

# Cradle

## OVERVIEW



## Introduction

In this project, you'll create a cradle that you and your family will cherish. With its elegant styling and simple construction, this Colonial-style heirloom cradle will be treasured by generations of your family.

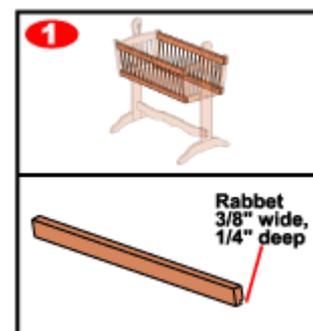
### BEFORE YOU START...

#### SKILL LEVEL & TIME TO COMPLETE

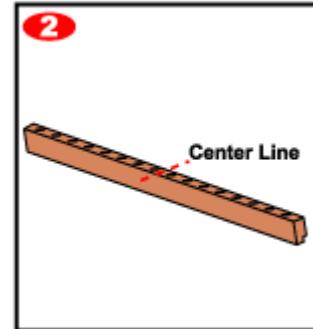
- Beginner - about 3 to 4 days
- Intermediate - about 1 to 2 days
- Advanced - about a day

## STEPS

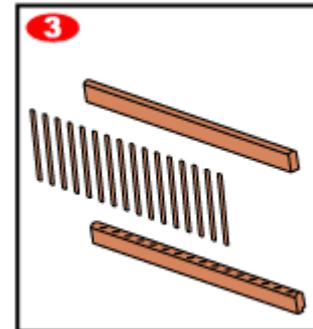
1. You can construct your cradle from pine, oak, or cherry, or any other wood that you wish.  
To begin, cut the two top and two bottom side rails to shape from the 1X6 pine or oak stock. On the bottom rails, cut a rabbet  $\frac{3}{8}$ " wide and  $\frac{1}{4}$ " deep.



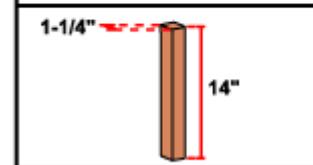
2. Mark the centerlines of all four side rails. Then, mark the locations of the holes, and drill them 3/8" in diameter and 3/8" deep.



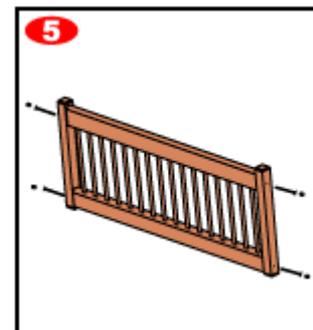
3. With a router or belt sander, round over the edges of side rails, but not over the edge with the rabbet. Cut 32 side dowels to length and assemble them in the drilled holes. You won't need glue unless your dowels are undersized or loose.



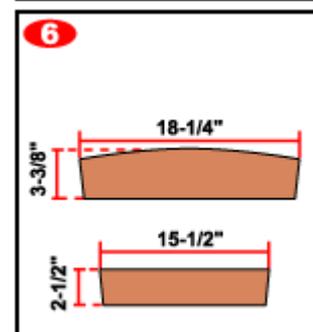
4. Cut the four corner posts from your 2X4 to dimensions of 1-1/4" x 14". Round over the ends with a router or belt sander. The corner of the post itself can also be rounded slightly if desired, but enough flat surface must remain to make full contact with the side and end rails for a good glue bond.



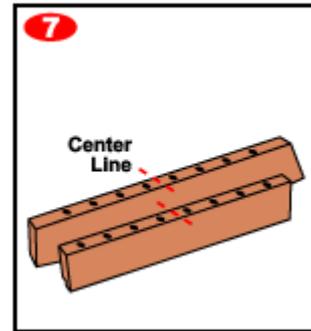
5. Apply glue to the ends of the side rails and clamp the two corner posts into place. Pre-drill the screw holes and countersink using a bit to match the size of your screw plugs. Secure with screws, apply glue to the wood plugs and tap into the holes. Sand the protruding plugs off flush with a sander after the glue is dry. Don't use protruding buttons as screw plugs due to the danger of a child swallowing one that's worked loose.



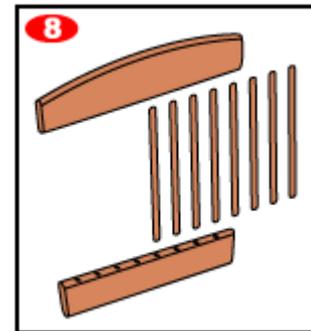
6. Cut two each of the top and the bottom end rails from your 1X6 stock to the shape and depth of the diagram. Now shape the end rails according to the template in the contour diagram. Cut a rabbet 3/8" wide and 1/4" deep, just like on the bottom side rails earlier.



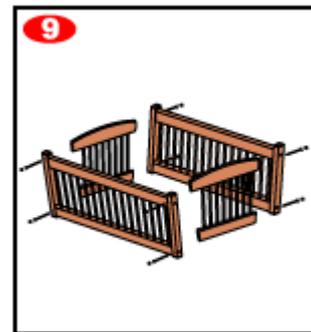
7. Measure and mark the center lines of the edges that are to be drilled for the dowels. Mark the hole locations. Use the same template for the top and bottom rails. Round over the edges of the parts just like you did on the side rails.



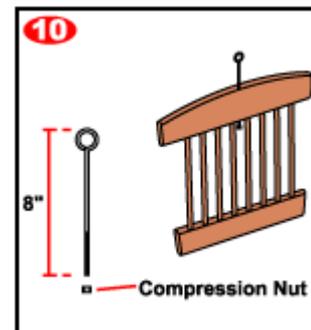
8. Assemble the 16 end dowels into the holes in both pairs of the top and bottom end rails. Again, you won't need glue unless the dowels are loose.



9. Pre-drill the screw holes to attach the completed sides to the ends. Offset the adjoining holes so you won't hit the screws already installed. Countersink the holes to accept the same wood plugs used earlier. Apply glue to the ends of the end rails, and assemble.



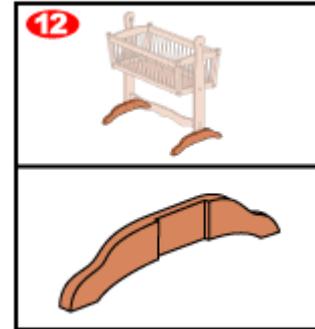
10. Install the 8" eyebolts at the center of the end rails, with the eyes lined up with the end rail. Be sure to use a compression-type nut to ensure it will never fall off.



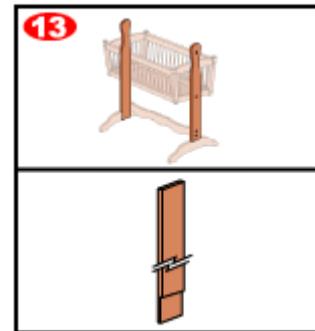
11. Cut the bottom of the crib from the quarter-inch plywood to shape. Notch the corners to fit the rabbets in the bottom edges of the bottom rails. Install the bottom with glue and screws. Make sure the screw holes are small enough that the screws have a good bite.



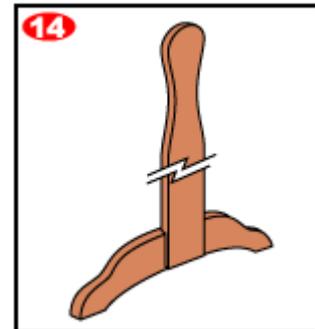
12. Cut the feet from the 1X6 stock to shape. Set the height of your table saw to exactly half the thickness of the stock and, by making repeat passes, cut away the center of the piece to form a half-lap joint. After the half lap is cut, complete the feet by cutting them to your desired shape. Then sand the parts, being careful not to round over any of the edges of the lap joint.



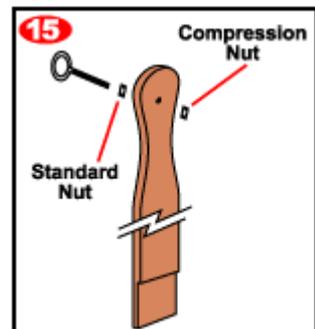
13. Cut the two towers from the 1X4 stock to shape. Then, using the same table saw setup as for the feet, cut the half laps at the ends of the towers. The width of the tower should match the width of the half lap cutout on the feet. When the lap is assembled, it should be snug and the bottom edges should be even.



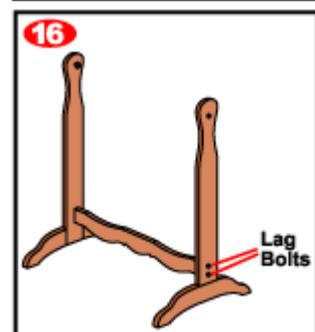
14. Cut the tops of the towers to shape. Sand the towers smooth, being careful not to round over any edges of the lap joint. Assemble the feet to the towers using glue and clamps.



15. The splits of the 2-1/2" eyebolts need to be spread apart enough to insert the eyes of the 8" eyebolts attached to the cradle. Then install the 2-1/2" eyebolts in the center of the arc at the tops of the towers. The eyebolts should have a standard nut on the inside and a compression nut outside. The split on the eyebolts should face up. Note the positions of the lap joints at the base of the towers when determining which side faces in.

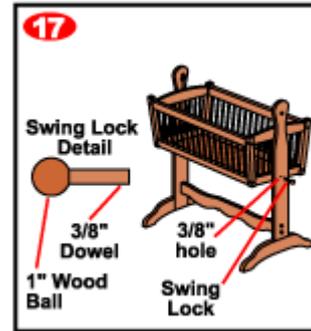


16. Cut the braces from the 1X6 oak or 2X6 pine. You have the choice of continuing from the straight piece of 2X4 or shaping the wood. Then install it between the towers using 3" long 1/4" lag bolts. Drive the lag bolts in snugly with a socket wrench.



17. Hang the cradle by placing the eyes of the 8" eyebolts into the split 2-1/2" eyebolts. Then squeeze the split eyes shut with pliers. You can make swing locks by gluing 2-1/2" lengths of your dowel into 3/8" holes in wooden balls that can be found in crafts stores. Next, drill holes through the center of the towers into the bottom end rails on each side of the cradle. Then simply insert the locks through the towers and into the base of the cradle to prevent swinging, and disengage them otherwise.

Finally, you can apply stain if desired, and maybe top it off with up to three coats of gloss polyurethane, and your heirloom cradle will be passed from generation to generation of your family.



## SHOP LIST

### Materials List

- (1) 1X6 pine or oak, 14' length
- (1) 1X4 pine or oak, 6' length
- (1) 2X6 pine -or- 1X6 oak, 3' length
- (1) 2X4 pine or oak, 2-1/2' length
- (1/4 sheet) 1/4" G1S plywood
- (10) 3/8" dowels, 48" length
- (2) 8" eyebolts, 1/4" or 5/16" dia.
- (2) 2-1/2" eyebolts, 1/4" or 5/16" dia.
- (4) 3" x 1/4" lag bolts
- (16) 2-1/2" #8 wood screws
- (20) 1" #6 wood screws

### Tools List

- Jigsaw
- Drill or drill press
- Belt Sander
- Table Saw
- Router
- C-clamps
- Pipe clamp
- Saw horses
- Basic hand tools