Sept. 9, 1930. R. H. JOHNSON 1,775,202

METATARSAL CUSHION

Filed June 27, 1928

Fig. 1

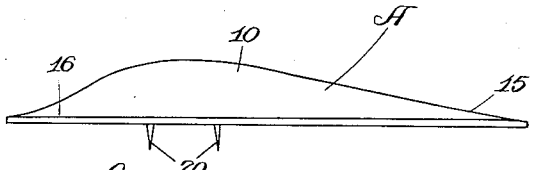
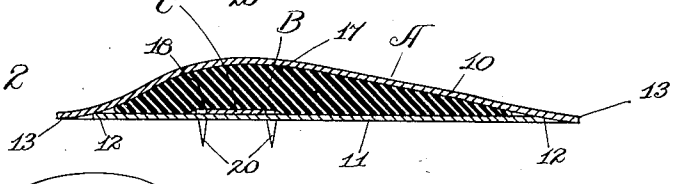


Fig. 2



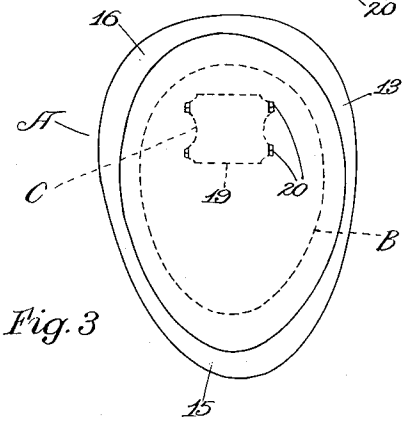


Fig. 3

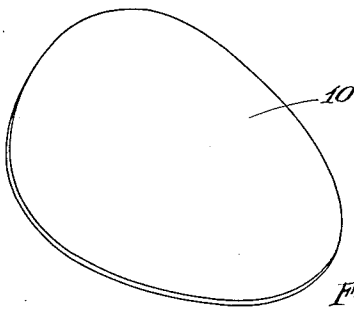


Fig. 4

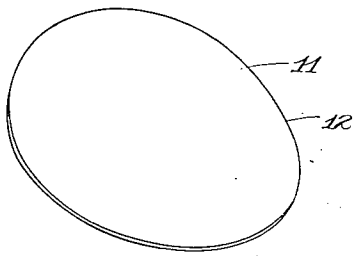


Fig. 5

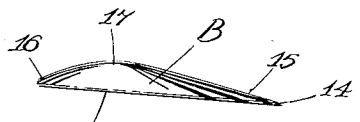


Fig. 6

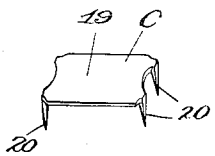


Fig. 7

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UNITED STATES PATENT OFFICE

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METATARSAL CUSHION

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My invention relates to metatarsal cushions adapted to be adjusted into a convenient position within the shoe, the primary object of which is to provide a cushion of a simple nature having a small number of parts which are readily secured together and adapted to operate to provide a metatarsal cushion for the foot.

The invention includes a metatarsal cushion having a filler of a soft, pliable nature, a top cover of a thin flexible piece of leather or other suitable material, a thin flexible under member adapted to cover the cushion member and to contact about the cushion member with the cover member, and a pronged member positioned beneath the cushion and piercing through the under member with sharp prongs which are adapted to hold the entire unit or assembly as a metatarsal cushion, adjustable to any position within the shoe very readily.

It is also a feature of my invention to provide a metatarsal cushion of an adjustable nature wherein the top and bottom portions are made of thin flexible sheets of leather. The top member is larger than the bottom member so that the marginal edge of the top member will over-lie the peripheral edge of the lower member forming a thin bevel-like edge about the metatarsal cushion. The filler member of my metatarsal cushion may be made of soft, pliable rubber with a very thin beveled edge and of an oval outline with a pointed end and an enlarged end, the enlarged end forming the knoll or high point of the cushion, while the pointed end bevels down to the thin peripheral edge from the knoll portion. This filler provides the soft, pliable cushion which is held between the top and bottom leather cover members so as to provide a metatarsal cushion of a very desirable nature with an extremely thin peripheral edge and a knoll-like portion near one end, while the other end bevels gradually from the knoll to the thin peripheral edge. The shape and formation of my metatarsal cushion are of primary importance in providing a means of forming an inexpensive metatarsal support adapted to be placed on top of the insole of a shoe in the position desired by the wearer.

The formation of my metatarsal cushion of thin leather members which are not affected in a detrimental manner by the perspiration of the foot together with the rubber filler is important in providing a metatarsal cushion for a shoe which will retain its flexibility and cushioning nature and not become objectionable for use due to the perspiration to which the same is subjected.

These features together with other details of my metatarsal cushion and objects will be more fully and clearly set forth in the specification and claims.

In the drawings:

Figure 1 is a side view of my metatarsal cushion.

Figure 2 is a longitudinal side sectional view of the same.

Figure 3 is a bottom view of my metatarsal cushion.

Figure 4 is a perspective of the top member.

Figure 5 is a perspective of the bottom member.

Figure 6 is a side view of the filler removed.

Figure 7 is a perspective view of the anchoring member for the metatarsal cushion.

My metatarsal cushion A is provided with a top member 10 which is made of thin flexible leather or other suitable material not readily affected by perspiration.

The metatarsal cushion A is formed with a bottom member 11 which is also made of thin flexible leather or other suitable material. The member 11 is somewhat smaller than the member 10 so that the top member 10 will over-lie the peripheral edge 12 of the bottom member. In this manner a very thin marginal edge 13 is provided, no thicker than the thickness of the top member 10. This is very important in my metatarsal cushion A as it provides such a thin edge about the metatarsal cushion that in placing the metatarsal cushion A in a shoe on top of the insole thereof, the thin edge 13 will lie down against the top of the insole.

The inner surfaces of the top members and bottom members 10 and 11 are covered with an adhesive material so that when the mem-

bers 10 and 11 are placed with their inner surfaces towards each other the marginal edge 12 of the lower member 11 will adhere to the inner surface of the member 10, and the marginal edge 13 of the top member 10 will have a tendency to seal itself to the top of the insole of the shoe in which the metatarsal cushion is placed. This seals the peripheral edge 13 of the metatarsal cushion A in close contact with the insole of the shoe in which it is placed.

The metatarsal cushion A is provided with a filler B made of soft pliable rubber or other suitable material which is formed oval and is provided with a very thin marginal or peripheral edge 14. The filler B together with the top and bottom members 10 and 11, respectively, are shaped pointed at one end so that the metatarsal cushion A is provided with a somewhat pointed end 15 and an enlarged end 16. The filler cushion B is formed with a knoll 17 on one side which is positioned at the enlarged end of the cushion and the surface of the cushion B tapers from the high point of this knoll toward the thin peripheral edge 14.

The knoll 17 is formed on the top surface of the filler B, while the under surface 18 thereof is flat and is adapted to extend in a plane with the thin beveled peripheral edge 14.

The filler B is of a smaller dimension but of a similar shape to the members 10 and 11. Thus when the filler B is inserted between the top member 10 and the lower member 11 it is adapted to be so positioned as to provide the marginal edge 12 about the entire thin edge 14 of the cushion B. This permits the upper and lower members 10 and 11 to contact with each other marginally and thus help to seal the members 10 and 11 together, and as the lower member 11 is smaller than the top member 10, the sealing edge 13 is provided about the entire metatarsal cushion A. I provide an anchoring member C which is made of metal or other suitable material and is in the form of a plate 19 having four sharp piercing prongs 20 projecting from one side of the same. This anchoring member C is adapted to be positioned with the prongs 20 piercing through the lower member 11, as illustrated in Figures 1 and 2, and with the plate or body portion 19 thereof inclosed in the metatarsal cushion, being covered by the lower member 11 and adapted to be embedded into the under surfaces 18 of the filler B. The anchoring member C is positioned preferably under the knoll 17 at the enlarged end 16 of the metatarsal cushion A.

The simplicity of my metatarsal cushion is of primary importance. By providing the two members 10 and 11 together with the similarly shaped filler B having a cushion knoll 17, I form with the anchoring member C a metatarsal cushion of a very desirable nature for the reason that it can be made up in a manner to seal economically and may be readily placed in the desired position within the shoe of the wearer or changed to adjust the same if desired by the wearer, and yet providing a structure wherein the hard wear and use to which a cushion of this nature is subjected will not affect the utility or pliableness of the same.

In accordance with the patent statutes I have described the principles of construction and the primary features of my metatarsal cushion and while I have set forth a particular illustration thereof, I desire to have it understood that the same may be varied within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A unitary metatarsal cushion for adjustable insertion within a shoe on top of the usual foot contacting member found therein including, thin flexible top and lower members, a soft rubber cushion filler between said members, and an anchoring member positioned beneath said filler having piercing means extending through said bottom member.

2. A metatarsal cushion for adjustable insertion within a shoe and on top of the usual foot contacting member found therein including, a cover member of oval shape, a bottom member having a similar shape, a rubber filler member of a similar shape to said cover and bottom members and of a smaller dimension than each of said other members, said filler member being adapted to be practically centrally positioned between said cover and bottom members, and anchoring means under said filler having piercing points extending through said bottom member with the body of said anchoring means covered over by said cushion.

3. A metatarsal cushion for adjustable insertion within a shoe and on top of the usual foot contacting member found therein including, three members, one a sponge like moisture proof filler being straight on one side and having a knoll projecting from the other side thereof with a thin peripheral edge, said filler being of a smaller dimension than each of the other members, the other members forming a top and bottom cover, for said filler, and an anchoring member beneath said filler having piercing means extending through the bottom member and projecting from the pad.

ROSS H. JOHNSON.