

# UNITED STATES PATENT OFFICE.

ADALBERT ERNST, OF CLEVELAND, OHIO.

## PAINT-REMOVING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 576,957, dated February 9, 1897.

Application filed June 15, 1896. Serial No. 595,659. (No specimens.)

*To all whom it may concern:*

Be it known that I, ADALBERT ERNST, of Cleveland, Cuyahoga county, Ohio, have invented certain new and useful Improvements in Compounds for Removing Paint and Varnish from Wood, Marble, Iron, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to a compound for removing paint and varnish from wood, marble, iron, &c.

The essential elements of the compound are soap or its ingredients, lard or fat, sal-ammoniac, ammonia, lye, flour or starch, and an acid or substance, such, for instance, as tartaric acid, for counteracting or reducing the burning action of the sal-ammoniac and lye.

For one and one-half gallons of paint-removing compound I prefer to compound the ingredients in the following proportions: soap, one pound; lard or fat, one-half pound; sal-ammoniac, two ounces; ammonia, one-half gallon; tartaric acid, one ounce; lye, two pounds; flour or starch, one-half pound. An addition of one ounce of alum and one-half pound of soda, preferably washing-soda, produces good results.

The manner of compounding the ingredients is preferably as follows: First, the soap is cut up and boiled with about one gallon of water until it receives the consistency of paste or dough, and the soap is stirred while boiling; secondly, the tartaric acid and sal-ammoniac are then added and boiled and stirred with the soap for several minutes; thirdly, the lye is added and stirring and boiling of the mass is continued for several minutes; fourthly, the fat, accompanied by soda and alum, if the two last-mentioned substances are used, is added and boiling and stirring of the mass is continued for several minutes; fifthly, the ammonia is added and stirring and boiling of the mass is continued for several minutes, and, lastly, the flour or starch is stirred in about one pint of water and then added to the mass, and the latter is then stirred and boiled for a short time. The mass is then allowed to cool or is artificially cooled and is stirred during the cooling process. The stir-

ring of the mass while the latter is cooling is important in order to thoroughly mix the liquid and solid elements of the compound and to render the compound homogeneous. I recommend the use of more or less lye, according as the thickness of the coat or coats of paint or varnish to be removed is greater or less.

I would remark that for a compound of the character indicated especially adapted for the removal of varnish less lye and more tartaric acid and sal-ammoniac can be used with good results.

It is obvious that the soap's ingredients might be introduced separately in place of the soap, that any acid or substance capable of counteracting or reducing the burning action of the sal-ammoniac and lye might be used in lieu of tartaric acid, and that the proportions of the ingredients used can be varied at pleasure to best suit the requirements of the compound for the peculiar nature and thickness of the coat or coats of paint or varnish to be removed and according to the nature of the painted or varnished surface. I would also remark that my improved compound does not only completely remove the paint, varnish, or coating without injury to the coated wood, marble, or material, but does not emit objectionable odors.

What I claim is—

1. The compound herein described, consisting of suitable proportions of the following suitably-compounded ingredients: soap or its ingredients, fat, sal-ammoniac, ammonia, lye, flour or starch, and an acid or substance capable of counteracting or reducing the burning action of the lye and sal-ammoniac.

2. The compound herein described, consisting of suitable proportions of the following suitably-compounded ingredients: soap or its ingredients, fat, sal-ammoniac, ammonia, lye, alum, washing-soda, flour or starch, and an acid or substance capable of counteracting or reducing the burning action of the lye and sal-ammoniac.

3. The compound herein described consisting of the following ingredients suitably compounded in the following proportions for one and one-half gallons of the product: soap, one pound; fat, one-half pound; sal-ammo-

niac, two ounces; ammonia, one-half gallon; tartaric acid, one ounce; lye, two pounds, and flour or starch, one-half pound.

4. The compound herein described, obtained  
5 by boiling, first, a suitable quantity of soap and water until it receives the consistency of paste or dough; secondly, adding a suitable quantity of tartaric acid and sal-ammoniac, and stirring and boiling the mass; thirdly,  
10 adding a suitable quantity of lye and continuing the stirring and boiling of the mass; fourthly, adding a suitable quantity of fat and continuing the stirring and boiling of the mass; fifthly, adding ammonia and continu-

ing to stir and boil the mass; sixthly, adding 15 a suitable quantity of flour or starch and continuing to stir and boil the mass, and then allowing the mass to cool down, or artificially cool the same, and stirring it during the cooling process. 20

In testimony whereof I sign this specification, in the presence of two witnesses, this 10th day of June, 1896.

ADALBERT ERNST.

Witnesses:

C. H. DORER,

ELLA E. TILDEN.