Book Reviews

Medicine and the Navy. Vol. III. CHRISTOPHER LLOYD and JACK L. S. COULTER. Edinburgh: E. and S. Livingstone, 1961; pp. 402, 16 illus. 505.

The much-lamented death of Surgeon-Commander John Keevil prevented him from finishing the work which he had begun so brilliantly. At the request of the Wellcome Trustees the difficult task of completing *Medicine and the Navy* has been undertaken by Christopher Lloyd, F.R.Hist.S., and Jack L. S. Coulter, F.R.C.S., and, judging by this volume which deals with the period 1714–1815, no happier choice could have been made.

The story of the medical service in the Navy during the hundred years ending with the year of Waterloo is intensely interesting. The authors have not adopted a purely chronological approach but have succeeded in painting an excellent composite but detailed picture from four different points of view. The first section paints in the background, telling us the size and structure of the wooden ships, the positions and nature of the medical quarters and equipment, the variety and function of the medical personnel (physicians, surgeons and apothecaries) and the system of victualling which so easily lent itself to vicious irregularities. The second section gives a vivid and graphic account of the Navy and its medical service in action in the wars of the eighteenth century, and what a terrible picture those wars reveal. After reading the gruesome account of the scene in the wardroom during an action given by Samuel Leech we can but echo his comment—'Such scenes of suffering I saw in that wardroom I hope never to witness again. Could the civilized world behold them-it seems to me they would for ever put down the barbarous practices of war by universal consent.' This section also includes a special chapter on the illnesses and wounds sustained by Nelson.

The third section is devoted to an historical account of the building development and administration of the big naval hospitals at Greenwich, Haslar and Plymouth. Much in this section will be quite new to most readers.

The final section is medical and deals with the common diseases which afflicted seamen in the eighteenth century. The thirty-five pages dealing with scurvy ought to be read by every medical man. Seldom can the ravages of that disease have been so graphically presented and never till we read this account could we understand why the controlled experiments of Lind were so long in being accepted and his treatment practised. This sentence remains in our memory—'Scurvy was so rife that the crews of many ships were reduced by two-thirds and so many dead were thrown overboard that the citizens of Plymouth dared not eat any fish for over a month.' The late acceptance of lemon-juice as a remedy was partly explained by Blane in these words—'The cure sounded too simple to be true.' Probably psychologically correct.

When one considers the class of men who were often pressed into the naval service, the coarse nature of the diet provided for them and the cramped ill-ventilated quarters in which they lived and died, it seems remarkable that the Navy achieved so much in the eighteenth century. As the authors write 'with their ancient hulls, rotting timbers, low deck space (5 feet $10\frac{1}{2}$ inches) and grim atmosphere, they can never have been very salubrious craft.' How bad the air could be can be judged by Nathaniel Bedford's comment—'When the hold was first opened every man who assisted in it was seized with fever within 24 hours.'

Here and there the authors give us a light touch. We should certainly have liked to be present at that cricket match in the grounds of Greenwich Hospital in 1796 between an eleven of one-armed against an eleven of one-legged men. Who won?

Book Reviews

You will find the answer on page 204 of this valuable, entertaining and most informative volume. It was a gracious but appropriate act to dedicate the book to John Keevil.

ZACHARY COPE

Daniel Drake (1785-1852); Pioneer Physician of the Midwest. EMMET FIELD HORINE, M.D. (Univ. of Pennsylvania Press, 1961). Pp. 425, with 35 plates. \$6.00.

Daniel Drake is one of the most colourful figures in the history of American Medicine. Sir William Osler, calling Drake 'the greatest physician of the West [of the U.S.A.], said that he started nearly everything in Cincinnati that is good and has lasted', while F. H. Garrison has told us in his monumental *History of Medicine* that there is nothing in the literature of Medical Geography to equal Drake's classic work on *The Principal Diseases of the Interior Valley of North America*, unless it be Hippocrates' *Airs, Waters and Places.* It is the fruit of many years of study.

The earliest of Drake's writings was his book entitled Notices concerning Cincinnati, written when he was twenty-five, a guide of much value to the many Americans who were at that time moving westward. Drake founded two great medical schools, and stated his views on medical education, which were so strangely modern, in his *Practical Essays on Medical Education*, originally published in 1832, and reprinted by Dr. David Tucker, Jr. in 1952, a book which may still be read with pleasure and profit.

In 1828, Drake had established the Western Medical and Physical Journal, of which he remained editor until 1849; meanwhile the name had been changed to the Western Journal of Medicine and Surgery. Another important work was Drake's Treatise on Cholera, written during the epidemic at Cincinnati in 1832, in which he advocated strict cleanliness, and the boiling of drinking water. This, of course, was long before the cause of cholera was demonstrated.

Such a man as this deserves a good biography, more especially as no full-length account of his life and work has appeared since Dr. Otto Juettner wrote *Daniel Drake* and *His Followers* in 1909. The time was therefore ripe for a revaluation of Drake and his noteworthy achievement.

This task has now been most ably undertaken by Dr. Emmet Field Horine, a wellknown cardiologist of Louisville, where Drake himself taught medicine for seven years. Dr. Horine has devoted many years of study to the life and work of Daniel Drake, and was well fitted for his task as biographer.

In tracing Drake's ancestry, he can neither confirm nor refute the family tradition of descent from Sir Francis Drake. Quoting extensively from Drake's autobiography, entitled *Pioneer Life in Kentucky*, written for his children and published eighteen years after his death, the author traces the early life of his hero from his birth in a log cabin on 20 October 1785, and through his apprenticeship, at the age of fifteen, to Dr. Goforth of Cincinnati, after the family had removed west across the Allegheny Mountains, a hazardous journey at that time.

Thus Daniel Drake entered upon his study of Medicine, 'regaling his olfactory nerves with the mingled odours' which arose from brown paper bundles of herbs and open jars of ointment like those of 'an apothecary in the days of Solomon', and committing to memory the works on anatomy and humoral pathology available at the time.

His next step was to study in more academic fashion at Philadelphia under such inspiring teachers as Benjamin Rush, William Shippen and Caspar Wistar, and to graduate M.D. in 1816. The writer goes on to tell us of Drake's appointment in 1817 as professor of materia medica in Transylvania University, Lexington, the first