

polarized at from  $10^{\circ}$  to  $15^{\circ}$  above the standard temperature of the instrument, thus introducing an error of from 0.3 to 0.5 per cent.

Usual methods of polarization where more than one optically active substance is present are described. The importance which the author attaches to errors caused by change in specific rotation of sucrose due to concentration would lead the reader to the opinion that such change is greater than that in specific rotation due to variation of temperature; such, however, is not the case.

A valuable chapter is that relating to the application of the polariscope in scientific research; this shows how the polariscope may be used in the study of some of the fundamental principles of physical chemistry. A valuable chapter is also contributed on the application of the polariscope to other bodies besides carbohydrates. A very interesting and practical part of the work is not indicated by the title; namely, pages 111 to 220 inclusive, which deals chiefly with technical subjects relating to sugar and starch manufacture, and the chemical methods for the determination of sugars and other carbohydrates.

The book as a whole will prove useful. It may be regarded as a reduction to practice of Landolt's work, to which have been added many practical suggestions derived from the large experience of the author.

H. W. WILEY.

SEWERAGE AND SEWAGE PURIFICATION. By M. N. BAKER, PH.B., C.E.  
New York: D. Van Nostrand Company. 1905. Price, 50 cents.

This book is a second edition of No. 18 of the Van Nostrand Scientific Series which was published in 1895. The study of the past ten years has added decidedly to our knowledge of the bacterial changes that sewage undergoes as the decomposition of the organic matter that it contains proceeds. The ideal purification of sewage is accomplished when its noxious substances are completely changed into mineral substances and harmless gases. To do this as completely as possible and at an allowable cost is the aim of the sanitary engineer, and the studies of the past ten years have had this end in view.

Mr. Baker has had the opportunity to study, not only in this country but in England, the change in methods that has resulted from this study, and the portion of his book that treats of sewage purification, the last fifty-eight pages, has been almost entirely rewritten, and describes briefly but clearly the treatment of sewage by intermittent filtration beds, by septic tanks, by contact beds

and percolating filters. The first ninety-five pages of the book are devoted to sewerage and are practically a reprint of the same pages of the first edition. They treat of the health value of a sewerage system, preliminary reports and plans, cost and methods towns can employ for meeting the cost, and also details regarding construction, as main conduits, grades, man-holes, catch basins, storm overflows, depth and ventilation of sewers. The book is well written and gives a good general idea of the main points of a sewerage system and of sewage treatment. It can well be said to be one of the best of Van Nostrand's Scientific Series.

LEONARD P. KINNICUTT.

THE JOURNAL OF BIOLOGICAL CHEMISTRY. Edited by J. J. ABEL AND C. A. HERTER. Vol. I, No. 1. New York. 1905. Subscription price, \$3.00 per volume.

It has long been recognized that a very considerable amount of excellent work in biological chemistry is done in this country which suggested the desirability of founding here a journal devoted to this growing specialty. Such a journal was announced some months ago and the first number has just been issued. It contains five articles, as follows: John J. Abel and R. DeM. Taveau: "On the Decomposition Products of Epinephrin Hydrate;" Reid Hunt: "The Influence of Thyroid Feeding upon Poisoning by Acetonitrile;" P. A. Levene: "The Cleavage Products of Proteoses;" Edward R. Posner and William J. Gies: "Is Protogon a Mechanical Mixture of Substances or a Definite Chemical Compound?" Frank P. Underhill: "Certain Aspects of Experimental Glycosuria."

On the title-page along with the names of the editors there are the names of twenty-two men as collaborators. This list of names is sufficient to guarantee the successful future of the journal, as far as contents, at any rate, are concerned. The general appearance of the new publication, which is printed on good paper with clear type, calls for distinct praise.

J. H. LONG.

JAHRBUCH DES VEREINS SPIRITUS-FABRIKANTEN IN DEUTSCHLAND, UND DES VEREINS DER STÄRKE-INTERESSENTEN IN DEUTSCHLAND. Fünften Jahrgang, 1905. Für der Schriftleitung verantwortlich, DR. G. HEINZELMANN. Berlin: Paul Parey. Price, M. 6.

As usual, this Jahrbuch is a true record of progress in the alcohol and starch industries of Germany, better known