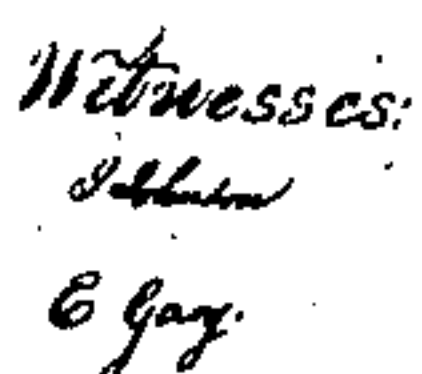


Shoe Heel,

Patented June 25 1861.



Inventor:
Geo. A. Mikell
By Atty E. W. Scott

UNITED STATES PATENT OFFICE.

GEORGE A. MITCHELL, OF TURNER, MAINE.

BOOT-HEEL.

Specification of Letters Patent No. 32,638, dated June 25, 1861.

To all whom it may concern:

Be it known that I, GEORGE A. MITCHELL, of Turner, in the county of Androscoggin and State of Maine, have invented a new and useful Method of Securing the Upper, the Soles, and the Heels of Boots and Shoes Together; and I hereby declare that the following specification, in connection with the accompanying drawings and letters of reference marked thereon, constitute a full, clear, and exact description of the construction, application, and use of the same.

In referring to the said drawings, Figure 1 denotes a side elevation of a shoe with my invention applied thereto. Fig. 2, an inverted plan of the same a portion D, of the heel being detached. Fig. 3, the detached portion D of the heel. Fig. 4, a section on line A, B, when the part D, Figs. 2 and 3, is attached to the shoe. Fig. 5, a transverse section on line C, D, Figs. 1 and 4, and showing the parts beyond. Fig. 6, an end view of the portion D, of the heel. Fig. 7, a plan of the pad or piece E of the heel. Fig. 8, an inverted plan of a portion of sole B, and piece E.

Invention.—The nature of my invention consists in securing the outer and inner soles and the upper between them, firmly together at the heel portion of the shoe or boot, by a pad of metal or any suitable material, covering this portion of the soles, and secured firmly thereto by screws, rivets, or by any desired means and to which the outer portion of the heel is secured, thus making an indestructible heel portion to the boot or shoe, and effectually securing the heel thereto; all as will be hereafter seen.

Construction.—To enable persons skilled in the art to which my invention appertains to construct and carry out the same I will describe it as follows.

The boot or shoe may be constructed in any desired form or manner, or as seen in the drawings, the upper being seen at A, the outer sole at B, and the inner sole at C. The outer sole B, must be cut short at its heel end, seen at *r*, Fig. 4, which is also a matter of economy as well as necessity resultant from my invention: and to still further economize in material, the sole B, may end at red line *a*, Fig. 8, and the piece H, added to complete the desired length of sole; thus saving an important portion of every outer sole, which saving may be replaced or made good by pieces of waste

leather. I now construct a pad seen at E, Figs. 2, 4, 5, 7, and 8, which is so formed that its surface will conjoin with the sole B, at the heel of the shoe or boot, and secure it thereon and to the inner sole C, and also the upper between the soles; by screws *n*, or rivets, or by any efficient means, thus overlapping the piece H, and firmly securing this entire part of the heel to the boot or shoe, and firmly together, thereby cheaply, imparting a great durability to it.

A slot J, Figs. 2, 7, and 8, is formed through the pad E through or into which the spring F, may be sprung in putting on the outer portion D, of the heel, the spring F, is secured to the pad E, by rivets *i*, *i*. The circular edge of pad E, must be in the same plane, even, true, and uniform. I now construct the outer portion of the heel seen at D, of metal or any suitable material or substances, and form a channel or groove, or projecting edges around in the inner part and near the top of it, as seen at *a*, Figs. 4, 5, and 6, so that by this groove or projection the portion D of the heel may be slid and firmly held upon the pad E, the edges of which fit snugly into groove *a*, to secure part D, to the shoe or boot efficiently and beyond the contingency of removal by accident as well as to prevent ingress of water or dirt into the interior of the heel.

In sliding on the portion D, to the pad E, the spring F, is sprung into the slot J, and when the part D, is in its place as seen in Figs. 1, 4, and 5, then the end of spring F, will recoil and remain against surface *k*, of part D, of the heel which prevents its sliding back or moving from pad E, and from the shoe or boot: a catch or button may be used in lieu of spring F.

I form a slot in part D, and seen at *c*, Figs. 4, 5, and 6, into which the key G, may be inserted the point pressing the spring F, into slot J, so that the part D, can be readily removed for renewal or for changing them from shoe to shoe to secure an evenness of wear where the tendency is to wear unevenly or run down.

A hole may be drilled through portion D, as seen at *e*, and a wire inserted to press down the spring F, to allow portion D, to be removed, this hole *e*, being filled with a piece of cork or otherwise, to prevent ingress of water or dirt, and I prefer this method of removal to that previously described.

The entire expense of my within described heel is much less than a leather heel; they need no repairs, and they are far more durable than any shoe or boot and capable of
5 being readily changed from right to left, and vise versa, by any person wearing them, they are also lighter than the leather heel, and the part D, may be cast with its under surface chilled hard for great durability.
10 The pad E, may be made of sheet iron, and it adds great strength to the heel portion of the shoe or boot. The spring F, may be made of either iron or steel as may be desired. The part D, may be colored black

by any of the known processes for that purpose. 15

What I claim as my invention and desire to secure by Letters Patent is—

The pad E, united to the upper and soles by screws or rivets, for securing the heel 20 portion of the boot or shoe firmly together as described, and for receiving the heel, to be thereon secured for the purpose set forth.

GEORGE A. MITCHELL.

Witnesses:

JAMES B. WALKER,
E. W. SCOTT.