

# JUNIOR BACKHOE



*Half-pint sidewalk superintendents will go ape  
for this boy-size, rugged, easy-to-build digger.*

By C. L. Widdicombe

ANY healthy lad can do wonderful things with a little loose dirt but a boy with his own backhoe is an earth-moving hero.

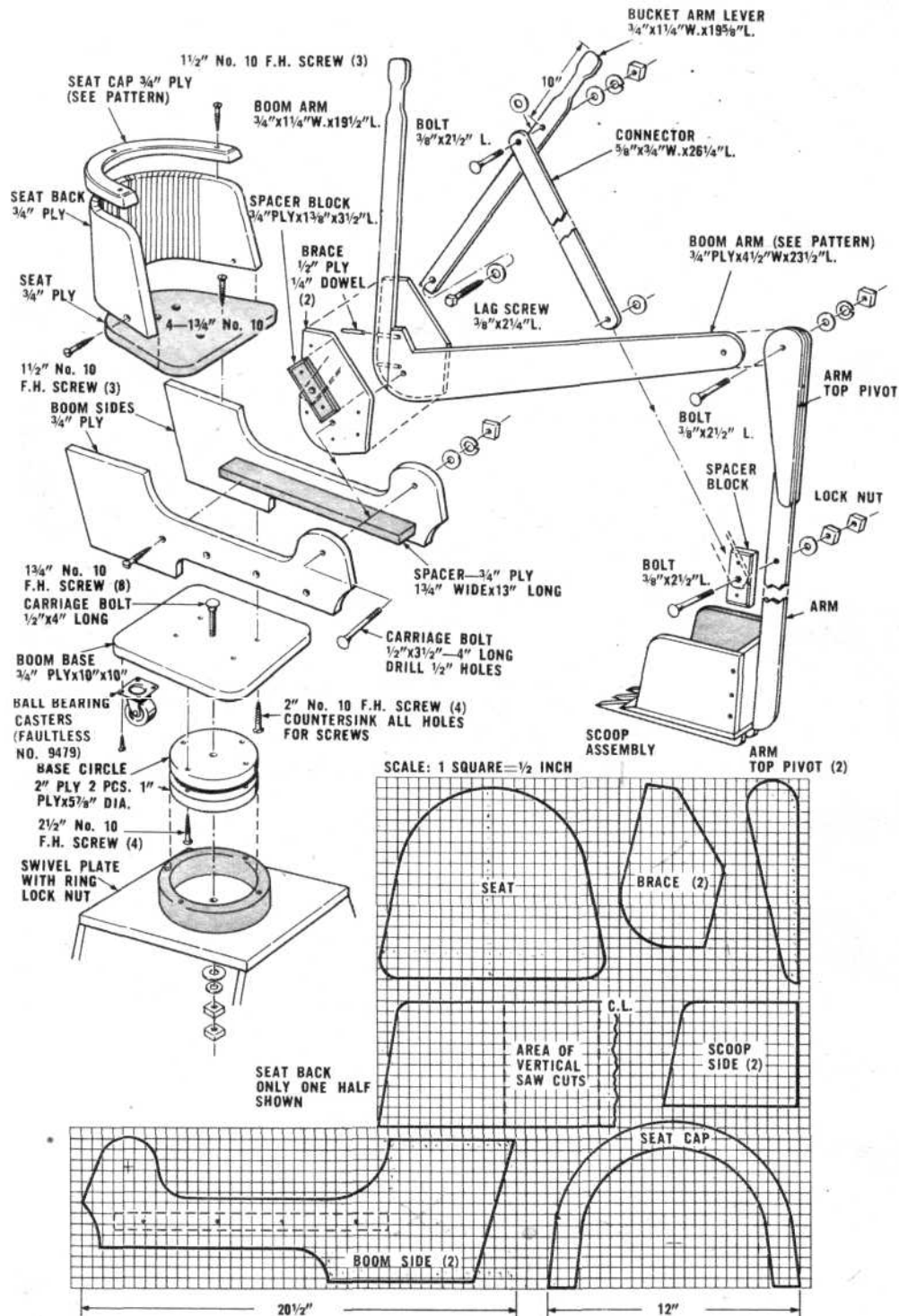
This stout, boy-size toy is rugged—but it *won't* gouge rocks out of a quarry or do much of a job in hard clay. Spaded backyard earth or beach sand are its natural elements.

The scoop can take out enough fill to

load the average toy truck, and the boom swings in a complete circle. The caterpillar treads rotate freely enough to permit moving the backhoe about. **Begin** with the caterpillar links (see first drawing). These are of maple or any suitable hardwood. The links are notched at either end to form a tongue-and-groove joint. Corner cuts are sawed; surplus material between

The side view of each link also shows a 3/8" radius at each end. To get this, cut the corners at a 45 deg. Angle and

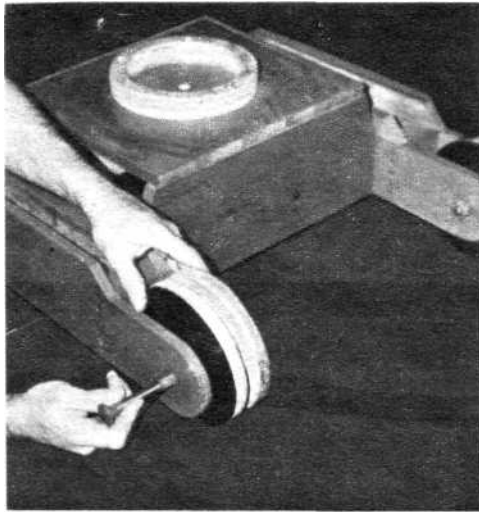
Wheels. (first drawing). Each wheel



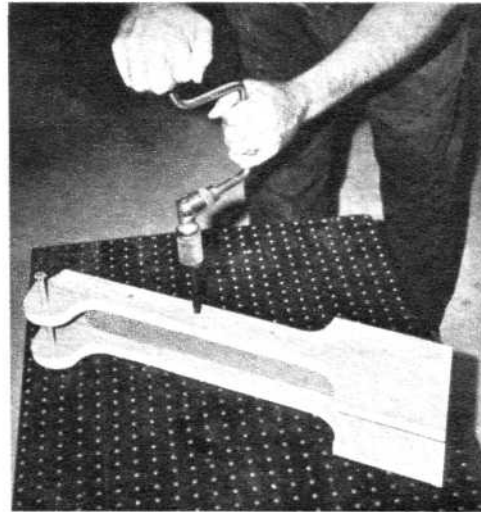
assembly is made of two outer circles of 3/4-in. Novaply or plywood and one center circle of half-in. Novaply or plywood. The outer circles are 7 1/8-in. diameter; the inner circle is 6 1/8-in. diameter. Bore a half-in. hole through the center of each of the 12 wheel pieces. To assemble the wheels, spread glue on the surfaces to be bonded, pass a half-in.

bolt through the holes and clamp. Run in four 1 1/2-inch No. 10 flathead steel screws well countersunk and staggered. Shellac the wheels and enamel them red.

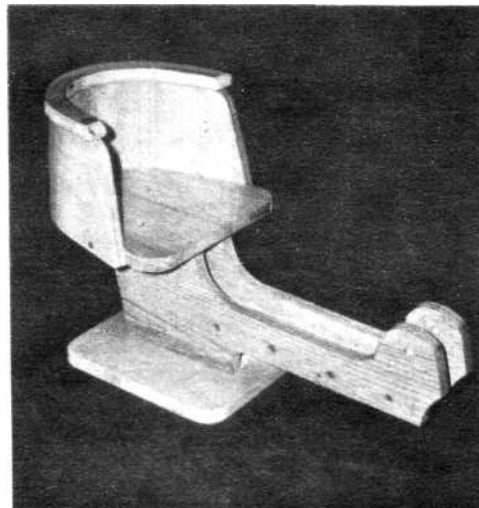
**Frame sides.** (First drawing.) These are of 3/4-inch plywood. Tack together the pieces from which they are to be made and cut [*Continued on page 128*]



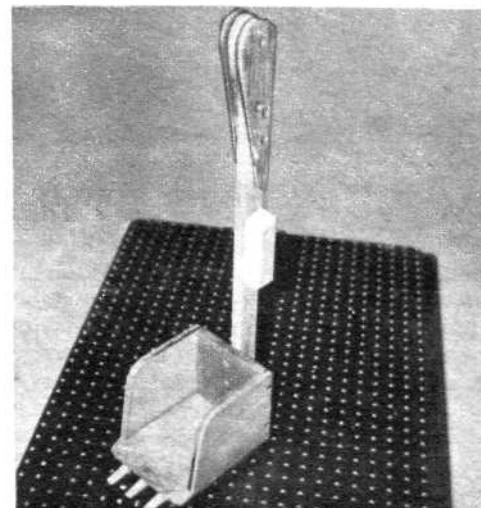
**WHEELS** are secured with 4 1/2x4 1/2-inch carriage bolts, flat washers, lock washers.



**ARMS** are sanded, then attached to spacer block. Bolt through pivot hole aligns them.



**SEAT** and boom assembly as it looks when complete. Seat back is of bent plywood.



**SCOOP**, assembled. Scoop will not dig in compacted earth—it's for loose earth, sand.

*June, 1965*