important influence on the deposition of ceroid. It seems probable that some substance or substances which are present in cod liver oil causes the appearance of this pigment. They did not observe ceroid in rats receiving palmitic, stearic, oleic, linoleic or linolenic acids. Cirrhosis may be produced on a completely fat-free diet.

THE DEFECT IN UTILIZATION OF TOCOPHEROL IN PROGRESSIVE MUSCULAR DYSTROPHY. A. T. Milhorat and W. E. Bartels. *Science 101,* 93-4 (1945).

## PATENTS

HIGH VACUUM DISTILLATION PROCESS AND APPARATUS. K. C. D. HICKMAN (Distillation Products, Inc.). *U. S. 2,364,360.* This invention relates to improved high vacuum centrifugal stills and in particular high vacuum stills in which the condensing and vaporizing surfaces both rotate.

LUBRICANT POUR DEPRESSOR. E. Lieber and H. T. Rice (Standard Oil Development Co.). *U. S. 2,364,454.* The invention comprises the production of wax modifying agents by chemically condensing halogenated derivs. of abietic and related acids with aromatic compds.

PROCESS FOR TREATING FIBROUS PRODUCTS AND PRODUCT THEREOF. E. W. Glusenkamp (Monsanto Chemical Co.). *U. S. 2,365,813.* A combined grease proof and water repellent paper contained a previously prepd. N,N'diacyl diamino methane, where the acyl groups are those of fatty acids ranging from $C_{12}$ to $C_{28}$.

PROCESS AND REAGENT FOR DEMULSIFYING OILS. M. S. Arguss and H. Schindler (Pure Oil Co.). *U. S. 2,365,852.* Reagent for use in breaking water-in-oil emulsions comprises a major portion of sulfonated tall oil which has been neutralized with alkali metal hydroxide and a minor proportion of glycerin dichlorhydrin and *n*-Bu aniline.

BREAKING OF CRUDE OIL EMULSIONS. M. S. Arguss and H. Schindler (Pure Oil Co.). *U. S. 2,365,853.* This demulsifier contains Na salts of sulfonated tall oil and mahogany sulfonates, alc. and water.

TREATMENT OF FABRICS WITH METALLIC SOAPS. H. Schiller (Socony-Vacuum Oil Co.). *U. S. 2,364,391.* A treating soln. for fibrous materials against fungi comprises a heavy metal soap of a soap-forming org. acid; water, $NH_3$ in quantity sufficient to produce soln. of said soap in said water, and a quantity of an alkylolamine sufficient to delay the pptn. of said soap which otherwise results from the evapn. of the $NH_3$.

PRODUCTION OF HYDROXY FATTY ACIDS. Donald Price and Richard Griffith (National Oil Products Co.). *U. S. 2,367,050.* A process for the production of hydroxy fatty acids contains the steps of subjecting sulfated fatty acids, sulfated fatty oils, sulfated fats, sulfated fatty waxes to an acid hydrolysis and subjecting the acid-hydrolyzed mass to alk. hydrolysis at a temp. of 80 to 250°.

METHOD OF PURIFICATION OF GLYCEROL FORMED BY FERMENTATION. James S. Wallerstein and Ralph Thomas Alba (The Overly Bio-Chemical Research Foundation, Inc.). *U. S. 2,366,990.* The method of obtaining pure glycerol from fermented carbohydrate solns. by distn. consists in treating the impure glycerol solns. with small quantities of $CH_2O$ and maintaining the soln. for a period of about 1 hr. at an alk. reaction prior to distn.

# Abstracts

## Soaps

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PREPARATION AND APPLICATION OF SOLUBLE OILS. Andrew Treffler. *Chem. Industries 55,* 922-24 (1944). Soluble oils are homogeneous compositions containing mineral oil, pine oil or other hydrocarbons; an emulsifying agent and a small amount of water. The emulsifying agents used include: fatty acid soap, sulfonated mineral oils or a combination of both. The fatty acid may consist of two parts of oleic or linoleic acid and one part of rosin acids, or two parts of tall oil and one part of oleic acid. Other ingredients may be naphthenic acids or Alox. The soluble oil when properly prepared may be used in hand soaps, hand cleaners and disinfectants and metal cleaning and degreasing compounds.

A UNIVERSAL SEPARATORY FUNNEL. M. M. Katsin. *Zavodskaya Lab. 10,* 217 (1941). This funnel, designed for the analysis of fats, soaps, etc., permits the removal of the upper layer without disturbing the lower layer. A cylindrical separatory funnel has 2 glass tubes extending into it from above and 1 from below. A ground-glass connection is made between the lower tube (I) and another tube (II) in such a way that II can be moved up and down inside I and adjusted so that its upper end is approx. 2 mm. above the surface of the liquid layer to be removed. II is closed by a ground-glass stopper attached to a glass rod and manipulated through one of the upper tubes. The extn. liquid is introduced through the other upper tube, the stopper is removed and the floating layer is removed by sliding II down to the proper level. (*Chem. Abs.*)

SOAP IN SPECIALIZED TEXTILE TREATMENTS. *Chem. Industries 55,* 984 (1944). Soap may be used in a new process for producing a wool-like character in acetate rayon by treating the acetate rayon with water at 70-100° C. and with soap, or certain other substances to produce curling of the fibers.

WETTING AGENTS IN INK. *Am. Ink Maker 22,* No. 12, 35 (1944). The use of a five to seven percent addition of a wetting agent to ink has several excellent results, such as control of crawling, crystallization, gelation, and relief of tension and heating between ink and paper.

GLASS CLEANERS. Milton A. Lesser. *Soap 21,* No. 1, 28-31, 69 (1945). A review is given of the formulation of glass cleaners, polishes and antimists. Soaps and glycerine are contained in many of the formulations. Twenty-six references.

AUTO POLISHES. Robert A. Stetson. *Soap 21,* No. 1, 32-35, 70 (1945). Automobile polishes may be divided into five classes: polish emulsions, cleaner polishes,

combined cleaning, polishing and waxing products, pre-wax or rubbing cleaners and wax polishes. Formulations are given for these types with soap being used in many of them.

FORMALDEHYDE-SOAPS AND THEIR USE AS DISINFECTING AGENTS. J. Thomann. *Pharm. Acta Helv. 19,* 161-6 (1944). Expts. show that the HCHO-soap of the supplement of the German Pharmacopeia VI contg. 23% HCHO is much superior to that of the Swiss Pharmacopeia V, especially toward Staphylococcus pyogens aureus hemolyticus and B. coli. (*Chem. Abs.*)

PLANT FOR POST-WAR PRODUCTION. I. SOAPMAKING PLANT AND EQUIPMENT. N. G. Weir. *Soap, Perfumery and Cosmetics 17,* 906-13 (1944). This article surveys the field of soap plant equipment and manufacturers of individual articles. Different types of equipment include: evaporators and soap coolers, mixers, pumpers and flakers, driers, mills and plodders and centrifuges.

THE FILTRATION OF LIQUID SOAPS. A. Kufferath. *Fette u. Seifen 50,* 292-4 (1943). A review. (*Chem. Abs.*)

CAPILLARY-ACTIVE MATERIALS AS WASHING AND PURIFYING AGENTS. Widaly. *Seifensieder-Ztg. 1944,* 1-2. A review. (*Chem. Abs.*)

## PATENTS

METALLIC SOAP COMPOSITION. Francis J. Licata and Joseph Nothum (National Oil Products Company). *U. S. 2,350,688.* Metallic soap useful for waterproofing fibrous materials prepared by reacting an alkali metal soap from hydrogenated castor oil or corresponding fatty acids such as 12-hydroxy stearic acid with suitable aluminum salt.

METHOD OF MAKING A COMPOSITION FOR USE IN DETERGENTS. Harry Gerard Bissinger (Drew Associates, Inc.). *U. S. 2,356,443.* A caustic alkali detergent such as sodium hydroxide coated with a layer of fatty acid glycerides to prevent adhesion of particles and with a small amount of mineral oil to prevent dusting.

PROCESS OF MAKING SOAP AND ARTICLE PRODUCED THEREBY. Edith A. Westerberg. *U. S. 2,360,920.* Individual soap buds which will immediately dissolve upon the application of water, produced by whipping to stiffness a soap mass which has had gelatin or glycerine added as a demulcent.

METHOD OF PRODUCING A DETERGENT COMPOSITION. John J. Spiegler. *U. S. 2,367,971.* A washing and cleaning agent which consists of sodium hydroxide, sodium silicate, borax and hydrogen peroxide combined to form a gelatinous mixture and allowed to dry.

METHOD OF PREPARING HYDROXY HEAVY METAL SOAP COMPOSITIONS. Arthur Minich. *U. S. 2,368,560.* Reaction of a water-insoluble non-volatile organic acid with the reaction product of a water-soluble heavy metal salt and an alkali hydroxide, in amounts insufficient to produce the normal salt of such heavy metal, but sufficient to produce the hydroxy metal soap.

SURFACE-ACTIVE SUBSTANCES. Wilhelm Muster and Bernhard Schmitt (I. G. Farbenind-A.-G.). *German 740,104.* Aromatic hydroxy compounds are caused to react with more than 1 mol, of an aromatic vinyl compound. The reaction is carried out in the presence of acid substances having no polymerizing effect. An alkylene oxide is subsequently added to the product to make it water-soluble. (*Chem. Abs.*)

CLEANING AND WASHING AID. Walter Fischer. *German 738,694.* Alkali-pectin compounds are used as fat-free detergents. (*Chem. Abs.*)

WASHING AID DETERGENT AND DISPERSANT (I. G. Farbenind-A.-G.). *German 738,974.* (*Chem. Abs.*)

FREE-FLOWING POWDERED SOAP MIXTURE AND ITS METHOD OF PREPARATION. Grady M. O'Neal (Sherwin-Williams Co.). *U. S. 2,350,521.* A dry, free-flowing, powdery soap mass consisting of water-insoluble metallic soap of rosin acids and fatty type acids in the proportion of one part of rosin acid to four parts of fatty acid and in intimate association as a result of having been formed in the presence of each other.

WATER-INSOLUBLE SOAP OF SOAP-FORMING ACIDS IN POWDERED, FREE-FLOWING FORM. Grady M. O'Neal (Sherwin-Williams Co.). *U. S. 2,350,526.* A dry, free-flowing, powdered, water-insoluble, metallic soap having complex soap-forming acid radicals from the substance which results from condensing resin substances selected from the group consisting of rosin and abietic acid, with incompletely polymerized glyceride of drying oil.

PROCESS AND APPARATUS FOR MOLDING SOAP. Robert Craig and Lawrence Seymour Harber (Baker Perkins and Lever Brothers and Unilever Limited). *U. S. 2,354,000.* A method and apparatus is described for molding and cooling molten soap to produce small soap billets or cakes free from bubbles and of a size and form suitable for the direct stamping of the soap into tablet form.

SULPHATED AMIDE WETTING, DETERGENT, AND SUDSING AGENTS. Heinrich Bertsch (Hydronapthene Corp.). *U. S. 2,355,503.* A process is described for producing wetting, detergent and sudsing agents consisting of water-soluble salts of sulphuric acid esters of hydroxy ethyl, acyl amide.

SOAP LEAF. Clarence W. Mabley. *U. S. 2,356,168.* A soap sheet or leaf is made consisting of methyl cellulose dissolved in water and combined with liquid soap and dried in the form of a thin film which will completely dissolve in water and leave no residue.

SOAP CUTTER. Robert V. Burt (Procter & Gamble Co.). *U. S. 2,359,403.* A new soap-cutting machine is described.

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## CORRECTION

In the paper "Evaluation of Color Quality of Crude Soybean Oil—Some Data and Difficulties Incident to Developing a Suitable Test for Off Grades" in the January 1945 issue of Oil & Soap (*22,* 13, 1945) footnote 1 under Table 1, p. 14, should read as follows:

$$\text{Total} = Y + 10R + 20Bl + \%\ \text{Neutral Absorption}$$

In the caption under Figure 6, p. 19, the term now reading

$$.1y + r/2$$

should read

$$(.1y + r)/2$$