

phants to the United States and raise them for ivory? The putting of the questions exposes the absurdity of the plan as applied to some articles. The cost of producing manna would probably involve the best thought of the customs service for the next two generations—the manna meanwhile resting in the warehouse pending decision.

“Breaking away from these inconveniences, the Senate proposes the export value of manna, ivory and all the rest of the long list, from acids to Zingiber. The value of the country of origin is the standard—what the American importer paid for it where he got it, in short. But there is an important addendum to this decision, an addendum which fills several pages of the amended bill. Under certain circumstances the President may by proclamation raise or lower tariff duties 50 percent.

“If President Harding finds that the protection to the American manna industry is insufficient he can make the ad valorem rate 15 percent instead of 10 percent. Again, if the foreign value of tusks becomes uncertain he may change the basis of value to the value of American tusks, which would probably double or treble the duty exacted on imported tusks, provided the President found that there was such a thing as an American-grown

tusk. The President is further empowered absolutely to cut off all importation of manna or tusks and any other article where he finds unfair trade practices which tend to crush out American manna and tusk growers, etc.

“Finally, if Abyssinia or the Congo discriminates against the articles of the United States, in the opinion of the President, then he is empowered by proclamation to clap onto manna, tusks and the like whatever duty he finds necessary to equalize the discrimination shown by Abyssinia and the Congo. It is not a dull and edgeless thing, this valuation weapon which the Senate has fashioned. If the President is of a mind to be arbitrary he can apparently do anything he wants to with the tariff under the proclamation powers accorded to him.”

DEGREES FOR A PRICE.

A Philadelphia Public Ledger man, evidently following up evidence that degrees were being sold in Philadelphia and New York to foreigners, secured a doctor's degree by purchase; the price paid was \$41.00. The *Ledger* of April 23rd printed a reduced photographic reproduction of the diploma, and the accompanying account is very interesting reading matter.

BOOK NOTICES AND REVIEWS.

Bacteriology for Students in General and Household Science. By Estelle D. Buchanan, M.S., recently Assistant Professor of Botany, Iowa State College, and Robert Earle Buchanan, Ph.D., Professor of Bacteriology, Iowa State College, and Bacteriologist of the Iowa Agricultural Experiment Station. Revised Edition. 12mo., 560 pp. Cloth, \$2.60. New York, The Macmillan Company.

This volume is a revision of the lectures given during a great many years to students in Home Economics at the Iowa State College of Agriculture and Mechanical Arts. The first edition was published in 1912, and owing to many changes in point of view and development in the science of bacteriology a revision was called for. The Introduction deals with Historical Notes and Germ Theory of Fermentation, Decay and Disease. Section I comprises Morphology, Classification and Distribution of Microorganisms; Section II, Cultivation and Observation of Microorganisms; Section III, Physiology; Section IV, Fermentation or Zymotechnique; and Section V,

Microorganisms and Health. The Appendix contains a Key to the Families and Genera of the Commoner Molds, an Authors' Index and a Subject Index. The book is written very clearly, and the text is elucidated with 360 illustrations. We can cheerfully recommend it to pharmaceutical students and to pharmacists, chemists and bacteriologists.

OTTO RAUBENHEIMER, Ph.M.

Colorimetric Analysis. By F. D. Snell. 16 illustrations, 150 pp. Cloth, \$2.00. New York, D. Van Nostrand Company.

This comparatively new science consists of treating a solution of the substance to be tested with a reagent, in such a way as to produce a color which is proportional in intensity to the amount of the substance in solution. The methods are not only applicable to the determination of many metals but also to acid radicals and compound radicals to a limited extent. The test substances treated are Iron, Copper, Carbon in Steel, Lead, Bismuth, Arsenic, Aluminum, Chromium, Nickel, Cobalt, Manganese, Zinc, Potassium, Magne-

sium, Gold, Titanium, Vanadium, Tungsten, Fluorine, Chlorine, Perchlorates, Nitric and Nitrous Acids, Ammonia, Phosphorus, Silica, Boron, Oxygen, Hydrogen, Peroxide, Sulphur, Hydrogen Sulphide, Selenious Acid, Salicylic Acid, Cyanides, Water, Oils and Dyes. Truly enough material in such a small volume! We wish this little book and the new science the best of success.

OTTO RAUBENHEIMER, Ph.M.

Handbook of Laboratory Glass Blowing. By Bernard D. Bolas, with Numerous Diagrams by Naomi Bolas. 12mo. 106 pp. \$1.50. New York, E. P. Dutton & Co.

This little book is an excellent treatise on the practical application of glass blowing in the laboratory. The many illustrations help the reader to understand the text. Students, pharmacists and chemists will be amply repaid by studying this book and making use of the knowledge herewith gained. The author deserves thanks, not only for the publication of this monograph but quite especially for giving the underlying reason for each detail of procedure. It is a little book well worth having in the laboratory.

OTTO RAUBENHEIMER, Ph.M.

The publishers, Harcourt, Brace & Co., New York City, have submitted the following two texts for review:

Fundamental Principles of Organic Chemistry. By Charles Moureu, Member of the Institute and of the Academy of Medicine and Professor at the Collège de France. Authorized translation from the 6th French Edition by Walter T. K. Braunscholtz, B.A., A.I.C. Octavo, 399 pages.

The author, also a member of the Paris Faculty of Pharmacy, has lately received the degree D.Sc. *honoris causa* from the University of Montreal, for his chemical researches and for the numerous methods of application of chemistry in warfare which he effected during hostilities. No less an authority than Sir William J. Pope, the well-known Professor of Chemistry in the University of Cambridge, wrote a very interesting introduction to this book, in which he recommends it to English students.

The 7 chapters of the work comprise the following subjects: General Theories, Hydrocarbons, Functions containing O, Functions containing N, Organo-Mineral Compounds, Heterocyclic Compounds and Dyestuffs. The chemical nomenclature proposed by the Geneva Congress in 1892 has been freely used in the

original French edition, but, in view of the fact that it is only partially followed in the United States, the translator preferred to use the standard English nomenclature and enclosing some of the Geneva names in brackets.

It is to be hoped that the present edition will also be given a favorable reception, which it fully deserves.

Practical Biological Chemistry. By Gabriel Bertrand, Professor in the Faculté des Sciences and the Institut Pasteur, and Pierre Thomas, Assistant in the Faculté des Sciences and the Institut Pasteur. Translated from the 3rd Edition by Hector A. Colwell, M.B., D.P.H., joint author of "Radium, X-Rays and the Living Cell," late Pathologist to the 36th General Hospital, Salonika. Octavo, 348 pages.

Prof. Gabriel Bertrand is known as an authority on biological chemistry the world over. Those who were fortunate enough to see and hear him at the 8th International Congress of Applied Chemistry during September 1912 in New York City will surely never forget him. Besides his many papers read before this Congress, his general lecture "Sur le Rôle des Infinités Petites en Agriculture," published in Vol. 28 of the Transactions, is a master work on the application of biological chemistry in agriculture.

During the past decades biological chemistry has made progress which may fairly be described as phenomenal. The composition and chemical relations of substances that play the principal part in metabolism have been elucidated, not only analytically but also synthetically. As a consequence, biological chemistry has advanced to the status of a definite branch of science, and now has its own specialists and laboratories, its own methods and literature.

Prof. Bertrand's "Guide pour les Manipulations de Chimie Biologique" is a standard, in fact, the standard work on this subject. The translator, Dr. Colwell, deserves credit and thanks, as he made this work available to the chemist who does not master French. It is with regret that we notice the expression "degrees Beaumé." It was Antoine *Baume*, and not *Beaumé*, the Paris apothecary and Professor at the Collège de Pharmacie, who invented the hydrometer scale, which still bears his name!

OTTO RAUBENHEIMER, Ph.M.

Organic Medicaments: Préparation des Médicaments Organiques. By E. Fourneau. 350 pp. Illustrated. Price 25 fr. (J. B. Baillièrre & Sons, Paris.)