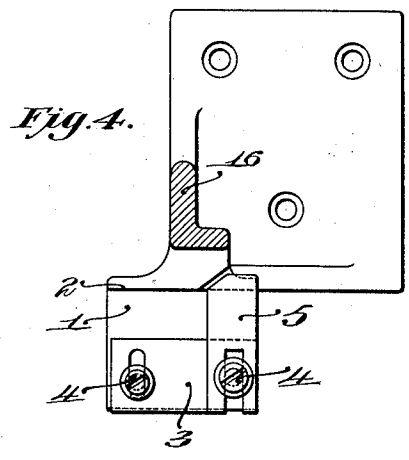
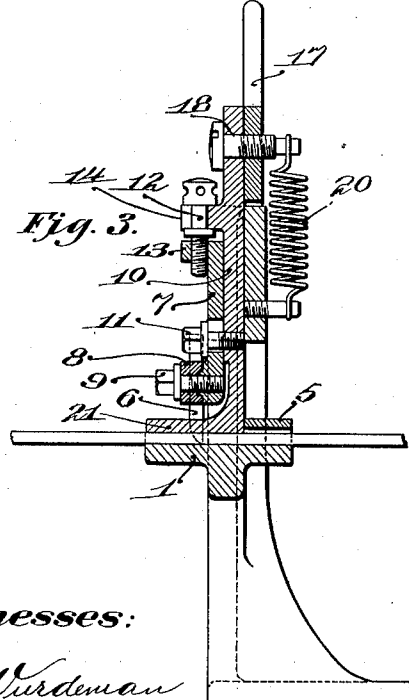
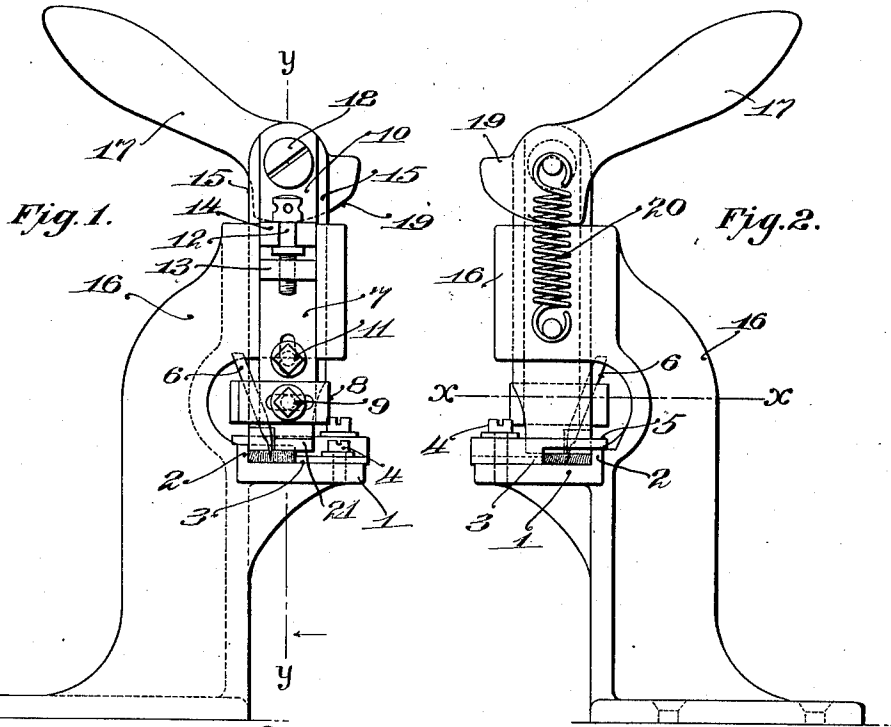


F. H. HAWKINS.
 WELT SPLITTING DEVICE.
 APPLICATION FILED NOV. 8, 1906.

1,003,181.

Patented Sept. 12, 1911.



Witnesses:
E. Wurdeman
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Inventor:
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UNITED STATES PATENT OFFICE.

FRANK H. HAWKINS, OF LYNN, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

WELT-SPLITTING DEVICE.

1,003,181.

Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed November 3, 1906. Serial No. 342,483.

To all whom it may concern:

Be it known that I, FRANK H. HAWKINS, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Welt-Splitting Devices; 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.

In the manufacture of shoes and other leather goods, particularly in connection with stitch-down shoes, it is necessary to use a narrow welt, and for this purpose it has been found convenient to divide into two or more portions a strip of welting of full width, such as is used in making a welted shoe.

The object of the present invention is to produce a device by which a strip of welting may be conveniently split into two or more narrow strips, and the invention consists in the device herein described and shown, as defined in the claims.

In the drawings Figure 1 is a front elevation of a device embodying the present invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a vertical section on the line $y-y$ Fig. 1, looking from right to left, and Fig. 4 is a horizontal section with the knife carrier and its adjuncts omitted, on line $x-x$ Fig. 2.

The illustrated embodiment of the invention comprises means for guiding a strip of welting, a knife for splitting the strip, and a knife carrier provided with means for throwing the knife into and out of operation and for adjusting the knife with relation to the work.

The welt rests upon a work table 1 provided with a shoulder 2 against which one edge of the welt is guided; the other edge of the welt is guided by an edge gage 3 which is adjustably secured to the work table 1 by screws 4 passing through slots in the edge gage. Upon loosening the screws 4 the edge gage may be moved toward or from the shoulder 2 so as to accommodate welts of different widths. The edge gage is provided with a top plate 5 to hold the welt down in engagement with the edge gage.

The welt splitting knife 6 is fixed to a knife block 7 by means of a clamping plate

8 and a screw 9 passing through a slot in the clamping plate and threaded into the knife block 7. By loosening the screw 9 and sliding the clamping plate 8 horizontally upon the knife block the knife may be moved laterally, so as to provide for the different widths of welting to be produced. The knife block 7 is mounted upon the knife carrier 10, being fixed thereto by means of a binding screw 11 passing through a vertical slot in the knife block and threaded into the knife carrier. Upon loosening the binding screw 11 the knife block may be adjusted vertically upon the knife carrier, so as to adjust the knife in position to cut completely through the welt without striking against the work table. Means are provided for so adjusting the knife block, in the form of an adjusting screw 12 threaded into a lug 13 on the knife block and engaging a slotted lug 14 on the knife carrier.

The knife carrier is in the form of a vertical slide provided with beveled edges 15 engaging a dove-tailed recess in the frame 16 of the device. A hand lever 17 is pivoted at 18 to the upper end of the knife carrier and provided with a cam portion 19 engaging the upper surface of the frame 16. A spring 20 connected with the knife carrier and the frame, as shown in Figs. 2 and 3, tends to draw the knife carrier downward to move the knife into operative position; but when it is necessary to insert a strip of welting in the device the knife carrier and knife may be raised by swinging the hand lever 17 so as to afford a space for the convenient insertion of the welt. The lower end of the knife carrier is provided with a presser foot 21 which engages the upper surface of the work, thereby holding it close against the work table and limiting the downward movement of the knife carrier.

By means of the various adjustments above described the device may be arranged to operate upon welts of different widths and thicknesses and to divide them into strips of equal or of unequal widths.

The device is operated by merely inserting the strip of welting under the knife and then drawing it through the device as it is required for use, the knife operating with a drag cut as the material is drawn through.

The invention is not limited to the precise details of construction and operation

of the illustrated embodiment but may be embodied in other forms within the scope of the claims.

Having now described the invention, what is claimed is:—

1. A welt-splitting device, having, in combination, adjustable means for guiding the welt during its longitudinal movement past the splitting knife, a welt-splitting knife to divide the welt longitudinally, a knife carrier, a presser foot, and means for throwing the knife, knife carrier and presser foot simultaneously into and out of operation, substantially as described.

2. A welt-splitting device, having, in combination, adjustable means for guiding the welt during its longitudinal movement past the splitting knife, a welt splitting knife, a knife carrier, and means for throwing the knife carrier into and out of operation, including a cam lever pivotally mounted on the knife carrier for moving the knife in one direction, and a spring for moving the knife carrier in the other direction, substantially as described.

3. A welt-splitting device, having, in combination, adjustable means for guiding the welt, a welt splitting knife to divide the welt longitudinally, a knife block, a knife carrier, connections between the knife and knife block permitting transverse adjustment of the knife with respect to the width of the welt, and connections between the knife and knife carrier permitting longitudinal adjustment of the knife in accordance with the thickness of the welt, substantially as described.

4. A welt-splitting device having, in combination, means for guiding a welt during its longitudinal movement past the splitting knife, a welt-splitting knife to divide the welt longitudinally, a knife carrier movable to throw the knife into and out of opera-

tive position, and a presser-foot rigid with the knife carrier and engaging the surface of the welt when the knife is in operative position, substantially as described.

5. A welt-splitting device having, in combination, means for guiding a welt during its longitudinal movement past the splitting knife, a welt-splitting knife to divide the welt longitudinally, a knife carrier movable to throw the knife into or out of operative position, a spring connected with the knife carrier and tending to maintain the knife in operative position, and a presser foot rigid with the knife carrier and engaging the surface of the welt to limit the movement of the knife carrier by the spring, substantially as described.

6. A welt-splitting device having, in combination, means for guiding a welt during its longitudinal movement past the operating knife, a yieldingly mounted carrier provided with a presser foot engaging the surface of the welt and a welt-splitting knife to divide the welt longitudinally mounted to move with the presser foot, substantially as described.

7. A welt-splitting device having, in combination, means for guiding a welt, a yieldingly mounted carrier provided with a presser foot arranged to engage the surface of the welt and a welt-splitting knife to divide the welt longitudinally mounted to move with the presser foot and adjustably secured to the carrier to permit longitudinal adjustment of the knife in accordance with the thickness of the welt, substantially as described.

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

FRANK H. HAWKINS.

Witnesses:

FREDERICK L. EDMANDS,
ANNA C. BRIER.

It is hereby certified that in Letters Patent No. 1,003,181, granted September 12, 1911, upon the application of Frank H. Hawkins, of Lynn, Massachusetts, for an improvement in "Welt-Splitting Devices," an error appears in the printed specification requiring correction as follows: Page 2, lines 63-64, for the word "operating" read *splitting*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 10th day of October, A. D., 1911.

[SEAL.]

E. B. MOORE,
Commissioner of Patents.