# TRESTLE TABLE

by MEGAN FITZPATRICK

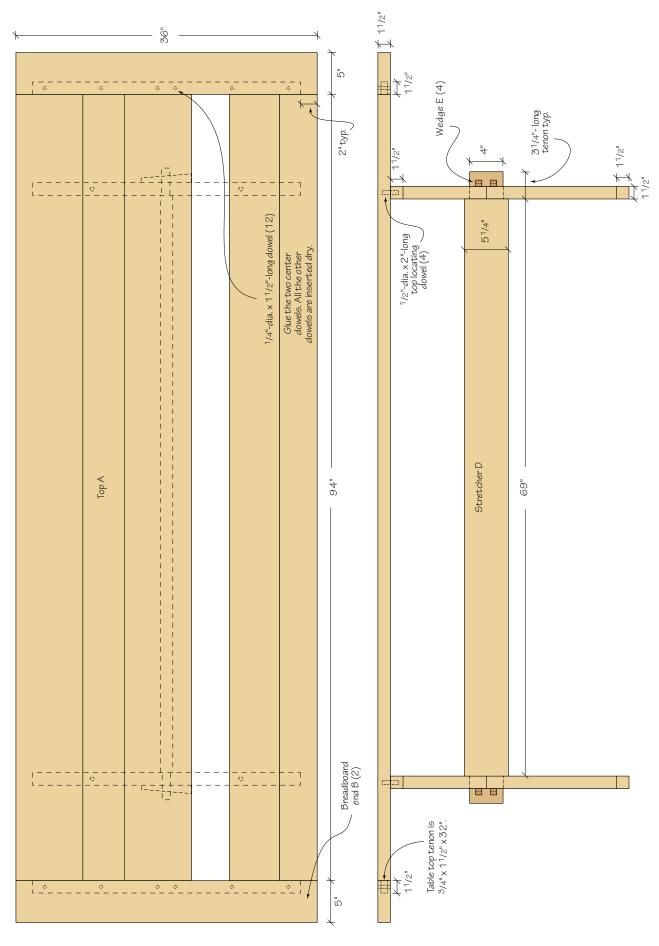
# PROJECT TWELVE

This large trestle table is modeled after a piece you might find in the great hall of a medieval castle. It's built of sugar pine, uses no hardware and is entirely knockdown. This very soft wood will pick up dings and dents readily, which helps age the piece a couple of centuries in just a few weeks!

As a dabbler in medieval and renaissance history and literature, I'm fascinated not only with the cultural productions of the time, but the physical ones as well. Thus, I modeled my table after several I've seen in books and in museums, and made my version without any hardware, as most of the furniture of the time was held together by pegs, and iron and leather bands.







### **INCHES (MILLIMETERS)**

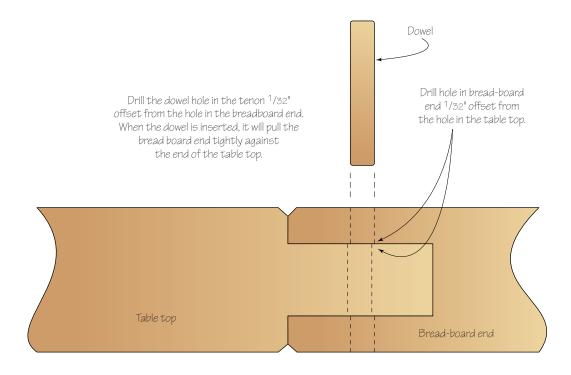
REFERENCE	QUANTITY	PART	STOCK	THICKNESS	(mm)	WIDTH	(mm)	LENGTH	(mm)	COMMENTS
Α	1	top	sugar pine	1 <sup>1</sup> / <sub>2</sub>	(38)	36	(914)	96 <sup>1</sup> / <sub>2</sub>	(2451)	random width boards to make 36" (914mm)-wide top
В	2	breadboard ends	sugar pine	1 <sup>1</sup> / <sub>2</sub>	(38)	5	(127)	36	(914)	
C	4	legs	sugar pine	11/2	(38)	5	(127)	40+/-	(1016)	
D	1	stretcher	sugar pine	1 <sup>1</sup> / <sub>2</sub>	(38)	5 <sup>1</sup> / <sub>4</sub>	(133)	69 <sup>1</sup> / <sub>2</sub>	(1765)	
Ε	4	wedges	sugar pine	3/4	(19)	1	(25)	6 <sup>1</sup> / <sub>2</sub>	(165)	

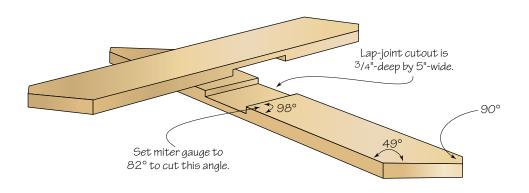
### **HARDWARE & SUPPLIES**

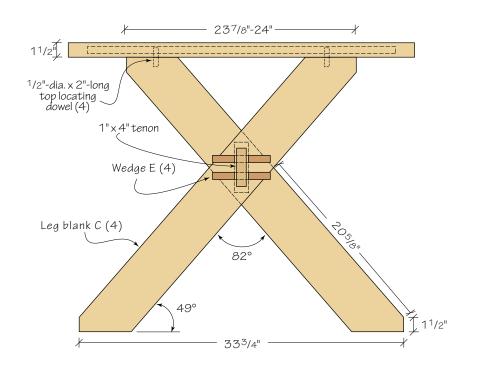
12 <sup>1</sup> / <sub>4</sub> "-dia. x 1 <sup>1</sup> / <sub>2</sub> "(6mm x 38n	m) dowels
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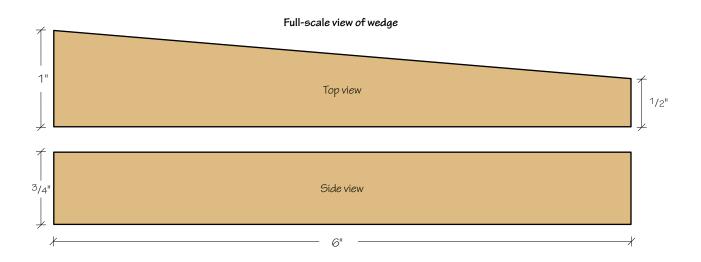
<sup>1</sup>/<sub>2</sub>"-dia. x 2"(13mm x 51mm) dowels

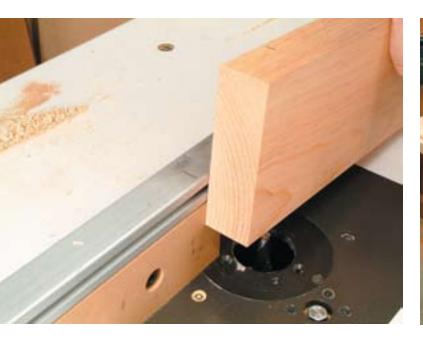
## Full-scale section of table-top tenon and pegs



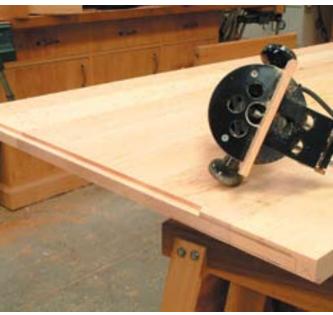








**STEP 1** | Cut out all parts for the top. Use random width boards totaling 36" in width. Before gluing these boards together, cut a bevel on all the long edges using a router with a bevel-cutting bit. Now, cut a  $\frac{3}{4}$ "-wide  $\times$   $\frac{1}{2}$ "-deep  $\times$   $\frac{32}{2}$ "-long mortise in both breadboard ends using a router fitted with a  $\frac{1}{2}$ " straight-cutting bit. Mount the router under a router table. Because the mortise is deep, cut the mortise only  $\frac{1}{2}$ " deep per pass, and then go back for more.



**STEP 2** | This is the router setup used to cut the tenons on the top. Remember to make test cuts on scrap wood until the tenon fits the mortise in the breadboards.



**STEP 3** | When you're satisfied with the fit, cut a  $\frac{3}{4}$ "-wide ×  $1\frac{1}{2}$ "-deep × 32"-long tenon along each end of the top.



**STEP 4** | Drill holes in the breadboards for the dowels that will help secure the breadboards to the ends of the top.



**STEP 5** | Moving the center of the holes in the tenons toward the center of the table, drill the holes in the tenons offset  $\frac{1}{32}$ " from those in the breadboards. This will ensure the breadboards are pulled tightly to the top. (See the illustration for details.)



**STEP 6** | Bevel the inside edges of the breadboards. Then slide the breadboards onto the tenons. The fit should be snug. Drive  $\frac{1}{4}$ " ×  $1\frac{1}{2}$ " dowels into the predrilled holes, leaving them proud of the surface to sand off later. Apply glue to the two center dowels only.



**STEP 7** | Cut the tops and bottoms of all four leg pieces at a 49° angle.



**STEP 8** | For aesthetic purposes, make a 90° cut 1" from both ends of each of the leg pieces.



**STEP 9** Using your table saw, cut lap joints on the legs. The dado cut should be exactly one-half the thickness of the leg and the same width as the leg. Make test cuts in scrap wood first. Be sure to clearly mark the leg parts so you cut the joints correctly.



**STEP 10** | Glue up the leg assemblies. Then, using a router with a  $\frac{1}{2}$ " by  $\frac{1}{2}$ "-long bit, rout a mortise through the lap joint in both halves of the legs. Square the corners of the mortise using a chisel. This mortise will receive the stretcher tenon that holds the base stable. While some woodworkers choose to cut the tenon first and then cut the mortise to fit, I find it's easier to start with the mortise and fit the tenon to the mortise.



**STEP 11** Using the table saw, cut the tenons on the ends of the stretcher. Leave the tenons a little thick and plane down the excess until the tenons slide snugly into the mortises in the leg assemblies. Because this is a knockdown project, you want to be able to slide the tenons in and out easily, but still have a tight enough fit to ensure stability.



**STEP 12** | Mark the overhang on the tenons to determine the placement of the holes for the wedges.



**STEP 13** Drill ¾"-diameter holes to create the mortises. Make sure the edges of the holes are slightly inside the lines you drew. Then, using a chisel, square the holes.



**STEP 14** | Make a simple wedge-cutting fixture by cutting two pieces of <sup>3</sup>/<sub>4</sub>"-thick plywood 4" wide by 10" long. Cut the wedge shape out of one of the pieces on the band saw, then join the two with brads. The edges of your wedge-shaped cut need not be perfect, but cut them as close as you can.



**STEP 15** | Insert a piece of wedge stock into the fixture, then cut the wedges on the table saw. Flip the offcut edge for edge and cut another wedge. Flip the stock before each cut. Make a few extra wedges (you never know when a wedge will go missing).



step 16 | This is the underside of the wedge-cutting fixture. Finish-sand all the table parts with 220-grit sandpaper. This table was stained with a heavily pigmented oil-based stain directly on the raw wood. The stain was allowed to dry for 36 hours. Two coats of polyurethane finish were then applied.