No. 642,929. Patented Feb. 6, 1900.

# A. SEAVER.

## INNER SOLE.

(Application filed Nov. 17, 1899.)

(No Model.)

FIG. 1.

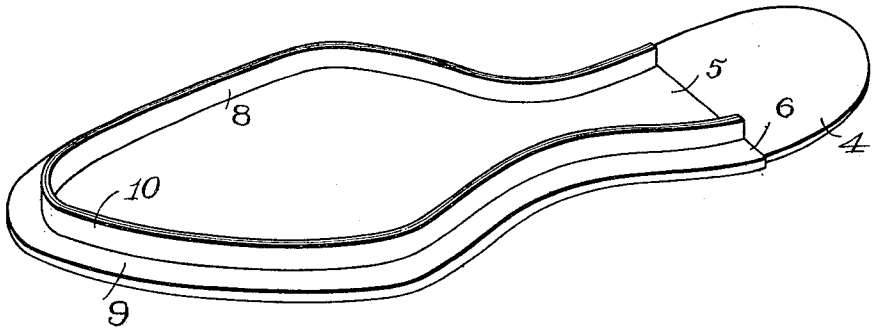



FIG. 2.

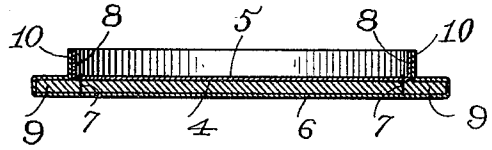
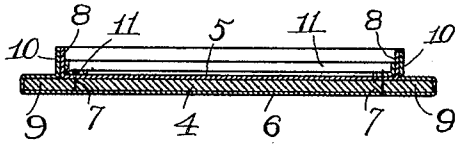



FIG. 3.




WITNESSES:

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INVENTOR:

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his atty

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

AUGUSTUS SEAVER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-FOURTH TO LEROY E. COOLIDGE, OF HOPKINTON, MASSACHUSETTS.

## INNER SOLE.

SPECIFICATION forming part of Letters Patent No. 642,929, dated February 6, 1900.

Application filed November 17, 1899. Serial No. 737,332. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUSTUS SEAVER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Inner Soles, of which the following is a specification.

This invention has relation to boots and shoes, and more particularly to what are known as "welted" shoes; and it consists of an inner sole, such as illustrated upon the drawings, described in the following specification, and particularized in the appended claims.

Referring to the accompanying drawings, Figure 1 represents in perspective view an inner sole embodying my invention. Fig. 2 represents a transverse section through the same. Fig. 3 represents a transverse section through an inner sole having a reinforce for the wale.

The inner sole comprises at least three main parts—to wit, a body 4, an inner covering 5, and an outer covering 6. The body is cut into proper shape and is formed of any suitable material or composition—such as pasteboard, pancake, or cork, or several layers of material, such as pasteboard and cork, pasteboard or equivalent substance and rubber. The inner covering 5 is preferably made of some suitable non-extensible material, such as canvas, and it is similar in shape to the body. It is secured to the body by one or more rows 7 of stitches, which parallel the outer edge of the body and thereby form a loose flap 8 along the edge of said inner covering. The flap follows the contour of the body and is located at some little distance from the edge thereof to provide a well-defined "feather-edge" 9. The outer covering may be formed of some suitable material, such as some soft or thin leather—for instance, sheepskin—entirely covering the outer face of the body and concealing the row 7 of stitches. It is drawn taut across the body and is folded over the edge of the latter and over the uncovered portion of the inner face of the body outside the row of stitches, as clearly shown, and the edge 10 of the outer covering is secured to the flap 8 to form a wale. The said meeting edges 8 and 10 are preferably connected together by cement, and they stand perpendicularly to the body to receive the needle during the operation of stitching the welt and upper thereto. After the welt and upper are sewed to the wale the outer and inner coverings are firmly connected to the other parts of the shoe and firmly hold the body 4 in place even should the stitches 7 break or rip. By reason of this construction it will be seen that the body may be constructed of the most inexpensive material, as it receives no wear, and that when it is covered by the sheepskin it presents the appearance of an insole formed of a single layer of leather. The sheepskin being turned over the edge of the body prevents the formation of sharp corners to hurt the foot and renders the shoe "easy" and comfortable.

Where the body is formed of several layers, such as pasteboard and rubber, I prefer to have the layer of rubber next the outer covering where it is nearest the foot to keep dampness from entering the shoe.

By constructing the inner layer of some non-extensible material, such as canvas, the outer covering or layer may be in the form of any yielding material, such as soft sheepskin, without lessening the strength of the wale or permitting the latter to give unduly after the upper and welt are secured thereto, so as to injure the shape of the shoe. The canvas layer is sewed flat on the body by a row of stitches which define the base of the wale, when the free edge is subsequently turned up, and when the outer layer is stretched across the face of the body and cemented to the wale the row of stitches is entirely covered, so that the insole presents a smooth surface for the inside of the shoe.

For the purpose of assisting the operator during the welting and lasting operations I sometimes employ a reinforce 11, whose edge constitutes a gage above which the stitches should not extend. This reinforce is formed of tape, and it is secured in place by the row 7 of stitches when the inner covering is fastened on the body, said stitches passing through said tape near its median line. Its upwardly-projecting flap stands but a short distance above the surface of the body, and the welting-stitches are therefore brought close to the said surface, so that the wale cannot give to one side or the other. In addition

to acting as a gage the tape reinforces the wale and adds greatly to its strength.

Having thus explained the nature of my invention and described a way of making and using the same, although without having attempted to set forth all the forms in which it may be embodied or all the modes of its use, I declare that what I claim is—

1. An inner sole comprising a body or middle layer, an inner covering or layer of non-extensible material secured to the body and having a free edge turned up to leave an edge portion of the body exposed, and an outer covering or layer of leather folded over the exposed edge of the body and having its edge united with the upturned edge of the inner covering to form a wale, the outer layer or covering being secured to the body independently of the means which attach the inner layer or covering to the said body, whereby the said outer layer presents a smooth surface on the inside of the shoe.

2. An inner sole comprising a body or middle layer, an inner layer of non-extensible material secured to said body by stitches and having a free upturned edge exposing the edge of the said body, and an outer layer folded over the exposed part of the inner face of the said body, and having its edge united with the upturned edge of the inner layer to form a wale, said outer layer covering and concealing the stitches which secure the inner layer to the body.

3. An inner sole comprising a body or middle layer, an inner layer of non-extensible material secured to said body by stitches and having a free upturned edge exposing the edge of the said body, an outer layer folded over the exposed part of the inner face of the said body, and having its edge united with the upturned edge of the inner layer to form a wale, said outer layer covering and concealing the stitches which secure the inner layer to the body, and a gage extending along said wale to determine the location of the stitches which secure the welt and upper to said wale.

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

AUGUSTUS SEAVER.

Witnesses:

MARCUS B. MAY,

PETER W. PEZZETTI.