

The Heirloom Cradle

A wooden canopy and turned rocking treadles make this cradle truly unique.



There's something very comforting about a wooden cradle...its gentle back-and-forth movement can be almost as soothing to a parent as it is to a baby.

Since we receive so many requests for cradle project plans, we decided to expand upon the more traditional baby cradle to fulfill your modern-day needs. A delicately arched canopy shields the baby's sensitive eyes from harsh light, while the twin, turned treadle bars allow you to rock the cradle with one foot while relaxing in your favorite *easy chair*.

Making the Cradle

To make the cradle, you'll need 32 feet of 1" x 8" (actually 3/4" x 7-1/4") lumber and 18 feet of 1" x 6" (actually 3/4" x 5-1/2") lumber, plus dowels, brads and flathead wood screws.

Start by cutting and jointing the lumber to the approximate size boards needed. Cut them a little oversized to allow for squaring.

Next, edge glue a series of boards together to form the wider panels you'll be needing for assembly. For added strength and to maintain proper alignment during glue-up, you might want to consider using a Biscuit Joiner with the appropriate sized Biscuits.

- For each side (A), edge glue two 3/4" x 7-1/4" x 41" boards and a 3/4" x 7-1/4" x 18" board.
- For the headboard (B), edge glue three 3/4" x 7-1/4" x 19" boards.
- For the footboard (C), edge glue two 3/4" x 7-1/4" x 16" boards.
- For the base, edge glue two 3/4" x 5-1/2" x 37" boards and a 3/4" x 7-1/4" x 37" board

Glue up the stock you'll be needing to turn the treadle bars (J) and end caps (K). For the treadle bars, glue up three 3/4" x 2-1/4" x 26" boards for each treadle bar. For the end caps, glue up three 3/4" x 2-1/4" x 10" boards to make one blank for turning all four of the end caps.

The rockers (H), canopy support (E) and canopy pieces (F,G) are cut from the remaining stock.

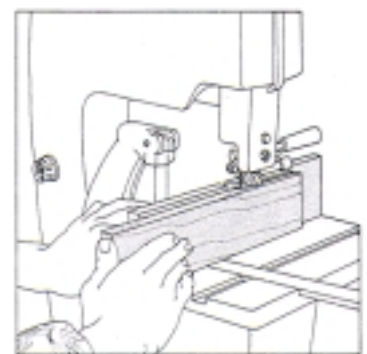


Fig. 1 Using a bandsaw to resaw stock.

While the glue dries on the assembled boards, cut enough stock to width and length to make the canopy pieces (F,G). Then use a Bandsaw to resaw the pieces to 1/4" thickness (See Fig. 1).

Next, use a Table Saw and a Hollow Ground Blade or a Jointer to cut a slight 2-degree edge bevel along the length of each piece, so the pieces will form a smoothly arched canopy when assembled.

With your Bandsaw, cut the rockers (H) and canopy support (E) to size and shape, according to the drawings. To make sure both rockers are exactly the same shape, pad saw the two workpieces by double-stick taping them together and sawing both pieces out at the same time (See Fig. 2). Be sure to leave your cutting line intact while cutting.

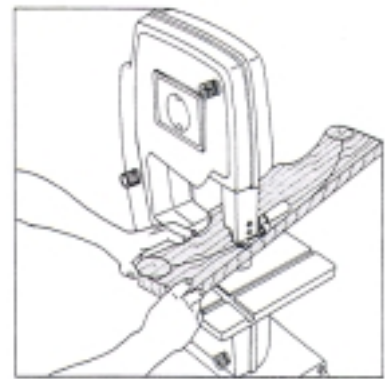


Fig. 2. Using a bandsaw to pad saw rockers to shape.

While they're still taped together, use a Drum Sander to sand them to final shape, then drill two 1" diameter holes in the ends to accept the treadle bars (J).

Once the glue has dried on all of the pieces you glued together earlier, use a Hand Scraper to knock off any excess glue, then belt sand the surfaces of the assembled pieces smooth.

Next, mark the angles and patterns on the sides (A), headboard (B) and footboard (C). A Protractor/Bevel or Precision Protractor will make easy and precise work of this task.

With your Table Saw set up for making bevel cuts...and your Miter Gauge set for making angled cuts, cut all required edge bevels and angled cuts in the various pieces. Next, use a Scroll Saw or Sabre Saw to create the circular cut-outs in the sides.

Use a 1" dia. Brad Point Bit to drill the ends of the handle cut-outs, then your Scroll Saw or Sabre Saw again to remove the remainder of the stock. Remember to stay outside your cutting lines so you can smooth the handle edges with a small diameter Drum Sander once you've finished cutting them out.

Use your Bandsaw to cut out the pattern for the footboard (C). Cut the base (D) to size on your Table Saw, then shape the edge of the base using your Router Set-up with a 1/4" Router Chuck and a Roman Ogee Bit. **IMPORTANT:** To avoid splintering in the corners, always remember to rout the end grain first...then the edge grain.

Once the glued-up stock for the treadle bars (J) and end caps (K) has dried for 24 hours, use your Lathe to turn these pieces to shape. Remember that your four end caps (K) are to be turned from a single piece of glued-up stock. Smooth sand and finish sand the treadle bars and end caps **at slow speed** while they're still mounted on the Lathe.

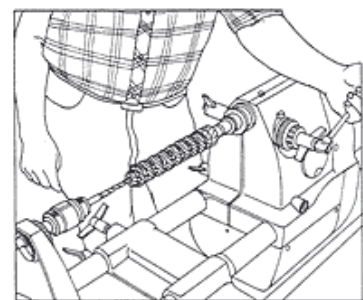


Fig. 3. Drilling dowel holes in the end cap.

Now, drill a 1/4" diameter by 1/2" deep dowel hole in each end of each treadle bar...and the adjoining ends of each end cap, using a Tailstock Chuck Arbor, your Drill Chuck and a 1/4" diameter Brad Point Bit. See Fig. 3.

Sand all remaining pieces smooth. Assemble the sides (A) to the headboard (B) and footboard (C) with glue and counterbored 1-1/2" - #8 flathead wood screws (L).

Span the canopy support (E) between the sides (A), then glue and screw the upper support into place. Using glue and counterbored 1-1/2" - #8 wood screws (L), attach the base (D) to the bottom edges of the sides, headboard and footboard.

Use brads (P) to assemble the canopy pieces (F,G) to the cradle. Start in the center with narrower 1/4" x 1-1/4" x 14" pieces and work your way to the ends. The 1/4" x 3" x 14" pieces are attached on the ends.. Sand the canopy top for a smooth, rounded contour.

Insert the ends of the treadle bars (J) through the holes in the rockers (H). Attach the end caps (K) with 1" x 1/4" dowels (N) and glue into place. Attach the rockers to the bottom of the base (D) with glue and counterbored 1-1/2" - #8 flathead wood screws (L).

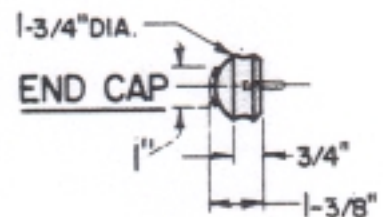
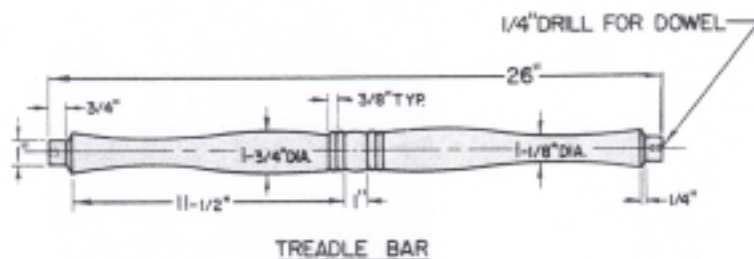
Cover all counterbored screws with 3/8" diameter x 1/4" dowel plugs (M). Sand the plugs flush, then finish sand.

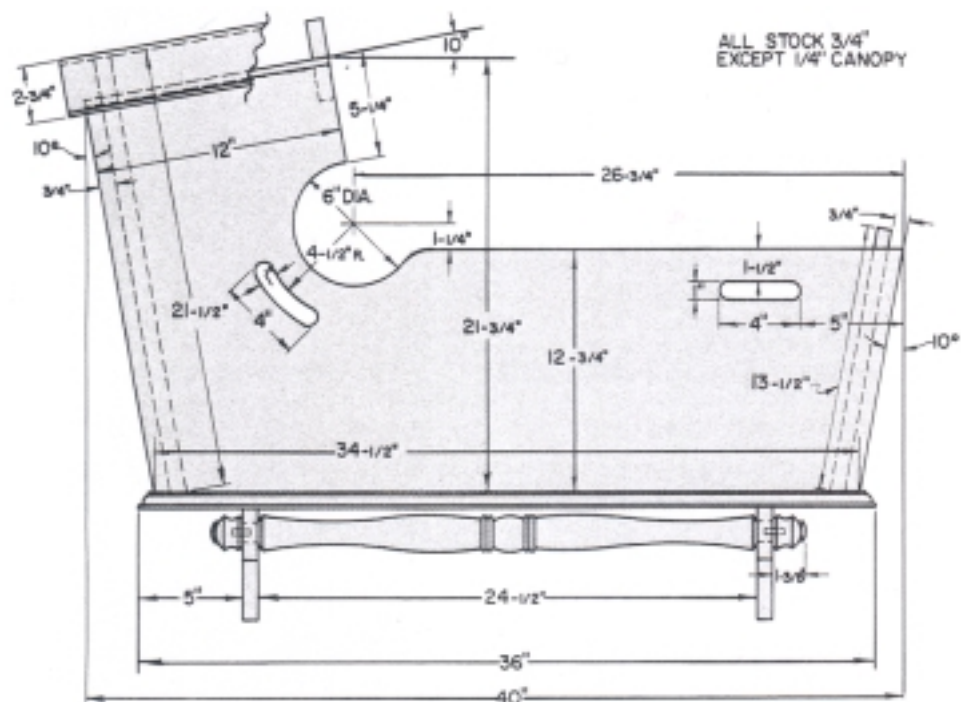
Since the cradle is to be used for a baby, be sure to use a non-toxic finish such as Salad Bowl Finish or Preserve Oil Finish.

List of Materials

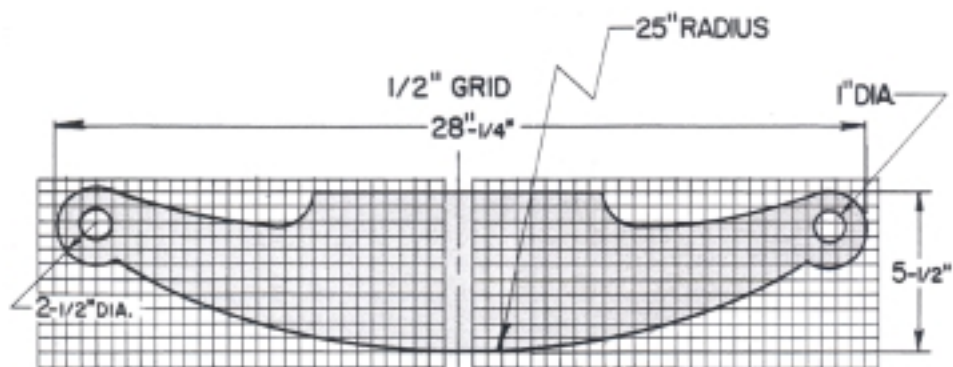
(finished dimensions in inches)

A	Side (2)	3/4 x 21-3/4 x 40
B	Headboard	3/4 x 21-1/2 x 17-3/16
C	Footboard	3/4 x 13-1/2 x 15-1/4
D	Base	3/4 x 15-1/2 x 36
E	Canopy Support	3/4 x 4 x 17-3/16
F	Canopy Boards (12)	1/4 x 1-1/4 x 14
G	Canopy Edge (2)	1/4 x 3-1/2 x 14
H	Rocker (2)	3/4 x 5-1/2 x 28-1/4
J	Treadle Bar (2)	1-3/4 dia. x 26
K	End Cap (4)	1-3/4 dia. x 1-3/8
L	Wood Screws (49)	Flathead, 1-1/2 - #8
M	Dowel Plugs (49)	3/8 dia. x 1/4
N	Dowels (4)	1/4 dia. x 1
P	Brads (1 oz)	#18 x 1





CHILD'S CRADLE



ROCKER

