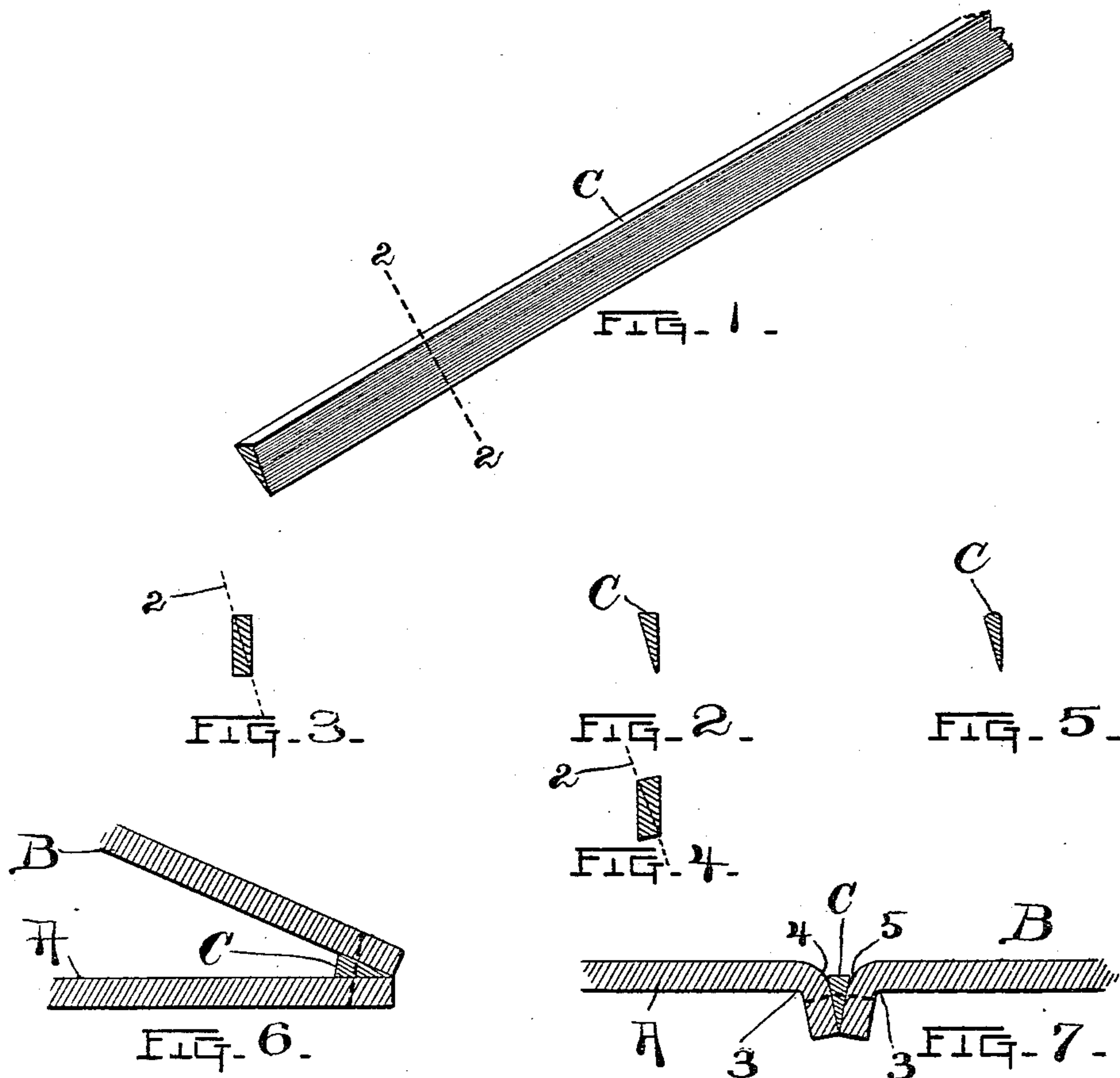


(No Model.)

F. W. MERRICK.
WELTED SEAM.

No. 555,255.

Patented Feb. 25, 1896.



WITNESSES.

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UNITED STATES PATENT OFFICE.

FRANK W. MERRICK, OF BOSTON, MASSACHUSETTS.

WELTED SEAM.

SPECIFICATION forming part of Letters Patent No. 555,255, dated February 25, 1896.

Application filed January 16, 1894. Serial No. 497,048. (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 Welled Seams, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention will be described first with reference to the accompanying drawings, after which its distinguishing characteristics will be particularly pointed out and distinctly defined in the claim at the close of this specification.

15 In the accompanying drawings, Figure 1 is a perspective of a portion of a welting or closing strip such as I embody in my invention. Fig. 2 is a view showing the same in section on line 2 2, Fig. 1. Fig. 3 is a view in transverse section of a strip of stock such as may be employed in the construction of the said welting or closing strip. Fig. 4 is a similar view showing a modified form of the said strip of stock. Fig. 5 is a view in cross-section of a modified form of welting or closing strip. Fig. 6 is a view in cross-section showing a seam uniting two pieces of leather at their edges with the wedge-shaped welting or closing strip in position to close the seam. Fig. 7 is a similar view showing the position of the parts immediately after they are "turned."

20 In the manufacture of articles from leather or similar material—as, for example, in the manufacture of boots or shoes—certain seams, such as the seam up the leg of a boot, require to be what is termed "closed"—that is, rendered tight—and given a finish by the insertion in the seam of a welting or closing strip. This welting or closing strip is laid in position between the edges of the pieces of leather A B which are to be secured together, and the pieces are then sewed, the stitches passing through each end of the pieces of leather and through the intervening welting or closing strip C. The stock is then turned—that is, the pieces of leather are then usually separated or spread apart into substantially the same plane, and the seam is beaten out and finished. The seam when viewed from the finished side

of the leather—that is, the exterior of the boot-leg, for example—reveals the edge of the welt. Hitherto it has been common to employ a welting or closing strip for thus closing and finishing the seam made from a strip of material, the sides of which are parallel with each other.

In practicing my invention I employ a strip which in cross-section is of substantially wedge shape, being thicker at one edge than at the other, and having converging or beveling sides, as shown in Fig. 2. It is preferably formed from leather and may conveniently be produced by taking a four-sided strip of leather, such as is shown in cross-section at Fig. 3, which is severed into two parts lengthwise by a beveling cut, as indicated at 2 in said figure, thus forming two strips, each of which is thicker at one edge than at the other. In making my improved seam the thicker edge of the said strip is so placed in the seam as to show on the finished side of the work, and this edge of the strip may be either left flat or it may be finished by rounding the edge, as shown in Fig. 5, by means of a proper implement or device; and when the edge is rounded it may be blacked and burnished to give it a finished and corded appearance. By the employment of a welting or closing strip thus constructed the edges of the leather A B through which the stitches pass are laid and held tightly against the beveling faces of the said strip, and the leather when the seam is beaten out is not turned so sharply on itself at the points designated at 3, Fig. 7. The stitches are therefore subjected to less strain and the seam is not so liable to "gape," or "crack," as it is termed, at each side of the welting or closing strip on the finished side of the goods. The inside of the seam is also improved, and the distance between the points 4 and 5, Fig. 5, is not so great as it would be if a parallel-sided welt-strip were employed. The inner edge of the welting or closing strip, being thin, is more flexible and permits the seam to be beaten out more perfectly and easily than would be the case if a strip were employed which was as thick at one edge as at the other.

In turning the work after it is stitched—that is, separating the pieces of leather A B

into the same plane—the stitches are less apt to show or “grin” than is the case when the old form of welting or closing strip is employed. The broad edge of my wedge-shaped welting or closing strip covers the stitches when the seam is beaten out because of the fact that it is wider at the edge than where the stitches pass through it.

It will be noted that the cross-sectional shape of the wedge-shaped welting or closing strip is such that twice the length of strip may be made from the same amount of stock as could be made if the said welting or closing strip were of equal thickness at both edges—that is to say, a strip of leather of a sufficient size to make a welting or closing strip of equal thickness at both edges is severed diagonally, as shown, Fig. 3, and with the result of producing a quantity of welting or closing strip twice as great in length as the original piece of leather, and the improved strip will have the same appearance in the finished seam that the original piece of leather would have if placed in the seam and with the additional advantages in finishing, beating out the seam, &c., which have been heretofore enumerated. In this way an effective welting or closing strip is provided, by the employment of which a seam of superior quality is obtained, said strip being produced at a

minimum of expense by the employment of a minimum of stock.

The strip of stock represented in Fig. 3 is rectangular in cross-section and the welting or closing strips produced by severing the same by a cut along one of the diagonals of the said parallelogram have the form in cross-section of right-angled triangles, as represented in Fig. 2, and in consequence are slightly unsymmetrical. The strip of stock may be made, as in Fig. 4, of the shape in cross-section of a rhomboid, and when it is thus formed the welting or closing strip produced by splitting the same on the diagonal, as indicated at 2 in Fig. 4, will be in cross-section of a symmetrical triangular form.

What I claim is—

The combination with the two pieces of material A, B, of the interposed welting or closing strip consisting of a strip of material which is tapering in cross-section from one edge thereof to the other, the whole united by stitches passing transversely therethrough, substantially as described.

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

FRANK W. MERRICK.

Witnesses:

WM. A. MACLEOD,

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