

Book Reviews

RICHARD C. DALES, *The scientific achievement of the Middle Ages*, Philadelphia, University of Pennsylvania Press, 1973, 8vo, pp. ix, 182, illus., \$12.50.

Professor Dales has selected extracts from primary sources to illustrate early medieval scientific thought, from the twelfth to fourteenth centuries, and presents them with lengthy introductions in the form of an historical narrative. There are also included evaluations of medieval science by modern scholars of varying points of view. His topics concern the twelfth century when scholars were manifesting increasing curiosity and intellectual adventuresomeness, Grosseteste (c. 1168–1253) and scientific method, the tides, studies of the rainbow, studies of local motion, astronomy, and the fringes of science, which includes astrology and alchemy. There is also an introductory essay on science and culture of early Europe, and a most valuable bibliographical essay at the end.

The author has omitted medicine and biology because of the small advances made in them during the Middle Ages. Even if this is true, it would have given the book more balance had a brief survey of them been provided. It should also be noted that the book's title is misleading inasmuch as most of the material concerns the early medieval period.

HÉLÈNE METZGER, *Newton, Stahl, Boerhaave et la doctrine chimique*, Paris, A. Blanchard, 1974, 8vo, pp. 332, Fr.32.

In 1923 Dr. Metzger published *Les doctrines chimiques en France du début du XVIIe à la fin du XVIIIe siècle*. Having been castigated by Sarton for the disproportionate emphasis she had laid in this her first book upon French achievements, the author tried to redress the balance in the present work published first in 1930, and now reprinted. This consists of three independent studies and was reviewed in *Isis*, 1931, 15: 351–353, and in *Archeion*, 1930, 12: 406–408. Much of the first two essays had already appeared in these two journals and only the third, on Boerhaave, was entirely new. On the whole it was given a lukewarm reception.

JAMES F. GIFFORD, jr., *The evolution of a medical center. A history of medicine at Duke University to 1941*, Durham, N.C., Duke University Press, 1972, 8vo, pp. [xi], 249, illus., \$8.75.

Duke University School of Medicine and Hospital is one of the outstanding medical centres in the United States, and this is the first of two projected volumes which will trace its progress from the beginning in 1930 to the present day. Established by the generosity of James Buchanan Duke, whose vast fortunes derived from the tobacco industry, it provides a complex of health care institutions. The initial planning of medical school activities were, as in the case of the other North American schools, influenced by the standards of education that had been set by the Johns Hopkins University School of Medicine. Since then its reputation has continued to grow.

Dr. Gifford writes well, and he chronicles carefully, with full documentation, the problems faced by the founders and the steady growth of all the services provided by the centre, as well as the resultant improvement of medical care throughout the Carolinas, as was Duke's wish. But his history is more than a parochial chronicle

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for he has attempted, with perhaps less than complete success, to provide a social setting for his story. The book is, therefore, of interest to all concerned with medical education, especially those grappling with plans for new schools or the rehabilitation of old ones, and also to those concerned with the problems relating to the provision of health care. In other words it is not intended for purely domestic consumption in the Carolinas, and it should have a wide audience.

GAVIN DE BEER (editor), *Charles Darwin. Thomas Henry Huxley. Autobiographies*, London, Oxford University Press, 1974, 8vo, pp. xxvi, 123, illus., £3.30.

The late Sir Gavin de Beer had the excellent idea of juxtaposing autobiographies of Charles Darwin (1809–1895) and Thomas Huxley (1825–1895). By so doing the sharp contrasts between the two men become clear. Whereas Darwin had worked out how evolution took place, Huxley busied himself examining the remarkable results of this process. Their differing personalities are also highlighted. Darwin was modest and withdrawn, hiding from the world by means of a psychoneurotic disorder recently studied by Sir George Pickering, and he found writing a great labour. Huxley, on the other hand, was the reverse, because he was always in the limelight, leading the crusade on the concept of evolution, and writing interminably.

Sir Gavin has provided a brief but excellent introduction, notes on the autobiographies, a select biographical bibliography, chronologies of the two men, and explanatory notes. The book is elegantly produced with excellent portraits and represents a solid contribution to the history of evolution, which has been notable recently for a number of superficial and frothy studies.

THOMAS HOBBS, *De homine. Traité de l'homme*, translation and commentary by Paul-Marie Maurin, Paris, A. Blanchard, 1974, 8vo, pp. 205, illus., Fr.30.

In 1658 Hobbes (1588–1679) published his *De homine*, which includes sections on his elaborate theory of vision, the language of science and on psychology. It is here translated into French, with an excellent introduction and many explanatory notes to each section. The only defect is a lack of reference to the extensive secondary literature.

Hobbes, in his attempts to describe the nature of man as a basis for political theory, contributed substantially to the early history of association psychology by restating the then radical Aristotelian principle of association of ideas by contiguity. As well as having a psychological bias he also had mechanical and social ones, and the first two of these led to writings that we would term physiological psychology. Basically, he provided an idea of the thought process, of social motivation, and of the political contrast which forms a society.

However, Hobbes' *De homine* is less important than his other writings and gives the impression of being hurriedly thrown together. The theory of vision is out of place in a philosophical work, and much of the rest is found in fuller form in his *Human nature* and *Leviathan*. There will therefore be small demand for this book.