

Vegetable Drugs" are very readable and useful. The "keys" are comprehensive and appear to be very carefully prepared. The chapter on "Quantitative Microscopic Determination" is entirely new. Two hundred powders are figured, and the figures described. The figures are mostly in simple pen lines, but very clear and valuable in actual practice.

The book is of special value to the practical microscopist who meets with powdered vegetable drugs, and is a reference book that should be in every pharmaceutical library, but it is too comprehensive for any of the subjects offered in the two-year pharmaceutical course. Perhaps it could be used as a textbook in a four-year pharmaceutical course.

E. N. GATHERCOAL.

Pharmaceutical Bacteriology. By Albert Schneider, M.D., Ph.D., Professor of Pharmacognosy, College of Pharmacy, University of Nebraska, Lincoln. Second edition revised and enlarged with 97 illustrations. 441 pages. P. Blakiston's Son & Co. Price \$4.00.

The second edition of Schneider's *Pharmaceutical Bacteriology* is a decided enlargement of the first edition and also presents some improvements. The work is very comprehensive. Some of the rather glaring faults of the first edition have not been corrected; notably, the erratic arrangement of the chapters. As this work represents the only textbook so far published especially designed for bacteriology courses in the pharmacy curriculum, it is unfortunate that it is not more suitably arranged for such courses. If it is to be used as a textbook, a laboratory guide must also be supplied; for the chapter on bacteriological technic, placed near the center of the book, is not at all suitable as a laboratory guide for students beginning in bacteriology.

The preliminary chapters on history, origin of bacteria and other microorganisms, general morphology and physiology, are very extensive and well written, but contain a very large amount of material that cannot really be used in short pharmaceutical bacteriological courses. When one considers, too, that at least 100 pages are devoted to such subjects as: Symbiology, Zymology, Yeasts and Molds, and Adenology, one realizes what a vast amount of material, even though it be good material, is presented on topics that must

be of inferior rank in pharmaceutical bacteriology. The chapters on immunology, serology, disinfection and communicable diseases are extensive, complete and modern. Perhaps in a pharmaceutical bacteriological course of three or more semesters the work would be suitable as a textbook.

E. N. GATHERCOAL.

Pharmaceutical Botany. A Textbook for Students of Pharmacy and Science. By Heber W. Youngken, A.M., M.S., Ph.M., Ph.D., Professor of Botany and Pharmacognosy and Director of the Microscopical Laboratories in the Philadelphia College of Pharmacy. Third edition, revised and enlarged, with 238 illustrations and glossary of botanical terms. 479 pp. P. Blakiston's Son & Co. Price \$3.75 net.

The third edition of Professor Youngken's *Pharmaceutical Botany* follows the general lines of the second edition, with some notable enlargements and improvements. As has been stated in the review of the second edition, the text is especially designed for use in the botanical department of pharmaceutical courses.

The plan of the text is decidedly different from the usual textbook of botany, but includes sufficient morphology, histology, and taxonomy to prepare the student well for the study of pharmacognosy.

The illustrations in the text are excellent, though it is to be noted that the common practice is followed of "borrowing" many illustrations.

E. N. GATHERCOAL.

French-English Medical Dictionary. By Alfred Gordon, A.M., M.D. (Paris), Late Associate in Nervous and Mental Diseases, Jefferson Medical College; Fellow of the American College of Physicians; corresponding member of the Société Medico-Psychologique de Paris, France, etc. Published by P. Blakiston's Son & Co., Philadelphia. 164 pp. Price \$3.50 net.

The dictionary has been prepared by one who has been in touch with French medicine, and, therefore, the terms and definitions given conform to their application. Each French word is accompanied by a combination of letters in English, giving the pronunciation as accurately as possible, and there is also a separate key to pronunciation. The dictionary seems to be quite complete and,

certainly, will be useful for those who desire, or find it necessary to read and study French medicine. While primarily compiled as a medical dictionary, many of the terms apply to pharmacy and chemistry.

PUBLICATIONS RECEIVED.

Reprints of Published Papers of the Wellcome Chemical Research Laboratories embodying the results of investigations carried out in the Laboratories. These are numbered 176 to 185, the subjects dealt with being: "Examination of the Bark of *Croton Gubouga*," by J. A. Goodson and H. B. W. Clewer; "Substituted Phenylarsinic Acids and Their Reduction Products," by R. G. Fargher; "The Abnormal Behaviour of Glyoxaline-carboxylic Esters and Anilides towards Diazonium Salts," by R. G. Fargher and F. L. Pyman; "The Stereo-chemistry of Hyoscine," by H. King; "1:3-Benzodiazolearsinic Acids and Their Reduction Products," by R. R. Baxter and R. G. Fargher; "Constituents of the Leaves of *Helinus Ovatus*," by J. A. Goodson; "The Composition of Salvarsan," by R. G. Fargher and F. L. Pyman; "Orientation of the Nitro- and Arylazo-Glyoxalines Fission of the Glyoxalone Nucleus," by R. G. Fargher; "Arsinic Acids Derived from Guaiacol and Veratrole," by R. G. Fargher; "Ortho-Para-Isomerism in the Preparation of Diaminodiphenylmethane," by H. King.

NEW PUBLICATIONS.

Organic Chemistry: A Laboratory Course of Organic Chemistry, Including Qualitative Organic Analysis. By A. W. Titherley. 263 pp. Illustrated. New York: D. Van Nostrand Co. Price, \$2.50.

Organic Medicinal Chemicals. By M. Barrowcliff and Francis H. Carr. (Industrial Chemical Series.) London: Bailliere Tindall & Cox. Price, 15s., net.

Plant Chemistry: The Chemistry of Plant Life. By Roscoe W. Thatcher. 268 pp. New York: McGraw-Hill Book Co., Price, \$3.00.

Plant Chemistry: An Introduction to the Chemistry of Plant Products. Vol. I. On the Nature and Significance of the Commoner Organic Compounds of Plants. By Paul Haas and T. G. Hill. 3rd edition. 414 pp. New York: Longmans, Green & Co. Price, \$5.50.

Applied Colloid Chemistry: General Theory. By Wilder D. Bancroft. 345 pp. Illustrated. New York: McGraw-Hill Book Co., Inc. Price, \$3.00.

Chemical Laboratory: How to Make and Use a Small Chemical Laboratory. By R. F. Yates. 102 pp. Illustrated. New York: D. Van Nostrand Co. Price, \$0.75.

An Introduction to Bacterial Diseases of Plants. By Erwin F. Smith, in charge of Laboratory of Plant Pathology, Bureau of Plant Industry, United States Department of Agriculture, Washington, D. C. 688 pp. with 453 illustrations. Philadelphia: W. B. Saunders Co., 1920. Price, cloth, \$10.00 net.

The Microscope. By Dimon Henry Gage. Thirteenth edition. Ithaca, N. Y.: The Comstock Publishing Co.

Volumetric Analysis for Students of Pharmaceutical and General Chemistry. By Charles H. Hampshire, B.Sc. (Lond.), F.I.C. Third edition. 124 pp. London: J. and A. Churchill, 1921. Price, 7s. 6d., net.

The Raw Materials of Perfumery: Their Nature, Occurrence, and Employment. By Ernest J. Parry, B.Sc., F.I.C., F.C.S. ix + 112 pp. London: Sir Isaac Pitman and Sons, Ltd. Price, 3s., net.

The Analysts' Laboratory Companion. By Alfred E. Johnson, B.Sc. (Lond.), F.I.C., A.R.C.Sc.I. Fifth edition. ix + 176 pp. London: J. and A. Churchill, 1920. Price, 10s. 5d., net.

Quantitative Analyse durch Elektrolyse. By Alexander Classen. Sixth edition, revised and enlarged. 346 pp. M. 26. Berlin: Julius Springer. For review see *Oesterr. Chem.-Ztg.*, 23, 138, 1920.

Einführung in die analytische Chemie. Part I. Theorie und Gang der Analyse. 94 pp. *Part II. Die Reaktionen.* By F. Küssberg. 105 pp. M. 5.60. Berlin: B. G. Teubner. Price of each vol. M. 5.60. For review see *Tonind.-Ztg.*, 44, 1099, 1920.

Erläuterungen zum Gebrauch organischer Reagenzien in der anorganischen Analyse. By M. Müller. Ein Hilfsbuch für d. chem. Praktikum. Berlin: Walter de Gruyter & Co. M. 10.

Guida pratica all'analisi chimica qualitativa inorganica. By G. Ortoleva. Milan: Libreria Editrice Giuseppe Tamburini. Piazza Mentana N 3. L. 8.50. For review see *Boll. chim. farm.*, 59, 517, 1920.

A Dictionary of Scientific Terms: Pronunciation, Derivation, and Definition of Terms in Biology, Botany, Zoology, Anatomy, Cytology, Embryology, Physiology. By I. F. and W. D. Henderson. Edinburgh and London: Oliver and Boyd. 354 pp. 18s. net. For review see *Nature*, 106, 498, 1920.