

in this country as the corn-products industries. It covers the proceedings of the two leading societies, in which are discussed the questions relating to culture of the potato, the sole source of starch and largely the source of alcohol in Germany, the preservation of the crop, the operations of manufacture both mechanical and chemical, and the work of the Gährungs-Institut in Berlin. It is distributed free to all members of the two societies named and to subscribers to the *Zeitschrift für Spiritus Industrie*. It is a work which should find place in the library of every one interested in either of the industries named. It is not possible to enter into details of the contents of this excellent Jahrbuch. It is sufficient to say that practically every step in the manufacture of starch and alcohol is intelligently discussed, beginning with the most excellent paper of Privy Councillor Delbrück on "Enzyme Action" and, including the report of Dr. Hanow upon questions which have arisen in the spirit distilleries, regarding pure yeast and grain distilleries, acetic acid manufacture and the manufacture of starch, that of P. Lindner and Dr. Henneberg on the exhibitions, fermentation methods, pure cultures, etc. Abstracts of papers on technical subjects published in the *Zeitschrift für Spiritus Industrie*, Jahrgang, 1904; answers to queries by Dr. Heinzelmann, the latter covering the use of potatoes, Jerusalem artichokes, and fecal matter as sources of alcohol in which he discusses all the stages of manufacture, and statistics of the industries by Dr. Lange and Dr. Behrend, all combine to make the Jahrbuch of exceptional value to agriculturists and spirit and starch technologists alike. For instance, the studies in potato culture and the results obtained are well worthy of the careful attention of our agriculturists; the technical uses of alcohol will interest those who would have tax-free alcohol in this country and should be carefully studied. According to the Jahrbuch, fecal matter as a source of alcohol must be abandoned. Like its predecessors, this Jahrbuch commands both interest and respect and is quite worthy of its very eminent authors. WILLIAM MCMURTRIE.

**SUGAR AND THE SUGAR CANE.** An elementary treatise on the agriculture of the sugar cane and on the manufacture of cane sugar. By NOEL DEERR. Published by Norman Rodger, Altrincham (Manchester). Price, 7s 6d net.

The object of the author in publishing this interesting book of 400 pages, as stated in his preface, "is to present in one con-

secutive whole a general view of the cane-sugar industry. As there is no recent work in English covering this ground, he hopes that this compilation may be of use to the English-speaking community connected with the cane-sugar industry." In compiling the information contained in this treatise, the author very modestly disclaims any great originality on his own part; nevertheless he has shown, on the whole, such good judgment in the difficult task of selection and arrangement of material that his publication will rank as one of the most valuable of recent contributions to the literature upon the subject. Contrary to the usual custom of writers upon sugar-cane, the author has not limited himself to the conditions and methods of any one cane-producing country, but has treated his subject from a general standpoint, as is evidenced by the wide range of books and journals consulted.

The first 8 chapters of the book deal with the general characteristics of the cane and its agricultural requirements. The cultivation, irrigation and fertilization of cane are fully discussed, as well as the methods of harvesting, transporting, and unloading.

Chapters 9 to 19 are given to the discussion of sugar-house work, special stress being laid upon the subjects of extraction, evaporation, and crystallization. The molasses and bagasse problems are also briefly treated.

Chapters 20 to 23 give directions for the chemical control of the sugar house with a description of methods of analysis. The author's omission, however, of Allihn's method for glucose—the standard method of sugar chemists in this country and Germany—must be regarded as a serious mistake. His criticism of the German process as being less accurate and convenient than the time-consuming "American (?) method" of Defren and O'Sullivan is hardly warranted.

The concluding chapter of the book upon "fermentation" will be of interest to those desiring information upon molasses distillation. The typography of the volume is, on the whole, good, and the text is well illustrated with numerous explanatory cuts and diagrams. The nine colored plates of several typical varieties of cane are an especially attractive feature. Louisiana readers will no doubt fail to recognize their so-called home canes, the Ribbon and Purple, under the names of Striped Tanna and Black Tanna. This, however, is only one of countless instances

of the confusion which has arisen in the nomenclature of canes, and the reader, after finishing Chapter III of Mr. Deerr's book, will readily agree with his verdict that the subject of classification "is in an almost hopeless state."

Those desiring a condensed treatise upon the agriculture and technology of the sugar-cane industry will find Deerr's "Sugar and the Sugar Cane" deserving of attention.

C. A. BROWNE, JR.

**ECONOMIC GEOLOGY.** A semi-quarterly journal devoted to geology as applied to mining and allied industries. Published by the Economic Geology Publishing Co., 41 N. Queen St., Lancaster, Pa. Price, 50 cents a copy, or \$3.00 a year; foreign subscription, \$3.75 a year.

This journal has been established to fill the long-felt want of a periodical in the English language devoted exclusively to the subjects named in the sub-title. It is the purpose of the founders to make this in every way a first-class medium for the publication of articles of scientific merit, excluding those which have to do with the engineering and commercial aspects of mining. That this high aim is likely to be fulfilled, the names of the editor and his associates give full assurance. These are: J. D. Irving, editor; Waldemar Lindgren, James F. Kemp, Frederick L. Ransome, Heinrich Ries, Marius R. Campbell, Charles K. Leith, associate editors. The first number appeared in October, with contributions by Messrs. Ransome, Kemp, Campbell, Lindgren and Keith of the editorial board, and E. C. Sullivan. Most if not all of these will be duly noticed in the pages of this Journal devoted to abstracts.

W. F. HILLEBRAND.

**CATALOGUE OF THE WARD-COONLEY COLLECTION OF METEORITES.** By HENRY A. WARD, A.M., LL.D. Chicago, 1904. xii + 113 pp. Plates.

The Ward-Coonley collection, as all students of meteorites know, is deposited provisionally in the American Museum of Natural History, New York City. The falls represented numbered in the year of publication 603, thus making it in this respect the largest of the great collections. Following a preface and introduction, the catalogue proper is subdivided into sections covering Siderites, Siderolites, Aerolites, after which come lists of all known meteorites and their geographical distribution, a section on taxonomy, etc. The publication is worthy of the great collection which it represents.

W. F. HILLEBRAND.