J. FORRAY.

SPRING HEEL FOR SHOES.

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1,098,241.

Patented May 26, 1914.

Fig. 1.

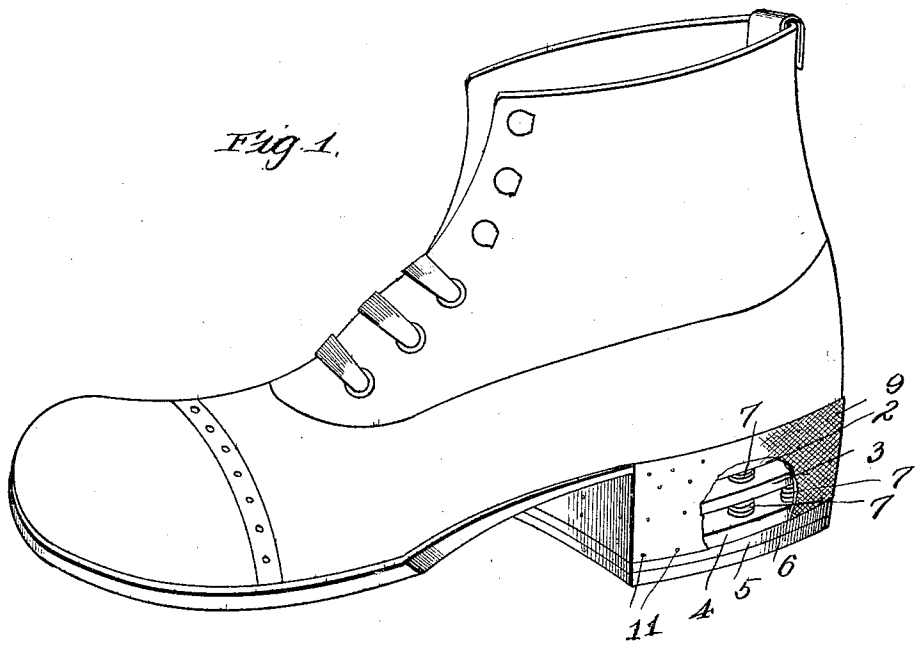
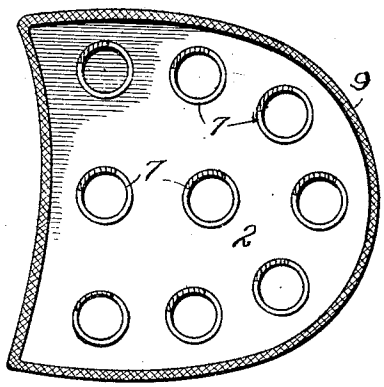


Fig. 3.



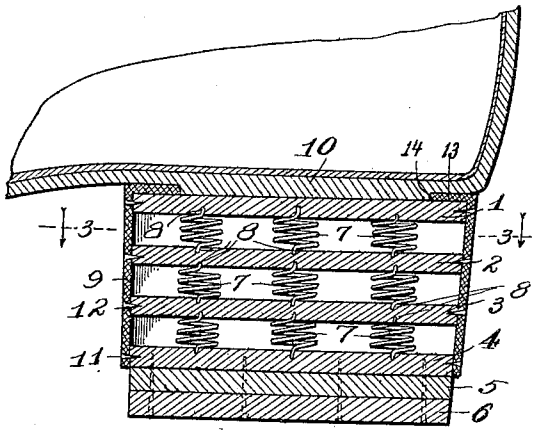


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

JOHAN FORRAY, OF HEATHERMAN, WEST VIRGINIA.

SPRING-HEEL FOR SHOES.

1,098,241. Specification of Letters Patent. Patented May 26, 1914.

Application filed November 14, 1913. Serial No. 801,008.

To all whom it may concern:

Be it known that I, JOHAN FORRAY, a subject of the King of Hungary, residing at Heatherman, in the county of Kanawha and State of West Virginia, have invented certain new and useful Improvements in Spring-Heels for Shoes, of which the following is a specification.

This invention relates to spring heels for shoes.

The object of the invention is to provide a novel, thoroughly effective, and easily applied spring heel for shoes or boots in the use of which, shocks and jars will positively be absorbed, and in which the parts shall be so constructed and arranged as to permit of ready repairs when necessary.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and arrangement of parts of a spring heel for shoes, as will be hereinafter fully described and claimed.

In the accompanying drawing forming a part of this specification and in which like characters of reference indicate corresponding parts:—Figure 1 is a view in perspective of a shoe equipped with the heel of the present invention, a portion of the heel being broken away to exhibit its interior construction. Fig. 2 is a vertical longitudinal sectional view through the heel and counterportion of a shoe, on an enlarged scale. Fig. 3 is a horizontal sectional view taken on the line 3—3, Fig. 2.

The heel of the present invention embodies a plurality of lifts 1, 2, 3, and 4, which may be termed permanent lifts, as these will not be subjected to wear, and two other lifts 5 and 6, which are termed temporary lifts, as these are the part of the heel which will receive the direct wear, and which will have to be replaced from time to time, while, as stated, the remaining lifts will remain *in situ*.

Spacing the lifts 1—4, is a series of coiled springs 7, each of which is a counter-part of the other, and the terminal whirl of each of which is provided with a prong or point 8 to be sunk into the leather of the adjacent lifts, thus to maintain the springs in position. The springs are so disposed as to take up shock or jar throughout the entire area of the heel, thus to insure the greatest comfort in wear.

The lifts are inclosed in a sheath or casing 9 constructed of some flexible material, such as heavy canvas, relatively thin leather, or the like and is secured between the first lift 1 and the insole 10 in any preferred manner, but preferably as shown in Fig. 2, the upper edge of the casing being turned inward to provide a horizontal flange 13 overlapping the first lift 1 and the insole 10 being recessed to provide a shoulder 14 against which the edge of the flange 13 abuts, the lower portion of the sheath being secured by nails 11 to the lifts 4 and 5, the sheath terminating adjacent to the upper surface of the lower lift 6, thus to prevent wear. In order to hold the sheath properly assembled with the lifts 1—3, nails 12 are provided which may be suitably spaced apart for the purpose.

From the foregoing description it will be seen that while the heel of the present invention is of simple character, it may be readily manufactured and will in use, be thoroughly effective for the purpose designed.

What I claim as new and desire to secure by Letters Patent of the United States is:—

The combination with a shoe sole recessed to provide a shoulder on its under surface conforming in contour to a shoe heel, of a heel comprising a plurality of relatively closely-spaced lifts, coil springs between each pair of adjacent lifts, said springs having terminal spurs to enter the lifts, and the upper springs being arranged in vertical alinement with those below them, and a sheath of flexible material secured to the edges of each lift, and provided at its upper end with a flange overlapping the upper lift and having its edges abutting said shoulder.

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

JOHAN FORRAY.

Witnesses:
LOUIS ELEKER,
STEVE SEBÖK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."