

*SS Great Britain, Brunel's Ship, Her Voyages, Passengers and Crew.* Helen Doe. Amberley, Stroud, 2019. 304 pp, 30 ill. Hardback, £20.00. [ISBN 978-1-445684-51-2].

With the end of the Napoleonic wars, and peace with the United States, transatlantic trade exploded. Filling the holds of American and British sailing ships, cotton, wheat, and other agricultural products flowed east while manufactured goods returned on western voyages. Passengers too came aboard. Impoverished immigrants packed together in unhealthy conditions struggled to survive below while cabin passengers paying "Thirty guineas, wine included", enjoyed comfort on the upper decks. Increasingly, speed and reliable service were in demand, characteristics not common to sailing vessels whose crossing times averaged 30 days or more. Steam was the answer.

Having formed the Great Western Railway Company to link London with the southwest and west of England, one of the company investors, the renowned engineer Isambard Kingdom Brunel, joked that they could make the line even longer by building steamships to run between Bristol and New York. The idea was taken seriously, and in 1836 Brunel, Thomas Guppy, a Bristol businessman, and others, formed the Great Western Steamship Company. Two years later they launched the wooden hulled side wheel steamer *Great Western* whose success led them to an even bolder venture building a second ship, the *Great Britain*. Designed by Brunel, on July 19, 1844, to the cheers of thousands of spectators, including Prince Albert, the world's first iron hulled, screw propelled passenger vessel floated out of her building dock in Bristol.

Having written widely on maritime subjects, including *The First Atlantic Liner: Brunel's Great Western Steamship* and *Brunel's Ships and Boats*, Helen Doe brings to this volume a depth of knowledge and insight that inform every page. Her approach is biographical. The engaging narrative takes us from *Great Britain's* conception, to birth, to life and death (almost) and finally resurrection. It is a story replete with nobility and melancholy. Designed by Brunel, perhaps the greatest engineer of the nineteenth century, she was, like his later creation, *Great Eastern*, both a triumph and a failure. In her early halcyon days *Great Britain* was the "Wonder of the World." With two ships ferrying the Atlantic, the Great Western Company enjoyed full holds and high profits. Those expectations sank quickly. On 22 September 1846, her master, James Hoskens, relying on faulty charts, ran her aground on a sandbar at Dundrum Bay in the north of Ireland. For eleven months she lay stranded. Remarkably, her sturdy iron hull remained intact, and through enormous efforts salvagers managed to refloat her. Nonetheless, while the ship survived, the company did not. Although the accident triggered the company's demise, other fundamental problems that challenged all early ocean steamship operations, were equally at fault.

Two ships were not sufficient to provide regular transatlantic service. In the face of a multitude of unforeseen conditions, manmade and natural, Samuel Cunard had established that at least four ships were necessary to provide reliable transatlantic service. Cunard's first ships, wooden paddle wheelers, were considerably smaller than *Great Britain*, and in comparison, far less expensive to build and operate. Adding to the Great Western Company's woes were poor management, insufficient capital, and the failure to obtain, unlike Cunard, a generous public subsidy. The burdens were too great. The company collapsed, and in 1852 sold *Great Britain* to the firm of Gibbs, Bright and Company where she began a new life trading to Australia.

Recognizing that steam power was impractical for long voyages, *Great Britain's* new owners opted to place their main reliance on sail. They removed the vessel's main engines and replaced them with smaller auxiliary power plants. In August 1852 *Great Britain* made her first voyage to Australia. For the next 34 years, apart from service as a troop ship in the Crimean War, brief passenger service to New York, and her final days as a coal carrier, Liverpool/Cardiff to San Francisco, in her new working life her main occupation was carrying immigrants to Australia during which she logged more than a million miles.

While Doe rightfully acknowledges *Great Britain's* role in the development of Victorian technology and the empire's maritime dominance, that is a story, as she explains, that has been told before. Her emphasis, particularly in the later chapters, is more focused on the social history of this great ship. Through extraordinary research, mining a wide variety of sources, many of them digital, Doe recounts the history of the passengers, mostly immigrants, and crew who sailed aboard this ship. Her eleven extensive appendices add splendid detail to the narrative. Not only does she list the voyages of *Great Britain*, but she presents to us a good deal about the problematic legal organisation of the company, as well as listing shareholders and proprietors. In addition, the inclusion of "Emigrant Regulations, 1852" and a list of "Surgeons on Board," helps to explain that, despite the long voyage, the mortality rate en route to Australia, compared to American "coffin ships" plying the shorter North Atlantic route, was remarkably low. While comprehensive regulations and competent medical care were critical to the wellbeing of passengers, Doe also gives credit to a remarkable group of women known as "matrons." According to Doe "the women appointed to the role were often middle, or lower middle, class single women or widows in reduced circumstances, or wives whose husbands had 'suffered reversals.'" Given free passage and a small stipend, applicants were selected by the British Ladies' Female Emigration Society. Between 1859 and 1873, 219 women made their passage as matrons on board *Great Britain*. Although Doe never cites a total number, in her long history *Great Britain* brought thousands of immigrants to Australia. How many Australians today might trace their family history to this ship?

In 1876 *Great Britain* made her last Australian voyage. After more than three decades at sea she was entering her twilight years. In 1882 new owners, intending to use her as a bulk carrier, Welsh coal to San Francisco with a return cargo of wheat to Liverpool, removed her engines and passenger accommodations. Departing Penarth on 6 February 1886 for San Francisco she met heavy weather in the South Atlantic, forcing her into Port Stanley, Falkland Islands. Although she suffered considerable damage aloft, her iron hull was deemed "quite tight", but her sailing days were over. Port Stanley was her last port of call. The Falkland Islands Company purchased her to use as a warehouse. It was an ignominious end for such a grand ship, but the builders in Bristol had done their work well. Her hull survived. In the early twentieth century, viewed by some as a dangerous navigational obstruction, recommendations were made to tow *Great Britain* to sea and sink her. Standing against the locals, who wished to be rid of the relic, the Governor of the Islands, Sir Herbert Henniker Heaton, launched an effort to preserve and restore *Great Britain*. The campaign failed. Sure to be destroyed if she remained in Port Stanley harbour, Heaton ordered the ship taken to Sparrow Cove, three and a half miles away where she was run aground. While hardly preserved, just as she had endured the agony of Dundrum Bay, *Great Britain* survived.

Although *Great Britain* was far away, she was not forgotten. In the late 1960s, despite facing immense challenges, a remarkable group of people in Great Britain, including several organisations public and private, arranged to bring the ship home. After a careful survey, it was determined that her hull was too weak to be towed in an open sea. Undeterred, her supporters managed to arrange for her to be placed on the top of a floating pontoon, and towed home to Bristol. On July 5, 1970 thousands of people watched as *Great Britain* passed under Brunel's Clifton Suspension Bridge on her return to the Great Western Dock to rest in a place she left more than a century and a half ago.

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