

growth can be secured as if in a laboratory." This thesis is developed at length, and the author does not confine himself to any one country, but ranges over much of the British Empire. The book will be found to help the agricultural student who wishes to farm in the Empire, but is not certain where to go or what sort of problems will confront him when he begins.

E. J. RUSSELL.

History and Method of Science.

Studies in the History and Method of Science.

Edited by Dr. Charles Singer. Vol. 2, Pp. xxii+559+55 plates. (Oxford: At the Clarendon Press, 1921.) 48s. net.

IN recent years there has been a great development in the study of history as applied to science, and apart from special journals and magazines dealing generally with the history of science, there is a constant accession to scientific literature of historical treatises, essays, and biographies. The present volume is the second of a series the aim of which is to help the student to a conception of the true place of scientific discovery in the history of human thought, and by a series of special papers to show the lines along which the accumulated mass of scientific knowledge has evolved.

The scope is wide, for the volume deals with such diverse subjects as hypothesis, science and metaphysics, Aristotle and the heart, medieval astronomy, the scientific works of Galileo, Leonardo as an anatomist, Greek biology and its relation to the rise of modern biology, etc. Whether it is expedient to collect in one volume subjects differing so widely in nature may be open to argument. At the same time, so far as we can judge, all the articles are of high merit, and many of them represent the work of years or even a lifetime. There must be few people whose minds are so constituted or whose knowledge and interests are so great that they can turn from reading "Four Armenian Tracts on the Structure of the Human Body" to read with relish or profit the learned article on "Archimedes' Principle of the Balance and some Criticisms upon it"; but the object of the editor was no doubt one of instruction and an attempt to keep open the wider channels of science which are daily liable to silt up through the contracting power of extreme specialism.

Mindful of these difficulties, it would therefore be invidious to criticise each article. As the bulk of the volume applies to history in the natural sciences, it will appeal most strongly

to biologists, and in this connection we may direct attention to the interesting article by E. T. Withington, "The Asclepiadæ and the Priests of Asclepius"; that by the Norwegian, H. Hopstock, on "Leonardo as Anatomist"; and the very exact and accurate article by F. J. Cole on "The History of Anatomical Injections." The editor, Dr. Singer, contributes the longest article in the book, entitled "Greek Biology and its Relation to the Rise of Modern Biology," amply, and indeed expensively, illustrated.

Altogether, the book is a credit to all those who have co-operated in its production, and considering its get-up as well as the price of everything connected with printing at the present time, its cost must be regarded as very reasonable, if not actually cheap.

W. B.

Our Bookshelf.

The Chemists' Year Book, 1921. Edited by F. W. Atack, assisted by L. Whinyates. Vol. 1, pp. vi+422; vol. 2, pp. vii-viii+423-1142. (Manchester: Sherratt and Hughes, 1921.)

THE new edition of "The Chemists' Year Book" has been revised in the sections on fuels and illuminants, crystallography, and cellulose, while the section on coal-tar has been completely rewritten. There are some inaccuracies to be noticed in the section on "Notable Dates in the History of Chemistry," but the numerical data appear to have been edited carefully in accordance with recent work. The section on acid and alkali manufacture is too brief to be of much value, though in some cases in which the book has been tested it has shown itself superior to other more ambitious works. The exact meaning of "percentage" in density tables, for instance, is given in cases where other compilations are quite ambiguous.

Pure Thought and the Riddle of the Universe. By F. Sedláč. Vol. 1, *Creation of Heaven and Earth.* Pp. xv+375. (London: George Allen and Unwin, Ltd., n.d.) 18s. net.

THE aim of this book is praiseworthy in the highest degree. Unfortunately it cannot be said to achieve success. The author tells us that he has already published a translation of the first two volumes of Hegel's "Wissenschaft der Logik," but it had failed to arouse interest. He has therefore conceived the idea, not of paraphrasing it literally, but of presenting what he considers and accepts as its essential meaning in his own words. Where he seems to us to fail is in not understanding that Hegel, so far as he makes appeal to present students, does so in the spirit of his thought and not in the now antiquated form of its expression.