

3,500 pounds for keels. If a metal fin be used it shall not be less than half an inch thick. A substantial cabin-house is called for, at least 7 feet long. Keel, frames and beams of oak, planking three-quarters of an inch in thickness and substantial clamps and stringers are specified, and also sufficient air-tight space to keep the boat afloat when full of water. The actual sail area is limited to 600 square feet, 480 feet of which shall be in the mainsail, besides which one headsail and a spinnaker only shall be carried. The equipment includes a 25-pound anchor and a go-fathom cable of 1/4 inch rope, bucket, pump, compass, foghorn, boathook, lead and line, lantern and five life preservers. The crew is limited to five persons, the helmsman to be an amateur, and only one professional allowed aboard.

A number of boats for this class will be built in time for the coming season in Milwaukee and Chicago.

AMERICAN SCHOONERS FOR GERMANS.

The fine schooner yacht *Lasca*, well-known as both a smart racer and an able deep-water cruiser, has been sold to Dr. Walter von Bruening, of Berlin. She was designed by Mr. A. Cary Smith, who also designed the schooner *Yampa*, now owned by the Kaiser. Another German subject, Mr. Sholto Douglas, a yachting friend of the Kaiser, has bought the schooner *Alcea* from Mr. Vaughn L. Clark. She was designed by Mr. Gardner in 1892, and is a capital seagoing craft. There is some talk of inaugurating a racing class of schooners in Germany, and these two craft though outclassed in this country will do admirably and no doubt carry all before them in German waters.

THE SEAWANHAKA CUP.

The agreement between the St. Lawrence

Yacht Club and the White Bear Yacht Club which will govern the race for the Seawanhaka International Challenge Cup specifies:

The course to be triangular, and to windward or leeward and return, each one 12 nautical miles in length. The races shall be sailed alternately over the triangle and to windward and return, and the match to go to the winner of three out of five races. Each club must name its representative five days before the first race. All the races shall be started with a one-gun flying start, and there shall be no time allowance. Yachts must not exceed as feet racing length, with a dead weight of 450 pounds aboard. Draft not to exceed 5 feet of hull or keel, or 6 feet with centerboard down. Centerboards must house without leaving any projection below keel or hull. The total sail area of the mainsail and fore triangle shall not exceed 500 square feet, and the spinnaker shall not exceed twice the area of the fore triangle. Shifting ballast shall not be allowed, but centerboards shall be regarded as fixed ballast, Wooden centerboards shall not be loaded except to overcome flotation. If made of metal they must not be more than 3/8-inch thick, and shall not weigh over 300 pounds. Double-hullers are barred. The scantling specified in the agreement will insure a craft of moderate strength. The weight of crew, including their belongings carried with them, shall not exceed 650 pounds. All the crew shall be amateurs and members of the respective clubs.

The above are the salient conditions of the match condensed from a long document. It is to be hoped that all further contests for the cup will occur without being the cause of such frequent and lamentable friction as has unfortunately attended them in the past.

A. J. KENEALY.

ROWING.

COMPARATIVE COST OF RACING CREWS.

IN looking over the various financial reports of the colleges and universities, it has occurred to me that many of our readers might be interested in knowing what it costs to put out and maintain an eight-oared shell with all the necessary appliances and training expenses, relatively in this country and in England. Of course no comparison can be drawn with regard to the expenses of the crews on the two sides of the Atlantic, nor in fact between two crews in this country, for circumstances vary in every case, and necessarily expenses with them. The following items are gathered from the various college publications:

The Cambridge (England) University boat last year extended £1,064 12s., which is practically equal to \$5,323.

Of this total expenditure comparatively little is incurred until about six or seven weeks before the race against the Oxford crew; no training table is kept before that time, and men do all their work on their local waters. After this the rowing takes place some sixteen miles down the river, on more open water, to which the crew and coaches travel every day. For about the last three weeks of training the whole establishment, crew, coaches and quarters, is

removed to the neighborhood of the Thames, near London, and this is the cause of the greater part of the expenditure.

At the University of Pennsylvania we find that the boat expenses were \$8,383. At Harvard the expenditures amounted to \$10,530, and at Yale there was an expenditure of \$12,691.

HARVARD BOAT HOUSE.

The new University Boat House, in the course of construction, at Harvard, was completely destroyed by fire on December 27th, when about two-thirds finished. It would have been ready for use this year, but it is doubtful under the present circumstances if the crews will now be able to make any use of it.

YALE-HARVARD RACES.

The arrangements for the annual Yale-Harvard boat races have been completed. They will be held on the Thames just above New London, on June 28th.

Each college will be represented by three crews, the University eight, University subs four-oar, and the Freshmen eight.

The University eight-oared race will be rowed first, the ours will race next over the first two miles of the course. The Freshmen crews will race last, their starting-point being at the two-mile point of the four-mile course.

VIGILANT.