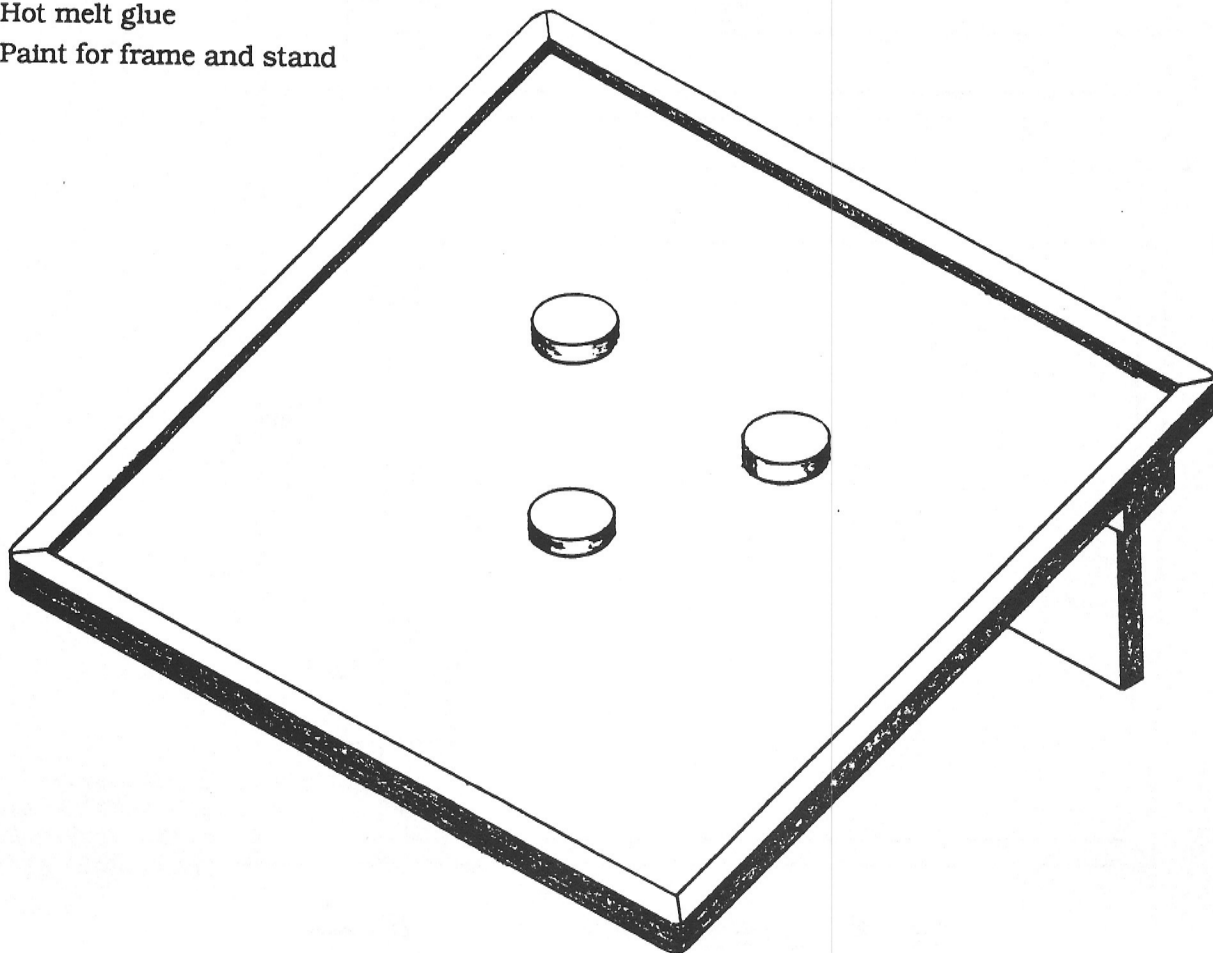


The Magnetic Gameboard is quite easy to make. Because it requires pieces of sheet metal cut by a sheet metal shop (furnace and duct installers) to assure that there are no curled edges, making multiple boards at the same time would take advantage of your trip to the metal supplier.

Any intriguing objects can be affixed using magnets. Shapes, small blocks with pictures, letters, numbers, game pieces or even plastic animals can be fun to manipulate on the board.

MATERIALS NEEDED

- A 15" x 15" piece of 24 or 26 gauge steel sheet
- Lacquer thinner for cleaning the steel
- Spray enamel, Varathane or equal, satin finish rather than gloss
- A 15" x 15" piece of 1/4" tempered Masonite (hardboard)
- 5 1/2' of 1/2" x 1/2" clear birch for frame (cut from 16" x 3" x 3/4" piece)
- A 16 1/8" x 1 1/2" x 1/2" piece of pine for hinge support
- A 14 5/8" x 5" x 1/2" piece of pine for hinged stand
- Two pieces 5" x 1/2" x 1/4" pine for hinged stand stiffeners
- Two 1 1/2" x 1" brass hinges with four screws each
- Five 1/2" diameter rubber bumpers
- Twelve plastic milk bottle caps 1 5/8" diameter x 1/2" high in four colors. Obtain from a local dairy that bottles gallon plastic jugs
- Hot melt glue
- Paint for frame and stand



- Twelve doughnut-shaped magnets approximately $1\frac{1}{8}$ " x $\frac{3}{16}$ " thick with $\frac{5}{16}$ " center hole. Obtain from Radio Shack catalog # 64-1885.
- Brads $\frac{1}{2}$ " long to nail the stiffener pieces to the hinged stand
- Tube of caulking such as "Liquid Nails" made by Macco Adhesives, Glidden Company

TOOLS NEEDED

- Table saw
- Sander
- Hammer, screwdriver, sanding block, etc.

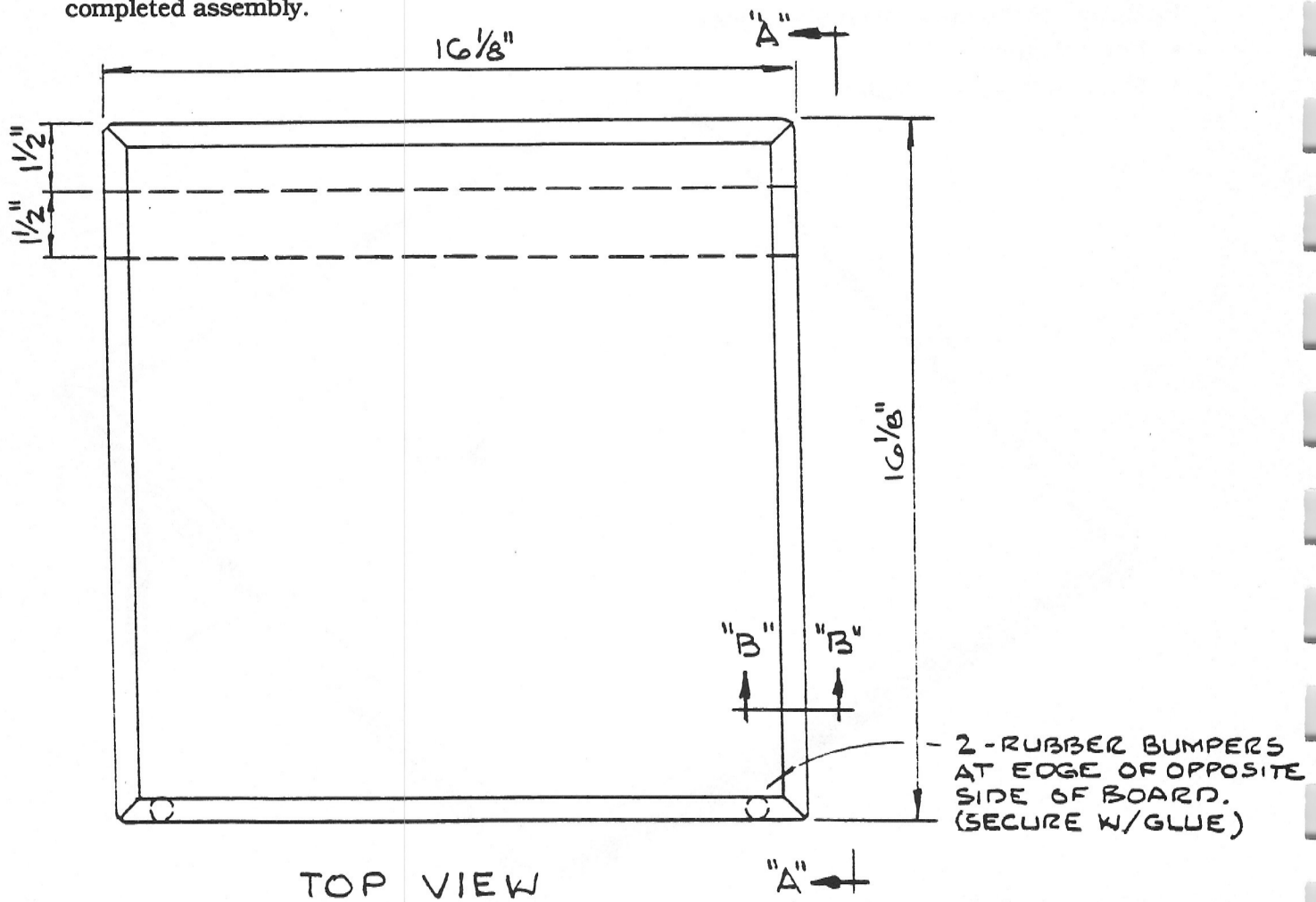
CONSTRUCTION SUGGESTIONS

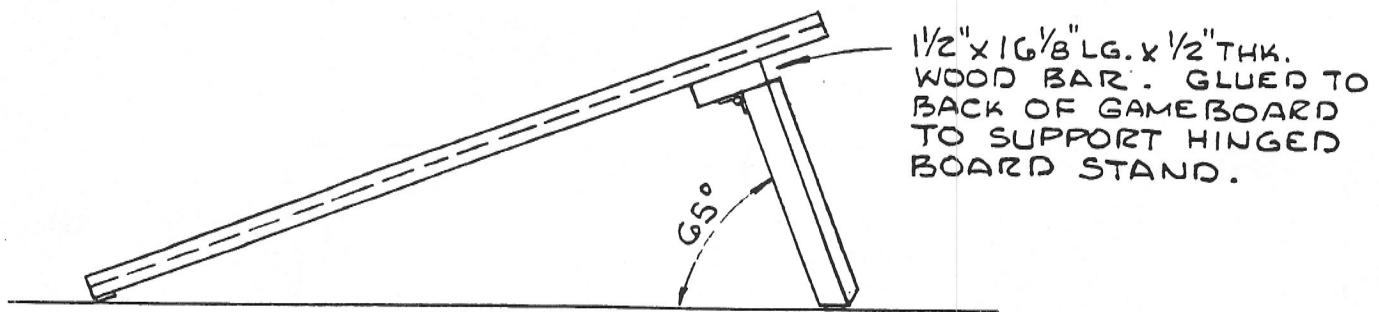
Get the sheet metal cut to 15" x 15." Cut the Masonite (hardboard) to 15" x 15." Glue the sheet metal to the Masonite using a small amount of Liquid Nails. Clean the steel with lacquer thinner or spray paint the steel.

Cut out the frame pieces and the slot into which the steel and Masonite fit. Cut the frame pieces to length, sand, and paint. Glue the frame onto the steel and Masonite assembly.

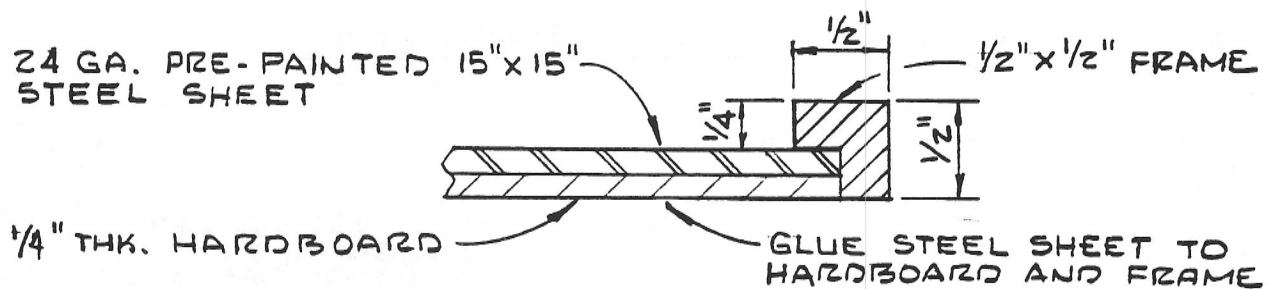
Cut out the hinge support, the hinge stand, and the stand stiffeners. Sand each piece.

Assemble according to the drawing details using glue, brads, and the hinge screws. Varnish the completed assembly.



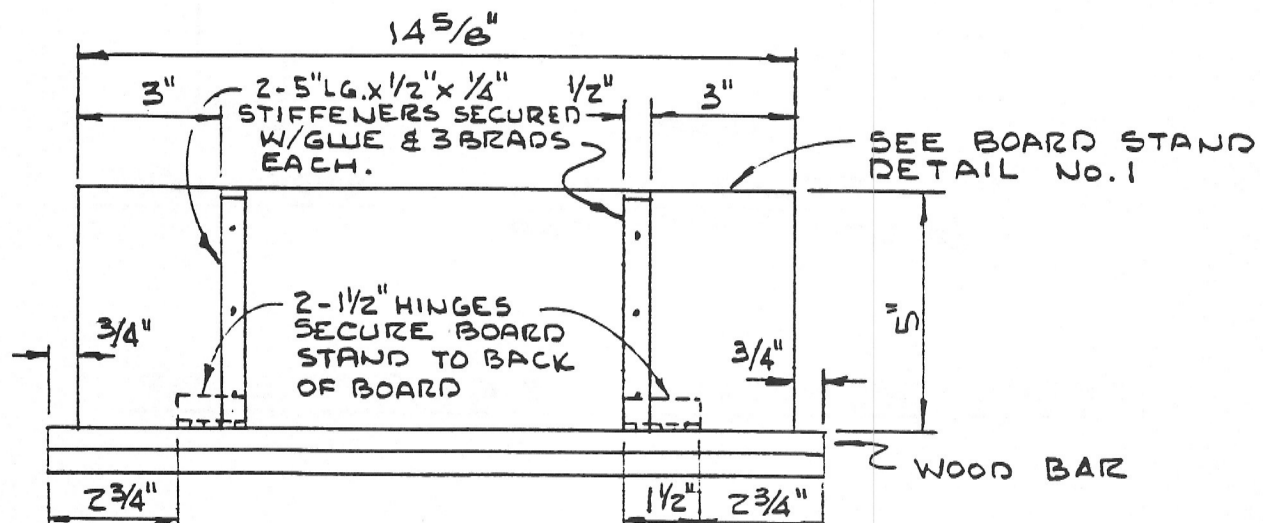


VIEW "A-A"

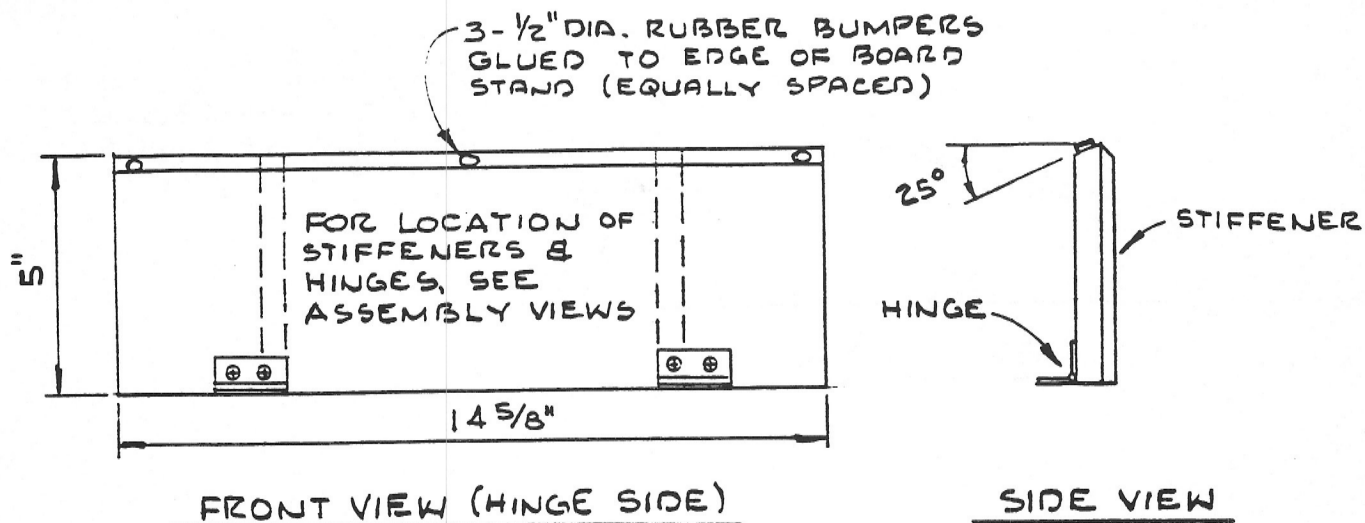


SECTION "B-B"

FULL SCALE



REAR VIEW

BOARD STAND - DETAIL No.1

1" DIA. MAGNET
SECURED INSIDE
BOTTLE CAP W/
HOT MELT GLUE

MILK BOTTLE CAP
IS REQUIRED
OF FOUR DIFFERENT
COLORS.

FRONT VIEW
(INSIDE BOTTLE CAP)

SIDE VIEWDETAIL OF MAGNET INSIDE BOTTLE CAP