

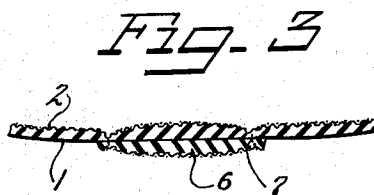
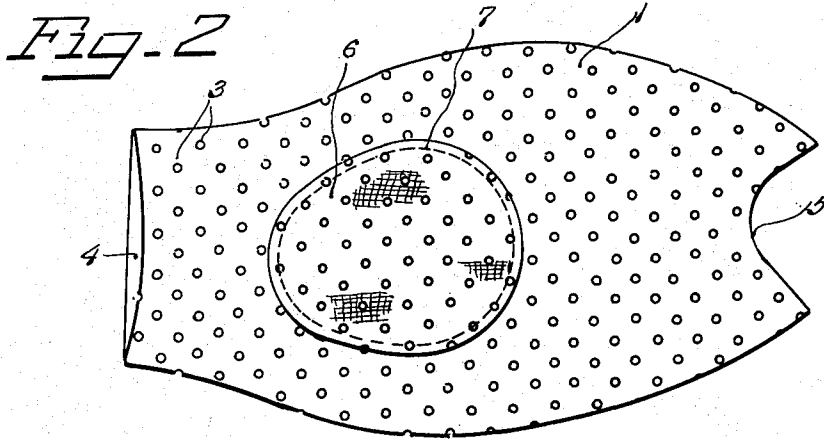
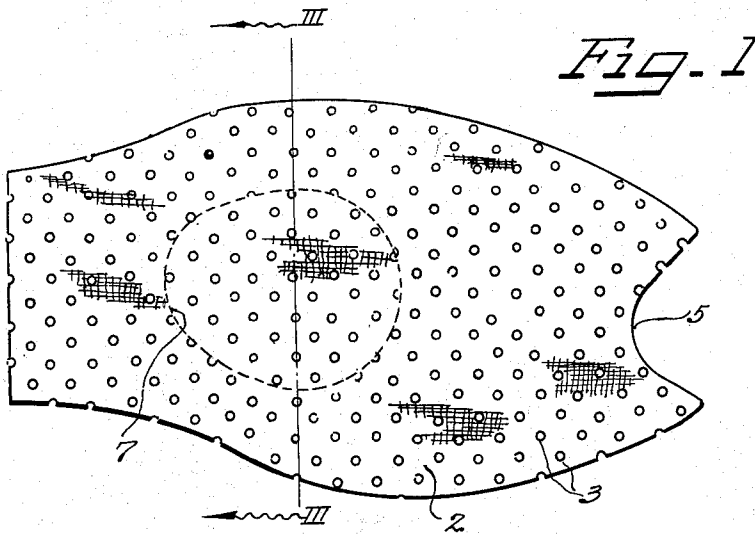
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FOOT CUSHION

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FOOT CUSHION

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2 Claims. (Cl. 36—71)

This invention relates to improvements in a foot cushion, and more particularly to a foot cushion highly desirable for use as a partial insole to underlie the forepart of the plantar surface of the foot and lend relief to persons suffering from cramped toes, persons whose toes ride more fully on the ends, persons who suffer from tender relatively thin tissue on the metatarsal area of the foot, persons afflicted with callosities on the plantar surface of the foot, and similar afflictions, although the invention will afford relief to various other afflictions and deformities, as well as lend comfort to a normal foot, as is apparent to one skilled in the art.

In the past, many and various types of foot cushions have been developed, but in most instances were not as satisfactory in use as is desired. In many cases these formerly known devices crowded the foot and particularly the toes to an objectionable extent when disposed in an article of footwear of proper size for the individual foot. In addition, these formerly known devices, in every instance of which I am aware, were not adaptable particularly for use in ladies' open-toed shoes and similar articles of footwear without visibly betraying their presence to the casual onlooker. Further, formerly known devices of this particular character in many cases gave rise to an abrupt elevation in the shoe, especially when made in the form of a partial insole, and in many cases did not give adequate support or relief to the metatarsal arch of a foot.

With the foregoing in mind, it is an important object of the instant invention to provide an improved foot cushion for disposition in a shoe or other article of footwear, and which is made in the form of a partial insole sized and contoured for disposition in the shoe under the forepart of the foot, and provided with means to lend adequate support to the metatarsal arch of a foot.

Also an object of this invention is the provision of an improved foot cushion in the form of a partial insole to underlie the forepart of a foot, and which partial insole is provided with a notch or cutout at the forward end thereof to insure adequate toe room within the shoe without departing from the effective function of the device.

It is also an object of this invention to provide an improved foot cushion particularly designed to adequately support the foot of a user, and yet be invisible when disposed within an open-toed shoe or similar article of footwear.

Still a further object of the instant invention is the provision of a foot cushion in the form of a partial insole to underlie the forepart of a foot, so constructed as to provide adequate ventilation for the foot at all times, and also constructed to eliminate any sudden rise or elevation beneath the plantar surface of the foot.

Still another feature of the invention resides in the provision of an improved foot cushion comprising a laminated partial insole, with an added piece of the same laminated material secured to the partial insole to underlie the metatarsal arch of the user and lend support

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to that arch, the use of the same materials adding noticeably to the economy of manufacture.

While some of the more salient features, characteristics and advantages of the instant invention have been above pointed out, others will become apparent from the following disclosures, taken in conjunction with the accompanying drawing, in which—

Figure 1 is a top plan view of a foot cushion embodying principles of the instant invention;

Figure 2 is a bottom plan view of the structure of Fig. 1; and

Figure 3 is a transverse vertical sectional view taken substantially as indicated by the line III—III of Fig. 1, looking in the direction of the arrows.

As shown on the drawings:

In the illustrated embodiment of the instant invention there is shown a foot cushion in the form of a partial insole, sized and contoured for free disposition in a shoe or other article of footwear to underlie the forepart of the foot.

The foot cushion proper includes a laminated sheet comprising an under and relatively thick layer 1 of cushioning material, preferably foam latex, and a top covering layer 2 of any suitable material providing a smooth surface for contact by the foot or hosiery of the user. A silky finish fabric is quite satisfactory for this purpose, although any material having a smooth, slick, or non-binding surface would be suitable. In the instant disclosure, a smooth silky surfaced fabric is utilized, and this is preferably cured or vulcanized directly to the foam latex layer.

Foam latex is preferred for the material for the under-layer owing to its lightness, its resistance to compacting, its durable restorative powers, its launderability, and the fact that when it has intercommunicating cells it provides a desirable ventilation feature. Air will be pumped into and out of the cells during the repeated applications and releases of pressure upon the cushion during walking. As is clearly seen in Figs. 1 and 2, ventilation is also enhanced by the provision of numerous apertures 3 extending entirely through the laminated structure.

With reference to Fig. 2, it will be seen that the device is preferably laterally skived as indicated at 4 along its rear edge so as to eliminate any abrupt elevation against the foot of the user when the device is disposed in a shoe or the like. This skiving 4, in the illustrated instance, would occur mostly in the latex layer, and will cause a gentle rise or elevation that is not uncomfortable to the foot.

The illustrated form of the invention extends from a point beneath the longitudinal arch of the foot, forwardly to the end of the shoe. It will be especially noted that the forward end of the device is cut out to provide a curvate notch 5 which performs a dual function. First, provision of the notch insures adequate toe room for the user within a shoe that normally fits the foot of the user without the cushion therein. Secondly, the notch is preferably so shaped as to conform with the cut in the upper of an open-toed shoe so that when the device is worn in such shoe, the device itself is invisible.

Further, as seen in the drawings a generally ovate piece, preferably of the same laminated material in order to reduce manufacturing costs, is taken and secured to the partial insole in the region of the metatarsal arch. In the illustrated instance, this piece 6 is secured to the partial insole by a line of stitching 7 which passes entirely through both the piece and the partial insole. Preferably, as seen best in Fig. 3, the added piece 6 is secured with its latex side confronting the latex side of the partial insole so that the fabric on the piece 6 is downward. The addition of the ovate piece 6 provides a double

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thickness beneath the metatarsal arch of the user, and lends support to that arch in a gentle yet effective manner.

In use, it is simply necessary to slip the cushion in a shoe or other article of footwear, and the latex under-surface will provide a gentle clinging action to the built in insole of the shoe, so that the foot cushion will remain in position during use, and not tend to shift or buckle, or otherwise assume a position uncomfortable to the user. The smooth upper surface permits easy donning of the shoe with the foot cushion in place.

Manifestly, the foot cushion will add comfort to the foot of a normal person spending an amount of time on his feet. The cushion also will relieve callosities on the plantar surface of the foot, provide gentle but firm support to a metatarsal arch that has partially fallen or is tending to fall, and the cushion is particularly desirable by a person lacking a normally thick layer of healthy tissue under the ball of the foot, the cushion effectively compensating for tender, thin tissue in the metatarsal area of the foot. The notch in the forward end of the support renders it invisible in an open-toed shoe, and provides ample toe room in a shoe normally fitting a particular foot. Obviously, the device is durable, may be laundered whenever desired, is simple in construction and economical to manufacture, and will aid other and various ailments or afflictions of the foot.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In a laminated cushion for the forepart of the plantar region of the foot, a sheet of foam latex contoured to underlie that part of the foot extending for-

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ward from the region of the longitudinal arch, a smooth covering over said sheet and of the same area, said cushion having a curvate notch cut out of the forward end thereof to provide additional toe room when the device is in an article of footwear, and a generally ovate piece of the same laminated cushion material secured to the underside of said cushion with the covering downward to provide a support for the metatarsal arch of the foot.

2. In a foot cushion, a laminated partial insole comprising a layer of foam latex and a smooth cover bonded thereto, said partial insole having a curvate notch in the forward end thereof being sized and contoured for disposition in a shoe beneath that part of the foot extending forward from the region of the longitudinal arch, a generally ovate piece of the same laminated material as said partial insole to lend support to the metatarsal arch of the foot, a line of stitching securing said ovate piece to the underside of said partial insole, and said partial insole being laterally skived on its underside at its rear end to provide a gradual elevation when disposed in a shoe.

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