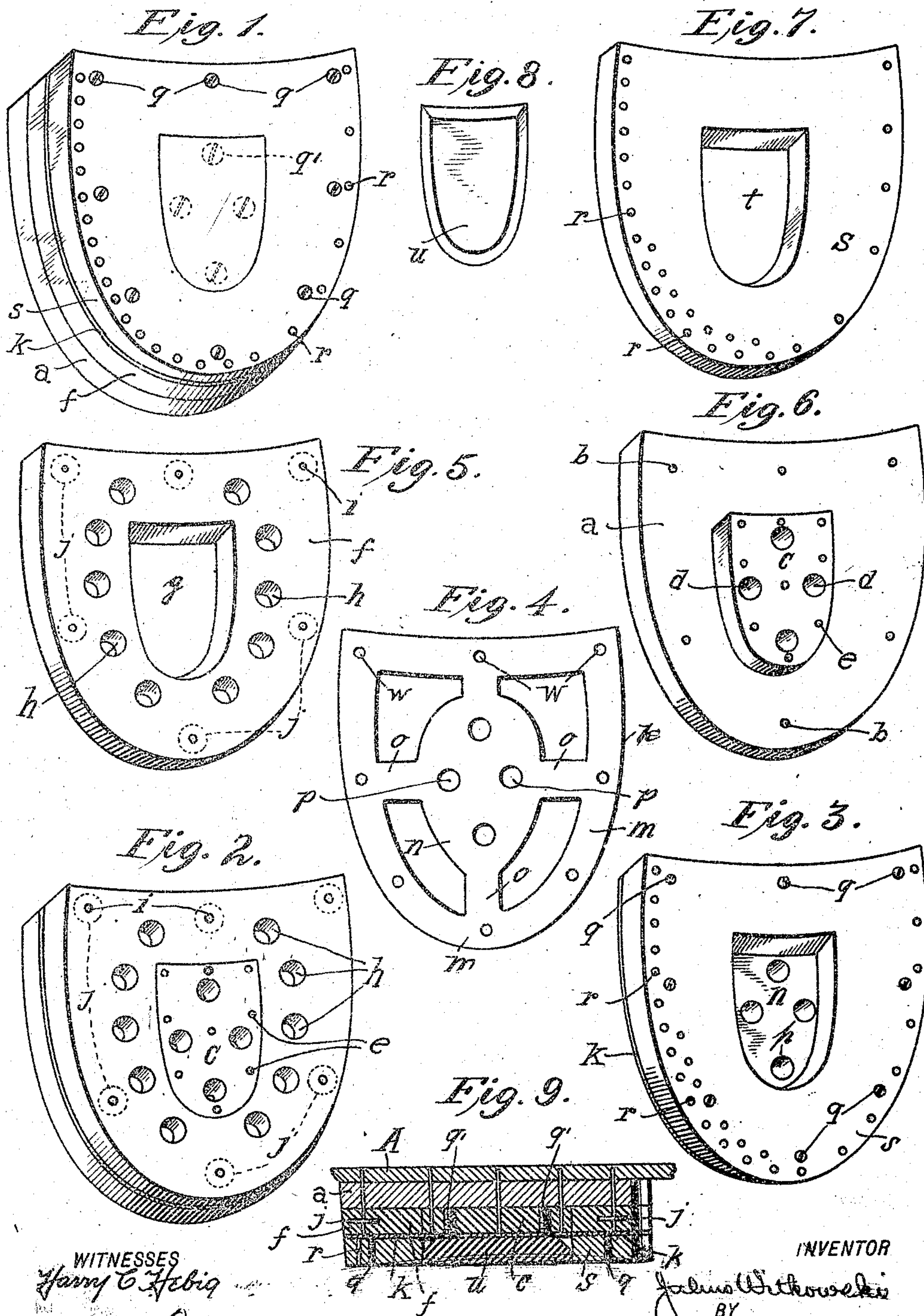


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PATENTED OCT. 15, 1907.

J. WITKOWSKI.  
CUSHION HEEL.

APPLICATION FILED NOV. 12, 1908.



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JULIUS WITKOWSKI, OF SAN DIEGO, CALIFORNIA.

## CUSHION-HEEL.

No. 868,054.

Specification of Letters Patent

Patented Oct. 15, 1907.

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*To all whom it may concern:*

Be it known that I, JULIUS WITKOWSKI, a citizen of the United States, residing at San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Cushion-Heels, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to improvements in heels for boots, shoes and other articles of footwear, and particularly to heels of greater resiliency or springiness than the ordinary leather heel.

One object of my invention is to provide a heel of the class described which will take the place of the rubber heel; now commonly used. It has been found that heels of pure rubber soon wear out, and such heels cannot be repaired but must be thrown away after use. My new cushion heel reduces the concussion to the same extent as does the best rubber heels made today and at the same time it will outlast several pairs of such rubber heels and will be more noiseless than the ordinary leather heel.

Another object of my invention is to provide a cushion heel which may be readily repaired. My new heel requires neither the services of a shoemaker nor the use of hammer and nails. It is necessary only to unscrew and remove the piece of leather which forms the wear surface and to replace the worn one by a new one which may be purchased cut to size at any shoe-store.

Other features of my invention will be pointed out hereinafter.

In the drawings illustrating the principle of my invention and the best mode now known to me of applying that principle, Figure 1 is a perspective view of my new cushion heel, Fig. 2 shows the inside ply or layer and the layer of rubber assembled; Fig. 3 shows the outside ply or the wear surface and the spring-plate assembled; Figs. 4, 5, 6, 7 and 8 illustrate details or parts of the heel; and Fig. 9 is a sectional detail view—

*a* (Fig. 6) is the layer or lift of the heel which is fastened to the sole of the shoe by nails passing through the holes *b*; and centrally mounted upon the layer *a* is a block of leather *c* formed with screw-holes *d* and nail holes *e*. Through the latter are driven nails which fasten the block *c* and lift *a* to the sole *A* of the shoe.

Passing downwardly from the sole of the shoe, the next layer met with is the layer of rubber *f* (Fig. 5) formed with a central aperture *g* and with holes *h* which serve to give lightness to the rubber cushion and to save material. The rubber cushion *f* is further formed with nail holes *i* which register with the nail holes *b* in the leather layer *a* and which are each provided with a small washer *j* the central aperture in which registers

with the nail hole. The central aperture *g* is so shaped that within it fits snugly the block of leather *c*, and the layer *a* and the rubber cushion *f* are assembled as shown in Fig. 2, the nails passing through the nail holes *i*, washers *j* and nail holes *b* serving to secure the two layers to the sole of the shoe, as well as to secure the two layers together.

Over the layer of rubber *f* is placed a plate *k* of thin spring steel of a thickness of, say, one thirty-second of an inch. This plate *k* consists of a rim portion *m* and a central portion *n* connected to the rim by ribs *o*. The central portion *n* is formed with large screw-holes *p* adapted to register with the screw-holes *d* in the leather block *c* mounted on the layer *a* (Figs. 4 and 6); while the rim portion *m* is formed with small screw-holes *w* adapted to engage the shank of the screws *q* which secure the outer or wear layer *s* to the spring plate *k*. The layer *s* is shown detached in Fig. 7; and around the outer edge of its outer face are driven slugs *r* to resist the wear which falls naturally upon this part of the heel and tends to make it "run down". The screws *q* pass through the screw-holes *p* and *d* and secure the spring plate *k* to the leather block *c*. Thus, the rubber cushion is held between the spring-plate *k* and the inner lift *a*.

The outer layer *s* is formed with a central aperture *t* and in this aperture is forced a rubber plug or insertion-piece *u* shown detached in Fig. 8. The edges of the plug *u* are beveled, as shown, and thus the plug is made to fit snugly in the aperture *t*. The plug *u* covers the screws *q* and serves to keep mud and dirt out of the aperture *t*. By means of the screws *q* the wear lift *s* is secured to the spring plate *k*; and these two parts are shown assembled in Fig. 3. When the wear lift *s* is worn out, the screws *q* are loosened and the old wear lift replaced by a new one procured at any shoe store. Thus, no skilled help is needed to repair the heel and the operation requires very little time and the use of no tool other than a common screw-driver, or a device which will serve the purpose thereof.

I claim:

1. A cushion heel made up of a lift of leather; a layer of rubber secured thereto; a spring plate secured to said lift of leather beneath said layer of rubber; and a wear lift of leather secured detachably to said plate, and free from said rubber.

2. A cushion heel made up of a lift of leather; a spring plate secured to said lift; a layer of rubber interposed between said plate and lift and free from the former but secured to the latter; and a wear lift detachably secured to said plate free from said rubber and formed with an aperture which gives access to the means by which said plate is secured to the first-named lift.

3. A cushion heel made up of a lift of leather provided with a downwardly-extending central projection of leather;

a layer of rubber formed with a central aperture into which said projection fits snugly, said layer being secured to said lift; a spring plate secured to said projection beneath said layer of rubber and free from connection with the latter; and a wear lift secured to said plate and free from connection with the other parts of the heel.

5 4. A cushion heel made up of a lift of leather provided with a downwardly-extending block of leather having at least one straight side; a layer of rubber formed with an

aperture into which said block fits snugly and thereby prevents said layer from turning; a spring plate; and a wear lift secured to said plate and free from connection with other parts of the heel; said spring plate being interposed between said layer of rubber and said wear lift.

JULIUS WITKOWSKI.

Witnesses:

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