

described. There are sixty or more pages of formulas in the chapters mentioned, and the information given is of value to pharmacists. The hundred or more pages following relate to oral diseases, treatment, etc., and contain many formulas, and tests for albumin, sugar, indican, etc., are given. A number of pages outline urine analysis and saliva analysis.

The chapter on miscellaneous subjects includes formulas for toothache gum, toothache drops, lotions, lubricants, plastic compounds, hardening fluids, bleaching compounds, formulas for making negatives, lantern slides and Roentgen-Ray work, etc.

The book will prove of value to pharmacists because the formulas will enable them to supply preparations that have been employed successfully in dental practice, and give them a better understanding of the dentist's needs.

Organic Chemistry or Chemistry of the Carbon Compounds. By Victor von Richter. Edited by Prof. R. Anschütz and Dr. H. Meerwein. Translated from the 11th German edition by E. E. Fournier D'Albe, D.Sc., A.R.C.Sc. Volume III. Heterocyclic Compounds. P. Blakiston's Son and Company. Philadelphia. Price \$6.00.

Richter's "Organic Chemistry" needs no introduction to organic chemists. Volume III completes the English translation of the 11th German edition. This volume deals with the heterocyclic compounds having rings containing successively O, S and N, two N members, an O and an N member, and three, four, five, and six-member substances. All except the more rare classes of heterocyclic compounds are considered. The vegetable alkaloids of the pyridine, tropine, cinchonine, morphine and isoquinoline groups are treated in a fairly comprehensive manner from the viewpoint of structure. The information given, however, is not sufficiently comprehensive to fill the requirements of the analyst. The facts stated are so numerous and the subject matter so condensed that the work is much more nearly an encyclopedia than a textbook. Structural formulas are given for the principal representatives of the more important classes of substances. References to the original literature are given quite generally so that the book becomes useful to researchers, particularly those who do not care to purchase the much more expensive works like Beilstein's "Organische Chemie." English-speaking chemists will notice the absence of the year in the references, the volume and page only being given. Another feature particularly unfortu-

nate for the pharmacist is that the last German edition appeared ten years ago. Consequently there are many recently discovered synthetics much used in medicine, such as acriflavine, butyn and mercurochrome, which are not described. Like the preceding volumes in the set, Volume III has its own index. Teachers and students alike will appreciate the resultant increased utility for rapid reference work. Considering the great typographical difficulties in publishing a work so complex as this, the translator and the publisher are to be congratulated on producing a book so free from errors.

L. E. WARREN

Jahrbuch der angewandten Naturwissenschaften. Vol. 32, 1920-1921. Von Dr. August Schlatterer. Lex. 393 pp. Cloth, \$1.50. Herder & Co., Freiburg in Breisgau.

Germany is the home of the year books. The one before us deals with the entire field of applied natural sciences. Among the many chapters we must call attention to the following which are of special interest to pharmacist, chemist and physician: Chemical Technology by Prof. Dr. Karl Scheid, Dentistry by Dr. Heinrich Lauer, Veterinary Medicine by Dr. K. Brueggemann, and Medicine by Generaloberarzt Dr. Karl von Schnizer. The last subject is cleverly divided into physiology and pathology, general and special therapy and hygiene. This chapter also contains a list of the newer remedies comprising two and a half pages.

Prof. R. Lais in Triberg contributes a special article on "Modern Plant Variation," illustrated with a colored plate showing how dandelion flowers can be varied according to Mendel's Law. This article alone is worth the price of the book! Another valuable addition is the Necrology containing obituaries of scientists, etc., who died during 1920.

The Jahrbuch, or still better, a set of these Year Books, is a valuable addition to any library.

Taschenbuch der Mikroskopischen Technik. Von Benno Romeiss. 10. edition von Alexander Bohm und Albert Opper. 12 mo. 472 pp. R. Oldenbourg Verlag, München.

If a book passes through ten editions, then it is a proof of its utility. The General Part contains 13 chapters treating the microscope, the microtome and the preparation of the object. The Special Part consists of 22 chapters treating the cell and the microscopical examination of all the different parts of the anatomy including blood and urine.

Very complete indices of Literature, Authors and Subjects conclude this valuable book which we can highly recommend to those interested.

OTTO RAUBENHEIMER, PH.M.

The Riddle of the Rhine. By Victor Lefebure. Victor Lefebure was a French chemical liason officer during the war; in this book he gives a comprehensive description of the development of chemical warfare, from the first use of gas by the Germans in 1915 to the last campaigns of the war. The account of the change, of the releasing of gas from cylinders, to the use of the "Livens Projector" and the German "cross shells" containing gaseous compounds of phosphorus, arsenic and organic poisons, is most interesting.

The book is of the propaganda type, and has for its chief purpose the calling to the world's attention the monopoly of the organic chemical industry which is controlled by the Interessens Gemeinschaft, "I. G.," of Germany. These huge dye works centered along the Rhine and its tributaries put Germany, although technically disarmed, in command of the largest source of munitions the world has ever produced. The connection between organic chemical research in Germany and the government is inseparable and it is estimated that within six days from the outbreak of any future war, Germany would be in a position to control the world supply of dyes, explosives, poisonous gases and organic drugs.

The seriousness of this situation cannot be overestimated; the next war will be fought with smoke, gas and gas shells and the country which establishes the initiative in gas warfare, viz., in the discovery of new poisonous com-

pounds and effective methods of protection, will have on its side one of the greatest components of victory. The treaty of Versailles does not prohibit Germany's taking the lead in the chemical industry and consequently this scientific nation is "fixing" tons of atmospheric nitrogen monthly and establishing an economic system of resources through chemistry, which will stand out as the peer of any country in the world.

Every American interested in the preservation of peace and democracy should read Victor Lefebure's book. The position of the American Chemical Warfare Service and its power and effectiveness in conflict is discussed most judiciously. Finally, the future of any nation in war or in peace is limited by the size of its chemical industries; let us of America build and utilize this fundamental science in industry until researches and power of production of American Chemistry will be the glory of our nation, anything short of this is anachronism in industry. J. C. KRANTZ, JR.

Nursery Guide for Mothers and Nurses, by Louis W. Sauer, M.D., senior attending pediatrician, Evanston Hospital, Illinois. Published by C. V. Mosby Company, St. Louis, Mo. Price \$1.75. 188 pages.

"This little *vade mecum*, written for mothers and nurses, gives in clear, concise form all essential details in the care and feeding of infants. Unlike other books it does not give hazardous feeding formulas and prescriptions. It tells how to care for the infant in health and in disease. The subject matter is coherent and systematically arranged. The illustrations are timely."



Grove Park Inn, Asheville, N. C.