

W. R. LEE.
 ARCH SUPPORT.
 APPLICATION FILED MAY 7, 1909.

1,045,303.

Patented Nov. 26, 1912.

Fig. 1.

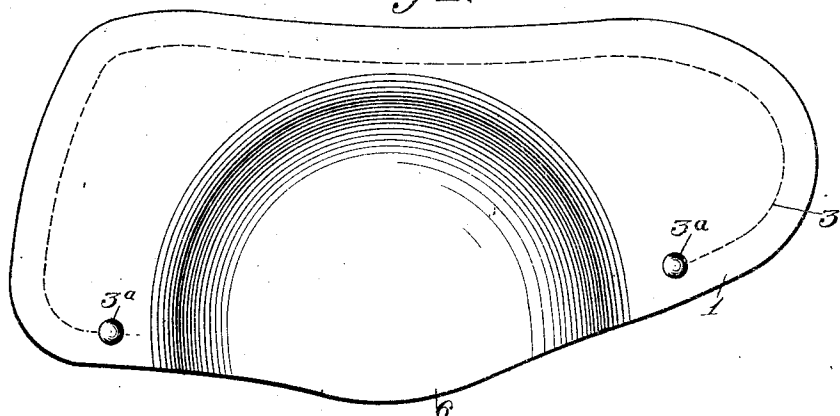


Fig. 2.

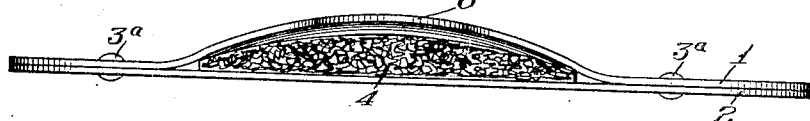


Fig. 3.

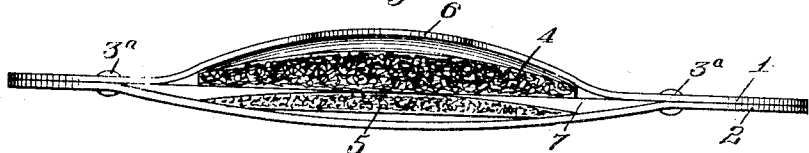


Fig. 4.



Witnesses

Nelson Copp
H. N. Linn

William R. Lee Inventor

By *Church & Dick*
 his Attorney

UNITED STATES PATENT OFFICE.

WILLIAM R. LEE, OF ROCHESTER, NEW YORK.

ARCH-SUPPORT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM R. LEE, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Arch-Supports; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

The present invention relates to arch supports of the type which are insertible in completed shoes, and it has for an object to provide a construction in which height of the arch of the support may be varied at the will of the wearer.

To this and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claim at the end of the specification.

In the drawings: Figure 1 is a plan view of an arch support constructed in accordance with the present invention; Fig. 2 is a view of the inner side of the support before the height increasing member is attached thereto; Fig. 3 is a like view after the height increasing member has been attached; Fig. 4 is a transverse section of the arch support with the height increasing member therein.

It has been customary heretofore to employ arch supports which have initially heights corresponding to the heights of the arches of the feet of users, and as a consequence while the supports are adapting themselves to the feet, the users are subjected to a great deal of pain and inconvenience. In this invention the arch supports are given heights initially less than the heights of the foot arches in order that the supports adapt themselves to the feet without inconvenience, and after such adaptation are increased in height by the attachment of a height increasing means.

In the preferred embodiment of the invention there is employed a main body portion comprising two pieces or layers of sheet material 1 and 2, such as pliable leather

shaped to fit or to be inserted within a shoe. These sheets may be secured together by stitches 3 along all edges thereof, except the inner edges which are left unconnected so that a pocket is formed opening toward the inner side of the support, rivets 3^a being employed at the ends of the stitching to prevent ripping.

In order to give an arched shape to the upper pliable layer, a filler 4 of felt or any other material, preferably of a soft or yielding nature, may be arranged within the pocket and secured by cement in this instance, to the under face of the upper layer but free of the upper face of the lower layer. The arch support is used in this form until it has adapted itself to the feet of a wearer and then a wedge shaped member or auxiliary filler 5 of any suitable material, cork preferably being employed as it is light and yielding, is introduced into the pocket to increase the height of the arch of the support. The resiliency is further increased by making the opposite sides of the height increasing member also of wedge formation, as after each pressure on the arch in walking the sides of the filler 4 will separate, as shown in Fig. 3, at 7. It will be noted that the lower layer serves as a means for detachably securing or holding the member 5 below the pliable upper layer, thus permitting the height of the arch support to be varied at will.

At the high point of the arch a flexible extension 6 may be provided on the inner edge of the support. In the present instance this extension is formed on the upper layer or upper wall of the pocket and it is adapted to cooperate with the inner wall of the shoe, as shown in Fig. 4; in order to bridge the space between the arched portion of the support and the inner wall of the shoe.

I claim as my invention:

An arch support for shoes, comprising two layers of pliable sheet material arranged one above the other and secured together along their outer and end edges thereby providing a pocket between them, reinforcing means secured to the layers at points adjacent to

their inner edges and at the ends of the pocket, a flexible portion extending from the upper layer outwardly beyond the edge of the lower layer, and a filler secured to the under surface of the upper layer and terminating at the edge of the lower layer, the filler being shaped to conform to the arch of the foot, and having its under side free from the lower layer.

WILLIAM R. LEE.

Witnesses:

HAROLD H. SIMMS,
RUSSELL B. GRIFFITH.