No. 753,532. PATENTED MAR. 1, 1904.

F. F. ANDERSON.

DETACHABLE HEEL FOR BOOTS OR SHOES.

APPLICATION FILED DEC. 27, 1901.

NO MODEL.

Fig. 1

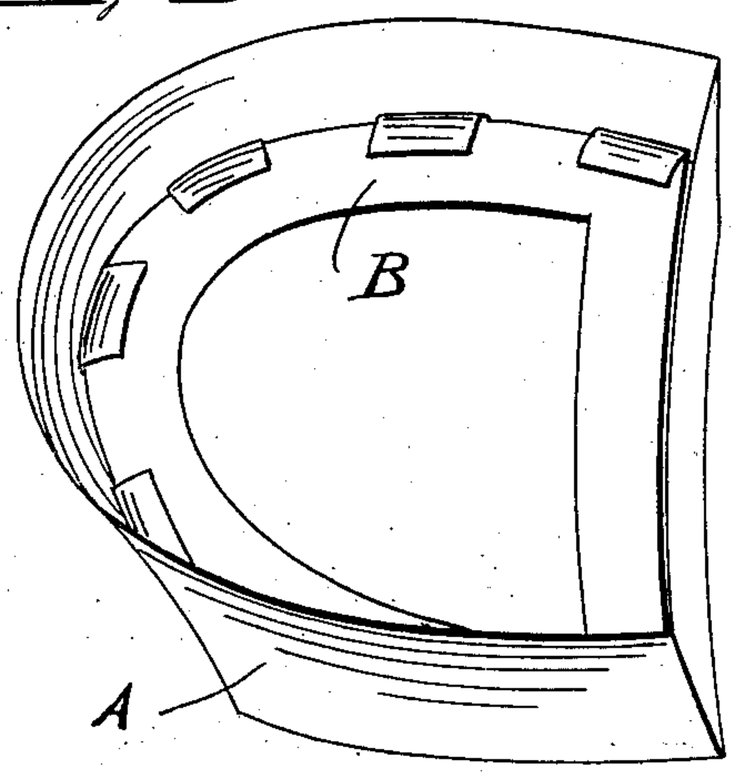


Fig. 2

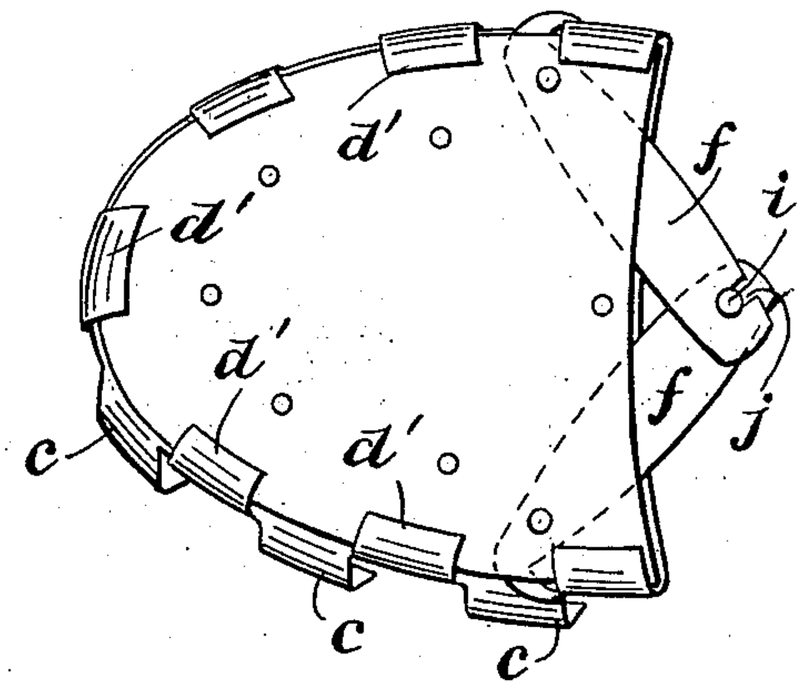


Fig. 3

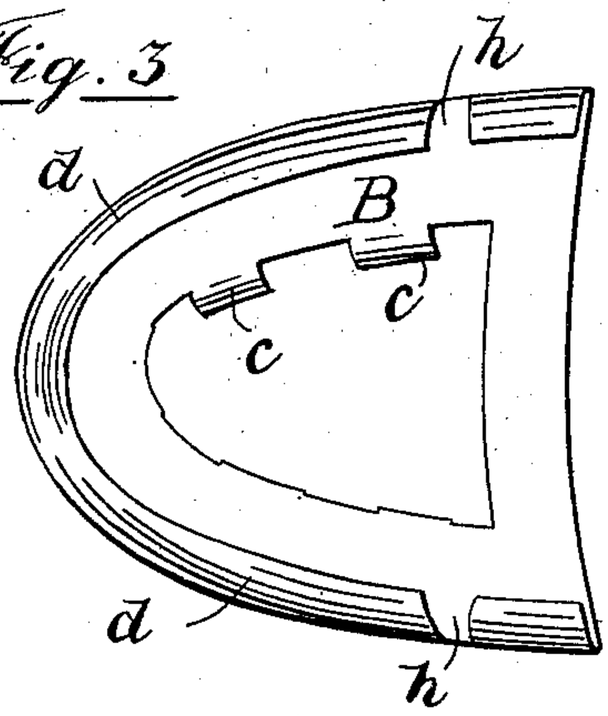


Fig. 4

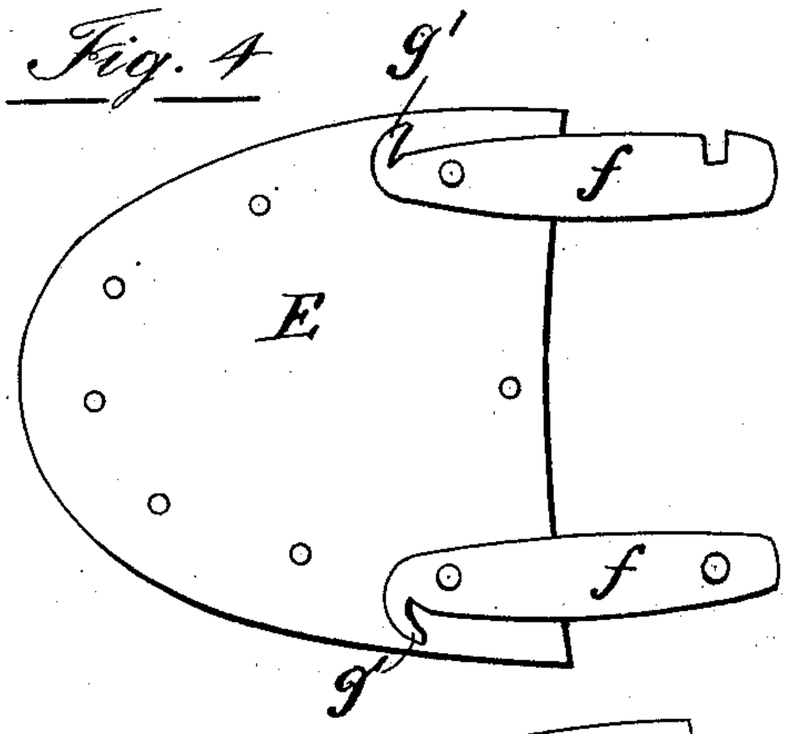
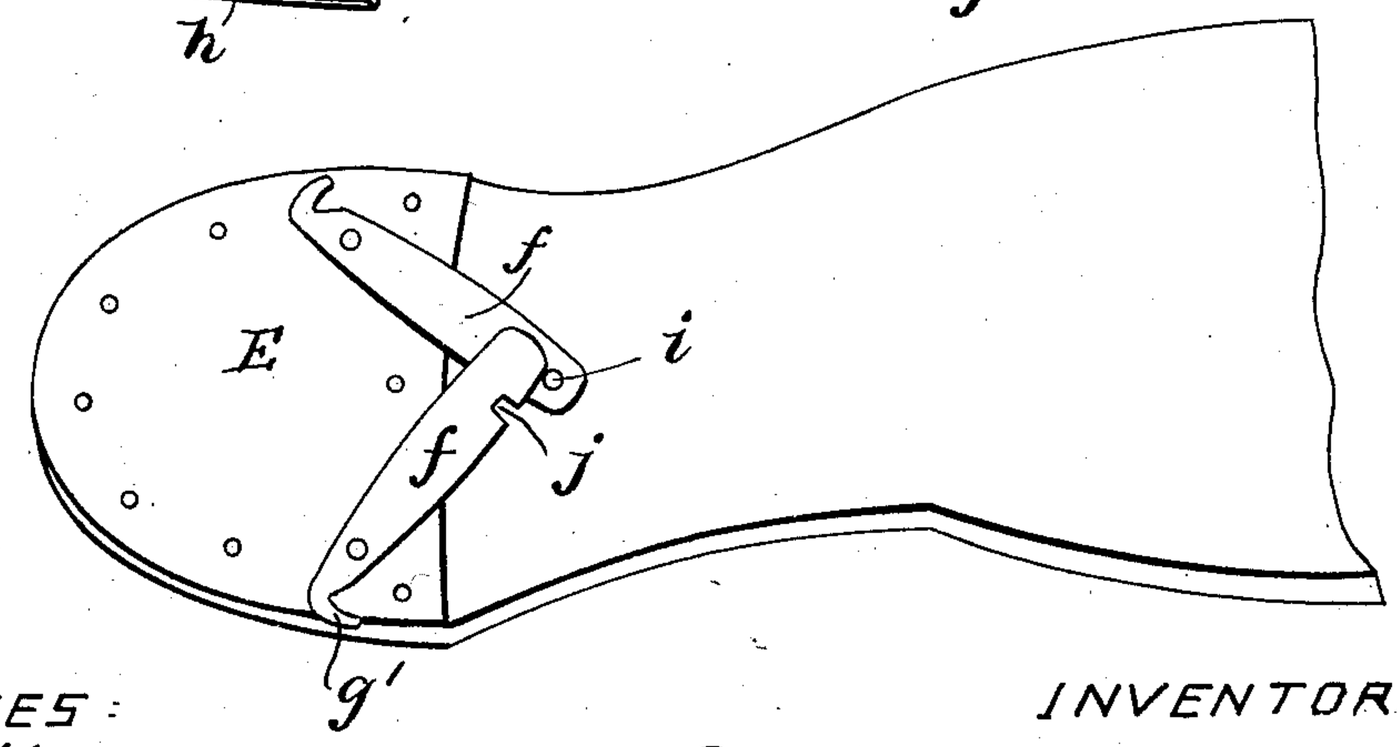


Fig. 5



WITNESSES:

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No. 753,532. Patented March 1, 1904.

UNITED STATES PATENT OFFICE.

FREDERICK FRANCISCO ANDERSON, OF OAKLAND, CALIFORNIA, ASSIGNOR TO LOUIS KOHN, OF OAKLAND, CALIFORNIA.

DETACHABLE HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 753,532, dated March 1, 1904.

Application filed December 27, 1901. Serial No. 87,441. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK FRANCISCO ANDERSON, a citizen of the United States, residing at Oakland, Alameda county, State of California, have invented certain new and useful Improvements in Detachable Heels for Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to an improved device for removably attaching heels to boots and shoes, so that the heel can be attached and detached at will, so as to be transferred from one boot to the other.

It consists of a plate fixed in the top of the heel, which is provided with an overturned edge, so as to provide a groove or channel, and another plate of corresponding size attached to the sole of the boot or shoe heel, so that its edge will slide into and engage the channel of the overturned edge of the heel-plate, and a locking device by which the two plates are fastened and locked together, all as hereinafter more fully described.

Referring to the accompanying drawings, Figure 1 is a perspective view of a boot or shoe heel, showing the plate which is attached to the heel with overturned lips on its outer edge. Fig. 2 is a detached view in perspective of both plates in their engaged position, showing the hooks that secure the lower plate in the heel. Fig. 3 is a plan view of the lower plate which is attached to the heel, showing an unbroken overturned rim and the hooks which attach it to the heel on the edge of the opening. Fig. 4 is a detached view of the plate which is attached to the heel portion of the shoe-sole with its fastening-hooks thrown open, and Fig. 5 shows the heel-plate attached to the heel portion of the sole.

A represents a boot or shoe heel, which can be made of any desired material; but my heel-attaching device is especially adapted for an india-rubber or composition heel. I prefer to make the heel hollow, in which case I remove the center part of the plate B, which is attached to the heel, so that the plate in that case is a narrow horseshoe-shaped plate, as shown at Figs. 1 and 3. The plate B, I attach to the top surface of the heel by any suitable means, but preferably by means of lugs *c c*, which are bent downward from the outer or inner edge of the plate, as the case may be. When the outer edge *d* of the plate is turned over, so as to form one continuous groove, as at Fig. 3, I turn the lugs *c c* down from the cut-away inner portion of the plate, as shown at said Fig. 3; but I can slit the outer edge of the plate and turn the alternate portions between the slits in opposite directions, so that those lugs which are turned upward from the lips *d'*, Fig. 2, form the engaging groove, while the alternate lugs, which turn downward, are formed into lugs *c* to form anchoring-pins. In casting or forming india-rubber or composition heels I embed the hook-bent lugs or anchoring-pins *c* in the plastic material before it hardens, so that the plate B is firmly fixed and held in the heel-top. The turned-over outer edge of the plate, whether continuous or intermittent, forms a groove for the reception of the outer edge of the heel-plate, as hereinafter described.

The plate E (shown at Fig. 4) is secured to the sole portion of the shoe directly above the heel, and it is of proper size to have its outer edge or rim enter and slide into the groove which is formed by the turned-over outer edge of the heel-plate B, so that when the heel, with its plate B uppermost, is slid forward upon the heel-plate E the outer edge of the heel-plate will enter and fit in the groove of the overturned edge and fasten the two together all around the heel.

A lever-hook *f* is attached by a rivet to the rear part of the heel-plate near each side of the heel, so that one end projects between the two plates, while the opposite extremity extends beyond the straight portion of the heel. The ends of the levers which project between the plates are formed with hooks *g* on the outer edge opposite the notches *h* in the plate B. When these hooks are standing, as shown at Fig. 4, they do not interfere with the sliding

together of the plates; but when the two plates are slid together and the hooks thrown, by means of the lever-handles, to the positions shown at Fig. 2 the hooks are thrown into engagement with the inturned lugs of plate B, so as to connect the two plates and prevent them from being displaced. In case the overturned edge of plate B is continuous I make notches *h* in it at the proper point to receive the hooks. The projecting lever ends of the hooks are thus brought together, and a pin *i* on one lever is engaged with a notch *j* on the other to lock them together, and thus secure the heel to the heel-plate of the boot or shoe.

The particular advantage of this device is that it makes a solid fastening for the heel that interlocks entirely around the heel and makes a close and reliable joint and at the same time the heel can be attached and detached in an instant without tools and it is not liable to become disconnected.

Having thus described my invention, what I claim is—

In attaching devices for removably securing detachable heels to boots and shoes, a plate secured to the top of the heel having its outer edge turned over so as to provide a groove or channel around the outer rim of the plate; a plate secured to the heel portion of the sole of the boot or shoe and adapted to have its outer edge engage with the groove or channel of the heel-plate when the two slide together; notches in said overturned edge; a hooked lever centrally pivoted to each side of the plate which is attached to the sole of the boot or shoe and adapted to engage with said notches when their outer ends are drawn together, and means for locking the levers when thus engaged, substantially as described.

FREDERICK FRANCISCO ANDERSON.

Witnesses:
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