

Work at Bristol.

WITH the arrival of both nickel steel and Tobin bronze plates at Bristol, five weeks ago, came apparently the end, so far as the material for the plating of the new cup defender was concerned, of what C. Oliver Iselin facetiously called the "guessing contest" into which he and the Herreshoffs had lured the newspaper men. Everything pointed to bronze plating below the waterline and nickel steel above, but the progress of work on the boat for the past week has shown that tobin bronze will be used clear to the rail.

The bronze plates are being put on the boat as fast as the workmen can get them there, while the steel plates are going into the bulkheads, floors, deck strapping and deck stringers of the boat, and into her steel spars. Mr. Iselin has scored a point, but the correct information is out at last and with the launching of the boat from her locked and guarded shop still two months away.

Still it is only fair to Mr. Iselin to say that he never expected the "guessing contest" could be kept up until launching time, but was only anxious that it be made as long as possible. Whether or not the cat is out of the bag earlier or later than he expected, he alone knows, but undoubtedly he has had many a quiet laugh over the guesses.

In the meantime the boat is steadily growing under the hands of skilled workmen, and at the same time is showing that something more than "guessing" has been done in giving previous information about her. She is in every important respect, except that of topside plating, the boat that was detailed in *The Globe* four weeks ago. The construction shows a few differences in minor details, but the model, general dimensions and scheme of construction as then given have been confirmed from reliable sources of information.

The over all length of the boat was then given as about 130 ft. This was before a single frame had been put in place, and was based on the knowledge that 77 frames, spaced 20 in. on centers, would go into the boat. The construction is now so far along as to show that the boat's structure goes about 3 ft. forward of frame 1, and about 2 ft. aft of frame 77, giving very close to 131 ft. over all, or just 7 ft. longer than Defender. Her beam is just over 24 ft., as then stated, or a foot more than

Defender's and her draft close to 20 ft., with the probabilities of something less rather than over that figure.

Her sail plan is still largely a matter of conjecture, in

spite of confident assertions as to length of spars, etc. It can safely be said that no one not in her builder's confidence knows her exact sail plan, or just where the additions will be made to give her the greater sail area than Defender that is assured. The sail area will assuredly be materially larger than Defender's, and all indications point to an extension upward rather than on the base line. Such an extension would be in line with the model of the boat, for she is evidently designed to heel well out when sailing, as is shown by the "tumble home" of the topsides to save dragging the lee rail and deck through the water.

This "tumble home" is not in itself a very pronounced one, but is quite marked as against the straight side of Defender or the flaring side of Vigilant. With it the boat will be more easily driven at a great angle of heel, while at the same time she will not throw quite so high a side out to windward as with straight topsides.

The yachtsmen who have been privileged to look at her are enthusiastic in praise of her model and expected speed.

In the big shed of the Boston Spar Company, on Conder street, East Boston, is the longest and handsomest stick of Oregon pine that it has ever been the writer's good fortune to see. Its beauty as a spar would alone make it well worth seeing, but when is added the fact that it is to be used in the new cup defender building by the Herreshoffs at Bristol in case her steel mast does not prove all that is expected, the combination is simply irresistible as an interesting one.

Manager William E. Bailey of the company, at the request of the Herreshoffs, refrains from telling visitors the length of the spar, or its other dimensions, but he makes no attempt to conceal his pride in its beauty, nor could he be blamed for such a feeling. The great length and thickness of the spar, its wonderfully straight grain and whiteness, and its surprising freedom from knots, checks and sap or pitch streaks, together with the excellent job of work done in fashioning it from the rough stick, make it not only a subject of just pride to the company furnishing it, but also to every one interested in the boat for which it is intended.

The spar is finished from the bottom to within about 25 ft. of the top. Here the head has simply been roughed out, and the finishing and fitting of the hounds, caps and other iron work will be done in the Herreshoff works at Bristol. This absence of finish at the head gives opportunity for another "guessing contest" as to the length of the spar when finished and ready to be put in place.

The extreme dimensions can be told, but not the amount that Herreshoff workmen will cut away in the finishing.

The length of the spar is very close to 107 ft. As "roughed out" for a 20-foot masthead there is a possibility of a finished measurement of 80 ft. from deck to hounds, or 8 ft. more than shown in the old Defender's mast. Probably the finished spar will show something less than that, but the length of the spar in itself confirms the increased sail plan for the new boat over Defender that has been indicated from her model and the increased weight of her lead keel.

Between 23 and 24 ins. is near enough to the diameter of the spar for any one who is not concerned in making the fittings for it. The spar has been made with the butt end of the original stick uppermost—that is, the head of the mast has been worked out of the lower end of the tree, thus giving the greatest strength at the upper end of the spar, where there is the greatest strain. This has also permitted the working of the cheek pieces to support the hounds out of the solid stick, so that no bolting on of extra pieces is required.

Making the mast to stand the opposite way from the original tree also brings the few knots that show down close to the foot, and it is doubtful if any of them can be seen above the deck if ever the mast is put in place. The stick has been drying out in the shop since last fall, when the order for it was first placed, and it is in fine shape. It has been smoothed to within a few feet of the head and well rubbed with lard and yellow ochre to keep it from checking.

It is a noble spar, and it seems a pity that it is only being made to play second fiddle to a steel one. Yet its chance may come, since the steel mast is an experiment whose success the very making of a wooden mast shows a possible doubt.

The Herreshoffs have also ordered from the spar company for the new boat, two bowsprits, two topmasts, two spinnaker poles and two complete sets of club topsail poles for topsails of different sizes. Topmast and bowsprits are of Oregon pine and the other spars are of spruce. All are fine-looking sticks and splendidly worked out and finished. No booms or gaffs have been ordered, showing that full reliance is to be placed in the steel boom and gaff now building at Bristol. The use of these spars in the Defender has undoubtedly proved that they can safely be depended upon.

Mr. Bailey has furnished the spars for Defender, Vigilant, Colonia, Navahoe and many other Herreshoff boats. He expects to ship the new boat's spars to Bristol within ten days.—*Boston Globe*.