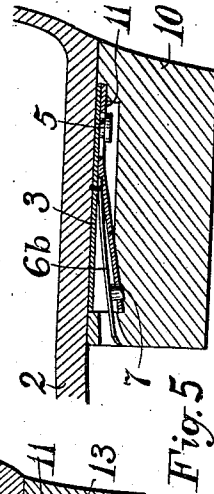
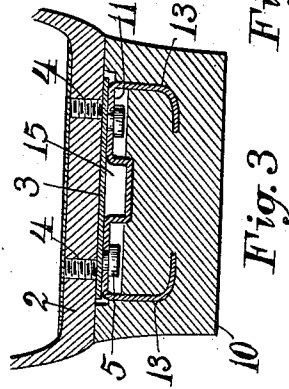
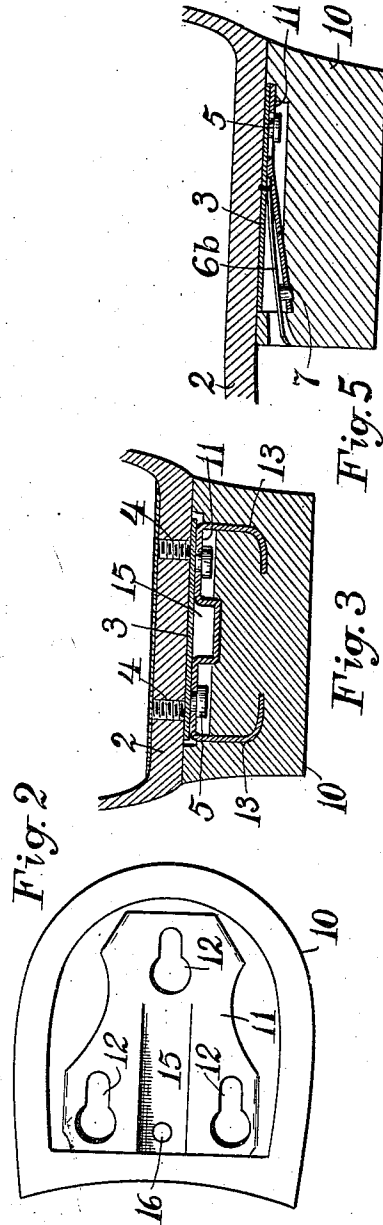
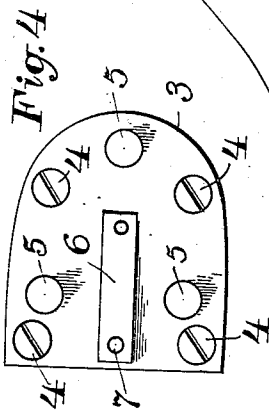
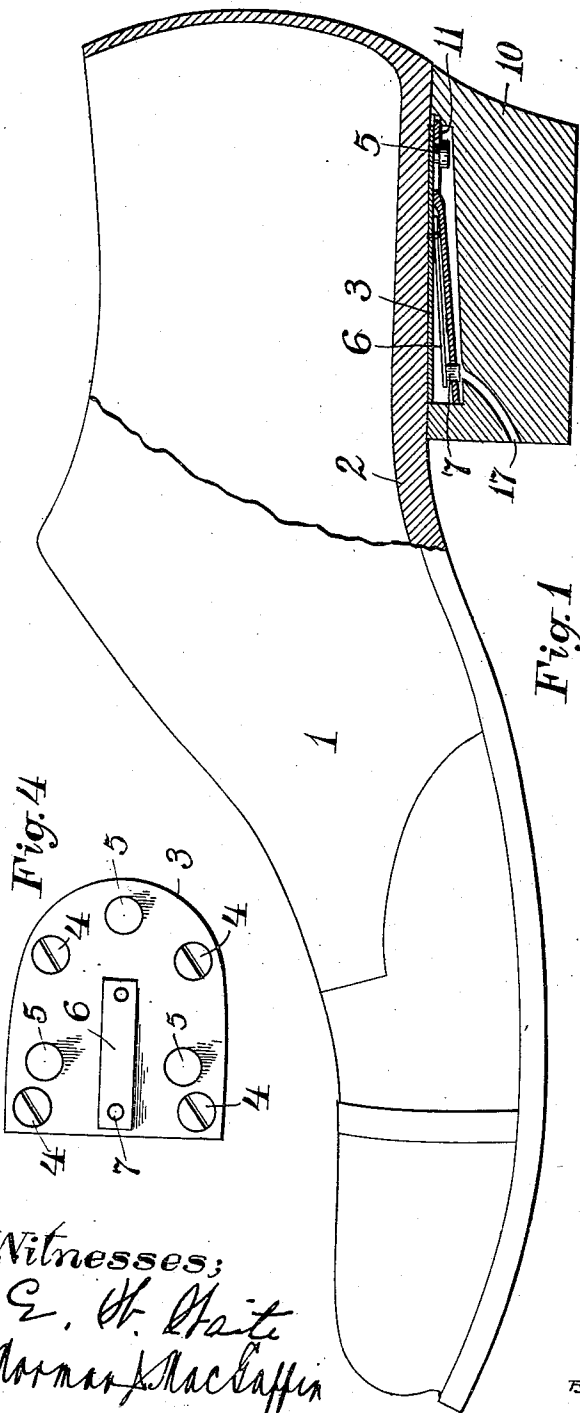


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HEEL.

APPLICATION FILED NOV. 15, 1909.

988,060.

Patented Mar. 28, 1911.



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UNITED STATES PATENT OFFICE.

LOUIS ANDREWS, OF NEWTON UPPER FALLS, MASSACHUSETTS.

HEEL.

988,060.

Specification of Letters Patent.

Patented Mar. 28, 1911.

Application filed November 15, 1909. Serial No. 528,159.

To all whom it may concern:

Be it known that I, LOUIS ANDREWS, of Newton Upper Falls, in the county of Middlesex and Commonwealth of Massachusetts, a subject of the Kingdom of Italy, have invented certain new and useful Improvements in Heels, of which the following is a specification.

The object of this invention is the construction of means for easily and expeditiously applying heels to boots and shoes, and removing the same therefrom at will.

Referring to the drawings forming part of this specification, Figure 1 is a side elevation of a shoe showing in section a heel embodying my invention applied thereto. Fig. 2 is a plan view of the heel alone. Fig. 3 is a vertical cross section of the heel and a portion of the shoe-sole to which the same is attached. Fig. 4 is a face view of that one of the two attaching plates which is designed to be fastened to the shoe. Fig. 5 is a side sectional view of a slightly different form of the device.

The reference numeral 1 designates the shoe selected for illustration, and 2 the sole thereof. To the under surface of the heel section of the sole is fastened a plate 3, preferably by means of short screws 4 as shown in Fig. 3. From the under face of said plate project a plurality of headed lugs or buttons 5, the number being preferably three, and to said face is secured a leaf spring 6 having a detent 7 at its free end; said free end being normally a substantial distance away from the plate. See Figs. 1, 3 and 4.

In a recess in the upper surface of the heel 10 is secured a plate 11 containing a number of key-hole shaped slots 12 corresponding in positions to the lugs 5 on the sole-plate 3. This plate 11 is fastened to the heel by means of the peripheral fingers 13 embedded in the material of which the heel is composed, preferably rubber, as shown in Fig. 3. In this heel plate is a longitudinal recess 15 positioned to receive said spring 6 projecting from the sole-plate, and in said recess is an opening 16 adapted to

be entered by said detent. By pressing the heel up against the plate 3 to enter its lugs 5 into the larger ends of the slots 12, and then sliding the heel slightly forward, the heads of said lugs will be positioned beneath the narrower parts of said slots, and the detent 7 will snap into the opening 16, thereby locking the two plates rigidly together. This locking function is evidently performed by both said lugs and the detent. To remove the heel, a nail, wire or a special pin designed for the purpose, is pressed through the channel formed therefor in the heel as shown in Fig. 1 at 17 for the object of pushing the detent 7 back from its engagement with the opening 16. The moment this is done, the heel can be slid rearward until the larger ends of its slots 12 reach the headed lugs 5, when the heel at once drops off from the shoe.

In the construction shown in Fig. 5, the spring 6^b extends forward through a suitable opening in the heel to a point where it can be directly manipulated by a finger or a tool. The main object of this heel attaching means is to enable the two heels of a pair of boots or shoes to be readily interchanged at frequent intervals in order that they shall be made to wear evenly; for with the majority of people the outside edges of their heels wear away the most rapidly, while others, and particularly women, wear them quicker at the inner edges. By having the heels changed periodically, as every week or two, they will be made to wear both outer and inner edges equally, and so not "run over" their shoes.

What I claim as my invention and for which I desire Letters Patent is as follows, to wit:

The combination with a boot or shoe, of a heel comprising a rubber body, a plate having integral fingers embedded in the rubber, a plurality of key-hole slots and a slanting recess having a hole at its deeper end, a plate fastened to the shoe, and a leaf spring fastened to last-named plate to fit in said recess and having a projection adapted to enter said hole and retain said parts

in engagement, the second-named plate having headed pins adapted to enter said slots, the free end of said spring being located near the front end of the heel and the latter
5 formed with an opening for the disengagement of said spring from its locking hole.

In testimony that I claim the foregoing

invention, I have hereunto set my hand this 9th day of November, 1909.

LOUIS ANDREWS.

Witnesses:

A. B. UPHAM,

H. L. WHITTLESEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
