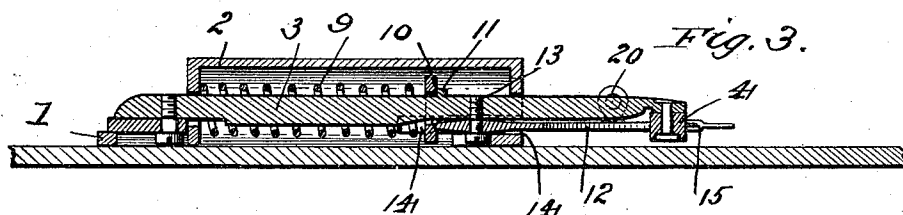
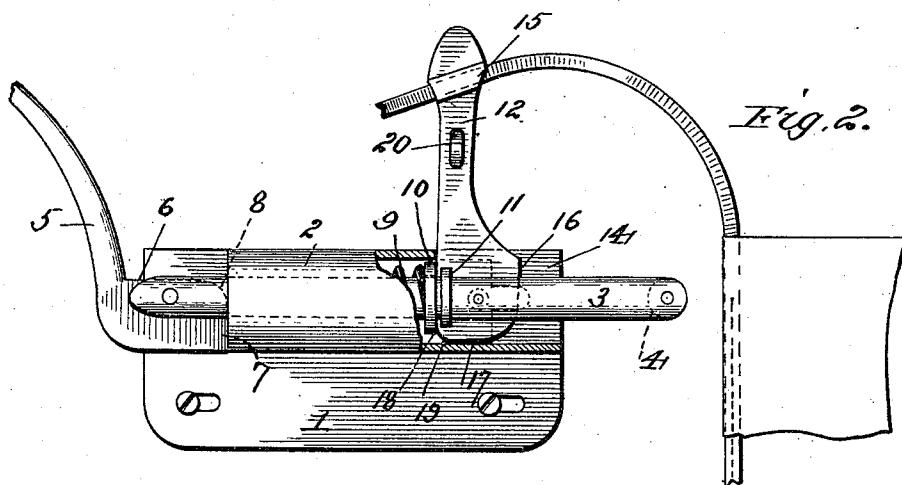
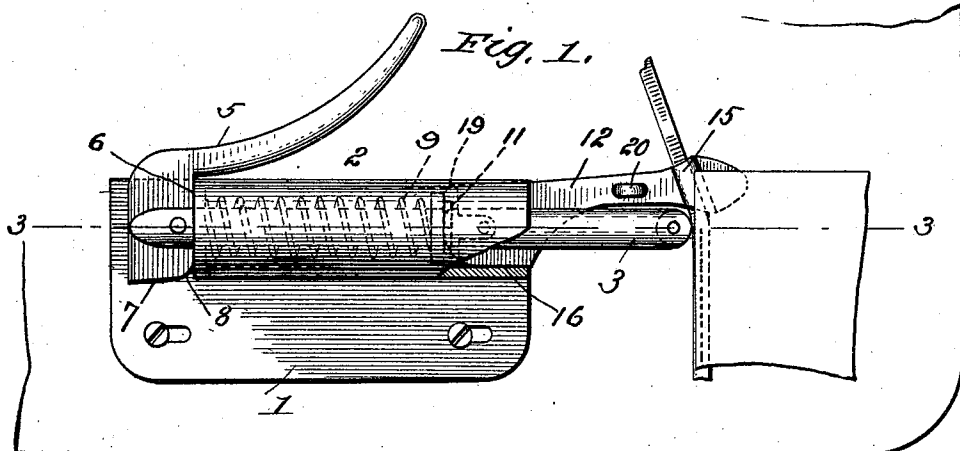


(No Model.)

B. S. BOUTON & S. E. GERMAIN.
COMBINED WELT GUIDE AND GAGE.

No. 575,100.

Patented Jan. 12, 1897.



Witnesses
G. M. Lamasure
G. H. Walmsley.

Inventors
Baldwin S. Bouton
Silas E. Germain
By *Alexander Davis*
Attorneys

UNITED STATES PATENT OFFICE.

BALDWIN S. BOUTON AND SILAS EDWARD GERMAIN, OF RIPON, WISCONSIN.

COMBINED WELT-GUIDE AND GAGE.

SPECIFICATION forming part of Letters Patent No. 575,100, dated January 12, 1897.

Application filed September 3, 1896. Serial No. 604,824. (No model.)

To all whom it may concern:

Be it known that we, BALDWIN S. BOUTON and SILAS EDWARD GERMAIN, citizens of the United States, residing at Ripon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in a Combined Welt-Guide and Gage, of which the following is a specification, reference being had therein to the accompanying drawings.

In the drawings, Figure 1 is a plan view of the device in working position; Fig. 2, a similar view, partly in section, the gage and guide being thrown back; and Fig. 3, a longitudinal section on the line 3 3 of Fig. 1.

This invention is designed to produce a simple and compact device that may be attached to any sewing-machine, and which will enable the operator to do faster and more accurate work than with the devices now in use, and which will require less skill on the part of the operator to perform accurate and neat work, as more fully hereinafter set forth.

Referring to the drawings by numerals, 1 designates the base-plate of the device, which is to be attached, as usual, to the bed-plate of a sewing-machine a suitable distance from the presser-foot. Along the rear edge and upon the upper side of this plate is formed a hollow semicylindrical barrel 2. The gage-bar 3 extends longitudinally through this barrel, its right-hand end extending a suitable distance beyond the plate 1 and being provided on its under side with the gage-roller 4. The gage-bar is cut away on its under side sufficiently to bring the gage-roller in proper position in relation to the bed-plate of the sewing-machine. A cam-lever 5 is pivoted on the left-hand end of the gage-bar beyond the adjacent end of the barrel 2, the lever curving to the right and backward, so as to be easily thrown over to the left by the operator when it is desired to withdraw the gage from proximity to the presser-foot, said lever being provided with the two straight edges 6 and 7, connected by a rounded portion or corner 8 to hold and lock the gage-bar in either of its adjusted positions, said cam edges being preferably at right angles to each other and being adapted to bear against the adjacent end of the barrel 2. Within the barrel 2 and surrounding the gage-bar is a coil-spring 9, which

is confined between the left-hand end of the barrel 2 and a washer 10, which is loosely mounted upon the gage-bar near the right-hand end of the barrel, said spring maintaining the gage-bar normally pressed toward the presser-foot. A shoulder 11 is formed on the gage-bar within the barrel and near the right-hand end thereof, against which the washer 10 abuts when the parts are in their normal positions.

The welt-guide consists of an arm 12, pivotally connected to the underside of the gage-bar within the barrel 2 by a vertical pivot 13, said bar extending outwardly through a horizontal slot 14 in the barrel. The guide-arm extends out to the right slightly beyond the gage-roller and is provided with the flat tubular guide 15, which is adapted to rest between the two parts of the fabric being sewed just behind the gage-roller, the guide-tube being inclined sufficiently to bring it to that position. Beyond the guide-tube the arm is very thin for the purpose of easily separating the two pieces of material being worked upon. The under side of the gage-bar, at its right-hand end, is cut away to bring the welt-guide tube 15 approximately in the middle of the vertical face of the gage-roller. The left-hand end of the guide-bar 12 is formed with the straight edges 16, 17, and 18, which serve to hold said arm in its various positions. In its normal position the edge 17 bears against the washer 10, and the spring 9, bearing against the washer, holds the guide-arm against any rearward movement. In this position the edge 16 bears against the forward side of the barrel 2 and prevents the arm moving forward, as shown in Fig. 1. When the guide is thrown back, the rounded corner 19 forces the washer 10 against the spring 9, and the arm is permitted to turn upon its pivot, and when it has reached its backward position the spring 9 forces washer 10 against the straight edge 18 and holds the guide in its adjusted position, as shown in Fig. 2.

The guide-arm at its pivot 13 is beveled downward on its upper side on each side of the pivot and upwardly on its under side on each side of its pivot to permit said arm to have a slight vertical vibrating motion to allow the guide-tube to automatically adjust itself to varying thicknesses of fabric. The

guide-arm is provided with a thumb-piece 20 for convenience in swinging it backward and forward. It will be seen that spring 9 forces the gage-bar toward the presser-foot and also maintains the guide-bar in its adjusted positions.

It will be observed that this device is adapted for use wherever it is desired to sew a welt between the edges of leather or fabrics. We have designed it especially for use in sewing welts in gloves, where numerous short turns have to be made in working around the fingers and thumb. The feature of the device lies in attaching the welt-guide to the fabric, guide so that they may be adjusted simultaneously, the guide, however, having a slight rocking movement independent of the gage to permit it to adjust itself to varying thicknesses of leather or other fabric and also a pivoted movement to permit it to be thrown back independently of the gage to permit the operator to examine or remove the work. It will be seen that while in operation the guide-tube rests directly behind and a little beyond the roller of the gage, so that it will carry the welt in between the two thicknesses of leather and hold it against the gage-roller while being sewed.

To withdraw both the gage and the guide from proximity to the needle for the purpose of removing or inspecting the work, it is simply necessary to throw the cam-lever over to the position shown in Fig. 2.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of a guide, a sliding gage-bar working therein, means for yieldingly pressing said gage-bar outward, means for withdrawing said gage-bar against said yielding pressure and holding it in its inner position, a guide-arm connected to said gage-bar and adapted to be moved therewith, and a welt-tube carried by said guide-arm at its forward end, substantially as and for the purpose set forth.

2. The combination of a sliding gage-bar,

means for yieldingly pressing the gage-bar outward, means for withdrawing said gage-bar against said yielding pressure, a welt-guide, and means for securing the welt-guide to the gage-bar whereby it may be given a vertical rocking movement independent of the gage-bar, substantially as and for the purpose described.

3. The combination of a gage-bar, a welt-guide pivoted thereon and adapted to be moved out of operative position independent of the gage-bar, and a device engaging the rear end of the welt-guide and adapted to automatically hold it in either its operative or inoperative positions, substantially as described.

4. The combination of a base-plate, a gage-bar slidably mounted thereon and carrying a gage-roller at its outer end, a spring normally pressing said bar outward, a guide confining said gage-bar to the base-plate, a cam-lever for operating the gage-bar, a guide-arm carrying at its outer end a tubular welt-guide, a vertical pivotal pin projecting upward from the guide-arm through the gage-bar, whereby the guide-arm is pivotally attached to the gage-bar, substantially as described.

5. The combination of a base-plate, a gage-bar slidably mounted thereon and carrying a gage-roller at its outer end, and formed with the shoulder 11, a guide for said gage-bar, a spring normally pressing the gage-bar outwardly, a washer 10 adapted to be forced by said spring against shoulder 11 of the gage-bar, a welt-guide pivoted to the gage-bar, its inner end being adapted to bear against the washer 10, said guide being formed with the straight edges 17 and 18, substantially as and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

BALDWIN S. BOUTON.
SILAS EDWARD GERMAIN.

Witnesses:

A. E. HAMLEY,
L. T. BURROUGHS.