

Playboy—14' SPORTS RUNABOUT

By WILLIAM D. JACKSON, N.A.

Craft Print Project No. 201

SHARP! Styled like a sporty inboard—that's *Playboy*. From her wrap-around spray rails to the walk-through entrance to the forward cockpit, *Playboy* simply exudes class—superior of any factory built runabout in looks and performance. With a Johnson or Evinrude "25", *Playboy* will step around lively at 32 *mph*. Extras include a "glove compartment" for fishing gear, charts, odds and ends, smooth floor to save scrambling over frames and mahogany planking and deck. Ideal for sports, *Playboy* packs plenty of power for skidding aquaplanes or water skis or hauls up to six persons—seated.

Even with the convex bottom, you can plank *Playboy* with plywood sheets that keep it dry and take all the punishment a fast ride on a choppy lake can dish out. It will

Playboy will seat six persons comfortably in fore and aft cockpits. Note built-in "glove" compartment.

USES: Deluxe outboard runabout. For extended trips afloat, hauling water skiers and aquaplanes, or as a sporty fishing craft.

LENGTH: 13 ft 6 in. over all

BEAM: 5 ft 9 in. over all

DEPTH: Fwd. 31 in., amidships 25 in., aft 18 in.

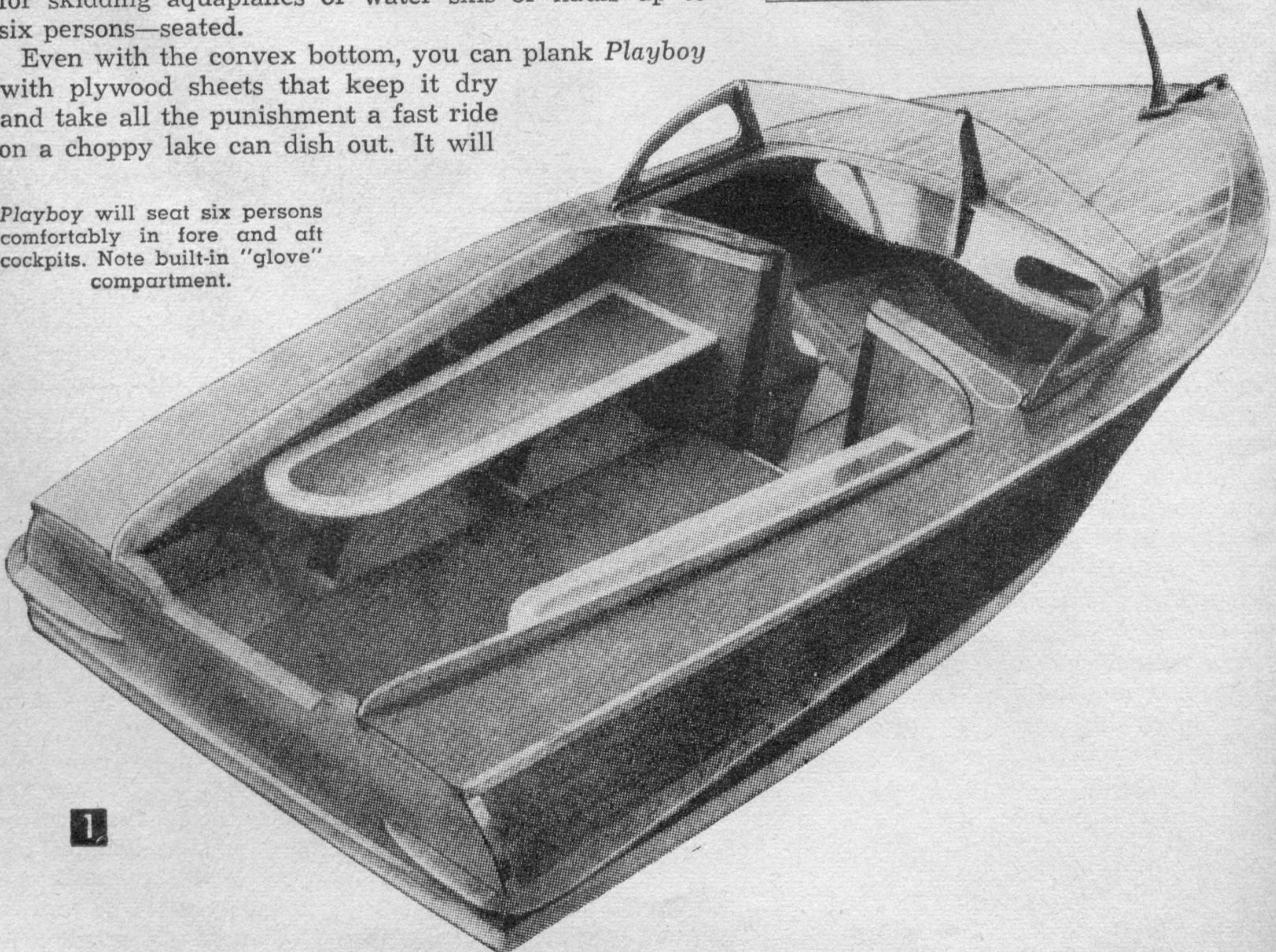
WEIGHT OF HULL: 300 lb with all equipment aboard except motor

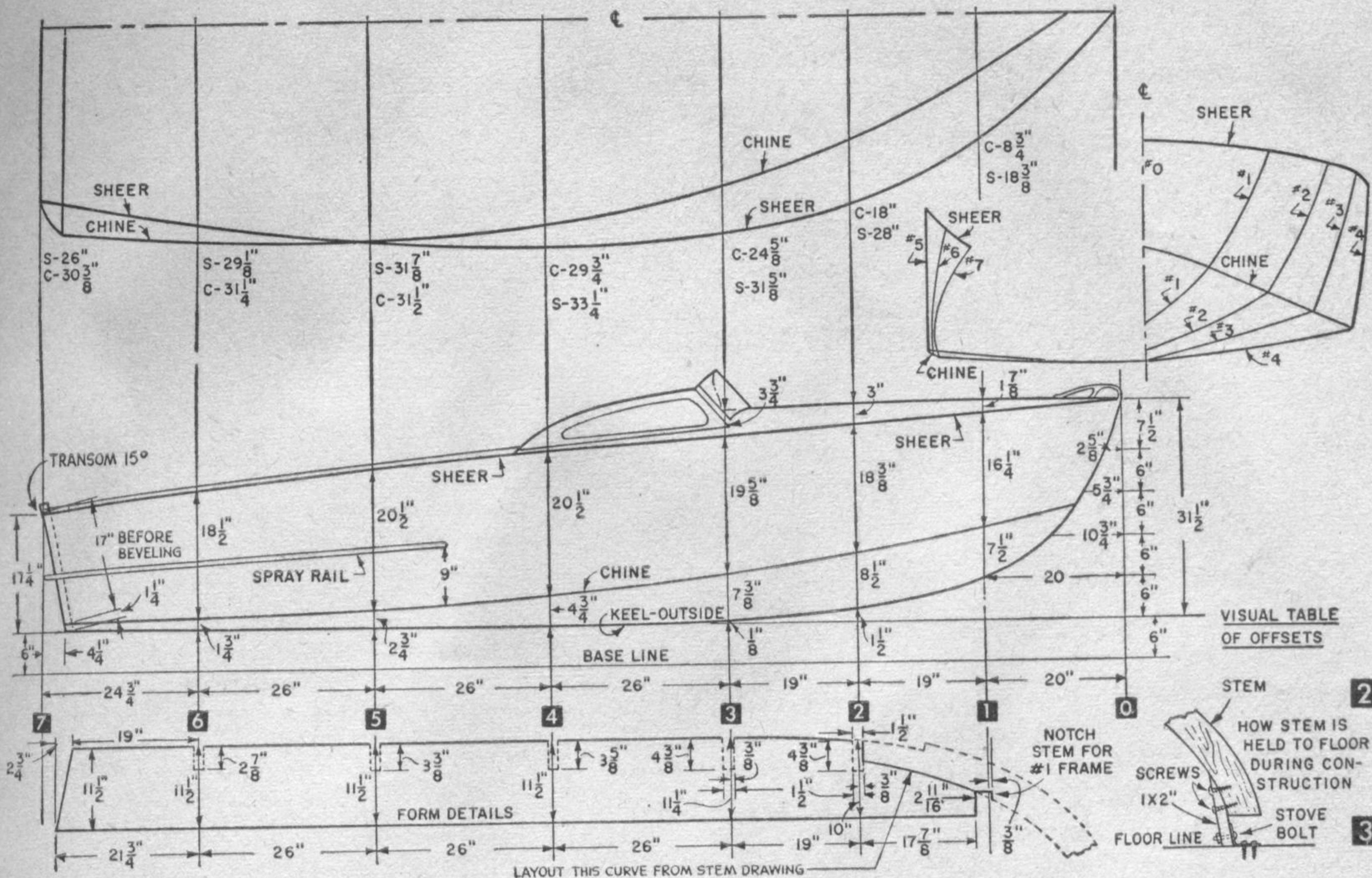
CAPACITY: Seats two persons forward—three or four aft

CONSTRUCTION: 3/8-in. plywood convex bottom—1/4-in. mahogany plywood sides

SPEEDS: EVINRUDE 25 Big Twin or
JOHNSON 25, 1953 models.... 32 MPH
MARTIN "20" 25 MPH

COST: Hull built with mahogany.....\$200.00
Hull built with fir..... 150.00
Gear shift and throttle 40.00
Motorapprox. 395.00





cost about \$150-\$200 to build a copy of *Playboy*, and you'd have to pay around \$650 for its equal.

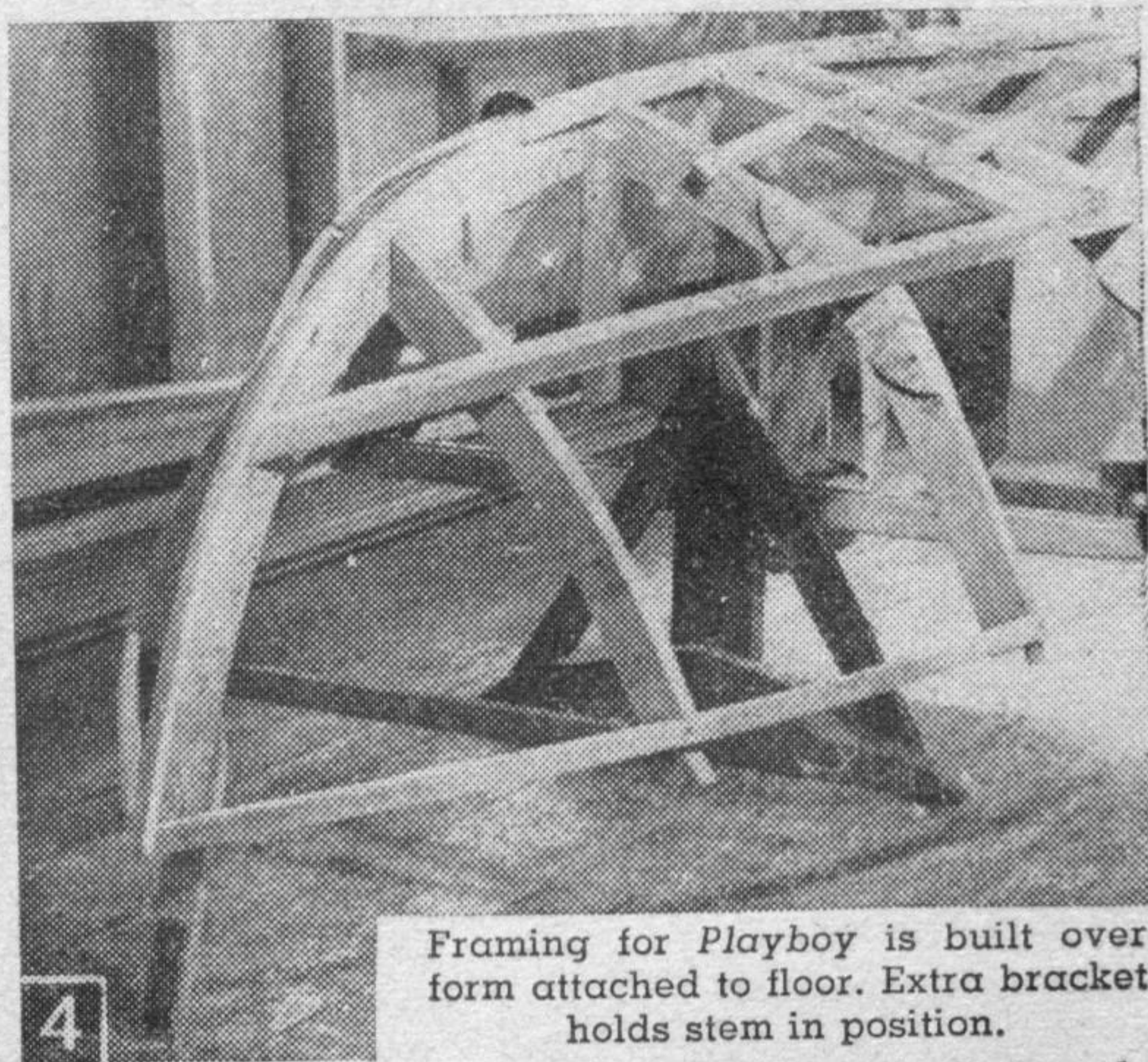
Building the frames are first. On a roll of red rosin paper (available from your lumber dealer), draw patterns full size of all frames and stem (Figs. 7 and 8). Transfer the shapes of paper patterns to the building material with a toothed dress maker's wheel, or punch outline through with a nail or awl.

Starting at station #0, the stem, saw the two outer stem pieces from $\frac{3}{8}$ -in. plywood to shape and the inner core from oak or fir. Coat all contact areas of these stem pieces with *Weldwood* glue, clamp together and lay aside to set.

The transom is $\frac{3}{4}$ -in. plywood backed up with a frame work (Fig. 8). Diagonal pieces slant towards the keel, to transmit strain and engine vibration directly to keel. The center of these diagonals is filled solid with two wedge shaped pieces. Glue and screwfasten framing to transom with #8 x $1\frac{1}{4}$ -in. fh screws. Cover diagonal braces and filler blocks with $\frac{1}{4}$ -in. plywood screwfastened with #6 x 1-in. fh screws. Lay the transom in a flat position until the glue is dry and continue on with the other frames.

Frames #5-6 are similar in construction. Saw side and bottom members to shape and fasten joints at chine with two $\frac{3}{8}$ -in. plywood gussets screwed to the frames with #6 x $\frac{7}{8}$ -in. fh screws—first coating contact surfaces of gusset and frame with *Weldwood* glue.

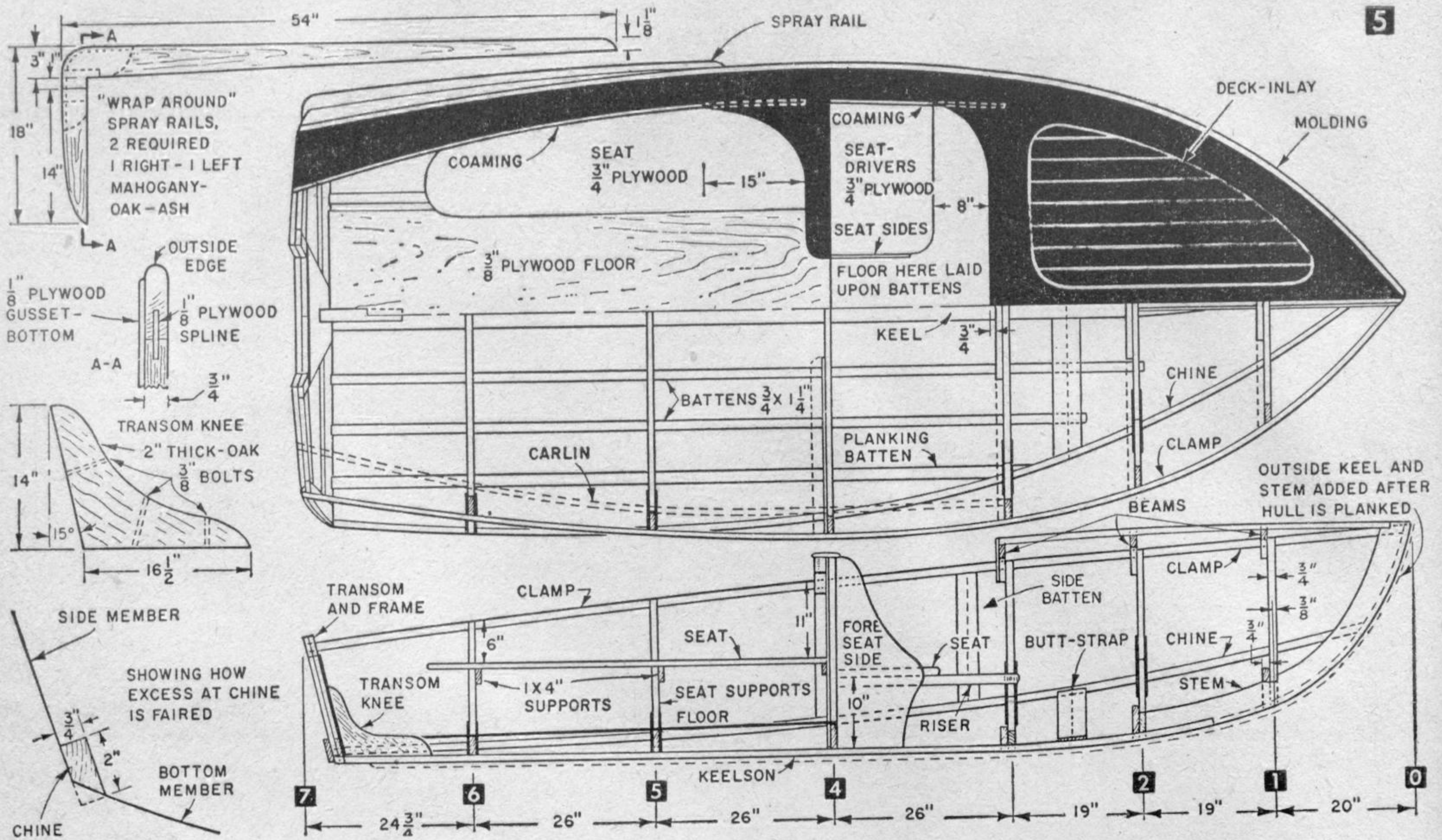
Frame #4 is similar except that $\frac{3}{8}$ -in. plywood bulkheads are glued and screwfastened to aft side of frame with #6 x $\frac{7}{8}$ -in. fh screws. Forward side of #4 frame is reinforced by $\frac{3}{4}$ -in. corner blocks (Fig. 8) glued and screwfastened



Framing for *Playboy* is built over form attached to floor. Extra bracket holds stem in position.

in position. Cover corner blocks with $\frac{3}{8}$ -in. plywood gussets. #2-3 Frames at stations #2 and #3 are similar to others except that these frames are made in halves, joined together at the keel with a floor frame, glued and screwfastened with #8 x $1\frac{1}{2}$ -in. fh screws to midship keel joint. Frame #1 is made in two pieces, joined together at the stem center with a cross piece screwfastened as indicated (Fig. 8).

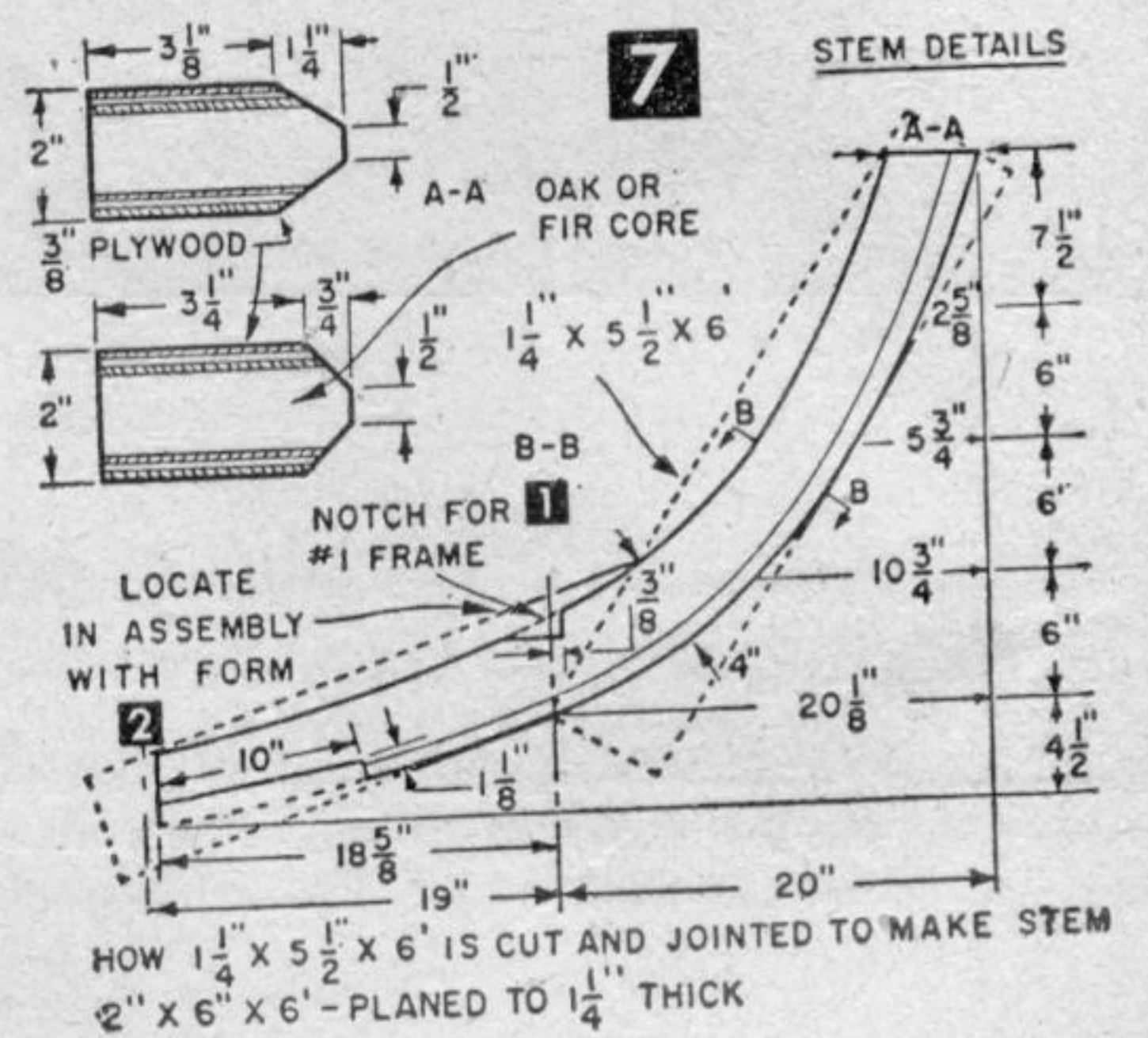
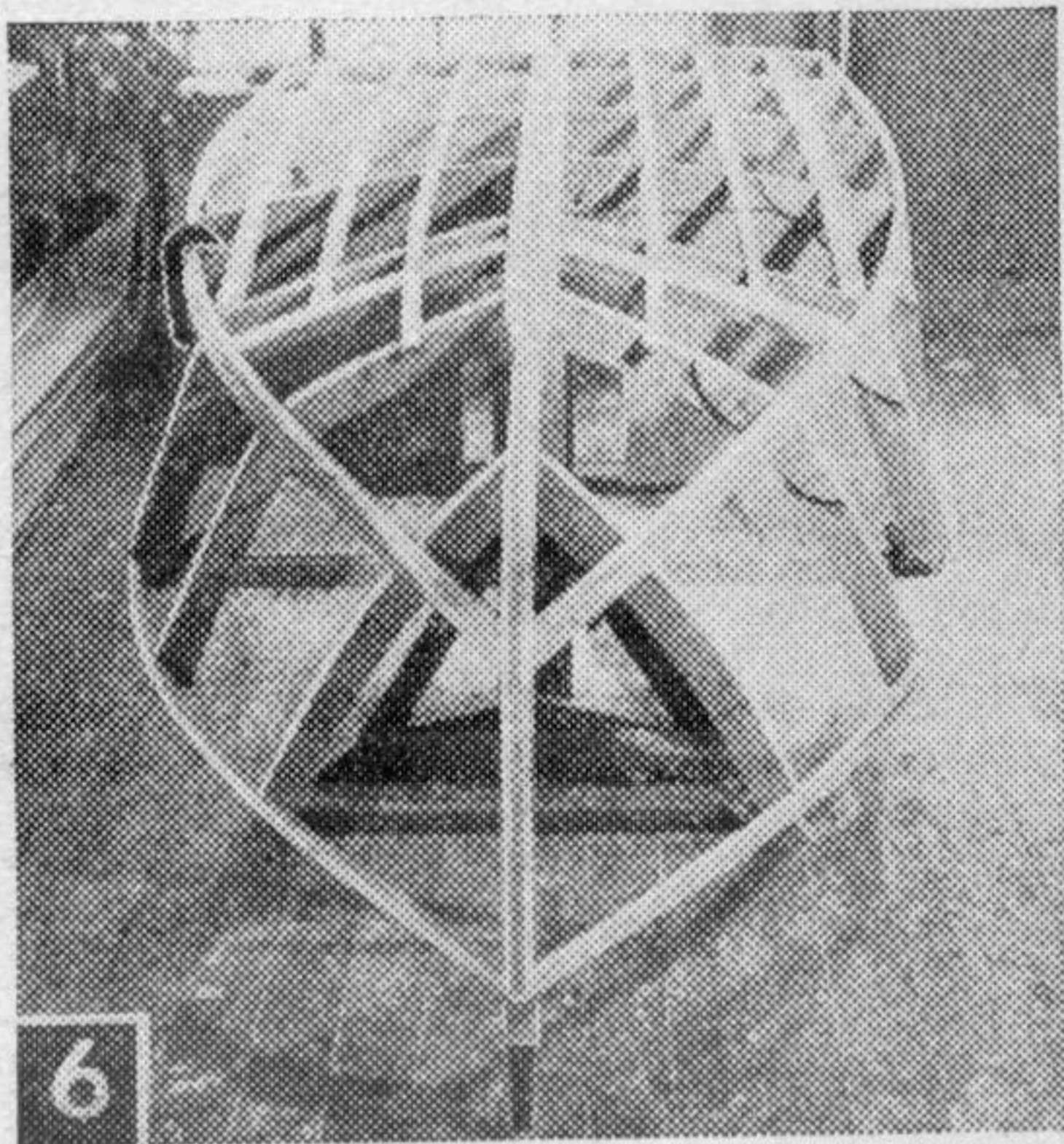
While glue on frames is setting, build the form and jig (Figs. 3 and 4). Notch out the form to receive frames and mount the form on 2 x 4 legs at a convenient working height. Before mounting frames on form, cut keel and clamp notches full depth and about $\frac{1}{8}$ in. under-size except omit chine notch in #1 frame. As the chines are placed in position you can mark



the exact location for # 1 frame chine notch. Bevel stem and notch for keel. Place all frames in position on the form, and brace them to the form and floor. Fasten #1 frame to stem with one #10 x 2-in. fh screw. Maintain the stem in position with a bracket (Fig. 3) screwfastened to the floor.

The keel is the first member attached to the frames. Fit the keel in position using chisel or wood rasp to insure close seating of the keel in notches. At the transom, notch keel all the way through transom and frame. Fasten keel to frame notches with two #10 x 2-in. fh screws at each joint. Drill lead holes for all fastenings and rub screw threads with laundry soap for easy entry. Fasten keel to stem with three #10 x 2-in. fh screws. To further secure stem and keel to the form during construction and to prevent misalignment, screw cast steel brackets and angles between form and keel (Fig. 3).

Chines are next. Spring them into position along both sides and clamp. Seat the chines in notches by running a saw along side until chine seats flush and follows sweep of the sides. Now is the time to notch out #1 frame for chines, and continue by beveling chine ends to fit stem. Fasten chines at all points with one #10 x 2-in. fh screw. Countersink all screws slightly below the surface so the framing may be faired without clipping screw heads later.

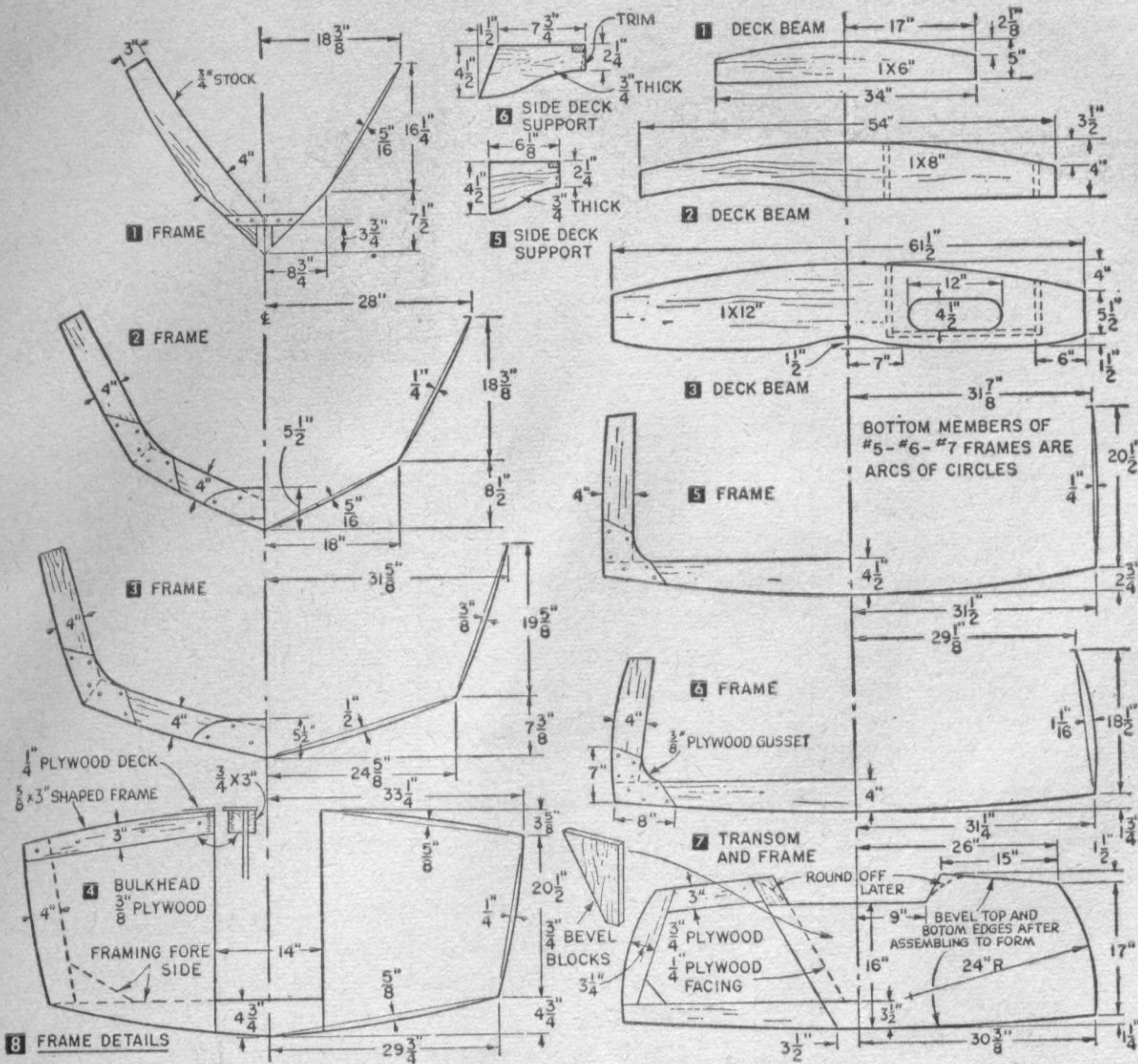


Left, bottom framing ready for planking.

Spring the clamps into position along sides. Fit them into clamp notches by rasping to fit evenly. Fasten clamps with one #8 x 1 3/4-in. fh screw at each joint. Bevel clamp ends to fit stem and fasten similarly.

Before fastening the battens in place trim and fair entire framework so plywood to be attached lies evenly at all points. For this fairing, jack plane and coarse wood rasp are especially helpful. Frames requiring the most beveling are #1 and #2 and an extra allowance has been made upon the frame dimensions of these members for just this purpose.

Playboy is not planked with a seam running down the center. One 4 x 10-ft piece of 3/8-in. plywood covers most of bottom surface and the seams are out towards chines (Fig. 9). Maintain the centerline of the plywood exactly over the keel's centerline and clamp in place. Mark frames along the outer edges. Remove plywood and notch two 3/4 x 2-in. battens flush into frames



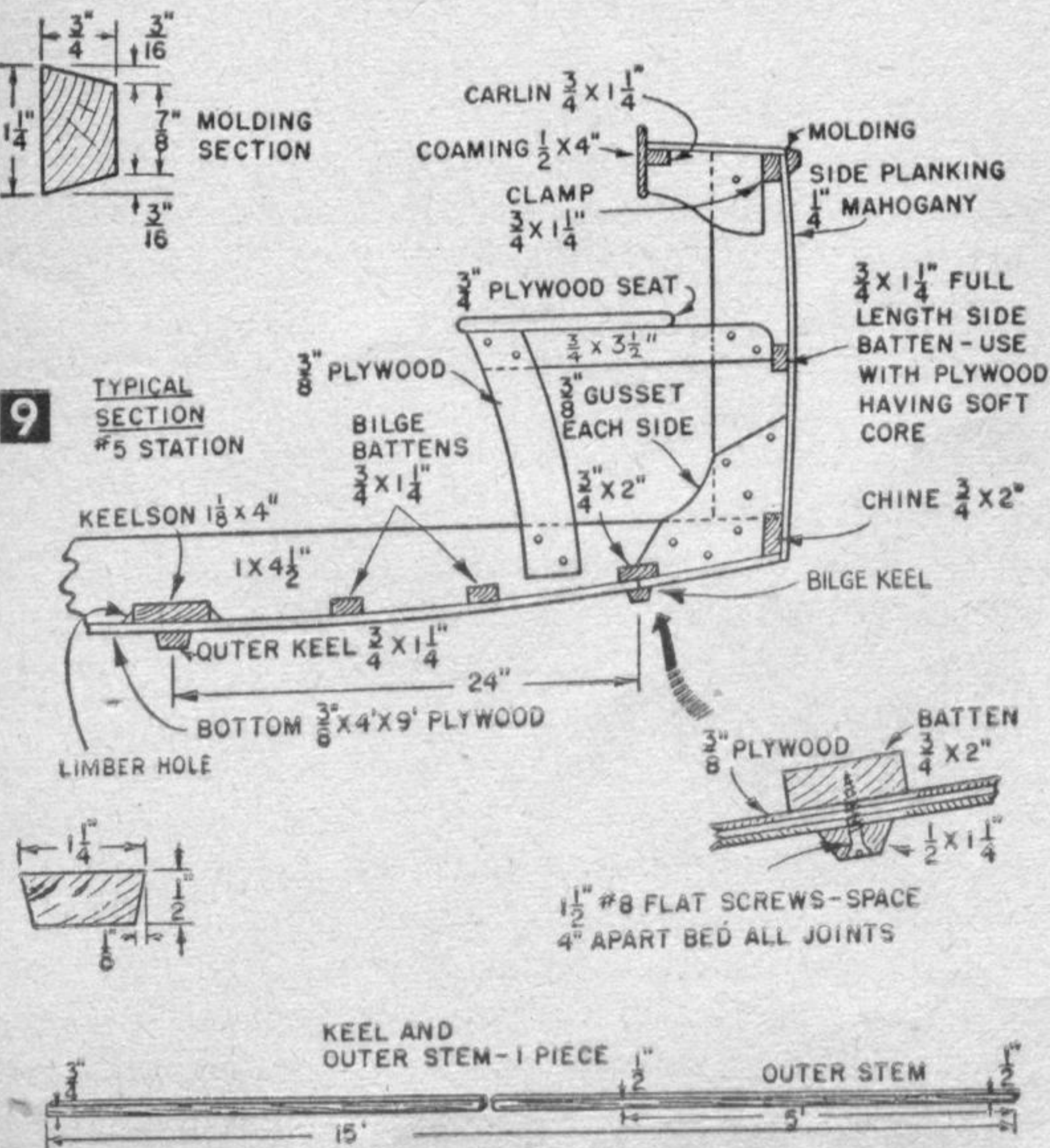
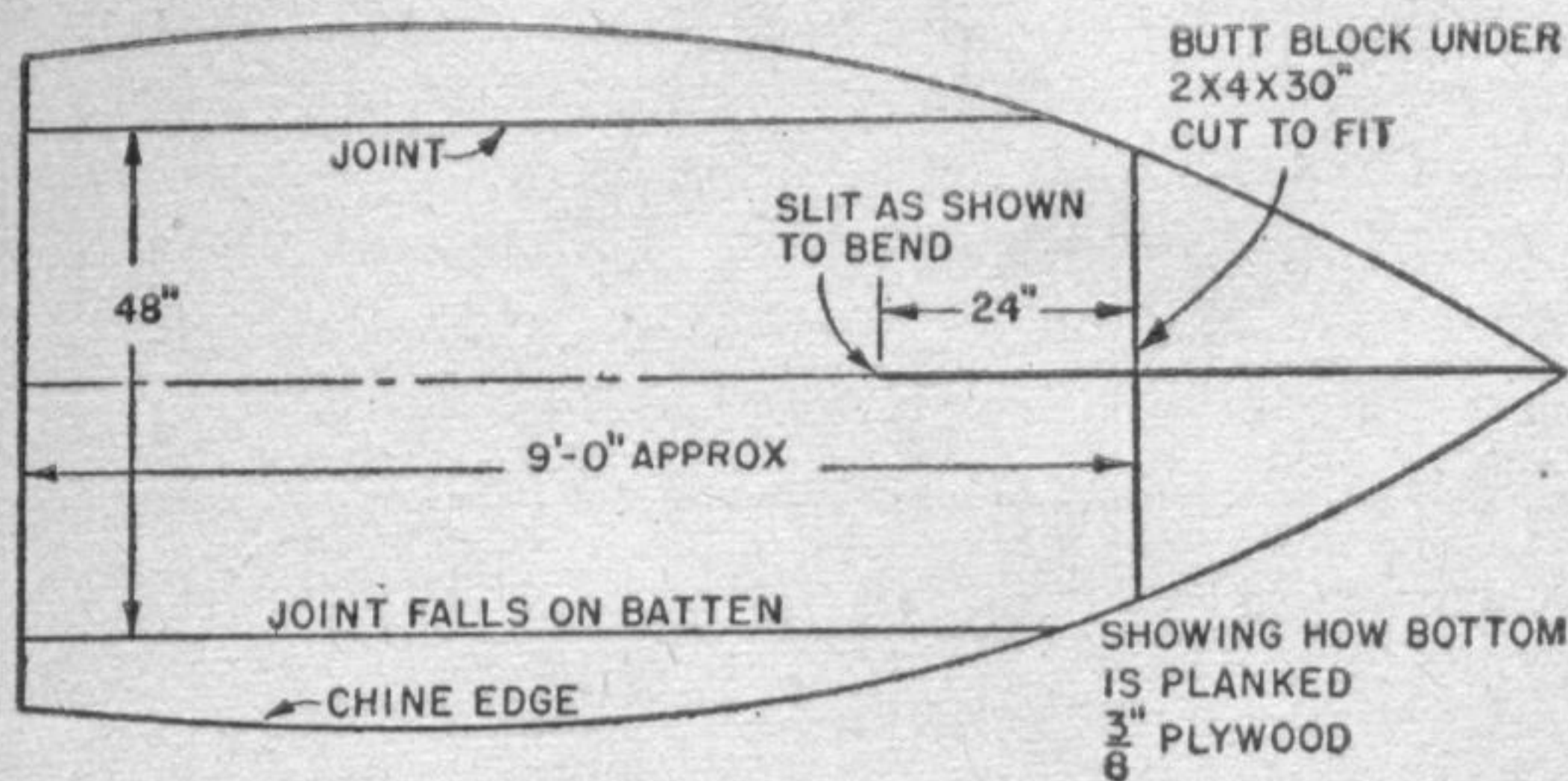
to receive this plywood joint. (Fig. 9). Fasten battens in place with #8 x 1 3/4-in. fh screws, one to each joint. Notch transom all way through for battens; fasten.

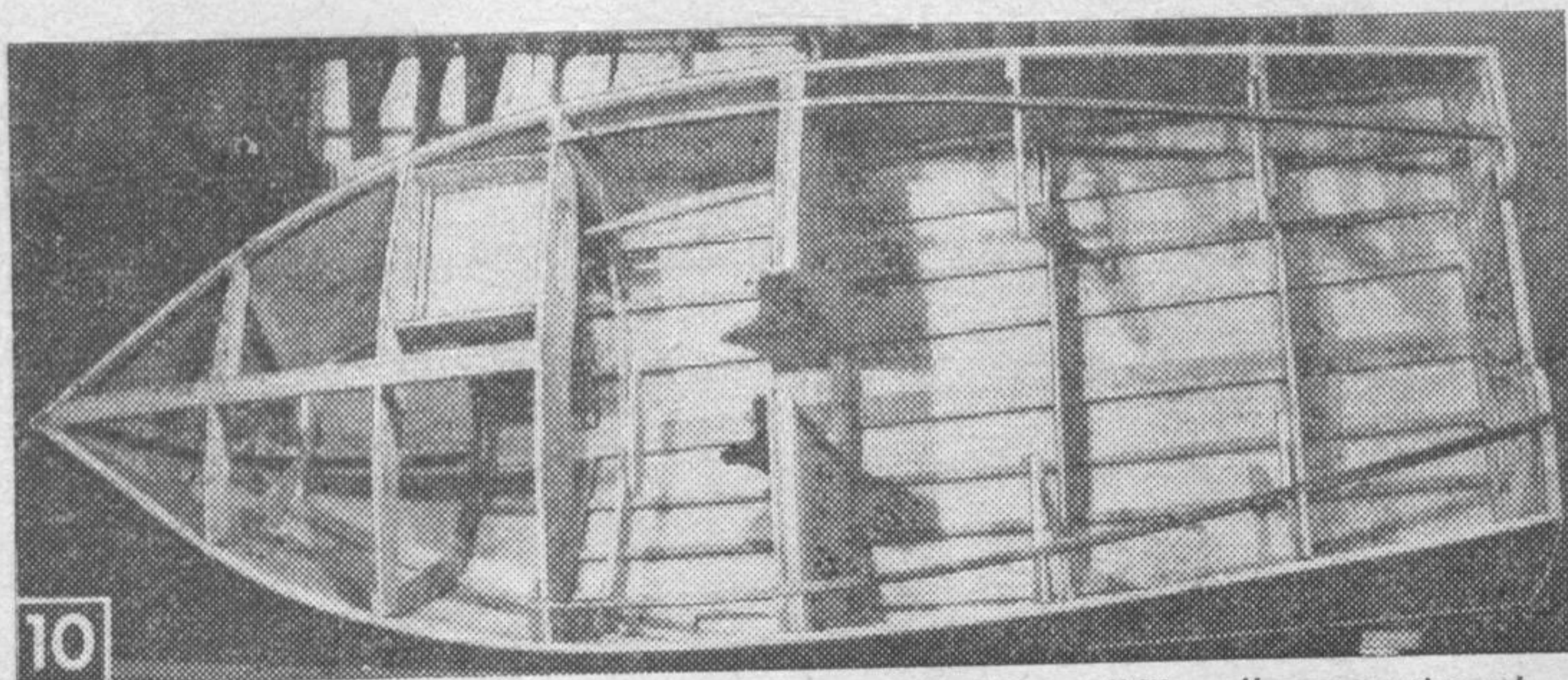
Now return the 4 x 10-ft plywood to the bottom, 1-in. extending aft, clamp and mark for shape. With fore edge of plywood landing between #2 and #3 frames, aft edge overlaps transom 1 in. Remove and saw this plywood to shape, slitting the fore end as indicated so it will bend readily. Now four 3/4 x 1 1/4-in. bilge battens are spaced equi-distant, two on each side between keel and plywood joint batten, notched flush and

fastened with one #8 x 1 3/4-in. fh screw at each joint. An electric hand saw helps to cut frame notches accurately. For the butt-block at the transverse planking seam, band saw the curvature on a 2 x 4 fir block to follow the sweep of the bottom (Figs. 4 and 5). Notch bilge battens into this butt block and fasten it to chine with a #8 x 3-in. fh screw and to keel with one #8 x 1 3/4-in. fh screw.

Lay the shaped bottom piece of plywood in position and clamp temporarily to see that everything fits well. Now reach up underneath and mark the outline of all battens, keel and frames with a pencil. Remove plywood, turn penciled lines up and drill holes thru plywood in the center of the outlines about 12-in. apart. Now when the plywood is turned over and holes connected with pencil lines, you'll know where to insert all bottom fastenings.

Before fastening bottom plywood in place, close exposed joints of keel and battens along the outer face of the transom with a 3/4 x 3-in. frame, first coating liberally with Kuhls' Bedlast and screwfastening in place with #8 x 1 3/4-in. fh screws spaced about 4-in. apart. To finally fasten planking to bottom, coat keel, battens and butt-block with Weldwood glue, apply a liberal coating of Bedlast to the plywood joint batten and transom. Position the shaped 3/8-in. plywood bottom, clamp and fasten in place with #8 x 1-in. fh screws spaced about 2 1/2-in. apart at all points. Stagger a double row of screws down the keel and transom. Trim plywood evenly at fore and





Deck and side framing in place, ready for decking. "Glove" compartment is built in before covering (A). Note seat risers and contoured seat sides.



aft ends. Make a cardboard pattern of the fore end planking to fit framework and lay upon $\frac{3}{8}$ -in. plywood. Saw out one right and one left piece. Before fastening these shaped forward bottom ends, steam or pour hot water over them for a period of ten to fifteen minutes, so they will bend readily. Coat all joints forward with *Weldwood*, clamp and screwfasten planking in position. Trim plywood evenly, marking as shown in Fig. 11 for the bottom and side joint. The $\frac{1}{8}$ -in. filler pieces of plywood along the

chines are bedded in and fastened similar to bottom.

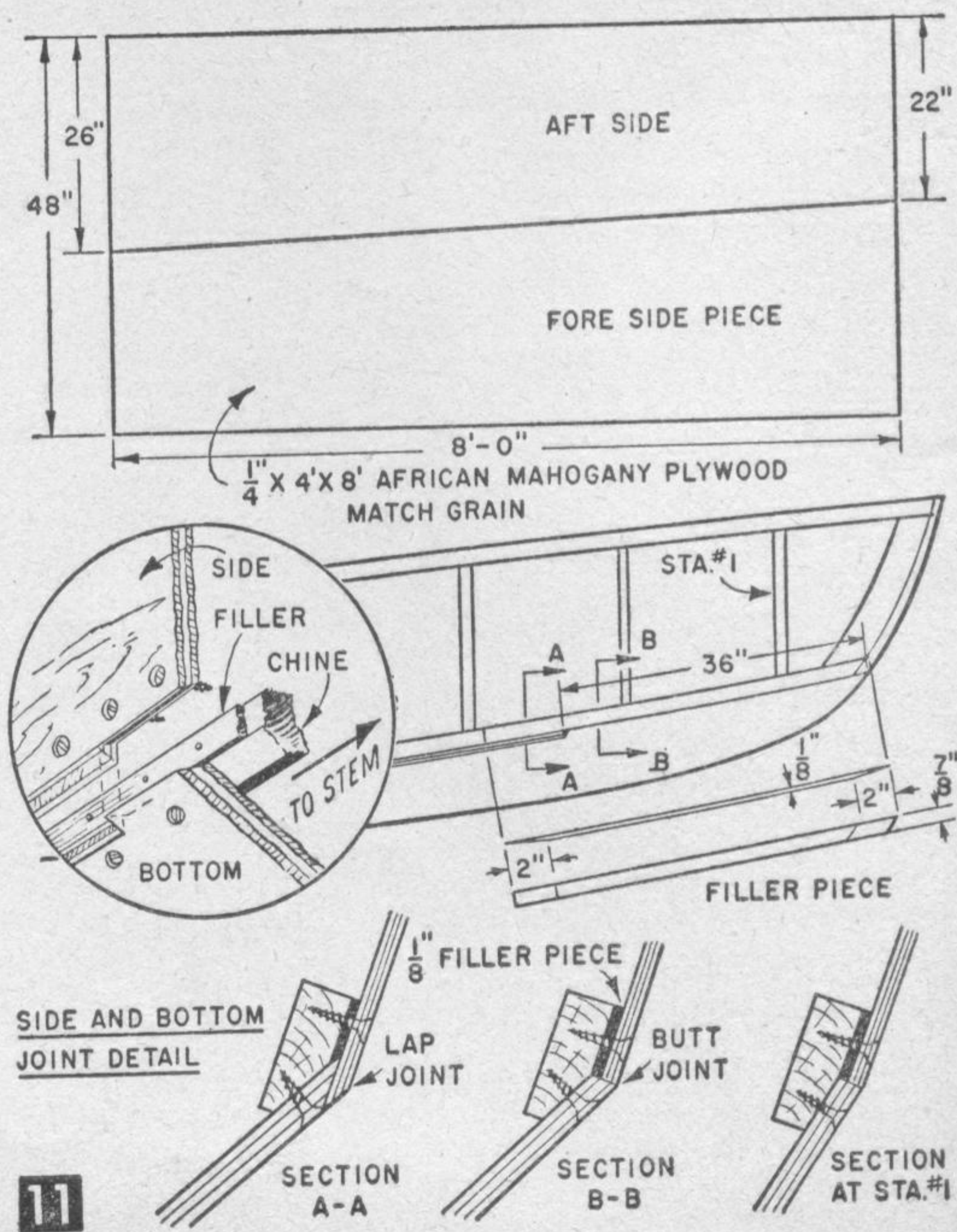
The side planking is preferably African or Philippine mahogany plywood. Place 4x8-ft sheet of mahogany in position, clamp, mark to shape and saw. Before final fastening, fit $\frac{3}{4}$ x2-in. butt blocks back of side joints (Fig. 5). Coat clamps, stem and butt blocks with *Weldwood*. Coat transom and chines liberally with *Bedlast*. Fasten side planks with #8x1-in. *fh* screws along all contact surfaces, spacing screws about 2 $\frac{1}{4}$ -in. apart. Stagger a double row of screws along the transom.

Outer keel covers both the stem and keel center line and is tapered so it will bend readily at the stem when softened with hot water (Fig. 5). Clamp outer keel in place at the stem and work back towards the transom, coating contact surfaces with *Bedlast*. Drill lead holes and fasten outer keel in place with #8x1 $\frac{1}{4}$ -in. *fh* screws spaced about 6-in. apart.

Bilge keels cover the jointing of the bottom

MATERIALS LIST—PLAYBOY

No.	Description	Use
Plywood (exterior or marine grade AA or AB)		
1	$\frac{3}{4}$ " x 4' x 7', fir	seats, transom
2	$\frac{3}{8}$ " x 4' x 10', fir	bottom planking, flooring, gussets, seat supports, stem bulkheads
4	$\frac{1}{4}$ " x 4' x 8', mahogany	side planking, decking, windscreen side supports
Lumber can be oak or fir. Sizes are finished dimensions.		
1	$\frac{1}{8}$ x 3 $\frac{3}{4}$ " x 11'	keelson
1	$\frac{3}{4}$ x 1 $\frac{1}{4}$ " x 15'	outer keel and stem band
2	$\frac{3}{4}$ x 2" x 14'	chines
2	$\frac{3}{4}$ x 1 $\frac{1}{4}$ " x 15'	clamps
3	$\frac{3}{4}$ x 5 $\frac{1}{2}$ " x 10'	bottom frames
2	$\frac{3}{4}$ x 4" x 12'	side frames, floor frames
1	$\frac{3}{4}$ x 11 $\frac{1}{2}$ " x 14'	deck beams, (waste makes side cockpit beams, glove compartment framing and seat supports)
1	$\frac{1}{4}$ x 5 $\frac{1}{2}$ " x 6'	stem—inner core
2	$\frac{3}{4}$ x 2" x 9'	plywood joint battens
4	$\frac{3}{4}$ x 1 $\frac{1}{4}$ " x 9'	bottom battens
2	$\frac{3}{4}$ x 1 $\frac{1}{4}$ " x 10'	carlins
2	$\frac{1}{2}$ x 4 $\frac{1}{2}$ " x 10'	coamings (makes 2 aft and 2 fore)
1	$\frac{3}{4}$ x 2 $\frac{1}{2}$ " x 5'	deck batten
2	$\frac{3}{4}$ x 1 $\frac{1}{4}$ " x 15'	moldings
1	$\frac{3}{4}$ x 4" x 12'	spray rails
2	$\frac{1}{2}$ x 1 $\frac{1}{4}$ " x 9'	battens—closes plywood joint
1	2 x 10" x 24"	transom knee
1	$\frac{15}{8}$ x 11 $\frac{1}{2}$ " x 12'	form (any rough lumber)
1	1 x 6" x 4'	windshield center post and flag staff bracket
1	$\frac{15}{8}$ x 3 $\frac{3}{4}$ " x 6'	#4 bulkhead beams (makes 2 pieces)
1	$\frac{15}{8}$ x 3 $\frac{3}{4}$ " x 4'	butt block
Framing not indicated is made from waste		
Miscellaneous		
6 doz	#6 x $\frac{7}{8}$ " <i>fh</i> screws	
1 gr	#6 x 1" <i>fh</i> screws	
6 gr	#8 x 1" <i>fh</i> screws	
1 gr	#8 x 1 $\frac{1}{4}$ " <i>fh</i> screws	
4 doz	#8 x 1 $\frac{1}{2}$ " <i>fh</i> screws	
4 doz	#8 x 1 $\frac{3}{4}$ " <i>fh</i> screws	
6 doz	#10 x 2" <i>fh</i> screws	
3 pts	Kuhls' <i>Bedlast</i> , bedding composition	
1 lb	<i>Weldwood</i> glue powder	
1	streamlined bow handle	
2	aluminum lifting handles	
1	running light	
	Plexiglas—for windshield $\frac{1}{4}$ " thick	
2	step plates	
1 $\frac{1}{2}$ gal	white <i>Firzite</i>	
1 gal	clear <i>Firzite</i>	
1 $\frac{1}{2}$ qts	Condon's Boatlife or best spar varnish obtainable	
1 lb	Spackle patching plaster	



plywood out towards the chines. First coat the joint well with *Bedlast* and fasten bilge keels in place with #8x1 1/4-in. fh screws spaced about 4-in. apart.

Before the hull is removed from the form apply three coats of white *Firzite* to the bottom. *Firzite* may be tinted to match succeeding enamel coats. Putty all screw heads and follow with marine enamels. Mahogany sides will require extra treatment. Sand joints smoothly, wipe dust free and apply a coating of wood filler, thinned with turpentine and stained mahogany. Try the filler on a wood scrap to get the right shade. Let the filler stand 10-15 minutes and wipe off across the grain with a clean piece of burlap bag. Now allow filler to dry about twelve hours, smooth lightly with 4/0 garnet paper, and apply three coats of clear *Firzite* allowing each coat to dry thoroughly. Lightly sand each coat when dry. Apply a coat of *Boat Life* spar varnish just as it comes from the can a few days before launching, sanding all but last coat.

The hull is now removed from the form and turned right side up on the floor, chocking at strategic points to prevent "rocking." Cut the deck beams (Fig. 8) and fasten them to the frames with one 3/16x2 1/4-in. rh stove bolt (washers both sides) at each joint. Beam #3 is cut out for the glove compartment and beam #2 is deeper along the starboard side to accommodate boxing for the glove compartment. Build the glove compartment as shown in Fig. 10A. Notch the 3/4x2-in. deck batten flush into beams and stem. Secure it with two #8x1 3/4-in. fh screws to each joint. Beam #3 is faced with a scrap piece of 1/4-in. mahogany plywood, making a cut out in the facing for the glove compartment. Fasten mahogany facing to beam with #6x7/8-in. fh screws, spaced at 6-in. intervals.

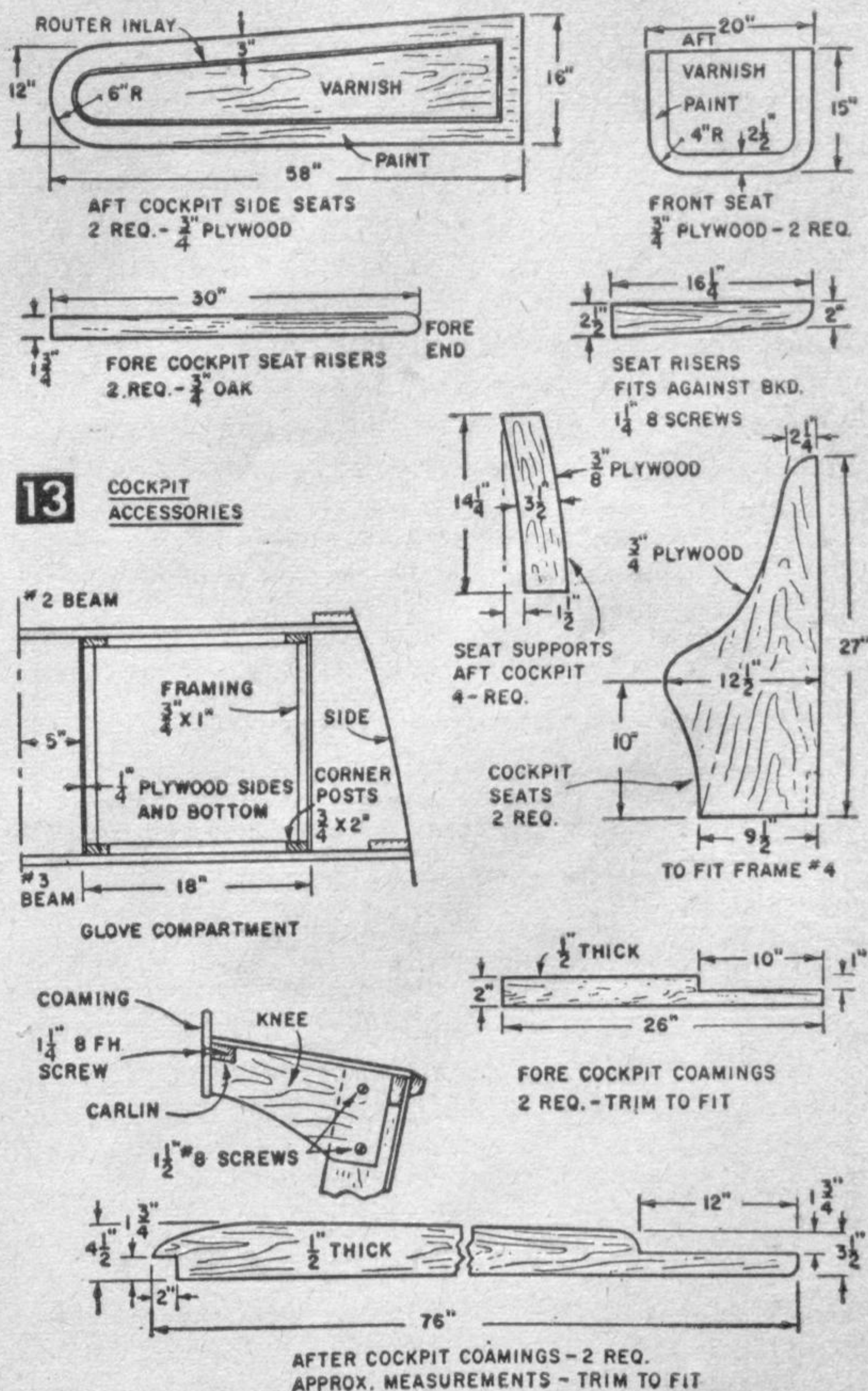
The framing and bulkhead are now attached to aft side of #4 frame. Screwfasten from bulkhead into the 1 5/8x3-in. shaped frame. On the fore side of the bulkhead fit a shaped 3/4x3-in. frame and screwfasten directly through 3/8-in. bulkhead into frame (Fig. 8). Forward cockpit seat sides are cut as in Fig. 13 from 3/4-in. plywood and secured alongside center aisle to the bulkheads (Fig. 5).

Carlins are now notched flush into #3-#4 beams and transom. At #5-#6 frames the carlins are supported by knees (Fig. 8). Carlins and knees are fastened with one #8x1 3/4-in. fh screw at each carlin joint and with two screws at each knee joint. Carlins at the transom need be cut through the frame only, so the extreme ends of the carlins do not show.

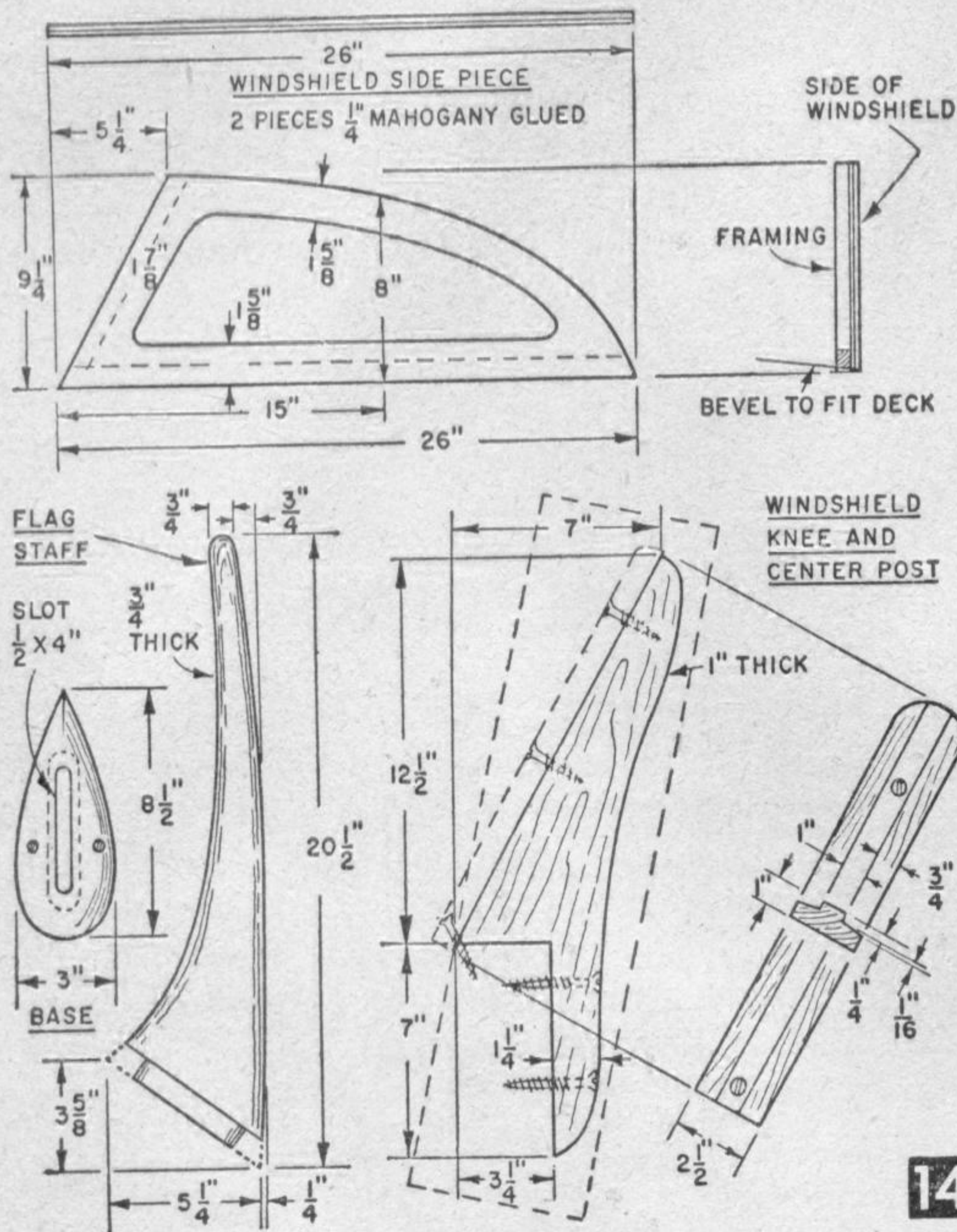
Seat supports are next. Aft cockpit seat supports are 3/4x3 1/2-in. cross pieces screwfastened to side frames with a shaped 3/8-in. plywood upright screwfastened to bottom frames and to cross pieces. Bulkhead end of the aft seats simply rests on a 3/4x3 in. piece screwfastened to bulkheads. Aft and fore seats are 3/4-in. plywood (Fig. 13). Framing for the fore seats is a 3/4x2-in. seat riser screwfastened to frames #3-#4 and a

3/4x2-in. piece screwfastened inside seat sides (Fig. 13). Simply set the fore seats in place, positioning risers until seats are in line. To prevent one seat being lower than the opposite seat, fore or aft, align them with a 3/4x1 1/2-in. batten laid across the tops of all risers.

You're ready to finish the interior of the hull with paint or varnish. My *Playboy* was painted a light fawn tan to the top of the chines and the mahogany inside and out was varnished. Apply four coats of clear *Firzite* followed by paint or varnish. Before finishing, pick inside clean as a whistle with your wife's vacuum cleaner.



You can deck *Playboy* by letting the 1/4-in. mahogany plywood come flush with all edges (Fig. 5). With all side planking trimmed evenly along the sheer, place a 4x8-ft piece of 1/4-in. mahogany plywood in position forward with inner edge along center of deck batten. Clamp in position, mark along the under side, remove and cut to shape. Make a shaped piece of decking for the opposite side. Inscribe the curved deck patterns on the mahogany and rout out to simulate decking using the shaped pattern as a guide for the router (Figs. 15 and 16). The shaped and scribed pieces of mahogany are now returned to the boat, clamped in position with wood pads under the clamps to prevent marring



15

ROUTER PATTERN FOR DECK INLAY
1/8 - 1/4 PLYWOOD

and plywood fastened in place with #6x7/8-in. fh screws spaced 2-in. apart. There will be a minimum of fitting over the center deck batten. Fasten decking to the clamps and deck batten only. Don't use any screws through #1 and #2 deck beams as there is a compound curvature in the deck, but do fasten to #3 deck beam.

Finish the side decking similar to bow decking with curved areas at #4 bulkhead frame (Fig. 5). Screwfasten at all points and back up side deck joint of plywood with a 3/4x2-in. butt-block. Coat block and plywood ends with *Weldwood* and secure joint with #6x7/8-in. fh screws. Trim decking evenly along sheer and carlin edges.

Coamings are next and are shaped according to Fig. 13 for both fore and aft cockpits. Fasten coamings in place with #8x1 1/4-in. fh screws spaced about 4-in. apart. Round corners of coam-



Portable router follows pattern to cut deck inlay.

ings and sand smoothly.

Moldings are now cut (Fig. 9), sprung into place along each side and screwfastened in place. Drilling moldings first, on a drill press, and countersinking holes saves hours in assembly time. Simply take a pair of dividers and mark moldings at 8-in. intervals for screws and drill lead holes. Secure moldings to sheer edges of hull with #8x1 1/4-in. fh screws. Round off ends of moldings when in place.

The windshield assembly (Fig. 14) is stronger than ordinary aluminum parts. The center post windshield bracket is cut to shape shown, and the center piece rabbeted to receive the plastic windscreen. Center piece is screwfastened to the bracket knee with three #8x1 3/4-in. fh screws. Secure this post to the exact center of decking and deck beam #3 with two #10x2-in. fh screws into beam and one #8x2-in. fh screw into deck, driven on a slant (Fig. 14).

The outer streamlined wings that support the outboard edges of the windscreen are 1/2-in. mahogany plywood (simply glue two thicknesses of your 1/4-in. mahogany together). Round outer and inner corners with coarse then fine sandpaper.

Flag staff and base are sawn out on the band saw, rounding both base and staff. Secure staff to base with *Weldwood* only. The "wrap around" spray rails are spline jointed around the transom end (Fig. 5), gluing all joints.

Seats fore and aft may be scored with the router or drill for a distinctive appearance. Always use a pattern with a portable electric router. Give the inside three coats of varnish, with two coats of enamel (light color) on top. When completely finished, place the seats in position and screwfasten them to risers with six #8x1 3/4-in. fh screws in each of the fore seats and nine in each of the aft seats.

Now to finish each of the separate pieces and the decking, begin by filling the decking with a coat of mahogany wood filler (light) thinned with turpentine as you did the sides. Follow filler with three coats of clear *Firzite* and one thinned coat of varnish. Allow ample drying time between all coats and especially the last coat of thin varnish. It may be necessary to wait

two weeks for the last thin coat of varnish to dry thoroughly before the deck seams are filled with white seam compound. Because there is so much rubbing with turpentine to remove the excess white filler it may soften and "lift" the varnish coat and ruin the job. Be patient—the white seam compound used in these deck seams is nothing but spackling compound.

Mix spackling compound with a small quantity of white *Firzite* or flat white paint, and more turpentine to make a thick paste. One pound is sufficient for this job. Press the paste into the seams with a putty knife and level to surface; do one side of the deck at a time. Now take a rag soaked in turpentine, wring out and wipe away all excess compound from the surface. The seams will be depressed just enough to present a neat appearance. Now allow seams to dry about one hour and apply a full coat of Maurice Condon's plastic finish or equivalent.

Apply three coats of plastic finish to the windshield brackets, flag staff, spray rails, finish moldings and side decks. The windshield sides are now screwfastened in place. Base of flag staff is drilled and screwfastened to deck with two #8x1 $\frac{3}{4}$ -in. *rh* screws. Spray rails are positioned, marked, removed and holes drilled through sides of boat and transom. Return spray rails, screwing to hull from inside the boat.

Flooring for *Playboy* is $\frac{3}{8}$ -in. plywood (Fig. 5). The aft cockpit floor may be placed directly on the keel and battens but a continuous floor from the transom to #4 frame on top of frames pro-

vides a cockpit free of things to stumble over. This aft cockpit floor must be made in two pieces to allow you to place it in position. Paint with a dark marine enamel, three coats of chocolate brown look well and don't show soil. Fasten floor to bottom members with #8x1-in. *fh* screws spaced about 8-in. apart. Flooring for the forward cockpit should be laid directly upon the keel and battens to provide more leg room. Fasten flooring in place with #8x1-in. *fh* screws.

Hardware needed to complete *Playboy* is an aluminum lifting handle fastened to bow forward and two lifting handles fastened to transom. Aft handles are more useful for securing *Playboy* to a trailer than for lifting. *Plexiglas* for the windshield is fitted in place with the aid of cardboard patterns and sawn on a band saw. An aluminum running light forward aids in night running. Last, but not least, a steering wheel attached to port side #3 beam along with flexible gear shifting for the outboard motor used gives *Playboy* more flexibility.

● Craft Print No. 201 in enlarged size for building *Playboy* is available at \$1.50. 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 (no C.O.D.'s or stamps) to Craft Print Dept. B58, 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.



Playboy—14' **SPORTS RUNABOUT**

