Mortising Machine Clamp

By: Logan Wittmer

Using a mortising machine can feel a bit like a rough ride in a rodeo at times. This shop-made clamp takes the wrestling out of making mortises.

The hold-down on my benchtop mortiser doesn't hold workpieces as firmly as I'd like. If the workpiece twists even just a little bit, the chisel binds in the mortise. I also wanted a way to clamp the workpiece against the fence of my mortiser. To do this, I added a "modified" C-clamp to an auxiliary base that I was building for my mortiser, as shown in the photo you see here.





I started with the clamp. First, cut off the top leg of a 6" C-clamp (detail 'a') and round the cut end so it will swing easily. Then drill holes in the remaining body of the clamp for the pivot pin and locking pin.



Next, cut two pieces of plywood to size. These will serve as the base for the mortising machine. For added stability, I attached a cleat to the bottom layer so I could clamp the base in the vise on my workbench. To be able to slide the locking pin side to side, grind a flat spot onto the rod. Then drill and tap a hole through the flat spot to accept a carriage bolt that passes through a hardwood dowel handle. A square nut between the slot and the rod allows a slight twist of the handle to tighten the locking pin in place.



The pivot and locking pins are sandwiched between the plywood pieces. Grooves must be routed in both halves to house the pins (detail 'b'). When I was satisfied that everything was working smoothly, I screwed the two plywood pieces together and bolted the base to my mortiser stand.