

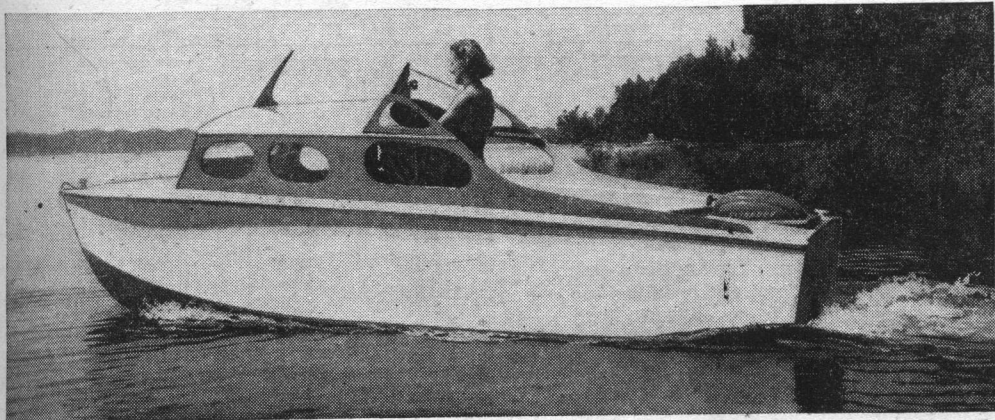
as shown from  $\frac{3}{4}$ " plywood, with edges tapered and blade hung with pintles and gudgeons. The rod tiller will project through the transom and the boat will be steered with tiller ropes and blocks on each side. A suitable steering wheel can be mounted in the cabin forward or a tiller handle can be provided in the cockpit.

The engine is mounted as indicated. A bed of  $1\frac{1}{4}$ " oak is provided and secured to frames with angle irons. Use a standard inside stuffing box. If an outboard motor is to be used, cut an opening in the transom to receive it. Gas tanks for any engine are best installed on each side under the side decks.

Cabin windows are of  $\frac{1}{8}$ " plexiglas, with  $\frac{1}{4}$ " masonite gaskets around the edges and with the window assembly screw-fastened to cabin sides.

A small hatch opening cut into the forward deck, with hatch cover provided, can be used to provide ventilation through the hull. It can also serve as a vantage point from which to toss the hook overboard when rough weather is encountered.

• Craft Print No. 62 in enlarged size for building Dolphin 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 (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.



# Eager Eve

By WILLIAM D. JACKSON  
Naval Architect

FROM 50 feet away you'd swear that *Eager Eve* was a luxury inboard cabin cruiser. A cover hides the 25 hp outboard motor that drives this efficient cruiser fast enough to keep up with or outrun nine out of ten inboards.

In a first test *Eager Eve*, powered by an Evinrude 25 hp motor made 22 mph with one person aboard. Without a heavy inboard engine, you can transport it easily on a trailer and store it in a garage.

*Eager Eve* is built upside down with extensions from the side frames secured to the floor. Nail cross pieces to extensions and mark the centerline on these cross pieces to line-up entire assembly of main frames.

First step is to draw full-size patterns of the stem, the six main frames, half-frames, knees, gussets and floor frames on red rosin paper (available at lumber yards). Mark the material for cutting from the full-size patterns and saw out the pieces to size. This is the spot where power saws will save hours of time. Lay out the parts for frames 1, 2, 3 and 4 on the pattern and

## Craft Print Project No. 175

**USE:** Efficient outboard cruiser with motor concealed in a well. May be used for extended cruises upon inland waterways, or sports use at the home harbor for sight seeing or pulling water skiers.

**LENGTH:** 18 ft.

**BEAM:** 6' 1" (widest point outside planking.)

**DEPTH:** forward, 40"; aft, 28"—deepest points

**WEIGHT OF HULL:** 600 lbs.

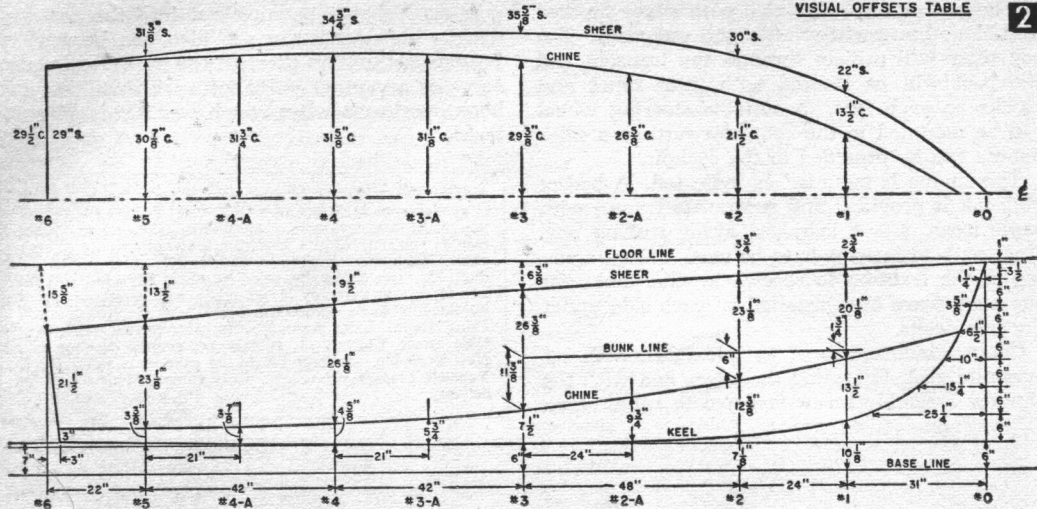
**CAPACITY:** sleeps 2 persons, 4 persons seated with deck chairs.

**CONSTRUCTION:**  $\frac{3}{8}$ " plywood planking, bottom vee-con-  
vex, developable surfaces.

<b>SPEEDS:</b> Evinrude 25 "Big Twin" or Johnson	1 person—22 MPH
1952 Model	2 persons—21 MPH
Evinrude 33 HP	4 persons—19 MPH
4-cylinder	Top Speed 30 MPH
1948 Model	two persons aboard.

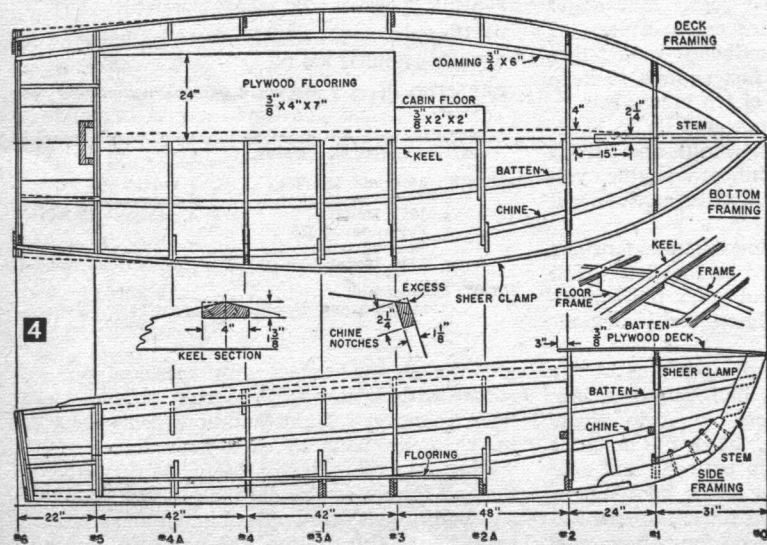
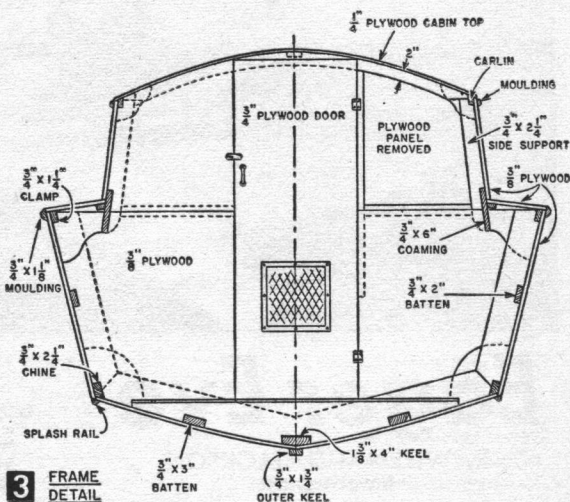
<b>COST:</b> Cost of hull.....	\$225.00	} Approx.
Gear Shift and Throttle.....	50.00	
Motor .....	390.00	

glue the gussets in place with resorcinol glue and secure with  $\frac{7}{8}$  in. #6 fh screws. Bolt and glue floor frames at 1, 2 and 3 stations using six  $\frac{3}{16}$ x2 in. rh stove bolts to each floor frame. Place washer on both sides of frame bolts. Build up the half frames as you did the full frames, gluing and bolting with three  $\frac{3}{16}$ x2 in. rh stove bolts to each joint. Cut station #5 and #6 transoms



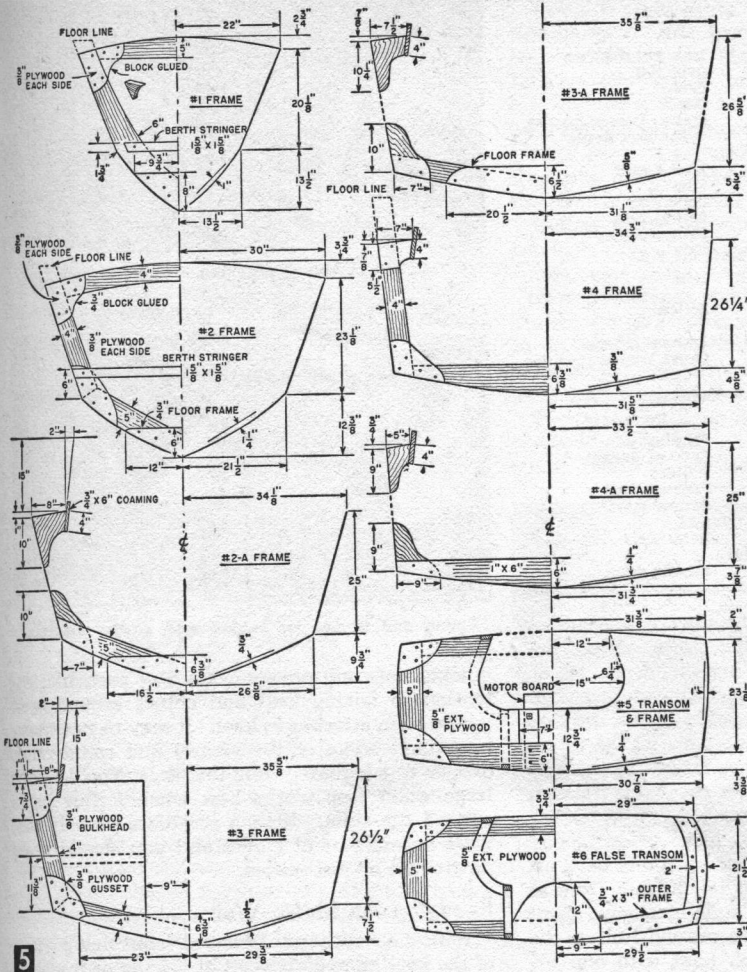
from  $\frac{5}{8}$  in. plywood with framing fastened as shown in Fig. 5. Glue contacting surfaces using a resorcinol glue and screw fastening transom plywood into framing with  $1\frac{1}{2}$  in. #8 fh screws spaced at 3 in. Glue gussets and screw fasten them with  $\frac{7}{8}$  in. #6 fh screws. Cut opening for the motor in #5 transom but don't cut openings for tilting motor in #6 transom—wait until the entire framing is completed—as explained later.

To cut the stem, place the material under the pattern outline, prick-punch the shape through, and saw to shape. The upper and lower stem parts are joined together with a knee. When all parts are fitted coat all contacting surfaces with Kuhls *Seamlast* and bolt together with four  $\frac{5}{16}$  x  $5\frac{1}{2}$  in. carriage bolts, heads flattened and well



countersunk. Glue and screw fasten deck beams to #1 and #2 frames with  $\frac{7}{8}$  in. #6 fh screws. Bolt berth supports in place (Fig. 5) with one  $\frac{1}{4}$  x 2 in. carriage bolt to each joint. At this point notch all frames for keel, chines and sheer clamps.

When the frames are finished, outline on the floor with pencil the proper spacing of frames #1 to #6 and the stem. Leave the half-frames until later. Secure the stem to the floor with two angle irons screwed to each side of stem and the floor (Fig. 1). Nail

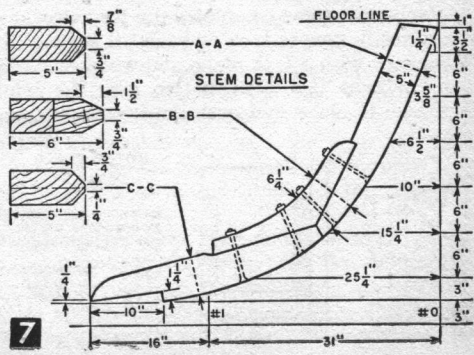
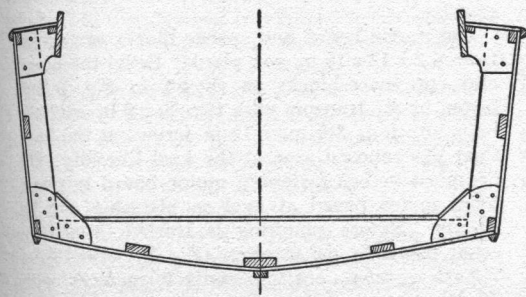


motor board.

When the frames are lined up and fastened down, you're ready to clamp the keel into keel notches. If keel notch is too snug, trim the notches to fit. Running a saw alongside the keel insures a good fit laterally. Mark the keel at its fore end to fit stem notch and mark taper on keel as shown in Fig. 2. Remove keel, trim fore end as marked, and replace. Use the keel notch in #6 frame until the entire framing is complete, then saw out the keel aft of frame #5 and the cutout in #6 transom to allow motor to be tilted. Fasten keel to frames and stem with three 2 in. #10 fh screws at each joint. First drill lead holes, countersinking for heads of screws and swiping threads of screws over a bar of brown laundry soap for easier entry. With all main frames in place, including #5 and #6 transoms, place half frames with their clamp knees in position, clamp to keel and fasten with two 2 in. #10 fh screws to each half frame.

cross pieces of each frame to its mark on the floor, being certain that frames are squarely aligned and exactly over center line. A plumb line from keel centerline to floor centerline indicates perfect alignment. When you come to #6 transom, remember it mounts at an angle and should be aligned with the plumb bob. The #5 motor transom is square with base with a beveled

spring battens over the bottom, one on each side of keel, 3/4 x 2 in. and nail temporarily in place. These battens align and hold half frames in place until the chines are attached. Next step is to spring chines in place. If full length chines are not available, use two pieces, making a butt joint between frames, and reinforcing the joint with a 3/4 x 3 x 18 in. batten, glued and screw-fastened in



6 FRAME DETAILS AT STATION #4

7

## MATERIALS LIST—EAGER EVE

Lumber (Oak or Yellow Pine)

1 pc.	13 $\frac{1}{2}$ " x 4" x 16'	Inner keel or keelson
1 pc.	3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " x 16'	Outer keel
2 pcs.	1 $\frac{1}{8}$ " x 2 $\frac{1}{2}$ " x 18'	Chines
2 pcs.	3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " x 18 $\frac{1}{2}$ '	Clamps
3 pcs.	7 $\frac{1}{8}$ " x 4" x 10'	Frames, Transom Framing, also Deck Beams
6 pcs.	7 $\frac{1}{8}$ " x 6" x 12'	
1 pc.	1 $\frac{1}{2}$ " x 8" x 8'	
1 pc.	3 $\frac{1}{4}$ " x 7 $\frac{1}{2}$ " x 16'	Floor Frames
1 pc.	2 $\frac{1}{4}$ " x 8 $\frac{1}{2}$ " x 8'	Stem
1 pc.	3 $\frac{1}{4}$ " x 1 $\frac{3}{4}$ " x 6'	Outer Stem
2 pcs.	3 $\frac{1}{4}$ " x 3" x 18 $\frac{1}{2}$ '	Battens—Sides
2 pcs.	3 $\frac{1}{4}$ " x 3" x 16'	Battens—Bottom

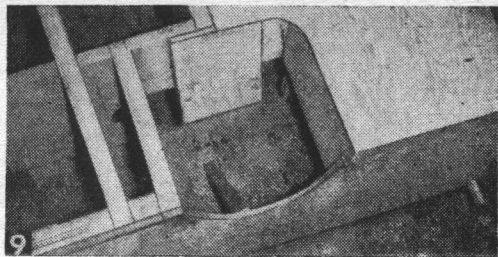
Plywood (Fir Exterior Grade D.F.P.A.)

2 pcs.	3 $\frac{1}{8}$ " x 4' x 14'	Sides
2 pcs.	3 $\frac{1}{8}$ " x 4' x 5'	
2 pcs.	3 $\frac{1}{8}$ " x 4' x 14'	Bottom
2 pcs.	3 $\frac{1}{8}$ " x 4' x 4'	
2 pcs.	3 $\frac{1}{4}$ " or 5 $\frac{1}{8}$ " x 4' x 6'	Transom #5-#6
1 pc.	1 $\frac{1}{8}$ " x 4' x 4'	Curved Transom and Cabin Cubby

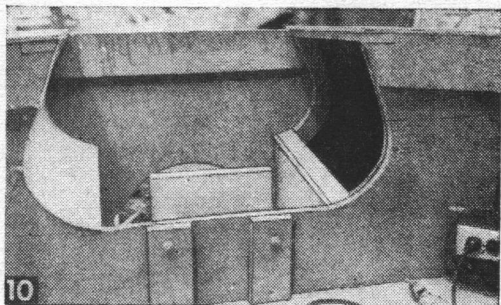
(Waste Makes Interior Sheathing)

Fastenings

8 gross	1 $\frac{1}{4}$ " #8 fh. Screws	Planking
2 gross	1 $\frac{3}{4}$ " #8 fh. Screws	Coaming, Gussets—3 $\frac{1}{4}$ "
		Clamps
24	2 $\frac{1}{2}$ " #12 fh. Screws	Frames to Keel
6 dozen	2" #10 fh. Screws	Battens and Chines
4 bolts	3 $\frac{1}{8}$ " x 6 $\frac{1}{2}$ "	Stem
2 bolts	3 $\frac{1}{8}$ " x 6"	Motor Board
1 qt.	Weldwood or Cascophen Glue	
1 gal.	Kuhls Seamlast (Gray)	Planking Joints



Cutout in bottom planking for engine well.



Lining and frames for engine well partly complete.

place. Make this butt joint toward aft end of hull. Bevel fore ends of chines to fit stem. Before fastening chines, run a saw alongside at each frame notch to insure perfect contact surfaces. Bend both chines in place working from the fore end and screwfasten with one 2 in. #10 fh screw to each joint. Allow chines to extend all the way through #6 transom, and later cover this transom and joint with an outside frame.

If splicing is necessary to fasten sheer clamp into notches, stagger sheer clamp joints near aft part of hull so joints do not fall in same line as jointed chines. Bevel fore ends of clamps to fit stem and spring both clamps around hull at the same time, fastening at each joint with one 1 $\frac{3}{4}$  in. #8 fh screw, drilling lead holes and countersinking.

Notch the 3 $\frac{1}{4}$  x 3 in. battens—both sides and bottom flush into frames. Locate battens equidistant between clamps and chines on the sides and equidistant between keel and chines on the bottom. Secure battens with two 1 $\frac{3}{4}$  in. #8 fh screws at each joint. Bottom battens extend from #2 frame aft to transom, while side battens extend from stem to transom.

Attaching battens completes the framework, so you're ready now to trim and fair all parts of the framework with a jack plane and wood rasp. By laying a light 1 $\frac{1}{2}$  x 3 $\frac{1}{4}$  in. batten over the joints from keel to chine and over the frames, you can

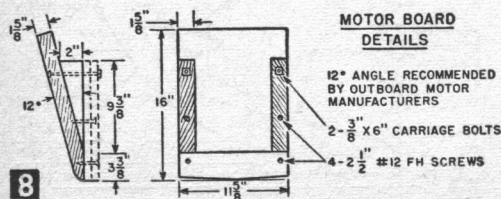
quickly note any unevenness. Pay particular attention to fairing keel and chines around area where stem attaches to keel. It may be necessary to remove some of the screws and countersink deeper to adequately fair this area. You'll find a large wood rasp works best when fairing parts around the stem. If rasp scratches your hands, wear an old pair of gloves and you should have no trouble or discomfort.

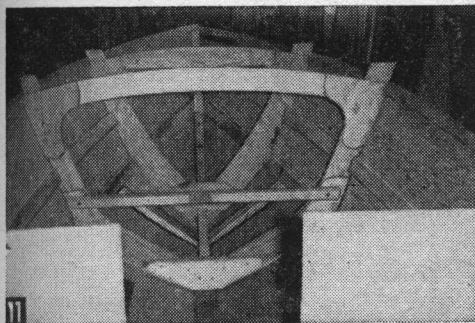
### Readying the Motor Well

With the entire hull faired, saw out that portion of the keel immediately aft of #5 motor transom. Remove screws and saw out #6 transom (Fig. 9) so motor may be tilted. Notch #5 and #6 transoms for 1 $\frac{1}{2}$  x 3 $\frac{1}{4}$  in. frame pieces and fasten them in place with 2 in. #10 fh screws. Provide 1 $\frac{1}{2}$  x 1 $\frac{1}{4}$  in. uprights (Fig. 5) and screwfasten to #5 and #6 transoms, to provide the side supports to motor well. Plank this well with 3 $\frac{1}{8}$  in. plywood, using plenty of Kuhls Seamlast at all joints. Fasten the plywood planking in well with 1 $\frac{1}{4}$  in. #8 fh screws, spaced at 2 in. and slightly staggered.

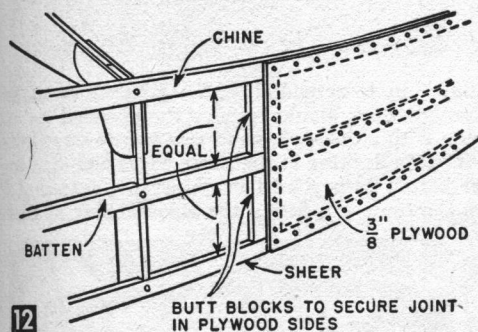
The motor board and spacer blocks are sawed from a 2 x 12 x 16 in. oak plank. Bevel the board and cut space-blocks as shown in Fig. 8 and fasten to #5 transom with two 3 $\frac{1}{8}$  x 6 in. carriage bolts and four 2 $\frac{1}{2}$  in. #12 fh screws at the keel. Coat the exposed area at the keel liberally with Seamlast before fastening motor board in place. Trim motor board at keel so planking will lie evenly. Before planking is started, attach an outer frame to #6 transom (Fig. 5) with 1 $\frac{1}{2}$  in. #8 fh screws, coating contact surfaces with Seamlast.

To plank the bottom, lay a 3 $\frac{1}{8}$  in. x 4 ft. x 14





11 Frame structure forward of bulkhead.



ft. sheet of plywood on the hull with the keel edge of plywood directly on center. Clamp in place and mark along chine and motor-well opening. Remove plywood and saw to shape using shaped plywood as a pattern for opposite side. Coat all contact surfaces liberally with Seamlast before laying shaped plywood in position. Clamp one bottom plank at a time and screwfasten at all contacts except battens with  $1\frac{1}{4}$  in. #8 fh screws, spaced 2 in. Screwfasten plywood to battens with 1 in. #8 fh screws, spaced 2 in.

### Planking Forward Stem

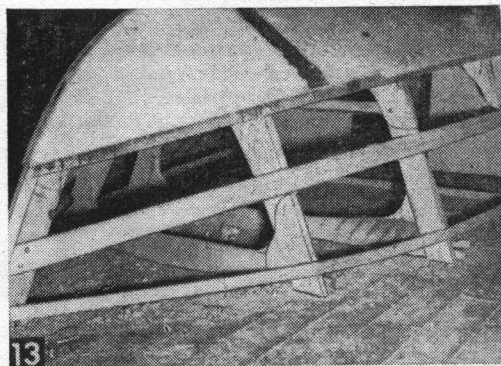
Since planking to cover the stem forward requires short pieces, make a pattern of this section on red rosin paper and transfer the shape to  $\frac{3}{8}$  in. plywood. Shape a batten to reinforce the plywood joints from a 2x4. You'll need to curve this piece to fit the bottom at this point. This thick batten with its flat side up and curved side adjacent to the plywood is trimmed to fit between keel and chine. Glue and screwfasten batten to plywood with  $1\frac{1}{4}$  in. #8 fh screws.

The shaped fore ends of plywood are "steeped" in hot water for 15 minutes, transferred to position, clamped where possible and screwfastened in place like the aft bottom planking. Coat the butt joint of fore and aft planking with a stiff mixture of fine sawdust and resorcinol glue, and sand smoothly when dry for an invisible joint. Finish bottom by preparing a joint as indicated—42 in. aft of stem so side and bottom planking will form a butt joint. Aft of this point, bottom plywood laps over side.

The side planking is mostly clear sailing. Simply clamp a 4x14 ft. plywood sheet in position, starting from stem. Mark the plywood to fit joint forward allowing for later trimming. Mark to fit aft, remove and cut to shape, using shaped piece as a pattern for opposite side. Fit  $\frac{3}{4}$ x3 in. butt blocks back of plywood joints along sides after fore side planks have been fastened in place as the drawings indicate.

Before fastening side planks, coat chine and transom edges with Seamlast and coat battens, frame, and sheer clamps with resorcinol glue. Clamp side planks and screwfasten to chines with  $1\frac{1}{4}$  in. #8 fh screws, spaced 2 in. Use 1 in. #8 fh screws for attaching plywood to clamps and battens. At side butt-blocks glue and screwfasten ends with 1 in. #8 fh screws.

The planking is finished by trimming edges of plywood evenly along chine joints at transom and stem, followed by "steeping" the outer stem



13 Trim bottom planking before applying side planking. Note corner in planking just forward of #2 frame where the bottom planking begins to overlap the side planking of the boat.

pieces in hot water and screwfastening to stem joint. Screwfasten outer keel in position with 2 in. #10 fh screws spaced 8 in. The outer keel should be tapered at the transom end and cut off about 12 in. forward of transom well opening as shown in the construction drawings.

### Ready for Paint and Hull Finishing

With these jobs done you are ready to paint the bottom and sides, applying one priming coat of Firzite and puttying all screw holes. Apply two flat coats of Firzite followed by one thin coat of enamel as it comes from the can. Lightly sand all coats but the last. Now you're ready to turn the hull right side up, with the help of some husky lads, and chock it in position. Apply two coats of Firzite to the remainder of the boat, inside and out.

Finishing the cabin, floor and interior on *Eager Eve* and getting her ready for the water are greatly simplified by the deck beams and floor frames already placed as we will explain in the following pages.

Here's another shot of Eager Eye in action. Note how well the outboard motor is concealed by this design—almost looks like a costly inboard!



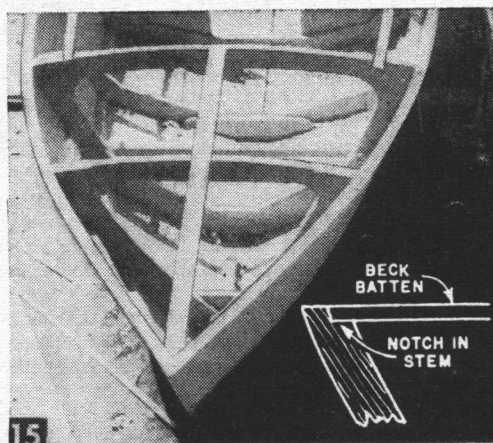
### Completing the deck, interior and controls of this neat little cruiser

Now that you have completed the basic hull, framing, planking and other basic structural details, you're all set to complete the deck, interior and controls of this 18 ft. outboard cabin cruiser. The floor beams which form part of the hull and the simplicity of the interior design make *Eager Eye* much easier to finish and prepare for the water than other cruisers of her size.

Before planking the deck, you'll need to bolt or screw the deck gussets into place with two  $\frac{3}{16}$  x 2 in. rh stove bolts at the main frames and three #8 x 1  $\frac{1}{4}$  in. fh screws at the half-frame positions. Notch the deck carlins flush into #2 frame and gusset, aft along the deck gussets and ending in a flush notch in the frame only of #6 transom. Screwfasten the carlin in the notches with one #8 x 1  $\frac{3}{4}$  in. fh screw at each joint. Motor well carlins,  $\frac{3}{4}$  x 2 in., are now notched flush into transoms #5 and #6 and screwfastened with two #8 x 1  $\frac{3}{4}$  in. fh screws at each joint.

Before laying on the forward deck plywood, partially notch a  $\frac{3}{4}$  x 2  $\frac{1}{4}$  in. batten into the stem and fully flush into #1 and #2 deck beams to support the center of the plywood decking. Trim the  $\frac{3}{8}$  in. plywood, preferably 5-ply mahogany face, evenly along the edges with a seam down the center over the deck batten. When cutting,

allow 3 in. to extend aft of the #2 deck beam. To simulate deck planks, groove the plywood  $\frac{1}{16}$  in. deep with an electric hand saw before screwfastening the decking to the sheer edges and the center batten with #7 x 1 in. fh screws, spaced at 2 in. Continue aft, fitting the side decking at each

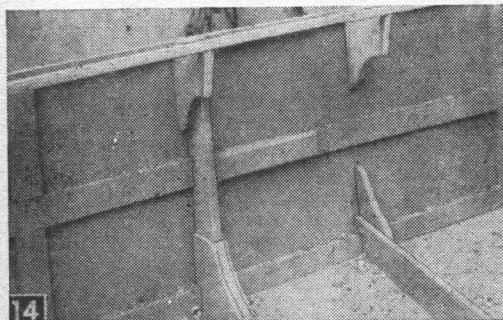


15 Fore deck framing. Note centerline batten located under the fore deck.

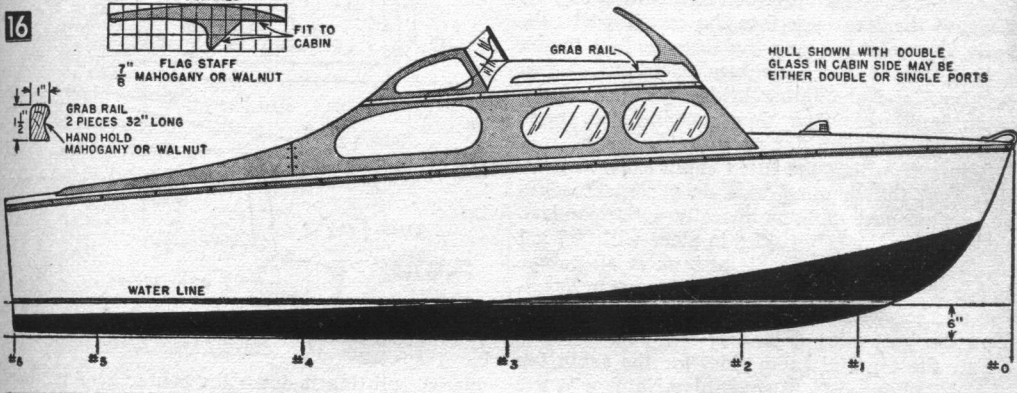
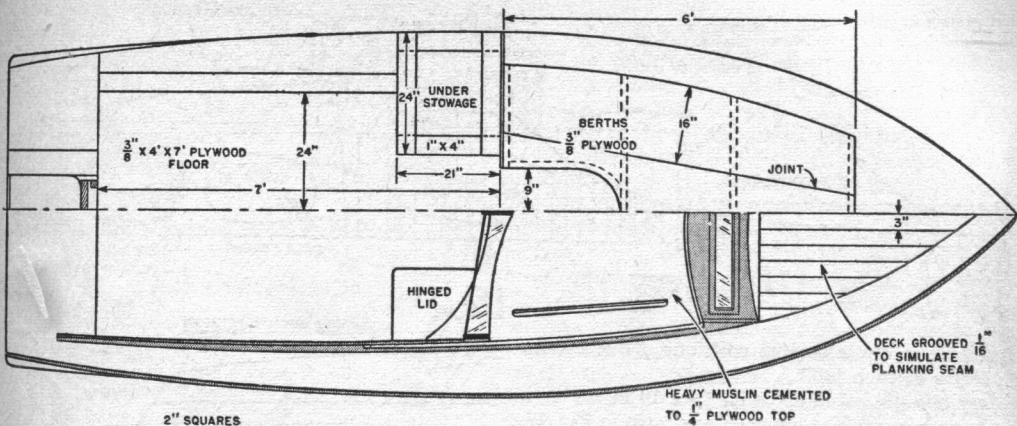
position and fastening with #7 x 1 in. fh screws. Where necessary to make butt joints, fit a  $\frac{3}{4}$  x 2 in. butt block on the underside, coat the contact surfaces with resorcinol glue and screwfasten. Fit the  $\frac{3}{4}$  x 6 in. coamings in position and screwfasten them to the frames with #8 x 1  $\frac{3}{4}$  in. fh screws (as shown in Fig. 18).

### Constructing the Cabin Front

The cabin front and windshield are built up from corner posts and top and bottom pieces that frame the folding windshield. Start with the corner posts first—you'll find these posts are tricky to fit and should be lined up little by little until all the angles and bevels, including rabbetted joints are correct (Fig. 17). Fit the lower windshield crosspiece between the corner posts and over the curved deck. Since the bottom of this crosspiece is both curved and beveled to match



14 Knee supports and the deck carlin notched into the inboard corner ready for the coaming.



MATERIALS LIST—EAGER EVE (Cabin and Deck)

Lumber (Oak or Yellow Pine)

- |        |                        |   |
|--------|------------------------|---|
| 1 Pc.  | 3/4" x 6" x 10'        | Cabin Beams                                       |
| 1 Pc.  | 1/4" x 8" x 6'         | Fore Cabin Beams<br>(behind windshield partition) |
| 2 Pcs. | 3/4" x 1 1/4" x 18'-6" | Moldings  |
| 2 Pcs. | 5/8" x 1 1/8" x 8'     | Spray Rain Bottom                                 |
| 1 Pc.  | 3/4" x 2 1/4" x 8'     | Cabin Uprights                                    |
| 1 Pc.  | 1/2" x 2" x 4'         | Cabin Top Batten                                  |
| 1 Pc.  | 3/4" x 1 1/4" x 14'    | Side Deck Carlins                                 |
| 2 Pcs. | 3/4" x 7 1/2" x 16'    | Floor Frames                                      |
| 2 Pcs. | 3/4" x 1 1/2" x 8'     | Cabin Carlins                                     |
| 2 Pcs. | 3/4" x 1 1/4" x 8'     | Coamings  |
| 2 Pcs. | 1/2" x 3/4" x 12'      | Cabin Moldings                                    |
| 1 Pc.  | 1/2" x 2 1/2" x 48"    | Cabin Corner Posts                                |
| 2 Pcs. | 3/4" x 6" x 48"        | Fore Cabin Framing                                |
| 1 Pc.  | 1/2" x 1" x 24"        | Motor Cover Strut                                 |

Plywood (Fir Exterior Grade DFPA)

- |        |                  |                                |
|--------|------------------|--------------------------------|
| 2 Pcs. | 3/8" x 4' x 8'   | Decking                        |
| 2 Pcs. | 3/8" x 16" x 8'  | Cabin Sides                    |
| 2 Pcs. | 3/8" x 6" x 48"  |                                |
| 2 Pcs. | 3/4" x 9" x 24"  | Motor Cover Sides              |
| 1 Pc.  | 3/4" x 36" x 72" | Cabin Door and Curved Supports |

- |        |                  |                                   |
|--------|------------------|-----------------------------------|
| 1 Pc.  | 3/4" x 4" x 24"  | Motor Cover End                   |
| 3 Pcs. | 3/8" x 4" x 7'   | Flooring and Bunks                |
| 1 Pc.  | 1/8" x 4" x 4'   | Curved Transom and<br>Cabin Cubby |
| 1 Pc.  | 1/8" x 24" x 36" | Motor Cover Top                   |

Fastenings

- |          |                     |                |
|----------|---------------------|----------------|
| 3 Gross  | 1" #7 fh Screws     | Decking        |
| 6        | 1/4" x 2 1/2" Bolts | Berth Supports |
| 1/2 Gal. | Kuhls Canvas Cement |                |
- Remainder of screws and hardware indicated in the previous Materials List.

Hardware and Fittings

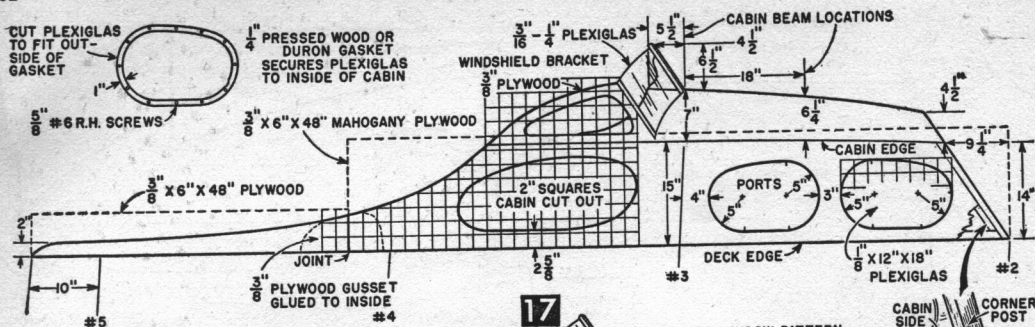
- |        |                               |                           |
|--------|-------------------------------|---------------------------|
| 1 Pc.  | 3/16" or 1/4" x 24" x 42"     | Plexiglas Wind Screen     |
| 1 Pc.  | 1/8" x 24" x 36"              | Plexiglas Cabin Ports     |
| 2 Pcs. | 1/8" x 3/4" x 18 1/2"         | Aluminum Molding          |
| 2 Pcs. | 4" x 12"                      | Bronze Screen             |
| 1      | Bow Plate                     | 1 Running Lite aft        |
| 1      | Mooring Bit                   | 1 Flag and Flag Staff     |
| 2      | Bow Chocks                    | 2 Life Preserver Cushions |
| 2      | Streamlined Cleats            | 2 Rubber Air Mattresses   |
| 1      | Running Lite fore—red and gr. |                           |
| 1      | Gasoline Stove (2 burner)     |                           |

the plane of the corner posts, take your time to fit it closely. Coat the contact areas between deck and lower crosspiece liberally with Kuhls Seamlast, and screwfasten to the corner posts. Screw the decking to this crosspiece from the underside with #8 x 1 1/4 in. fh screws.

Shape the upper windshield crosspiece with a beveled curve across the top and rabbet it into the corner posts. Screwfasten with two #8 x 1 1/4 in. screws at each joint. Back of this upper crosspiece, fit a 1 1/4 in. thick beam curved and beveled

to fit the top and screw the crosspiece to the beam with #8 x 1 1/4 in. fh screws from the fore side.

Cut cabin uprights, 3/4 x 2 1/4 in., and cabin beams, 3/4 x 2 in. according to Fig. 18. Screw the uprights to coaming with #8 x 1 1/4 in. fh screws. The cabin top beams are glued to top of uprights with 1/4 in. plywood gussets, screwfastened with #6 x 7/8 in. fh screws. Notch cabin carlins, 3/4 x 1 1/4 in., flush into the beams and partially into the corner posts. Extend the carlins about 3 ft. aft of #3 frame.

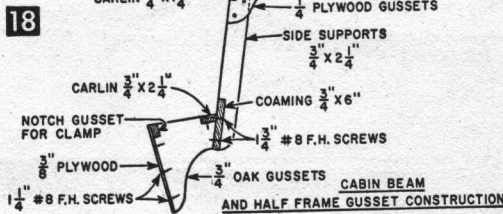
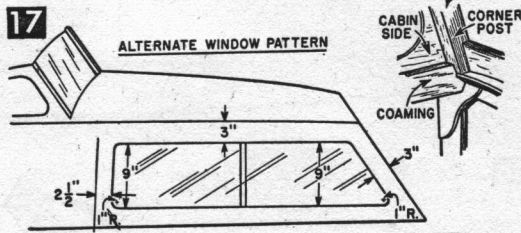


Screwfasten these carlins with one #8 x 1 3/4 in. *fh* screw at each joint.

Lay out the cabin sides on 3/8 x 16 in. by 8 ft. 5-ply mahogany face plywood as shown in Fig. 17. First, fit the fore ends into the corner post rabbets, then clamp along the sides and fit to the deck. Mark the port openings, using one or two openings, and the flying bridge port aft of the cabin bulkhead. Saw these openings to shape with a jig-saw or a fine tooth keyhole saw.

Before fastening the fitted cabin sides in position, coat the coaming, side deck contact edges and corner post rabbets liberally with *Seamlast*. Screwfasten the cabin sides in place with #7 x 1 in. *fh* screws spaced at about 3 in. at all points. Shape the aft ends of the cabin sides, set in *Seamlast* and screwfasten in place, gluing a gusset behind the butt joint (Fig. 17).

Fair the top and cabin sides for the cabin top of 1/4 in. plywood to fit smoothly. Notch a 1/2 x 2 in. batten into all beams and extend it aft of #3 beam about 6 in. Apply the cabin top in two



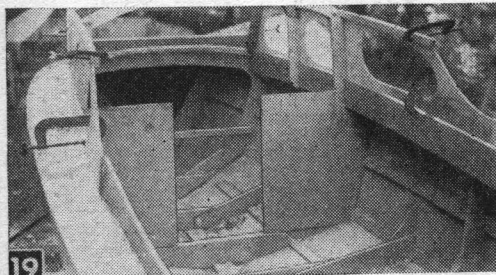
pieces, splitting it down the center over the batten. Mark the 1/4 in. plywood even with the end of the center batten and fashion a sweeping curve out to the cabin sides (Fig. 20). Screwfasten the two top pieces in place with #7 x 7/8 in. *fh* screws spaced at 3 in. along all contact edges.

Round off the edges of the plywood cabin top and cut a single piece of heavy muslin to fit. Follow directions on the can of Kuhls canvas cement and it will not be necessary to tack the edges. Lap the muslin over the edges about 1 1/4 in. and cement to the underside of the plywood top. Lap the aft edge of the cloth under the curved edge and cement. For a neat finish at this curved aft end, cut a plywood gasket 3/8 x 2 in. and cover the tucked under cloth. Clinch nail this gasket from the top, preferably with copper clout nails.

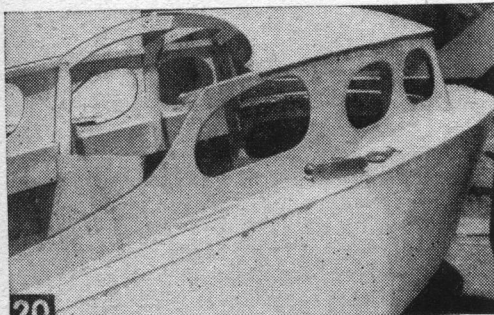
To finish the cloth surface, thin one quart of the canvas cement with turpentine to the consistency of thin paint and coat the entire cabin top, working the cement into the cloth. When the cement is dry, finish the outer edges with a 1/2 x 3/4 in. molding finish nailed or screwfastened in place. Apply one thinned coat of deck enamel, followed by a second coat straight from the can.

Make up the upper windscreen supports and groove the edges for the 1/4 in. Plexiglas or Lucite sheets. At this point, finish the cabin sides—two coats of *Firzite* followed by two coats of spar varnish to the mahogany or walnut faced plywoods.

You can plank the cockpit floor with a single sheet of 3/8 in. plywood 4 x 7 ft. No additional floor

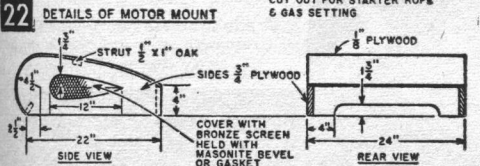
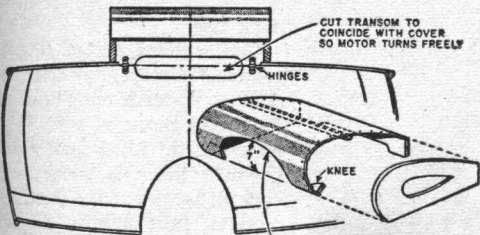
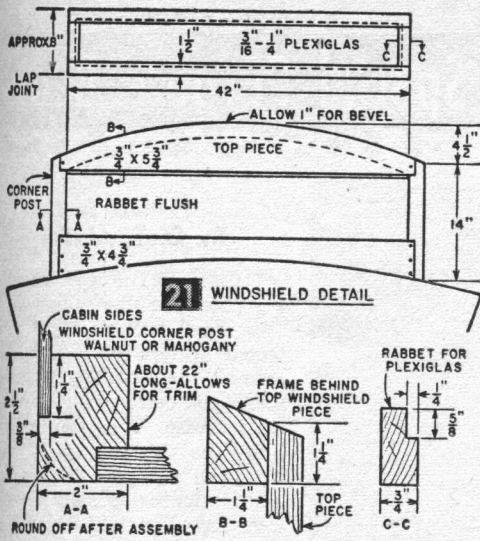


19 Fitting the cabin sides.



20 Applying cabin top after sides are in place. Note sweeping curve from center of cabin top to the sides.





stringers are required, as the tops of the frames provide plenty of support. It will be necessary to fit the plywood floor to its position, nothing for motor board uprights and #4 and #4A frames.

Bunks are  $\frac{3}{8}$  in. plywood laid over the berth supports which were previously bolted in place. You'll need an additional support,  $1\frac{1}{8} \times 1\frac{1}{8}$  in. bolted to the forward side of #3 cabin bulkhead. Fit the berths and screwfasten the berths and floor in place with #8 x  $1\frac{1}{4}$  in. fh screws. Screwfasten additional pieces of  $\frac{3}{8}$  in. plywood to the aft side of #3 cabin bulkhead and cut a cabin door from  $\frac{3}{4}$  in. plywood.

Plexiglas or Lucite for windows and windshield should be  $\frac{3}{16}$  in. thick with  $\frac{1}{4}$  in. recommended for the flying bridge windscreen.

Complete the transom assembly and the motor well according to Fig. 22. Bend  $\frac{1}{8}$  in. plywood around the curved portions of the well, glue and screwfasten with #6 x  $\frac{1}{2}$  in. fh screws at  $1\frac{1}{4}$  in. spacing. The curved-top motor cover muffles some of the outboard engine's exhaust.

The original *Eager Eve* was decorated in a pleasing contrast of a green bottom, white sides, varnished fore-deck (simulated deck seam

grooves filled with brown seam compound) and side covering boards light blue. The canvas cover over the cabin was finished in a yellow buff and the cabin sides in natural finished gum. After painting, attach the moldings around the sides with #8 x  $1\frac{1}{4}$  in. fh screws spaced at 8 in.

The streamlined flag staff with a pennant whipping in the breeze adds a sporty touch to *Eager Eve*. Saw the staff from solid mahogany or walnut and finish with clear spar varnish.

Installation of the throttle and gear shift controls and a steering wheel on the aft side of the bulkhead will vary according to your outboard engine and the type of controls you select. Locating the engine controls near the wheel affords flexibility and convenience. The controls are relatively expensive (about \$75) and should be installed by an outboard engine dealer to make certain there is proper clearance without binding and to assure smooth operation. Without these controls, direct steering and engine operation is still simple from the back of the cockpit.

● Craft Print No. 175 in enlarged size for building *Eager Eve* 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 & 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.

