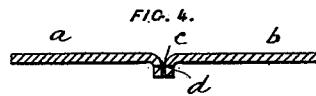
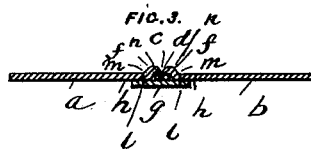
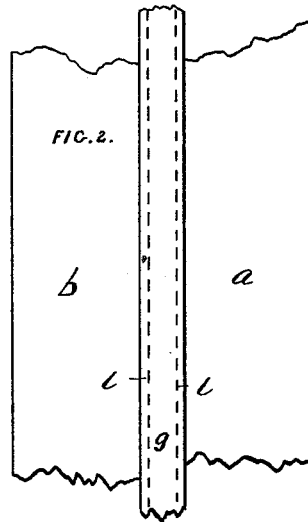
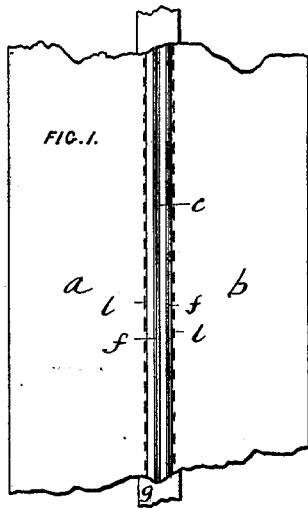


D. A. SUTHERLAND
 Method of Staying the Seams of Boots and Shoes.

No. 206,641.

Patented July 30, 1878.



WITNESSES.

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UNITED STATES PATENT OFFICE.

DANIEL A. SUTHERLAND, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN METHOD OF STAYING THE SEAMS OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **206,641**, dated July 30, 1878; application filed October 5, 1877.

To all whom it may concern:

Be it known that I, DANIEL A. SUTHERLAND, of Lynn, in the county of Essex and State of Massachusetts, have invented a certain new and useful Improved Method of Staying the Seams of Boots and Shoes, of which the following is a specification:

This improvement in seams for boots and shoes pertains particularly to the seams of the several parts composing the upper; and it consists in the combination, with a seam made by stitching or sewing or otherwise securing the two parts together in the usual manner, of corrugations in the parts at each side of the seam, and of a strip or band of leather, cloth, or other suitable material, which is applied and secured to and over the seam of the said corrugated or crimped parts in such a manner that said strip and its fastenings will take the strain on the parts seamed as aforesaid, and thereby practically relieve the seam proper of strain, all substantially as hereinafter described.

In the accompanying plate of drawings, Figures 1 and 2 are face views on opposite sides of my improved seam, and Fig 3, an enlarged cross-section of the same.

In the drawings, *a* and *b* represent the two parts of an upper, which are stitched or sewed together at *c*, as ordinarily, making a seam, *d*; *f*, a corrugation in the parts *a* and *b* at each side of the seam *d*, which corrugations are made by passing the parts either before or after sewing them together, as aforesaid, through grooved pressure-rolls of suitable shape, as is well known; *g*, a flat strip or band of suitable material, such as leather or cloth, preferably leather, applied to the face *h* of the seamed parts *a* and *b*, preferably the inner face, and there preferably secured by two rows of stitches, *l*, one at each side of the seam *d*, and along and within the depressions *m* of the corrugations on the parts *a* and *b* of the upper, the said strip being of suitable width therefor.

By the above-described construction of the seam the strain on the parts of the leather comes upon the applied strip or band *g* and its fastenings to said parts, and is thereby taken off from the seam proper at *d*, for the reason that the length of the two parts *a* and *b* of the upper between the lines of stitches which join them to the strip *g*, because of their corrugated form and the location of said

stitches in relation thereto, is greater than the length between said two lines of stitches in the flat strip or band *g*, all as is obvious without further description.

In lieu of stitching the strip *g* to the parts *a* and *b*, as above described, it may be cemented or riveted or otherwise secured thereto, and, again, the seam *d* may be made by cementing or riveting or otherwise fastening the parts together without deviating from the invention herein described.

When the strip *g* is stitched to the parts *a* and *b*, as above described, the stitches are protected against wear by the ridges *n* of the corrugations, as is obvious without further explanation.

The strip *g* is waterproofed, and, by preference, with a suitable india-rubber water-proof preparation, whereby water or moisture is prevented from passing through the seam *d* to the foot of the wearer, and the strip may be applied or fastened to the seam at the time of crimping it, if desired.

The improved construction of seam herein described secures a neat finish and great strength in the line of juncture of the two parts *a* and *b*, as is obvious, and when the two parts are sewed together before being corrugated the juncture-seam is forced by the pressure-rolls when corrugating the parts into the grooves, leaving a flat and smooth surface on the inside of the boot next the foot of the wearer. Although this seam is especially stated as for use in boots and shoes, it is evident that it is useful in uniting leather for a variety of purposes.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

The improved method of staying or strengthening the seams in uppers of boots and shoes by corrugating the parts united outside of and adjacent to the line of juncture, and then placing a strip or band of leather or other suitable material over the seam and connecting it to the united portions outside of the said corrugations, all substantially as and for the purpose set forth.

DANIEL A. SUTHERLAND.

Witnesses:

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