to submit test portions of each and every batch of such drugs to be tested in the laboratories of the Department of Health; requiring that only approved batches may be imported, sold, or offered for sale; and prescribing a schedule of fees for inspection, licensing and biological testing.

The amendment also prohibits the distribution from door to door, or in a public place, or through the mails, of samples of

any drugs. This provision, however, does not prevent manufacturers or wholesale dealers from distributing samples by mail or otherwise, in compliance with individual requests for same, or from distributing samples to physicians, veterinary surgeons, dentists, registered nurses, hospitals, or to retail druggists for individual redistribution to adults only. (Assistant Trade Commissioner O. B. North, Ottawa.)

BOOK NOTICES AND REVIEWS.

Julius von Wiesner Die Rohstoffe des Pflanzenreichs. (The Raw Materials of the Plant Kingdom.) Edited by Paul Krais and William von Brehmer. 4th edition. Volume 1. Alkaloide bis Hefen (Alkaloids to Yeasts). With 307 fig., 1122 pages. Press of Wilhelm Engelmann, Leipzig. 1927. The following coworkers have added to the success of this work: F. Boas, K. Bourant, E. Gilg, W. Figdor, F. Schneider, P. N. Schurhoff, J. Weese, H. Wolff, S. Zeisel and A. Zimmermann.

This edition differs from the previous ones in first dividing the numerous raw materials into groups, which are then arranged alphabetically and are thus taken up. In this first volume the groups are the following: Alkaloide (Alkaloids) by F. Boas, to which 32 pages are devoted; Aetherische Oele und Kampfer (Ethereal Oils and Camphor) by K. Bournot, E. Gilg and P. N. Schürhoff, to which 50 pages are devoted; Bitterstoffe (Bitter Principles) by J. Messner, 80 pages; Eiweiszstoffe (Albuminous Substances) by F. Boas, 9 pages; Enzyme (Enzymes) by F. Boas, 12 pages; Farbstoffe (Coloring Substances) by R. Hoffmann, E. Gilg and P. N. Schürhoff, 79 pages; Fasern und Baste (Fibres and Bast) by J. Weese and S. Zeisel, 95 pages; Gerbstoffe (Tannins) by W. v. Brehmer and E. Konstanty, 136 pages; Gallen (Galls) by W. Figdor, 19 pages; Gummiarten (Gums) by W. v. Brehmer and S. Zeisel, 58 pages; Harze und Balsame (Resins and Balsams) by H. Wolff, 85 pages; and Hefen (Yeasts) by F. Boas, 14 pages. The authors' concept "raw materials" is pretty broad, and includes not only in a few instances the living plant, for example the sugar cane, and more often the dried plant, but also such substances as exudations, whether natural or produced artificially, and extracts, for example Gambir, fixed oils, etc., etc. They realize the difficulty in answering the two questions, "What is a

raw material?" and "What is a manufacture?" They note that the concept "raw material" is not a fixed one, and that it is more or less conventional.

Each group of raw materials is preceded first by a general part, next the special part and finally a bibliography. Thus under Alkaloids, in the general part are taken up, "Characteristics," "Occurrence," "Detection," and "Classification." In the special part we find descriptions of the various alkaloids known, arranged in scientific order, beginning with those found in the Cryptogams, next those found in the Gymnosperms, then those in the Monocotyledons and lastly those in the Dicotyledons. Most of the alkaloids are found in the Dicotyledons. A bibliography of 191 titles concludes the article on Alkaloids.

Ethereal Oils are treated in the same way. First, the general part in which are taken up the chemistry, the physics, how obtained, adulterations, substitutions, etc., etc. In the special part comes a botanical explanation and illustration of the various glands, and glandular hairs that secrete volatile oil. The oils are taken up alphabetically, and in each case is given its botanic source, habitat, how obtained, its composition, how detected and its uses. It has a bibliography containing 112 titles.

Likewise, Bitter Principles are treated much the same way. It is concluded with a bibliography containing 874 titles. Also the one on Albuminous Substances or Proteids, it is concluded with a bibliography containing 17 titles. And the one on Enzymes has one containing 84 titles. The article on Coloring Substances is treated as follows: First the botanical part and second, the chemical part. In the latter, the various coloring substances, 170 in number, are classified and then taken up according to their chemical composition. It is concluded with a bibliography con-

taining 325 titles. Fibres and Bast are treated much the same as Alkaloids, first the general part in which are taken up their anatomical structure, morphology, chemical characteristics, physical properties and microchemical reactions; and second the special part, containing first a general survey of plants furnishing fibres, and most important technical uses made of plant fibres, followed by a general description of them, taken in the following order, first plant hairs, then bast fibres, leaf fibres, etc. It has a bibliography of over 800 titles. The authors go into this subject with the greatest detail, treating it perhaps better than any of the others.

Fats and Oils have similar consideration, first a general part, in which authors take up, the occurrence and physiological significance, how obtained, purified, use, chemical composition, etc., and, second a special part in which the oils are taken up alphabetically. A bibliography containing 722 titles accompanies the article.

Tannin, too, has first a general part and then a special part. Plants containing tannin are taken up in the following order: First, tannin-producing barks, then tannin-producing woods, tannin-producing leaves, tannin-producing roots and last, tannin-producing fruits. This article has a bibliography containing 491 titles.

The article on Galls is treated also with a general part and a special part. It has a bibliography containing 94 titles. The one on Gums, likewise has a general part and a special part. In the general part the authors take up the physical and chemical differences and how gum is produced. It has a bibliography containing 242 titles.

Resins and Balsams are treated also much the same way. In the special part there is a table of solubilities of the most important resins and balsams in alcohol, in ether, in chloroform, in carbon disulphide, in benzol, etc. The bibliography contains 364 titles.

The last group taken up in this first volume is that on Yeasts. The author takes up the morphology, and the classification of this group of plants, the chemical analysis of the yeast cell, and the various uses made of yeast, in fermentation and in medicine. It has a bibliography containing 110 titles.

This valuable encyclopedia of knowledge should find a place among the books of reference found on the shelves in all drug stores.—Charles C. Plitt.

The well-known publisher, Julius Springer, Linkstr. 23 and 24, Berlin W. 9, submitted the following three books for review:

Grundzuege der Praktischen Pharmazie. Von Dr. Phil. Richard Brieger. 6 völlig neubearbeitete Auflage der "Schule der Pharmazie," Praktischer Teil von Dr. E. Mylius. Octavo. 100 Textabbildungen 358 pp. Cloth Mk. 14.70.

The Practical Part of the "School of Pharmacy" by Apotheker Dr. E. Mylius lived through five editions, surely a proof of its popularity and usefulness. The sixth edition is now before us under a new title "Fundamentals of Practical Pharmacy" by Apotheker Dr. Richard Brieger, one of the editors of the Pharmaceutische Zeitung.

Instead of a lengthy Introduction, the author agreeably surprises us with a letter from an Apotheker to his son who is about to enter pharmacy under the tutorship of a friend. That the old Apothecary lays special stress upon carefulness, conscientiousness and honesty is to be expected! Among the sixteen chapters I beg to call attention to the following: II. A Walk through the Apotheke; V. The Sale of Medicines and Poisons; VI. Prescription Compounding; X. Sterilization; XI. Manufacturing Pharmacy; XIII. Homeopathy and Biochemistry; XIV. Commercial Pharmacy; XVI. Pharmaceutical Jurisprudence.

A double-column Index of 19 pages gives testimony of the contents of this book, which although written for German conditions is of great value not only to the student but even to pharmacist and professor in the United States.

Die Tablettenfabrikation und ihre maschinellen Hilfsmittel. Von Georg Arends. 3. Auflage. 63 pp. Mk. 3.75.

The first edition of this little book was published in 1915 and the present, third edition has been thoroughly revised and enlarged. Besides the manufacture in all its phases, the preservation, packing and sterilization of tablets are thoroughly treated. A chapter of 20 pages is devoted to Tablet machines for use on a large as well as small scale. Explicit directions are given in another chapter of 30 pages for the manufacture of tablets of different substances in alphabetical arrangement from Acetanilid to Washing Blue. It is a book well worth having.

Der Apotheker als Subjekt und Objekt der