

BOOK REVIEW

EDIBLE OILS AND FATS, THEIR SUBSTITUTES AND ADULTERANTS. By G. D. Elsdon, B.Sc., F.I.C., Lancashire County Analyst. Ernest Benn, Ltd., 1926. Pp. 521. 45s.

Mr. Elsdon's book is a thoroughly comprehensive treatise which will at once take its place among the standard works of reference on the analytical examination of fatty oils. The work involved in compilation of a manual of this kind at the present day is enormous, and praise is due to the author for the thoroughness with which the task has been carried out, and also for the concise manner in which, having regard to the great number of references which are necessarily cited, the data have been presented. This aspect of the book is also greatly assisted by the good indexes and abundant sectional bibliographies which are given, and by the convenient system of giving the majority of original references as abstracts either in the *Analyst* or the *Journal of the Society of Chemical Industry*.

The analytical methods employed in the field of oils and fats, whether technical or dealing with the chemical constitution of the components, are both numerous and involved, owing to progressive improvements, real or supposed, which have been superimposed continuously upon the original processes proposed; at the same time there exist many lacunæ in our knowledge of these materials, probably more so than in any other branch of organic chemistry at the present day.

It is, therefore, good to find that the book stands out in its class in that the author does not merely describe, non-critically, a string of analytical processes for the deter-

mination, say, of the iodine number of a fat, but adds a paragraph "Method suggested," in which the relative values of the variant processes are assessed succinctly for particular cases which may arise. Similarly, he indicates freely throughout the text those parts of the subject which are still in much need of further research, and in this respect the work is to be regarded not only as an analytical handbook, but as an aid and stimulus to the investigator.

It may be asked, perhaps, whether certain sections of the book fall strictly within the scope of "Edible Oils and Fats," such as those on glycerol, and on rosin and rosin oils; also, perhaps the customary long lists of salts of the fatty acids on pp. 20-30, 34, 35, etc., might have been shortened with advantage, and again the number of individual oils described on pp. 168-187, 196-211, 237-249, 279-300, 323-354 may be unnecessarily large, although it is admittedly difficult to know where to draw the line.

The following minor points may be referred to for attention in the second edition which undoubtedly soon will be necessary—P. 36: "Unsaturated acids $C_nH_{2n-2}O_2$," should be " $C_nH_{2n-2}O_2$ "; p. 46: Twitchell's lead salt-alcohol method is sufficiently sound to warrant more extended mention: P. 54: The references to "p. 21" and "p. 140," obviously do not refer to the present book and have apparently been transcribed from Crowther and Hynd's original paper. P. 103: "Oswald" should read "Ostwald." P. 305: The reference to Matthes and Rohdich's work refers to unsaponifiable matter from "this quantity of fat," "this quantity," however, not being specified.*

*T. P. Hilditch in *Chemical Age*.