Feb. 19, 1935. G. F. MADINGER 1,992,081

ARCH SUPPORTER

Filed May 1, 1934

Fig. 1.

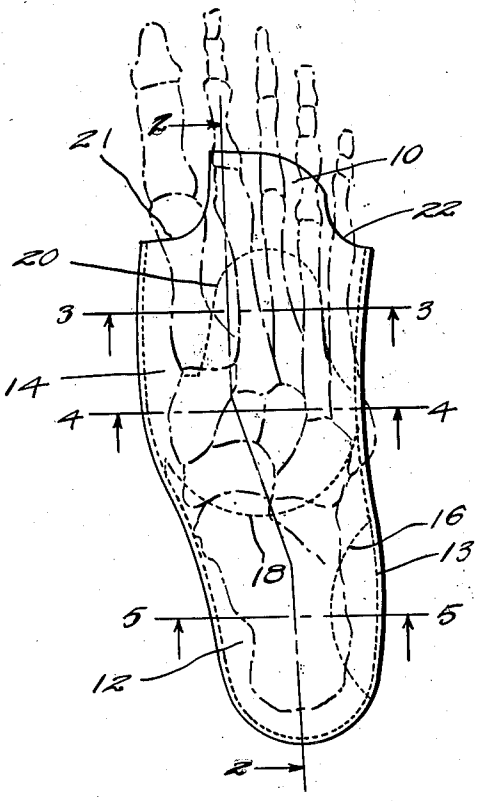


Fig. 3.

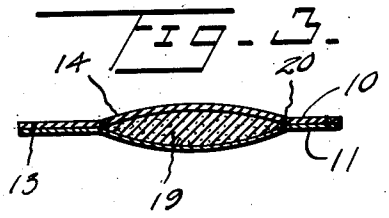


Fig. 4.

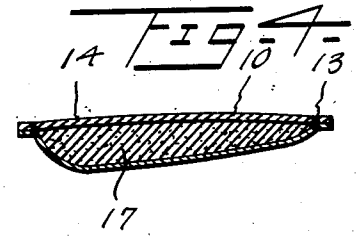


Fig. 5.

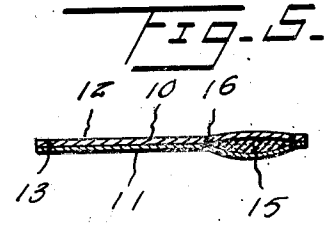
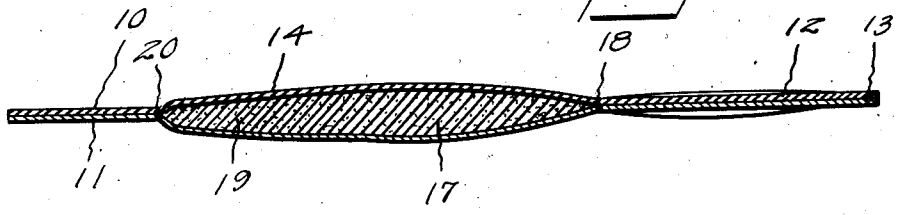


Fig. 2.



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UNITED STATES PATENT OFFICE

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ARCH SUPPORTER

Gottlieb F. Madinger, St. Joseph, Mo.

Application May 1, 1934, Serial No. 723,382

1 Claim. (Cl. 36—71)

This invention relates to arch supports and more particularly to a support which can be readily mounted in a shoe and which will support the foot within the shoe.

An object of this invention is to provide a support which is so constructed that it will completely support the bones forming the transverse arch of the foot and also the inner and outer longitudinal arches, thereby preventing the elongation of the foot and at the same time distributing the weight of the body equally over the parts of the foot.

Another object of this invention is to provide in a support of this kind padding which is so distributed that it will firmly hold the weak portions of the foot and to prevent spreading of the foot.

A further object of this invention is to provide as a new article of manufacture an arch support which can be transferred from one shoe to another and which is so constructed that it will stay in place on the inside of the shoe while it is being worn without the use of any securing means.

The above and various other objects and advantages of this invention will in part be described and in part be understood from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawing wherein:—

Figure 1 is a bottom plan view of the device showing the position of the device relative to the bones of a foot.

Figure 2 is a longitudinal section taken substantially through the center of the device.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Figure 5 is a sectional view taken on the line 5—5 of Figure 1.

Referring to the drawing wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 10 designates generally the upper member of an arch and foot support which has secured thereto a lower member 11 as by stitching 13, which engages the two members 10 and 11 at a point slightly inwardly of the marginal edges thereof. The marginal edges may also be cemented so that the two members 10 and 11 will be firmly secured together.

These two members 10 and 11 are constructed in the present instance of leather and preferably the lower member 11 has a relatively rough undersurface so that when the device is in a shoe, it will not easily creep. The two members 10 and 11 are cut along their marginal edges so that the rear portion 12 will be disposed at the heel of the shoe and engage the heel of the wearer while the forward or instep portion 14 is adapted to engage beneath the arch of the foot.

On the outside portion of the support comprising the two members 10 and 11 at the heel 12, there is positioned a cushioning member 15 which is held in place by stitching 16. In the present instance, this heel supporting member 15 extends inwardly from the outer edge of the support and is adapted to support the outside portion of the heel so as to keep this portion raised. A second cushioning member or support 17 is disposed between the two members 10 and 11 at a point forwardly of the heel 12 and this supporting member 17, as shown in Figure 4, tapers from the inside edge of the support in the direction of the outer edge. The rear portion of the support 17 is held against movement by stitching 18.

This support 17 is adapted to engage beneath the instep and beneath the bones of the foot comprising the inner longitudinal arch so as to prevent falling of the arch. The padding or supporting member 17 is continued forwardly in a substantially uniform manner, as shown at 19, so as to provide a support for the metatarsal bones of the foot or that portion of the foot forwardly of the arch. The supporting member 19 is disposed substantially centrally of the two members 10 and 11 and stitching 20 engages the sides and forward end of the member 19 so as to prevent creeping thereof or displacement between the two members 10 and 11.

The two members 10 and 11 are continued forwardly of the supporting member 19 and on the inside edge terminate in a cutout portion 21 which is disposed substantially at the head or forward end of the first metatarsal bone, and the opposite end of the support is cut out, as at 22, at a point adjacent the head or forward end of the fifth metatarsal bone.

In the use of the device herein disclosed, the two covering members 10 and 11 are secured together along their marginal edges as by the stitching 13 and the supporting members 15, 17 and 19, are disposed therebetween and held as by the stiching 16, 18 and 20, respectively. The device is placed in the shoe with the member 10 uppermost and when the foot is inserted in the shoe, the padding members 15, 17 and 19 will snugly engage against the heel and instep portions, respectively, of the foot so as to hold the foot in its natural position and to thereby prevent

running over the heels of the shoe, to prevent spreading of the foot, and also to prevent longitudinal disfiguration of the foot. It will be apparent that the support herein disclosed can be mounted in any type of shoe and can be transferred from one shoe to another.

What is claimed is:—

An arch support, comprising a pair of relatively flexible sheet members shaped to conform to the configuration of the inside of the shoe at the rear end, stitching engaging the marginal portions of the members to hold the two members together, each of said members having cut out portions at the forward ends thereof and on the opposite sides, a heel pad disposed between the two members inwardly of the marginal stitching and having a width narrower than the width of the members at the rear, said heel pad being disposed closely adjacent the outer edge of the members, stitching engaging the two members about the inner edge of the heel pad to hold the heel pad against movement, a transversely tapered longitudinal arch pad disposed between the members and between the marginal stitching in a position spaced forwardly of the heel pad, an extension integral with said arch pad and disposed in substantially the center of the two members and being narrower in width than the arch pad, and stitching engaging about said extension and the rear portion of the arch pad.

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