

*Handbook of Pharmacognosy.* By OTTO A. WALL, M.D., Ph.G., revised by Leo Suppan, Ph.G., B.Sc., Professor of Botany and Pharmacognosy in the St. Louis College of Pharmacy. Fifth Edition. 472 Pages, 407 figs. Published by The C. V. Mosby Co., St. Louis, 1928. Price \$5.00.

The first edition of this book appeared in 1917; that within eleven years a fifth edition becomes necessary speaks well for the plan followed in this presentation of pharmacognosy. The drugs are taken up much the way advocated by the reviewer (see *JOUR. A. PH. A. XVII* (1928), 292-295), not from the standpoint of an evolutionary sequence, but from a strictly morphological one. Thus, leaves are taken up first, next leaf buds, then flowers, fruits, seeds, herbs, roots, etc., etc. The descriptions for each drug are short and concise, seldom covering more than a page of space, and illustrations are abundant. The author lives up to the statement, that the book is to serve merely as a skeleton, and only the absolutely essential of each drug is given. It is rather too bad that, in a work so well conceived, there should be any derogatory criticism, most of which could have been avoided by a more careful revision.

(1) The author contends that, for the beginner in pharmacognosy, the identification of drugs by their physical characteristics is sufficient; notwithstanding, the author goes far more into the microscopic structure than this premise should permit. Practically all that is stated on pages 23-38, under the caption "Vegetable Histology," might well be omitted; likewise, what is stated on pages 189-216, on the "Structure of Roots and Stems." Little of this is required in the identification of drugs by their physical characteristics. Furthermore, all of this the student will get in any good course in botany or vegetable histology.

(2) Notwithstanding the author's contention, that as a pharmacognosist, one is not interested in the question whether a drug is official or not, the reviewer believes that the book would be improved by a statement after each drug, as it is taken up, whether it is a U. S. P. drug, an N. F. drug, etc. There should appear, at any rate, under N. (Name), the Latin name, the English name and the synonyms given in the Pharmacopœia for each U. S. P. drug, and those given in the National Formulary, for each N. F. drug. The author is not always consistent in selecting his names, notwithstanding that on page 19, he states, that under this head come the Latin name,

meaning thereby the pharmaceutical title, the scientific English name, and then the more extensively used English names or synonyms. He frequently omits the Latin name; thus, under XANTHOXYLI FRUCTUS, page 118, he gives first a synonym, not recognized by the N. F., and then the English name; under CASSIA FISTULA, page 116, he gives only the synonym; under VANILLA, page 115, only the English name, etc., etc. Or, he gives the Latin name and omits the English name or the synonym, thus under CORIANDRI FRUCTUS, page 121, he gives the Latin name and the English name, but omits the synonym; likewise for FOENICULI FRUCTUS, page 124. Under APII FRUCTUS, page 125, he gives "Apium," as its Latin name and its synonym, but does not give its English name. Under "STRAMONII FOLIA," there is no mention that its Latin name is STRAMONIUM, as also its English name; the four names given are all synonyms, yet he does not mention Jamestown weed, which is a synonym recognized by the U. S. P. There are a great many of these so-called "inconsistencies."

(3) There are a great many misspelled words, some of them no doubt typographical errors, which careful proof reading would have eliminated. Since the student is not able to detect them, it makes errors of this kind especially unfortunate. The following are some of the more marked errors of this kind; on page 48, "Ericaceoe," instead of *Ericaceae*; on page 49, "Erythroxyllaceoe," instead of *Erythroxyllaceae*; on page 54, "Rosmarinus officinalas" for *R. officinalis*; on page 104, "Rubus Idoeus" for *R. Idaeus*; on page 128, "Chilies" for *Chillies*; on page 189, "Euphorbraceae" for *Euphorbiaceae*; page 244, "Panax quinquofolius" instead of *P. quinquifolium*; page 259, "Athaea" for *Althaea*; page 274, "Lilaceæ" for *Liliaceæ*; page 300, "Scopola" for *Scopolia*; page 310, "ERIODYCTION" for *ERIDICTYON*; page 364, "Thymelaceæ" for *Thymelaeaceae*; page 376, "Aquafoiaceæ" for *Aquifoliaceae*; page 396, "Hippocreaceæ" for *Hypocreaceae*; page 398, "Polyporus" for *Polyporus*; page 400, "Dryopteris Felix mas" for *D. Filix-mas*.

(4) *Errors in capitalizing or not capitalizing specific names.* In some cases, perhaps, there may be a difference of opinion; upon the whole, however, one must follow the rules set down for the guidance of botanists in this matter, or at least follow the examples set in the U. S. P., and the N. F., unless they are unmistakably

in error. Such names as *Canadensis*, *Americana*, *Gallica*, *Sinensis*, *Virginica*, *Californica*, etc., etc., used as specific names are adjectives, and adjectives in Latin are written with small letters; the author has written them all with capitals. Among the errors of this kind, he has on page 436, *Fagus Sylvatica* instead of *F. sylvatica*. On the other hand, some of the specific names still capitalized, he fails to capitalize, thus on page 64, *Datura tatula* should be *D. Tatula*, and on page 65, *Verbascum thapsus* should be *V. Thapsus*. Generic names are always capitalized and so on page 328, *graphis elegans* should be *Graphis elegans*. Here, too, it may be well to call attention to page 118; the name of the plant, according to many authors, is not *Xanthoxylum*, but *Zanthoxylum*; and on page 395, the botanic source of the drug is not *Sticta pulmonacea*, but *Lobaria pulmonaria*.

(5) *Non-conformities, sometimes mistakes, and omissions.* On page 63, *Hamamelis Virginica* should be *H. virginiana*. On page 64, why not use "STRAMONIUM," instead of "STRAMONII FOLIA?" And why not conform with the U. S. P. which does not recognize *Datura Tatula* as one of its sources? On page 119, under "LAPPAE FRUCTUS," the fruit of *Lappa officinalis*, should be the fruit of *Arctium Lappa*, which is also the source of LAPPA, as the author recognizes on page 260. On page 226, under "GLYCYRRHIZA," the author states this is the root of *Glycyrrhiza glabra* and *G. glandulifera*; the U. S. P. states it is the rhizome and roots of *G. glabra v. typica* or of *G. glabra v. glandulifera*. On page 243, we note "ANGELICA," why not ANGELICAE RADIX as in the N. F.? The N. F. recognizes rhizome and root of *Angelica Archangelica* and other species of *Angelica*; the author states root of *Archangelica officinalis* and other species of *Archangelica*. On page 303, under CORYDALIS, the author states, the tubers of *Dicentra Canadensis*; the N. F. states, the tubers of *D. canadensis* or *D. Cucullaria*. On page 345, the "Cinchona" described by the author is not CINCHONA, U. S. P. He should, in some place, make note of this; likewise, on page 348, the "Cinnamomum" described is not CINNAMOMUM U. S. P., the latter being described as *Cinnamomum Saigoncum*; here again, there is no statement to guide the student. On page 359, the author states that *Berberis* is the bark of *Berberis vulgaris*; the name "BERBERIS" should be reserved for the N. F. drug, which he in no place describes. On page 389, under "Galla," the insect causing the excrescence is described

as *Cynips Gallae tinctoria*, most authors call it *Cynips tinctoria*. Under FUCUS, page 393, the author fails to mention *Fucus serratus*, and *F. siliquosus*, as also sources of the drug. On page 417, the author uses "Saccharum" as a Latin name for sugar. It should be replaced by SUCROSUM, a name he fails to mention at all. On page 430, Shellac is not a substance exuded from various plants in consequence of the stings from the female insects of *Coccus Lacca*. On page 432, he states that COPAIBA is obtained from "Copaifera Langs—dorfii," and other South American species of *Copaifera Copaiba*, instead of species of *Copaiba* as advocated by the U. S. P. *Copaiba* is also the English name advocated by the U. S. P., hence "Para Copaiiba" and "Maracaibo Copaiiba," and not "Copaiva." On page 436, *Betula alba* does not belong to the *Cupuliferæ*, but to the *Betulaceæ*, neither does *Fagus sylvatica* belong to it, but to the *Fagaceæ*. On page 453, LACTOSUM is not mentioned, but the drug is described under its former title "Saccharum Lactis." At no place do I find a description of *Cocillana*, *Dextrosium*, *Tyroideum*, *Pituitarium*, *Vaccinum Variolae*, *Antitoxinum Diphthericum*, or of *Antitoxinum Tetanicum*.

(6) There are also botanical inaccuracies; thus on page 128, Pepper is described under Fleshy Fruits or Berries, since it is a drupe, it should have been described under Drupes; likewise on page 139, under White Pepper, Pepper is described as a berry. On page 135, Pimenta is described as a drupe, and on page 137, Solanum is described as a drupe, both are berries. On page 197, the author speaks of a nucleus sheath, why not use endodermis? And on page 213, no attempt is made to explain anomalous structure, and he simply calls the rings of growth, "spurious rings."

(7) No attempt has been made to criticize any of the other findings, as Habitat, Description, Constituents, Uses and Dose. These are, with the exception of what he states as constituents of ERGOTA, for the most part, probably correct.—CHARLES C. PLITT.

*International Health Year-Book, 1928.* Fourth Year. Reports on the Public Health Progress of 29 Countries (35 Public Health Administrations) in 1927. (L. of N. 1929. III. 6.) 1175 pages. Cloth. World Peace Foundation, American Agent, Boston, Mass. Price, \$6.00.

The Health Organization of the League of Nations has just published its International