Project 10394EZ: Early American Bench



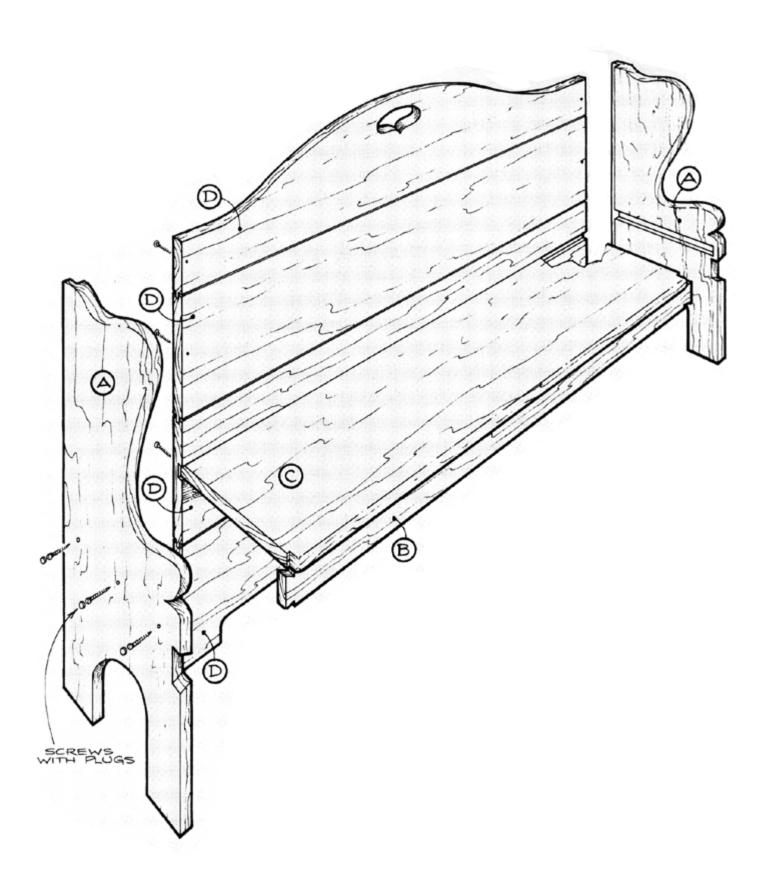
Small benches like this, made of pine, were found in many Early American homes, probably because they were light-

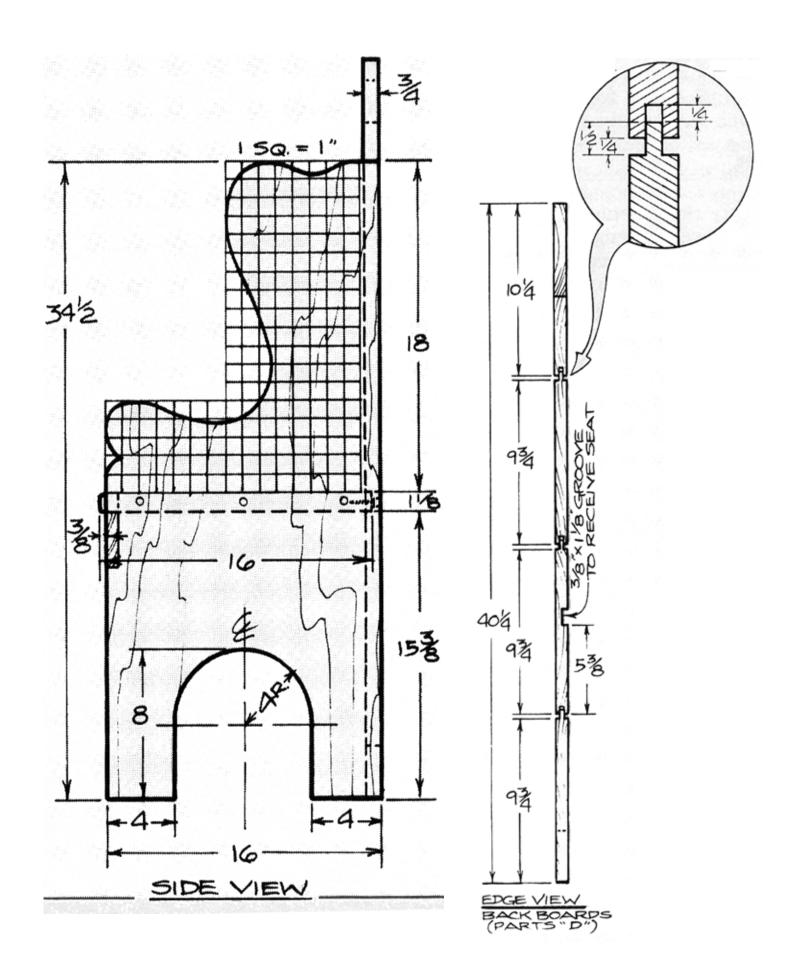
weight and could be moved from the supper table to an out-of-the-way wall with a minimum of effort. In the winter, it might be found next to the hearth, arranged so that it was perpendicular to the wall. Here, a couple could sit facing the warm fire while the backboards shielded them from the chilling drafts that regularly meandered through those old houses. We used clear pine for our bench, although a few small sound knots are acceptable.

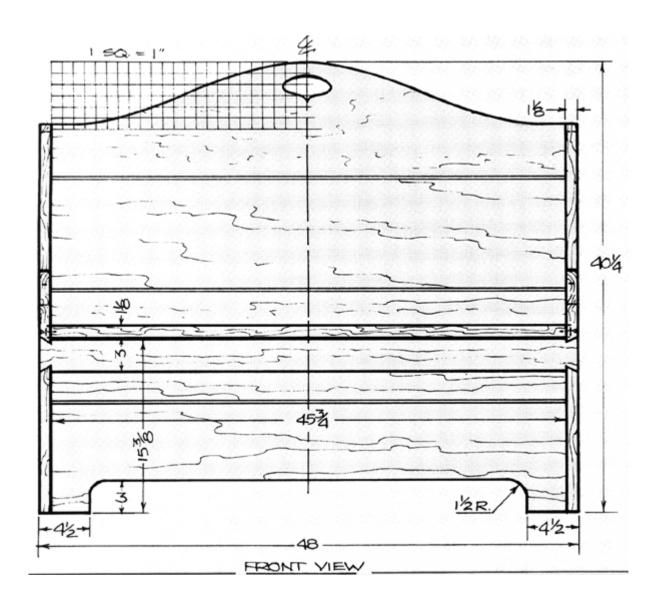
Early American Bench Materials List

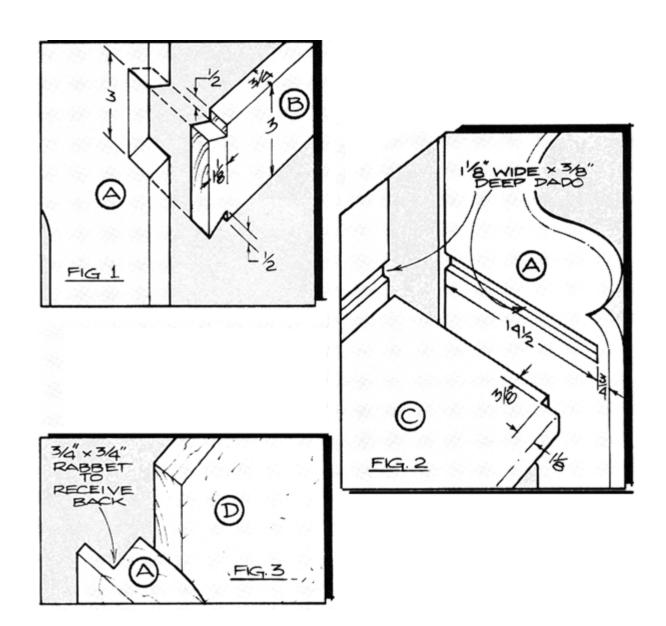
Part	Description	Size	No. Req'd	
Α	Side	1-1/8" x 16" x 34-1/2"	2	
В	Stretcher	3/4" x 3" x 48"	1	
С	Seat	1-1/8" x 16" x 46-1/2"	1	
D	Backboard	3/4" x 10-1/4" x 47-1/4"	4	

Early American Bench Complete Schematic









Early American Bench Step-by-Step Instructions

Step 1: Make the Sides (A)

- 1. Edge-glue two or three 1-1/8" thick (five-quarter stock) pine boards, cut wider and longer than necessary to make the two sides (A).
- 2. Use two or three waxed alignment cleats keep the boards aligned as you apply clamp pressure.
- 3. Allow the glue to dry and remove the clamps.
- 4. Trim the stock to length and width.
- 5. Use the table saw equipped with a dado head cutter to cut the 3/4" x 3/4" rabbet along the back edge.
- 6. Equip the router with a 3/8" diameter straight bit.
- 7. Make a fence from a piece of 3/4" x 1-1/2" pine to clamp to the side.
- 8. Locate the fence so that the first cut will establish the lower edge of the 1-1/8" wide by 3/8" deep stopped dado at a point 15-3/8" from the bottom.
- 9. Set the router bit to 1/8" and, starting at the back of part A and stopping at a point 3/4" from the front edge, make the first pass.
- 10. Set the bit to a 1/4" depth and make a second pass.
- 11. Set the bit to a 3/8" depth and make a third pass.
- 12. Move the fence and repeat the process to widen the groove to 3/4".
- 13. Make one more fence adjustment and one more series of 1/8" deep cuts to complete the 1-1/8" wide dado.
- 14. Use a chisel to square the corners at the point the dado is stopped.
- 15. Transfer the grid pattern profile in the side view to each side.
- 16. Use the band saw to cut out the profiles.
- 17. Lay out, mark, and cut out the 4" radius at the bottom as shown.
- 18. Sand the edges, finishing with 220-grit sandpaper.

Step 2: Make the Stretcher (B)

- 1. Cut the stretcher (B) to overall length and width.
- 2. Lay out and mark the dovetails on each end.
- 3. Use a fine-tooth backsaw or a dovetail saw to cut out the dovetails.
- 4. Use the stretcher dovetails as templates and trace the profile on the front edge of the sides. **NOTE**: The top edge of the stretcher is located 15-3/8" from the bottom of the side.
- 5. Cut out the dovetails with a back or dovetail saw and a sharp chisel.

Step 3: Make the Seat (C)

- 1. Edge-glue 1-1/8" thick stock to get enough width for the seat (C).
- 2. Trim to length and width.
- 3. Cut the 3/8" deep by 1-1/8" long notch on each front corner.

Step 4: Make the Backboards (D)

- 1. Select 1" by 12" stock (which measures 3/4" thick x 11-1/4" wide) to make the four backboards (D).
- 2. Rip the stock to 10-1/4" wide.
- 3. Cut each board to length.
- 4. Use a router table to cut the tongue and groove on each board.
- 5. Cut the dado groove to accept the seat. **NOTE: This groove is cut only on the second board from the bottom.**
- 6. Transfer the grid pattern profile (shown in the front view) to the upper backboard.
- 7. Cut out the profile with a saber or band saw.
- 8. Lay out the 1-1/2" radius on the bottom backboard and cut out in the same manner.

Step 5: Sand, Assemble, and Finish

- 1. Assemble the sides, stretcher, and seat, using glue on all joints and countersunk flathead wood screws with plugs to join the sides to the seat.
- 2. Use three or four clamps to provide adequate pressure at the glue joint between the seat and the stretcher.
- 3. Use five screws and glue to attach the grooved backboard to the seat.
- 4. Add the remaining backboards, joining each one to the rabbeted back edge of the sides with a single screw at the center point (measured across the width) and allowing 1/4" between each board.
- 5. Final sand all parts.
- 6. Stain as desired.

These plans were originally published in Volume 10, Issue 3 of *The Woodworker's Journal* (May/June 1986, pages 32-33).