bicarbonate. Heat was used in the procedure and ether was one of the excipients.

In 1930 Lang (14) made use of exsiccated sodium carbonate in a formula and used dextrin and kaolin, glycerin, and water as the excipients. He claimed that his mass did not oxidize or harden with age. In spite of such a claim as this Witts (15) says that the ideal preparation of iron still awaits discovery.

From a résumé of the subject one becomes convinced that many hours of labor have been expended by a long list of workers in an effort to perfect an ideal mass of ferrous carbonate. The problem is still an intriguing one.

It is of interest to note that the formulas for Blaud's Pills in the pharmacopœias of the United States, Great Britain, France and Germany have not been altered greatly since 1890. Not much has been written about the problem since 1900. However, it seems that there is a revival of interest in it at the present. The results of our recent work and observations will appear in another paper.

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"If you have knowledge, let others light their candles on it"—Margaret Fuller

Book Reviews

"Cushny's Pharmacology and Therapeutics," by EDMUNDS and GUNN. 852 pages. Lea & Febiger, 1940. Price, $6.50.

When a book has passed through twelve editions and has enjoyed the wide acceptance of this test in both medical and pharmacy schools for forty-one years, little can be said in comment on it. The changes in the present edition over the previous one are mainly in bringing the subject matter up-to-date, and in the inclusion of newer remedies. Among these is sulfanilamide and related compounds where an excellent job of correlation has been done in a difficult field. The temptation to introduce into this section material with unproved but fascinating implications must have been great. This has been avoided and consequently the student is properly prepared for future more controversial aspects of this field. The outstanding characteristic of this edition, as well as those which have immediately preceded it, seems to be a careful and intentional attempt to make this text useful to the student. There is probably no subject in the medical-pharmaceutical curriculum which lends itself to organization with such difficulty. Drugs often have many points of action and are used for so many different therapeutic purposes that the author of a textbook is confronted with the difficult task of classification and presentation in a logical form. The original author and his revisers have given evidence of awareness of this problem and have consciously set out to solve it in so far as our present knowledge of pharmacology will permit. To this end they have devised a system which is designed for "convenience in teaching the subject and ease of learning it." They have admirably succeeded. Some may object to occasional omissions of obscure, but pharmacologically interesting substances. Others might object to the use of so few references. But if one remembers the purpose for which the book was designed, it can be seen that these are advantages. For students, particularly those in pharmacy, proper orientation and sound fundamental organization are more important objectives than heterogeneous miscellanea, no matter how extensive. These objectives are admirably fulfilled by this text. —J. M. DILLE

Vitamin E—A Symposium, under the auspices of the Food Group (Nutritional Panel) of the Society of Chemical Industry on April 22, 1939, at the School of Hygiene and Tropical Medicine, London, W.C.I., England. Monograph of 88 pages, bound. Chemical Publishing Co., Inc., New York. Price $2.00.

The monograph, which is edited by A. L. Bacharach of the Glaxco Laboratories, Middlesex, and Professor J. C. Drummond of the Biochemistry De-

partment, University College, Gower Street, London, is divided into three parts. Part I deals with the chemical structure and properties of tocopherol (vitamin E) under six divisions, or heads; the chemistry of vitamin E by Professor A. E. Todd of the University of Manchester; synthetic analogs and homologs of vitamin E; and the stability of tocopherol and tocopherol esters by research workers on the subject. Part II is devoted to a consideration of the physiological action of vitamin E and the consequences of vitamin E deficiency. Part III comprises reports of work done on the treatment of habitual abortion in the Maternity Hospital, Leeds, and Jessop Hospital for Women, Sheffield, and the University of Sheffield.—E. G. E.

An Introduction to Materia Medica and Pharmacology, by HUGH ALISTER MCGUIGAN and ROBERT ALISTER MCGUIGAN with ELSIE E. KRUG. 871 pages. St. Louis: The C. V. Mosby Company, 1940. Price, $3.50.

The second edition of this interesting text is in reality a handbook of materia medica and pharmacology designed primarily for instruction of nurses. Unlike the senior author's "Applied Pharmacology," this book is conveniently separated into chapters and offers as satisfactory and rational a classification of materia medica and pharmacological subjects as is possible at the present time. Much space, of course, is devoted to the purely pharmaceutical information which nurses are required to know, and official and semi-official drugs in elementary chemistry are listed very concisely. Beautifully colored plates of important drug plants, as well as of certain pharmaceutical preparations, constitute one of the best features of the book. The very satisfactory handling of the pharmacological section of the volume enables it to meet the requirements of the nursing profession and makes it profitable reading even for the medical student. An interesting feature of the text are the questions with which the various chapters conclude. The book will be welcomed by those reviewing the subject with an eye to the state examinations. The excellent format of this work also serves to make it one of the best of that type which has come to the attention of the reviewer. —D. I. M.

The Physiology and Pharmacology of the Pituitary Body. Volume II, by H. B. VAN DYKE, M.D. xiv + 402 pages. University of Chicago Press. Price, $4.50.

This monograph of some 400 pages is not, as might be supposed from its title, a second volume of a work on the pituitary gland but really a supplement to Volume I, which contains a critical digest by the same author of experimental and clinical literature appearing since 1935 on the master gland of the human body. In other words, it covers the scientific output on the subject during the period extending from 1935 to the early part of 1938. As books go it is therefore already out of date in this year of 1940. The prodigious amount of work being done on the pituitary can be gathered from the fact that approximately 750 articles dealing with that gland are published yearly and that the bibliography of the volume before us contains 1418 titles. A perusal of the pages reveals the complexity of the subject and the remarkably ingenious methods which have been employed in investigation of the pituitary gland. The volume begins with a chapter of thirty-two pages on its anatomy, followed by lengthy sections devoted to the various functions of the anterior pituitary lobe, and it is only in the ninth chapter that the writer discusses the important new discoveries made regarding the chemistry and pharmacology of the posterior lobe of *Pars neuralis*. A full chapter is delegated to the subject of regulation of growth by the pituitary. Two other chapters deal with the gonadotropic hormones of the pituitary and the relation of these hormones to pregnancy, and to certain neoplasms. A separate section is devoted to the *Pars glandularis* in relation to the development of the mammary glands and lactation. Another section of 24 pages discusses the thyrotropic function of the pituitary. A very important chapter describes the interrelationship between *Pars glandularis* and the adrenal glands, and its influence on metabolism of carbohydrates, lipoids, proteins, minerals and function of parathyroid glands. A separate chapter is given to the regulatory function of the pituitary in connection with chromatophores. The portion dealing with the posterior lobe presents the latest knowledge concerning chemistry and pharmacology of that still not completely understood part of the pituitary gland. An excellent discussion at the end deals with *Pars neuralis* as a gland of internal secretion. This monograph is richly illustrated with diagrams, some of them in colors. An appendix presents the structural formulas of the principal hormones of natural origin. The whole work is a scholarly digest of an intricate subject by one who has gleaned his information in a considerable degree from original research and is thorougly conversant with literature on the subject. The statement on the title-page that Dr. Van Dyke was formerly professor of pharmacology at the University of Chicago and the Peiping Medical College and is now director of pharmacology at the Squibb Institute should not be overlooked. There is a moral in this bit of information. It points to the significant fact that the number of distinguished pharmacologists associated with privately endowed industrial laboratories is increasing while the roster of those connected with pharmacological departments of the universities dwindles in proportion.—D. I. M.