

4. The centrifugal method gives higher refined bleached colors with the recommended 30° Be' lye, but with weaker lyes the refined bleached colors are closer to those obtained by the cup methods.

AND WHEREAS, There are several disadvantages to the centrifugal method which must be considered; namely,

1. Additional equipment will be needed over the present, facilities for the A. O. C. S. cup method.
2. There will probably be need for changes in equipment design necessary to place the centrifugal method on a completely practical basis.
3. Under present conditions, the securing of new equipment is uncertain.
4. There will be difficulties involved in synchronizing the centrifugal method with procedures followed on other oils.

AND WHEREAS, The ultimate centrifugal refining loss test should correlate with commercial practice,

BE IT RESOLVED, That the A. O. C. S. Refining Committee suggest that at some future date the work on the development of the centrifugal refining method be continued at the Northern Regional Research Laboratory under the direction of Dr. R. T. Milner.

(2) WHEREAS, The present A. O. C. S. cup methods for hydraulic and extracted soybean oils have produced unsatisfactory results in many cases.

AND WHEREAS, The trading experience of the industry for many oils has been based upon the cup refining methods of the A. O. C. S.,

BE IT RESOLVED, That the Refining Committee continue their studies on modifications of the present A. O. C. S. cup methods which are now under way in Sub-Committees with the Northern Regional Research Laboratory collaborating in this work at the present time, and the new recommended procedures be subjected to collaborative work for possible adoption at the earliest time, if possible by September 1, 1943. Such methods to be tentative and subject to further modifications as conditions warrant.

Mr. Taylor moved that these resolutions be adopted; seconded by Mr. Durkee. They were carried.

Mr. Kruse offered the following resolution:

The present method for expeller oil is satisfactory and gives reproducible results. Modifications of the present methods for extracted and hydraulic oils would improve these from the standpoint of reproducibility and such modifications will be presented at the earliest possible time.

This was seconded by Mr. Sorenson, and carried.

Another meeting of this Committee will be called as soon as additional data are available for consideration.

BOOK REVIEW

"Practical Emulsions," by H. Bennett, Editor-in-Chief, *The Chemical Formulary*; Technical Director, Glyco Products Company, Inc. Chemical Publishing Company, Inc., Brooklyn, New York, 1943; 462 pp. illustrated; 15 x 22 cm. Price \$5.00.

This is a highly practical book which makes no attempt to delve into the theoretical aspects of emulsions. It concisely sets forth much helpful information on the production and preservation of good emulsions.

The book is divided into two parts. The first is concerned with emulsifying agents, type of emulsions, methods, formulation, equipment, stability of emulsion, and a discussion of several of the more important technical emulsions such as asphalt, cosmetic, detergent, lubricating, latex, food, leather and paint, polish and wax emulsions. Also included in this section is a chapter on dispersing and wetting agents. The section finally contains a list of some 600 emulsifying agents and 1,000 emulsions with references to their composition or source, and a list of demulsifying and defoaming agents.

The second part of the book gives formulas and methods for making many types of emulsions. Among them are agricultural sprays, cutting and soluble oils, cleaners and soaps, as well as emulsions in the fields of asphalts, cosmetics, drugs, foods, lacquers, leather, lubricants, medicines, paints, paper, polishes, resins, and textile.

H. C. BLACK,

Abstracts

Oils and Fats

Edited by
M. M. PISKUR and SARAH HICKS

TESTING EDIBLE OILS. Official methods of analysis in Portugal. *Oil & Colour Trades J.* 104, 130 (1943).

NEW METHODS FOR DETERMINATION OF FAT IN FOODS. A. Schloemer and K. Rauch. *Z. Untersuch. Lebensm.* 83, 289-305 (1942). Extn. of fat from milk by the Grossfeld method, in which the sample is hydrolyzed with HCl in presence of CHCl_3 gave results on fat content and the butyric acid no. of the extd. fat that agreed with those using the Gerber fat detn. method. Replacing the CHCl_3 with CCl_4 at first gave lower results, but on increasing the time of heating for hydrolysis and adjusting the ratio of reagents results were obtained which agreed with those of the Gerber and the Roesse-Gottlieb methods. The modified method for milk is as follows: 10 g. milk, 10 cc. CCl_4 , 15 cc. coned. HCl and some pumice stone are refluxed 20 mins. After cooling add 10 cc. 96% alc. and 40 cc. benzine, shake vigorously for 15 secs. and allow to stand 15 mins. The wt. of fat is detd. in a 25 cc. aliquot from the fat soln, phase and the results are obtained with the use of Table 4, p. 336 of "Anleitung zur Untersuch. Lebensm." The new method produces

less caramelization of lactose than the method using CHCl_3 or the Schmid-Bondzynski-Ratzlaff method. With dried milks 2 g. of sample, 10 cc. HCl, 10 cc. CCl_4 and 10 cc. alc. should be used as reagents and the addn. of the alc. should be followed by a 5 min. addnl. refluxing. In work on cheese, the Grossfeld Hoth method was as reliable and simpler than any modification of the CCl_4 method. Procedures for the use of the new method on dried eggs and bakery products were also prepd.

NEW METHOD FOR DETERMINING FAT IN CHEESE. J. Grossfeld and A. Zeisset. *Z. Untersuch. Lebensm.* 84, 193-201 (1942), Bring 5 g. sample, 6x6-cm. "Zell-glass," some pumice stone and 10 cc. 25% HCl to a boil in a reflex app. After 10 min. add 20 cc. CCl_4 . Boil 10 min., cool to 20°, add 30 cc. benzine (b.p. 60-70°), shake ½ min. and allow to stand over night. Amt. of fat in a 25 cc. aliquot is detd. and fat content is read from Table 4 in "Anleitung zur Untersuch. Lebensm.," p. 384. The method checks well with the international method and requires less reagents.