

expended and for the accumulated results of technical experience which manufacturers have given just as freely. The least it can do in return is to provide for that continuity of investigation which will lighten the work of preparing the Pharmacopœias of the future.

(2) When a technical work has reached its twentieth edition in the course of less than half a century, it may be assumed that the author knows much better than any merely ephemeral reviewer, what his particular public requires and in what form to give it to them. This is the case of the "Extra Pharmacopœia". The book is fittingly noticed here because it provides the

medical practitioner with the information he needs about the latest developments in therapeutics and thus facilitates that extensive clinical experimentation with new *materia medica*, the results of which alone can finally determine their real value. It thus serves the cause of medical progress and at the same time admirably fulfils its main purpose as a handy and singularly complete reference book for the multifarious needs of the pharmacist and the medical man. In these respects the twentieth edition is as good and as up to date as its predecessors were in their day, and those who know the "Extra Pharmacopœia" need no further commendation. T. A. H.

### Short Reviews

The Outline Series. *The Physical Nature of the Universe*. By J. W. N. Sullivan. Pp. 143. *Theories and Forms of Political Organisation*. By G. D. H. Cole. Pp. 160. *Modern Theories and Forms of Industrial Organisation*. By G. D. H. Cole. Pp. 159. *An Introduction to the Study of Sex*. By Prof. F. A. E. Crew. Pp. 160. *An Introduction to Psychology*. By Prof. F. Aveling. Pp. 176. *An Introduction to Finance*. By Prof. T. E. Gregory. Pp. 144. *An Introduction to Economics*. By Maurice Dobb. Pp. 143. *The Arts of Painting and Sculpture*. By Roger Fry. Pp. 160. *An Introduction to Psycho-Analysis*. By Prof. J. C. Flügel. Pp. 159. *The Theory and Practice of Architecture*. By Prof. C. H. Reilly. Pp. 144. *Principles of Literary Criticism*. By Prof. Lascelles Abercrombie. Pp. 160. (London: Victor Gollancz, Ltd., 1932.) 1s. 6d. each.

One of the more hopeful signs, indicating the approach of an age in which knowledge and power are more closely and harmoniously related, is the reception afforded to the various summaries or outlines of modern knowledge which have appeared in recent years. The publication in separate parts of eleven of the essays by acknowledged authorities which formerly appeared as a composite book under the title "An Outline of Modern Knowledge" is evidence of this demand and the publishers are to be congratulated on the step they have taken in place of issuing a new edition of the composite work.

The publication as individual essays is free from several objections which may be brought against the combined treatise. The essays can be seen as the introductory monographs which they really are and the impression of a reference book is destroyed. The lack of proportion in the original book is less conspicuous in the separated monographs and could indeed easily be remedied by the publication of supplementary volumes to fill the more serious gaps, so far as they are not found in the reprinted monographs themselves.

*Handbuch der Pflanzenanalyse*. Herausgegeben von G. Klein. Band 2: *Spezielle Analyse*. Teil 1: *Anorganische Stoffe; Organische Stoffe, I*. Pp. xi + 973. (Wien: Julius Springer, 1932.) 99 gold marks.

A KNOWLEDGE of the constituents of plants is becoming both of increasing importance and difficulty, as their number continues to grow, and it is, therefore, of value to have a work of reference which, on one hand, lists the various products according to some logical scheme, whilst on the other, it describes the methods for their identification and analysis. Working in conjunction with the index of nearly ninety pages, it is possible rapidly to have the requisite information about any desired compound.

The book is necessarily the result of collaboration, no less than twenty-three different authorities being responsible for the several sections. The first quarter of it deals with the inorganic constituents of plants including the nitrogen compounds, also the analysis of plant ash and gas: it is done with great attention to detail but in a suitably concentrated form. There follows the organic section divided up into groups of allied substances as is customary: it is this part which will be found of immense value to all active workers in the domain of plant chemistry.

The matter is highly condensed but contains just the information which is usually needed, and the text is not overburdened with countless references to the original literature, which the seeker must find in certain other works indicated, should he require them. Taking the section headed "Phenols" for example: the systematic occurrence in indicated plants is given for 61 phenols, 10 quinones, 11 anthraquinones. The general properties and colour reactions of phenols are described with a note as to the properties and derivatives of each individual phenol, the whole giving the complete state of knowledge in this particular field, which it would otherwise take a great deal of reading to survey.