

## Book Reviews

composing discords and making oppositions to harmonize, so through diverse movements and uses and employments of the muscles are effected the works and actions of the body and of the parts (p. 143).

Nature performs her works in animals by the power of the muscles and attains her end by means of rhythm and harmony. . . . It will appear that through godlike power truly in the heaven there is a pursuit of the delectable and the lovable by harmony and rhythm of movement of which we have no more perception than a dog has of music (*ibid.*).

Thus through orderliness and sympathy and antipathy, the final builder of all (sc. ordained) actions, passions and even dust. Hence the Cosmos (p. 194).

Harvey calls the proportion of the moving muscles and those at rest: 'Tacita Musica'—the silent music (p. 146).

Is the brain the general? The nerves carry the commands, sergeant major. The spinal medulla the lieutenant-cornet. The branches of the nerves . . . the captains. The muscles, the soldiers. Or is the brain the ruler of the senate. . . . The nerves, the magistrates. . . . Or again is the brain the choir-master. The nerves the time-keepers and prompters, dancers. The muscles, the actors, singers, dancers. . . . Or is the brain the prime mover? The nerves, the intelligences. The muscles, the spheres (p. 150).

Harvey, however, decides with Aristotle in favour of the sovereignty of the heart:

Or rather W.H. Is the heart the general or ruler? The brain, the judge, sergeant major, marching overseer. . . . Or is the heart the musician or the architect . . . the captain, maker, owner, prime mover? The brain the master of the ship, the *primum mobile*, the sun. . . (*ibid.*, see also p. 110).

No word of praise can do justice to the very high standard of the work performed by Dr. Whitteridge. A glance at the frontispiece—a photostat-page of the manuscript exhibiting the familiar scrawls—should suffice to judge the magnitude of the task that confronted the editor and translator. She has shown herself equal not only to this, but also to a full provision of the intricate historical-philosophical (notably Aristotelian) and historical-medical background of the treatise. Her book forms an essential part of the Harveian Corpus, and a fine piece of scholarly editorship and historical understanding.

WALTER PAGEL

*Jacopo Berengario da Carpi: a Short Introduction to Anatomy (Isagogae breves)*. Translated with an introduction and historical notes by H. R. LIND. University of Chicago Press, 1957; pp. xi, 228. \$5.00.

The Renaissance of anatomy did not occur overnight. Nevertheless, it has often been said that the study of anatomy, as we know it, began with Vesalius, and that before him no light had penetrated the mediaeval penumbra shrouding the structure of man. He had, however, several important predecessors whose contributions, although less well known, are of considerable significance in the history of the subject.

Perhaps the most outstanding was Berengario da Carpi (?1460–?1530), who has been claimed by some as the first modern anatomist. He possessed a bold and original mind, he made original observations, and he had a healthy scepticism of blind tradition. Evidence of these qualities, together with the earliest use of figures to illustrate the text, are found in his work, *Isagogae breves*. It was designed as a dissecting

## Book Reviews

manual, and, as was usual in such mediaeval works, the contents were arranged according to the relative rates of decomposition of tissues and organs. First published in Bologna in 1522, it ran through four editions in 13 years, and 118 years later a translation into English by Henry Jackson was considered justifiable.

Dr. H. R. Lind, an American classicist, now presents another translation and precedes it with an introduction recording most of what is known about Berengario. Important as this is, the translator would have served his author better if he had included a more detailed account of the events leading up to this critical phase in the history of anatomy. Although bibliographical details are not intended, the information concerning the location of Berengario's works is inaccurate.

The translation itself is followed by notes, but there is no indication of these in the text. There are also anatomical notes, provided by Dr. P. G. Roofe, referring mainly to modern anatomical nomenclature. The terminological complexities of pre-Vesalian anatomy are well known, and the modern reader needs as much help as possible in his attempt to recognize the structures under discussion. Unfortunately, the collaboration of a classicist and an anatomist may not always achieve the necessary lucidity. A detailed critical analysis of the present translation would be petty, even if space allowed it, and it would detract from the importance of Dr. Lind's overall achievement. He states that he disagrees with the previous translator, Jackson (1660 and 1664), only once, but even so some of his interpretations are debatable. Take, for example, the section on the kidneys, which contains, incidentally, the first account of a 'horse-shoe' deformity: the word 'spleen' is omitted from the second sentence: 'milker' artery does not improve on 'emulgent' and as the 'renal' vessel is being discussed this should at least be mentioned: 'aquosity' is not better than 'moisture': 'panniculus' has several connotations, but it is used here, as in the *Anothomia* of Mundinus, to describe the renal calyx: there is confusion between 'urethra' and 'ureter'. When difficulties such as these arise there are at least two possible solutions: the inclusion of the original text (as in Dr. Lind's translation of Vesalius' *Epitome*), or the addition of a glossary of terms, as for example in Singer's translation of Mundinus' *Anothomia*. Either one, or preferably both, whilst admittedly increasing the book's size, would have also increased its value considerably.

Berengario was fully aware of the assistance that the traditions of art could give to the growing science of anatomy. His illustrations, varying in number, in his *Commentary on the Anatomy of Mundinus* (1521) and in the four editions of the *Isagoges breves*, are renowned, and, although somewhat crude, they possess artistic merit. It is a pity, therefore, that they have been increased in size here, with a consequent loss of definition in some, particularly in those facing pages 78, 168, 170, 172 and 174. Furthermore, the figure of a skeleton facing p. 176 has features which are found in none of the originals. Dr. Lind has chosen the illustrations from the 1535 printing, whereas those of the elegant 1523 edition are more aesthetically pleasing, as well as more numerous.

This book, although on the whole disappointing, is an addition to our knowledge of Renaissance anatomy, for, as well as providing a translation of an important work, it sheds lights upon a person who has hitherto received less attention than he merits in the English tongue. Berengario, a brilliant, colourful and controversial person, stood at the threshold of modern anatomy, bridging the gap between mediaeval knowledge and Vesalius. Dr. Lind suggests that more information concerning his contribution to the development of anatomy lies in the as yet untranslated *Carpi commentaria cum amplissimis additionibus super anatomia Mundini* (Bologna, 1521) and Dr. Lynn Thorndike has already discussed some of it. It is known, however, that the humanists, being

### Book Reviews

suspicious and sceptical of Mundinus' work, banned it in some places. Furthermore, it is of interest that most of the few extant copies of the *Commentaria* have clean, un-fingered pages, that there was only one edition, and that Gesner does not mention it in his *Universal Library* of 1545. Could it be, therefore, that the *Commentaria*, unlike the *Isagogae breves*, was rarely consulted by medical men of the sixteenth century and that it thus had less influence on the advance of medicine than the contents deserved?

EDWIN CLARKE

*Le Choléra. La Première Epidémie du XIX<sup>e</sup> Siècle.* Etude collective par LOUIS CHEVALIER.

La Roche-sur-Yon: Imprimerie Centrale de l'Ouest, 1958; pp. xvii, 188. 750 francs.

Cholera to nineteenth-century Europe was what plague had been to it in earlier periods. Although much has been written on the medical aspects of the several epidemics which swept across the continent as part of more extensive pandemics, few serious attempts have been made to place them accurately against their historical background. It is the object of this book to do so with the 1831-2 outbreak, and to show that in the life of a nation a biological catastrophe is just as important as a major upheaval such as a war, because of the social and political disturbances which invariably accompany it.

The disease in Paris, Lille, Normandy, Bordeaux, Marseilles, Russia and England is discussed by ten collaborators, the last-named being dealt with by Professor D. E. C. Eversley of Birmingham. Each section has adequate reference to the literature, and maps and charts are included; there is, however, no index. An interesting introduction deals with demographical, historical, social and political aspects of the subject and then each locality is considered in turn. In Paris, as elsewhere, the lower classes were principally affected so it is natural that the government and *bourgeoisie* were blamed. The industrial city of Lille was attacked very severely by cholera and the authors, in this excellent section, trace social, industrial, sanitary, nutritional and economic factors which probably contributed to this. In Russia, the epidemic led to demands for a more progressive governing body, whilst in England it coincided with the 1832 Reform Act unrest. But of equal importance in Britain was the attention it drew to the need for better sanitary conditions and for adequate control of them. It soon became clear that the State must shoulder these and other national responsibilities, many of which were by-products of industrialization.

The importance of discussing medical events in relationship with other factors controlling or influencing man's existence is obvious enough, yet the approach is not employed with the frequency it deserves. This monograph is a commendable effort to do so and should prove to be of great interest and value to workers in several disciplines.

EDWIN CLARKE

*Essays on the First Hundred Years of Anaesthesia* (Vol. 1). W. STANLEY SYKES. Edinburgh: E. & S. Livingstone Ltd., 1960; pp. 171. Illustrated. 30s.

This book presents us with a series of essays, connected chiefly by Dr. Sykes's enthusiasm and perseverance in card-indexing hundreds of references from the early journals, which he has ransacked for details of anaesthetic processes.

Dr. Sykes has also made a collection of over five thousand photographs of anaesthetic and other apparatus. Unfortunately, he has reproduced very few of these in his book, merely enough to whet the appetite for more. In this connexion, it would