

(No Model.)

E. F. AYRES & T. H. FOSTER.

HEEL PLATE.

No. 481,324.

Patented Aug. 23, 1892.

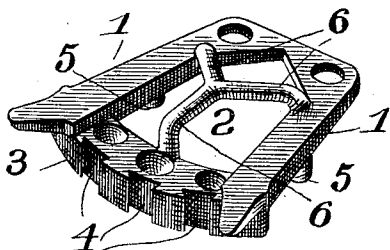


Fig. 1.

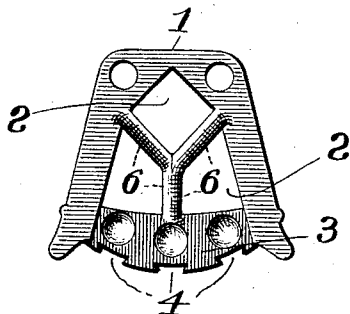


Fig. 2.

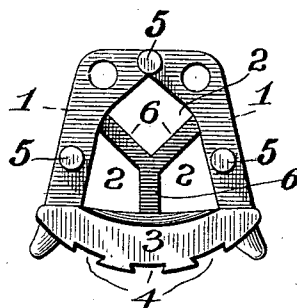


Fig. 3.

WITNESSES:

J. F. Finch,
S. Williamson.

INVENTORS

E. F. Ayres
T. H. Foster.

BY

R. W. Smith.

ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD F. AYRES AND TIMOTHY H. FOSTER, OF DANBURY, CONNECTICUT.

HEEL-PLATE.

SPECIFICATION forming part of Letters Patent No. 481,324, dated August 23, 1892.

Application filed November 5, 1891. Serial No. 410,975. (No model.)

To all whom it may concern:

Be it known that we, EDWARD F. AYRES and TIMOTHY H. FOSTER, citizens of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Heel-Protectors for Rubber Boots; and we 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.

Our invention relates to certain new and useful improvements in the construction of heel-protectors, such as are contained within the heels of rubber boots, and has for its object to prevent such protectors from dropping out of the heels after the latter have been worn down by continual use.

In the accompanying drawings, Figure 1 is a perspective of a heel-protector constructed in accordance with our improvement; Fig. 2, a plan view of the same; Fig. 3, a bottom view.

Similar numbers of reference denote like parts in the several figures of the drawings. Our improvement may be cast into any desired general shape; but we prefer the style and shape shown in Letters Patent No. 457,394, issued to us August 11, 1891.

1 is an extended plate or core; 2, a central opening; 3, a depending rear portion having dovetailed notches 4 within its outer edge, and 5 are studs depending from the core to a level with the portion 3.

6 are ribs which rise from the top of the core and bridge over the opening 2. There may be any desired number of these ribs and they may extend in any direction; but we

prefer three ribs meeting at the center to form a Y-bridge, as shown in the drawings. The core is forced within a rubber heel under great pressure and the rubber projects through the opening 2 on both sides of the bridge formed by the ribs 6, the latter thus constituting a means whereby the protector may be firmly locked within the heel. The portion 3 and studs 5 form the wearing-points of the protector, and the number of such points is of course immaterial.

This present invention has nothing to do with the construction of the heel-protector shown excepting in so far as the bridge is concerned, and we therefore do not wish to be understood as claiming herein anything save the raised bridge.

We claim—

In a heel-protector adapted to be contained within the heel of a rubber boot or shoe, comprising an approximately-V-shaped plate, such as 1, provided with perforations and depending studs or wearing-points 5 and having the ends connected by a bar 3, provided with dovetailed grooves 4, adapted to act in the capacity of retaining-points, and a spider or Y-bridge formed of ribs 6, which rise from approximately equidistant points on the upper surface of said plate and unite at the center, substantially as and for the purpose described.

In testimony whereof we affix our signature in presence of two witnesses.

EDWARD F. AYRES.
TIMOTHY H. FOSTER.

Witnesses:

F. W. SMITH, Jr.,
S. S. WILLIAMSON.