

UNITED STATES PATENT OFFICE.

THOMAS GARE, OF STOCKPORT, COUNTY OF CHESTER, ENGLAND, ASSIGNOR
TO A. AND W. PATERSON, OF GLASGOW, SCOTLAND.

TREATMENT OF LEATHER, &c.

SPECIFICATION forming part of Letters Patent No. 306,333, dated October 7, 1884.

Application filed February 16, 1884. (No specimens.) Patented in France November 28, 1883, No. 158,839.

To all whom it may concern:

Be it known that I, THOMAS GARE, of Stockport, in the county of Chester, England, have invented Improvements in the Treatment of
5 Leather and other Materials, (for which I am about to apply for Letters Patent in the Republic of France, Empires of Germany and Austria, and Dominion of Canada, and in no other country or countries,) the following being a specification of the invention.

This invention relates to improvements in the treatment of leather and other materials—such, for example, as “compressed paper-pulp,” “compressed skin-pieces,” commonly
15 called “leather-board,” and composed wholly or partly of refuse leather parings or shavings, also what is known as “compo leather-board,” and other such like substances which are used in the manufacture of boots and shoes; and the invention has for its object to render
20 the said leather or leather substitutes waterproof and more resisting to tear and wear.

The invention consists in melting together unwrought wood resin—such as American
25 pine resin—and gum-thus, which is otherwise known by the term of “frankincense,” preferably in equal parts, by weight.

To give an example of practicing the invention, there are melted together fifty-six pounds
30 weight each of resin and gum-thus, and when heated these substances are stirred together until they are thoroughly commingled. These melted and commingled substances are then removed from the melting-vessel and are placed
35 in any other suitable vessel, wherein is mixed with them one gallon of boiled or linseed oil, and there is also added one pound weight of the india-rubber solution of commerce, which is previously diluted in half a gallon of petroleum-benzoline or bisulphide of carbon.
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When all the foregoing substances are thoroughly commingled, there is added thereto a further quantity of petroleum-benzoline, sufficient to prevent the mixture of substances
45 from setting into a hard mass. It is preferred to add the petroleum-benzoline in quantity sufficient to reduce the mixture to about the

degree of fluidity of molasses at the ordinary temperature of the atmosphere, and when using the mixture for treating leather and
50 leather substitutes there is again added to it a further quantity of petroleum-benzoline to render the mixture sufficiently liquid to penetrate the pores of the leather or leather substitutes.

In treating leather or leather substitutes by the mixture or compound hereinbefore described, and for the purposes hereinbefore described, the leather or leather substitutes
55 are simply immersed in a tank containing the said mixture or compound, and they are kept immersed therein for about one-quarter of an hour, when they are taken out and washed in a bath of petroleum-benzoline, after which the pieces of leather or leather substitutes so treated
60 are spread out on racks or their equivalent to dry.

It is to be understood that the foregoing example which is given of the proportions of the several substances is one wherein the invention
65 may be advantageously used for treating leather and leather substitutes of the kinds ordinarily employed for the soles and heels of boots and shoes; but the proportions of the several ingredients may be varied according
70 to the degree of hardness or stiffness or its opposite flexibility which it is desired the leather or leather substitutes should have.

I claim—

The mixture or compound composed of unwrought wood resin, gum-thus or frankincense, boiled or linseed oil, india-rubber solution, and petroleum-benzoline or bisulphide of carbon, for treating leather and leather substitutes, for the purposes and in the manner
80 hereinbefore described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS GARE.

Witnesses:

ST. JOHN VINCENT DAY,
JOHN MADDER LUDHOPE,
Both of 115 St. Vincent St., Glasgow.