

# Dovetail joinery

symbolizes high quality furniture. Used in case and drawer construction, the joints are strong, functional and beautiful. Known for strength and versatility, dovetail joints are also rewarding to build. You can build them using power tools, but nothing quite matches the beauty of hand cut dovetails. Better yet, they are as fun to build as they are to look at. Give dovetail joinery a try and watch your woodworking skills reach a whole new level of craftsmanship.

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The tools required for dovetailing are a backsaw, marking gauge, chisels, combination square, dovetail template, coping saw, marking knife, tape measure, pencil and mallet. I also like to use a smoothing plane to finish off the joint.



Use cabinet maker's triangles to mark the orientation of the case.

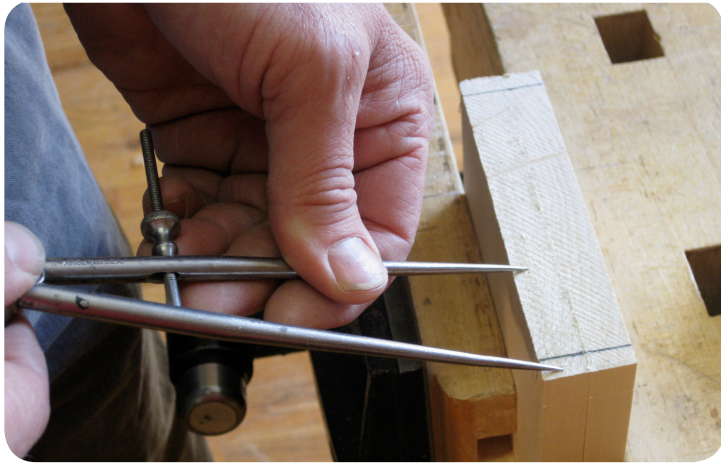


Scribe baselines on both sides and edges of the tail boards and both sides of the pin board.

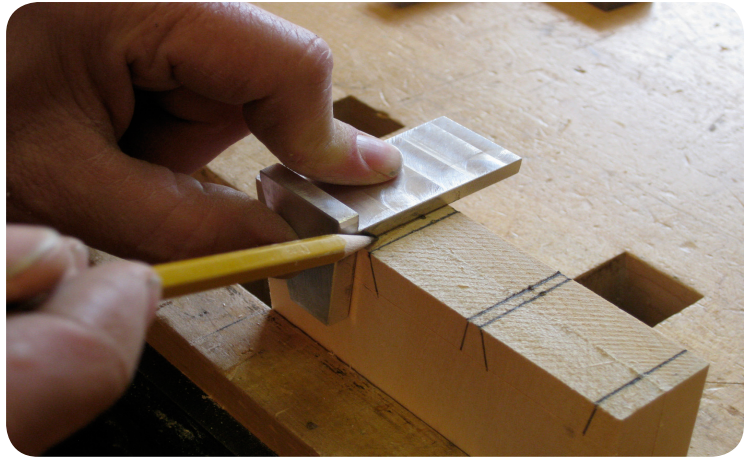


Place the tailboards in a bench vice with the end up. Measure in 1/4-inch from both edges and make a pencil mark.

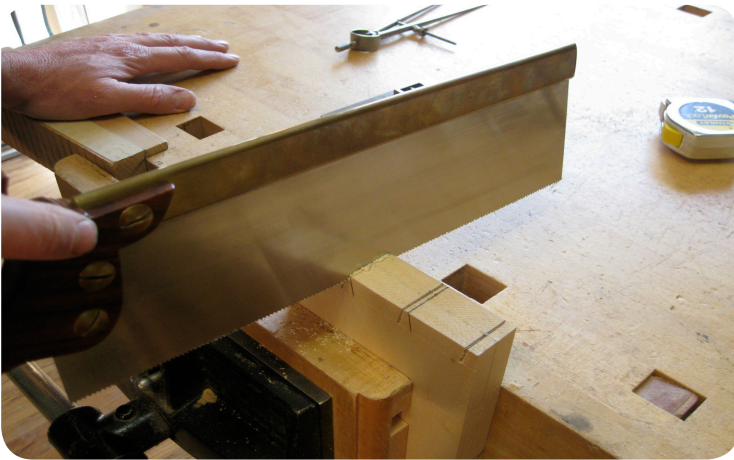




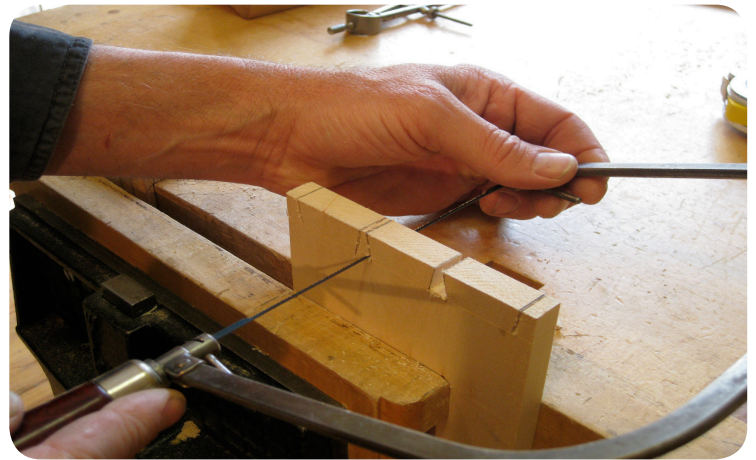
Use dividers to layout the dovetails. Start at the 1/4-inch mark on the left and walk the dividers across the board end, counting the number of tails you want to incorporate into the joint. The distance the dividers extend beyond the right 1/4-inch mark represents the dovetail spacing. Work back across the board, starting with the right hand 1/4-inch mark.



Use a dovetail template and a sharp pencil to finish laying out the dovetails.



Make saw cuts on the waste side of the pencil lines to the baseline. Keep the saw cut perpendicular to the face.



With the tails now defined with saw cuts, remove the waste with a coping saw, ideally leaving 1/32-inch of material between the cut and the baseline.

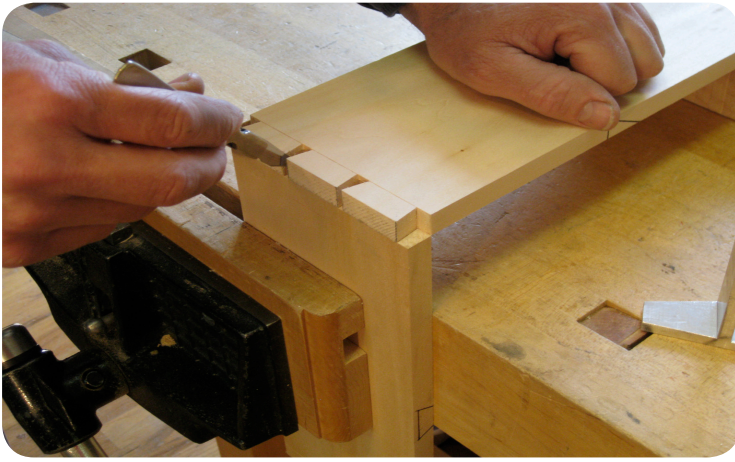


Remove the halfpin waste with a back saw. Cutting accurately to the baseline will eliminate cleanup work later.

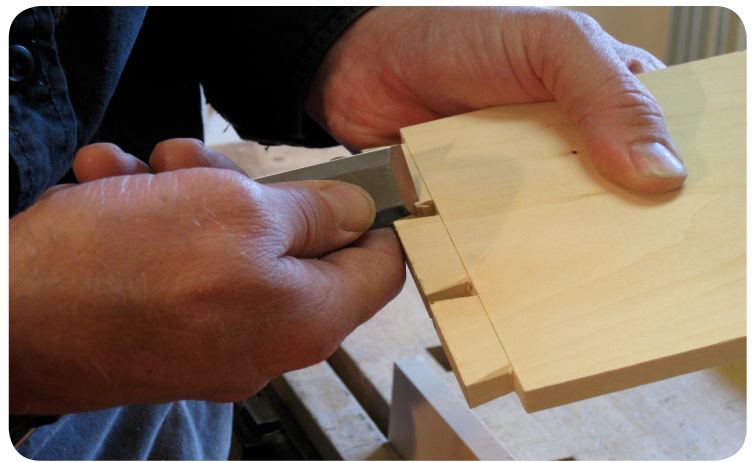


Chisel the pin sockets to the baseline. Chisel halfway from the inside first, then repeat from the outside.

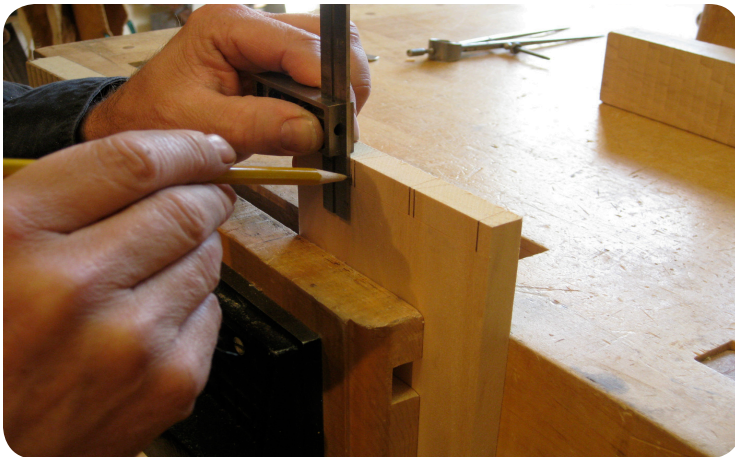




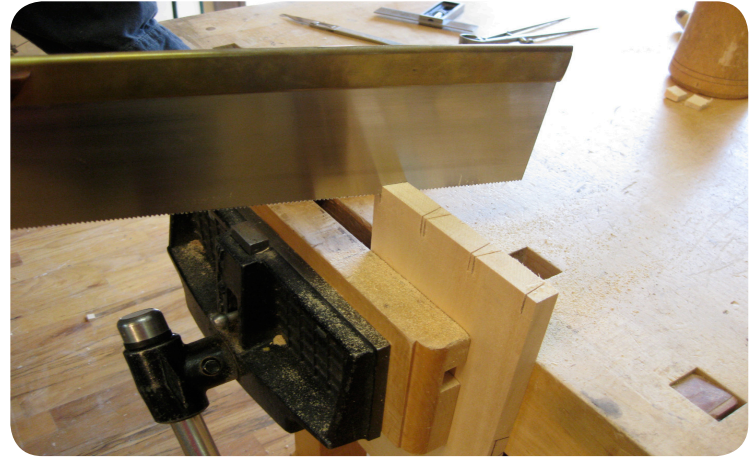
Place pinboard into a vice with its face out. Register and align the tailboard on the pinboard with its face out. Check that your cabinet makers' triangles are properly oriented. Mark the pins from the tailboard using a marking knife.



Chamfer the inside of the tails, starting 1/8-inch in from the board ends.



Use a pencil and square to extend the pin marks down the board face.



Cut the pins on the waste side of the line. Accurate cuts here can greatly reduce cleanup time later. Remove the waste with a coping saw and chisel the baseline as described earlier.

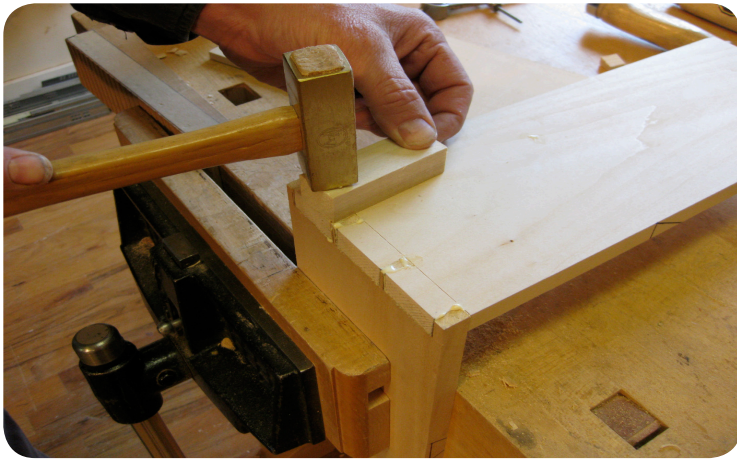


If necessary, pare the pins to your layout lines. Paring crossgrain, as in this photo, is preferable.



Apply glue and spread it on the tails and pins with a brush.

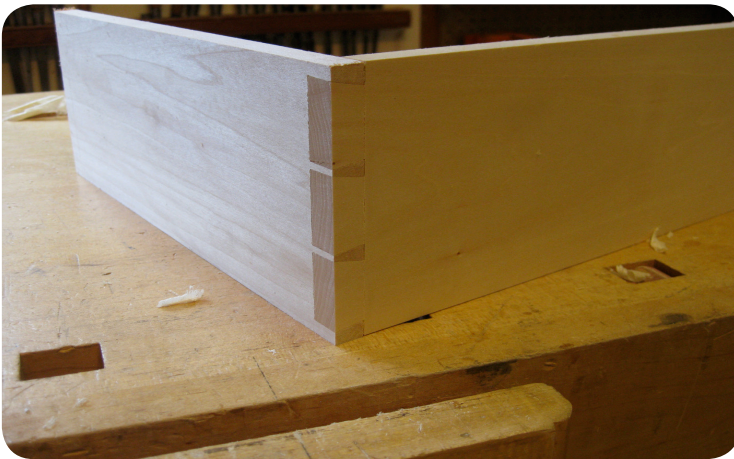




Use a hammer and wooden block to tap the joint together.



When the glue has set, plane the joint flush.



The finished joint.