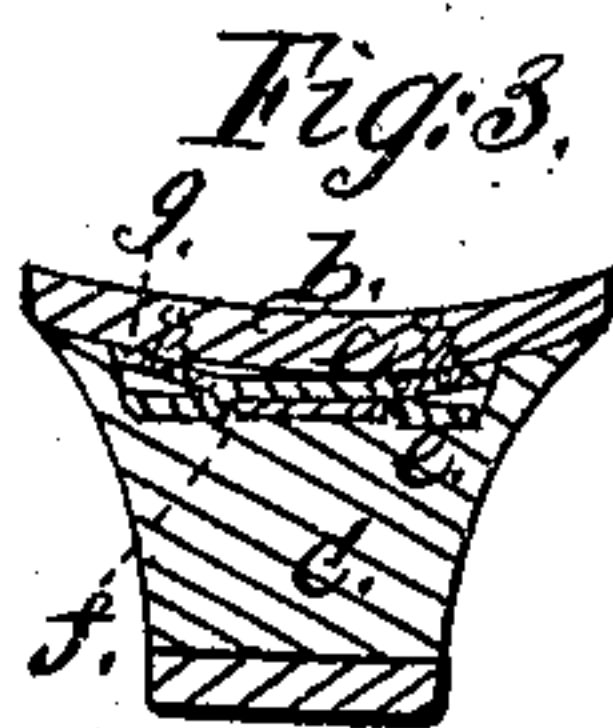
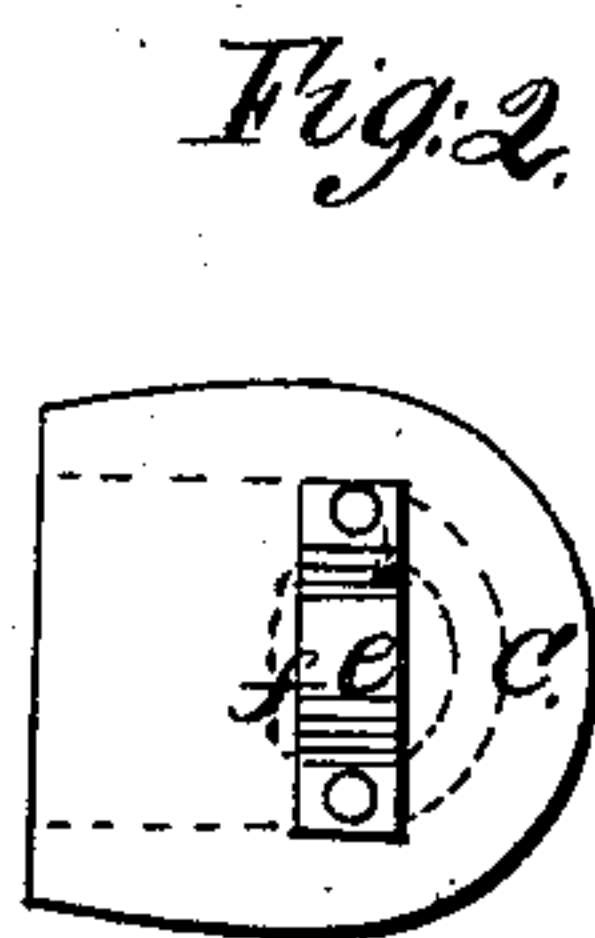
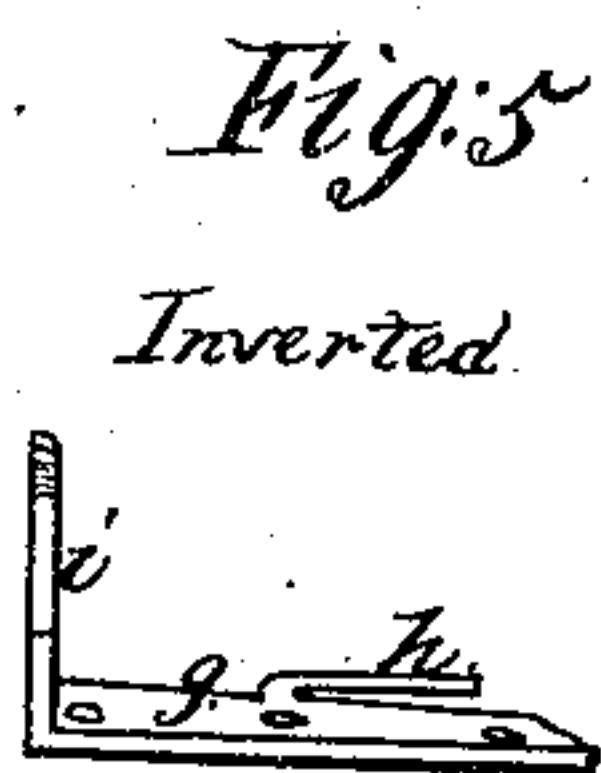
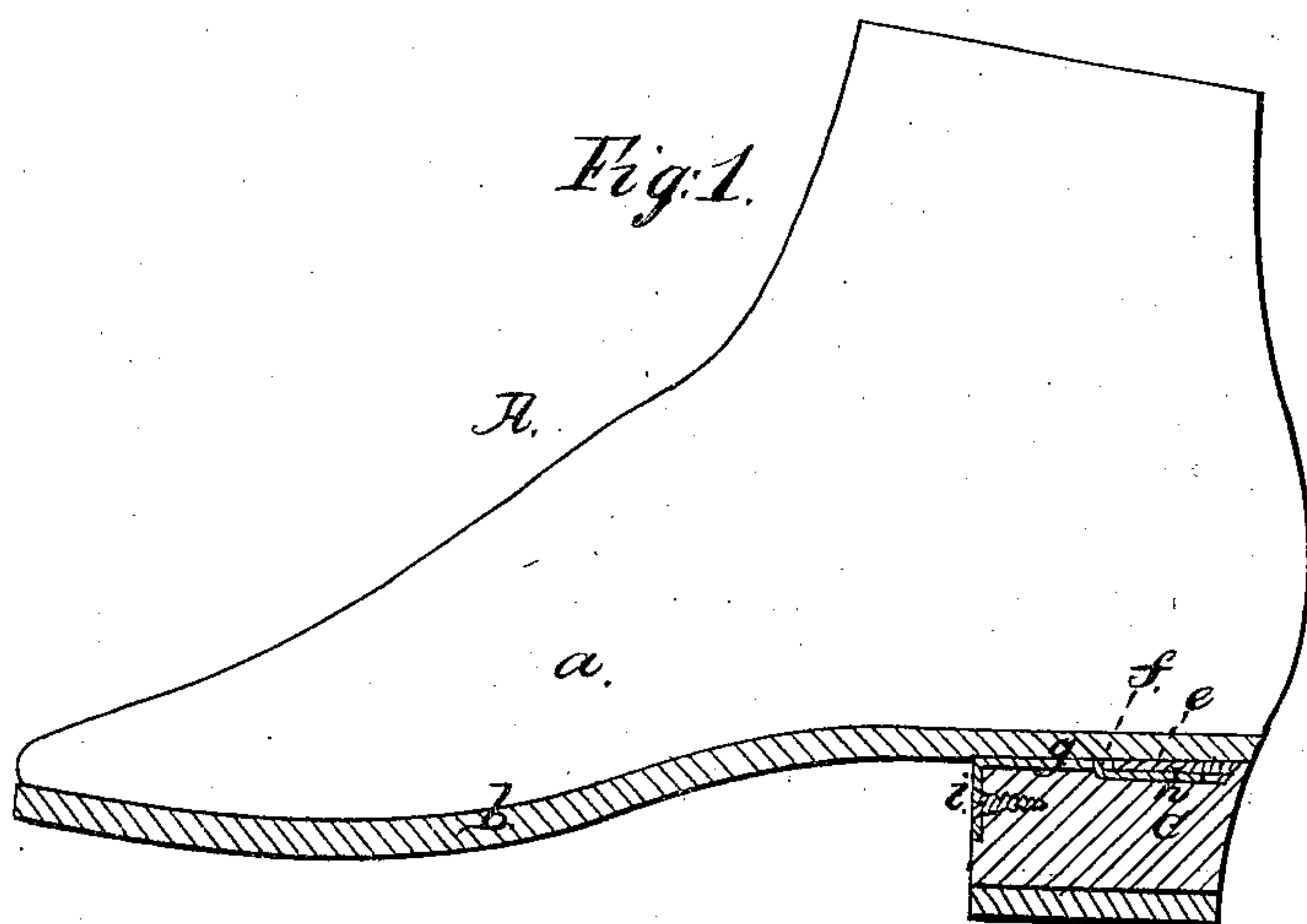


C. D. Ulmer.

Attaching Boot Heels.

N^o 86,955.

Patented Feb 16, 1869.



Witnesses.
Edward. Griffith.
Geo. A. Loring.

Inventor.
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Frederick Curtis.

United States Patent Office.

CHARLES D. ULMER, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 86,955, dated February 16, 1869.

IMPROVEMENT IN ATTACHING HEELS TO BOOTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all to whom these presents shall come:

Be it known that I, CHARLES D. ULMER, of Boston, in the county of Suffolk, and Commonwealth of Massachusetts, have made an invention of a new and useful Mode of Attaching Heels to Boots and Shoes; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a section of a boot containing my invention or improvement;

Figure 2, a top view of its detachable heel, as removed from the boot;

Figure 3, a section of the heel and sole of a boot, showing the application of my invention;

Figure 4 is an edge view of the transverse plate or latch applied to the heel, as hereinafter explained; while

Figure 5 is an edge view of the metallic-tongued plate applied to the sole in manner to be explained.

The invention comprising the subject-matter of this patent has reference to a mode of manufacture of boots and shoes now becoming very general, whereby the heels of such boots and shoes may be removed from and applied to the sole thereof at pleasure, one object of such application of the heels being to allow of an interchange between the heels of a pair of boots, according to varying conditions of the wear upon them; another object of such disposition of the heels being to enable worn-out heels to be replaced by new ones.

My present invention has reference to means for accomplishing this changeable union of the sole and heel of a boot or shoe, in a simple, economical, and durable manner, and consists in applying, to the lower surface of the sole, a metallic plate, provided with a tongue in rear and a bent lip in front, the purpose of the tongue being to extend into a latch or socket applied to the upper surface of the heel of the boot, and by this means confine the heel to the sole, against lateral or oblique thrusts, while the lip, being secured to the front of the heel, insures the proper position of such heel, with respect to the sole and socket, against any longitudinal slipping of it upon the sole.

In the drawings before mentioned as accompanying this specification, and which illustrate my invention—

A represents a boot, of which *a* is the upper, *b*, the sole, and *c*, the heel.

In carrying out my invention, I form the heel, shown at *c* in the drawings, independent of the sole, and made of wood, or any other desirable material, and I apply securely to the upper surface of the heel, and in rear of its centre, a transverse metallic strap or bar, *e*, so formed or provided and applied to the heel as to produce a socket or latch, *f*.

To the under side of the sole of the boot, and at its rear end, I firmly fix a broad metallic plate, *g*, such plate corresponding in form to and being slightly less in size than the heel, in order that the latter shall entirely obscure it from sight.

The plate *g* is formed with an offsetting tongue, *h*, punched from it, and depending below it, as shown in fig. 1 of the accompanying drawings, the purpose of this tongue, as before premised, being to extend into the socket *f*, where the heel is applied to the sole, and forced forward to its farthest extent, thus securely holding the heel in place.

To insure the union of the heel and sole, as thus created, against any longitudinal pressure upon the former, I form the plate *g* with a hanging lip, *i*, to extend in front of the heel, and to which it is secured by a screw, or other suitable means.

From the above description of the purpose of my invention, and the mode of carrying it into effect, the intelligent reader will at once perceive that the heel may be readily detached from the boot, by removing the screw which confines it to the lip *i*, last explained.

Claim.

I claim as my invention, and desire to secure by Letters Patent of the United States—

The device hereinbefore described for applying the heel of a boot or shoe to its sole, the same consisting of the transverse latch or socket *f* and the plate *g*, the former being fixed to the heel, while the latter is affixed to the sole, and provided with the tongue *h*, and secured to the heel, when such heel is in wearing position upon the sole, as shown, the whole being constructed, and arranged, and operating as before described.

CHARLES D. ULMER.

Witnesses:

FRED. CURTIS,

EDWARD GRIFFITH.