

Such slips are few, but not a few sentences fail to express precisely what the author doubtless intended. "Sal mirabile, in which, as he believed, lay extraordinary medicinal virtue" requires to be amended by the student so as to read, "sal mirabile, in which he believed that there lay extraordinary medicinal virtue." Not a few words and phrases are infelicitous, as in case of the fourth words in the two following citations: "His work, though rendered in the most learned and convincing scientific publication of the period, was immediately forgotten" : "Complete success had awarded his efforts." To speak of "the carbonic acid salts of chalk" is an oversight; to refer to Berthollet's *Essai de Chimie Statique* now as the *Essai Chimique* and now as the *Essai Statique* annoys the scholarly reader and misleads the novice.

Lesser slips of much the same kind make the style of some parts of the history less direct and clear and luminous than is desirable. Improvement in a future edition may be confidently expected, for the style of sentences in which the author records, not the conclusions of others, but his own convictions, is not only forcible, but clear and precise.

A passage in the preface well expresses the spirit and aim of the book:—"I hope that whatever the faults [of this book] may be, the student of chemistry may derive profit by learning something of the mind, the method, the enterprise, and the energy of the great fathers of the science. . . . The domain of chemistry is so vast that much of our information must necessarily be at second hand. And the terms of the chemist—his alkali, his acid, his atoms, molecules, equivalents, his valency and basicity—are each the product of many a life's work. To have used them, and used them often, is not necessarily to have understood them nor to have become emancipated from the dogmatism of the elementary text-book. For the young student, a little dogma is expedient and even essential; but for the serious student, there can be no substitute for some knowledge of Lavoisier, Dalton, Berzelius, Liebig, Gerhardt and Kekulé."

EDWARD W. MORLEY.

VAN NOSTRAND'S CHEMICAL ANNUAL, 1907, BY JOHN C. OLSEN. FIRST YEAR.
D. VAN NOSTRAND CO., NEW YORK. x + 496 pp. \$2.50 net.

This annual "has been limited in its scope almost entirely to numerical data." Thus no schemes for chemical analysis or methods for making physical or physico-chemical measurements are contained in it. "All tables and numerical data have been quoted from the original source wherever possible, notwithstanding the labor which this involved." The editor has secured the cooperation of A. F. Tucker, E. E. Reid, C. A. F. Kahlbaum, Allan Rogers, V. J. Chambers, J. L. R. Morgan, G. B. Pegram and C. H. Lips, who share with him the responsibility for certain parts.

The tables useful in analytical work (60 pp.) are very clear and com-

plete. Physical constants of inorganic (120 pp.) and organic (120 pp.) compounds give a judicious selection of substances and data. Definite values for solubilities are often given, in place of the vague statements of *the Chemiker Kalendar*. In the specific gravity tables (60 pp.) the values are expressed in accordance with American standards, where there is any difference. It is a pleasant surprise to find that the serious hypertrophy in the region of thermochemical data, of which the German work is a victim, has been avoided, these data being confined almost entirely to matters of practical value and compressed within 10 pages. The values are given in British thermal units, as well as in calories. A classified list of important investigations in all branches of chemistry published during the past two years (48 pp.) and a classified list of books on chemistry issued during the same period (28 pp.), together with an index, complete the volume. The smaller tables, which include one of five place logarithms, are too many to be enumerated here. The book is convenient (small 8vo.) in size and the typography is beyond reproach. The editor says, "the attempt has been made to select and tabulate only that which is of fairly general interest and utility." In this attempt he has succeeded admirably. The book should be daily in the hands of every American chemist.

ALEXANDER SMITH.

A PRACTICAL HANDBOOK ON THE DISTILLATION OF ALCOHOL FROM FARM PRODUCTS, INCLUDING CHAPTERS ON ALCOHOLOMETRY, AND THE DENATURING OF ALCOHOL. BY F. B. WRIGHT, NEW YORK. SPON & CHAMBERLAIN, 1906. (pp. VIII + 194.) PRICE, \$1.00.

The author states that this book was written in answer to the increased desire for information on the subject consequent upon the passage of the "Denatured Alcohol Act" by Congress. It contains chapters on fermentation, distillation, production of alcohol from potatoes, grain, beets and molasses, alcoholometry, denaturing, etc. The text is illustrated with outline cuts, and the book is neatly printed and bound.

The chapter devoted to alcoholometry figures Syke's hydrometer, the official instrument used in England, and states that Dica's hydrometer (copper with poises and thermometer attached), is used in America. I doubt if many American chemists have ever seen this form of hydrometer.

The chapter dealing with the denaturing and use of alcohol in Europe is carelessly compiled and contains numerous inaccuracies. The United States law and regulations are correctly quoted in the chapter devoted to that purpose.

C. A. CRAMPTON.

SCIENCE IN SUGAR PRODUCTION. AN INTRODUCTION TO THE METHODS OF CHEMICAL CONTROL, BY T. H. P. HERIOT. ALTRUICHAM, ENGLAND. NORMAN RODGER, 1907. Price, 6 shillings, net.

The specific object of this book, as succinctly stated in the preface, is "to bring the methods of science within easy reach of the practical sugar-