

No. 679,978.

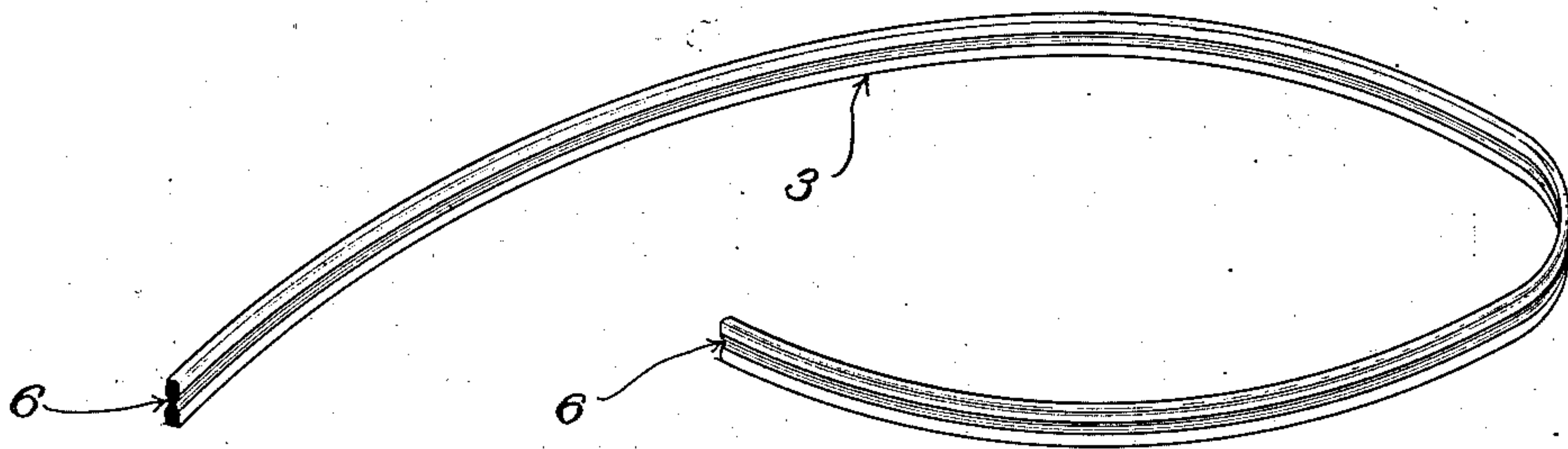
Patented Aug. 6, 1901.

F. W. MERRICK.  
SEAM CLOSING STRIP.

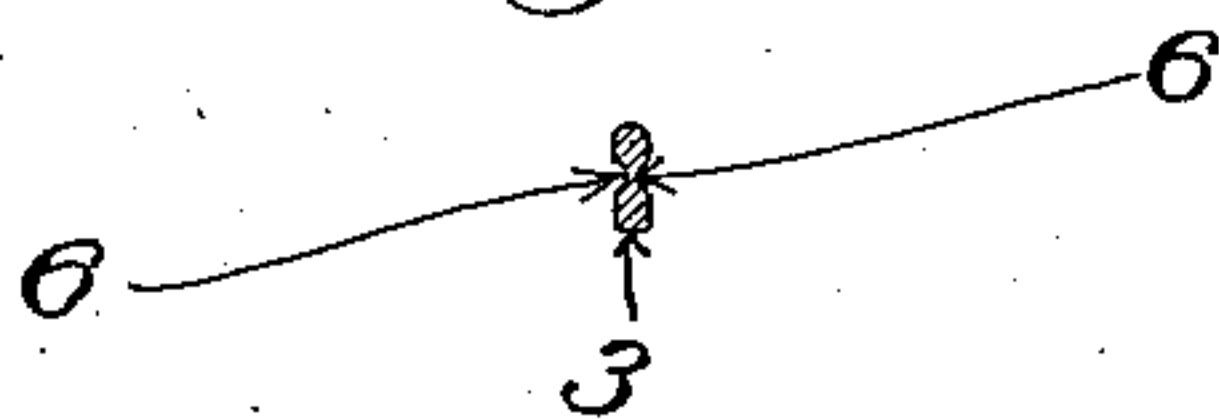
(Application filed Nov. 25, 1898.)

(No Model.)

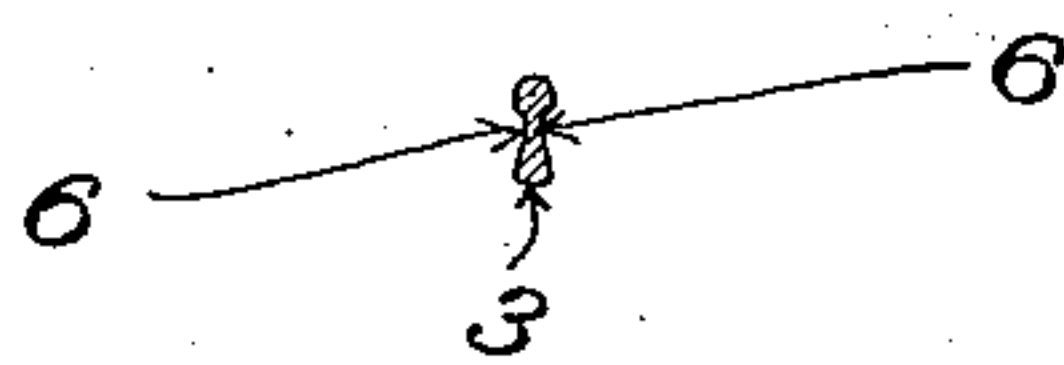
*Fig. 1.*



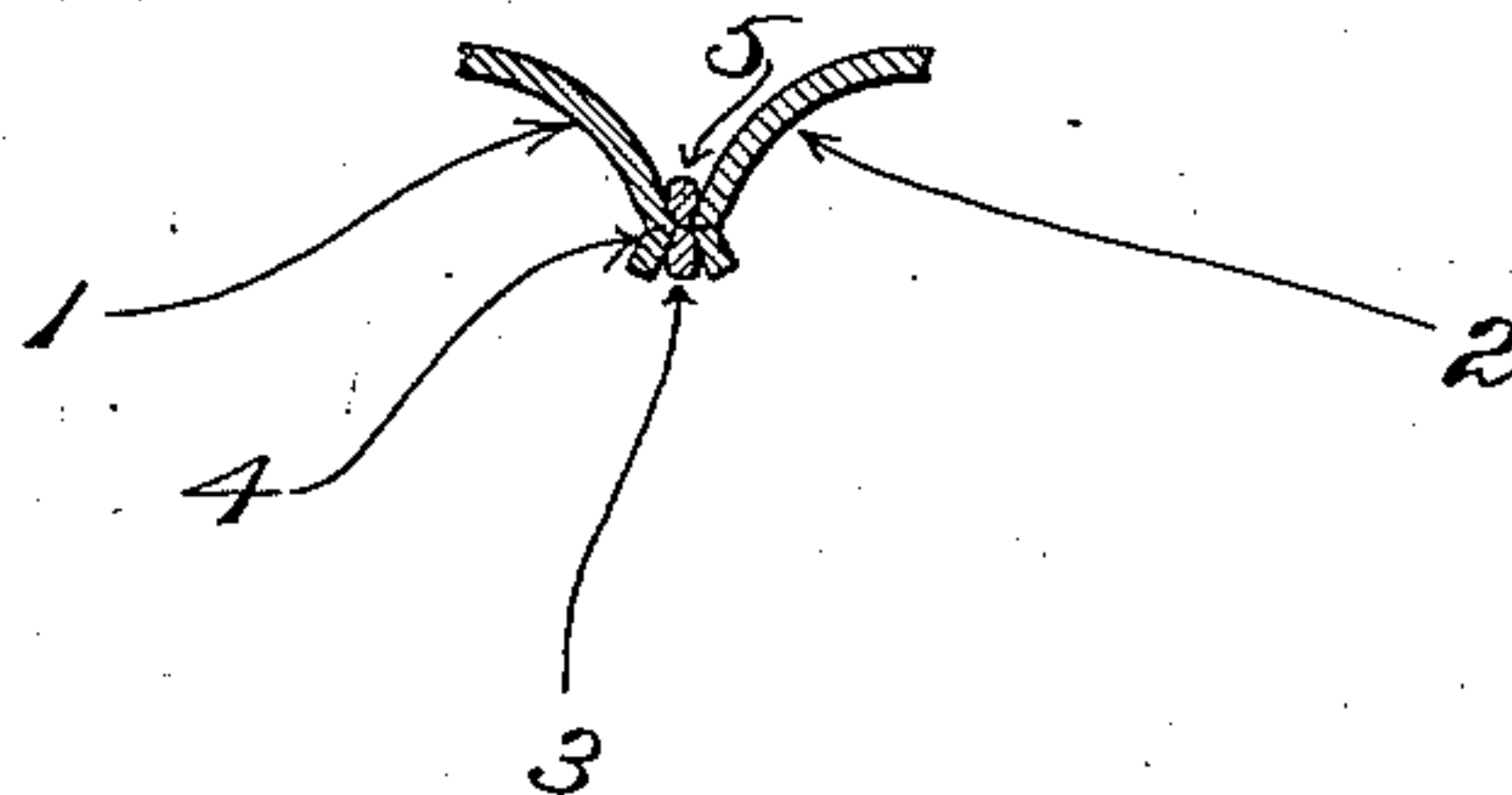
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses:*

Oscar F. Hill  
Edith J. Anderson.

*Inventor:*

Frank W. Merrick  
by Maceo Calver & Randall

*Attorneys:*

# UNITED STATES PATENT OFFICE.

FRANK W. MERRICK, OF BOSTON, MASSACHUSETTS.

## SEAM-CLOSING STRIP.

SPECIFICATION forming part of Letters Patent No. 679,978, dated August 6, 1901.

Application filed November 25, 1898. Serial No. 697,318. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK W. MERRICK, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Seam-Closing Strips, of which the following is a specification, reference being had therein to the accompanying drawings.

In the manufacture of articles from leather or similar material—as, for example, in the manufacture of boots and shoes—closing-strips are introduced into certain seams—such, for instance, as the back seam of a shoe and the seam up the leg of a boot—in order to give a finish and prevent the thread of the stitches from showing in the seam when the finished side of the article is viewed. The closing-strip is laid in position between the two pieces of leather or other material which are to be stitched together, usually at or near their edges, and the sewing then is effected, the stitches passing through all three. The stock then is “turned”—that is, the two pieces of leather or other material are spread apart into substantially the same plane with each other—and the seam is beaten out, and thereby flattened. When the completed seam is viewed from the exterior or finished side of the boot, shoe, or other article, the edge of the closing-strip is visible and gives a finish to the seam. In the manufacture of some classes of articles—fine work, for instance—the closing-strip which is employed is so thin and narrow and also so flexible or pliable that, although the sewing-machine by which the stitching is performed is provided with a welt-guide for use in introducing the closing-strip, the needle in descending is liable to deflect the strip more or less completely laterally when its point strikes the same, so that the needle either penetrates the strip too near the edge of the latter or does not carry the thread through the strip at all. One aim of my invention is to obviate this tendency of the seam-closing strip to become deflected laterally by the action of the needle by providing a seam-closing strip so shaped that ordinarily instead of becoming misplaced by the tendency of the needle-point to occasion deflection of the strip the strip shall be caused by the action of the needle-point in striking

thereagainst to seek its proper position in the seam, so that the line of stitches shall pass through the strip at a proper distance from the edges of the latter. Sometimes the closing-strip employed is so very thin and in consequence the edges of the same and the pieces of leather between which the strip is secured lie so closely and flatly together that when the seam is beaten out all three edges are pressed over together to one side or the other and lie superimposed instead of becoming separated or spread out from one another in a completely flattened out condition. Another aim of my invention is to obviate such disadvantageous result by making provision to occasion a tendency of the edges to open or separate at the back of the seam sufficiently to insure the complete and proper spreading and flattening of the seam in the course of the beating-out operation.

The invention will be described first with reference to the accompanying drawings, in which I have illustrated the same, and afterward will be particularly pointed out and clearly defined in the claims at the close of this specification.

Figure 1 of the drawings shows, on a considerably-enlarged scale, a short length of seam-closing strip embodying my invention. Fig. 2 is a view representing a cross-section of Fig. 1. Fig. 3 is a view representing in cross-section a slightly-modified form of closing-strip. Fig. 4 is a sectional view on a scale which is somewhat larger than is ordinary in practice, showing a seam made with the aid of the closing-strip of Figs. 1 and 2.

Having reference to Fig. 4, 1 and 2 designate what may be said to represent two pieces of leather, only the portions thereof which are at and immediately adjacent the seam being shown. 3 designates the closing-strip, which is introduced between the said pieces 1 and 2 at the edges of the latter, and 4 designates the line of stitches passing through the said pieces of leather and the strip and fastening all three together. 5 designates the edge of the closing-strip which is visible on the side of the seam which is meant to be exposed to view.

In accordance with my invention I groove the closing-strip longitudinally, as at 6, between the side edges thereof. The grooving



is well defined, as shown in the drawings. When now the pieces 1 and 2 of Fig. 4 are laid flat together with the closing-strip 3 between them and are fed to the needle of the sewing-machine by which the stitching is performed, the grooving aids the point of the needle in each descent of the latter in finding the proper place in the strip where the latter should be penetrated. Thus whenever the point of the needle strikes the surface of the strip it tends to find its way into the depression of the groove in such surface, the said point by its action against the sides of the groove deflecting the strip slightly, but sufficiently to accomplish the desired result. The breadth and form of the grooving may vary somewhat in practice. It may be either narrow, as in Figs. 1, 2, and 4, or as in Fig. 3, in which last-mentioned figure the depth is greatest next the side of the strip which is exposed in the seam and gradually diminishes toward the opposite side. The stitching 4, Fig. 4, draws the pieces 1 and 2 tightly together on the opposite faces of strip 3, the effect being to compress portions of pieces 1 and 2 slightly into the grooving of strip 3, more or less after the fashion which is meant to be indicated in Fig. 4. At the back of the seam the free edges of pieces 1

and 2 are spread or separated by the lower side of strip 3, with more or less tendency to diverge, after the fashion which is sought to be indicated in Fig. 4, and hence in the operation by which the seam is beaten out the spreading apart and flattening of the back of the seam are effected readily and uniformly. In preparing the closing-strip for sale in the market I preferably round the side 5 thereof, as in the drawings.

I claim as my invention—

1. The improved seam-closing strip comprising the narrow strip having the longitudinal grooving, as at 6 in the surface thereof formed intermediately of the width thereof, substantially as described.

2. The combination with the pieces of leather or other material, 1, 2, of the closing-strip 3 placed between the said pieces and having the longitudinal grooving at 6, and the line of stitching 4 uniting the three and passing through the grooved portion of the said strip, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK W. MERRICK.

Witnesses:

CHAS. F. RANDALL,  
WILLIAM A. COPELAND.