A. K. POMEROY.

CUSHION HEEL.

APPLICATION FILED AUG. 4, 1914.

1,162,709. Patented Nov. 30, 1915.

Fig. 1.

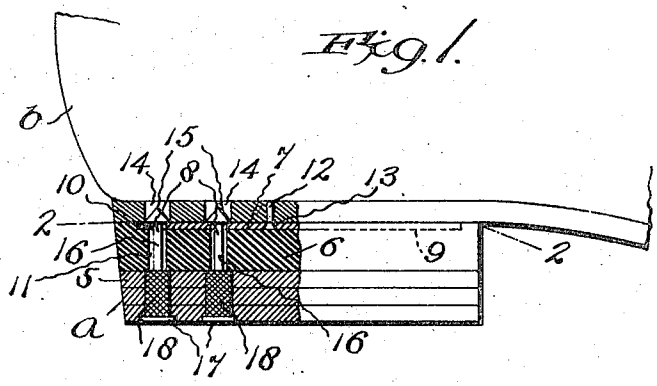


Fig. 2.

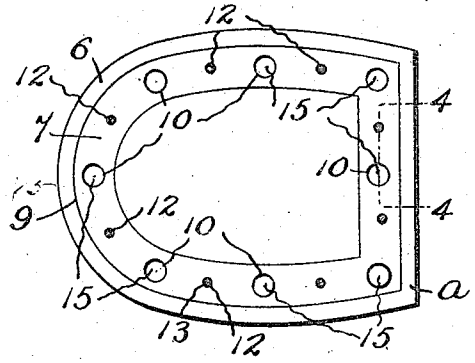


Fig. 3.

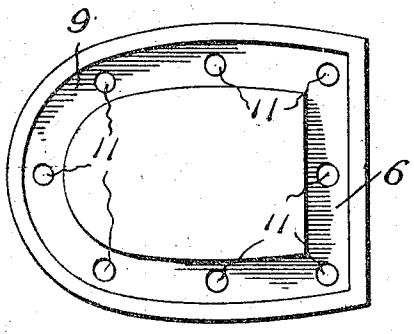
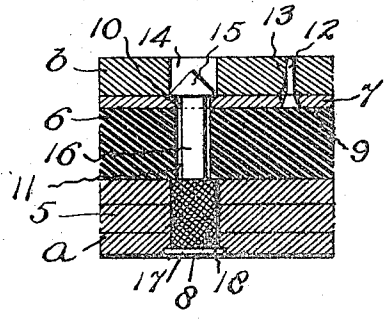


Fig. 4.



Witnesses

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CUSHION-HEEL.

1,162,709. Specification of Letters Patent. Patented Nov. 30, 1915.

Application filed August 4, 1914. Serial No. 855,052.

To all whom it may concern:

Be it known that I, ARTHUR K. POMEROY, a citizen of the United States, residing at Williamstown, in the county of Camden and State of New Jersey, have invented new and useful Improvements in Cushion-Heels, of which the following is a specification.

The general object of this invention is to refine the construction of resilient heels in point of providing a heel which may be readily attached to a shoe with a minimum of labor and further, may be readily detached from the shoe so as to admit of the interchanging of the heels on the shoes for the purpose of giving the heels a tendency to wear in an even manner.

Another object is to provide a resilient heel of such structure that upon the heel being worn out, the same may be repaired as in the case of the usual leather heel now provided on shoes. And to these ends the invention consists of a heel having a cushing element and a leather portion and adapted to be attached to a shoe so that the leather portion is undermost.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part hereof, in which;—

Figure 1 is a side elevational view of a shoe provided with my improved heel and having portions broken away for the purpose of clearness. Fig. 2 is a sectional plan view taken on the line 2—2 in Fig. 1. Fig. 3 is a top plan view of the rubber portion of my improved heel. Fig. 4 is an enlarged cross sectional view taken on the line 4—4 in Fig. 2.

The heel *a* is formed of the usual shape of shoe heels and may be made of relatively different sizes so as to accommodate itself to the various kinds of shoes to which it is adapted to be applied. As shown in the drawings the heel is formed of the leather portion 5, the rubber portion 6, the plate 7 which is attached to the shoe and the elements 8 which are fitted within the heel and are adapted to engage with the plate 7 for attaching the heel on the shoe *b*.

As shown, the heel *per se* is formed of the two component portions namely, the rubber portion and the leather portion. The rubber portion 6 is preferably of the usual form of rubber now used in the manufacture of rubber heels and is shaped so as to conform to the outline of the shoe-heel. The leather portion 5 is shaped in conformity with the rubber portion and is built up of a series of leather layers which may be secured to each other by any suitable means. As shown in Fig. 3, the upper face of the rubber portion is recessed or countersunk as indicated by 9, which recess is of similar shape to the outline of the heel and is spaced away from the peripheral edge thereof as shown.

The plate 7 is formed of suitable metal such as steel or the like and is shaped so as to be fitted substantially snugly within the recess 9 of the heel as shown in Fig. 2, and is provided with a series of spaced apertures 10 which are adapted to coincide with suitable openings or perforations 11 provided in the heel at the recessed portion thereof. The plate is adapted to be secured to the heel portion of the shoe *b* by suitable means such as the brads or nails 12, and to accommodate these nails in the plate, the latter is provided with suitable perforations 13; and as shown in Fig. 1, the heel or rear portion of the sole of the shoe is provided with recesses 14 which aline with and are substantially larger than the openings 10 provided in the plate 7. These enlarged openings in the shoe are provided to accommodate the heads of the attaching elements or lifts 8 which are provided for securing the heel to the shoe. These attaching elements are provided with an enlarged head 15, a shank 16 and a suitable flange or base 17, and as shown the shank 16 is enlarged for a portion of its length as indicated at 18, which enlarged portion is knurled so as to admit of firm engagement being had with the leather when cement or other adhesive is applied to the said enlarged portion. The heads 15 are slightly larger in diameter than the apertures 10 in the plate 7.

In practice, the plate is secured to the shoe as before stated, and the heel is then placed in position. It will be noted that the attaching elements 8 are provided in the body-portions of the heel and by virtue of having conical heads, the same may be forced through the openings 10 of the plate. Now, upon these enlarged heads passing through the openings, the same will be appreciably retained by contacting with the upper sur-

face of the plate and be prevented thereby from being withdrawn under ordinary circumstances; thus it will be seen that the heel may be very readily positioned on a shoe without the aid of special implements or the like, and upon desiring to remove the heel, a sharp instrument may be inserted between the heel and the sole of the shoe, and by slight pressure the heel may be pried off the shoe.

From the foregoing it will be seen, that upon walking or exerting like pressure upon the heel, the contact of the ground will be with the leather under portion of the heel, and the pressure will be absorbed by the rubber portion which cushions the shock. It will be seen that as the rubber portion is compressed, the attaching elements 8 will have a sliding movement within the rubber portion, and by providing enlarged openings 14 in the sole of the shoe, the heads 15 of the elements 8 will have play therein, thus allowing the full cushioning action of the rubber.

It is quite obvious, that upon the under portion of the heel becoming worn out by walking or the like, the same may be readily repaired by a cobbler or such artisan by simply removing the worn layers of leather and substituting new layers therefor, thus admitting of the heel being of economical structure.

It is obvious that those skilled in the art may vary the details of construction and arrangements of parts without departing from the spirit of my invention and therefore I do not wish to be limited to such features except as may be required by the claim.

What I claim as new is;—

A shoe provided with apertures at the heel portion thereof, a plate secured to said heel portion, a cushioning element, and a wearing heel portion positioned below the plate, said plate, wearing and cushioning elements having apertures registering with the apertures in the heel portion, and devices passing through said registering apertures and securing the cushioning element and wearing portion to the shoe; said devices comprising bolts which pass through the apertures of the plate and have heads which engage the upper side of the plate at the edges of the apertures therein.

In testimony whereof I, affix my signature in presence of two witnesses.

ARTHUR K. POMEROY.

Witnesses:
M. E. LAUGHLIN,
GEO. A. BYRNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."