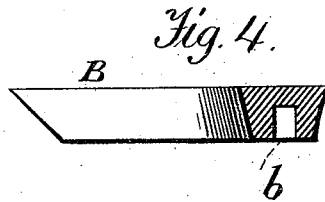
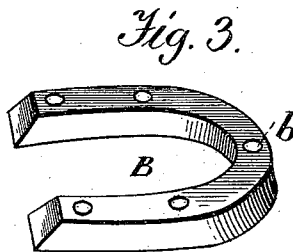
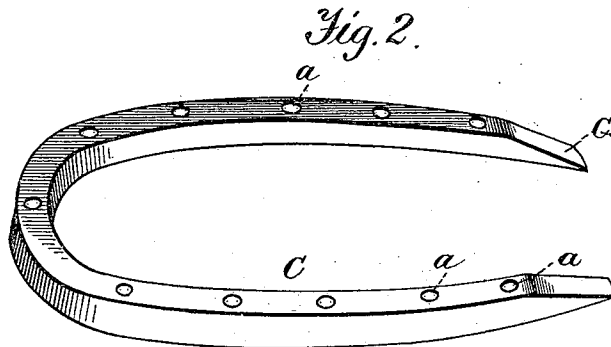
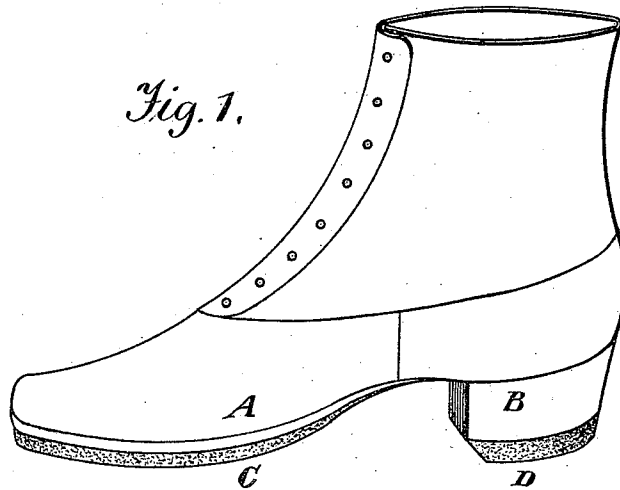


(No Model.)

E. C. CRITCHLOW.
SOLE FOR BOOTS OR SHOES

No. 460,523.

Patented Sept. 29, 1891.



Witnesses.
A. Ruppert,
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Inventor.
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Per
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UNITED STATES PATENT OFFICE.

EDWARD COE CRITCHLOW, OF MEADVILLE, PENNSYLVANIA.

SOLE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 460,523, dated September 29, 1891.

Application filed January 29, 1891. Serial No. 379,533. (No model.)

To all whom it may concern:

Be it known that I, EDWARD COE CRITCHLOW, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in External Adjustable Soles for Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The special object of the invention is to protect the foot from dampness and from the coldness of pavements; also to give it spring and elasticity in walking; also to prevent slipping on ice in wintry weather.

The invention consists in an article manufactured of rubber and conformed in shape to the outer rim of the sole and heel, as hereinafter more fully described.

Figure 1 of the drawings is a perspective view showing a shoe provided with my rubber protector; Fig. 2, a perspective view of the sole-piece, and Fig. 3 a similar view of the heel-piece; Fig. 4, a section of the heel-piece.

In the drawings, A represents the sole of the shoe, and B the heel thereof. C represents my rim-sole for the part A of the shoe, and D the rim-piece for the heel B.

The rim-pieces of rubber are molded in solid strips, having the general external configuration of a shoe sole or heel and are provided with deeply-countersunk holes *a b*, into which the fastening nails or tacks or screws are placed and then driven into the shoe until the heads thereof are sunk a considerable distance below the outer working face of the rubber. This causes all the bearing to be upon the rubber to afford the desired spring, while it prevents the tack or nail from being worked by the contraction and expansion of the rubber. To ladies' shoes they may be attached by cement.

Any shoe-maker will readily tack these protectors on the sole and heel when they are intended to serve the purpose of ice-creepers;

but they may be used on shoes at all times with great satisfaction and profit, as they give a springiness to the walk which is not only graceful to the eye of a looker-on, but exceedingly pleasant to the wearer. They also prevent foot-soreness from walking on city pavements, taking up effectually the shock of impact when the foot strikes the hard material of the pavement. They can also be manufactured at small expense and furnished to the consumer at a trifling cost.

My solid strip of rubber around the rim of sole and heel produces a surface-bearing which catches on the ice or the smooth pavement like the unshod hoof of a horse, while a leather or rubber solid bottom will soon slip and slide. Again, my solid strip around the rim of sole gives sufficient bearing, while it does not permit the continual impact of the ball of the foot upon hard pavements, the same producing hot and perspiring feet if the weather is at all warm. Again, my solid rim-strip can be adjusted to any form or size of shoe or boot without any cutting of the rubber, while it greatly economizes the material and is much lighter than a solid sole or heel.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

A boot or shoe provided with a solid strip of rubber secured around the rim of the sole and heel of a shoe or boot, said solid strip being provided at intervals with deep holes, in which the tack or nail heads may be sunk so far below the working face of the rubber that all the bearing will be on the rubber, and the expansion and contraction of the rubber will not cause the said tacks or nails to work loose, all substantially as shown and described.

In testimony whereof I have affixed my signature in presence of two witnesses.

EDWARD COE CRITCHLOW.

Witnesses:

A. B. RICHMOND,
CHAS. E. RICHMOND.