Dedicated, Fixed Fingerjoint Fixture

by Don Butler

The practice of having a fingerjoint adapter jig to put on the tablesaw's miter gauge can make for problems when it's taken off and then put back on.

At that point the jig may not (and probably not) be right back where it should be on the miter gauge. At that point the jig doesn't produce good fitting joints.

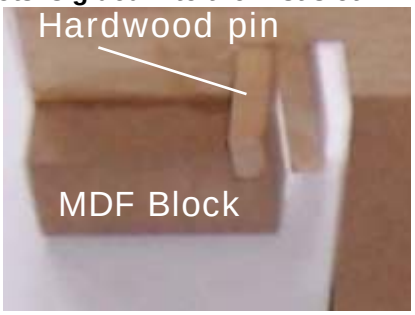
So it makes sense, if fingerjoints are going to figure large in your work, to have a dedicated fixture that will be the same every time it's used.

The fixture above is designed to always cut the finger the same size and the same spacing when used with a specific dado set. In this case it works with the two outer blades of my set with out any chippers, giving the narrowest dado the set can make without going down to one blade. That doesn't make any sense because a good rip blade would do that better. So here's the scoop.

The base is MDF for smoothness and stability. The upright backer is plywood. I started without the bracket seen on the right side in the photo above. A couple of round spots can be seen in the MDF base back by the upright. Those are hardwood dowels into which holes were drilled for threading with a ¼-20 tap. Then ¼" studs were screwed into the embedded dowels. The plywood upright was slotted so it could be adjusted side-to-side and fastened to the base with nuts and washers over the studs.

A ¾" x 5/16" hardwood rail was fastened to the bottom of the base so it would ride securely in the miter gauge slot in the tablesaw. The dado set is installed in the tablesaw and raised to the right height to make the fingers in the stock, which in this case is ½" AC ply. Then with the plywood backer adjusted all the way to the left (as seen from the back of the tool) and a slot is cut through the backer.

Carefully measure the slot and move the backer to the right so the saw will cut another slot exactly two slots width away from the first one. For example, if the dado set is making a slot exactly ¼" wide, there should be ¼" between the two slots. A short piece of plywood the same width as the slots is glued into the first slot. The closeup at right shows it.



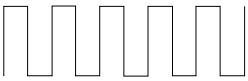
There's a small piece of MDF glued there to stabilize the stock being fingerjointed when the last slot is cut. A trial run is then conducted to determine that the fingerjoints cut with the fixture are accurately spaced.

When the adjustment is good the bracket piece is glued and bradded into place and the plywood back piece is also bradded to be sure it doesn't ever move. The fingerjoint fixture is now ready for use.

Start the first workpiece squarely on the base and up against the pin and using a clamp to hold it, cut the first slot. Release the clamp and place the slot just cut over the pin. Make sure it's right down on the base, clamp it again and cut the next slot. Proceed to cut slots all the way across the workpiece. The second workpiece, the one that fits into the first one, is started away from the pin the width of the slot. That gives a pin on the edge that fits into the slot on the edge of the other piece. After that slot is cut, the work continues as with the first piece.

Mark the fixture for the material and dado set it works with and make a hole to hang it from. For other stock sizes and pin widths, make a separate, dedicated fixture and mark it the way you did the first one.

Accurately fitted fingerjoints are well regarded for drawer corners and small decorative boxes. Make your fixture carefully and you'll be making beautiful fingerjointed corners for a long time.



Have fun and make pretty woodworking joints!