

BOOK NOTICES AND REVIEWS.

Annual Report of the Hamburg Institute for Applied Botany. Fifty-sixth (1938) Report, coöperation of PROFESSOR DR. C. BRUNNER, F. MÆBIUS, K. HAHMANN, O. NIESER, L. MERKEL and O. NERLING; established by PROF. DR. G. BREDEMANN, Director of the Institute. This report includes a collective index for 1929-1938; previous reports may still be obtained by payment or exchange of the Botanical Museum, of the Institute, of activities of the division for seed control, etc. The contents of the annual report cover activities, interesting and valuable in research on applied botany of drugs, cultivation and products obtained. The General Index reports the activities of the Institute, contributory work by addresses, high school studies, meetings—congresses, state coöperation, etc. The investigations are carried on in the culture of various countries. Reports are also made on the unit laboratories where special work is carried on in studies of food products, animal foods and their composition, parts of plants, spices, oil, fats, gums, balsams, wax, paper production and other manufacturers and activities. The Year Book of the Department of Agriculture will give an idea of the valuable works being carried on at the Institute, where also exhibits are arranged for bringing information to the public.

Monographs on Older Medicinal Plants from the Botanical Institute, by DR. PAUL GREVE, Apothecary. A botanic-chemical-pharmaceutical contribution on *Ledum palustre* L. The subject is dealt with in three parts: Botanical, Chemical and Pharmaceutical, each subdivided—native, literature, morphology, anatomy, entomology and synonyms. The chemical description is classified in a similar way—literature, water content of the living plant and monthly determination; ash analysis, collection time, quantitative calcium content; etherial oil contained in various parts of the plant, the isolation and separation of arbutin and ericolin; extraction of constituents in plant parts.

The pharmaceutical division includes the history of the drug; its pharmacology, its use in homeopathy, biological application, testing on self, galenical uses, technical application, pharmacognostic description, prescription use. There are 43 illustrations showing sections of all parts of the plant, a wood cut of the "Kreäuterbuch" of Matthioli, 1598, is reproduced.

The study is carefully reported and makes the monograph on *Ledum palustre* quite a complete reference; it is published in German.

Bakteriologie, Serologie and Sterilisation im Apothekerbetriebe (Bacteriology, Serology and Sterilization in Pharmaceutical Practice), by CONRAD STICH, Leipzig, with comprehensive exposition of preparing sterile solutions for ampuls. Fifth edition thoroughly revised, 270 pages with 134 illustrations, color, in part, published by Julius Springer, Berlin, 1938. The previous edition was reviewed in November 1925, JOURNAL A. PH. A.

The first part considers Bacteriology and Serology and advises relative to the construction of the plant and of the apparatus, methods and location. The details of the description are helpful. The general descriptions of the bacteriologic investigations and the microscopic directions are complete and clearly presented. The work is shown in uncolored material and then in color, and explanations and selection of the dyes. The details of the presentations make this book useful to pharmacists who seek information on the subject, to those who engage in the work and well-suited for hand and reference. The special division includes pathogenic microorganisms, systematic study of pathogenic microorganisms, yeast organisms, spirilla, rhizopoda, etc.

The second part considers sterilization in its various phases, means and methods and application in practice, solutions, other preparations and in prescription work. It is necessary to have a knowledge of German, to know the terms and to have an acquaintance with the subjects discussed. The author has contributed many papers on the subjects of the book to pharmaceutical literature.

The Care of a Small Rat Colony, by R. J. MAIN. Publishers, C. V. Mosby & Company, St. Louis. 1939. 101 pages. Illustrated. Price, \$2.00.

This is a brief discussion of the author's technique of handling a rat colony, including descriptions of the size and number of rooms needed, heating and ventilation, types and construction of cages and racks, cleaning, methods of mating, feeding, diseases and costs. Addresses of firms supplying equipment and feeds are furnished, as well as a chapter on the assay of Vitamin D. The book is intended primarily for those who have not had much experience in raising rats, or who may be dissatisfied with their present methods.