No. 774,784. PATENTED NOV. 15, 1904.

A. C. ROUNDS.

SHOE.

APPLICATION FILED FEB. 15, 1899.

NO MODEL.

Fig. 1.

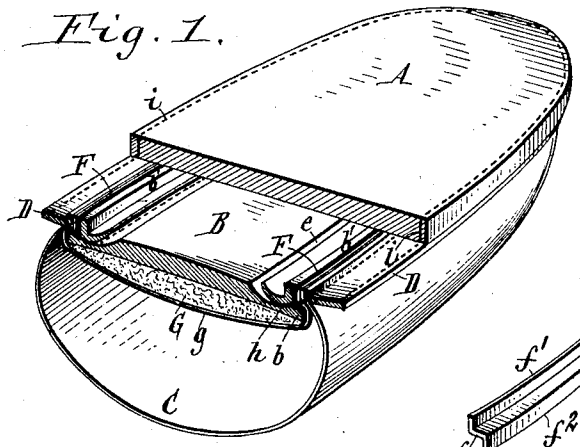


Fig. 2.

Fig. 3.

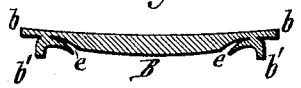


Fig. 4.

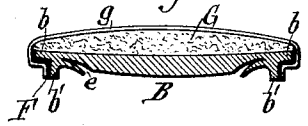


Fig. 5.

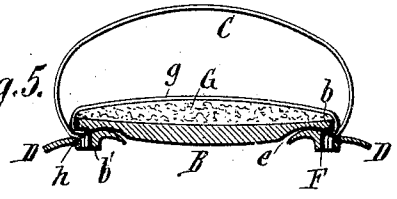
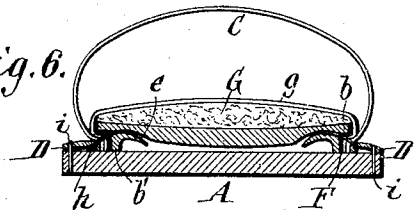


Fig. 6.



Witnesses:
Henry L. Deckt.
Chas. F. Burkhart.

A. C. Rounds Inventor.
By Wilhelm Bonnd
Attorneys.

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No. 774,784. Patented November 15, 1904.

UNITED STATES PATENT OFFICE.

ALBERT C. ROUNDS, OF BUFFALO, NEW YORK, ASSIGNOR TO THE SCHAUROTH SHOE COMPANY, OF BUFFALO, NEW YORK.

SHOE.

SPECIFICATION forming part of Letters Patent No. 774,784, dated November 15, 1904.

Application filed February 15, 1899. Serial No. 705,565. (No model.)

To all whom it may concern:

Be it known that I, ALBERT C. ROUNDS, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Shoes, of which the following is a specification.

This invention relates more particularly to that class of shoes in which a cushion is arranged on top of the insole, so as to render the same more suitable for tender feet.

The object of this invention is to provide a shoe of this character with means whereby water is effectually excluded from the cushion and whereby the edge of the insole is prevented from cutting the covering of the cushion.

To that end the invention consists in interposing a strip of rubber or other elastic waterproof material between the edge of the insole and the edge of the cushion-covering.

In the accompanying drawings, Figure 1 is a sectional perspective view of the toe portion of a cushioned-insole shoe, showing the elastic strip interposed between the edges of the cushion-covering and the insole. Fig. 2 is a perspective view of a portion of the elastic strip. Fig. 3 is a cross-section of the prepared insole. Fig. 4 is a similar view showing the elastic strip and cushion applied to the insole. Fig. 5 is a similar view showing the vamp and welt secured to the cushion and insole. Fig. 6 is a cross-section of the complete shoe.

Like letters of reference refer to like parts in the several figures.

A represents the walking or out sole of a shoe; B, the insole; C, the upper or vamp, and D the welt.

The insole is provided in its edge with a longitudinal slit forming upper and lower flanges *b b'* on the edge of the insole. The upper flange *b* is left in a horizontal or outwardly-projecting position, while the lower flange *b'* is bent downwardly into a vertical position substantially at right angles to the upper flange *b*, as shown in Fig. 3, forming a rabbet along the edge of the insole. The insole is provided on its under side along the inner side of the lower flange *b'* with a channel or slit *e*, which extends upwardly and outwardly from the lower side of the insole.

F represents an elastic strip or dam of rubber or similar material, which in cross-section is preferably made substantially in the shape of the letter **Z** and which consists of a horizontal web *f*, a vertical rib *f'*, extending upwardly from the outer edge of the web, and a vertical rib f^2, depending from the inner edge of the web, as shown in Fig. 2. This elastic strip, as shown in Figs. 1, 4, 5, and 6, is cemented or otherwise secured to the edge of the insole with its web *f* bearing against the under side of the upper flange *b* of the insole and with its upper and lower ribs *f' f²* bearing against the outer edge of the upper insole-flange *b* and the outer side of the lower insole-flange *b'*, respectively.

A cushion is arranged on the upper side of the insole, so as to render the same comfortable when worn by persons having tender or callous feet. This cushion is made of a pad or filling G, of wool or fibrous material, which covers the upper surface of the insole and is secured thereto by cement or otherwise, and a covering *g*, of soft leather or similar material, arranged on top of the pad. The covering, which is made integral, is larger than the pad, and its edge is lapped downwardly and inwardly against the elastic strip, to which latter it is secured by cement, so that the lap of the covering conforms to and has substantially the same angular form as the strip, as shown in the drawings.

The vamp C is lapped with its edge against the outer side of the marginal portion of the cushion-covering, and the welt is placed with its inner downwardly-projecting portion against the edge of the vamp. The insole, elastic strip, cushion-covering, vamp, and welt are secured together by a line of thread stitches *h*, which extend from the inner end of the channel *e* through the lower flanges of the insole and the strip and the adjacent edges of the cushion-covering, vamp, and welt, as shown in Figs. 1, 5, and 6. The outsole is secured to the welt by a row of stitches *i*, extending along the outer edges of the welt and

the sole in the usual well-known manner. As the stitches *h* pass through the elastic strip the material of the latter around the thread-opening is spread and compressed, which causes the strip to exert a constant pressure against the thread and hug the latter very tight all around each stitch of the thread in the strip. This checks any water from passing through the thread-opening in the strip or along the thread in the same, thereby preventing the insole and the cushion resting on the same from getting wet. This is especially desirable in shoes in which the leather insole is arranged with its hair or coarse-grained side on top and with the flesh or fine-grained side on the bottom, because the inner end of the stitches are close to the top of the insole, and any moisture carried inwardly by the thread would be readily transmitted by the coarse pores in the top of the insole to the cushion, and so dampen the inside of the shoe. Upon sewing the insole, elastic strip, cushion-covering, vamp, and welt together by the stitches *h* the elastic strip is compressed flatwise to such an extent that it exerts a constant lateral pressure, thereby causing the parts through which the stitches pass to be constantly pressed close together and preventing any water from reaching the stitches, whereby the liability of dampening the bottom of the shoe is reduced to a minimum and the rotting of the stitches is prevented.

It has been found in practice that when the lower portion of the soft vamp works or chafes against the edge of the hard insole the vamp is frequently broken, cracked, or cut along the line of contact and destroys the shoe. By extending the elastic strip upwardly so that it is interposed between the edge of the insole and the adjacent part of the vamp breaking, cracking, or cutting of the vamp is prevented, because the elastic strip forms a yielding surface or cushion on the edge of the insole for the vamp to bear against.

It will be seen that the elastic dam or strip not only serves to exclude moisture from the bottom of the shoe, but also renders the same more durable by avoiding undue wear upon the vamp.

I claim as my invention—

The combination of an insole provided with a rabbeted edge forming an overhanging flange thereon which has a downwardly-facing shoulder, a Z-shaped rubber strip fitted into said rabbet so that its central web bears against said shoulder while its side webs bear against the adjacent edges of the insole, a cushion arranged on the insole, a covering arranged over the cushion and having its edges turned downwardly against the outer side of said rubber strip, a vamp applied to said covering, a welt applied to said vamp, and a single line of stitches connecting the insole, strip, covering, vamp and welt, said strip serving the double function of producing a waterproof joint which prevents dampening of the cushion and also forming an elastic bearing for the marginal portion of the insole, substantially as set forth.

Witness my hand this 7th day of February, 1899.

ALBERT C. ROUNDS.

Witnesses:
NUOV SCHAUROTH,
THEO. L. POPP.