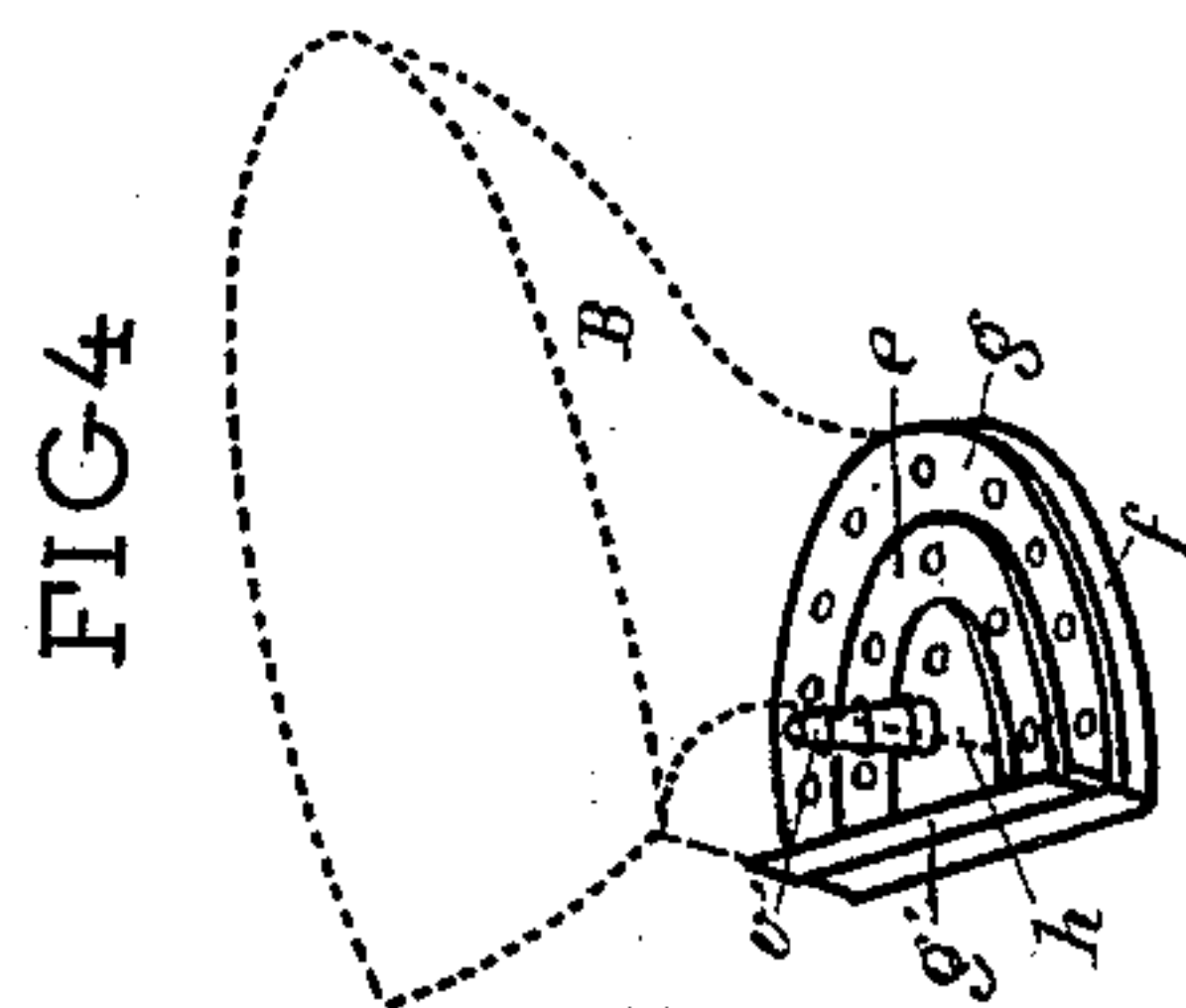
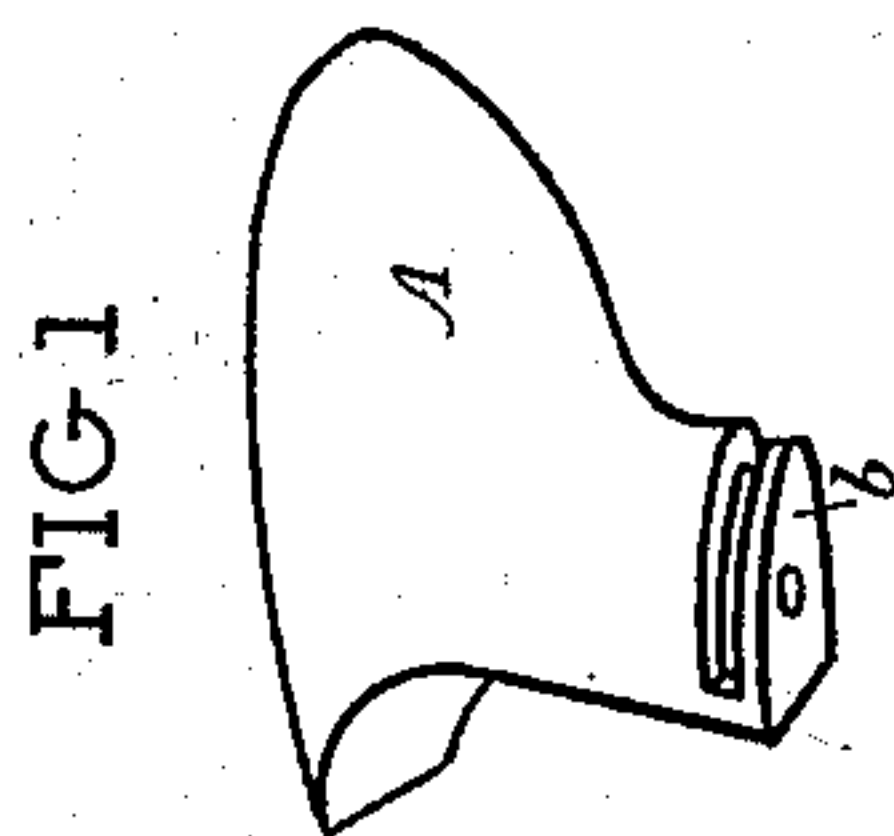
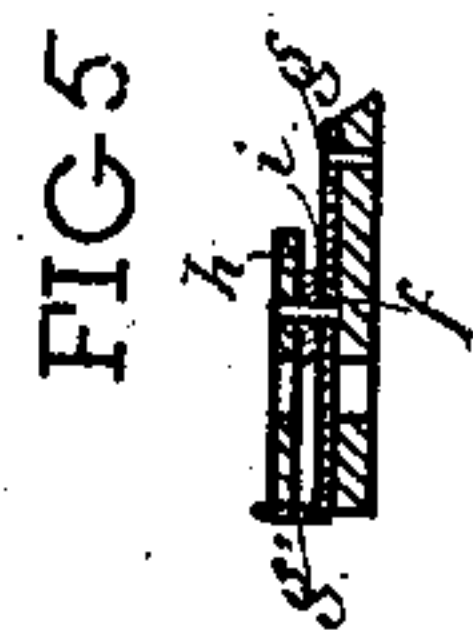
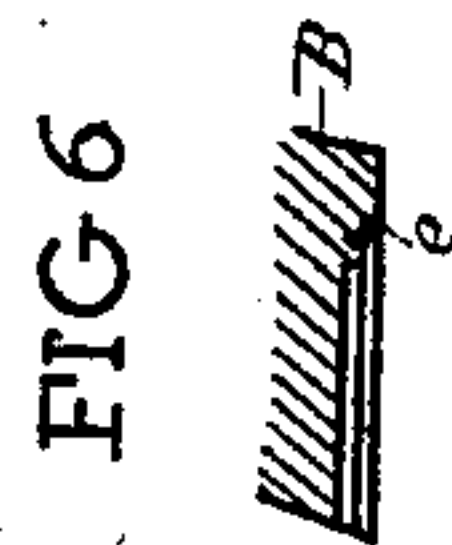
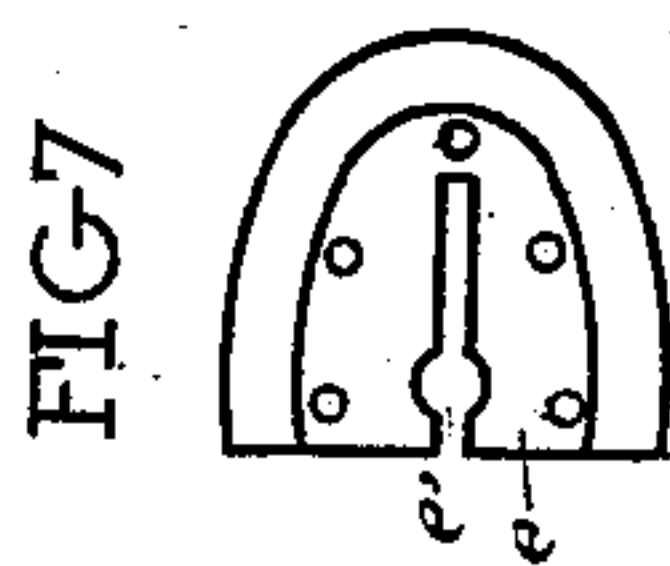
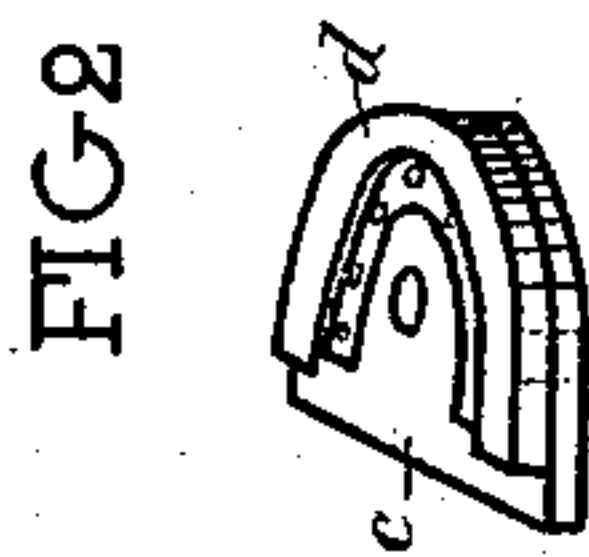
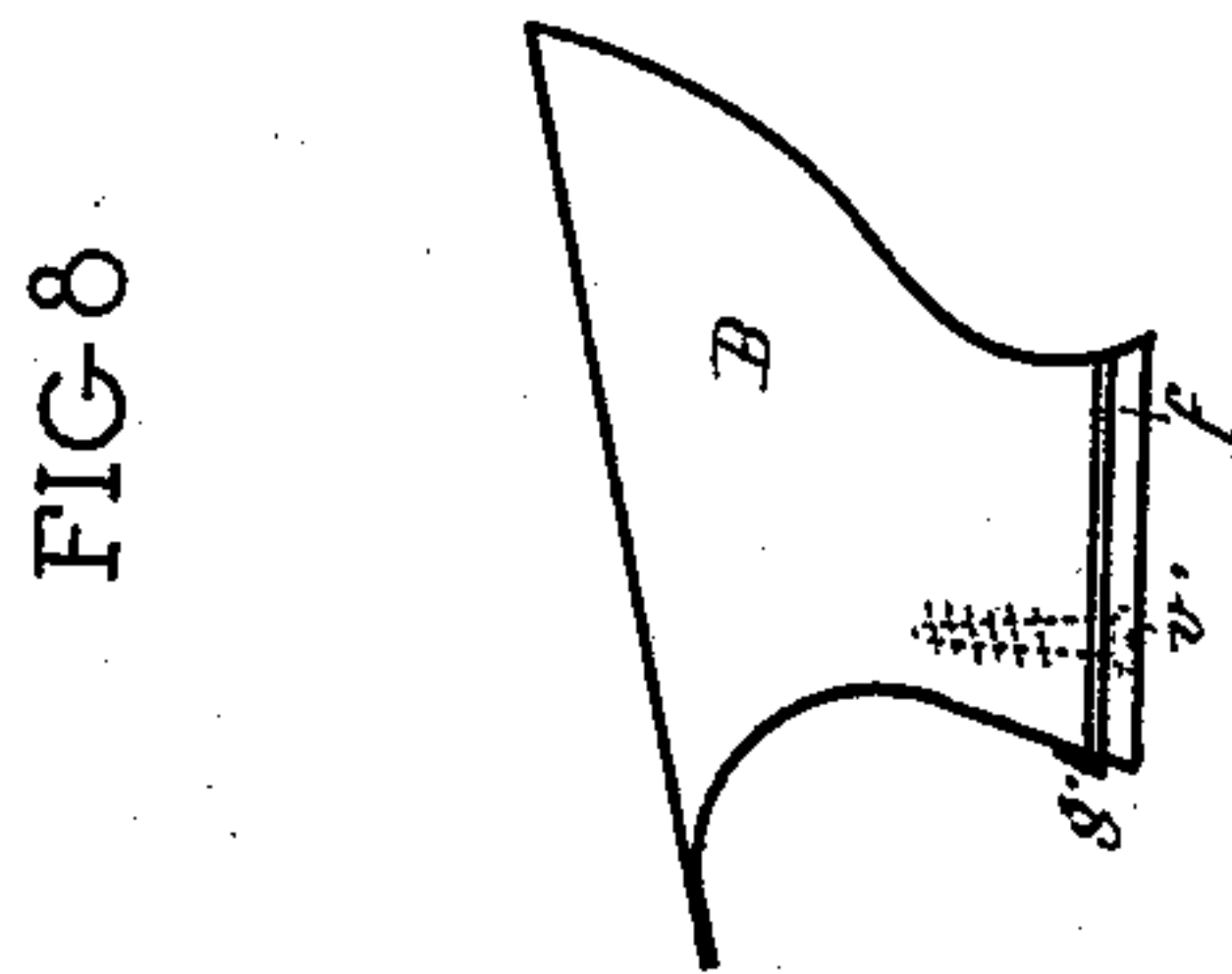
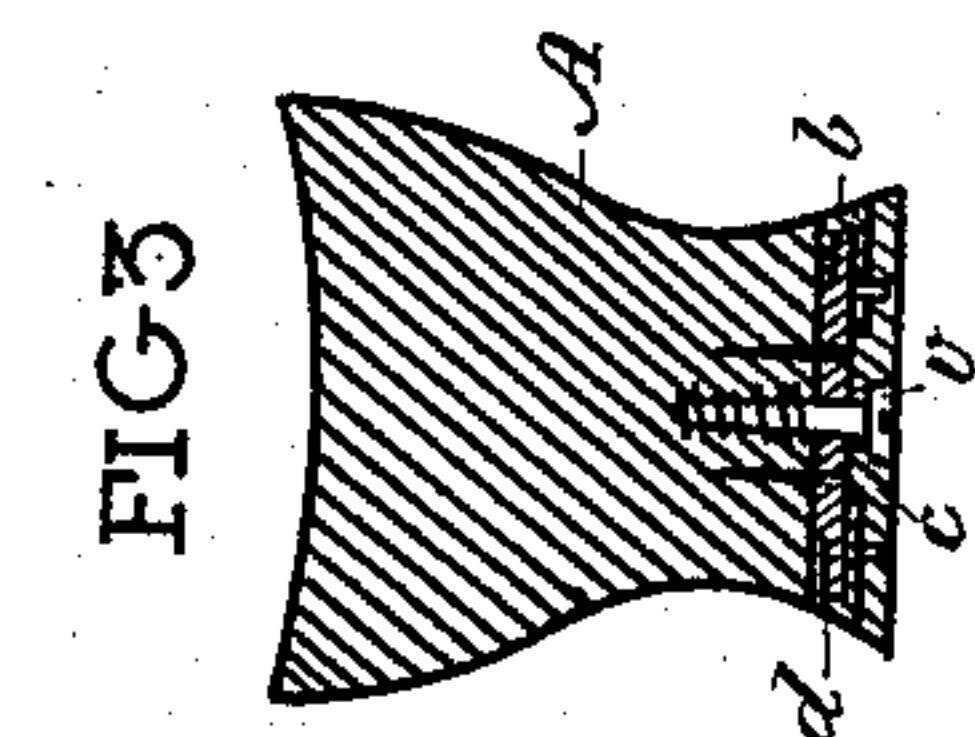


(No Model.)

F. P. URRUELA.
HEEL FOR BOOTS OR SHOES.

No. 402,366.

Patented Apr. 30, 1889.



Witnesses,
Alex. Stewart,
Ed. Smith

Inventor:
Francisco P. Urruela
by, Clunk Clunk
His Attorneys,

UNITED STATES PATENT OFFICE.

FRANCISCO P. URRUELA, OF MADRID, SPAIN.

HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 402,366, dated April 30, 1889.

Application filed December 3, 1888. Serial No. 292,561. (No model.) Patented in Spain August 16, 1888, No. 8,597, and in England November 14, 1888, No. 16,548.

To all whom it may concern:

Be it known that I, FRANCISCO P. URRUELA, a subject of the King of Spain, residing at Madrid, Spain, have invented certain new and useful Improvements in or relating to Heels for Boots or Shoes, of which the following is a specification, the same having been patented in Spain, No. 8,597, August 16, 1888, and England, No. 16,548, November 14, 1888.

The present invention relates to improvements in heel-plates constructed in such a manner that they can easily be detached from the heel and replaced by fresh ones when worn out.

In the accompanying drawings, Figure 1 represents a perspective view of a heel constructed for the reception of the removable heel-plate. Fig. 2 represents a perspective view of the removable heel-plate. Fig. 3 is a vertical section of the heel with the heel-plate. Fig. 4 represents a modified form of the heel-plate. Fig. 5 represents a vertical longitudinal section of the heel-plate represented in Fig. 4. Fig. 6 represents a similar section of the lower part of the heel constructed for the reception of the heel-plate represented in Figs. 4 and 5. Fig. 7 is a plan of the under side of the heel without the heel-plate. Fig. 8 is a side elevation of the heel fitted with the removable heel-plate.

In the first construction the heel A, Fig. 1, is provided at the bottom with a top lift, preferably of leather, *b*, suitably fastened to the heel in such a manner as to leave a substantially U-shaped recess above the same.

The removable heel-plate, Fig. 2, consists of a piece of leather, *C*, riveted or otherwise attached to a U-shaped piece of metal, *d*, which is also preferably U-shaped in cross-section, with the bottom flange extended to afford a better attachment for the plate. To apply the plate just described to the heel, it is slipped over the top lift and the metal plate pushed into the recess above said lift, the whole being then firmly secured in position by means of a screw, *v*, passing through the heel-plate within the space between the arms of the U-shaped metal plate.

In the modified form, Figs. 4 and 8, the top lift of the heel B is preferably formed of or provided with a metal plate, *e*, properly secured in position, and having the central slot, *e'*, extending nearly across its longitudinal axis. The U-shaped recess for the reception of the piece on the plate is formed above the plate *e* and inside of the heel, as will be readily understood. The heel-plate is further provided with a smaller U-shaped plate, *h*, fixed thereto, a small piece, *i*, of suitable material, being interposed so as to leave a small space between the two plates.

To fit or fix the heel-plate to the heel, the smaller plate *h* of the heel-plate is introduced between the heel and the top lift or plate fastened thereto, and the small piece *i* interposed between the two plates of the heel-plate sliding in the slot formed in the metal plate fastened to the body of the heel. The heel-plate is then firmly fixed to the heel by means of a screw, *v'*, passing through the parts, as already described.

From the foregoing it is easy to understand that to replace the heel-plate when worn it is only necessary to remove the screw which fastens it to the heel and slip the worn heel-plate off and a new one on. The arrangement is equally adaptable to men's, ladies', or children's boots, and always insures a good flat heel, thus preventing fatigue, sore feet, corns, and a too rapid deformation of the boot.

By reason of the employment of the substantially U-shaped plates on both the removable plate and heel, a bearing is afforded all around the heel, effectually preventing all liability of the plate working loose, and, further, by the employment of such U-shaped plates a space is left for the insertion of the screw, which will thus draw the parts firmly together—a construction far preferable to those in which the fastening device is, so to speak, outside of the plates—such, for instance, as employ a screw entering the shank portion of the sole.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination, with a boot or shoe heel having the top lift with the U-shaped recess above said lift, of the removable sliding heel-plate having the U-shaped plate thereon fitting within the U-shaped recess in the heel, and the screw passing through said parts within the space between the arms of the U-shaped plate for holding the parts in position, substantially as described.

2. The combination, with a boot or shoe heel having the extended top lift with the U-shaped recess above the same around the outside of the heel, of the removable sliding

heel-plate having the flanged U-shaped plate substantially U-shaped in cross-section secured thereto and fitting within the circumferential U-shaped recess in the heel, and the screw for holding the parts in position, substantially as described.

In testimony whereof I have hereto set my hand in the presence of two subscribing witnesses.

FRANCISCO P. URRUELA.

Witnesses:

ACHILLE MARILLIER,

JEAN ROBELET.