base without regard to proper pharmaceutical technique.

SHCO can be used to overcome incompatibilities; coal tar or balsam of peru, for instance, previously triturated with SHCO may readily be incorporated with petrolatum, lard, lanolin, etc.

The emulsified base is an oil-in-water emulsion. This is a distinct advantage as such an emulsion would absorb perspiration or serous fluid better than a water-in-oil emulsion. A less greasy base (semi-vanishing) may be obtained by substituting diethylene glycol monostearate up to about 50% of the SHCO.

Ointments prepared with SHCO are recommended particularly in cases where there is serous discharge or perspiration, or in cases where a washable ointment is indicated. An example of the latter is scalp ointments; SHCO ointments have proved very satisfactory for this purpose since they are readily removed by simple washing with water.

SUMMARY

Sulfated hydrogenated castor oil is recommended as an ointment base. It is water-soluble, semi-solid, compatible with medicaments used in ointments and produces, when used in quantities of twenty-five per cent or more, hydrophilic ointments. An emulsified base comprised of sulfated hydrogenated castor oil, petrolatum and water is described. Formulas are given for the official ointments prepared with adhesive base, smooth base and emulsified base.

REFERENCES

(1) Mumford, F. B., *Brit. J. Dermat. Syphiol.*, 50 (1938), 540.

(2) Gross, R. E., "Ointment Bases," presented before the American Academy of Dermatology, November 7, 1939.

(3) Blank, I. H., *J. Investig. Dermat.*, 2 (1939), 67–79, 231–242.

"When the archer misses the center of the target, he turns around and seeks for the cause of his failure within himself."—Kong Fu Tsze.

Book Reviews

A New Dictionary of Chemistry, edited by STEPHEN MIALL. 544 pages. Longmanns, Green & Co. Price, $15.00.

This dictionary is intended for both chemist and layman and it provides a reference source of chemical terms and facts relating to chemicals and drugs for use in special fields. It contains a vast number of entries which include the latest advances in chemistry, inorganic, organic and physical. Many of the entries include references to books and papers in which further information can be found. Trade names are included in many cases. There are many short biographical sketches of eminent chemists in which their outstanding achievements are given. The volume also contains a classified reading list of 85 volumes and a table of physical constants of organic compounds.—A. G. D.

Handbook for Chemical Patents, by EDWARD THOMAS. 270 pages, $5^1/_2$ x $8^1/_4$. 1940. New York: Chemical Publishing Company. Price, $4.00.

The author of this book is a former employee of the U. S. Patent Office and is, therefore, well qualified to explain the essential details of patent procedures, which he has done. Included in the explanations are suggestions for writing patent specifications, anticipation of a patent based on previous facts, types of infringement, process of taking out a patent from the patent office, assignments, licenses, etc. Explanatory references to cases are numerous. The book should prove to be an invaluable aid to those seeking to obtain a patent on a chemical process or composition of matter.—A. G. D.

The Essentials of Physiology and Pharmacodynamics, by GEORGE BACHMANN and A. RICHARD BLISS, JR. 3rd Edition. xiv + 508 pages, $6^1/_2$ x 10. 1940. Philadelphia: The Blakiston Co. Price, $4.50.

This, the third edition of this well-known textbook on physiology and pharmacodynamics, follows along the lines of preceding editions. The anatomic viewpoint is maintained and the pharmacologic activity of drugs is explained at the appropriate point. This edition includes the newer drugs, such as ergonovine, sulfapyridine, etc.—A. G. D.

Mathematics in Bacteriology, by OTTO RAHN. ii + 63 pages, $8^1/_4$ x $10^3/_4$. 1939. Minneapolis: Burgess Publ. Co. Price, $1.75.

This book gives the application of mathematics to the interpretation of such subjects as cell division and growth, unrestricted and restricted multiplication and fermentation, and the death rate in disinfection. The probable error computed on a statistical basis and the use of graphs are discussed. It contains a sufficient amount of elementary calculus and information on the use of graphs to enable

the student to make these applications. The book should serve to point out the possibilities of the mathematical treatment of certain biological processes.—A. G. D.

Synopsis of Materia Medica, Toxicology and Pharmacology, by F. R. DAVISON. 633 pages, $4^3/_4$ x $7^5/_8$. 1940. St. Louis: C. V. Mosby Co. Price, $5.00.

This book is designed for students and practitioners of medicine. The first portion treats of the principles of drug action, methods of administration of drugs, modification of their action, sources, types, standards, classification of drugs, etc. There is also a chapter on prescription writing and one on toxicology. Part II deals with the drugs used by the physician. These are classified according to their action on the body. In addition to the action, use and dose of the various drugs, there is frequently given one or more prescriptions indicating the practical application of the drug. This enables the physician to make immediate use of the material presented and also makes the volume one which may be included to advantage in a pharmaceutical library.—A. G. D.

Forensic Chemistry, by HENRY T. F. RHODES. 214 pages. Chemical Publishing Co., Inc., 148 Lafayette St., New York, N. Y., 1940. Price, $5.00.

The author stated that the purpose of this book is to collect in one volume information on forensic chemistry which has appeared in criminological journals and to provide an outline for the operating of a forensic chemical laboratory. The book is divided into two parts. Part I deals with the application of chemical methods to the identification of persons. The identification of persons by indirect means is discussed, *e. g.,* by means of dust particles, starch, shellac and other materials which may be found on a person and from which a clue as to their occupation or the habits of a person may be obtained. Part II is devoted to a discussion of the chemical methods for the proof of "*corpus delicti.*" The examination of stains, weapons, documents, poisons, etc., is also discussed. There is a chapter devoted to questioned documents, others on firearms, explosives, counterfeit money and the examination of toxic materials. At the end of the book there is a bibliography of several pages. The book contains considerable information from the personal experience of the author and should prove a valuable addition to the limited number of books now available on this subject.—A. G. D.

What Are the Vitamins? by WALTER H. EDDY. 247 pages. Reinhold Publishing Corp., 330 West 42nd St., New York, N. Y., 1941. Price, $2.50.

This book contains pertinent and reliable information based on original investigation and a review of the literature. It answers such questions as: What are the vitamins? What do they do? Which one do I need? How much of each do I need? Where and how can I get them? In the two opening chapters supplemented by tables of potency, unit equivalents and the chemical nature of vitamins and vitamin values of foods, the vitamins are defined as organic chemical compounds and the function of these substances as prosthetic groups in enzyme system controlling respiration and intracellular metabolism is explained. The remaining eleven chapters are devoted to the functions of each vitamin. The treatment is mainly pathological and is concerned chiefly with the diagnosis, clinical manifestations and treatment. There is a bibliography at the end of each chapter. The book is believed to be of particular value to the physician and pathologist, also the worker in the field of nutrition. —A. G. D.

The Chinese Way in Medicine, by EDWARD H HUME. 189 pages. $5^1/_2$ x $7^3/_4$. The Johns Hopkins Press, Baltimore, Md., 1940. Price $2.25.

In this book the author has succeeded in bringing out the important philosophies of Chinese medicine and in presenting an interesting commentary upon the leading Chinese physicians of ancient times and on the drugs employed by them. Among the physicians mentioned are Fu Hsi, a contemporary of the great Imhotep of Egypt, Shên Nung, the father of Chinese medicine and the compiler of Pên Ts ào, the original Chinese pharmacopœia, and Huang Ti, who introduced methods of diagnosis and physical therapy. Attention is also called to the fact that many of our present-day drugs are mentioned in the Pên Ts áo, the best known of which is probably ephedra from which ephedrine is obtained. It is also noted that such important drugs as kaolin, chaulmoogra oil, stramonium, etc., are listed in the Pên Ts ào Kang Mu, a catalogue of native herbs compiled by Li Shih-Chên during the Ming dynasty. The book contains much valuable information on the history of Chinese medicine and is worthy of a place in all medical and pharmaceutical libraries.—A. G. D.

NOTICE

It will be appreciated if any one, who has a copy of the January 1940 issue of the Scientific Edition that he does not need, will mail it to the AMERICAN PHARMACEUTICAL ASSOCIATION, 2215 Constitution Ave., Washington D. C., as our supply of this number has been exhausted.