



Birdcage

Here's a delightful fix for an uninteresting corner of the room. Although not designed for live birds, this birdcage is an attractive conversation piece with limitless decorative potential.



Materials List

- 3 linear feet of 1 x 6 pine
- 20 linear feet of 1 x 2 pine
- 18 linear feet of 1 x 1 pine
- 2 linear feet of 1 x 4 pine
- 2' x 4' sheet of $\frac{3}{4}$ " plywood
- 2' x 4' sheet of $\frac{1}{4}$ " plywood

Hardware

- 30, 2-1/2" 8d finishing nails
- 15, 2" 6d finishing nails
- 10, 1-1/2" 4d finishing nails
- 2, 2" hinges
- 2 small drawer pulls
- 150 linear feet of 18-gauge wire rod
- Small spool of 28-gauge wire
- 4 small metal L-angles

Cutting List

Code	Description	Qty.	Material	Dimensions
A	Lower Sides	2	1 x 6 pine	11-1/4" long
B	Vertical Sides	4	1 x 2 pine	43" long
C	Upper Sides	2	1 x 2 pine	11-1/4" long
D	Back	1	$\frac{3}{4}$ " plywood	29" x 13-1/2"
E	Bottom	1	$\frac{3}{4}$ " plywood	13-1/2" x 12-3/4"
F	Vertical Front	2	1 x 1 pine	43" long
G	Upper Front	1	1 x 2 pine	12" long
H	Middle Front	1	1 x 1 pine	12" long
I	Lower Front	1	1 x 4 pine	12" long
J	Door Vertical	2	1 x 1 pine	25-3/4" long
K	Door Horizontal	2	1 x 1 pine	11-3/4" long
L	Tray Front	1	1 x 1 pine	11-7/8" long
M	Tray	1	$\frac{1}{4}$ " plywood	11-7/8" x 13"
N	Top	1	$\frac{3}{4}$ " plywood	15-1/4" x 17-1/4"

Constructing the Sides

1. Cut two Lower Sides (A) from 1 x 6 pine, each measuring 11-1/4 inches.

2. Referring to *Figure 1* mark and cut out a semi-circle on one 11-1/4-inch long edge of each of the two Lower Sides (A). Our semicircle has a 6-1/2" radius, but cut to any radius you choose.

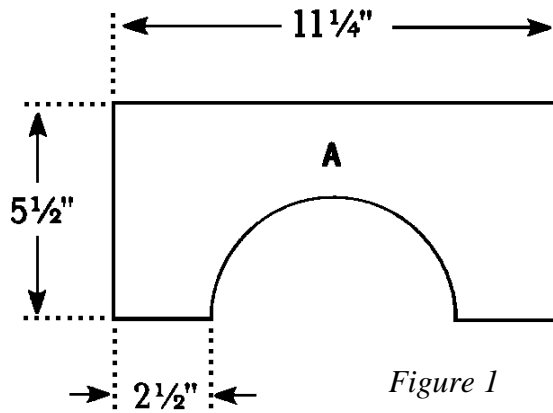


Figure 1

3. Cut four Vertical Sides (B) from 1 x 2 pine, each measuring 43 inches.
4. Cut two Upper Sides (C) from 1 x 2 pine, each measuring 11-1/4 inches.
5. Place two Vertical Sides (B) on a level surface, parallel to each other and 11-1/4 inches apart. **Note:** because of the relatively thin wood used for this project, and the depth that the nail must penetrate, we strongly suggest that you pre-drill all of your nail holes to avoid splitting the

wood. Place one Upper Side (C) between the ends of the two Vertical Sides (B), as shown in *Figure 2*. Apply glue to the meeting surfaces, and nail through the Vertical Sides (B) into the ends of the Upper Side (C) using two 2-1/2" nails on each joint.

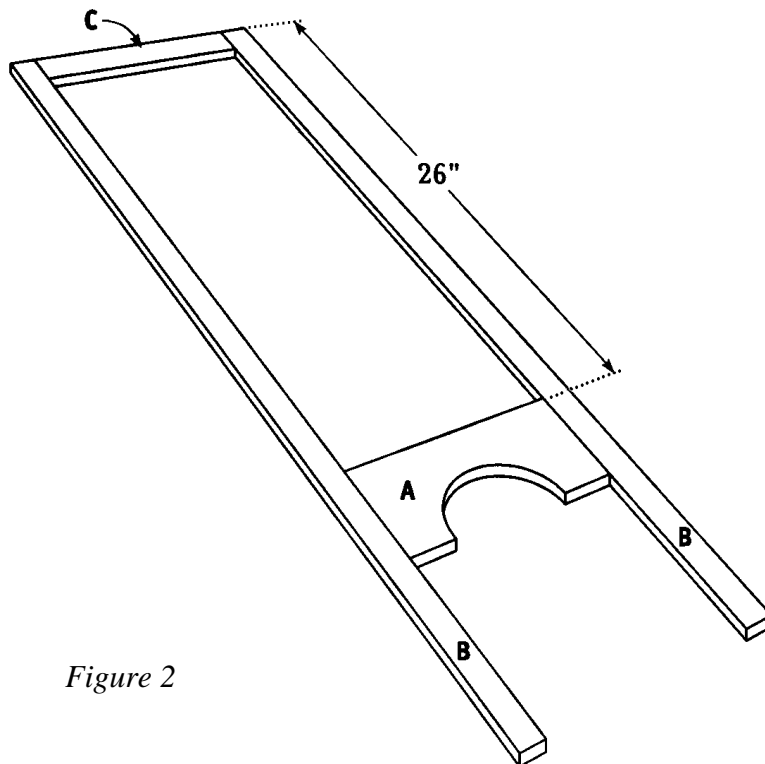


Figure 2

6. Fit one Lower Side (A) between the same two Vertical Sides (B), 26 inches below the Upper Side (C), as shown in *Figure 2*. Apply glue to the meeting surfaces, and nail through the Vertical Sides (B) into the ends of the Lower Side (A) using two 2-1/2" nails on each joint.
7. Repeat Steps 5 and 6 to construct another cage side using the remaining Lower Side (A), two Vertical Sides (B) and Upper Side (C).

Adding the Back and Bottom

1. Cut one Back (D) from $\frac{3}{4}$ " plywood, measuring 29 x 13-1/2 inches.
2. Place the Back (D) on a flat surface. Place one assembled side on edge, flush against one 29-inch-long edge of the Back (D), as shown in *Figure 3*. Apply glue to the meeting surfaces, and nail through the Vertical Side (B) into the edge of the Back (D), using 1-1/2" nails spaced about every 5 inches.

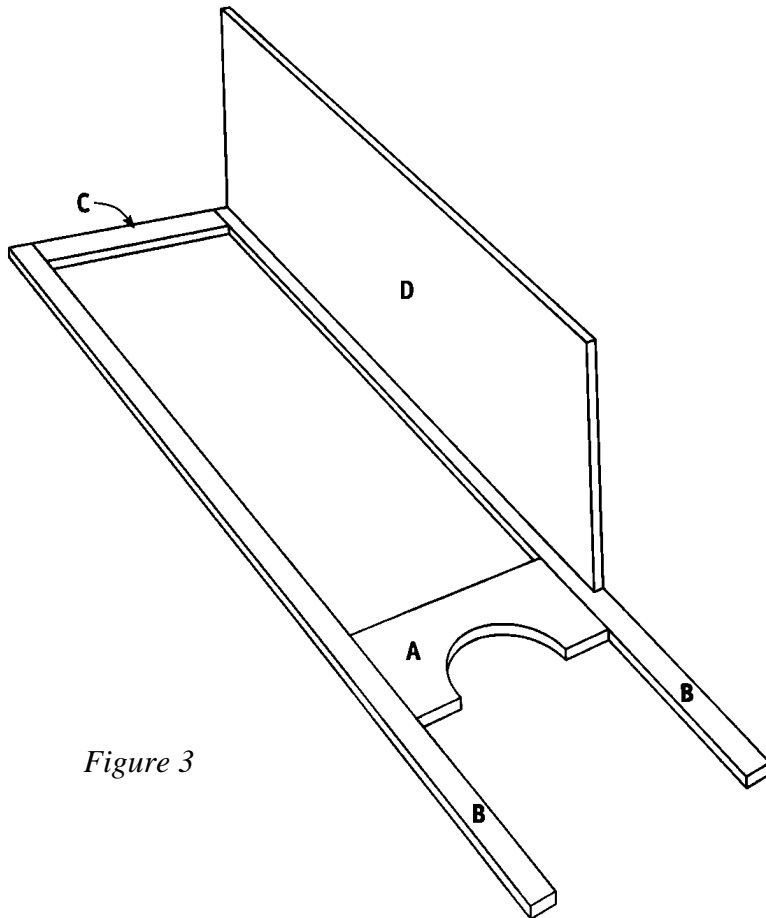


Figure 3

1. Repeat Step 2 to attach the remaining side assembly to the opposite 29-inch-long edge of the Back (D)
2. Cut one Bottom (E) from $\frac{3}{4}$ " plywood measuring 13-1/2 x 12-3/4 inches.
5. Fit the Bottom (E) between the two cage sides, 29 inches below the top of the Back (D).
6. Apply glue to the meeting surfaces, and nail through the sides and back into the edges of the Bottom (E) using 2" nails spaced every 5 inches.

Constructing the Front

1. Cut two Vertical Fronts (F) from 1 x 1 pine, each measuring 43 inches.
2. Cut one Upper Front (G) from 1 x 2 pine measuring 12 inches.
3. Place the two Vertical Fronts (F) on a flat surface, parallel to each other and 12 inches apart.
4. Fit the Upper Front (G) between the ends of the two Vertical Fronts (F), as shown in *Figure*

4. Apply glue to the meeting surfaces, and nail through the Vertical Fronts (F) into the ends of the Upper Front (G) using two 2" nails on each joint.

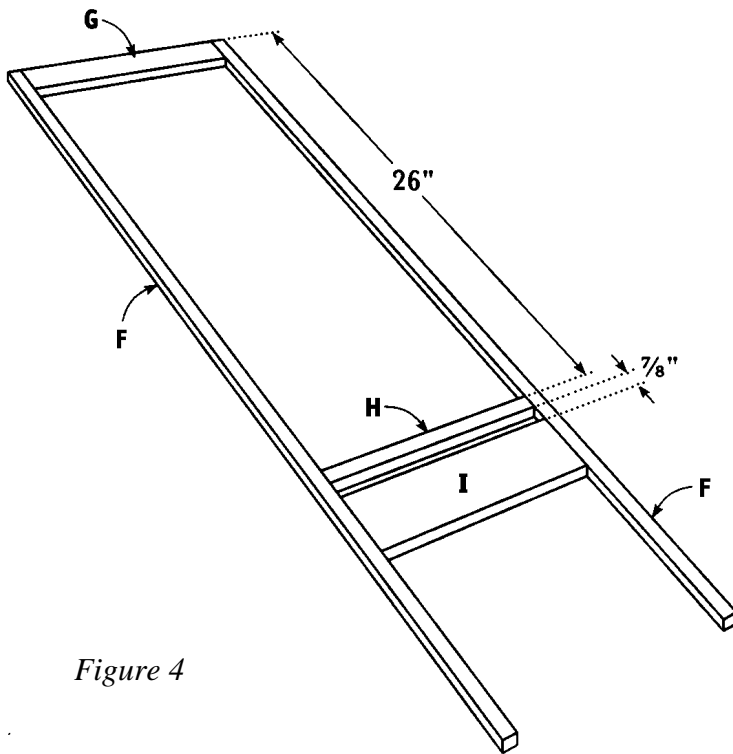


Figure 4

5. Cut one Middle Front (H) from 1 x 1 pine, measuring 12 inches.
6. Fit the Middle Front (H) between the two Vertical Fronts (F), 26 inches below the Upper Front (G), as shown in *Figure 4*. Apply glue to the meeting surfaces, and nail through the Vertical Fronts (F) into the ends of the Middle Front (H), using one 2-inch nail on each joint.
7. Cut one Lower Front (I) from 1 x 4 pine, measuring 12 inches.
8. Fit the Lower Front (I) between the two Vertical Fronts (F), 7/8-inch below the Middle Front (H). Apply glue to the meeting surfaces, and nail through the Vertical Fronts (F) into the ends of the Lower Front (I), using two 2-inch nails on each joint.
9. Fit the assembled front between the two assembled sides. Nail through the sides into the edges of the Vertical Fronts (F), using 1-1/2" nails spaced about every 5 inches.

Constructing the Door

1. Cut two Door Verticals (J) from 1 x 1 pine, each measuring 25-3/4 inches.
2. Cut two Door Horizontals (K) from 1 x 1 pine, each measuring 11-3/4 inches.
3. Place the two Door Verticals (J) on a flat surface, parallel to each other and 11-3/4 inches apart. Fit one Door Horizontal (K) between the ends of the two Door Verticals (J), as shown in *Figure 5*. Apply glue to the meeting surfaces, and nail through the Door Verticals (J) into the ends of the Door Horizontal (K) using one 2" nail on each joint.
4. Install small metal L-angles over each of the four joints between the Door Verticals (J) and

Door Horizontals (K).

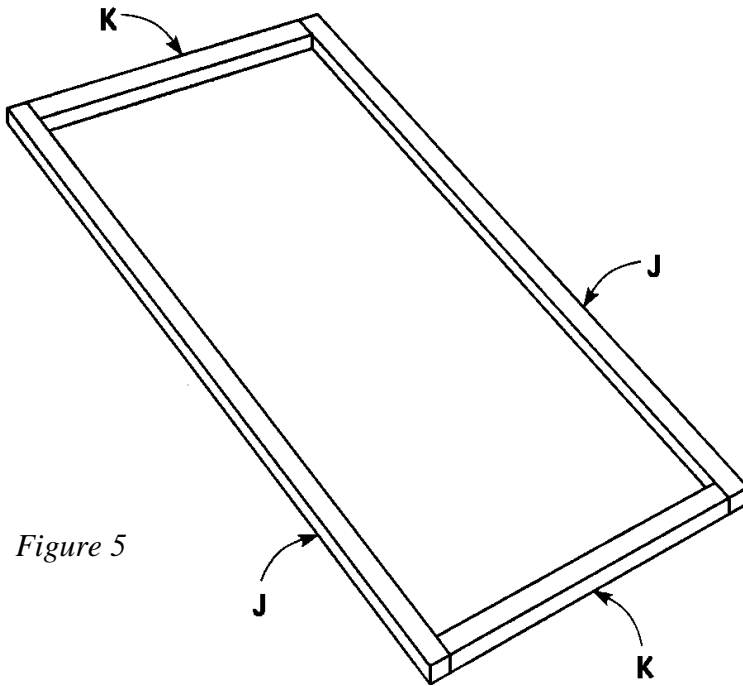


Figure 5

Making the Tray

1. Cut one Tray Front (L) from 1 x 1 pine, measuring 11-7/8 inches.
2. Cut a 1/4-inch dado to a 1/4-inch depth, centered width-wise, down the length of the Tray Front (L).
3. Cut one Tray (M) from 1/4" plywood, measuring 11-7/8 x 13 inches.
4. Apply glue to the meeting surfaces, and insert one 11-7/8" edge of the Tray (M)

into the dado in the Tray Front (L), as shown in *Figure 6*. Allow the glue to set up for 24 hours.

5. Install a small drawer pull on the center front of the assembled tray.

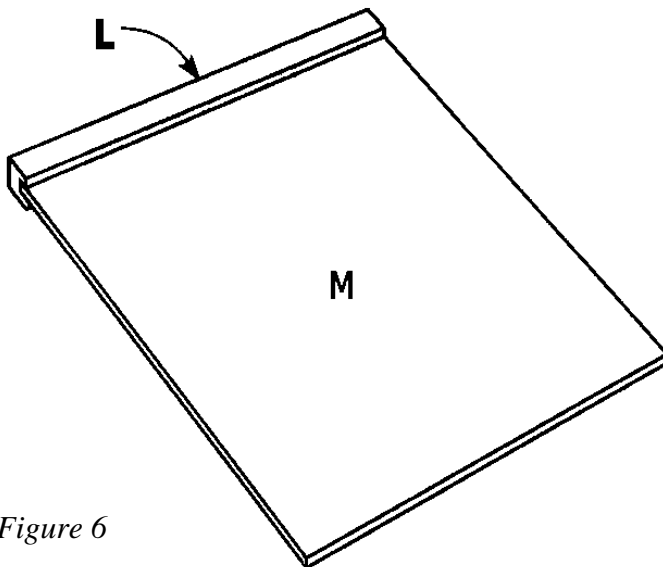


Figure 6

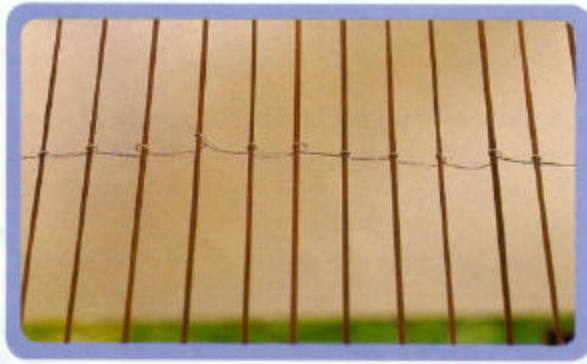
Adding the Top

1. Cut one Top (N) from 3/4 plywood, measuring 15-1/4 x 17-1/4 inches.
2. An optional step at this point is to use a router and round-over bit and rout both 15-1/4" edges and one 17-1/4" edge of the Top (N).
3. Center the Top (N) over the assembly. It should be flush at the back, and overhang the sides and front. Apply glue to the meeting

surfaces, and nail through the Top (M) into the edges of the Upper Fronts (G) and Upper Sides (C) using 1-1/2" nails spaced every 5 inches.

Installing the Door

1. Attach two 2-inch hinges to the left side of the Door Vertical (J). Fit the door inside the opening at the front of the birdcage, and secure the hinges to the Front Verticals.
2. Install the small drawer pull on the right side of the door.



Finishing

1. Fill any holes, cracks or crevices with wood filler.
2. Thoroughly sand all areas of the completed birdcage.
3. Paint or stain the birdcage the color of your choice. We chose a pale yellow paint. After the paint dried, we applied a tropical wallpaper to the back of the birdcage, and random wallpaper cutouts to the front, sides, and top of the birdcage. See photo.
4. The bars of the cage are 18-gauge wire rods inserted into the Lower and Upper sides (A and C). To install the rods, drill holes the diameter of the rods into the bottom of the Upper Sides (C), spacing the holes 1/2 inch apart. Drill corresponding holes (1/4 inch deep and 1/2 inch apart) into the top of the Lower Sides (A).
5. Insert the end of one wire rod in the first hole, and cut the wire rod to length (1/4 inch longer than the opening). Insert the cut end into the corresponding first hole in the top of the Lower Side (A).
6. Repeat Steps 4 and 5 to add wire rods across the entire opening, fitting the rods into each of the remaining corresponding holes.
7. Repeat Steps 4 and 5 to add wire rod bars to the opposite side of the birdcage.
8. Drill Corresponding holes 1/4 inch deep every 1/2 inch into the inside edges of the Door Horizontals (K). Insert 18-gauge wire rods into the corresponding holes, using the same method described in Steps 4 and 5.

9. Wrap lengths of 28-gauge wire around each of the 18-gauge wire rods to hold the rods in position.

