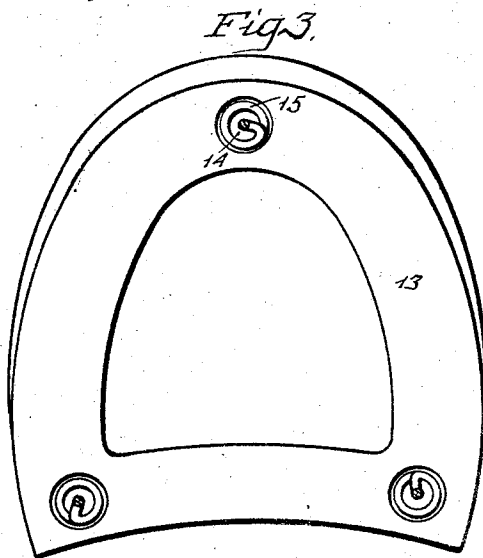
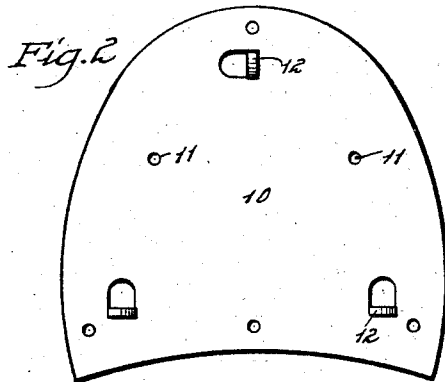
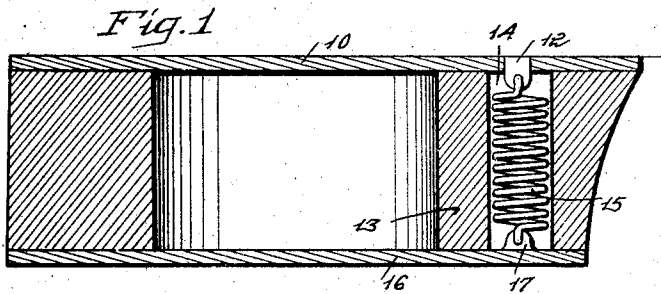


M. LAGE.
APPAREL SHOE HEEL.
APPLICATION FILED OCT. 25, 1911.

1,027,659.

Patented May 28, 1912.



Witnesses.

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UNITED STATES PATENT OFFICE.

MINNIE LAGE, OF GLAD BROOK, IOWA.

APPAREL-SHOE HEEL.

1,027,659.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed October 25, 1911. Serial No. 656,680.

To all whom it may concern:

Be it known that I, MINNIE LAGE, a citizen of the United States, residing at Gladbrook, in the county of Tama and State of Iowa, have invented a certain new and useful Apparel-Shoe Heel, of which the following is a specification.

The object of my invention is to provide a heel for apparel shoes of simple construction which has the cushioning feature of a rubber heel while being free of the rapid wear to which a rubber heel is subject.

More particularly, it is my object to provide a rubber heel which may be easily and quickly attached to a shoe and to provide plates above and below said rubber heel for fastening the same to a shoe and for protecting it from wear, the parts of my device being so constructed that there are no nails, screws or the like in the rubber to interfere with its resiliency.

A further object is to provide simple and durable means whereby a rubber heel may be secured to a shoe.

My invention consists in certain details, in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:

Figure 1 shows a central, vertical, section through a heel for apparel shoes embodying my invention. Fig. 2 shows an inverted plan view of the upper metal plate. Fig. 3 shows an inverted plan view of my improved heel for apparel shoes with the lower plate removed.

In the accompanying drawings, I have used the reference numeral 10 to indicate a metal plate of proper shape to be fitted to a shoe from which the ordinary leather heel has been removed. The plate is provided with perforations 11 which are designed to receive nails or any other suitable means for securing the plate to a shoe. The plate 10 is also provided with downwardly extending lugs 12 preferably three in number and located respectively near the rear edge of the plate 10 in the middle thereof and near the front edge of plate 10 near the sides thereof as shown in Fig. 2. The lugs 12 are provided with perforations for the purpose hereinafter explained. The lugs 12 are formed by cutting short strips from the plate 10 leaving same attached at one end

and bending the strips at right angles to said plate. Beneath the plate 10 is a rubber body portion 13 which may be solid or may have its central portion cut away as shown in Fig. 3. My purpose in cutting away the central portion of the rubber body 13 is to save weight and material.

The rubber body 13 is provided with vertical openings 14 extending through the body and located in such positions that when the rubber body 13 is placed against the plate 10, the lugs 12 will be received in said openings. In the openings 14, I place contractible coil springs 15. One end of each spring 15 is secured to one of the lugs 12 by being extended through the opening therein. Below the rubber body 13 I provide a metal plate 16 having integrally formed upwardly extending lugs 17. In the lugs 17 are openings which receive the lower ends of the respective springs 15 which are thus secured to the plate 16. The springs 15 normally exert yielding pressure to hold the rubber body 13 against the plate 10 and to hold the plate 16 against the rubber body 13. When the heel is compressed by the weight of the wearer of the shoe beyond the point where the springs 15 are contractible, those springs become push springs and aid in giving resiliency to the heel.

My improved heel for apparel shoes has all the advantages of the resiliency of a rubber heel and is at the same time, practically immune from ordinary wear. The plate 16 receives the friction of the ground. The use of the contractible coil springs 15 prevents any rattling or play between the parts. The use of said springs also makes it possible to dispense with nails or screws in the rubber body 13 and enables me to secure the full benefit of the resiliency of said rubber body. The method of making the lugs 12 as hereinbefore described, enables me to stamp out the plates 10 with great rapidity and at a small expense. The use of the rubber body 13 with the central portion removed, secures the full resiliency of a rubber heel with a considerable saving of material and weight. It will be noted that the plate 16 has no openings in its lower surface to permit the entrance of dirt or the like. The use of the contractible springs 15 prevents the entrance of dirt between the parts.

I claim as my invention:

1. In a device of the class described, a

metal plate designed to be secured to a shoe, lugs formed thereon by cutting strips from said plate and bending said strips downwardly, a rubber body adjacent to said plate, a plate below said rubber body and contractible coil springs secured to said second plate and extending through said rubber body, and secured respectively to said lugs.

10 2. In a device of the class described, a plate designed to be secured to a shoe, a rubber body having its central portion removed, and having vertical openings extending through it, a second plate below
15 said rubber body, contractible coil springs, each of which is secured to said second plate extending upwardly through one of the openings in said rubber body and is secured to said first named plate.

3. In a device of the class described, a 20 metal plate designed to be secured to a shoe, lugs formed thereon by cutting strips in said plate and bending said strips downwardly, a rubber body having its central portion removed and provided with vertical 25 openings, a second metal plate below said rubber body provided with upwardly extending lugs and contractible coil springs mounted in the vertical openings in said rubber body, each of which is secured at its 30 respective ends to one of the lugs on said lower plate and to one of the lugs on said upper plate.

Des Moines, Iowa, Oct. 18, 1911.

MINNIE LAGE.

Witnesses:

CHAS. EMMERLY,
HARRY LUNDT.