

(No Model.)

J. W. BOWEN.
BOOT OR SHOE.

No. 558,345.

Patented Apr. 14, 1896.

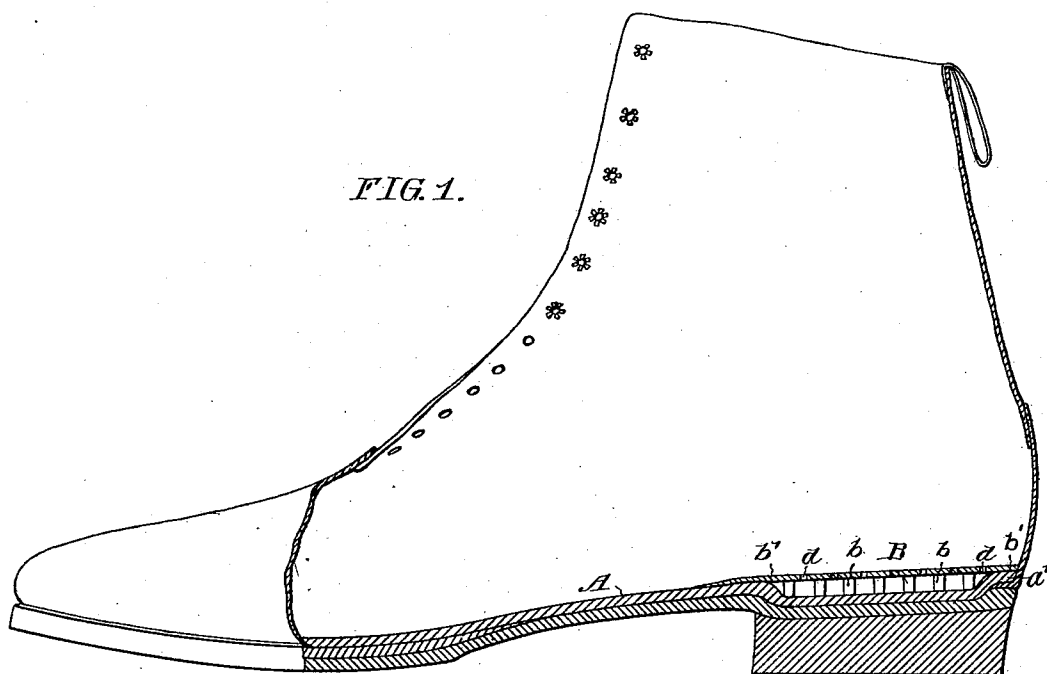


FIG. 2.

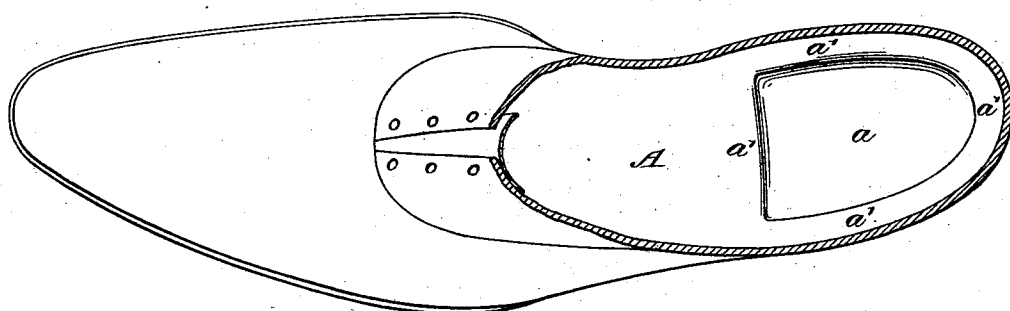
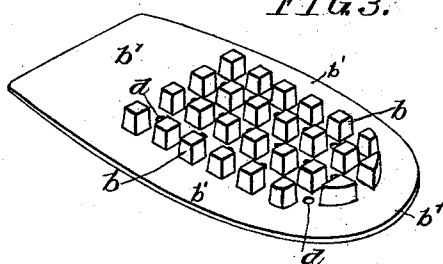


FIG 3.



Witnesses:

F. D. Goodwin
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Inventor:

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by his Attorneys

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UNITED STATES PATENT OFFICE.

JOSEPH W. BOWEN, OF PHILADELPHIA, PENNSYLVANIA.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 558,345, dated April 14, 1896.

Application filed May 9, 1895. Serial No. 548,664. (No model.)

To all whom it may concern.

Be it known that I, JOSEPH W. BOWEN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Boots or Shoes, of which the following is a specification.

My invention relates to that class of boots and shoes which have a cushion-plate in the heel, the object of my invention being to so construct such a cushion-plate and the heel portion of the shoe for receiving the same that the shoe will not be weakened at the heel, the heel-plate will be prevented from slipping out of place, and the elastic projections with which the cushion-plate is provided will not have to withstand the entire pressure of the heel.

In the accompanying drawings, Figure 1 is a view, partly in section, of a shoe provided with a cushioned heel-plate in accordance with my invention. Fig. 2 is a sectional plan view showing the recess formed in the insole, at the heel portion of the same, for the reception of the projecting portion of the cushion-plate; and Fig. 3 is an inverted perspective view of the cushion-plate detached from the shoe.

In Fig. 1, A represents the insole of a boot or shoe, in which, at the heel, is formed a depression *a* of the same contour as the heel portion of the shoe, but of less dimensions than the latter, so as to form around said depression a rim or flange *a'* in the same plane as the top of the remaining portion of the insole.

The cushion-plate B has on the under side a group of projections *b*, this group of projections being such that it will fit within the recess *a* formed in the lower portion of the insole and being less in dimensions than the plate B, so that the latter has around the group of projections a projecting flange *b'*. Hence when the group of projections enters the recess *a* the flange *b'* will rest upon the rim *a'* surrounding said recess, and the bearing of the heel will not come wholly upon the group of projections, but will be borne partially by the rim *a'*, so that the projections are relieved from excessive pressure. Surrounding the recess *a* is a comparatively abrupt shoulder, which serves to retain the projections *b* in proper position and prevent the heel-plate from slipping out of place in the heel of the shoe. The projections, and, if desired, also the plate B as well, are composed

of rubber, felt, or other elastic material, so that as the heel alternately presses upon the plate B and is lifted therefrom in walking there will be a slight depression of the plate into and a following rise of said plate from the recess *a*, the elastic support of the heel preventing the usual shock or jar upon the same and thus very materially lessening the fatigue of walking, while the movement of the plate B into and out of the recess *a* causes an alternate forcing of air from and drawing of air into said recess, so as to provide for the ventilation of the body of the shoe, thereby preventing the feet from becoming moist and at the same time keeping the feet warm.

To further facilitate the ventilation of the shoe, the plate B is provided at points between the projections *b* with perforations *d*, so as to provide for a flow vertically into or from the recess *a* as well as laterally under the flange *b'* of the elastic heel-plate.

It will be noticed that the depression or recess *a* in the heel of the shoe is formed by pressing down the inner and outer soles without cutting away any part of the same. Hence the shoe is not weakened as in prior cases with which I am familiar, in which, in order to form a recess with surrounding shoulder for confining the elastic projecting portion of the heel-plate, the sole, and in some cases part of the heel also, has been cut away.

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

The combination of an internal heel-plate having a group of elastic projections extending downwardly therefrom, and a projecting flange extending outwardly beyond said group of projections, with a shoe having in the heel portion a depression or recess pressed into the insole without cutting away the same, said recess being bounded by a retaining-shoulder for confining the projections of the heel-plate, and surrounded by a broad raised supporting-rim upon which the projecting flange of the heel-plate is seated, substantially as specified.

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

JOSEPH W. BOWEN.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.