

J. R. WEBB.
SHOE CONSTRUCTION.
APPLICATION FILED NOV. 23, 1911.

1,060,300.

Patented Apr. 29, 1913.

Fig. 1.

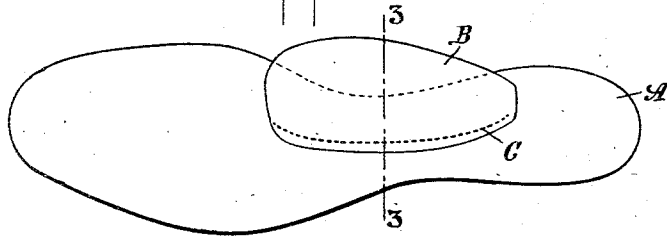


Fig. 2.

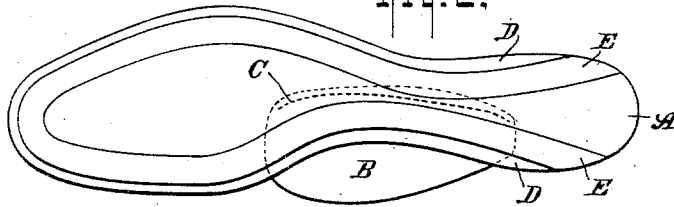


Fig. 3.

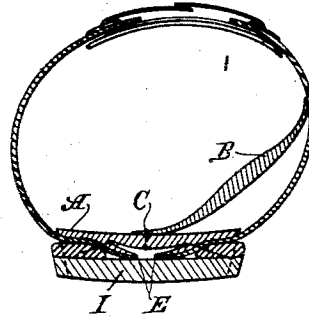


Fig. 4.

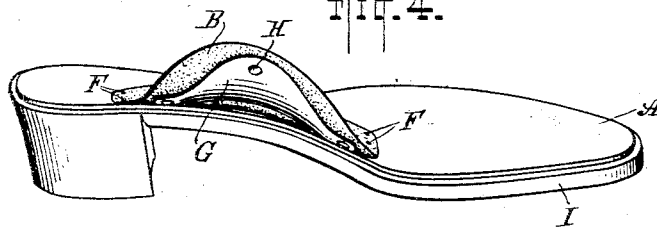
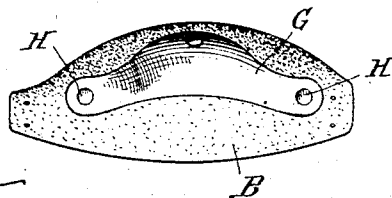


Fig. 5.



WITNESSES

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SHOE CONSTRUCTION.

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To all whom it may concern:

Be it known that I, JAMES R. WEBB, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Shoe Construction, of which the following is a specification.

This invention relates to the manufacture of shoes having as an integral part thereof a support for the arch of the foot and has for its object to effect this result by simple efficacious means.

Arch supports as at present known may be conveniently divided into two classes: those which form part of the shoe itself on the one hand; and those which are adapted to be inserted as a distinct article of manufacture into a shoe after it is finished.

My invention relates to the first of these classes. The arch supports which are not part of the shoe necessarily occupy a considerable amount of space in a shoe which, being made on a last intended to represent the foot of the average wearer, has no provision for the reception of this additional material. This type of device consequently presents manifest inefficiencies. When, on the other hand, the arch support embodied in a shoe as a part of its inherent construction has heretofore always required the use of special expensive processes with respect to the elements constituting a shoe not directly involved in the arch support as, for instance, the use of specially shaped insoles. Such a special shape of insole requires to be specially channeled since machine channeling follows the outline of the insole and would, therefore, not be applicable to an insole having an integral part intended to support the instep (without being attached at that point to the main sole.) Furthermore, any arch support based upon the use of an insole having an integral flap intended to support the arch, and supporting the arch only from a point beginning at the outer edge of the insole proper is an insufficient construction especially for the reason that the part of the insole intended to support the arch will, in a very short time, be reduced to the condition of being practically a part of the upper.

By my invention I support the arch properly and permanently and make it possible to shape the support upon the last without interfering with any of the normal prac-

ticable operations of shoe building. This I accomplish by the use in the simplest form of my invention of a piece of stiff leather extending from the breast of the heel to the ball of the insole and attaching it approximately near the center line of the shoe to the insole. The piece of leather being thus attached at a point where it interferes with none of the regular stitches used in shoe making can be shaped upon the last so that it rises from the insole not at the edge thereof but at a point quite far in from the edge. By constructing the support in this fashion the arch of the foot is supported at the point where it requires support and being located partly beneath rather than at one side thereof acts as a real support rather than as a mere stiffening of the upper. For greater rigidity the stiff piece of leather may be further reinforced by a metal plate attached to its under and outer surface.

In the drawings Figure 1 represents a top view of an insole of a lady's shoe with the arch support attached thereto. Fig. 2 represents the bottom view of the insole. Fig. 3 is a section through the complete shoe along line 3-3 of Fig. 1. Fig. 4 shows the support with the metal reinforcement on a shoe with the upper removed. Fig. 5 is a bottom view of the support shown in Fig. 4.

In the drawings A represents the usual insole carrying the arch support B which is attached thereto by the row of stitches C near the center of the shoe. This row of stitches as more plainly seen in Fig. 2 passes through parts of the insole which are not used for any other mechanical working, and since the leather B is bent away from the insole A upon the last it leaves the parts D of the insole free for further operations connected with the completion of the shoe without interference by reason of the presence of the leather support B. In ladies' shoes which are extremely narrow at the center it is important that the row of stitches C should pass through the insole at approximately the central part of the shoe since otherwise these stitches will get in the way of the parts E E which are intended for mechanical cooperation with other parts of the shoe. In men's shoes which are wider at this point the stitches C need not be so accurately located at the center but may be located at either side of the center line, it being important, however, that there should

be a material space between these stitches and the edge of the insole. The leather support may be further attached to the insole by rivets F (see Figs. 4 and 5), where the heavier support carrying the metal reinforce G is employed. This metal reinforce is preferably attached to the support by means of flat headed rivets H. The upper edge of the support B lies against the inner face of the upper but rising as it does from near the center of the shoe, the arch will be supported from a point toward the center of the foot and not merely from the edge of the insole. The support B extends from the breast of the heel to the ball of the insole and from approximately the center of the insole under and up toward the inside arch of the foot. In addition to the row of stitches C I may also use a cementing means to unite the sole A with the support B for the purpose of holding both in place until stitches are placed.

The essence of this invention resides in the use of the support as a part of the construction of a shoe in which the support rises under the instep beginning at a point materially in from the edge of the insole. This brings the support directly under and close to the arch of the foot. The support being shaped on the last makes the arch support a part of the construction of the shoe and being built in the shoe makes it a permanent part thereof. It will be noticed that the stitches C pass through the insole only and not through the main sole I of the shoe.

This is one of the characteristics of my construction.

What I claim is:

1. A shoe construction comprising a main sole, an upper, an insole, and an arch support secured to said insole and extending upwardly therefrom at an angle, said support contacting with said insole only along substantially the median line thereof and having portions intermediate of its longitudinal edges free from said upper and said insole.

2. A shoe construction comprising a main sole, an upper, an insole, an arch support secured to said insole in contact therewith only along substantially the median line of said insole, and a reinforce secured to the lower surface of said support and being independent of said insole.

3. A shoe construction comprising a main sole, an upper, an insole, an arch support secured to said insole and in contact therewith only along substantially the median line of said insole, said support tapering upwardly from said insole toward said upper and a reinforce secured to the lower surface of said support and being independent of said insole.

In witness whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JAMES R. WEBB.

Witnesses:

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