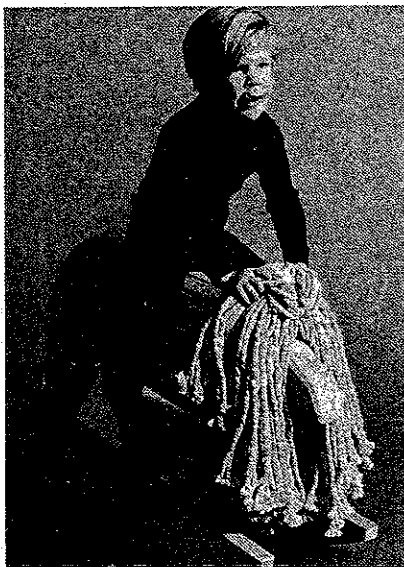


Three-Way Hobby Horse

The 3-way "Hobby Horse" has been designed with interchangeable heads so it can quickly become a donkey, a lion or an elephant.

All basic elements can be cut out of a single piece of 2 x 10 lumber 10-feet long. This, however, gives only one headboard, which means only one face. If you want to make up all three heads, pick up an extra 3-foot length of 2 x 10 or even better, buy two pieces of 2 x 10 8-foot long instead of a 10-foot length. Hand select the lumber to be sure that the board is straight and all knots are tight.



You'll Need These Tools:

1. Surform tool
2. Claw hammer
3. Crosscut saw
4. Screwdrivers—one to fit No. 8 screws and one for No. 12
5. Combination square
6. Steel measuring tape or folding wood rule
7. Push pull drill (or 1/4" electric drill) with assorted bits and countersink. Try "Screw Sink" or "Screw Mate"
8. Wood brace with 3/8" bit
9. Adjustable wrench,
10. Clamps

You'll Need These Materials:

- 1 piece 2 x 10 10-feet long plus a 3-foot long piece for additional

heads or two pieces 2 x 10 8-foot long.

- 4 pieces 1 x 2 8-feet long for body.

Flat Head Wood Screws

34 No. 8 1-1/4" long

12 No. 12 2-1/2" long plus 4 extra screws for each additional head.

- 2 3/8" diameter carriage bolts 3-1/2" long for each head

Handful of 6d finishing nails

Box of large head tacks

Length of 3/8" dowel for elephant tusks and for attaching eyes

2 Wood drawer pulls for eyes

Short length of rope for tail

Mop for lion mane

Two pieces of leather or heavy vinyl for donkey and elephant ears

Wood glue, Sandpaper,

Tracing paper

Step One:

Figure 1 gives all the principal dimensions and how to arrange the elements to get everything for a basic horse out of one piece of 10-foot long 2 x 10. It also gives location of pilot holes for screws and location of holes for dowels and carriage bolts.

Dotted lines on Fig. 1 are suggestions for straight cuts. To mark curved lines on board, use scale at top right of Fig. 1 to get rough dimensions and then draw curved lines freehand.

Use same method to draw lines for face. Draw one side of face, then take tracing paper and transfer line to it. Cut along line



to make pattern to mark other side.

To mark the curve for end-pieces, mark a point exactly one-half the board width from the end of board and in the exact center of the width of board. Take a piece of cardboard, make two pinpoint holes in it exactly one-half the board width apart. Fasten the cardboard through one hole into a point marked on the board and put a pencil point in the other hole and swing the cardboard around to mark the radius.

The Rockers:

Decide which radius you want (Fig. 1) and lay out the dimension using the scale. Mark a point along top of rocker drawing one-half the total length. At the ends, measure the distance from the top to the beginning of the curve. For the 12-foot radius this will be about 2-1/4". Divide half the length of the top into four equal parts. These should be 4-1/2" apart. Mark these points on the drawing. Take a square or rule and run lines from these points to the line of the radius. Measure these lines and then take all the measurements you've made on the drawing and transfer them to the board using feet and inches. Next, drive small nails part way into the wood at each end of the line. Bend a piece of cardboard using the nails as supports and hold it at each end with additional nails. Use the cardboard as a guide to draw the radius for one half the rocker.

Make a tracing and pattern to use for other side of rocker and for second rocker.

Cut and Shape:

Cut out basic elements taking off as much waste as possible with handsaw. Shape curves with Surform tool. Where two pieces must match, clamp them together and finish both at same time.

Assembling:

Cut 13 pieces of 1 x 2 22-inches long (Fig. 2). Bevel ends and edges. Cut four pieces of 1 x 2 7-inches long for supports (Fig. 3). Attach supports to front and rear end-pieces with glue and screws. (Fig. 4). Supports should be set exactly 3" from bottom.

Now tack the slats in place with 6d nails but don't drive the nails all the way in at this time.



With all the slats in place, adjust to get equal spacing between them. Fix them in place with glue and screws. Attach rockers with glue and screws.

The Face:

Fig. 1 shows location of holes in headboards. Detail A & B in Fig. 1 gives size and location of holes in face for eye dowel and elephant tusk dowel and Detail A in Fig. 6 shows detail for wood drawer pull and dowel eyes.

Fig. 5 shows how to assemble the face. After face has been assembled, set it on the headboard and use square or rule to make sure it's even before attaching with screws.

Fasten face to body. Smooth off rough spots. Apply a finish of a clear sealer, varnish or paint. When the finish is dry, add the lion mane and ears for elephant and donkey face.

Three-Way Hobby Horse Plan

Fig. 1

PARTS LAYOUT ON 10-FT 2x10 BOARD

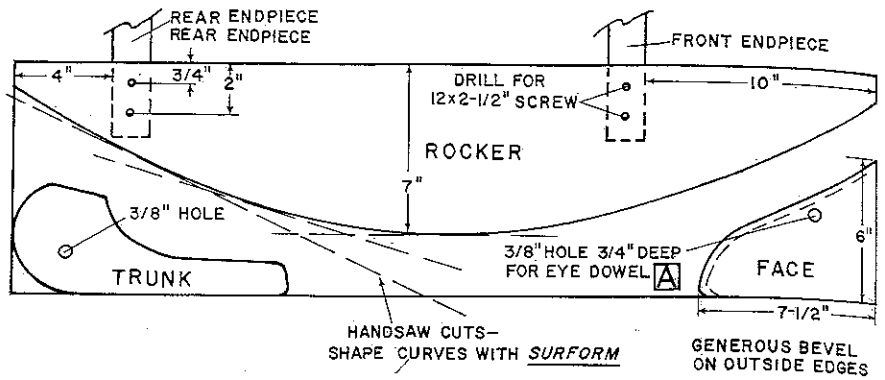


Fig. 4

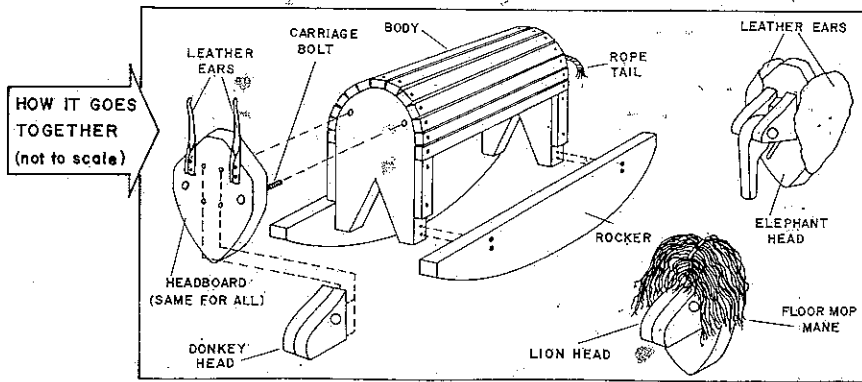
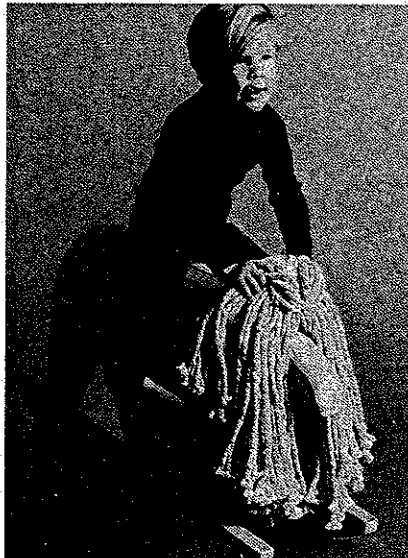
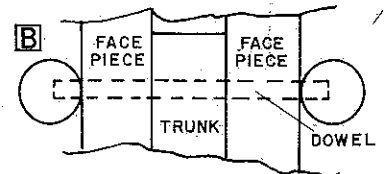
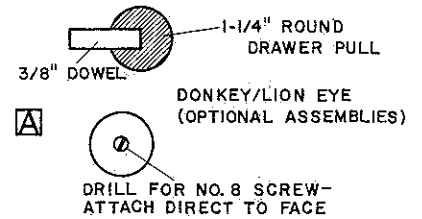


Fig. 6



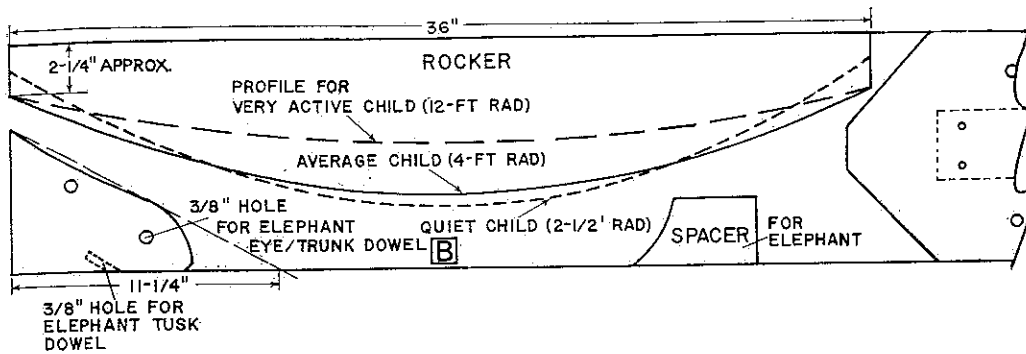


Fig. 3

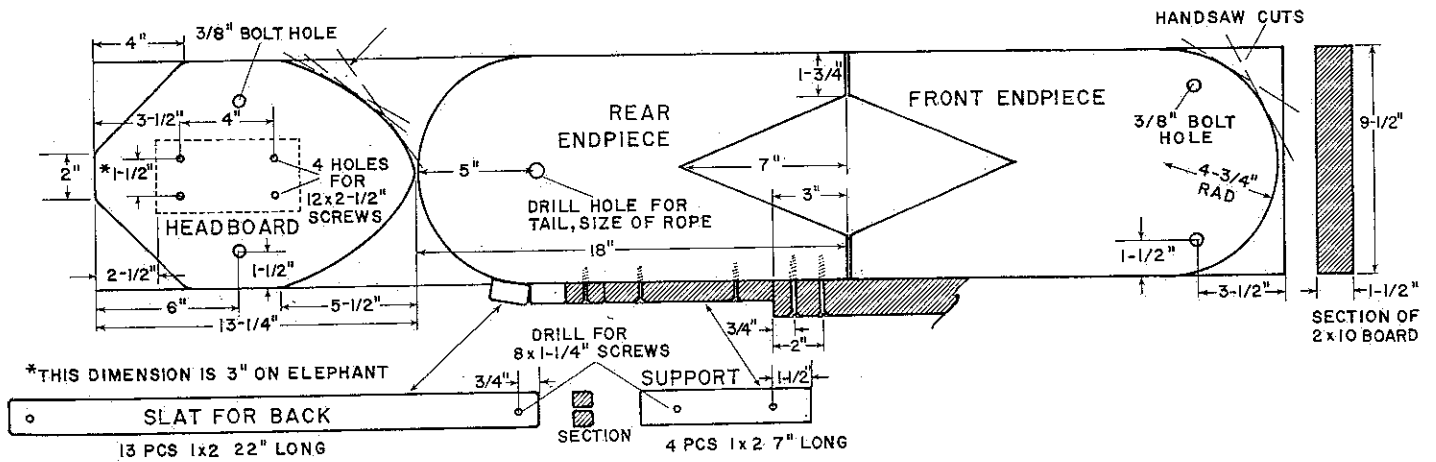


Fig. 2

Fig. 5

BEVEL ALL EXPOSED EDGES WITH SURFORM

FACE/HEADBOARD ASSEMBLY (not to scale)

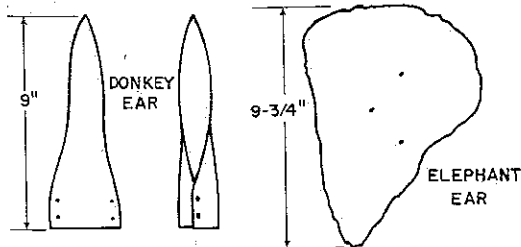
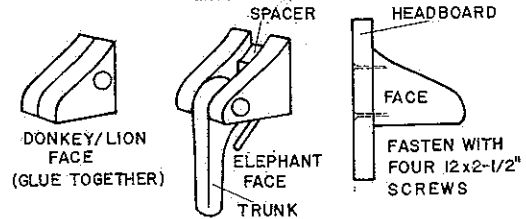


Fig. 7

CUT EARS FROM VINYL OR LEATHER SCRAP.
OVERLAP DONKEY EAR AS SHOWN
FASTEN EARS TO HEADBOARD WITH NAILS OR SCREWS, USING WASHERS TO PREVENT TEARING