is set for absolute zero. I chose the 1/2" equally spaced blind dovetail because it seems to fit the scale of the piece very well. Set up to determine proper bit height. After the proper fit of the tails is determined, cut the two side pieces to a length that yields an 18" overall length.

The three dovetail pins are centered on the angled edge of the end pieces (3-1/8"). For **IPM**, use the Jointech manual to find the board center for **CLINCHER**, using the rabbit and carrot.

Before the pins can be cut a jig must be made to hold the end piece at an angle of 15 degrees from the router fence. From a scrap piece of 3/4" MDF cut a wedge as shown.

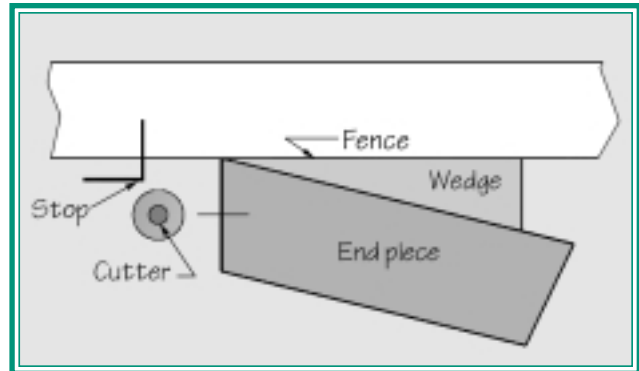


To use the wedge cut strips of double back tape approximately 6 inches long and 3/8" to 1/2" wide. Apply a strip of tape to the angled side of the wedge and tape wedge to the end piece as shown and cut the pins in that part.



Repeat the process for the second end piece. Use fresh tape for each setup.

To make the cuts on the other end of the end pieces it is necessary to adjust the positioning machine setting.



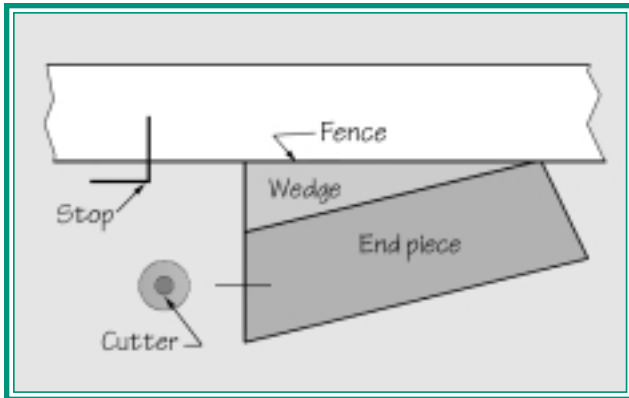
FOR IPM-1

Loosen the lock knob and move the fence until the cursor is on the zero line. Read the measurement shown on the fixed scale. Move the cursor exactly 2" to the right (the exact width of the wedge). Slide the dovetail template to the right until the zero line is lined up with the cursor.

FOR CLINCHER

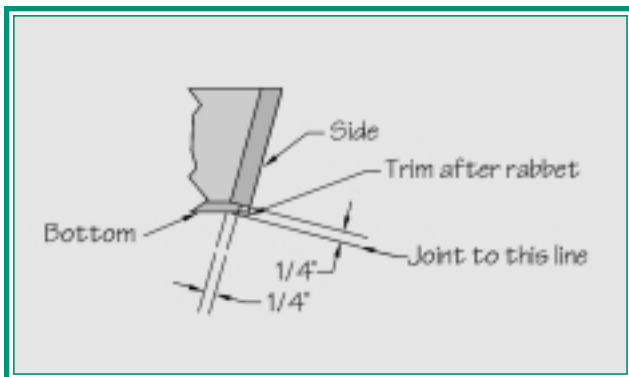
Loosen the lock lever and move the carriage until the cursor is on an index mark on the 1/2" dovetail template (either black or red). Move the carriage 2" to the right, as indicated on the carriage scale. Slide the 1/2" dovetail template until the nearest identical mark (black or red) is lined up with the cursor.

Tape the wedge to the end piece as shown. Be very careful that the end of the wedge and the end of the board are lined up. The end of the wedge is the surface that contacts the stop. Use a rubber faced pushblock to move the board. Make sure the tape is securely attached. You will not have the security of the stop when you start to cut. Cut **SLOWLY** and don't let the bit grab the wood.



The tails can be cut in the normal way. Reset the **IPM-1** to zero and center on the 3-5/16" width of the sides. Both sides can be cut at the same time, don't forget to use a backer board.

Dry fit the sides and mark a line where the end intersects the side at the bottom. Joint the bottom of each side to the line. The next step is to cut the rabbets for the bottom. The rabbet for the side is shown in the drawing. The side can be rabbeted full length but the rabbet in the end pieces must be made blind.



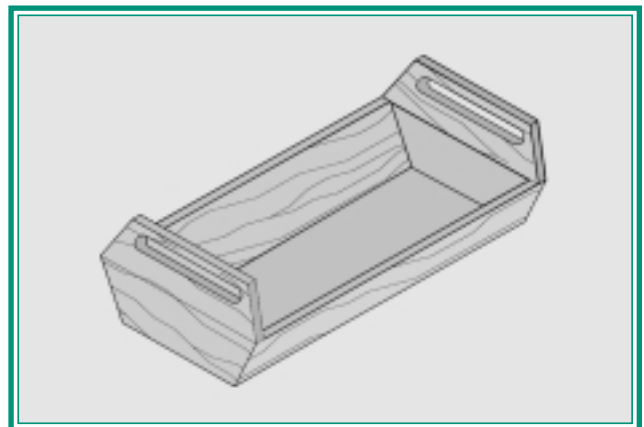
Cut the plywood bottom to size and plane the two sides to fit the side pieces as shown in the drawing.

Cut out the center board but do not cut to the finished length. Cut the shape with a band saw, jig saw or saber saw and sand smooth. Sand the inside surfaces of the sides and ends. Ease the handle edges with a 5/32" roundover bit.

Assemble the box with glue and clamps. Glue the bottom in place and use brads to hold it until the glue is dry. Trim the center board to a snug fit inside the box. Install the center board in the center of the box. Secure the center board with two countersunk screws in each end. Glue plugs in the screw holes. Sand the exterior of the tray and finish to suit.

Glue felt to the underside to prevent scratching the table top.

A variation of the tray is shown below, and would be more of a fruit tray whereas the other is a bread or biscuit tray. Complete the dovetail cutting before gluing the top half on the end pieces.



MATERIAL REQUIREMENTS

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>SIZE</u>	<u>MATERIAL</u>
1	Center board	1	1/2" x 6-1/2" x 17-1/2"	Hardwood
2	Side	2	1/2" x 3-5/16" x 18"	Hardwood
3	End	2	1/2" x 3" x 9-11/16"	Hardwood
4	Bottom	1	1/4" x 7-9/16" x 17-1/2"	Hardwood plywood
5	Screws	4	#6 x 1"	
6	Plugs	4	3/8"	