

United States Patent Office.

MARTIEN H. BÖTTGER, OF SACRAMENTO CITY, CALIFORNIA.

Letters Patent No. 101,974, dated April 19, 1870.

IMPROVED WATER-PROOF COMPOUND FOR BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same

I, MARTIEN H. BÖTTGER, of Sacramento City, Sacramento county, State of California, have invented a certain compound for application to the upper leathers of boots and shoes, which I call Water-proof Grease.

It is useful for the purpose of rendering the leather impervious to moisture, and effectually resists the penetration of water, snow, &c.

To prepare the mixture I take, first, common distilled coal-oil equal to six parts; dissolve in this one part of caoutchouc, or common India rubber, the time it takes to dissolve being about eight days, varying according to the quality of material mixed; agitating the mixture periodically will assist dissolution. Admix with the above four parts of neat's-foot oil, and boil the compound over a slow fire, or, more safely, by steam heat, for about two hours. Whilst the mixture is hot, melt in four parts of tallow and one part of bees-wax; and lastly, about ten minutes before the mixture is removed from the fire, add in oil of citronella in the proportion of twenty-four drops to every pound of the mixture. After allowing the compound to cool, it is ready for use.

The parts of the ingredients are measured in proportion by weight, except the oil of citronella, which is measured as above.

The object of putting in each ingredient is as follows:

First, the caoutchouc or India rubber is the water-proof agent, which, entering the pores of the leather and forming a thin film over the surface, effectually resists the penetration of water or moisture.

The coal-oil is used solely to dissolve the same.

The neat's-foot oil renders the leather soft and pliable, and is excellent for preserving the same. It is a fair water-proof agent, as all greasy substances resist, to a certain extent, the penetration of water, when applied in the above connection.

The neat's-foot oil also neutralizes the action of the coal-oil tending to injure by rotting the leather.

The tallow is a cheap substance used to give body to the mixture, and for its excellent properties as a preservative of leather; it also, being a greasy substance, in some degree repels water.

The bees-wax coagulates and hardens, and makes the mixture of desirable consistency. It possesses fair qualities as a water-proof agent, and does not interfere with the action of the other ingredients.

The oil of citronella is mixed in to neutralize the unpleasant smell of the coal-oil and caoutchouc; it also preserves the mixture from becoming rank and moldy.

Claim.

I claim as my invention—

The manufacture or preparation of a compound which I denominate "water-proof grease," of the ingredients, in the proportion, and for the purposes as herein set forth.

MARTIEN H. BÖTTGER.

Witnesses:

PETER TIETIENS,
PHILIPP WETZEL.