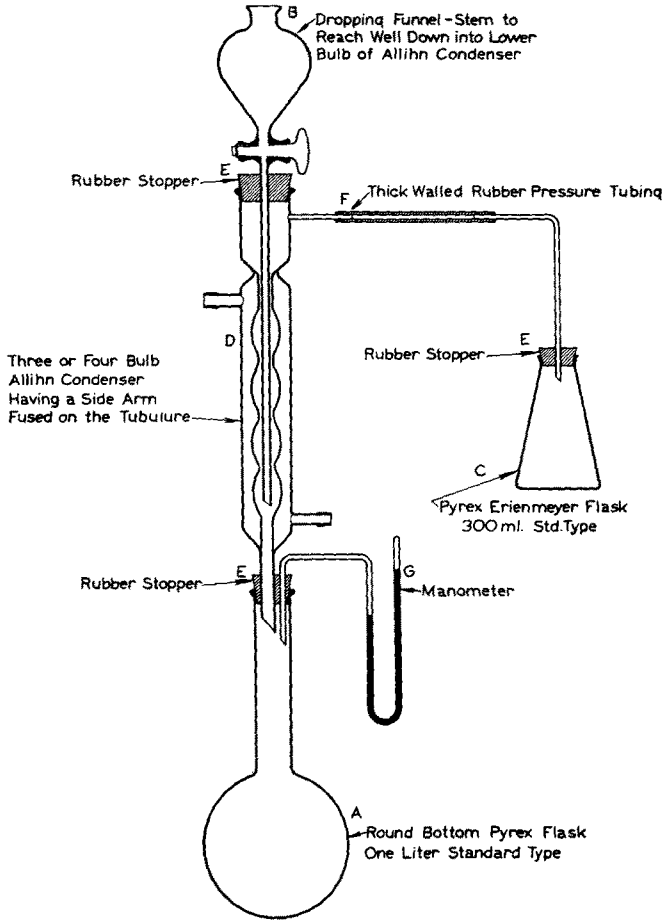
CORRECTION

Apparatus for Evolution – Volumetric Method for the Determination of Carbonates as CO_2 in Soap and Other Detergents



Apparatus for Evolution-Volumetric Method for the Determination of Carbonates as CO_2 in Soap and Other Detergents.

(We regret that this drawing in the April issue was incorrect. A comparison with this corrected sketch will show that the extension of the thistle tube inside the condenser to coincide with the inside condenser tube was the mistake.)

Abstracts

Oils and Fats

Edited by M. M. PISKUR

CHARACTERIZING OILS BY DETERMINING THEIR INTERFACIAL TENSION AGAINST WATER AND WATER SOLUTIONS. F. Seelich. *Fette u. Seifen 48,* 15-20 (1941).

EXTRACTION OF FAT FROM TISSUE FOR THE DECOMPOSITION TESTS. Fr. Kiermeier. *Fette u. Seifen 48,* 11-2 (1941). The influence of solvents and extn. methods on the peroxide and aldehyde reactions of fats was investigated. For peroxide detn. K. recommends refluxing 10 g. sample with 50 cc. low boiling petrol. ether. An atm. of CO_2 may be used. Filter in 100 cc. flask, make to vol. and evap. 10 cc. in a special app. Det. peroxide value of the residue. The method is not suitable for obtaining sample for the aldehyde test.

MEASURING OXIDATION OF A VEGETABLE OIL. G. L. Clark and F. M. Rugg. *Ind. Eng. Chem. Anal. Ed. 13,* 243-4 (1941). The measurement of the spreading pressure of a drop of liquid placed on a monomol. film on the hydrophilic balance is a far more accurate evaluation of oxidation in a vegetable oil such as soybean oil or the presence of hydrophilic groups in any liquid than the familiar peroxide number. The evaluation of lubricating addn. agents is an especially valuable application.

FRACTIONAL DISTILLATION OF UNSATURATED FATTY ACIDS. THE EFFECT OF VACUUM DISTILLATION ON THE ABSORPTION SPECTRA OF POLYETHENOID ESTERS FROM COD LIVER OIL. Frank A. Norris, Irving I. Rusoff, Elmer S. Miller and Geo. O. Burr. *J. Biol. Chem. 139,* 199-205 (1941). Spectroscopic and chem. evidence indicates that distillates obtained by vacuum fractional distn. of methyl esters of highly unsaturated fatty acids are sufficiently representative of the original material to be used in isolation and structure work. Analytical applications of the process are limited by the concn. of isomerized material in the residue.

SOLVENT EXTRACTION OF COTTONSEED OIL. H. S. Olcott. *Ind. Eng. Chem. 33,* 611-15 (1941). Problems involved in the introduction of solvent-extn. methods into the cottonseed oil industry are reviewed. Although there is a slightly higher refining loss, the hexane extn. of rolled and cooked cottonseed meats yields a refined oil directly comparable to that obtained by pressing methods. Except that larger yields of oil are obtained, no changes in the existing methods of treatment and disposal of oil and meal are required.

ANTIOXIDANTS AND THE AUTOXIDATION OF FATS. XIII. THE ANTIOXYGENIC ACTION OF ASCORBIC ACID IN ASSOCIATION WITH TOCOPHEROLS, HYDROQUINONES AND RELATED COMPDS. Calvin Golumbic and H. A. Mattill. *J. Am. Chem. Soc. 63,* 1279-80 (1941). Ascorbic acid is an effective antioxidant for certain vegetable oils, their hydrogenated products and esters. It enhances the antioxygenic activity of tocopherols, hydroxy chromans, hydroquinones and related compds.

A SUGGESTION FOR A U.S.P. TEST FOR OLIVE OIL TO ELIMINATE TEASEED OIL. Wallace H. Dickhart. *Am. J. Pharm. 112,* 371-2 (1940).

PURIFICATION OF GLYCEROL BY CRYSTALLIZATION. H. B. Hass and J. A. Patterson. *Ind. Eng. Chem. 33,* 615-16 (1941).

THE ISOLATION OF PURE LINOLEIC ACID BY CRYSTALLIZATION. Jerome Frankel and J. B. Brown. *J. Am. Chem. Soc. 63,* 1483-4 (1941). A bromination procedure is followed by crystn. to remove iso-acids.

FORMATION AND DETERIORATION OF PAINT FILMS. J. L. Overholt and A. C. Elm. *Ind. Eng. Chem. 33,* 658-60 (1941). Changes in the glyceryl esters of several unsaturated fatty acids under exposure to ultraviolet light. Data on the changes in I, acid, aldehyde, peroxide and ester values, viscosity, refractive index and total oxygen of olein, linolein, linolenin stearin on exposure to ultraviolet light are graphically presented.

THE PRODUCTS OF THERMAL TREATMENT OF RICINOLEIC ACID AND ITS MIXTURE WITH OXALIC ACID. V. I. Esafov and A. V. Shpadi. *J. Applied Chem. (U.S.S.R.) 13,* 1040-4 (1940). In heating ricinoleic acid at 200°, no decompn. to enanthaldehyde and undecylenic acid was observed, the main reactions being the formation of (1) estolides of linear type: and (2) cyclic esters: The products of both polymerization reactions (especially of the latter one) may be used for the prepn. of a composition for a plastic mass. (*Chem. Abs.*)