

WoodRat Corner No.4



Drawerfront Dovetails

The WoodRat can make perfect half-blind dovetails with proper square corners. It can also make them with rounded tails, yet without the limitations of a dovetail jig. You can use any size of bit, any dovetail angle, at any spacing, in any thin-ness of drawer side, and it'll cope with asymmetric dovetails just as easily as symmetric ones. It'll work equally well with the LittleRat.

You'll need a MitreBox, GuideRails with Stop, a sharp pencil, clean stock with nicely squared ends. A piece of acrylic for a cursor, blu-tak etc. Use the parallelogram to mark out the pin/socket positions on the end of a drawer side. Put a spare drawerside into Marker Position on the left.



Back-referencing: this means picking up each pin/socket position by placing the cutter over the positions marked on the workpiece, and transferring that position back onto a template in the Marker Position.

Locate the position of the cursor by placing the cutter on the left-hand edge of the workpiece. Say it's an -8mm diameter cutter; mark 4mm in from the edge of the template, and lay the edge of the cursor over that mark, fixing it firmly with the Blu-tak. It now lies on the exact centre of the cutter.

Take the cutter to each pin position, and **draw pencil lines** at each position on the template. Depth the cutter before plunging, and **cut each socket in turn**. That defines the sockets: now we need to complete the template.



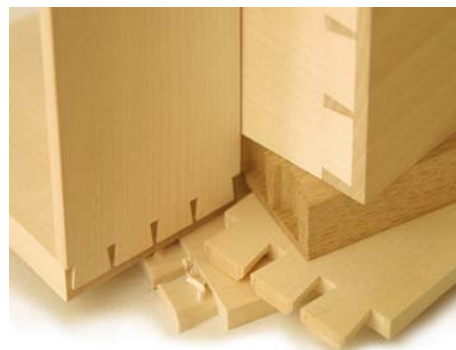
Raise the cutter and place it on the work so that the cutter (blades East/West) is exactly on the right-hand edge of the neck of the socket. Mark the template with a fine line. Repeat on each side of each socket down the board, marking the template with lines either side of the line for the sockets. These are the "in" and "out" lines.



Plunge the cutter again, and locate it with the starknob so that it will **cut the back of the board** to make the angle. Make a reference marker on the guiderails against the routerplate so you can find your place again.

Turn the workpiece over, and zero the cutter onto it so the blades (North/South) come exactly onto the front of the work. Take the Stop up to the abutment on your router and fix it. Mark it also for reference. This will define how far the cutter comes into the drawer front.

Place the drawer front – inside upwards – horizontal, into the MitreBox and make sure that the front is squarely placed and tight against the machine face. As you track the piece follow the template running under the cursor. The "in" and "out" lines define the pocket. Bring the router forward on the left line, stop against the Stop. Track across to the "out" line on the right, and push the router away. This cuts the pocket. Cutting into end-grain with a fine router bit needs gentle handling: the 1in9 fine cutters need special care. Gently track left and right between the 'in' and 'out' lines, and carefully clean out the pocket. Take time over it: you'll soon learn how fast you can go.



Check the fit, and take the square corners off each tail so that they fit into the rounded pockets. You don't vary the fit by raising and lowering the cutter, as with a dovetail jig, but simply track to one side or other of the line on the template. As usual the simple visual ways are best.

**Happy 'Ratting,
Martin Godfrey**