

study effects upon both forms and handling not even to be hoped for on fresh water anywhere.

That this latest step by the Americans is a long stride in the direction of real progress there can be no question, and it has already developed a determination to test the relative values of miniatures and larger craft in the most practicable manner and establish beyond disputation the efficiency of form irrespective of size.

Commodore Lane announces that plans or half models submitted by any member of the club, drawn or cut to a scale of two inches equalling one foot, will be considered by a committee shortly to be nominated; that the three best designs will be built as models and fully tried out in actual racing, until some one model proves to possess superior all-round abilities, when the club will immediately put the plans in charge of a reputable builder, and an actual vessel will be built at the club's expense to compete with all other clubs in the one-rater class.

Thus class, by the rules of the Seawanhaka-Corinthians, for instance, must not exceed 25 feet racing length, the square root of the sail area being added to the load line and the product divided by 2.

On the proposed scale, then, of two inches equalling one foot, the plans for models will call for boats *not exceeding fifty inches racing lengths*, and another season will see a small fleet of model racers in the American Club comparing favorably with the best the country can produce.

Of recent races, a match was sailed off Thirty-fourth Street, on Labor Day last, between George W. Townley's *Star* and William Wallen's *Ripple*, of the Wave Crest Model Yacht Club, for the American Club's Challenge Trophy—a handsome solid silver anchor and champion belt combined, with artistic effect.

Secretary Piggott put the *Star* over the course with the better seamanship, and Referee Mitchell, of the Philadelphia Model Yacht Club, awarded him both heats and *Star* the championship for the season of '06.

The Brooklyn *Daily Eagle* Perpetual Challenge Trophy and the OUTING Challenge Cup

were also sailed for the same day; the first event was called off thirty-fourth Street in the morning, and the last off the Wave Crest Club at Bay Ridge in the afternoon.

The American representative *Gracie* won the first heat from her opponent, *Streak*, in a closely contested trial, but was promptly disqualified in the second for finishing outside of buoys marking the line; and, while leading again to the finish in the final heat, lost the trophy by a scant two seconds on time allowance.

The Wave Crest Champion *Wave* again demonstrated her superiority, and successfully defended the OUTING Challenge Cup against the American's *Minerva*, which had to give ten seconds time allowance.

A much more interesting event, however, was sailed off Bay Ridge on September 27th, when O. L. Gray challenged for the Outing Cup with his crack sloop *Mabel*, the defender, of course, being again the *Wave*, in accordance with the deed of gift, which, for the purpose of an accurate relative record of performances, prescribes that the boat winning the cup must defend it or surrender it to any challenger within thirty days.

By no other means could comparative or relative progress be continuously gauged, and, while it has been asserted that no progress is possible under such a condition, it should be at once obvious that, if any vessel of a winning club might be pitted against the challenger, no quantities could be considered as known, but would always remain variable, and the successful defender in one match might easily be infinitely inferior to the unsuccessful challenger in a previous event, or *vice versa*.

In the race of September 27th the *Wave* again won the cup, but obviously only by the poorer handling of the *Mabel*, as the latter took the first heat with minutes to spare, and only lost the last two heats by a few seconds, showing that, with models as well as with vessels of considerable size, the individual elements enter very largely into ascertained results, and the more salt-water sailing is encouraged the more real progress will at least be possible.

FRANKLYN BASSFORD.

ANSWERS TO CORRESPONDENTS.

L. M. D., Ithaca, N. Y.—You can find the "Rules of the Road at Sea" in any book on yachting—for instance, Lieut. Qualtraugh's "Yachtsman's Manual," \$3.50, or Capt. Howard Patterson's "Yachtsman's Guide," \$5.00. Both may be gotten through this office. Nautical Almanac also gives these rules. Charts can be obtained, also Nautical Almanac, from U. S. Geodetic Survey, Washington, D. C., or from John Bliss & Son, 128 Front Street, New York. The cost of charts is about fifty cents per sheet.

C. M., New York.—(I.) Female cycle racing has been under the ban of the governing bodies of American cycling from the beginning, and now it is practically extinct, because any track allowing such competition is refused sanctions by the Racing Board of the L. A. W. Female professional racing still lingers in indoor com-

petition, but entirely on a dime-museum basis, (II.) Mrs. Reinhart, of Denver, Colo., has ridden 200 miles on the road within 24 hours. The best track record for the mile is 2:27, made at St. Louis in 1895. The London-Brighton and return is held by Mrs. B. Ward, in 7h. 26m. (III.) New York, Boston, and Washington, 1879, I think. (IV.) About 2,500,000, judging from statistics of manufacturing. (V.) No. (VI.) Time for mile, 2:17; eight miles on the road, Gloucester to Manchester-by-the-Sea, Mass., eight miles in 31m. 15s.; twenty miles 1h. 32m. 8s. (VII.) The first one to ride an American machine was the wife of Smith, the Washington manufacturer.

S. G. M.—You can obtain the designs from the designers mentioned in August OUTING, if they can be obtained at all. We know no other source.