fantasy and fiction. This is a theme already touched upon in a more traditional way by Glyndwr Williams. Mackay argues that fiction has been a far more powerful motivating force in exploration — and perhaps in many other realms — than ever was fact.

In general, books of collected essays lack the sustained analytical focus of single-authored works. What they *can* offer is a diversity of view. Roughly a third of the essays in this book might have been written in the 1960s or 1970s. The rest are deeply informed by preoccupations and approaches of the 1990s. The book lacks a conclusion and its introduction is presumptive rather than critical. The opening address by the Squamish Chief Philip Joe is more token than a convincing declaration of commitment to a balanced and critical approach to the history of the "encounter." Nevertheless, the quality of scholarship in most of the chapters and the imaginative flair of two thirds of the book carry it.

NOTES

- First O'Gorman, then Jennings and finally Todorov sent off the opening salvoes with Edmundo O'Gorman, The Invention of America: An Inquiry into the Historical Nature of the New World and the Meaning of Its History (Bloomington: Indiana University Press, 1961); Francis Jennings, The Invasion of America, Indians, Colonialism, and the Cant of Conquest (New York: Norton Co. Inc., 1975); and Tzvetan Todorov, The Conquest of America: The Ouestion of the Other (New York: Harper & Row, 1984). For a strong sense of new and important trends see Stephen Greenblatt, Marvelous Possessions: The Wonder of the New World (Chicago: University of Chicago Press, 1991); R. Cole Harris, The Resettlement of British Columbia: Essays on Colonialism and Geographical Change (Vancouver: UBC Press, 1997); Ken G. Brealey, "Mapping them Out: Euro-Canadian Cartography and the Appropriation of the Nuxalk and Ts'ilhqot' in First Nations' Territories, 1793-1916," The Canadian Geographer 39, 2 (Summer 1995): 1140-156; and Karl W. Butzer (ed.) "The Americas Before and
- After 1492: Current Geographical Research," Annals of the Association of American Geographers 82, 3 (September 1992).
- The traditional history of "discovery" has been a popular topic of research since the early nineteenth century. The best of the work of the 1950s, 1960s and 1970s came from the pen and influence of David Beers Quinn.
- See Victoria Wyatt's book: Shapes of their Thoughts: Reflections of Culture Contact in Northwest Coast Indian Art (Oklahoma: University of Oklahoma Press, 1984). Of recent interest are Janet Catherine Berlo, ed., The Early Years of Native American Art History (Seattle and London: University of Washington Press, 1992); Judy Sund, "Columbus and Columbia in Chicago, 1893: Man of Genius Meets Generic Woman," Art Bulletin 75, 3 (September 1993): 442–446; and more popularly, Vickie Jensen, Where the People Gather: Carving a Totem Pole (Seattle and London: University of Washington Press, 1992).

John E. Barnard, Building Britain's Wooden Walls: The Barnard Dynasty, 1697–1851

DANIEL G. HARRIS

Barnard, John E. Building Britain's Wooden Walls: The Barnard Dynasty, 1697–1851. Introduction by Jean Sutton. Oswestry, England: A. Nelson, 1997. 110 pp., 48 illus., 26 tables and plans, 18 appendices. Cloth £20, ISBN 0-904614-638.

This fine book about British eighteenth and early nineteenth-century commercial ship-building by Mr John E. Barnard is the result of his perusal of a magazine in the waiting room of his oculist. In it, he was surprised to find a reproduction of a print of a merchant vessel on

the stocks; its caption read "An Indiaman in H. Barnard's Yard, Deptford — published by H. Moses 1824." That print roused the curiosity of the former royal marine reservist, stockbroker and yachtsman about his shipbuilding ancestors. The consequence of that 1985 visit was twelve years of extensive and thorough research of Admiralty, Municipal and Royal Society records.

Those twelve years of research have culminated in the production of a scholarly and well-documented work about one of the leading merchant shipbuilders for the Royal Navy, and

the Honourable East Indian Company in the eighteenth and early nineteenth centuries.

Apart from statistics, little has been written about the activities of the eighteenth and early nineteenth-century commercial wooden shipbuilders that contributed much to Britain's mastery of the seas in the years 1739–1815. Mr Barnard's book is one of a few that fill a large gap in British Maritime history.

Prior to the outbreak of war in 1739 between Britain and Spain, the royal dockyards fulfilled most of the Navy's requirements for new construction, and the maintenance, and repair of the fleet's vessels. The 1739 war, the later hostilities with France that continued until 1815, and the royal dockyard's inabilities to meet the fleet's pressing needs for more ships made the merchant shipyard's production vital to the attainment of Britain's maritime supremacy.

The author reveals that in 1739, most commercial yards were small family businesses that required space for a timber pile, a saw pit (preferably covered), a forge, and a gentle sloping beach with sufficient depth of water. The practice was for these private enterprise yards, in most instances, to complete only a naval vessel's hull. Following launch, a hull would be towed to a royal establishment for rigging. The author states that "a 74-gun ship required about three thousand oaks for its construction." The sources for oak supplies were Britain, New Brunswick, Quebec and Eastern Europe. Pine for masts usually came from eastern Canada and the Baltic area. The payments for new ship construction was by the Naval Board's issuance of bills of exchange drawn upon the Crown for payment at dates when revenues were likely to be available. The first was made on the signing of the contract for construction, the last after the vessel's launch.

The Barnard family's involvement in the shipbuilding activity probably began in East Anglia in the sixteenth century. A proof is an apprenticeship indenture for Henry Barnard dated 17 May 1591, which is included in Appendix I. However, little is known of his subsequent career.

John Barnard, the younger (1705–1784), owned a small yard on the river Orwell near Ipswich from 1739. In that year, at the direction of an army colonel, Barnard built a 3-ton vessel supposed to be an unsinkable lifeboat. The demonstration for the Navy Board's official was disastrous, nonetheless, the Admiralty accepted Barnard's tenders to build one 20-gun sixth rate, and one 50-gun fourth rate. This was the beginning of a long association of the

Barnard shipbuilding family with the Admiralty. The need for new vessels was so urgent that by the end of 1739, Merchant shippyards were to build eleven vessels for the fleet. Nine of the construction contracts were with builders in the Thames area.

The Navy Board's practice was to place an overseer with each yard to ensure vessels were completed in accordance with the authorized specifications and contract's terms. The overseer sent to the Barnard yard was Thomas Slade. He was to design Nelson's *Victory*, and be responsible for the 74-gun ship's development. It is interesting to note that the provision of anchors and cables necessary for a launch was the Admiralty's responsibility. John Barnard was to complain that the failure to supply these items lead to delivery delays.

The commercial shipyards had to contend with the Navy's press gangs' maraudings. The Navy Board authorized the shipyards to issue certificates of protection to its shipwrights. The documents stated that the holder was employed on naval work and thus was exempt from impressment.

In 1742, John Barnard realized the Orwell's upper area was unsuitable for the larger vessels required by the fleet. The King's yard at Harwich had been idle since 1713. Prompted by Slade, Barnard offered to build a 50-gun ship at a reasonable price in return for renting the Harwich yard. The annual rental was to be £30.

Between 1742 and 1748, the Harwich yard launched four 50-gun ships, as well as one 58-gun and one 24-gun ship. The times taken to build three 50-gun hulls averaged thirteen months. One 50-gun vessel, the Litchfield, took twenty-four months to complete, had a difficult launch, and came to a sad end twenty years later. The author has included that tragedy in the book, but has apparently not found the reasons for the vessel's two years on the stocks.

John Barnard had concern that the Harwich yard could be attacked by French privateers, consequently, the "Right Honourable Lord Commissioners of the Admiralty" sent an old 48-gun vessel, 40 muskets, 20 cutlasses and 20 pairs of pistols for the yard's protection. It was never attacked.

During the years 1748–1763, part of the period of the "establishments," John Barnard extended his shipbuilding activity by buying Ipswich land for a new yard. His son William built one East Indiaman and six other merchant vessels on this site.

John Barnard's Harwich yard, in the eight years 1756–1764, was to build the first 74-gun

ship, the *Arrogant*, designed by Slade for the British Navy. It took over two years to build. Two more 74s were launched in the following three years. For the first time, the Navy Board offered bonuses for delivery before the contract date. The 32-gun *Alarm*, launched in 1758, was the first naval vessel to be copper sheathed; its sister *Quebec*, delivered two years later, was lost in an action with two French vessels in 1779.

Correspondence between Barnard's Manager, Turner, and the Navy reveals that it was the latter's responsibility to provide bilgeways for a vessel's launch. These would be returned after use. Shortages of suitable iron for bolts prompted a request to the Board for the supply of high-grade bolts. It refused the yard's request, and there is no record of the difficulty's resolution.

In September 1761, George III's bride-to-be landed at Harwich. John Barnard was the receiving host and presented the princess with a basket of grapes grown in his greenhouse. She requested a cutting for a new vine. The Crown offered John a Knighthood for his services but he replied that a contract for a new ship would be preferred.

The author tells of the opposition of the Dissenters Chapel's minister to work on Sunday to complete the Indiaman *Speaker*. Work on Sunday was necessary to obtain the £50 bonus for delivery ahead of the contracted date. The yard's personnel had no objection to work on Sunday and the minister's thunder from the Pulpit failed to influence the shipwrights. Incidentally, the cleric left shortly thereafter for America.

Not all went well with John Barnard's Harwich yard. In 1775, there were disagreements about materials used in construction. In one instance, the Navy Board accused the yard of using east country oak instead of English oak for trennels. Next, the Board changed its payment methods. No installment would be paid on the execution of a construction contract. That first payment would only be made when the builder assured the Board that he had sufficient material to begin building. The Crown's payments were made by postdated Navy bills. These would have to be discounted at rates up to 111/4 per cent with a bank to obtain cash to pay for materials and labour. Contracts contained no escape clauses to cover inflation caused by the War of American Independence. Contracts contained penalty clauses of up to £5 per ton for late delivery. In 1781, as a result of insufficient cash resources, John Barnard was declared bankrupt.

In 1782 William Barnard, John's eldest son, took over the Harwich and Ipswich yards. A year later, he formed a partnership with William Dudman and Henry Adams of Buckler's hard-to-lease nine acres at Deptford on the Thames, for a new yard later known as Grove Street. In contrast to the Harwich activity, here the new buildings would be evenly divided between merchant and naval vessels.

The author, in Chapter 8, "The Honourable East India Company," outlines the company's history and explains the terms "ships husbands" and the permanence of "ships bottoms."

Three chapters cover the operations of the Deptford yards. Building for the East India Company's "ships husbands" enabled the business to survive. Moreover, the East Indiamen had similar scantlings to the naval vessels, a fact that facilitated construction. In the second Grove Street chapter, the author has included a short description of Barnard's methods to salvage the wrecked East Indiaman *York*. I wish the author could have included the draught of the salvage methods shown on page 211 of MacGregor's "Merchant Sailing Ships." William's paper for the Royal Society about his salvage methods is in the book's Appendix X.

In the ten years 1780–1790, the Barnard yards completed 42 vessels, 29 for East India Company "husbands" and 13 for the Navy.

William died in 1795. His widow became the owner of the Deptford yards which were to be managed by her sons William II and Edward George. In this period of unrest in Britain, the new managers had to contend with strikes by caulkers and shipwrights, in addition to the rising cost of materials caused by wartime inflation. The Crown thus agreed to increase its payments for ships to meet those increased costs. Edward George became sole manager in 1805. The naval business ended in 1813. After building nine East Indiamen between 1812 and 1825, the activity closed down.

Between 1740 and 1825, the Barnard yards had built 77 seven naval vessels, 62 East Indiamen and 4 other merchant vessels, more than any other contemporary British yard.

The book has eighteen appendices that include the copies of leases, description of a Chinese punch bowl, and an account of the action between the French *La Piemontaise* and the East Indiaman *Warren Hastings*.

In my opinion, John E. Barnard's book will hold the reader's attention and will, I hope, stimulate research into the activities of other eighteenth and early nineteenth-century private shipyards.