

SHOWBOAT - - Novel

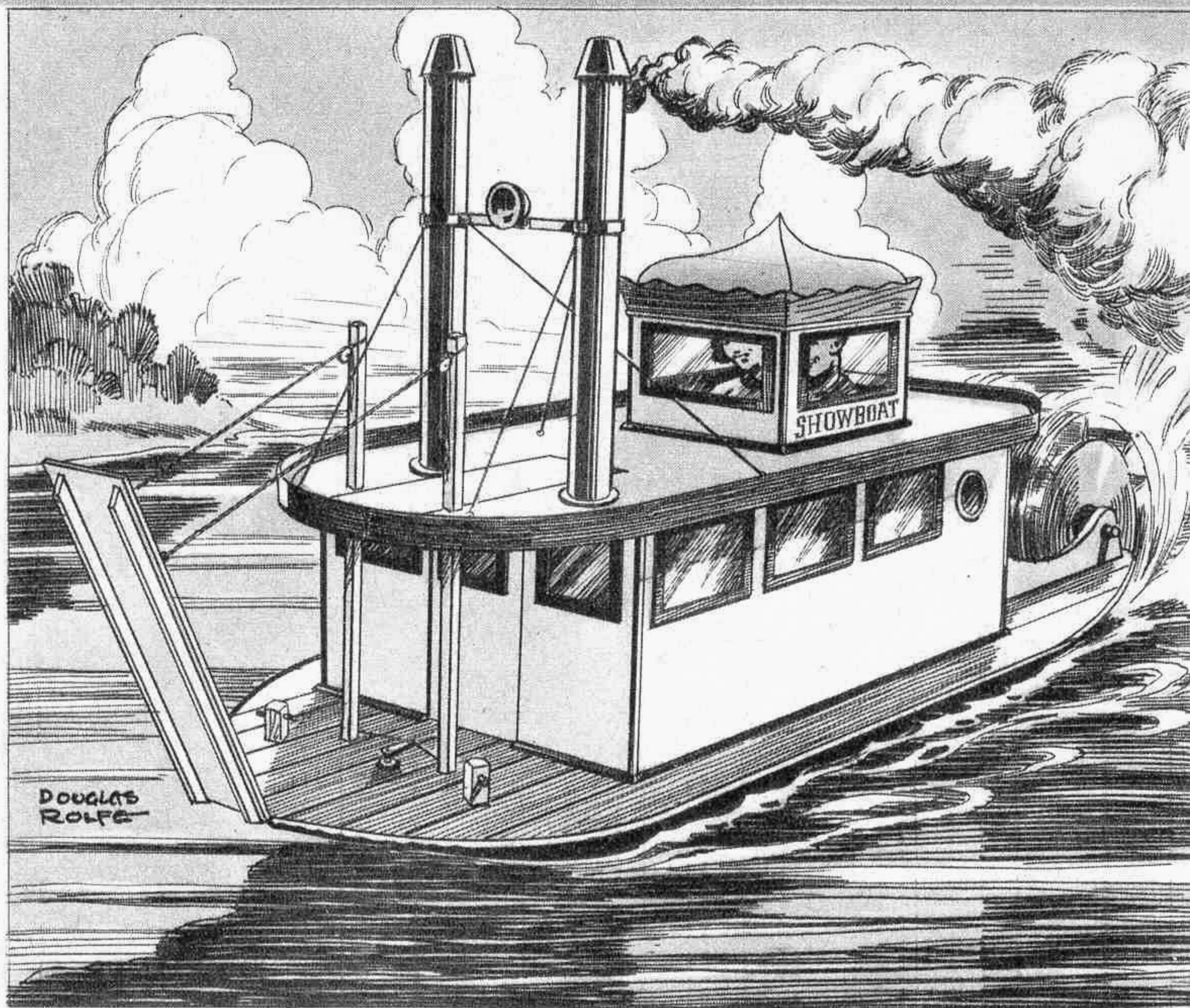
This miniature "Showboat" is an ideal camp afloat for those who like to spend vacation days on lake or river. Economical to operate, it permits fun on limited budgets.

by
Douglas Rolfe

FOR generations the old stern-wheelers have been industriously churning their way up and down the great rivers of America, and even today the river Steamboat is a familiar sight at many of the old Mississippi landings. *Showboat* brings a small and simplified edition of these famous boats within the practical building scope of anyone interested in lake or river craft, and offers, besides novelty, extraordinary economy and remarkable cabin capacity for so small a craft.

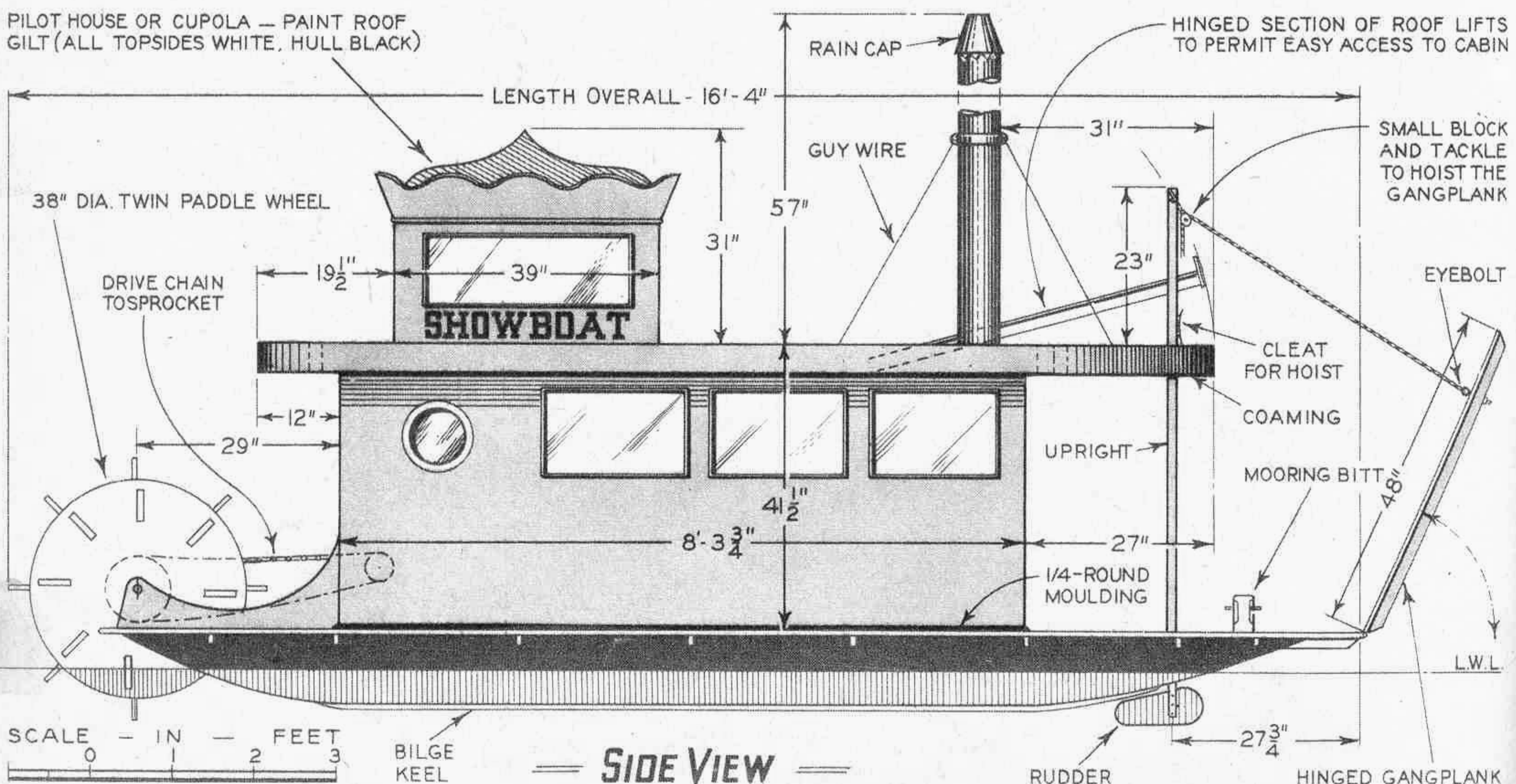
The advantages of the design are plentiful. In the first place it requires nothing beyond ordinary carpentering to build and no very special skill at that trade. Then again it provides the maximum of cabin space and yet draws so little water that

it can be run into a safe landing wherever a few inches of water are available. On top of all that, unless it is engine operated, it costs nothing in the way of fuel to run. *Showboat* is powered by the crew and passengers. Two old bike frames, mounted side by side, are coupled quite simply, without a difficult conversion job, to the twin stern wheel so that two ordinary persons can

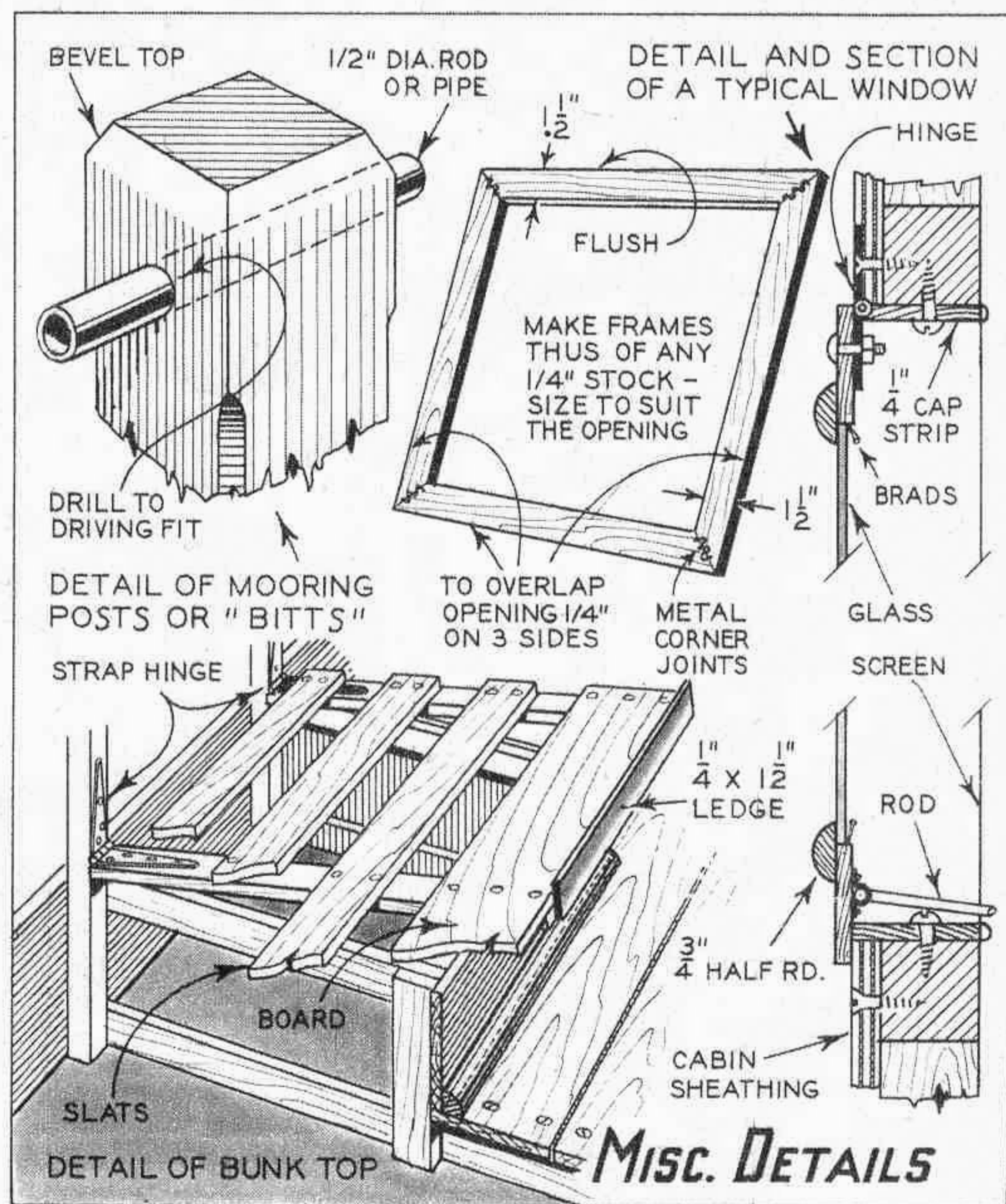
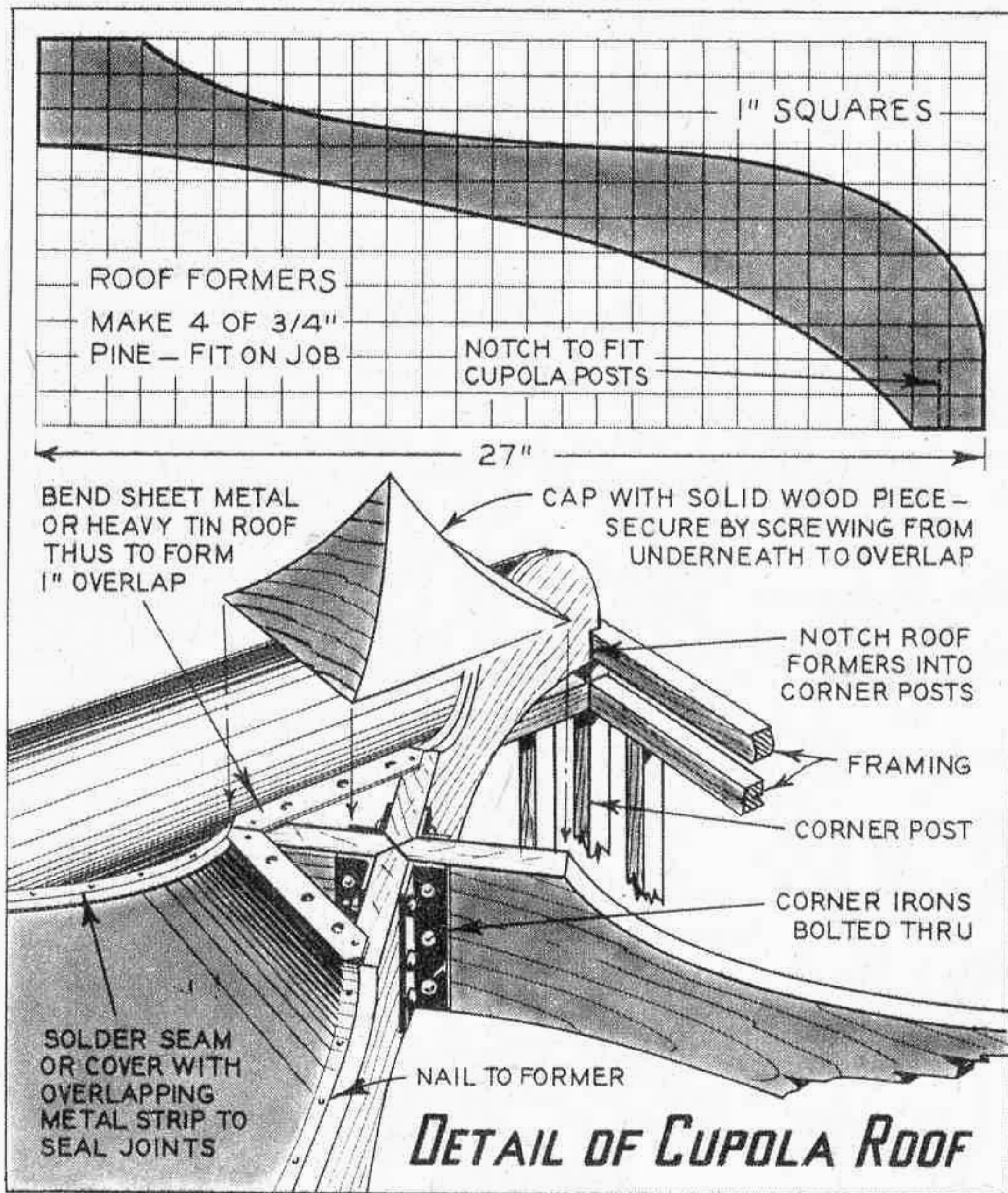


The artist's drawing above and side view below give the proportions of the *Showboat*.

PILOT HOUSE OR CUPOLA — PAINT ROOF GILT (ALL TOPSIDES WHITE, HULL BLACK)



Stern Wheel River Cruiser

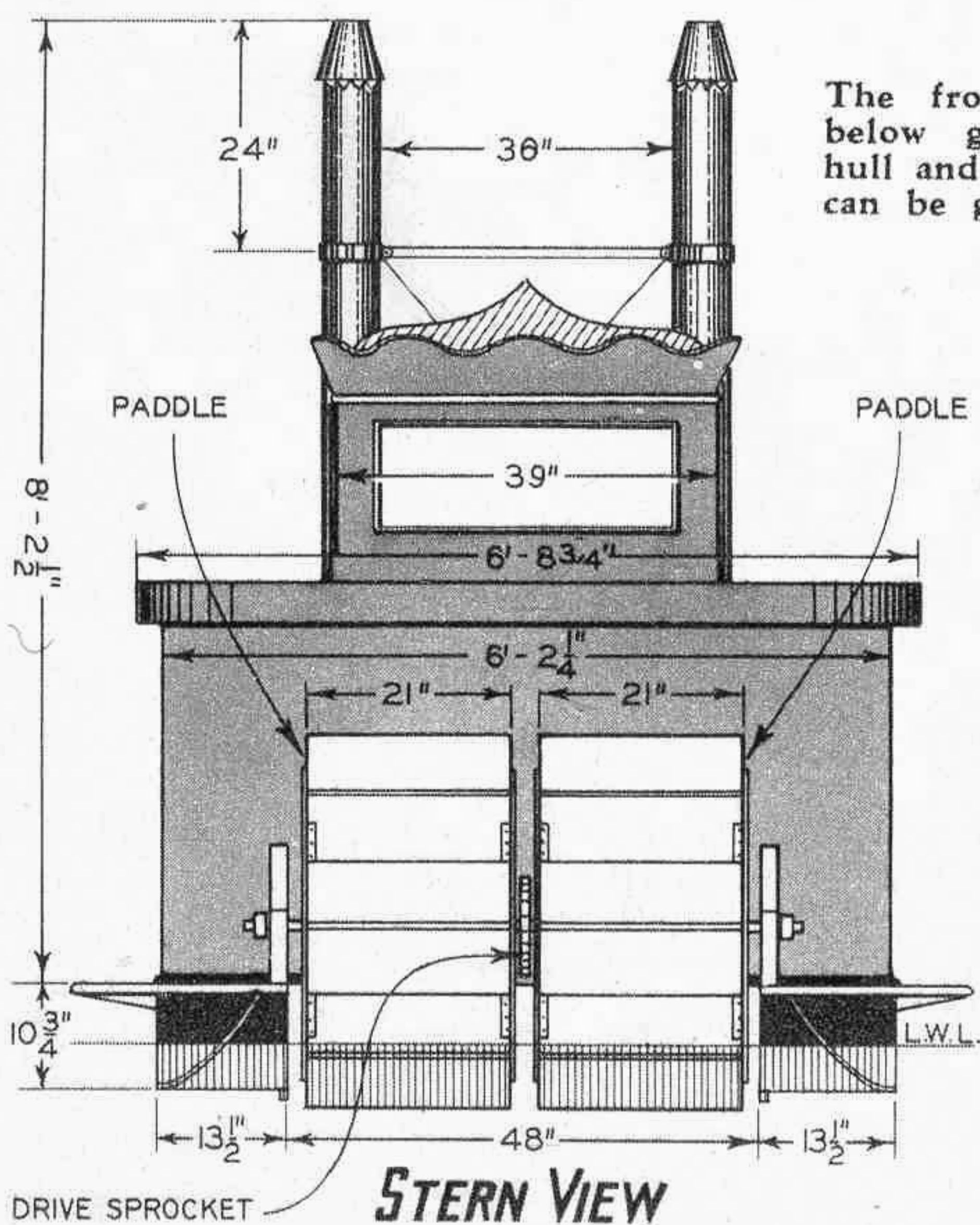


Follow the detail drawings above when assembling the boat. All parts are accurately planned.

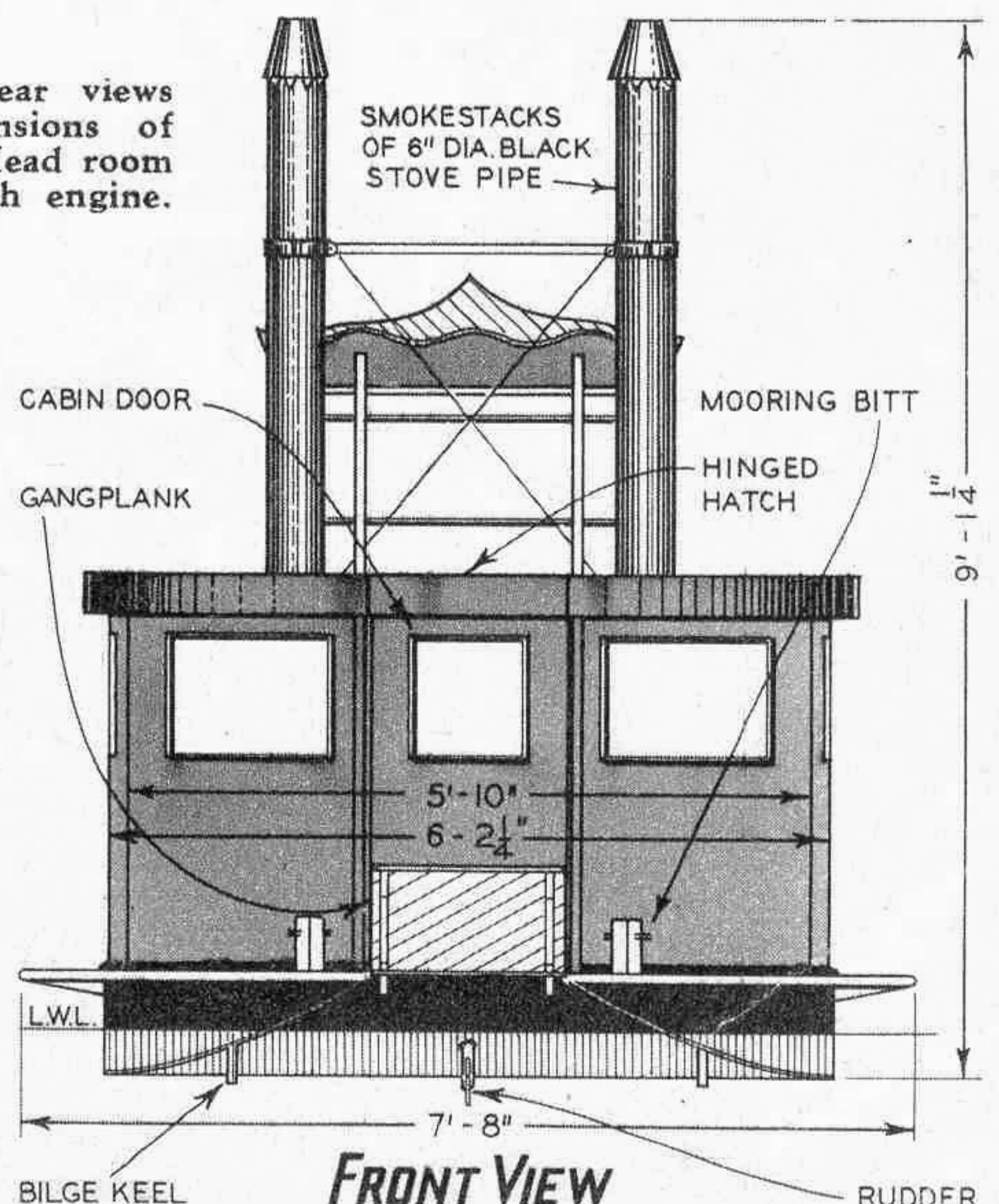
comfortably propel this unique ship anywhere they choose to go. Steering is effected in an equally simple manner. One set of handlebars is left free to turn and is connected by means of hidden cables to the forward rudder.

Although economy and novelty advise the simple "power plant" just described there is

nothing to prevent the use of a small gasoline engine instead of pedals. In that case the engine would be neatly mounted between the bunks and against the aft cabin wall. The exhaust could be led forward and out through one of the smoke stacks which contribute to the realism of the design. Incidentally these smoke stacks are not



The front and rear views below give dimensions of hull and cabin. Head room can be greater with engine.



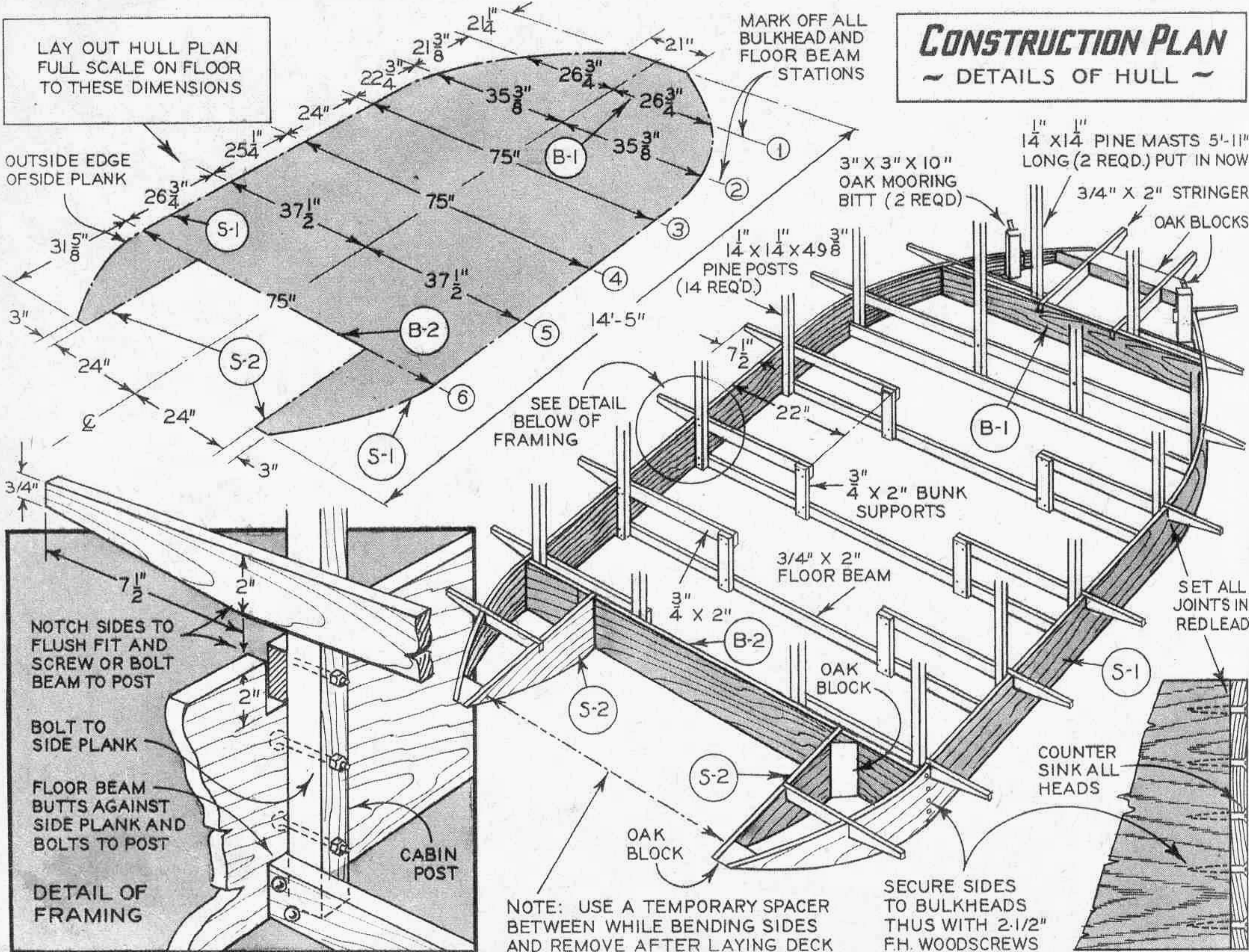
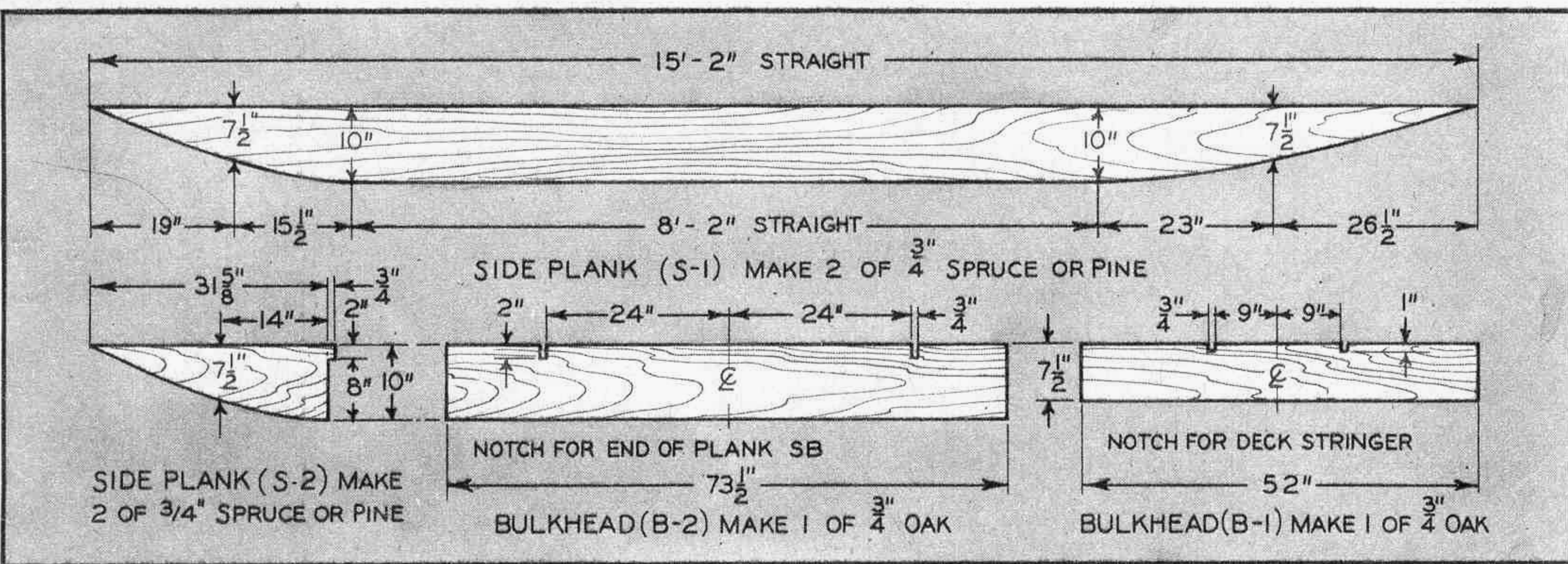
entirely ornamental as one of them is already utilized in acting as a chimney for the stove. The stove may be located on either side of the cabin and may be wood or even coal burning if desired. Of course if engine power is substituted for man power, then some other provision will have to be made for the steering. Fortunately this is a simple business and merely calls for a small wheel to be mounted on the forward beam of the pilot house and connected by cables as already mentioned for the bike steering gear.

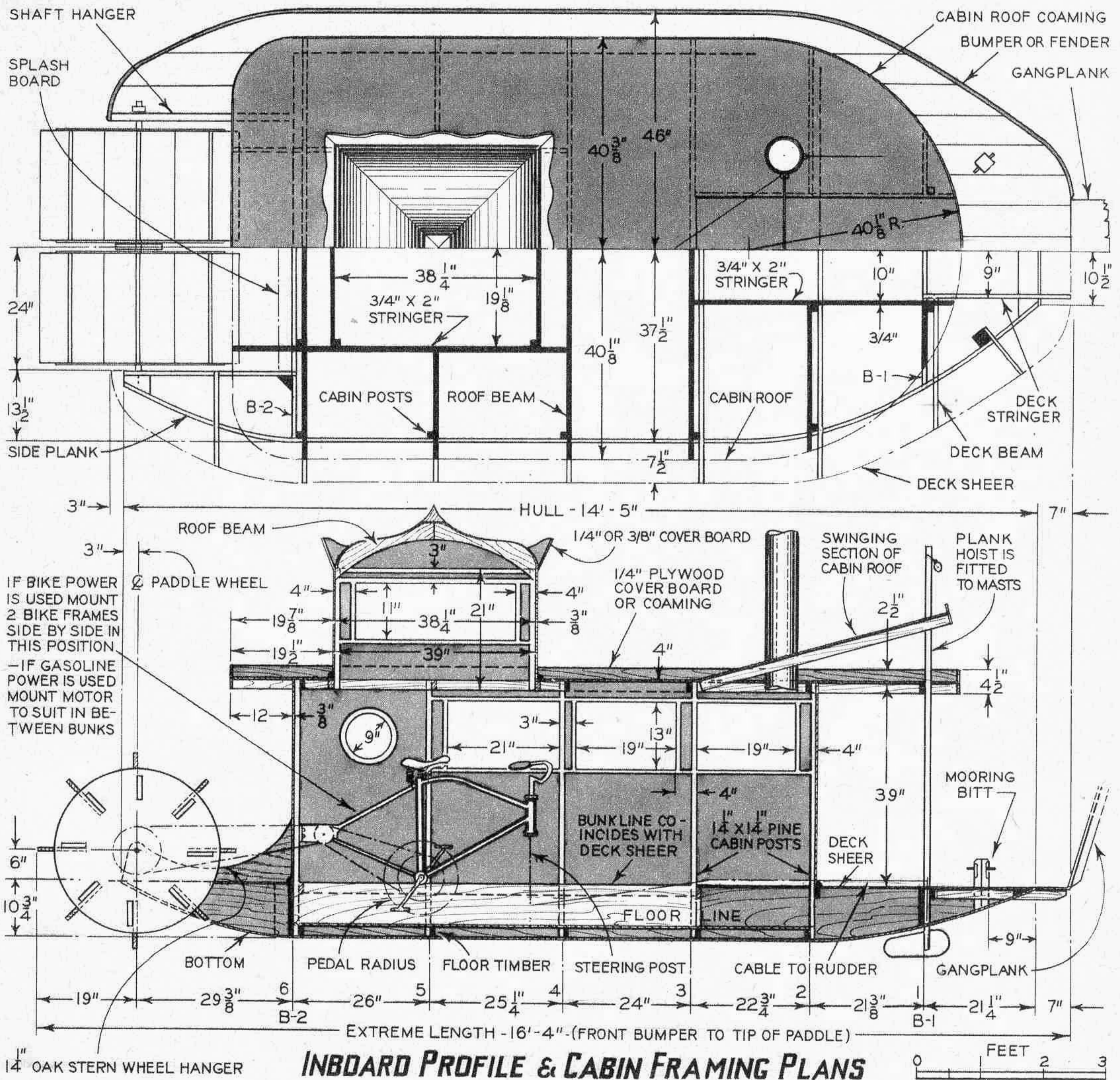
So much for the general description of *Show-boat*. Now for the actual construction.

The hull proper is composed of two $\frac{3}{4}$ " boards

which are bent around two oak bulkheads and the intervening frames. The first step then is to cut out the required side boards and bulkheads to the dimensions given for these pieces. When the side boards have been cut and dressed mark off the bulkhead stations accurately on each plank, S-1 and then proceed to lay down the hull plan full size on any flat and convenient floor. All station lines and the center line should be laid down at the same time. You will then have a full size working plan on which to set up the hull. Place one of the planks, S-1, against this floor plan so that the bulkhead stations marked on the plank coincide with those on the floor plan. Mark

Complete hull plans and dimensions are given below. Follow instructions carefully for best results.





INBOARD PROFILE & CABIN FRAMING PLANS

Above: Cabin layout and pedal drive arrangement. A 5 to 7 horsepower motor may be used instead.

off on the plank all cabin post stations Nos. 3 to 6, inclusive. Now place the two side planks together and mark off the second plank similarly.

The planks can now be fitted with the $1\frac{1}{4} \times 1\frac{1}{4} \times 49\frac{3}{8}$ cabin posts at the stations marked. The post which occurs at Station 2 is fitted after the sides have been set up and bent to shape. Note that No. 6 post butts against the bulkhead B-2 and must be placed accordingly in relation to the station line. The cabin posts are secured to the side boards with $\frac{3}{16}$ carriage bolts, heads outside and not countersunk.

The two planks, complete with post, are now set up on the floor plan and connected by means of the bulkheads, B-1 and B-2. Line them up accurately and temporarily brace them to the floor while putting in the frames which occur between the bulkheads. The plans clearly show the disposition of the frames. The floor timbers or beams simply butt up against the side boards and are bolted to the cabin posts. Deck beams and bunk beams (one and the same in fact) are

fitted into notches cut into the side boards as these pieces project $7\frac{1}{2}$ beyond the sides to support the forthcoming overlapping deck.

The hull frame will now appear as a hollow box with projecting open ends. These ends can now be brought together to the desired width at stem and stern. A temporary spacer will be needed at the stern until after the deck is laid as is noted on the drawings. The planks are secured to oak blocks at the stern and the short side planks, S-2, should be fitted at this time. At the bow end the planks are also secured to oak blocks but with the forward deck stringers interposed as shown.

The remaining cabin posts, the masts, the oak mooring posts or bitts and the short deck beam fore and aft are now installed. Before laying the deck it is necessary to install the rudder post tube. Also, the entire interior of the hull should be given at least a coat of good paint. The deck can now be laid.

It is a matter of choice whether $\frac{1}{2}$ boards or

$\frac{3}{8}$ " plywood is used for the deck. The planked method is probably easier and it involves less wasted material. In any case the decking, wherever it touches the outer edges of the hull, should be laid in either paint or in flannel strips and marine glue.

Next put in the cabin flooring. This should be not less than $\frac{1}{2}$ " stock resting directly on the floor timbers and butting flush against the bunk supports. The bunks can be completed now or later. However, the cover boards on the side and end of each bunk should be put in now as this helps stiffen the hull.

The cabin top beams are next in line. Beams are bolted to cabin posts and stringers are bolted or screwed as the situation warrants. The stringers are required to support the cupola corner posts and also where the hatch opening occurs. When the roof framing is completed the $1\frac{1}{4}$ "x $1\frac{1}{4}$ " window framing is put in on three sides. No windows are used in rear wall of the cabin.

Outside sheathing is of $\frac{3}{8}$ " plywood throughout. Tongue and groove stock or even wallboard may be substituted but the plywood will be found most satisfactory and easier to apply. Cover the sides, back and front, cutting out or piecing as needed to allow for window openings and for the door. Outside corners are covered with metal

trim to hide the ragged ends and effect a neat exterior.

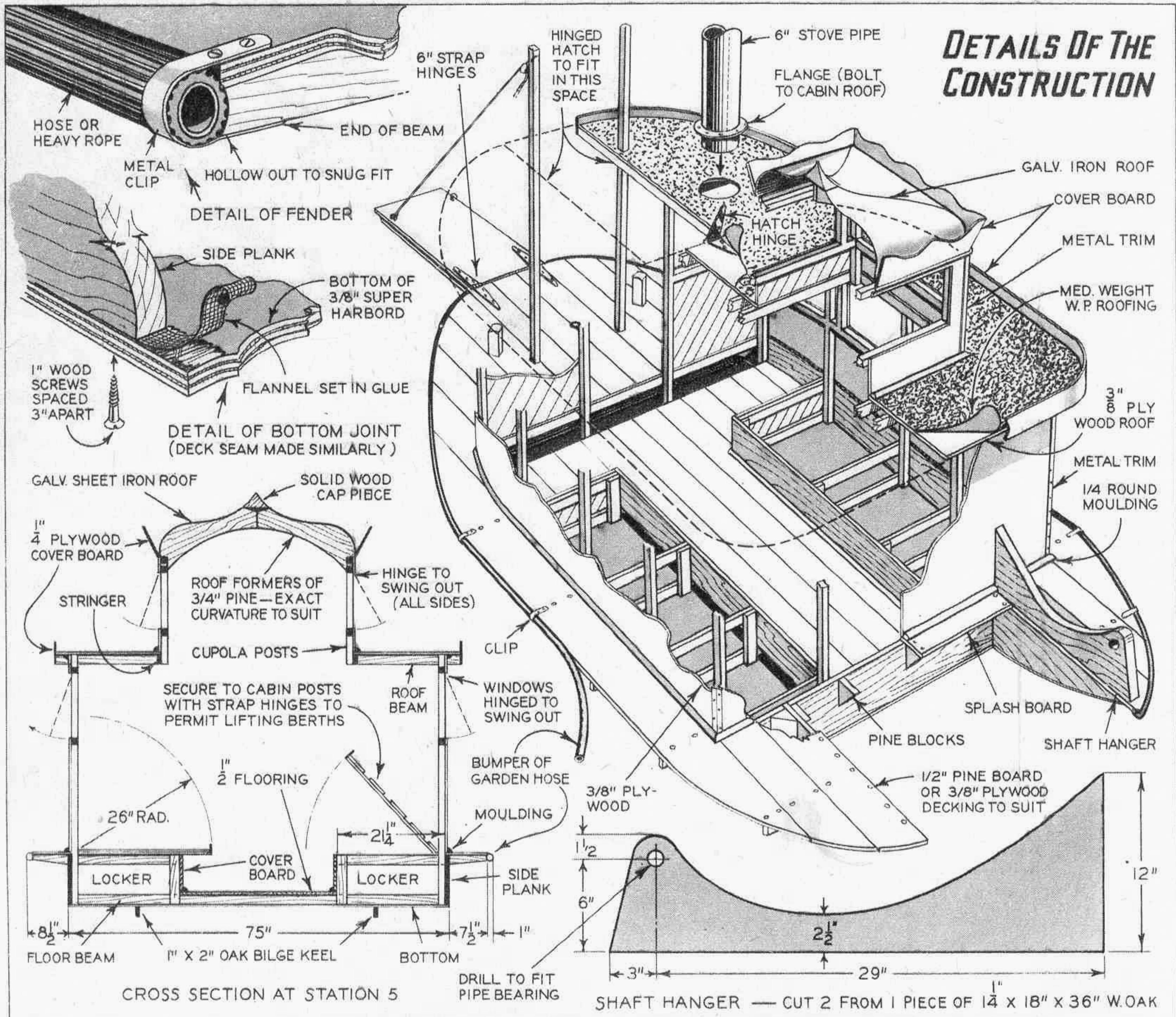
The cabin roof, also of $\frac{3}{8}$ " plywood is laid next. Leave the hatch space open and fit snugly around the cupola opening. The entire roof is later covered with asphalt roofing paper. Complete the cupola by cutting out and fitting the curved roof beams and covering the sides with odd scraps of plywood. Cover the roof with galvanized iron.

Now complete the cabin roof by fitting the hatch hinges and cutting out the openings for the smoke stacks. The entire roof is then covered with roofing material as mentioned and the $\frac{1}{4}$ " plywood coaming or coverboards bent around the edge and secured to the roof beams and also to the roof itself.

The cabin hatch, door, and windows can be made now. Windows simply hinge to swing outwards and are held shut by hooks and staples. The hatch lifts upwards and fastens to hinges already secured to roof. The hatch should have a projecting brass trim to overlap the roof.

The bottom of $\frac{3}{8}$ " Super-Harbord plywood is laid in flannel and glued along the sides and ends of the boat and secured with 1" flathead brass screws as noted. Trim the bottom flush with the sides of the hull and fit the bilge keel which are

[Continued on page 144]



Above: This drawing shows the interior and deck of the *Showboat*. Note roominess of boat.

Showboat

[Continued from page 122]

later firmly secured to the bottom by means of screws driven through from the inside of the hull. Cut a hole at the rudder post tube so that the rudder post can be fitted later.

Bunk tops are of slats nailed to cross pieces and hinged to the cabin posts. The cabin hatch, door and windows, if not already made, should be finished and hung. The gangplank is now made and hung on 6" strap hinges. The smoke stacks can now be set in place and braced securely to the roof.

Before painting the superstructure and finishing off the deck the details of the power plant, the stern wheel and the rudder remain to be attended to. The stern wheel is built up in two simple units and mounted on a common shaft with a large diameter sprocket pinned to the shaft in between. Mount bikes as indicated.

The rudder is quite simple and is made and fitted as shown in the drawings. Drill the mooring posts or bitts to take a short piece of iron rod or pipe to a driving fit so that the ends project as shown.

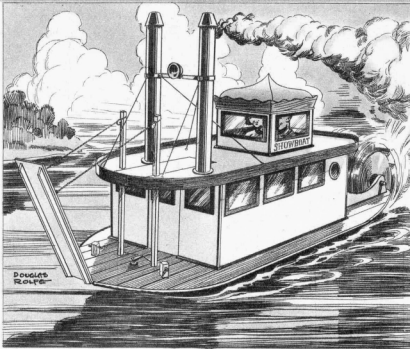
Large blueprints for *Showboat* are available. See page 146.

Materials Required

- Side planks—2 pieces $\frac{3}{4}$ "x10"x15'—3" spruce or pine;
 - 2 pieces $\frac{3}{4}$ "x10"x32"—3" spruce or pine.
 - Bulkheads—1 piece $\frac{3}{4}$ "x10"x6'—3" w. oak; 1 piece $\frac{3}{4}$ "x7 $\frac{1}{2}$ "x48"—6" w. oak.
 - Framing—120 feet $\frac{3}{4}$ "x2" pine; 180 feet 1 $\frac{1}{4}$ "x1 $\frac{1}{4}$ " pine.
 - †Mooring posts—frame blocks—7 feet 3"x3" w. oak.
 - Decking— $\frac{1}{2}$ "x8" and $\frac{1}{2}$ "x6" pine or $\frac{3}{8}$ " plywood to suit.
 - Cabin siding— $\frac{3}{8}$ " plywood or T. & G. pine to suit.
 - Cabin roof— $\frac{3}{8}$ " plywood, quantity to suit.
 - Moulding—100 feet $\frac{3}{4}$ " quarter-round (wood to suit).
 - Shaft hanger—1 piece 1 $\frac{1}{4}$ "x18"x36" w. oak.
 - Bottom— $\frac{3}{8}$ " super harbord plywood, quantity to suit.
 - Bilge keels—28 feet 1"x2" w. oak.
 - Cover boards— $\frac{1}{4}$ " plywood, quantity to suit.
 - Paddle blades—28 feet $\frac{3}{4}$ "x9" pine.
 - Flooring— $\frac{1}{2}$ "x6" or $\frac{3}{4}$ "x6" pine boards to suit.
- †Frame blocks are obtained by splitting the 3"x3" diagonally.
NOTE: All lumber sizes given are minimum for dressed lumber.

HARDWARE

- Thirty-two— $\frac{1}{4}$ " tie rod bolts 23" long.
- Medium weight galvanized iron sheet for cupola roof, quantity to suit.
- Medium weight asphalt roll roofing for cabin roof, quantity to suit.
- 30 feet rustproof auto runningboard moulding for outside corner trim.
- Heavy ga. galvanized iron sheet for paddle wheels, quantity to suit.
- Two 5-foot lengths of black 6" stove pipe for smoke stacks.
- 1 length of $\frac{3}{4}$ " inside dia. galvanized pipe for stern wheel shaft.
- Four $\frac{3}{4}$ " pipe floor flanges.
- Small length of brass pipe to running fit for O. D. of above pipe.
- 2 square feet $\frac{3}{16}$ " galvanized iron plate for rudder, fittings, etc.
- 24-inch length of $\frac{1}{2}$ " O. D. steel rod for countershaft.
- About 35 feet garden hose for bumper or fender.
- Four 6" steel strap hinges for gangplank and cabin hatch.
- 20 small hinges for hanging windows.
- 40 sets hooks and staples, small, for fastening windows.
- 6 sets hooks and staples, large, for securing hatch, or 2 steel hinged hasps for hatch and door and bunks.
- 2 dozen 2 $\frac{1}{2}$ " F. H. woodscrews—3 gross 1" F. H. woodscrews, $\frac{3}{16}$ "x2 $\frac{1}{2}$ ".
- Carriage bolts, quantity to suit, and finishing nails as required.
- 1 large sprocket for stern wheel shaft.
- 1 small sprocket for countershaft.
- 1 length chain to fit above.



DOUGLAS
ROLFE