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BOOT OR SHOE.

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(No Model.)

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

WITNESSES:

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To all whom it may concern:

Be it known that I, WILSON BURWELL, a citizen of the United States, residing at Summit, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to provide a detachable heel for boots and shoes; to thus secure a heel which can be removed from a boot when worn and replaced by a new one; to enable the heels of a pair of shoes to be interchanged, so that they will be worn equally; to provide a firm and durable, yet simple, construction, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved heel of boots and shoes and in the arrangements and combinations of parts thereof, all substantially as will be hereinafter set forth and finally embraced in the claim.

Referring to the accompanying drawings, in which letters of reference indicate corresponding parts in each of the several views, Figure 1 is a central vertical longitudinal section of a boot having my improved heel attached. Figure 2 is a transverse vertical section on line a, Figure 3. Figure 5 is a reverse plan of the heel in position on a shoe. Figure 4 is a reverse plan of a certain inner plate, and Figure 5 is a plan of the detachable heel.

In said drawings, a indicates the upper of a boot or shoe of any ordinary construction and suitably attached to a sole b, preferably of leather. At the heel of the shoe is arranged an inside plate c, which lies against the upper surface of the sole b and is in turn covered by the insole d for greater ease and comfort. Said inside plate c is preferably somewhat dished or concave upwardly to better fit the heel of the wearer, and from its under surface project downwardly-extending lugs or studs c', passing through suitable perforations therefor in the sole b and terminating flush with the under surface of said sole. Said studs c' are longitudinally bored and threaded in from their lower ends to receive screws e, which serve to hold an outer plate f firmly in place against the under surface of the sole b and the ends of said studs c'. This outer plate f conforms in plan view to the outer surface of the sole b and engages the studs c', while at the under surface a downwardly-extending rim g extends around the curved or horseshoe-shaped portion of the heel. At the inner or concave side of said rim g the same is grooved adjacent to the under surface of the plate, as at g', said groove being adapted to receive a tongue h on the detachable heel i. Said detachable heel is formed of a shape and size in plan substantially the same as the outer plate f and is of any height or thickness desired. The upper and outer edges of the curved portion of the perimeter of said detachable heel are recessed, as at j, to receive the downwardly-extending rim g on the outer plate f. The upper part of the heel thus extends into the space bounded by the rim g until its top comes in contact with the under side of the outer plate f, and at the upper per edges of said upper part of the heel is the tongue h, extending around the curved portion of the perimeter and adapted to lie in the groove g', as before described. The detachable heel i can thus be slid into place from the front of the heel of the shoe, where the transverse end of the outer plate f is devoid of the rim g, as has been described, and can be removed with the same facility. The rim g prevents said detachable heel from slipping out backwardly, and to hold the heel against slipping forward out of its seat when such movement is not desired I have provided small screws k k. Said screws are disposed at each side of the heel and near its front end, as shown more especially in Figure 3, and extend horizontally inward through countersunk perforations k' in the rim g' to screw into threaded sockets k' in the sides of the
detachable heel \( i \), said sockets \( k^2 \) being adapted to register with the perforations \( k^1 \) when the heel is properly seated in the plate \( f \).

By simply removing the screws \( k \) the detachable heel may be readily removed at any time for renewal or any other purpose, the means of connection described between said heel and the outer plate \( f \) not being subject to wear or injury, interfering with their normal operations. It will be seen that the fastening means thus described are particularly adapted to a removable heel centrally hollowed out, as hereinafter described, an ample and solid seat being still afforded for the set screws, whereby the heel is firmly held. At the same time the screws are easily accessible for removal of the heel, and their position prevents any wearing which will interfere with operating them.

Both the outer holding-plate \( f \) and the detachable heel \( i \) are preferably of metal, and to secure lightness and cheapness the heel is hollowed out from the bottom, the sides of said cavity diverging upward. The cavity may then be filled or packed with any suitable material, which packing \( m \) will be held from falling out by the inclination of the inner sides of the cavity. The walls \( l \) around the cavity may be left of any thickness or weight desired and are preferably at the rear provided with lateral thickened portions