

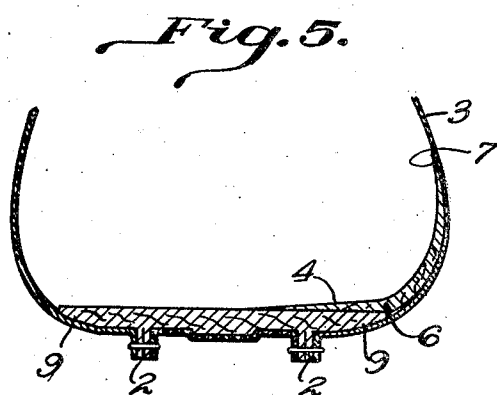
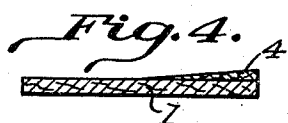
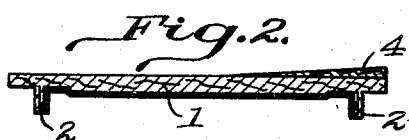
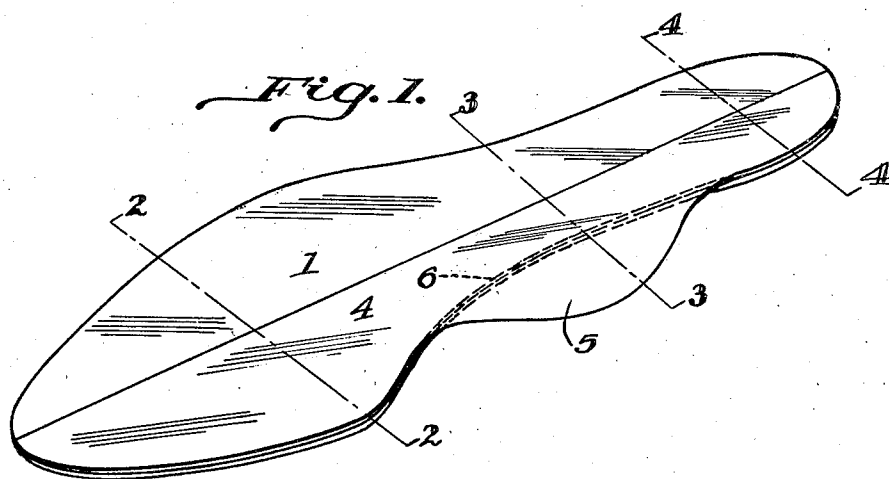
Dec. 18, 1934.

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1,984,576

INSOLE FOR CORRECTIVE SHOES

Filed Dec. 22, 1932



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1,984,576

INSOLE FOR CORRECTIVE SHOES

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Application December 22, 1932, Serial No. 648,458

7 Claims. (Cl. 36—22)

This invention relates to corrective shoes and more particularly to the manufacture of insoles constructed to give effective support to the arch of the foot and the relief of certain ailments or infirmities thereof.

The main object of the invention is to provide an insole of this character embodying a lateral wing extension adapted to fit beneath and provide increased support for the arch of the foot.

Another object of the invention is to construct this lateral wing extension or arch supporting element so that it may be readily shaped to fit the instep of the last and to retain its shape and corrective effect on the foot of the wearer of the shoe into which it is built during the active life of the shoe.

It is also an object of the invention to form the arch supporting element from a separate piece of material from the body of the insole so as to effect a saving in the cost of construction of the insole and to eliminate waste in material which is present should the lateral extension forming the arch support be made an integral part of the sole.

A further object of the invention is to form the piece of material from which the arch support is made with forwardly and rearwardly directed extensions which are wedge shaped in transverse cross section and overlie the inner edge of the sole on one side of the longitudinal center thereof. These extensions together with the arch support provide a longitudinal wedge which will raise the inner portion of the sole and tend to shift the weight of the wearer of the shoe to the outer portion of the foot and thereby correct certain infirmities of the foot.

It is also a further object to form the lateral extension or arch support so as to give it a sharp upward curvature from the body of the insole in order to snugly embrace or hug the arch portion of the foot with which it is intended to engage and without materially weakening the supporting exterior where it joins the sole.

A still further object of the invention is to bevel the outer edge of the arch extension and the bottom edge of the shank portion of the sole where it connects said extension so that the latter and this portion of the sole will conform more readily to the upper and without producing sharp off-sets where the upper overlaps the sole and extension to give a smooth and more finished appearance to the shoe.

Other objects of the invention will be understood from the following description and claims

taken in connection with the accompanying drawing wherein:

Fig. 1 is a perspective view of the sole formed in accordance with the present invention;

Fig. 2 is a transverse vertical sectional view taken through the sole on the line 2—2 of Fig. 1;

Fig. 3 is a similar view taken on the line 3—3 of Fig. 1;

Fig. 4 is also a similar view taken on the line 4—4 of Fig. 1;

Fig. 5 is a transverse sectional view taken through the arch portion of the shoe and the sole showing the arch portion thereof in a raised position and adjacent the shoe upper.

Referring more particularly to the drawing, the numeral 1 designates an insole blank shaped to fit the outline of a last bottom (not shown) to which the sole is usually attached in the process of constructing the shoe. This sole blank, which is particularly designed for use in connection with women's shoes, has its under surface formed, with the exception of the heel, with sewing ribs 2 made in any approved manner, to which ribs the upper 3 of the shoe is usually stitched as illustrated in Fig. 5 of the drawing.

In the construction of the insole according to this invention, the sole 1 is provided with a strip of material 4 which is preferably formed of leather and attached to the upper surface of the sole blank along the full length of the inner side thereof. This strip of material which is of a width substantially half of that of the blank and lying wholly to one side of the longitudinal center thereof is shaped along one edge to conform to the outline of the inner edge of the forward and heel portion of the sole. Formed intermediate the ends of the strip 4 and projecting laterally from the portion thereof overlying the shank of the sole is an extension or wing 5 forming a support for the arch of the foot which it is intended to underlie. The arch extension 5 is of a length substantially equal to that of the shank portion of the sole, a width large enough to embrace the instep of the last and of such thickness as to provide a substantial support for the arch.

In order that the extension 5 may be shaped to conform readily to the last during the construction of the shoe, the underside thereof is scored or formed with a shallow slit 6 which extends the full length of the extension at a point along the concave line of the inside edge of the sole shank. This scoring or slit produces what may be termed a hinge which per-

mits the extension to be turned abruptly upward along the normal contour lines of the shank of the sole and thereby enabling the extension to snugly hug the upward curvature of the foot at this point. This feature is highly essential in order to provide for the proper bracing or supporting effect of the arch. As the slit 6 only needs to be very shallow to produce flexing of the arch extension at this point, the same will not materially weaken the material but will only provide for the sharp bending thereof and eliminate the tendency of becoming straightened when the weight of the foot is placed thereon. The fact that the slit is formed on the underside of the extension, the same will not form a gap but leaves the material smooth and unbroken on the inner side of the sole when the foot is in engagement therewith.

The extension may be cemented in place to the inside of the upper and the outer or upper edge thereof thinned or skived down as at 7 to avoid forming an off-set or ridge in the side of the upper. Likewise, the bottom edge of the insole may be formed with a bevel 9 to also eliminate sharp corners and permit the shoe upper to conform more readily to the shape of the sole and thereby enhance the beauty and appearance of the shoe. It will be noted that the beveling of the sole at the shank portion is very slight and therefore the same will in no way weaken the sole, destroy its rigidity or sacrifice any of its weight and strength.

The strip 4 which extends the full length of the sole along the inner edge thereof is wedge-like in transverse cross section throughout its length and tapering inwardly from the edge of the sole into a thin edge which when the wedge-like strip is cemented in place upon the sole will lie substantially flush with the upper surface of the sole blank.

This longitudinal wedge strip raises the inner portion of the sole and tends to shift the weight of the wearer of the shoe towards the outer portion of the foot and thereby correct certain ailments or infirmities of the foot. In some shoe constructions, the strip may only extend under the arch and heel portion of the foot and again only under the forward and shank portion of the foot as the case may be depending upon the particular ailment of the foot to be corrected.

From the foregoing, it will be seen that an insole has been provided which when completed to be incorporated in a shoe is formed to include a lateral wing extension forming a special support for the arch of the foot, the construction also provides means for permitting the arch support to snugly or closely hug the arch of the foot so as to form a finished support therefor. Further the sole construction provides a longitudinal wedge extending over the full length of the inner portion of the sole or a portion thereof which wedge will raise the inner part of the foot and tend to straighten the same so that the weight of the wearer of the shoe will be equally distributed and supported for the full width of the insole. The application of the wedge strip and the extension to the insole will in no way hinder or affect other manufacturing operations of the shoe.

What is claimed is:

1. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of said blank along the inner edge thereof and

to one side of the median line of the sole blank, said strip being shaped to conform to the blank along the inner edge of the strip and formed with a wing extension projecting from the strip at the inner shank portion of the sole blank, said wing extension being scored on its under side at the line of juncture with the sole blank, to permit the extension to be turned sharply upwardly in supporting relationship with the arch of the foot.

2. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of the said blank along the inner edge thereof and to one side of the median line extending longitudinally through the center of the blank, said strip being shaped to conform to the blank along the forward and heel portions thereof and provided with a wing extension projecting laterally therefrom at the inner shank of the blank, the portion of the material lying on top of said blank being tapered inwardly beginning at the edge of the sole blank.

3. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of said blank along the inner edge thereof and wholly to one side of the median line passing longitudinally through the blank, said wedge strip being formed with a wing extension projecting therefrom at the inner shank portion of the sole blank, said extension being so formed as to provide flexibility at its line of junction with the sole blank to permit the extension to be turned sharply upwardly to closely hug the instep region of a last, the rearward portion of said strip overlying the inner heel portion of said blank.

4. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of said blank along the inner edge thereof, said strip being shaped to conform to the blank along the inner forward and heel portions thereof and formed with a wing extension intermediately of its ends which projects laterally from the strip at the inner shank portion of the sole blank, said wing extension being scored throughout its length at its line of juncture with the sole blank to permit abrupt upward turning thereof from the blank into close engagement with the instep region of a last during the construction of the shoe, the outer edge of said extension being tapered to a thin edge and the bottom inner edge of the shank portion of the sole blank being tapered or beveled toward said wing extension.

5. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of said blank along the inner edge thereof and to one side of the median line of the sole blank, said strip being shaped to conform to the blank along the inner edge thereof and formed with a wing extension projecting from the strip at the inner shank portion of the sole blank, said wing extension being slit on its underside along the line of juncture with the sole blank to permit the extension to be turned sharply upwardly in supporting relationship with the arch of the foot.

6. An insole for a corrective shoe comprising a sole blank, a wedge strip attached to the top of said blank along the inner edge thereof and to one side of the median line extending longitudinally of the blank, said strip being shaped to conform to the blank along the forward and heel portions thereof and provided with a wing extension projecting laterally there-

from at the inner shank of the blank, the portion of the wedge strip lying on top of said blank being tapered inwardly beginning at the edge of the sole blank and said extension being
5 weakened on its under side along the line of juncture with the sole blank to permit the extension to be turned sharply upwardly in supporting relationship with the arch of the foot.

7. A shoe insert comprising a strip of leather
10 formed for attachment to the upper surface of an insole, one edge of said strip being shaped

to conform to the insole along its inner sole and heel portions, a wing extension projecting laterally from the insert at its shank portion, the opposite edge of said strip being shaped to coincide, when the insert is positioned upon the insole, with the longitudinal center line of the insole, said strip being beveled transversely from the edge having the insole contour to the opposite edge.

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