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The meeting then adjourned.

E. F. Kelly, *Secretary*.

BOOK NOTICES AND REVIEWS.

Die Riechstoffe und Ihre Derivate. (Odor Bearing Substances and Their Derivatives.) Unter Mitarbeit von Fachgenossen Herausgegeben von Dir. Alfred Wagner. Erste Abteilung: *Aldehyde der Aliphatischen Reihe.* Bearbeitet von Dir. Alfred Wagner, Chem. Alfons Burger, Prof. Dr. F. Elze. A. Hartlebens Verlag, Wien und Leipzig.

This volume is the first of a promised series designed to assemble the chemical knowledge of organic compounds which have proved interesting to the perfumer. Treatment of the subject matter is extensive and detailed. Some conception of content and scope may be conveyed by the following brief description.

Of the 404 pages comprising this book on the aliphatic aldehydes, 72 are devoted to a general introduction to the chemical reactions of aldehydes in general and 332 to a "practical section" which treats the individual aldehydes in monographic fashion. The monograph on citral occupies 108 pages, that of citronellal 70 pages. It is obvious to which aliphatic (sub-classified as olefinic) aldehydes the perfume chemist has hitherto bestowed most of his creative energy and powers of observation! Still the space devoted to the saturated aldehydes, 43 in number, totaled 131 pages, a striking contrast to the few lines received by a scant half dozen of these aldehydes in other treatises a few years ago. The subject matter presented for each aldehyde varies greatly of necessity, but the following

subtitles are generally included: history, structure, occurrence, preparation and production, physical properties, chemical reactions, derivatives and identification and genetic relationships. Occasionally statements on the microchemical identification of a given aldehyde are reprinted. The sections devoted to the aldehydes of special importance, particularly citronellal and citral, are much expanded in comparison with the outline just sketched. In addition to these same topics, methods of analysis, commercial production, purification and the synthesis of numerous derivatives are given. The subsection on the higher fatty aldehydes is likewise prefaced by a description of synthetic methods.

At first thought the reviewer was inclined to regard the work as representing a modernized version of Semmler's "Die Aetherischen Oele." However, continued study of the volume developed the impression that the perfume chemist was dominant in the selection of the material and particularly in the manner of its presentation. Wagner's style of treatment resembles that of Houben-Weyl (the volume is dedicated to Prof. J. Houben) in that the central objective seems to be to characterize each "Riechstoff" in detail as an organic chemical and to give exact directions for its preparation. From this point of view it is immaterial whether a given substance is wholly artificial, wholly natural or a hybrid of these origins. Botanical relationships also

are relegated to a quite secondary position. But like Semmler, Wagner has made very extensive use of schematic tables presenting chemical relationships. In fact these tables are an outstanding feature of the book.

From the above description it is evident that a group of specialists headed by a German technologist has undertaken to condense another large block of technical information. Being the product of such an effort "Die Riechstoffe" will be judged by comparison with those monumental handbooks which have been a conspicuous culmination of modern German scientific culture. To pass a final judgment on a work of this scope, particularly with only the first volume at hand, is scarcely the function of a single critic. Essentially such publications are extended abstracts of a specialized literature. Accordingly they are informative guides to the original publications and at most a substitute therefore when the latter are inaccessible to a given investigator. This estimate is not written to disparage the great usefulness of these compendia, but to emphasize the sphere of their special functions. Handbooks in other fields have filled a real need. Doubtless this publication will be of genuine assistance to many workers in commercial laboratories where the pressure of daily tasks and the lack of exceptional library facilities prohibit extended reading. Being written from an "organic" viewpoint, Wagner's "Riechstoffe" ought to appeal more strongly than some other publications in this field to the professors of organic and biochemistry in our colleges. The reviewer commends it to their attention particularly in the hope that it will contribute to a less stilted presentation of "terpene chemistry" than that offered by current textbooks.

R. E. K.

FORMS OF DIGITALIS MEDICATION.

Digitalis infusion is preferred on the Continent since an aqueous extraction of digitalis leaves contains the milder glucosides, *i. e.*, digitalein and gitalin. Stalks and ribs are poorer in glucosides than the leaf-tissue, so that a well-mixed powder should be prepared from the entire leaf. If powdered digitalis leaves contain more than 5% of moisture, decomposition through hydrolysis may take

place; to a far greater extent is this the case with aqueous solutions where enzymes oxidize and break up the glucosides. The author discusses the various forms in which digitalis is prescribed.

A few of the suggestions made are the following: Digitalis powders should be prepared freshly to avoid deterioration of the glucosides through absorption of moisture. The points of importance in making an infusion of digitalis are the avoidance of prolonged heating and filtration through paper, the use of concentrated infusions is quite inadmissible. The excipient for digitalis pills must not contain water, the most suitable substance being wool fat. Since it is noted that resorption of digitalis takes place in the rectum and that the dissolved substances are carried straight into the *vena cava superior*, thus avoiding the liver, where far-reaching processes of decomposition always take place, the rectal method of administered digitalis, in the form of suppositories is highly desirable, and preferable to the intravenous route. It is essential, however, that digitalis preparations for rectal application be water-soluble and contain all water-soluble glucosides unchanged. Such a water-soluble product is obtained by percolation of the leaves, the percolate is evaporated in vacuo, and the dry residue is made up with dextrin or pure glucoside to the original weight of the digitalis leaves used; after biological testing and standardization the suppository is made, with care taken not to heat the theobroma oil above 40° C. Aqueous digitalis preparations are the only ones suitable for injection, but since decomposition of the glucosides takes place almost immediately, it is necessary to use a 2-chambered ampul, one containing the sterile water, the other the residue of the alcoholic digitalis glucoside solution (alcohol removed); the contents are mixed just before use.—R. Rapp, *Wissensch. Pharm. Rezeptur u. Defektur*; through *Pharm. J.*, 123 (1929), 369; 442.—J. P.—*Squibb Abstract Bulletin*.

OMISSIONS FROM THIS NUMBER.

On account of the addresses of the presiding officers and Association Business it is necessary to omit several of the Departments from this number of the Journal.