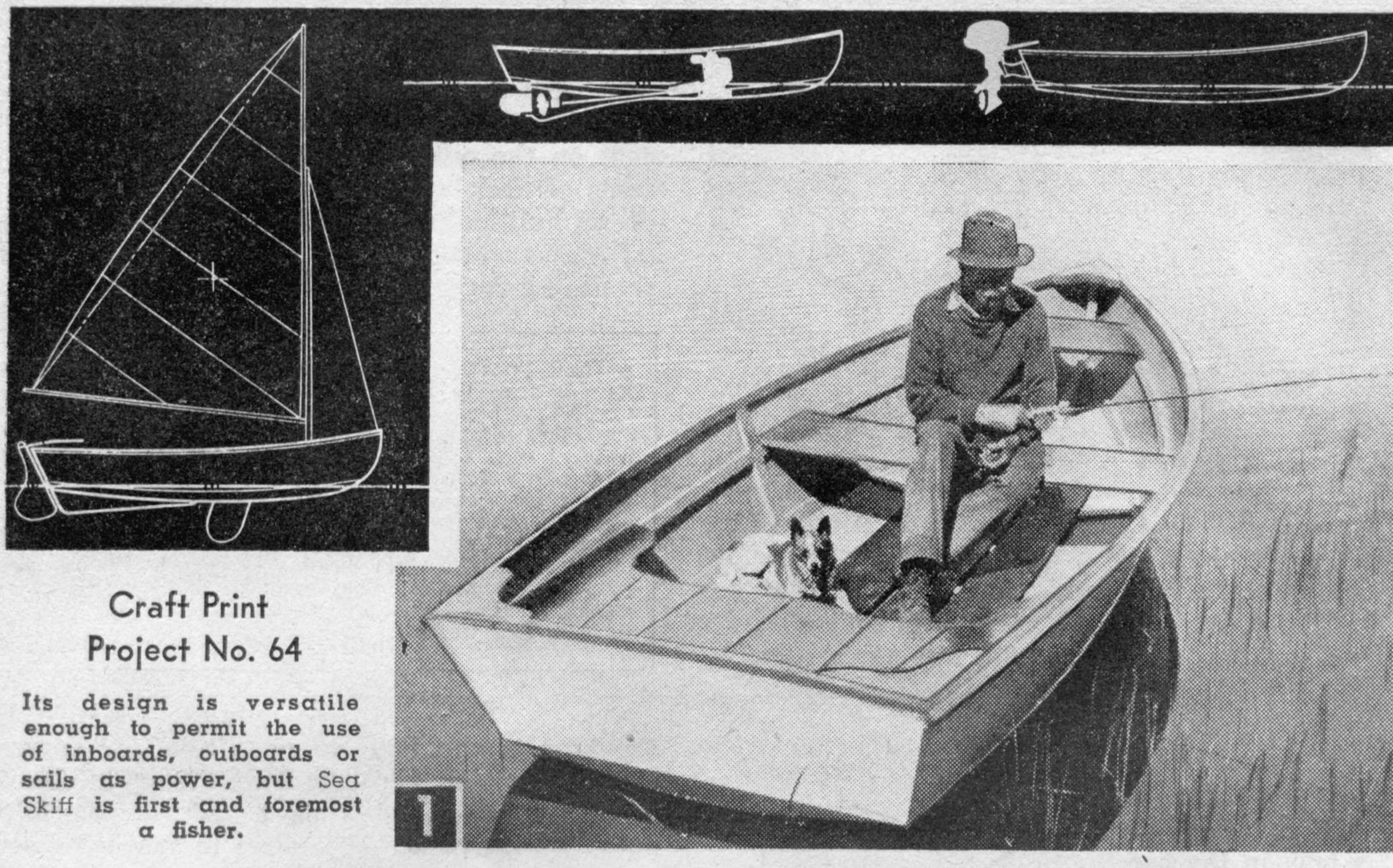


Craft Print
Project No. 64

Its design is versatile enough to permit the use of inboards, outboards or sails as power, but Sea Skiff is first and foremost a fisher.

SEA SKIFF

Designed for the man who likes to fish, this sturdy craft can be rowed, powered by an outboard or by an inboard, or driven by the wind

By WILLIAM D. JACKSON
Naval Architect

STATEMENT OF USES

USES: Seaworthy craft for use on any waters anywhere, for boat liveries as well as for personal use.

TYPE: Skiff.

LENGTH: 13 ft. 9 in. to outside stem.

BEAM: 60 in.

SEATING CAPACITY: Five passengers.

POWER: Oars, outboard, air-cooled inboard, or sail.

SEA SKIFF is quickly built over forms for construction of one or for several boats. It is planked with waterproof plywood and will retain its leakproof qualities even if left to dry in the sun for long periods. An ingenious method of framing makes for a sturdy boat and provides a hull that will give many years of trouble-free service.

The general design presents a sturdy skiff that may be used on any waters anywhere. The boat may be rowed, powered with air-cooled inboard motors or outboard engines, or rigged for sailing. As a sailer it is dry, light, and fast in a good breeze.

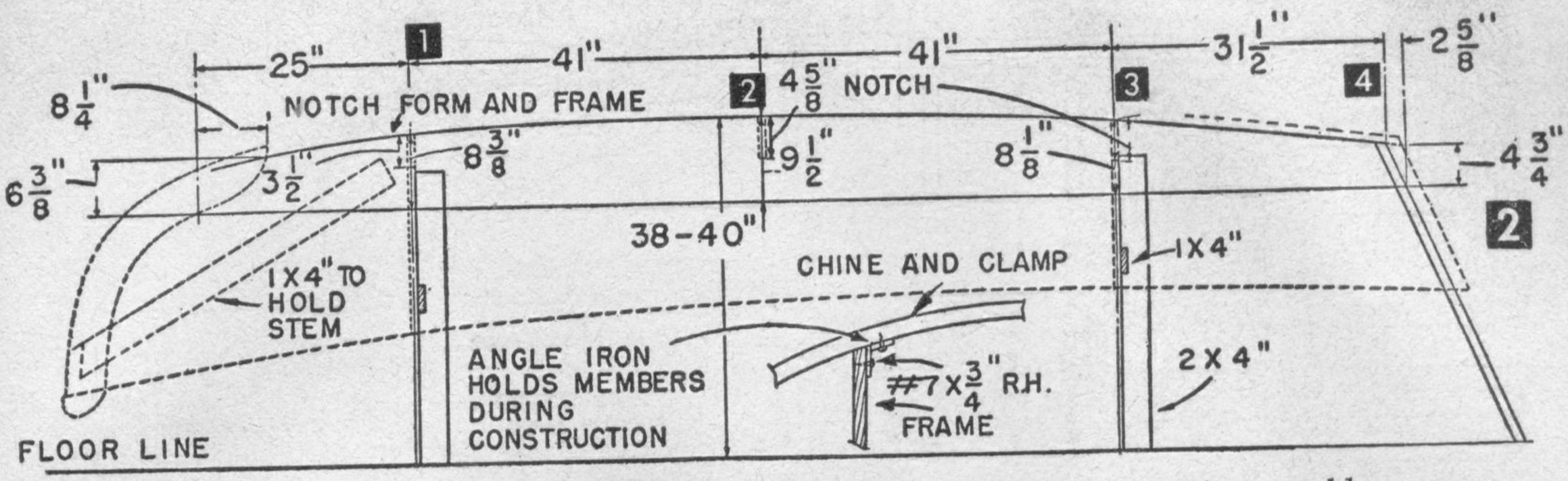
Start construction by obtaining the materials listed in the Materials List. Then saw the form (Fig. 2) to shape and mount it on 2 x 4 legs at a convenient working height. To construct the mould frames, stem and transom (Figs. 3 and 4) accurately, draw full-size paper patterns of these parts, lay your material upon outlines, mark and cut to shape, reassemble on the pattern and fasten. The transom is cut from ¾-in. plywood with a ¾ x 3-in. frame, fastened with #8 x 1½ *fh* screws, inserted from the aft side of the transom.

Saw the mould frames from 1x6; fasten at chine joints with ⅜-in. plywood gussets. If these moulds are to be used several times, glue and screwfasten the gussets, afterward attaching cross pieces to prevent misalignment. The stem is sawed to shape as shown in Fig. 3.

Now mount the transom, mould frames and stem on the form and hold in place by bracing. With everything secured, spring a light batten over the framework and mark correct beveling so that plywood will lie evenly and fair at all points.

With all parts beveled, cut notches for clamps, chines and keel in all parts. Spring the keel in place and attach to transom, frames and stem notches with two #10 x 2-in. *fh* screws at each joint. Be careful not to attach any members to the moulds, as the hull is later to be lifted clear of the form and moulds when planked.

Now secure the chines. Fasten both chines simultaneously to prevent wringing framework out of shape. Use one #10 x 2-in. *fh* screw at transom joints, bevel the ends to fit the stem and fasten in the same way. If the chines have a tendency to slip off the mould-frame notches, hold temporarily with small angle irons screwed to moulds and chines (see detail, Fig. 2). When hull is planked, simply remove the screws and lift the hull clear. Continue by attaching clamps in



similar fashion, fastening at transom and stem with one #10 x 2-in. *fh* screw to each joint.

Trim and fair the entire framework so the plywood will lie evenly at all points. Hull may be covered with either full-length or 8-ft. length plywood. Using 8-ft. lengths, cover the sides first with a length of plywood clamped in place. Mark and cut to shape. A butt strap ¾ x 4 in. fitted between clamps and chines secures the butted joints of plywood on sides and bottom. Before fastening the plywood, coat chines, clamps, transom and stem with Weldwood glue. Place plywood in position and fasten with #8 x 1-in. *fh* screws spaced about 2 in. apart.

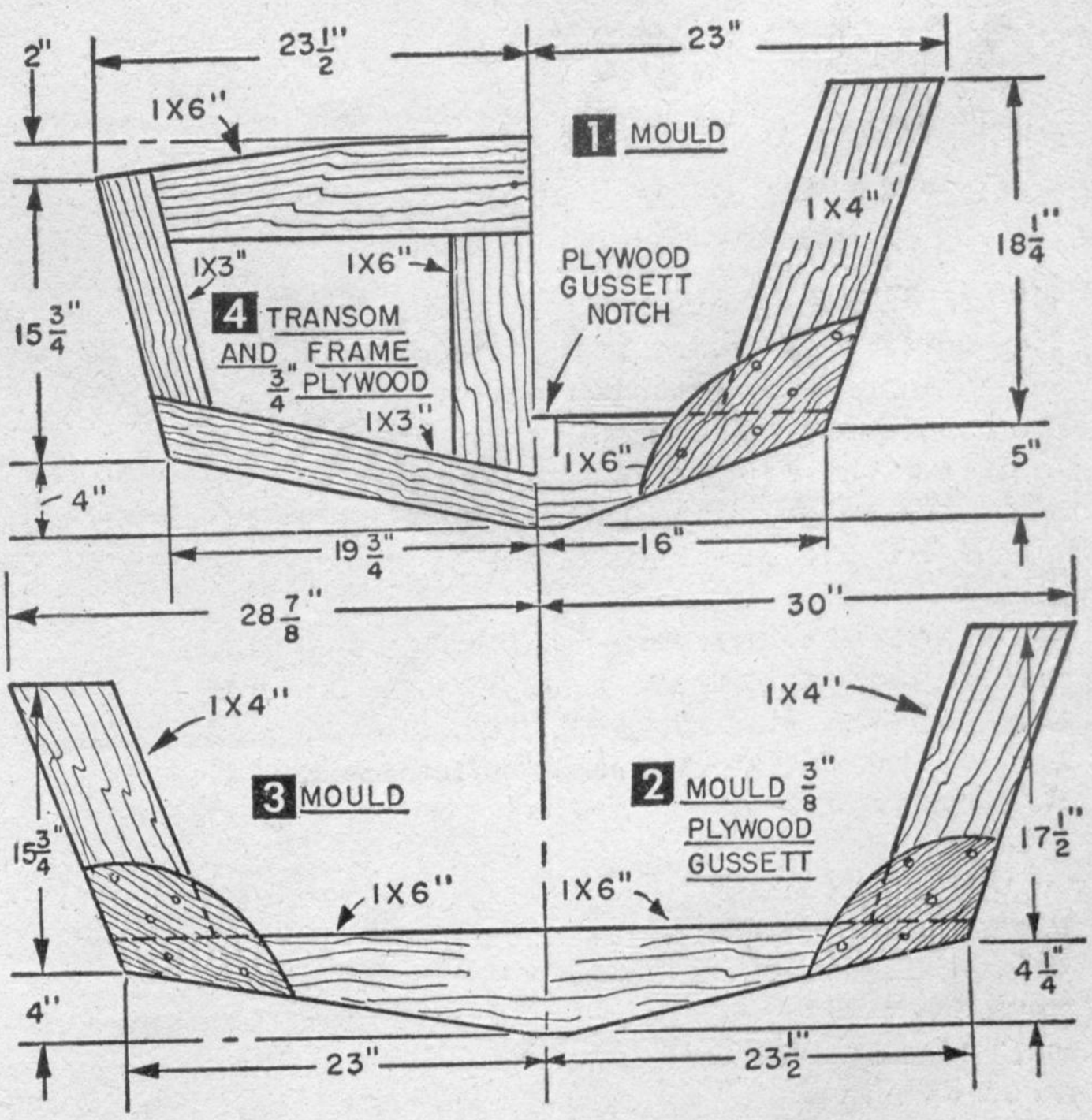
With both sides attached, trim edges evenly. Install the skeg (if you don't plan on using an inboard) and short keel. The skeg is fitted closely and held temporarily with a few screws. Later, when the hull is turned over, the skeg is fastened with screws from the inside.

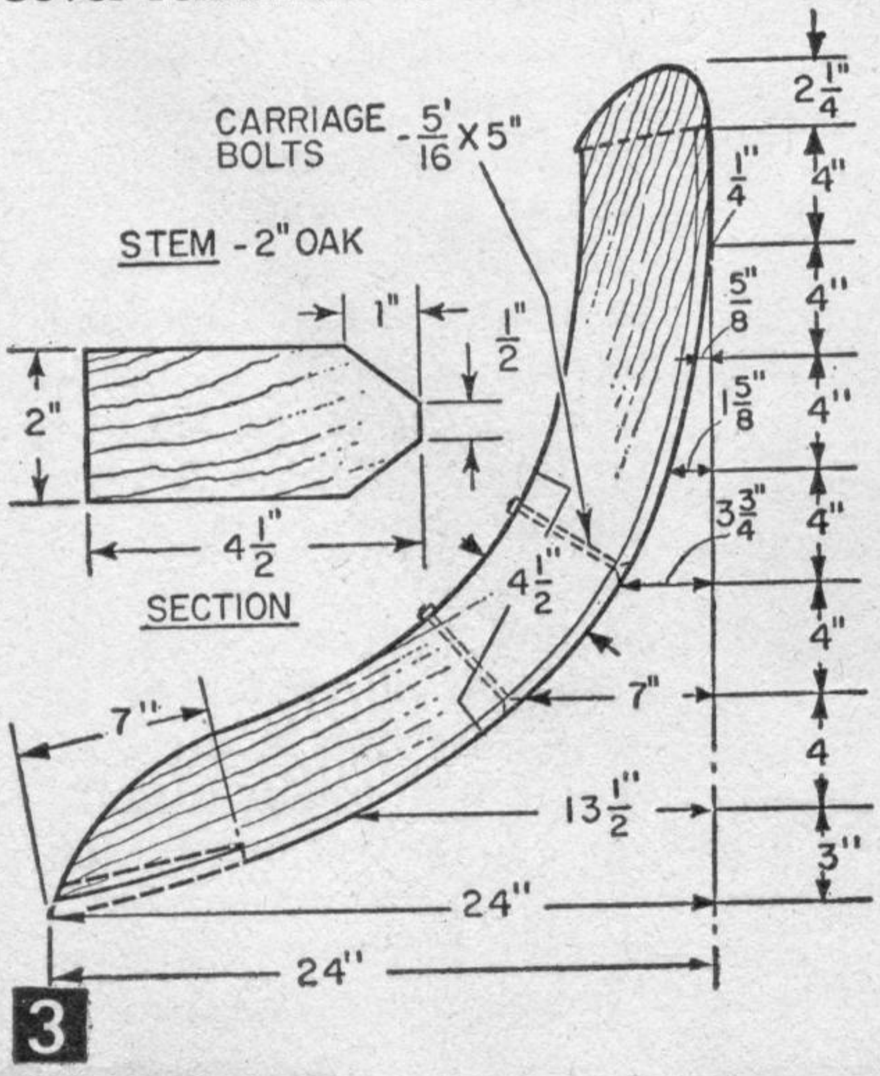
Lay 8-ft. lengths of plywood in position on the bottom, marking and cutting to shape. Before attaching plywood, coat all adjoining surfaces with Kuhls aviation glue. Lay cloth strips about 1-in. wide on glued area, recoat and lay plywood in position, fastening with #8 x 1-in. *fh* screws spaced about 2-in. apart. Cover remainder of bottom similarly —and *don't* fasten plywood to moulds.

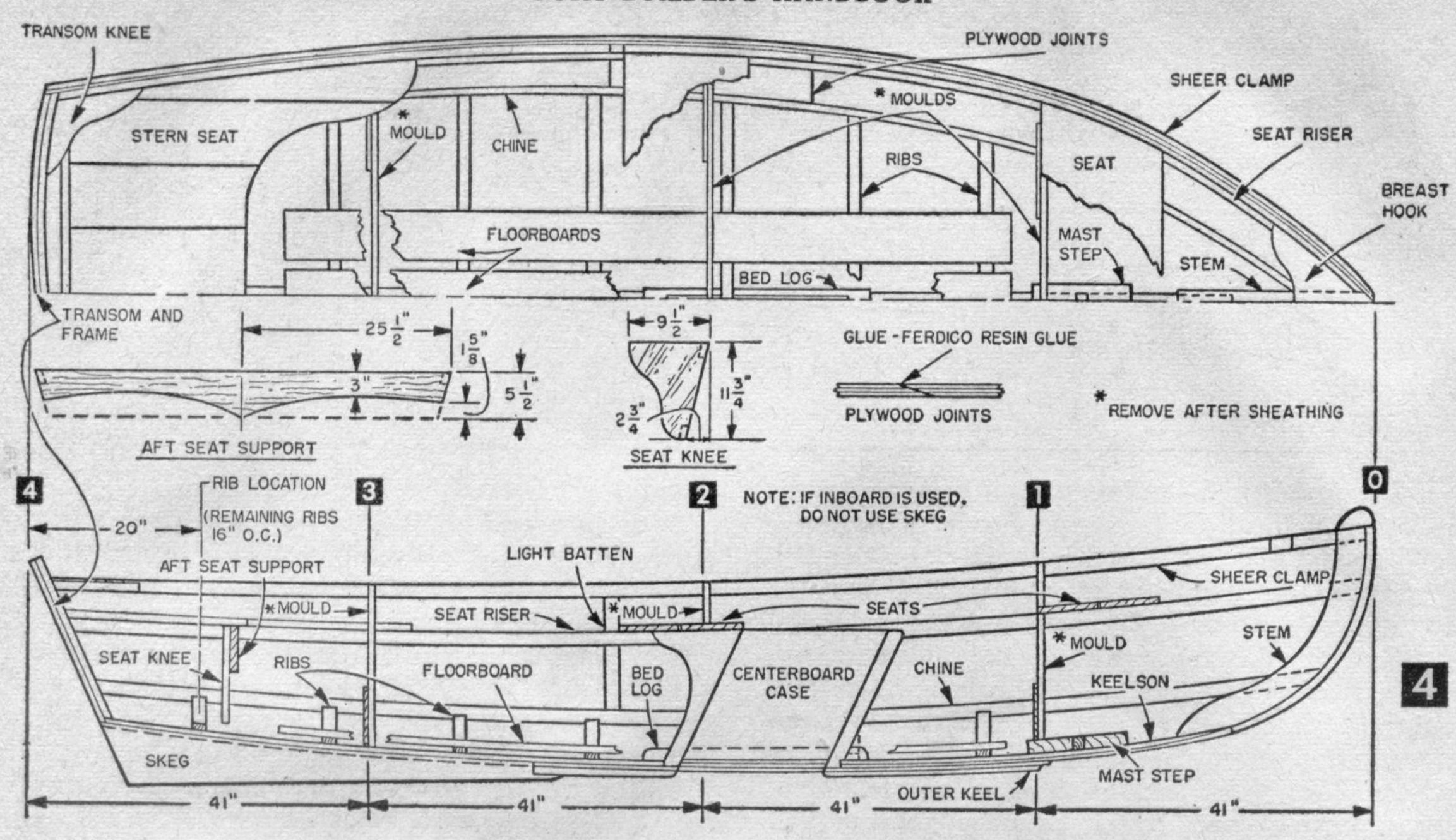
Trim fore end of hull along stem and cover exposed edges of plywood with an outer stem ½ x 1½-in., softened with hot water, bent and screw-fastened in place.

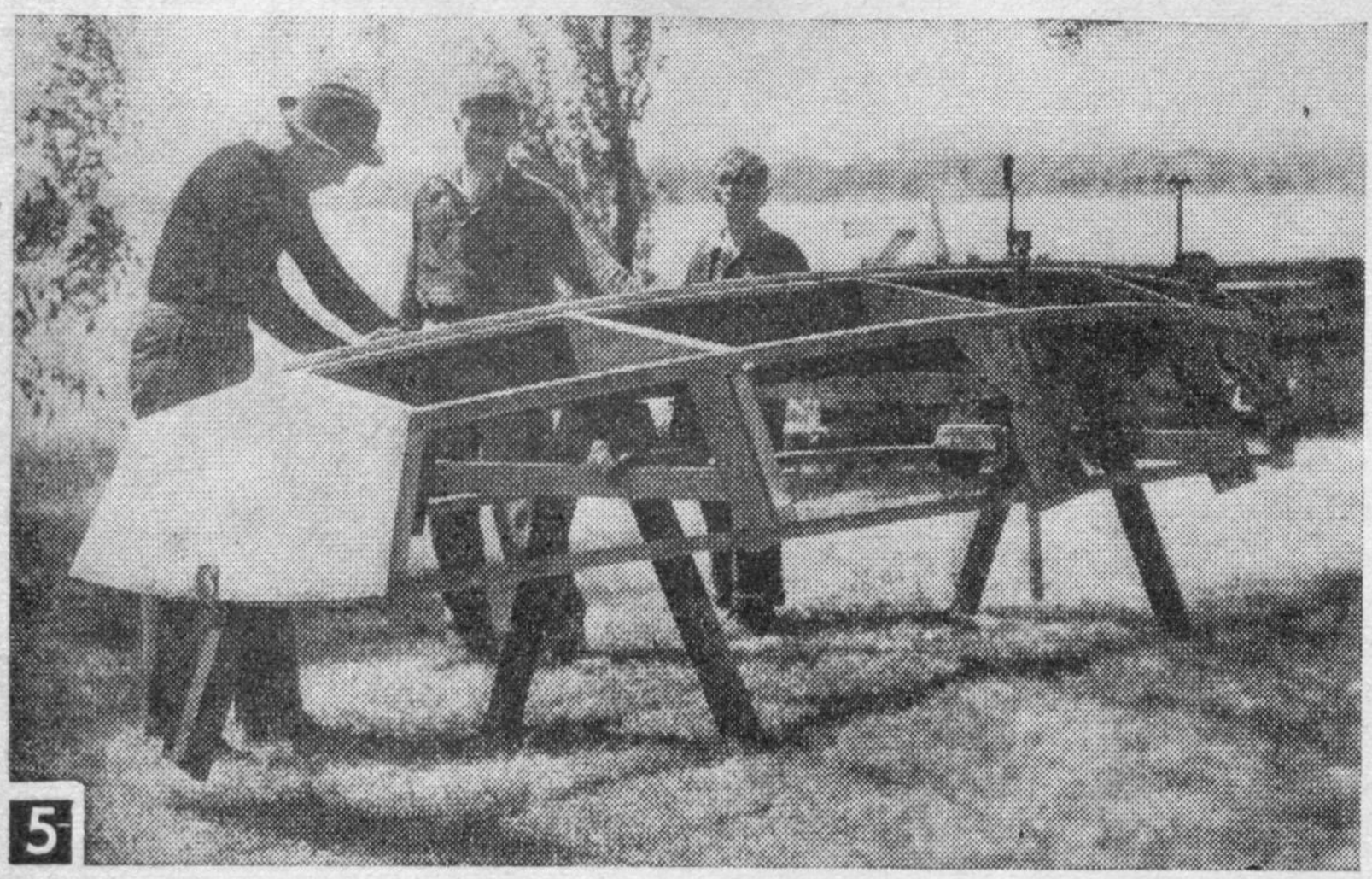
Now remove the hull from the form and turn it right side up. Seat risers are attached by springing to sides and securing with #8 x 1-in. *fh* screws inserted from outside hull.

Fasten ribs in place next. Mark locations on keel and secure each rib with two #8 x 1½-in. *fh* screws. The center of each rib is drilled and



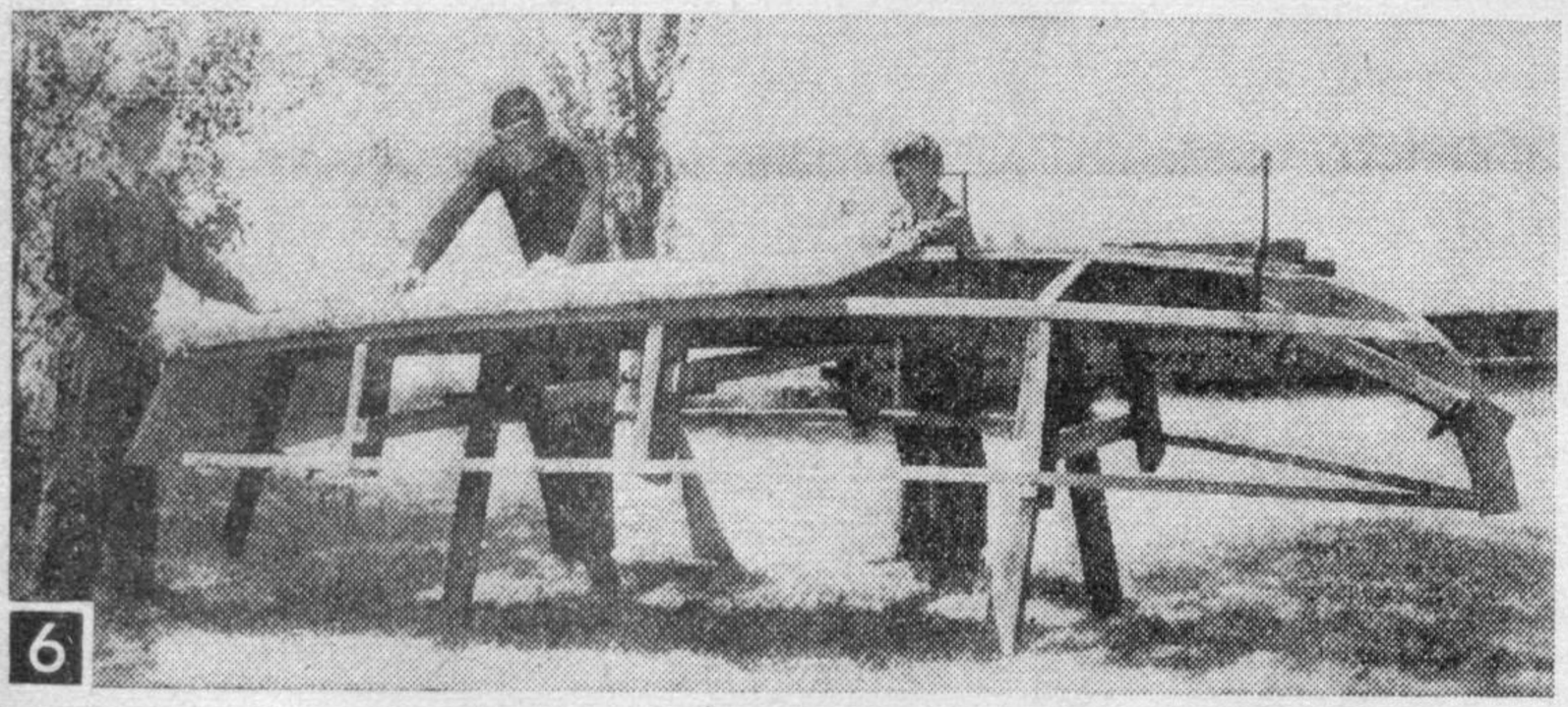






5

The completed framework.



6

Covering the frame with plywood.

a galv. shingle nail inserted, clinched on the inside. A little Weldwood glue under each rib will ensure a rigid job.

Install seats as indicated, fastening them to the risers with #8 x 1¾-in. *fh* screws. Cut the breast hook and transom knees to fit and fasten with #10 x 2-in. *fh* screws. Fasten mouldings in place with #8 x 1¾-in. *fh* screws spaced about 8 in. apart. Screwfasten floor boards of ⅜-in. plywood or ⅝ x 6-in. boards. Smooth hull and apply one or two coats of sealer. Follow with two coats each of white primer and paint or enamel. If you cover bottom with fiber glass (materials and instructions for application of this material are available from Herter's Inc., Waseca, Minnesota), complete freedom from worm damage is possible in salt water and strength is greatly increased in either salt or fresh water.

For use of *Sea Skiff* as a sailboat, see Fig. 7 for complete details. An air-cooled inboard, such as the 1¾ *hp* Reo Trollabout Inboard Marine Engine (Williams Marine Co.) or a 3.6 *hp* Clinton engine, may be mounted off center or on the center line of the boat. With an off-center installation, the centerboard used in sailing can be left intact and you can use sail also. You may prefer to mount your engine on center, however, and forego sailing equipment. If you mount inboard on

11 1/8"
SEAT RISER (1X12")
3/8" PLYW. SIDES FIT HERE
3/4" STOCK
14" APPROX. CUT TO FIT
2"
INSIDE CASE
15"
2"
CENTERBOARD CASE
NOTCH
30°
KEEL
21 1/2"

RUDDER
1/2 - 3/4" PLYW.
WATERPROOF WITH 3 COATS OF CASTOGLAS
20"
1 3/4"
30°
2" SQ.
9 1/4"

14 1/2"
3/8" PLYW.
37 3/4"
DAGGER TYPE CENTERBOARD
2" SQ.
46"
WATERPROOF WITH 3 COATS OF CASTOGLAS

FLEXIBLE WIRE TRAVELER
1/8"
SCREW EYE
SHEET
BOOM
SLIDE
SHEET TRAVELER

ALUMINUM 1/8 X 1"
SHEAVE IN MAST TOP
BOLT 1/4 X 2 1/4"
1" #8 R.H. SCREWS
THIMBLE
2"
3"
6"
TAPER ROPE, SERVE WITH #18 - #20 WIRE, AND WIPE WITH SOLDER

15"
GAFF 10'-0"

1/4" MANILA HALYARD
1" #8 F.H.S.
3/4" BLOCK
TOPPING LIFT

2 3/4"
12"
1 1/4"
1 1/2"
MAST
2 1/2"
3/4"
1 1/4"
FULL WIDTH 2/3 OF WAY TO TOP; THEN TAPER TO 1 3/4" SQ., ROUNDING AFTER GLUE DRIES

8" ROACH
LEACH 17'-0"
1/4" MANILA OR COTTON RINGS
CENTER EFFORT 85 SQ. FT.
LUFF 14'-6"
6'-10"
STRAP IRON JAWS BEND EDGE WISE (SEE DETAIL BELOW)

1 5/8"
41"
TILLER (1X4" REQ)
SAIL
BOOM
MAST
SLIDE-GOOSENECK
#2 MOLD FRAME LINE
MAST 12'-0"
15"
1 5/8"
2 1/4"
BOOM AND GAFF SECTIONS

BLOCK ON EYE STRAP
FOOT 10'-9"
1/4" LINE
NYLON OR MANILA
BOOM 11'-0"
2" AT STA. #3
54"
15"
4" NOTCH
7 1/2"
4 1/2"
MOULDING
1/4" BLOCK
12-14"
BELAY CLEAT SEAT
3/8" PLYW. SIDES
3/4" OAK CORE
SKEG & SECTION
1 3/4"
1/4" TURNBUCKLE PETITE STYLE
3 1/2"
5"
25°
8 1/8"
SEAT RISER LINE
15"
9 1/2"
C.L.R.
C.E. SAILS
*CHINE LINE
8 3/8"
3/16"
1 1/4"
3/4"
#3
#2
#1
*LOCATE FROM MOULDS, STEM, AND TRANSOM

GAFF
1"-#8 FHS
MAST
1/8 X 1 X 13" STRAP IRON JAWS
BEND EDGE-WISE

1 1/2"
3 1/2"
12"
1 1/4" SQ.
MAST STEP
2 X 4" STOCK - FASTEN WITH 2 1/4" - #10 F.H.S.

1/8 X 1" ALUMINUM
1"-#8 F.H.S.
INWALE 3/4"
3/4" BLOCK
1/4" BOLT
CHAIN PLATE

MATERIALS LIST—SEA SKIFF

No.	Size and Description	Use
	LUMBER REQUIRED	
2	3/4 x 1 3/4" x 14 1/2'	clamps
2	3/4 x 1 3/4" x 14 1/2'	seat risers
2	3/4 x 1 3/4" x 14'	chines
2	7/8 x 4" x 12'	keelson
1	3/4 x 1 1/2 x 8'	outside keel
2	3/4 x 1 1/4" x 14 1/2'	moldings
6	1/2 x 1 1/4" x 4 1/2'	ribs
1	3/4 x 3" x 8'	transom frame
1	1 1/4 x 10" x 3'	breast hook and transom knees
1	2 x 8" x 4'	stem
1	1/2 x 1 1/2" x 4'	outside stem
3	3/4 x 8" x 12'	skeg seats
1	1 x 4" x 12'	aft seat support
1	1 x 6" x 12'	mold frames
1	2 x 10" x 12'	mold frames form
	PLYWOOD REQUIRED	
4	3/8" x 4 x 8'	planking
1	3/4 x 24 x 48"	transom
	waste from 3/8" plywood or 5/8 x 6" boards	floor boards
	FASTENINGS	
4 gross	1" fh screws	
6 dozen	1 1/2" fh screws	
3 dozen	1 3/4" fh screws	
3 dozen	#10 x 2" fh screws	
1 lb.	1 1/4" galv. shingle nails	
2	5/16 x 5" carriage bolts	
1 pt	Kuhls aviation glue	
1 lb	Weldwood resin glue	
	paint as needed	

center, move the amidships seat forward. The Reo Trollabout comes in kit form (about $100 for fresh water installations, $125 for salt water), with complete instructions for installing. For use of *Sea Skiff* with outboards, cut out transom as indicated in Fig. 8, or attach an outboard motor bracket (such as that made by the Hadley Mfg. Co., 2242 Smead Avenue, Toledo 6, Ohio), to the transom.

(Note: Possessing the advantages of great strength together with light weight, and more easily built than craft that follow conventional rules of construction, *Sea Skiff*, as mentioned earlier, is easily mass produced. Moreover, a set of full-size paper patterns—required for one or 100 *Sea Skiffs*—lend themselves to rapid mass production.)

● Craft Print No. 64 in enlarged size for building Sea Skiff is available at $1. SPECIAL QUANTITY DISCOUNT! If you order two or more craft prints (this or any other print), you may deduct 25¢ from the regular price of each print. Hence, for two prints, deduct 50¢; three prints, deduct 75¢, etc. Order by print number. To avoid possible loss of coin or currency in the mails, we suggest you remit by check or money order to Craft Print Dept. B58 (no C.O.D.'s or stamps), SCIENCE AND MECHANICS, 450 East Ohio Street, Chicago 11, Illinois. See coupon on page 192. Now available, our new illustrated catalog of "186 Do It Yourself Plans," 10¢. Please allow three to four weeks for delivery.

