Folding Cookbook Stand

Attach this stand to a wall next to the area where you do most of your measuring and mixing. Then, whenever you need to hold open your cookbook, pull the stand away from the wall, and its prop board will drop down to brace the stand at a convenient angle. When you're through, just fold the prop back, and the stand will rest flat against the wall again.

Materials List

White or red oak is recommended for this project.

(4)	3/4" x 3-5/16" x 19"	Top
(1)	3/4" x 7-1/2" x 15"	Prop board
(1)	3/4" x 1-1/8" x 18-3/4"	Bottom rail
(1)	3/4" x 3-1/16" x 6"	Pivot arms
(1)	3/4" x 3-1/16" x 10"	Mounting blocks
(1)	5/8" x 36"	Birch dowel

Suggested Tools

Table saw
3/8" drill
5/64" and 3/16" drill bits
5/8" spade bit
No. 8 pilot bit and countersink with stop collar
Router
3/8" roundover bit
1/2" straight bit
Jigsaw
Compass
36" straightedge
No. 2 Phillips screwdriver
3/16" straight blade screwdriver
Pipe clamps
Try square
Palm sander

Hardware & Supplies

Yellow wood glue
1-1/4"-diameter wooden balls (2)
1-1/4" x 14" piano hinge
No. 5 x 3/4" flathead brass screws
4-gauge x 2-3/16" screw eyes (2)
No. 8 x 1" flathead wood screws
No. 8 x 1-1/2" flathead wood screws
Spray lacquer

Construction Procedure

1. To make the stand's top piece, spread glue evenly on adjoining edges of the four 3-5/16" x 19" boards. Clamp the pieces together squarely and evenly, and allow the glue to dry overnight. Sand both surfaces.

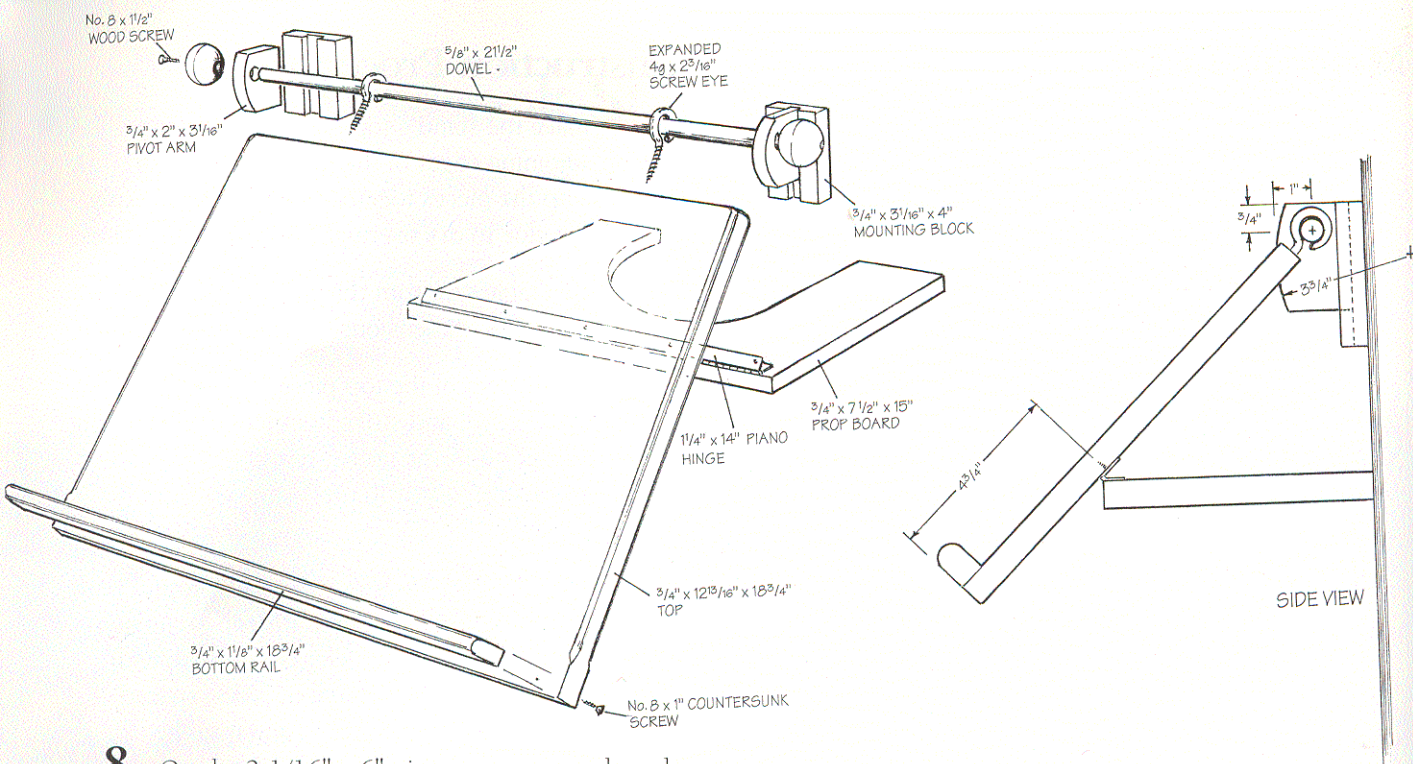**2.** With a table saw, trim the glued-up top to 12-13/16" x 18-3/4" dimensions.

3. On both faces of the top piece, measure up 1" from an 18-3/4" edge, and strike lines lengthwise. Using a 3/8" roundover bit in the router, round three edges on both faces of the top, down to the 1" marks. Sand the top's edges.

4. On the 1-1/8" x 18-3/4" bottom rail, round both sides of one edge. Clamp the rail to the top (at its non-routed edge) so that the rail's lower face is flush with the top's bottom edge. Then drill four holes, spaced 5-1/4" apart, through the top's back and into the bottom rail's edge. Use the No. 8 pilot bit, setting the stop collar at 1". Fasten the rail with No. 8 x 1" flathead screws.

5. On the top piece's upper edge, measure and mark 5" in from each end. At each mark, drill a 3/16" hole to a depth of 1". Next, use the tip of a straight-bladed screwdriver to open the eyes of the two screw eyes enough to accommodate the 5/8" dowel. Then fasten the screw eyes to the top piece's edge so that their eye-holes are aligned.

6. On the top's back face, measure up 4-3/4" from the bottom edge, and strike a line the length of the board. Center the piano hinge at this line so that its screw holes are on the line (see Side View). The hinge should close toward the top of the top piece, and its pin should face toward the bottom. Use a 5/64" drill bit to make the mounting holes, and mount the hinge with No. 5 x 3/4" flathead screws.

7. On the 3-1/6" x 10" piece, use a straight bit in the router to dado a 3/4"-wide, 3/8"-deep slot down the center of one face. Round both long edges of this face, using a 3/8" roundover bit in the router. Cut the piece into two 4" lengths to make the two mounting blocks.

No. 8 x 1/2" WOOD SCREW

3/4" x 2" x 3¹/₁₆" PIVOT ARM

5/8" x 21¹/₂" DOWEL

EXPANDED 4g x 2³/₁₆" SCREW EYE

³/₄" x 3¹/₁₆" x 4" MOUNTING BLOCK

³/₄" x 7¹/₂" x 15" PROP BOARD

1¹/₄" x 14" PIANO HINGE

³/₄" x 12¹³/₁₆" x 18³/₄" TOP

³/₄" x 1¹/₈" x 18³/₄" BOTTOM RAIL

No. 8 x 1" COUNTERSUNK SCREW

1"
3/4"
3³/₄"
4³/₄"

SIDE VIEW

8. On the 3-1/16" x 6" piece, measure and mark two lines, 2" in from each end. Then strike a center line down the length of the board.

9. From the center line, strike a 3-3/4" radius at each end of the piece.

10. From each 2" line, measure 1" toward the radius and mark a line across the piece. On each end of the piece, measure down 3/4" from one edge, and mark along the piece. Where each set of marks intersects, use a 5/8" spade bit to drill a hole through the piece (see Side View).

11. Use a jigsaw to cut the radius line at each end. Cut the piece at the 2" lines to create two 2" x 3-1/16" pivot arms. Sand the cut edges and the holes smooth.

12. Position the two pivot arms in the dadoes of the two mounting blocks so that the top edges are flush. Use a No. 8 pilot bit to drill through the back of the mounting blocks and into the pivot arms. Set the stop collar at 1". Fasten the supports with No. 8 x 1" flathead wood screws.

13. Cut the dowel to 21-1/2" in length, and drill a 1/2"-deep hole in the center of each end, using the No. 8 pilot bit. Slide the dowel through the screw eyes; then slip the pivot arms over each end of the dowel.

14. Set the stop collar at 1-1/2", and drill a hole through the center of each 1-1/4" wooden ball. Fasten the balls to the ends of the dowel with No. 8 x 1-1/2" flathead wood screws.

15. Find the center of the 7-1/2" x 15" prop board piece, and strike a line across the board's width, using a square. From one long edge, measure down 1-1/4", and mark on the line. Use this point as a center to strike a 3-3/4"-radius half-circle across the line. Use the square again to strike lines between the ends of the half-circle and the edge of the board (see the Folding Cooking Stand illustration for location of this marked shape).

16. With a jigsaw, cut out the marked section.

17. Use the 3/8" roundover bit in the router to round both edges of the 7-1/2" ends and the inside edge of the cut radius. Sand the board and the cut edges.

18. Mount the finished prop board to the hinge with No. 5 x 3/4" flathead screws. The cut opening should face away from the stand's top piece.

19. Sand the project lightly, and finish with several coats of spray lacquer.