ABSTRACTS

Oils and Fats

Edited by
W. F. BOLLENS and R. E. KISTLER

The amino saponification of fats. II. E. De CONNO and L. TARSITANO. *Ann. chim. applicata* **22**, 433-40 (1932); cf. *C. A.* **12**, 1172.—In previous work, the fats have been sapond. in the presence of $PhNH_2$, thus forming the anilide directly. The reaction has now been carried out with *m*-xylidine, *p*-anisidine, and *p*-phenetidine in place of aniline. However, with these derivs. of aniline, the sapon. is not complete. All types of fats were tried: drying oils; semi-drying oils; non-drying oils, *i. e.*, peanut oil, oil of almonds, olive oil, castor oil; cod-liver oil; lard, suet.
A. W. CONTIERI.

David's method for the separation of solid from liquid fatty acids. R. JUNGKUNZ. *Chem. Umschau Fette, Öle, Wachse Harze* **39**, 171-3 (1932).—David's method (*C. A.* **5**, 594) is based on the insoly. of solid fatty acids in a large excess of NH_4OH at 13-14°. J. finds that myristic and lauric acids go largely into soln. and therefore rejects the method. P. ESCHER.

Determining the iodine number of the unsaponifiable matter in olive oil. B. RICCA and R. LAMONICA. *Olii minerali, olii grassi, colori vernici* **12**, 74-5 (1932).—Olive oils were secured from Reggio Calabria with the consts. d_{15} 0.9166-0.9175, acidity as oleic acid 2.01-6.62, sapon. no. 190.7-192, n_{25} 61.6-62.4, I no. 75.07-80.53. After the oils had been dried, filtered and kept in desiccators results of detns. of the I no. of the unsaponifiable matter varied from 76.93 to 134.50. Varying the length of the treatment with the I did not change the results. The amt. of unsaponifiable matter extd. from the oils varied markedly, though between definite limits. The I no. for the unsaponifiable matter was inversely proportional to the percentage of unsaponifiable matter. Together with the substance absorbing I there was extd., in varying proportion, some other nonabsorbent product influencing the final value. Special precautions in extg. the unsaponifiable matter and prolonging the washing of the ether ext. with water did not appreciably improve the results. The unsaponifiable matter always had an acid reaction (2-14% of the unsaponifiable matter).
RAFFAELE SANSONE.

A modification in the Villavecchia-Fabris sesame oil reaction. ANTONIO MONTEFREDINE. *Olii minerali, olii grassi, colori vernici* **12**, 93 (1932).—A few cc. of distd. water is added to the acid liquid. This is decolorized in the absence of sesame oil even if intensely colored; it remains colored in its presence. Some oils when decolorized take on a slightly greenish cast.
R. SANSONE.

The action of sun rays on olive oil. GUGLIELMO LOEW. *Olii minerali, olii grassi, colori vernici* **12**, 89-91 (1932).—Sun rays act on layers from 1 mm. to 1000 mm. in thickness. The thicker they are, the slower is the action. If the oil is placed in vessels covered with white or colored glass, bleaching takes place to the same extent, but much more slowly, almost all the action taking place in the last third of the exposure time. For bleaching quickly, max. contact between oil, air and sunlight is needed. With the oil flowing slowly down low steps bleaching takes place in ½ the time. Sun-bleached olive oil still gives a fluorescence in Wood's light. The purified oil of d_{15} 0.9170, acidity 2.03% I no. 82.6, sapon. no. 193.5, n_{20} 1.46588 and heat index 43.0, after 15 days' exposure to the sun in an open glass vessel had d_{15} 0.9172, acidity 2.03%, I no. 81.9, sapon. no. 192.2, n_{20} 1.46600, heat index, 44.8; and after 30 days, d_{15} 0.9175, acidity 2.03%, I no. 82.8, sapon. no. 191.9; n_{20} 1.46625, heat index 46.6 Increasing the exposure increased the viscosity.
R. SANSONE.

The relation of agronomic practice to the quantity and quality of the oil in flaxseed. I. J. JOHNSON. *J. Agr. Research* **45**, 239-55 (1932).—The av. oil content of flaxseed shows a fairly uniform increase from 5 days to 25 days after flowering, followed by a slight decrease to maturity. The I absorption no. of the oil increases rapidly from the 5th to the 17th day after flowering, then decreases slightly to maturity; this indicates that the satd. fatty acids are formed first in the synthesis of the oil but are progressively transformed to acid with a greater degree of unsatn. The analyses of the seed showed a very slight reduction in oil content with delayed planting in 1929 but no consistent differences in 1930. The I no. of the oil as detd. in 1930 indicated, a slight decrease with delayed planting for one variety but no significant change for another. W. H. R.

The action of sun rays on olive oil. GUGLIELMO LOEW. *Olii minerali, olii grassi, colori vernici* **12**, 89-91 (1932).—Sun rays act on layers from 1 mm. to 1000 mm. in thickness. The thicker they are, the slower is the action. If the oil is placed in vessels covered with white or colored glass, bleaching takes place to the same extent, but much more slowly, almost all the action taking place in the last third of the exposure time. For bleaching quickly, max. contact between oil, air and sunlight is needed. With the oil flowing slowly down low steps bleaching takes place in ½ the time. Sun-bleached olive oil still gives a fluorescence in Wood's light. The purified oil of d_{15} 0.9170, acidity 2.03%, I no. 82.6, sapon. no. 193.5, n_{20} 1.46588 and heat index 43.0, after 15 days' exposure to the sun in an open glass vessel had d_{15} 0.9172, acidity 2.03%, I no. 81.9, sapon. no. 192.2, n_{20} 1.46600, heat index 44.8; and after 30 days, d_{15} 0.9175, acidity 2.03%, I no. 82.8, sapon. no. 191.9, n_{20} 1.46625, heat index 46.6. Increasing the exposure increased the viscosity. R. SANSONE.

Determination of beeswax in candles. FRANCIS W. POWER and EDWARD S. HAUBER. *Ind. Eng. Chem., Anal. Ed.* **4**, 389-90 (1932).—The method recommended for sapon. no. is to use 40 or 50 cc. of 0.5 *N* or *N* KOH in abs. alc. with 3.5 g. of sample and reflux for 2-2.5 hrs. and titrate with HCl with 1 cc. 1% phenolphthalein. It may be assumed that Am. candles contain only beeswax, stearic acid and paraffin. The percentage of beeswax may be calcd. from the expression; percentage of beeswax

$$= \frac{\text{ester no. of candle}}{\text{ester no. of beeswax}}.$$

E. SCHERUBEL.

The significance and character of the retention of solvents. LEO IVANOVSZKY. *Chem. Listy.* **26**, 331-2 (1932).—Waxes and carbohydrates resembling waxes decrease the rate of evapn. of solvents very markedly. This property is called retention (R). The retention no. (Rz) is detd. by the loss in wt. in 100 g. of a 25% wax in a benzene soln. (b. 150-95° leaving under 1% residue) made under identical conditions and exposed to the atm. at 15° in cylindrical dishes with a cross-section area of 133 sq. mm. The retention becomes $R = 100 \div Rz$. For the retention of pure dil. wax solns. the relation $Rv = f_1(C_1V_1)$ holds until satn., where C_1 is the concn. and V_1 the sp. retention of the dissolved wax. The retention of satd. solns. is expressed by $Rg = (Rv)\text{max}$. Large series of detns. show that the R of sp. waxes is const. within narrow limits and characteristic numerically; it can be used as a criterion for their identification and purity for it is markedly affected by small addns. of foreign waxes. Cf. following abstr. F. M.

The retention of a solvent as a constant for wax. LEO IVANOVSZKY. *Chem. Listy.* **26**, 332-5 (1932).—The retention nos. (Rz) decreased in the following order for the waxes: crude montan, Japan, carnauba, beeswax, refined ozocerite, extn. paraffin, hard paraffin, normal paraffin, bleached montan, ozocerite-ceresin mixt., soft paraffin, hard paraffin, refined ozocerite-paraffin and beeswax-paraffin. The Rz values depend only on the chem. properties and purity of a wax and are not related to the m. p. The addn. of any wax decreased the Rz values of beeswax. Mixts. of paraffin with oxocerite or beeswax show minima in the Rz curves which allow the evaluation of the purity of ozocerite. The minima appear in the mixt. paraffin 97.5%, ozocerite 2.5%. For mixts. of ceresin and ozocerite it is necessary to add a quantity of paraffin to bring out the minima for the ozocerite content is usually small. The carnauba and montan waxes together with various mixts. of paraffin show no minima; their retention corresponds to the partial retention of 2 components following their percentage compn. F. M.

Sulfonated hydrocarbons as a soap base. H. POMERANZ. *Seifensieder-Ztg.* **59**, 357-9 (1932).—By adding at the double C bonds of a triglyceride one or $2HO_3S$ groups, Turkey-red oils are formed which resemble soaps but are stable toward CaO, MgO, dil. acids and alkalies. Still better results are obtained by sulfonating alkyl esters and amides of fatty acids, or by esterifying lower aliphatic hydroxy sulfonic acids with fatty acids, and also by reducing the CO_2H group of a fatty acid to a CHOH group with or without catalysts, and then esterifying with H_2SO_4; all these are products with a soap character but form no insol. soaps with CaO, etc., and do not hydrolyze in H_2O. By sulfonating hydrocarbons direct, detergents for wool washing have been manufd., but their constitutions have not yet been clearly detd. P. ESCHER.

ABSTRACTS

Soaps

***Edited by* M. L. SHEELY**

Explanation of Drop in Soap Production. *American Perfumer and Essential Oil Review,* October, 1932.—Significant trends which have combined to injure the soap trade are: (1) There are a smaller number of servants, who are apt to be wasteful with soap. (2) Paved roads, much cleaner than dirt and gravel roads, have greatly increased. The popular closed model of automobile also tends to keep out dirt. (3) Linoleum and tile, which require little soap for cleansing, have been substituted in many places for carpets and rugs. (4) By the widespread use of electricity in the household, the dirt from wood and coal stoves is avoided. (5) The use of chemicals in laundries. (6) Women wear clothing of lighter weights and less yardage than formerly. (7) The trend of industry is to let machines do the heavy dirty jobs. T. C. PITKIN.

Investigates Dry-Cleaning Soap Properties. *The American Perfumer and Essential Oil Review,* October, 1932.—C. L. Bird has recently made some experiments in Britain in order to study the effect of the addition of water to mixtures of soap (in this case, potassium oleate soap) oleic acid, petroleum spirit and denatured alcohol. The addition of water to potassium oleate in petroleum spirit gives a gelatinous precipitate; further additions increase the viscosity until a slight excess causes a decrease in viscosity with ultimate separation into two layers.

Mr. Bird reached the conclusion that commercial dry-cleaning soap should not contain more than 5% denatured alcohol and that the olein used should not be more than 60% saponified. The high oleic acid content in the absence of a little denatured alcohol is necessary to ensure stability.

Ethylene Glycol Soaps. *Perfumery and Essential Oil Record,* September, 1932.—Glycol "soaps" are now on the market under the names of diglycol oleate and diglycol stearate, and consist of mixture of the mon- and diesters. Soda, potash, ammonia or ammonia derivatives have been replaced by ethylene glycol.

The oleate is a liquid insoluble in water, but soluble in alcohol, esters, and hydrocarbons, and its solution in naphtha is being used in dry-cleaning. The stearate has a melting point of 58-60° C., and disperses in warm water, a 10% mixture with hot water giving a thick cream. It is said to be useful in wool-washing and in weaving rayon and silk, as well as in cosmetics. Both the oleate and stearate are used in polishes as emulsifying agents, and the addition of 4-6% to an ordinary soap is claimed to increase the detergent power and give a more lasting lather, with smaller bubbles. A special feature of these compounds is that they are neutral or slightly acid, whereas an ordinary so-called neutral soap is always alkaline when dissolved in water.

Litharge and glycerine mortars. GEORGE W. GLEASON. *Paper Trades Journal,* Vol. XCV, No. 15, Page 33, October 13, 1932.—The litharge-glycerine mortars, when made up with Portland cement and sand, are so plastic and "fat" that there appears to be little difference in the glycerine requirement for a certain plasticity due to the type of sand used. The addition or subtraction of relatively small masses of glycerine solution change the consistency materially.

A continual increase in the strength of set mortar is experienced with increase in the glycerine content of the glycerine-water solution used to mix the mortar. Such variation, because of the price of glycerine, should make possible an optimum concentration for given conditions.

Practically, the writer has found many uses for this mortar. It forms a strong, quick-setting cement for placing steel pins in concrete or machine base bolts. It cements tile joints, joins broken concrete, embeds wall inserts, etc. The property of rapid set combined with the high strength obtained to a large measure overcomes the high cost of the mortar.

Soap or synthetic compounds? *Chemical Abstracts.* Vol. 26, 6171 (1932).—J. STOCKHAUSEN and E. KESSLER. *Seifensieder-Ztg.* 59, 539-40, 558-60 (1932).—The pH values of 2 soaps of a synthetic washing compound and of Na_2CO_3 were determined with phenolphthalein and Alizarin yellow R indicators at 25° and 65°. The concentration of the soap and the amount of Na_2CO_3 added were varied to represent commercial conditions. Conclusions: The pH value of soap solutions is controlled by the percentage of Na_2CO_3 present: the hydrolyzing effect of soaps has little effect. The damaging effect of soaps containing Na_2CO_3 upon wool was determined by washing wool, drying, storage for 4 weeks and then applying the Allwoerden and the Pauly-Mark-Brunswik reaction for damaged fibers. Result: With normal soap-soda concentrations and temperatures no damage occurs, but increased temperature or increased time of exposure causes fiber deteriorations. The advertised damaging effect of hydrolyzed soap is without foundation.

PATENTS

Soap and glycerol. *Chemical Abstracts,* November 10, 1932.—John B. E. Johnson. French 728,431, December 18, 1931. Soap and glycerol are prepared by submitting a rapid current composed of a mixture of oil or liquefied fat and an aqueous solution of a basic saponifying agent in amount sufficient to form soap, to a relatively high temperature (e. g. 250°) at a sufficiently high pressure to insure complete saponification while excluding air and preventing decomposition of the soap formed at the temperature to which the mixture is submitted.

Soap manufacture. *Soap,* November, 1932.—U. S. Patent, 1,878,547, Soap Manufacture, Patented September 20, 1932, by Julius A. Schwantes, Wauwatosa, Wisconsin, assignor to Colgate-Palmolive-Peet Company, Chicago. The combination with a conveyor means, of means for forming soap into cakes on the conveyor means, and means for polishing and finishing the cakes while on the conveyor means.

Glycerol in laminated glass. *Chemical Abstracts,* Vol. 26, 6090 (1932).—Wilbur F. Brown (to Libbey-Owens-Ford Glass Co.). U. S. 1,873,280, August 23. Glycerol is used for bonding together layers such as glass and cellulose derivative compounds. C. F. C. A. 25, 5535.

Scouring action of soap on silk. *Chemical Abstracts.* Vol. 26, 6144 (1932).—RISAKU TSUNOKAYE. *J. Soc. Chem. Ind.,* Japan 35, Suppl. binding 405-10 (1932); of *C. A.* 26, 5762.—In the degumming of silk, the soap and its hydrolyzed products remain combined with the fiber physically and chemically and influence the nature of the silk. The substances which affect the silk are fatty acids, alkali and soap, the alkali destroying the luster and decreasing the strength and elongation, while the fatty acid increases the elasticity. Adsorbed saturated fatty acids hold the color of the scoured silk while unsaturated fatty acids, because of their oxidation, change its color. Adsorbed fatty acids also influence the degree of weighting of the silk. The effect of adsorbed soap on the strength, elongation and elasticity of the silk is various, but it is not so liable to undergo oxidation on the silk fiber. Fatty acids and not soap are the cause of the scroop on scoured silk.

Washing powder and soap powders containing water glass and their behavior in hard water. *Chemical Abstracts,* November 10, 1932.—WELWART. *Seifensieder-Ztg.* 59, 489-90 (1932).—So-called bleaching soda is a mixture of Na_2CO_3 and Na silicate, the latter usually in an insoluble form that does not aid in softening hard water, but increases the deposits on the fabrics and is a positive detriment. In soap powders its presence means a filler.

Middle soap. R. H. FERGUSON and A. S. RICHARDSON. The Procter and Gamble Company, *Industrial and Engineering Chemistry* 24, 1329 (1932).—Equilibria involving middle soap have been investigated in the systems tallow soap-sodium chloride-water, coconut oil soap-sodium chloride-water, and mixed soap systems at 100° C.

Middle soap has been described as it occurs in such commercial soap systems, and, from analyses of the actually separated phases, it has been possible to confirm fully McBain's discovery of the existence of this form of soap as a separate and distinct phase, immiscible with neat soap and nigre.

Commercial soap systems such as were investigated appear to stimulate to a marked degree three-component systems of soap, water, and electrolyte in concentration ranges where middle soap occurs; they exhibit the same types of equilibria as the pure soaps of single fatty acids.

Soap helps launch liner. *American Perfumer and Essential Oil Review,* November, 1932.—It is interesting to note that soap plays an important part in the launching of modern liners. The new French leviathan, the Normandie, which was launched at St. Nazaire on October 30th, required 35 tons of soap, tallow, and lard to enable the structure to move quickly and steadily along the slipway into the sea.

Registration, American Oil Chemists' Society Convention, October 20th and 21st

Agee, G. Worthen, and Wife, Barrow-Agee Laboratories, Inc., Memphis, Tenn.
Allbright, W. B., The Allbright-Nell Co., Chicago, Ill.
Aspegren, Herman, Norfolk Research Corp., Norfolk, Va.
Bennett, E. J., and Wife, Bennett Clark Co., So. Bend, Ind., and San Antonio, Texas.
Berg, I. A., Cereal Laboratories, Chicago, Ill.
Birch, R. B., Jr., Gillette Publishing Co., Chicago, Ill.
Blake, R. E., The Best Foods, Inc., Chicago, Ill.
Campbell, Archibald, Cincinnati, Ohio.
Cannon, Lloyd, and Wife, Sinclair Refining Co., Olmstead, Ill.
Carlson, A. J., University of Chicago, Chicago, Ill.
Clark, C. B., Corn Products Refining Co., Argo, Ill.
Connelley, Paul C., Gillette Publishing Co., Chicago, Ill.
Cosgrove, D. P., Sterne & Son, Chicago, Ill.
Craig, J. D , Spencer-Kellogg & Sons, Inc., Buffalo, N. Y.
Dawson, Lyman L., Vogt Processes, Inc., Louisville, Ky.
Degavre, Martin L., Colgate-Palmolive-Peet Co., Jeffersonville, Ind.
Doherty, J. E., Lever Bros. Co., Boston, Mass.
Dormitzer, H. C., and Wife, Wilson & Co., Chicago, Ill.
Durkee, M. M., A. E. Staley Mfg. Co., Decatur, Ill.
Eisenstadt, Wm., 133 W. Washington Street, Chicago, Ill.
Ferguson, J. L., J. L. Ferguson Co., Joliet, Ill.
Foerster, C., Darling & Co., Chicago, Ill.
Garrison, Kenneth, Purina Mills, St. Louis, Mo.
Gierahm, T. A., Southern Cotton Oil Co., Chicago, Ill.
Gillette, H. P., Gillette Publishing Co., Chicago, Ill.
Griem, M. E., Cudahy Brothers Co., Cudahy, Wis.
Groundwater, R., Swift & Co., Chicago, Ill.
Guillaudeu, Arthur, Swift & Co., Chicago, Ill.
Hamner, N. C., and Wife, Southwestern Laboratories, Dallas, Texas.
Hansen, Theo. B., Independent Biscuit Mfg. Co., Chicago, Ill.
Harrington, B. S., Armour & Co., Chicago, Ill.
Harris, Benjamin R., Epstein Reynolds & Harris, 5 So. Wabash Ave., Chicago, Ill.
Harris, John P., and Wife, Industrial Chemical Sales Co., Inc., Chicago, Ill.
Hartley, M. L., The Best Foods, Inc., Chicago, Ill.
Hatter, R. C , Van Camps, Louisville, Ky.
Hoyt, L. F., Larkin Co., Inc., Buffalo, N. Y.
Irwin, W. H., and Wife, Swift & Co., Chicago, Ill.
Jensen, L. B., Swift & Co., Chicago, Ill.
Johnson, Victor, University of Chicago, Chicago, Ill.
Kemper, David A., Cleveland-Cliffs Iron Co., Cleveland, Ohio.
Kiess, Arthur A., Armour & Co., Chicago, Ill.
King, A. E., Swift & Co., Chicago, Ill.
Kistler, J. C., Armour & Co., Chicago, Ill.
Kistler, R. E., Swift & Co., Chicago, Ill.
LaMent, H. H., Sharples Specialty Co., Philadelphia, Pa.
Lanier, S. J., Lever Bros. Co., Hammond, Ind.
Lappen, J. J., A. E. Staley Co., Decatur, Ill.
Leamon, E. C., Central Scientific Co., Chicago, Ill.
Lenox, R. V., Southern Cotton Oil Co., Chicago, Ill.
Lewis, W. Lee, Institute of American Meat Packers, Chicago, Ill.
Long, C. P., Procter & Gamble, Cincinnati, Ohio.
Luckow, Elmer R., and Wife, Allen B. Wrisley Co., Chicago, Ill.
MacGee, A. Ernest, and Wife, Skelly Oil Co., Chicago, Ill.
Martin, C. B., Sterne & Son Co., Chicago, Ill.
Marx, Victor, Chicago, Ill.
Maxfield, J. P., A. Daigger & Co., Chicago, Ill.
McDonell, G. H., American Can Company, Maywood, Ill.
McLeod, Wm. G., Canada Packers, Ltd., Toronto.
Miner, Carl, Miner Laboratories, Chicago, Ill.
Moore, G. A., Corn Products, Chicago, Ill.
Moran, J. A., Cudahy Bros. Co., Milwaukee, Wis.
Newton, R. C., Swift & Co., Chicago, Ill.
Oilar, Rozier D., West LaFayette, Ind.
Perry, R. W., Wm. Davies Co., Chicago, Ill.
Phelps, G. W., Swift & Co., Chicago, Ill.
Polczynski, Edward R., Cudahy Bros. Co., Cudahy, Wis.
Putland, A. W., Armour & Co., Chicago, Ill.
Pulfrey, Arthur, Corn Products Refining Co., Argo, Ill.
Pye, A. R., The Columbia Alkali Corp., Chicago, Ill.
Reese, W. J., Colgate-Palmolive-Peet Co., Kansas City, Kan.
Richardson, A. S., Procter & Gamble, Cincinnati, Ohio.
Richer, A. S., and Wife, H. Konstam & Co., Inc., Clearing, Ill.
Roeg, Louis M., Merck & Co., Inc., Rahway, N. J.
Robinson, A. A., and Wife, Wilson & Co , Chicago, Ill.
Robinson, A., Swift & Co., Chicago, Ill.
Roth, Wm., The Andrew Jergens Co., Cincinnati, Ohio.
Schille, J. L., Best Foods, Inc., Chicago, Ill.
Schroder, Arthur, Precision Scientific Co., Chicago, Ill.
Sheely, M. L., and Wife, Armour & Co., Chicago, Ill.
Sherrick, Paul, E. H. Sargent & Co., Chicago, Ill.
Sieck, Ernst, Sieck & Drucker, Chicago, Ill.
Siegal, L. A., Lever Bros., Hammond, Ind.
Sjostrom, O., 6204 S. Maplewood Ave., Chicago, Ill.
Spielman, L. A., Durkee Famous Foods, Inc., Chicago, Ill.
Stephen, R. A., J. L. Ferguson Co., Joliet, Ill.
Stern, Paul L., Clinton Corn Syrup Refining Co., Clinton, Iowa.
Strand, O. P., Wilson & Co., Chicago, Ill.
Taylor, W. L., and Wife, Archer-Daniels-Midland Co., Chicago, Ill.
Tefft, Henry D., Institute of American Meat Packers, Chicago, Ill.
Trainor, Geo. W., Darling & Co., Chicago, Ill.
Truxal, Geo. W., The Cleveland-Cliffs Iron Co., Cleveland, Ohio.
Tucker, Floyd, Corn Products Ref. Co., Argo, Ill.
Utesch, Donald N., Armour & Co., Chicago, Ill.
Van de Weghe, Marins, Holman Soap Co., Chicago, Ill.
Vibrans, Frank C., Institute of American Meat Packers, Chicago, Ill.
Visser 't Hooft, Dr. F., Buffalo, New York.
Vollertsen, J. J., and Wife, Armour & Co., Chicago, Ill.
Weatherhead, D. T., Darling & Co., Chicago, Ill.
Wrench, J., Industrial Chemical Sales Co., Inc., New York, N. Y.
Wright, R. E., Lever Bros. Co., Hammond, Ind.
Wurster, O. H., and Wife, Wurster & Sanger, Inc., Chicago, Ill.
Wylds, Harry W., Lever Bros. Co., Hammond, Ind.

Fully Automatic Water Softener Announced by Permutit

A NEW fully automatic industrial zeolite water softener has just been announced by The Permutit Company, New York.

By a combination of a meter operated switch and electric controls with a motor driven Permutit single valve, each operation of the water softener is conducted under precise control. Briefly, at the end of the softening run, the meter actuates the electrical controls which carry through the steps of: Cutting the softener out of operation. Backwashing it for a regulated period so as to secure thorough cleansing. Admitting a carefully regulated amount of saturated salt brine so as to assure thorough regeneration without wastage of salt. Rinsing out the hardness salts to waste with the minimum amount of rinse water. And throwing the softener back into service thus placing it again under control of the meter, which governs the volume of water to be softened during the softening run and initiates the start of the next regenerating cycle.

Not only may the new models be had in the full automatic type but it is also a relatively simple matter to apply the automatic control to existent downflow softeners thus converting manual to fully automatic operation.

Metal Polish in Powder Form

Such products as have been offered on the market give unstable suspensions in naphtha or gasoline and are unsuitable for use in making water base polishes. An improved product on which patent is pending consists of silica and suitable emulsifying and stabilizing agents. It is manufactured and sold in dry form to consumer trade. The consumer simply mixes the powder with water. Manufacturers or janitors' supply houses buy in bulk, mix with water, put in cans under their own label and sell to consumer trade as liquid metal polish.

Information as to purchase of the product and licenses to manufacture under pending patents can be obtained from the Hull Company, 130 Clinton Street, Brooklyn, N. Y.

Price charts in essential oils from 1929 to the present time are being sent on request, by Fritzsche Brothers, Inc., 78 Beekman street, New York.

A recent decision by the U. S. Customs Court, in the much discussed "Bergamot Oil Case," is expected to be an effective weapon against the adulteration of essential oils. The court held that oils containing any foreign substance were, within the meaning of the law, "compounds" and as such were subject to the prohibitive duty of the tariff against other than pure oils.

Investigation with Respect to Flaxseed Discontinued

The Tariff Commission announces that the investigation with respect to flaxseed has been discontinued and dismissed without prejudice.

This investigation was instituted June 9, 1931, for the purposes of Section 336 of the Tariff Act of 1930. The investigation also includes linseed or flaxseed oil, but this part is continued, in order to carry out the provision of Senate Resolution 243, 72d Congress, adopted June 20, 1932.

It is planned that the information with respect to flaxseed collected thus far in the investigation will be used in the preparation of a survey on the subject, under the provisions of Section 332 of the present tariff law.

Patterson Foundry and Machine Co., of East Liverpool, Ohio, has mailed an interesting booklet on "Special Processing Equipment" to the trade. Many illustrations of uses of their machinery make the booklet interesting and helpful to the plant superintendent and others.

Formation of a new sales division, called the Closure Division, is announced by the Armstrong Cork & Insulation Co., Lancaster, Pa. Dwight L. Armstrong, a vice-president of the company, has been made general manager of this division, which is comprised of three departments: Corks Department, E. F. Ebberts, manager; Cap Department, S. L. Barnes, manager; and Crown Department, J. C. Feagley, manager, assisted by J. M. McCormick.

The new president of the Chicago Perfumery, Soap and Extract Association is Dudley F. Lum, of Chicago. He was elected at the annual meeting in December to succeed Donald M. Clark. W. Kedsie Teller, of Columbus Laboratories, is the new secretary.

Carl F. Miller & Co., of 1008 Western avenue, Seattle, Washington, has been appointed sales representative in the northwestern field by the Glyco Products Co., Inc., of Bush Terminal, Brooklyn, N. Y. They will specialize on special emulsifying agents and synthetic resins and waxes.

Sesame Estimate Sharply Revised

November sesame seed report shows exports five thousand five hundred ninety-eight short tons. Egypt leads one thousand nine hundred ninety-three. Europe one thousand five hundred forty, United States one thousand four hundred fifty. Stocks Hankow November 30 three thousand five hundred short tons. Substantial revision crop estimate reduces exportable surplus of sesame seed from seventy thousand short tons to forty-five thousand or fifty thousand short tons.