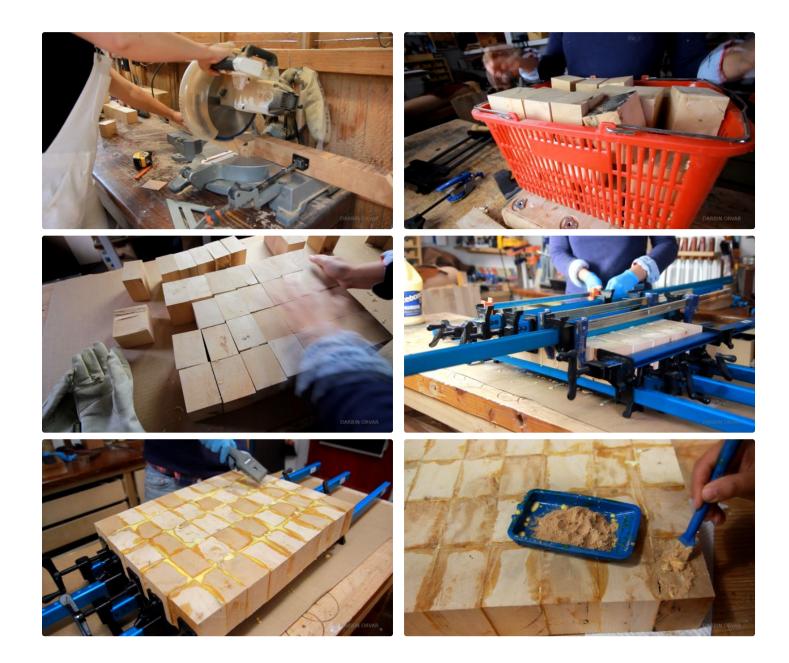
Mini Workbench W/ Woodworking Vise & Clamps

This mini workbench features a really thick and sturdy top, a woodworking vise with jaws dressed in leather, dog holes and t-tracks for all sorts of clamping options. It also has sturdy feet covered in thick rubber which makes it very stable and the bench stays put while using it to saw or chisel on.



Step 1: The Board

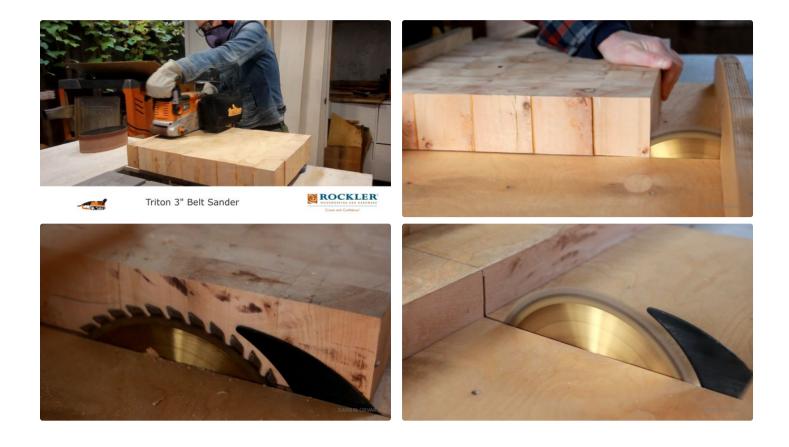
I began with gluing up a board using maple end grain off cuts which were left over from when I made my maker space counter. The pieces were not all identical so it was a bit like fitting a puzzle together. I used these pieces since I had these on hand, however you could totally use framing lumber to create this type of work bench instead. After gluing and clamping, I tried to scrape off as much glue as possible before it completely dried to save on sandpaper for later and then I mixed some sawdust with glue to fill in the gaps.



Step 2: Trimming the Board

Next up, sanding the board and then trimming the sides to get it nice and even.

We need a secondary piece to attach the vice to the board, so cutting up a thick piece of maple.



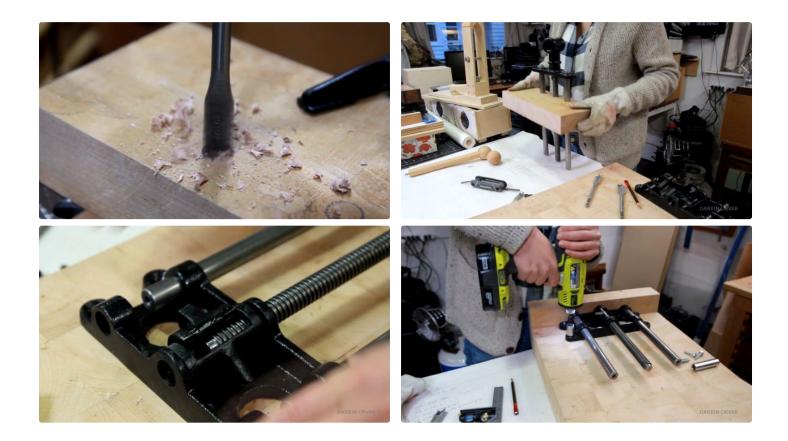
Step 3: The Vise

I'm using a quick release vise which is made up of two parts, there are two screws in the back that needs to be removed so you can take off the back plate.

Then marking out where the holes need to be drilled on this cap piece, once drilled, the vise rods fit right into the cap piece.

And simply assembling the vise back together again.





Step 4: T-tracks

Next up - grooves for the t-tracks. And just taking a couple of passes with the router going deeper each time.

What's nice about these t-tracks is how you can place them wherever you want them, one on each side of the board seemed like a good idea.

Then a bunch of sanding, and securing the tracks with screws.





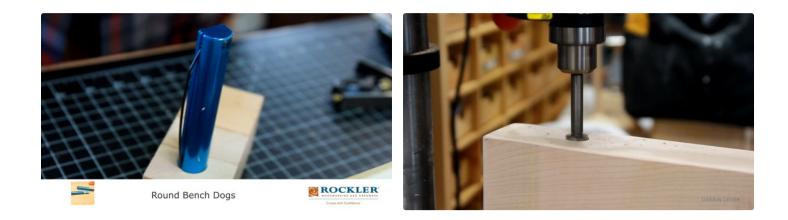
Step 5: Legs

Next up, legs. For this we're using maple blocks and just rounding the edges a little bit with a plane to make them less sharp, and then they were ready to get screwed on.



Step 6: Dog Holes

Another thing that would be nice in the vice would be some dog holes, so just drilling those out on the sides, that way they won't interfere with the vice hardware.



Step 7: Leather

I really wanted to add some leather in the jaws of the vice, so cutting up some veg tanned leather here. Then securing with some water based contact cement. And carefully cutting out the holes for the vice rods in the leather.

And putting everything back together again, this time with some heavy duty bolts.





Step 8: Rubber

To prevent the bench from sliding all around when chiseling or planing I wanted to add some heavy duty rubber, and this is the stuff people use for lining their truck bed. I, found it at the farm store and it's really thick and nice. Again, securing with some contact cement.



Step 9: Top Board

Next working on a sacrificial board so you can either use it to press things, like a book press, or you can secure it and use it as a base for drilling or chopping, so you don't destroy the main board. It's simply a piece of plywood with holes drilled through that line up with the position of the t-tracks so it can be screwed down.



Step 10: Front Supports

After noticing that the vice was a little front heavy when extended, we added some inserts to provide more support, simply by chiseling out space and screwing in place. That way it's easy to add some adjustable supports and this worked pretty great.



Step 11: Finish

For a finish - shellac everywhere at first, and then some of my linseed oil beeswax polish to get it nice and smooth.

