

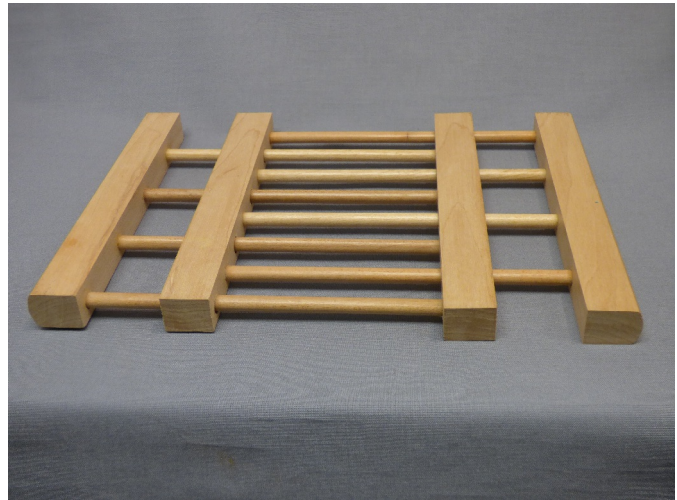
Directions for making an expandable trivet

by Dr. John Dekle

Forty years ago we were living on a shoestring so we purchased a wooden dining room set unfinished. Having done all the work to finish it ourselves we had good reason to take special care of the furniture. After raising a couple boys and having a constant flow of company the table and chairs still look in excellent condition. Part of the care was to use trivets under hot dishes rather than to set them directly on the table. A wide variety of trivets have been used over the years but our favorite has been an expandable wooden trivet which is easy to adjust to the needed size and collapses for storage.

Our church often have pot-luck dinners and we always need something to put under hot dishes so as not to melt the plastic covering for the serving tables. The solution was to make several of these trivets for their use. They can be made quite easily but care must be taken to get all the holes to line up so the trivet can expand and compress easily.

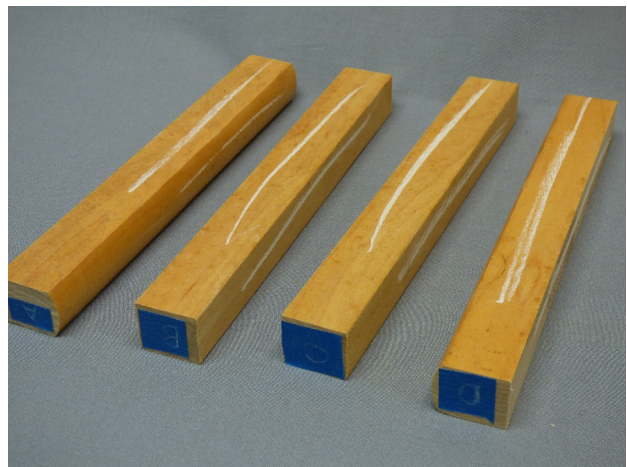
Materials: 4 Rails 3/4" x 1" x 8"
 8 dowels 3/8" x 7.5"
 Finish of your choice



Diag 1 - Completed project

Step 1. Cut rails to size 3/4 x 1 x 8 inches.
(See Diag 2)

Step 2. Lay out rails as they will be in the completed project. Label the side that goes toward the jig. As they are setting in your layout, the side that goes toward the jig will be on the bottom and it will be the same for all four rails. Mark the bottom in some way with tape or chalk. The left and right side of each rail needs to be marked. Identify the rails on the end (left to right) A - D.

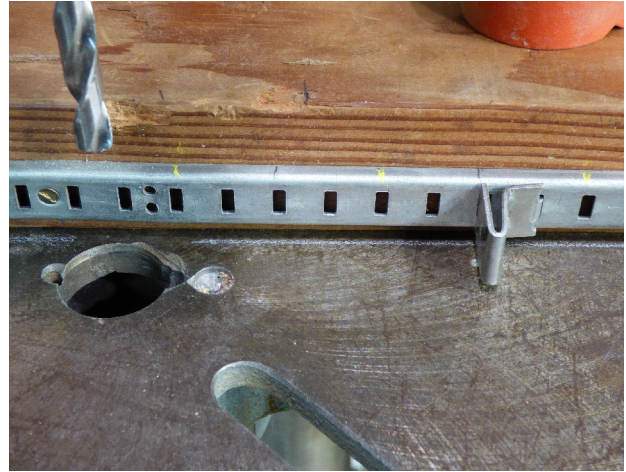


Diag 2 - Rails cut and identified

Step 3. Making the drilling jig. Use a 2x4 at least as long as your drill press table. (Mine is 21" long.) Cut a shelf standard, the kind that use small clips (see photo Diag 3), the length of the 2x4. With the 2x4 laying flat use a 1/4" plywood or something similar to but up to the 2x4. Put the standard on this which will raise it up an equal distance and fasten it to the 2x4 edge. Each slot is 1/2" apart allowing you to evenly space your project in 1/2" increments using a small clip as a stop. (See Diag 4) You may want to drill a hole in the top near center to hang the jig and label it for future reference.



Diag 3 - Drilling jig



Diag 4 - Clip for stop and marks for project

Step 4. Mount the drilling jig on the drill press and adjust so it is square and the drill bit is centered as close as possible to the center of the rail (3/4" side). Position the jig so the end edge of the rail if it were at the 8" mark is centered on the drill bit. (This will make the 7.5" hole exactly 1/2" from the edge and the rails will line up well when collapsed.) Mark the jig at 1.5", 3.5", 5.5" and 7.5". Adjust the depth to drill to 3/8" deep. (See Diag 5)

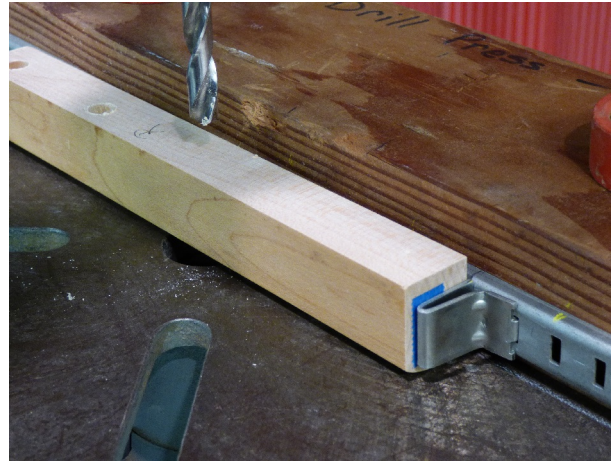


Diag 5 - First rail ready to be drilled

Step 5. With the drilling jig in place drill 4 holes (3/8" diameter 3/8" deep) in rail A and D. (Check a hole on a scrap piece of wood to determine if the bit size for the dowels is correct.) Drill holes on the right side of rail A at 1.5", 3.5", 5.5", and 7.5". Next drill 4 holes at the same



Diag 6 - first hole drilled



Diag 7 - 2 holes drilled
marks on the left side of rail D. (See Diag 6-8)

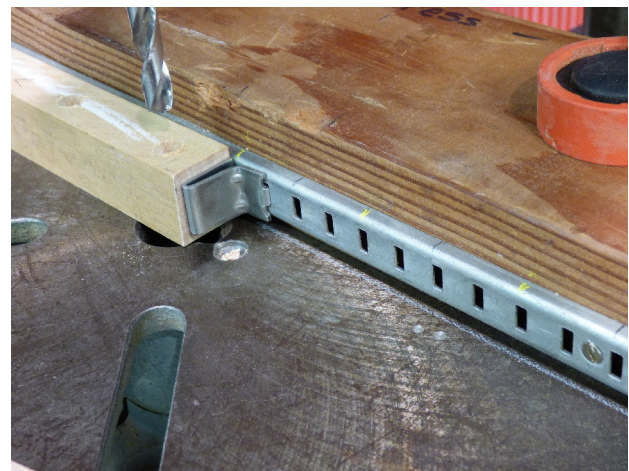


Diag 8 - ready to drill the fourth hole

Step 6. With a different color pencil mark the jig at 1/2", 2.5", 4.5" and 6.5". (see Diag 9) Drill the 3/8" holes 3/8" deep on the right side of rail B using this pattern (1/2, 2.5, 4.5 & 6.5). Next drill the left side of rail C following this same pattern. (See Diag 10)



Diag 9 - marking the jig



Diag 10 - Drilling rail B and C