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CLEANING COMPOSITION

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1 Claim. (Cl. 87—5)

Where workers with varnishes of the old type had to remove such material from the hands, there was no particular difficulty, it being sufficient to apply turpentine or mineral spirits, and a soap and water wash completed the process. With the advent of lacquers based upon nitrocellulose or synthetic resins, considerable difficulty has resulted in the matter of satisfactory removal of such materials incidentally getting upon the skin of workers with such preparations. Most generally workers in finishing shops used gritty soaps such as have long been customary in machine shops and the like for removing grease. These soaps however are of little value, the lacquer residue on the skin being too hard to be either emulsified by the soap or attacked by the grit, and irritation of the skin results. If such liquids as esters and coal tar hydrocarbons be used in attempts to remove such lacquer residue on the skin, it is found that very serious irritation is set up, all of these materials being active skin irritants, and usage of such eventuates in skin inflammations and infections. I have now however devised a cleaner which is not only effective in removal of such lacquer residue from the skin, but is non-irritant and without detrimental effects.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the features hereinafter fully described, and particularly pointed out in the claims, the following description setting forth in detail certain embodiments of the invention, these being illustrative however of but a few of the various ways in which the principle of the invention may be employed.

In its general aspects, my invention contemplates a solvent material capable of attacking nitro cellulose or synthetic resin base lacquers, and means therewith for preventing deleterious action on the skin. I have found that as such means for guarding the skin, skin-softening agents miscible with the solvent for the lacquer base have in this connection the property of guarding the skin against irritation. Among agents which I may so employ are glycerol and fatty substances such as lanolin, stearin, cocoa butter, petrolatum, almond oil, olive oil, mustard oil, waxes such as Chinese wax, beeswax, etc. Preferably lanolin is employed. Such skin-softening agents are, singly or in mixture, carried with the lacquer base removed, being soluble also therein.

As the lacquer base remover component, I may employ certain solvents, singly or in combination, depending somewhat upon the particular base which is involved. Generally, where a synthetic resin material is to be removed a liquid coal tar hydrocarbon is preferable, especially toluol, and with this if desired may be added such solvents as higher alcohols and esters, for instance butanol, butyl acetate, ethyl acetate, and the like. If nitrocellulose lacquer is to be washed off, active solvents such as the esters are used, with or without toluol or other diluents.

The proportions of skin-softening agent to liquid lacquer-softening agent may vary within quite a range, depending upon conditions. Generally, one-half to one pound of the skin-softening agent per gallon of lacquer-softening agent is desirable. If a lower proportion be employed, the results are not so satisfactory, and the use of much more is prone to be objectionably greasy and sticky after application.

In the preferred form of my invention, I dissolve one-half pound of lanolin in one gallon of toluol. This liquid may then be employed freely as a wash applied to synthetic resin lacquer base residue on the skin, the toluol softening and removing the lacquer, and the skin-softening agent at the same time acting to facilitate the separation, while guarding and protecting the epidermal cells.

As another formula: One pound of lanolin is dissolved in one gallon of a liquid mixture made up of toluol 60 per cent. by volume, butanol 5 per cent. by volume, butyl acetate 15 per cent. by volume, and ethyl acetate 20 per cent. by volume. The relative proportions may be varied from these figures; however, these proportions are generally most desirable for compound base lacquers, where both nitro cellulose and synthetic resins may be present.

In another formula, I may also use an almost straight ester, with some alcohol; as for example 60 parts ethyl acetate, 15 parts butyl acetate, 10 parts denatured alcohol and 5 parts butanol. This is particularly useful for straight nitrocellulose lacquers, like some bronzing liquids.

Other modes of applying the invention may be employed, change being made as regards the details described, provided the ingredients stated in the following claim, or the equivalent of such, be employed.

I therefore particularly point out and distinctly claim as my invention:—

A non-saponaceous hand-cleaning composition, comprising a liquid mixture of toluol, butanol, butyl acetate, ethyl acetate, and one-half to one pound of lanolin per gallon of such liquid.

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