Woodworking Tools That Make You an Expert

Carefully made, these six jigs for a table saw will promote any man into the professional class sooner

By R. J. De CRISTOFORO

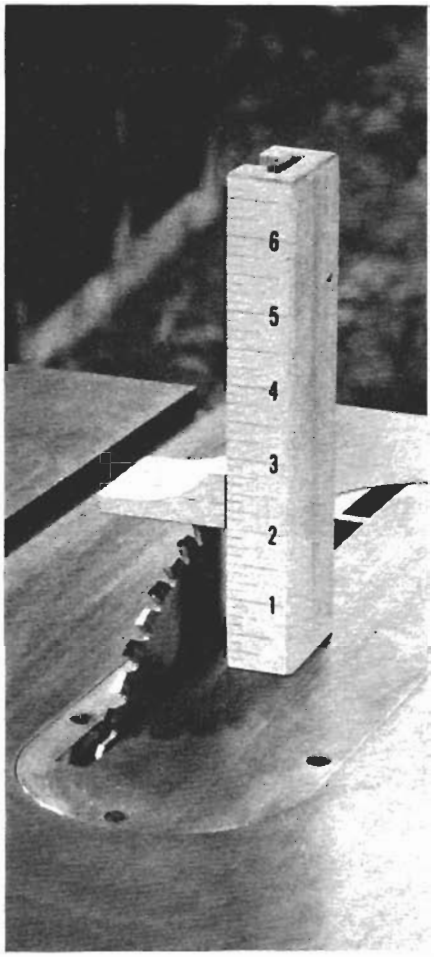
Accuracy is usually the only difference between an expert and tyro woodworker. The tyro *can* achieve accuracy, of course; it just takes him longer. These table-saw gauges, carefully used, will help him get into the expert category sooner—the stage where accuracy comes the first time around.

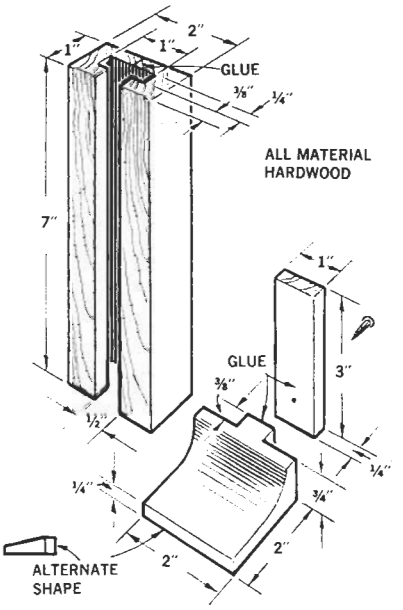
Strangely enough, even though all six have been job-proven time and time again in my shop, only one of the gauges is available as a commercial table-saw accessory. That's the miter-gauge hold-down.

Making them yourself, however, is half the fun, and once you have them completed they'll last you a lifetime.

Before you start, pause long enough to observe that all are honest-to-goodness *tools*. Decide beforehand that you are going to produce quality items. Be even more critical of your own work than you would be of a commercial product. Work slowly, carefully. Sand all parts and apply at least two coats of clear sealer with a steelwool rubdown between coats.

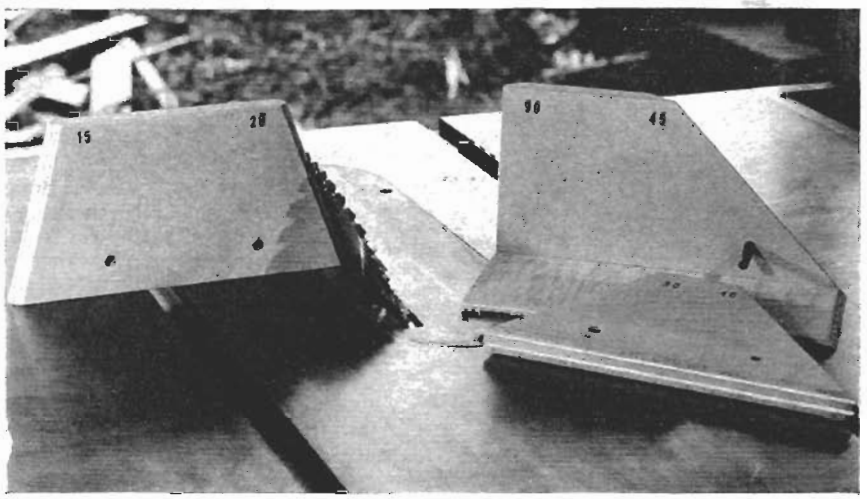
Between use, store your new accessories as you would any other fine tool.





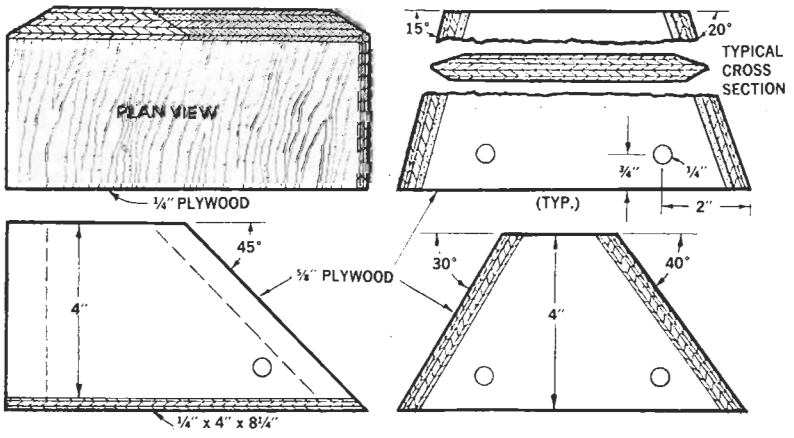
Blade-projection gauge

It's more accurate than sighting across a blade against a scale held vertically. Use this gauge with a saw blade, dado, molding head. Make the post in two pieces and glue them together. Then size the slide for smooth action. You can use a ready-made dressmaker's tape for the graduations or lay out your own on heavy paper, using dry transfer numerals you can buy in a stationery store.

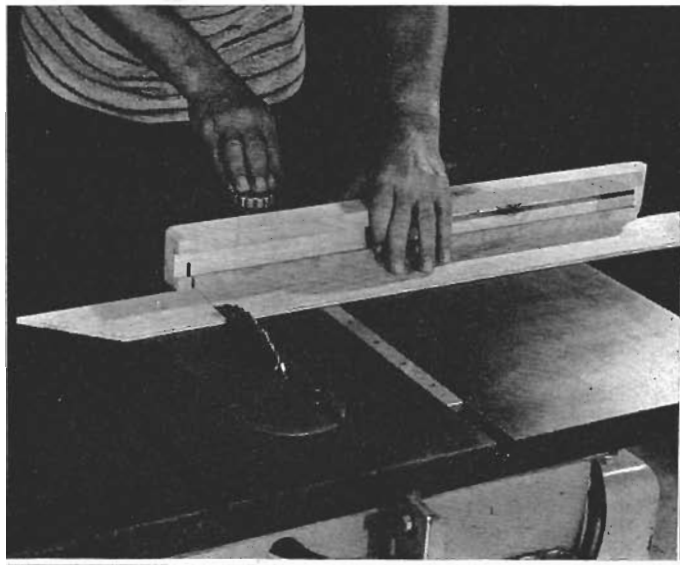


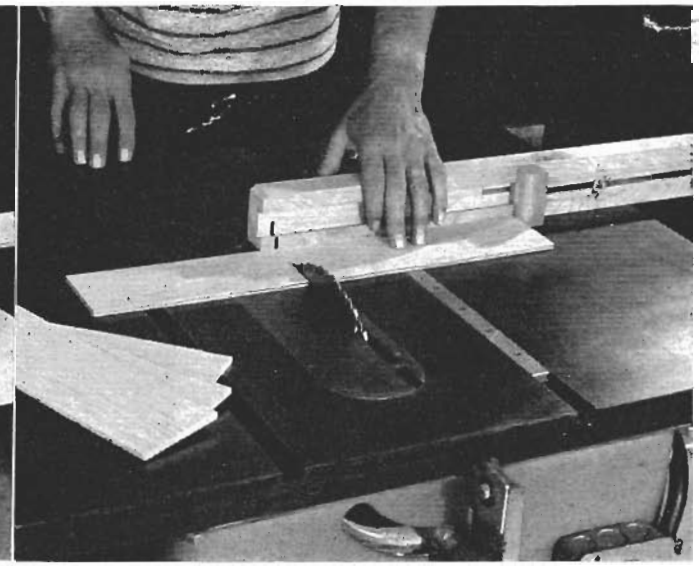
Blade-tilt gauges

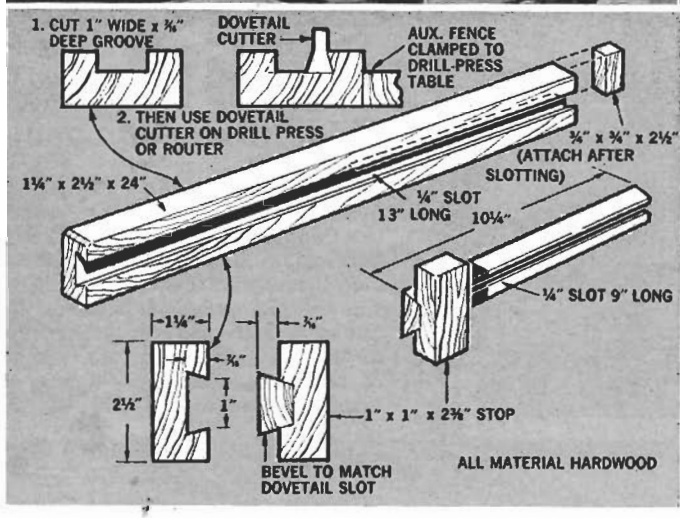
Lay out the gauges with a protractor. Cut them to approximate size, and then finish on a belt or disk sander. Hardboard-surfaced plywood is a good material. Provide perfect angles so you'll be sure when you set the saw blade. It's okay, after you have the angles, to bevel the edges on the table saw. You want to end up with an edge narrow enough to fit between the teeth on a saw blade. Thus you use the flat of the blade for checking. The gauges should cover all commonly used angles. The ¼" bolt (photo) is included so the set can be kept together in a workbench drawer.



For other tools that make you an expert, please turn the page



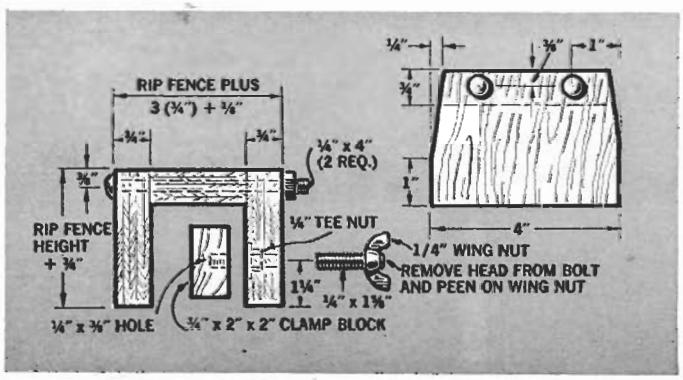




Miter-gauge extension

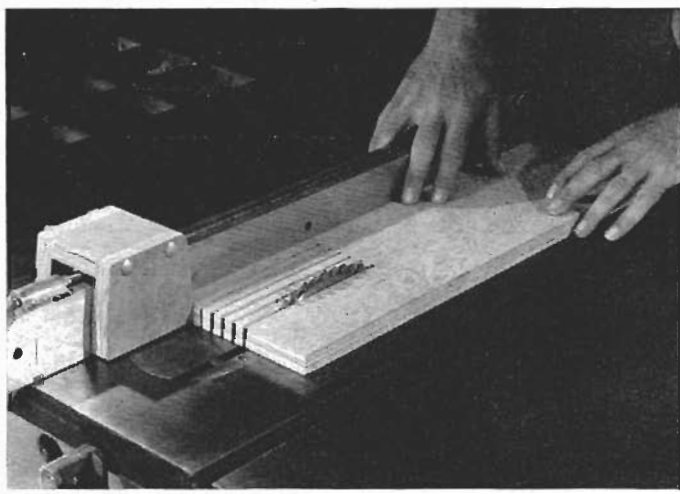
You get good support for crosscutting (photo left) with this extension. A line on the work lets you set accurately to the kerf in the extension, and you avoid sighting by eye with little or no precision. A sliding stop makes the extension a good tool for multiple cutoff work, either square or miter-type cuts. The sliding-stop lock is a ¼" bolt and wingnut. Wood screws through the miter gauge hold the extension in place.

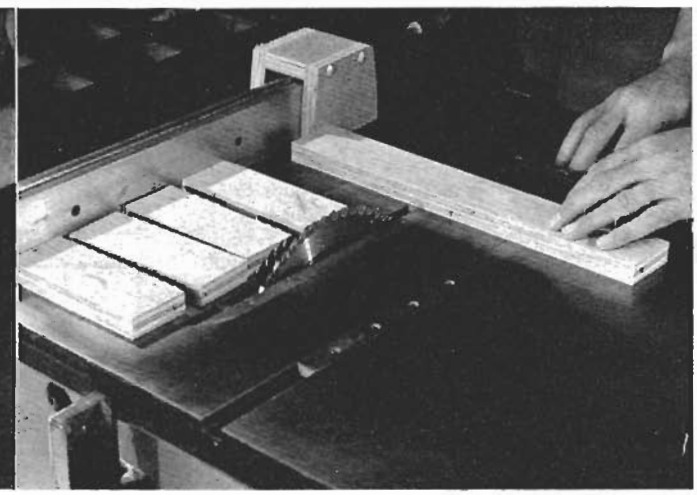
Start by sizing the extension. Form the dovetail as shown in steps 1 and 2. The undercuts can also be done on the table saw by making two bevel cuts with blade projection set to match the depth of the groove—about 15 degrees should do it. The ¼" slot down the center of the dovetail can be formed with a couple of rip-type passes on the saw. Cut the slide from ¾" stock. Attach the stop to the slide with glue and two finishing nails. When you attach the extension to the miter gauge, let it extend on the right side, just far enough so that the blade will cut a kerf through it.

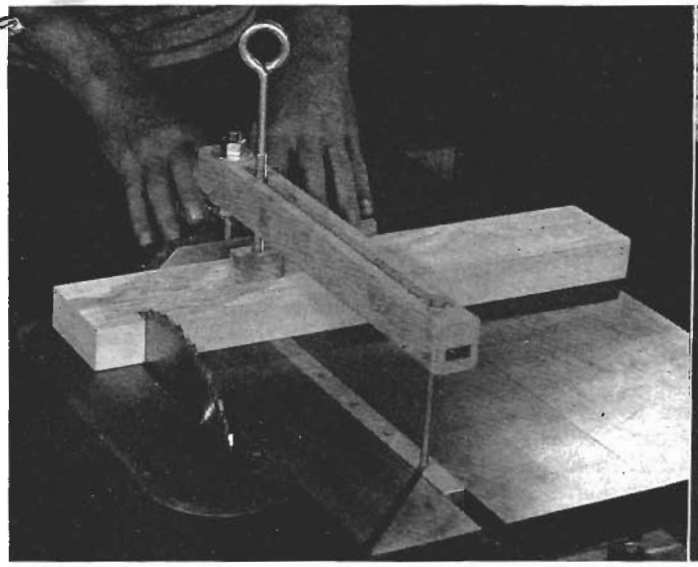


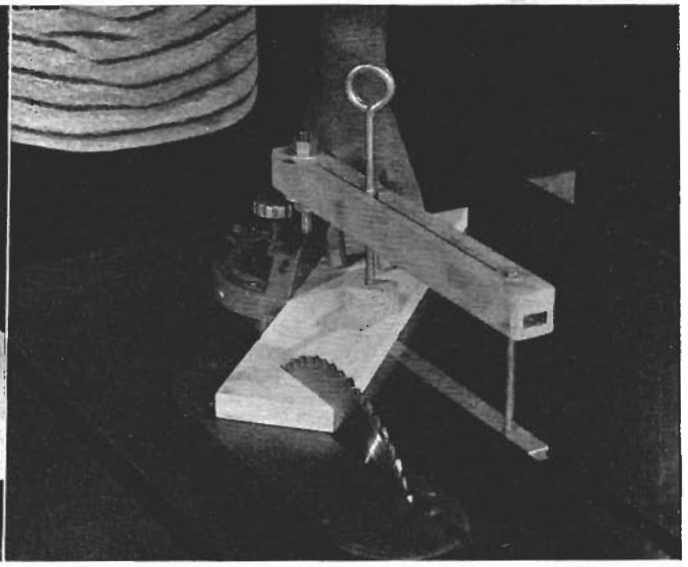
Rip-fence stop block

Here's a more professional way of doing those jobs so often done by clamping scrap wood to the fence. Using ¾" plywood, form the two sides and spacer of the stop block, and assemble with glue. Then drill through all three pieces for the two ¼" bolts. Drill for, and press-fit, the T-nut before doing the assembly. Clamped anywhere on the rip fence, the block (photo at left) gauges the length of stopped cuts whether you are working with a saw blade, dado, or molding head. You can also use it for cutting off narrow pieces of identical length when there's danger of jamming or kickback. Since the thickness of the side of the stop is constant, you always know exactly how much to compensate for when setting the rip fence.



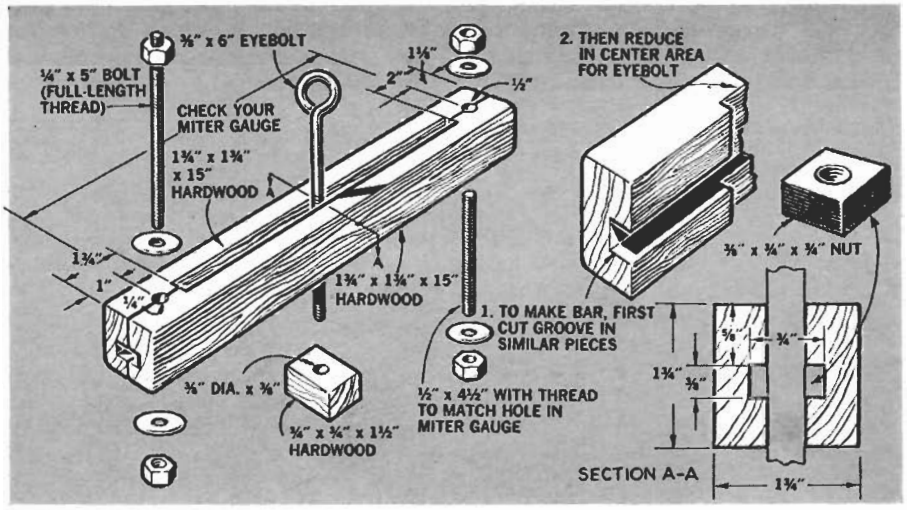






Miter-gauge hold-down

Slippage is prevented with this tool. The hardware to make one to fit your saw can be found in well-stocked hardware stores. If your gauge bar doesn't have a hole in the forward end, drill one and tap it for a ¼" bolt. Chances are that your bar has a tapped hole in the top edge. Check this for fine or coarse threads, and buy a bolt to suit. Form the bar in two pieces, then glue them together. If you can't find a suitable square nut for the eyebolt, make one yourself, tapping it to suit the eyebolt threads. If you find one that's suitable, size a slot in the bar to take it. The hold-down helps, even on simple crosscutting jobs (above, left), but you'll appreciate it most on miter cuts where it guards against creep.



Slotting jig for dowels or tenons

The need to slot dowels or square tenons may not arise often. But pick a project calling for such work and you'll find this jig makes a tough job simple. When you make it, make it for more than one-time use by providing extra openings for a variety of sizes. The drawer pull makes the jig easier to handle while doing a slotting job.