

L. & S. P. Holden.

Boots & Shoes.

Patented Apr. 2. 1861

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31929.

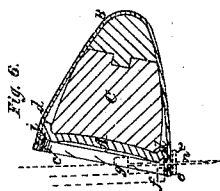


Fig. 5.

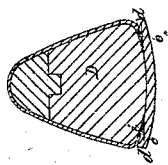


Fig. 3.



Fig. 2.

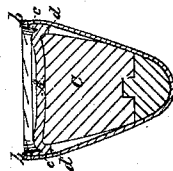


Fig. 4.

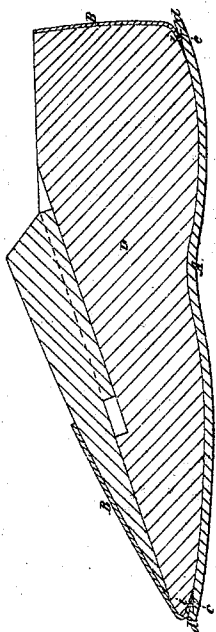
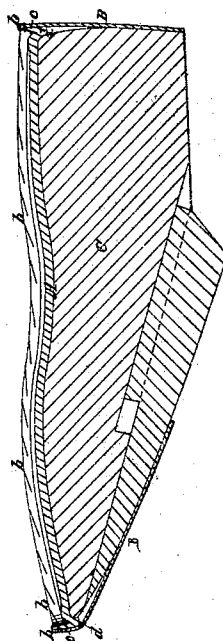


Fig. 1.



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UNITED STATES PATENT OFFICE.

L. AND S. B. HOLDEN, OF WOBURN, MASSACHUSETTS, ASSIGNORS TO THEMSELVES, AND
J. C. SEELYE, OF EAST CAMBRIDGE, MASSACHUSETTS.

MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 31,929, dated April 2, 1861; Reissued December 27, 1864, Nos. 1,841 and 1,842.

To all whom it may concern:

Be it known that we, LUTHER HOLDEN and STOUGHTON B. HOLDEN, both of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Shoes and Boots; and we do 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.

Our invention consists in an improved mode of preparing the sole and upper for sewing, whereby the seam is brought entirely on the outside of the shoe or boot in the sewing operation, but if the shoe or boot be turned the seam will be brought entirely on the inside thereof. The especial object of this mode of preparing the sole and upper is to afford greater convenience for sewing them together by a sewing machine than is afforded by the common arrangement of the parts.

Figure 1, in the drawing represents a longitudinal section of a sole and upper prepared and lasted for sewing. Fig. 2, is a transverse section of the same. Fig. 3, is a transverse section of the sole before it is applied to the upper. Fig. 4, is a longitudinal section of the shoe after it has been lasted on the finishing last. Fig. 5, is a transverse section of the same. Fig. 6, is a transverse sectional view illustrating the mode in which the sewing together of the sole and upper is performed by a machine.

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

A, represents the sole made of ordinary sole leather or other suitable flexible substance. This after being cut out to the proper form has a notch *a*, see Fig. 3, cut all around the inner side near the margin as in ordinary "channel" work to form the channel *c*, through which the stitches are made in sewing the upper to the sole. The marginal portion *d*, of the sole outside of the notch *a*, is then turned over toward the outer side of the sole *i. e.*, the side which is to be outward when the shoe or boot is finished, and by this means the two portions *c*, and *d*, are caused to stand out in opposite

directions at right angles or thereabout to the body of the sole as shown in Figs. 1, and 2. The upper B, having been closed is now arranged inside out and applied to the sole as shown in the last mentioned figures, the outer face of the sole being toward the inside of the upper. The upper and the channel *c*, are then temporarily united by stitching over their edges by hand with a small thread *b*, and the shoe so far formed is lasted on a last C, which has its sole as much smaller than the sole of the shoe as to permit the whole of the portion *d*, to turn over the sides of the last as shown in Figs. 1, and 2. The shoe now in the condition represented in the last mentioned figures, and in Fig. 6, is ready for sewing by the sewing machine, by which the sole and upper are to be permanently united, the channel *c*, and marginal portion of the upper being close together and standing out from the sole at right angles or nearly so to the principal portion of the face thereof in such a manner as to enable them to be sewn through and through either by a sewing machine or by hand without any difficulty, both sides of the seam being presented on the outside of the shoe.

In sewing by a machine the shoe is held in the position shown in Fig. 6, in which *e*, is the bed or plate on which the work rests, *f*, is the presser, *g*, is the needle bar and *n*, the needle. The seam is made quite close to the line in which the channel *c*, is turned back, as shown in Fig. 6, in which and in Figs. 4, and 5, *i*, *i*, represent the stitches by which the sole and upper are permanently united. In order to make plenty of room for the needle bar of the sewing machine the sole of the last C, is made concave.

When the sewing is finished the shoe is removed from the last C, turned and then lasted upon the wider finishing last D, which is similarly proportioned to the lasts commonly used and the channel *c*, then lays back toward the middle of the sole and close against the inside thereof as shown in Figs. 4, and 5.

What we claim as our invention and desire to secure by Letters Patent; is,

So preparing the sole and upper for sewing that the parts to be sewed together are brought to the condition substantially as illustrated by Figs. 1, 2, and 6, and herein
5 described, that is to say; projecting from the central or principal portion of the sole at right angles or nearly so to the face thereof, in such manner as to bring both faces of the

seam on the outside of the work while the sewing is being performed.

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