

A Very Large Dinner Bell

Why should a dinner bell be discreet? This one will let you summon your children from three blocks away, paralyze night prowlers, and punish howling dogs, as well as announce that supper is served. We tend to be a bit inhibited, so our gong is made of copper and doesn't ring very loudly, but a stainless steel pan will let you put the bells of Notre Dame to shame.

Materials List

Walnut is recommended for this project.

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|-----|---------------------|---------------------------|
| (2) | 3/4" x 2-1/4" x 20" | Uprights |
| (1) | 3/4" x 4" x 13" | Upper base plate |
| (1) | 5/8" x 5" x 14-1/8" | Lower base plate |
| (2) | 3/4" x 13-1/2" | Birch dowels |
| (1) | 1" x 14-1/2" | Birch dowel |
| (1) | 3/8" x 9-1/2" | Birch dowel mallet handle |

Suggested Tools

3/8" drill
No. 8 pilot bit and countersink with stop collar
1/16", 1/8", and 3/8" drill bits
3/4" and 1" spade bits
Jigsaw
Router
45° 7/16" chamfer bit
36" straightedge
Compass
Try square
No. 2 Phillips screwdriver
Tack hammer

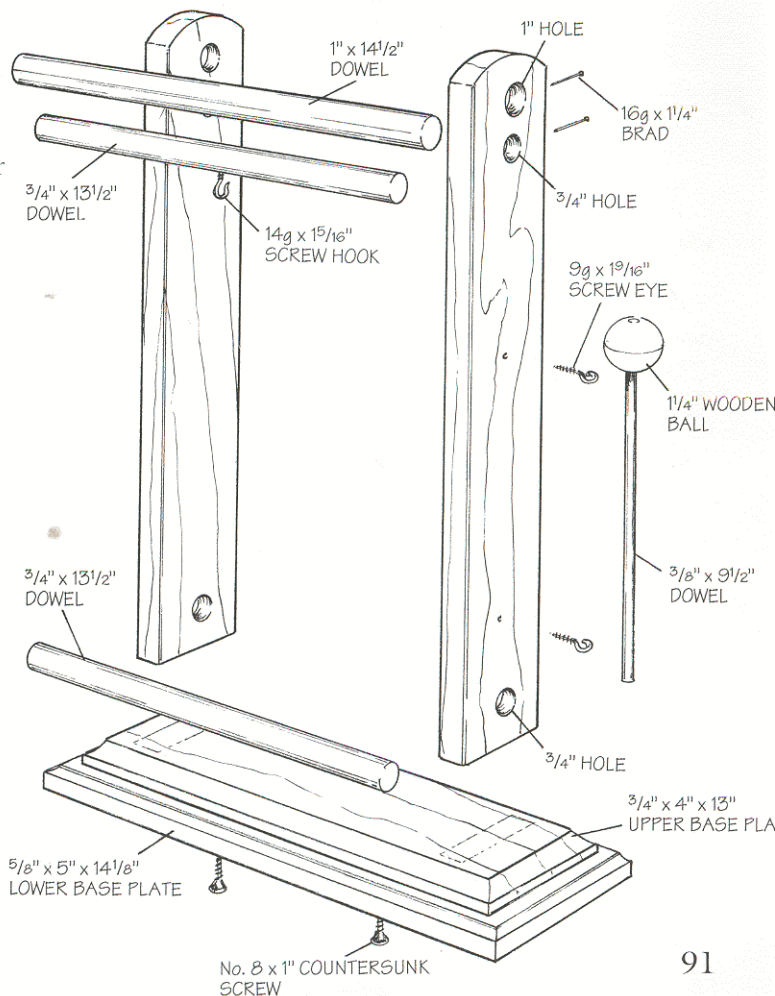
Hardware & Supplies

No. 8 x 1" flathead wood screws
No. 8 x 1-1/4" flathead wood screws
16-gauge x 1-1/4" brads
9-gauge x 1-9/16" screw eyes (2)
14-gauge x 1-5/16" screw hook
1-1/4"-diameter wooden ball
Spray lacquer

Construction Procedure

1. Locate the center of the 2-1/4" width of each 20" upright piece, and strike a line lengthwise at that point. Mark a 2" radius from the center line on one end of each piece (see Upright Detail).

2. Measure 1-1/4" and 2-5/8" down from the same end, and mark on the center line. On the opposite end of each piece, measure up 1-3/8" and mark.





3. Using sharp spade bits, drill 1" holes on the two 1-1/4" marks and 3/4" holes on the 2-5/8" and 1-3/8" marks.

4. Cut each upright's radius-marked ends with a jigsaw.

5. To locate positions for the uprights on the 4" x 13" upper base plate, measure 1-1/4" in from each end, and mark across the piece. Then measure 2" in from each end, and make a second set of marks. Strike lines 7/8" from the plate's edges to cross these marks.

6. Use a chamfer bit to rout all the upper edges of the upper base plate to a depth of 7/8". Sand the plate when the routing has been completed.

7. Measure 9/16" in from each end of the 5" x 14-1/8" lower base plate, and strike lines across the width of the piece. Measure 1/2" in from the edges, and strike lengthwise lines. The resulting marked rectangle will establish the placement of the upper base plate.

8. With the chamfer bit, rout the lower base plate's upper edges to a depth of 1/8". Sand the plate thoroughly.

9. Slip the cut dowels through the appropriate holes in the uprights, and center the uprights so that they align with the guide marks on the upper base plate. To secure the dowels, drive and set 16-gauge x 1-1/4" brads through one edge of each upright. (Pre-drill the holes with a 1/16" bit to prevent the wood from splitting.)

10. Mount the assembled uprights to the upper base plate with No. 8 x 1-1/4" flathead screws driven from the plate's bottom. Use a No. 8 pilot bit to drill the holes, and set the stop collar at 1-1/4". (Note that these screws are not visible in the illustration.)

11. Mount the upper base plate to the lower base plate with No. 8 x 1" screws driven from the bottom of the lower base plate. Set the stop collar at 1".

12. Drill a 3/8" hole in the 1-1/4" wooden ball; then glue the 3/8" dowel handle into it.

13. From the upper base plate's surface, measure up 4" and 11", and mark these points on one outer face of one upright. Drill 1/8" holes at each point, being careful not to penetrate the upright's opposite face. Fasten the two screw eyes into these pre-drilled holes, aligning the openings in the two eyes. These will hold the mallet handle.

14. Locate the center of the upper 3/4" dowel, and drill a 1/16" hole into its bottom face. Thread the 1-5/16" screw hook into the hole; the gong will hang from this hook.

15. Sand the project lightly. Then finish it with several coats of spray lacquer.

