Nonconformity during its period of greatest travail. Hunter and Gregory have given us far more than the diaries of an interesting, but minor, figure; they have given us one of the best recent books on the history of medicine and astrology in early modern England and an important contribution to economic and ecclesiastical history.

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NANCY G. SIRAISI, *Avicenna in Renaissance Italy: the* Canon *and medical teaching in Italian universities after 1500,* Princeton University Press, 1987, 8vo, pp. xii, 410, £31.40.

"To what part of philosophy does it belong?" asked the medieval teacher, introducing a new text to his class. The book reviewer often has to do likewise. Here, the expectations of the reader might coincide with one of the motives of the author in seeing this book as an extension of her earlier work on medieval Italian medicine. But in fact it belongs to a different part of philosophy. Although furnished with the same impeccable scholarship as *Taddeo* it is about the *fortuna* of a book, not of people, and this brings it closer in nature to the bibliographical side of the industry, to the establishment of a *Hippocrates*, *Galenus* or *Avicenna Latinus*. In this way the book is like a commentary to its appendices, which list editions and commentaries of the *Canon* appearing after 1500.

There is much to be said for the choice of topic. The *Canon* was a central text in medical education; it was used from 1300 to 1800; it was Arabic, and very large. On all counts, a history of its use in teaching links with most of the things we like to think about—humanism, scholasticism, philology, teaching, commentary, new anatomy and physiology, and the scientific revolution. As Siraisi points out, Renaissance medical commentary has remained largely unexamined and one goal of the book is to make such an examination "in an attempt to understand more clearly what it meant to study or to teach a text . . . by such a method".

We would not expect from Siraisi anything less than first-rate scholarship, and we get it, in heaping measure, in an extensive apparatus. Many additions are made to other stories that were happening in the Renaissance, but the story of the *Canon* itself is, ultimately, not compelling. Partly this is due—quite properly—to the book's bibliographical function. Partly it is due to the immensity of the subject matter: Siraisi is obliged to limit her attention largely to the first part of the first book of the *Canon* and to a small selection of commentators. And it is partly due to the fact that the life of the *Canon* was given to it only by the people who used it. To make a comparative study of such usage tells us more about the users than the used. Or to employ the *Canon* as a "case study of the extent to which scholastic medical learning of the sixteenth century was capable of assimilating or initiating change" is to give it something of an artificial life, maintained by ancient authority and traditions. I think it is partly this, as well as the magnitude of the field, that contributes to the difficulty Siraisi feels in "weighing the significance of the material examined in the previous pages".

But then this is not intended to be a book full of answers but of resources and questions. Taken as that "part of philosophy" the book will become indispensable.

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LUCINDA McCRAY BEIER, *Sufferers and healers. The experience of illness in seventeenth-century England,* London and New York, Routledge & Kegan Paul, 1987, 8vo, pp. x, 314, £30.00.

Lucinda Beier's investigations into a few casebooks and diaries from the seventeenth century provides solid ammunition for those who seek a history of medicine from a non-medical standpoint. Yet, as she herself admits, it is doubtful if her material is broad enough to admit more than the most banal of generalizations or to mark off that century from any between the twelfth and twentieth. Even Paracelsian remedies, as Gerhard Eis showed, owe much to "folk"

medicine, and their use may be independent of Paracelsian theory or cosmology. This continuity is further obscured by Beier's belief in such sixteenth- and seventeenth-century worthies as Lanfrance of Milan (*fl.* 1293) and Albertus Magnus (d. 1280, here called A. Magnus), and in such Englishmen as Forestus (Dutch) and the Germans Jacob Rueff and Scultetus. Her reliance only on English versions of their works inevitably leads to misunderstandings of date, origin, and significance. The complex problem of how to interpret literary evidence is never faced, although quotations from plays are confidently introduced as solid data.

But for those who have not access to the five or so printed diaries and, still more, the three manuscript casebooks, Beier performs a useful service in extracting medical ore and forging from it a coherent narrative. But even here there are difficulties. Her example of female orgasm (p. 214) and her equation of the use of uroscopy with piss prophets are worrying signs of an inability to comprehend certain aspects of seventeenth-century medical theory. Her method of citing the manuscripts according to her own transcript and not by the folio numbers in the manuscripts themselves is slovenly, and makes any attempt to check her transcriptions almost impossible. Even so, it may be worth noting that (Barnabas) Oly of Clare Hall (BL, Sloane 1112, fols. 23v and 33v) was never knighted (as p. 127 declares), and that he lived for more than sixty years after being treated for gonorrhoea. Dr. Barker's casenotes in Sloane 78 = 663 are not, as might be supposed from pp. 271, 278, 299, in two different manuscripts but in a single manuscript given two different classification numbers. It is a pity that the data in this manuscript was not compared with that by the same physician in Sloane 79 = 664, fols. 112r–156v, and that the medical productions of Dr Poeton in Sloane 1954 were not supplemented by those of his in Sloane 1965, which are far more extensive than the catalogue might suggest.

Overall, this book, in its narrow focus, is as antiquarian as the older medical histories it purports to supplement or replace. True, it includes the occasional vivid story or telling instance, but these cannot compensate for the lack of historical insight or sustain the burden of generalization placed upon them. Besides, a book on medicine of this period that cites neither William Clowes nor Richard Wiseman inevitably lacks savour.

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AHMAD Y. AL-HASSAN and DONALD R. HILL, *Islamic technology: an illustrated history*, Cambridge University Press/Unesco, 1986, 8vo, pp. xiv, 304, illus., £25.00.

This publication represents a major achievement in the history of technology, and gives a concise, but nevertheless encyclopaedic, coverage of civil, mechanical, and water engineering, crafts, military and naval technology, chemistry, agriculture, and food processing. Numerous photographs and illustrations, many of the latter from original manuscripts, are clearly reproduced and integrated with the text to provide an invaluable and enjoyable supplement to the historical account. As no accurate account of the history of science is possible without an understanding of the actual behaviour, tools and processes of the associated technological innovations and traditions, anyone interested in the history of medicine should find much food for thought in this work. The discussion and illustrations cover water-lifting devices and water supply, metallurgy (although not the manufacture of surgical tools: has this aspect of museum collections been neglected in recent metallurgical analyses?), the distillation and extraction of alcohol, petroleum fractions, and essential oils, the manufacture of the classic inorganic acids, and the invention of hard soap.

The authors do not neglect the role of pre-Islamic and non-Islamic science and technology in providing important elements which contributed to the widespread technological innovation and organization which the shared religious, cultural, and linguistic perspectives of the Islamic world helped to achieve. The range of Islamic innovation is also emphasized. Recent field surveys in Jordan documenting Ayyubid-Mamluk water-powered sugar mills are noted, and not everyone interested in the history of nutrition would know that Muslim industrial and agricultural technicians helped introduce sugar refining to China and to establish the first sugar-cane plantations in the West Indies. A tenth-century reference to cast iron is a significant