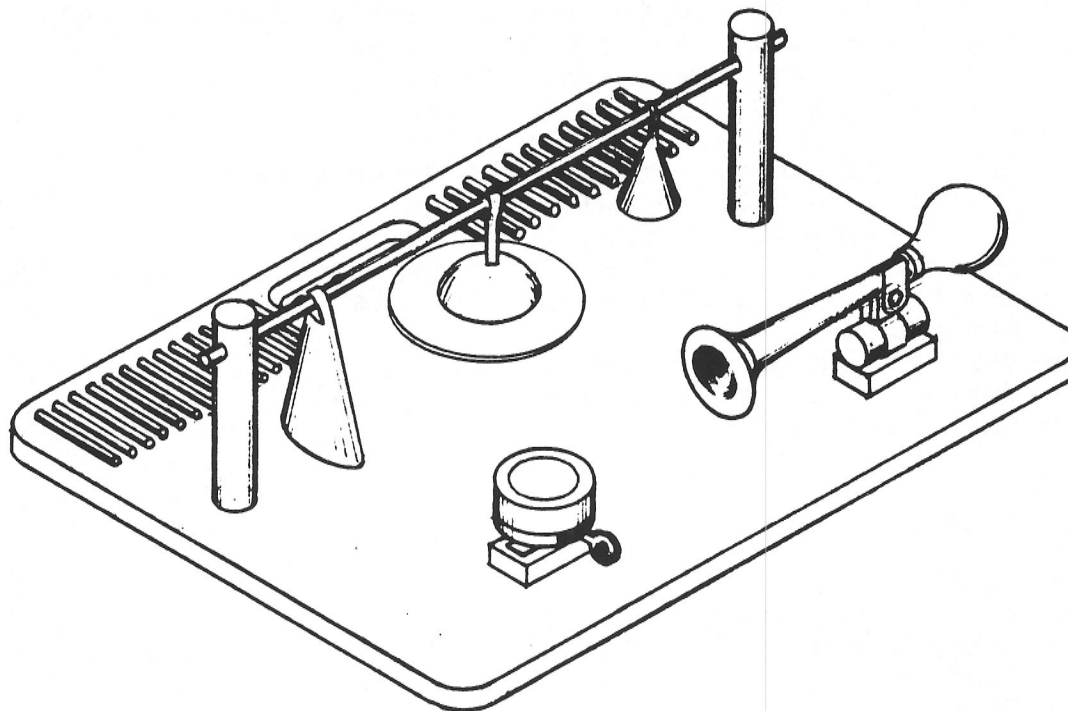# NOISE BOARD

This board is full of assorted noisemakers that let a child discover the sounds that several different devices make when hit, or squeezed, or pushed, or rubbed.

Materials needed:

- One piece of 3/8" thick x 20" x 14" birch plywood
- Two pieces 5 1/4" long 1" diameter dowel
- One piece 18" long 1/2" diameter dowel
- 19 pieces 2 1/2" long 3/16" diameter dowel and flattened on one side
- 12 pieces of 2 1/2" long 5/16" diameter dowel and flattened on one side
- Two pieces 1/2" x 2" x 1" birch plywood
- Four 3/4" x #6 tapping screws with countersunk heads
- Two 1 1/4" x #10 sheet metal screws
- Two 3/4" x #6 sheet metal screws
- Five 3/8" x #4 sheet metal screws
- Elmer's Carpenter's Glue or equal
- One bicycle horn, Schwinn #05005 or equal
- One bicycle bell, Schwinn or equal
- One 5" diameter cymbal, from toy store
- One cow bell, from Pier 1 Imports (see page 6) or equal
- One brass bell, from Pier 1 Imports
- Sandpaper
- Varathane gloss varnish or equal
- One piece 20" x 14" non-skid material
- Contact cement

Tools needed:

- Table saw
- Set of drill bits and drill
- Saber saw with fine tooth blade
- Sanding block
- Brush
- Screwdriver
- A mechanical sander would help to flatten the dowels
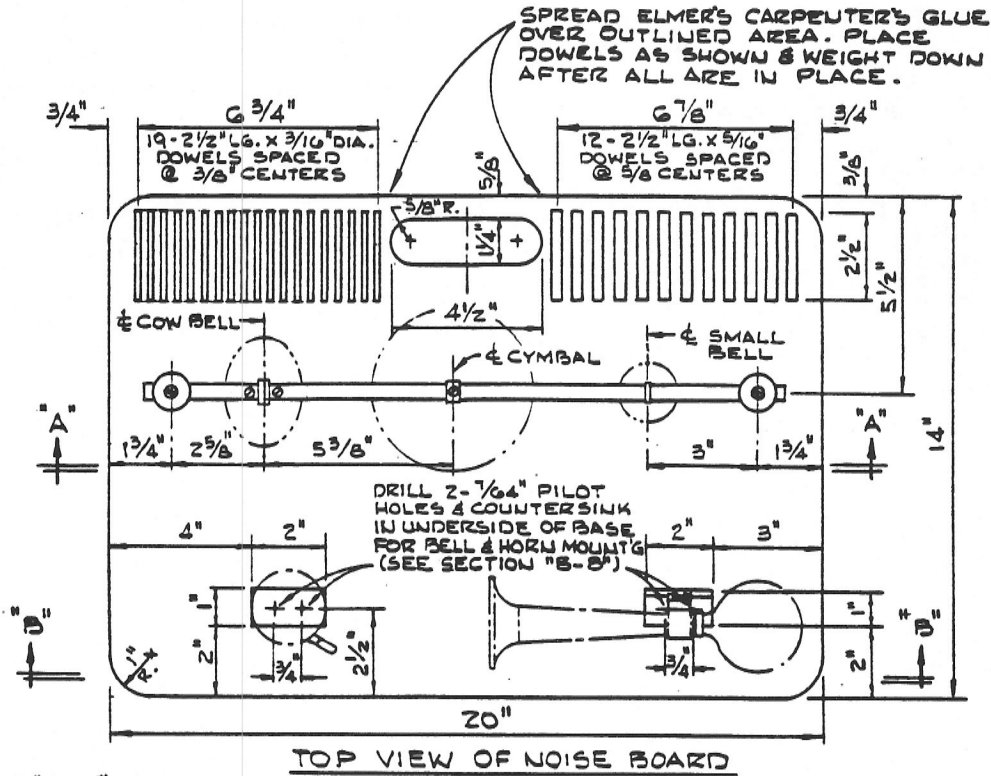
Construction suggestions:

On the large piece of 3/8" plywood, make a layout as detailed on page 4. Using a 5/8" hand drill bit, drill two holes for the hand hole half way through from each side to assure a smooth cut. Then cut the remainder of the hand hole and the corner curves with a saber saw. Sand all edges smooth.

With the 3/16" and the 5/16" dowels in their full uncut length, sand a flat area on each lengthwise, then cut to length, all as shown on page 5.
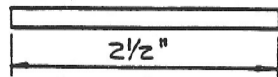
Glue the flattened and cut dowel pieces in the outlined areas as detailed on page 4.

Cut, drill and install the bell and cymbal holding dowels as detailed on page 4, Section "A-A". Mount the bell and the horn as detailed on page 4, Section "B-B".

Apply two coats of Varathane Gloss Varnish, or equal, to all wood areas, sanding lightly between coats.
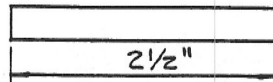
SPREAD ELMER'S CARPENTER'S GLUE
OVER OUTLINED AREA. PLACE
DOWELS AS SHOWN & WEIGHT DOWN
AFTER ALL ARE IN PLACE.

3/4" 6 3/4" 6 7/8" 3/4"

19-2 1/2" LG. X 3/16" DIA.
DOWELS SPACED
@ 3/8" CENTERS

12-2 1/2" LG. X 5/16"
DOWELS SPACED
@ 5/8 CENTERS

5/8" R.   1/4"   3/8"
4 1/2"
2 1/2"
5 1/2"

¢ COW BELL   ¢ CYMBAL   ¢ SMALL BELL

"A" "A" 14"
1 3/4" 2 5/8" 5 3/8" 3" 1 3/4"

DRILL 2- 7/64" PILOT
HOLES & COUNTERSINK
IN UNDERSIDE OF BASE
FOR BELL & HORN MOUNT'G
(SEE SECTION "B-B")

4" 2" 2" 3"
"B" 1" R. 2" 3/4" 2 1/2" 3/4" 1" 2" "B"

20"

TOP VIEW OF NOISE BOARD

3/8" LG. X #4 SHEET METAL SCREWS
TO PREVENT BELLS FROM SLIDING
AND FASTENING CYMBAL.

3/4" LG. X #6
SHEET METAL
SCREW.
(TYP. BOTH SIDES).

5 1/4"

CYMBAL
COW BELL   SMALL BELL

BASE MAT'L.
1/2" BIRCH
PLYWOOD

SECTION "A-A"

DRILL PILOT HOLE AND
COUNTERSINK BASE FOR
1 1/4" LG. X #10 SHEET
METAL SCREWS. (TYP.
BOTH SIDES)

MOUNT BELL AND HORN
ASSEMBLY W/2-3/4" LG. X
#6 TAPPING SCREWS EACH.

BICYCLE BELL
ASSEMBLY

BICYCLE HORN
ASSEMBLY

4 5/8" 3/4" 3/4" 3 5/8"

COVER UNDERSIDE WITH NON-SKID
MATERIAL TO PREVENT SLIDING.

SECTION "B-B"

SAND FLAT FOR GLUING
APPROX. 1/4 OF DOWEL DIA.

2 1/2"

3/16" DIA. DOWEL
(19 REQUIRED)

SAND FLAT ONE SIDE FOR GLUING
APPROX. 1/4 OF DOWEL DIA.

2 1/2"

5/16" DIA. DOWEL
(12 REQUIRED)

1/2" DIA.

18"
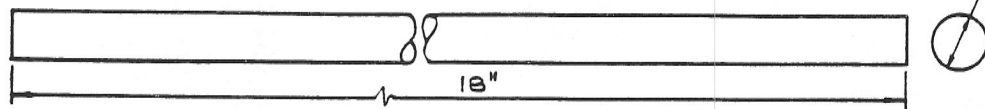
CROSSBAR DOWEL
(FOR MOUNTING TWO BELLS & CYMBAL)

1/2" DIA. HOLE FOR
CROSSBAR DOWEL

1" DIA.

4 5/8"

5 1/4"

3/32" DIA.
PILOT HOLE

3/32" DIA.
PILOT HOLE
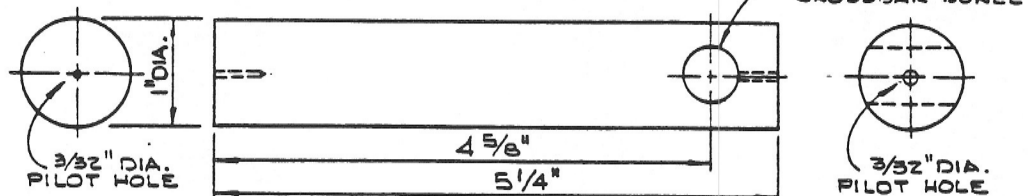
UPRIGHT DOWEL FOR CROSSBAR SUPPORT
(2 REQUIRED)
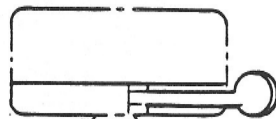
HARDWARE FOR MOUNTING HORN TO
3/4" DIA. DOWEL IS PROVIDED WITH HORN

SCHWINN TWO-TONE HORN
PART NO. 05005

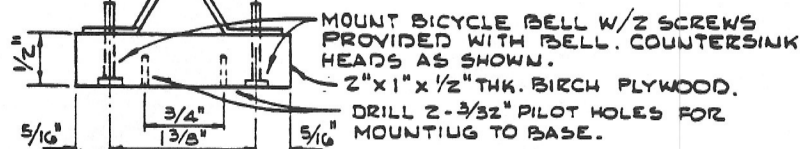3/4" DIA. X 2" LG. DOWEL
SECURE HORN TO DOWEL
AS YOU WOULD TO BICYCLE
HANDLE BAR..

2"X 1"X 1/2" THK. BIRCH
PLYWOOD.

DRILL 2-3/32" PILOT HOLES
FOR MOUNTING TO BASE

3/4" DIA.

1/2"

5/8"

5/16"

3/4"

13/8"

2"

5/16"

2-3/4" X #6 TAPPING
SCREWS.
COUNTERSINK HEADS

HORN MOUNTING ASSEMBLY

MOUNT BICYCLE BELL W/2 SCREWS
PROVIDED WITH BELL. COUNTERSINK
HEADS AS SHOWN.

2"X 1"X 1/2" THK. BIRCH PLYWOOD.

DRILL 2-3/32" PILOT HOLES FOR
MOUNTING TO BASE.

1/2"

5/16"

3/4"

13/8"

5/16"

BICYCLE BELL MOUNTING ASS'Y.