logical chemistry, but also it offers to other scientific workers, and indeed to many whose work is not scientific at all, an excellent review of progress in one of the greatest of the world's industries. The opening paragraphs of the chapter on fuel, for example, show how the chemist, in effecting economies and developing alternative sources, is quickly brought into contact with reverberations in the form of social problems and the incidence of taxation. It is satisfactory to read that precautions taken in British gas works in regard to waterless gasholders are adequate to prevent another such disastrous explosion as that which occurred in Germany at Neunkirchen.

In the chapter on textiles, reference is made to the ignorance displayed by the general public, including some newspapers, about the conduct of the chief manufacturing industry of Great Britain; this industry is engaged in a struggle of serious national significance, and appreciation of its position can be based only on knowledge of its mode of existence. Fortunately, in certain other branches of chemical industry, steady improvement is reported. Thus in the iron and steel industry there is "quiet optimism"; in the glass industry "improving tendencies"; in the rubber industry "encouraging aspects" despite instability; in the leather industry "improvement". The report on the food industry refers with concern to the unpleasant fact that a very large proportion of the world's inhabitants are seriously undernourished, and indicates the chemist's part in remedying this state of affairs. But a few references such as these cannot adequately reflect the interest which the report provides. A. A. E.

Technique of Modern Welding. By Prof. P. Bardtke. Authorized translation from the second German edition, with additions and revisions by Prof. Bardtke, by Harold Kenney. Pp. xi+299. (London, Glasgow and Bombay: Blackie and Son, Ltd., 1933.) 15*s*. net.

IN recent constructional engineering there has been no more notable development than the application of welding. Welded joints, to-day, are used in bridges, boilers, ships, roofs, motor-cars, aeroplanes and many other structures. At first carried out by rule of thumb methods, a rational technique has been developed, symbols and codes have been introduced, standardised tests established and there is already an extensive literature on the subject. To this literature this translation of a book by the works manager of one of the German State Railways is a valuable addition. The main chapters deal with fusion welding, pressure welding, the applications of welding and the economics of welding. There are also chapters devoted to testing, to accident prevention and to gas-cutting. Descriptions of the various types of plant are included and many useful hints are given on the welding of both ferrous and non-ferrous metals. The book is well printed and illustrated and contains an adequate index.

Outlines of Organic Chemistry: a Book designed especially for the General Student. By Prof. F. J. Moore. Revised by Prof. William T. Hall. Fourth edition. Pp. xiv+338. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1933.) 16*s*. 6*d*. net.

THIS book was written "merely to serve as an introduction to organic chemistry and to serve as a guide especially to those who study the subject from a non-professional point of view". It provides a coherent and straightforward treatment of the subject, but considering the particular aim in view it is remarkable that the work conveys no sense at all of the historical or chronological development of the subject. The account is formal and singularly impersonal, so that, for example, the fundamental account of stereochemical theory contains no mention of Pasteur, Le Bel, or van 't Hoff. The experimental aspect of organic chemistry also receives little attention. The book is well printed but sparsely illustrated; British students will consider it expensive. J. R.

The British Journal Photographic Almanac and Photographer's Daily Companion, with which is incorporated "The Year Book of Photography and Amateurs' Guide" and "The Photographic Annual", 1934. Edited by George E. Brown. Pp. 684+64 plates. (London: Henry Greenwood and Co., Ltd., 1934.) 2*s*. net.

THIS almanac has been published as a book since 1861. Mr. Brown has edited it since 1906. Year by year he has made it a very worthy 'daily companion' for the photographer. While it contains, in each issue, brief working details of most of the common processes of photographic technique, it seems to keep thoroughly up-to-date. By means of good indexes, which cover advertisements as well as text, it has been possible to make the long series of volumes into a kind of encyclopædic work from which not only details of technique may be learned, but also the development of photography may be followed. It can be recommended confidently to all who use photography.

Das Problem der Gleichzeitigkeit. Von Dr. Karl Vogtherr. Pp. 196. (München: Ernst Reinhardt, 1933.) 5.50 gold marks.

ALL who desire to acquaint themselves with the attitude of a serious and well-informed critic of relativity theory from the philosophical point of view may be recommended to read this book. The author examines the postulates and axioms of geometry, time-theory and kinematics, and the principles underlying measurements of space, time and motion, and then discusses the determination of the simultaneity of events. Although his conclusions are certain to be challenged by geometers and relativists alike, nevertheless his book will be found very interesting and stimulating, whatever may be the reader's opinions on the many contentious questions raised in it.

© 1934 Nature Publishing Group