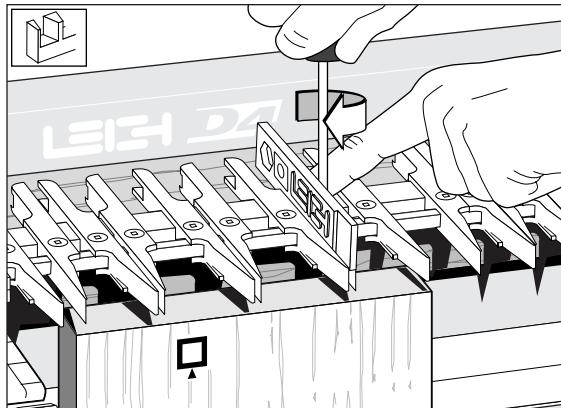


Large and Small Through Dovetails

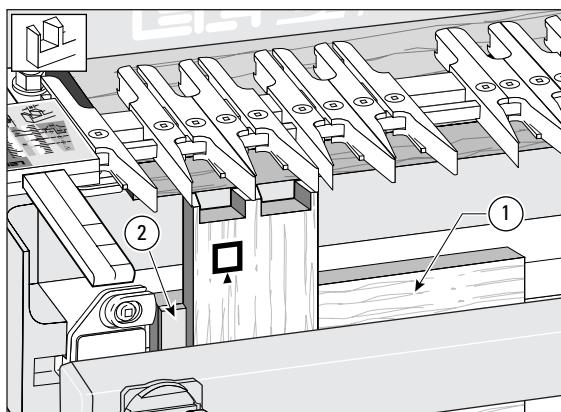
Chapter Foreword

The following procedures considerably expand the D4 jig's versatility. However, before attempting them, thoroughly master the techniques of Through Dovetails in Chapter 8.



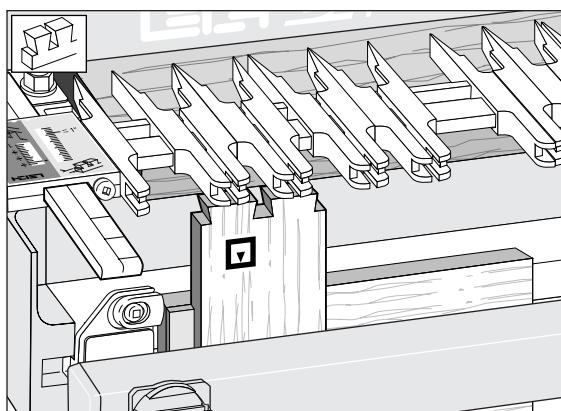
9-1 LARGE THROUGH DOVETAILS

The procedures for using cutters 90 and 160 or 100 and 150 are identical to the previous figures, except that a $\frac{5}{8}$ " [15,9mm] OD guidebush is used, and *each pair of guidefingers must be at least $\frac{3}{16}$ " [5mm] apart*. Use the Leigh wrench gauge ($\frac{3}{16}$ " [5mm] thick) to make sure there is enough separation. Note: Because the fingers are separated by $\frac{3}{16}$ " [5mm], the closest possible pin centres using these cutter combinations is $1\frac{3}{8}$ " [35mm], instead of 1" [25,4mm].



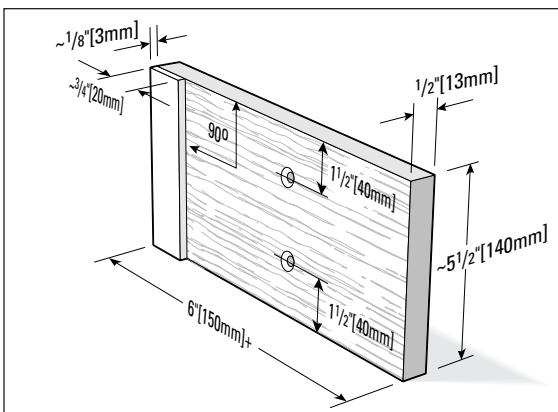
9-2 SMALL THROUGH DOVETAILS

Item 50 and 60 cutters allow you to create tiny through dovetails in material $\frac{3}{8}$ " [10mm] or less in thickness. This procedure is an extra bonus: the Leigh jig was not originally designed for it. The  TD PINS scale does not go down far enough, so you have to space the boards away from the jig face with a shop-made block ① fitted with its own side stop ② (see next page for how to make the block). Use a $\frac{7}{16}$ " [11,1mm] O.D. guidebush for these small joints.

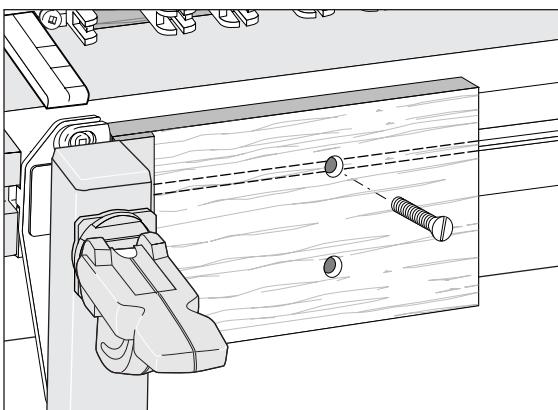


9-3

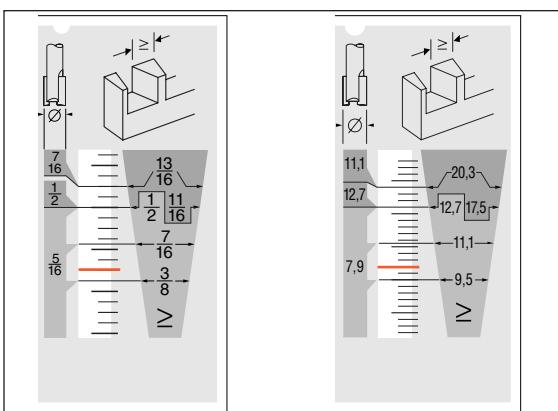
Use the same block with side stop when cutting the tails to ensure correct alignment of the pin and tail boards.

**9-4**

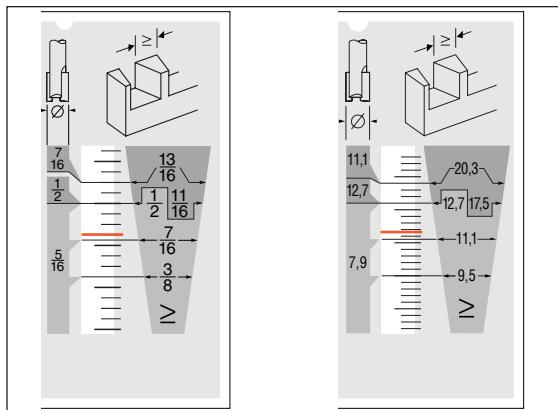
Make the block with side stop out of $\frac{1}{2}$ " [13mm] stock as shown. Bore two $\frac{1}{4}$ " [6mm] holes, countersunk for a flat head screw (part no. 287). Or you could bore one hole and put side stop strips on both ends.

**9-5**

Remove one front cam clamp, lower the clamp bar and attach the block to the jig face using the screw (No. 287) into the entrapped square nut. Replace the clamp bar and cam clamp.

**9-6**

For boards up to $\frac{1}{4}$ " [6mm] thick use dovetail cutter 50 and pin cutter 140 with a $\frac{7}{16}$ " [11.1mm] guidebush. To cut pins matching the sockets made with item 50, begin with the setting shown here. Cut test pins in some scrap stock and test for fit. Adjust as necessary.

**9-7**

For boards up to $\frac{3}{8}$ " [9,5 mm] thick use dovetail cutter 60 and pin cutter 140 with a $\frac{7}{16}$ " [11,1 mm] guidebush. To cut pins matching the sockets made with item 60, begin with the setting shown here. Cut test pieces in some scrap stock and test for fit, then adjust as necessary. Record the actual settings for cutters 50 and 60 on these scale reproductions below.

Note: You may also rout joints in boards $\frac{5}{16}$ " to $\frac{3}{8}$ " [8,0 to 9,5 mm] with cutters No. 70 and 140 without the use of the shop-made block.

