

(No Model.)

C. P. SHAW.
HEEL CUSHION FOR BOOTS OR SHOES.

No. 569,589.

Patented Oct. 13, 1896.

Fig. 1.

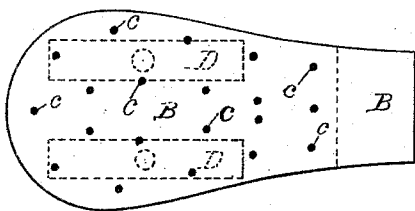


Fig. 2.

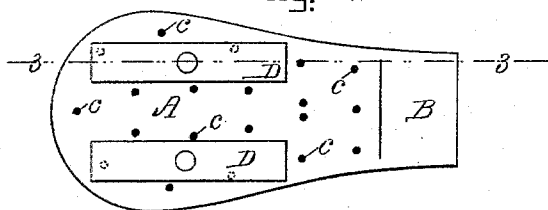


Fig. 3.

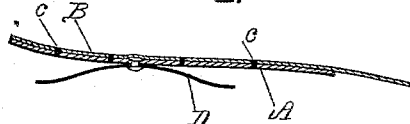
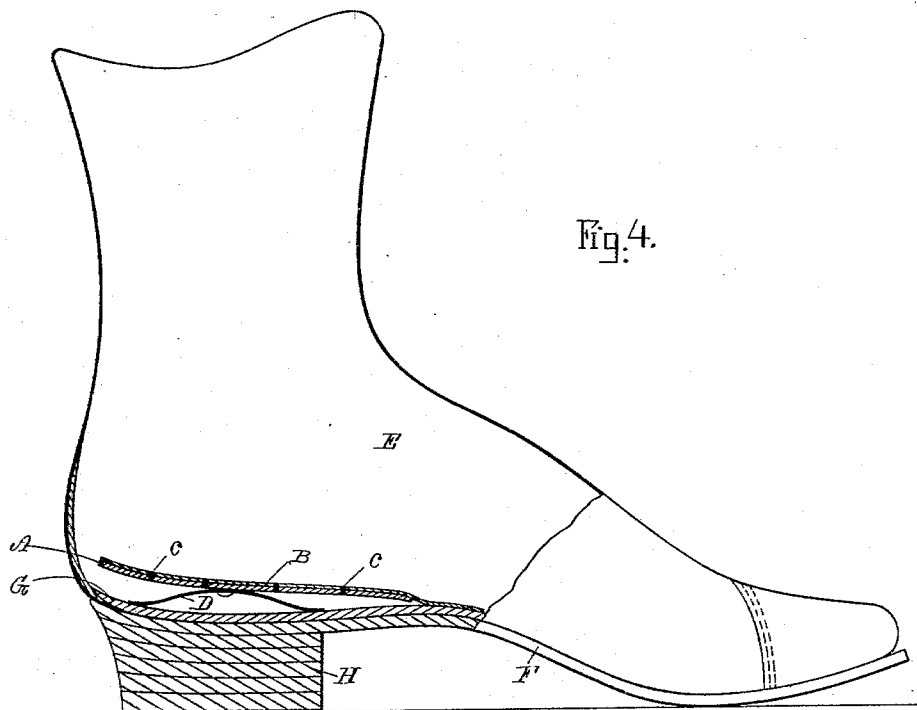


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

CLARANCE P. SHAW, OF ABINGTON, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO CHARLES N. COBB, OF SAME PLACE, AND EDWIN L. SPRAGUE, OF BOSTON, MASSACHUSETTS.

HEEL-CUSHION FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 569,589, dated October 13, 1896.

Application filed August 8, 1893. Serial No. 482,646. (No model.)

To all whom it may concern:

Be it known that I, CLARANCE P. SHAW, a citizen of the United States, and a resident of Abington, in the county of Plymouth and State of Massachusetts, have invented new and useful Improvements in Heel-Cushions for Boots or Shoes, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in heel-cushions for boots and shoes adapted to be inserted in boots or shoes of ordinary construction, so as to rest on the inner sole and, if so desired, to be secured in a suitable manner thereto.

The object of the invention is to provide a heel-cushion which can be introduced between the heel of the wearer and the inner sole of the ordinary boot or shoe as bought from the salesman, so as to render walking easy and avoid harsh jars in stepping, and it is particularly well adapted for persons having diseased or injured limbs or feet, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 represents a detail top plan of the improved heel-cushion. Fig. 2 represents a bottom view of the same. Fig. 3 represents a longitudinal section on the line 3 3 shown in Fig. 2; and Fig. 4 represents a partial side elevation and section of a boot or shoe, showing the improved heel-cushion arranged for use therein.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

The invention consists of a metal plate A of a proper size to be retained within the heel portion of an ordinary boot or shoe and made long enough to extend from the inner rear or heel portion of the boot or shoe to or beyond the shank portion thereof, as shown. To the upper side of such metal plate is secured a lining B, made of leather, cloth, felt, or other suitable material, the forward end of which extends beyond the metal plate and is preferably secured to the insole of the boot or shoe, so as to prevent the said plate and lin-

ing from getting loose from the boot or shoe when the foot of the wearer is withdrawn. It will be observed that by thus extending the lining B beyond the metal plate A and securing it to the inner sole it forms a hinge for said metal plate to permit the cushioning effect of the springs, to be referred to. In practice I prefer to provide said lining B and its metal plate A with a series of registering perforations C C, so as to insure proper ventilation where the foot rests on the cushion.

To the under side of the metal plate A is secured, by rivets or otherwise, one or more flat bowed steel springs D D. The said springs D D are secured centrally to the plate A and normally serve to hold the said plate A raised above the insole of the boot or shoe by having their free ends simply resting upon the inner sole above the heel, as shown in Fig. 4. By this construction and arrangement it will be observed that the ends of the bowed springs are free to slide upon the inner sole, and hence there will be no strain between the cushion and the shoe when in use. Said springs D D are shown as arranged in a longitudinal direction relative to the plate A, but this is not essential, as they may be arranged in a lateral or other direction on said plate without departing from the essence of my invention.

In Fig. 4, E represents the upper of a boot or shoe, on which F is the outer sole, G the inner sole, and H the heel, as usual. The improved heel-cushion is placed in the boot or shoe without alteration thereof, with the springs D D resting on their ends upon the inner sole of the boot or shoe, as shown, and the extended portion of the lining B pasted, stitched, or otherwise secured to the inner sole. By thus securing the extended portion of the lining to the inner sole the cushion is permitted to rise and fall under the action of the wearer's foot and without any strain between the parts of the cushion and the shoe.

Prior to my invention it has been proposed to construct the heel of a boot or shoe with a hole or cavity made therein from the inside of the shoe to contain a spiral or rubber spring which supports a leather plate, which

is made fast to the shoe at its forward end and is free at its rear end, and which leather plate may or may not have an attached metal wear-plate interposed between it and the spring; but this construction differs from my invention in that it requires an alteration of the boot or shoe for the reception of the spring, whereas my invention is applicable to a boot or shoe without any alteration thereof.

In another illustration of elastic or yielding heel-pieces the inner sole had applied to its under side a pair of metal plates riveted together at their forward ends and left free at their rear ends, the upper plate of the pair of plates having riveted to it at one end a V-spring; but this construction differs from mine in that it requires an alteration of the inner sole, whereas my invention requires no such alteration. It has been proposed also to ventilate the shoe by making a passage-way through the heel from the inside of a shoe to the face of the heel and elevating a perforated inner sole above the outer sole for the intervention of springs and longitudinal strips of material, and this construction obviously differs from my invention in that it requires an entirely new construction of heel and inner sole. It has also been proposed to construct an inner sole for boots and shoes of a piece of pasteboard provided at the toe and heel portions with perforations, over which perforations are secured perforated metal plates, and to the under side of the sole at the toe and heel portions are secured rubber tubes, the said rubber tubes being incased by a covering of leather, and this construction differs from my invention in that it is an inner sole pure and simple, whereas my invention is an attachment to be applied to the upper side of the inner sole at the heel portion only of a boot or shoe of ordinary con-

struction without alteration of the boot or shoe.

What I wish to secure by Letters Patent and claim is—

1. As an improved article of manufacture, the within-described heel-cushion, comprising the metal plate A, the lining B therefor, and a suitable number of bowed springs D, secured centrally to the under side of said plate, said cushion being adapted to be applied to the upper side of the inner sole of a boot or shoe of ordinary construction without alteration of said boot or shoe, the free ends of said springs engaging and free to slide upon the upper side of the inner sole above the heel of the boot or shoe when in use, substantially as described.

2. As an improved article of manufacture, the within-described heel-cushion, comprising the perforated metal plate A, the perforated lining B applied directly to said plate, the perforations of said plate and its lining registering, and a suitable number of bowed springs D, secured centrally to the under side of said plate, said cushion being adapted to be applied to the upper side of the inner sole of a boot or shoe of ordinary construction without alteration of said boot or shoe, the free end of said springs engaging and free to slide upon the upper side of the inner sole above the heel of the boot or shoe when in use, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 4th day of August, A. D. 1893.

CLARANCE P. SHAW.

Witnesses:

ALBAN ANDRÉN,
WILLIAM W. LUMMUS.