

attention should be devoted to the formation and properties of the large class comprising condensation products derived from substituted hydrazines, and the latter half is allotted almost entirely to this voluminous branch. The service thus rendered is conspicuous, for, in addition to arranging in logical sequence the numerous and scattered records of previous investigators, the author has elaborated methods based on his own research for dealing with mixtures containing two, three, and four monosaccharides. Due notice is given also to the recognition and estimation of glycuronic acid, the importance of which in glucoside chemistry is well known. The two concluding chapters provide detailed examples of the application to typical cases of the analytical processes under discussion.

The appearance of such a book emphasises in a very remarkable manner the facilities for monograph production offered by German publishers, and concurrently illustrates the difference in treatment adopted by Continental and by Anglo-Saxon authors. Van der Haar's treatise must be accepted as faithful and complete when viewed as a record of facts, yet it is useful only to a small number of specialists, whilst E. F. Armstrong's "Simple Carbohydrates and the Glucosides," dealing with identical materials, appeals alike to students, specialists, and general practitioners of organic chemistry. One presents the bones for sixty-four marks, the other makes a personal introduction to a living body for twelve shillings.

The present work is admirably produced, and remarkably free from errors, most of which are conveniently overtaken in a list of corrections on the concluding page; but the absence of a subject-index is to be regretted.

M. O. F.

### Our Bookshelf.

*Solubilities of Inorganic and Organic Substances.* By Dr. Atherton Seidell. Second edition, enlarged and thoroughly revised. Pp. xxii+845. (London: Crosby Lockwood and Son; New York: D. Van Nostrand Co., 1920.) Price 45s. net.

SOLUBILITY determinations are often incidental to other investigations, and are, consequently, not indicated in the title of the original paper, or included in the index of the journal in which they appear. For this reason such data are often difficult to locate, and Dr. Seidell's well-known compilation is a valuable contribution to chemical literature.

Originally published in 1907, the work was the first successful attempt to present a critical survey of available quantitative solubility data and to select from the discordant results of different

observers the most trustworthy values for any given substance. An enormous mass of solubility data has since accumulated, and the present much enlarged edition, which brings the subject-matter up to 1918, is certain of a warm welcome. The nomenclature, especially of organic substances, has been revised, and the scope of the work extended to include freezing- or melting-point data for binary and ternary systems.

The author has endeavoured to maintain "un-remitting vigilance" to avoid errors, but attention may be directed to an unfortunate lapse in the second table on p. 518, where an error has been made in converting milligram-molecules into grams, and where KOH ought to be K<sub>2</sub>O. All the values in the fourth and fifth columns are wrong. In some cases the author has detected errors in calculation of original results, and indicates the necessary corrections—*e.g.* under strontium formate (p. 681) and ammonium perchlorate (p. 43).

New features in the present edition include a detailed explanation of the tables for the guidance of those more or less unfamiliar with the usual tabular methods of expressing such data; a chapter describing some of the methods used for the accurate determination of solubilities, with excellent diagrams; and an author index, with references to all the original papers consulted.

S. A. K.

*Small Holding and Irrigation: The New Form of Settlement in Palestine.* By Dr. S. E. Soskin. Pp. 63. (London: George Allen and Unwin, Ltd., 1920.) Price 2s. net.

THIS small publication has been issued by the Zionist Organisation in the interests of agricultural and horticultural settlements in Palestine. Intensive gardening is the main theme, and the application of the water resources of the country to the development of vegetable culture, as a primary industry, is strongly urged. "The intensive utilisation of the irrigable areas for vegetable and fruit plantations should not come at the end of a period of development of years and decades, but at the beginning of our work of reconstruction in Palestine." After the preface and introduction, the subject is elaborated in four chapters. The first chapter deals with the general principles of irrigation in Palestine, as also does the introduction, contrasting the climatic conditions with those which obtain elsewhere in tropical and subtropical regions. It is claimed that artificial irrigation will work wonders, rendering two, three, and even four crops a season a possibility. The second chapter discusses the features of intensive gardening and the utilisation of manures and other adjuncts to cultivation. Tomato growing is represented as a promising venture, as also is the cultivation of the banana. The next chapter, headed "A Garden City," indicates the opportunities for, and the value of, co-operative effort. The last chapter is a brief, final word on the essential preparations for the first settlements under the scheme.