Oct. 11, 1938. J. R. RIGANDI 2,132,882

SHOE CONSTRUCTION

Filed April 29, 1937

FIG. 1.

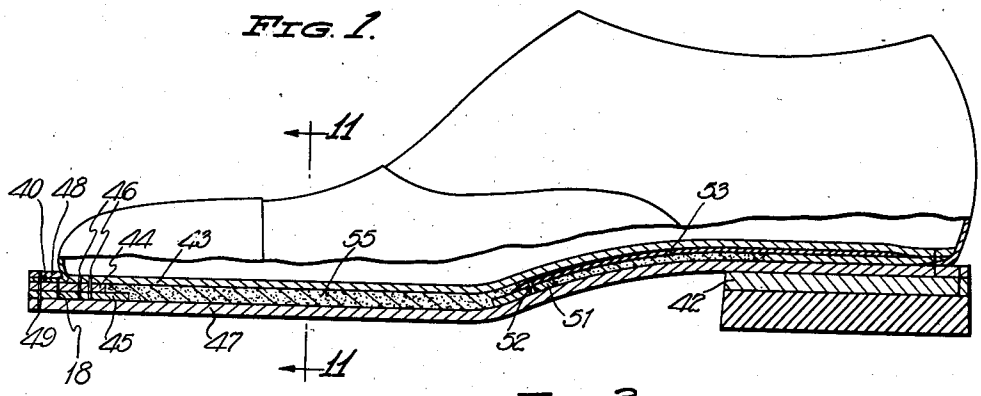


FIG. 2.

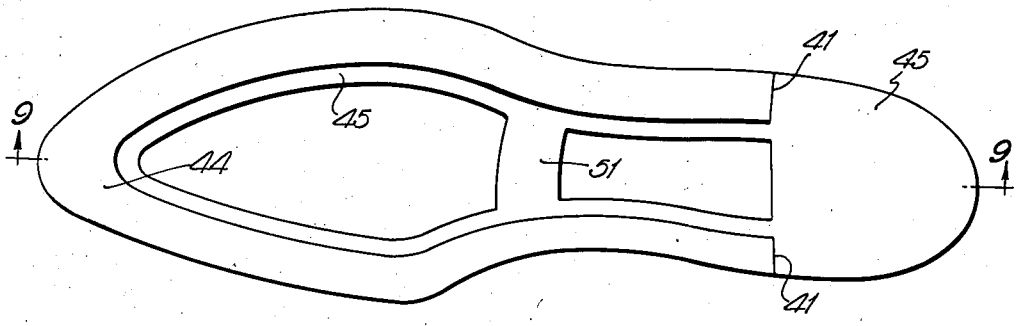


FIG. 3.

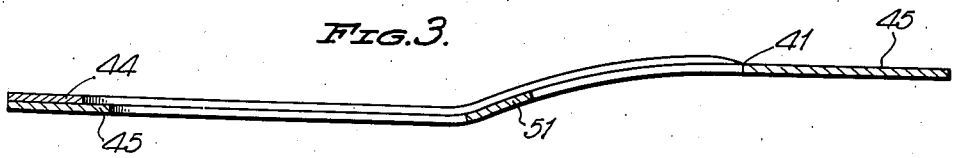


FIG. 4.

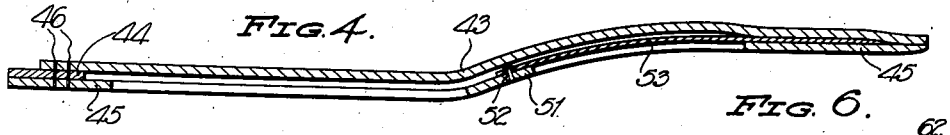


FIG. 6.

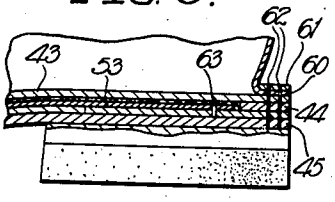
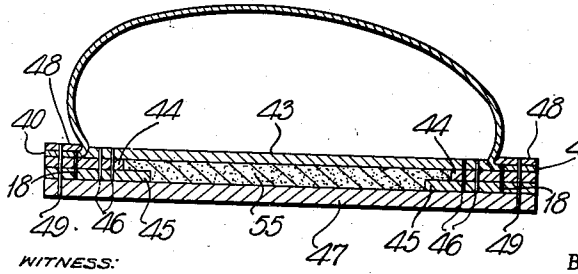


FIG. 5.



WITNESS:

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SHOE CONSTRUCTION

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Application April 29, 1937, Serial No. 139,661

3 Claims. (Cl. 36—16)

This invention relates to new and useful improvements in shoes and more particularly it pertains to sole and upper constructions thereof.

One object of the invention is to provide a new and novel construction whereby a substantial and comfortable sole for shoes may be had.

A further object of the invention is to provide a new and improved manner of embodying in the shank of a shoe sole, a shank stiffening member.

Still another object of the invention resides in the provision of a composite sole in which the filler medium will be retained in position in the shoe sole.

Still another object of the invention resides in a novel construction by which greater strength is obtained and by which the shoe will retain its shape to a better advantage than when the common construction is employed.

Other objects of the invention will become apparent as the nature thereof is better understood for which purpose reference is to be had to the following specification and claims and the accompanying drawing, in which:

Figure 1 is a longitudinal sectional view of a shoe embodying the invention,

Figure 2 is a plan view illustrating a skeleton midsole employed in the invention,

Figure 3 is a longitudinal sectional view taken substantially on the line 9—9 of Figure 2,

Figure 4 is a longitudinal sectional view illustrating the complete insole,

Figure 5 is a transverse sectional view taken substantially on the line 11—11 of Figure 1, and;

Figure 6 is a fragmentary sectional view illustrating a modified form of the invention.

Referring to the drawing, the upper has an outwardly turned marginal flange 40 which, however, does not extend entirely around the marginal edge of the upper but instead, terminates at the point 41 in Figure 2, which is substantially on the forward edge or breast of the sole 42. There is an inner sole 43, a welt member 44, and a skeleton midsole 45. The inner sole 43 the welt member 44 and the skeleton midsole 45 are secured together by a double line of stitching 46. The reference numeral 47 designates the outer sole and 48 designates an outer welt member and this outer sole, the skeleton midsole 45, the welt member 44, the marginal flange 40 of the upper and the outer welt member 48 are secured together by a line of stitching 49.

The skeleton midsole 45 has a bridge piece 51 and secured to the bridge piece 51 as at 52 there is a shank stiffening element 53 which may be of any suitable stiff material such as metal, stiff leather or the like. The skeleton midsole 45 together with its bridge piece 51 serves to space the inner and outer soles with respect to each other to provide for the reception of suitable cushioning material such as 55 which may be of any suitable compressible material.

In that form of the invention illustrated in Figure 12, the out turned marginal portion of the upper which, in said figure, is designated 60 extends entirely around the outer edge of the shoe upper and is secured to the outer sole at the rear of the shoe by means of an outer welt member 61 and a plurality of rows of stitches 62 which extend through the insole 43, the welt member 44, and the skeleton midsole 45. Also in this form of the invention the shank stiffener 53 is secured at its rear end as at 63 to the heel portion of the skeleton midsole 45, as distinguished from that form of shank stiffener illustrated in Figures 1 through 4 in which the rear end of the shank stiffener member 53 is not attached to either the inner sole or the skeleton midsole.

From the foregoing it will be apparent that the present invention provides a new and improved construction of shoe in which the objects heretofore recited are obtained and in which the advantages recited are present.

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

1. In a shoe construction, an upper, an inner sole, a welt member secured directly to the inner sole, a skeleton midsole secured to the inner sole, and spaced therefrom by the welt member, an outer sole, said outer sole being spaced from the inner sole by the skeleton midsole and the welt member to provide a space or chamber in which is disposed a cushioning material, and a shank stiffener mounted in the space or chamber between the inner and outer sole, said shank stiffener being rigidly attached to the skeleton midsole at its forward end only.

2. In a shoe construction, an upper, an inner sole, an outer sole, means for securing the inner sole and the outer sole in spaced relation to provide an intervening space, said means including a skeleton midsole having a transverse bridge portion intermediate of its ends, a cushioning material positioned in the space between the inner and outer sole and in the spaces of the skeleton midsole, and a shank stiffener connected to the transverse bridge portion of the skeleton midsole and extending rearwardly from its point of attachment.

3. In a shoe construction, an inner sole, a

welt member secured to the inner sole, a skeleton midsole secured to the welt member and inner sole, said skeleton midsole having its inner edge extending beyond the inner edge of the welt member, a transverse bridge extending across the skeleton midsole intermediate of its ends, a shank stiffener secured to the inner face of the transverse bridge in the space between the transverse bridge and the inner sole, said shank stiffener extending rearwardly from its point of attachment, an upper secured to the marginal edge of the welt member, an outer sole secured to the outer face of the skeleton midsole and spaced from the inner sole, and a filler filling the space between the inner sole and the outer sole.

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