trated with plates of a number of pharmaceutical manufacturing establishments to whom the author expresses appreciation. Thirty chapters comprise the Table of Contents. The book is well bound and contains many bibliographic references in the text. A criticism is offered on the typography; parts of the book in the reviewer's opinion, would have been improved in appearance if the type were clearer and some pages would be read with greater ease and assurance. There seems to have been an effort to hold down the number of pages by the use of small type. Bold face small type makes the reading of important matter somewhat difficult for those who are not very familiar with the subject.—E. G. EBERLE.

The Essentials of Physiology and Pharmacodynamics, by George Bachmann, M.S., M.D., Professor of Physiology in the School of Medicine of Emory University; sometime Demonstrator of Physiology in the Jefferson Medical College, Philadelphia, and A. Richard Bliss, Jr., Ph.D., M.D., LL.D., Professor of Pharmacology and Dean of Pharmacy in Howard College of Birmingham, Ala., member of the Committee of Revision of the U. S. Pharmacopæia. Third Edition. Publishers, The Blakiston Co., Philadelphia. Price, \$4.50. Published, January 2, 1940. The edition has been thoroughly revised.

Use has been granted in this volume by the respective Revision Committees of U. S. Pharmacopæia and National Formulary, also the British Pharmacopæia, and New and Nonofficial Remedies, for comment-no responsibility is accepted by the respective committees, for inaccuracies or errors in percentage strengths. The authors have placed the titles of individual drugs and preparations at the end of the groups; the aim is to present the material for study by students of pharmacy, including the essential facts of anatomy. The principles of pharmacodynamics are explained and the relation of materia medica with notes on pharmacology, hygiene and public health. The book contains 506 pages, 196 illustrations. Typography and binding are good. The revisers state that they have considered especially those topics in which more important advances have been made, as the vaccines, electro cardiogram, the pharmacodynamics of the cell, the vitamins, the barbiturates, newer antiseptics, newer anesthetics, the endocrines, allergens. The Table of Contents shows 42 chapters; the authors are known to teachers of pharmacy, they have prepared the revision for use in pharmacy schools, and libraries of pharmacy and other professional institutions, and for individuals.—E. G. EBERLE.

A Textbook of Materia Medica, Pharmacology and Therapeutics, by Harold N. Wright, M.S., Ph.D., Assistant in Pharmacology, University of Minnesota; and Mildred Montag, R.N., M.A., Instructor in Nursing Arts, St. Luke's Hospital, New York City, illustrated. Published by W. B. Saunders Co., Philadelphia and London, 560 pages. Price \$2.75.

The authors state that the subject matter for the study of drugs is commonly divided into Materia Medica, Pharmacology, Therapeutics and Toxicology. They have drawn upon their teaching experience for drugs used in the presentation of the text, and for the explanation of the use of weights and measures in the calculation of doses and in making preparations. The book gives information on toxicology, antiseptics, oxygen therapy, new preparations, endocrines, vitamins and on sulfanilamide and sulfapyradine. The standards under the Food and Drugs Act are briefly described. The biographies and illustrations are well selected. For some description, articles could have been selected from the Proceedings of the American Pharma-CEUTICAL ASSOCIATION. More National Formulary preparations could have been used. Under Narcotics, marihuana could have been employed for illustrating the possibilities of addiction and the responsibilities of those who handle narcotics. Marihuana is not used in prescription practice. The authors, wherever they had opportunity, give brief and clear illustrations. This applies to solutions and other forms of Materia Medica wherein calculations are required, prescription dosage and parts when additions or reductions are to be made on order of the physician. The authors have prepared a useful work, they have different views on some questions, as an example, the use of the designation of "dram" is a subject of discussion at different times. "Dram" is not frequently used and is not essential to medical and pharmaceutical practice, but possibly more should have been said in connection with the subiect.—E. G. EBERLE.

The Second Supplement to the Pharmacopæia of the United States of America, Eleventh Decennial Revision (U. S. P. XI—1939 Supplement.) 1939. Distributed by the Mack Printing Company, Easton, Pennsylvania, 178 pages. Price, \$1.50.

The Second Supplement to U. S. P. XI became official on January 1, 1940, and all monographs and general tests published in this Second Supplement superseded the corresponding U.S.P. XI Standards and First Supplement on that date with exceptions for the revised minimum standards for vitamin A under Oleum Morrhuæ and under Oleum Morhuæ Non-Destearmatum, and also for the new monograph for Chorda Chirurgicalis-these will become official July 1, 1940. The new articles under English title are: Ascorbic Acid, Mandelic Acid, Nicotinic Acid, Tribasic Calcium Phosphate, Surgical Gut, Cyclopropane, Tribasic Magnesium Phosphate, Methylrosaniline Chloride, Soluble Pentobarbital, Sulfanilamide, Thiamine Hydrochloride, Natural Vitamin A in Oil, Natural Vitamin A and D in Oil. Changes in official Latin titles are: Ergosterol Activatum in Oleo, Petrolatum Liquidum, Petrolatum Liquidum Leve, Serum Antipneumococcicum. Changes in official English titles are: Antipneumoeoccic Serum, Liquid Petrolatum, Light Liquid Petrolatum, Activated Ergosterol in Oil. All page

references in this Supplement refer to U. S. P. XI unless otherwise indicated. Glass-stoppered bottles may differ from those specified if resistant to the substance packaged, apparatus is subject to related specification. Specifications for the content of the bottle for Solution of Magnesium Citrate are given. Arsphenamine and Neoarsphenamine labels must bear expiration dates—Arsphenamine to be not more than five years from date of manufacture, that of Neoarsphenamine not more than three years.— E. G. EBERLE.

Medicolegal and Industrial Toxicology, Criminal Investigations, Occupational Diseases, by Henry J. Eilmann, Ph.D., Director of Physicians' Laboratory Service of Toledo, Ohio, Lecturer in Bacteriology and Histology, Mary Manse College of Toledo. Publishers, The Blakiston Company, Philadelphia. Price \$3.00. Published January 3, 1940.

The drugs designated poisons have been classified according to chemical behavior, during isolation from mixtures. Four groups are presented; the first includes volatile substances and acetone, analine, chloroform, hydrocyanic acid, phosphorus, etc. The members of the second group are separated with alcohol containing tartaric acid, e. g., acetanilid, pieric acid, salicylic acid; another sub-group, by ether extraction after the acid has been rendered alkaline, includes alkaloids. Still another sub-group obtained by separating alkaloids, in the etherchloroform solution and rendering alkaline with amonium hydroxide includes apomorphine, morphine, narceine, etc. The third group contains arsenic, antimony, bismuth, mercury, lead, silver, etc. In group four are mineral acids, alkalies and organic drugs. The general plan is a study of the symptoms of poisoning, the toxicology, detection, quantitative determination and postmortem findings. Other studies include criminal investigations, medicolegal examinations, industrial poisoning and the last, occupational diseases-classification of diseases under the "Compensation Act." The work has been prepared for those who seek information on the subjects presented, and is of value to industrial physicians, lawyers, insurance adjusters, toxicologists and laboratory workers, for general information and those who seek information on all phases of court cases, not only poisonings, but also other means of accidental or unlawful injury or destruction.—E. G. EBERLE.

Accepted Foods, The Council on Foods of the A. M. A. xx + 492 pages,  $5^{1}/_{2}$  x  $8^{1}/_{2}$ . American Medical Association, Chicago, Illinois. Price \$2.00.

This volume comprises a list of foods accepted by the American Medical Association Committee on Foods, particularly the trade marked foods of the present-day diet. It contains such articles as oleomargarine with fish liver oil, cookies of thiamine hydrochloride, beverages of ascorbic acid, milk with ergosterol, etc. It will no doubt do in time for foods what "New and Non-official Remedies" has done for trade marked medicinals.—A. G. D.

German-English Science Dictionary, by Louis DeVries. x + 473 pages, 5 x 7. McGraw-Hill, New York, 1939. Price \$3.00.

The author is Professor of Languages at Iowa State College and it is stated that the dictionary is intended for use in the agricultural, biological and physical sciences. The volume contains forty-eight thousand German scientific terms and will be found to be sufficiently comprehensive for all practical purposes. There is an appendix which contains definitions for some of the more troublesome German abbreviations.—A. G. D.

Merck's Index, fifth edition, by Joseph Rosin, C. V. Addinall, Alfred I. Cone and other members of the Merck staff. 1060 pages, 6 x 9, Merck & Co., Rahway, New Jersey, 1940. Price \$3.00.

The first edition of this encyclopedia for drugs and chemicals was published in 1889 and succeeding editions in 1896, 1907, 1930 and 1940. The volume contains descriptions of nearly six thousand drugs and chemicals and includes a discussion of such topics as cold-tar colors for use in food, drugs and cosmetics, culture media, fixatives, staining solutions, etc. It also contains tables of physical constants, indicators and other information of a similar nature. The entire series of "Tests and Reagents by Author's Names" published in Merck's Report has been included in the appendix. The list comprises 4500 tests. There is also a table of antidotes. The monographs as heretofore are short and concise and include for the first time structural formulas for organic substances. The book is a useful source of information to anyone dealing with drugs and medicinal chemicals and particularly the pharmacists.—A. G. D.

May's Chemistry of Synthetic Drugs, by PERCY MAY and G. MALCOLM DYSON, fourth edition. xii + 370 pages, 53/8 x 81/2. Longmans, Green & Co., New York. Price \$6.00.

The fourth edition of this book makes its appearance seventeen years after the publication of the third edition. The authors begin with a discussion of the theories of the action of drugs, the effects of various organic radicals and the changes which drugs undergo in the organism. They then discuss in systematic order the anesthetics, narcotics, antipyretics, alkaloids, the tropeines, the isoquinolines, ethylamines, hormones, vitamins, phenols, halogens, organometallic compounds and others. In each instance, brief descriptions are given as to the structure, properties and uses of the compounds. Specific methods of preparation of compounds are not given although in most instances general methods of preparation are stated. The book is an excellent one for obtaining a general view of the present state of development of the chemistry of synthetic medicinal substances.—A. G. D.