

Figure 3-35. The joint lines will not be so noticeable if you design shelves like this.

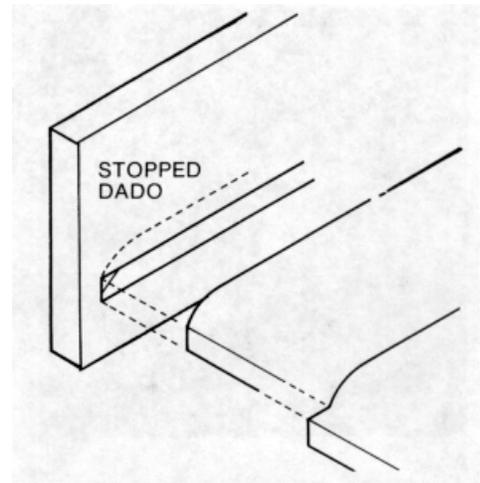


Figure 3-37. Shelves can be shaped this way to conform to the arc that is part of a stopped dado.

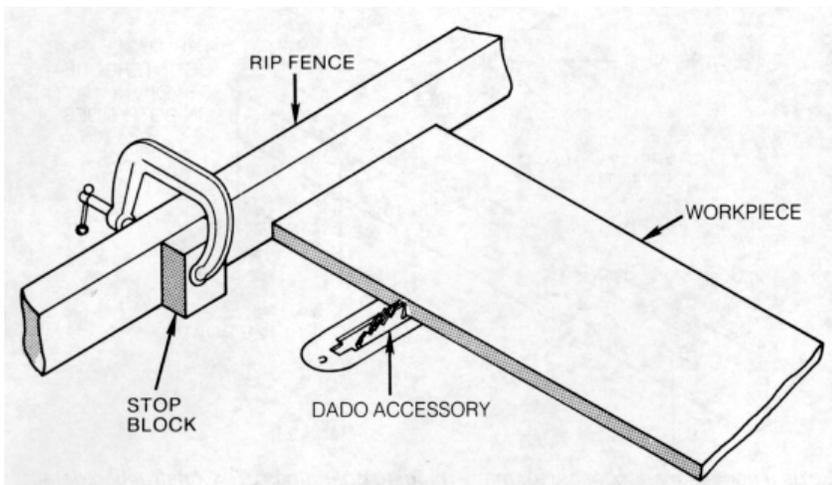


Figure 3-36. A stopped dado results when you do not cut entirely across the stock. A stop block can be used to control the length of cut.

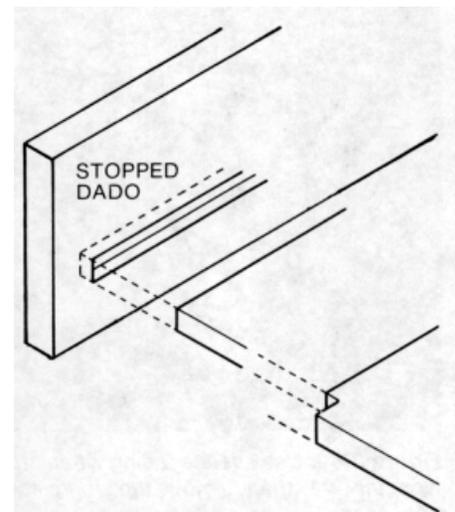


Figure 3-38. The arc area of the stopped dado can be cleared out with a chisel; the shelves can then be fitted this way.

The size of the rabbet is determined by the piece that will be joined to it. For example, if you were recessing a 1/4" panel into the back of a bookcase frame made of 3/4" stock, the rabbet would have to be 1/4" deep (to accommodate the panel) by about 3/8" wide (to provide fastening area without loss of strength to the side).

While rabbets can be cut with a conventional saw blade as described later in this chapter, they are more easily formed with a dado accessory. To obtain the most accurate results, make a fence facing like the one shown in Figure 3-39. To form the relief arc that is needed in the facing, continue in this manner: Raise the table above the dado accessory and bolt the facing to the rip fence. Lock the fence so the dado accessory will cut about three-quarters of the facing's thickness; then very slowly lower the table until the arc's height is about 3/8" deep.

To form an edge rabbet, lock the rip fence so the distance from the fence facing to the outside of the dado accessory equals the width of the rabbet. Adjust the blade projection for the depth of the rabbet. Hold the

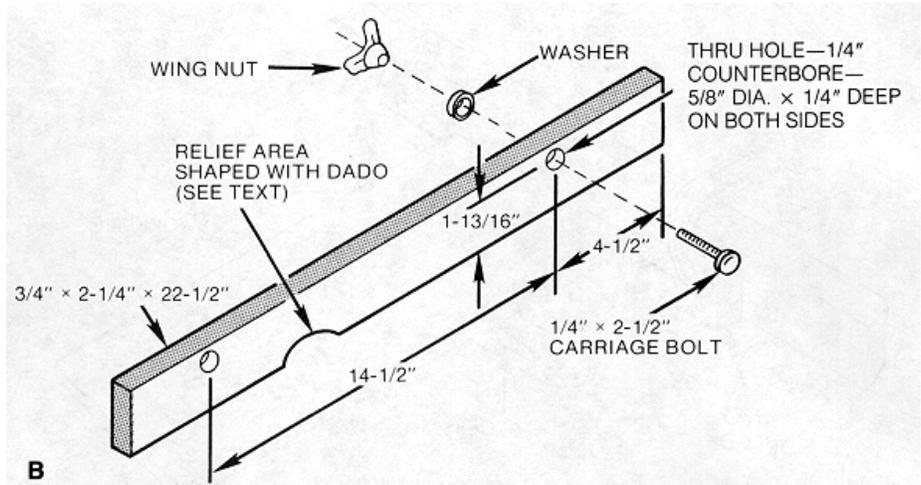
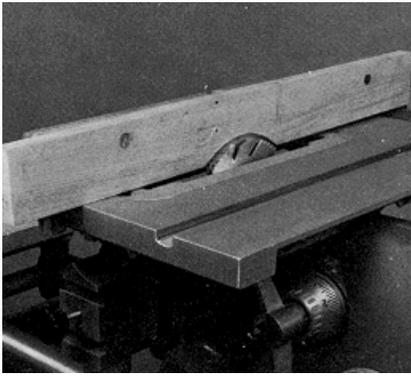


Figure 3-39. (A) A fence facing, which you make, is a necessary accessory for many dadoing operations. (B) Construction details of the fence facing.

workpiece snugly against the facing and make the pass as shown in Figure 3-40.

End rabbets may be cut in similar fashion but a spacer is mounted on the rip fence and the miter gauge with safety grip advances the work (Figure 3-41). The rip fence is locked so the distance from the spacer to the outside of the dado accessory equals the width of the rabbet; the blade's projection is set for the rabbet's depth.

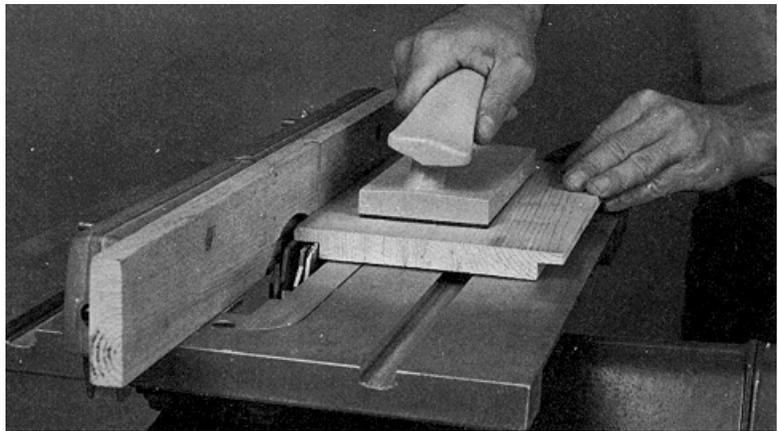


Figure 3-40. Use a fence facing when cutting edge rabbets. It's much better to work this way than to move the workpiece between the fence and the dado accessory.

Figure 3-38. The arc area of the stopped dado can be cleared out with a chisel; the shelves can then be fitted this way.

Tongue-and-Groove Work-To perform tongue-and-groove work, assemble the dado accessory so you'll get the groove width you need. Set the projection for the depth of the groove; then make the pass as shown in Figure 3-42. Be sure that the stock has ample bearing surface against the insert. To ensure that the groove will be exactly centered, assemble the dado accessory parts to make the cut narrower than you need. Make one pass and then turn the stock end-for-end and make a second pass.

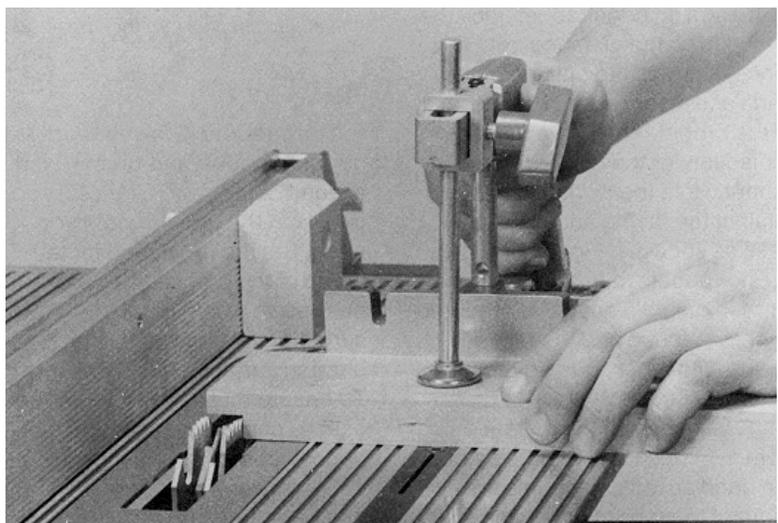


Figure 3-41. A spacer on the rip fence can be used to gauge the cut width of an end rabbet. Position the spacer so it is well in front of the dado accessory.

The tongue is formed by making two opposing rabbet cuts on the stock's edge

(Figure 3-43). Make a first cut with one side of the stock against the fence and make a second cut after turning the stock end-for-end. It's easier to make adjustments for the rabbet cuts that form the tongue, so always shape the grooves first and fit the tongue to the groove.

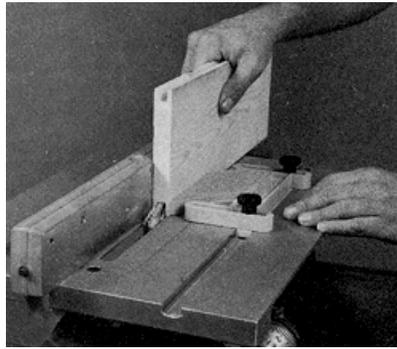


Figure 3-42. Cutting a groove for a tongue and groove joint. Be sure the stock has ample bearing surface against the insert.

Forming a Tenon-A tenon can be formed by making two matching rabbet cuts, controlled by the setup shown in Figure 3-44. The distance from the spacer to the outside of the dado accessory equals the length of the tenon. The blade's projection equals one-half of the stock's thickness minus half the thickness of the tenon. Make repeat passes to clean away the waste stock; then turn the work over and repeat the procedure (Figure 3-45).

ADDITIONAL JOINERY

All of the joints shown in Figure 3-46 can be accomplished by work-ing with either a saw blade or a dado accessory. Some of the joints can be made using the Tenon Master Jig. It's a good idea to become familiar with these joints since they are used in many types of furniture and cabinetmaking and in drawer and case constructions.

Saw Blade Joinery

By making repeat passes with the saw blade you can form dados, grooves and rabbets.

Dadoes-Figure 3-47 shows how to form a dada by making repeat passes with a saw blade. The first and second cuts form the shoulders of the dado. The material between the two cuts is removed by making overlapping passes. When the same cut is required on more than one piece, gauge the first and second cuts by using a stop block on the rip fence and miter gauge extension or stop rod.

Warning: Never position the miter gauge stop rod so it crosses in front of the blade. Do the cuts in sequence on all pieces; that is, make the first cut on all pieces and then the second cut. This will ensure that the cuts will be similar and correctly located on all the work.

Grooves-A repeat-pass groove is formed by working against the rip fence as diagrammed in Figure 3-48. Work this way to assure that the groove will be exactly centered. Mark the stock for the first cut; this will indicate the stock thickness that remains after the

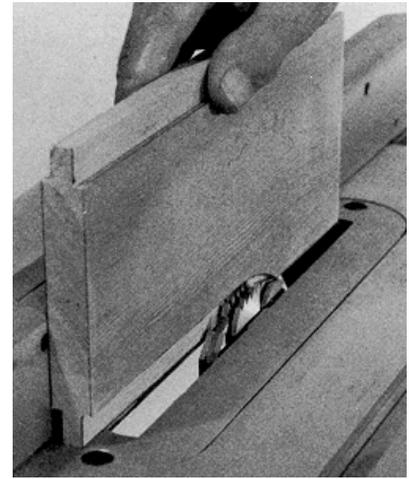


Figure 3-43. A tongue is formed by making matching rabbet cuts on opposite edges of the stock. Always cut the grooves first and then form the tongues to fit.

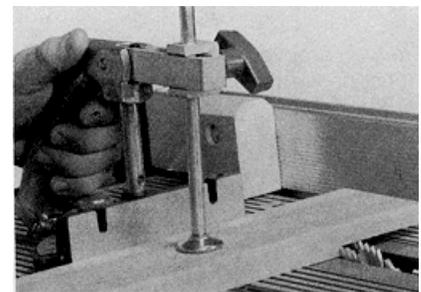


Figure 3-44. A tenon is formed by making two rabbet cuts. The spacer controls the total cut width. Clean out waste by making repeat passes.

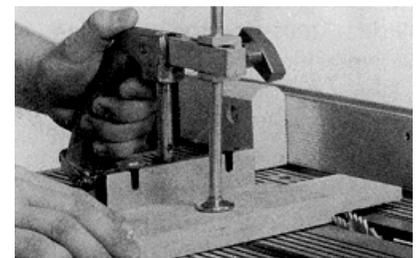


Figure 3-45. To finish the tenon, turn the stock over and repeat the procedure.