

UNITED STATES PATENT OFFICE.

HENRY LYON, OF BROOKLYN, NEW YORK.

IMPROVED CORK SOLE FOR BOOTS OR SHOES.

Specification forming part of Letters Patent No. **34,437**, dated February 18, 1862.

To all whom it may concern:

Be it known that I, HENRY LYON, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Method of Making Water-Proof Soles, to be worn inside boots or shoes; and I do hereby declare that the following is a full, clear, and exact description of the same.

I dissolve gum-elastic in oil of turpentine or by any other known means. I cut or grind cork into small pieces, and mix the gum-elastic and cork, using as much of the latter as can well be united with the former. The gum-elastic readily adheres to the cork, and thus forms a composition substantially cork, a thin coating of which I spread on cloth, having first prepared the cloth by spreading on it, very sparingly, soft gum-elastic. In this manner the composition is made to adhere firmly to one side of the cloth, making it on that side thoroughly water-proof. This fabric I cut into the desired form, and thus I produce water-proof soles. I place these soles inside boots and shoes with the composition down, resting on the leather, first warming the composition by the fire or in some way, and it will adhere to the leather sufficiently to hold it in its proper position. This effectually prevents all dampness from reaching the feet by passing through the bottoms of the boots and shoes. The same

end may be attained by coating the cloth with pure gum-elastic; but I prefer to use the composition described, as it is less expensive, and, I think, not so liable to be affected by changes of the atmosphere. Cork soles covered with cloth and leather are in extensive use; but my soles can be produced at less expense, are equally useful, and, at least in one respect, superior, in that they are thinner and do not occupy so much space in the boots and shoes.

The nature of my invention consists in making water-proof soles from fine cork, to be worn in boots and shoes for the purpose of preventing dampness from passing through the bottoms to the feet.

I do not claim to have first united cork with india-rubber, but to have produced an improved article consisting of a water-proof cork sole. It is substantially a cork sole, only sufficient india-rubber being used to unite the particles of cork.

What I claim as my invention, and desire to secure by Letters Patent, is—

The improved water-proof cork sole made from fine or granulated cork, as set forth in this specification.

HENRY LYON.

In presence of—

RICHARD D. MARKS,
R. A. ADAMS.