

J. S. YOUNG.
CUSHIONING DEVICE FOR FOOT WEARING APPAREL.
APPLICATION FILED APR. 4, 1910.

986,666.

Patented Mar. 14, 1911.

FIG. 1

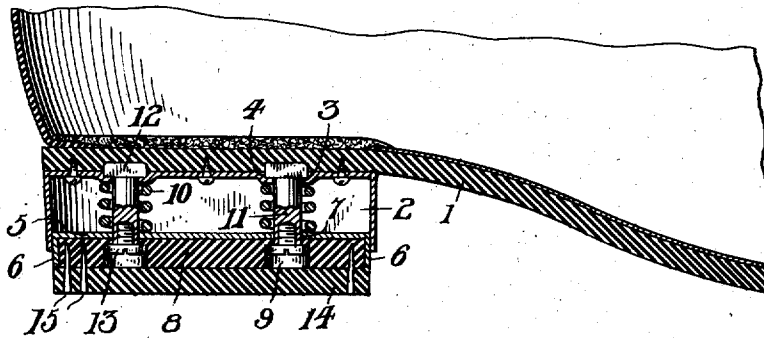


FIG. 2

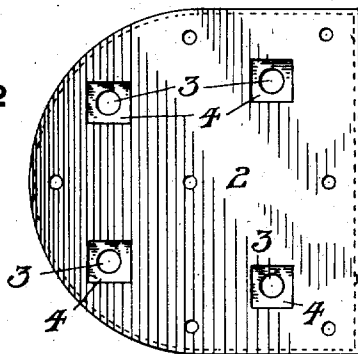


FIG. 4

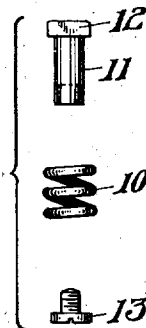


FIG. 3

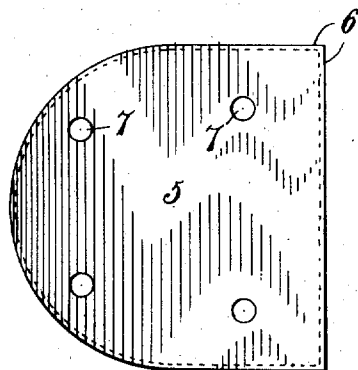
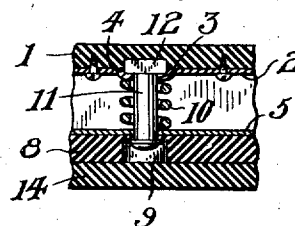


FIG. 5



WITNESSES

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CUSHIONING DEVICE FOR FOOT WEARING-APPAREL.

986,666.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed April 4, 1910. Serial No. 553,404.

To all whom it may concern:

Be it known that I, JOHN S. YOUNG, citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cushioning Devices for Foot Wearing-Apparel, of which the following is a specification.

My invention pertains to certain new and useful improvements in wearing apparel, with special reference to foot wear, the object being to provide a novel and practical cushioning feature for the heels of boots, shoes, or slippers, in order to minimize the jar due to walking or running, and likewise minimize the well known trait of, "running down at the heel", by so adapting the tread portion of said heel that it will automatically adjust itself to peculiarities in walking, and will present an even wearing surface at all times.

With the above special objects in view my invention involves the construction and arrangement of parts shown in the accompanying drawing, in which:

Figure 1 is a sectional view of my device as applied to the heel of a shoe. Fig. 2 is a top plan view of the main or upper securing hollow plate member. Fig. 3 is a similar view of the lower or adjustable plate. Fig. 4 is a group view of a resilient member and securing means therefor, and Fig. 5 shows a fragmental sectional view with modified securing means for the resilient members, involving a rivet head instead of a set screw.

Throughout the different views shown in the drawing the numeral 1 designates the outer sole of a shoe, which also affords a securing means for the heel portion. Rigidly attached to said portion 1 is a hollow member 2, forming part of the heel, the vertically disposed walls of which are more or less tapered. This said portion 2 is preferably constructed of a metallic material, this being optional however, and in configuration is made to conform to any style of heel desired, is provided with a plurality of apertures 3, and in its upper face, surrounding said apertures, are the square counter-sunk portions 4; the utility of which will be further explained hereinafter. Operatively seated in said hollow member 2, and adapted to telescope therein, is the plate 5, having the downwardly depending flange or rim 6 around its entire periphery, which

is tapered in conformity with the walls of the member 2, and is provided with a plurality of apertures 7 that come in alinement with the said apertures 3. This said member 5 is adapted for free movement within the member 2, and carries a filler block 8 secured in position by any suitable means, which latter member is provided with a plurality of counter-sunk apertures 9 that come in alinement with the apertures 3 and 7.

Positioned intermediate of the two members 2 and 5 are the resilient coil springs 10, which have a bearing against the under side of the part 2 and upper face of the part 5. These said members 10 are held in position and surround posts 11, which seat through the apertures 3 and 7, and are preferably provided with the square heads 12 that seat in the correspondingly shaped counter-sunk portions 4, thus affording a locking feature to prevent said posts from turning when the set screws 13 are inserted in the lower ends of said posts. These said screws 13 enter through the apertures 9, and when turned into securing engagement with the said members 11 also bear against the filler block 8, and serve to assist in retaining that member in position, and likewise prevents the plate 5 from leaving the casing 2. The final step in the assembling process is the addition of the bottom or tread piece of leather 14, which is held by means of pegs 15, or any suitable means.

As explained in the preamble to this specification the primary object of my invention is to provide a cushioning feature to the heel portion of boots, shoes, or similar foot wear. Every step taken by the user of foot wear equipped with my device will have a tendency to telescope the movable member 5 into the part 2, and by so doing will depress the resilient spring members 10 and set up a positive cushioning action that will minimize the shock or jar due to locomotion; the size and tension of said resilient members being regulated to suit the weight of the user.

Another advantage of my invention will be the even wearing of the tread portion 14 which, on account of its adaptability to adjustment, will, to a great extent, overcome the peculiarities in walking, and at all times present an even wearing surface; thus avoiding the common result of running down at the heel.

While the resilient spring members 10 are considered preferable for the purpose intended, other means, such as flat springs, rubber, etc. could be substituted and the
5 desired result, in a modified sense, be accomplished.

From the description, taken in connection with the accompanying drawings, the advantages of the construction, and of the
10 method of operation, will be readily apparent to those skilled in the art to which this invention pertains, and while I have described the principle of the operation, together with the device which I now consider to be the best embodiment thereof, I
15 desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claim appended
20 hereto.

What I claim as new, is:

In combination with foot wearing apparel, a cushioning device comprising the heel, involving a hollow member secured to
25 the outer sole, and provided with a plurality

of apertures surrounded by counter-sunk portions; an apertured adjustable element, provided with a downwardly depending flange, adapted to telescope within the said hollow member; a filler block within the
30 said adjustable element provided with counter-sunk apertures which register with the apertures formed in the adjustable element; headed posts seated through the apertured hollow member, their lower portions being
35 threaded, to receive screw members seated through the apertures formed through the said filler block; coil springs seated around the posts and engaging the under side of the hollow member and top of the adjustable
40 element; and a tread piece secured to the filler block; substantially as, and for the purpose set forth.

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

JOHN S. YOUNG.

Witnesses:

BEATRICE FITZGERALD,
J. P. HEGLEMAN.