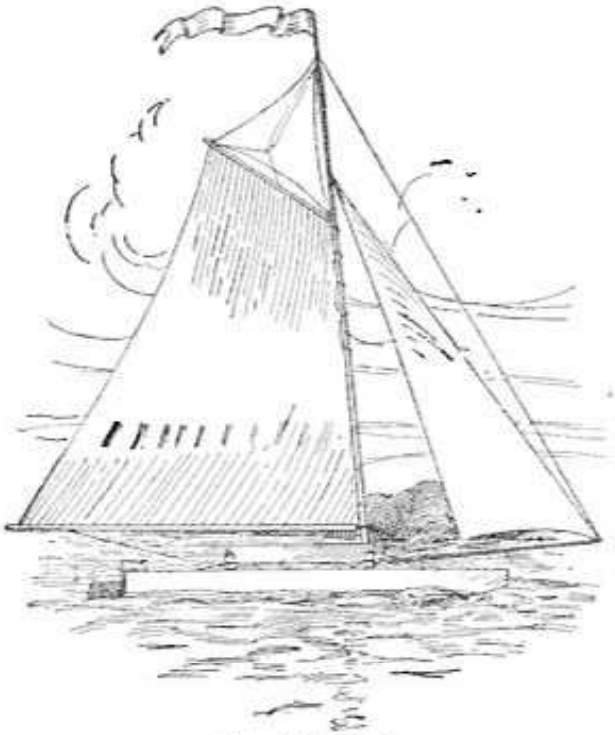
How to Make a Cruising Catamaran

A launch is much safer than a sailing boat, yet there is not the real sport to be derived from it as in sailing. Herein is given a description of a sailing catamaran especially adapted for those who desire to sail and have a safe craft. The main part of the craft is made from two boats or pontoons with watertight tops, bottoms and sides and fixed at a certain distance apart with a platform on top for the passengers. Such a craft cannot be capsized easily, and, as the pontoons are watertight, it will weather almost any rough water. If the craft is intended for rough waters, care must be taken to make the platform pliable yet stiff and as narrow as convenient to take care of the rocking movements.

This catamaran has been designed to simplify the construction, and, if a larger size than the dimensions shown in Fig. 1 is desired, the pontoons may be made longer by using two boards end to end and putting battens on the inside over the joint. Each pontoon is made of two boards 1 in. thick, 14 in. wide and 16 ft. long, dressed and cut to the shape shown in Fig. 2. Spreaders are cut from 2-in. planks, 10 in. wide and 12 in. long, and placed 6 ft. apart between the board sides and fastened with screws. White lead should be put in the joints before turning in the screws. Cut the ends of the boards so they will fit perfectly and make pointed ends to the pontoons as shown in Fig. 3, and fit in a wedge shaped piece; white lead the joints and fasten well with screws.

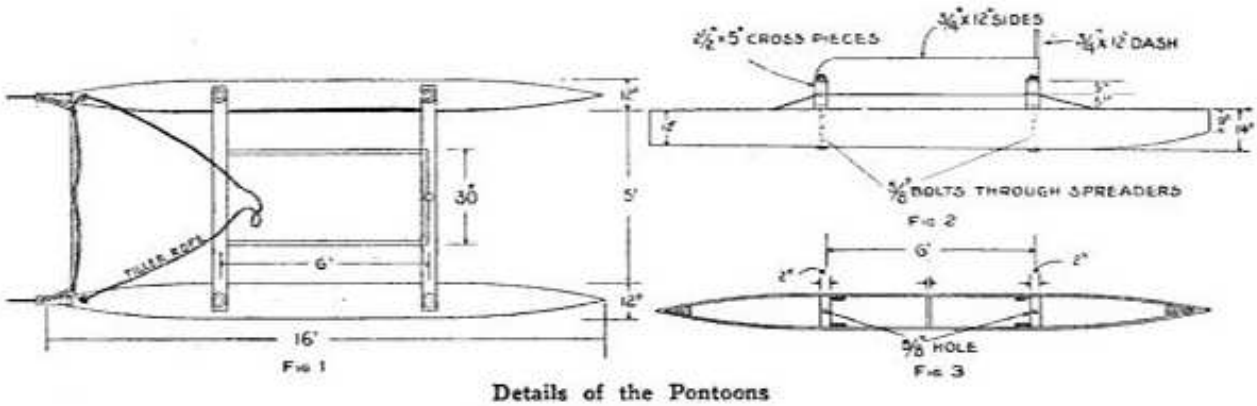
Turn this shell upside down and lay a board ½ in. thick, 12 in. wide and 16 ft. long on the edges of the sides, mark



Completed Boat

on the under side the outside line of the shell and cut to shape roughly. See that the spreaders and sides fit true all over, then put white lead on the joint and nail with 1¾-in. finishing nails as close as possible without weakening the wood. Slightly stagger the nails in the sides, the 1-in. side boards will allow for this, trim off the sides, turn the box over and paint the joints and ends of the spreaders, giving them two or three coats and let them dry.

Try each compartment for leaks by



Details of the Pontoons

turning water in them one at a time. Bore a 5/8-in. hole through each spreader in the center and through the

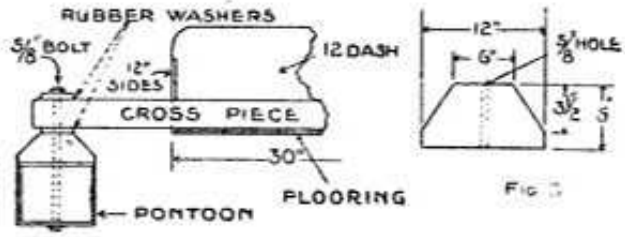


Fig. 4

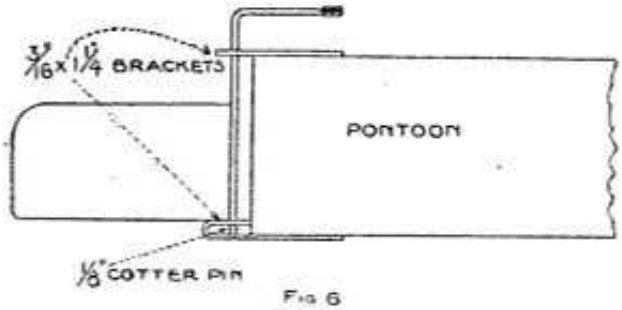


Fig. 6

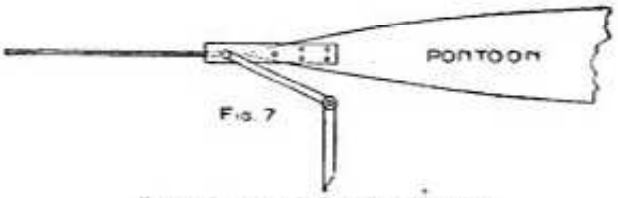


Fig. 7

Crosspiece and Rudder Details

bottom board as shown. The top board, which is 1/4-in. thick, 12 in. wide and 16 ft. long, is put on the same as the bottom.

After finishing both pontoons in this way place them parallel. A block of wood is fastened on top of each pontoon and exactly over each spreader on which to bolt the crosspieces as shown in Fig. 4. Each block is cut to the shape and with the dimensions shown in Fig. 5.

The crosspieces are made from hickory or ash and each piece is 2 1/2 in. thick, 5 in. wide and 6 1/2 ft. long. Bore a 5/8-in. hole 3 in. from each end through the 5-in. way of the wood. Take maple flooring 3/4 in. thick, 6 in. wide, 74 1/2 in. long and fasten with large screws and washers to the crosspieces and put battens across every 18 in. Turn the flooring and crosspieces upside down and fasten to the pontoons with long 5/8-in. bolts put through the spreaders. Put a washer on the head of each bolt and run them through from the under side. Place a thick rubber washer under and on top of each crosspiece at the ends as shown in Fig. 4. This will make a rigid yet flexible joint for rough waters. The flooring being placed on the under side of the crosspieces makes it possible to get the sail boom very low. The sides put on and well fastened will greatly assist in stiffening the platform and help it to stand the racking strains. These sides will also keep the water and spray out and much more so if a 12-in. dash is put on in front on top of the crosspiece.

The rudders are made as shown in Fig. 6, by using an iron rod 5/8 in. in diameter and 2 ft. long for the bearing of each. This rod is split with a hacksaw for 7 in. of its length and a sheet metal plate 3/32 in. thick, 6 in. wide, and 12 in. long inserted and riveted in the split. This will allow 3/4 in. of the iron rod to project from the bottom edge of the metal through which a hole is drilled for a cotter pin. The bottom bracket is made from stake iron bent in the shape of a U as shown, the rudder bearing passing through a hole drilled in the upper leg and resting on the lower. Slip the top bracket on and then bend the top end of the bearing rod at an angle as shown in both Figs. 6 and 7. Connect the two bent ends with a crosspiece which has a hole drilled in its center to fasten a rope as shown in Fig. 1.

Attach the mast to the front crosspiece, also bowsprit, bracing them both to the pontoons. A set of sails having about 300 sq. ft. of area will be about right for racing. Two sails, main and fore, of about 175 to 200 sq. ft. will be sufficient for cruising.—Contributed by J. Appleton, Des Moines, Iowa.