



Appendix XI Suggested Plans for Woodworking Projects

Nine Block Puzzle

Materials needed

- Use ¼-inch plywood for sides and base. Use 1-inch lumber (actual thickness ¾ inch) for the blocks. See illustration for the dimensions.
- Glue
- ½-inch brads

Tools needed

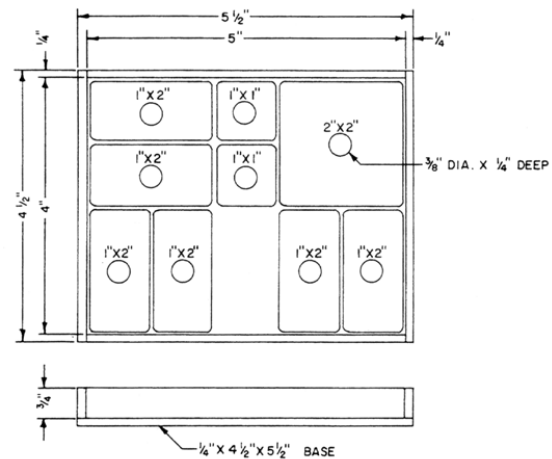
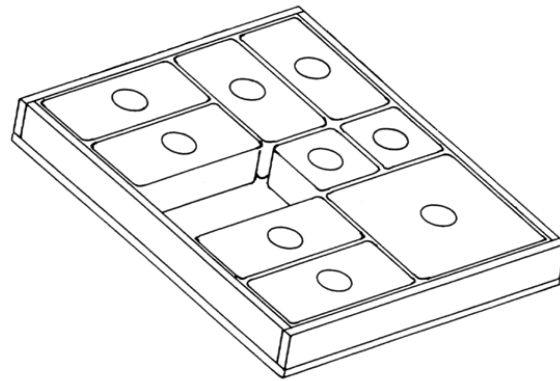
- Tack hammer
- Saw
- Drill with ⅜" countersink bit
- Sandpaper
- Paint or stain and varnish

Instructions

1. Cut all pieces to size.
2. Glue and nail frame together and then glue and nail to base.
3. Drill a shallow countersink hole in the middle of the nine blocks so they can be moved easily.
4. Sand all pieces and round corners so they will move easily in frame.
5. Finish as desired.

Playing instructions

Start from position shown. The object of the game is to move the large block from the upper right corner to the upper left corner. This takes a minimum of 47 moves.





Bed for Dog or Cat

Materials needed

- 1 piece lumber 1" x 8" (actual size 3/4" x 7 1/2") x 18" for back
- 2 pieces lumber 1" x 8" x 12" for ends
- 1 piece lumber 1" x 8" x 10" for front
- 1 piece lumber 1" x 8" x 2" for front
- 2 pieces lumber 1" x 2" (actual size 3/4" x 1 1/2") x 18" for floor supports
- 1 piece 1/2" plywood 11 1/4" x 18"
- 6d finishing nails

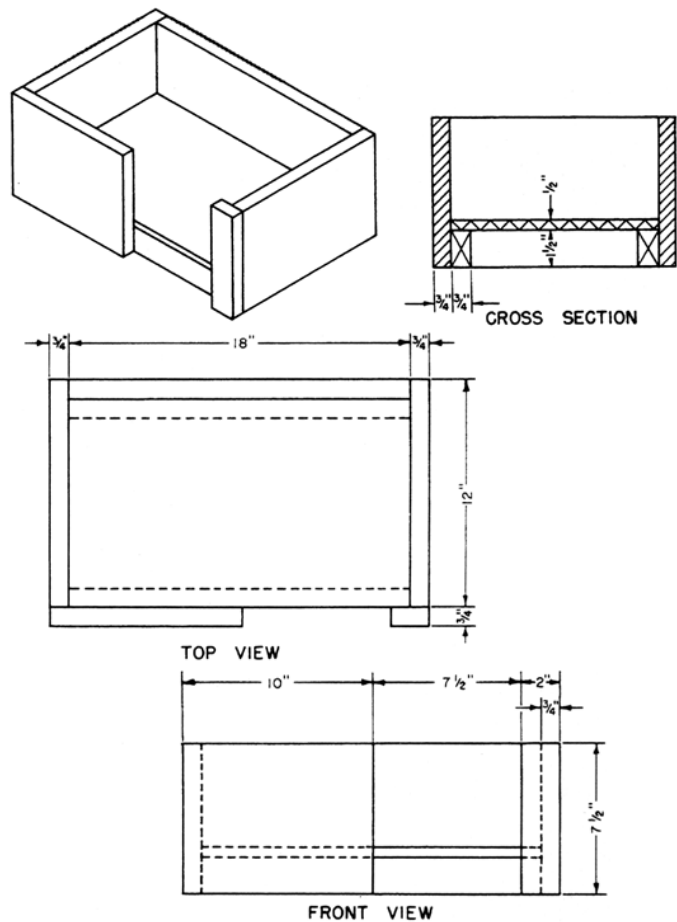
Tools needed

- Saw
- Hammer
- Sandpaper
- Shellac or paint

Instructions

1. Cut pieces to size.
2. Nail ends to back.
3. Nail front pieces to ends.
4. Set floor supports in place and nail through end pieces into ends of supports.
5. Nail floor to supports.

Note: If pet is larger or smaller, dimensions can be changed accordingly.



Nail & Tool Box

Materials needed

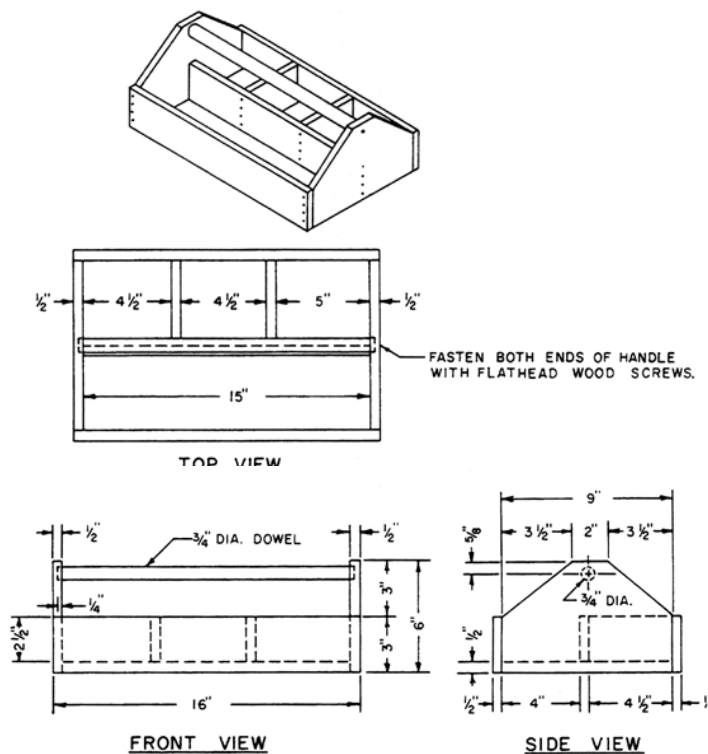
- 1 piece wood 1/2" x 24" x 24" (use exterior plywood)
- 1 piece of 3/4" dowel stock, 15 1/2" long
- Finishing nails 1 1/4" or 1 1/2"
- 2 No. 8, 1" flathead wood screws
- Glue

Tools needed

- Hammer
- Saws
- Screwdriver
- Drill with 3/4" bit
- Sandpaper
- Paint or shellac

Instructions

1. Cut pieces to size.
2. Drill end pieces 1/4" deep for dowel.
3. Sand all pieces before assembly.
4. Glue and nail partitions to base.
5. Glue dowel between ends and fasten with screws.
6. Fit end/handle section over base. Glue and nail.
7. Glue and nail side pieces to unit.
8. Apply finish.





Firewood Basket

Materials needed

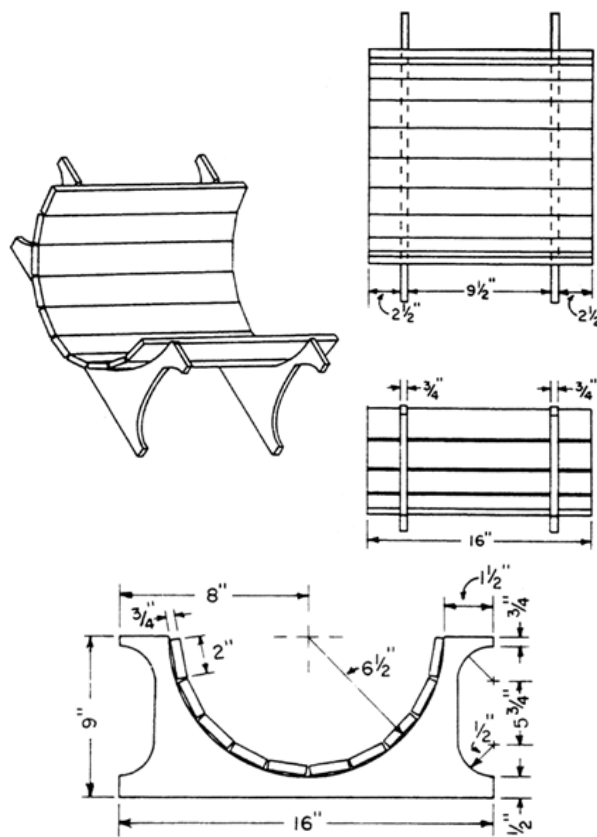
- 2 pieces of $\frac{3}{4}$ " \times 9" \times 16" plywood for ends
- 10 pieces lumber 1 \times 2 (actual size $\frac{3}{4}$ " \times 1 $\frac{1}{2}$ ") \times 16" for slats

Tools Needed:

- Table saw or hand saw
- Jig saw or saber saw
- Hammer
- Hand plane
- Sandpaper on block
- 50 6d box nails

Instructions:

1. Leave ends of plywood square. (Note: If notched out, keep notch shallow or nails will stick through.)
2. Find center on plywood pieces.
3. Use compass on a string and pencil to lay out semi circle to be cut out for basket ($6\frac{1}{2}$ " radius).
4. Smooth all surfaces.
5. Cut 10 pieces $\frac{3}{4}$ " \times 2" for slats.
6. Start at top of semi circle to nail on slats. Keep at 90° angle while nailing. Alternate nailing on slats, first one end then the other.
7. Paint to preference or finish as desired.



Lawn Stool

Materials needed

- 2 pieces lumber 2 \times 3 (actual size $1\frac{1}{2}$ " \times 2 $\frac{1}{2}$ ") \times 2'6"
- 6 pieces lumber 2 \times 3 (actual size $1\frac{1}{2}$ " \times 2 $\frac{1}{2}$ ") \times 1'4"
- 2 pieces of 1" dowel stock, 19 $\frac{1}{4}$ " long
- Waterproof glue
- 8 No. 12, 2 $\frac{1}{2}$ " flathead screws
- 16 No. 12, 1 $\frac{1}{2}$ " flathead screws
- About 23' of $\frac{3}{8}$ " manila rope
- Foam rubber or other waterproof cushioning material

Tools needed

- Saw
- Drill with 1", $\frac{7}{16}$ ", $\frac{1}{8}$ ", $\frac{3}{8}$ ", and countersink bits
- Screwdriver
- Knife
- Wood file
- Sandpaper
- Exterior paint or stain and exterior varnish

Instructions

1. Cut pieces to size. Round corners as shown with wood file.
2. Glue rails to legs.
3. Drill 1" holes in legs and glue dowels in place.
4. Drill $\frac{1}{8}$ " pilot holes through legs into rails and fasten with No. 12, 1 $\frac{1}{2}$ " screws (4 per joint).

5. Glue braces between rail ends. Drill $\frac{1}{8}$ " pilot holes and fasten with No. 12, 2 $\frac{1}{2}$ " screws (2 per joint).
6. Drill $\frac{7}{16}$ " holes in frame (6 per side and 3 per end) for rope, as seen in illustration. Weave rope through holes, forming a webbed support for the seat cushion.
7. Sand and finish.
8. Add seat cushion.

