## **Book Reviews**

given communities and about relationships existing in them, as indicated by their inheritance customs.

In 1976 reviewers greeted this book with acclaim, and it has since established for itself an enviable reputation. A paperback version is, therefore, most welcome.

[ANTONIO] ALIOTTA, The idealistic reaction against science, [facsimile of 1914 ed.], New York, Arno Press, 1976, 8vo, pp. xxii, 483, \$28.00

JOHN R. BAKER, The freedom of science, [facsimiles of The scientific life (1943), and Science and the planned state (1945)], New York, Arno Press, 1975, 8vo, pp. 154, 120, \$15.00.

[ROBERT] FLINT, Philosophy as scientia scientiarum and a history of classification of the sciences, [facsimile of 1904 ed.], New York, Arno Press, 1975, 8vo, pp. x, 340, \$19.00.

HENRY BENCE JONES, The Royal Institution: its founders and its first professors, [facsimile of 1871 ed.], New York, Arno Press, 1975, 8vo, pp. x, 431, \$25.00.

Four new titles are added to this excellent series, which is entitled, *History*, *philosophy and sociology of science*. Classics, staples and precursors. Each is an elegant facsimile reprint of the original, and in each case the opportunity of being able again to purchase a copy will be widely welcomed. They do, however, lack added material, such as an introductory essay or explanatory notes, and are understandably expensive.

Aliotta's book (1914) is translated from the Italian and is partly philosophy of science and partly "The new theories of mathematics and physics". It is a classic worthy of a wide audience.

Freedom of science comprises two perceptive essays by Professor John R. Baker. Flint (1904) is concerned with the history, philosophy, and sociology of science. Again this is a classic, well worth close study today. Unfortunately, like so many of these earlier works, precise references to the masses of literature that must have gone into the book's production are lacking, which of course diminishes the value of the work.

Dr. Henry Bence Jones (1814–1873), better known for the proteinuria of multiple myeloma, published his book in 1871, and it has ever since provided scholars with a useful source of information concerning the first two decades of the Royal Institution, Count Rumford, and Sir Humphry Davy.

Further titles in this series will be much appreciated.

GERALD HOLTON, *The scientific imagination: case studies*, Cambridge University Press, 1978, 8vo, pp. xvi, 382, £15.00 (£5.95 paperback).

The chief aim of Professor Holton's book is "to contribute concepts and methods that will increase our understanding of the imagination of scientists engaged in the act of doing science". There are four aspects of this objective. First, to juxtapose published results with pertinent correspondence, interviews, notebooks, etc. Being a physicist, the author's case studies relate to his field of knowledge. Here Fermi and Millikan are examples. Second, to explore the background to a scientific advance: the personal, public, social, and cultural currents. Third, to examine the explicit or implicit presuppositions or "thema" which may impede the scientist, but which may

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also guide him to success. Fourth, to examine the practical consequences of scientific work for the advancement of scholarship in the history and philosophy of science and for the better understanding of the place of science in our culture and for educational programmes.

Professor Holton has written a thought-provoking book, parts of which, however, will be opaque to non-physicists. Nevertheless, it has a great deal to offer to all scientists, and those in the biological and medical fields will be able to test the author's interpretations by applying their own case studies to them.

ALBERT ROTHENBERG and BETTE GREENBERG, The index of scientific writings on creativity. General: 1566-1974, vol. 2, Hamden, Conn., Archon Books; Folkestone, Dawson, 1976, 8vo, pp. xx, 274, £18.50.

There are 6,823 entries in this interdisciplinary book, culled from the world literature on the natural, social, and administrative sciences, medicine, and education, and it is intended "to facilitate study, learning and research on factors involved in the achievements of science, art and positive human growth". "Creativity" is interpreted widely, and items deal with the creative person or process, and these in relation to the product created. Each entry has a detailed bibliographical citation, but is not annotated.

The coverage is indeed wide, psychology and psychiatry being especially richly represented, and the indexes are lengthy and valuable. The labour involved must have been enormous, but one wonders if it will be justified. The book's price will certainly deter most private buyers.

EUCHARIUS RÖSSLIN [the younger], On minerals and mineral products. Chapters on minerals from his "Kreutterbüch", Berlin and New York, W. de Gruyter, 1978, 8vo, pp. xxxvii, 418, DM.240.00.

Rösslin's herbal was published at Frankfurt-am-Main in 1535, and a critical edition of its chapters on minerals and mineral products has now been prepared by Professor Belkin, a Germanist, and Professor Caley, a chemist. It is thus a splendid example of the interdisciplinary collaboration of a philologist and a scientist. The text (pp. 52-205) is arranged with the original German on the left and the translation on the right. This is introduced by a discussion of philological, biographical, and bibliographical matters, and of Rösslin's editorial procedures and practices used in preparing the 1535 edition. The philological and scientific commentary on the text is extensive (pp. 207-326); Rösslin's sources, immediate and more remote, are considered, and all problems are discussed in great detail. There are a number of appendices, and an index to the German text and one to names and subjects.

The editors offer this remarkably scholarly work as a contribution towards a better understanding of late medieval German medical works. It is of special importance because it comes at the end of the traditional, medieval manner of describing nature. It is to be warmly welcomed, and the announcement of a new series of *Ars medica*, consisting of medieval medical texts in Latin and the vernacular, is especially good news for the many who are ill-equipped to tackle the primary sources of this period unaided.