

## BOOK REVIEWS

*PHARMAKOLOGISCHE METHODEN* by L. Ther. Pp. 443 and Index. Wissenschaftliche Verlagsgesellschaft m.b.H. Stuttgart, 1949.

This book, a product of post-war Germany, should be of interest to those pharmacologists, physiologists, and others concerned with the techniques of experimental investigation of the properties of medicinal substances. The volume has many good features to recommend it as a practical book of reference, or a guide book to laboratory procedures, not least of which is the presence of some 244 line drawings of apparatus or techniques, and the citing of over 1,200 references to original literature describing technical procedures. The apparatus depicted is somewhat out of date, many of the blocks dating from the time when the favourite mode of heating depicted was a small Bunsen flame. The text deals mostly with continental methods with a preponderance of Teutonic origins. It is of interest that nothing much more recent than a decade ago is described. The descriptions apply briefly to a multiplicity of methods rather than provide an adequate description of any one procedure. The chapter on testing of vermicides is interesting, that on striped muscle singularly inadequate. The others vary in quality. There is no evidence of acquaintance with any of the recent advances in physics, biochemistry or operative procedures in this volume. The chapter on the handling of common laboratory animals is useful, though the rhesus monkey might have been included with advantage. The type and paper are good, the binding of a lower standard. The book might be described as a useful guide to the more classical methods of investigation of drug action, with a particular interest for the teacher of pharmacology on account of the description of several useful methods of demonstrating the action of drugs on tissues.

J. D. P. GRAHAM.

*A TEXT BOOK OF PHARMACOGNOSY*, by G. E. Trease. Pp. VIII-811 and Index. Fifth Edition. Bailliere, Tindall and Cox, London, 1949, 30s. net.

A perusal of this text-book shows the wide field covered by modern pharmacognosy. Besides descriptions of a large number of vegetable and animal drugs, information is given on such varied materials as cotton, silk and surgical dressings, bacteria and fungi (including *Penicillium* spp. and yeast), chalk and kieselguhr, shellac, gelatin, beeswax and spermaceti, wool alcohols and gums; in short, the raw materials from the vegetable and animal kingdoms which go to furnish the pharmacist with his dressings, his vaccines and antibiotics, his plant insecticides and cosmetic creams, as well as the usual tinctures, infusions and tablets, pure alkaloids and crystalline products like picrotoxin and tubocurarine. The arrangement of the information is similar to that of the previous edition, the bulk of the book consisting of descriptions of crude drugs, etc., arranged in order of Phyla and families. Many of the descriptions include microscopical characters.

Besides this descriptive part there are short chapters on the history, commerce, cultivation, storage and evaluation of crude drugs. There are also chapters of a general nature on microscopical technique, constituents and extraction of crude drugs, and analysis (including fluorescence and chromatographic analysis). This information is necessary in order that the practitioner may be able to apply modern technique both to the description and evaluation of crude drugs.

As the author's aim is to cover the requirements of examination syllabuses

## BOOK REVIEWS

one should not perhaps expect much information on more recent work in pharmacognosy and additions to the materia medica such as alginates, *Ammi Visnaga*, the *Holarrhena* alkaloids, *Erythrina* alkaloids and rutin, but one would expect information on thyroid and pancreas, both of which are in the new syllabus for the degree of Bachelor of Pharmacy. Apart from these omissions the author's aim is well fulfilled in this book.

J. W. FAIRBAIRN.

*PRECIS DE CHIMIE TOXICOLOGIQUE*, by F. Schoofs. 2nd edition, 1948. Pp. 509 and Index. Les Presses Universitaires de Liege, Maison des Etudiants, Liege.

The scope of toxicology, and of toxicological chemistry in particular, is so wide that it is in the light of the author's statements that any volume on this subject must be considered. In the preface to the first edition it is stated that the book is intended for students as an introduction to the fundamental ideas of toxicological chemistry, not as an encyclopædic treatise but as a guide to those poisons which are more frequently encountered. As regards practical details it is said that these are given to enable "the more important methods used for the detection and determination of poisons" to be performed. It must be stated at the outset that, although the volume forms a useful introduction to the general principles of toxicological chemistry and deals with a wide range of poisons it would, in the opinion of the reviewer, be of limited value to anyone confronted with the actual task of toxicological analysis.

The work is divided into eight chapters: (1) general discussion; (2) gaseous substances; (3) volatile poisons and poisons isolated by distillation; (4) acids; (5) poisons extracted by immiscible solvents; (6) metallic poisons; (7) non-metallic poisons; (8) the purity of reagents. The first chapter on generalities is, to a chemist, one of the most useful in the book. It includes a discussion of the various routes of absorption and excretion of poisons, of the relation between molecular structure and toxicity, and contains some notes on the general precautions to be taken in toxicological analysis. It is to be regretted that the volume does not contain more references to the original literature. Most of the references are to text-books and little is given of recent analytical procedures and in particular of methods capable of detecting and estimating small quantities of organic and inorganic poisons. In dealing with lead, for example, useful notes are given on acute and chronic poisoning, on the toxic dose and on the method of elimination. It is difficult, however, to appreciate the value of the method given for the detection and estimation of lead when one considers that following this the use of a dithizone solution in chloroform is dismissed with the sentence "Cette solution verte, agitée avec un sel de plomb dissous dans l'acétate d'ammonium en présence de cyanure de potassium, donne une coloration rouge." Some sections, such as that on alcohol, are well written and fairly comprehensive, although that on barbituric acid derivatives occupies only six pages, a small number in view of the present day prevalence of this type of poisoning. The book is bound in paper covers and almost all of the pages require cutting. The editing and proof reading have been well done, although the formula for D.D.T. (p.396) is wrongly given. It is likely that this volume will be mostly useful in providing an account of the pharmacological action and general chemistry of a fairly wide range of poisons.

R. E. STUCKEY.