

of casein in the textile industry, casein food stuffs, miscellaneous applications.

One of the most interesting products mentioned is "galalith," an insoluble compound formed by the action of formaldehyde on casein. It forms a perfect substitute for ivory, ebony, horn, tortoise-shell, celluloid, coral, imitation marble, etc. "Galalith" is inodorous and does not burn easily. It can be dyed, and the crude article, while warm, can be bent blocked and stamped, retaining its form perfectly when it cools. It does not attack metals, and is one of the best insulating materials known.

Among miscellaneous uses of casein, the following are mentioned to show the great variety: In paper industry for water-proofing, sizing, etc., water-proof and fire-proof asbestos paper and board, washable drawing and writing paper, paint remover, shoe polish, photographic plates, ointments, soap making, etc.

L. L. VANSLYKE.

A MANUAL OF BACTERIOLOGY. H. U. WILLIAMS. 4th edition, revised by B. M. Bolton. P. Blakiston's Son & Co., Philadelphia.

This is an excellent edition of a well known and widely used brief text in bacteriology. The present edition has the same scope and purpose as the former editions but a considerable number of changes and enlargements have been made to bring the subject down to date. The book is well written and serves as a good digest of the subject. In the hands of a beginner it would seem that it might be found too much condensed. It is written from the standpoint of the medical man and for the use of medical students or practitioners it can be safely recommended where a brief text is desired. The typography and cuts are good and the index is excellent.

W. D. FROST.

HANDBUCH DER SPRENGARBEIT. BY OSCAR GUTTMANN. 2nd ed. Druck und Verlag von Friedrich Vieweg und Sohn, Braunschweig. 1906. pp. 99.

The first thirty-five pages of this handbook are devoted to brief accounts of the history of blasting, the composition and characteristics of the more important of the different classes of explosives used, and the devices employed for exploding them. The remaining pages are given over to blasting as applied in mining and quarrying, with descriptions of the manual and mechanical methods of preparing blasts, the methods of estimating charges and determining how they should be placed and fired. The book contains 146 illustrations in the text, and five folding plates, besides two folding tables devoted to safety explosives. These latter give the names and composition of upwards of 110 explosives, most of which have been proposed for use in the fourteen years that have elapsed since the first edition of this work appeared, and it is in connection with

this feature and that of rock drills that the largest amount of new matter has been inserted in the present edition, though it is in all other regards brought up to date and made a serviceable, practical and reliable handbook. It is naturally written from the standpoint of European practice, which differs in many regards from that which obtains in this country. It will therefore be interesting to those familiar with the official objections raised to American practice in the past to note how large a number of nitroglycerol preparations containing ammonium nitrate have now been accepted for use in Europe and even in Great Britain.

CHARLES E. MUNROE.

RECENT PUBLICATIONS

BECKENHAUPT, C. DIE TETRAEDERTHEORIE IN LEBEN, IN DER EVOLUTION U. IM AUFBAU DER MATERIE. Grundzüge einer atomistisch-mechanischen Naturgeschichte. Heidelberg : 1906. 8. XIX u. : 91 ss. Mark 2,80.

BECKENHAUPT, C. ÜBER DIE CONSTITUTION DES ÄTHERS UND DER ELEKTRONEN UND DEN MECHANISMUS DER ELEKTROMAGNETISCHEN VORGÄNGE. Heidelberg : 1906. gr. 8. VI u. : 89 ss. Mark 2,40.

BÖCKMANN, F. DAS ZELLULOID, SEINE ROHMATERIALIEN, EIGENSCHAFTEN UND TECHNISCHE VERWENDUNG. 3., ungearbeitete Auflage. Wien : 1906. 8. 140 ss. mit 40 Abbildungen. Mark 1,80.

CHURCH'S LABORATORY GUIDE. A MANUAL OF PRACTICAL CHEMISTRY FOR COLLEGES AND SCHOOLS, SPECIALLY ARRANGED FOR AGRICULTURAL STUDENTS. Revised by Edward Kinch. London : Gurney and Jackson. 1906. 8 vo. 336 pp. 6s 6d.

CLAASEN, H. BEET-SUGAR MANUFACTURE. Translation from 2nd German Ed. by W. T. Hall and G. W. Rolfe. New York : John Wiley & Sons. 1906. XIV + 280 pages. \$3.00.

CLAYWORKER'S HANDBOOK. London : Chas. Griffin & Co. 1906. 354 pp. 6s. CONGRÉS INTERNATIONAL. 7., pour l'étude de la Radiologie et de l'ionization tenu à Liège du 12 au 14 Septembre 1905. Comptes rendus. Liège 1906. Fr. 18.50.

DALMON, H. LE VENIN DES SERPENTS. Paris 1906. Fr. 4.50.

DENNSTEDT, DR. M. ANLEITUNG ZUR VEREINFACHTEN ELEMENTARANALYZE F. WISSENSCHAFTLICHE UND TECHNISCHE ZWECKE. 2 Aufl. Hamburg : 1906. 99 ss. Mark 2,40.

DONATH, B. DIE GRUNDLAGEN DER FARBENPHOTOGRAPHIE. Braunschweig. 1906. Mark 5,80.

DAWSON, J. EMERSON AND A. T. LARTER. PRODUCER GAS. New York : Longmans, Green & Co. 8 vo. 276 pp. 73 Illustrations. \$2.50.

EBELING, M. LEHRBUCH DER CHEMIE AND MINERALOGIE. 2 Auflage. Teil I.: Unorganische Chemie. Berlin 1906. IX u. 345 ss. mit 376 Figuren. Mark 31,80.

ECCLES, R. G. BEDEUTUNG DER KONSERVIERUNGSMITTEL FÜR DIE MENSCHLICHE ERNÄHRUNG IN WIRTSCHAFTLICHER UND HYGIENISCHER HINSICHT. In Deutscher Bearbeitung herausgegeben vom Bunde Deutscher Nahrungsmittelfabrikanten. Heidelberg 1906. gr. 8. X u. 172 ss. Mark 4,50.