

(No Model.)

P. J. VAN VALKENBURG.
HEEL PLATE.

No. 547,306.

Patented Oct. 1, 1895.

Fig. 1.

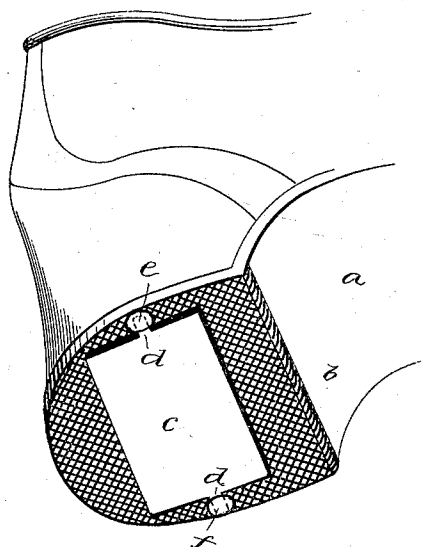


Fig. 2.

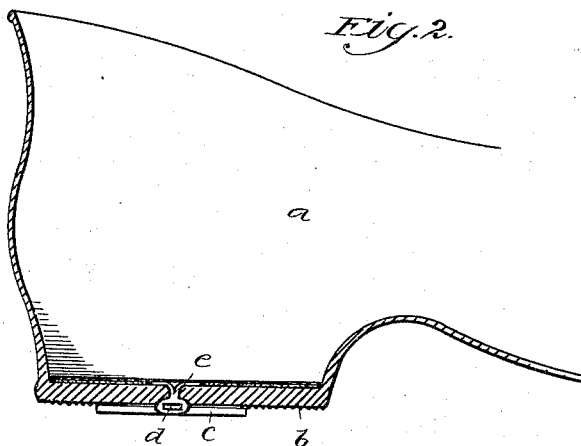


Fig. 3.

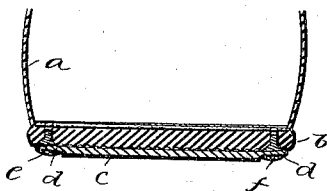
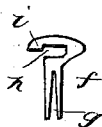


Fig. 4.



WITNESSES:

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Fig. 5.



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HEEL-PLATE.

SPECIFICATION forming part of Letters Patent No. 547,306, dated October 1, 1895.

Application filed May 31, 1895. Serial No. 551,204. (No model.)

To all whom it may concern:

Be it known that I, PERCY J. VAN VALKENBURG, of New York city, in the county and State of New York, have invented a new and Improved Heel-Plate, of which the following is a full, clear, and exact description.

The invention relates to an improved device for preventing the heels of shoes, especially rubber shoes, from wearing out. Ordinarily the rear extremity of the heel in rubber shoes is subjected to a great deal more wear than the other portion, and very early in the life of the shoe becomes so worn that the shoe will be unfit for further use. Now, it is the object of this invention to provide means for effectively preventing this wearing, and to this end I provide a plate having at opposite sides projecting ears or lugs and secured to the heel of the shoe by peculiarly-constructed retaining devices or eyelets, which are adapted to respectively receive the ears of the plate and hold the same in place. All of this will be fully described hereinafter, and finally embodied in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view showing the under side or bottom of the heel and also showing my improved device applied thereto. Fig. 2 is a sectional view taken through the heel and showing the plate and one of the securing-eyelets in elevation. Fig. 3 is also a section taken on a line at right angles to the line of Fig. 2 and showing the plate and securing devices in section. Fig. 4 is a detail elevation of one of the securing-eyelets, and Fig. 5 is a detail section illustrating one way of constructing the plate.

The reference-letter *a* indicates the rubber shoe, which may be of any known construction, and *b* the heel thereof.

c indicates the protecting-plate, and this is preferably rectangular in form and has projecting from its opposite sides the ears *d*. These ears are two in number, one for each side, and are adapted to co-operate with the peculiarly-shaped eyelets, whereby the plate is held in place. These eyelets are respectively indicated by the letters *e* and *f*. The eyelet *e* is shown in elevation in Fig. 2, and

consists of a closed eye portion connected to a split shank, the shank being passed through the heel and clinched on the inner side thereof, while the eye portion is partially sunk in the soft rubber of the heel *b*. By reference to the figure referred to, it will be seen that the eye portion is located with its recess in approximately the same plane as the bottom of the heel, so that the lower extremity of the eye portion will not project below the plate *c*.

The eyelet *f* comprises a split shank *g* and a head portion, which is formed with an ear-receiving slot *h*, having an open end, over which the overhanging part *i* projects, as is clearly illustrated in Fig. 4 of the drawings. This eyelet *f* is also arranged with its shank *g* passed through the heel and clinched on the inner side thereof, while the main portion is sunk in the soft rubber of the heel until the end of the overhanging portion *i* firmly engages and slightly indents the rubber of the heel.

The eyelet *f* is arranged so that the plate *c* may have one of its ears *d* inserted in the eye *e* and then moved toward the eyelet *f* and engaged with the eye *h* thereof by pushing back the soft rubber of the heel, so that the remaining ear of the plate *c* will be sprung under the overhanging portion *i* and firmly seated within the recess *h* of the eyelet. Thus it will be seen that the plate *c* is removably, yet securely, fastened to the heel, and that it may be readily removed when worn and replaced by a new plate, the purpose of the peculiarly-constructed eyelet *f* being to permit the removable connection of the plate *c* therewith.

The plate *c* will be arranged midway the heel *b* and so as to relieve the rear portion thereof, and, indeed, every portion of the heel, from contact with the ground or floor. Now, in use the strain will be mainly on the rear side of the plate *c*, and for this reason the said rear side will wear away before the front side. When this happens, the plate may be simply reversed, and thus its life prolonged to twice what it would ordinarily be.

The plate *c* is to be constructed of various material according to the class of shoe on which it is used. Fig. 5, for example, illustrates a construction of the plate which consists in a metallic stiffening portion *k*, to the under side of which is vulcanized or other-

wise secured the hard-rubber plate *l*. This hard rubber may be changed to soft rubber, or, if desired, the whole plate may be composed of hard or soft rubber. Still further, 5 leather may be used, or the rubber on the plate *l* may be omitted and the plate used alone. It is generally desirable, however, to provide some material for stiffening the plate, so that the ears *d* may have that degree of 10 rigidity which is desirable in their operation with the eyes *e* and *f*.

While my invention is particularly adapted for application to the heel of a shoe, it will be understood that it may be applied to the 15 sole with equally good results, and when so applied the parts will be arranged and will operate just as described in relation to the heel.

Having thus described my invention, I claim as new and desire to secure by Letters 20 Patent—

1. A shoe having secured to its under side two eyelets, one of which has a closed eye and the other being provided with an open eye and an overhanging portion, the said eyelets also 25 having split shanks which are passed through the heel and clinched on the inner side thereof, and a plate for the heel, the said plate having two ears one for each eyelet, one of said

ears being passed into the closed eyelet while the remaining ear is adapted to be removably 30 connected with the open eyelet, substantially as described.

2. A shoe having secured to its under side two eyelets, and a plate having two ears projected therefrom and arranged oppositely 35 thereon, said ears being each capable of completely removable connection with the eyelets, substantially as described.

3. A shoe, having secured to its under side two eyelets, each having split shanks which 40 are passed through the heel and clinched on the inner side thereof, and one eyelet having a closed eye while the other is formed with an open eye and an overhanging portion which engages with the under side of the heel, and 45 a plate having two lugs projected therefrom and arranged oppositely thereon, one of said ears being passed through the closed eye and the remaining ear being sprung under the overhanging portion and received in the open 50 eye of the eyelet which has said overhanging portion, substantially as described.

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