No. 1.-Louise. 20-Tonner. Built 1879. No. 2.—SIOLA. 20-Rater. Built 1890. No. 3.—AUDREY. 20-Rater. Built 1895. No. 4.—Penitent, 52ft. Linear Rater. Built 1896. No 5.—GAUNTLET. 52ft. Linear Rater. Built 1901. No. 6.—Camellia. 52ft. Linear Rater. Built 1902. No. 7.—OSTARA, 15 Metres. Built 1909.

TYPES OF YACHTS FOR RACING AND CRUISING.
(See Chapter XIX.)

From Photographs of Models by the builders, Messes, Summers & Payor, Southampton, and Mr. Alfred Malne, 81, Hope Street, Glasgow.

DIXON KEMP'S MANUAL

OF

YACHT AND BOAT SAILING

AND

YACHT ARCHITECTURE.

NEW AND ELEVENTH EDITION.

EDITED BY

BROOKE HECKSTALL-SMITH,

Associate of the Institution of Naval Architects, Secretary Yacht Racing Association and International Yacht Racing Union,

AND

LINTON HOPE, M.I.N.A.,

Consulting Naval Architect to H.M. The King of the Belgians.

THE LORDS COMMISSIONERS OF THE ADMIRALTY HAVE BEEN PLEASED TO DIRECT THAT THIS BOOK SHOULD BE ISSUED TO SHIPS OF THE ROYAL NAVY.

LONDON:

HORACE COX,
THE "FIELD" OFFICE, BREAM'S BUILDINGS, E.C.

1913.

In light weather when a bowsprit spinnaker is carried, it is unusual to let the jib run in, but several of the hands stow and stop it along the bowsprit.

To Set a Jackyard Topsail.—Bend the sail to the topsail yard and jackyard; pass the weather earing first, and then haul the head taut along

the yard by the peak earing (see how the peak earing of the gaff was passed, page 78). Tie the stops round the yards. Bend the sheet to the jackyard. See that the sheet is inside the topping lift, and that it passes under the yard from the mast side before it is bent to the jackyard. See that the clew line is fast to the



Fig. 33.

jackyard. Shackle on the halyards and bend the trip halyards (see Fig. 33), and hoist the sail clear of the deck. Hook on the tack-tackle. A mousing should be put on all hooks. (See "Knots and Splices" in the Dictionary.)

To keep the sail from blowing away from the mast, it is usual to have a "lazy tack," which consists of a short line, one end of which is fast to the tack cringle of the sail; the other end is passed round that part of the main or peak halyards which has been belayed to the mast bitts, and is then made fast to the tack cringle the same as the other end was; the line thus forms a kind of traveller, and the main or peak halyard serves as a jackstay.

With a jackyard topsail it is better to sheet the sail when it is to leeward of the peak halyards, this is really a rule for all topsails; the sail goes out much cleaner, as it does not press on the peak halyards. It also makes sure that the jackyard will remain on the same side of the peak halyards as the tack. When a topsail is set to windward of the peak halyards the jackyard frequently "blows over"; then no end of trouble begins, and it generally ends in a hand having to go aloft to put things right.

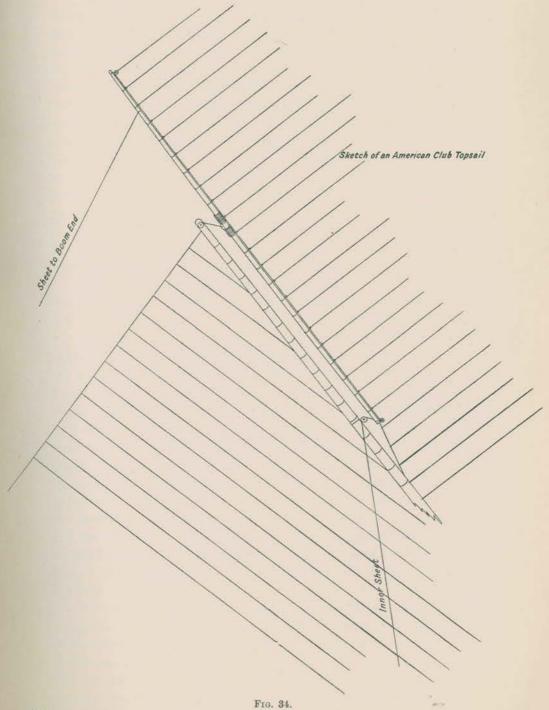
Hoist on the trip halyards until the peak is well up inside the topping lift (the peak will always be the aft end of the yard), then hoist away on all, hauling out the sheet as the sail goes up; otherwise, if the sail blows about, the sheet may get a turn round the gaff end. When the yard is so high that the point where the trip halyards are bent is level with the trip halyard sheave in the topmast, leave the trip halyards adrift, and all hands hoist by the other halyards. When the yard is chock-a-block, belay. Bowse down the tack to the last inch to take all the "render" out of the halyards, and belay. Set taut the trip halyards. Pass the lacing and haul taut round the masthead. Haul out the sheet until the sail sits as desired. A topsail should never be sheeted until the

tack has been bowsed down. When a topsail is properly set there should be plenty of "drift," or space, between the jackyard and the gaff to allow the sheet to be hauled out after the sail has stretched.

Before the topsail is sheeted, a look should always be given to the topmast stay. Also a look should be given to see if the peak requires purchasing up, as a topsail will always require "sheeting" after the mainsail has been "peaked."

SHEETING A JACKYARD TOPSAIL.—The sheeting of a modern large jackyard topsail requires a master hand's attention, especially when it is fitted "Yankee fashion," having three sheets, as very many now are-namely, the main topsail sheet, the outer and inner sheets on the ends of the jackyard (see Fig. 34). Great care needs to be taken with the outer sheet, which is, or should be, of wire, and it is here that the trouble often arises. When the mainsail is first set in the morning it is comparatively cold and possibly damp, or the sun may not have driven the morning mist away, the main boom is high, and the mainsheet is away off, ready for manœuvring at the start; then comes the gun-that crucial moment when all hands swarm on to the mainsheet like flies and haul "all together" until they harden it in block and block. The leech of the mainsail under the great pressure stretches out, the main boom comes down, but the outer topsail sheet being wire does not stretch, and the result is that the outer end of the jackyard is drawn to windward, causing a back sail. At this moment the outer sheet requires slacking with care and judgment until the jackyard and gaff form a fair line. Afterwards, should the topsail require sheeting, a heave on the main topsail sheet will tighten up both itself and the outer sheet, but very frequently the outer sheet needs more easing, especially if the leech of the mainsail continues to give out. Great care is therefore required, and more particularly, we think, with the old style or ordinary style of mainsail with vertical cloths than with the newest cross-cut mainsails with horizontal cloths. The latter are not nearly so elastic on the after leech, and consequently it is much more easy to keep a mainsail and topsail in their place when the mainsail is cross-cut than when made in the old style. As with everything in connection with the practice of seamanship, a man must take an interest in the most minute details of his craft; the mate must always have an eye for his topsail (hanging it up is no good), and watch it as a physician would an invalid, observing every change.

The big jackyarder is the first sail to lift, owing to the angle at which it lies to the wind, and too much care and attention cannot be given to it in order to keep it in its place, and so make it effective instead of a hindrance when sailing on a wind.



Drawing, by Messrs. Ratsey and Lapthorn, showing the Three Sheets used in Setting a No. 1 Jackyard Topsail on a First-class Racing Yacht.

To Take in a Jackyard Topsail.—One hand will go aloft to cast off the lacing. When all is ready for lowering, cast off the halyards and trip halyards from the belaying pins. Lower away with the halyards, but keep the trip halyards hand taut, until the yard is "up and down" the mast. Ease up the sheet, but look out not to allow the end of the jackyard to come down too suddenly, and lower away all. If there be much wind, several hands must be put upon the tack at first to haul down as the halyards are started, otherwise the bellying bunt of the sail is certain to blow in between or over the parts of the peak halyards, and will thus prevent the sail lowering. In such a case do not cast off the "lazy tack" until the sail is on deck. The hand aloft will keep the heel of the yard inside the topping lift as it passes down.

As the yard comes down between the topping lift and the mainsail, haul forward by the tack (casting off lazy tack), so that the heel of the yard (the lower end) goes forward.

When the sail is on deck, unshackle the halyards and make fast to the weather rigging. Unbend the sheet, and take it to the mast. Roll the sail up on the yard; or unbend it, roll up, and stow below.

Formerly the practice was to lower the topsail to leeward of the mainsail, as it was thought to come down more freely under the lee of the lower sail; but the difficulty is that the sail or yard is almost certain to get foul of the topmast rigging or lee crosstrees, and the crew cannot handle it so well from the lee scuppers. Very often in attempting to take in a topsail to leeward it will take charge and blow out, whereas if it were to windward it would lie flat on the mainsail, and could not blow away. So now the practice is, if the tack be to leeward, for a hand to go aloft in the lee rigging or up the mast hoops and unhook the tack-tackle, whilst another hand goes aloft on the weather side to the masthead, and lowers a line to him to bend to the tack. When the line is so bent, the hand at the masthead pulls the tack up over the peak halyards, so that the sail can be got down to windward. The heel of the yard is pushed to the weather side of the topmast whilst lowering.

To Set a Schooner's Fore Gaff Topsail.—The sail should be sent up stopped to the yard, with the clew and tack cringles showing clear. Bend on the halyards, and hoist to the masthead. The hand aloft will then bend on the lee sheet and lee tack to the cringles; then the weather sheet and tack will be bent, first passing them over the main-topmast stay. When this is done, hoist the sail chock-a-block, bowse down the lee tack, then heave the lee sheet taut by the winch.