

Figure 2-50. You can straighten stock with irregular edges by working this way. The guide rides against (A) the rip fence on the Model 510 and (B) against the edge of the table on the Model 500.

large-sized pieces of stock can be handled in this fashion.

Taper Ripping

Taper rip cuts, needed for many projects, call for a taper guide that has one straight side that can move along the rip fence and an adjustable side that can be locked at an angle to gauge the amount of taper. You can buy a taper guide or make one as shown in Figure 2-51. Surface-mount or mortise the hinge on the ends of the legs. The cross-piece, or brace, that is used to secure settings can be made of metal instead of wood.

After the guide is assembled, mark a line across both legs 12" away from the hinged end. Because of the 12" marks, you can preset the guide for particular tapers by measuring between the legs (Figure 2-52). For example, if you were making a stool with legs that are 12" long, 3" wide at the top, and 2" wide at the bottom, you would need to cut a 1" per foot taper. By separating the legs 1" at the 12" mark, you would have the correct setting for the guide to cut the taper on two adjacent sides only.

To provide a scale for future adjustments, separate the legs to

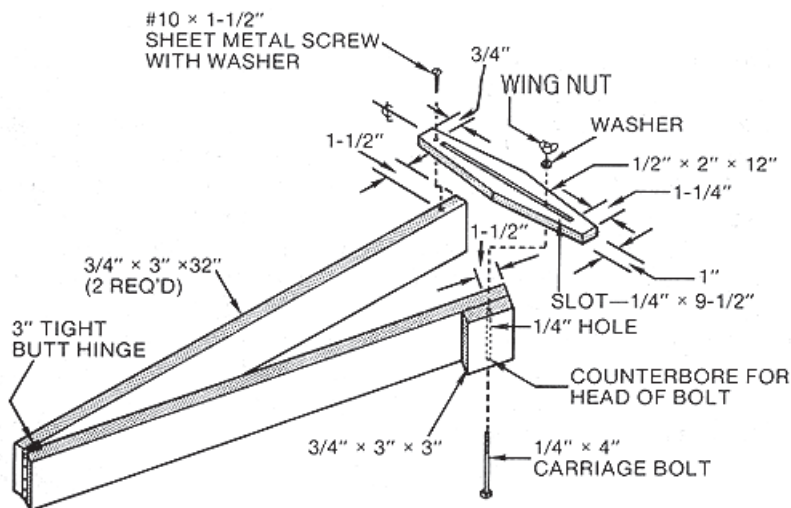


Figure 2-51. Construction details of a taper guide.

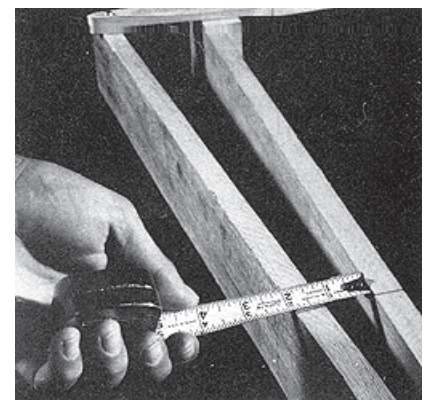


Figure 2-52. Mark across the legs 12" away from the hinged end; then you can measure between the marks to set the guide for a particular taper per foot.

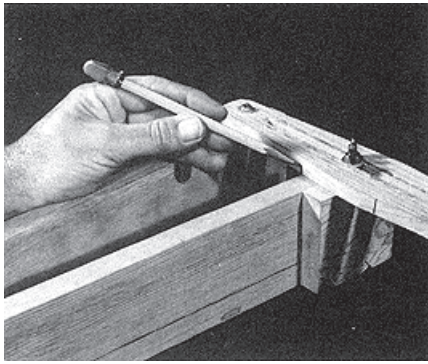


Figure 2-53. You can calibrate the cross brace for particular taper-per-foot settings.

various dimensions across the 12" marks and use a pencil to mark the settings on the cross brace (Figure 2-53).

When a project component, a table leg, for example, needs to be tapered on four sides, make one pass and then a second pass on an adjacent side of the stock without changing the guide's setting. Adjust the guide to twice the original setting and then make a third and fourth pass consecutively on the next adjacent sides.

Use a taper guide as shown in Figure 2-54. The workpiece is placed flush against the leg of the guide. Both the guide and the workpiece are then moved forward to make the cut. Notice that the worktable is positioned at the right end and lined up with the extension table to increase the work-piece support area. The operation is done just like a routine rip cut. The only difference is that the workpiece is fed forward by moving the guide.

When the same taper is required on the opposite side of the stock, make the first cut as just described; then adjust the guide to twice its original opening. Position the stock so the edge already tapered is

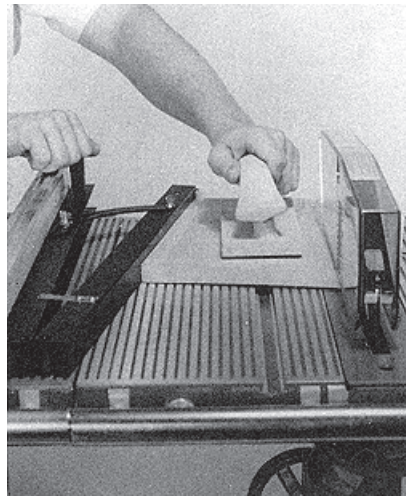


Figure 2-54. This is how the workpiece is placed in the taper guide. Place hands as you would for regular rip cuts. Be sure the guide rides against the fence throughout the pass

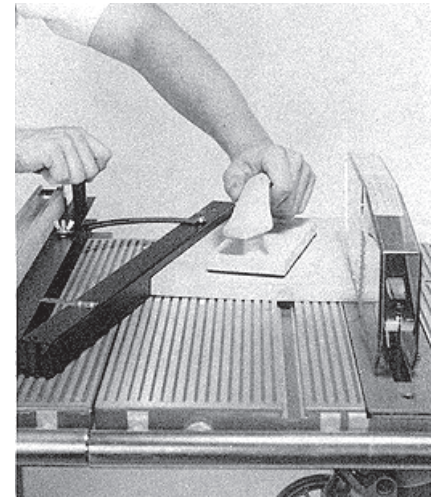


Figure 2-55. When you require the same taper on opposite edges, reposition the workpiece, set the guide for twice the original taper, and make a second pass.

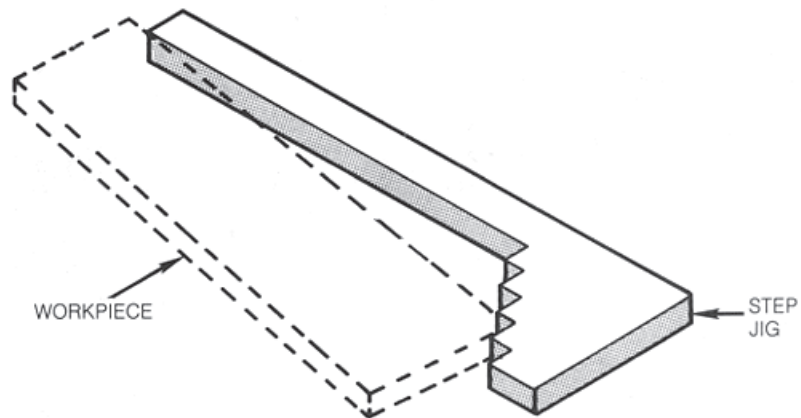


Figure 2-56. A step guide is a good aid if you do production work and will frequently be needing a particular taper.

against the guide, and make a second pass (Figure 2-55).

Other Tapering Techniques-- The step guide, diagrammed in Figure 2-56, is a good aid for production-type work because it eliminates having to set the variable guide for different tapers. The steps in the guide, which are dimensioned

for particular cuts, gauge the amount of taper. Each step will consistently produce the same taper. The work is placed so that one corner is in the correct step and the opposite end butts against the arm of the guide. The straight edge of the guide rides against the rip fence. against the rip fence.