

there are entries for vessels that were intended for foreign navies. The S and W classes prior to the Great War were Italian designs, built in British yards, for the Italian navy. The reason for their inclusion here is not entirely clear – admittedly two of the S-class boats served for a few months with the RN prior to being turned over to the Italians in 1915, but this incidental service was brief and presumably connected to Italy's uncertain adherence to its alliance obligations to Germany and Austria-Hungary at the time. It also includes information on German U-boats that were used for trials purposes after both world wars to help improve British designs. As there was never any intention to include them in the RN submarine inventory, their inclusion here is a little idiosyncratic.

A significant drawback to the book is the absence of a narrative that links the various designs to each other, and how the art of naval architecture evolved with experience, an absence the more regrettable in that the author is a naval architect. This is particularly unfortunate in the period prior to the Great War when technical evolution was both dramatic and remarkable. When one considers what now seems the extremely primitive Holland design of 1901, with the E class of 1912, one can only be astounded. The book would have benefited enormously from a discussion, however brief, of the improvements implemented in the A through D classes that clearly led to the highly successful E class. How this was achieved would have been a useful addition to the book. Indeed, the lack of such information is glaring where you have a number of classes comprising one or two boats, followed by subsequent classes that profited from the lessons learned by their predecessors. One is left to assume or guess.

The evolution of British submarine design is an interesting study and, by the

nature of this account, easily followed in its basic trajectory. Some fascinating side trips included the notion of submarines accompanying a battlefleet resulting in designs that were comparatively speedy on the surface but suffered significant shortcomings in traditional submarine functions. Later still, the M class of 1917 incorporated a 12-inch gun, with one of the class having the gun removed and replaced by a hanger and a seaplane. After each shot the submarine needed to surface to reload – although it could apparently fire with the barrel poking out of the water (along with the conning tower). Another class, the X1 class of 1923, featured two turrets and was clearly experimental with a view towards an anti-merchant-shipping role. It was a failure and the concept was not repeated.

Notwithstanding some of the reservations noted, the book is a helpful guide to the Royal Navy's submarine fleet over the past 120 years and will provide a quick reference for anyone needing to know the particulars of a given class. It is also a sobering reminder of the number of losses of RN submarines in both wars, as well as a steady series of peacetime losses due to misadventure. The courage and fortitude of submariners is a byword throughout the naval profession (a point which we have been reminded of with the tragic loss of the Indonesian submarine KRI *Nanggala* 402 on 21 April 2021), but the very first were extraordinarily brave to put to sea in the contraptions of the day as is well attested in Cocker's useful, if short, reference book.

Ian Yeates
Regina, Saskatchewan

Howard J. Fuller. *Turret versus Broadside: An Anatomy of British Naval Prestige, Revolution and Disaster 1860-1870*. Warwick, UK: Helion &

Co., www.helion.co.uk, 2021. 416 pp., illustrations, appendices, bibliography, index. UK £35.00, paper; ISBN 978-1-91333-622-6.

In *Turret versus Broadside: An Anatomy of British Naval Prestige, Revolution and Disaster 1860-1870*, Howard Fuller outlines the social and political factors surrounding the debate about the Royal Navy's adoption of turreted ironclads from 1860 to 1870. To a much more limited extent, he discusses how the loss of HMS *Captain* affected those discussions and subsequent events.

The author has taken the time and effort to extensively note and reference a wide variety of sources. The use of published and archival documents allows the discussions that occurred before and after the sinking, to be put into context. Furthermore, the use of American documents enables the reader to examine the role and influence of the events discussed, from the perspective of parties on both sides of the Atlantic Ocean. It also presents previously published work on the subject to be viewed in another context. While the thorough research is very useful, and students looking for period documents will find a wealth of documents to explore, the extensive footnoting throughout the book is potentially disruptive to more casual readers.

Students of maritime history will find this book useful in several ways. The decade discussed saw advancements in several technical fields, and these had long lasting effects on the established culture within the Royal Navy. Individuals interested in the engineering and mechanics of ship stability will find the discussions regarding the use and suitability of sails on ironclad warships most useful. Fuller also tackles the role of politics and public opinion in the procurement and design of naval warships. One of the driving factors throughout

the discussion is the fact that these advancements and changes were occurring in several nations simultaneously. The back-and-forth between nations and new technologies and improvements to existing ones is a recurring theme throughout this work and illustrates that none of the events discussed were occurring in a vacuum.

One of the book's more interesting contributions for American students of naval history is the way it frames events occurring in Europe during the American Civil War. It positions the events and effects of that conflict within a wider context. It also sheds light on how new and advancing technologies and the requirement for nations to meet or exceed the capabilities of their neighbours can drive decision-making. Like the dreadnaught race that would occur in the following decades, the emergence of new technology in the fields of propulsion and armament threatened to start an arms race between the powers of Europe and introduced instability to the continent. By the same token, including the role of politics and diplomacy in the work invites students of history to explore events beyond the maritime sphere.

Casual readers may find this book less accessible. It does not offer a narrative discussion of the loss of the ship or the lives of its crew. The technical nature of naval architecture and discussions of stability, while not requiring an extensive engineering background, may be of less interest to readers wanting to know more about the loss of HMS *Captain* itself. In fact, so much time is spent discussing the events surrounding the need for and the construction of the ship, that comparatively little is spent on the sinking and its aftermath. The same caveat generally applies to a knowledge of British politics. While not essential, an understanding of the dynamics of British politics during this period is use-

ful. Readers looking for an account of the personal loss resulting from a maritime disaster, and the broader affects it has on society, should probably look elsewhere.

Turret versus Broadside: An Anatomy of British Naval Prestige, Revolution and Disaster 1860-1870 provides something for students in several historical disciplines, though it may not satisfy students searching for a specific historical perspective. While some may find it too technical and non-narrative, it offers a useful perspective for examining events of the late-nineteenth century, and the effects of the rapid technical innovations that were taking place at that time. The author does not advocate for either side of the debate, but leaves it to the reader to decide which school was the correct one.

Michael Razer
Ward, Arkansas

Gareth Glover. *Nelson's Navy in 100 Objects*. Barnsley, S. Yorks: Frontline Books, www.frontline-books.com, distributed by U.S. Naval Institute Press, 2021. 301 pp., illustrations, notes, index. UK £25.00, US \$49.95, cloth; ISBN 978-1-52673-132-6.

Gareth Glover, whose primary focus has been the land side of the Revolutionary and Napoleonic Wars, has gathered images of 100 artifacts, paintings, drawings, and maps to illustrate the Royal Navy during the era. As the ultimate naval icon of the age, Horatio Nelson centres the book. This is the author's fourth publication of a book of 100 objects, the other three concerning the Battle of Waterloo, Napoleon, and the Duke of Wellington. It is a high-quality book with a shipload of stunning images.

The book begins with a basic biography of Horatio Nelson, touching on his life, early years at sea, his notable

battles and injuries, his death and funeral. His reputation was a standard for other naval officers of the time and many, indeed, rose to the challenge, performing their duty for country nobly and with great effect. After the brief bio, the author sets about laying out the stories surrounding the objects, dealing with entities like the Admiralty, the Royal Ordnance Department, the Navy Board, and the Transport Board. Glover discusses ship construction, sails, and sail handling, ship maintenance, innovations during the period and, at the end, the ultimate fate of several key ships (*Foudroyant*, *Clyde*, etc.). Over the course of the book, he also covers all the ranks from admiral to landsmen, discipline, punishment, mutiny, and naval engagements. He touches on most, if not all, essential areas of the Royal Navy in the era of Napoleon and Nelson.

While some related topics are somewhat clustered together, others are spread across the volume. For example, the administration of the navy is found in the first few entries, while information about ships and their operation – from different rates, to masts, copper sheathing, and armament – constitute many of the first 40 items. The issue of dock yards, however, is spread throughout the book, as is information on sailor health, food, and mortality. The scattering of related items does beget some repetition of information.

The text does contain some factual errors. After the Battle of the Nile, Glover writes that Nelson recovered from his head wound in Sicily, but his first stop was in Naples with Emma Hamilton for three months before taking Emma and the royal family of Naples to Palermo (10). The author suggests that Nelson's state funeral included "hundreds of river boats" escorting his remains from Greenwich to St Paul's Cathedral (11). While his body was carried along the Thames from Greenwich to the White-