

*175*  
**HANGING WINE  
GLASS RACK**

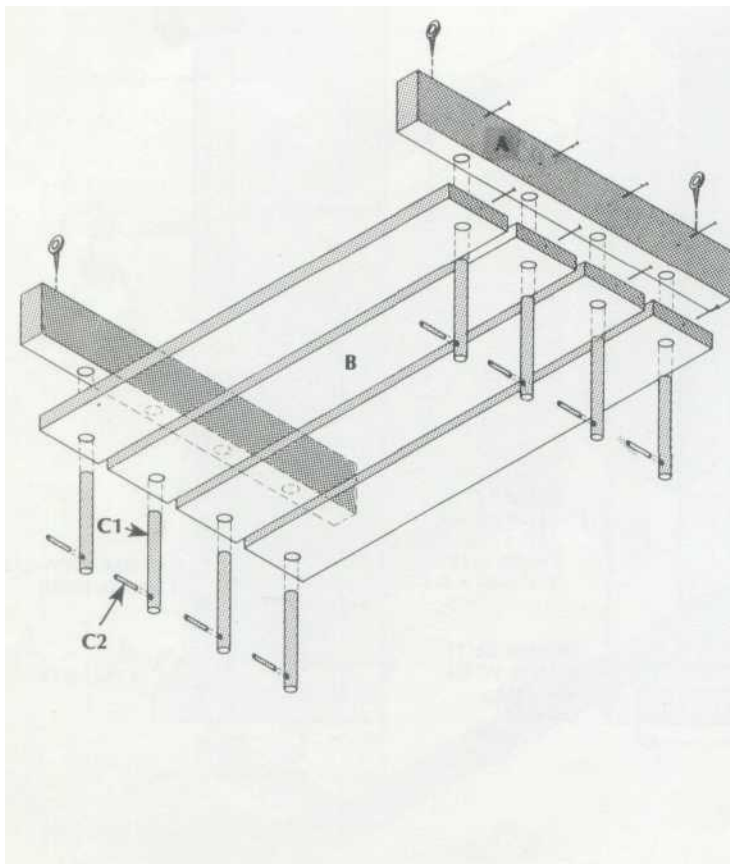


With this decorative hanging rack you can show off your fine wine glasses. It's useful in any kitchen or above any bar; it is attractive, and also helps solve your storage problems.

1. To make the wine glass rack, start with a 38" length of 2 x 4, a 49" length of 1 x 8, and two dowel rods (one 1/4" in diameter and one 3/4" in diameter).
2. Crosscut the 2 x 4 into two 18-1/2"-long pieces. Rip, then plane or sand these pieces to a thickness of 1-1/4" and a width of 2-1/2" to make the crosspieces (A).
3. Crosscut the 3/4"-thick stock into 24"-long boards, then rip these boards into 3-1/2"-wide pieces for the rails (B).

4. Cut the 3/4"-diameter dowel rod (C1) into eight 5"-long pieces. Cut the 1/4"-diameter dowel rod (C2) into eight 1-1/4"-long pieces. To make sure that the pieces are the same length, use a stop block when crosscutting.

5. Clamp the adjacent rails together two at a time to drill the glass stem recesses. From the ends, measure in 3" and mark a point. From these marks, space the other recesses 4-1/2" apart. Using a countersink bit, drill a 1/4"-deep recess where the edges of the rails meet.
6. Mark the centerpoints for the screw eye and dowel holes in the upper edge of the crosspieces. Center the screw eye holes 1-1/2" in from each end and the dowel holes



#### 5. Clamp the adjacent rails together

Clamp the adjacent rails together two at a time to drill the glass stem recesses. From the ends, measure in 3" and mark a point. From these marks, space the other recesses 4-1/2" apart. Using a countersink bit, drill a 1/4"-deep recess where the edges of the rails meet.

#### LIST OF MATERIALS

(finished dimensions in inches)		
<b>A</b>	Crosspieces (2)	1-1/4 x 2-1/2 x 18-1/2
<b>B</b>	Rails (4)	3/4 x 3-1/2 x 24
<b>C1</b>	Dowels (8)	3/4 dia. x 5
<b>C2</b>	Dowels (8)	1/4 dia. x 1-1/4
	Screw eyes (4)	1 dia. x 2-1/4
	Brads	#16 x 1-1/4
	Wood glue	

3-1/4" in from the ends and 4" apart. Mark the dowel hole centers 1" from the ends and midway across the lower faces on the rails.

7. Drill pilot holes for the screw eyes 1" deep into the crosspieces. Drill 3/4"-diameter dowel holes completely through the crosspieces and the rails. To avoid tear-out when drilling the dowel holes, drill only until the tip of the bit penetrates the far side of each piece, then flip the piece over to complete the hole.

8. Center and drill a 1/4"-diameter hole through each 3/4"-diameter dowel 5/8" from one end. Hold the dowels steady for drilling by placing them in a V-groove plowed down the middle of a block of scrap lumber. Position the block so that the drill bit will strike the center of the groove, then clamp it to

the table or hold it firmly against a fence.

9. Sand all pieces before assembling.

10. Drive the 1/4"-diameter dowels through the ends of the larger dowels so that their ends extend the same distance to either side. Then fit the rails onto the larger dowels and push them down until they are stopped by the smaller dowels.

11. Make sure the rails are turned so that the tapered recesses on their edges will face up when the unit is installed. Then drive brads through the ends of the rails into the dowels to prevent them from moving out of position.

12. Arrange the rails so that the two with recesses on both edges are in the middle and the recessed edges of the other two face inside.

Spread glue inside the dowel holes in the crosspieces and the upper ends of the dowels. Then insert the dowels into the underside of the crosspieces, pushing them up until their upper ends barely emerge from the crosspieces. After the glue dries, sand the dowel ends flush with the crosspieces.

13. If you want to stain the assembly, do it at this time, then rub with steel wool.

14. Finally, install the screw eyes and hang the rack.

