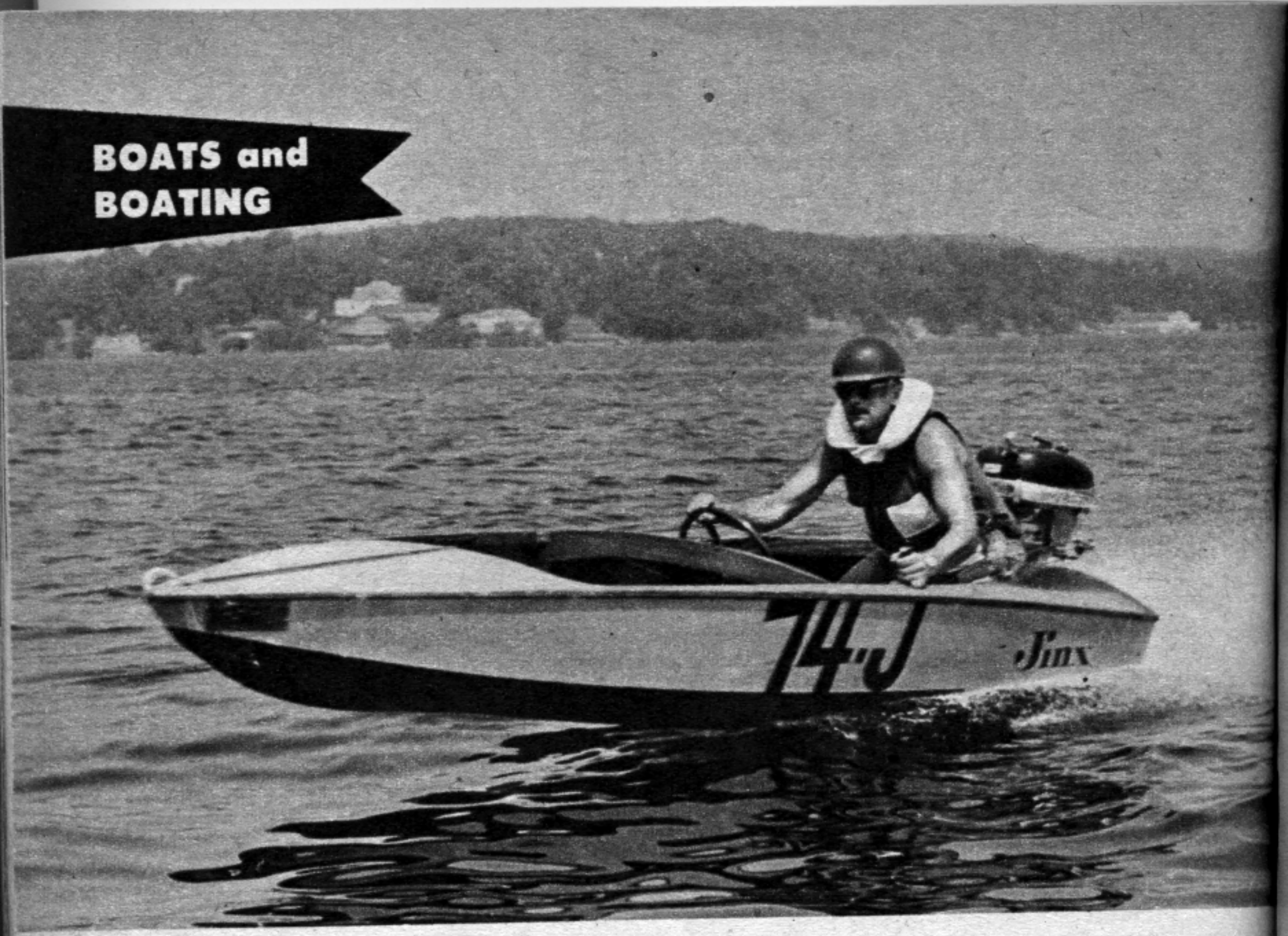
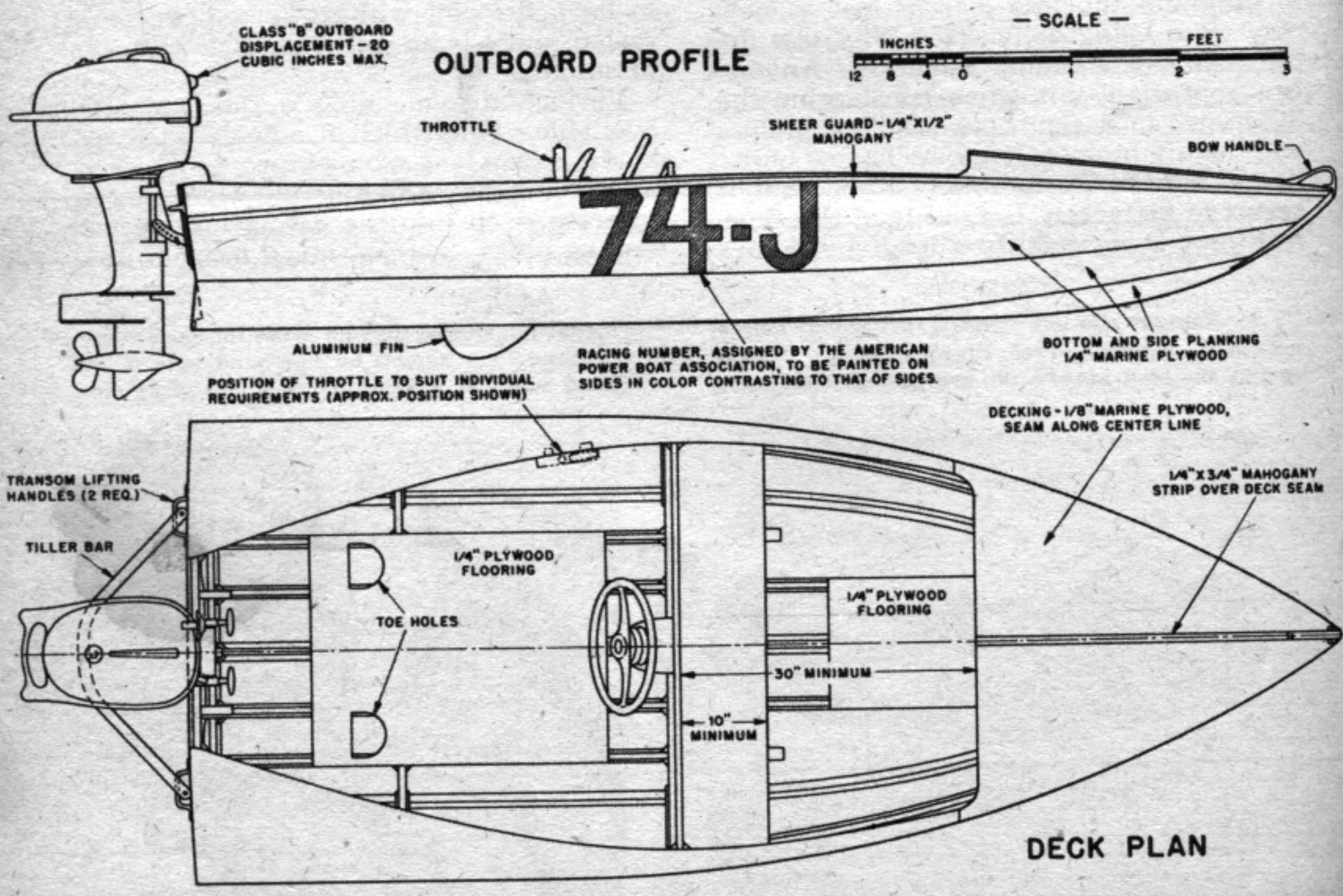
BOATS and BOATING



OUTBOARD PROFILE



DECK PLAN

JINX

The Utility Boat

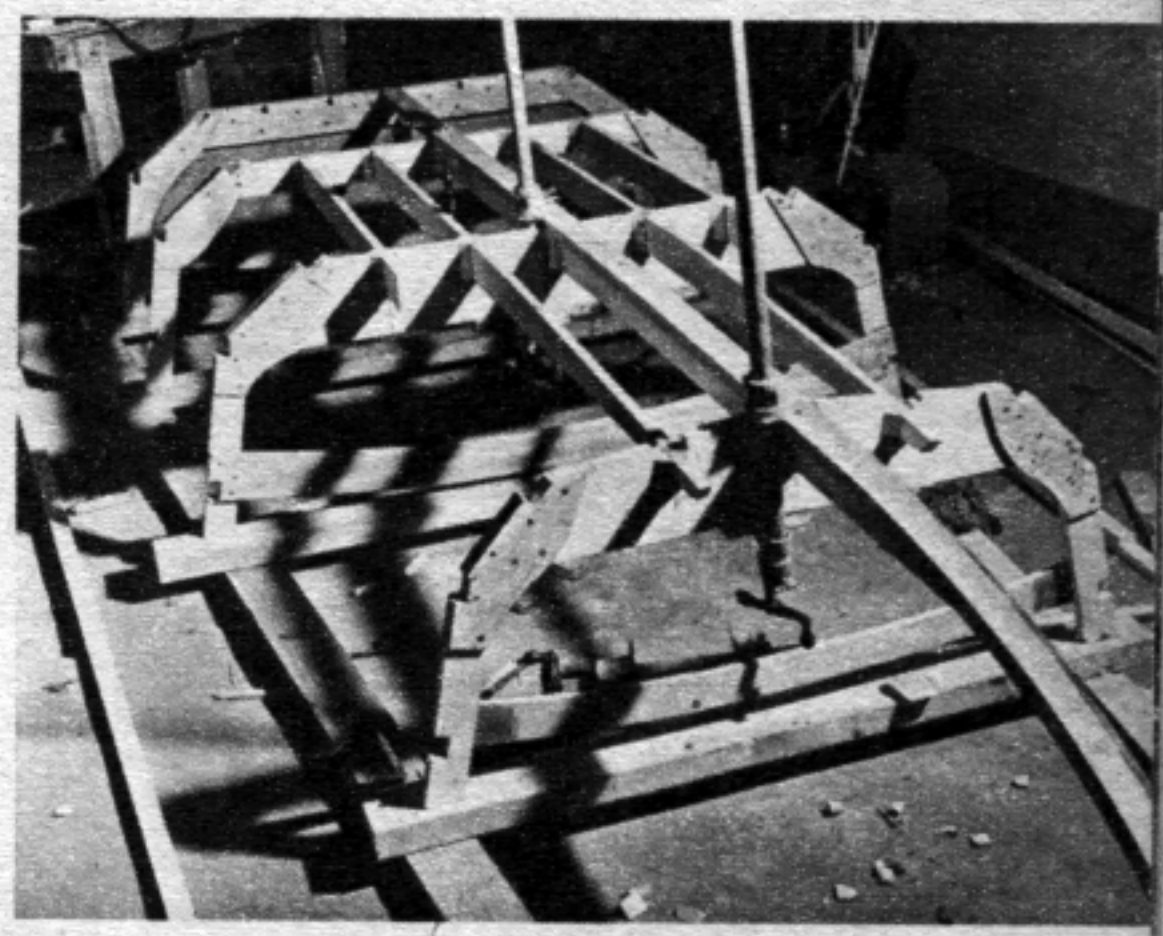
Jinx will race like a demon and is safe and sturdy enough to use as a small boat for the family.

By Harold Kelly

THE "Jinx" is designed primarily for Class "B" stock utility racing and will qualify under 1955 A.P.B.A. rules. If built with the same materials as listed, it will weigh, with all hardware, just under 140 lbs.

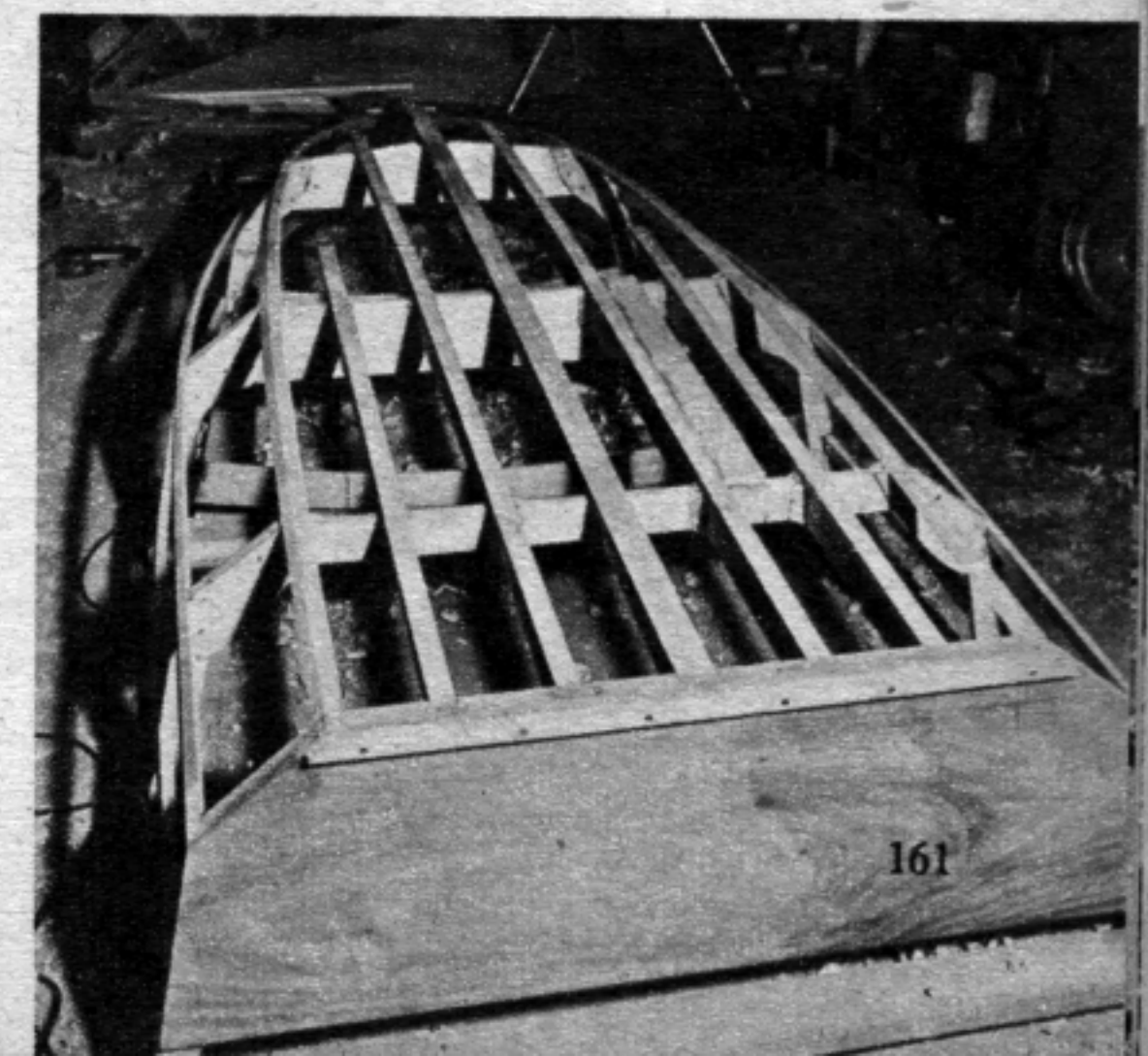
In 1952 this little boat finished ninth out of 74 in the Albany to New York marathon. As it was my first try I got lost or she would have finished in the money. The waves out at Haverstraw Bay were 4 feet high. Even the winning boat, a big class "D" job broke its keel in the rough water. The little "Jinx" came through unscratched. That

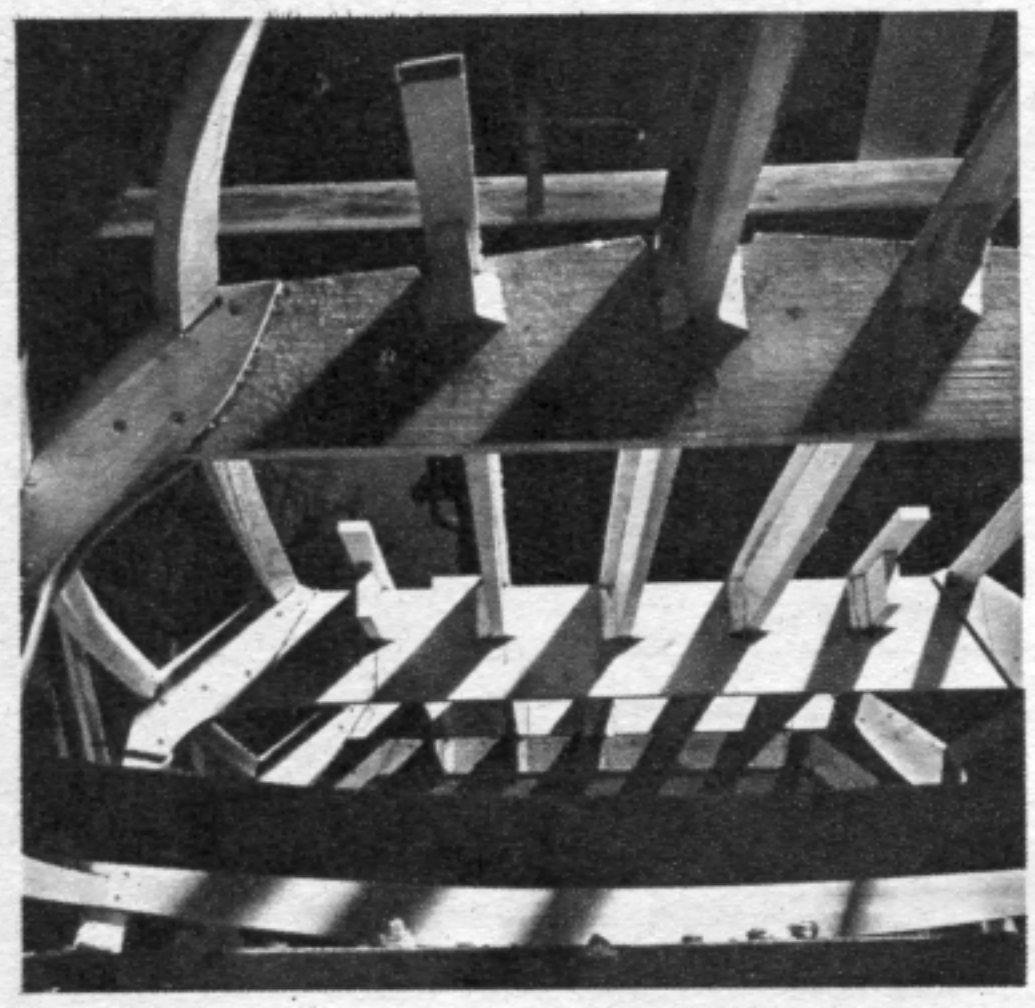
Jinx was designed to fit inside a Plymouth Suburban for convenient transportation to the races.



Keel is here in place and attached to transom. Note strengtheners for stringers butt to rib #3.

Beveling complete, Jinx is ready for plywood paneling. Note extra support for after plane.





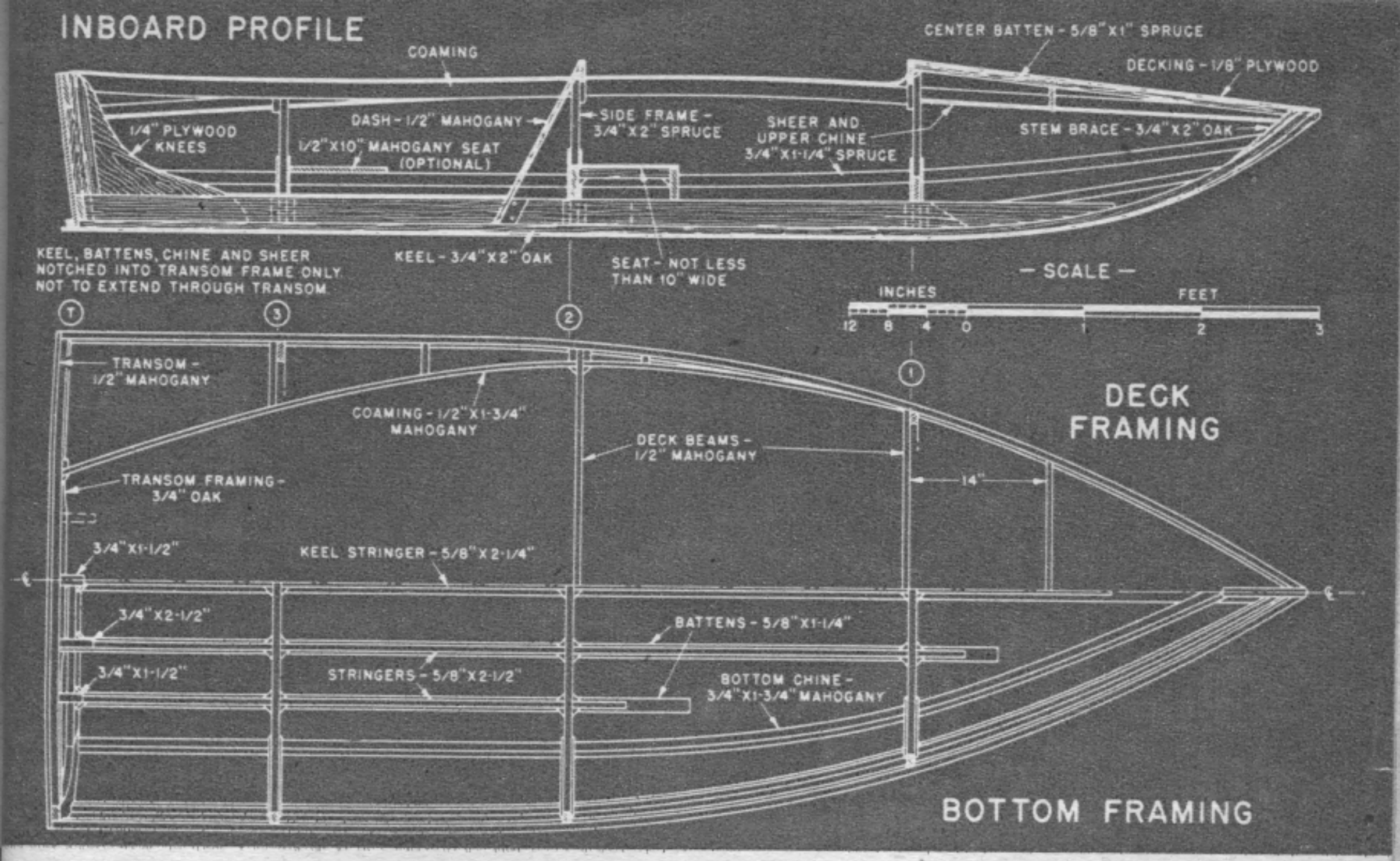
This is the skeleton of Jinx completed. Frequent use of glue blocks will add much to its strength.

Beveling chine, sheers and hull. The large wooden hand plane is even better for the flat areas.

ought to speak for its rough-water ability, and in short course races it came in first several times.

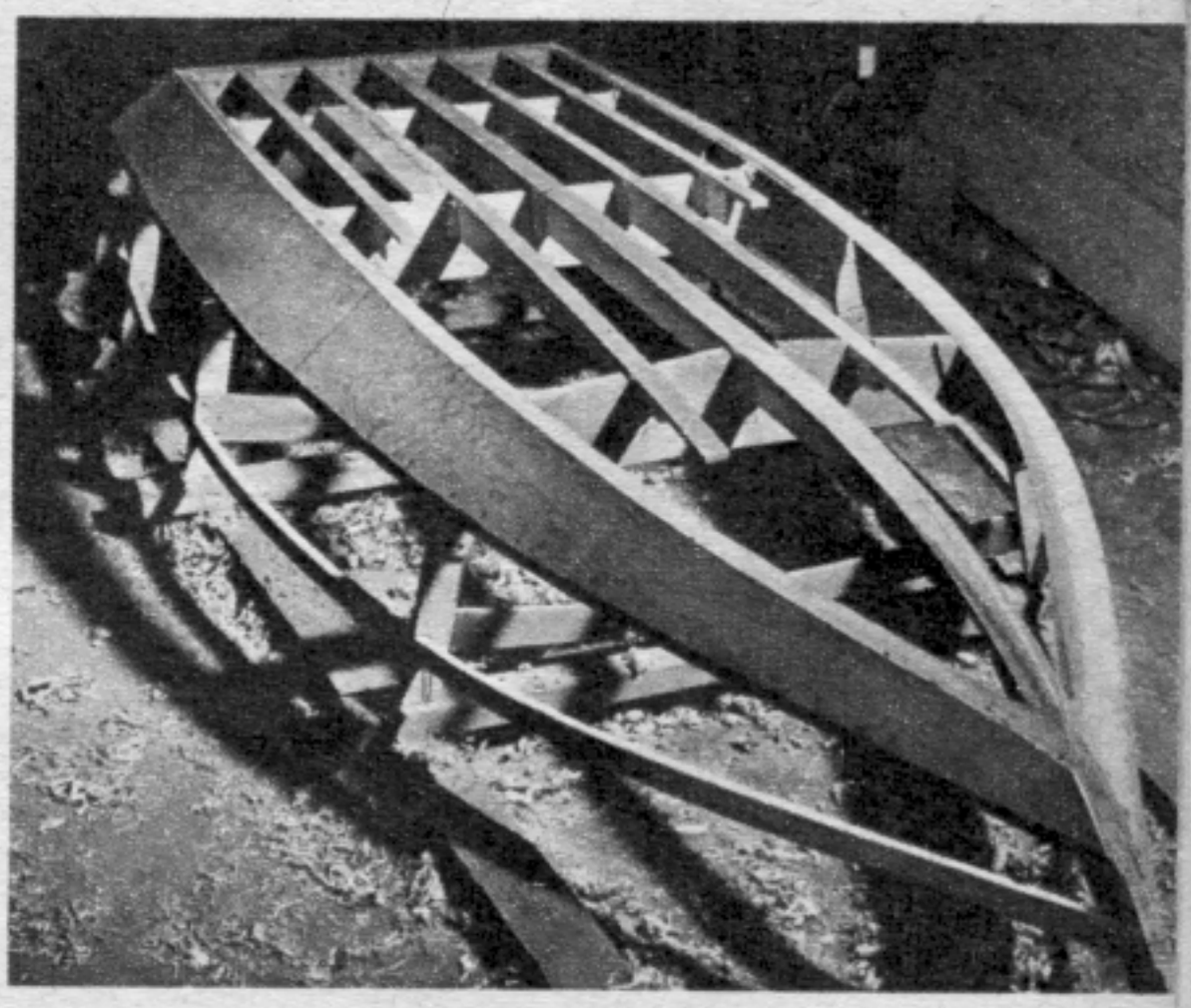
With one 160-pound man in it, it will do 26 miles an hour with a 7½-hp Mercury with a stock lower unit and propeller, 33 miles an hour with a 10-hp Mercury with a stock lower unit and prop, and 34 miles an hour with a 22 hp Evinrude or Johnson with a stock prop. I would like to add that with a stock prop it will go faster under load than with a racing lower unit and prop. I have a 10-hp Mercury equipped with a quicksilver unit and 6¾x8½ Johnson prop and it will plane three 160-pound men at 27 miles an hour. Set up for short course racing it will do better than 44 miles an hour with one 160-pound man. Used as a small family boat she is safe, fast and sturdy. I don't think there is a safer or better type of boat for turns. With its high non-trip chines it is almost impossible for her to dig in and turn over.

With the motor jacked up with a ¾-in.

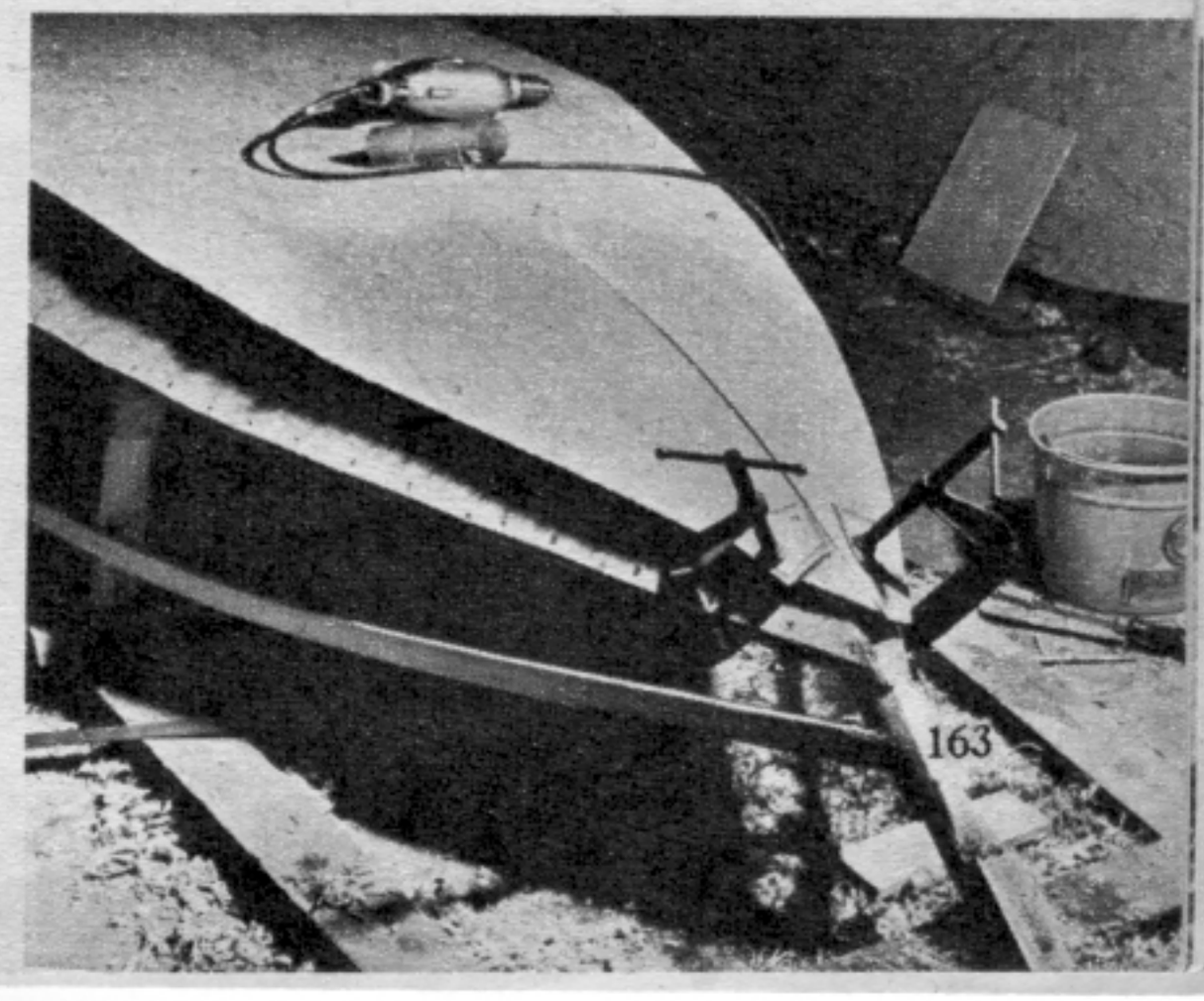


thick stick under the motor bracket and the motor perpendicular to the water, she is a racing demon. But in order to get more push out of the motor for family use, you'll have to drop it down to its 15½-in. transom and swing the shaft in one notch toward the transom, and now you have a family boat that can safely do high speeds.

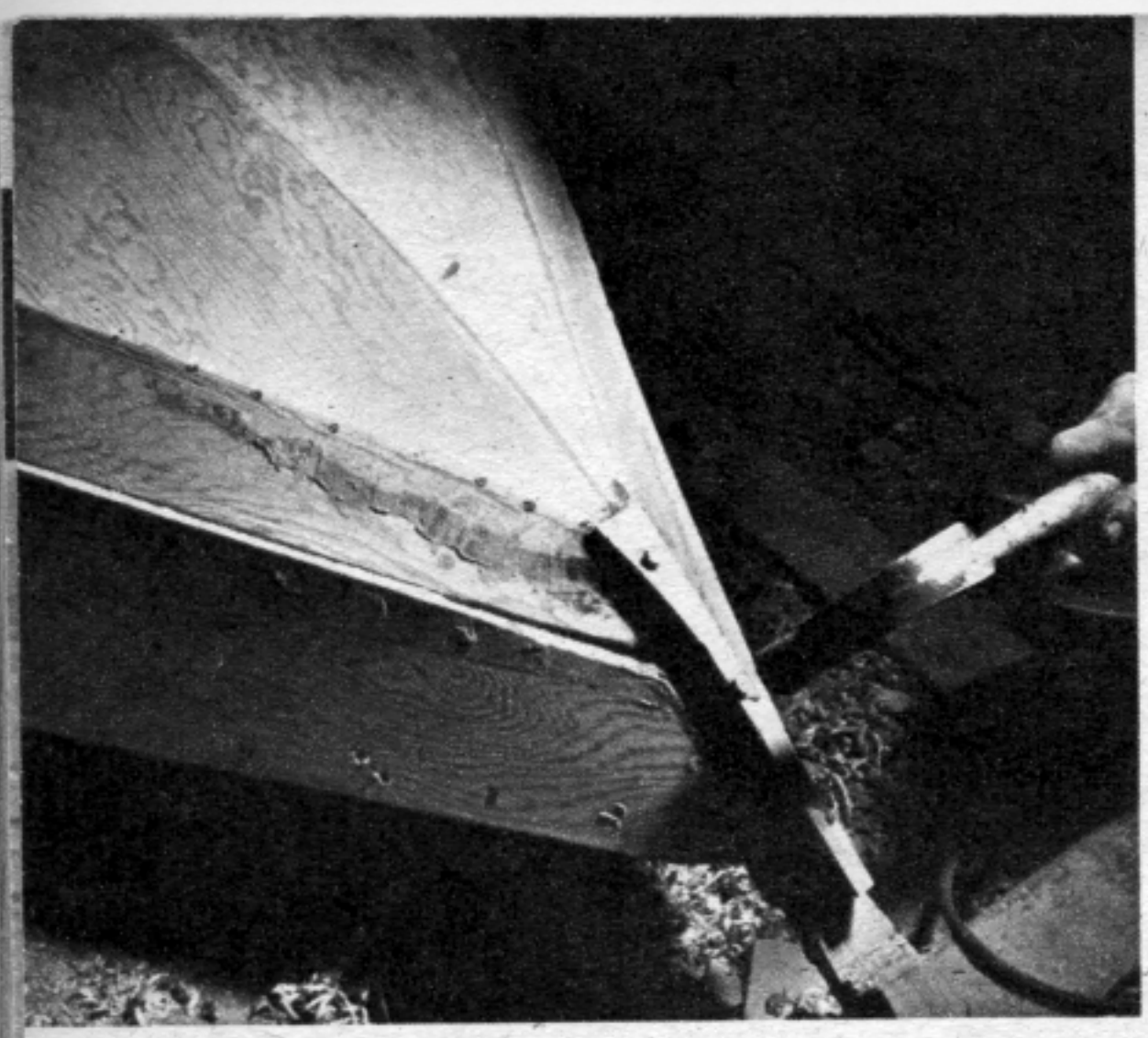
Getting down to building the "Jinx," after you have accumulated the stock listed in the bill of materials proceed as follows: 1. Lay out full size frame complete to dimensions given on drawing. On a 2x6-ft. piece of plywood, Masonite or sturdy cardboard, draw both sides of each frame and the transom. As a check on your layout work, make sure that the distance from the intersection of the floor line and centerline of each frame to its chine is the same port and starboard. Remember when drawing the transom frame that the dimensions shown are projected. Actually the transom is raked in 2½ in. 2. Assemble the frames. Sets follow frame No. 1 through, step by step. The rest will be duplicates except for shape. The bottom frame is continuous from chine to chine and has a maximum depth of 5¾ in. The side frames are 2 in. wide throughout and are straight sided, the large gussets form the non-trip chine. Place the frame components on the drawing and hold them in place with temporary



The non-trip chine is glued and screwed on first. Cut from 12-ft. length of ¼" waterproof plywood.

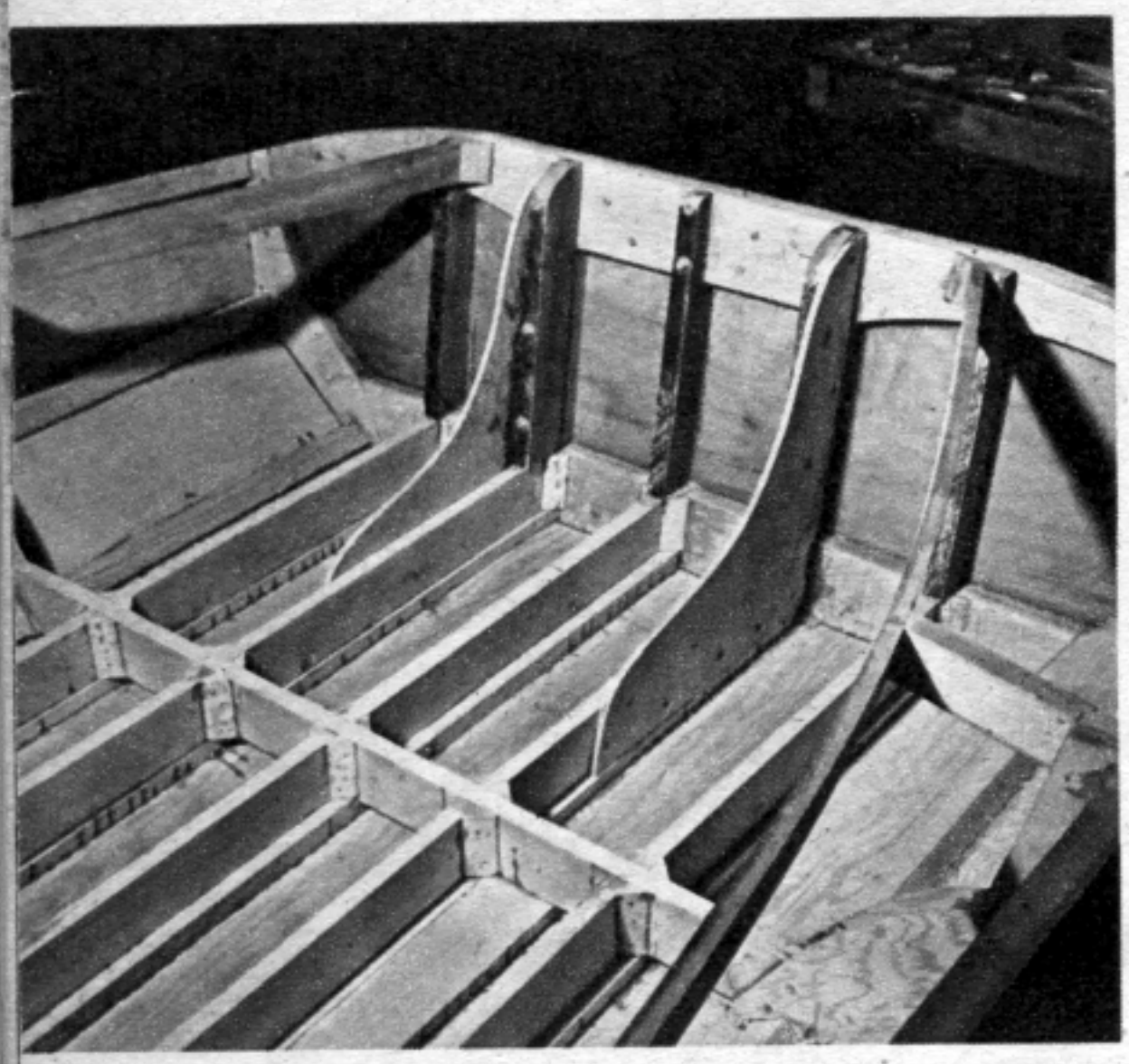


The bottom is rough cut and the bow is sponged with hot water, after which it is carefully fitted.

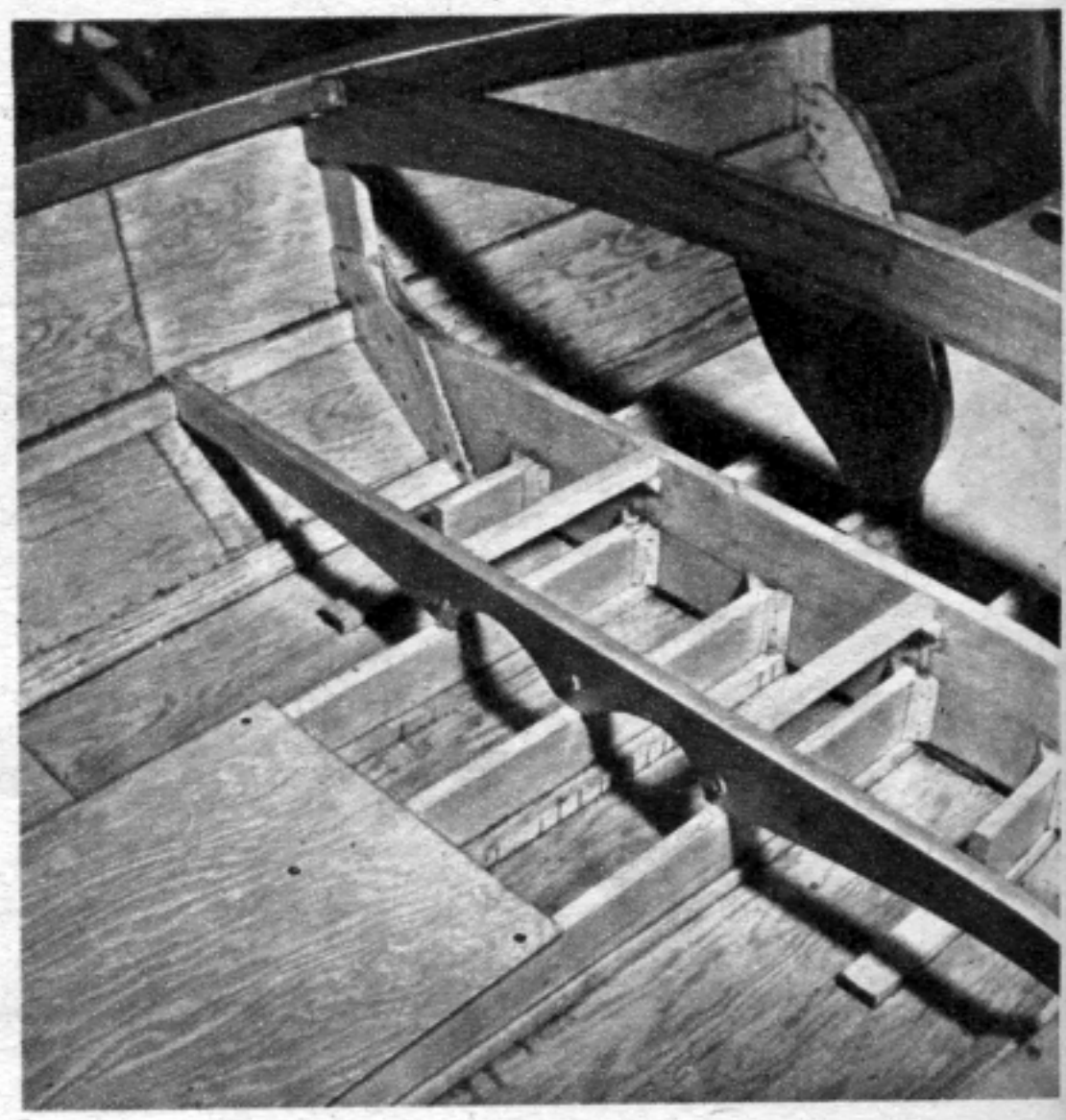


Screw holes in stern cap are plugged up here. For an adhesive, Sealer 900 was used on bottom.

The boat is now completely planked and turned right side up, ready for the finishing touches.



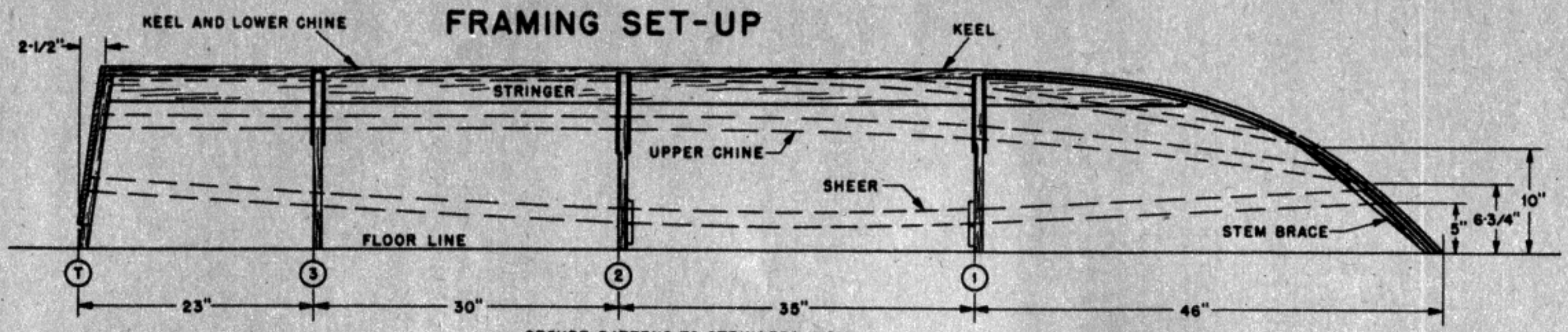
Two ¼" plywood knees are used to support transom and keep rigid the stern section of bottom.

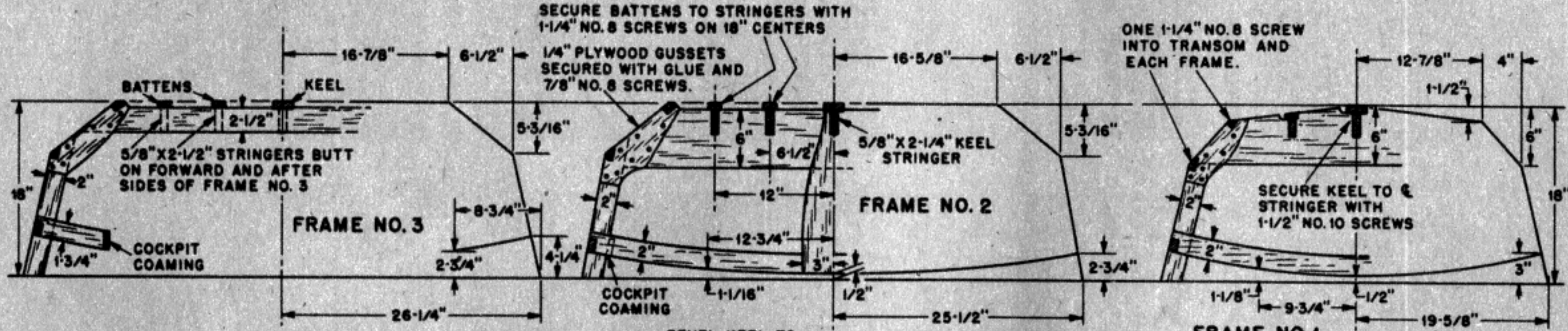


Frame for the seat rests on all three strengtheners and the non-trip chine for extra rigidity.

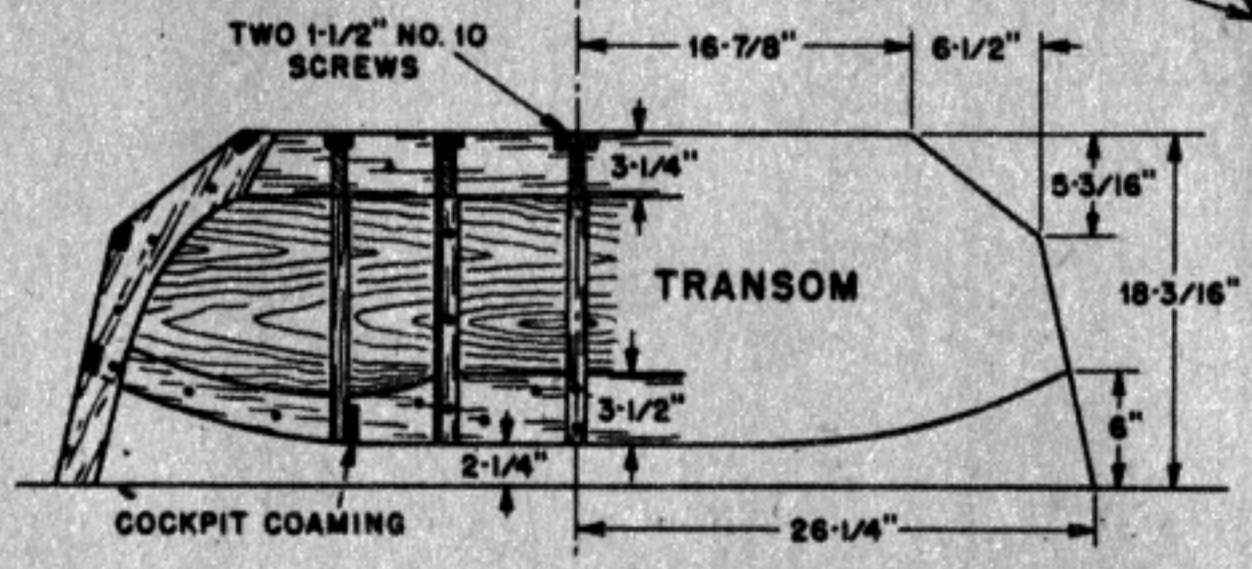
fastenings. Place two ¼-in. plywood gussets over frames and fasten with glue and ⅞-in. No. 8 flathead screws.. There should be at least 3 screws in each frame piece. Drive the screws in pilot holes that are drilled one screw size smaller than the fastenings being used. When both sides are finished, carefully turn the frame over and fasten the gussets on the other face. Before you lift the frame from the drawing, carefully inscribe the centerline on one face and nail a temporary brace across the tops of the side frames. 3. Assemble the transom and transom frame. Cut transom from ½-in. solid mahogany and transom framing from ¾-in. oak with lapped joints at non-trip chines and sheers. All lapped joints should fit snugly. Coat the mating surfaces of the joints and the after surfaces of framing with Weldwood glue and clamp the transom and framing together using ample clamps and setting them up hard. When the clamps are on, bore for the fastenings and screw the frame to the transom with 1¼-in. No. 8 flathead wood screws. Allow one day for the glue to fully set before taking off the clamps. 4. The keel and stern are one piece with the curved

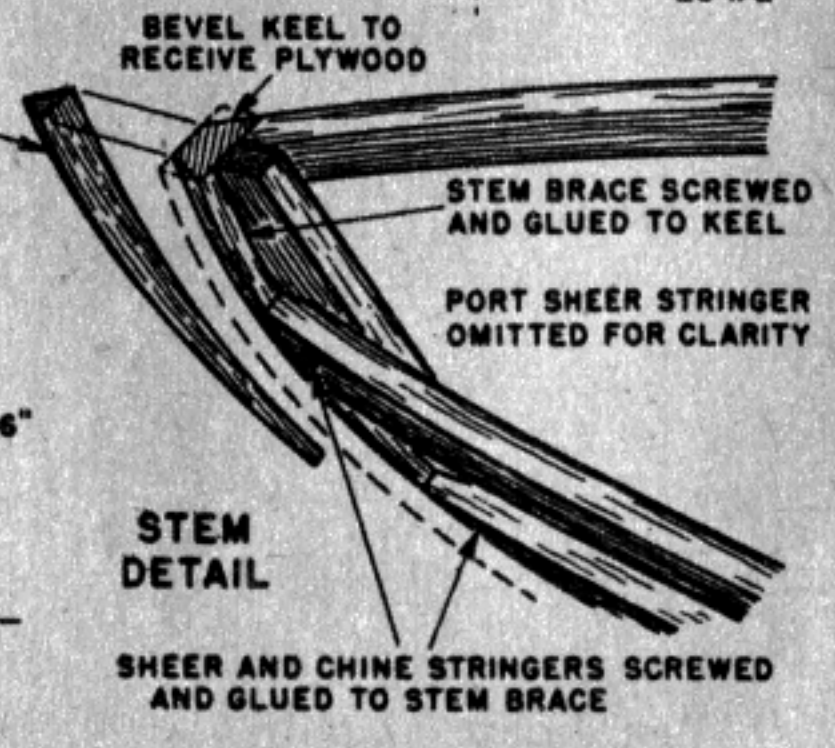
FRAMING SET-UP

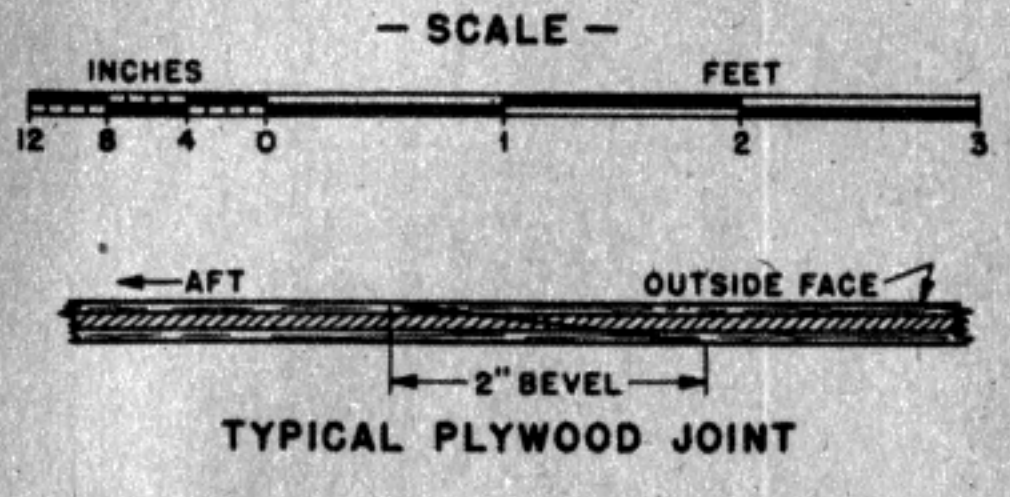




FRAME DETAILS

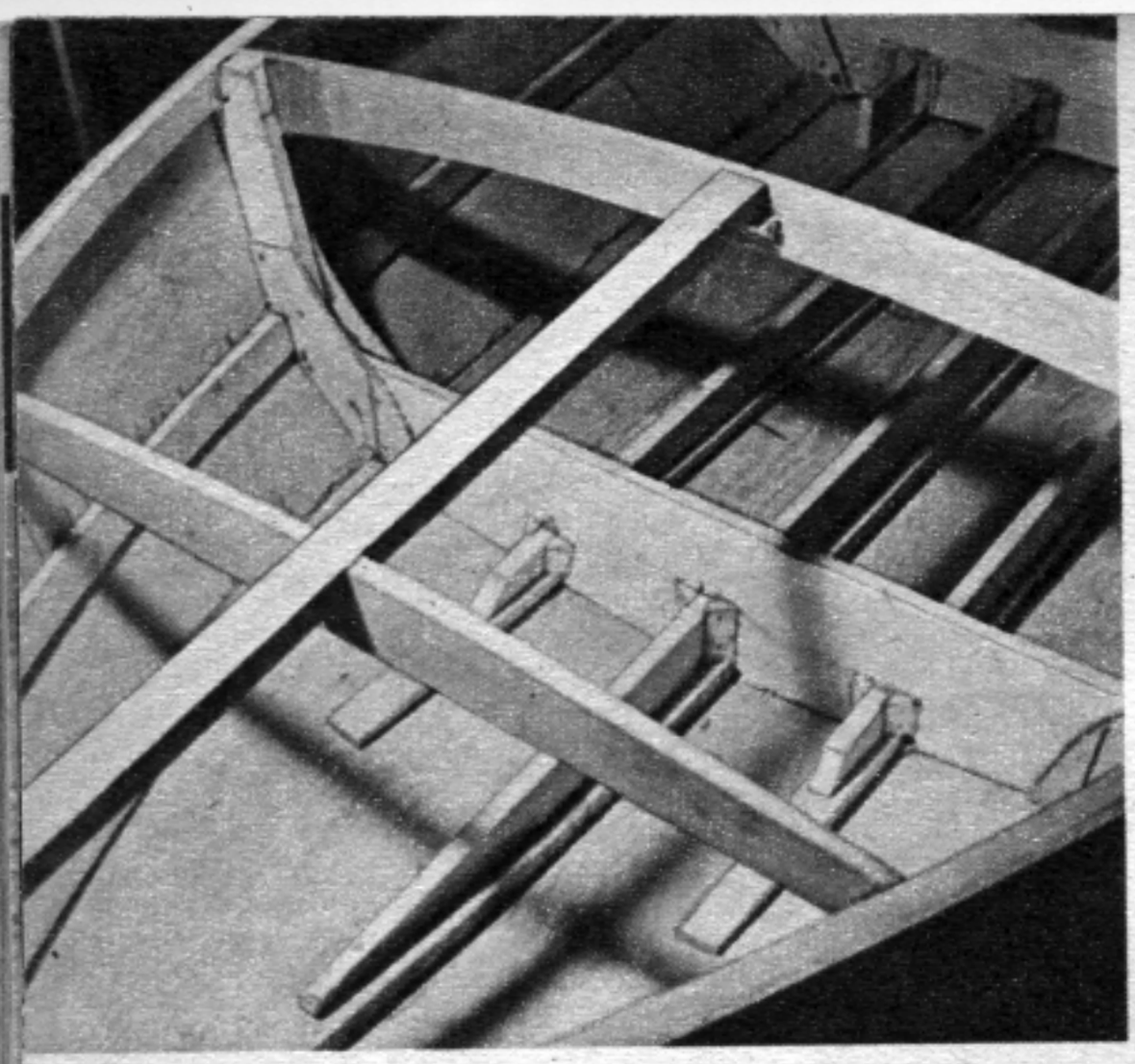






TYPICAL PLYWOOD JOINT

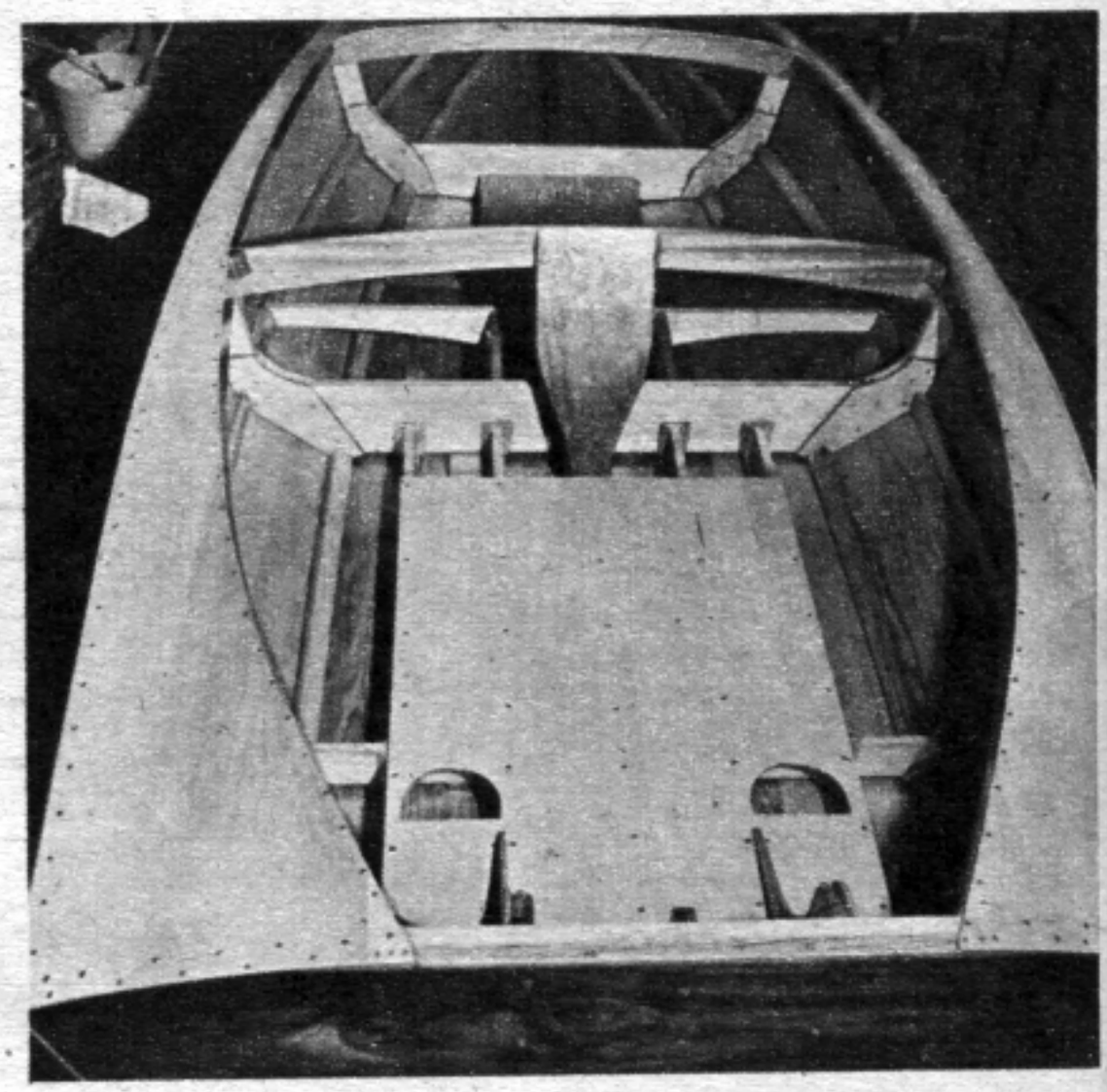
PLANS BY PAUL PLECAN



Stringer strengtheners go through rib 1 and reinforce glue blocks. Note the decking supports.

Deck framing completed, it's now ready to receive ⅛" plywood decking. Stringers go through frame 2.

This photo shows the ⅛" plywood decking being nailed in place with anchor head fastenings.



Floor boards are in place. Stirrup holes for toes are visible, suit individual convenience.

part up front being steamed into shape or shaped as follows: Saw down its side for about 3 ft. and with a generous coating of glue, slip a ⅛-in. x 2-in. piece of wood between halves and bend assembly into shape, then clamp with a series of small clamps. After the glue in the frames and transom has hardened, remove the clamps and cut the notches for the keel and chines. Note that only in frame No. 1 and No. 2 do the bottom stringers go through. 5. The boat should be built on a level wooden floor, or on a wooden cradle laid on a concrete floor in a space about the size of a one-car garage. Lay out the centerline and frame lines on the floor or cradle according to the spacings given in drawing, using such temporary bracing as you feel necessary. Set up frames and transom. A couple of nails will hold each frame to floor or cradle. When all is securely erected, coat the bottom stringers' notches with glue and slip stringers into place. Then fasten to ribs with small blocks glued and nailed. Next slip the keel into place with glue and 1½-in. No. 10 screws, using two screws to secure keel to transom and one every 10 in. to bottom stringers. Glue and secure the bottom stringers; all stringers butt to frame No. 1. After all [*Continued on page* 194]

Jinx—The Utility Boat

[*Continued from page* 166]

the battens are in place, screw them to bottom stringers, just like keel, the short bottom stringers go from transom to rib No. 3. Secure all bottom stringers to ribs and transom with small wood blocks glued and nailed into place with 1-in. wire brads. Next, secure the chines and sheers using glue and 1¼-in. No. 8 screws. When they butt against the stem and transom, bevel them to obtain good landing, and secure with one 1¼-in. No. 8 screw. Don't forget fin bracing from frame No. 2 to frame No. 3. 6. Before fitting the planking, bevel the frames, chines, sheers and keel using a plane and a good wood file, carefully trim and fair so the plywood planking will lay full on all structural members. Check the framing from time to time as you progress by springing battens around the structure. Remember that from rib No. 2 to transom the bottom must be perfectly flat and the plywood bottom cannot be flat unless the structural members are faired flat. The sides are 12-ft. lengths of fir plywood and the bottom is mahogany plywood. 7. The non-trip chines are fitted first. Cut panels a bit oversize. Clamp in place and mark outline of the boat on panels, remove them and accurately saw to shape. Put glue on the framework, clamp the panels back in place and start boring and fastening. The bottom goes on much the same way and is all one piece with a V cut in front to allow bottom to come to a V at the front. On the bottom Sealer 900 is used instead of glue. The top of the non-trip chine is planed the same angle of the side, so the side panel is glued and screwed over the edge of the non-trip chine. The edge of the bottom is planed to the same angle as the non-trip chine. Sink screws in about $\frac{1}{16}$ in. and use wood dough over them. 8. Remove the temporary bracing and turn the boat over on a couple of padded saw horses at a workable height to put the decking, transom, keels and floor on. Fashion the deck beams, sawing them to the crowns shown on drawing and fasten them to the frame and sheer using 1¼-in. No. 8 screws.

Fit transom bracing and knees in place using bolts and screws as indicated in drawings. Next glue and screw deck and hood frame in place. Decking and hood covering is ⅛-in. waterproof plywood and is glued and nailed in place with 1-in. anchor-head nails. 9. Glue ¼-in. plywood on bottom stringers in rear cockpit of boat and screw in place with ⅞-in. No. 8 screws. This forms a structural part of the bottom and will prevent bottom from warping and cupping. A small piece of plywood is just screwed in place in the front cockpit just big enough to step on. The front seat offers no problem, and if you prefer a back seat instead of kneeling, just screw a ¾-in. thick mahogany board to the top stringers of the non-trip chines. 10. Sand the entire boat down carefully. The decks, transom and inside need 4 coats of a good marine varnish. The sides I painted light gray and the non-trip chines and bottom red. The bottom will take a lot of patient hard sanding and three coats of a good racing enamel. I used "Boat Life" for the bottom and non-trip chines. Lightly sand between coats and fine wet sanding with an oscillating sander on the last coat and a good Simonizing. Now screw the fin in place. The back of the fin should be about 28 in. from the back of the boat. 11. Finally comes the installation of the hardware and gear. Secure the bow handle with long screws driven into the deck batten and stem. Bolt the lifting handles in place on the transom, locating them to suit. Bolt the steerer to the dash panel and place the motor on the transom. Position the dashboard pullup to provide good leads to the tiller arms and bolt them in place, then rig the tiller lines. Locate the throttle control to suit your reach.

You're now ready to launch and test the "Jinx." Check your steering gear, throttle control, gas and personal equipment. Put on your life jacket and crash helmet. Push the nose away from the dock, start the motor, and idle out into clear water. To make the boat plane, open the throttle and lean forward.

You will be pleased with her performance, but as I mentioned earlier, motor angle and height are very important for racing and a motor ⅛ in. too high or low is the difference between winning or losing a race. A marine speedometer is handy to have while making these adjustments.

To get your racing number, send $10.00 to the American Power Boat Association, 700 Canton Ave., Detroit, Mich. Enclose in the letter a description of your boat and motor. The A.P.B.A. will want to know the make, model, and serial number of the latter. •

BILL OF MATERIALS

Bronze, Monel, or Everdur Fastenings

8 gross ⅞" No. 8 flathead wood screws; 3 gross 1¼" No. 8 flathead wood screws; 2 gross 1" anchor head fastenings; 6 carriage bolts ¼"x4" with nuts and washers; 2 carriage bolts ¼"x3" with nuts and washers; 2 dozen 1½" No. 8 flathead wood screws; ¼ lb. 1" wire brads.

Paint Products

5 lbs. Weldwood glue; 1 lb. wood dough or similar surface filler; 1 quart of Sealer 900; 2 quarts Spar Varnish for interior and decking; 1½ qts. Marine paint colors to suit, for exterior.

[*Continued on page* 222]

Telescope Maker's Page

[*Continued from page* 178]

You can get good results by mounting the camera on a separate, sturdy, tripod. The camera of course should be optically aligned with the axis of the telescope. A single lens reflex camera such as a Graflex or Exakta are ideally suited for this type of work, as the ground glass enables you to visually check the focus.—*Peter A. Leavens* •

Jinx—The Utility Boat

[*Continued from page* 195]

Mahogany or Fir Plywood

Decking—1 sheet ⅛"x4'x6'; Bottom, side planking and gussets—2 sheets ¼"x4'x12'.
U. S. plywood throughout.

Honduras Mahogany

Bottom chines—2 pieces—¾"x1¾"x1'; transom—1 piece — ½"x15¾"x4'-6"; dash — piece — ½"x7½"x20"; deck beams—1 piece—½"x5"x11'; cockpit coming—2 pieces—½"x1¾"x8'; sheer guard—2 pieces—½"x-¼"x½"x11'.

Oak

Keel—1 piece—¾"x2"x12'; transom and knee braces —1 piece—¾"x6"x8'.

Hardware

1 steering wheel; 1 piece of steering rope 25'; 1 safety throttle; 1 Bowden throttle cable 5' long; 1 racing fin; 2 snap swivel tiller rope blocks; 2 swivel eye tiller rope blocks—with straps; 2 extra straps (to hold steering rope tighteners to boat); 2 steering rope tighteners; 2 tiller or wire rope clamps; 2 stern lifting handles; 1 bow handle.

Sitka Spruce

Sheers and chines—4 pieces—¾"x1¼"x11'; side frames —1 piece—¾"x2"x6'; bottom frames—1 piece—¾"x6"x7'; bottom of frame No. 3—1 piece—¾"x2½"x4'; battens—2 pieces—⅝"x1¼"x8'; battens—2 pieces—⅝"x1¼"x5'; bottom stringers—3 pieces—⅝"x2½"x8'; bottom stringers —2 pieces—⅝"x2½"x5'.


74-J
Jinx