

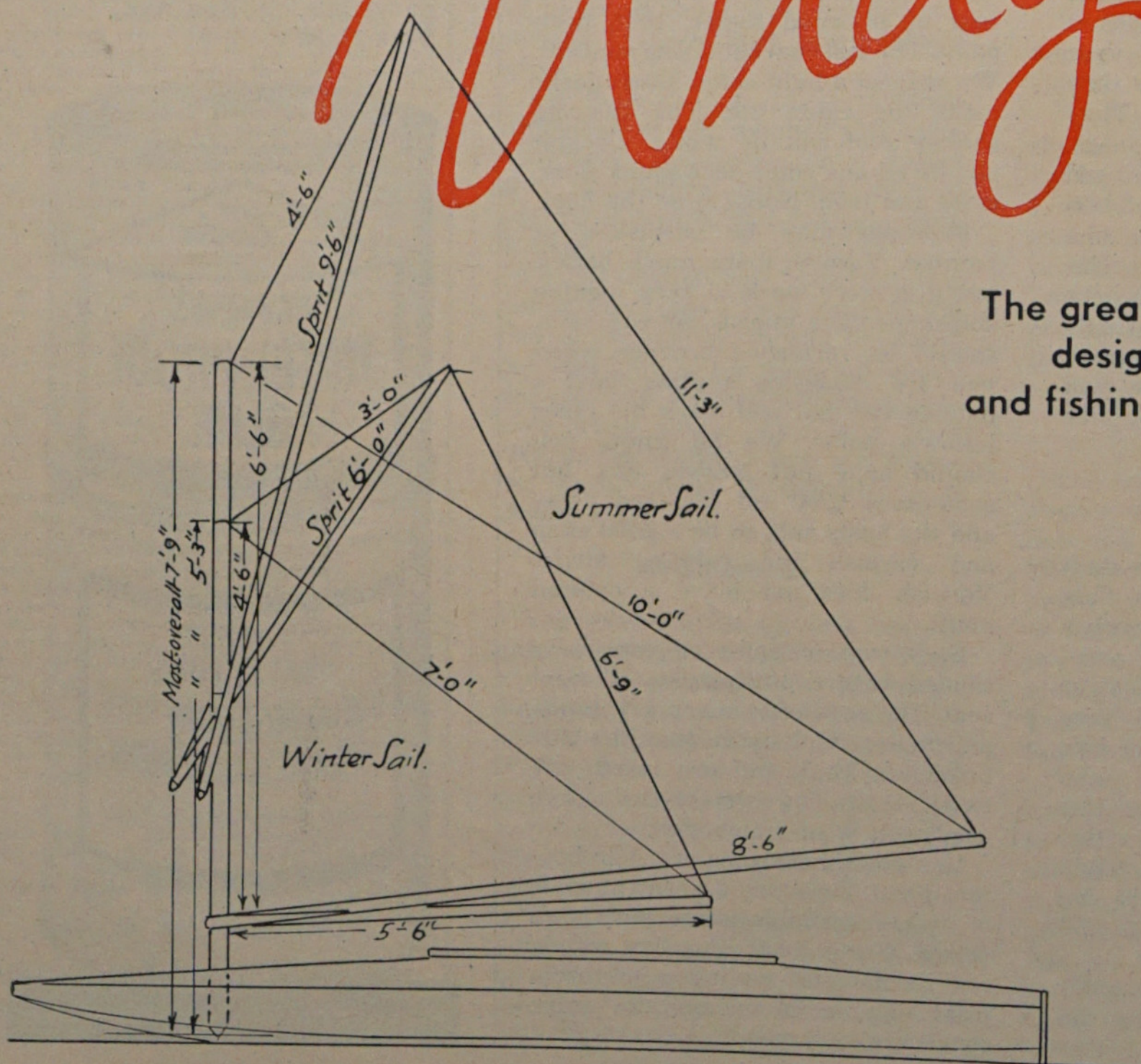


She's strictly a one-man boat, but will carry you safely in all kinds of weather.

PLYWOOD SNEAKBOX

Widgeon

The greatest little boat ever
designed for hunting
and fishing inland waterways



By H. P. MEGARGEE

IN 1875 Nathaniel Bishop, a seafaring man from Medford, Massachusetts, where he was born in 1837, planned a cruise down the Ohio and Mississippi rivers and along the Gulf Coast to the mouth of the Suwannee River in Florida. Bishop, who had had worldwide experience with small craft, selected a Barnegat sneakbox for the trip. He described his voyage in the book *Four Months in a Sneak Box*, published in 1879. Starting from Pittsburgh, Pennsylvania, on December 2, 1875, he lived for four months in this tiny floating home, 12' long and 4' wide, while he sailed and rowed 2,600 miles to his destination. Except for the two weeks when the Ohio River was frozen over, he slept aboard and wrote his book by the light of a 3" candle—a longer one would have burned the hatch above him.

Nat Bishop's book, written 80 years ago, contains sketches and diagrams of his boat that would serve to describe sneakboxes built today. She was built by Captain George Bogart of Manahawkin, New Jersey, and followed closely the lines originated about 40 years earlier by Captain Hazleton Seaman of West Creek, New Jersey.

The baymen who built these boats 100 years ago were for the most part Coast Guardsmen, wise in the hazards of the sea and clever in the design of craft that ride the waves. In the intervening years their successors have not been able to improve substantially on the earliest models. Certainly Nat Bishop had nothing but the highest praise for the comfort, seaworthiness and maneuverability of his craft. Joining in Bishop's enthusiasm, I would go a step further and say that for its manifold purposes of hunting and fishing in inland waterways it is the greatest little boat ever designed. Strictly a one-man boat, it will carry you safely and comfortably in weather that would trouble boats twice its size. Covered with thatch or seaweed and drawn into a notch on shore or in still water, afloat against the bank, it serves as a blind for the reclining hunter.

I have hunted ducks from sunken blinds, concrete pits, stick-up blinds, Chesapeake Bay booby blinds and other hides in the United States and Europe, but never have I found anything as comfortable or that lends itself as well to duck shooting. In it with plenty of dry hay, a man with reasonably good circulation can stay

out in cold that would freeze a black duck to death.

The *Widgeon* is not a true sneakbox, for old baymen will tell you that these boats should have "clean-swept chines," meaning that the bottom and crowned deck timbers as well as the curve of the chine are all arcs of circles. Our boat is a modified sneakbox with dead rise sides and V bottom. It is designed for simplicity of construction with plywood which cannot be bent into the compound curves inherent in a true sneakbox.

In building *Widgeon*, I selected Weldwood Royal Marine Duraply. This plywood has been developed by U. S. Plywood Corporation after wide experience with marine engineering and construction problems. Its advantages over ordinary marine plywood include the elimination of grain raising and checking, greater abrasive strength and affinity for paint. It needs no sanding or undercoating.

The boat may be made satisfactorily with ordinary marine plywood but as a "do-it-yourselfer," I preferred to pay a little extra to get the advantages of this superior material.

Because it employs plywood, requiring careful alignment, the plan calls for "setting up" substantial 2" x 4" stringers on which molds are located. The boat will be built bottom up and then turned over to construct the deck.

The setup plan has legs at a convenient height from the floor, but if you have a good substantial pair of horses, the legs may be dispensed with. By all means, build the setup form accurately and make sure that it is square at the four corners before nailing the diagonal crossbraces. Note that the stern transom and the bow assembly are the only pieces in the setup that remain in the finished boat. Lay off the indicated distances for each mold and nail the mold braces in place to receive them. The molds are cut from second 1" planks such as 7" wide shelving. Be sure however that the lumber selected for both molds and setup stringers is not warped, for your success depends upon these forms being accurately sized, aligned and placed. Fasten molds to the mold braces with screws so that they may be easily removed at the proper time.

Note on the plans that the line where the side planks and deck meet (the deck line) is a straight line running fore and aft. Always keep this in mind as it is an essential reference line. Cut notches in each

mold at the deckline that will take $\frac{7}{8}$ " x 1" strips extending from bow to stern on both sides. These must form a straight line, and if they do not, molds must be corrected. When side planks are in position, these strips are used to scribe the deckline on the planks.

Note that the angle the sides make with the vertical is the same for all the molds and for the stern transom as well. It is a diagonal in the ratio of 1:4. It is suggested that you make a very accurate pattern cut at this angle to be used in making all molds. For convenience in attaching clamps to hold side planks, nail a 1" x 1" batten to the end of each mold.

A stern transom is formed from $\frac{7}{8}$ " spruce or pine. At the deck its curvature is the arc of a circle whose diameter is 4' 9". To draw this and other curves, make your own beam compass from a 1" x $\frac{1}{2}$ " batten, 5' long, with a pencil stub set in one end and a brad driven in as a pivot at the proper radial distance.

Having laid this arc off and drawn the cord which is 35", now with your 1:4 pattern, draw the side angles. The angle of the V bottom is $1\frac{1}{2}:8$, and this should be laid off directly on the transom as indicated on the detail plan. After the transom has been shaped, glue and screw pieces of 1" x 1" oak flush along the ends, and also the 1" x 1" x 6" oak strip to which the keel is fastened so that the keel will be flush with the transom. Like the molds, the transom is set at a right angle to the setup stringers and is fastened to the braces temporarily with screws.

Bow assembly is shown in precise detail on the plan. Rough-out the nosepieces but leave out final shape-up until ribs and deck frames are in place, after which with a straight edge you can determine just how much trimming is needed. Here again temporarily screw bow assembly to the setup form, making sure that it is properly aligned.

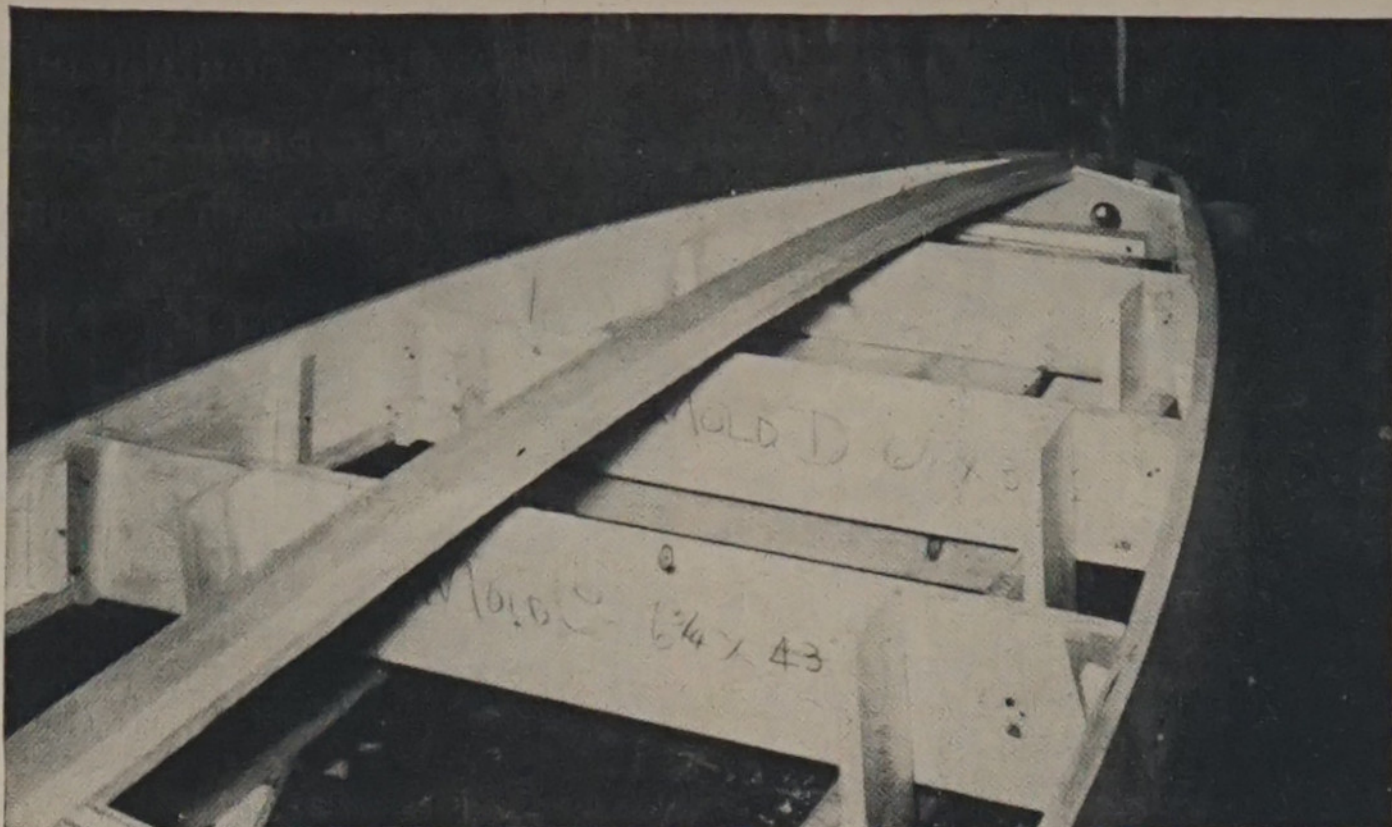
Now you are ready to start actual construction. You will need two $\frac{3}{4}$ " side planks, 8" wide and 12' long. My preference would be white cedar boat boards but clear spruce or pine is good. Start by clamping the planks at the stern—apply pressure at the opposite end with a rope tourniquet. Proceeding from the stern, clamp both planks to opposite sides of each mold. As you go toward the bow, spring the boards gradually with the tourniquet until finally they are flush with the bow assembly. In this way

you will avoid unequal pressure that might pull your molds slightly out of line. Now clamp 1" x 1/2" battens 12' long along the molds at the chine lines and draw these lines on the side planks. Scribe the decklines as indicated above. Saw the planks to shape, allowing at least 1/8" top and bottom to be planed down. The planks should be identical. Now clamp them together and plane down to exact size. Reclamp them to the molds using the same procedure outlined above. At the stern the planks are permanently glued and screwed to the transom and at the bow, glued and bolted to the assembly.

The bottom frames or ribs are 1" deep, 3/4" wide cedar or spruce and joined at the center with 3/8" plywood gusset which is dimensioned on the detail sketch of the midship section. These rib assemblies are identical as to angle (1 1/2:8) and vary only in length. Using a sheet of plywood (the piece you will use for the floor is okay), lay off a baseline 4' long and bisect it at right angles with a centerline. At the ends of the baseline draw perpendiculars 4 1/2". From the centerline draw the two lines that subtend the right angles whose sides are 24" and 4 1/2" (ratio 8:1 1/2). On these lines which form an obtuse angle, nail 3/4" x 1 1/2" battens. At their junction, with its ends touching the battens, center and nail a block 3 5/8" x 1/2" that is 1 1/4" thick.

Examine the detailed midship section and the above will be quite clear. This arrangement will provide you with a jig upon which to construct all the ribs. The ribs are mortised so that when laid along the battens they fit the keel block on the jig. Nail them temporarily in place and lay a gusset on them. Drill three screw holes each side of the keel block, glue gusset to ribs and screw it in place with 3/4" No. 6 screws. Put gussets on both sides of the ribs. Make ten ribs to be installed at Stations 1 to 10 inclusive, and each long enough to span the boat at its particular station. Ribs and deck frames are connected at Stations 1 to 10 with 3/4" to 1" rib risers (see midship section) and joined by small 1/4" plywood gussets glued and screwed (only one gusset per joint). Each rib riser is attached to the side planks with glue and two 1 1/2" No. 7 screws.

Set up one rib at Station 6 and brace it firmly from the setup stringers in a vertical position, making sure that it is absolutely square across the boat with the keel notch exactly at the center. Prepare the keel which is 3/4" x 3 5/8" pine or spruce and bevel it as indicated. Fasten it permanently at the stern



Be sure that lumber selected for molds and setup stringers is not warped, for your success here depends on accuracy.

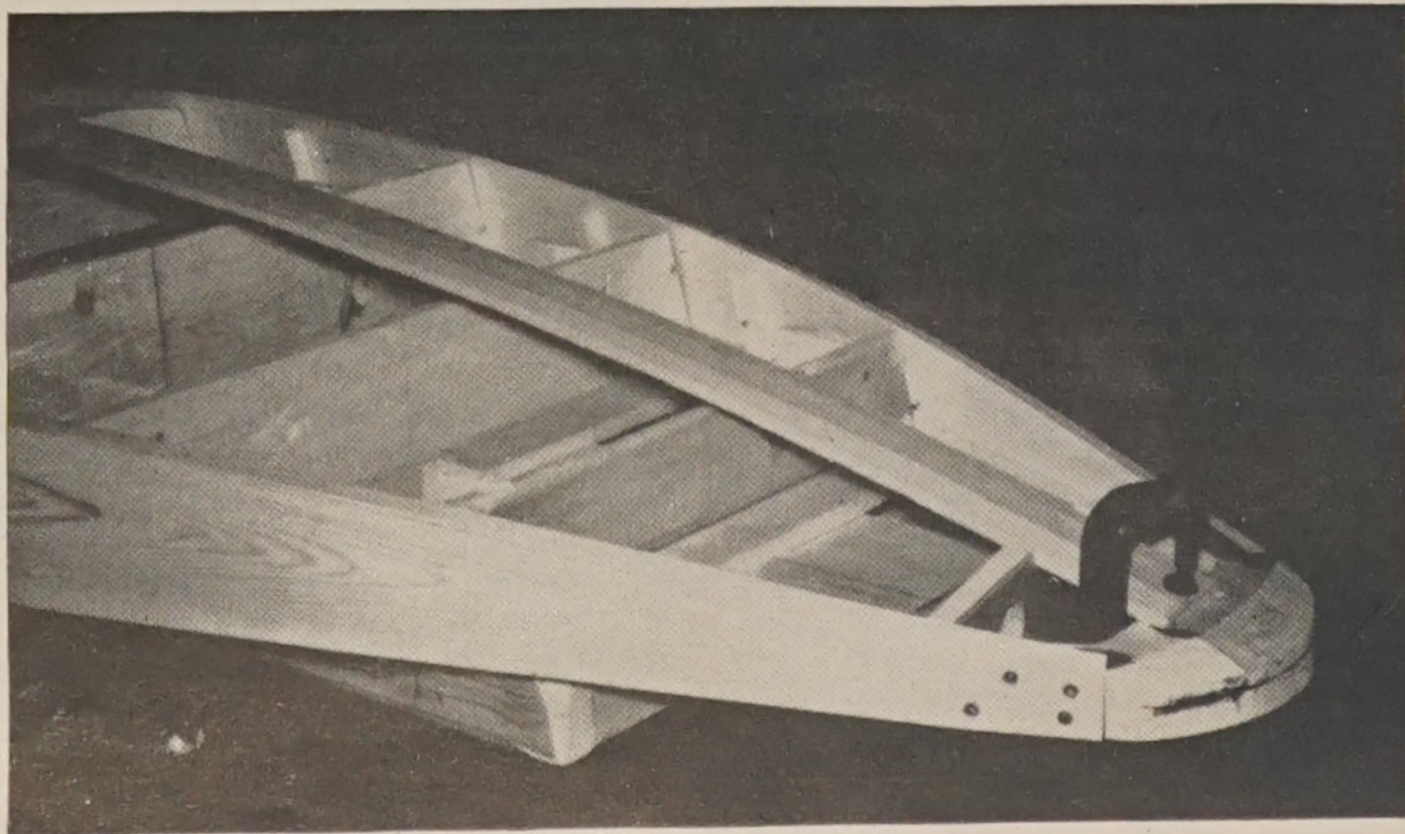
transom, bend it into the notch on Station 6 rib and clamp it temporarily there and to the bow assembly. Working forward from the stern, set all ribs. They must go in place without forcing the keel out of line fore and aft. If additional arch in the keel is necessary, simply loosen clamps at Station 6 and bow. After securely fastening all ribs to the rib risers, glue the keel to the ribs. Next glue and screw to the center of the keel a 1/4" x 1 1/2" pine strip against which the bottom planks butt.

With ribs and keel in place use a batten laid along the ribs as a guide in trimming the bottom of the bow assembly so that planking will fit snugly. Bevel the sides to conform to the rib angle. Attach a 2' x 12' sheet of 1/4" marine plywood to the ribs temporarily. Lay the stern end of this sheet flush with the outside of the stern transom. The sheet is

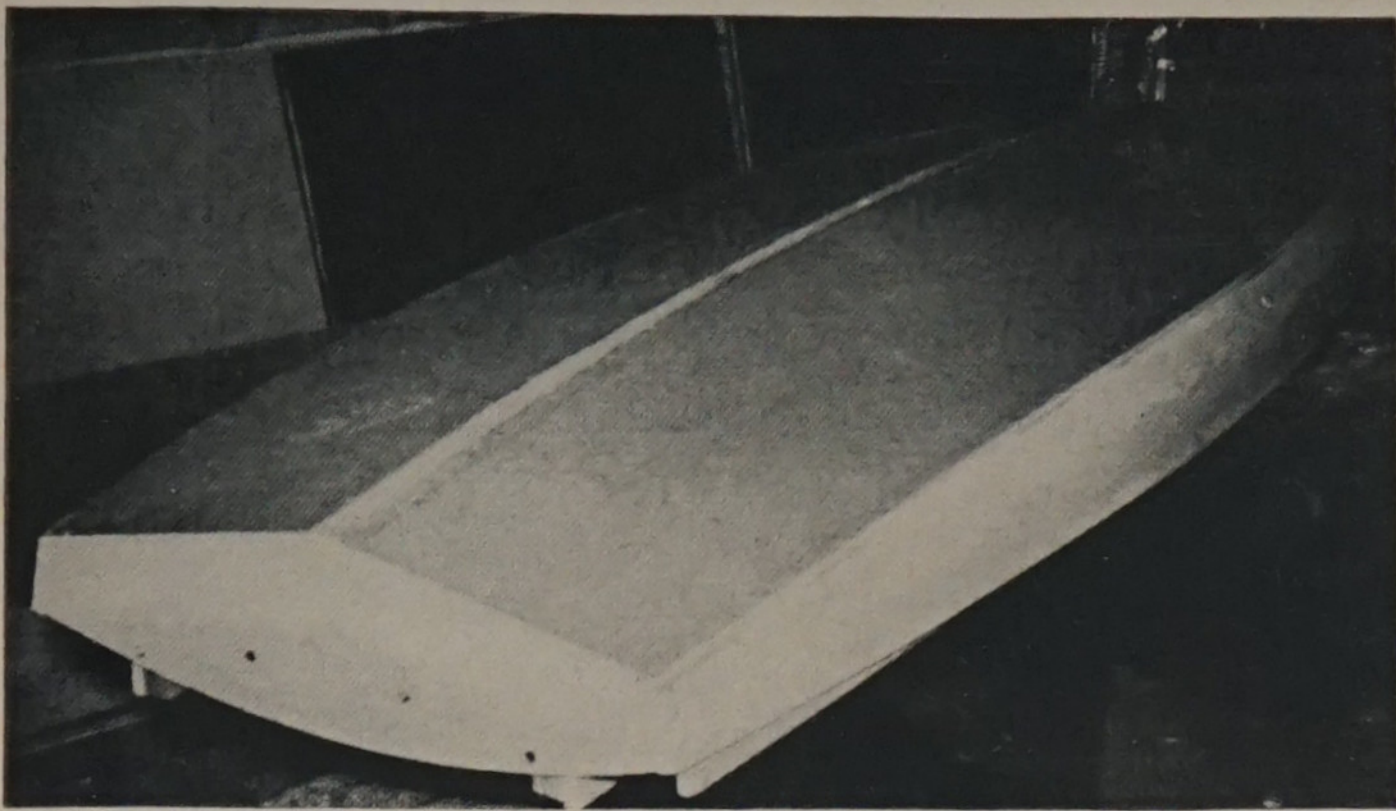
roughly marked along the keel and cut to shape and then carefully planed to fit along the keel exactly. With a few screws, temporarily fasten the sheet in place and scribe the line of the chine (where side plank meets the bottom sheet) on it. Cut to this line allowing at least 1/4" to be planed down when the sheet is permanently installed. This sheet will serve as a pattern for the opposite side. Both are carefully fitted, glued to the planks, keel and ribs. Space 3/4" No. 6 screws 2" apart along side planks and keel, and 4" apart on ribs. It is recommended that a hard-setting resorcinol resin glue be used. If you plan to use an outboard with more than 3 hp, then use 3/8" plywood on the bottom. Then the thickness of the strip along the keel between the bottom planks must be increased to 3/8".

The boat is now turned over to be

Nosepiece for bow should be roughed-out. Final shaping is left until ribs and deck frames are all fitted in place.



It is recommended that a hard-setting resorcinol resin glue be used when the bottom of *Widgeon* is permanently installed.



decked and the setup form is removed. All deck frames are sawed on a 4' 9" outside radius using the beam compass. Have the grain run tangent to the frame at the center. Frames are cut from a $\frac{3}{4}$ " plank and are made $1\frac{1}{4}$ " deep. They are set flush with the sides at Stations 1 to 10 and rest on the rib risers to which they are fastened with gussets as described above. Before you permanently fasten deck frames, set them temporarily and check for alignment. Lay a straight edge at the center of the frames from Station 7 to the bow and one from Station 3 to the stern transom. If your side planks have been properly shaped, each group of frames will be in perfect line. If not, you must correct the side planks to bring them into line. Bevel the side planks to conform to the curve of the frames. Also at this point trim any excess off deck level of the bow assembly so that the deck fits it. Note that at Stations 3 and 7 the frames are double where

the deck is butt joined. If you plan a centerboard well, do not install Frame 8 until the well cap is in place.

While of course the finished boat will not have frames across the cockpit, install full frames from side to side at Stations 4, 5 and 6. Leave them until you are ready to install the side decks from Stations 3 to 7 and braces supporting the deck are in place. Temporarily nail a longitudinal strip to deck Frames 3 to 7 close to points where coaming will be installed. This will prevent lateral movement of frames. Cut away Frames 4, 5 and 6. On each side screw-fasten a strip $\frac{1}{2}$ " x $1\frac{1}{2}$ " extending from Frames 3 to 7, its top flush with deck frames. We will call these strips "cockpit liner." Glue the side decks and screw them to side planks, cockpit liner and frames with $\frac{3}{4}$ " No. 6 screws. Save cutaway frames and use to construct a hatch.

Before going any further, let us consider several optional uses of the

boat. If you plan to use her entirely with an outboard motor, you may dispense with the centerboard and well, mast hole and step, rudder and sails. By all means retain the oarlocks and buy a stout pair of 7' ash oars both for safety and convenience. Should you decide to depend on your own brawn and the little winter sail for reaching when the wind blows fair, the centerboard and well are not essential. Omit the summer sail and rudder as well. Steering is done with an oar by all webfooted baymen. There's a trick to this. Sitting on the edge of the cockpit stern, your knees on the floor, put an oar over the lee side and scull her head around until the sail fills. As she gains way the tendency of the oar is to come out of water. To prevent this, turn the blade from a vertical position through about 30° . The forward motion of the boat will then keep the oar under water. You must learn to do this with one hand as you will need the other to tend sheet.

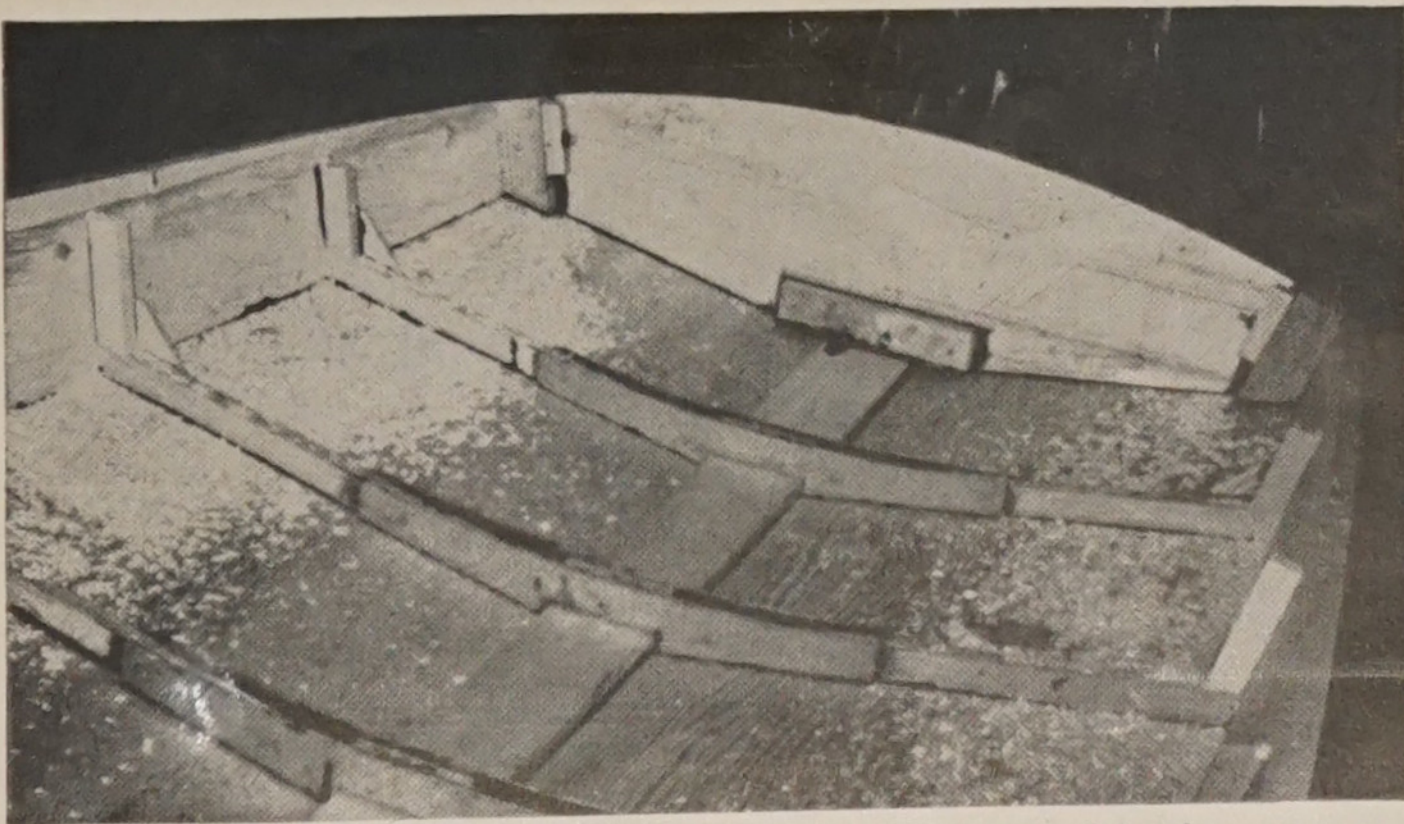
Finally you may wish to use *Widgeon* as an all-purpose boat that you will share with your family, and then you will shoot the works and build with all appurtenances.

The sneakbox is a grand little boat for children to learn to sail—safe and seaworthy. Witness the hundreds of one-design *Perrines*, named after their builder Samuel Perrine of Barnegat, New Jersey. Many of today's top skippers learned the rudiments of racing in these little sneakboxes.

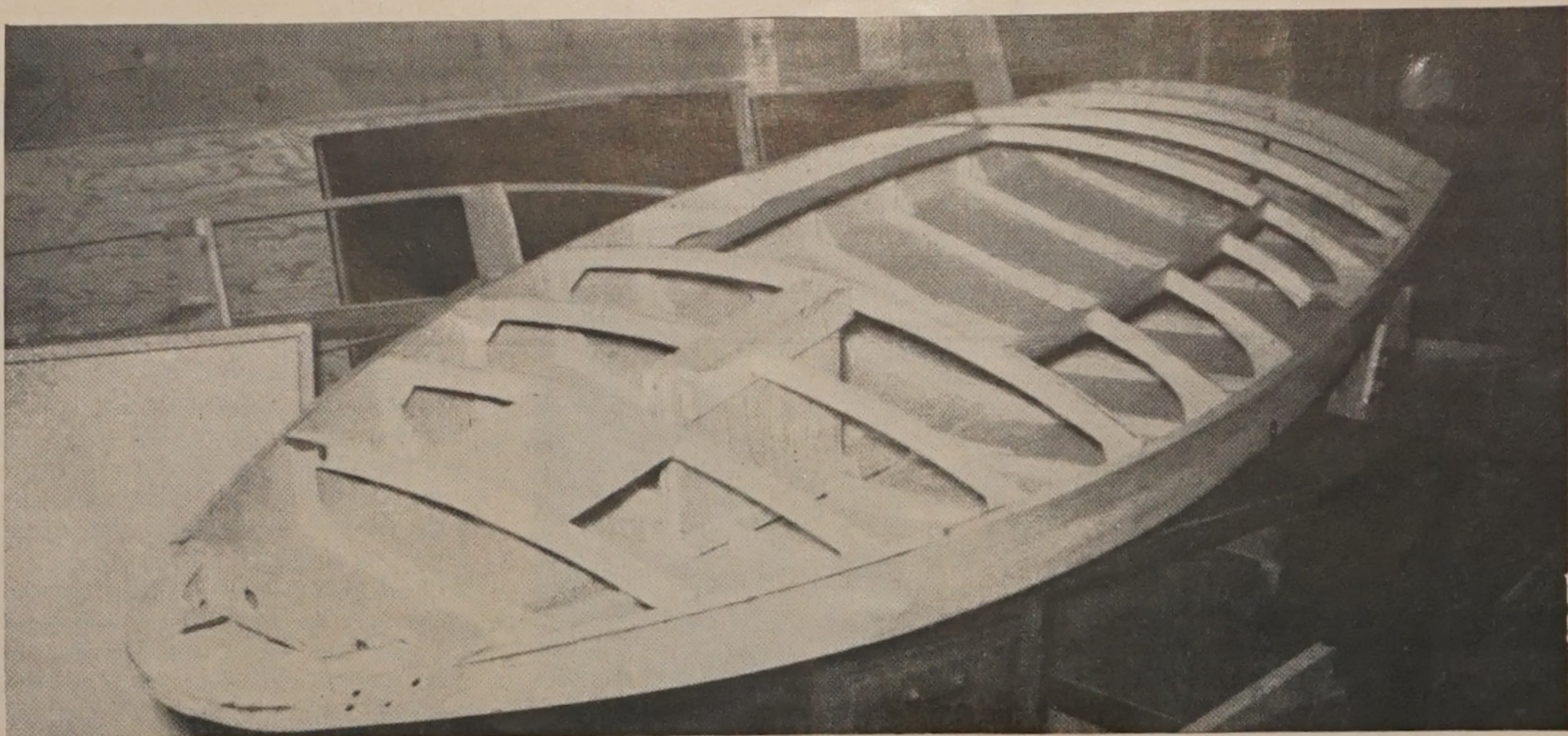
If you decide to install a centerboard, refer to the detail drawing on the plan, and build the well before you put on the forward deck. Cut a $\frac{3}{4}$ " slot in the center of the keel—carefully fit the head ledges, making the mortised end extend through the keel to be sawed off flush with the bottom. Ribs and gussets at Stations 7 and 8 must be cut through to take bed logs.

The well cap extends from Station 7 to 9 flush with deck frames. It is $\frac{3}{4}$ " x $3\frac{5}{8}$ " pine and here again head ledges are mortised into it. Frame 8 should not be placed until the well cap is in and then is cut and mortised to it. The well slot through the cap is $1\frac{1}{2}$ " wide to permit the $\frac{3}{8}$ " plywood sides of the well to come through and butt against the deck. Start the well from the bottom, planing the bed logs to conform exactly to the curve of the keel. Rabbet their upper edge to receive the $\frac{3}{8}$ " plywood sides which are carried up through the cap.

Use plenty of soft-setting marine glue where bed logs meet the keel and on other parts of the well. Secure bed logs to keel with 2" No. 10



The stern of completed hull. Now that the setup form has been removed, next step is to cut and install deck frames.



Before you permanently fasten deck frames, set them temporarily and check for alignment. For centerboard, don't install Frame 8 until well cap is in place.

screws on 3" centers. Paint the inside of well as it is constructed. Before decking, install mast step, partner which is flush with top of frames, reinforcing blocks under oarlocks, and bolt on outboard bracket. If you use sail only, attach a riser 1" x 1" to carry lag screws to hang rudder. If both motor and sail, make a detachable oak outboard bracket slightly tapered to drop into metal channels and forked to slip over the rudder riser. Just above the fork insert a 1/4" galvanized bolt from side to side of the bracket.

Bow and stern decks are 1/4" plywood and after careful fitting are glued and screwed to the side planks on 2" centers and to frames on 6" centers, all with 3/4" No. 6 screws.

Next install coaming around cockpit, oarlocks, 1/2" quarter-round trim around coaming, 1" half-round rail, 1" half-round gunwale, brackets and cleats for the decoy rack, skeg and of course the spray curtain.

Usually sneakbox oarlocks are made to fold down against the deck to get them out of sight. The inboard bottom side of the oarlock block is quarter-rounded so that it will fold inboard. The fit must be so close that the upright block jams slightly inside the vertical position and is held there by a small chock wedged into a deck cleat and a notch in the oarlock itself. Folding oarlocks are not too important. They may be solidly bolted to the deck if preferred.

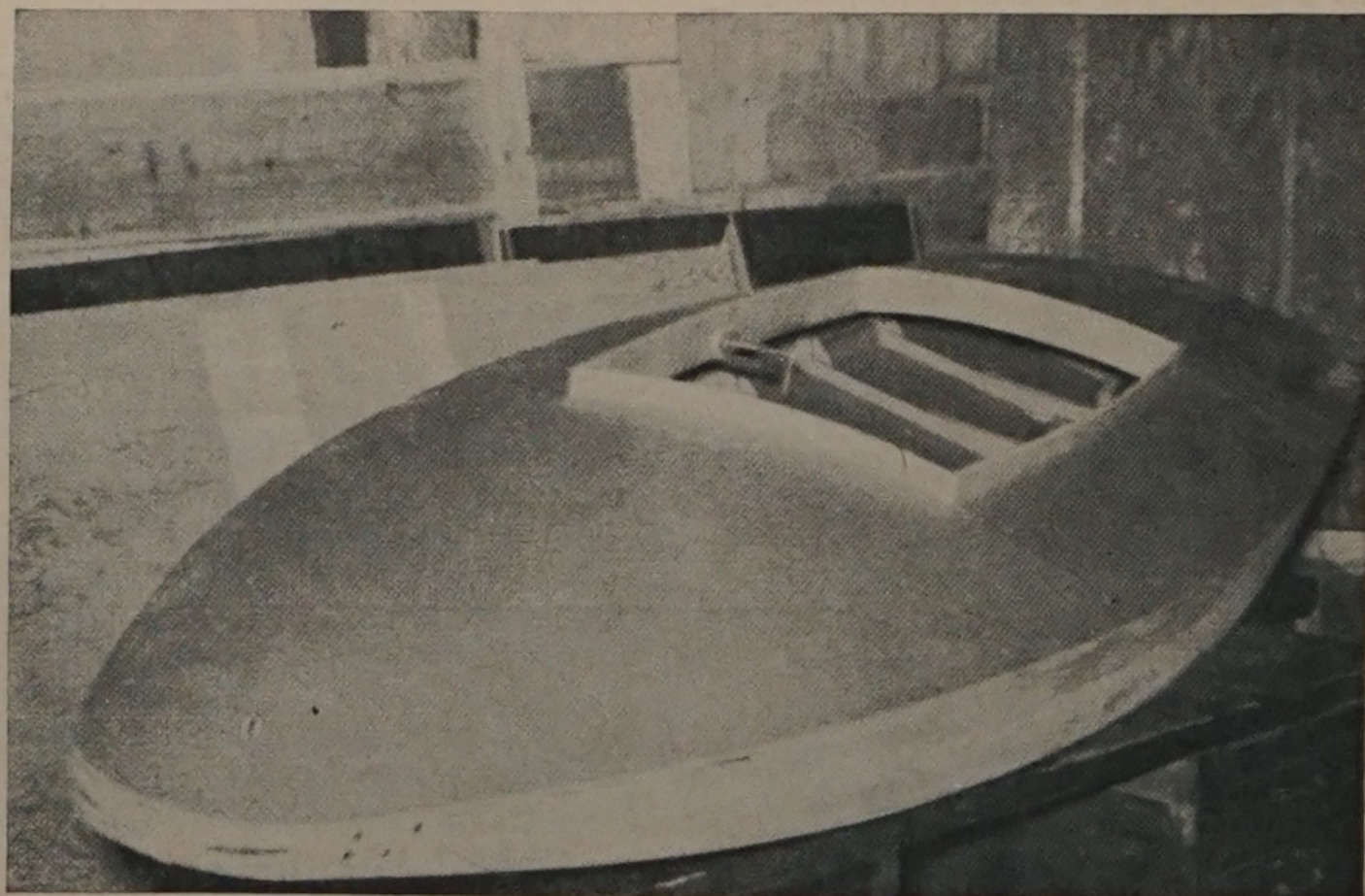
Bow and stern decks are 1/4" plywood, and after careful fitting are glued and screwed to the side planks on 2" centers; frames on 6" centers.

The decoy rack should need no explanation. It is made of 1/2" x 6" siding. Two cleats on the stern portion fit into sockets fastened to the stern transom. At the forward end the sides fit behind the oarlocks, and near the stern engage the end of a cleat on each side and finally hooks and eyes fasten them to the stern piece.

The rack is the handiest method of stacking decoys of which I know. It will accommodate 30 to 40 stools, sloped on their tails. If anchors are dropped from side to side in regular order, the decoys may be put out without fouling anchors or lines, provided you unload them in the reverse order.

The three deck frames (4, 5 and 6) cut out to make the cockpit are used

to frame a hatch. Cut two hatch ends 1/2" x 2" to fit the outside of the coaming ends and on the same curve. Temporarily fasten these in place and spring two pieces 1/2" x 2" around the cockpit side and fasten them to the hatch ends. Next notch the saved pieces of the deck frames (4, 5 and 6) halfway through to fit over the coaming and glue and screw them to the hatch sides at intervals. Over all, glue and screw a piece of 1/4" plywood to complete the hatch. At the stern end of the underside of the finished hatch, fasten a Z-shaped metal bracket that will slide snugly under the deck. At the bow fasten a hasp with staple on the deck so that a padlock will protect your gear stowed inside. The hatch is left ashore when afloat.



The midships section shows 1/2" x 6" shelves on both sides extending from Station 4 to 6. These are not essential but very handy to store shells, lunch, duck call and other small bits of gear.

Of vital importance to the hunter going to windward in cold weather is the spray curtain. With this gadget your sneakbox will shed water like a duck. Heavy seas rolling over the bow will part on the curtain and wash to either side. Start with a 1" curtain pole, 18" long. With this held upright at the center of the coaming, measure the distance to the top of one oarlock and double this. You will need a piece of 10-ounce tan canvas approximately 3' x 7 1/2'. Cut the long dimensions of the canvas exactly to your measured distance and sew a hem in one edge to take a 1/4" cotton rope. At the center of the hem sew a 3" triangular gusset and in it next to the hem place a grommet which takes the pointed end of the curtain pole. Put brass screweyes at the oarlock corners and fasten the rope ends to them. With the pole in place, draw the center of the canvas taut to a point a few inches aft of the mast hole. Turn the canvas under and fasten to the deck. With surplus material turned under all around, tack to deck on curve as shown on the plan and also down the side of the oarlock. When completed, cut off surplus material from the inside.

Here a word about propelling the boat with oars. They should be stout 7' ash. Baymen always row a sneakbox seated on the floor so that when the curtain is up no spray bothers them. The position when pursuing crippled ducks, if it is not blowing too hard, is to face the bow while kneeling at the stern and to push the boat forward with the oars while keeping the swimming duck continuously under observation.

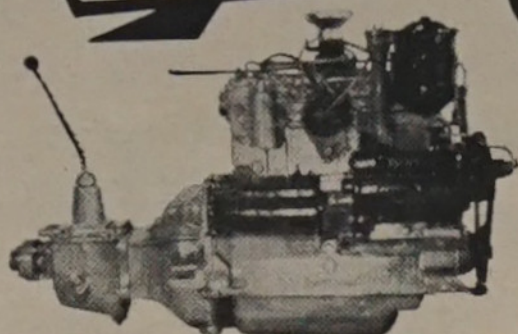
If you do build with a centerboard well you will find a "jab board" a great convenience. It is simply a 1" x 6" board 7' long, pointed on one end, with a cleat at the other to serve as a hand hold, that is thrust down the well into the bottom of the bay to hold the boat when setting out decoys.

Another convenience is a piece of tan canvas 3' wide and 4' long, waterproofed. In the rain it is rolled out to cover the cockpit except for a few inches where the hunter's head projects to keep watch.

Large-scale blueprints for this boat, made from the original drawings, are available at \$7.50 a set. They may be obtained by writing to Harry Megargee c/o SPORTS AFIELD, 959 Eighth Avenue, New York 19, New York.

For Your Boat...

JEEP 61 HP MARINE MOTOR



\$425.00 61 HP JEEP marine conversion by Stokes—the ideal power plant for many types of small craft. Offers plenty of ready and dependable power, ease of operation, real economy and the advantages of light weight! Brand new conversion parts, starter, generator, reverse gear, and genuine factory rebuilt block—complete, ready for fast, easy installation. For fresh or salt water use.

Big Savings...

Send for FREE Catalog Now!

STOKES MARINE SUPPLY CO.
Dept. SA-60, Coldwater, Michigan—U.S.A.
Please send me your New FREE 1960 Catalog and complete information on all available motors.

NAME _____
ADDRESS _____
CITY _____ STATE _____

EARN EXTRA MONEY The Sports Afield Way!

Could you use \$50.00 next month—in fact every month of the year? Would you be interested in a part-time opportunity to earn substantial sums, in your own community, with no expense or investment needed?

Hundreds of men—and women too—are doing just that: *earning extra money*, as representatives of *Sports Afield* by accepting subscriptions for all well-known magazines, right from their own homes. It is easy to obtain orders from your friends at work, members of your club and neighbors.

Mail the coupon below and we will send you complete information and everything you will need to start earning generous commissions now!

Sports Afield,
Dept. B60-B
250 W. 55th St., New York 19, N.Y.

Please send me complete details of your money-making subscription plan without obligation.

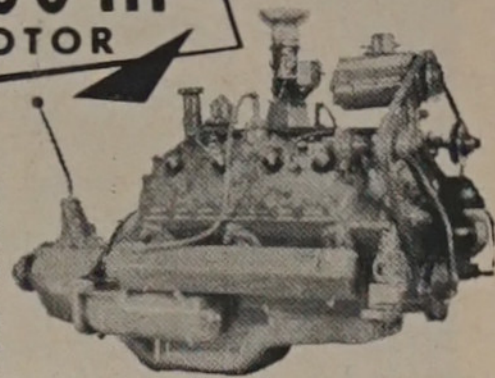
Name
St. & No.
City & Zone
State

Low Cost INBOARD MARINE ENGINES

SMOOTH ★ POWERFUL ★ DEPENDABLE

FORD 100 HP MARINE MOTOR

\$475.00



Want real speed and power—dependable service—and operating economy? Then here's the inboard for you—the Stokes 100 HP FORD marine conversion. The last word in engineering efficiency, peak performance. Comes complete with genuine factory rebuilt block, starter, generator, reverse gear. Built for salt or fresh water, quality throughout—at a bargain price!

Amazing low prices on big variety of marine conversions: Chevrolet V-8, Plymouth V-8, Dodge V-8, Ford 6, Studebaker Champion, Olds 88, DeSoto Fire-Dome, Chrysler V-8, Willys 6, and many others.

ALL KINDS OF SUPPLIES—

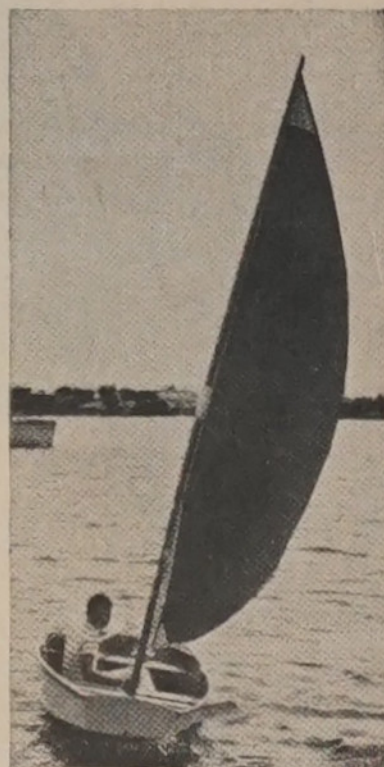
Whatever your marine needs, Stokes can supply you—and SAVE you money! Big selection of new, used, and rebuilt engines, gasoline and diesel, 2 to 550 HP. Stock list Free! Big assortment of Conversion Kits, all complete! Plus marine supplies and equipment of all kinds, at low prices. Send for Big FREE Catalog.

STOKES MARINE SUPPLY CO.
COLDWATER, MICHIGAN—U.S.A.

ROBERTS KITS

FAMILY
FUN
—
EASY TO
BUILD
—
QUALITY
MATERIALS

8' Rowing and
Sailing Sea Shells
Sail Conversion Kit
(converts prams to
lively sailboats)
8' Skimmer
(penguin pram)
Penguin and
Blue Jay Sailboats



The famous Roberts Sea Shell

Roberts kits and boats made from top grade marine plywood—bronze fastenings—all parts pre-cut with pre-assembled frames—simple, step-by-step easy to follow instructions.

A kit-ful of happy days for young and old.

Write for free catalogue. Semi-finished and water-ready boats and hydrofoil-equipped BAT included.

ROBERTS INDUSTRIES, INC.
71 Post Road, Branford, Connecticut