## MODEL SAILING YACHTS AND HOW TO SAIL THEM BY EDWARD W. HOBBS, A.I.N.A.

Tow would you like to be a sailor? To roam across the seas of the world, to visit strange ports and see wondrous sights? Such delights cannot be yours until you are old enough; and you must know how to sail a boat. What you can do is to get a model sailing yacht and learn how to sail it properly;

in doing so, you will have many happy days, watching your little ship sailing away to the westward, or perhaps beating up channel in the teeth of a gale.

If you had a real pilot boat, and not only a model, like the Seagull, shown in Fig. 2, you would want to know just what to do in a gale, for a pilot must

put out in all weathers to the aid of a ship that needs guidance and help.

The Seagull, as made by Bassett-Lowke, Ltd., is a regular little pilot boat, rigged as a sloop—that is to say, it has only two sails, the foresail, as the sail in front of the mast is called, and the larger one called the mainsail.

When the boat is bought the mast and sails will be detached from the hull, so the first thing to do is to "step" the mast, as a sailor would call it, by pushing the mast through the hole in the deck until the bottom or "heel" of the mast goes into a little hole cut to receive it in the bottom of the hull.

A young enthusiast trying out the paces of his new model yacht.

ropes that keep the mast upright, and slide the ivory bowsies or adjusters along the rope until it is tight, or "all a-taut-o." The foresail hooks on to the bowsprit at the outer end; the upper part or halliards hook on near the top of the mast. The "gaff" of the

mainsail

Then hook

on the two

shrouds or

must be tightened up with the bowsie until it is just sufficiently taut to keep the sail in shape, but no more.

The "sheets" are the names of the ropes used to tighten or slacken the booms on the bottom of the sails, and these have hooks which hook into an eye or a "hawse"-and

they also are fitted with a bowsie for

adjustment.

Everything is now ready for the trial trip, so look and see in which way the wind is blowing, and put the boat into the water with the bows towards the wind. Suppose the wind is blowing straight in your face, as you look at the pond or wherever the boat is being sailed, and that you want her to sail to your left. She will then have to sail on the starboard tack. So slacken the fore sheet until the fore-

sail boom is nearly in line with the side of the hull, and slacken the main sheet so that the mainsail can swing over a little further. Now

point the boat towards / the left of direction in which the wind is blowing, and let the wind fill out the sailswhen you can release the boat and she will sail away. If you wanted her to sail in the opposite direction, or port tack, all you need do is to point the boat in that direction and allow the sails

to swing over until they are full of wind. That is when the wind blows on the sails and keeps them taut

and without flapping about.

At first it will be found very difficult to make the boat sail just where you want it to go; but practice makes perfect, and some further experiments will teach you a whole lot about sailing.

Suppose the boat did not sail towards the wind, but across it. This is called "reaching," and shows that the mainsail is too slack, or not near enough to the centre of the boat; so

tighten it up until the main boom is nearly in line with the hull sides, and tighten up the foresail just a little bit. Now try her on the port tack, and she will sail much closer to the wind, or will be "beating to windward," as a sailor would say.

If you want to make your boat sail "down the wind" or the same way as the wind is blowing, you must slacken out the mainsail and the foresail as far as possible, and if all goes well we shall reach the starting-point

again. The whole secret of model-yacht sailing is the correct adjustment of the sails. It can only be learnt by experiment and by actually trying to sail

a model. Once you try to do this you are sure to get enthusiastic about it, but do not be discouraged if success does not come with the first day's sailing. Remember that to make the boat sail towards the wind, you must have the sails as tightly "sheeted in" as the boat will stand without going "into

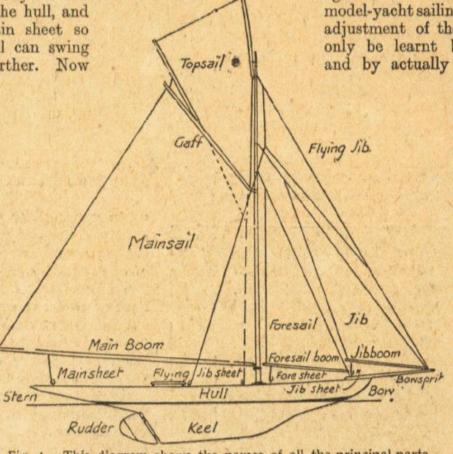


Fig. 1. This diagram shows the names of all the principal parts of a model racing yacht.

irons," which means that the boat will try to go first this way and then the other way, and mostly stop in the same place. Cure this by slackening the sheets a trifle. To sail across the wind, slacken the sheets still more; and to sail away from the wind, called "running" or "down wind," the mainsail must be slacked right out until the boom is at right angles to the boat.

Though it will give you an unusual amount of fun, of course you cannot expect to do everything with a cheap little boat like the

Seagull. If you get a racer like the Shamrock, shown in Fig. 3, much better results are obtained, but there are more sails to attend to, so remember what you have learnt about the Seagull and apply this knowledge when you sail the Shamrock. This has five sails and is just like a real racing yacht; the names of all the parts are shown in the diagram, Fig. 1, so that you will know what is meant when the topsail or the flying-jib is referred to. All these sails can only be used when the wind is They are set up in the same way as on the smaller boat, and have to be adjusted in exactly the same manner. But the rudder will have to be attended to on this boat-or on any other like it.

When you are beating to windward or reaching, do not use the rudder at all; it should be unhooked and carried in the pocket until wanted, which is only when running before the wind. You will probably have discovered by now that a boat will not sail very nicely straight before the wind—she keeps on working

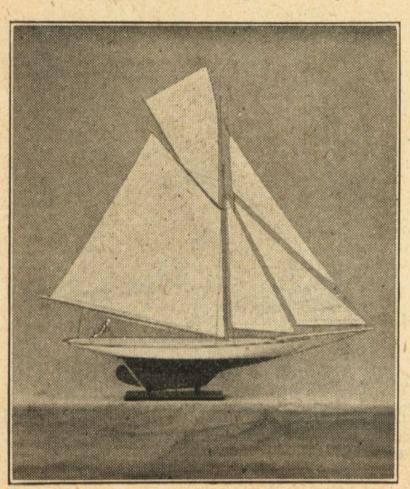


Fig. 3. The "Shamrock," a real racing model.

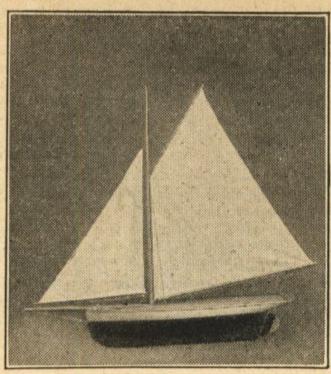


Fig. 2. The "Seagull," a typical sloop-rigged model pilot boat.

off to starboard or port. But this is largely corrected by using the swing rudder, because as the wind heels the boat, the rudder swings over and acts like a helmsman, and steers the boat back on to her course. Several different sizes of rudders are a great convenience, as the stronger the wind the heavier the rudder needed to correct the course of the boat.

When it is possible to afford a proper "automatic rudder," it is very useful to have one fitted, as by its aid a model boat can be made to sail in almost any direction.

They can be obtained and fitted by Bassett-Lowke, Ltd., of 112, High Holborn, London, W.C., or in Edinburgh at No. 1, Frederick Street. This automatic rudder is a most ingenious but simple device; it is nothing more than a T-shaped tiller, fixed on the top of the rudder-post and connected by it to the rudder. Instead of hooking the main sheet to the eye or "hawse" on the deck, it is attached to the tiller, consequently as the wind blows on the sails, it

exerts a pressure on the main sheet, which then pulls over the tiller and thus puts the rudder over.

By using two main sheets instead of one, and crossing them over and leading them through two pulleys fixed on the deck, you can put the tiller over either to port or to starboard, whichever may be required.

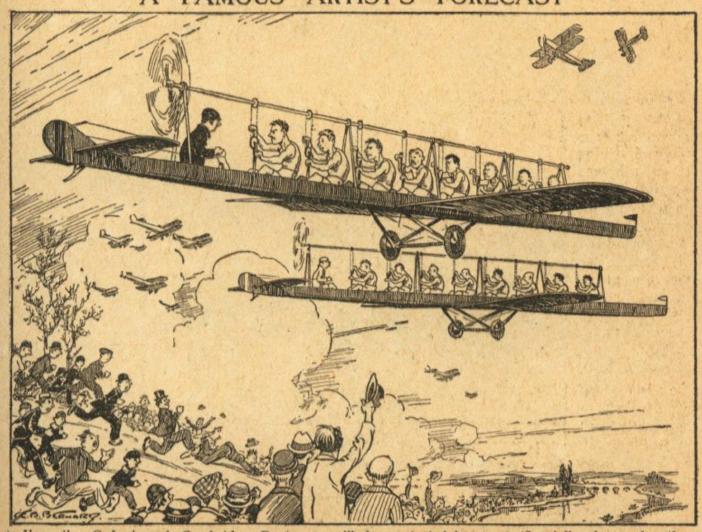
It sounds complicated, but the makers fit it up all ready for use, and when once fitted it never needs attention, except to replace a cord, should it accidentally be broken. A rubber band is used to keep the tiller on the middle line of the boat, and pegs are provided to check the movement of the tiller, the different amounts of movement corresponding

to the different weights of the swing rudders. Thus, in light winds, the movement is limited by the pegs; but in heavy winds the pegs are adjusted to allow the tiller to move a greater amount. In very heavy winds the Shamrock will sail well with only the mainsail and the foresail; in moderate winds add the jib; and in very light weather use the topsail flying-jib as well.

When proficiency has been gained with these small and simple models you can begin to think about a regular racing model built to a rating rule, and go in for class racing, and perhaps win a challenge cup or championship award, or even aspire to owning a real yacht of your own.

THE END

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