

MELLEN BRAY.
Boots and Shoes.

No. 121,927.

Patented Dec. 19, 1871.

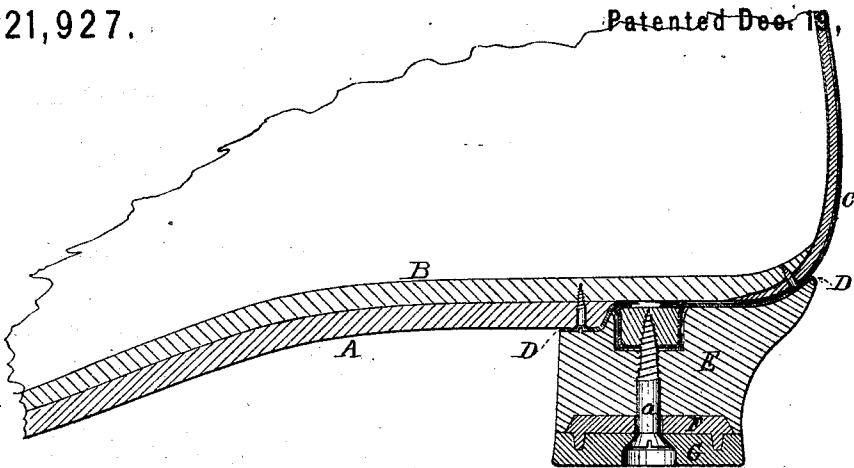


Fig. 1.

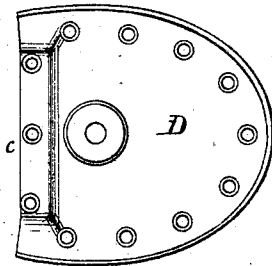


Fig. 2.

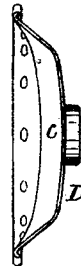


Fig. 3.

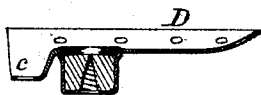


Fig. 4.

WITNESSES.

N. C. Lombard
John H. Webster

INVENTOR.

Mellen Bray

UNITED STATES PATENT OFFICE.

MELLEN BRAY, OF NEWTON CENTRE, MASSACHUSETTS.

IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. 121,927, dated December 19, 1871.

To all whom it may concern:

Be it known that I, MELLEN BRAY, of Newton Centre, in the county of Middlesex and State of Massachusetts, have invented Improvements in the Construction of Boots and Shoes, of which the following is a specification:

My invention relates to the construction of boots and shoes with detachable heels; and it consists in dispensing with a portion of the outer sole at the heel equal to about four-fifths of the length of the heel, and so forming the heel and heel-plate to be secured to the shoe as to lap over onto the rear end of the sole, and, being firmly secured thereto by nails, screws, or other suitable fastening, make a substantial connection between the sole and the heel-plate, the other portions of said plate being secured in like manner to the inner sole, and clamping the upper between it and the inner sole in an obvious manner. The object of this invention is a saving of leather and substituting a cheaper material, such as wood or metal, of which the body of the heel is formed, therefore making actually a saving of about one sole in six without any extra cost of heel.

In the drawing, Fig. 1 is a vertical section through the heel portion of a boot. Fig. 2 is a plan of the under side of the plate to be secured to the shoe, and to which the heel is secured. Fig. 3 is an end elevation of same, and Fig. 4 is a longitudinal section of the same.

A is the outer sole, having about one-sixth of its length cut away at the heel—or, in other words, made one-sixth shorter than has heretofore been the custom—the shoe or boot being made up in every respect, except that part pertaining to the heel, in the usual manner. B is the inner sole, and C the upper. D is the heel-plate formed from sheet metal so as to fit to the curvature of the rear portion of the inner sole

and press hard upon the upper around its outer edge, and also provided at its forward end with a recess, *c*, to receive the rear end of the sole A, said recess being formed by forcing a portion of the metal of the plate downward a distance equal to the thickness of the outer sole A. This plate D is secured to the shoe by means of screws or nails, the screws or nails in the forward part of the plate passing through the plate D, outer sole A, and entering the inner sole B, while the screws or nails around the rear portion of the plate pass through it, the upper, and the inner sole. E is the body of the heel, which may be made of wood, metal, or other suitable material. F is a metal disk, to which the leather lift or tip G is secured, the whole being attached to the shoe by the screw *a* in a well-known manner.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A boot or shoe having a detachable heel, the outer sole of which is cut short at the rear end, as set forth, and having a heel-plate for securing the heel, formed substantially in the manner shown and set forth, whereby the larger portion thereof rests upon the upper and the inner sole and is secured thereto, while the forward part incloses the rear end of the outer sole and is firmly secured to said sole, substantially as described.

2. The heel-plate D, formed, as set forth, with the recess *c* to receive the rear end of the outer sole A, substantially as described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

MELLEN BRAY.

Witnesses:

N. C. LOMBARD,
JOHN H. WEBSTER.

(16)