

F. RICHARDSON.
Boot and Shoe Heels.

No. 219,526.

Patented Sept. 9, 1879.

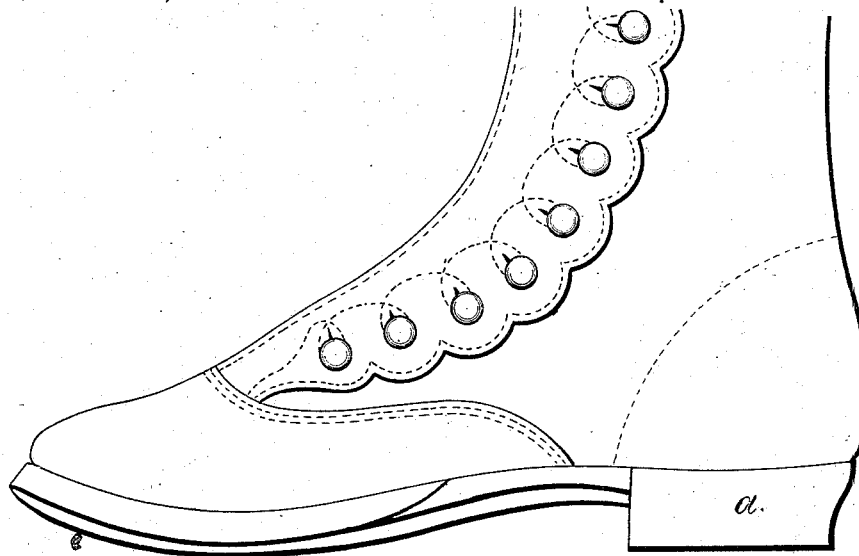


FIG. 1.

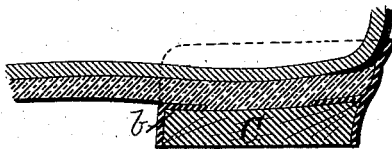


FIG. 3.

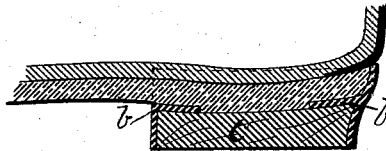


FIG. 2.

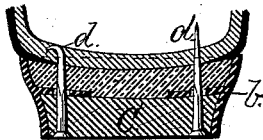


FIG. 4.

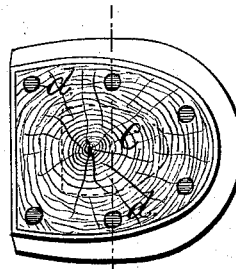


FIG. 5.

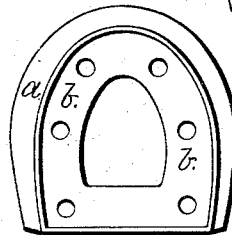


FIG. 6.

WITNESSES.

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FREDERICK RICHARDSON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
THE REVERSIBLE HEEL COMPANY, OF SAME PLACE.

IMPROVEMENT IN BOOT AND SHOE HEELS.

Specification forming part of Letters Patent No. **219,526**, dated September 9, 1879; application filed
May 17, 1879.

To all whom it may concern:

Be it known that I, FREDERICK RICHARDSON, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Boot and Shoe Heels; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to produce a substantial, strong, and cheap boot-heel, that can be readily secured to the boot or shoe, and will be more durable than boot or shoe heels as heretofore constructed.

The invention consists in the peculiar and novel construction of a boot or shoe heel, by which a metallic shell is provided with a core, and the whole is secured together and to the boot or shoe, as will be more fully set forth hereinafter, and pointed out in the claims.

Figure 1 is a perspective view of a boot provided with my improved heel. Fig. 2 is a sectional view of the heel end of the shoe and a heel secured thereto. Fig. 3 is a sectional view, showing a heel in which the heel-shell extends upward so as to support the counter. Fig. 4 is a sectional view, showing a heel-shell secured to a shoe, the central part of which shell is filled with wood or similar material, so as to form the wearing part of the heel, and the whole is secured by nails. Fig. 5 is a bottom view of the improved boot and shoe heel, showing the shell, the central core, shown as made of wood, the end of the grain forming the wearing-surface, and the nails by which it is secured. Fig. 6 is a view of the heel-shell, showing the plate or rim.

In the drawings, *a* is the heel-shell, which is separated into two parts by the partition *b*. The upper part surrounds the sole, and is of such form as to receive the same, so that the upper edge of the heel-shell is even with the line formed by the union of the upper-leather with the sole; or, in children's shoes, the heel-shell may be arranged to extend sufficiently upward to support the counter, as is shown in Fig. 3.

The lower division is filled with wood, and this is preferably cut across the grain, so that the end of the grain forms the wearing-surface of the heel.

The filling *c* is secured within the shell *a*, and the whole is secured to the boot or shoe by the nails *d*, passing through the tap or filling-piece *c*, and through the holes in the partition *b*, and as the tap or filling-piece *c* is forced into the shell *a* and the nails *d* are made tapering, by driving the nails the tap *c* is compressed and firmly held, and the combination of the metal and wood forms a durable wearing-surface, while the shell, which is protected by a water-proof enamel, giving to its surface a high finish, presents an elegant appearance.

This heel can be made at a much less cost than heels heretofore constructed. It is more durable, and requires no finishing after it is secured.

Boots and shoe requiring tapping can be readily supplied with this improved heel, and such heels will outlast any other part of the boot or shoe.

To secure firmness and rigidity the holes in the filling *c* are drilled so as to match the holes in the plate or rim *b*, and the nails are driven through these holes. The portion of the nail entering the sole is therefore firmly supported in the rim or plate *b*, and thus the whole is braced and firmly held, which is not the case when nails are driven into a material forming the heel and into the sole without a metal plate between the two, so as to prevent bending or yielding of the nails.

As the tap rests against the rim or projection *b* from below, and the rim *b* rests against the sole of the boot or shoe, the nails *d*, passing through the tap into the sole, and being clinched by contact with the iron last, firmly secure both the shell and the tap to the shoe.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the heel-shell *a*, provided with an inwardly-projecting perforated flange or plate, *b*, of the wooden tap *c*

and fastening devices extending through the tap, and through the perforations in the heel flange or plate, and adapted to engage with the sole of the boot, substantially as set forth.

2. The combination, with the heel-shell *a*, divided into two parts by the rim or plate *b*, of the wooden tap *c* and the tapering nails *d*, arranged to pass through the tap, and through

holes in the rim or plate, and adapted to secure both tap and shell to the shoe, substantially as and for the purpose described.

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Witnesses:

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