The Birth of Penicillin and the Disarming of Microbes, by RONALD HARE, London, George Allen & Unwin, 1970, pp. 236, illus., £3·15.

There have been many bizarre birthplaces of antibiotics including the sewage of Sardinia (the Cephalosporins), an open fracture (Bacitracin), the soil of Borneo (Vancomycin), Caracas and Venezuela (Chloramphenicol) and the Philippine Archipelago (Erythromycin).

Penicillin was born in St. Mary's Hospital, Praed Street, Paddington, and this splendid monograph describes the labour, delivery and puerperium conducted by that most admirable of midwives, Alexander Fleming. At the time he discovered penicillin Fleming was only forty-seven years old; he was small, with blue eyes, a large head, a bent nose and a broad Ayrshire accent. The son of a Scottish lowlands farmer, he had worked for a time as a clerk in a city office before inheriting sufficient money to become a doctor. He became a member of Sir Almroth Wright's team at St. Mary's, went to France with him during the First World War, and remained with Wright until he died. On returning from a summer holiday in September 1928, he noted with interest an agar plate on which a growth of staphylococcus aureus was absent in the vicinity of a mould. This unusual phenomenon was demonstrated in turn to D. M. Pryce, E. W. Todd, Hurst Brown, C. J. La Touche and others who dropped in on Fleming at his laboratory. Penicillin, produced by the mould, killed the growing staphylococci. Such was the birth of penicillin and the heralding of a new era.

Professor Hare unfolds the story with the authoritative insight of a distinguished bacteriologist who had himself worked in this laboratory and was present at the discovery of penicillin. The paper describing the discovery was sent to the *British Journal of Experimental Pathology* on 10 May 1929, and published in the June issue of that journal.

The introduction of the sulphonamides was in many respects even more exciting; certainly Ronald Hare heightens the entertainment with charming personal digressions in a lucid style.

This historically important account of the advent of chemotherapy by an Emeritus Professor of Bacteriology in the University of London is compulsively readable and most enjoyable.

D. GERAINT JAMES

The Cole Library of Early Medicine and Zoology. Catalogue of Books and Pamphlets. Part I: 1472 to 1800, by NELLIE B. EALES, Reading, The Alden Press for the Library, University of Reading, 1969, pp. xiv, 425, *front.*, no price stated.

This is an unusual catalogue in several ways. To begin with, it records a collection which is more than a little out of the ordinary, as anyone will know who has seen it in Reading University Library. Professor Cole was no random collector. And so one is impressed by the contents. But equally impressive is the way in which they are arranged. It is as if Dr. Eales had entered the mind of a librarian and noted down all those virtues which he expects a good reference book to have; and then provided them.

The contents of the Cole Library catalogue amount to more than 2,000 items, representing something like 500 writers from the pre-1800 period. The authors follow in chronological sequence starting with Hippocrates and ending with Abraham

Ypelaar. Entries are arranged according to dates when books first appeared, and in cases of posthumous works (e.g. Leonardo, Eustachius) the author is sensibly placed in his period.

The result is a stage-by-stage reconstruction of medicine and zoology as they developed through 2,000 years of history. Bibliographically speaking what could be more logical! But Dr. Eales has done more than this. She has interspersed biographical material, even when this is in the form of periodical articles, with the classic texts; which means that her catalogue has taken on the character of a bio-bibliography. On occasions this practice of including what might be called secondary material highlights serious lacunae in the collection, as for instance under Paracelsus where there is a complete absence of any work by him. It might, incidentally, have been a good idea to have had these biographical entries printed in smaller type.

Many of the items are extensively annotated especially in respect of illustrations: as Dr. Eales says, 'zoological illustration is of interest to other than zoologists'. One detects, however, a few errors and omissions such as the failure to comment under Aselli's *De Lactibus*, 1628 (incorrectly transcribed in the catalogue) that the illustrations are reduced black and white copies from the 1627 coloured edition. At the end Dr. Eales has provided indexes of biographies, authors and subjects. Some of the headings in the latter section ('Satires', 'Journals', 'Technique', 'Travels', 'Museums') will be extremely useful to those who for one reason or another have to retrieve historical information.

The whole book is beautifully printed. E. GASKELL

History of the American College of Apothecaries, 1940–1965, by ERNST W. STIEB, Washington D.C., American College of Apothecaries (in collaboration with the American Institute of the History of Pharmacy), 1970, pp. xvi, 98, illus., $5·00.

There are many advantages in writing a history of an organization celebrating its first quarter century; its impact upon social and professional practice is apparent, documents are available, and many of its founder members are alive to recall the formative years. The author, Ernst W. Stieb, professor of the History of Pharmacy in the University of Toronto, has made good use of his sources. The idea of increased professionalism in pharmacy, with emphasis upon ethics and service rather than increased sales to the public, had been in many minds in the U.S.A. long before World War II. This idea was fostered by groups set up in a number of States and by the parent body, the American Pharmaceutical Association. In particular, a New York Association for the Advancement of Professional Pharmacy was already in being when at Richmond, Virginia, on 9 May 1940, the American College of Apothecaries was founded, so named as it was intended that its members should give wider service than was normally rendered by pharmacists. Caustic comments upon the supposed exclusivity which the new members of the College would assume gave rise to such phrases as 'The Brahmins of Medicine'. This did not deter the founders and officers: a constitution and an emblem were agreed. Two dedicated secretaries, Charles Selby and Robert Adams, seem to have carried the burden of administration for almost the whole twenty-five years.