

W. J. C. ARLIDGE.  
INNERSOLE FOR SHOES.  
APPLICATION FILED JAN. 17, 1918.

1,298,156.

Patented Mar. 25, 1919.

FIG. 1.

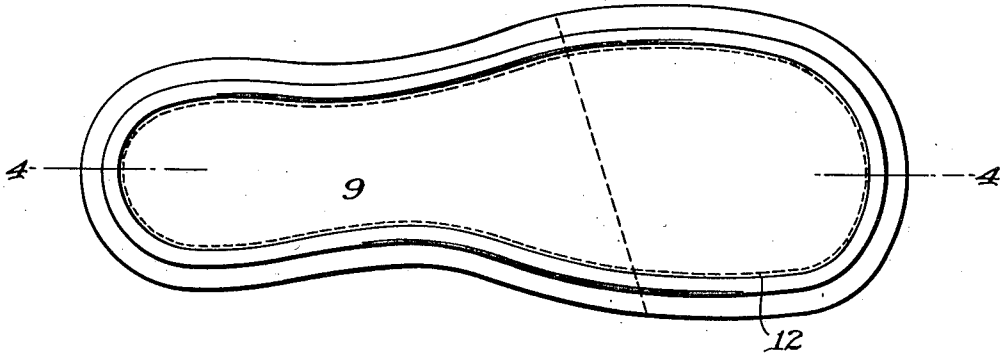


FIG. 2.

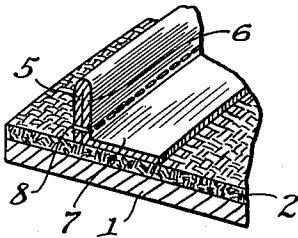


FIG. 3.

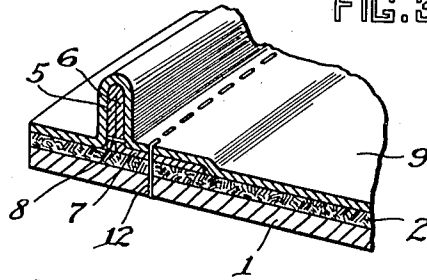


FIG. 4.

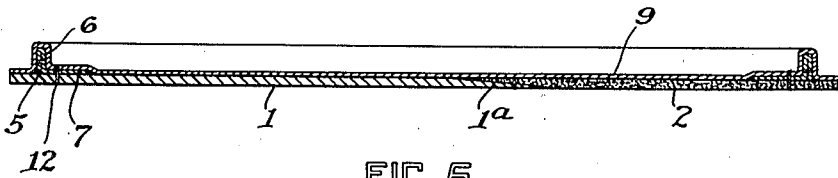
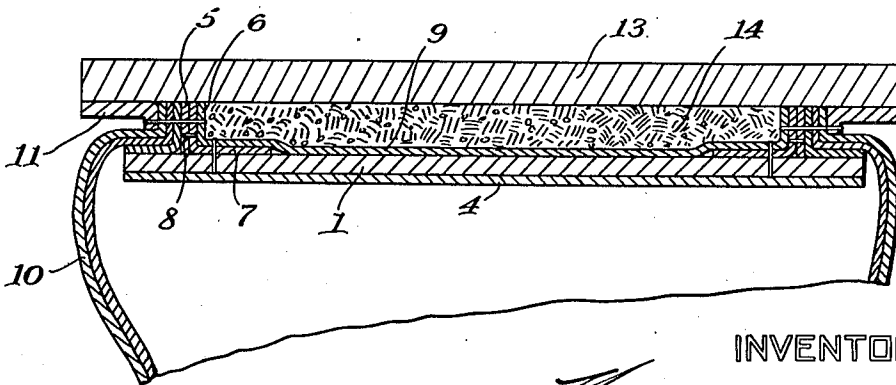


FIG. 5.



INVENTOR:

*William J. Arlidge*  
by *Davis & Simms*  
*his attorneys*

# UNITED STATES PATENT OFFICE.

WILLIAM J. C. ARLIDGE, OF BARNARD, NEW YORK.

## INNERSOLE FOR SHOES.

1,298,156.

Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed January 17, 1918. Serial No. 212,349.

*To all whom it may concern:*

Be it known that I, WILLIAM J. C. ARLIDGE, a citizen of the United States, and resident of Barnard, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Innersoles for Shoes, of which the following is a specification.

The present invention relates to an inner sole for shoes, and more particularly to an inner sole for use in what is known as the "welt" shoe where the welt and the upper are stitched to a rib formed on the under surface of the inner sole. It is an object of this invention to provide an inner sole which may be made from inexpensive materials, as distinguished from pure leather, while at the same time providing a rib on the inner sole which will be strong and durable, and at the same time providing a square shoulder for abutment by the underturned edge of the upper. Another object of the invention is to provide an inner sole which will have a stiffened heel and a shank portion, and a flexible toe portion.

To these and other ends the invention consists of certain parts and combinations of parts, all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings:—

Figure 1 is a plan view of an inner sole constructed in accordance with this invention;

Fig. 2 is a sectional view through the inner sole with the under layer removed;

Fig. 3 is an enlarged sectional view of the inner sole showing the upper and under lower soles, the stiffening device and rib forming device;

Fig. 4 is a section on the line 4—4, Fig. 1; and

Fig. 5 is a transverse section through a shoe employing the present invention.

Referring more particularly to the drawings, 1 and 2 indicate the body portion or upper layer of the inner sole, said body portion, in this instance, comprising two parts, part 1 being formed, in this instance, from leather board and extending throughout the heel and the shank portion of the inner sole and also partially on to the sole portion, while the remaining or toe portion 2 is, in this instance, formed of burlap and extends throughout the main portion of the sole portion of the inner sole, the rear portion 1 be-

ing beveled at 1<sup>a</sup> so that a substantially continuous surface is provided for engagement with the foot of the wearer. A thin piece of leather, fabric or other material 4 may cover the upper face of the sole after the latter has been embodied in the shoe.

Upon the under side of the body portion of the inner sole a rib forming device is arranged. This rib forming device in this instance is formed from a strip of canvas, one face of which is provided with cement, the strip being folded to provide two laps 5 and 6 and a laterally turned portion 7. The two laps are not only held together by the cement, but are secured by stitches 8, while the laterally turned portion is cemented to the body portion of the inner sole, that is, to the portion 1 and the portion 2. One free edge of the strip or the edge at the fold 5 abuts the body portion of the inner sole and tends to hold the rib forming device upright.

Over the body portion of the inner sole, as well as over the rib forming device, a layer 9 of canvas or other suitable textile material is cemented, so that the rib to which the upper 10 and the welt 11 are secured comprises four folds, two in the rib forming device and two in the fabric layer 9. Furthermore, this rib presents a substantially square corner in which the underturned edge of the upper may be received, so that there is no space or opening between the upper and the rib.

In order to still further strengthen the rib, stitches 12 are passed through the body layer 1—2, the flange 7 on the inner side of the rib forming device, and the layer 9. These stitches are so arranged that they are not interfered with by the machinery which attaches the upper to the inner sole, and at the same time the strain is received by the stitches in such a direction that the liability for breaking is reduced to a minimum.

The shoe is otherwise constructed like an ordinary welt shoe having the outer sole 13 secured to the welt 11 with the cork or other filling 14 between such outer sole and the inner sole.

An inner sole constructed in accordance with this invention is inexpensive to manufacture, as it does not require any leather. The rib to which the upper is secured is formed so as to provide a square shoulder on the outer side, and it is so constructed that a strong and durable structure is provided.

The toe portion of the inner sole is flexible permitting the shoe to accommodate itself to the foot of the wearer. The device as a whole is especially adapted for shoes for children as it is strong and inexpensive.

What I claim as my invention and desire to secure by Letters Patent is:—

1. An inner sole comprising a body layer, a rib forming device made of a strip of fabric folded to provide a rib, one edge of said device being turned inwardly and laterally and stitched to the body while the other edge abuts the sole body directly beneath the rib and on the outer side of the laterally turned edge, and a fabric layer cemented to and covering said body layer and said rib forming device.

2. An inner sole comprising a body layer, a rib forming device made from a strip of

fabric folded to provide a rib, the two laps of the fold being stitched together, one edge of the strip being turned laterally and inwardly, a fabric layer cemented to and covering said body layer and said rib forming device, and stitches passing through the two layers and the laterally and inwardly turned portion of the rib forming device.

3. An inner sole comprising a body layer having a stiff heel and shank portion provided with a beveled end and also having a flexible toe portion of textile material, a second layer of textile material cemented to the under side of the body layer, and a rib forming device stitched to the under side of the body layer between the layers and extending onto both the stiff and the flexible portions of the body layer.

WILLIAM J. C. ARLIDGE.