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ARCH CORRECTING INSERT FOR SHOES

Filed Jan. 2, 1930

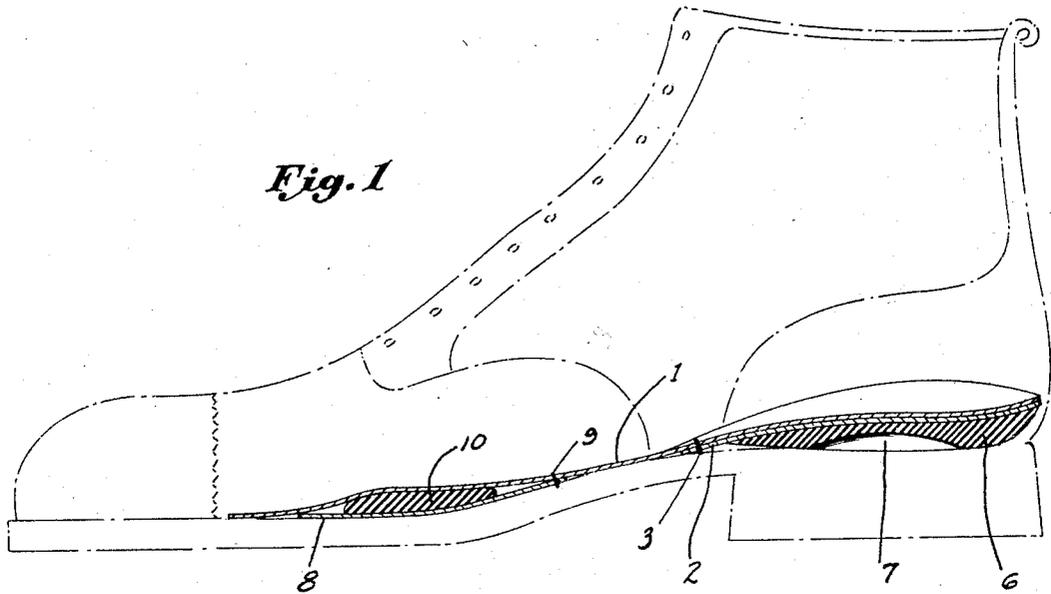


Fig. 1

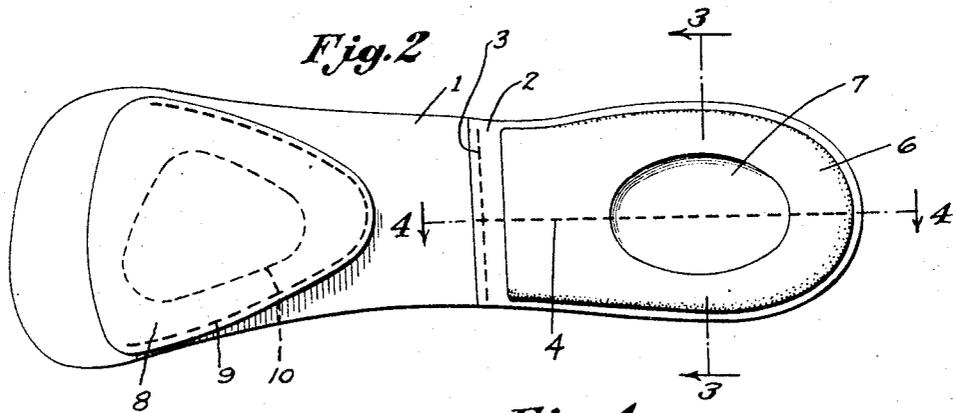


Fig. 2

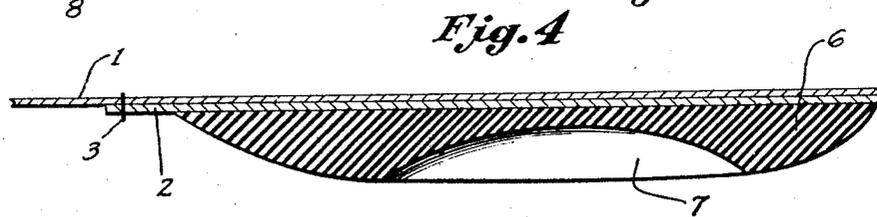


Fig. 4

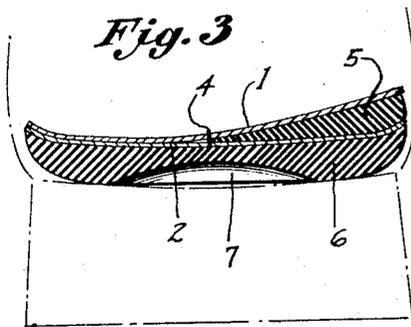


Fig. 3

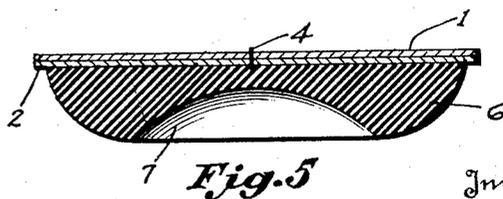


Fig. 5

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ARCH CORRECTING INSERT FOR SHOES

Application filed January 2, 1930. Serial No. 413,075.

This invention relates to an arch correcting insert for shoes.

An object of the invention resides in providing an arch correcting insert for shoes having a main body member of thin, flexible sheet material formed to fit the contour of the heel of the shoe and having a forward end portion extending into the forward portion of the shoe, this body member supporting a heel member attached to the heel portion to provide pockets at opposite sides of the heel portion for receiving inserts, and also carrying a cushioning member or pad formed with a central recess or depression providing means for retaining said member in position by the suction cup effect of the recess, and at the same time providing a cooperation between this pad and the inserts in the pockets for correcting the position of the heel in the shoe and providing a cushion for the heel.

The invention also includes the provision of a pocket on the front portion of the main body member formed by attaching a suitably shaped piece of material thereto having an opening adapted to permit the insertion of an arch supporting insert between the piece of material and the main body member for supporting the metatarsal arch of the foot.

This invention also comprehends an improvement over the structure of my previously filed application Serial No. 412,187, filed December 6, 1929 in the provision of the cushion pad having the concave recess provided for cooperation with the other parts in a manner hereinafter clearly described.

The invention comprehends other features which are pointed out hereinafter in the description of the structure of the invention and in the claim.

In the drawings:

Fig. 1 is a vertical longitudinal section through the improved arch correcting insert showing the outlines of a shoe in dot and dash lines for illustrating the position of the insert in the shoe.

Fig. 2 is a bottom plan view of the insert forming this invention.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2 to which is added the showing of

the outlines of the heel portion of a shoe in dot and dash lines.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2 showing the heel portion of the insert on a substantially enlarged scale.

Fig. 5 is a sectional view similar to Fig. 3 with the insert omitted, and slightly enlarged.

The arch correcting insert of this invention includes a main body member 1 which is preferably formed of thin flexible leather and shaped to fit the heel portion of the shoe at the rear end, while the front end extends into the forward end of the shoe, is shaped to fit the contour thereof, and terminates rearwardly of the toe portion of the shoe as shown in Fig. 1. A heel member 2 preferably formed of thin, flexible leather is superposed on the main body member 1, is normally positioned on the underside thereof, and has its forward edge portion secured to the main body member 1 by a transverse row of stitches 3. The main body member 1 and the heel member 2 are secured together along the median longitudinal dimension thereof by a row of stitches 4 as clearly shown in Fig. 2 so as to provide a pair of pockets between these members, one pocket being located at each side of the central row of stitches 4 and opening through the side edges between the members 1 and 2.

An insert 5, shown more clearly in Fig. 3, of wedge shape or of suitable shape according to the foot correction necessary or desired, is inserted in either of the pockets formed between the heel member and the main body member. Usually only one insert 5 is used because it is usually only necessary to turn the heel relative to the normal position of the shoe to one side or the other to obtain the desired correction and the proper fit of the heel in the shoe so as to prevent the wearing of one side of the heel faster than the other and forming what is usually termed "run-over heels." By the insertion of this insert 5 an even wear on the heel is obtained and this running over is prevented. Also defects in the foot are corrected due to the proper support of the heel in the shoe.

A cushioning member or pad 6 is applied to

the bottom face of the heel member 2 and has its edge portions terminating coincident with the edge of the heel member 2, except the front end thereof which terminates slightly short of the forward end of the member 2 as shown in Fig. 2. This cushioning member or pad 6 is suitably cemented or otherwise secured to the heel member 2 and is preferably formed of sponge rubber or other suitable form of cellular material which is highly resilient for producing the desired cushioning effect. The bottom face of this cushioning member or pad 6 is substantially convex adjacent the edge portions being of increasing thickness toward the center and tapering off toward all of the edges in the manner shown in the drawings.

The central portion of this pad 6 is formed with a concave recess 7 to provide a suction cup and an air cushion. The suction cup effect of recess 7 securely retains the body member 1 and its connected parts in proper position in the heel of a shoe as shown in Fig. 1 through its cooperation with the inner bottom face portion of the shoe. In addition, this recess 7 provides an air cushion for the heel far more resilient than the material of the pad 6 and permits the heel to force the central portion of the pad downwardly so as to form a cupped support in the heel portion of a shoe not provided with a cupped out portion thereby providing a better fit of the shoe to the heel of the foot and greater comfort to the wearer. This recess 7 further provides cooperation with the insert 5 because the insert is cushioned by the thick portion of the pad 6 immediately under the central portion of the insert as shown in Fig. 3 and cooperates with this insert in obtaining the desired correction of the heel of a wearer in the shoe.

A pocket forming member 8 is secured to the underside of the front portion of the main body member 1 by a row of stitches 9 extending around the marginal portion thereof as shown in Fig. 2, the forward edge of this member 8 being left unsecured so that an insert 10 may be placed between the member 9 and the main body member 1 for supporting the metatarsal arch of the foot and obtaining a desired correction in this metatarsal arch for persons having deformed arches.

It will, therefore, be noted that a special construction of the pad 6 with the concaved recess 7 and the remaining convexed lower surface, together with its special relation with the heel member 2 and the main body member 1 providing the pockets for the insert 5 immediately above this pad 6, obtains a series of functions in the cooperation of these parts; in which the main body member 1 is retained in position by the suction cup provided by the recess 7 also providing an air cushion for the heel of the wearer which in use permits the main body member and the heel member to have the heel portions thereof

slightly cup shaped to fit the contour of the heel, while this pad 6 cooperates with the insert 5 by having its portions of major thickness underlying the central portions of the insert 5, so that in obtaining the correction for deformed heels in the shoe, the desired cushioning will be obtained with the desired correction for the defects.

What is claimed is:

As an article of manufacture, an arch correcting member adapted for removable insertion in a shoe, comprising a main body member formed of an elongated piece of flexible sheet material having one end portion shaped to fit under the heel of a foot and the opposite end portion extending under the foot in advance of the heel portion, a heel member of sheet material superposed on the heel portion of the main body member and having the edge portions thereof substantially coincident with the edge portions of said main body member, a transverse row of stitches extending between the opposite edges of said main body member and securing the front edge portion of said heel member to said main body member, a longitudinal row of stitches extending from the front end of said heel member to the rear end thereof along the median longitudinal portion thereof for securing said heel member to said main body member to provide a pair of pockets between said members opening at opposite sides thereof and positioned at opposite sides of the median longitudinal dimension of said members, a heel supporting insert adapted for insertion in either of said pockets, and a cushioning pad secured to said heel member and substantially coextensive therewith having a central concave recess in the bottom face thereof, having portions of greatest thickness adjacent the edges of said recess and of successively decreasing thickness toward its outer edge portions.

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