

BOOK NOTICES AND REVIEWS.

Toxicology, or the Effects of Poisons. By Frank P. Underhill, Ph.D. P. Blakiston's Son & Co., Philadelphia, vii plus 292, 1924.

"This volume has been compiled with the object of presenting a short, concise description of the effects of poisons upon the organism. No attempt has been made to enter into the details of the chemical reactions involved in the isolation and identification of poisons." As the author points out, several recent publications have discussed the chemical aspect of toxicology, but the physiological aspect has not been presented. As a whole, this text covers the physiological aspect very well as a medical school text. More attention has been given to some products than might seem warranted by their importance or frequency of occurrence. Nothing is said in the Introduction about the excretion of poisons into the stomach; gastric lavage may be employed several hours after poisoning by morphine, *e. g.*, because of this mode of elimination. The effect of cumulation upon drug action is probably discussed at greater length in the lecture than in the text. The use of lead chromate in foods is specifically prohibited by the Federal and by many state food and drug laws, so the chance of lead poisoning by it (page 75) should be rather slight. There is an excellent discussion of the mode of action of the "war gases." Oddly, nothing is said about the separation of alkaloids by shaking out in immiscible solvents, although the alkaloidal precipitants are given. Pertinent recent references are usually given for each poison, but under *Digitalis* one finds only a reference to work done in 1912; some mention of the more recent monographs, such as that by Robinson, would seem helpful. It is rather surprising to find the recommendation (page 233) that castor oil be given as a purgative following oil of chenopodium.

The subdivision of each discussion into the general headings: Symptoms, Poisonous Action, Fatal Dose, Fatal Period, Post Mortem Appearances, and Treatment, appears valuable in aiding the memory of readers. It would seem that a table might be included, perhaps as an appendix, summing up this information for all the drugs presented, to serve as a ready reference.

A few misprints were noted, which may be readily corrected in the next edition. This publication covers a field which has not been discussed by recent writers, and the information is presented in a concise but interesting

form. As a guide to the physiological effects of poisons, it should prove of much assistance to medical students and other interested persons.
J. C. MUNCH.

Quantitative Chemical Analysis. By Frank Clowes, D.Sc. and J. B. Coleman. A.R.C.S. Twelfth Edition. 576 pp. Blakiston's Son and Co., Philadelphia.

This being the twelfth edition, speaks for a well-deserved popularity. Originally written for the use of Senior students but later broadened so as to appeal to the practical chemist. The subject matter with its subdivisions has been handled in an original manner. The general divisions are:

PART I—GENERAL PROCESSES.

PART II—SIMPLE GRAVIMETRIC ESTIMATIONS.

PART III—VOLUMETRIC ANALYSIS.

PART IV—GENERAL QUANTITATIVE ANALYSIS.

PART V—ORGANIC ANALYSIS AND MOLECULAR WTS.

PART VI—VOLUMETRIC ESTIMATION OF GASES.

PART VII—REFERENCE TABLES.

PART VIII—PREPARATION OF GASES, USE OF COMPRESSED GASES. BOOKS OF REFERENCE.

Section I.—The Chemical Balance and Weighing.

This section deals with the adjustment and testing of the balance, testing of weights, weighing (direct and substitution), and the general handling of balances.

We do not fancy the author's method of weighing in which all the weights are removed from the box, placed on numbered squares and reading from the uncovered spaces. The present system of arrangement of weights in the analytic weighing-box, suffices for this method of checking.

Section II.—Determination of Relative Density. M. p. and B. p.

It seems unfortunate that the authors still adhere to the old standard of 15.5° C. only. Since this work is to be used in our country, it should have referred to our standards of 20° C. (Bureau of Standards) and 25° C. (the U. S. P.) which were adopted for well-known reasons. Further, methods for calculating gravities from one standard to another are missing—very necessary, since our gravity tables are usually expressed in either of the latter standards.

Practical examples as an aid to beginners in calculating results, form an admirable feature of this work.