

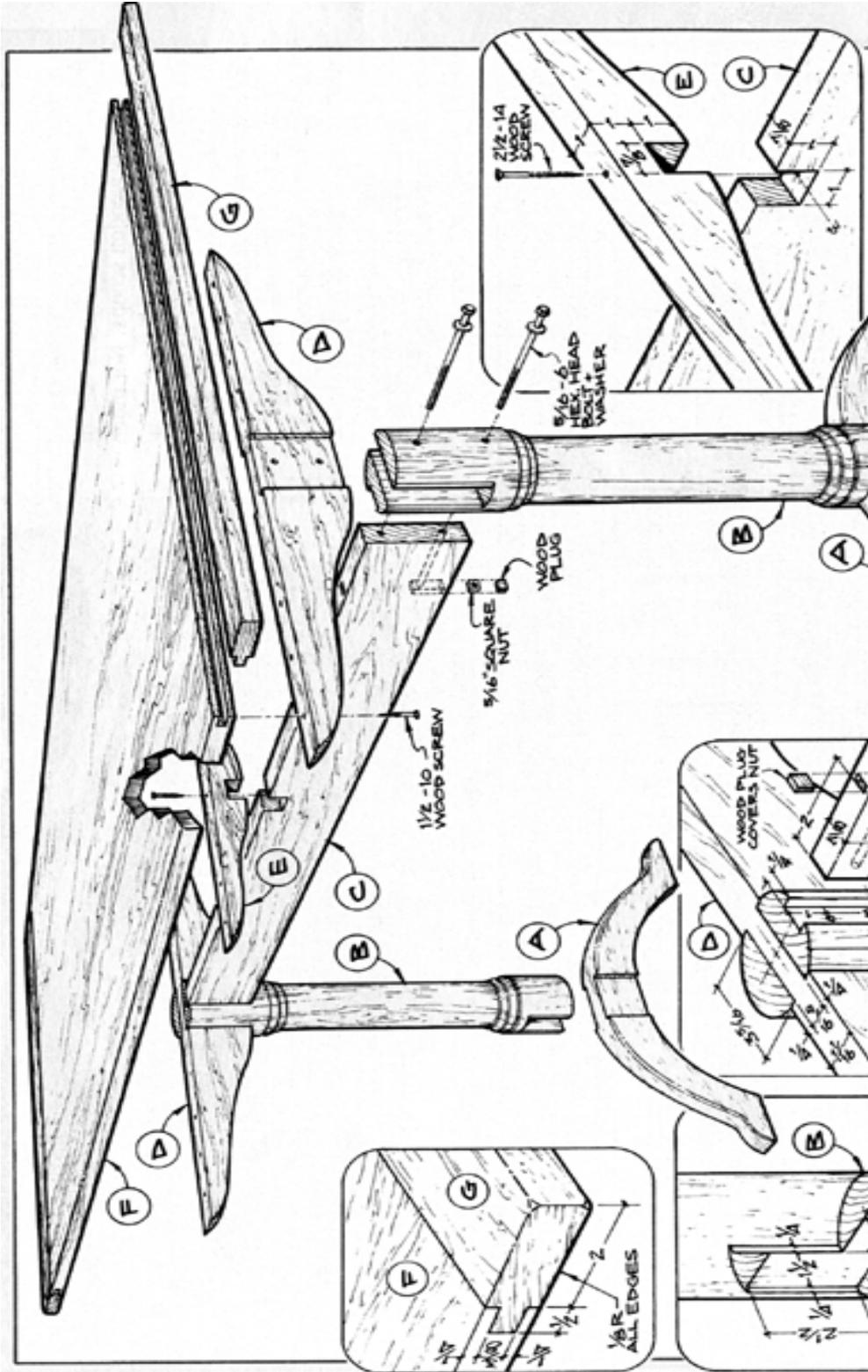
Project 18407EZ: Shaker Trestle Table

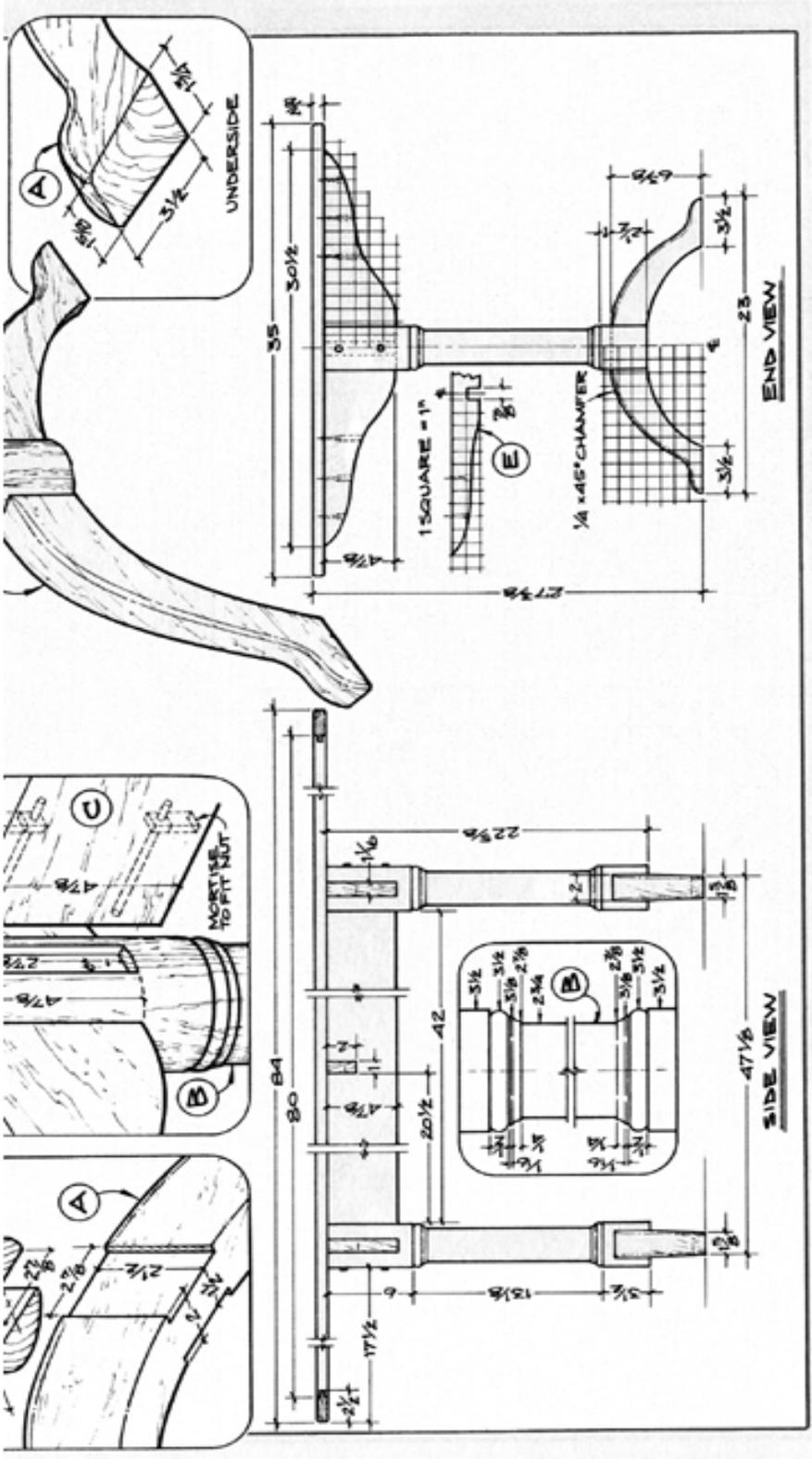
This trestle table exhibits many of the finer elements of classic Shaker design. The high arched feet and the delicately turned details on the legs are two aspects of its design that are especially noteworthy. The bridle joint in the legs and feet is also typically Shaker. The subtle use of the chamfer to soften the transition from the round stock of the legs to the flat stock of the feet is a device the Shakers often employed. Shaker tables of this style were most often executed in cherry, however hard maple would also be a fine choice. Whichever wood you choose, be aware that the selection of stock was important to the Shaker craftsman and should be equally as important to you.

Shaker Trestle Table Materials List

Part	Description	Size	No. Req'd
A	Feet	2" x 6-3/8" x 23"	2
B	Leg	3-1/2" square x 22-5/8" long	2
C	Stretcher	7/8" x 4-7/8" x 42-1/2"	1
D	Cross Brace	1-16" x 4-7/8" x 30-1/2"	2
E	Cleat	1" x 2" x 24-7/8"	1
F	Top	7/8" x 35" x 80"	1
G	Breadboard End	7/8" x 2-1/2" x 35"	2

Shaker Trestle Table Complete Schematic





Shaker Trestle Table Step-by-Step Instructions

1. Obtain a thickness plane to achieve the various thicknesses to make this project, or have a millwork shop plane the stock for you before you begin the project.
2. Choose stock carefully, making sure there are no knots or other defects, to make the feet (A) — the high arch and the fact that they are cut from a single board makes the short cross-grain sections relatively weak.
3. Cut the stock for the feet to 6-3/8" tall x 23" long.
4. Plane the stock to the 2" thickness.
5. Transfer the grid pattern for the feet to the stock.
6. Make the notches in the feet to accept the bridle joint (see detail) while the stock is still square by using the dado-head set to a 1/4" depth.
7. Use a band saw to cut the shape of the feet as shown, tapering them gradually from 2" at the top of the arch to 1-5/8" wide at the rounded toe end.
8. Apply the 1/4" wide, 45-degree chamfer.
9. Use the table saw to remove the corners of 24" long turning blocks for the legs (B).
10. Mount one of the turning blocks on the lathe.
11. Begin by roughing out the block with the gouge.
12. Use a square nosed chisel to bring the cylinders to their 3-1/2" diameter.
13. Lay out the pencil line graduations for the molded detail, both top and bottom. **NOTE: The molding begins 6" from the top and 3-1/2" from the bottom.**
14. Use a parting tool to establish the molding depths.
15. Use the square nosed chisel to form the 2-3/4" diameter center section cylinder.
16. Use a half-round chisel and, working from the center out, skew and round over respectively to cut the cove, flat, and round sections of the molding.
17. Use a backsaw to cut the bridle joint slots, both top and bottom. **NOTE: You may want to cut these slightly small and make adjustments later, since these joints are critical to construction.**
18. Clean the slots with the chisel. **NOTE: The edges where the leg contacts the feet and cross-brace are cut back.**
19. Notch the inside of the leg as indicated to accept the center stretcher.
20. Repeat the process for the remaining legs.

21. Cut square and plane to the correct thickness the stock needed to make the stretcher (C), the two cross-braces (D), and the cleat (E).
22. Transfer the illustrated grid patterns for the cross braces and cleat to the stock.
23. Use the dado-head to notch the cross-braces as shown.
24. Use the bandsaw to cut the profiles for the cross braces and the cleat.
25. Notch both the stretcher and cleat as shown in the corresponding detail.
26. Drill and counterbore the cross-braces and cleat for woodscrews where indicated.
27. Mortise the stretcher to accept the 5/16" machine nuts. **NOTE: The mortises are located so that the 6" bolts will extend about 3/4" through the nuts.**
28. Cut four wood plugs to fill these mortises (see detail).
29. Test-assemble the table's trestle frame.
30. Use a drill guide or a jig to drill out for the 5/16" x 6" long hex head machine bolts (two on each end). **NOTE: It is impossible to drill these holes with a hand-held drill so that they are at right angles to the legs. A drill guide or a jig will insure that the holes are aligned so they will carry through to the center of the nut mortises in the stretcher.**
31. Check to make sure that the bridle joints fit the feet and cross braces and make adjustments as necessary.
32. Glue the feet and cross-braces into their corresponding bridle joints when everything looks satisfactory. **NOTE: Do not glue the stretcher to the legs, as this will override the knockdown capability of the table, which was the primary reason the Shakers employed a machine nut and bolt assembly system.**
33. Select stock with a relatively uniform and clear grain, free of knots and other defects to make the table top (F).
34. Use simple butt-type glue edges to assemble the stock for the top, arranging the grain direction as desired.
35. Equip the router with a 1/4" bearing guided wing cutter.
36. Make several passes to cut the tongue and groove dado for the breadboard ends (G) with several passes.
37. Cut and plane the two breadboard ends to achieve the correct dimensions.
38. Glue the ends securely in place, taking care to make the joint right, because its integrity will control the overall dimensional stability of the table top.
39. Use 1-1/2" wood screws to assemble the table top to the base as indicated. Again, do not use glue here.

40. Add the wood plugs in the nut mortises.
41. Final sand the table, finish to taste, and apply sealer and waterproofing agents to protect the top.

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