

dominating facts than all the other physiologists in the world. Michael Foster, Sharpey and Burdon Sanderson were among those who felt more should be done in this country to encourage physiological work. Accordingly, on 31 March 1876, they founded the Physiological Society, happily still extant. The Society has published monographs on physiological classics, a list of which appears at the end of this volume, the forty-second in the series.

Bernard began his career in 1840. This memoir represents about eight years of research, first appearing in book form in 1856. It has been excellently translated by John Henderson of the Department of Physiology, St George's Hospital Medical School, London. All the illustrations have also been reproduced, being of first-class quality.

In his introduction, Bernard stresses the role of mammals in his experiments. The first chapter discusses the anatomy of the pancreas in man, dog, cat, and rabbit. The word "pancreas" is from the Greek (all flesh), being so-called because it is a fleshy organ. The following chapters deal with the collection of pancreatic juice and its digestive influence on fat, starch, and albumen. The final chapter compares the physiology of the organ in birds, reptiles, fish, and invertebrates.

On page 76 *et seq.* eight autopsied cases in man are fully described with interesting commentaries by Professor W. B. Robertson of the Department of Histopathology at St George's. The memoir ends with the observation that all the results of an experiment must be observed, both those connected with the pre-conceived idea and those without any relation to it. Despite this, Bernard failed to note that glycosuria follows total pancreatectomy—possibly due to the fact that all his animals died of post-operative peritonitis. It was forty-three years later—1889—that glycosuria was first described by von Mering and Minkowski.

There is a table of contents, an index, and a list of references. This is a beautifully produced volume of fundamental research that can be unreservedly recommended to physiologists and to the interested general reader.

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KITTI JURINA, *Vom Quacksalber zum Doctor Medicinae*, Cologne and Vienna, Böhlau Verlag, 1984, 4to, pp. ix, 331, illus., DM. 168.00

The title of this book gives only a brief guide to the riches it contains. It is, in effect, a study of the whole range of medical life in, for the most part, German-speaking Europe during the fifteenth and sixteenth centuries. Its subjects range from booksellers' catalogues to healing saints, from the development of uroscopy to the woes of patients. Dr Jurina has ranged widely among primary texts, and her comments are of particular value in redressing the imbalance in traditional medical historiography towards Italy and Italian universities. If at times some of her suggestions seem lacking in sophistication, this should not be held against an essentially pioneering work.

But it is less the text that commands attention than its illustrations, over 400 of them. They are drawn from manuscripts, incunabula, printed books, and paintings, and together constitute a remarkable visual repertory for the renaissance historian. There are portraits of learned physicians, Paracelsians as well as Galenists; depictions of operations and bedside consultations; caricatures; and scenes of the bath. One can observe, for example, how the illustrators of medical satires in their turn parodied the pompous frontispieces of medical textbooks. The range of material also illustrates how far an interest in medicine pervaded German society, for some of the fugitive sheets and pamphlets were clearly designed to be understood by those who could not read for themselves. Artistic description supplemented, if not at times replaced, the verbal. Conversely, in pl. 351 the medical imagery is used to give point to a visual satire on a theological theme.

This interest in the interrelation between text and image was explored at length for theology by R. W. Scribner in his *For the sake of simple folk*, and Dr Jurina has performed a similar service for medicine in Germany. What is less clear from her discussion is the extent to which the emphasis on additional visual imagery is confined to Germany and to German printers. One thinks, for

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example, of the illustrations to the writings of the Elizabethan surgeon William Clowes, or to Italian editions of Matthioli's *Herbal*. But both these authors and their printers were aiming at the top end of the market, and it is one of the great merits of this book to have given us examples taken from the other end of the spectrum as well. This is, in short, a fascinating book, whose assembly of artistic material might well be imitated for other regions. It adds a new dimension to the study of renaissance medicine.

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RICHARD PANKHURST, *The history of famine and epidemics in Ethiopia prior to the twentieth century*, London Central Books (for Relief and Rehabilitation Commission, Addis Ababa), 1986, 8vo, pp. 120, illus., £2.50 (paperback).

This volume reprints a number of the author's articles, originally published between 1961 and 1973 and here updated and revised as chapters of the book. The transition to monograph form has been masterfully achieved; and as some of the original studies were published in highly specialized or little-known journals, their reappearance here is particularly welcome.

For the period prior to 1888, the author has found that the character and paucity of the evidence makes a detailed assessment of Ethiopian famines and epidemics impossible. The sources are largely hagiographical; hence, they dwell upon the deeds and miracles of the pious, and discuss natural disasters in terms of divine wrath and punishment. Little historical detail is provided, and it is often impossible even to identify the disease named in the accounts of medieval epidemics. Nevertheless, there are certain episodes of famine and epidemic, beginning in the fifteenth century (pp. 25–56), that emerge more clearly to our view; and these leave no doubt as to the terrible impact of these disasters.

The real importance of Pankhurst's study lies in its final chapter (pp. 57–120) on the great famine of 1888–92. His account of this disaster takes up more than half of the book, and for good reason. For this event he is able to bring to bear evidence from no less than a hundred different sources, including diplomatic reports and official dispatches now in European archival collections (primarily Italian), accounts by missionaries and travellers, traditional Ethiopian chronicles, and even oral descriptions by eyewitnesses interviewed in their old age by Pankhurst during the 1950s and '60s.

The famine of 1888–92 was precipitated by a series of earlier calamities: an epidemic of rinderpest that by late 1888 had killed more than ninety per cent of the country's cattle, drought and hot weather that caused a major crop failure, and a sudden influx of swarms of locusts and caterpillars. In the resulting famine, food prices soared thirty- and forty-fold, and in many areas food of any kind was simply non-existent. Pankhurst describes the consequences of all this in hideous detail. The starving scratched in the ground for roots, ground old cowhides into powder for soup, and ate animal dung and carrion. Cannibalism was not unknown. Entire villages perished, and in many towns (including the capital Addis Ababa) the starving, too weak to resist, were dragged away and eaten alive by wolves and hyenas. Informed contemporary observers estimated that a third of the population perished; and if this figure is only approximately correct, then this famine was fully as devastating in Ethiopia as the Black Death was in Europe in 1348. In any case, Pankhurst demonstrates that its long-term consequences were very serious: displacement of populations through migrations, the collapse of traditional institutions (e.g., marriage and legal customs) and of subsistence agriculture in general, and long-term disruption of the traditional balance in the relations between various sectors of society.

This is an important book, not only as a chronicle of famines and epidemics in Ethiopia, but also as an informative contribution to the social history of the traditional Near East and North Africa. It is also a distressing book, for the horrors it relates still persist today. It was this consideration, in fact, that led to the work's publication. It contains numerous illustrations by