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TREATMENT OF ARTICLES MADE OF LEATHER-LIKE MATERIAL

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2 Claims. (Cl. 134—7)

This invention relates to a method of treating leather articles such as shoes, wearing apparel, handbags and cases.

An object of the invention is to enable the leather to be cleaned without affecting its nature and to enable cleaned suede or like materials to retain their nap. A further object of the invention is to enable leather articles to be decolorized in simple and effective manner.

According to the present invention there is provided a method of treating leather articles comprising subjecting the surface to be treated to a stream of fluid containing particles of a hard material other than sand.

Preferably the fluid used is in a cooled condition so that frictional heating of the treated surface is minimized. Suitable fluids for use as a carrier for the particle material are air, nitrogen and carbon dioxide, but other gases and liquids whose liquid/gas and solid/liquid transition temperatures respectively are suitable can be employed also. For example, if carbon dioxide is used it would be stored in a cylinder in liquid form under pressure and consequently the need for a compressor would be mitigated. Also by using carbon dioxide under pressure, the gas is necessarily in a cooled state on emergence from the cylinder and consequently heating of the articles during treatment is minimized.

A preferred inorganic material which can be used consists of aluminum oxide particles of a size described below.

A surface of leather treated as above is cleaned and/or decolorized thereby and the surface is rendered suitable for re-dyeing, the pores remaining open. Other methods of cleaning usually leave the pores clogged making it difficult to re-dye the leather.

An embodiment of the invention will now be described, by way of example.

A light shot or sand blasting gun fed by variable fluid pressure is used to carry out the method of the invention. Into the fluid stream is introduced shot comprising particles of a size chosen to suit the surface of the material to be treated. The controllable pressure of the shot-containing fluid stream emanating from the blasting gun

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nozzle, the orifice size of which can be varied between 0.0075" diameter and 0.50" diameter, can range from 0.5 p.s.i. to 300 p.s.i. The particles are important both in choice of material and size, a typical range of particle size being 0.002" diameter to 0.060" diameter. All the above factors play an important part in producing the desired result on the surface to be treated.

The surface being treated is first subjected to a fluid stream at low pressure with shot just light enough to clean the surface and then a fluid pressure and shot size regulated to suit the desired finished surface is subsequently applied. For example, if a very smooth finish was required, a medium fluid pressure and fine particle size would be used.

By using shot of different materials various effects may be obtained by intermixing various types and grades of material to produce the required effect on the article being treated.

Also by using aluminum oxide, Carborundum, corundum, glass beads or granite chips as the abradant, frictional heat at the surface being treated is also minimised owing to the relatively high thermal conductivity of these materials and the consequent removal of frictional heat in the shot.

What I claim is:

1. A method of treating articles of leather in which frictional overheating of the same is minimized comprising subjecting the surface to be treated to a stream of cooled fluid containing particles of aluminum oxide wherein the pressure of the cooled fluid stream lies between 0.5 p.s.i. and 300 p.s.i. and the particles have a diameter in the range from 0.002 inch to .060 inch.

2. A method according to claim 1, wherein the cooled fluid is selected from the group consisting of gaseous air, nitrogen and carbon dioxide.

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