

sibility, as professional men and women, in safeguarding the public.

"The Opium Problem" is comprehensive and of value to every library, because information on the subject of addiction is sought, at times, in every city, by lawyers, legislators, physicians, pharmacists, teachers and students. The subject is treated under the following divisions: Extent of Addiction, Development of the Problem, Etiology, General Nature; Pathology—Somatic and Psychic Changes, Tolerance, Dependence, Withdrawal; Symptomatology, Types of Users, Treatment; Control—International, National, State, Municipal, Miscellaneous Suggestions, and concluded with a Bibliography and an Index.

It might be added here that "The Compilation of Food and Drug Laws" by the Proprietary Association, and "Dunn's Food and Drug Laws" are additional sources of information on laws and regulations that apply to the manufacture, sale and dispensing of narcotics.

Handbuch der Biologischen Arbeitsmethoden, "Handbook of Biological Methods."—Edited by PROF. DR. EMIL ABDERHALDEN. Section 259. Price 5 marks. "Preliminary Biological Examination of Unknown Drugs." By JOHN GRONBERG-HELSINGFORS. Urban & Schwarzenberg. 1928.

This interesting pamphlet comprising some ninety pages deals broadly with some of the methods employed by the pharmacologist, using the term again in the broad sense of the word, in starting an investigation of an unknown substance or chemical from the pharmacological or toxicological point of view. The book is by no means complete but has some interesting information on a few select topics. The methods here described are often somewhat antiquated and some of them have been supplanted by more accurate and useful forms of experimentation. The chief value of this essay consists in some of the original technic employed by the author John Gronberg and useful information may be gleaned also from some experimental data adduced by that writer. The beginner or tyro in pharmacological investigation will find this monograph of considerable interest and usefulness in some respects. Thus for instance a good deal of space is devoted to a description of methods employed by the author in investigating narcotic and hypnotic drugs and the same may be said of anthelmintic drugs. On the other hand the chapter devoted to exami-

nation of antiseptics is very elementary and the same may be said of the section on purgatives. The monograph is certainly not very comprehensive or well balanced. It is evident that the writer has expatiated chiefly concerning the drugs with which he has been personally engaged. That is, however, not the purpose of a handbook for biological methods.

D. I. M.

Handbuch der Biologischen Arbeitsmethoden, "Handbook of Biological Methods."—Edited by PROF. DR. EMIL ABDERHALDEN. Section 251. Price 7 marks. "List of Toxic and Lethal Doses of Some Poisons." By F. FLURY and FRANZ ZERNIK-WURZBURG. Urban & Schwarzenberg. 1928.

This section of the well-known handbook on methods edited by Abderhalden comprises some one hundred and thirty pages and consists almost entirely of tables giving the toxic and lethal doses of different drugs and various animals. The material herein collected is not an original one but is the result of an extensive search through the literature. The tables indicate the authors whose figures are quoted and also give the more important literary references. This book will be found useful by the pharmacologist using the term in the broad sense of the word as defined by the reviewer elsewhere in this journal and also by toxicologists. The information here found will be used by the scientist with a grain of salt because every pharmacologist is quite aware that the question of dosage is not a hard and fast one especially in connection with animal experimentation and will be more or less modified by various conditions. The book contains information concerning drugs which are not very familiar to many physicians, and on the other hand all information concerning other compounds in which a research man may be interested will often be lacking. Thus, for instance, one can find here figures concerning the toxicity of cobra venom, cicutoxin, euphorin and yet there is a deplorable lack of available information, for instance, concerning many of the newer organic mercurials. German synthetics are found here in abundance but well-known drugs of foreign origin are often found missing. Altogether the book, however, will be a useful one to have on the shelves of the specialist in pharmacology and toxicology.

D. I. M.

Chemistry in Medicine. A coöperative treatise intended to give examples of progress made

in medicine with the aid of chemistry. Edited by Julius Stieglitz, professor of chemistry, University of Chicago. Advisory Editors: Anton J. Carlson, professor of physiology; Frank R. Lillie, professor of zoology; H. Gideon Wells, professor of pathology, all of the University of Chicago and Reid Hunt, professor of pharmacology, Harvard Medical School, and Lafayette B. Mendel, professor of physiological chemistry, Yale University. 12 mo., 757 + XX pages, limp, \$2.00. Publishers, The Chemical Foundation, Inc., New York City.

The foreword informs that the impetus which has led to the preparation of the book had its origin some years ago in the loss by death of Patricia daughter of Mr. and Mrs. Francis P. Garvin. In memory of their daughter the latter have made provisions for aiding in the establishment of independent and self-sufficient American Chemical Industries, of a better understanding of the possibilities and purposes of chemistry, to foster school, college and postgraduate education in Chemistry, to advance the cause of adequate American research facilities and, through the agency of scientific societies and universities, of chemical literature and chemical laboratories. The purposes of these endeavors are expressed in The Chemical Foundation which is dedicated to the protection of children and adults against avoidable disease and death.

The titles of the chapters indicate the aims of the Foundation: "The Significance of Chemistry and of Its Methods of Attack on Fundamental Problems," "The Human Body as a Machine," "The Story of the Discovery of the Vitamins," "The Conquest of Dietary Diseases," "Chemical Regulators of the Body," "The Policing of Civic Life in the Laboratory," "The Alleviation of Suffering," "The War of Invading Germs," "A Hope of Mankind—Chemotherapy." These divisions are subdivided with accompanying discussions; for example, Chapter IX on "The War on Invading Germs" considers the main subject under *The Germ Theory of Disease, Immunity—the Chemical Warfare of Existence, The Fight against Pus Organisms, The Battle against Malaria, The Advance against Amebic Dysentery, The Hope of the Leper, War on the Hookworm, Combat against Syphilis, Battle against Tuberculosis.*

In connection with this chapter it is interesting to note the recent announcement of the cure of John Early, the leper, who on a number of occasions brought fear to localities visited

by him and serious interference on the part of friends. Dr. Adams, in the discussion of "the hope of the leper," states: "The result of these medical and chemical studies is that for every leper effectively treated eight years ago, probably 100 are effectively treated to-day."

Pocket Medical Dictionary. By GOULD. Ninth edition, 40,000 words, pronounced and defined. Contains a Dose-List for physicians, and a Veterinary Dose-List. Revised in accordance with the U. S. Pharmacopœia X. Flexible Binding, \$2.00. Thumb Index, \$2.50. Publishers, P. Blakiston's Son & Co., Philadelphia.

"Gould Dictionaries" keep up with the advances made in medicine, evidenced by the number of consecutive editions and revisions. The volume to which reference is being made is of a convenient size for the pocket; the printing and binding are of the excellence which applies to former editions. Every pharmacy needs a Medical Dictionary.

The writer suggests that definitions of official drugs, chemicals and preparations, both of the U. S. Pharmacopœia and National Formulary, be given in conformity with these standards; necessarily, this must, in some instances, be in condensed form and most of the U. S. P. drugs are considered in that way, but the same consideration should be given to the National Formulary. This means, of course, that mention should also be made of the National Formulary under the copyright statement. The names of the official drugs of the National Formulary are given, but these definitions do not conform with that standard. Citing a few, the official title of *Cocillana Bar.* is *Cocillana*. *Convallaria majalis* is given in the Dictionary, it should be *Convallariæ Radix*. *Gossypium* is given in the Dictionary—the official U. S. P. item is *Gossypium Purificatum*, that of the National Formulary—*Gossypii Cortex*. *Taraxacum Officinale* of the Dictionary should be *Taraxacum*. The name *Gelsemium* of the Dictionary is correctly given, but the definition is not; namely, "A genus of shrubs; also the root of *G. sempervirens*;" to conform to the official definition this should be: **Gelsemium**—Gelsemium consists of the dried rhizome and roots of *Gelsemium sempervirens*. The examples might be continued, but the foregoing will suffice to point out that confusion obtains when legal standards are not followed; in other words, there should be uniformity in definitions of this kind, thereby adding certainty and definiteness.