

# UNITED STATES PATENT OFFICE

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## FINISH-REMOVER.

983,884.

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No Drawing.

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*To all whom it may concern:*

Be it known that I, CARLETON ELLIS, a citizen of the United States, and resident of Larchmont, in the county of Westchester and State of New York, have made a certain new and useful Invention Relating to Finish-Removers, of which the following is a specification.

This invention relates to finish removers and relates especially to non-inflammable finish removers comprising carbon-tetrachlorid and alcoholic solvent material with incorporated phenate of soda or other antacid material.

Ethyl alcohol may be used with advantage in non-inflammable finish removers and is still more desirable when partially dehydrated which may be done by passing such alcoholic material through a percolating tower filled with lump quicklime and also if desired through a second tower containing calcium carbide after which the solvent is preferably redistilled. Ethyl alcohol may be used in connection with a small proportion of methyl alcohol and with more or less of the higher alcohols if desired and may be combined with thirty per cent. or so by volume of carbon-tetrachlorid and suitable stiffening and antacid material in connection of course with a greater or less proportion of suitably cooperating finish solvent material, such for example, as turpentine, pine oil, wood tar distillate and so forth.

Desirable antacid material for such removing compositions comprising carbon-tetrachlorid or other chlorinated solvents are the alkali phenates, such as carbolate or cresolate of soda, potash or other similarly acting phenate salts, the crude phenate of soda comprising carbolate of soda and which is produced in the manufacture of carbolic acid being desirable when incorporated and dissolved to the extent of two to five per cent. or so when it seems to suppress the evolution of corrosive acid vapors and prevent corrosion of tin or similar metal containers above the liquid level. If desired, a suitable proportion of benzoate or salicylate of soda, potash or the like, may be incorporated, preferably in finely divided condition, and by the aid of slight heating to facilitate solution, these compounds being also valuable antacids in this connection and aiding in neutralizing or suppressing the acid tendency

of the solvents which seems to be due to hydrolysis or somewhat similar action.

An illustrative remover suitable for general purposes may be prepared by combining 70 parts by weight and volume of ethyl alcohol, 30 parts by volume of carbon-tetrachlorid, 3 or 4 parts by volume of methyl alcohol, 3 parts by weight of ceresin or paraffin wax, 2 to 5 parts by weight of crude phenate of soda, such as is produced in the commercial manufacture of carbolic acid and 2 to 3 parts or so by weight of benzoate of soda. The finish solvents may be mixed and the wax incorporated and the two alkali salts added in finely divided condition and dissolved by agitation at gentle heat if desired. The amount of ethyl alcohol in the above formula is the standard of weight and volume, that is, it represents the standard of volume for such of the ingredients as are specified by volume and represents the standard of weight for such of the solid ingredients as are measured by weight.

Another illustrative remover may comprise 65 parts by weight and volume of ethyl alcohol, 10 parts by volume of turpentine, 35 parts by volume of carbon-tetrachlorid, 4 parts by weight of ceresin wax and 4 parts by weight of cresolate of potash combined in a similar way.

This invention has been described in connection with a number of illustrative ingredients, formulas, proportions and processes, to the details of which disclosure the invention is not, of course, to be limited.

What is claimed is:—

1. The non-inflammable finish remover consisting substantially of 70 parts by weight and volume of ethyl alcohol, 30 parts by volume of carbon-tetrachlorid, 3 to 4 parts by volume of methyl alcohol, 3 parts by weight of ceresin wax, between 2 and 5 parts by weight of crude phenate of soda and between 2 and 3 parts by weight of benzoate of soda.

2. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, a few per cent. of methyl alcohol, waxy stiffening material and dissolved crude phenate of soda and benzoate of soda.

3. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, a



few per cent. of different alcohol, waxy stiffening material and several per cent. of dissolved alkali phenate, antacid material.

4. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, a small proportion of coöperating finish solvent material, stiffening material and dissolved alkali phenate, antacid material.

5. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, waxy stiffening material and a few per cent. of dissolved alkali phenate, antacid material including carbolate of soda.

6. The non-inflammable finish remover consisting substantially of composite organic volatile finish solvent including a large proportion of ethyl alcohol and a considerable proportion of carbon-tetrachlorid, said remover comprising several per cent. of dissolved alkali phenate, antacid material.

7. The non-inflammable finish remover consisting substantially of composite organic volatile finish softening material including a large proportion of ethyl alcohol and a considerable proportion of inflammability suppressing chlorinated solvent, said remover comprising a few per cent. at least of dissolved alkali phenate, antacid material and alkali benzoate.

8. The non-inflammable finish remover consisting substantially of composite organic volatile finish softening material including a large proportion of ethyl alcohol and a considerable proportion of inflammability suppressing chlorinated solvent, said remover comprising a few per cent. at least of dissolved alkali phenate, antacid material.

9. The finish remover consisting substantially of composite organic volatile finish softening material containing chlorinated solvent having an acid tendency and a small proportion of incorporated alkali phenate, antacid material.

10. The finish remover consisting in large part of composite volatile organic finish softening material having an acid tendency and a small proportion of dissolved alkali phenate, antacid material.

11. The non-inflammable finish remover consisting in large part of composite volatile organic finish softening material having an acid tendency comprising a small proportion of dissolved alkali phenate, antacid material resisting said acid tendency.

12. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, a few per cent. of different alcohol, and several per cent. of dissolved alkali phenate, antacid material.

13. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, a few per cent. of methyl alcohol, and dissolved crude phenate of soda and benzoate of soda.

14. The non-inflammable finish remover comprising approximately 70 parts of ethyl alcohol, 30 parts of carbon-tetrachlorid, and a few per cent. of dissolved alkali phenate, antacid material including carbolate of soda.

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Witnesses:

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