



How To Build a Sharptown Barge

By ROBERT M. STEWARD

22 Foot Flat Bottom Skiff

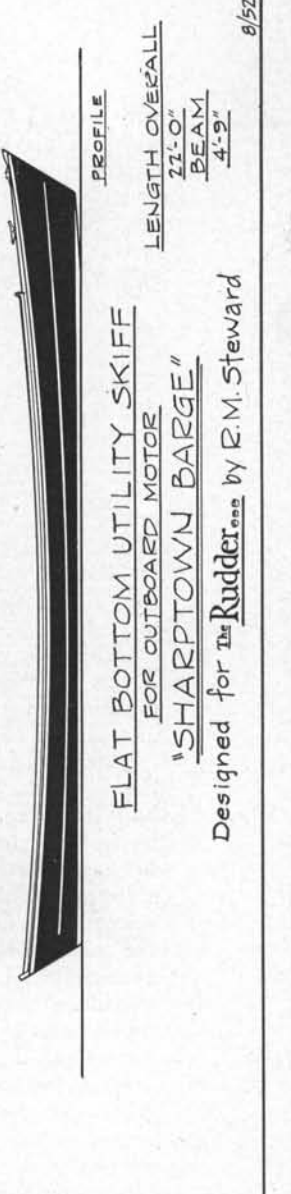
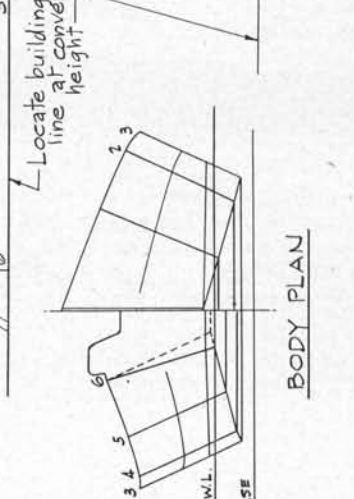
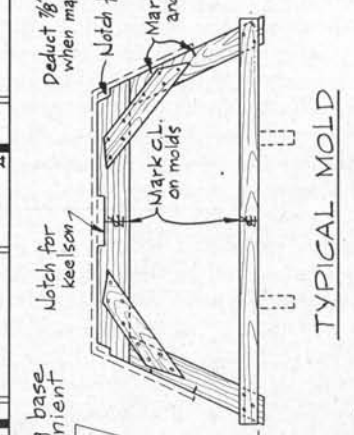
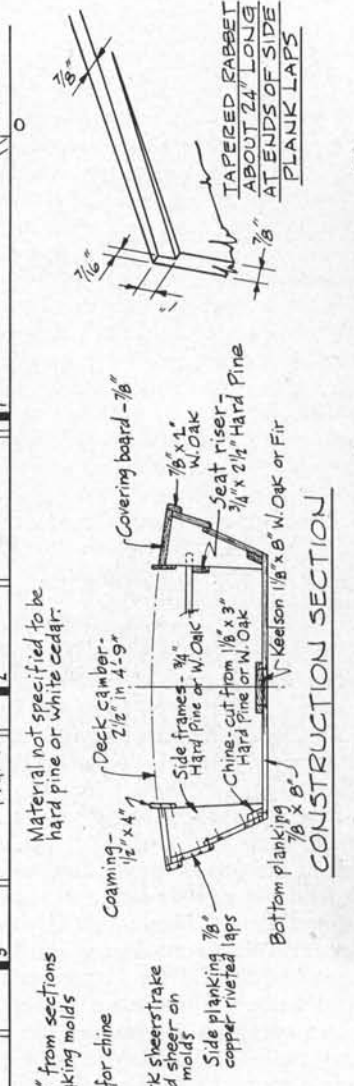
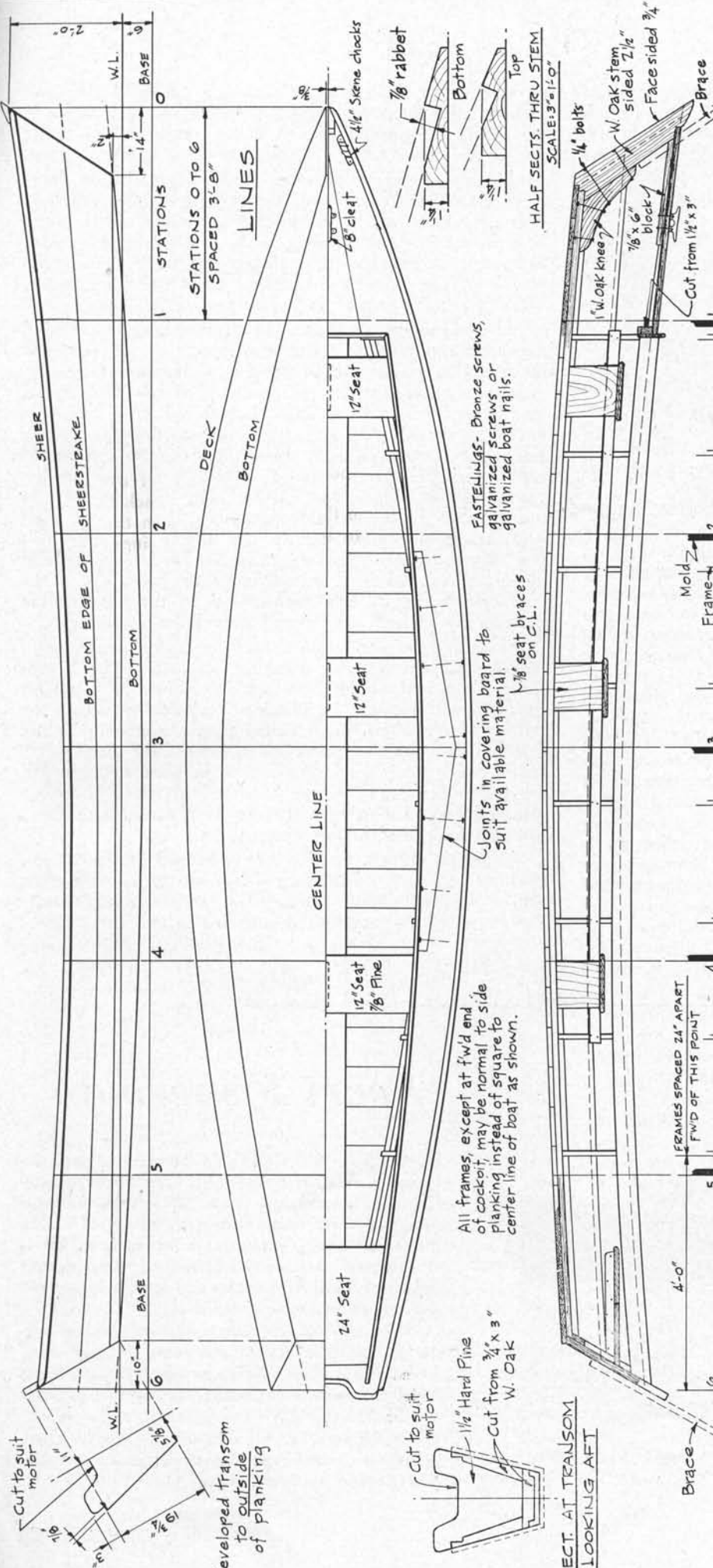
WHEN a general plan and a photograph of a Sharptown barge were published in the September, 1948, issue of *THE RUDDER*, many letters were directed to the writer asking whether building plans were available. Since the series of monthly articles that ultimately were published as a book, *Small Boat Construction*, had been started, and were to run for almost two years, the writer did not have the time then to comply with the requests for building plans.

Those who were readers of *THE RUDDER* in 1948 may remember that the barge was described by her owner, Dr. R. H. Burkart of Bishop's Head, Maryland, as a type commonly used by the shad fishermen in the Nanticoke River on Maryland's eastern shore. Although not wide, the barge is a burdensome hull due to the length. At the time measurements were made for the plan then published there was a 3.3 horsepower outboard on the stern of the barge which drove the lean hull with ease. Since then a ten horsepower has been used and with it the barge seemed to fly in a light chop. Fifteen miles an hour I am sure would be a conservative estimate of the speed with two people, five gallons of gas and assorted gear aboard.

On a trip to Maryland this past summer a barge was observed that once had an inboard engine, undoubtedly a one lugger, judging from the engine bed. It certainly

would not be difficult to install a small engine such as a five horsepower Kermath Sea Pup, or a Palmer six horse Model BH, and hook on an outboard rudder with tiller. This low power would be ample and the fuel cost of little importance.

The barge hull makes a good utility boat wherever a flat bottom hull is acceptable and with the generous length is driven easier with low power than the usual squatty stock hulls. The construction, as built by the commercial fishermen, is simple yet rugged enough to stand abuse. The hull is easy to build, especially if the Nanticoke River practice of making each side of but a single board is followed. This may have had something to do with the design, the hull being somewhat of an adaptation of available material for a given mode of building. Because the single plank needed for a side would be out of the question in most localities, I have taken the liberty of reducing the amount of sheer in the original design by increasing the minimum freeboard. Besides the benefit of increased freeboard the greater depth lends itself, with less waste, to the lapped two plank construction shown on the plan. I believe more people will take to the idea of two planks to the side than one, as each will be easier to bend although the total amount of work, taking the lap into consideration, will be a little more. Anyone who wants to tackle the job of planking each side



| STATIONS | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------------------|--------|-------|--------|--------|-------|--------|--------|
| HALF BREADTHS | 0-11-0 | 1-8-2 | 2-2-3 | 2-4-4 | 2-1-6 | 1-4-4 | 0-0-3 |
| DECK | 0-3-5 | 1-0-7 | 1-7-2 | 1-9-2 | 1-5-3 | 0-8-3 | — |
| BOTTOM | 0-2-0 | 0-5-2 | 0-6-6 | 0-8-6 | 0-8-0 | 0-4-6* | — |
| BREADTH OF COVERING BOARD | 1-11-0 | 1-7-6 | 1-5-7 | 1-6-0 | 1-7-7 | 1-11-7 | 2-6-0 |
| SHEER | 1-2-4 | 1-0-2 | 0-10-7 | 0-11-2 | 1-0-5 | 1-3-3 | 1-7-1* |
| SHEERSTRAKE | 0-6-5 | 0-4-2 | 0-2-3 | 0-1-6 | 0-2-6 | 0-5-3 | 0-9-3* |
| BOTTOM | | | | | | | |

OFFSETS IN FEET-INCHES-EIGHTHS TO OUTSIDE OF PLANKING.

* EXTENDED

FLAT BOTTOM UTILITY SKIFF
FOR OUTBOARD MOTOR
"SHARPTOWN BARGE"
Designed for the Rudder ²⁰⁰⁰ by R.M. Steward

with one plank will certainly come out all right, and the width of plank needed can be made up out of two or three narrow planks. Join them with edge glued splined joints, or shiplapped joints, glued and copper riveted. Waterproof glue such as Cascophen must be used in both cases, of course, mixed and applied strictly in accordance with the maker's instructions.

Start to build the boat by drawing the lines full size on a piece of building paper or drafting detail paper. When the sections have been drawn, deduct the planking thickness from bottom and sides and make molds as shown on the drawing, extending the sides to a base line at a convenient height for building the hull upside down. Notch the molds for the keelson and chines, mark the boat center line, the sheer line and the plank lap on each of the molds. Set the molds up on a floor or other surface prepared so the base line will be absolutely level. Space the molds as shown on the plan and brace them securely. The framework should not twist as the hull is planked, allowing the boat to distort.

The side sections of the hull are parallel, therefore the bevels on the top and bottom edges of the chines can be machine sawn to the angle taken from the full size sections, and planed to finished surfaces before they are set up.

Make the stem as shown, cutting a rabbet both sides for the $\frac{7}{8}$ inch planking. Saw and plane the stem knee and bolt it to the stem. Attach a brace to the stem so it can be fastened to the floor and add other braces as necessary to hold the stem at the proper angle fore and aft and plumb sideways. The transom can be made up of edge glued and splined boards and cut to shape. Remember to allow for the transom bevels, which are taken from the full size lines, as the finished transom will be larger on the inside than outside. There will be a frame around the fore side of the transom as shown, notched for chines, keelson and cockpit coamings. Like the stem, set up and rigidly brace the transom at the correct angle. Complete the setting up by putting the keelson in place, bolting it to the stem knee and screw fastening it in the notch in the transom frame, then screw the chines in their transom notches, bend them around the molds and half lap them into the sides of the stem so the outside of the chines is flush with the rabbet for the planking. To do this the sides of the keelson must be tapered

to fit between the chines. Fasten the chines to the stem with screws. Temporarily fasten the keelson and chines to the molds with round headed screws with washers under the heads. These will be removed as the planking is fitted.

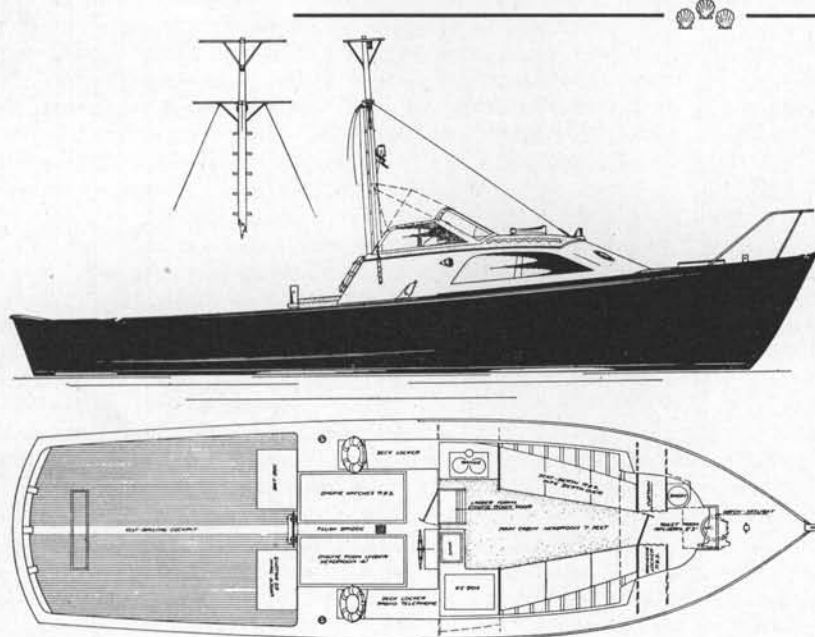
The remainder of the job, and the part already done, is nothing but straightforward flat bottom boat building. If one has never done it before, the procedure can be found in a number of boat building books available through THE RUDDER Book Department, or in many of the "how to build" articles in THE RUDDER about this type of hull, for example, "How To Build Susan" in the August, 1952, issue.

The fastenings all should be of one kind throughout, either all galvanized (with the exception of the side planking lap rivets) or all bronze. Galvanized fastenings will be much cheaper of course and if of good hot dipped quality will last a long time. Galvanized boat nails can be used for the bottom planking—two into the edge of each side plank, three into each chine, four into the keelson. If screws are used for the bottom planking, the size for the plank ends is 2 inch No. 14, and $1\frac{1}{2}$ inch No. 14 into the keelson. Fasten the side planks to the stem, the transom, along the chines and to the frames with $1\frac{1}{2}$ inch No. 14 screws. All screws are to be flat head of course, and all fastenings, whether screws, nails or bolts, are to be countersunk slightly below the surface of the wood on the outside of the hull and puttied over before painting.

Coat wood-to-wood joints, such as bottom planking to chines and transom, side planking laps, stem rabbet, with thick white lead as the parts are assembled. This applies to all joints that will be inaccessible hereafter except the bottom plank seams. The bottom planks are to be tightly fitted together on the inside for $\frac{1}{4}$ inch of the plank thickness. Bevel the edges beyond the tight joint so there will be $\frac{1}{16}$ open seam on the outside into which to roll a strand of cotton wicking with a caulking wheel. The seams are then stopped with seam composition.

After planking, turn the hull over and fit the frames, decking and seats, coamings and rub rail at the deck edge, add a cleat and chocks for mooring, and the boat is ready for painting. Use good quality marine paints.

NOTE. Scale blueprint is available from THE RUDDER, price \$5.00.



Sport Fisherman

PHILIP C. BOLGER of Gloucester, Mass., designed this sport fisherman for Silveira Associates of New London, Conn. She will be built this winter at the Silveira yard and her name will be Pirate. Primarily a big game fishing boat, she is a commercial venture and besides the usual charter service she will be suitable for light towing work and limited market fishing.

The boat's dimensions are 39 feet 9 inches overall, 35 feet 2 inches on the water, 11 feet beam, 3 feet draft. She will be powered by a pair of Buick Roadmaster Eight engines and fuel capacity will be 275 gallons.

The skipper and his wife will live aboard much of the year, operating all along the East Coast with New London as their headquarters.