

NOTE.

Preparation of Triphenylchlormethane.—In my paper on "The Preparation of Triphenylchlormethane," in the November number, page 752, this Journal, a misstatement occurs which gives an ambiguous meaning to the paper. The first paragraph should read: "It is generally stated * * * *triphenylmethane* is the principal product of the reaction," and not *triphenylchlormethane*, as it reads now.

I also wish to take this opportunity to state that Thorp ("Inorganic Chemical Preparations," p. 39) recommends the preparation of aluminum chloride, in small quantities, by the same method as given in my paper.

M. GOMBERG.

NEW BOOKS.

DIE AETHERISCHEN OELE. Von E. GILDEMEISTER und FR. HOFFMANN, bearbeiten im auftrage der firma Schimmel & Co. in Leipzig. Berlin: verlag von Julius Springer. 1899.

THE VOLATILE OILS. By E. GILDEMEISTER and FR. HOFFMANN. Written under the auspices of the firm of Schimmel & Co., Leipzig. Authorized translation by EDWARD KREMERS, Madison, Wis. Milwaukee: Pharmaceutical Review Publishing Co. 1900.

THE CHEMISTRY OF ESSENTIAL OILS AND ARTIFICIAL PERFUMES. By ERNEST J. PARRY, B.Sc., etc. London: Scott, Greenwood & Co. 1899. New York: D. Van Nostrand Company.

The subject of the essential or volatile oils has until very recently been given a distinctly secondary place in the chemical text-books in comparison with the class of fixed oils. Indeed, a few lines about terpenes and camphors has been thought quite a sufficient treatment by the writers of some of the most reputable text-books until quite lately. But this state of things could not remain in view of the brilliant work done in recent years in this branch by men like Wallach, Tiemann, and von Baeyer. As Prof. Emil Fischer, of Berlin, has recently remarked, it is a chapter of organic chemistry that has undergone more rapid development within the past fifteen years than any other.

It is fortunate that, the need having been felt, it should have been filled by the firm of Schimmel & Co., of Leipzig, who are so intimately and honorably connected with the industry of the

essential oils, stepping forward and commissioning scholarly and competent men like Drs. Gildemeister and Hoffmann to write a book covering this ground. The result is the magnificent volume before us in which, as Prof. Kremers says, we find a happy blending of history with chemical science and technology that is quite unique in modern chemical literature.

With true German thoroughness, the work begins with an Historical Introduction, in which we have an account of the spice trade in antiquity and during the middle ages, illustrated by two colored charts, showing "the highways of commerce" in ancient times and in the middle ages, respectively.

This introduction also contains a history of volatile oils, and a history of the methods of distillation and of distilling apparatus. This portion of the work shows much antiquarian knowledge and research and is from the pen of Dr. Fr. Hoffmann, the former editor of the "Pharmaceutische Rundschau," of New York, now resident in Berlin. It is copiously provided with bibliographic references and is of very great interest to the historical student.

The General Part which follows, discusses first the theoretical basis for obtaining volatile oils by steam distillation and then takes up for enumeration and scientific description the more commonly occurring constituents of volatile oils. This descriptive part is very valuable to the chemist, as it epitomizes the latest and most accurate results in this group, and gives full references to the journal literature in foot-notes. This is followed by an account of the methods of examination of volatile oils, both physical and chemical, and lastly we have a list of plants arranged according to families, from which volatile oils are obtained.

The third and longest division of the book is the Special Part, in which we have the history, origin, preparation, properties, composition, examination, and commercial statistics of the volatile oils. The number of individual oils so treated in detail in the original German work is 422, and in Prof. Kremers' translation 430.

Besides the two colored charts already referred to as found in the Historical Introduction, we have two colored maps of Ceylon and of Calabria and Sicily, respectively, and numerous wood-

cuts illustrating the conditions of production of some of the essential oils.

The German publication forms a stately volume of 919 pages, bound in half morocco, and will form a most satisfactory addition to any chemical library.

A few words specially with regard to the American edition. In Prof. Kremers, of the University of Wisconsin, the authors found a most competent translator and editor for the English issue, as it is a field in which he has himself made valuable contributions and with which he is entirely familiar. By condensing several of the sections in the Historical Introduction and putting the bibliographical notes together at the end of the book he has been able to bring all the matter in the compass of 733 pages, without sacrifice of any important feature.

The charts and illustrations are all reproduced and the book is well printed and finely bound.

The work of Mr. Parry on "The Chemistry of Essential Oils and Artificial Perfumes," which also appeared in 1899, while not so ambitious a work as that of Drs. Gildemeister and Hoffmann is, nevertheless, a valuable work, written throughout in a scientific spirit and with a careful consideration of available sources of information. Without attempting anything in the way of a history of the subject, it starts in with the general properties of the essential oils briefly stated, and then gives an excellent review of the compounds occurring in essential oils, stating the most approved views with the aid of structural formulas. The sections on the preparation and analysis of the essential oils are relatively brief and deal with the subject only in a general way. The systematic study of the oils, which takes up the body of the book, deals with them according to the botanical relationship of the plants yielding them, that is, according to natural orders. This part seems to have been well done and the journal literature is considered throughout. A chapter on terpenes follows. The chemistry of artificial perfumes, to which 41 pages are devoted, is well treated, in fact is the best summary of our knowledge which, as far as the writer knows, has appeared in the English language. It makes frequent reference to the patent literature, giving numbers and dates of patents, giving an account of the ionone and violet-oil patent litigation, quoting Tiemann's

and Fritsche & Co.'s patents in full, explains the methods for the manufacture of vanillin, heliotropin, artificial musk, hyacinth, etc. The appendix contains a valuable table of the constants for the more important essential oils. The book can be thoroughly commended as furnishing a compact and convenient reference book on the subject. SAMUEL P. SADTLER.

CHEMISCH-TECHNISCHE UNTERSUCHUNGSMETHODEN. Herausgegeben von DR. GEORG LUNGE. Dritter Band, mit 104 abbildungen. Vierte auf- lage. xxii + 1082 pp. Berlin: Verlag von Julius Springer. 1900. Price, M. 23.

This volume contains Mineral Oils and Examination of Lubri- cants, by Dr. D. Holde; Oils and Fats and Special Methods of the Oil and Fat Industry, by Dr. Rob. Henriques; Examina- tion of Resins, Balsams and Gum Resins, and Drugs and Galen- ical Preparations, by Dr. Karl Dieterich; Caoutchouc and Caoutchouc Wares, by Dr. Rob. Henriques; Ethereal Oils, by Dr. E. Gildemeister; Raw Materials, Products, and By-products of Sugar Manufacture, by Dr. O. von Lippmann and Dr. Georg Pulvermacher; Starch, by Dr. C. von Eckenbrecher; Spirits, by Dr. A. Ebertz; Brandy and Liqueurs and Vinegar, by Dr. G. Schüle; Examination of Wine, by Dr. Karl Windisch; Beer, by Prof. L. Aubry; Examination of Vegetable Material Con- taining Tannin, by Dr. C. Counciler; Leather, by Dr. Joh. Paessler; Paper, by W. Herzberg; Ink, by O. Schluttig and Dr. G. S. Newmann; Organic Preparations, by Dr. J. Messner; The Tartaric Acid Industry and Citric Acid Manufacture, by Dr. Hermann Rasch; and Organic Dyes and the Examination of Textile Fibers and Loading Materials, by Dr. R. Gnehm.

This is a wide range of subjects, which seem in the main to be well covered. The authors confine themselves very closely to methods of testing. Very little is said about methods of manu- facture. This seems on the whole something of a defect, for while it is true that information of this sort is otherwise attainable, it is widely scattered and one of the chief values of such a compila- tion as this is found in the saving of the time of the busy work- ing chemist. Very few chemists can expect to fully cover, even in analytical knowledge, so wide a range as is here presented.

The "Anhang" contains numerous tables from the body of the work printed on one side of the paper for pasting on the