

NEW BOOKS.

A TEXT-BOOK OF PHYSIOLOGICAL CHEMISTRY FOR STUDENTS OF MEDICINE. By JOHN H. LONG, M.S., Sc.D., Professor of Chemistry in Northwestern University Medical School, Chicago. Philadelphia: P. Blakiston's Son & Co. 1905. 424 pp. Price, \$2.50.

The modest prefatory statement of the author that this book is intended for beginners, should not be allowed to encourage the idea that it is in any sense an "elementary" treatise of the ordinary sort. Although the treatment of the subject-matter tends throughout to be distinctly chemical in method, Professor Long has not lost sight of the fact that some knowledge of biological science is certainly essential to a proper understanding of the chemistry of living beings. The general classification of the subject adopted is one that will meet with approval. The intimate combination of physiological theory, descriptive text and laboratory directions which is introduced in this manual is likewise a good one in principle. The chemical components of the body and its nutrient substances—termed "nutritives" instead of nutrients—afford the themes for the first section; this is followed by the discussion of ferments and the digestive processes, the chemistry of the blood and of the various tissues and glands with their special products; finally the metabolic changes are elucidated by a study of the processes and products of excretion and the transformation of energy in the organism.

In a text-book which aims to compile only the established facts of any science the omission of many controversial questions ought not to be criticized unfavorably. Nevertheless, the author's chapter on the proteids is scarcely as satisfactory as many of the others. For example, the crystallized proteids and the valuable American contributions on plant proteids are barely mentioned.

The reviewer especially commends the historical treatment as a factor of distinct didactic value. The new book has as distinctive features the introduction of the recent theories of immunity and of the modern physico-chemical methods (cryoscopy, electrical conductivity) applicable in physiological work. All the descriptions of experiments to be done are unusually clear and comprehensive; they might advantageously be greatly increased in number, particularly in the chapter on the urine, which seems inadequate. Thus hippuric acid is not mentioned at all. Recent American investigations on nutrition are accorded considerable space.

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