

The Incredible L-Fence

Take your tablesaw to another level with this simple shopmade fence

BY BOB VAN DYKE



Adding jigs and auxiliary fences is a common way to increase your tablesaw's capabilities. But the most clever tablesaw add-on might be one you've never heard of. The "L-fence" makes rabbets, tenons, and straight flush-cuts a breeze, and it will change the way you think about miters. Once you grasp the basics, the L-fence will become an indispensable fixture in your shop.

In its simplest form, the L-fence is two boards fastened along their edges at a right angle. One side is clamped flat to

the rip fence; the other side extends horizontally for a workpiece or template to ride against. It's not hard to build (see opposite page) but once you do, it will make your tablesaw much more versatile.

Easier rabbets and tenons

The L-fence excels at partial cuts into workpieces. As opposed to a sacrificial rip fence, an L-fence remains undamaged, and

Fast rabbets and safe tenons

With the L-fence, you bury the dado blade under the fence—not in it—so you can use the fence repeatedly. It makes quick work of tenons, too, without trapping the offcut.

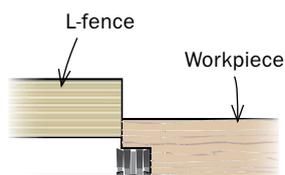


Set it straight. Set the L-fence $\frac{1}{16}$ in. to $\frac{1}{8}$ in. above the blades. Shims hold the fence parallel to the table while you tighten the clamps.

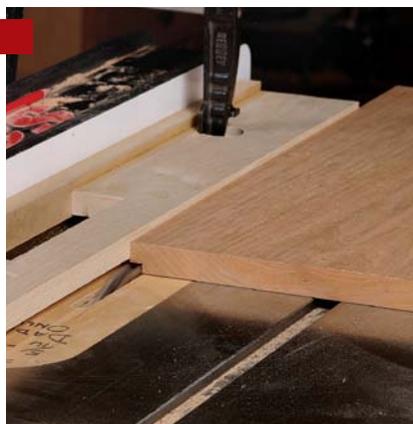


Adjust the rip fence. The width of the exposed dado set establishes the width of the rabbet. Measure from the edge of the L-fence to the outside of the blade's teeth.

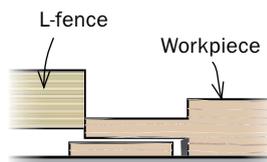
RABBETS



Run your rabbets. Keep the edge of the workpiece tight against the edge of the L-fence as you make the cut.



TENONS

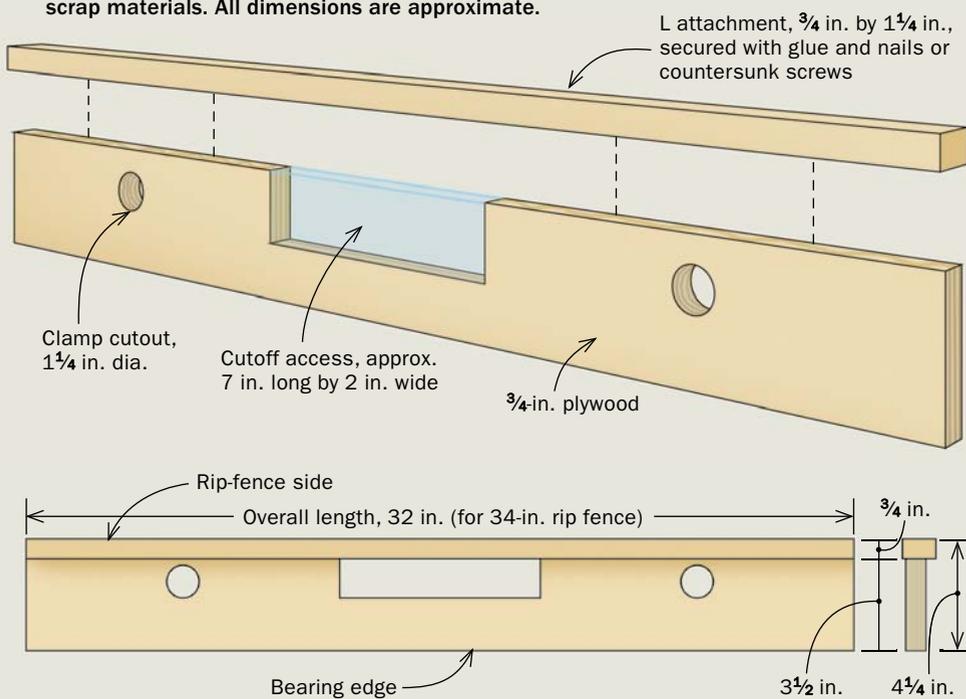


Tenons, too. After the cheek cuts, cut the shoulders with the tenon riding against the L-fence. The cutoff falls away safely.



L-fence is easy to make

You can put together this handy jig in no time, with scrap materials. All dimensions are approximate.

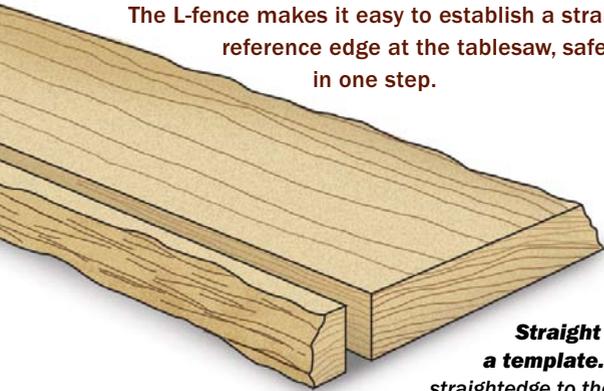


Pop, pop. Attach the two pieces with a bead of glue and a few nails (or countersunk screws).

Use it with templates

PUT A STRAIGHT EDGE ON ROUGH LUMBER

The L-fence makes it easy to establish a straight reference edge at the tablesaw, safely, in one step.



Straight board is a template. Attach a straightedge to the workpiece with double-sided tape.



Set up for a flush cut. Use a ruler to align the edge of the L-fence with the outer edge of the teeth. The L-fence should be a little above the blade, and parallel to the table.

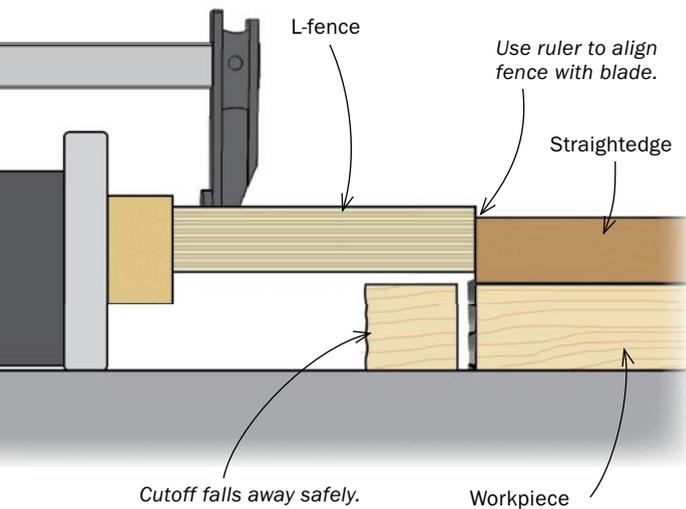


allows the offcuts to drop away harmlessly. To cut a rabbet, raise the dado blades up to the depth of the rabbet and clamp the L-fence to the rip fence, positioning it $\frac{1}{16}$ in. above the blade, parallel to the table. As with a sacrificial fence, the width of the exposed blades equals the width of the rabbet. But unlike a sacrificial fence, the L-fence doesn't need to be replaced.

You can make shoulder cuts on tenons the same way. Use the L-fence with a miter gauge (or push blocks, for wider tenons) to cut the shoulders, and the freed cutoff will fall away safely.

Add a straight edge to a waney board

Putting the first straight edge on rough lumber is usually a two-step process: Bandsaw close to a line, then run that edge over the jointer to clean up the cut. With the L-fence, you can do both steps at once. Lay out your cut line on the workpiece, then fasten a straight piece of wood on the line. Set the L-fence just above the



Rip it flush. Push the workpiece through, letting the template bear against the L-fence. The beauty of the L-fence is that if you bobble the workpiece, you're cutting into the waste, not the work. If you make a mistake, just run it again.

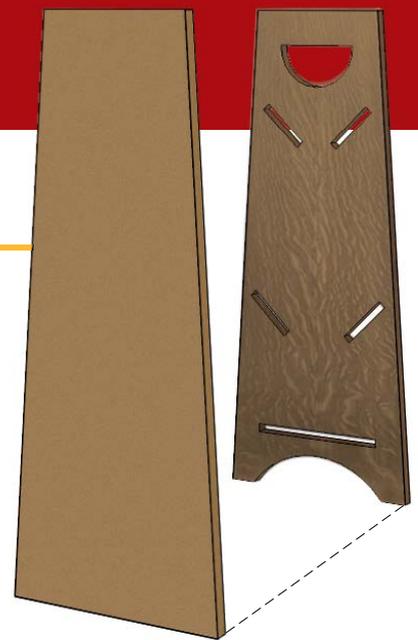




Trace it out. Lay the template on the workpiece and trace around it. Plywood and MDF make better templates because their dimensions stay stable over time.

CUT OUT A COMPLETE PROFILE

With the L-fence, you can use templates to reproduce any straight-sided shape. The sides of this bookcase are trapezoidal. Without parallel edges or square corners, you'd probably cut the rough shape at the bandsaw and then clean up the edges. But with the L-fence, you can cut both workpieces accurately in a fraction of the time.



Cut flush to the template. Here, instead of using double-sided tape, the template is attached with screws, located in an area that will be cut away.



Crosscuts are easy, too. Use a push block to keep the template tight to the fence as you work your way around the pattern.



MAKE PRECISE CUTS ON AWKWARD PARTS

The foot of this tea table leg must be perfectly square to the edge that will be joined to the pedestal. Using a square template (in this case, clear plastic) to cut the two straight edges on all three legs ensures that all three feet will land flat on the floor.



Two templates. Trace the leg pattern onto a square Lexan template. Then use the clear template to locate a leg on the blank and mark the straight edges.



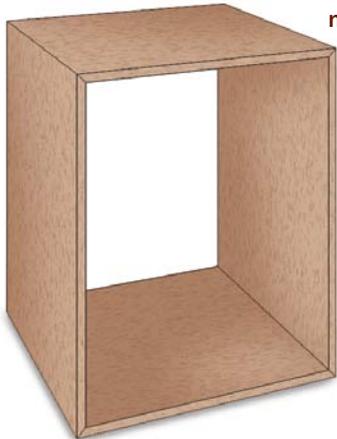
Cut the critical edges. After bandsawing away most of the waste, reattach the Lexan template (left) and use it with the L-fence to trim the critical edges (right). Afterward, use the leg pattern to mark the curves, and shape them any way you choose.



Perfect miters

ON BIG CASES

An L-fence takes the headaches out of case miters by allowing you to make cuts without trapping the case sides between the blade and the rip fence—eliminating the burning and scarring that can interfere with a clean, tight fit.

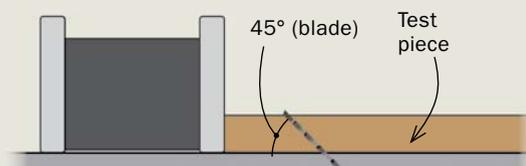


THE SETUP IS CRITICAL

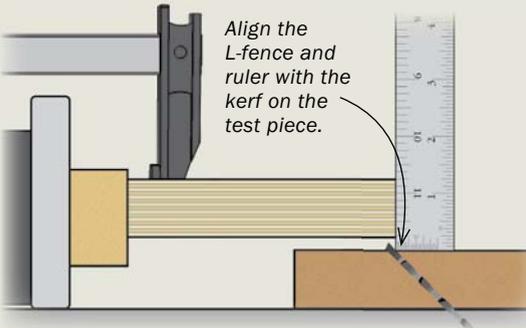


Test cut sets up L-fence. Tilt the blade to 45° toward the rip fence. Run a scrap from the case side stock halfway into the blade and hold it as you shut off the saw. Move the L-fence over the blade so its bearing edge is aligned with the kerf as shown.

1. MAKE A PARTIAL CUT



2. ADJUST THE FENCE



Attach straightedges flush. With the case sides cut to their final dimensions, attach straightedges flush to the edges of the workpieces (above) with double-sided tape (use thicker carpet tape). The other sides of the straightedges are cut at 45° so they can serve as clamping cauls during assembly.



Perfect miters come together quickly. The clamping cauls make glue-up a breeze. When the glue sets, remove the cauls. A solvent rag cleans up any lingering residue from the double-sided tape.

blade, where it will make solid contact with the straightedge. To cut flush to the straightedge, set the L-fence's bearing edge in line with the blade's teeth. Keep the straightedge tight to the L-fence as you make the cut.

Replicate any straight-sided pattern

Routers are great for pattern-cutting and trimming flush to a template, but for a pattern with straight sides, using the L-fence is often faster and more accurate. In fact, it's often the best tool for making the template in the first place.

Once you've laid out your pattern on the template stock, use a straightedge as described above, but this time reposition the straightedge multiple times for multiple cuts, until the shape is complete. Now that you have your template, you can use the L-fence—again, set up for flush-cutting—to duplicate any straight-sided part. Trace the template on the workpiece, then use a bandsaw or

AND SMALL BOXES

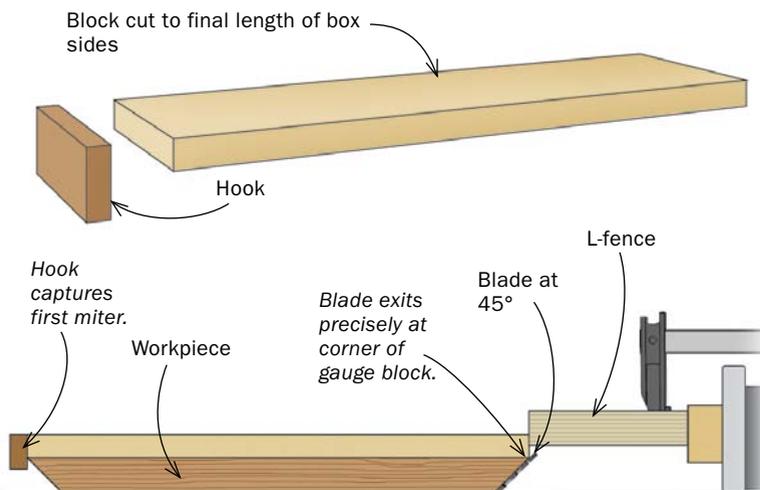
Using the same L-fence mitering setup and a simple “gauge hook” as a template, you can make endless identical box sides.



Miter one side. Before you introduce the gauge hook, cut the first miter on each workpiece with just the miter gauge.



GAUGE HOOK ENSURES PERFECT BOX SIDES



Get the hook. With the L-fence set for a mitered flush cut (see opposite page), use the gauge hook to make the second miter. Use the miter gauge and let the end of the gauge hook ride the L-fence.

jigsaw to trim the waste to within $\frac{1}{4}$ in. of the line. No need to be fussy, but keep in mind that the waste side of the cut can't be wider than the L-fence itself or the rip fence will be in the way. Big offcuts take up more space between the blade and the rip fence and need to be cleared out more often to eliminate the risk of kickback. You can use double-sided tape to attach the template, but I use screws when possible, placing them in areas that will be cut away later—like the through-mortises for the Arts and Crafts bookshelf on p. 63.

A foolproof approach to case miters

The setup for case miters is really just another kind of flush cut. Provided you used care setting up, the L-fence will help you produce accurate miters that come together effortlessly.

Cutting case miters exactly to a final dimension can be tricky, but when using the L-fence you start by cutting the parts square, then add the miter in a second step.

Once you have the fence set up as shown on the opposite page, and you've cut the sides to final size, you attach straightedges flush

to the edges. I cut the opposite side of my straightedges at 45° so they'll work as clamping cauls during assembly. With the fence and blade set up as shown, run the case sides so the straightedges bear against the L-fence.

Identical box miters made easy

For a quick and easy way to cut identical box sides, start with the same L-fence setup. Rough-cut the box sides close to the approximate final length, and use a miter gauge to miter one end. Cut gauge blocks to the finished length of the pieces you need. Tack a lip to one end of each block to create a hook. This will grab the knife edge of the first miter on each workpiece, and the block will bear against the L-fence as you make the cut on the other end.

The sides will be cut to the exact length of the block. Repeat the process with the other block, and your boxes will come together perfectly. □

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