

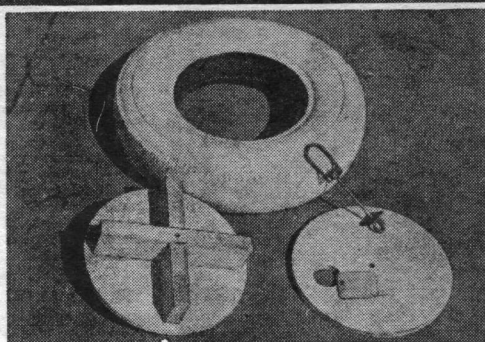
Mooring Buoy

HERE is an inexpensive mooring buoy that protects the boat from bangs and scratches. It is easily finished in a few hours. A mooring eye large enough to secure the dinghy while the boat is still fastened is one of the features.

To make this buoy, obtain a used tire and tube. The size will determine the size of the two plywood discs and cross spacer (we used a 7.60-15).

The only other items needed are an eye bolt, washers, screws, plus a chain and weight or anchor. We used two concrete building blocks. However, the size and weight of the anchor should be in proportion to the size of the boat. Also needed is about half a pint of white or yellow paint. Cover all wood surfaces and the tire with at least two coats of paint before assembling. (Lazy man's note: A bald-headed tire is easier to paint).

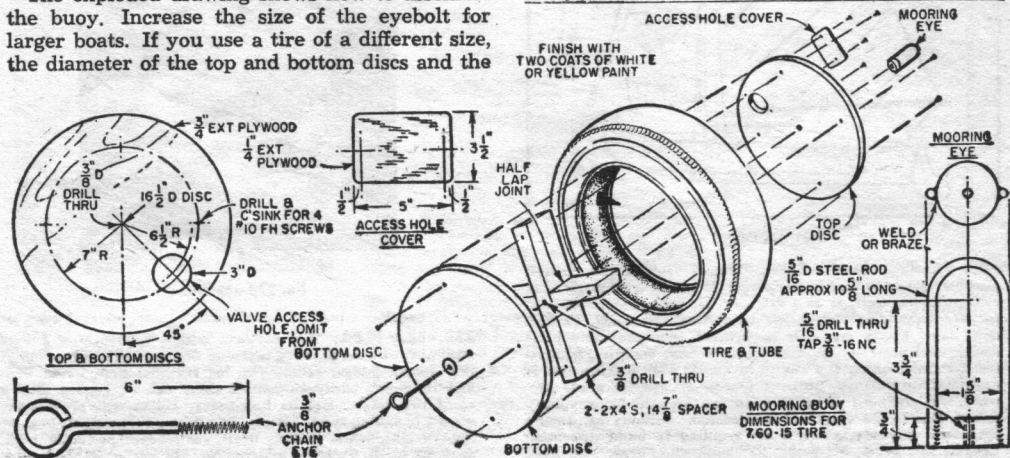
The exploded drawing shows how to assemble the buoy. Increase the size of the eyebolt for larger boats. If you use a tire of a different size, the diameter of the top and bottom discs and the



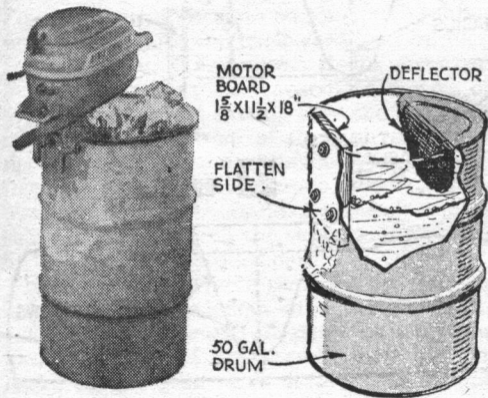
length of the spacer member will change. Use thick paint or bedding compound between the discs and tire. Don't inflate the inner tube until the discs have been securely fastened to the spacer and the eyebolt tightened; then put in about three or four pounds of air and your buoy is ready for its hold-down job.—C. T. ALLEN.

MATERIALS LIST—MOORING BUOY

Amt.	Description	For
1	tire and tube to fit 15" rim, used	
2 pcs	2 x 4 x 14 3/4" wood	spacer
2 pcs	3/4 x 18 x 18" exterior fir plywood	top and bottom discs
1	3/4-16 x 6" eyebolt	
1	3/8" washer	
1 pc	5/16" dia. steel rod, about 10 5/8" long	mooring eye
1 pc	3/4 x 1 7/8" dia. hot or cold-rolled steel slug tapped as shown	mooring eye
1	3/8"-16	mooring eye—see detail
1 pc	1/4 x 3 1/2 x 5" exterior fir plywood	valve stem cover
8	#10 x 1 1/2" long brass fh screws	
2	#6 x 3/4" long brass fh screws	
1/2 pt	marine paint—white, yellow or orange	
1/2 pt	bedding or calking compound	



Outboard Motor Test Tank



● If your outboard motor is given a periodic check before and after being laid up for the season, it will give many years of trouble-free service. The best way to make such inspection checks is by running the motor for short intervals in your own test tank. Then, too, if the motor was used in salt water, it should be flushed in fresh water, as the action of salt water on aluminum parts causes electrolytic corrosion and premature failure of underwater parts. A 25-gal metal drum with head cut out provides a satisfactory test tank for small motors up to 5 hp, while larger motors will require a 50-gal tank prepared as shown. Cut the head of the tank with a cold chisel and bend the lid down to serve as a deflector. Then attach a motor board to flattened fore side of the tank, and fill tank about $\frac{2}{3}$ full of fresh water the cans in place.—V. H. LAMOY.

MOTOR BRACKET for Canoes



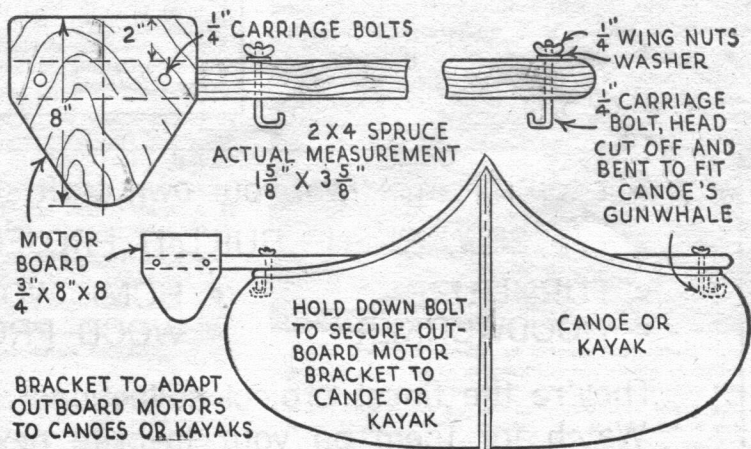
Ever get tired of paddling? Here's an adapter that allows you to motorize your canoe

By WM. D. JACKSON

with the aid of two bolt brackets. These brackets are made of two $\frac{1}{4}$ inch carriage bolts; heads of bolts are hacksawed off and bolts are bent as shown to fit under the boat's gunwale. Bracket bolts are tightened and secured in place with wing nuts.

Finish this outboard motor bracket by rounding edges of the thwart piece and also the motor board with a spoke shave. Then sand it smoothly and follow with three coats of varnish, or varnish the thwart piece and paint the motor board bright green for an attractive piece of equipment. Now, with the aid of a small outboard motor of one to two horse power, any craft not ordinarily adapted to motors can putt-putt you anywhere you want to go. If motor requires more angle to set correctly on the motor board, bevel the thwart piece edge.

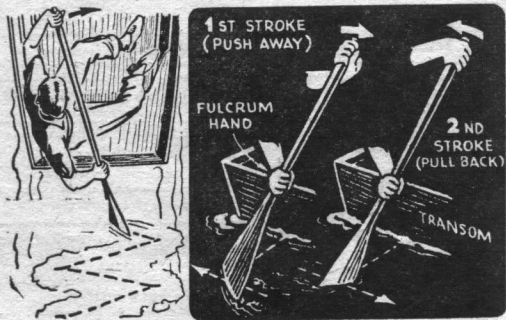
THIS outboard motor bracket for powering your canoe, kayak, etc., is simplicity itself; it consists of a spruce 2x4 thwart piece, cut to fit across the canoe with enough overlap to attach a motor board. The motor board is a $\frac{3}{4}$ x 8 x 8 inch oak board cut as shown and attached to the thwart piece with two $\frac{1}{4}$ x $4\frac{3}{4}$ inch carriage bolts. The motor board and thwart piece assembly is secured to the canoe or other type boat



Better Boating Kinks

Stuck with One Oar?

• If you are caught out on open water with only one oar try sculling your way back to shore. Sculling is a method of propelling a boat that fishermen have used for centuries. Sculling a boat is easy, but you will require a little practice to become proficient.



First place yourself in the stern of the row boat. Grasp the oar so that one hand is on the handle and the other about halfway down on the shaft. Put the blade on the water until it is about $\frac{3}{4}$ submerged, holding it at a 45° angle. Using the lower hand as the fulcrum, move the handle back and forth, twisting the oar at the end of each stroke with the upper hand so that blade cuts into the water forcing the boat ahead; action is similar to that of a propeller blade in water. If boat has a notch for a steering oar, use that notch as the fulcrum.—D. M. S.

Ever-Ready Shear Pins

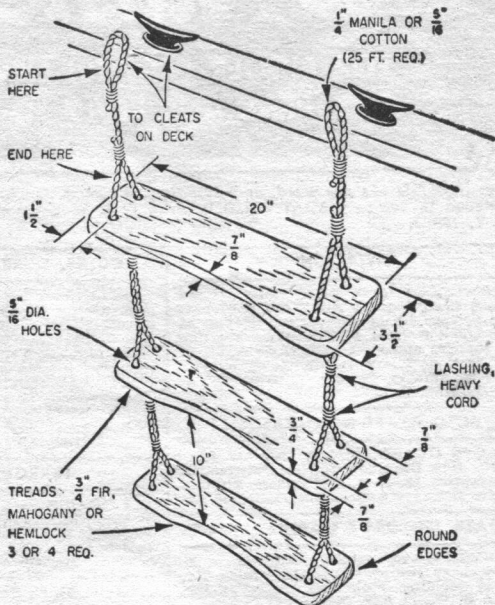
• Keep extra shear pins always at hand by taping two or three to the steering handle of the outboard motor. Use plastic tape which is unaffected by gas and oil and may be readily unwound, rather than black friction tape which dissolves and becomes a gummy mass when permeated by grease or gas.—W. D. J.

Split-Shot Solderless Connectors

• When an ignition wire of your boat motor requires slicing and no soldering equipment is at hand to make a strong and reliable connection, slip an opened split-shot sinker over the joined wires and close it firmly with a pair of pliers. Completed with a wrapping of friction tape, you will have a joint that is dependably safe and strong.—G. H.

Swim Ladder

• If your small outboard cruiser or utility boat is so high-sided that you have difficulty boarding it from the water, make this swim ladder. Cut three or four 20-in. long treads from 1 x 4's to the shape shown in the draw-



ing below, and bore holes for the ropes. String treads together at 10-in. intervals, lashing heavy cord to the $\frac{1}{4}$ -in. manila support lines to maintain treads in position. Secure ladder to boat by lashing upper ends of support lines to small cleats placed upon deck.—WM. D. JACKSON.

Glove Compartments for Boats

• A lady's large discarded purse makes an ideal compartment for storing tools, fishing tackle, lunch, binoculars, camera and other items generally carried on a boating trip. Fasten the purse to the side of the boat, seat or transom with staples or screws, to keep the contents away from the damp boat bottom. If it has a strong lock, the contents will not be lost even when the boat is moved on a trailer or car-top from one lake to another.—STERLING S. SOUDER.

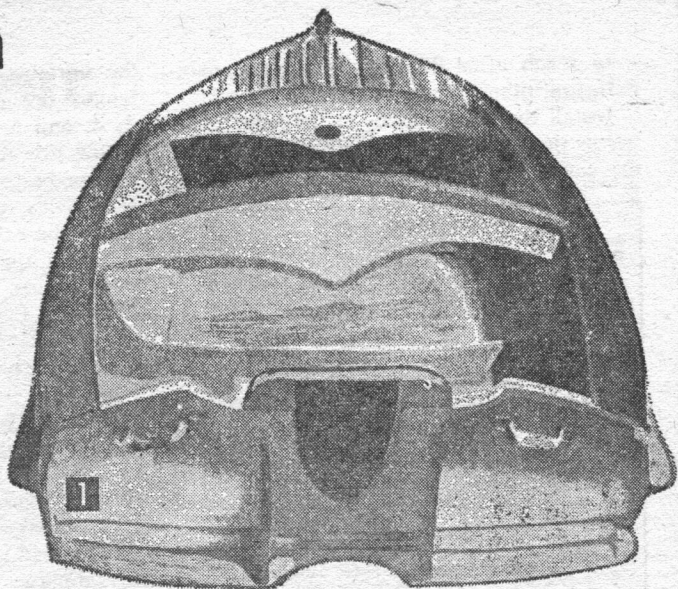
Canoe Stabilizer

• Prevent canoe accidents caused by a sudden movement of people in the canoe or in rough water with this stabilizer. Place a thin board under center of canoe so about 2 ft. extends from each side. Run a length of stout rope around each end of board, up sides of canoe and tie tightly under seat.—C. L. MEEHAN.

A Transom Bracket

For adapting out-board motors to individual boats

A transom bracket was attached to this 10-ft. outboard runabout to accommodate an Evinrude Fleetwin motor, and the performance of the boat was remarkably improved.



HOW well does your outboard motor match your boat? In many cases, if you don't have the best motor and boat combination, the performance of your boat can be greatly improved by modifying it with this quickly-assembled transom bracket.

Improvements in speed and maneuverability usually result when motors such as Evinrude, Mercury, Johnson, Scott, and others are raised 1 to 3 in. above the transom so that the cavitation plate is just about 1 in. below the bottom planking of the boat as in Fig. 2. This not only results in less gear case drag, but also allows you to navigate better in shallow waters.

Before you construct the bracket, raise

your motor first with temporary blocks, and drive your boat on smooth and rough waters to determine the optimum height. Be careful not to set the motor too high, for this will cause dangerous cavitation.

Construct the bracket from a block of wood the same thickness as the transom, and attach the two 1/4-in. plywood face plates to this block by means of #8 x 1-in. flathead screws as in Fig. 3.

You can attach the bracket permanently to the transom, or use it just as a temporary mounting for a different motor on the same boat. Regardless, you'll be agreeably surprised by the improved performance of your boat.—WM. D. JACKSON.

