

appears to have strengthened a conception of education—akin to that which H. E. Armstrong untiringly expounded—much of which was arrived at during the Nazi occupation.

Although, as has been remarked, M. Naville's thesis is specifically directed towards conditions in France, it has implications which should be carefully considered in Britain and indeed in every industrialized country faced with the present-day problems of acute shortage of man-power. Somehow, within the confines of the democratic conception, ways and means must be found of relating man-power more efficiently to industrial and social needs; nothing less than the guidance of labour at every level from the manual worker to the university graduate is in question. Much fundamental and creative thought will have to be given to a critical re-examination of the basis of vocational guidance and selection, in order that the people at large may contribute of their best to the needs of a devastated world, and at the same time enjoy the satisfaction which is the goal of a civilized and progressive community.

10/6 RICHTER'S ORGANIC CHEMISTRY

The Chemistry of the Carbon Compounds

By Victor von Richter. Edited by the late Prof. Richard Anschutz. Vol. 3: The Aromatic Compounds. Newly translated from the twelfth German edition by A. J. Mee. Pp. xviii + 794. (New York: Elsevier Publishing Co. Inc., 1946.) 15 dollars.

IN the course of chemical research it frequently happens that an investigator finds himself entering a field relatively unknown to him, for the exploration of which the ordinary text-book is necessarily too skimpy while, on the other hand, the massive detail of Beilstein's Handbook makes it difficult to carry out a rapid initial survey. At such times Richter-Anschutz's "The Chemistry of Carbon Compounds" is invaluable, and we particularly welcome, therefore, the publication of Volume 3 of the latest edition in English. It had been the intention of the publishers that this new edition, although based on the twelfth German edition of 1935, should be revised and brought up to date by Dr. T. W. J. Taylor and Dr. Wilson Baker. Unfortunately, however, only the first portion, some 50 pages of the present text, had been completed when the outbreak of war prevented the continuation of the project. In order to complete the English version, it was then decided to publish the remainder in the form of a literal translation of the German edition. This has been prepared and edited by Dr. A. J. Mee and Mr. M. F. Darken. The bulk of the material is therefore the same as that contained in the German edition of 1935, and for material published during the past ten or twelve years the chemist must necessarily seek elsewhere.

Nevertheless, there are several important changes to be noted in the present volume. For example, the opening pages, dealing with the general properties of aromatic compounds, the determination of the position of substituents, rules of substitution, etc., have been revised by a team of experts, and there is an entirely new account (pages 16–25) of the structure

of the benzene nucleus. This has been specially contributed by Dr. T. W. J. Taylor, and in it the reader will find a clear and concise account of this classical problem of organic chemistry treated in terms of the modern outlook. A further innovation of special importance to English readers is that literature references are now given to the original journal in which the information in question was published and authors' names are also indicated. This change makes a great improvement over the earlier editions, in which references were almost exclusively to the *Chemisches Zentralblatt*. So far as can be judged from various test cases applied by the reviewer, the selection of references has been carried out with discrimination, and the user of the book will readily be able to find his way to the most significant papers.

The formidable task of effecting translation has been carried out with conspicuous success, with the result that a clear account is presented of the many and multifarious divisions of aromatic organic chemistry. It is obvious, too, that considerable care and thought have been given to the matter of arrangement and setting out of the sections, with much advantage to the reader, who is thereby enabled to trace with minimum effort the information for which he is searching. The number of formulæ given is adequate and, in the great majority of instances, they have been printed, despite the need for saving space, in forms which display clearly the chemical structure of the molecules concerned—no mean feat in view of the magnitude of the work.

Some slight idea of the comprehensiveness of the book may be gained from the statement that the index alone comprises 80 pages of double columns and contains some 8,000 references. The present volume is clearly one which every research worker in organic chemistry will wish to have in his hands, and it is a pleasure to be able to accord to it the high praise that it is indeed worthy of its dedication by the editors to the memory of August Kekule.

E. L. HIRST

ELEMENTARY METEOROLOGY

Meteorology with Marine Applications

By William L. Donn. Pp. xv + 465. (New York and London: McGraw-Hill Book Co. Inc., 1946.) 22s. 6d.

THE weather touches our lives at many points, and had we been air-crew personnel or among those concerned with beach landings or, indeed, with many other operations during the War, the effect of weather would have been of great immediacy. The subject is therefore of wide interest, it has been widely practised in recent years, and in consequence has acquired a fairly large semi-popular, introductory literature. This literature is, however, very uneven in quality, as a result presumably of enthusiasm for the subject sometimes outstripping the understanding. Meteorology, if not a difficult, is certainly a very complicated subject, calling for a thorough grounding in the classical branches of physics, particularly of mechanics and heat, and it is to be feared that not a little harm has been done to its students, if not also to the subject itself, by some of its recent expositors. One meets so often a series of false or incomprehensible statements, or, little better, of half-truths such as "hot air rises", "the winds are a consequence