

UNITED STATES PATENT OFFICE.

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COMPOSITION FOR WATERPROOFING AND PRESERVING LEATHER.

993,315.

Specification of Letters Patent.

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No Drawing.

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To all whom it may concern:

Be it known that I, CHARLES L. MILLER, a subject of the King of Sweden, residing at Lynn, in the county of Essex, Commonwealth of Massachusetts, have invented an Improvement in Composition for Waterproofing and Preserving Leather, of which the following description is a specification.

My invention relates to compositions for waterproofing leather and similar substances and rendering the same more durable.

The object of my invention is to provide a preparation that may be conveniently and expeditiously used and which, when applied to leather, will render it permanently waterproof and impart to it toughness and a wear resisting quality, without destroying its pliability. Compositions hitherto used for this purpose possess, among others, two serious disadvantages, viz., first, the waterproofing and toughening effect upon the leather is not permanent, and second, treatment by these compositions prevents the channel flap of a shoe sole from being afterward firmly cemented down over the channel. By the use of my improved composition, however, the disadvantages and objections to the use of the compositions referred to are avoided and the leather, without regard to kind or quality, is rendered permanently waterproof and tough, though still pliable, so that it can be easily handled in manufacture.

An efficient composition embodying this invention comprises the following ingredients, preferably in about the proportions indicated: viz., pine tar, ten per cent.; blue vitriol, two per cent.; linseed oil, sixty per cent.; japan, twenty-eight per cent. In this composition leather is immersed and, as a result, it is rendered waterproof and tough.

The proportions of the different ingredients used may be varied to adapt the composition for use with leather of different kinds and quality, and also to produce the desired degree of hardness in the leather, without departing from the spirit and scope of my invention. Leather of good quality and fine

grain should be immersed for fifteen to thirty minutes, if the composition is used cold, the length of time being determined by the degree of hardness required to be imparted to the leather.

My improved composition may be used either hot or cold with equally good results. Although it is more convenient ordinarily to use the composition cold, it is effective in less time if used hot. The ingredients may be mixed in any order that is convenient. My composition, readily absorbed by the leather, acts probably owing to the presence of the hydro-carbons as a preservative of the same, rendering it at the same time impervious to water, tough and durable.

The leather needs no special preparation in the process of tanning to enable it to be waterproofed by my composition. It is treated after it is tanned and the composition may be applied to the leather as a hide or after it is cut up and ready to be made into the manufactured article. It also makes no difference for what purpose the leather is to be used, as wherever the waterproofing and wear resisting qualities are desired they are available in the leather prepared with my composition.

While it is preferred to use the specific ingredients hereinbefore mentioned, they are not indispensable: and those skilled in the art will be able to substitute for one or more of said ingredients others having similar properties without impairing the efficiency of the composition.

Having thus described my invention, what I claim as new is:

The improved composition for waterproofing and preserving leather consisting of pine tar, linseed oil, japan, and blue vitriol in about the proportions specified.

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

CHARLES L. MILLER.

Witnesses:

EVERETT S. EMERY,
ROBERT H. KAMMLER.