

reprinted in book form, with the addition of many tables and plans not hitherto published. The name of Prinsen Geerligs certainly needs no introduction to those interested in cane-sugar, and the many friends of his previous work upon the "Sugar Cane in Java" will welcome this new book, previously inaccessible to many in the original Dutch.

The first part of the book gives in condensed form methods for the analysis of cane, bagasse, juices, press-cakes, masse-cuites, molasses, and sugars, together with a chapter upon calculations and interpretation of results. The remainder of the text deals with the reporting of results and the equipment of the sugar-house laboratory.

A complete set of tables for laboratory use and a model of books and forms for the sugar-house are given in the second half of the book.

Several of the methods described are open to some criticism, especially that of sampling juices, given as follows (p. 8): "During grinding small quantities of juice are continually taken from the gutters with a 10 cc. measure." Such a method is now obsolete in the best American practice, having been discarded for some form of continuous sampler, which requires no attention and gives a more uniform sample of juice.

The book is written entirely from a Java standpoint and local conditions in other cane-producing countries do not render all the methods described universally applicable. The method, for example, of determining the point of maturity of the cane-field (p. 4) would be valueless in Louisiana. But apart from such minor criticisms this new publication will prove of great value to the sugar-house chemist, even if its directions be not followed in every particular.

C. A. BROWNE, JR.

**SELECT METHODS OF FOOD ANALYSIS.** By HENRY LEFFMANN and WILLIAM BEAM. Philadelphia: P. Blakiston & Co. Second Edition. 1905. 596 pp. Price, \$2.50.

During the last five years great progress has been made in the field of food chemistry, and many valuable methods and results of analyses have been published. The trend of modern investigation has been largely along the line of simplifying processes and suggesting "short cuts" to methods too complicated and intricate to be of practical value. This newer material has been well digested by the authors in the second edition of their book, re-

placing much that was obsolete in the first edition. The entire book has been rewritten, to record the latest results of the work of the State and Government food laboratories.

Recent problems, such as the detection of palm oil in oleo-margarine, the identification of egg substitutes, and the modern examination of maple products, are exceedingly well treated. The new Government standards of purity for food products, so far as adopted, have been included.

No mention is made of the Babcock process of fat determination in milk, a noticeable omission, in view of the importance and extensive laboratory use of the process. More frequent references to original sources of information might perhaps be helpful to those who wish to further investigate data or methods.

The work as revised is a convenient and excellent handbook in condensed form for the laboratory worker, and should be on the shelves of every food chemist.

ALBERT E. LEACH.

THE USE OF COAL TAR COLORS IN FOOD PRODUCTS. By HUGO LIEBER.  
New York: H. Lieber & Co. 1904. 150 pp.

The main portion of this book is devoted to physiological experiments showing the effect of coal-tar colors on dogs and rabbits, applying the colors both hypodermically and through the stomach with the food. It is largely a translation of Dr. Theodore Weyl's *Die Theerfarben*, and it would seem as if this fact should be made apparent on the title-page or in the preface, yet such is not the case. True, the author in one place in the text mentions that he is copying reports of Weyl and others, but the extent of his indebtedness is not apparent to the reader, who would naturally assume most of the subject-matter to be the work of Lieber rather than of Weyl.

It should be said that an excellent authorized translation by Leffmann of this same book of Weyl was published in 1892 entitled "The Sanitary Relations of the Coal Tar Colors," covering the same ground.

In addition to the physiological experiments, Lieber gives an interesting summary of the laws in foreign countries relating to coal-tar colors in foods. He urges the necessity of forcing dealers in colors intended for food products to sell such colors only as have been demonstrated to be harmless, and that manufacturers of food products should use more care in the choice of their colors.

ALBERT E. LEACH.