N. J. SIMONDS.

HEEL-STIFFENERS FOR BOOTS AND SHOES.

No. 189,066. Patented April 3, 1877.

FIG. 1.

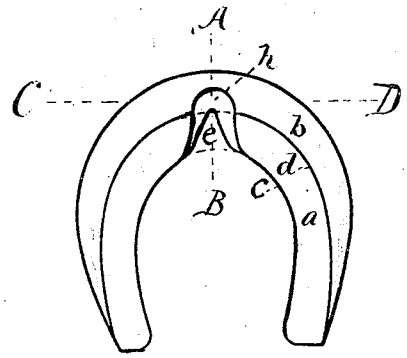


FIG. 2.

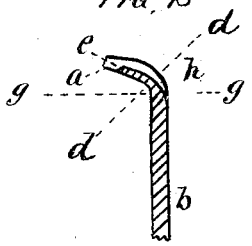
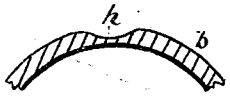


FIG. 3.



WITNESSES.

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NATHAN J. SIMONDS, OF WOBURN, MASSACHUSETTS.

IMPROVEMENT IN HEEL-STIFFENERS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **189,066**, dated April 3, 1877; application filed October 5, 1876.

To all whom it may concern:

Be it known that I, NATHAN J. SIMONDS, of Woburn, State of Massachusetts, have invented an Improvement in Heel-Stiffenings for Boots and Shoes, of which the following is a specification:

This invention relates to improvements in heel-stiffenings or counters for boots and shoes, which counters are molded into form as a preparatory measure before being incorporated in the boot or shoe; and the invention consists in a groove or channel formed or cut away in the vertical wall of the stiffening, in the longitudinal line thereof, at and near the bottom and rear part of said vertical wall, and at the angle of intersection of the vertical wall and horizontal flange, to allow room for the seam by which the quarters are united together at the heel, as will be hereinafter more fully described.

Figure 1 is an inverted or upside-down plan view of a stiffening having a groove or channel cut in the vertical wall, as invented by me. Fig. 2 is a longitudinal vertical section taken on line A B, Fig. 1, and showing a part of the vertical wall in section, and a part of the base in elevation. Fig. 3 is a section taken on line C D, Fig. 1, and at right angles to the plane of the vertical wall, a portion of which is omitted by being taken away.

In said sections the thickness of the wall of the stiffenings is exaggerated, the better to show the improvements.

Similar letters of reference indicate like parts in each of the figures.

In the drawings, *a* represents the horizontal portion or base of the stiffening, which is inserted between the inner and outer soles of the shoe. *b* is the vertical wall, which is inclosed and surrounded by the upper-leather of the shoe. The line *c* forms the interior or concave boundary of this base, and *d* is the boundary between the base and the vertical wall; and, so far as relates to the base and vertical wall in their outlines, curves, configurations, or proportions, I claim herein nothing as new except the said groove or channel to be described.

As stiffenings are usually formed, the line *c*, instead of being carried round by a regular curve, as shown by the dotted line, is carried to the dividing-line *d*, thereby forming a space or retiring angle, *e*, at the center of the base, which facilitates the process of molding the stiffening into form, but does not give room for the said quarter-seam at the point where it changes from a horizontal to a vertical line. Hence, I bevel the edges of the base at the retiring angle *e*, and cut a groove in the vertical wall above line *d*, as shown at *h*, Figs. 1, 3, 4. This groove extends above line *d*, as shown by line *g g*, Fig. 3, thereby allowing the quarter-seam at the angle of intersection of the vertical wall and horizontal flange, where it leaves the soles and rises at the counter-room in said space, so that the inner and outer soles may both lie flat upon the plane of the upper-leather, instead of being kept asunder at this point by said seam, as has been the case hitherto. Exhibits 1 and 2 filed herewith are stiffenings having channels formed therein, as shown in Figs. 1, 3, 4.

I claim—

A boot or shoe stiffener having a groove or channel formed on its outer surface, at the angle of intersection of its vertical wall with the horizontal flange, as shown, adapted to receive the seam of the quarters at or near the joint where it enters between the inner and outer sole, all substantially as shown and described.

NATHAN J. SIMONDS.

Witnesses:
EUGENE HUMPHREY,
EBEN HUTCHINSON.