

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.)

There comes to the editorial table a volume entitled "The Preparation of Organic Drugs." Ernest Fourneau, head of the Pasteur Institute, member of the Academy of Medicine and director of the Poulenc Laboratories, is the author of this, one of the few books available for particulars as to the preparation of organic medicaments. There is no lack of detail in this volume such as is usual with others on this subject. Dr. Roux, director of the Pasteur Institute, has supplied a comprehensive preface in which he refers to the experience of Monsieur Fourneau in Madrid in practical laboratory demonstrations and in schools of pharmacy, and his theoretical and practical experience. These lessons are absolutely complete on every subject they touch. It is admitted that therapeutic researches are not greatly encouraged in France, the large number of new medicaments going to France from other countries. Monsieur Fourneau is convinced of the necessity of being independent of foreign lands for the important medicaments and in this volume has contributed much to incite young chemists to enter this work. The subject matter is divided into 2 parts: "Lessons" and "Practical Work." The first part of the book gives the rationale of the processes involved in the preparation of the organic compounds, and is clearly set out so that advanced students will have no difficulty in understanding. For example, in the first lesson relating to guaiacol the various steps in the preparation of orthonitrophenol are described, then the rules for nitration, other processes for preparing the nitrophenol, the methylation of pyrocatechin, and so on throughout this part of the book. The practical part describes the mounting of apparatus, with advice to beginners; many illustrations are given. This is followed by detailed accounts of the preparation of the various compounds, giving the quantities of reagents required, and full details as to manipulation. The yield is in nearly every case stated. The preparation of intermediate products is described with as much detail as the chief substance. The effect of a scanning of this work, which, by the way, is written in French, is to give the fingers and the brain instant occupation by following the formulas set down.

HELEN PITKIN SCHERTZ.

PUBLICATIONS RECEIVED.

The Story of Drugs. By H. C. Fuller. The *Centurion* states that this is a fascinating book on a subject rarely opened at all to laymen.

The author is H. C. Fuller of the Industrial Research Laboratories, Washington, D. C. What drugs are and where they come from; "Farming for Medicines;" patent medicines; vaccines and serums; vitamins (engagingly entitled "The spirit-world of Medicine"); the question of "dope;" cosmetics; the medical rôle of alcohol—all these are discussed. The publisher is the Century Co., 353 Fourth Ave., New York City, and the price is \$3.00.

The book has been written with the purpose in mind of giving the public a better understanding of drugs; considerable space is given to an exposition of the need of alcohol in pharmacy and pharmaceutical and chemical manufacturing in an effort to dissociate in the minds of the people such employment from that of beverage, a use that no longer is lawful. The author presents the matter from every standpoint, arguments relative to which our readers are informed and therefore only the following quotations are given:

"In the national prohibition law alcohol is classed as a liquor. Its manufacture, sale, and use is surrounded by a mass of regulation that causes much hardship and dissatisfaction to the legitimate users. . . . The unfortunate circumstance is that alcohol as a medium for the manufacture of drugs and medicine has to be treated as a liquor. . . . It ought to be made the subject of special provisions and methods of administration; its legitimate use facilitated and not hampered."

The table of contents indicates the subjects discussed: What drugs are and where they come from; Beginnings and accomplishments of the medicine industry; How medicines are made; The rôle of alcohol; Farming for medicine; Patent medicines; their place in the economy of the nation; Nature's gift to mankind; Vaccines and serum therapy; In the spirit world of medicine; Vitamins; Dope and not dope; Self-medication—the family medicine chest; Paint, powder, and rouge: the height of the complexion; Hay fever: the malady of strenuous America; Legislation and its effect on the drug business.

Some will not wholly agree with the views expressed by the author on "patent medicines" and the family medicine chest, but this is a book written for the laity, for those who use these preparations, and the author's reasoning will lead the reader to think about practices he has heretofore followed without reasoning. Still there was an opportunity, in our opinion not fully taken advantage of by the author,