



## Woodworking Plans

### Get Along Little Doggie

#### Materials needed

- 1 piece of 1 x 2 lumber (actual size  $\frac{3}{4}$ " x  $\frac{1}{2}$ ") and 11" long — axles
- 1 piece of  $\frac{3}{4}$ " x 10" x 22" A-C or better plywood — body\*
- 1 piece of  $\frac{3}{8}$ " x 6" x 8" or  $\frac{1}{2}$ " x 6" x 8" A-C or better plywood — wheels\*
- 2 — 10d finishing nails
- 8 —  $\frac{1}{2}$ " wire nails
- Cloth or leather — ears
- Glue
- Finish, optional

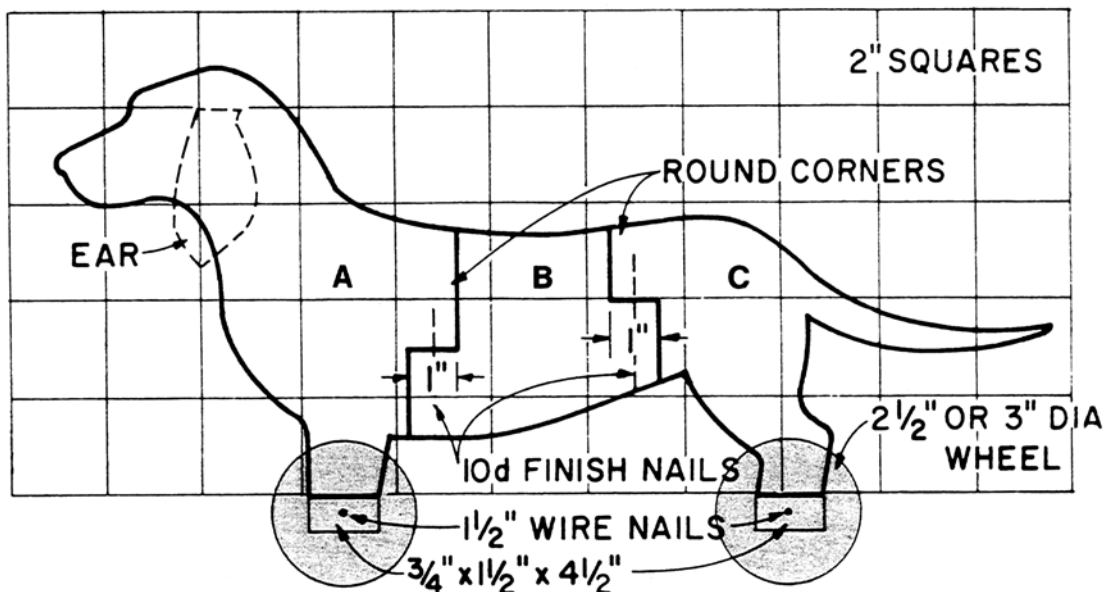
#### Tools needed

- Coping saw
- Hammer
- Rasp or file
- Drill press or other boring tool with appropriate bits
- Pencil compass
- Oscillating sander (or sandpaper)

\*Note: If the toy will be used outdoors, use A-C exterior plywood. For best appearance on front and back, use A-A plywood (A-A exterior for outdoors). See the discussion on plywood grades in Unit II.

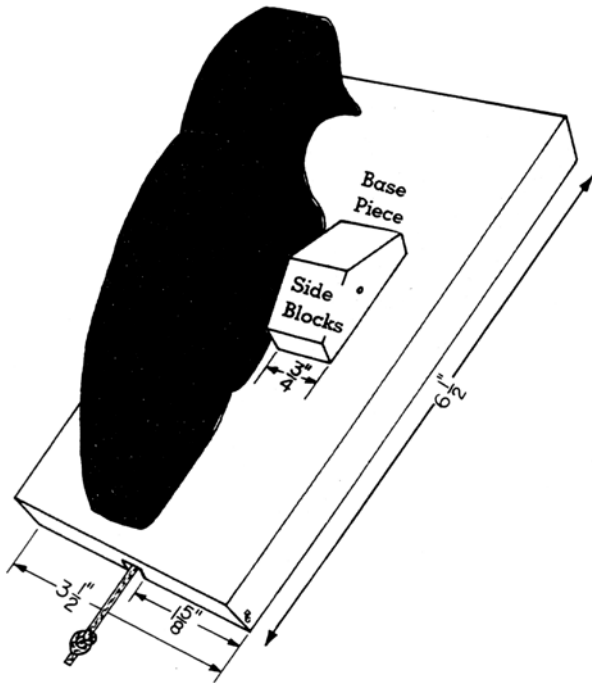
#### Instructions

1. Make a trace pattern using the grid system. Trace pattern onto wood.
2. Cut out body, wheels, and axles.
3. Cut body into A, B, and C pieces. Round the cut edges with a rasp or file so that the dog can twist and turn.
4. Drill loose fitting holes for hinge nails in bottom part of B piece. Drill tight pilot holes for hinge nails in top part of A and C pieces.
5. Sand all pieces smooth.
6. Drill loose fitting holes for nail hub in wheels. Attach axles to A and C pieces with glue and nails.
7. Assemble sections of dog with nails.
8. Attach ears.
9. Apply finish, if desired.





## "Pecky" the Door Knocker



### Instructions

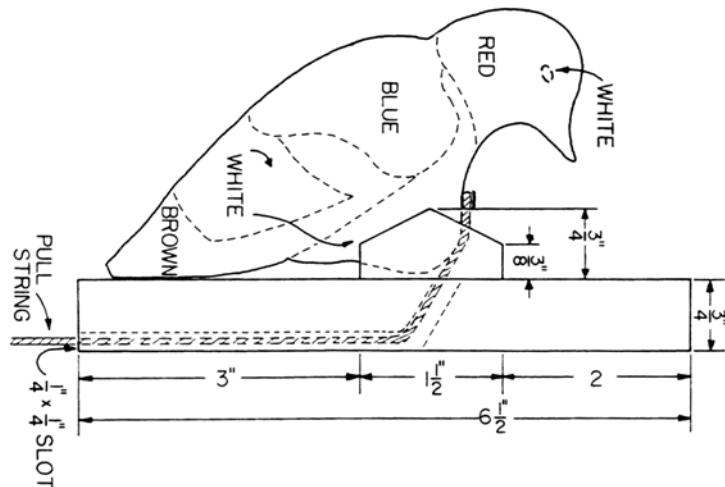
1. From one end of your wood piece, cut out the base to size.
2. Using the grid system, make a trace pattern of Pecky's body size  $3\frac{1}{2}'' \times 5\frac{1}{2}''$ . Trace onto wood.
3. Mark the two side blocks, each  $\frac{3}{4}'' \times 2''$  long.
4. Cut out all three pieces.
5. Mark and drill nail hinge or pivot holes in side blocks. (The hole in Pecky must be larger than the nail you will use as a pivot.)
6. Drill a  $\frac{1}{4}''$  hole through the base piece for the string. Chisel a  $\frac{1}{4}''$  recess on the bottom edge for the string as seen in the illustration.
7. Sand all pieces. Finish as desired.
8. Attach the side blocks to the base piece using the wire brads.
9. Attach pull string to Pecky's breast using the wire nail.
10. Attach Pecky to the base.

### Materials needed (Hardwood preferred)

- 1 piece of lumber 1 x 4 (actual size  $\frac{3}{4}'' \times 3\frac{1}{2}''$ ) and 14" long
- 1 — 6d finishing nail
- 12" of strong cord, cloth or leather shoe lace
- 1 —  $\frac{5}{8}''$  wire nail
- 4 — 1" wire brads
- Finish, optional (weather proof, if needed) or paint

### Tools needed

- Hand saw
- Coping saw
- Drill press or other boring tool with appropriate bits
- Hammer
- Rasp or file
- Chisel
- Oscillating sander or sandpaper





## Sandbox

### Materials needed

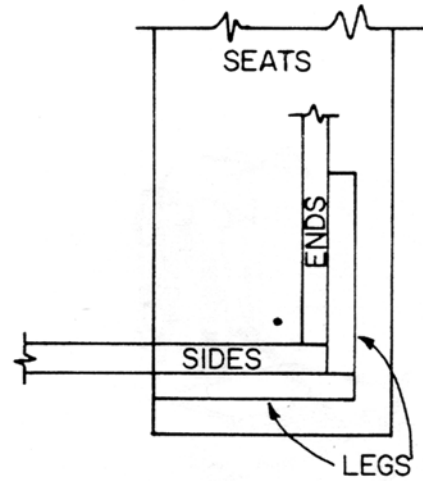
- 3 pieces of 1 x 8 lumber (about  $\frac{3}{4}$ " x  $7\frac{1}{4}$ ") and 8 feet long for ends, sides, and seats
- 1 piece of 1 x 6 lumber (about  $\frac{3}{4}$ " x  $5\frac{1}{2}$ ") and 8 feet long for legs
- 1 piece of 1 x 4 lumber (about  $\frac{3}{4}$ " x  $3\frac{1}{2}$ ") and 4 feet long for support cleat
- 1 piece of  $\frac{3}{4}$ " x  $47\frac{3}{4}$ " x 38" exterior grade plywood for bottom
- 7d galvanized siding nails
- Penetrating semi-transparent oil base stain (free of penta) for finish

### Tools needed

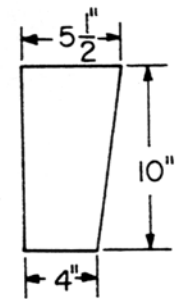
- Crosscut saw
- Coping saw
- Pencil compass
- Square
- Countersink
- Claw hammer
- Drill with  $\frac{1}{4}$ " bit
- Oscillating or belt sander
- Paint brush

### Instructions

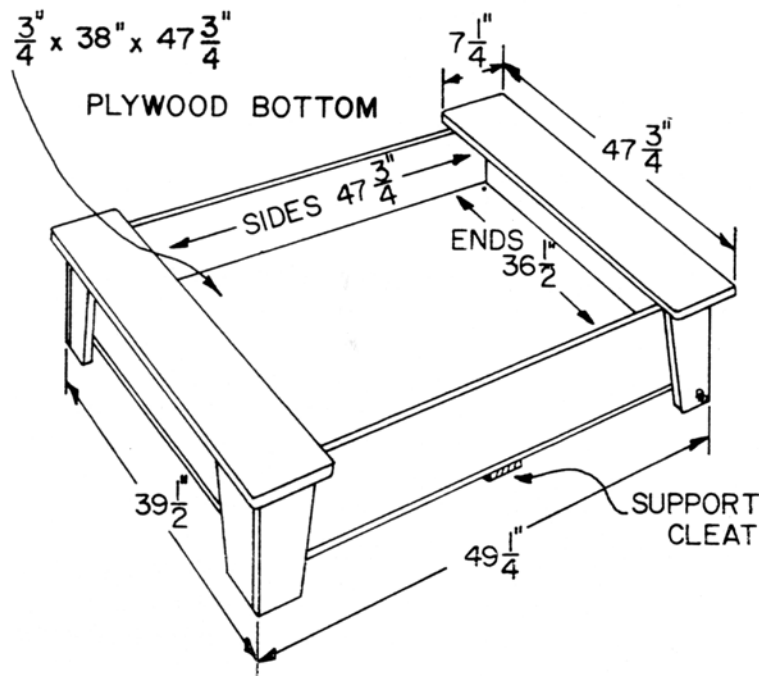
1. Check the thickness of material used for sides. The thickness will affect the length of the end pieces.
2. Drill a drain hole  $\frac{1}{4}$ " in diameter near each corner.
3. Slightly round all corners of seats.
4. Finish.



CORNER DETAIL



LEG DETAIL





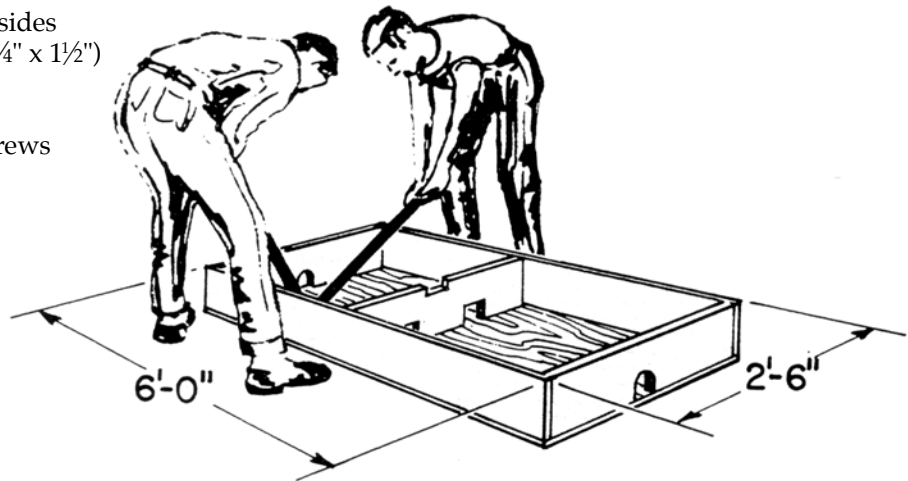
## Box Hockey

### Materials needed

- 1 piece of  $\frac{3}{8}$ " x 30" x 6 feet exterior grade plywood for floor
- 1 piece lumber 2 x 6 (actual size  $1\frac{1}{2}$ " x  $5\frac{1}{2}$ "") and 8 feet long for ends and partition
- 2 pieces lumber 1 x 6 (actual size  $\frac{3}{4}$ " x  $5\frac{1}{2}$ "") and 6 feet long for sides
- 2 pieces lumber 1 x 2 (actual size  $\frac{3}{4}$ " x  $1\frac{1}{2}$ "") and 30" long for sticks
- 1 puck — 1" thick, 2" diameter
- 12 — No. 6,  $\frac{1}{4}$ " flathead wood screws
- 36 —  $\frac{1}{2}$ " finishing nails
- Paint or varnish

### Tools needed

- Crosscut saw
- Coping saw
- Pencil compass
- Square
- Countersink
- Claw hammer
- Drill with  $\frac{1}{8}$ " bit
- Oscillating or belt sander
- Paint brush



### How to play Box Hockey

Players stand on opposite sides of the box, which is placed on the floor. Each player has a hockey stick and holds it at the end. The puck is placed in the notch in the center partition. To start the game, the players "shinny off." (i.e., They touch the bottom of the box and then each other's stick three times, counting 1-2-3 go.) The object of the game is to knock the puck out of the box through the end opening to the player's own left. When the puck goes through opening, the players start over. Best two out of three goals win.

