AUTOBIOGRAPHY OF REAR ADMIRAL CHARLES WILKES, U.S. NAVY, 1798-1877. Edited by William James Morgan, David B. Tyler, Joye L. Leonhart, and Mary F. Loughlin. Washington, D.C.: U.S. Government Printing Office, 1978. xxii, 944 p. \$13.50 U.S.

The life of Charles Wilkes spans the greater part of the 19th century, and his autobiography, which he began in 1871, covers over sixty years, breaking off in 1862. His career was varied, eventful, turbulent and, all in all, successful, since he progressed from midshipman to rear admiral in relatively easy stages, though he never compromised his rigorous principles and had to weather convictions by two courts-martial — setbacks which would surely have destroyed a lesser man. The most notable features of his career include his command of the U.S. Exploration Expedition (1838-42), during which the icebound Antarctic was discovered to be a continental land mass; and his boarding of the British steamer, Trent, to remove the Confederate Commissioners, John Slidell and James Mason: an international incident which found its way into most English and American school history books.

The autobiography, though incomplete, is nevertheless massive, and encompasses nearly one thousand closely printed pages. It does not make for easy reading for several reasons. First, the format, obviously designed to cram the work into one volume, is very congested. Secondly, editorial adherence to the original punctuation, paragraphing and spelling (frequently bizarre and often illiterate, e.g., "annonamous") considerably impedes ready comprehension. Thirdly, the narrative is often disjointed and repetitive, with the writer heavily labouring his major points. Above all, the profusion of sometimes irrelevant detail provides us with many fine trees and lots of shrubs, but frequently denies us a wood.

Many facets of Wilkes's character emerge strongly throughout. He was consistently honest and sincere, and warmhearted to friends, but also conceited, somewhat priggish, and a stern disciplinarian. He seems to have cultivated strong likes and dislikes, and regularly placed people in absolute categories of good and bad. His strongest abhorrence was of bland, ineffective or corrupt administrators. In turn, in their eyes he suffered from the two cardinal faults of abrasiveness and arrogance.

The autobiography is extremely informative, but not always in the manner one might expect. It does not, for example, supply as much information on American naval history as might be hoped, and it says understandably very little about the voyages of discovery, since these were dealt with in Wilkes's Narrative of the Exploring Expedition, which appeared in 1845. Yet, as a crowded canvas depicting such varied subjects as the life of a midshipman at sea, social behaviour in Washington, D.C., and sights and customs of numerous places in Europe, South America and the Pacific, it is stimulating and informative. Among major events ably described are the boarding of the Trent (including the opposition offered by the frenzied female relatives of the two Confederate Commissioners), and the bungled and brutal destruction of the Norfolk Navy Yard (enshrining the pathetic plea of Captain Edelin not to set fire to the barracks because it housed a hen sitting on twelve eggs). Wilkes also provides a dramatic eve-witness account of the accidental explosion on board the *Princeton* of the gun "Peacemaker", which claimed among its victims Wilkes's arch enemy, Abel Upshur, Secretary of the Navy, and almost killed the President of the United States. Wilkes's comment on the occasion is typical of his anti-British feeling throughout. Noting that the gun was made in England he observes: "It would be of great advantage could Americans emancipate themselves from the follies and prejudices which make up the burthen of English Society, held down by every injustice and inequality that any nation can submit to.

English seamen in general come under his censure, and his comments on Captain Edward Belcher and Sir James Ross are especially scathing, though to some degree justified. He describes Belcher's abandoning of his ship as "one of the most untoward acts of want of resolution and bravery" and asserts that everyone under his command suffered from his tyranny. Belcher is also described as indelicate in his dealings with missionaries and cruel in his handling of native chiefs. Comments on Ross, all of them bitter, focus on the claim that he never acknowledged the help Wilkes had given him in the form of charts, reports, and sailing directions, and he is summarized as being deficient in generosity and uprightness.

The remarks on Ross are part of a larger picture of opposition and malice that Wilkes felt directed at him over his Expedition. It is amazing to read how vindictive the government could be in its attempts to deny

Wilkes proper credit for his achievements, though he eventually gained the official recognition he deserved.

Wilkes is somewhat waspish about nearly all the important personages with whom he came into contact, many of them now hallowed by history. Simon Bolivar, Wilkes concedes, "was, of course, a great man", but of unprepossessing appearance, being very short and emaciated, with an ill-shaped mouth, bad teeth, coarse hair and a suspicious eye. Bolivar fares better than most of the American Presidents Wilkes met. Tyler and Polk are described as "second class": they "neither conferred respect by holding office nor properly estimated the position they held." Polk, with letters stuffed in his pockets, reminded Wilkes of a "Penny postman." Even Lincoln incurs considerable criticism, despite Wilkes's staunch Northern loyalties. He felt Lincoln had "no sign of refinement and education about him, and . . . the effect he produced upon the country was not calculated to inspire confidence . . ." But Wilkes could also be generous in his assessments. In particular, he speaks with considerable understanding and sympathy about the problems of the South.

Transcribing the volume must have been taxing, since, to judge from the specimen provided on the inside-covers, Wilkes's hand is difficult to decipher, and his style is chaotic. The editorial process seems to have been thorough, and the work is provided with admirable illustrations, a useful chronology, and a comprehensive index. Only the explanatory notes seem deficient, being sparse and a little capricious. It is also a pity that Fagan, the admirable proof-reader who saw Wilkes's Narrative and the works of James Fenimore Cooper through the press, could not have been resurrected to correct the spelling in the chronological table, which is almost as haphazard as Wilkes's own (e.g., "disobediance" and "Cemetary"). In general, however, the volume should be welcomed by every maritime library and by students of 19th century naval history.

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THE WINTERS OF THE WORLD: WORLD UNDER THE ICE AGES. Edited by Brian S. John. A Halstead Press Book. New York: John Wiley & Sons, 1979. 256 p.

My initial reaction to the book was "At last!" Here is a profusely and well illustrated book written in a popular vein on Precambrian through Quaternary glaciations. The book is divided into eight chapters and a glossary. Reading the book, one gets glimpses of the Precambrian, Ordovician, Carboniferous, and Quaternary glaciations, and some of the postulates as to the origin, causes and future possibilities of renewed glaciation. Unfortunately, the glimpses are overshadowed by the inadequacies of the book. These include inadequate cross-referencing of text and figures, inadequate explanation of figures, inadequate or incorrect definitions and numerous typographical errors. Figures are unnumbered and not specifically referred to in the text, so that the reader may be unaware that the following page has a highly informative illustration that would help clarify a concept. Nor do the captions alert the reader to the real significance of the illustrations or the details to be gleaned from them. Many of the illustrations, such as the diagram outlining the accumulation and ablation zone, are inadequately or not at all explained.

Definitions are often inadequate or incorrect. The following are but a few examples: *medial moraine*, makes no reference to accumulation downstream from the juncture of two coalescing glaciers; *palynology* as the "study of fossil spores, especially pollen"; and *carbonates* as "material made of carbonates such as a calcite, dolorite, or aragonite."

The concept of the book is one that would fulfill a need and is one that still appeals to me: one that would reach out both to the professional as a summary and to the layperson. A revised version of the present volume would be a welcome addition to the literature on glaciations for both the layperson and the professional. Regrettably, I cannot recommend the present version.

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