

NEW BOOKS

Sucrierie de Betteraves

J. DUBOURG. xii + 416 pages. J. B. Bailliere et Fils, 19 Rue Hautefeuille, Paris, France. 1952. 4000 francs. Reviewed by HARRY S. OWENS, Western Regional Research Laboratory, Albany, Calif.

THIS is one of a series of books on agriculture prepared under the direction of the National Institute of Agronomy in France. The first impression of the book was not favorable. The pages were uncut and the binding quite unsatisfactory for a reference book. Moreover, there are only two literature references in the entire book. This places considerable responsibility on the author who, fortunately, is a chemist and sugar technologist with many years experience. Unfortunately, he makes such statements as "per capita consumption of sucrose varies with latitude" and "marc is primarily cellulose." Actually retail price of sucrose compared to cost of necessary dietary items is at least as important as climate in controlling its consumption, and marc is primarily composed of pectic substances, a factor of con-

siderable significance to sugar technology.

On the credit side of the ledger, there are many items. The cover, typography, and illustrations are excellent. As a review of beet technology as practiced in France, the book is interesting and apparently thorough.

The first section of the book presents a brief review of the composition of beets, agricultural aspects, operations preliminary to factory treatment, and analytical methods. The section on composition is so brief that the relationship between composition and processing cannot be visualized. An effort is made to overcome this lack of information by including a review of the reactions of calcium ion with nonsucrose impurities in the chapter on liming.

The remaining section comprises chapters on diffusion, liming and carbonation, evaporation, crystallization, and utilization of by-products including pulp and waste waters. The reviewer was particularly impressed by Mr. Dubourg's presentation of the principles and controlling factors for each of the unit operations of beet technology. In these chap-

ters one also learns about the apparent differences between beet technology in France compared to that in America. There is more emphasis placed on the classical diffusion battery, on reuse of pulp press water, and on preliming than would be expected for American readers. There is little space devoted to the Stefens process, barium process, or ion exchange treatments used to decrease the yield of molasses.

The book is recommended to scientists and technologists who are interested in European beet sugar technology.

Productivity in Farming

Anglo-American Council on Productivity. 43 pages. U. S. Department of Commerce, Washington 25, D. C. 1951. \$0.35.

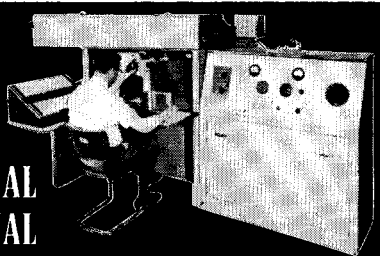
THIS REPORT is the result of a visit to the U. S. of a team of British farm leaders. The report is intended for British farmers, to tell them how American farms achieve their high level of productivity and also which of these techniques could be profitably adapted by British farmers.

Now *Enlarged and improved facilities*
AT JACO TO SERVE YOU BETTER

New and expanded facilities mean JACO can now bring you finer instruments and better service than at any time in our 50 years of experience . . . *Manufacturing space* — now more than 12,000 square feet available . . . *Sales department* — larger quarters, more trained personnel . . . *Customer Service Laboratory* — a new test analysis service for you. It will pay you to write outlining your instrument problems *today*.

IDEAL ANALYTICAL INSTRUMENT FOR AGRICULTURAL FOOD, NUTRITIONAL STUDIES

This packaged spectrochemical laboratory offers outstanding precision at an unusually low price. The ideal tool to help do your job easier and faster.



FREE Technical Report on Micro-Nutrient Studies . . . write for your copy today

X-Ray Equipment—Source Units—Microphotometers—
 Refractometers—Polarimeters—Microscopes
 Spectrographs—Spectrographic Laboratory Accessories

JACO JARRELL-ASH COMPANY

26 FARWELL ST., NEWTONVILLE, MASS.

SALES OFFICES: | DETROIT | EL CERRITO, CAL. | CHATTANOOGA | QUEENS VILL., N.Y.
 | 13680 Capital Ave. | 1344 Devonshire Drive | 1431 Broad Street | 8056 - 220th St.

ANALYTICAL METHODS in the FOOD INDUSTRY

- Measurement of Filth in Foods by Micro-analytical Methods
- Determination of Water in Some Dehydrated Foods
- Determination of Amino Acids
- Some Aspects of Control Methods in the Canned Food Industry
- Measurement of Color Changes in Foods
- Quality Control Methods in Frozen Food Production and Distribution
- Measurement of Oxidative Rancidity

Price \$1.50 per Copy

ORDER FROM:

**Special Publications Dept.
 American Chemical Society
 1155 16th St., N.W.
 Washington 6, D. C.**