

# UNITED STATES PATENT OFFICE.

FREDERICK RIEGERT, OF ST. JOSEPH, MISSOURI.

## TREATMENT OF SOLE-LEATHER.

SPECIFICATION forming part of Letters Patent No. 492,836, dated March 7, 1893.

Application filed January 15, 1892. Serial No. 418,188. (No specimens.)

*To all whom it may concern:*

Be it known that I, FREDERICK RIEGERT, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in the Treatment of Sole-Leather; and I do 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 appertains to make and use the same.

This invention relates to a process and composition of matter for treating sole and harness leather, so as to render it perfectly waterproof.

In my application for Letters Patent, filed April 24, 1891, Serial No. 390,354, I have described a process for treating leather so as to render the same waterproof, pliable and flexible, and that process is designed more particularly for treating leather used in the uppers of boots, shoes, and other articles, while my present invention is designed particularly for treating sole and harness leather, so as to render the same waterproof, pliable, flexible, and convenient to handle in manufacture, as well as enhancing the beauty of the leather.

In carrying out my present invention, I place in a suitable boiler, which is designed to be covered hermetically, five or ten pounds of bees-wax, and subject the same while in the closed vessel to the action of heat, at from one hundred and eighty (180) to one hundred and ninety (190), degrees, Fahrenheit. I then add for each pound of bees-wax, two pounds of essence or spirits of turpentine, benzine or any similar essence or spirits, when the mass is then subjected to the action of heat at about one hundred (100) and not more than one hundred and ten (110), degrees, Fahrenheit, as it will be found convenient to keep that temperature by steam. I then cut the leather to the exact size desired and soak it in the preparation for about ten or fifteen minutes, according to the thickness of the

leather to be treated, and after taking it out of the bath, I subject it to a pounding or pressing action; such as a hammer or a roller machine, so as to close or tighten the pores of the leather treated, and make it more pliable and durable.

When the leather is to be blacked as is usual for making black finish bottoms with sole leather in the manufacture of boots or shoes, the burnishing ink should be applied before the leather has been placed in the bath, and allowed to dry before being placed therein.

To make a perfectly waterproof bottom for boots or shoes, it is necessary to soak the inner soles when they are ready to be put on the last, and the preparation may be also applied to the in-seams with a brush or other implement.

While I have described the preferred manner of using the composition, and carrying out my process, yet I am aware that the manner of its use might be varied, and I therefore reserve the right to use the composition in other ways without departing from the spirit of my invention.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The process described of rendering sole and harness leather, pliable and water-proof, consisting first in subjecting the leather to a hot bath of bees wax, and essence or spirits of turpentine, benzine or the like, then removing the saturated leather from the bath and subjecting it to a pounding or pressing action so as to close the pores of the leather and render it more pliable and durable, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK RIEGERT.

Witnesses:

JOSEPH KNEAU,  
ADOLPHE HENRY.