

## Jackson's Crib

Featured Piece of the Month – March, 2020

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In May 2020 my son and daughter-in-law set up a Zoom call. I had made several projects for them, including a pair of curved nested tables in the past year. We talked for a while, and then my son said "we have a new project for you to build for us." When I asked what the project was, he said "we would like you to build a crib". My daughter in-law was pregnant with the baby expected in early December. The baby would be my first grandchild. Of course I said yes, and asked them what they had in mind. They wanted a convertible crib similar to a design from Evolur, but using walnut and Curly maple. I figured I needed to complete the crib and deliver it to Connecticut by Thanksgiving. At the time I was in the middle of building a challenging slant top desk. The desk was occupying my entire shop so I was unable to begin the crib. I finished the desk in mid-September.



This left me 2-1/2 months to design and complete the crib. Before beginning the convertible crib, I researched safety requirements for crib designs. I started by making full scale drawings of the sideboards, and half of the symmetrical foot and headboards.

From the drawings I put together a material list and drove up to Northland Forest Products in Kingston, NH. Northland has really nice rough hardwood but a limited amount of retail stock. I figured I could go up Highland Hardwoods if Northland did not have what I needed. Northland had some really nice 4/4 rough walnut. Their 4/4 curly maple was not impressive, but I climbed up further on the ladder and found a 6/4 curly maple board with some beautiful figure. It would take some additional milling, but the end result was worth it.

I started with the legs, milling the walnut legs to final dimensions using my jointer, thickness planer, and table saw. I cut the leg mortises with my General International mortising machine. From the legs, I moved on to the sideboards. I used the full scale drawing to define the curved piece at the top of the sideboard and the location of the end tenons.



I cut the curved pieces on my band saw and smoothed the edges with a spokeshave. I made the tenons with the method I had learned at the Furniture Institute of Massachusetts in Beverly. I cut the tenons to rough thickness with a dado blade and then used a shoulder plane to carefully bring the tenons to final thickness. To mark the ends of the tenon lengths, I scored all 4 sides with a sharp marking knife. The dado blade cut the tenons close to the knife marking, and then I used a sharp 1" chisel in the knife lines to finish the tenons to length.



One of the challenges on the project was marking and cutting the mortise and tenons for the curly maple slats on the curved faces. These were marked out using the full scale drawings and made using similar techniques to those described above (see later comments on the footboard).

The walnut panels in the sideboards and the curly maple panels in the footboard and headboard are 1/2" thick and detailed to allow for seasonal movement.



The footboard frame was made in a similar manner as the sideboards. I used the full scale drawing to layout the curved walnut piece and the location of the Curley maple slats. The length of the walnut curved top piece made the mortising for the slats challenging.



The set-up I used to cut the mortises is shown in the photo.



I used the leftover piece of the walnut board I had cut the curved piece from to clamp the curved piece to and “drill” each mortise, moving and adjusting the set-up for each mortise.



The headboard is a series of half-lap walnut pieces with small spaces between each of the boards and was designed to allow for seasonal movement.



Once all the sections were completed, I glued everything up. I added a walnut cap on top of all the sides and walnut dental molding at the top of the foot and head boards.





The mattress is held up by 3/4" birch plywood. The mattress height is adjustable. When the crib is converted to a bed, the sideboards will be removed and replaced by traditional stretcher boards to the head and foot boards. In my research, I found local companies which could make custom width box springs and mattresses.

I finished the crib with Earthpaint Baby Safe Crib finish and transported it to Connecticut in early November. My wife painted the birch tree panels behind the crib and made the framed animal pictures on the wall.

My grandson, Jackson, was born on Thanksgiving Day and is now sleeping in the crib.



