

Atomic Challenge

A Symposium by Prof. J. D. Cockcroft, Prof. M. L. Oliphant, Group-Capt. G. L. Cheshire, Dr. J. Bronowski, Sir George Thomson, Capt. Cyril Falls, Prof. P. M. S. Blackett, Sir Henry Dale, Bertrand Russell, Sir John Anderson and Henry Wallace; with Commentaries by Students of Different Nationalities. Pp. x + 180. (London: Winchester Publications, Ltd., 1947.) 8s. 6d.

THE talks on "Atomic Energy: the Present and the Future" which the British Broadcasting Corporation arranged during March last year, first in the Home Service and afterwards in the 'third programme', have now been published in book form. To them have been added a series of comments by younger men and women representing American, Russian, German and Chinese points of view, and the talk on atomic energy which was given by Mr. H. A. Wallace in the third programme of the British Broadcasting Corporation during his recent visit to Great Britain. While these comments are of interest as indicating the attitude of the younger generation to the problems which atomic energy presents, and in particular reveal a general readiness to face the sacrifice of national sovereignty involved in any scheme of control, they add very little to the substance of the symposium. Moreover, the comments are not very clearly distinguished from the actual talks: the reader who missed the actual broadcasts is left to identify them chiefly by the biographical notes. The titles of the broadcasts have been discarded, and the substitutes are scarcely an improvement on the originals. An equally important blemish is the omission of any indication as to the dates when the broadcasts were given; those who wish to study the actual broadcasts may well be better served by *The Listener* of May 13, 1947, in which the series was first published.

Annual Review of Microbiology

Charles E. Clifton (Editor), Sidney Raffel (Associate Editor), and H. Albert Baker (Associate Editor). Vol. 1. Pp. vii + 404. (Stanford, Calif.: Annual Reviews, Inc., 1947.) n.p.

IN the preface of this latest 'Annual Review' it is explained that a canvass of representative microbiologists indicated that their interests were not sufficiently covered by an already large number of periodical reviews covering at least many parts of the same subject. Time alone will show whether this opinion is justified. The term 'microbiology' may be taken to cover the whole physiology of organisms too small to observe without a microscope. It includes, therefore, morphology, biochemistry, genetics and all interactions with external environments of Protozoa, Bacteria, Fungi and so forth. Until recently, these subjects have been the concern of different groups determined by differences in technique, and undoubtedly this has led to a poor diffusion of knowledge of matters which are applicable to all groups. In some sections, however, this deplorable situation has been relieved by the publication of reviews in existing periodicals. Particularly this has been so in the chemical field, and it may now be doubted whether there is much ignorance of the biochemistry of one form of life among the students of another; at least in the particular field of biochemistry the student is interested in. It can scarcely become practicable for anyone to develop an abiding interest in many branches of a subject which has no biological limits. The present volume presents articles of widely

diverse interest. The fractions of each subject covered are necessarily so small that the reader must still rely on the many reviews appearing elsewhere on practically the same field. Any of the articles could properly have appeared in existing reviews and, curiously enough, one of them has already done so. The articles which the reviewer is capable of judging are of a high order and presented with a personal touch which is valuable. Certainly an active worker must run his eye through this further addition to his survey of information, but he must not expect that this annual review alone is going to keep him abreast of developments. PAUL FILDERS

A Text-Book of Practical Organic Chemistry

Including Qualitative Organic Analysis. By Dr. Arthur I. Vogel. Pp. xxiii + 1012. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1948.) 42s. net.

DR. VOGEL'S books on analysis are widely used in teaching practical inorganic chemistry. His new volume is intended as a comprehensive laboratory manual for students of organic chemistry. It gives a full and valuable description of organic chemical technique, details of preparation of more than six hundred compounds, and a scheme of qualitative organic analysis. There are appropriate notes on the preparative reactions described and on the properties of the various classes of organic compounds. A curious omission is the almost complete absence of reference to quantitative organic analysis. It seems to the reviewer that some practice at least in quantitative elementary analysis is of value in the student's training, even in these days when the fully fledged organic chemist hands his analysis specimens to the microanalyst for determinations which he is usually quite unable to carry out himself.

It is a little doubtful whether such an elaborate laboratory text-book will attract the average undergraduate student, who would certainly not wish to work through all the preparations described. It will have a greater appeal to teachers and research workers, although the almost complete absence of references limits its usefulness to these. The book is well produced and well illustrated, and the only error which has been noticed is in the structure assigned to hexamethylene tetramine. J. W. COOK

The Right Way to Understand the Countryside

By Stanley A. Manning. (Right Way Books.) Pp. viii + 116 + 4 plates. (London: Rolls House Publishing Co., Ltd., n.d.) 5s.

IN attempting to provide information about "trees, shrubs and woodlands, wild flowers and plants (including fungi, mosses, etc.), insects, animal life, birds, countryfolk, customs and folk lore", as well as "information on the National Forest Parks, Youth Hostels Association, local clubs, research areas, etc.", in 113 pages, Stanley Manning might well have considered if he might not have made his book a little longer. He might also have considered whether the use of technical terminology is advisable in a book meant for beginners and whether the introduction of controversial issues should not be left to a later place than the first chapter. This is particularly so since anyone who reads right through the book will realize that Manning has much of value to offer to the novice in country ways and customs. The scraper-board drawings by Elaine Hancock are attractively done, but perhaps not so suitable as line drawings for a book of this kind. T. H. HAWKINS