J. E. O'HARA.

SHOE SOLE.

APPLICATION FILED JAN. 10, 1916.

1,241,142.

Patented Sept. 25, 1917.

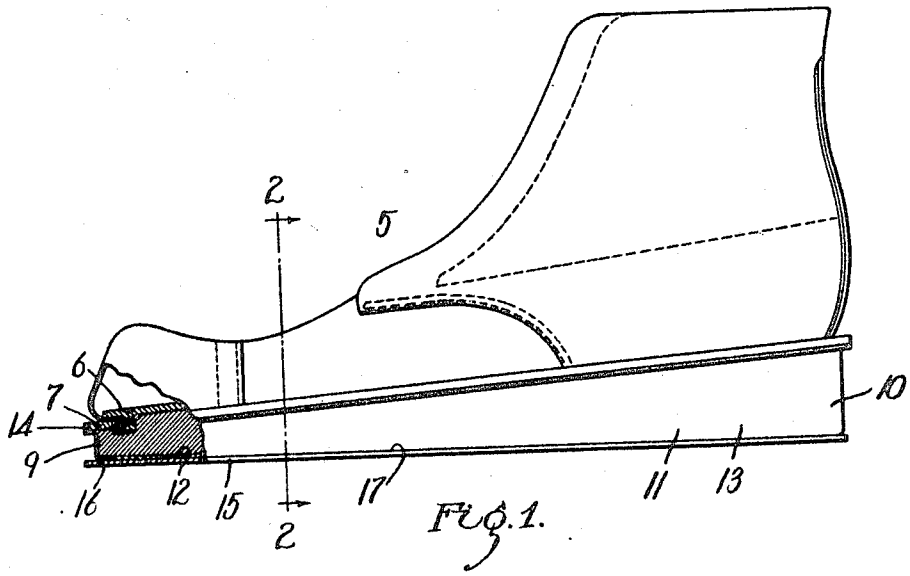


FIG. 1.

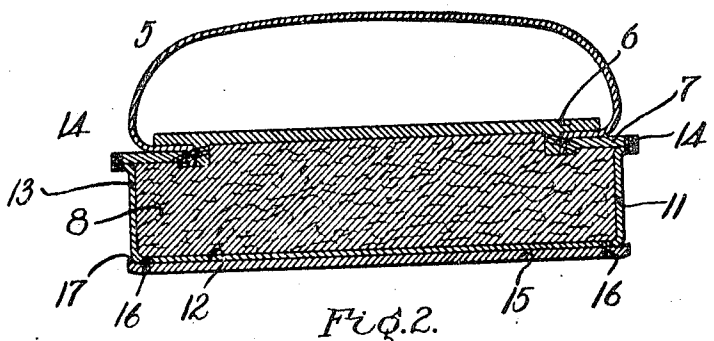


FIG. 2.

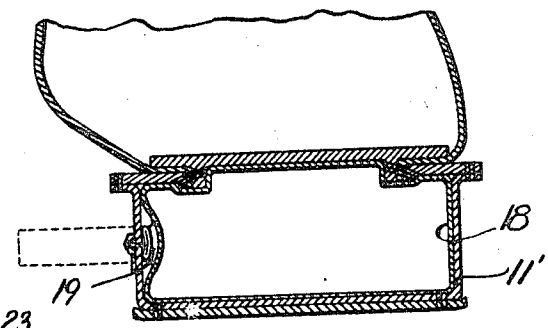


FIG. 3.

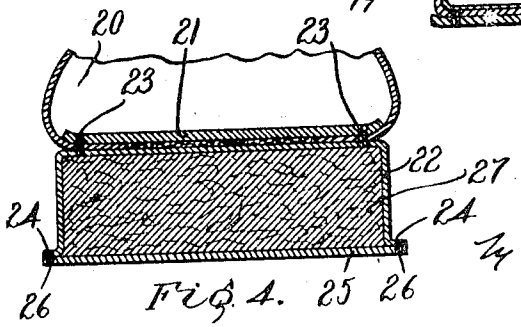


FIG. 4.

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UNITED STATES PATENT OFFICE.

JAMES E. O'HARA, OF WHITMAN, MASSACHUSETTS.

SHOE-SOLE.

1,241,142. Specification of Letters Patent. Patented Sept. 25, 1917.

Application filed January 10, 1916. Serial No. 71,373.

To all whom it may concern:

Be it known that I, JAMES E. O'HARA, a citizen of the United States, residing at Whitman, in the county of Plymouth and State of Massachusetts, have invented new and useful Improvements in Shoe-Soles, of which the following is a specification.

This invention relates to improvements in shoe soles, and has for its object to provide a resilient moisture proof cushion sole for boots or shoes.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims.

Referring to the drawings:

Figure 1 is a side elevation of a shoe with a sole embodying my invention shown attached thereto and partly in section.

Fig. 2 is a transverse section of the sole and shoe taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse section similar to Fig. 2, illustrating a modified form of cushion.

Fig. 4 is a section similar to Fig. 2, illustrating still another method of securing the covering to the shoe upper.

Like numerals refer to like parts in all views of the drawings.

In the drawings, 5 is the upper which may be constructed in accordance with the well known methods known either as the "welt" or "McKay" type of shoe, but for convenience a welt shoe is shown herewith, and embodies in its construction an insole 6 and a welt 7 preferably secured to the insole 6 and upper 5 in the usual manner.

A cushion member 8 preferably constructed of some suitable resilient material such as felt, sponge rubber, corrugated rubber, pulverized cork, leather shavings or the like, is arranged beneath the insole 6, said cushion member being formed tapering or gradually increasing in thickness from the toe portion 9 thereof to the heel portion 10, so as to elevate said heel portion.

A covering or casing 11 preferably constructed of leather or other suitable material is formed so as to incase said cushion member, said covering preferably embodying in its construction a sole portion 12 and a rim 13. The upper edge of the rim 13 is preferably attached to the welt 7 by stitches 14, said stitches being at a substantial distance from the tread or sole portion of said casing or covering, and therefore far enough from the ground so as not to be exposed to any great extent, to moisture which may be on the ground.

An outer sole 15 is attached preferably by stitches 16 to the sole portion of the covering 11, said outer sole being also cemented at 17 to said casing, so as to prevent moisture from working into the seam between said outer sole 15 and the covering 11.

In Fig. 3 I have illustrated another form of cushion which may be employed if desired, and consists of an inner casing 18 formed of suitable resilient material preferably rubber which is adapted to conform to the inner shape of the casing 11'.

The inner casing 18 is adapted to be inflated with air through a suitable valve 19 formed in one side thereof and extending through the covering 11'. The casings 11 and 11' are preferably treated in such a manner that they will resist moisture, thus providing a very resilient and comfortable shoe, capable of being used in either dry or wet weather without danger of moisture being conducted from the ground through to the interior of the shoe.

Either of the forms illustrated are adapted to support the heel, instep or forepart portions of the foot equally well and thereby eliminate all possibility of falling arch.

Refering now to Fig. 4 which is a modified view of a shoe, preferably of the "McKay" type of shoe in which 20 is the upper and 21 the inner sole thereof which are assembled in the usual well known manner. A covering 22, preferably formed of some suitable moisture resisting sheet material, is attached to the upper 20 and insole 21 preferably by stitches 23. The covering 22 is provided with an outward turned rim 24 at the lower edge thereof to which is attached an outer sole 25 preferably by stitches 26. The covering 22 may be filled with any suitable resilient filling material 27 such as that used in connection with the forms illustrated in Figs. 1 to 3 inclusive.

Having thus described my invention what I claim and desire by Letters Patent to secure is:

1. The combination with a shoe upper, of a sole embodying a casing member having a transverse portion, extending entirely across the sole, provided with a side wall disposed substantially at right angles to and integral with said transverse portion, said side wall gradually decreasing in depth from heel to

toe, the edge of said side wall terminating in an outwardly projecting rim, means for securing said casing to said upper, a filler of resilient material for said casing, and an outer sole attached to said casing.

2. The combination with a shoe upper, of a sole embodying a casing member having a transverse portion, extending entirely across the sole, provided with a side wall disposed substantially at right angles to and integral with said transverse portion, said side wall gradually decreasing in depth from heel to toe, the edge of said side wall terminating in an outwardly projecting rim, means for securing said transverse portion to said upper, a cushion member constructed of felt adapted to fill said casing, and an outer sole attached to the rim of said casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES E. O'HARA.

Witnesses:
SYDNEY E. TAFT,
HATTIE E. STRATTON.