Then, following the class reactions, are the more common individual compounds, listing in each instance the physical and physiological properties of the compound, the methods for its preparation, the characteristics of its important compounds and derivatives, following which are methods for its identification, and in many instances methods for its separation from other compounds as well as its quantitative estimation. In all there are considerably over 2,500 organic compounds considered in greater or less detail.

The volume closes with a chapter on the preparation of the necessary reagents, followed by a table of melting points arranged in ascending order, this being in turn followed by a boiling point table similarly arranged. The arrangement of the index is decidedly novel. The index of compounds is in tabular form, giving the name of the compound, the page citation, the formula, the molecular weight and the percentage composition. The volume is concluded by an author index to the numerous literature citations.

Organic chemists have long felt the need of such a work, and it will, I am sure, find a hearty welcome. The identification of an organic compound should be relatively simple if this reference work is used as a supplement to Beilstein and Richter's "Lexikon." It is likewise admirably adapted for use as a text in a course of qualitative organic analysis.

Ross Aiken Gortner

Molecular Association. By W. E. S. Turner. London and New York: Longmans, Green and Co. 1915. Pp. viii + 170. Cloth. $1.40 net.

This is a further contribution to the series of monographs on inorganic and physical chemistry edited by Alexander Findlay. Dr. Turner, with the cooperation of a number of his students, has prepared a praiseworthy contribution to this excellent series of publications. In the nine chapters of the book are given an introduction and a discussion of molecular complexity in gases, dissolved substances, and the liquid state. Special attention is given to "the influence of the solvent" in the case of solutions, also to surface tension, and other methods of measuring molecular complexity of liquids, to the molecular complexity of water and the theory of dynamic allotropy. The selection and use of molecular formulæ, molecular association and physical properties, and molecular association and chemical combination are the subjects of the last three chapters. A long and fairly complete list of references to original literature is given at the end of the book. The appendix contains in tabular form a summary up-to-date of work done on the molecular complexity of dissolved substances. Here also references to original publications are added.

The author evidently regards the various molecular weight determinations in solutions as indicative of the actual molecular weights of the dissolved substances, and does not consider that the "abnormally" high or low molecular weights so frequently observed may quite as well be explained by a species of chemical union between solvent and dissolved substance. Thus it is not surprising that the entire subject of "molecular association and chemical combination" should have received only a step-motherly treatment, but five pages of the monograph being devoted to it.

The book is a compilation and not an original contribution. It will doubtless be useful to the advanced student of physical chemistry, who has thus brought before him in available and readable form the essence of the various important contributions on the subject treated. The author is clearly an enthusiast over the molecular theory, and the student can not but get some of this enthusiasm in perusing the monograph. May this result in further experimentation that shall bring to light more useful knowledge and a better conception of the act of solution as related to chemical combination, on the one hand, and the forces of cohesion and adhesion, on the other hand.

The book is printed on good paper, the typography is excellent, the cuts are well executed, but the binding is unattractive, cheap and not durable in form.

Louis Kahlenberg