## CHERRY BREADBOARD TABLETOP PROJECT JOURNAL

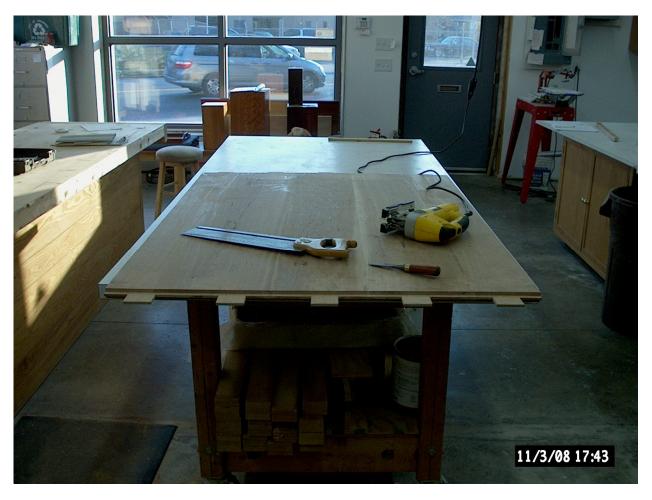
(This journal begins with the top glued up, and details addition of the breadboard ends.)

After the glue cured, the tabletop was trimmed perfectly square.

A two-sided jig was carefully made so that the top and bottom edges are perfectly aligned. When this jig is clamped on the tabletop, it will provide matching stops on both sides of the table. A router with a straight bit is adjusted to the desired depth and makes a perfectly centered tenon.



Then the tenons were carefully laid out and the waste removed. When possible, the cuts were made with a tenon saw. Between the tenons, the long cuts were made with a jig saw. The corners were cleaned up with a chisel.



Then the tablesaw is set up with a dado blade to make a matching dado. After confirming with a test piece, full width stub mortises were run in both breadboard ends.



The next step was to set up the mortising machine with the proper bit and adjust the fence so that the deeper mortises would be aligned exactly with the stub mortise.



With the mortising machine fully adjusted, the mortises were made in the breadboard ends.



Breadboard Tabletop 9 Nov 2008

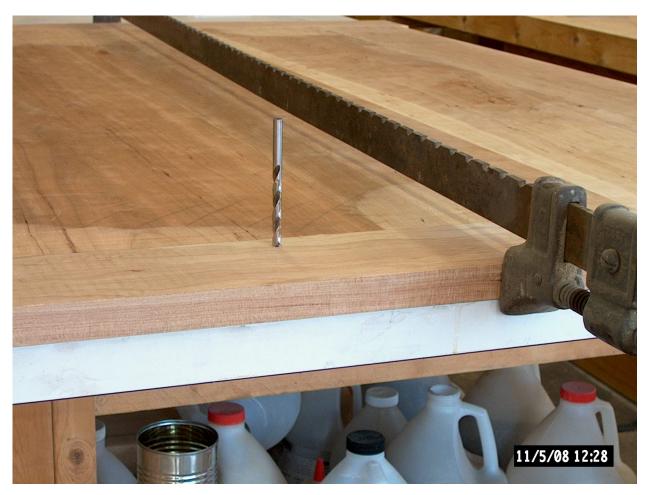
The center mortise was made the exact width of the center tenon. To allow for the inevitable wood movement across the width of the table, the outer mortises were made wider than the tenons.

The mortising machine could not make the mortises the necessary depth, so a mortising chisel and mallet were used to extend the depth.

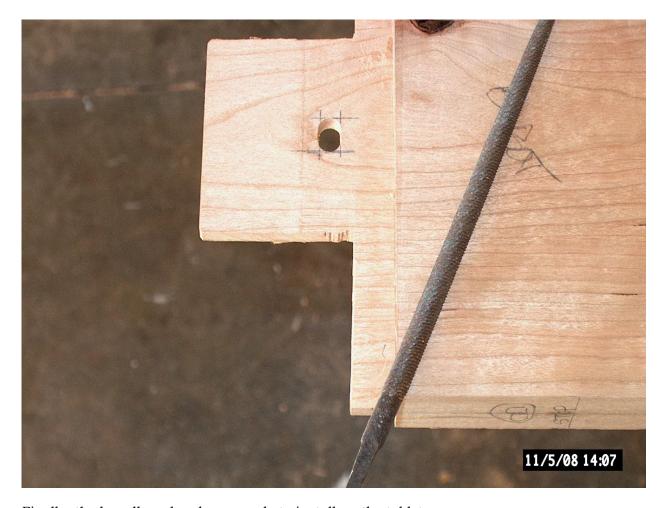


A block plane and shoulder plane were used to fine tune the thickness of the five full depth tenons and the stub tenon for a tight fit with the mortises. Once that was completed, the breadboard ends were marked for five pins, one for each tenon. The ends were drilled on the drill press for greatest accuracy.

The pins are slightly offset in the tenons, about 1/32" closer to the tabletop, so that they will tightly pull the breadboard end against the tabletop. With the breadboard ends in place, a center point bit was used to transfer the drilled holes onto the tenons.



After drilling the tenons, the holes in the outer ones were made oval to accommodate normal expansion and contraction of the tabletop. Since the breadboard ends' grain runs perpendicular to the tabletop, they will not expand and contract across the width of the tabletop.



Finally, the breadboard ends are ready to install on the tabletop.



The sandpaper lightly chamfered one end of each cherry dowel pin so that it would slip through the drawboarded tenons. Glue was applied to the center tenon and mortise to hold the breadboard end centered on the tabletop. The other four tenons were unglued to allow for movement.