

to say that the authors have contributed a valuable service by making available to students of pharmacy and others a wealth of historical information on the development of pharmacy in this country.—E. G. E.

Applied Pharmacology, by HUGH ALISTER MCGUIGAN. 914 pages. St. Louis: The C. V. Mosby Company, 1940. Price, \$9.00.

This interesting handbook on pharmacology contains more than nine hundred pages and many illustrations. To the reviewer the most striking feature of this work is the peculiar and almost extraordinary arrangement of subject matter, the book differing from most texts in not being divided into chapters but having instead a great many sections with headings in large and small bold-faced type. It would stretch one's candor too far to state that the classification employed is a logical one; in fact, in grouping or subdividing various subjects, the book follows no special criterion as do most texts on pharmacology. Some of the subdivisions have a solely physiological and others a chemical basis. Still others are purely pharmaceutical in character while there is a sprinkling of topics which cannot be classified at all. Thus, for instance, "crocodile tears" are relevant to no strictly pharmacological subject al-

though the bit of information given under this title is of interest from the standpoint of popular science. Discussed under strictly physiological headings are the effects of drugs on respiration, on the heart and circulation, on the central nervous system, on the kidney, the liver, the uterus and the muscles; on salivary glands, on deglutition, absorption through the skin, vision and other physiological functions but intermingled with this rational physiological classification are topics of purely chemical nature such as the acids, alkalis, halogens, dyes and similar groups. Again, many of the sections bear such purely pharmaceutical titles as astringents, soaps, gargles, expectorants and hypnotics. On the whole, however, the book contrives to cover fairly well the whole field of pharmacology as it is taught in the average medical school, and it is up-to-date in that it includes adequate discussions on chemotherapy, vitamins, hormones and proteins (sera, etc.) in relation to therapeutics. Many well-known pharmaceutical preparations, such as mercurochrome, for example, receive no other notice than a listing in the long catalogs of materia medica contained in this volume. The book has many admirable features. Thus, for instance, there is no cluttering of the pages with abstruse chemical formulas. Some of the diagrams are very instructive and enlightening and the text is generally clear although the literature throughout is scanty and inadequate.—D. I. M.

NOTICE

A. PH. A. Research Fellowships

The Committee on Pharmaceutical Research of the AMERICAN PHARMACEUTICAL ASSOCIATION, announces the availability of certain limited funds for the establishment of research fellowships for the school year 1941-1942, and invites applications for these grants. The allowance in each case is usually from \$300 to \$400.

These grants are to be made by the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION on the recommendations of the Committee on Pharmaceutical Research. They are to be made on the following basis:

- (a) The extent to which the award will serve to promote Pharmaceutical Research.
- (b) The extent, if any, to which the work supplements the program of the AMERICAN PHARMACEUTICAL ASSOCIATION'S Laboratory.
- (c) The qualifications of those who will perform the work for which the award is made and the facilities of the laboratory wherein the research will be conducted.
- (d) Preference will be given to applications wherein it is indicated that the award will supplement a contribution from the institution or laboratory in which the research will be conducted.

Application blanks may be obtained from the Chairman of the Committee on Pharmaceutical Research (Francis E. Bibbins, R.R. 16, Box 728-B, Indianapolis, Indiana). These blanks with all details necessary to evaluate the projects must be returned to the Committee not later than May 15, 1941.

Announcements of the awards will be made early in the summer.

Signed: Francis E. Bibbins, *Chm.*