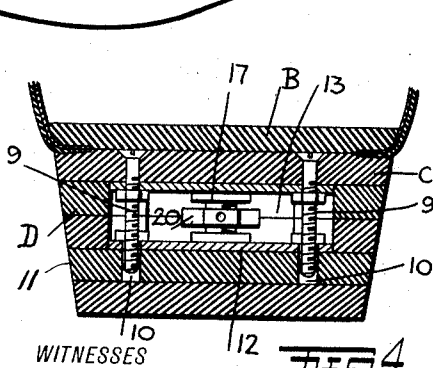
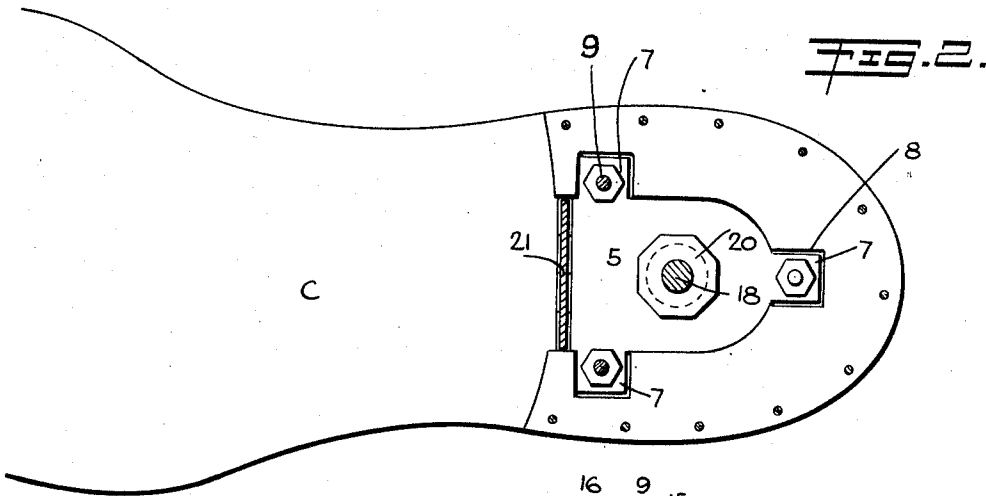
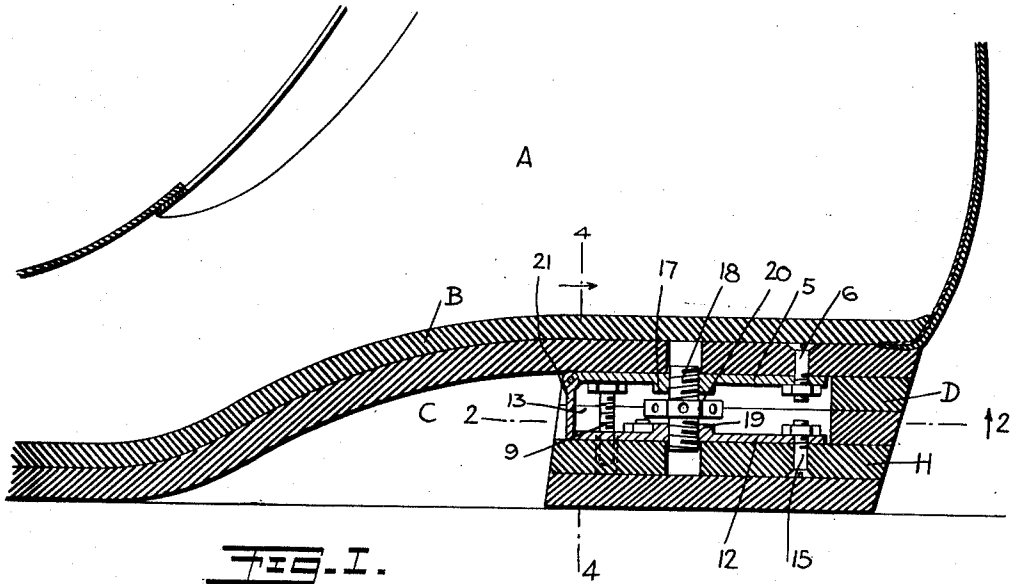


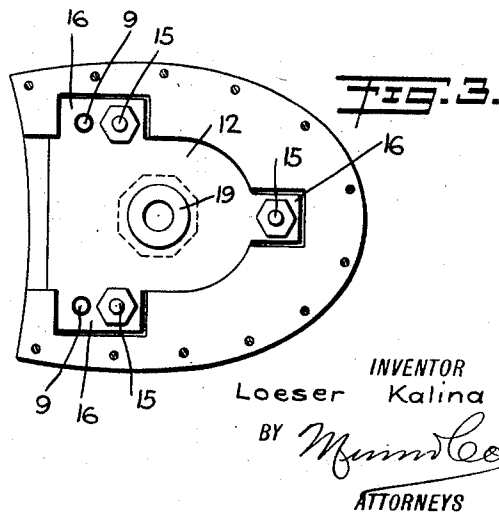
L. KALINA.  
 REMOVABLE HEEL.  
 APPLICATION FILED MAY 7, 1912.

1,042,924.

Patented Oct. 29, 1912.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

LOESER KALINA, OF NEW YORK, N. Y.

## REMOVABLE HEEL.

1,042,924.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed May 7, 1912. Serial No. 695,636.

*To all whom it may concern:*

Be it known that I, LOESER KALINA, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Removable Heel, of which the following is a full, clear, and exact description.

My invention relates to heels for shoes, and an object of my invention is to provide a shoe having a replaceable heel of leather, rubber, or composition, so that even a person unskilled in the art may readily remove a worn heel and replace the same by a new one.

A further object of my invention is to provide means for locking a removable heel in position, which means may be readily operated from the outside of the shoe and heel by the wearer.

I attain the above-outlined objects by positioning on the rear of the out-sole of the shoe, a plate having a threaded opening therethrough, which opening is engaged by a threaded screw, the opposite end of which screw is engaged by a similarly-constructed plate forming part of the replaceable heel.

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, and in which—

Figure 1 is a longitudinal vertical sectional view taken through the rear portion of the shoe and showing a preferred embodiment of my invention applied thereto; Fig. 2 is a plan view of the rear portion of the shoe with the heel removed, said view taken on the line 2—2 of Fig. 1 and looking in the direction of the arrow; Fig. 3 is a similar view of the top of the heel; and Fig. 4 is a vertical transverse sectional view through the heel and sole of the shoe, and taken on the line 4—4 of Fig. 1, looking in the direction of the arrow.

Described more in detail, I have shown a shoe A of any usual construction, having an insole B and an out-sole C. Positioned in the customary place on the out-sole, is the heel D more particularly forming the subject-matter of my invention. Positioned on the bottom of the out-sole C and adjacent the rear edge of the shoe, is a sole plate 5 fastened to the out-sole by any suitable means, and as shown in the illustration, taking the form of nut-and-bolt connections 6

passing through extensions 7 from transverse sides of the forward part of the plate 5 and from the central rear edge of said plate and integral therewith. As shown in Fig. 2, the extensions 7 may be positioned in recesses 8 in the top ply of the heel, so as to prevent any horizontal movement of the plate 5.

As shown in Fig. 4, the bolt 9 of the nut-and-bolt connection 6 may extend into a recess 10 in the ply 11 carrying the lower plate 12 hereinafter described, in order to prevent any horizontal torsion of the heel relative to the sole. The top of the heel has a recess 13 in the front part thereof, adapted to contain the plate 5 hereinbefore described, the bottom of which recess is outlined by the heel plate 12, similar in construction to the plate 5 and disposed below the same, said plate 12 being suitably affixed to the heel portion by means of a nut-and-bolt connection 15 positioned in extensions 16 from said heel plate. The shoe plate 5 has a depending boss 17 positioned centrally thereof, threaded into which boss is the upper end of a binding screw 18, the lower end of which screw engages a similarly constructed boss 19 projecting upwardly from the heel plate 12. The opposite ends of this screw 18 have respectively right and left hand threads thereon, so that the rotation of the screw in one direction will tend to draw the plates 5 and 12 toward each other, thereby tending to firmly bind the heel to the out-sole. It is desirable to actuate the screw 18 from the exterior of the shoe or heel, and for that purpose, the recess 13 is open to the front of the heel, through which opening an instrument or the fingers may be inserted in order to engage a nut head 20 centrally positioned on said screw and separating the right and left-hand threads thereon.

By the above outlined construction, it will be seen that when the heel is worn down, the screw 18 is rotated to disengage the removable part from the shoe and a new part having an attached heel plate 12 disposed thereon replaces the old heel. If desired, a flap door 21 may be hinged to the forward edge of the plate 5 in order to close the opening 13.

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

1. The combination of an out-sole having a plate at the heel portion thereof, a heel having a recess in the top thereof and open

at the front of the heel, a plate disposed in said recess and attached to said heel, said out-sole and heel-plates having threaded openings adapted to aline vertically when the heel is in position, a screw having right and left-hand threaded portions for respective engagement in the plate openings and having a central nut disposed within the said heel recess and accessible through the front open end thereof.

2. The combination of an out-sole having a plate disposed flatwise against its lower surface at the heel portion thereof, and securely connected thereto, a heel having a recess in the top thereof which is open to the front of the heel, a plate disposed in said heel recess and rigidly connected flatwise upon the base thereof whereby to assume a position parallel with the out-sole plate when the heel is disposed in position against the out-sole, said out-sole and heel-plates having substantially central threaded openings in vertical alinement, a screw having respectively right and left-hand threaded portions engaging the threaded openings of the said out-sole and heel-plates and provided with a central nut disposed

within the heel recess and accessible through the front open end thereof, and a plate hinged to the front edge of the said out-sole plate and extending downwardly at right-angles thereto for the purpose of normally closing the said open end of said heel recess.

3. The combination of an out-sole having a plate at the heel portion thereof, and heel having a recess in the top thereof open to the front of the heel, a plate disposed in said recess and attached to said heel, means for connecting the said out-sole and heel-plates at a substantially central point, and bolts connecting said plate to said out-sole, certain of which bolts have extending shanks outstanding on opposite sides of said connecting means, said heel and its plate having recessed portions into which said extended shanks project whereby to prevent displacement of the heel with respect to the out-sole.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOESER KALINA.

Witnesses:

W. S. ORTON,  
JOHN P. DAVIS.