Aug. 3, 1937. F. T. KING 2,088,707

FOOT ARCH SUPPORT

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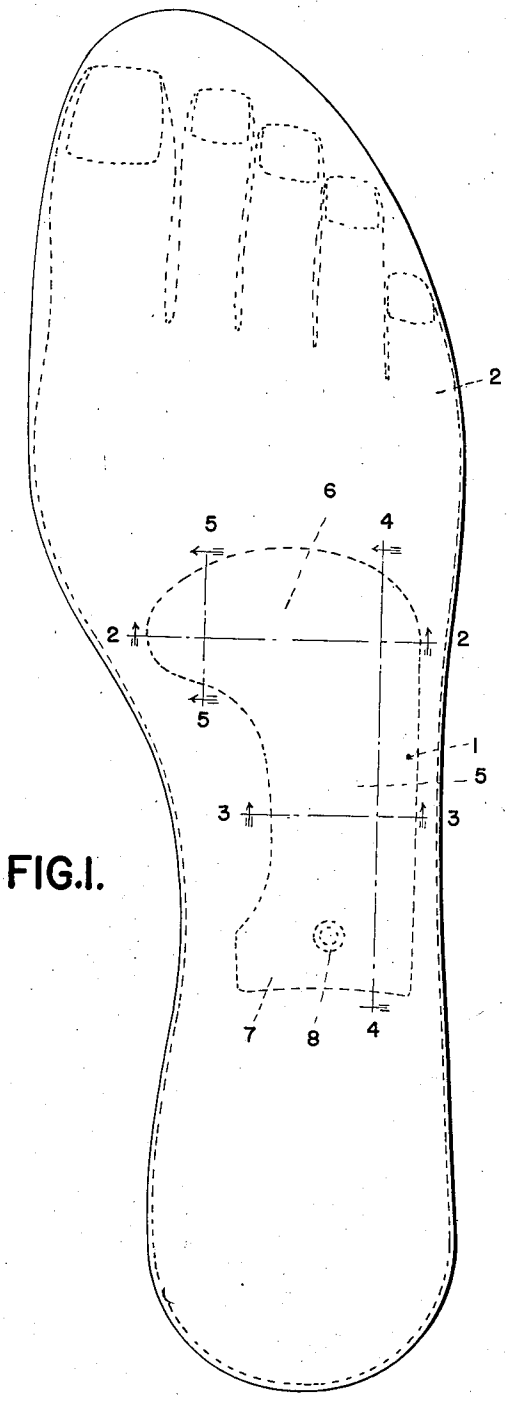


FIG.1.

FIG.2.

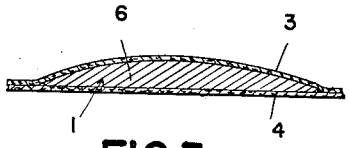
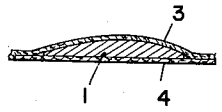


FIG.3.



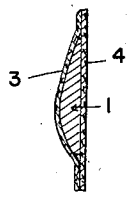


FIG.5.

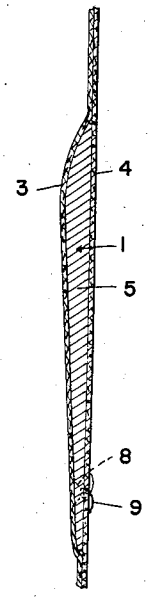


FIG.4.

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FOOT ARCH SUPPORT

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3 Claims. (Cl. 36—71)

The invention relates to foot arch supports and has for an object to provide an improved support for both the metatarsal and longitudinal arches of a human foot. The invention has for another object to provide a support which provides clearance for the inner longitudinal arch. The invention has for a further object to so construct the support that it has an extended face for supporting the foot and substantially relieving the heel of load.

These and other objects of the invention will become apparent from the following description, taken in connection with the accompanying drawing, in which

Figure 1 is a plan view of a foot arch support embodying my invention, a foot, shown by dotted lines, being superimposed;

Figures 2, 3, 4, and 5 are cross sections on the lines 2—2, 3—3, 4—4, and 5—5 respectively of Figure 1.

In general, 1 is the foot arch support which is designed to support the anterior metatarsal arch and the outer longitudinal or weight bearing arch of the human foot 2, shown in dotted lines in Figure 1. This support is also designed to provide clearance for the inner longitudinal or spring arch of the foot so that the latter may function normally. The support is solid and may be formed of a number of materials and, as shown, is formed of a light metal, such as aluminum. The lower face of the support is flat while the upper face is rounded. The support, as illustrated in the present instance, is located between the upper and lower leather layers 3 and 4 respectively, which are cemented together and form an insole. The portion of the upper insole layer engaging the upper face of the support conforms to the contour of the upper face. It is apparent that the support might also be built into the shoe between the insole and outsole or located on the insole and covered.

The support is a generally L-shaped member having the longitudinal part 5 and the integral transverse part 6. The support is so located that the longitudinal part supports the outer longitudinal or weight bearing arch of the foot and clears the inner longitudinal or spring arch of the foot and the transverse part supports the anterior metatarsal arch of the foot. The outer edge of the longitudinal part is preferably substantially straight and the upper face of this longitudinal part is preferably rounded transversely of the foot and tapers downwardly to merge with the lower face at the inner edge, as shown in Figure 3. The transverse part 6 extends inwardly of the foot beyond the longitudinal part 5 and its toe edge is curved and its upper face is rounded both longitudinally and transversely of the foot, as shown in Figures 2, 4, and 5, the greatest height being approximately at the middle of the transverse part.

The longitudinal part 5 is also formed at its heel edge with the integral extension 7 which extends inwardly of the foot. The heel edges of the longitudinal part and the extension register and are positioned to terminate adjacent the heel of the foot, the arrangement being such that the support has an extended supporting face for the foot adjacent the heel and substantially relieves the heel of load.

For additionally securing the support in proper position, the longitudinal part 5 near its heel end is formed with the countersunk hole 8 through which may extend a suitable riveting member 9 which may be clinched over against the lower insole layer 4.

What I claim as my invention is:

1. A foot arch support, comprising a transverse part for supporting the anterior metatarsal arch of the foot, the upper face of said part being convex longitudinally and transversely of the support, and a longitudinal part of less width than said transverse part for supporting the outer longitudinal arch of the foot, the upper face of said longitudinal part being convex transversely thereof.

2. A foot arch support, comprising a generally L-shaped member having a transverse part for supporting the anterior metatarsal arch of the foot, the upper face of said part being convex longitudinally and transversely of the support, and a longitudinal part for supporting the outer longitudinal arch of the foot, the upper face of said longitudinal part being convex transversely thereof.

3. A foot arch support, comprising a longitudinal part adapted to be located to support the outer longitudinal arch of the foot, and an integral transverse part at the toe end of said longitudinal part adapted to be located to support the anterior metatarsal arch of the foot, the upper faces of both of said parts being convex transversely of the parts, said transverse part extending inwardly beyond said longitudinal part and said longitudinal part having at its heel end an integral inward extension.

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