

**OBSERVATIONS ON  
THE BEST MEANS OF  
PROPELLING SHIPS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649192731

Observations on the best means of propelling ships by Alexander S. Byrne

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**ALEXANDER S. BYRNE**

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BY  
ALEXANDER S. BYRNE,  
MEMBER OF THE NATIONAL INSTITUTION, WASHINGTON.

LONDON:  
SMITH, ELDER AND CO., 65, CORNHILL.

1841.

822.

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LONDON:  
PRINTED BY STEWART AND MURRAY,  
OLD BAILEY.

TO THE  
DIRECTORS  
OF THE  
NATIONAL INSTITUTION,  
WASHINGTON.

GENTLEMEN,

The Author is induced to dedicate to you the following Observations on the best mode of Propelling Ships, convinced that, if he is correct in his opinions on this important subject, any advantages to society which may be derived from its introduction, will most effectually be developed, if approved of by the National Institution of Washington.

Gentlemen,

Your most obedient,

Humble servant,

THE AUTHOR.

NEW-YORK, 20th *January*, 1841.





## INTRODUCTION.

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PROMPTED by a sense of duty, and a desire to promote the interests of society, the author has been induced to devote much time to the consideration of the subject treated of in the accompanying observations, and to obtain the fullest information in his power. Until within the last few months he knew little on the subject, and being but imperfectly acquainted with nautical science, feels it necessary to apologize for placing the results of his inquiries before the public; but, moved by a deep sense of the importance of the subject to the progress of civilization and the useful arts, he could not refrain from doing his part to place it fairly before the world.

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ON THE BEST MEANS  
OF  
PROPELLING SHIPS AT SEA.

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WHETHER we view this question in a scientific, commercial, or political point of view, it is one of the utmost importance to the interests of society. The defects of the paddle-wheel are so glaring, and its extreme inefficiency in adverse wind and heavy sea so fully established, that it becomes a duty in every one interested in the subject to perfect, if possible, a better kind of propeller. It is gratifying to know that the means are at hand, and only need a candid and impartial inquiry to be universally adopted; with this object in view, the following observations are submitted to public notice, in the hope that the subject may receive the attention it deserves.

Many substitutes for the paddle-wheel have been recommended, which need not be noticed, from the circumstance that they are not only inadequate, but, as compared with other inventions, useless. It will be sufficient to notice the most important, and to explain their respective advantages. Two of these