

Book Reviews

Dr. Knight has written an excellent book that will prove invaluable as an introductory explanation of science for a wide audience, but especially for the younger person entering this discipline. It will also be a useful text for those interested in the history of science and medicine. It is very well written and does not demand of the reader much previous knowledge of science. It richly deserves a cheaper, paperback format.

DAVID KNIGHT, *Sources for the history of science 1660–1914*, Cambridge University Press, 1976, 8vo, pp. 223, £7.00 (£3.00 paperback).

The history of science draws on a vast literature, ranging from travel books to those on higher mathematics or molecular biology. A guide to these research sources is, therefore, an essential need and Dr. Knight provides us here with an excellent one. He first discusses the history of science in general, then histories of science, manuscripts, journals, scientific books, and surviving physical objects. To some extent the book reflects the author's own interests, which are mainly concerned with chemistry from the mid-eighteenth century to the mid-nineteenth century, but this is bound to happen, for no-one can cover the whole field at research depths. Again on a personal note, the author's opinions about the history of science as a discipline and those who practise it, are very valuable. However, British sources are given prominence, which the author admits, and it is also a pity that there is no cumulative bibliography, although copious footnotes are provided.

Nevertheless, as a readable, reliable and up-to-date survey and guide this book can be strongly recommended. It will provide an excellent introduction to the history of science for students. It is to be hoped that a companion volume on history of medicine sources will also appear in this series *Sources of history*, which is edited by G. R. Elton.

JOHN REDWOOD (editor), *European science in the seventeenth century*, Newton Abbot, David & Charles, 1977, 8vo, pp. 208, illus., £6.50.

The author's purpose is to illustrate by readings ". . . of literature telling men how to think scientifically and recording the thoughts of those who had tried patent methods. . . ." (p.10). The anthology is intended for the student and lay reader and it has four sections: 'Aims and methods' of selected men of letters and philosophers; 'Enterprise and achievement' of contemporary natural philosophers; 'Journals and scientific institutions' of the late seventeenth century; 'Instruments and men', dealing with the microscope. It is intended to display the diversity of seventeenth-century intellectual endeavour and achievement, the inter-relationships of disciplines, and a common bond that united them.

However, despite the fact that the word "European" occurs in the book's title, no less than twenty-two of the thirty authors selected are British. This can be due either to Britain's overwhelming importance in seventeenth-century science, or to the fact that an author writing in English is easier to include than one employing a foreign language.

In the case of the section on 'Anatomy and medicine' (pp. 103–127) the selections are unrepresentative: Harvey and Malpighi yes, but why Gassendi and Digby at the

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expense of Willis and Sydenham? As with other sections there is a brief introduction, which is quite inadequate and contains several errors. There are no textual annotations, which in some cases are essential for elucidation, and the 'Select bibliography' (pp. 200–201) is pathetically inadequate. It is also curious that Dr. Charles Webster's remarkable recent work on seventeenth-century science is not included.

The majority of the selections in this book can be found elsewhere and have in fact in the last few years been reprinted repeatedly. What is needed now are readings from the less well-known authors who had important things to say but never said them in English. This book, in sum, cannot be recommended to students, and in any case its price will keep it off their shelves.

G. L'E. TURNER (editor), *The patronage of science in the nineteenth century*, Leyden, Noordhoff, 1976, 8vo, pp. vi, 218, Dfl.40.00.

After a brief editorial introduction there are five scholarly essays on the means of acquiring money for experimental research. Dr. Robert Fox writes on 'Scientific enterprise and the patronage of research in France 1800–70', Dr. J. B. Morrell on 'The patronage of mid-Victorian science in the University of Edinburgh', Professor D. S. L. Cardwell on 'The patronage of science in nineteenth-century Manchester', Dr. R. M. MacLeod on 'Science and the Treasury: principles, personalities and policies, 1870–85', and Dr. W. H. Brock on 'The spectrum of science patronage'.

The first three show the importance of self-help, voluntary action and individualism, which in Britain supplemented and complemented the state's contributions, the subject of Dr. MacLeod's paper. The decline of French science in the late nineteenth century was in part due to the scientists who renounced state aid. Although Germany is discussed, especially by Brock, more space should have been given to the support of scientific research there in the nineteenth century. It is usually said that the emergence of the full-time academic medical scientist in the nineteenth century took place in Germany because of university funding, but the explanation for this phenomenon is probably not quite so simple. In addition, the American scene, for example in medical research as discussed extensively by Professor Richard Shryock (*American medical research past and present*, New York, 1947), could have been mentioned.

However, as a first endeavour to cover a large topic Mr. Turner's book is eminently successful and he and his contributors deserve praise for an excellent publication. It is the first of a new series *Science in history*, edited by Mr. Turner, and its quality augers well for future titles.

COLIN A. RUSSELL, with NOEL G. COLEY and GERRYLYN K. ROBERTS, *Chemists by profession. The origins and rise of the Royal Institute of Chemistry*, Milton Keynes, The Open University Press, in association with The Royal Institute of Chemistry, 1977, 8vo, pp. x, 342, illus., £9.50.

The Institute was founded in 1877 and this book celebrates its centenary. A chapter entitled 'Alchemists, assayers and apothecaries' (pp. 5–28) surveys events before 1877, which together with discussions 'Who is a chemist?', 'The growth of chemical institutions', 'Chemical training before 1877', 'The growing role of chemical analysis', and 'Pressures for reform' leads up to the Institute's foundation. Its evolution is then