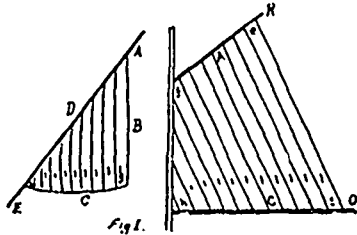
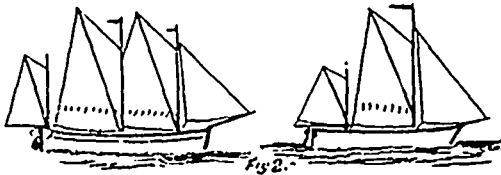


SAILS FOR OPEN BOATS.

Small open boats are designed, in a greater or less degree, to be impelled on the water by oars, and are distinguished by different names, according to their use, size, and model. Among such are life-boats, launches, dingies, gigs, jolly-boats, pinnaces, yawls, barges, feluccas, sharpies, whale-boats, long-boats, cutters, dories, canoes, punts, bateaux, skiffs, etc. Many of these craft are pro-



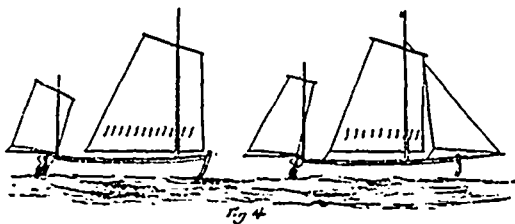
vided with light, portable sails and masts that can be readily rigged up when occasion requires. Boats, therefore, that are not specially intended for sailing purposes



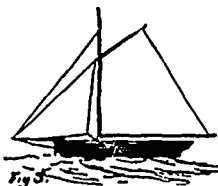
are usually equipped with a handy suit of sails, care being taken to choose a style that is likely to insure speed and weatherly qualities, though often local prejudices and the "custom" of the waters prevail as to the kind of rig.



All sails have either three or four sides. The former of these are sometimes spread by a stay, as a jib, or by a yard, as lateen-sails, or by a mast, as leg-of-mutton sails, in which cases the foremost edge is attached throughout its whole length to the stay, yard, or mast. The latter, or those of four sides, are extended by yards or by gaffs and booms, as the principal sails of a ship or schooner. They all acquire their names from the mast, yard, or stay upon which they are extended or made fast. The



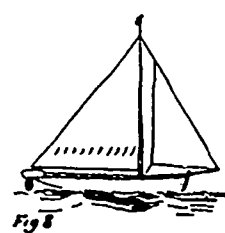
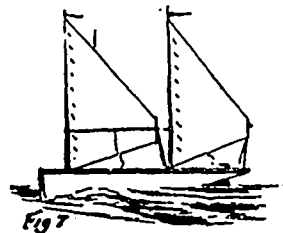
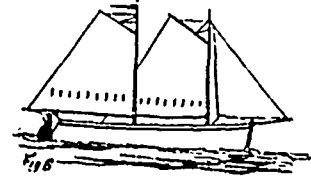
accompanying cut (Fig. 1), showing jib and mainsail, will aid the reader in learning the names of the different parts. The upper edge, A, is called the head; B, the



leach; C, the foot; D, the luff; the corner, E, is called the peak; F, the nock; G, the clew; H, the tack; the dotted rows are the reef points; I, the boom; R, the gaff; S, the stay.

SPRIT-SAIL. RIG (FIG. 2).

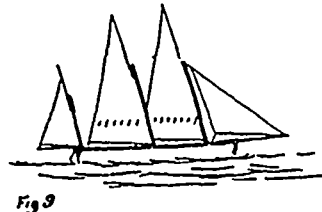
These sails have four sides. The luffs are secured to the mast by lacings, or pieces of rope yarn, rove through holes made in the sails about three feet apart, and the heads are raised and extended by sprits (small tough poles) that cross the sail diagonally from the mast to the peak. The lower end of the sprit has a blunt point, which rests in a rope becket or loop that encircles the mast like a slip-knot, and can be fixed in position without slipping. If there is any tendency, however, for the becket to slide, a little wetting will prevent it. One advantage of the sprit-sail is that it can easily be brailed up alongside of the mast,



with a line leading through a block on the mast and through the clew and around the sail. Pieces of cord are sewed in the seam across the sail, near the foot, for reefing points.

CAT RIG (FIG. 3).

Purely an American idea, and for narrow and crowded waters, bays, and harbours, is unsurpassed. The mast is stepped right in the bows of the boat, and carries one sail (secured to mast hoops), with a boom and gaff. These boats work with great quickness, are easily managed by one person, and have few equals in going into the "eye" of the wind.



BALANCE LUG (FIG. 4).

These sails are four-sided, secured to a yard which hangs obliquely to and is balanced on the mast, part of the sail being in front and part behind. The boom and the yard are of about equal lengths. The tack of a lug-sail is usually a loop on the boom, caught into a hook on the mast near its heel, and is made fast before the sail is set. When a boom is not used, as is often the case with a single sail, the tack of the lug is secured to the weather bow. While this is a popular rig and has many good sailing points, it suffers an inconvenience on account of the yard having to be shifted to leeward of the mast in tacking, termed "dipping the lug."

SLOOP RIG (FIG. 5).

Undoubtedly the handsomest of all rigs, though it is not so convenient for single-handed sailing, two people being required to sail them properly. For small boats the sails consist of mainsail and jib, and sometimes a topsail, the former secured to a gaff, and with or without a boom, as preferred.

