

UNITED STATES PATENT OFFICE

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FINGERNAIL POLISH REMOVER

Clifford E. Bishop, Rego Park, Long Island, N. Y.,
assignor to Northam Warren Corporation, New
York, N. Y., a corporation of New York

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4 Claims. (Cl. 87-5)

This invention relates to improvements in manicuring preparations and more especially to the type of manicuring preparations known as nail polish removers.

Hitherto, for the manufacture of these nail polish removers solvents have been employed such as ethyl acetate, acetone, butyl acetate, and various combinations of these solvents diluted with ethyl, isopropyl, or butyl alcohols. These solvents or mixtures of solvents and diluents have proved vary efficacious in removing a film of lacquer from the nail but suffer from the objection that they leave the nail and surrounding cuticle in a relatively dry and brittle condition. The object of my invention is to produce a preparation which will quickly and readily soften the lacquer used for tinting finger nails yet not render the nail brittle and lifeless.

As illustrative of an improved oily polish remover, I use a formula of the following type: Ethyl acetate, 50 parts, odorless castor oil, 1 part and coloring matter. Such coloring matter or perfuming material may be added as desired without materially changing the formula.

Instead of ethyl acetate alone a certain proportion of ethyl, isopropyl, or butyl alcohol or other miscible diluents may be added, or a combination of ethyl acetate and butyl acetate or other lacquer solvents. Such natural oils as neat's-foot oil, almond oil, cottonseed oil, olive oils, paraffin oils, or oily compounds of the following types: sperm-aceti, cetyl alcohol, glycol stearate, triethanol-amine-stearate, or magnesium oleate may be substituted for the castor oil. It is evident that other natural oils, or other esters or compounds of fatty acids may also be used in place of castor oil.

In the example above given I have used approximately one part of castor oil to fifty parts of solvent. This proportion may be varied as the action of the solvent is not hindered even if the oil or oil product is present up to 4%.

Having fully described my invention what I claim is:—

1. A non-leaching finger-nail polish remover for conditioning the nails prior to lacquering, consisting essentially of a solution of lacquer solvent and non-drying nail-softening oil in the proportion of approximately one part of oil to fifty parts of lacquer solvent, said oil, in the said proportion, having the effect of nullifying the affinity of the lacquer solvent for the natural oil of the nails without impairment of its affinity for lacquer.

2. A non-leaching finger-nail polish remover for conditioning the nails prior to lacquering, consisting essentially of a solution of lacquer solvent and castor oil in the proportion of approximately one part of the castor oil to fifty parts of the lacquer solvent, said oil, in the said proportion, having the effect of nullifying the affinity of the lacquer solvent for the natural oil of the nails without impairment of its affinity for lacquer.

3. A non-leaching finger-nail polish remover for conditioning the nails prior to lacquering, con-

5 Hitherto, for the manufacture of these nail
10 polish removers solvents have been employed such
15 as ethyl acetate, acetone, butyl acetate, and
20 various combinations of these solvents diluted
25 with ethyl, isopropyl, or butyl alcohols. These
30 solvents or mixtures of solvents and diluents have
35 proved vary efficacious in removing a film of
40 lacquer from the nail but suffer from the objection
45 that they leave the nail and surrounding cuticle in
50 a relatively dry and brittle condition. The object
55 of my invention is to produce a preparation which
will quickly and readily soften the lacquer used
for tinting finger nails yet not render the nail
brittle and lifeless.

I have found, as the result of extensive study
and experimentation, that the brittle condition
characteristic of finger nails which have been frequently
ornamented with tinted lacquers is due not to the
lacquers employed, but is caused, primarily, by the
use of preparations for removing worn lacquer
coatings. These preparations, as is well known,
contain essential ingredients which are highly solvent
of conventional lacquer bases. In addition to their
solvent action upon lacquer, I have discovered such
preparations have the quality of leaching, from the
nail itself, certain natural oils normally present
within the nail, without which oils the nail becomes
brittle and lifeless. Heretofore, it has been
recognized and contended that preparations for
removing finger nail lacquers, preliminary to
recoating with fresh lacquer, should be free from
traces of oil or grease of any description for the
reason that the presence of such oil or grease in the
preparation will result in the formation of an oily
surface on the nail which will interfere with proper
application and adherence of a new lacquer coating.
My invention consists in the discovery that, within
certain well-defined limits, certain organic oily
materials are compatible, and may be incorporated
with conventional lacquer solvents without
impairment thereof or the deposition of a refractory
oily film upon the decoated nail such as to
interfere in any apparent degree with the application
or adherence of a fresh lacquer coating. More
particularly, however, my invention consists in
the discovery and appreciation of the fact that
such a finger-nail lacquer solvent such as ethyl
acetate, if modified by the incorporation of from
2% to 4% of a substance such as castor oil, will
provide a preparation which is unimpaired as an

sisting essentially of a solution of ethyl acetate and castor oil in the proportion of approximately one part of the castor oil to fifty parts of the acetate, said oil, in the said proportion, having the effect of nullifying the affinity of the acetate for the natural oil of the nails without impairment of its affinity for lacquer.

5 4. A non-leaching finger-nail polish remover, for conditioning the nails prior to lacquering, con-

sisting essentially of a lacquer solvent having incorporated therein approximately from 2 to 4 per cent of a non-drying nail softening oil, said oil, in the percentage recited, having the effect of nullifying the affinity of the lacquer solvent for the natural oil of the nails without impairment of its affinity for lacquer. 5

CLIFFORD E. BISHOP.