

BOOK REVIEWS

THE CONDENSED CHEMICAL DICTIONARY. Fifth Edition by A. and E. Rose. Pp. xix + 1200 (double-column). Chapman & Hall, London, 1956. 100s. Reinhold Publishing Corporation, New York. \$12.50.

There can be few who do not regularly refer to glossaries, dictionaries and reference books to enlighten their regularly exposed ignorance. But even multi-volume dictionaries do not solve the problem of providing easy access to up-to-date information on names and technical terms. A single-volume chemical dictionary, because it can be revised more frequently, therefore attracts attention even though it is necessarily either restricted in its scope or in the extent of detail.

The fifth edition of this dictionary is stated to contain over 30,000 revised up-to-date entries. Data has been supplied by 355 named manufacturers, all except three having North American addresses. It is claimed that the material presented is specifically "tailored" to the needs of the busy chemist while at the same time providing ready answers to the more commonplace questions of the non-scientist. Its usefulness to the non-scientist appears likely to be considerable. Its usefulness to the scientist appears to the reviewer to be in those fields of chemistry with which the reader is less or not at all familiar. Thus the pharmacist or pharmacologist looking through the entries on names and terms about which he is knowledgeable will often be disappointed by what seems inadequate or over-simplified information. As merely one example in this connection the entry on insulin commences with the formula $C_{45}H_{69}O_{14}N_{11}S \cdot 3H_2O$ and continues "The pancreatic hormone which greatly increases the combustion of sugar and leads to a reduction of the amount of glucose in the blood, a systemic deficiency of which is the cause of diabetes". Its properties are given as "white powder, amorphous or crystalline; soluble in water" and yet the "Grade" is stated as "U.S.P.XV, a sterile solution in water", "containers" as "Glass bottles; ampoules; vials" and "Uses: medicine". There is no indication that it is used other than as a watery solution, no reference to complexes such as protamine zinc insulin, globin zinc insulin, isophane insulin or the insulin zinc suspensions. Very many similar examples could have been chosen to illustrate the limited nature of the information. And yet that very limitation can be of considerable help to the reader who merely wants a little information on a large number of items. Among the subjects stated to be covered are adhesives, agricultural chemicals, antibiotics, biologicals, brand names (all American though some are also used in the United Kingdom and elsewhere), catalysts, cellulose derivatives, ceramics and glass, colloids, cosmetics and perfumes, detergents, dyes and pigments, engineering materials, fats, oils and waxes, fertilizers, food and nutrition, isotopes, lubricants, medicines, metals and alloys, minerals, nuclear terminology, organic coatings, pesticides, petrochemicals, petroleum products, pharmaceuticals, plasticizers, plastics and rubber, rare earths, reagents, refractories, solvents, synthetic organics, textiles, trade names. Extensive sampling during review provided much new information and enlightenment; all of it clearly had an American flavour, U.S.A. shipping and transport regulations and available U.S.A. grades being indicated. Some entries were surprising, such as "Zwitterion" which is merely defined as "Trade name for N-coco-beta-amino-butyric acid; a 50-55% aqueous gel". American spelling is used throughout, some of it unexpected such as "heaver" for "heavier" at page 134. However, thumb-indexed, easy to handle, and of admirable format, this dictionary cannot fail to provide much help in concise form to all outside America who care to meet its cost.

FRANK HARTLEY.

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Gathercoal and Wirth's PHARMACOGNOSY. Third Edition by Edward P. Claus. Pp. 731 (including 307 illustrations and Index). Henry Kimpton, London, 1956. 93s. 6d.

The presentation of the subject matter of this book reflects a change in emphasis which is being accepted in the United States of America and to some extent in this country, stress being laid on the chemistry of crude drugs rather than on their morphology or taxonomy. Monographs on crude drugs are found in chapters devoted to Carbohydrates, Glycosides, Tannins, Fixed Oils, Fats and Waxes, Volatile Oils, Resins, Alkaloids, Endocrine Products, Vitamins, Enzymes, and Proteins. The taxonomical classification of previous editions is relegated to a short but adequate appendix. Macroscopical and microscopical descriptions of crude drugs are inadequate, the reader being referred throughout to the United States Pharmacopeia and the American National Formulary. For some drugs no descriptive matter is included, for others macroscopical characters only are given, while for yet others the microscopical features of the powdered drug only are described. However, the book is freely illustrated with drawings, photographs and photomicrographs, many of them excellent, though in most magnification is not stated. The key for the identification of powders suffers the defect of inflexibility and in some instances gives misleading information, such as the absence of sclereids from cardamom seed and the presence of lignified tissue in rhubarb. The introduction gives a clear outline of the scope of Pharmacognosy, but the quantitative microscopy of powdered drugs merits more prominence, and the section on chromatography would have benefited by the inclusion of examples. There is a good general account of the cultivation of drug plants, and of the collection and preparation for the market, although details for individual drugs are lacking. The chemical constituents of drugs and the characters of many of the isolated pure principles receive adequate treatment. Fuller accounts could have been given of digitalis, rauwolfia and senna leaf in the light of recent work. While specific references to original literature are few, general reading references are quoted for the chemistry of crude drugs, and for the new and useful chapters on Antibiotics, Immunizing Biological Products, Allergens and Pesticides. Another new feature of this edition is that proprietary products, some available in Britain, are named under the crude drugs from which they are derived. The nomenclature would benefit by the use of a uniform system and adherence to convention. The text is almost free from spelling mistakes and is reasonably well indexed. Presentation has been improved by standardising the size of print, and the quality of paper and the binding are excellent. This is a very comprehensive work with few omissions, and both student and drug analyst will find it a useful reference book.

FRANCIS FISH.

(ABSTRACT *continued from page 270.*)

the pneumonia was pneumococcal and about half the patients in each group had chronic chest disease. The results show that both antibiotics were equally effective in the treatment of bacterial pneumonia. Deaths were few (3 with tetracycline; 2 with chlortetracycline) and were confined to elderly patients with serious complicating diseases. The incidence of side-effects, mostly mild, was about 30 per cent with each antibiotic. This does not confirm the reported lower toxicity of tetracycline. The only serious complication followed tetracycline therapy, namely, one case each of staphylococcus enteritis, pulmonary moniliasis, and aspergillosis; in the last case the patient died.

S. L. W.