synonyms and trade names it is a dictionary as well. The definitions are concise but contain essential information. There are included about 2000 definitions and cross references in the volume under review. In nearly all instances the definitions are applicable to terms used in the United States, but there are exceptions; as an example, under "Alcohol, denatured," reference is made to "Methylated Spirit," by which name it is generally known in Great Britain, but not in U.S. Formulas for denatured alcohol could have been added, i. e., by reference to circulars or otherwise. The same criticism applies to some other terms, or an explanation should be made somewhere, indicating that the strength given is that of the British Standard-this is done in several places. Comparatively few in this country would look for "Paraffin, liquidum." There seems to the reviewer a way of correcting this and, therefore, attention is called. It might here be mentioned that about forty brand names are given under the heading quoted. A number of rather unimportant extracts are defined, but no fluidextracts. Coöperation of users is aiding in the improvement of this valuable dictionary.

· A few typographical errors occur-"jequirty" should be "jequirity" and "pecatorius" should be "precatorius;" in turning the pages several other misspellings were noted, but at this moment these are not recalled. Some of the definitions have not received careful consideration-"oil of cinnamon" is said to be cinnamic aldehyde. "Oil of Been" is stated to be a product of "Moringa aptera," should be M. arabica and, as "Oil of Benne" is much more frequently used than the former, attention should be called to the fact that the foregoing is not the product of Sesamum indicum. A number of lines of references and of definitions could be omitted; for example "Kola Nut" is followed by Kola seeds, a term given under the former.

The book is valuable for chemists and druggists as a dictionary and reference book; it is well printed and bound.

The Modern Soap and Detergent Industry. Volume III. The Manufacture of Glycerol. By Geoffrey Martin. 264 pages. D. Van Nostrand Company, 8 Warren St., New York. Price \$12.00.

The "Preface" states that "this volume on Glycerol completes the work on the Soap and Detergent Industry. In it will be found practical details of modern plants and processes, such as will be found in no other work published at the present time. In addition to this, there have been given all the more important patents on glycerol and a great many of the older ones, so that the reader can follow the lines of thought running through the minds of a long series of inventors, and possibly improve thereon. For the same reason references are given to the original literature, as nothing is more instructive for the reader than to read through original papers. He thereby attains an insight into the difficulties of manufacture and a freshness of view which is impossible to impart in any short summary of the work."

Acknowledgment is made for assistance by practical men employed in the related industries and by various firms—all of them seem to be British manufacturers. The author also thanks Messrs. J. & A. Churchill, Ltd. (London) for leave to use certain tables which appeared in Allen's "Commercial Analysis." In taking the latter reference from the "Preface" the misspelling, Allan, was noted—"a" instead of "e."

A. C. Langmuir has reviewed the volume for *Industrial and Engineering Chemistry*. He states that this is the only work in the English language devoted entirely to the subject (the manufacture of glycerol) and compares very favorably with Deite-Kellner's "Das Glyzerin" (1923) which has not been translated.

The portions quoted from the "Preface" indicate the reason for extended quotations from other publications—so as to collate information on the subject. Mr. Langmuir also calls attention to the fact that the F. J. Wood distillation process is given little space in the volume reviewed and that more than 150 million pounds are produced by this process in the United States. Attention is also called to a descriptive article in *Trans. Am. Inst. Chem. Eng.*, 5, 261 (1909), which Dr. Martin probably overlooked. It is stated that the patent rights of this described refining process will soon expire.

The Book is divided into six sections, comprising 33 chapters. The sections deal with the manufacture of crude undistilled glycerol, the manufacture of distilled glycerol, miscellaneous methods of producing glycerol, properties, technical applications and statistics of glycerol; polymerized glycerol and glycerol substitutes; commercial valuation and analysis of glycerol. The index of authorities covers nine 3-column pages and the index of subjects forty-five 2-column pages.

The type, illustrations, paper and press work is good and the book is necessary for the technical library and for the industries in which glycerol is an important item.

A Textbook of Physiology. By William Zoethout, Ph.D. Second Edition. 616 pages,  $5^{1/2} \ge 8^{1/2}$  inches, with 186 illustrations. Price, cloth, \$4.50. C. V. Mosby Company, St. Louis, Publishers.

The author states in the Preface that the book is intended to fill the gap between the larger texts and the brief treatises on physiology. References are made to the former books for those who seek a deeper knowledge of the subject and thus the author holds his treatise down to a comparatively small volume, which serves admirably as a text in dental and pharmacy schools. The author begins with the study of the characteristics of protoplasm and ferments and proceeds to tissues, cellular exchange, muscle-nerve physiology and the interrelationship of the organs.

The blood-general properties, composition-its circulation, etc., receives consideration in about 100 pages of text matter. This important subject is followed by chapters on Gas Exchange; Respiration; Foods, Digestion, Absorption, Movements of the Alimentary Canal, Metabolism, Animal Heat, Diet, Internal Secretions, the Kidneys, the Skin, the Receptors, or Sense Organs; the Central Nervous System; Reproduction.

Both the table of contents and index are well arranged for ready reference. The author has made the volume both interesting and instructive and succeeded well in presenting the fundamentals of physiology without overburdening the student with theories. It seems to the writer that the book is well suited for pharmacists and students of pharmacy.

The mechanical work is good—the type clear, most of the illustrations serve the purpose well and the paper and binding are good.

Drug Store Business Methods, a textbook on Commercial Pharmacy. By Charles W. Pearson, Associate Professor of Commercial Pharmacy at the Massachusetts College of Pharmacy. 300 pp. Price \$2.75. Lea & Febiger, Publishers, Philadelphia.

The author has been successful in the treatment of his subject by presenting principles and practices that are applicable to everyday business activities. A definition of "commercialism" as the maxims and methods of commerce or of commercial men, and strict business principles is proper and acceptable; however, there is something about the term "commercial pharmacy" which is not pleasing to some; therefore "a textbook on Commercial Pharmacy" might have been omitted, for it may be questioned whether the definition is more specific than the title. This, however, is a small matter compared with the able manner in which the author has presented his subject. The book is divided into five parts and 45 chapters.

The first part of "Drug Store Business Methods" deals with sales and the customer, the second part with methods of bringing goods and service to the attention of the patron and prospect, the third part to proper recording of business transactions, the fourth division to the laws of business conduct and the fifth is given to more or less of a résumé and business management.

In the chapter on Salesmanship the author goes into the usual details. He might, perhaps, have written at greater length on health, neatness, cleanliness, address, as essentials in salesmanship—qualities that are differentiating marks of distinction. A natural, easy manner is more appreciated by the average patron than fulsome attention. These points are ably presented in the chapter on "Personality," in fact the part serves as an excellent introductory for this useful book.

The various means and methods of advertising are given due consideration; however, the author might have said more about wasteful and faulty advertising and objectionable methods of publicity. The illustrations of window displays could have been improved upon and it might have been well to include a professional window or two, especially now that there is a "Pharmacy Week" to be featured.

The part devoted to Accounting is good and gives the reader an opportunity to judge his own methods or improve on them.

While the part in which laws applying to the drug business are considered is brief, the essentials given are helpful and it also suggests their importance.

Part V, Store Management, includes more pages than other sections of the book. Herein the author discusses problems of store location, beginning and organizing the business, banking