

SAILING CRAFT IN EUROPE AND ASIA.¹

IN these days, when sails are falling more and more into disuse for ocean-going vessels, and the construction of sailing-ships is a dwindling industry, it is refreshing to come across a book like this, breathing throughout an intimate knowledge of sailing-ships and sailors, displaying insight into, and sympathy with, the nature of the men who follow the sea on the coasts of many countries, and showing in every page powers of quick observation and ready understanding of all that makes for the efficiency of sailing craft. The author indicates his recognition of the inevitable triumph of the steam-ship in competition with the sailing-ship for purposes of both peace and war, but he rejoices no less in the belief that throughout all time fishing- and coasting-vessels will remain dependent upon sails, and so will constitute a school of seamanship in which the traditions of the past will be maintained. Mr. Warington Smyth describes the volume modestly as "an attempt to record the peculiarity of the principal types of sailing craft in Europe and Asia which I have observed . . . and to consider the causes which have been at work in the development of boats and the results attained under the conditions with which they have had to contend."

This attempt has been eminently successful, and has resulted in the production of a book which is a perfect treasury of information on the subject treated, is well arranged, brightly written, and beautifully illustrated. The author has received the assistance of many competent authorities in special classes of vessels described. Captain Drechsel has dealt with Danish vessels; Mr. Colin Archer, the well known naval architect of Larvik, has been responsible for details of Norwegian types; Mr. Robert Duthie, of the Scottish Fishery Board, has given valuable information in regard to the Scottish fisheries, and other friends have assisted in regard to extra-European types. The descriptions are arranged in geographical divisions, which is not merely the most natural scheme, but also that which best brings into relief the underlying motive of the book, namely, the illustration of the influence of local conditions upon form, type, and sail-plan. Other writers, notably the late Mr. Dixon Kemp, and those who, since his death, have continued the revision of his work on "Yacht and Boat Sailing," have emphasised the influence of local conditions, and gathered large stores of information illustrating the general principle. In most cases these writers have dealt with the subject from a more technical standpoint than that assumed in the volume under review. It must not be assumed, however, that Mr. Warington Smyth has neglected technicalities or unduly sacrificed them to a popular treatment of his subject. On the contrary, for many classes of sailing-vessels he gives the "lines" (or building drawings) and the sail-plans, and his portraiture of

both hulls and sails in the vignettes scattered freely throughout the text are admirable in their details. The interest of the book is increased by the introduction of numerous reproductions of famous pictures of shipping, and no pains have been spared by the publisher either in regard to these illustrations or to other features for which he is responsible.

Mr. Smyth excludes from his survey pleasure boats, yachts, and square-rigged vessels, and gives adequate reasons for that course. About one-half of the book is devoted to European types, beginning with the Baltic and Scandinavian countries, and passing to Holland, Scotland, the east coast of England and the Thames estuary, the south and west coast of England, and then to France and the Mediterranean. To English readers, probably the most interesting section of the book will be that dealing with Eastern

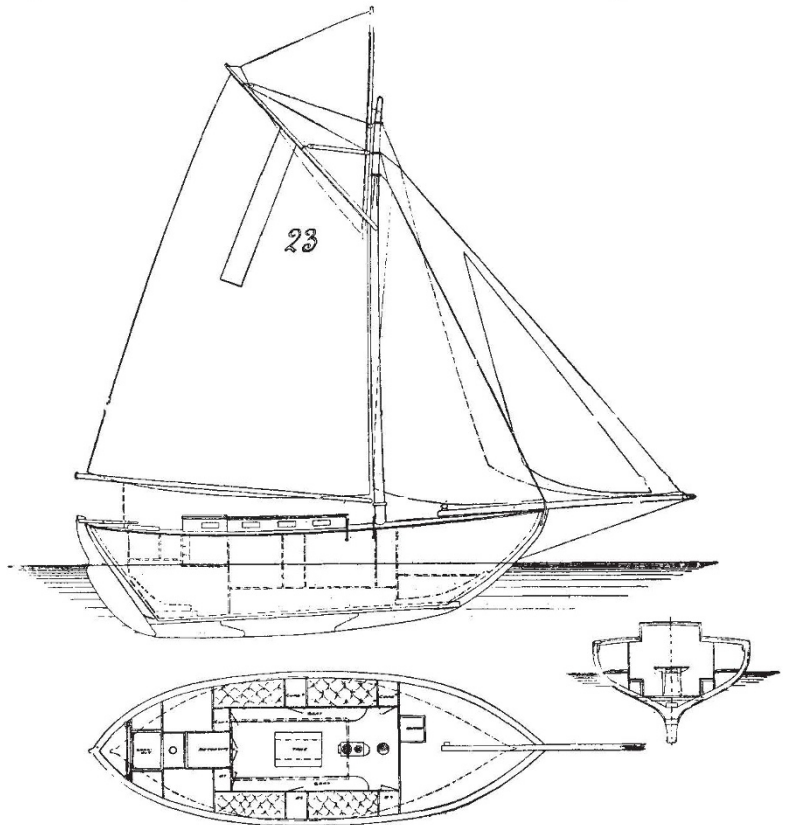


FIG. 1.—Norwegian Pilot-boat—Sail and Cabin Plans. From "Mast and Sail in Europe and Asia."

vessels, including those of the Indian Ocean, the Malay Peninsula, the Gulf of Siam, and China. Here we find special types of great antiquity, differing widely from Western vessels, but well adapted for their special services and surroundings. Mr. Smyth combines philosophical reflection with a yachtsman's enthusiasm and a technical knowledge which goes beyond that of the ordinary amateur, and this fact adds to the charm of his book.

One quotation may be permitted, even within the limited space available in this notice, as indicating this side of his work. He says:—"It is probably true that the degree of civilisation of any race is remarkably reflected in its boat architecture. The variety of its adaptations to the peculiar requirements of its waters is a measure of its appreciation of the value of the cheapest and most certain method of communication known to man; and it is evidence of

¹ "Mast and Sail in Europe and Asia." By H. Warington Smyth. Pp. xix+448. (London: John Murray, 1906.) Price 21s. net.

its ability to use materials at command and fit them to its needs. The highest degree of civilisation in maritime races has always been marked by activity in boat-building and by variety of design and rig. In no case has this been more notable than in the history of China and of Holland, and in the Adriatic in the fifteenth century, in Europe during the last two centuries and in the United States since 1780. The Negro, the American Indian, and the Slav, on the other hand, have never designed a sea-going boat or cut a sail. It has not been for want of water-ways or of opportunity. It has been simply owing to a lower class of intelligence and to want of originality and enterprise."

Mr. Smyth's allusions to the indirect influence upon character and resource of life and work in vessels equipped with sail power are also notable:—"It is above all in the men who handle sails that the self-reliance which is bred by tempest, darkness and the shadow of the Angel of Death reaches its highest point. The seriousness, from this point of view, of the loss of masts and yards to the Navy has been fully recognised, and it has only been reluctantly ac-

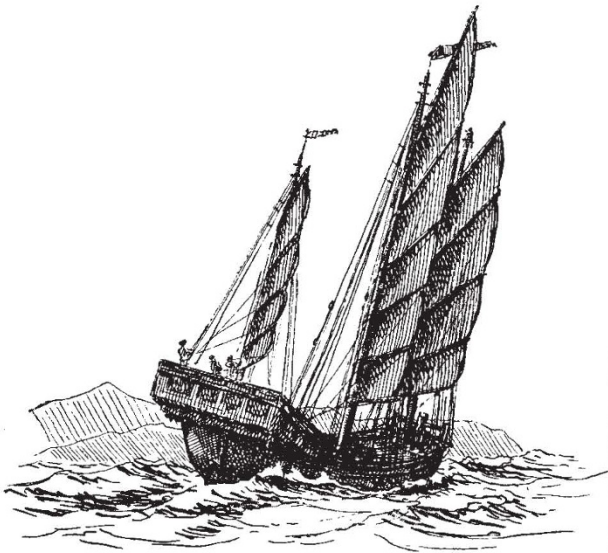


FIG. 2.—Hong Kong Junk. From "Mast and Sail in Europe and Asia."

ceded to on account of the pressing importance of other more essential forms of training. But amongst the coasters and fishermen of the world the mast and sail more than hold their own; and here a student of the sea will find himself in a by-path of the modern world, among the old thoughts, the old traditions, the old methods, and the old virtues of the great seas. And when this civilisation shall have condemned itself and passed the way of others, the lug-sail and the lateen will still be navigating the deep, conned by other races, but the same grim, great-hearted sailor men."

Enough has been said to indicate that, in our judgment, this book should find a hearty welcome from all who love to sail the seas and manage their own craft, and from all who are interested in the maintenance and development of that hardy race of seamen bred on the coasts of the United Kingdom, and leading a life of hardship, difficulty, and danger which must develop qualities of the highest value to the maritime greatness of the British Empire.

W. H. WHITE.

NO. 1901, VOL. 73]

THE SOLAR ECLIPSE OF 1905.

IT is very satisfactory that reports of the recent eclipse expeditions indicate that at some stations the weather conditions were all that could be desired, because we know that at several stations opportunities for securing good results were frustrated by clouds. The Hamburg Observatory party chose a spot which, however, did not come under the second category, and judging by the first portion of the report published,¹ which deals chiefly with the general arrangements and journey to and from the position of observation, it achieved complete success in all lines of work. The report itself is of great interest, and is accompanied, not only by excellent reproductions from photographs of camp scenes, &c., but by capital pictures of the corona. The style of reproduction here employed is to be highly recommended, and other publishers of reports might with advantage copy the good example set.

The party was not a very large one. It consisted of Prof. R. Schorr, the director of the observatory, Dr. Schwassman, the observer, and an observatory attendant, Herr Beyermann, and they were assisted by Prof. Knopf, director of the Jena Observatory, who joined the expedition.

The station selected and used as the observing position was Souk-Ahras, in Algeria, lying on the railway from Tunis, and to the south-west of Bône. The accompanying illustration shows the station occupied, with the several instruments in position. The work of the expedition was chiefly devoted to the following points:—structure of the inner corona; photography of the outer corona and extensions; a search after intra-Mercurial planets; the determination of the brightness of the corona and the total daylight during the eclipse; contact, meteorological, and other observations. The only spectroscopic work attempted was the employment of a Thorp diffraction grating to secure the spectrum of the corona.

For the attack on the inner corona a horizontal telescope of 20 metres focal length was employed. With this, very excellent photographs were obtained. Perhaps the most interesting part of the account of these photographs is the recording of three or four oval, ring-formed, cloud-like caps which lay at a distance of 4 to 6 minutes of arc above the large prominence on the east limb, and indicated a close connection with the eruptive nature of the prominence. These rings, it may be remembered, were also photographed by the Greenwich Observatory party under the direction of the Astronomer Royal, which observed at Sfax, in Tunisia, so that an independent photographic record of them is very important, as this is the first time they have been caught on the sensitive film. That such phenomena have been previously *seen* will be gathered from the following extract² relating to some spectroscopic observations made by Sir Norman Lockyer in 1870:—

"And what was going on, while this was happening? A prominence, obviously with its root some distance from the limb, had gradually travelled beyond the limb; in appearance it became very much more elevated, and seen, as it were, in perspective over the limb; but what I saw first was very rapidly changed, in a way that would be explained by supposing that cyclones were being shot up into the solar air like bombs! the changes in the F line were so rapid and curious. I was not observing with an open slit, so I at once coined the term 'motion forms,' because the forms observed did not in any way represent the shape of the prominence. But the

¹ *Mittheilungen der Hamburger Sternwarte*, No. 10.

² "Solar Physics," by Sir J. Norman Lockyer, p. 403.