17

April 5, 1932. J. F. GILKERSON 1,852,238

SHOE

Filed March 27, 1930

Fig. 1

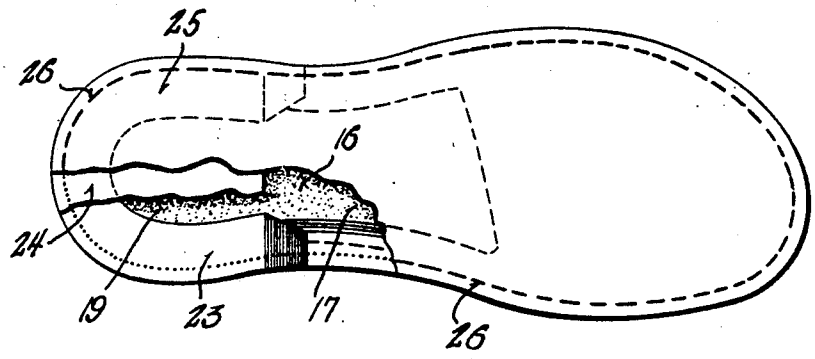


Fig. 2

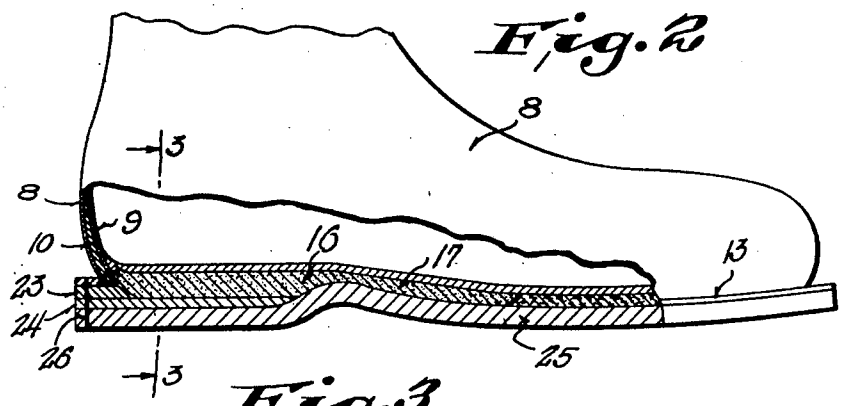
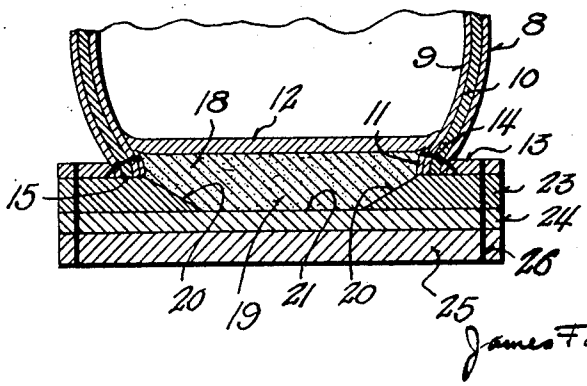


Fig. 3



Inventor

James F. Gilkerson

By Charles & Fresch

Attorneys

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UNITED STATES PATENT OFFICE

JAMES F. GILKERSON, OF MILWAUKEE, WISCONSIN

SHOE

Application filed March 27, 1930. Serial No. 439,331.

The invention relates to shoes and more particularly to Goodyear welt shoes having sewed heel seats.

The general object of the invention is to provide a cushion spring-heel construction for Goodyear welt shoes having sewed heel seats, which may be expeditiously incorporated in shoes of this type without any change in the factory equipment and which does not materially increase the cost of the shoe, but produces a far more comfortable and healthful shoe than the usual constructions and one which is especially suitable for children's use and for so-called athletic shoes. More particularly, the present invention embodies certain improvements over that of my prior application, Serial No. 383,610, filed August 5, 1929, which tend to simplify the cushion construction and its associated parts and in which an additional outer sole member is provided at the heel so that if the outer sole wears through this additional sole will protect the cushion until repairs can be made.

The invention further consists in the several features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings Fig. 1 is a bottom plan view of a shoe embodying the invention, parts of the outer sole being broken away;

Fig. 2 is a side elevation view of the shoe, parts being broken away and parts being shown in section;

Fig. 3 is a detail sectional view taken on the line 3—3 of Fig. 2.

As previously noted, this invention relates to Goodyear welt shoes in which the heel seat is sewed and in which no nails are used in attaching the heel to the heel seat and, as such, the shoe includes the usual upper 8, which may have a lining 9 and counter 10 associated therewith, these parts being secured in the usual manner to the flange 11 of the insole 12 and to the welt 13 by the inseam stitching 14, the welt 13 extending about the entire shoe.

Usually in shoes of this type the space formed between the inseam ridge 15 and the bottom of the insole is filled with the usual bottom filler, a relatively stiff and thick leather spring-heel is disposed over the heel seat and extends across under the welt and the outsole is secured to the shoe by stitching it to the welt at the toe and shank portions of the shoe and by stitching it to the spring-heel and the welt at the heel seat portion of the shoe, which provides a spring-heel shoe without any special cushioning properties, as neither the bottom filler nor the spring-heel possess such properties.

According to the present invention, after the inseaming operation, either a cushion heel member alone or a combined heel and shank member is interposed between the inner and outer soles.

Referring to the drawings, a piece of soft cushioning material 16, preferably molded sponge rubber, is formed to provide a heel portion and a flexible shank portion 17 and it will be noted from Figs. 2 and 3 that the heel portion includes a cushion part 18 which extends up into the space formed between the inseam ridges 15 and the bottom of the insole and takes the place of the usual bottom filler and includes the part 19, which forms a spring-heel portion, said part having its outer edges 20 tapering inwardly from the inseam ridge to the bottom 21. While the entire edge portion of the soft rubber member is located inwardly of the inseam ridges, the upper marginal portion of this member engages the inner surfaces of the inseam ridges and hence a yielding lateral pressure is exerted thereon. This piece 16, as such, is preferably placed in position after the inseaming operation and secured against the insole and inseam ridge by suitable cement and the space at the ball and toe portions of the shoe is filled with the usual bottom filler 22.

The heel construction is completed by affixing to the spring heel part 19 a member 23 of stiffer material, such as leather or denser rubber, such as is used in heels, said member 23 forming a marginal or enclosing frame for the part 19 and extending around the heel beneath the welt 13 and initially secured to the welt by suitable adhesive, the inner edges of said member being tapered to abut the tapered sides or edge 20 of the heel part 19.

Preferably, before securing the frame 23 in place, an outer heel, sole or lift 24 is secured to said frame by suitable adhesive and is then secured to the bottom of the cushion heel 19 or said sole 24 may be secured by adhesive to said heel and frame.

With the parts thus assembled the usual outsole 25 is secured to the shoe by stitching 26 extending through the welt and outsole at the front and shank portions of the shoe and extending through the welt 13, the frame 23, sole member 24 and outer sole at the heel portion of the shoe, as shown in Figs. 2 and 3.

Where the flexible shank portion is omitted, the space shown occupied thereby is filled in the same manner as the forepart of the shoe, with bottom filler.

With the above construction, should the heel portion of the outer sole wear through, the outer heel sole 24 will protect the cushion and its marginal frame until repairs can be made and also some saving in cushioning material, is effected by the form of the cushion heel part herein shown. By employing a separate stiff marginal frame member 23 which underlies the inseam ridges and yet having this marginal frame member and the soft rubber member provided with engaged and correspondingly beveled surfaces and also by virtue of the engagement of the upper marginal portion of the soft rubber member with the inseam ridges, the structure of the shoe is rendered strong and durable and yet the required cushioning effect is had. The yielding lateral pressure exerted by the soft rubber member permits flexion or yielding of the inseam ridges and yet this desirable action is had with a very secure structural organization of the upper, welt and inner and outer soles.

I desire it to be understood that this invention is not to be limited to any particular form or arrangement of parts except insofar as such limitations are specified in the claims.

What I claim as my invention is:

1. In a Goodyear welt shoe having sewed heel seats with the usual welt, inner and outer soles, a spring-heel construction interposed between the inner and outer soles comprising a soft rubber member, a separate stitch-receiving marginal frame member of relatively stiffer material surrounding said soft rubber member and extending beneath the welt, and an outer heel sole interposed between the main outer sole and said spring-heel portion and secured thereto.

2. In a Goodyear welt shoe having inner and outer soles and a welt inseamed to the upper materials at the heel seam, a spring-heel construction interposed between the inner and outer soles and comprising a soft rubber member having an outer tapered edge, and a separate stitch-receiving marginal frame member of relatively stiffer material extending around and having a tapered edge abutting the edge of the cushion member and extending beneath the welt.

3. In a Goodyear welt shoe having sewed heel seats with the usual welt and inner and outer soles, a cushioned spring-heel construction comprising a soft rubber member interposed between the inner and outer soles, a stitch-receiving marginal frame member of U-shaped form and of relatively stiffer material extending around the soft rubber member and interposed betwen and stitched to the welt and the outer sole, said marginal frame member and said soft rubber member having their adjacent edges correspondingly beveled.

4. In a Goodyear welt shoe having inner and outer soles and a welt inseamed to the upper materials at the heal seat, a cushioned spring-heel construction comprising a stitch-receiving marginal frame member of relatively stiff material interposed between and stitched to the welt and to the outer sole, and a soft rubber member interposed between the inner and outer soles and having its entire edge portion located inwardly of the inseam ridges.

5. In a Goodyear welt shoe having inner and outer soles and a welt inseamed to the upper materials at the heel seat, a cushioned spring-heel construction comprising a stitch-receiving marginal frame member of relatively stiff material interposed between and stitched to the welt and to the outer sole, and a soft rubber member interposed between the inner and outer soles and having its entire edge portion located inwardly of the inseam ridges, at least a portion of the soft rubber member engaging the inner faces of the inseam ridges and exerting a lateral yielding pressure thereon.

In testimony whereof I affix my signature.

JAMES F. GILKERSON.