

ABSTRACTS

David Wesson, Abstract Editor

In a suggested method for the determination of crude protein in feedstuffs, copper sulfate is substituted for mercury in the Kjeldahl analysis. One gram of material is heated with 5 grams of copper sulfate crystals, 15 grams potassium sulfate and 20 cc. sulfuric acid until the solution has a clear green color (about $\frac{1}{2}$ hour). The solution is heated for $\frac{1}{2}$ hour longer and distilled in the usual manner with sodium hydroxide. *Landw. Vers.-Sta.* 111,159-61, *Chem. Abstr.* 25,3096 (1931).

The nitrogen distribution in cod liver is said to be: protein nitrogen 84.1%, non-protein nitrogen 16.9%, water-soluble total nitrogen 25.0%, water-soluble protein nitrogen 9.1%. *J. Agr. Chem. Soc. Jap.* 6,927-9, *Chem. Abstr.* 25, 3042 (1931).

In the synthesis of fatty acids from hydrocarbons, the latter are oxidized for fatty acids by means of oxides of nitrogen or by nitric acid and the product of the oxidation is submitted to a temperature below 300° C. or to a reduction, preferably in the presence of catalysts or under high pressure, or both, before the final distillation. Fr. Pat. No. 697,595.

Pure lignoceric acid has been prepared from oil expressed from the seeds of *Adenanthera pavonina*. The seeds yield 14% of fixed oil, and the pure lignoceric acid yield was equivalent to 1.5% on the seeds.

In experiments on the hydrogenation of the methyl ester of linolenic acid, it has been shown that, in hydrogenation with one molecule of hydrogen, the double bond 12,13 is first saturated, forming the 9,10,15,16- linolic acid, then by a partial shifting of these double bonds, a quantity of the isomeric 10,11,14,15- linolic acid is formed. In hydrogenation with two molecules of hydrogen, the newly formed 10,11,14,15- linolic acid saturates its 14,15 bond, forming a 10,11- elaidic acid; the 9,10,15,16- linolic acid saturates its 15,16- bond and should therefore form the normal 9,10 oleic acid, but instead the 9,10 bond is shifted to 8,9 and possibly in part to 10,11 forming isomeric oleic acids. *Chem. Umschau Fette, Oele, Wachse u. Harze* 38,89-96 (1931).

Fats and waxes are atomized and coated with a harmless powder such as flour to prevent agglomeration and keep them in an easily used form as ingredients for cakes, confectionery and the like. Fr. Pat. No. 697,572.

Products for use in the textile, linoleum and rubber industries or as additions to varnishes, etc., are made by polymerizing vegetable oils or fats or their derivatives in the form of emulsions, small quantities of sulfur or oxygen or compounds liberating sulfur or oxygen being used as accelerators. Fr. Pat. No. 697,785.

Soft fat or liquid oil may be manufactured from solid fats by the action of the silent discharge against the fats in vacuo or in an atmosphere of nitrogen or hydrogen. Jap. Pat. No. 90,175.

In forming products suitable for compounding with rubber latex, a water-soluble volatile base soap of a higher aliphatic acid, such as ammonium stearate, is first mixed with a filler such as carbon black, in a finely divided form, which is nonreactive with the acid, the mixture is mixed with a rubber latex, and the soap is then reconverted into the original fatty acid, suitable by removing ammonia in a drying operation. U. S. Pat. No. 1,798,253.

Solvents and emulsifying agents for fatty materials and mineral oils are made by adding olein or its equivalents to a mixture of soaps or soap equivalents (such as aromatic or hydroaromatic sulfonic acids or their salts), with alcohols of high molecular weight.

Referee Applicant: A. G. Hayes, of Memphis, Tennessee, has applied for Referee Certification for all products covered by the rules of the National Cottonseed Products Association, (First publication).

Clifford T. Weihman, Smith-Weihman Co., vegetable oils, New York, has been elected to membership in the New York Produce Exchange.