

• JUNIOR'S EARTH-MOVING and road-building programs will be greatly extended with this toy power shovel. Comfortably seated on the cab, he pushes himself about and can swivel in any direction. One control lever operates the boom, another the shovel position, while a push rod opens and closes the shovel. There's also a winch to use as a "stump puller," and the cab opens to store valuables.

Dummy traction treads are mounted on two pairs of holders, each pair fitted with spacers. The four pieces having rounded ends are stacked and clamped together so axle holes can be drilled in alignment. Two of these pieces are assembled to a T-shaped crosspiece with waterproof glue and screws. Then the spacers are glued and nailed on and the two outside pieces are attached similarly.

The cleated treads are made from two strips of 3/8-in. white pine. Saw kerfs 5/16 in. deep, and spaced 3/4 in., are cut across them. The strips are soaked with water at points where they are to be bent over the rounded ends of the tread holders. The treads are cut out to fit around the ends of the chassis crosspiece, and are attached with waterproof glue and brads, two brads to each cleat. Treads project 1/4 in. beyond the outer tread holders.

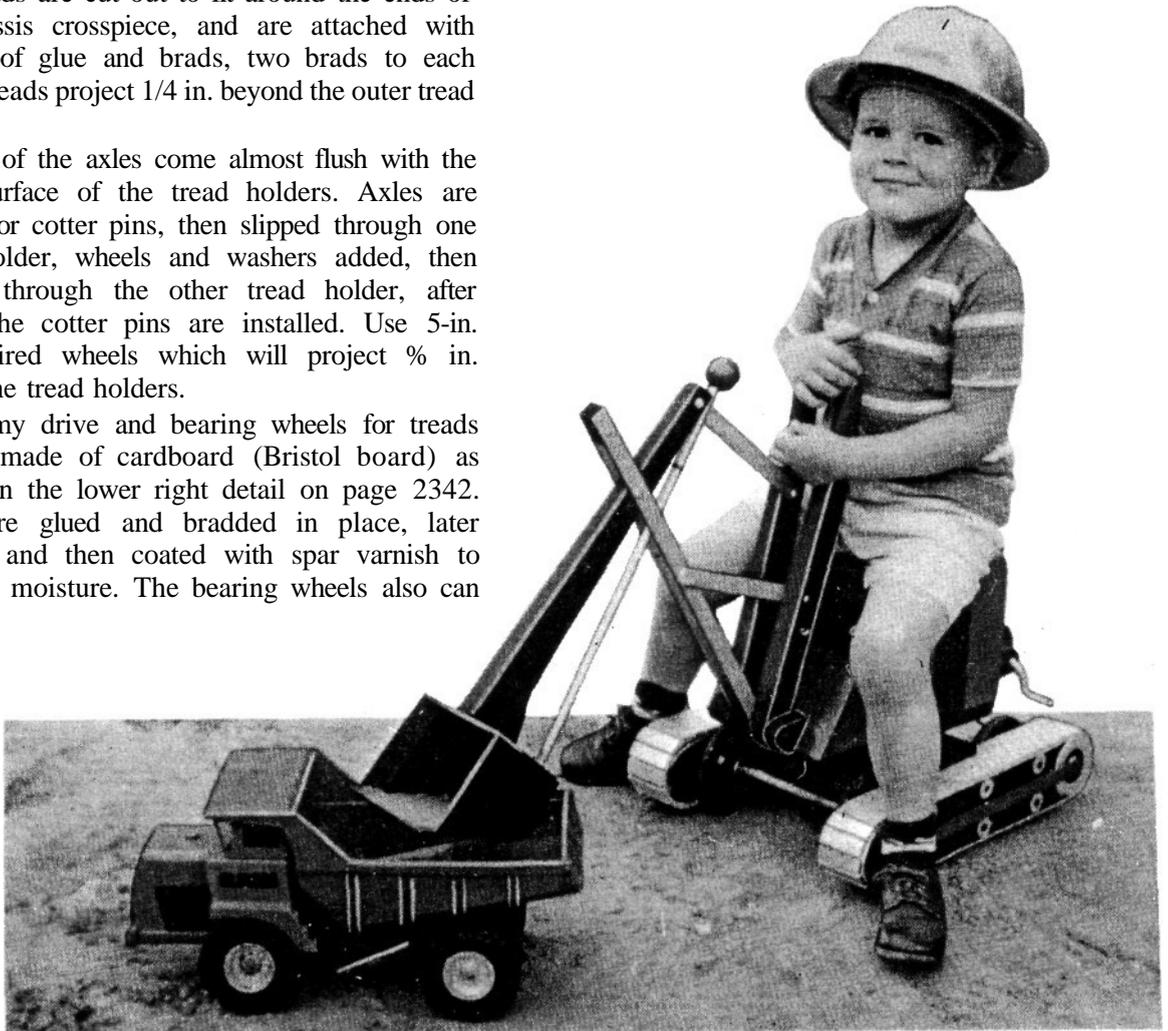
Ends of the axles come almost flush with the outer surface of the tread holders. Axles are drilled for cotter pins, then slipped through one tread holder, wheels and washers added, then slipped through the other tread holder, after which the cotter pins are installed. Use 5-in. rubber-tired wheels which will project 1/2 in. below the tread holders.

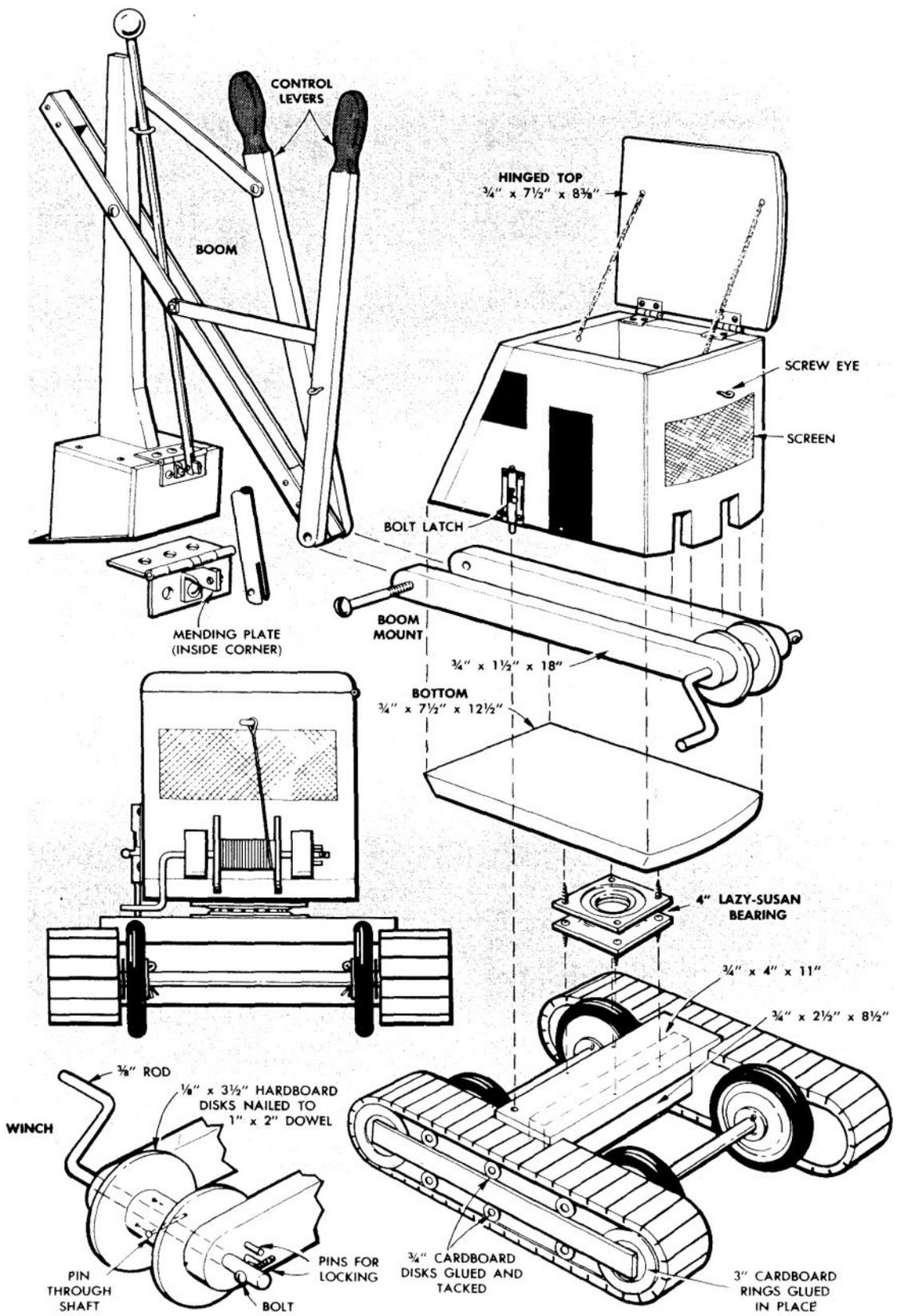
Dummy drive and bearing wheels for treads can be made of cardboard (Bristol board) as shown in the lower right detail on page 2342. They are glued and bradded in place, later painted and then coated with spar varnish to seal out moisture. The bearing wheels also can

Little digger for junior engineers

By RON ANDERSON

Junior construction engineers can ride this toy power shovel that operates realistically by using hand controls





boom mount. There should be enough clearance between the winch drum and the boom mount so the drum can move endwise permitting a bolt at the end of the crank to slide between two pins on the boom mount to lock the winch. Nylon cord is fastened to the drum and is provided with an S-hook made of No. 11-ga. wire, for easy attachment to objects to be pulled. When not in use the cord is wound up on the drum and the S-hook is clipped in a screw eye on the cab.

It is advisable to partly disassemble the unit for painting. The chassis is flat black; the treads and dummy wheels are aluminum and the side plates red. The cab is red as are the handles of the control levers. The rest of the levers are black, as are the doors, windows, boom mount and the ventilating grille, which is cut from ordinary screen and tacked in place.

