J. ZOOBOAVCH.

SPRING ATTACHMENT FOR SHOES.

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Ditnesses: Les Costantes John Zooboarch, Inventor
By Attorner Sultar J. Evans

UNITED STATES PATENT OFFICE.

JOHN ZOOBOAVCH, OF BROOKLYN, NEW YORK.

SPRING ATTACHMENT FOR SHOES.

No. 898,951.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, John Zooboavch, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Spring Attachments for Shoes, of which the following is a specification.

This invention relates to shoe springs or devices to be placed beneath the sole of a boot or shoe to produce a resilient effect in lifting the shoe as it leaves the ground, as will be more fully described in the following specification, set forth in the claims and illus-

15 trated in the drawings, where:

Figure 1 is a side elevation of the lower part of a shoe showing my improved spring applied thereto. Fig. 2 is a perspective view of the movable member of the device from its under side. Fig. 3 is a similar view of the permanent or attached member. Fig. 4 is a perspective view of the movable member from its upper side. Fig. 5 is a cross sectional view through the device, taken on the plane indicated by the line 5—5, Fig. 1. Fig. 6 illustrates a modified construction of the device. Fig. 7 is a perspective detail view illustrating the manner of securing the spring upon the base plate.

The object of the invention is to produce a cushioned effect upon the foot of the wearer in walking and it is to be placed under the sole of the shoe between the heel and the ball of the foot and is adapted to normally extend below same so that when the shoe comes in contact with the ground a certain amount

of pressure is exerted on the device.

The base piece 10 has at each corner a perforation 11 for the passage of screws or rivets .40 which are designed to secure it to the sole of the shoe and at one end is a socket 12 which affords one of the nieans by which the movable member is secured to the base piece. From the latter, projections or brackets 13 are stamped and stand at right angles to the plate, and between these projections are secured the springs 14 whose free ends extend downward. These springs may be sheet steel as shown and provided with a struck-up lug or tongue 14' at one corner thereof to be inserted through a slot or aperture 15' in the base plate and clenched upon the opposite side of the latter, thereby securing the spring in position. Springs made of wire, and secured in any suitable manner may be used, if preferred.

The movable member consists of a curved plate 15 having side pieces 16 turned at right angles to same and which are adapted to fit. and work on the outside of the projections 13 60 of the plate 10 to steady the member and prevent lateral movement. The forward end of the plate 15 is formed into a tongue 17 which enters the socket 12 and the plate may otherwise be held in connection with the base 65 piece by means of a screw 18 passing through a slot 19 in the rear tongue 20. The plate 15 also has a bail 21 with a perforation 22 to receive a screw 23 carrying the nut 24 which limits the distance which the plate 15 stands 70 from the base piece, and this distance may be limited by the nut and screw 18 when desired. The lower face of the plate 15 is covered with one or more strips 25 of leather or rubber as a bearing surface and to also render 75 the device noiseless.

This device applied to the bottom of a shoe greatly aids the wearer in walking as it gives a springy movement to the effort to raise the foot and consequently reduces the labor in- 80 volved in walking. The compression of the spring simply results from the force of the weight of the walker and requires no effort.

It is obvious that certain changes and alterations may be made in the device without 85 departing from the essential features described such as the dispensing with the attaching screw 18.

The strip 25 may extend backward as shown in Fig. 6, beneath the heel of the shoe 90 as an additional means for relieving the foot from the shock occasioned by walking and

particularly on hard pavements.

The invention is especially adapted for use by people threatened with spinal or nervous 95 troubles as it relieves the spine from the jolt and shock which it might otherwise sustain.

What I claim as new and desire to secure

by Letters Patent is:

1. In a spring attachment for boots and 100 shoes, a base plate having a socket at one end, a movable plate having a tongue engaging said socket, springs interposed between the base plate and the movable plate, and connecting means such as a bolt connected 105 with the base plate and extending through a slot in the movable plate and having a nut whereby the movement of said movable plate may be limited.

2. In a spring attachment for boots and 110 shoes, a base plate having a socket at one end and provided with projections or brack-

ets, springs fitted between said projections and having lugs projecting through the base plate, a movable plate having a tongue engaging the socket upon the base plate and provided with guide lugs engaging the projections upon the base plate, and means for loosely connecting the movable plate with the base plate.

3. In a spring attachment for boots and shoes, a base plate having a socket at one end and provided with pairs of struck-up projections, springs fitted between said projections and secured upon the base plate, a

movable plate having guide lugs engaging the projections upon the base plate and provided 15 with a bail, and a bolt extending through the base plate and through the bail of the movable plate and having a nut to limit the movement of said plate.

In testimony whereof, I affix my signature 20

in presence of two witnesses.

JOHN ZOOBOAVCH.

Witnesses:

JAMES F. DUHAMEL,

IRVING J. KING.