

While the faults of the book, which are chiefly those of omission, detract from its value and usefulness, it is clear to the reviewer that it will prove of value to the student of organic chemistry who has completed the usual text-book course in the subject, and is about to prepare for further work by a more detailed study of synthetical methods. The book contains a great many facts, well arranged and clearly put.

JAMES F. NORRIS.

TECHNOLOGIE DER FETTE UND OELE. HANDBOOK OF THE PREPARATION AND INDUSTRY OF THE ANIMAL AND VEGETABLE FATS, OILS AND WAXES. BY GUSTAV HEFTER, Director of the Triest Vegetable Oil Company, with the assistance of G. LUTZ, in Ausburg, O. HELLER, in Berlin, FELIX KASSLER, in Galatz, and other experts. pp 741. Berlin: Julius Springer. 1906. Bound, 22.50 marks.

This is the first of a series of four volumes dealing with the manufacture of the Fats, Oils and Waxes. Volume I considers the preparation of the fats and oils. Volume II pays special attention to the properties and uses of these substances, their by-products and commercial aspect. Volume III has to do with the industries, other than soap, employing these oils as of the edible and lubricating oils, the manufacture of degreas, rubber substitutes; varnish, Turkey red oil, etc. Volume IV is devoted exclusively to soap manufacture.

The subjects discussed in Volume I, just at hand, are the occurrence and formation of the oils, fats and waxes and the properties of the various acids and alcohols of which they are composed. The chemical and physical properties of the oils themselves are carefully considered.

Beginning with the fifth chapter the methods of obtaining these bodies are thoroughly and minutely discussed, nearly all the various processes and principal machines for storing, cleaning, conveying, crushing, shelling, cooking, pressing and extracting the seeds, as well as the methods of treating the oils themselves, and their by-products, being considered. The rendering and treatment of animal fats are detailed with equal care.

A whole chapter is devoted to the preparation of the waste fats. The last chapter deals with the bleaching and purification of the oils, the removal of water, sediment, albuminoids, acids, color, odor, etc.

Nothing has appeared on these subjects since the classical work of Schaedler, that can compare with the present volume in character, scope and minuteness. As an instance of the painstaking care shown in its preparation, may be cited an appendix describing advances in the subject while the book was in press. The copious references in two foreign languages, English and French, and especially the consideration of the work of Americans in this field are notable features.

The book fills a long felt want and may be most cordially recommended to all desiring information on these subjects.

A. H. GILL.