

Book Reviews

Practical Observations on Dropsy of the Chest (Breslau, 1706), trans. and ed. by SAUL JARCHO, (Transactions of the American Philosophical Society, New Series, vol. 61, part 3), Philadelphia, American Philosophical Society, 1971, pp. 46, \$2.00.

Dr. Saul Jarcho's several papers on the history of hydrothorax, culminating in the present translation of an authoritative eighteenth-century 'review article', effectively dispel the idea obtainable from some modern reference works that the history of hydrothorax begins with the introduction of auscultation and percussion. *Practical Observations on Dropsy of the Chest* was published in Breslau in 1706 by the Leopoldine Academy of Scientists as a tribute to Leopold I, who had died of hydrothorax in the previous year. The 'senior author' was probably Christianus Helwich (1666–1740), as emerges from the latter's paper on difficulty of respiration (1722), previously translated by Dr. Jarcho (*Bull. N.Y. Acad. Med.*, 1970, 46, 34–38). To the translation of the Breslau text of some 20,000 words, the editor has added a commentary, full references to the authorities originally cited, and an index, composed chiefly of nearly 200 proper names mentioned in the text (an indication in itself of the scope of the work).

After a laudatory dedication to the Emperor Joseph I and a strongly worded introduction to the reader, the treatise is divided into three parts. The first, on the natural history of the disorder, reveals careful observation of the manifestations of cardio-respiratory disease. Limited attempts are made to establish the differential diagnosis of empyema, and also of asthma, or dyspnoea from several causes. Special diagnostic emphasis is given to the occurrence of dyspnoea during 'the first period of sleep', a curious symptom first described by Carolus Piso in 1618. It was still stressed, as late as 1832, by Schonlein (S. Jarcho, *Amer. J. Cardiol.*, 1969, 24, 234–36), although by this time Corvisart, in his *Essay on the Organic Diseases and Lesions of the Heart and Great Vessels* (first published in 1806) had noted, among numerous features distinguishing 'essential hydrothorax' from diseases of the heart, the absence of 'sudden wakefulness' in the former and the dramatic disturbances of sleep in the latter. Although the Breslau treatise records the frequent association of cardiac irregularities and pericardial effusion, it fails to place heart disease in any causal relationship to hydrothorax. In the second section, on the causes of pectoral dropsy, it places emphasis on lymphatic dysfunction, blood dyscrasia and vascular obstruction, views which reflect current concepts of disease in general as well as some recent researches in these areas. It is curious, in view of the wealth of observation and logic in the first two sections that no distinction is drawn between unilateral and bilateral effusions, which might have directed attention to the significance of 'local' and 'general' causes (it is implicit in Corvisart's discussion that non-cardiac effusions are likely to be unilateral). However, various respiratory conditions are accepted as causes. As the disorder affects 'mainly youths and those established in maturity', it is perhaps not so surprising, in view of the likely causes of mortality, that Jarcho's 'expected heavy preponderance of tuberculous lesions' fails to appear. The final section, on treatment, is a physicianly compound of subtle reasoning and compromise. It establishes the principles of evacuating existing fluid and of preventing reaccumulation, it conceded the difficulty of achieving these objectives, and it sustains hope with an extensive list of therapeutic alternatives, chiefly diuretics, diaphoretics and purgatives. The case for paracentesis is carefully

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assessed but on the whole rejected; a aspiration was still abjured a century or so later, coming into more general favour only in the latter half of the nineteenth century.

Dr. Jarcho has made available an admirable review, critical and well documented, of the state of knowledge at the time. Since the understanding of hydrothorax requires an integrated appreciation of the physiology and pathology of the respiratory and circulatory systems, any contemporary account affords insight into the degree of assimilation into clinical concepts and practice of new developments in these areas; in the present treatise, the circulation of the blood, for example, emerges as having had little impact. It is therefore to be hoped that Dr. Jarcho will continue his series of studies on this theme, perhaps through the widely quoted but relatively inaccessible observations of Vieussens and Albertini, to the emergence of modern concepts. Indeed, since Dr. Jarcho himself has so clearly indicated the historical potential of hydrothorax, he has little alternative!

BRYAN GANDEVIA

Addison and the White Corpuscles: an Aspect of Nineteenth-century Biology, by L. J. RATHER, London, Wellcome Institute of the History of Medicine, 1972, pp. x, 236, illus., £3.00.

This remarkable book, Professor Rather relates in his preface, took origin in a lecture given at the Wellcome Institute of the History of Medicine in London. In this he discussed the work of William Addison, particularly in relation to the migration of white blood cells through the intact walls of small blood-vessels into inflamed tissues.

Clearly Professor Rather has now in this book presented some of the fascinating and complex background upon which his lecture was based. However, in doing so the emphasis of the subject has in fact shifted from its focal point of William Addison to a study of an important aspect of the micropathology of inflammation as it evolved during the first half of the nineteenth century. The multitudinous conflicting views of the pathology of inflammation at that time comprise so unwieldy a subject that the ingenious technique of dissecting, isolating and presenting one aspect of it justifies itself by giving a thread upon which to crystallise the story. Told with verve and zest, the story holds our attention to the end and is more reminiscent of the feeling derived from fiction than from a meticulous, carefully balanced account of a complex micropathological evolution of events such as that here presented. This feeling arises from a factor which might at first sight be thought to produce the very opposite effect—Professor Rather's conscientious avoidance of one of 'the besetting sins' of historians of medicine and science in studying, 'past science not on its own terms, but rather as if our present body of knowledge had absolute value.' The avoidance of this sin can only be achieved by the historian's saturation in the ideas of the period about which he is writing. Such saturation, though a joyful experience to a dedicated historian, unhappily but rarely communicates as much joyful appreciation to his readers. Professor Rather has been indubitably successful in leaping this difficult hurdle with his fluent narrative skill. It is significant that he should have chosen to preface his book with a passage from George Eliot's *Middlemarch*. For his book illustrates one of those revisions of explanations 'already vibrating along many currents of the European mind' with which Lydgate was enamoured.

Although the name of Addison is understandably included in the title of the work, it