

Figure 10-14. A dovetail tenon is formed in two passes, one on each face of the stock.

table and push it slowly. Caution: If the cut is for a through dovetail, use a scrap block between the work and the table.

The tenon on a single, wide dovetail is formed by making two cuts, one on each end of the stock. The mating part is formed the same way, with the waste stock cut away by running the work across the cutter within limits set by the two end cuts and stop blocks. Care must be exercised in positioning the pieces for successive cuts, but testing in scrap wood before cutting will make this easier. By using the setups shown in Figures 10-13 and 10-14, you can join boards edge-to-edge or provide a sliding arrangement.



Figure 10-15. A sliding table greatly simplifies cutting a dovetail slot in an extrawide piece.

Cut the slot in one pass by placing the table as shown and adjusting it so the cut is made directly down the centerline of the board (Figure 10-13). Depth of cut is set by lowering the quill and locking it in position. Feed the workpiece slowly and keep it flat against the table. Don't force the workpiece.

The tenon requires two passes. The workpiece is positioned so the cutter forms the tenon on one side of the board. Then the workpiece is turned and the second pass is made; thus, the cutter completes the forming of the tenon on the opposite surface of the board (Figure 10-14). Here, even more than elsewhere, be sure the workpiece is held firmly and flat against the table. Construction details for the fence extension are shown in Figure 5-10.

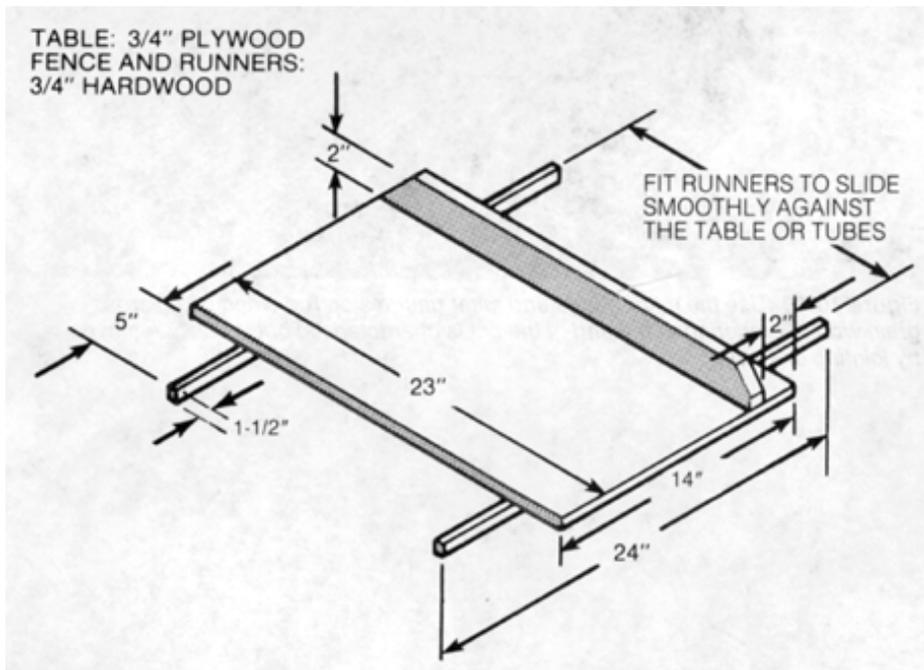


Figure 10-16. Construction details of the sliding table. Runners should fit snugly against the edges of the table (Model 500) or the table tubes (Model 510).



Figure 10-17. Two passes are needed on an extra-wide workpiece. Be sure to align the bith with the kerf.

Wide stock that must be grooved across the grain requires a sliding table arrangement to which the work can be clamped (Figure 10-15). The fixture is constructed as shown in Figure 10-16, with the runners situated so the platform will slide smoothly on the table. The table is raised to an approximate position and the final adjustment for depth of cut is made by using the quill feed lever.

With this arrangement the length of cut is limited to the distance from the cutter to the tubes. On narrow stock the groove can be completed in one pass by using a spacer board between the workpiece and the fence. Wide boards require two cuts from opposite sides of the board on a common centerline. Alignment is important. Locate the cutter center by marking a pencil line on the fence of the sliding table. Mark lines on the workpiece to locate the centerlines of the grooves. Align these with the mark on the fence. Since the first half-cut (on wide boards) removes the line, it is necessary to use a straightedge to realign the workpiece with the mark on the fence before completing the cut (Figure 10-17). This method is not limited to dovetail grooves; straight grooves are cut with router bits, and the procedure is exactly the same.

HORIZONTAL ROUTING

As shown in Figure 10-18, grooves are cut with the Mark V in the horizontal position. A fence extension and feather board provide guidance and support as the workpiece is fed through. Construction details for the fence extension are found in Figure 5-10.

The depth of cuts given in “General Routing” apply. If it's tough to feed the workpiece, the workpiece chatters, or the cut is rough, you are probably cutting too deep. Back off and make repeat passes instead. The same setup can be used to form rabbets or tongues.

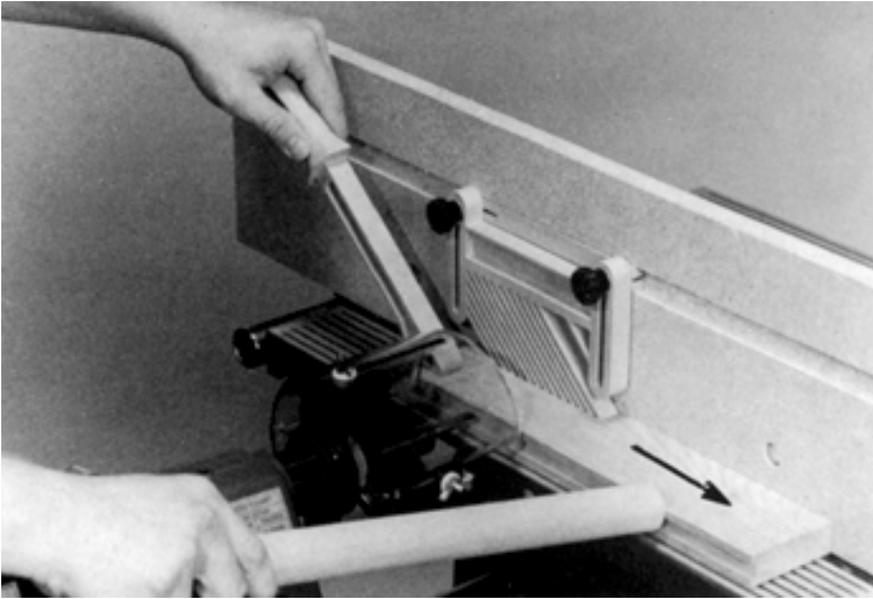


Figure 10-18. A router bit can be used to form edge grooves if this setup is employed. The feather board keeps the workpiece flat on the table.

Handle cross grain cuts by working with the miter gauge and using the miter gauge stop rod to determine the depth of cut (Figure 10-19). There will be some feathering at the end of the cut, so work on a piece that is wider than you need. Remove the chip by making a light jointer cut or by sawing.

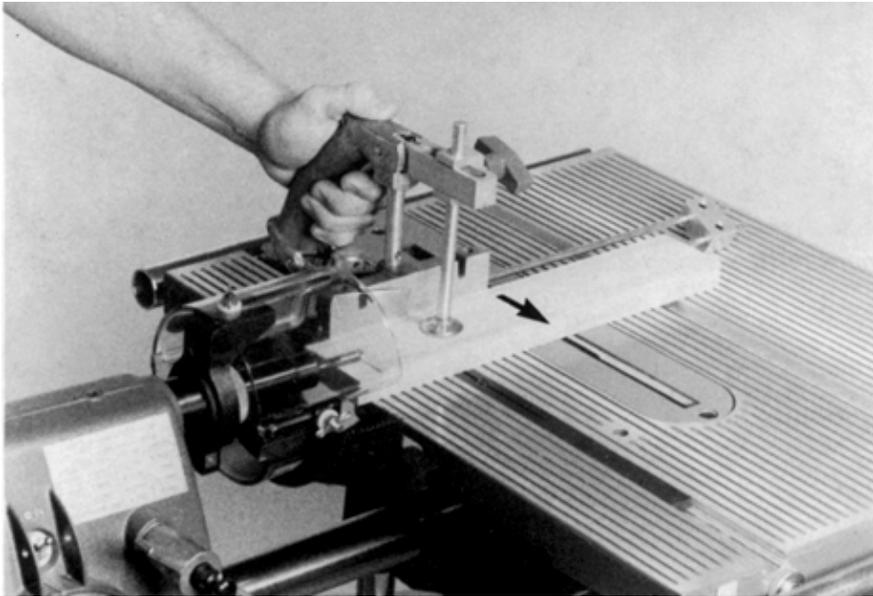


Figure 10-19. Use the miter gauge and miter gauge stop rod when doing cross grain work. Feathering at the end of the cut is characteristic but is easily removed by jointing or sawing.