already been well charted elsewhere. In part because there is scant comparison of the sort that can extract broader significance from narrowly local scrutiny, the monograph offers little that is analytically new. But it does draw upon a rich cache of regional manuscripts that often generate intriguing glimpses of what health care and the experience of illness were like. Accordingly, the most unexpected and useful chapter, 'Physician-patient relationships', is based almost entirely on letters that patients wrote to their physicians, and provides one concrete portal into assessing the elusive texture of patient perception and expectation.

Local history has returned to vogue in American historiography (medical and otherwise) during the past decade, and in so far as this facilitates a more finely grained empirical reconstruction of context, it is a good thing. Professor Crellin's book will serve well the popular readership for which it was principally written. Yet at the same time it reminds the historian and teacher that there is still no satisfactory general history of American medicine that systematically exploits the burgeoning bibliography of good local studies.

John Harley Warner
Wellcome Institute


This very readable book is a history of the United States Army Medical Department involvement in disaster relief. In 1973, as a contribution to the celebration of the approaching Bicentennial of 1776, the Army Medical Department Historical Unit assigned a newly arrived lieutenant to prepare a history of army medical relief for civilian communities struck by natural disasters. The study took more than three years, which is not surprising, considering the extent and breadth of the source material detailed in the numerous footnotes.

The first relief operation was undertaken in 1792 to famine-stricken Creek Indians and the last recorded mission to Nicaragua at the end of 1972. Most missions were for domestic assistance in earthquakes, floods, and fires, particularly the Texas City explosion in 1947. Nineteenth-century assistance overseas was mainly to stem epidemics of diseases, such as cholera and plague in the Philippines. It was interesting for me, as a surgeon, to learn of the limitations of sanitary measures in such situations and the recognition by some physicians, far in advance of their time, of the necessity for prophylaxis and case control. Prevention is only likely to be successful if one understands exactly what one is trying to prevent.

In some earthquakes, there were considerable numbers of injured requiring medical help, but in others, the main requirement was for the establishment of sources of clean water, power, and food distribution. In some circumstances, too much aid and too little co-ordination sometimes meant that international aid was as much harmful as helpful.

In underdeveloped countries, aid for natural disaster requires medical assistance. In developed countries, medical assistance is not often necessary and the main requirements are for command and control of relief operations and the establishment of basic facilities. In all types of relief operations, the questions of cost, and the relationship between government agencies and voluntary agencies are fundamental. The issues are thoughtfully explored in this book, which is useful reading for anyone involved, or likely to be involved, in disaster relief. Two facts seem to me to emerge clearly from this study. The first is that national disaster relief should not depend on the army, and the second is that disaster relief is not primarily a medical responsibility.

R. Scott
Royal Army Medical College


In his Knidische Medizin I (Berlin, 1975), Grensemann tried to distinguish three layers of Hippocratic gynaecology, using the evidence of both medical doctrine and language; for example, the different terms preferred for womb and menses. The present volume draws
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together those sections which he assigns to author C, giving text, critical apparatus, translation, a brief commentary, and a good index of Greek words. He supplies a detailed account of the manuscript tradition, but what is lacking is any real discussion of ancient gynaecological theory. While this is a meticulous piece of work, it will do little to dispel any lingering doubts over the value, or indeed the possibility, of assigning Hippocratic texts to particular dates or to "schools". Grensemann's answers may be good, but is he asking the right questions of his texts?

Helen King
Newnham College, Cambridge


Of the several English-language biographies of Sir Alexander Fleming this is the most readable, and certainly the most accurate and complete. The author has taken immense pains to sift and evaluate the often contradictory statements which have been made about Fleming and his work.

The first two chapters capture his happy boyhood on Lochfield Farm, Ayrshire, where the foundations were laid of his acute powers of observation and his lifelong physical vigour and stamina: the first was relevant to his discovery of penicillin; and the second was probably never more needed than towards the end of his life, during his gruelling but triumphant foreign tours to receive countless honours.

Fleming was a brilliant student. In the list of his honours at the end of the book appears the entry: "1902-06. Almost all class prizes and scholarships at St Mary's Hospital Medical School." In the next few years, his distinctions included at least two gold medals, promising a brilliant research career. However, although he held a part-time post as Assistant in the Inoculation Department at St Mary's under Sir Almroth Wright, he was kept so busy setting up opsonin tests that there could have been little time for other work. Concurrently, he was building up a private practice.

At the outbreak of the war in 1914, Fleming and others went with Wright to France to work on the bacteriology of wounds. Their competent demonstrations that disinfectants instilled into a wound could not reach its recesses, and that in any case they killed the phagocytes more readily than the invading bacteria, were not well received by the majority of surgeons, who only slowly and reluctantly were convinced of the team's findings.

When they returned to St Mary's Hospital in 1919, "tired and shaken" by the horrific suffering they had seen, Fleming was appointed Assistant Director in the Inoculation Department. Quite soon, he discovered lysozyme and, with the help of V. D. Allison, over the next few years investigated its occurrence and properties. This is sometimes regarded as Fleming's best work. Few details were given of the actual discovery, and while it must be the duty of a scientific editor to prune a manuscript of irrelevant information, Macfarlane notes here and elsewhere that Fleming tended not to disclose information which would now have been of interest. Perhaps this is allied to his well-known taciturnity and his custom neither to deny nor confirm the suppositions of others as to what he had, or had not, done in any particular situation. This trait was one factor favouring the creation of the many myths which surrounded him and his work.

In 1921, Fleming took over from S. R. Douglas the responsibility for the preparation in the Inoculation Department of the vaccines which were marketed by Parke, Davis & Co. This commercial activity enabled the Department to be self-financing and independent of St Mary's. In addition, it contributed £43,000 of the £105,000 required to rebuild the Medical School in 1930-33. The commercial activities remained almost unknown until the publication in this journal of the informative paper by Ronald Hare, 'The scientific activities of Alexander Fleming, other than the discovery of penicillin' (1983, 27: 347-372). Hare states that Fleming remained in charge for thirty-four years, that his duties must have taken up a good deal of his time, and that they were carried out with extreme efficiency; if so, this adds a new and rarely quoted dimension to Fleming's working life. Hare is on several counts a key figure in the history of penicillin, for he was actually working in the Inoculation Department in 1928 when Fleming made his discovery. A professional bacteriologist, Hare was joint director of penicillin produc-