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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,

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eugenics, the psychology of learning, etc., but also for the comprehension of twentieth-century American science and culture, as well as contemporary problems. Those interested in these issues will find this thoughtful essay most rewarding. It is an outstanding contribution to the ever-active Darwin industry.

MARTHA CRAVEN NUSSBAUM (editor), *Aristotle's De motu animalium*, Princeton University Press, 1978, 8vo, pp. xxiii, 430, £18.90.

The title of Dr. Nussbaum's excellent book disguises its riches. She presents us with a new text and English translation of this little tract, defends its authenticity, assigns it to a place among Aristotle's last works, and rescues it from undeserved neglect. This would be service enough, yet her discussions of the philosophical problems therein raised make this essential reading for anyone interested in Aristotelian science and especially psychology. Her comments are divided between the commentary proper (dealing with individual passages and preceded by section summaries of the argument) and five long interpretative general essays – on teleology (stressing Aristotle's limitation of teleological explanation to living things), on scientific method, on the elusive *sumphuton pneuma* and its place in Aristotle's theory of animal action, on the "practical syllogism" and its relationship to ethics and human behaviour, and on *phantasia* as an essential element in decision-making and action (in which she emphasizes the idea of "appearances" in general rather than the more usual interpretation of concrete images). Although at times the use of philosophical jargon and academic shorthand makes this book more forbidding to the less expert reader than it need have been, the importance of Dr. Nussbaum's investigations more than repays the efforts required to assimilate them.

TREVOR I. WILLIAMS (editor), *A history of technology. Volume VII: The twentieth century c. 1900 to c. 1950*, Parts I and II, Oxford, Clarendon Press, 1978, 4to; Part I: pp. xxv, 690, illus., £25.00; Part II: pp. xix, 691-1530, £27.00.

From 1954 to 1958 the first five volumes of this vast undertaking appeared. It received universal and well-justified praise, and it has remained the definitive and authoritative source of information on the history of technology. However, Volumes I-V did not venture past 1900, and at the time of publication there were no plans to cover the first half of the twentieth century. Fortunately it has been decided to do so under the distinguished editorship of Dr. Trevor I. Williams.

These two volumes cover the years c. 1900 to c. 1950, and Part I deals first with more general topics: the setting in world history; sources of innovation; economics of technological development; and trade unions. Then follow chapters on fossil fuels, atomic energy, electricity, agriculture; the chemical, textile, glass, paint, paper, ceramic, and clothing industries; etc. Part II considers transport, civil engineering, building, the internal combustion engine, electronics, computers, instruments, printing, photography, etc.

Chapters 54 to 56 are of special interest to the medical historian. The first is on medical technology by Audrey Davis of the Smithsonian Institution; it discusses industry, dental industry, pharmaceutical industry, radiology, anaesthesia, the ECG, polygraphs, blood-pressure management, stethoscopes, hearing, the microscope,