

C. O. KANOUSE.  
Insole.

No. 219,484.

Patented Sept. 9, 1879.

Fig. 1.

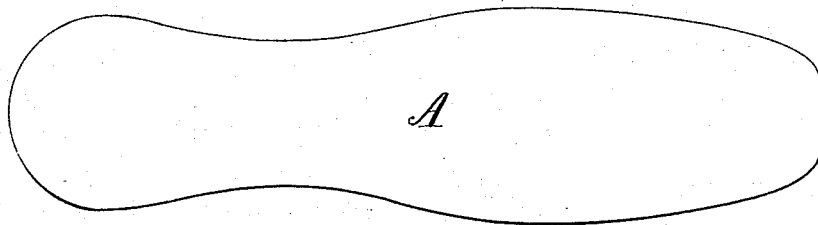


Fig. 2.

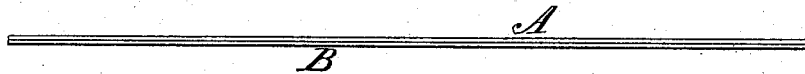
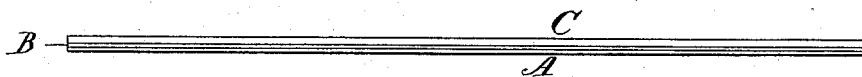


Fig. 3.



Attest:

Geo H Bodenschatz

Wm Breach

Inventor:

Charles O. Kanouse per

Thos. J. Crane, Atty.

# UNITED STATES PATENT OFFICE.

CHARLES O. KANOUSE, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN INSOLES.

Specification forming part of Letters Patent No. **219,484**, dated September 9, 1879; application filed February 25, 1879.

### *To all whom it may concern:*

Be it known that I, CHARLES O. KANOUSE, of the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Insoles for Boots and Shoes, which improvement is fully described in the following specification.

My invention relates to an improvement in water-proof insoles for boots and shoes; and consists in the application of celluloid to a plate of metal for protecting the same from oxidation, while the metallic plate maintains the celluloid in the proper shape when in use.

The celluloid is designed as a substitute for rubber, gutta-percha, and the various water-proof compositions hitherto used for insoles, and possesses, in addition to great durability and resistance to water, the quality of not absorbing any odor, which is a prominent objection to the use of other materials. Although called water-proof, it is well known that the other substances specified are gradually decomposed when in contact with the heat and moisture of the foot, and that they either possess offensive odors or absorb them when in use. Celluloid, on the contrary, does not, when properly prepared, possess any odor or absorb any from contact, and is not injured in the least degree by being washed in water when necessary.

To utilize these qualities in an insole the celluloid is combined with a sheet of metal, which serves to preserve the shape of the celluloid and keep it from wrinkling in the boot or shoe where it is used.

Although water-proof itself, the metal is not adapted for use without the celluloid coating, as it is affected by moisture from the boot and foot, and acquires a coating which is offensive and injurious to the feet and stockings. Any

such coating can be readily washed from the celluloid, and an insole prepared with it can therefore be retained in use much longer than if made of other material.

The construction of the insole is shown in the accompanying drawings, where Figure 1 is a plan of an insole; Fig. 2, a section of the same composed of celluloid and metal, and Fig. 3 a section of a similar insole with a cloth face attached.

A is the celluloid; B, the metal, and C the cloth cemented to the same.

When a cloth-faced insole is desired I use celluloid dissolved in alcohol or other solvent as a cement to attach the cloth to the metal, and the whole insole is then free from any ingredients which can be affected by or injuriously affect the feet.

When the cloth is not required the upper surface of the metal, as well as its lower, may receive a layer of celluloid or coat of celluloid varnish to protect its entire surface from oxidation. Such an insole can be washed repeatedly without injury and preserved in its original condition a long time.

From the above description the utility of celluloid combined with metal will be apparent, as the insole thus made possesses in the highest degree the qualities of resistance to water, freedom from odor, cleanliness, durability, and absence from oxidation or corrosion.

I therefore claim, and desire to secure the same by Letters Patent, as follows:

An insole composed of celluloid and metal, substantially as herein set forth.

CHARLES O. KANOUSE.

Attest:

THOS. S. CRANE,  
CHAS. C. HERRICK.