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medical historian. For others it is too limited in content and time-span, too textually superficial, and clearly the product of a non-medical individual. The topic is so large that collaboration would have been the only way to have made this attractive picture-book a professional treatise.

MAURICE CROSLAND, *Gay-Lussac. Scientist and bourgeois*, Cambridge University Press, 1978, 8vo, pp. xvi, 333, front., £15.00.

The name Gay-Lussac is widely known, due mainly to its use for degrees of strength of alcoholic liquors. A critical examination of the man (1778-1850) and his work, however, has had to await this excellent book by Professor Crosland, the renowned British historian of chemistry. Gay-Lussac is especially famous for his discovery of the law of combination of gases, one of the basic concepts of chemistry today. He also achieved several important advances in electro-chemistry, and he was one of the nineteenth-century giants who helped to make science a profession.

Crosland's book is a scholarly work dealing not only with its central character, but also with the social, economic, industrial, and political aspects of French society in the first half of the nineteenth century. It will remain for some years the definitive biography of a man who has so far been given inadequate attention. It will deservedly find a wide audience.

DOROTHY KOENIGSBERGER, *Renaissance man and creative thinking. A history of concepts of harmony 1400-1700*, Hassocks, Sussex, Harvester Press, 1979, 8vo, pp. xiii, 282, £13.50.

To encompass the breadth of learning adequately to understand the progression of the Renaissance thought is no easy task. The author believes that the doctrine of universal harmony was an essential component of the period. This harmony was to be found in music and natural philosophy, as well as between man and god, mind and nature. To attest this she calls on Renaissance individuals such as Leon Battista Alberti, Leonardo da Vinci, and Nicholas of Cusa to illustrate her thesis, and uses magic, music, and universality to do likewise. The harmony is to be appreciated intuitively, and to understand it an analysis of the concepts of the chief Renaissance figures is therefore supplied. Thus architecture, mathematics, physiology of the circulation, the origins of Newtonian philosophy, and anatomy, in addition to those already mentioned, are considered. Dr. Koenigsberger's book is not easy to read, but it is fully documented and it provides an excellent survey of a most exciting yet most complex era. Those concerned with medicine and science of the Renaissance and beyond will find it of great value. Unfortunately the index is grossly inadequate.

G. A. LINDEBOOM, *Descartes and medicine*, Amsterdam, Editions Rodopi, 1978, 8vo, pp. 134, illus., Dfl. 30.00 (paperback).

Despite the fact that Descartes (1596-1650) was not a physician he had a deep and lasting effect on the development of medicine. Professor Lindeboom, the distinguished Dutch physician and historian of medicine, aims in this book to describe this impact in the centuries after his death. It is an introduction to the study of Descartes' attitude to medicine and his contacts and relations with physicians in Holland, where he lived for

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many years. As well as from his written works, Professor Lindeboom draws important information from his letters, in which he was able to speak more freely. Thus, we learn of his vivisection of animals' hearts and how he tried to explain observations on his incorrect theories. These latter, as well as his more positive contributions, also stimulated research fruitfully. After general chapters, Descartes' physiology is dealt with in detail, and then his views on life prolongation.

This is a remarkably useful book because not only does it present Descartes' biological and medical theories, but it also gives a useful survey of his life, his medical friends, his role as a scientist, his philosophical and scientific background, and his philosophy. It deserves a wide audience because it is the only book in English which deals with a vital phenomenon of the seventeenth and eighteenth centuries.

JAMES R. MOORE, *The post-Darwinian controversies. A study of the Protestant struggle to come to terms with Darwin in Great Britain and America 1870-1900*, Cambridge University Press, 1979, 8vo, pp. xi, 502, £18.00.

It is claimed that this is the first book that looks in detail at the religious debates generated by evolutionary theory in the last few decades of the nineteenth century. It deals in particular with Protestant responses to Darwin after 1870 seen in accurate historical context.

The first section 'Historians and historiography' discusses the so-called conflict between science and theology and its unhealthy effects. What is needed is a revised view of the controversies over evolution that have derived from this "military metaphor", based on an analysis of the underlying intellectual struggle to come to terms with Darwin. The second part 'Darwinism and evolutionary thought' examines the "Darwinism" of Darwin himself and the main currents of post-Darwinian evolutionary thought. Part III is 'Theology and evolution', and it contains the responses of twenty-eight Christian controversialists. The affinities of Darwinism with orthodox theology are demonstrated and they explain the paradoxical acceptance by those professing the latter. Moreover the associations between evolutionary theories and liberal and romantic theological speculation also help to explain it.

Dr. Moore has written an important and unique book. It is well written, and nearly a third is occupied by notes, bibliography, and index. It will achieve deservedly wide popularity.

HAMILTON CRAVENS, *The triumph of evolution. American scientists and the heredity-environment controversy 1900-1941*, Philadelphia, University of Pennsylvania Press, 1978, 8vo, pp. xvi, 351, illus., \$17.50.

Professor Cravens presents the first scholarly history of the heredity-environment controversy in the American natural and social sciences. He carefully analyses the post-1900 evolutionists in the fields of psychology, genetics, evolutionary theory, anthropology, and sociology, who first produced the controversy in the 1920s. They were also responsible for the theory of interaction of heredity and environment in determining man's nature and culture. From this came the coherent interdisciplinary, evolutionary science which could explain and perhaps predict man's behaviour. The resolution of the controversy has important implications for the study of race,