
Steamships and Their Machinery from First to Last

Haldane John Wilton

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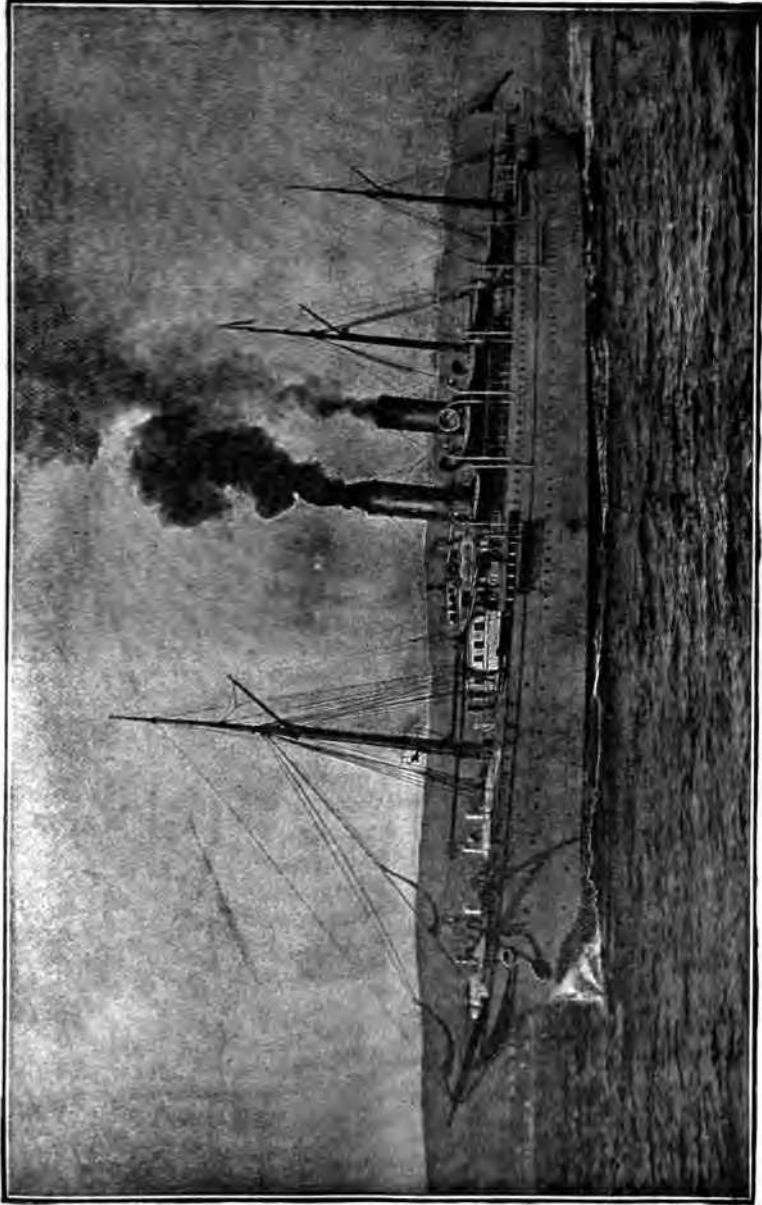




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STEAMSHIPS AND THEIR MACHINERY
FROM FIRST TO LAST



THE CANADIAN-PACIFIC COMPANY'S R.M.S. "EMPRESS OF JAPAN."

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STEAMSHIPS 425-92
AND THEIR MACHINERY

FROM FIRST TO LAST

BY
J. W. C. Haldane
J. W. C. HALDANE

CIVIL AND MECHANICAL AND CONSULTING ENGINEER

WITH MANY PLATES AND OTHER ILLUSTRATIONS

LONDON

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PREFACE.

The very high appreciation of my book on "Civil and Mechanical Engineering" by readers of all classes has encouraged me to prepare another upon "Steamships and their Machinery, from first to last." This treatise is based upon the Author's practice, since 1852, in the Works of Messrs. Denny, Neilson & Co., and Tod & Macgregor, of the Clyde, and Laird Brothers, of Birkenhead, etc.; also as a Consulting Engineer since 1873. Its object has been to describe in a simple, unconventional, and readable manner, the latest phases of Marine Engineering and its surroundings in all departments. Its contents, therefore, include chapters upon Works and their Machinery—Shipbuilding—Design and Construction of Engines and Boilers: also Auxiliaries for hoisting, steering, refrigerating, electric lighting, etc. Chapter XXIX contains a sketch of life on board an ocean racer while "Breaking the Record," and other Notes; and Chapter XXX a few concluding remarks of a general character.

With the object of gaining the best and latest information at all points, and especially upon the great establishments to which special chapters have been devoted, I had the privilege of being allowed to critically survey these and other Works. Every opportunity was kindly placed at my disposal for this purpose by various Firms, and, in addition to this, a large amount of valuable matter concerning the latest phases of advanced practice was generously supplied by engineers, etc., throughout the country, to utilise in my own way with a free hand.

Were I, however, to particularise any of the above, it would certainly be those whose manufacturing operations have been described in detail, viz.: Sir Joseph Whitworth & Co., Messrs. Galloway, the Steel Company of Scotland, Dallam Forge Company, Fairfield Shipbuilding and Engineering Company, and Sir John Brown & Co., to all of whom I am greatly indebted for kind favours whilst visiting their establishments. Messrs. Galloway additionally permitted the use of several illustrations of their system of Boiler manufacture, and Messrs. Tangye eight Plates of their latest Constructive Machines.

Many other Firms, whose names are given in the text, also kindly consented to the publication of views of their Machinery, and, amongst shipowners, may be mentioned Messrs. Ismay, Imrie & Co., who allowed the use of six Plates and other views of their R.M.S. "Teutonic," and Mr. Archer Baker, of the Canadian Pacific Company, who provided the Plate of their R.M.S. "Empress of Japan," which forms our Frontispiece.

The primary object of this treatise has been to glance generally at the various phases of Workshop Design and Mechanical Arrangement as the bases of financial success, before proceeding with the very numerous considerations affecting Machinery Design and Construction. With such an immense field to cover, the greatest brevity and clearness of expression have been necessary.

Owing to the desirability of writing lightly and simply, I have adopted, as far as possible, the style of language which largely contributed to the success of my first book, in the hope that it will again prove acceptable to many.

J. W. C. H.

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