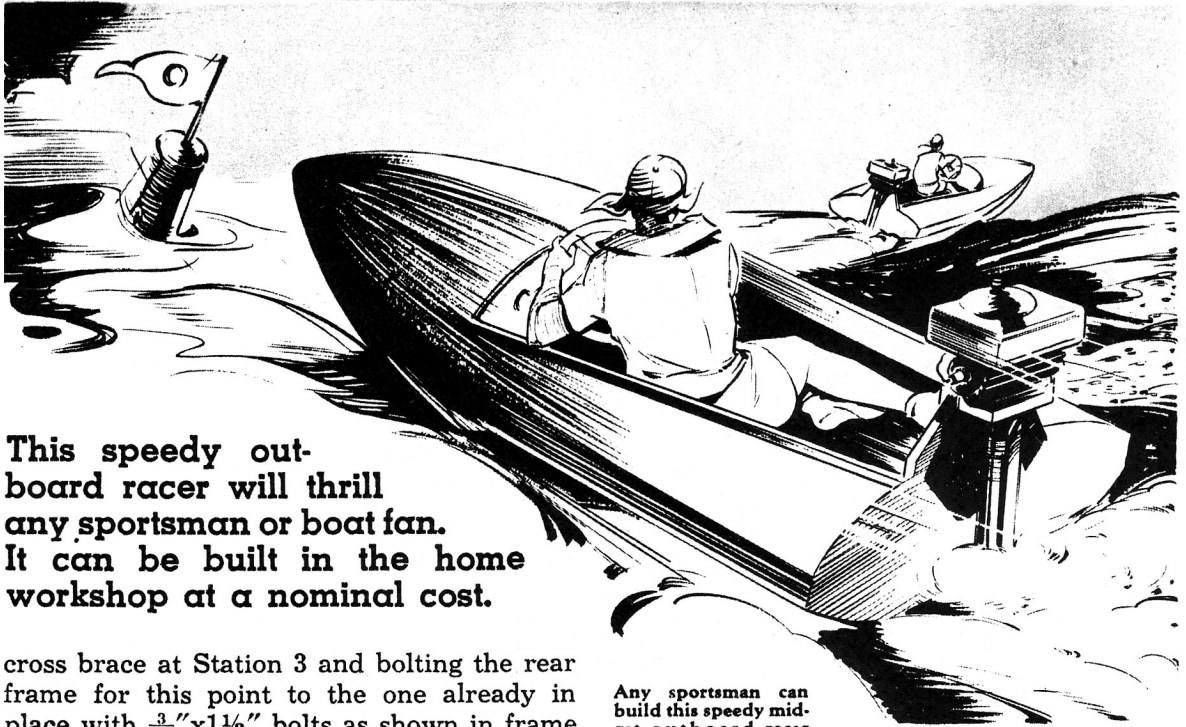


A Midget Outboard Racer



This speedy outboard racer will thrill any sportsman or boat fan. It can be built in the home workshop at a nominal cost.

cross brace at Station 3 and bolting the rear frame for this point to the one already in place with $\frac{3}{16}$ "x1½" bolts as shown in frame detail on page 18.

Construct the headlog of one piece of 2"x4"x11" spruce and cut to the shape indicated by dotted lines, then fit the chines to this with eight 1½" No. 8 brass screws and miter the ends. Next, plane off the headlog block and chines, reducing the forward edge to ½" and finish by shaping. Line these joints with strips of cotton soaked in marine glue. Cut the keel mortise and bolt the headlog to a similarly shaped block whose curve is ½" less all around, using two $\frac{3}{16}$ "x4" bolts. Drill holes for these bolts through the keel mortise and countersink heads and nuts. This second block is for attaching deck battens after boat is turned right side up. Line this joint also with cotton and glue as previously mentioned.

Lay the fore and aft keels and bolt the lock-

Any sportsman can build this speedy midget outboard racer in his workshop. A light engine powers it.

ing block in place where they lap, just forward of the frames at Station 3. Try the hull battens to locate notches in frames. After cutting these notches and laying hull battens, put the Haskelite hull covering on the rear planing surface. This is put on in one piece, extending from the step to the rear edge of the transom. Fasten at rear edge and along chine edges with ¾" No. 4 brass screws set on 1½" centers, after first stripping with glue soaked cotton. The bottom covering is similarly fastened along all frame edges and clinch nailed along battens with ¾" copper boat nails. All screws should be set just under flush and puttied over, while nails should be driven tight and the heads smoothed over with a file before hull is sanded and varnished.

After laying the covering of the rear planing surface fit the step filler, Fig. 8, securing it with ⅞" No. 8 screws. Put on the covering of the forward planing surface in two pieces, making a seam down the length of the keel which, later is caulked with cotton caulking wick and caulking putty. First, fasten along keel line and warp down to a close joint along step filler edge and chine edges. Bevel off edges as shown in the en-

TABLE OF OFF SETS

HALF BREADTHS

STATION	0"	1"	2"	3"	4"	5"	6"	7"
CHINE	1 1/4"	18 1/4"	22 3/4"	24"	23 3/8"	22 7/8"	22 3/8"	22"
COAMING	-	-	-	15"	13"	11"	9"	7 1/4"

HEIGHTS ABOVE BASE LINE

DECK LINE	6 1/2"	13 1/2"	15"	15 1/3"	12 1/4"	11 3/4"	11 1/8"	10 1/2"
CHINE - TOP	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"
CHINE - BOTTOM	6"	4"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
KEEL	6"	7/8"	0"	9/2"	2"	2"	2"	2"