

S. L. KELLEY.
 BOOT AND SHOE.
 APPLICATION FILED AUG. 15, 1912.

1,059,543.

Patented Apr. 22, 1913.

Fig. 1.

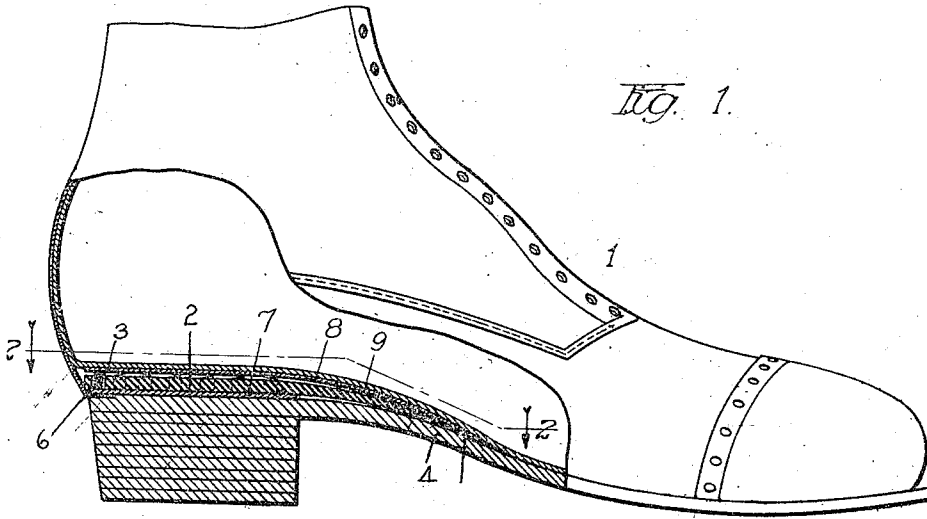


Fig. 2.

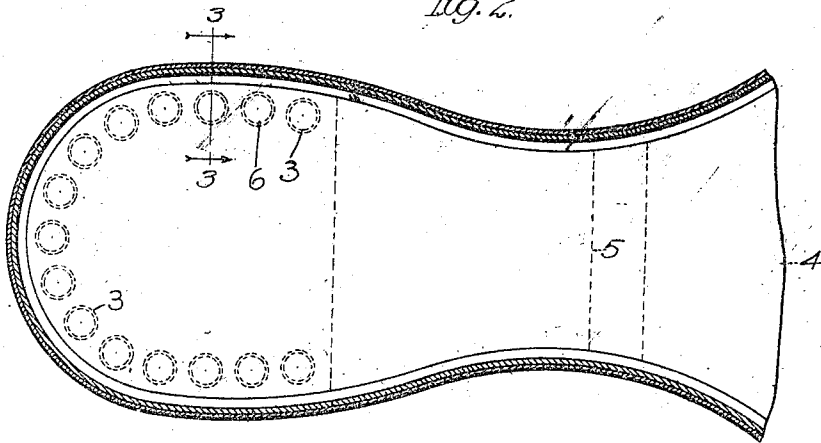
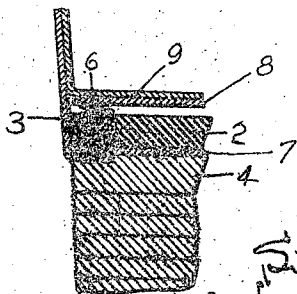


Fig. 3.



Witnesses:
 Robert H. Weir
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UNITED STATES PATENT OFFICE.

SILAS L. KELLEY, OF GRAND JUNCTION, COLORADO.

BOOT AND SHOE.

1,059,543.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed August 15, 1912. Serial No. 715,296.

To all whom it may concern:

Be it known that I, SILAS L. KELLEY, a citizen of the United States of America, residing at Grand Junction, in the county of Mesa and State of Colorado, have invented certain new and useful Improvements in Boots and Shoes, of which the following is a specification.

My invention has for its specific object the production of a cushioning-device, to be located upon the upper surfaces of the heel-portions and shanks of boots and shoes, for the purpose of preventing much of the impact, usually resulting from the operations of walking, running and jumping, from being transmitted therefrom to the feet of their wearers.

In order to accomplish the object proposed, means are employed consisting most essentially of an elastic auxiliary sole having transverse openings extending therethrough, coiled springs, longer than the thickness of the auxiliary sole and extending through the openings therein, and a pair of metallic plates including between them the auxiliary sole and contacting the ends of the springs.

Referring now to the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of a shoe, having a portion thereof sectioned away to show my improvements incorporated therein. Fig. 2 is an enlarged section, at the dotted line 2-2 in Fig. 1, of parts there shown. Fig. 3 is a section, at the dotted line 3-3 in Fig. 2, of parts there shown.

Like reference characters indicate corresponding parts throughout the several views.

1 is a shoe of the usual or any suitable construction.

2 is an elastic auxiliary sole—preferably of rubber—having transverse openings 3 extending therethrough and substantially coterminous laterally with the heel and shank portions of the shoe, and having its shank-end 5 preferably chamfered to an edge, as shown in Fig. 1.

6 are coiled springs, longer than the thickness of the auxiliary sole 2 and extending through the transverse openings 3 therein.

7 and 8 are a pair of metallic—preferably aluminum—plates, substantially coterminous laterally with the sole 4, including between them the auxiliary sole 2 and contacting the ends of the springs 6. The plate 7 is secured to the sole 4. The forward end only of the plate 8 is also secured to such sole 4, thereby leaving the side and rear portions of the latter free to move downward, under the weight of the wearer of the shoe, and upward, by virtue of the action of the springs thereunder. Moreover, the central portion of the plate 8 is curved upward, to any desired extent, to adapt it to serve as a support for the arch of the foot of the wearer.

9 is an inner sole, of any suitable material, substantially coterminous with the sole 4 of the shoe and fast thereto and to the plate 8.

In use, the weight of the wearer of a shoe equipped with my improvement will depress the plate 8, against the resistance of the springs 6, until such plate rests upon the elastic auxiliary sole 2, which will serve as a continuously-acting cushion for the foot of the wearer, so long as his weight is supported thereby. Obviously, as the foot of the wearer is raised the plate 8, acted upon by the springs 6, will assume its initial position, as shown in the drawings.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

The herein-described cushioning-device, for boots and shoes, comprising an elastic auxiliary sole, having transverse openings extending therethrough, coiled springs, longer than the thickness of the auxiliary sole and extending through the openings therein and a pair of metallic plates including between them the auxiliary sole and contacting the ends of the springs, substantially as and for the purpose specified.

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

SILAS L. KELLEY.

Witnesses:

C. W. SMITH,
WM. A. MARSH.