

N. J. Simonds,

Shoe Stiffener.

No. 105501.

Patented July 19, 1870.

Fig. 1



Fig. 2

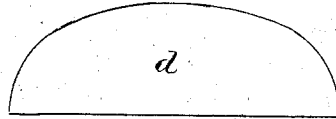


Fig. 3



Fig. 4

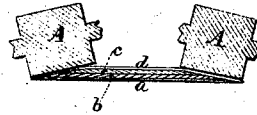


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

NATHAN J. SIMONDS, OF, WOBURN, MASSACHUSETTS.

IMPROVED BOOT AND SHOE STIFFENER.

Specification forming part of Letters Patent No. 105,501, dated July 19, 1870.

To all whom it may concern:

Be it known that I, NATHAN J. SIMONDS, of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Boot and Shoe Stiffenings; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention, sufficient to enable those skilled in the art to which it appertains to practice it.

This invention relates to an improvement in the construction or formation of the counter-stiffenings of boots and shoes, as will be hereinafter more fully described.

Figure 1 is a plan view of the back and interior pieces. Fig. 2 is a plan view of the front or face piece. Fig. 3 is a transverse section of the stiffening when pasted. Fig. 4 is a similar section, showing the effect of rolling, and Fig. 5 is also a similar section of a stiffening as heretofore formed.

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

In the formation of stiffenings from thin leather, as heretofore practiced, the several pieces were cut to the desired form, when they were pasted together, as shown by 1 2 3 4, Fig. 5, when, after being dried, the desired beveled edge was produced by "skiving," as the process is termed, which consists in beveling the edge by means of a cutting-blade held obliquely to the plane of the stiffening; and to effect this process a variety of machines have been devised, none of which have satisfactorily accomplished the skiving of irregular or semi-elliptic stiffenings, as shown in Figs. 1 and 2; besides, the effect of the dried paste upon the edge of the blade has rendered the

process, in all cases, slow, imperfect, and expensive.

In the manufacture of stiffenings as invented by me I cut the back (shown at *a*) of the full size of the stiffening and of any desired pattern, and upon this I paste the regularly-diminished pieces *b c*, when the thin cover or face *d*, of the same size as back *a*, is pasted upon the whole, as shown in Fig. 3. When sufficiently dried, the edges are subjected to the action of rollers, as shown at Fig. 4, and, as the edge of each layer is easily flattened, a true bevel is readily produced, as shown, the parallel or principal faces being rolled between parallel rollers in the usual manner. Thus a stiffening is produced which has the desired bevel at the edges, and yet has a continuous surface upon both sides.

I do not confine myself to any number of diminished pieces placed between back *a* and cover *d*, as such number may be used as the desired thickness of the stiffening and the thinness of the stock may render necessary; nor do I claim the employment of the back *a* and cover *d*, broadly, by themselves; neither do I claim, broadly, the employment of the diminished pieces *b c*; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

A stiffening composed of the back *a*, one or more diminished pieces, as shown at *b c*, and the cover *d*, rolled together or compressed in the manner substantially as described and shown.

NATHAN J. SIMONDS.

Witnesses:

T. W. PORTER,
C. L. MEASTON.