# CONTENTS

List of Plates ................................................. page xi

List of Figures in the Text ............................. xii

Foreword ....................................................... xv

Preface ........................................................... xvii

Chapter I. The birth of the steam boat ............ 1


Chapter II. Early progress of steam navigation ... 16


Chapter III. Pioneer transatlantic steamships ... 33

Voyages of Savannah, Royal William I and H.M.S. Rhadamantus. Transatlantic Steamship Companies. Voyages of Sirius, Great Western, Royal William II, Liverpool, British Queen, President and Britannia. Sailing packets and steamships.

Chapter IV. Steam men-of-war ......................... 49


Chapter V. The introduction of screw propulsion ... 64


Chapter VI. Naval officers and steam .......... 82

Opposition to steam. Books by naval officers on steam navigation and steam engines. Use of steam vessels in fleets. Combined use of steam and sailing ships.
 CONTENTS

Chapter VII. Iron ships for mercantile purposes  page 94
Birth of iron shipbuilding on Mersey, Thames and Clyde. Notable iron steamships: Great Britain, Sarah Sands, Persia, Himalaya, Great Eastern.

Chapter VIII. Early iron warships  111

Chapter IX. Low pressure marine boilers  125

Chapter X. Types of marine engines  142

Chapter XI. Steam and sail from 1860 to 1870  160

Chapter XII. The marine compound engine  174

Chapter XIII. Boiler practice and progress  189

Chapter XIV. Introduction of auxiliary machinery, I  204
CONTENTS

Chapter XV. Introduction of auxiliary machinery, II


Chapter XVI. Triple-expansion engines and water-tube boilers


Chapter XVII. Machinery of torpedo craft


Chapter XVIII. The introduction of the Parsons steam turbine


Chapter XIX. Steam turbines and transmission gear


Chapter XX. Steam machinery from 1919 to 1937

CONTENTS

Chapter XXI. The marine internal combustion engine  page 324

Chapter XXII. Marine engineering and the nation 340

Index 361

Coat Button worn by Engineers in Royal Navy 1841 to 1856.