

## BOOK NOTICES AND REVIEWS.

*Cuz, Iams, Poems and Papers.* By W. H. Cousins, editor of the Southern Pharmaceutical Journal, Dallas, Texas. Arthur S. Mathis, Limited Edition. Pp. 191.

Cow puncher, pill roller, pharmacist, poet, philosopher, and pharmaceutical journalist! All these rolled into one is Walter Henry Cousins of Dallas, in the State of Texas, and the volume of his selected essays and rhymes which is published under the name "Cuz" is a unique exhibit of his winning personality.

The world loves a real man and hates a sham, and the man who has the temerity to write his full heart for the world to read is sure to find interested readers. Walter Cousins is above all genuine. He has a fine command of language from cowboy slang to polished poetry, and through it all runs the thread of originality, of humor and of love for pharmacy and his fellow pharmacists who will read "Cuz" with pleasure.

C. A. M.

*Applied Pharmacology.* By A. J. Clarke, Professor of Pharmacy in University of London. P. Blakiston's Sons & Company, 1923. 390 pages.

In the preface of this interesting book the author says "unfortunately there are at present many reasons why medical students and others often fail to appreciate the connection between the science of pharmacology and the art of therapeutics, one of the chief reasons being that the student is taught pharmacology and therapeutics at different stages of his career and this creates a gap. \*\*\* The principal aim of this book is to try and bridge this gap between pharmacology and therapeutics, to demonstrate as clearly as possible the connection between the two subjects." While there is much that is commendable in the work we do not think that the book has met the announced purpose of bridging the gap between pharmacology and therapeutics. The mechanism of the action of drugs is set forth in an interesting and convincing style but the clinical applications of these facts are not sufficiently detailed to serve as a guide for the student to practical therapeutics.

The book is remarkable for the absence of antiquated, traditional pharmacology and for the clear exposition of some of the more recent experimental results and theories of drug actions. One evidence of the ultra-modernism of the author is the extraordinary number of new drugs to which reference is made and the brevity, and sometimes complete absence,

of consideration of old and still-trusted *arma medicamentarium*. For instance, considerable space is given to the recent antiseptic dyes, such as brilliant green, arciflavine, etc.; optochin has 4 references in the index, histamin is considered in 5 places, halogen derivatives of naphthol are described in some detail, although betanaphthol is only incidentally referred to; eucupin has 4 references in the index, eusol 2, and histamin 5. On the other hand aconite, belladonna, asafoetida, bismuth salts, alum, scopolamin, cacodylates, iron, menthol, iodofrom, homatropin and a host of other frequently employed drugs are not indexed at all. In this connection, however, it should be stated that the indexing is unsatisfactorily done and several of the drugs whose absence from the index strikes the attention are at least passingly mentioned in the text. Other features unusual in books on pharmacology, which also evidence the interest of the author in present-day problems, is a chapter of 25 pages on the vitamines, one of 11 pages of radium on X-ray, one of 6 pages on the products of protein decomposition and 13 pages devoted to immunity reactions. Considering the relatively small size of the book this seems an unduly large amount of space to be given to a class of subjects which are doubtfully classified as pharmacological.

Although there is so much omitted that the book can scarcely be recommended as a general textbook, as an exegesis of the modern trend of pharmacological investigation it offers much food for thought to those who are curious about the how and the why of drug actions.

H. C. W.

*The Microscopical Examination of Foods and Drugs.* By Henry G. Greenish. 3rd ed., Philadelphia, P. Blakiston's Son & Co., 1923.

The book purports to be a practical introduction to the methods adopted for the microscopical examination of foods and drugs, in the entire, crushed and powdered state. It is primarily intended for students.

The present (3d) edition is largely a reprint of the second edition, which appeared in 1910. As stated in the preface, the original arrangement of the subject matter has been retained, as it had proven well adapted for its particular purpose.

The contents are discussed in fifteen sections, the first being the starches, the study of which is comparatively simple. In other sections are discussed, (II) hairs and textile fibres (III)

spores and glands, (IV) ergot, (V) woods, (VI) stems, (VII) leaves, (VIII) flowers, (IX) barks, (X) seeds, (XI) fruits, (XII) rhizomes, (XIII) roots, (XIV) adulterants of powdered foods and drugs, (XV) general scheme for the examination of powders.

The author thus has the student proceed from the simple to the complex. Careful consideration has evidently been given to the selection of the substances to be examined, so that the student would become familiar with varying methods and varying structural characteristics useful in the examination of drugs and foods. Instead of discussing in detail the characteristics of many products, the author limits the discussion to structural types of drugs, spices, foods and several technical products. Throughout the text, and in the appendices A and B, following Section XV, reagents are given and statements are made which are helpful in the microscopical examination of various products.

The numerous illustrations throughout the text are helpful guides and make the book doubly valuable.

It is hoped that economical conditions at the time of issuing a fourth edition will have improved, in order to permit of elaboration.

In the way of suggestion for this fourth edition, the reviewer should like to see included a larger number of references to standard works, such as that of Reichert on starches, Dekker on tannins, Tunmann and Molisch on plant microchemistry. It also appears desirable to give reference to the latest, rather than the earlier editions of such works as Wiesner on plant products (3d ed. 1914-1921), Wm. Herzberg on paper testing (4th ed. 1915), etc. Some of the work of Tunmann, Mayrhofer, Rosenthaler, Nestler, and others, on microsublimation of drugs and foods, might also be included with advantage.

Recent work on the nature of crystals in pepper proves the presence of magnesium oxalate and not calcium oxalate, as stated. The author discusses saffron and its adulteration with Calendula flowers. We have not observed this adulterant within recent years, but find saffron frequently weighted with various salts and glycerin, or even entirely substituted by other flowers which are artificially dyed and weighted. Examples of recent adulterations, such as the one mentioned above, might well be included, as this would forcibly call attention to the significance of microscopical examination.

The book covers a large field, and covers it well. It deserves consideration by American students.

A. V.

*Practical Physiological Chemistry.* By Philip B. Hawk, M.S., Ph.D. 8th Edition. 666 pages and index. P. Blakiston's Son & Co., Philadelphia. Price \$5.00.

The popularity of Dr. Hawk's Chemistry is indicated by the fact that since its initial appearance in 1907, it has passed through eight editions. The present volume has increased somewhat in size over its predecessors, rendered necessary by the inclusion of important new material.

The arrangement of this edition is essentially the same as in the former ones: A discussion of enzymes and of carbohydrates being followed by a consideration of salivary digestion. The composition and chemical peculiarities of the proteins leads up to a consideration of gastric digestion and a quite complete review of the clinical methods for gastric analysis. As preliminary to studying pancreatic digestion, the chemistry of the fats is taken up; then follows a discussion of intestinal digestion; the production and composition of bile; putrefactive processes and the composition of the feces. As would be expected, the chapters on the blood and blood analysis are quite comprehensive; and this applies likewise to the succeeding chapter on "Respiration and Acidosis." A chapter on milk then follows; the chemistry of the epithelial, muscular, and nervous tissues is taken up; and then a very full discussion of urine, with a consideration of its composition and a number of clinical tests. In the next chapter, under the term "Metabolism," the reader is introduced to those fascinating discoveries that have been made in comparatively recent times regarding the importance of certain dictetic factors formerly considered of little moment.

The universal approval with which the preceding editions of "Practical Physiological Chemistry" have been greeted is sufficient evidence of their high worth; as regards the present edition, it can be added that it really constitutes a revision. Dr. Hawk has quite admirably combined clear, succinct, theoretical discussion with practical methods; methods which serve not only to illustrate points which he desires to bring out, but also those which are of value from the standpoint of clinical application. If any adverse criticism could be advanced, it might be against the detailed presentation of certain methods which are