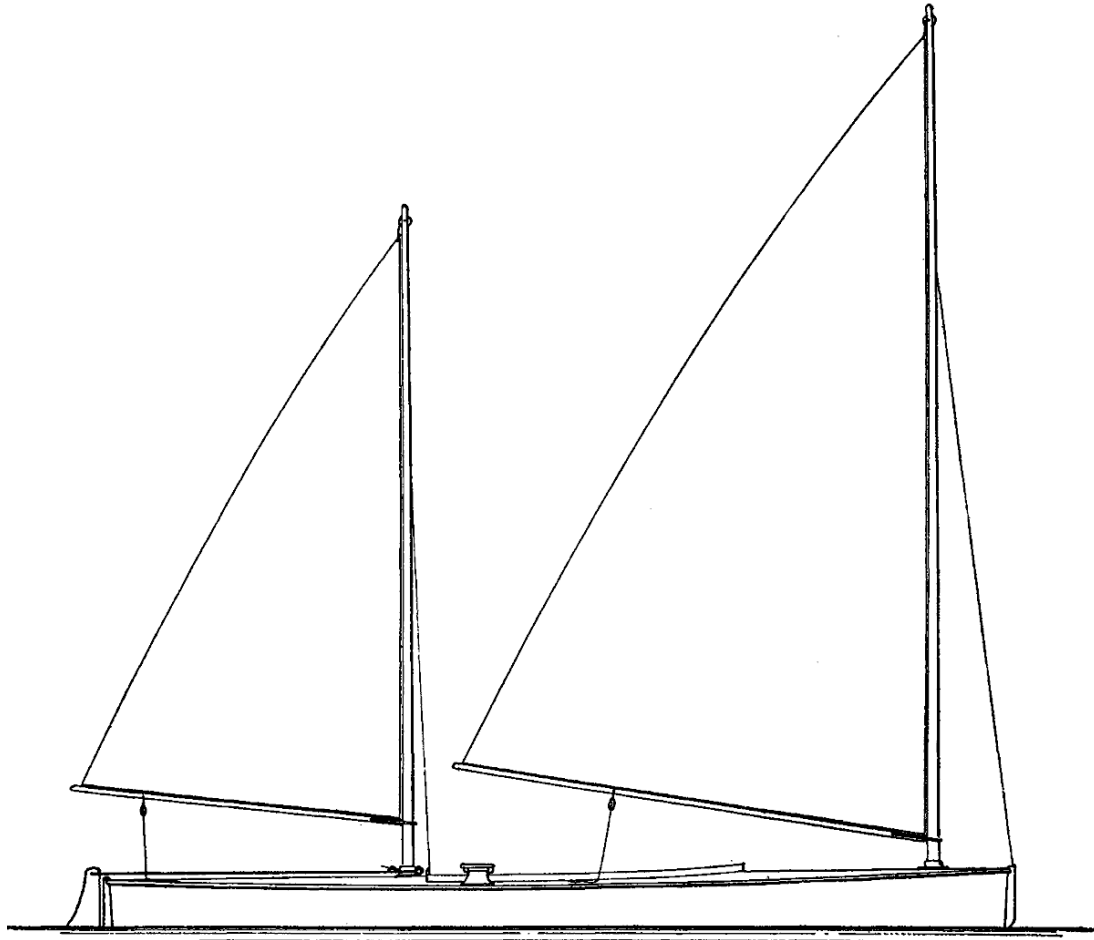


★ SKINNEY ★

A 17-FOOT SAILING CANOE

A Clever Design for an Attractive and Popular Style of Sailing Craft Which Will Furnish Thrilling Sport, Designed Especially for MoToR BoatinG



SOMETHING a little different in the Build A Boat Series is a sailing canoe of the skiff type. No doubt many of the readers of MoToR BoatinG have at one time or other had the desire to build and own a sailing canoe, to build a boat of this type on the round bottom style involves quite a bit of boat building experience while to build one as shown on the accompanying plans should be relatively easy.

With this boat as well as with any other boat regardless of type or size, the first thing to do before any construction can be started, is to lay the line drawing down full size. Sheets of building paper or large sheets of heavy wrapping paper can be used for this purpose. The drawing of the lines gives all the necessary dimensions for each frame. You will note on the half-breadth plan of the lines, two dimensions are given at each frame, one marked D and one marked C. The mark D means that these dimensions are for the half-breadth widths of the deck line and the mark C means the half-breadth widths of the chine line.

When this is done, the frames can be worked out and assembled. The keel, keel batten, stem and stern piece should also be gotten out. The frames are to be built up of three-quarter inch spruce, the side frames to be molded or to have a depth of one and one-eighth inches and the bottom frames to be molded one and three-eighths inches, the side and bottom frames are to set flush, that is both faces of each frame are to be set in the same vertical plane, they are to be joined in the corner at the chines as shown on the construction section, and braced there with a one-half inch spruce brace, brace to be bolted to frames with brass bolts, about two bolts in each member, of one-quarter inch diameter.

Get out the material for all the frames and assemble them. Laying them aside until the keel and other main members are out. The keel is to be of spruce in one length, seven-eighths inches thick, and three inches wide, at bow and stern the inside keel is to be tapered in to the siding of the stem and sternpost, namely one and one-half inches. Cut a slot in the keel for the centerboard, slot to be four feet one and one-half inches long, and to three-eighths inches wide, location of slot is given on the construction plan. The stem and sternpost are to be of oak, sided one and one-half inches, stem to be molded two and one-half inches at head and four inches at heel, the sternpost molded two inches at head and three inches at heel. The keel batten is to butt up against the stem and sternpost, and to be fastened to them with knees and brass bolts about one-quarter inch in diameter. On the center line of each

On the center line of each bottom frame mark out and cut a notch to receive the keel batten. Having done this we now can set up the frames on the keel batten in their respective places taking very good care that the frames are trued up, otherwise a twisted boat will result. Get out the material for the clamps and inner chines, the bevel for the chines can be taken from the full sized section that you have drawn on the wrapping paper. Clamps to be spruce in one length, and to be one-half inch thick and one inch wide. Inner chines to be of spruce in one length each, to be worked out from three-quarter inch thick spruce by one and one-half inches wide. Cut out notches in the heads of all frames to receive the clamps. Fasten the, clamps to the frames with one, one-eighth inch diameter brass bolt in each frame, bolts to be let in flush in clamp. Chines to be fastened to the corner pieces with one-eighth inch diameter brass bolts, one at each corner piece, heads of bolts to be let in flush in chine.

With this part of the construction properly set up and fastened together we can now lay off the spacing of our planks so that the seam battens can be set on. Split each side frame into five parts from the chine seam to the deck seam. Using each seam mark as a center line for the seam batten cut the notches in the frames to receive them, the battens are to be in one length from stem to sternpost, and of spruce five-eighths inch thick and three-quarters of an inch wide. Battens to be fastened to frames with brass screws, No. 6, about one and one-quarter inches long, one in each frame at each batten.

Build up the centerboard trunk, sides to be of one-half inch pine, headledges of oak three-eighths by one and one-half inches. See that the joint between the siding of the trunk and the keel batten is a very good one otherwise a leaky trunk will result, set the siding up in either thick paint or shellac, use through bolts of brass through the keel batten and the siding, bolts to be of brass and about three-sixteenth inch in diameter, spaced about 9 inches centers. Also take care with the joint at the headledges. To brace the siding of the trunk the cockpit floor beams can be fitted, this will tie the whole trunk rigid.

At each end of the cockpit there is to be watertight bulkhead fitted. This is to be built up of two layers of three-sixteenth inch pine, laid diagonally with 3 piece of linen laid between. Varnish or paint both sides of the bulkhead.

Lay out all the deck beams to the crown shown on the lines, all crowns to be a radius of a circle, the height of the deck at the center line is shown on the lines. The beams are to be of spruce one-half inch thick and one and one-quarter inch wide, sawn to crown a beam to be put on every frame. The fore and after to take the coaming is to be the same size stuff as the beams. Fit spruce partner pieces for the two masts and the two deck plates.

One three inch diameter brass tube is to be fitted forward to take the mainmast, and one, two and three-eighths inch diameter tube aft for the mizzen mast. At the base of these tubes fit wooden blocks with a groove cut in them to take the heels of the spars so that the spars will not turn.

The decking can be laid next, to be of mahogany, one-quarter inch thick, this can be left as is and stained and varnished or else it can be covered with a thin piece of canvas so that the deck will be made absolutely watertight.

The entire hull can be planked now, laying the planks out so that the seams come in the center of the battens. The side planking is to be of cedar, to finish one-quarter inch thick and the bottom planking, also of cedar is to

finish five-sixteenths of an inch. When planking allow for the outside chine and also the outside keel, or in fact it might be better to fit both of these members before planking. The planks can be fastened to the battens either with brass screws or copper rivets. The fastening between frames along the battens should be copper rivets as they are less apt to work loose. The finish on the planking can be either paint or varnish as preferred.

Make a large pattern both of the centerboard and the rudder, dimensions of both are given on the detail plans, the rudder is to be cut from a three thirty-second inch brass plate and the centerboard from three-sixteenth inch plate. The detail of the tiller arm on the rudder is given on the drawings. Hang the centerboard in the trunk with a three-eighth inch diameter bolt. After hanging the board the cockpit floor can be fitted. This floor should be made watertight. Two six-inch diameter handhole plates are to be fitted in the floor so that the bilge between the two bulkheads can be sponged out once in a while. Both these deck plates and the plates on deck are to be as light as possible, some build them of wood with metal rings which makes a very light plate.

No difficulty should be encountered in the rigging up of the sliding seat and of the rudder gear as they are pretty well detailed on the drawings.

For the sizes of the spars, all the necessary dimensions are given on the sail plan, the goosenecks used are to be of the simplest pattern obtainable. A sheave is to be fitted in the top of each mast for the halyard. Each mast is to be fitted with a track to take the slides sewn to the sail. One stay is to be fitted on each mast even this is not necessary and should be as light as possible. One single block fitted on each boom with two fair leaders fitted on each side of the deck for each sheet will constitute the sheet lead. Sails are to be made of what is known as balloon silk and had best be made by a sailmaker if a satisfactory job is desired.

Now everyone will probably ask, how much will this boat cost to build? I would say that the material should not cost over fifty dollars, exclusive of sails and the special fittings. The cost of these fittings depend on whether you can make a pattern for them or whether you will have to have it made. The pattern is generally the most expensive part of them. Any brass foundry will cast them for you at a pound rate.

SPECIFICATIONS:

INSIDE KEEL: Spruce 7/8 by 3 inches, about 17 feet 0 inches long.

OUTSIDE KEEL: Oak, 3/4 by 1 3/4 inches, about 17 feet 0 inches long.

STEM: Oak, sided, 11 1/2 inches, molded 2 1/2 inches at head and 4 inches at heel.

STERNPOST: Oak, sided, 1 1/2 inches, molded 2 inches at head and 3 inches at heel.

STEM KNEE: Oak, sided, 1 1/2 inches, shaped as shown.

STERN KNEE: Oak, sided 1 1/2 inches, shaped as shown.

INSIDE CHINE: Spruce, 1 1/4 by 1 3/8 inches.

OUTSIDE CHINE: Oak, 3/4 by 3/4 inches.

CLAMP: Spruce, 1/2 by 1 inch.

SEAM BATTENS: Spruce, 5/16 by 3/4 inches.

FRAMES: Spruce, 3/4 inch, spaced 12 inches. Side frames molded 1 1/8 inches. Bottom frames molded 1 3/8 inches.

DECK BEAMS: Spruce, 1/2 by 1 1/4 inches.

SIDE PLANKING: Cedar, to finish, 1/4 inch.

BOTTOM PLANKING: Cedar, to finish, 5/16 inch.

CORNER BRACES: Spruce, 1/2 inch.

DECKING: Mahogany, 1/4 inch.

COAMINGS: Mahogany, 1/4 inch.

COCKPIT BEAMS: Spruce; 1/2 by 1 1/4 inches.

COCKPIT FLOORING: Pine, 5/16 inch.

CENTERBOARD TRUNK: Siding, 1/2 inch pine, headledges, oak, 3/8 by 1 1/2 inches.

SPARS: Western spruce.

CENTERBOARD: 3/16 inch brass.

RUDDER: 3/32 inch brass.

MAST TUBES: One 3 inch diameter and one 2 3/8 inches diameter.

DECK PLATES: Two 6-inch diameter and two 8-inch diameter.

TILLER FITTINGS: Cast bronze.

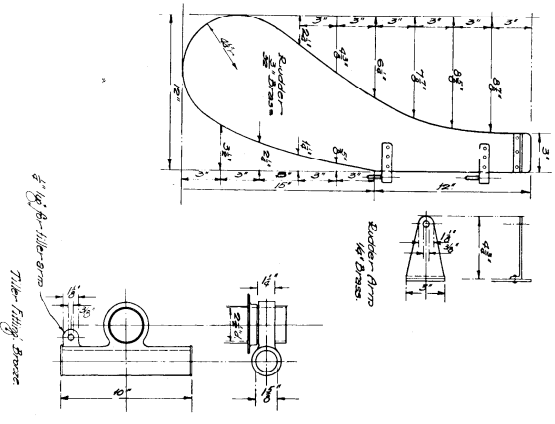
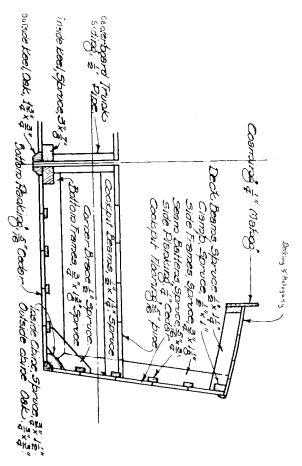
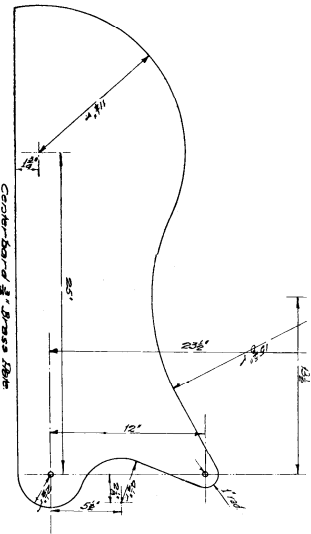
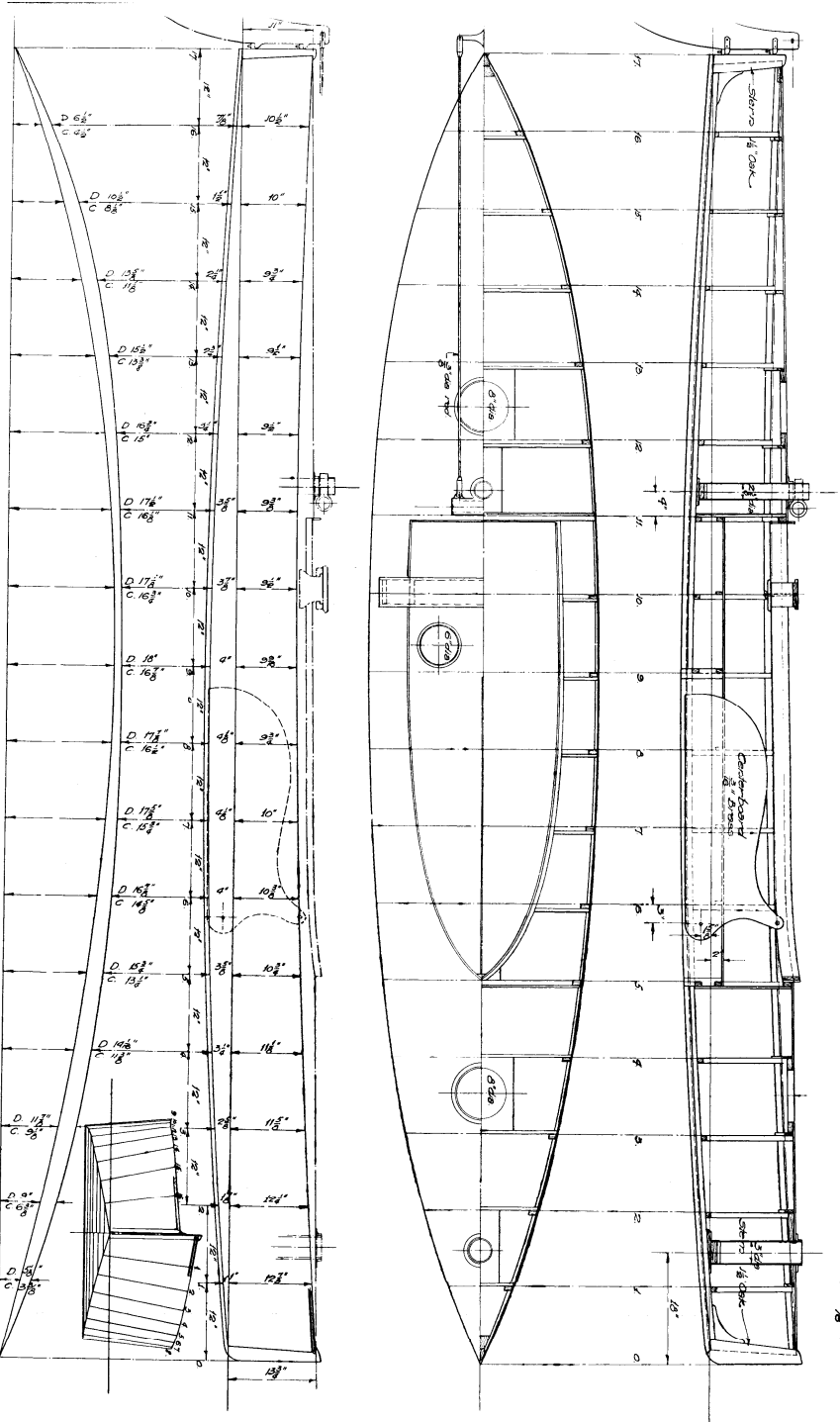
SLIDING SEAT: Seat, spruce, brace for seat to be of maple.

SAILS: Balloon silk.

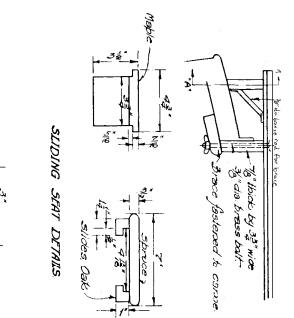
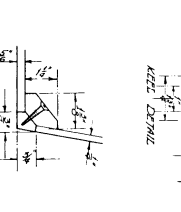
"SKINNEY"

A 17 FOOT
SAILING CANOE

SCALE - 3/4" = 1 FOOT



Designed Especially for
MOTOR BOATING
by
CANEDWIDEN



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Outboard profile of the 17-foot sailing canoe Skinny

