Dec. 25, 1951 A. HIGGS 2,580,094

METATARSAL CUSHION

Filed Nov. 2, 1949

Fig. 1.

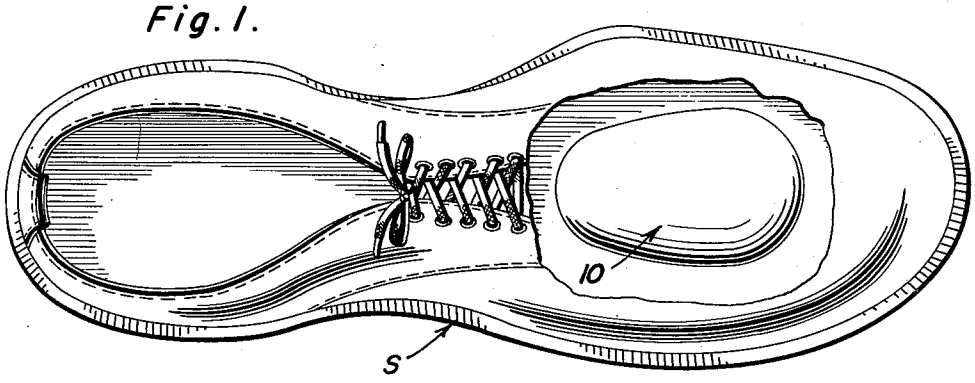


Fig. 2.

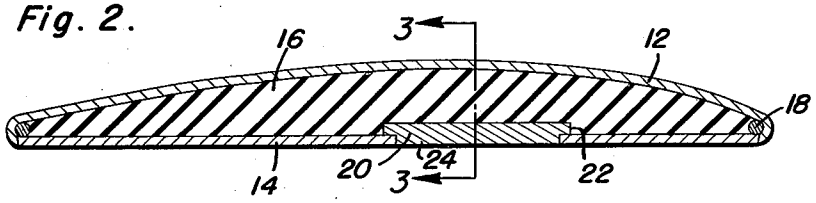


Fig. 3.

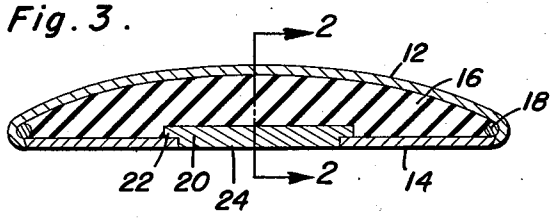
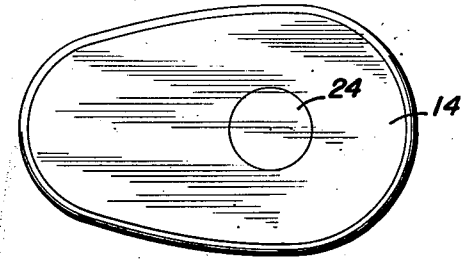


Fig. 4.



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METATARSAL CUSHION

Alfred Higgs, Harrisburg, Pa.

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2 Claims. (Cl. 36—71)

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This is a continuation-in-part of my co-pending application Serial No. 78,271, which was filed on February 25, 1949, now abandoned.

An object of this invention is to center a metatarsal support in the proper region of a shoe so that it will be located where it is needed for the individual requirements of the foot of a person by being able to observe the center of maximum thickness together with the outline of the metatarsal support through a fluoroscope.

Another object of this invention is to accomplish the above end by means of an improved support consisting of a pliable and flexible cover over a resilient filler together with a fabric base having an opening therein through which a lower surface of a metal insert passes, and together with a wire stiffener which passes between the peripheral edges of the cover and the base, the lower surface of the metal insert or disk being exposed so that it together with the fabric or leather base may be glued or otherwise rigidly fastened to the upper surface of the inside of the sole of the shoe.

Ancillary objects and features will become apparent in following the description of the illustrated form of the invention.

In the drawings:

Figure 1 is a plan view of a shoe with a part of the top removed to show a location of the metatarsal support;

Figure 2 is a longitudinal sectional view of the support and taken on the line 2—2 of Figure 3 and in the direction of the arrows;

Figure 3 is a sectional view taken on the line 3—3 of Figure 2, and

Figure 4 is a bottom view of the support.

A shoe generally indicated at S is disclosed as being typical of any conventional shoe. A fragmentary portion of the top of the shoe is broken away to illustrate one location of the metatarsal support generally indicated at 10. The structure of the support includes a cover 12 made of leather, kid or other flexible and pliable material. A bottom or bottom sheet 14 which is made of fabric coated with adhesive, is spaced from the top 12. In the space between top or cover and the bottom there is a resilient and pliable filler, as rubber, indicated at 16 which may be shaped in accordance with the needs of the individual using the device. The same is true of the plan form or peripheral configuration of the support.

A wire stiffener 18 is disposed between the peripheral edges of the bottom 14 and the peripheral edges of the top 12. This wire stiffener holds the device in shape and is also visible through a fluoroscope to indicate the marginal edges thereof.

A disk 20 made of a material visible through a fluoroscope, as metal, is disposed between the bottom 14 and the cover 12. This disk 20 has a circular shoulder 22 thereon which seats upon the upper surface of the bottom 14, whereas the

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reduced portion 24 is passed through an opening in the bottom 14. The disk 20 is located in the maximum thickness point of the metatarsal support throughout any predetermined place thereof so that the operator of the fluoroscope can judge and determine the location and position of the support.

When fastening the support to the sole of the shoe S, after it has been centered in the proper region of the foot and in the proper place of the shoe, it is held in place by means of glue which holds the support firm and fixed to the sole. Not only is the bottom 14 held in place but also the disk 24 so that it will be immovable with respect to the remainder of the device inasmuch as it has served its function and should not be moved after once being positioned in the shoe.

Having described the invention, what is claimed as new is:

1. A metatarsal support to be disposed in various locations on the inside surface of a shoe sole, said support comprising in combination, a wire frame with a bottom sheet having an adhesive thereon, a curved cover sheet, and a filler between said cover and bottom sheet, said frame being disposed within the peripheral edges of the cover and bottom sheet and said frame constituting a means to detect the edges of said support, being visible when viewed through a fluoroscope to center the support in proper location within the shoe, a member disposed in said filler and passed through an opening in said bottom and constituting a means to visually indicate the center region of the support when viewed through a fluoroscope, and said member having a flat bottom surface adapted to rest firmly upon the insole of a shoe.

2. In a metatarsal support, a cover and a bottom, a flexible filler disposed between said cover and said bottom, means for indicating the edges and means for indicating the center of the support when viewed through a fluoroscope, said means including respectively, a wire and a metallic disk, and said disk having a flat bottom surface accessible through said bottom so that when the bottom is fixed in a shoe the disk is also fixed with respect to the shoe.

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