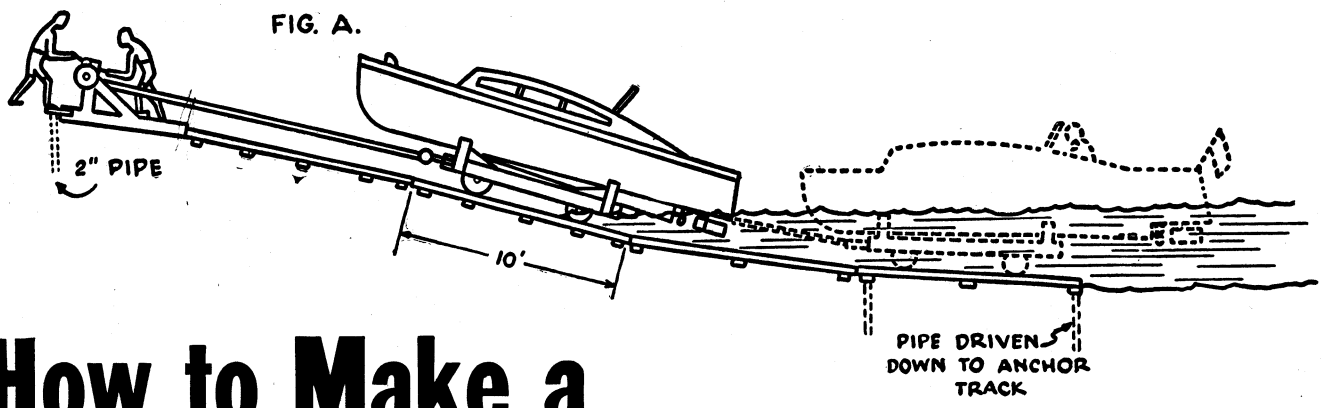


How to Make a MARINE RAILWAY

By HI SIBLEY

HERE'S an effective and easily-constructed project for hauling that big boat out of the water for bottom repairs or cleaning. And it's no chore to dismantle the setup since the track is made in 10-foot sections bolted together.

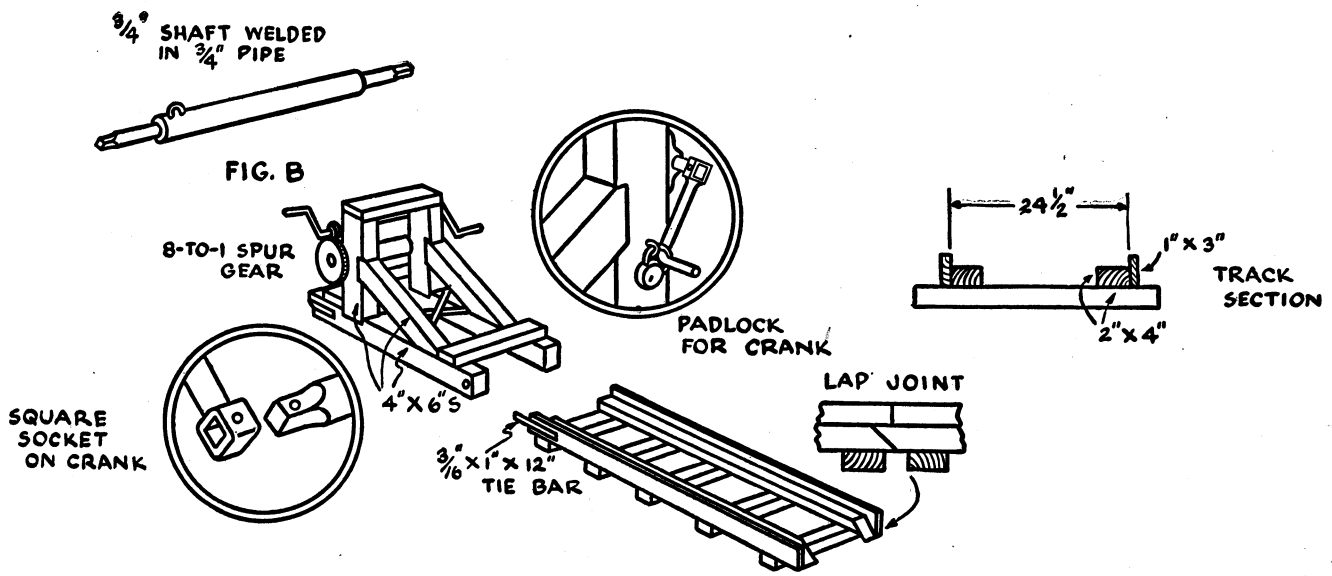
In Fig. A is the layout. The dotted lines show the craft approaching the car in shallow water. In fact the car is drawn in simultaneously with the boat until it rests firmly in the cradle. Two men at the winch can draw the boat up completely out of the water.

Winch details are given in Fig. B. Spur gears usually are available at a machine shop or can be picked up in a junk yard. Assemble them on ¾" cold-rolled steel shafting that turns in pillow blocks, or other available bearings. Note that cranks have *square* sockets, and are removable. Some sort of lock should be provided to prevent inquisitive kids from pinching their fingers in the gears.

Track is made up of 2" x 4"s with side members, 2" x 4" ties. End joints are lapped. They are linked together with the side bars. On dry land, sand should be scooped out for the ties so that the rails rest on the sand for support when heavy boats are hauled over them.

Dimensions of the winch are given in the two views: Fig. C, which shows the sturdy construction—Length of the car, Fig. D can be adapted to larger or smaller boats. Here it is dimensioned for an 18-footer. Before making the cradle, get a pattern of your boat's bottom. V-bottoms require only flat members, but for a roundbottom, the cradle pieces will have to be band-sawed. Also for a round- or flat-bottom sailboat with deep keel, allow keel clearance, as shown in Fig. E.

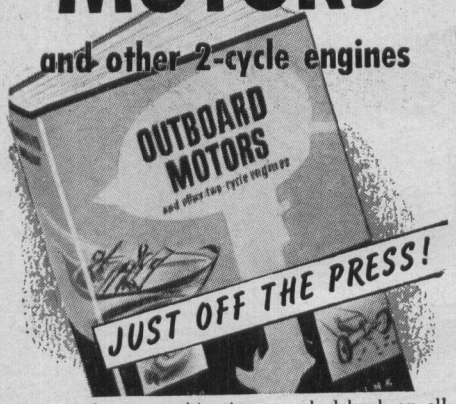
The perspective, Fig. F, shows all details of construction, and note that the cradle members are padded with canvas, not rubber. A wet boat slips on rubber. Bearings for the wheel axles can be made of a short piece of ¾" pipe welded to a flat plate, but a standard pillow block will be more satisfactory. Pack the bearings with salt-water grease, and paint all metal work with red lead, especially if the rig is to be used in tidewater.



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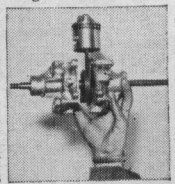
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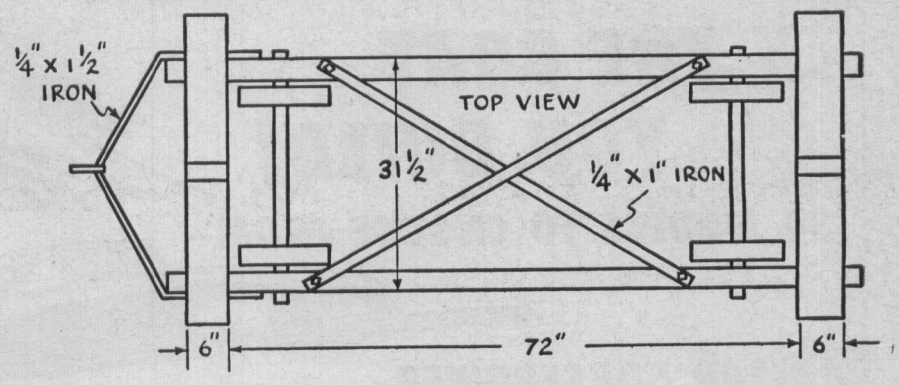
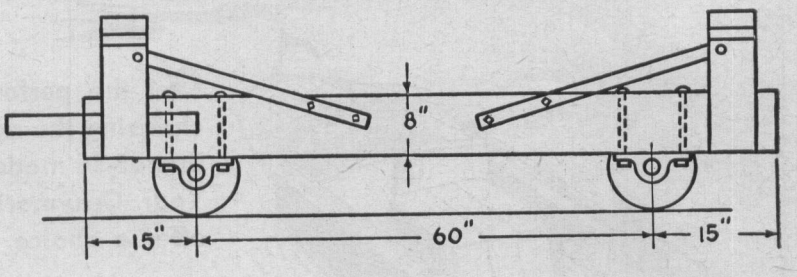


FIG. D



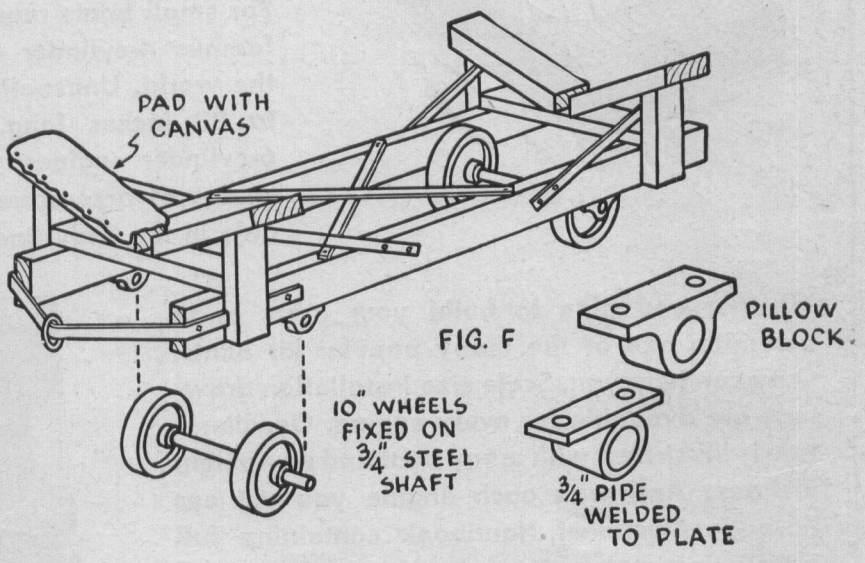


FIG. F

Fig. D shows the length of the car and it can be adapted to larger or smaller boats. Fig. F shows all of the details of the construction.

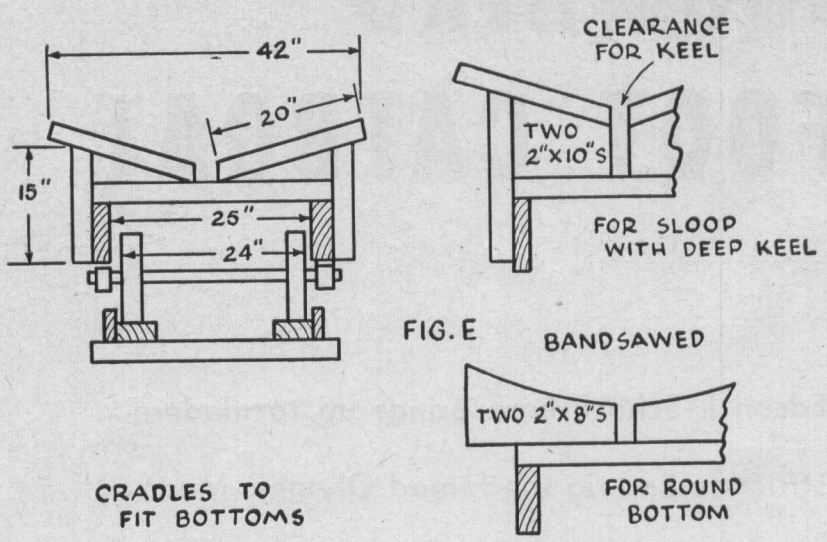


FIG. E

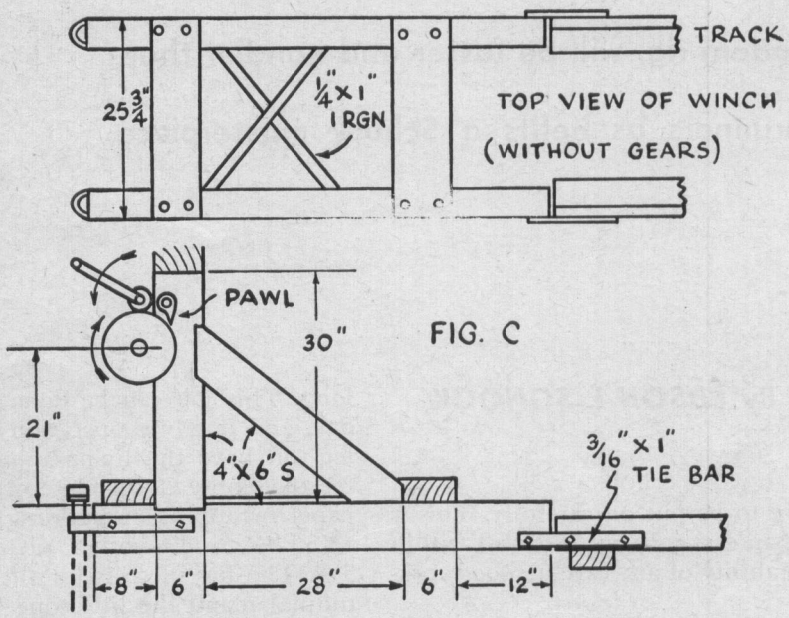
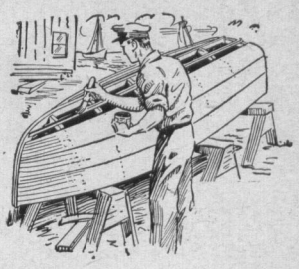


FIG. C

Fig. C shows the sturdy construction of the winch. At top, Fig. E, shows cradles to fit bottoms and also offers clearance for a keel.

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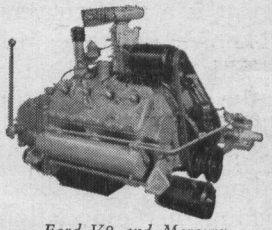
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