

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. Syphilol.*, 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.

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 $\frac{1}{2}$ x 8 $\frac{1}{4}$. 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 $\frac{1}{2}$ 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 $\frac{1}{4}$ x 10 $\frac{3}{4}$. 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

"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.