Nov. 2, 1937. R. LUSTIG 2,097,930

FOOT APPLIANCE

Filed Aug. 6, 1936

FIG. 1.

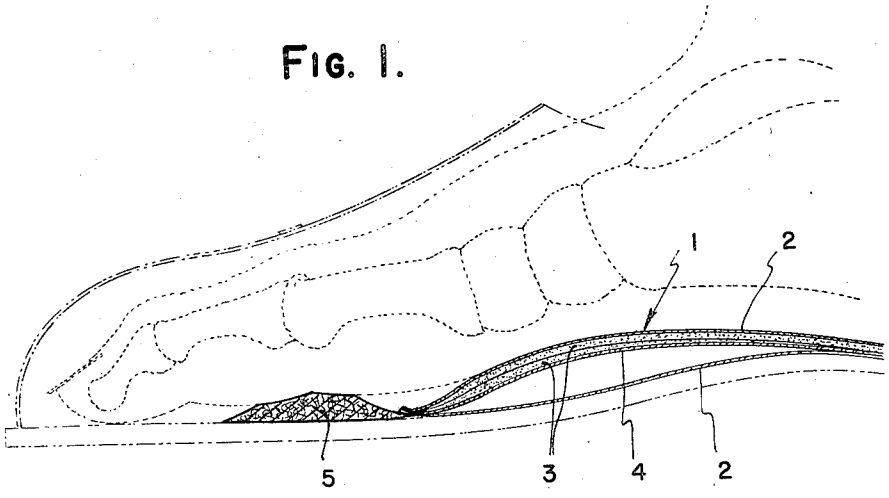


FIG. 2.

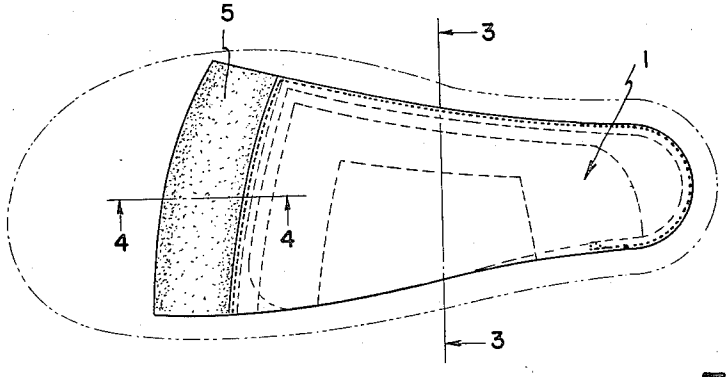


FIG. 4.

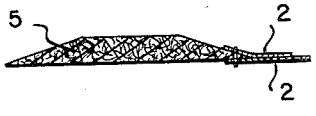
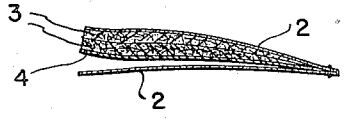


FIG. 3.



Inventor
Rudolf Lustig, decd
by Emily Lustig, Adm'trix

BY

ATTORNEYS

Patented Nov. 2, 1937

2,097,930

UNITED STATES PATENT OFFICE

2,097,930

FOOT APPLIANCE

Rudolf Lustig, deceased, late of Milwaukee, Wis., by Emily Lustig, administratrix, Milwaukee, Wis., assignor to Adam J. Deneseus, Milwaukee, Wis.

Application August 6, 1936, Serial No. 94,656

1 Claim. (Cl. 36—71)

This invention pertains to foot appliances, and more particularly to a corrective shoe insert for relieving and remedying both fallen arches and bent or "hammer" toes.

The present invention, which is an improvement upon Patent No. 1,426,750, issued to Rudolf Lustig August 22, 1922, has primarily for its object the provision of an arch support provided with means for cushioning and resting the ball of the foot to cause the phalanges to straighten out, and thus relieve the pressure upon the ends of the toes, which, in cases of "hammer" toes, causes considerable discomfort and pain.

Incidental to the foregoing, a more specific object of the present invention resides in the attachment of a transverse strip of cushioning material to the forward edge of an arch support.

A more detailed object in connection with the foregoing resides in skiving the forward and attaching edges of the cushioning strip, so as to eliminate abrupt shoulders, which would interfere with insertion or removal of a foot from a shoe, and at the same time have a tendency to unduly press into the foot and cause discomfort.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination, and arrangement of parts, substantially as hereinafter described, and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claim.

In the accompanying drawing is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawing:

Figure 1 is a fragmentary longitudinal section of an appliance constructed in accordance with one form of the present invention, the foot and shoe being shown in dotted lines.

Figure 2 is a plan view.

Figure 3 is a transverse section taken on the line 3—3 of Figure 2, and

Figure 4 is an enlarged fragmentary detailed section taken in the line 4—4 of Figure 2.

It is well known that the weight of the body is normally supported upon the foot at three points, namely, below the oscalsis, and the joints between the first and fifth metatarsal bones and the phalanges of the toes. Naturally, in the case of "hammer" toes, much of the weight of the body is supported upon the ends of the toes, which, as previously stated, causes considerable pain and discomfort, with the result that the normal posture of the body is interfered with, and much difficulty is encountered in walking.

The present invention, which is designed to correct and remedy bent or "hammer" toes, comprises an arch support 1, which may be of any type, but preferably embodying the structure disclosed in said Patent No. 1,426,750, for the reasons hereinafter set forth.

The arch support 1 is formed from a pair of identical blanks 2 of yieldable material, such as leather, fabric, or the like, stitched together at their forward, outer, and rear edges, to form a pocket for the reception of one or more cushion inserts 3, and a metallic support 4, preferably formed of spring brass.

As set forth in said Patent No. 1,426,750, the inserts 3 may be of any desired size and shape to build up the support as desired, to properly fit the particular arch condition encountered.

Secured to the forward edge of the support 1, by the line of stitching which connects the front edges of the blanks 2, is a strip of cushioning material 5 that may be formed from felt, rubber, or other suitable material, and which, as best shown in Figure 1, is designed to support the ball of the foot below the joints between the metatarsal bones and the phalanges of the toes.

In operation, in cases of bent or "hammer" toes, the bend of which occurs in the phalange joints, it will be noted, as best shown in Figure 1, that the cushioning strip 5, disposed between the phalange and metatarsal joints, serves to raise and support the ball of the foot, causing the toes to assume a straighter position than if the ball of the foot were to rest directly upon the sole of the shoe. It will also be obvious that in raising and supporting the ball of the foot by the strip 5, weight and pressure are relieved from the ends of the toes, thus largely overcoming the discomfort and pain otherwise encountered, and ultimately correcting the condition.

While the present invention is applicable to other types of support than that illustrated, there is a particular advantage in combining the same with a support having inserts permitting the same to be built up to meet the conditions encountered in each particular case, and, obviously, these vary considerably.

In addition to supporting the arch, it is desirable to raise the arch in proper proportion to the height to which the ball of the foot is raised. Therefore, the preferred form of applicant's invention contemplates the specific combination illustrated and described.

From the foregoing explanation, considered in connection with the accompanying drawing, it will be readily seen that in addition to an effective arch support, such as covered by said Patent No. 1,426,750, exceedingly simple means has been provided for correcting bent or "hammer" toes, and materially relieving discomfort and pain.

As best shown in Figures 1 and 4, it will be

noted that the front and attaching edges of the cushioning strip 5 are skived to a feather edge, all of which eliminates abrupt shoulders, which would otherwise interfere with insertion and removal of the foot, and at the same time press into the foot, causing discomfort. Also, it will be noted that the cushioning strip is slightly arcuate, thus properly positioning the same below the metatarsal and phalange joints of all of the toes.

It is claimed:

A corrective shoe insert comprising an arch support including upper and lower blanks formed of thin yieldable material and connected by stitching at their forward, outer, and rear edges to form a pocket for reception of one or more cushioning inserts, and a cushioning pad secured between the forward edges of said blanks by the line of stitching connecting the blanks and extending forwardly of said blanks for supporting a foot below the joints between the metatarsal bones and the phalanges of the toes, said cushioning pad having its front and attaching edges skived to a substantially feather edge forming a top crowned surface.

EMILY LUSTIG,
Administratrix of the Estate of Rudolf Lustig, Deceased.