

No. 688,411.

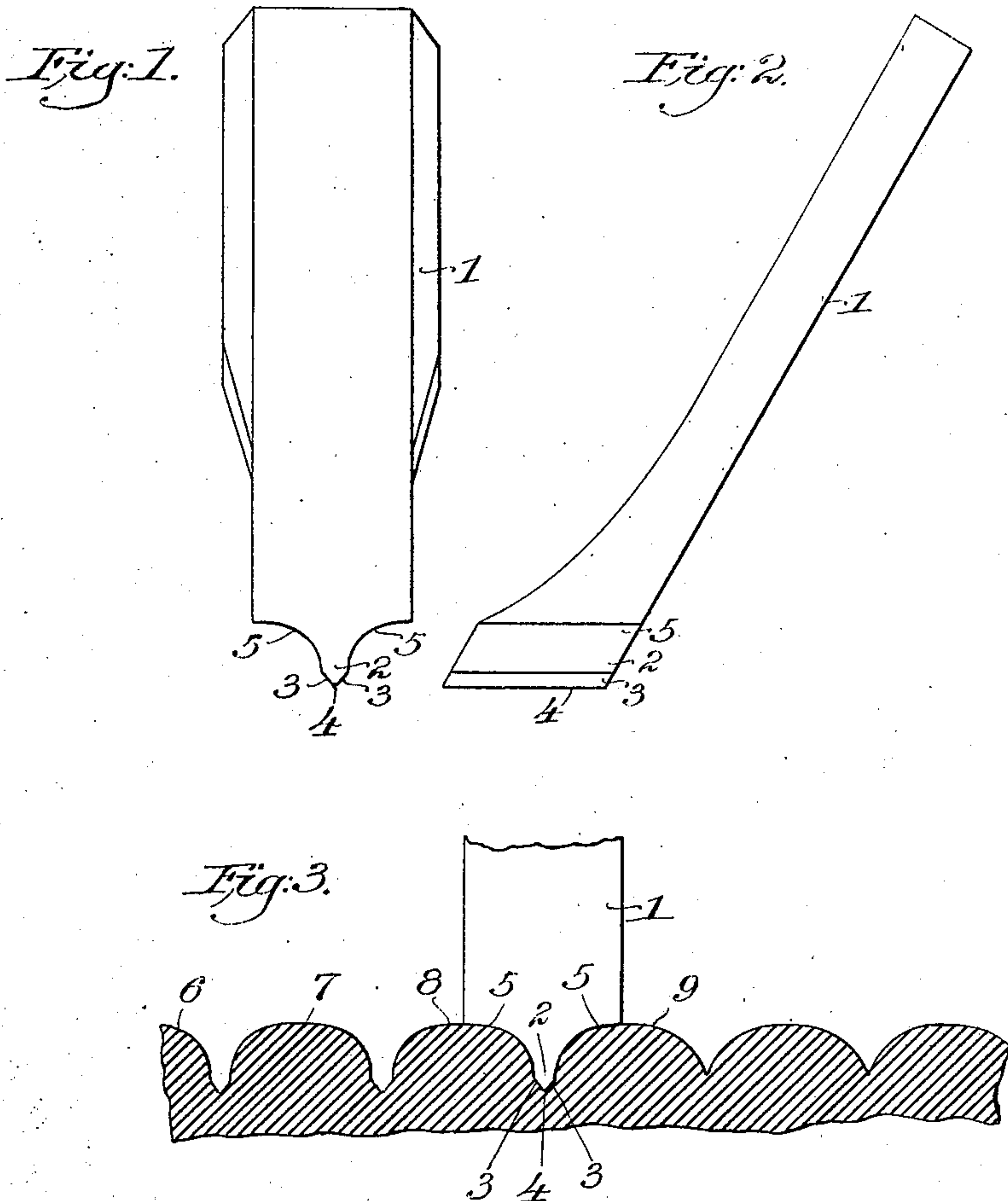
Patented Dec. 10, 1901.

J. B. HADAWAY.

TOOL FOR STITCH SEPARATING MACHINES.

(Application filed Apr. 12, 1901.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

JOHN B. HADAWAY, OF BROCKTON, MASSACHUSETTS.

## TOOL FOR STITCH-SEPARATING MACHINES.

SPECIFICATION forming part of Letters Patent No. 688,411, dated December 10, 1901.

Application filed April 12, 1901. Serial No. 55,451. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. HADAWAY, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Tools for Stitch-Separating Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to an improved tool for stitch-separating machines or stitch separating and "indenting" machines, as they are sometimes called. Such machines are now commonly used in the art to indent the material between the stitches appearing on the upper surface of the edge of the sole of a shoe to thereby bring the stitches into prominence and impart a finished appearance to the seam. To produce the best effect, the indentations between the stitches should be of uniform width and shape, and the ends of the stitches should be shaped to cause the crowns of the stitches to present a uniform appearance. The form of tool now ordinarily used is provided with an indenting-blade to enter and indent the spaces or intervals between the stitches, the lateral surfaces of the blade being arranged at an angle to each other and the edge of the blade being more or less rounded. While this form of tool produces indentations of uniform width and shape, it does not act to engage and shape the crowns or ends of the stitches. In order to shape the crowns of the stitches to cause the stitches of the seam to present a uniform and finished appearance, it has been proposed to provide a tool with a grooved end to act upon the crowns of the stitches, such a tool being disclosed in United States Patent No. 667,086, granted to me January 29, 1901. It has also been proposed to provide a tool with an indenting-blade to enter and indent a stitch interval and with a groove at one side of and above the indenting-blade to act upon the crown of a stitch, such a tool being disclosed in my prior United States patent, No. 653,236, dated July 10, 1900. The stitches of the seam at the edge of a shoe-sole vary more or less in length, and, as a

consequence, while the tools disclosed in my prior patents above referred to impart a substantially uniform shape to the crowns of the stitches, the indentations between the stitches produced by said tools vary in width, and in case the stitches vary considerably in length from the average the ends of the stitches are not shaped uniformly.

The object of my invention is to provide an indenting-tool which will produce indentations of a uniform width and shape and which will engage and shape the ends of the stitches at each side of the indentations, so that the crowns of the stitches will present a uniform appearance.

To this end my invention consists in the indenting-tool hereinafter described and claimed, adapted for performing these operations and possessing other advantages which will be apparent from the following description.

A tool embodying my invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view in front elevation thereof. Fig. 2 is a view in side elevation, and Fig. 3 is a view somewhat diagrammatic illustrating the action of the tool in indenting the stitch intervals and shaping the ends of the stitches.

The tool (designated as a whole by the numeral 1) is provided with an indenting-blade 2, the lateral surfaces 3 of which are arranged at an angle to each other and the edge 4 of which is somewhat rounded. Above the blade 2 the tool projects on each side, and each projection is provided with a groove 5, the surface of which meets the lateral surface 3 of the blade at an angle. The indenting-blade is of a width as viewed in Fig. 1 corresponding to the width of the indentation to be produced between the stitches, and the grooves 5 correspond in shape to the shape which is to be given to the ends of the stitches.

The manner in which the tool above described acts to indent the stitch intervals and shape the ends of the stitches will be apparent from an inspection of Fig. 3, which shows somewhat diagrammatically the appearance of the work both before and after the action of the tool thereon and also shows the tool in



contact with the work after having been depressed to indent a stitch interval and engage and shape the ends of the stitches on each side of the interval. It will be seen that the width of the indentations between the stitches 6, 7, 8, and 9 correspond to the width of the indenting-blade and that the ends of the stitches at each side of the indentations are shaped to correspond to the shape of the grooves 5. The angle between the lateral surfaces 3 of the blade 2 is preferably a right angle or an acute angle, and the edge 4 is rounded sufficiently to prevent the cutting of the stitch thereby and to permit the tool and work to move relatively to each other to locate the indenting-blade in a stitch interval when irregularities occur in the length of the stitches. By arranging the lateral surfaces 3 at an angle of ninety degrees or less the blade 2 can be readily located in the stitch intervals, and when forced into the intervals to indent the work has a secure engagement therewith and can be used to feed the work, if desired. The tool is preferably of a width equal to the length of the average stitch, so that substantially half of the stitch on each side of a stitch interval is acted upon and shaped by the tool.

It will be noted that at each actuation of the tool the interval between two stitches is indented by the indenting portion of the tool, and the adjacent ends of the stitches are simultaneously shaped by the shaping projections above and on each side of the indenting portion and that thereafter neither the shape of the indentation nor the shape of the ends of the stitches is altered by the separate subsequent action of any portion of the tool thereon. Any distortion of the shape of the indentation or of the shape of the ends of the stitches is therefore avoided, and a finished seam is produced in which the indentations are of uniform width and shape and in which

the crowns of the stitches present a uniform appearance.

I believe that I am the first to produce an indenting-tool by which the results above described are attained. I do not therefore desire to limit myself to the exact form of tool shown; but

I claim as new and desire to secure by Letters Patent—

1. An indenting-tool provided with a stitch-separating blade to enter and indent a stitch interval, and a surface on each side of the blade meeting the lateral surface of the blade at an angle to engage and shape the end of a stitch, substantially as described.

2. An indenting-tool provided with a stitch-separating blade to enter and indent a stitch interval, and a groove on each side of the blade to engage and shape the end of a stitch, substantially as described.

3. An indenting-tool provided with a stitch-separating blade to enter and indent a stitch interval, the lateral surfaces of said blade being arranged at an angle to each other and the edge of said blade being rounded, and a groove on each side of the blade, the surface of which meets the lateral surface of the blade at an angle to engage and shape the end of a stitch, substantially as described.

4. An indenting-tool provided with an indenting portion of a width equal to the indentations required between the stitches and with shaping projections above and on each side of said indenting portion, corresponding in shape to the shape which is to be given to the end portions of the stitches, substantially as described.

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

JOHN B. HADAWAY.

Witnesses:

ALFRED H. HILDRETH,  
HORACE VAN EVEREN.