No. 855,163. PATENTED MAY 28, 1907.

C. J. COTTER.

SPRING INSOLE FOR SHOES.

APPLICATION FILED SEPT. 5, 1905.

Fig. 1.

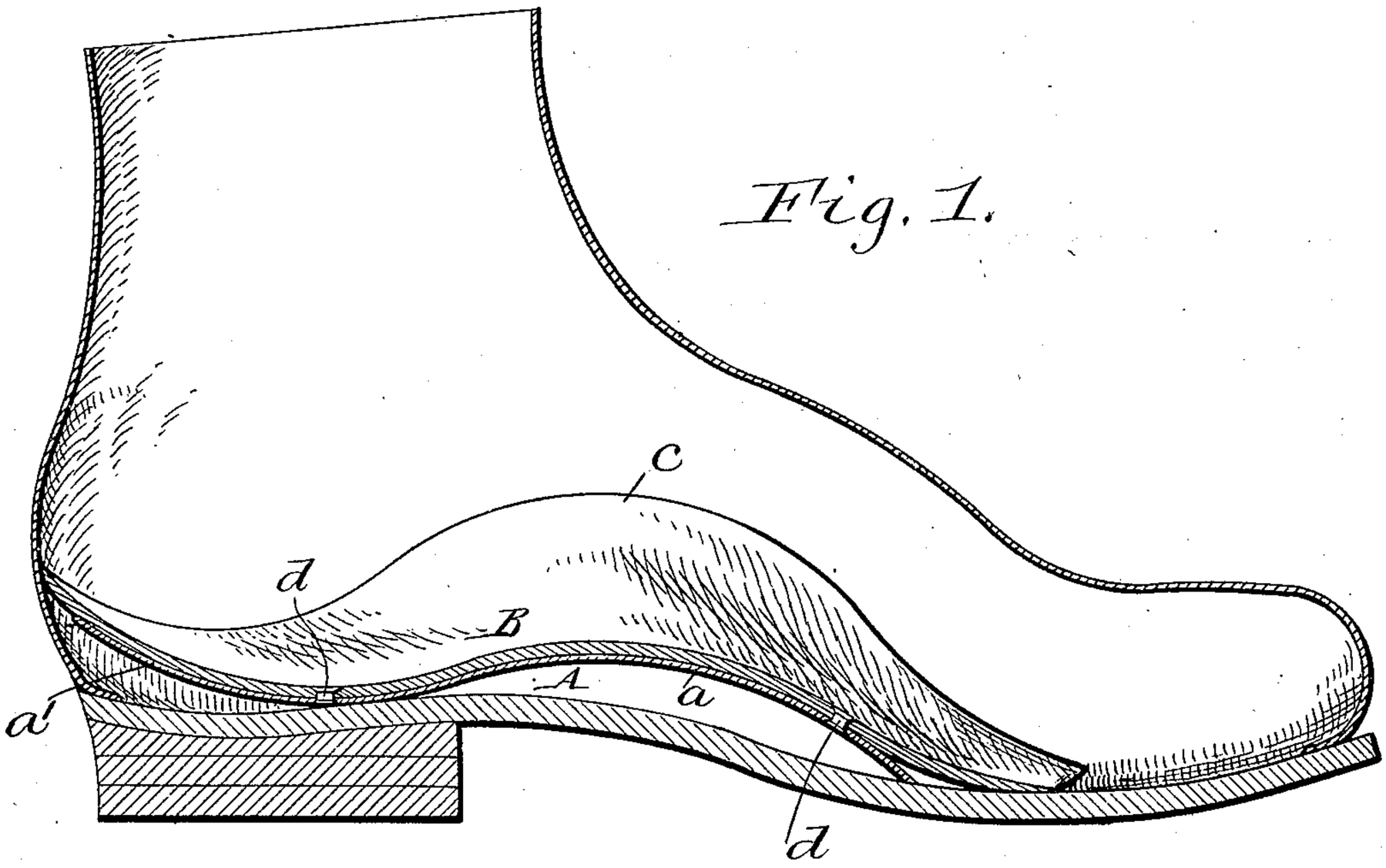
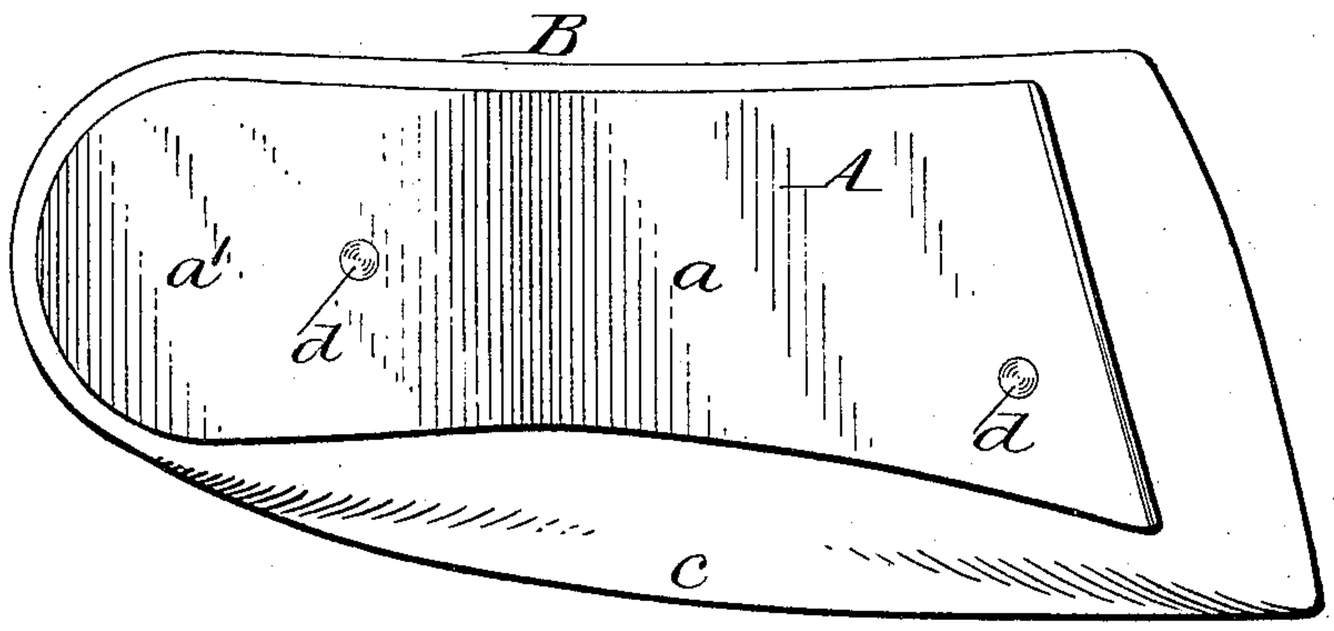


Fig. 2.



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UNITED STATES PATENT OFFICE.

CORNELIUS J. COTTER, OF BUFFALO, NEW YORK.

SPRING-INSOLE FOR SHOES.

No. 855,163. Specification of Letters Patent. Patented May 28, 1907.

Application filed September 5, 1905. Serial No. 277,023.

To all whom it may concern:

Be it known that I, CORNELIUS J. COTTER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Spring-Insoles for Shoes, of which the following is a specification.

The object of this invention is to produce a spring insole for shoes which forms a yielding support for the heel and also for the arch of the foot.

In the accompanying drawings:—Figure 1 is a vertical longitudinal section showing my improved insole applied to a shoe. Fig. 2 is a bottom plan view of the insole.

Similar letters of reference indicate corresponding parts in both figures.

My improved insole comprises two main parts, a lower member or spring A and an upper member or cover B. The spring is constructed of a sheet or strip of spring steel or other suitable material in substantially the shape of the letter **S** and consists of a front part *a* having the form of an arch and a rear part a^1 having the form of a leaf or tongue which curves upwardly and rearwardly from the rear end of the arch. This insole spring when placed lengthwise in a shoe rests on the bottom of the same only at the front end of the arch and at the junction of the arch and the tongue. The central part of the arch and the rear part of the tongue are thus elevated above the bottom of the shoe.

The cover B is of substantially the same form as the spring and fits over it so as to form practically a part thereof. The front and rear ends of the cover extend somewhat beyond the corresponding ends of the spring and are fitted to the adjacent parts of the shoe so as to form a finished joint between the same which will not discomfort the foot. On the inner longitudinal side of the cover, the same is provided with an upwardly projecting guard or extension *c* which fits against the corresponding part of the foot and forms a reliable support therefor.

The cover and spring may be connected in any suitable manner but preferably by means of rivets *d*, as shown.

In the act of walking the instep or arch and the heel of the foot alternately depress the arch and tongue of the insole spring, causing the latter to rock on the bottom of the shoe at the junction of the arch and tongue as a fulcrum, thereby causing the spring insole to always follow the movement and conform to the changing position of the foot. A firm but yielding support is thus furnished at all times for the foot both at the arch and at the heel, thereby relieving the feet of persons whose occupation causes the feet to be constantly subjected to jarring, such as motormen and conductors of street railways. My improved insole also aids in restoring to their former condition feet having broken down arches.

I claim as my invention:—

An insole spring for shoes constructed of a sheet of spring metal, and consisting of a front part having the form of an arch and a rear part having the form of a tongue which curves upwardly and rearwardly from the rear end of said arch, said insole being adapted to rest on the bottom of a shoe at the front end of said arch and at the junction of said arch and tongue so as to elevate the central part of the arch and the rear part of said tongue above the bottom of the shoe and cause the same to be depressed alternately by the instep and heel of the foot, thereby producing a rocking movement of the insole in the act of walking, substantially as set forth.

Witness my hand this 28th day of August, 1905.

CORNELIUS J. COTTER.

Witnesses:

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