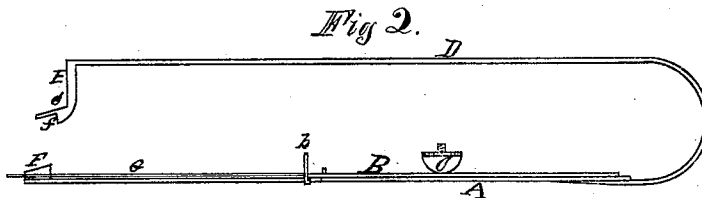
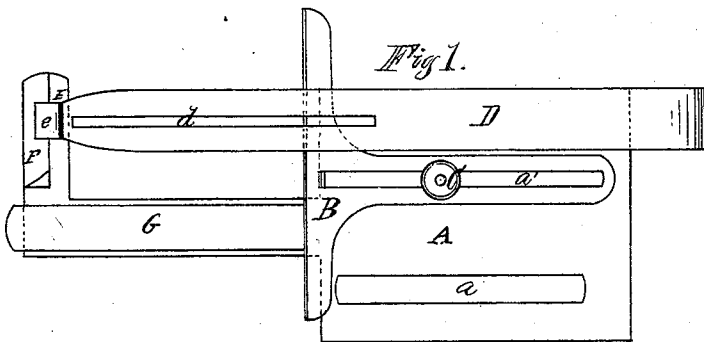


C. ARMSTRONG.

Tuck-Creaser for Sewing-Machines.

No. 131,206.

Patented Sep. 10, 1872.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES ARMSTRONG, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TUCK-CREASERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 131,206, dated September 10, 1871.

To all whom it may concern:

Be it known that I, CHARLES ARMSTRONG, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tuck-Marking Attachments to Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a general plan or top view of my said improvement, and Fig. 2 is a side elevation of the same.

Similar letters of reference indicate like parts in both figures of the drawing.

My invention relates to that class of tuck-marking attachments which are operated automatically by the needle-bar of the machine; and has for its object to form a mark upon the fabric parallel to the line of stitch, preparatory to folding the same; and the improvement consists in a block and shoulder, so arranged as to impinge the fabric between the edge of the block and shoulder by the downward movement of the arm, the whole of which will be more fully understood by the following description:

In the drawing, A represents the bed-plate, which is made of sheet metal of the proper thickness and in the form shown by Fig. 1. This plate is provided with a longitudinal mortise, *a*, through which is passed a set-screw, not shown, by which the said plate is secured to the bed of the machine in the usual manner. B is the gage, which is also made of sheet metal of the required thickness, and is loosely fitted upon the upper surface of the bed-plate. This gage is also provided with a longitudinal slot or mortise, *a'*, through which is passed a thumb-screw, C, which is permanently affixed to the bed-plate. This screw is so arranged as to allow the gage to move freely in the direction of its length upon the bed-plate, the object of which is to graduate the distance between the said gage and the line of the stitch, the same being firmly secured, at any desired point, by the tightening of the screw. D is a horizontal arm, the rear end of which is bent in the form shown by Fig. 2, and is

firmly attached to the rear end of the bed-plate. This arm extends forward to a point near the forward extremity of the plate, and is provided with a longitudinal slot, *d*, through which the needle passes. Firmly affixed to the forward extremity of the said arm, or made as a part of the same, is a depending-bar, E, the lower end of which is bent forward as shown at *e*. The lower surface of this bent portion is cut away, forming a shoulder, *f*, as shown in Fig. 2. Firmly secured to the upper surface of the bed-plate at its forward extremity is a block, F, the upper surface of which is slightly beveled forward. This block is so arranged as to allow the shoulder of the arm to come in contact with its rear edge as the arm is forced downward by the action of the needle-bar. Affixed to the forward extremity of the gage, or made as a part of the same, is a horizontal spring, G, which extends forward to a point slightly in advance of the forward extremity of the plate. This spring is so arranged as to bear upon the upper surface of the fabric, thereby holding the same smooth and preventing its edge from passing upward over the guiding surface of the gage, which insures a movement of the fabric in a line parallel with the same.

In constructing my improvement I usually make the arm of sheet brass; but any other suitable metal may be used, which possesses the proper elasticity to force itself upward against the needle-bar as the same recedes, which removes the shoulder from the fabric, thereby enabling the same to be moved forward by the action of the feed.

In using my invention, it is secured to the bed of the machine in the usual manner, allowing the needle to pass through the slot in the arm, which brings the lower extremity of the needle-bar against the upper surface of the arm, by which means the said arm is forced downward by the downward movement of the bar, and is forced upward by its own elasticity as the said bar recedes. The fabric is placed upon the bed-plate under the spring and over the block, and as the arm is forced downward the fabric is impinged between the said block and shoulder, thereby forming the requisite mark, the arrangement of the bar carrying the shoulder being such as to be moved slightly forward by the downward spring of the arm.

The fabric is prevented from being pushed away from the gage during this forward movement of the shoulder by the needle and the pressure-foot. The pressure-foot first presses on the fabric; then the needle comes down through the slot *d*, exactly on a line between the impinging-shoulder and the guide-block; pierces the fabric; and afterward brings the shoulder down and forms the mark; it is therefore secured by the pressure-foot and by the needle before the mark is made.

We do not claim the slot *d*, as that is old, but only when used in combination with our spring, shoulder, and block.

With my invention a mark may be made upon thin or unstarched fabrics without liability of injury to the fibers by breaking the same, and also upon thick or heavy fabrics, or over a number of folds with equal certainty.

My invention is so constructed and arranged that it can be used equally well with my improved guide for sewing-machines patented September 19th, A. D. 1871.

What I claim as new is as follows:

1. The bar *E D*, provided with the shoulder *f*, in combination with the block *F*, arranged as described, whereby the fabric is crimped in a line parallel to the line of stitch, while the fabric is held to the guide-bar *b* by the pressure-foot and by the needle, which, passing through the slot *d*, pierces the fabric on a direct line between the shoulder *f* and guide-bar *b*, substantially as specified.

2. In combination with the subject-matter of the last-above claim, the bed-plate *A*, gage *B*, thumb-screw *C*, and arm *D*, all arranged to operate substantially as and for the purpose specified.

The above specification of my invention signed by me this 25th day of January, A. D. 1872.

CHARLES ARMSTRONG.

Witnesses:

N. H. SHERBURNE,
J. H. KNOWLTON.