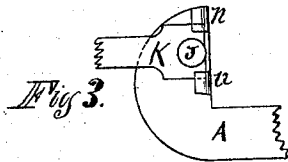
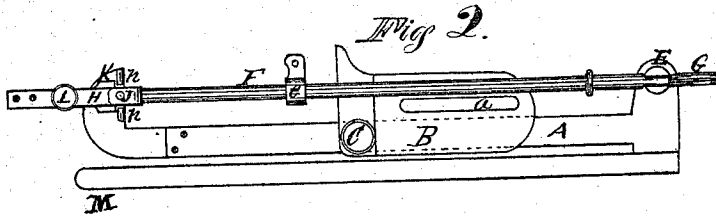
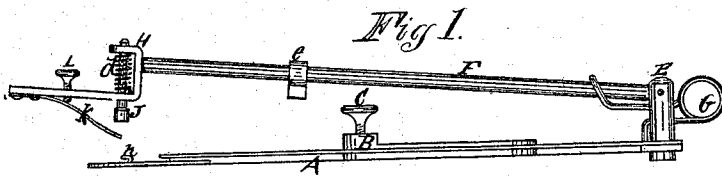


N. BARNUM.

Tuck-Creaser for Sewing-Machines.

No. 128,942.

Patented July 16, 1872.



Witnesses

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UNITED STATES PATENT OFFICE.

NELSON BARNUM, OF LA PORTE, INDIANA.

IMPROVEMENT IN TUCK-CREASERS FOR SEWING-MACHINES

Specification forming part of Letters Patent No. 128,942, dated July 16, 1872.

To all whom it may concern:

Be it known that I, NELSON BARNUM, of La Porte, in the county of La Porte and State of Indiana, have invented a new and useful Improvement in Tuck-Marking Attachments to Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, 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 side elevation of a tuck-marking attachment embodying my said improvement. Fig. 2 is a general plan or top view of the same; and Fig. 3 is a top view of a portion of the base-plate, showing the position of the respective parts employed in forming the mark when in contact with the fabric.

Similar letters of reference indicate like parts in the several 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 crease or fold in the fabric parallel to the line of stitch, preparatory to the laying of the plait; and to that end the improvement consists in providing the arm which is actuated by the needle-bar of the machine with a metal frame, within which is secured a vertical yielding pivot, so arranged as to act in conjunction with a curved spring affixed to the forward extremity of the frame, the said spring acting to fold the fabric around the end of lips formed upon the upper surface of the base-plate simultaneously with the descending movement of the pivot, the pivot acting to impinge the fold between its lower end and the upper surface of the spring, thereby forming a well-defined crease or mark.

In the drawing, A represents the base-plate, which is loosely fitted within a longitudinal groove formed in the lower surface of the gauge B, and is so arranged as to admit of being moved in the direction of its length to any desired point, and firmly secured by means of a set-screw, C, which passes through the upper portion of the said gauge to and in contact with the upper surface of the plate. This gauge is provided with a longitudinal mortise, *a*, through which is passed a set-screw, the said screw passing into the bed of the machine,

thereby firmly securing the said gauge and plate at any requisite point thereon. Firmly affixed to the rear end of the base-plate is a vertical upright, E, the upper end of which is provided with a slot, within which is loosely pivoted a horizontal arm, F. This arm extends forward to a point near the forward extremity of the base-plate, as shown in Figs. 1 and 2 of the drawing. Loosely fitted upon this arm is a clasp or eye, *e*, through which the needle passes in the usual manner. Affixed to the rear end of the plate is a spring, G, which extends backward through the slot formed in upright E, and is bent in an annular form at a point near the said upright, the forward portion of the said spring extending forward through the slot under the arm to a point forward of its fulcrum, and is bent at its end, forming a loop, through which the arm loosely passes. The arrangement of this spring is such as to hold the arm firmly against the lower extremity of the needle-bar, thereby insuring a positive and regular upward movement of the arm as the needle-bar ascends. Mounted upon, and firmly secured to the forward extremity of the said arm is a metal frame, H, within which is secured a vertical pivot, J. Loosely fitted upon and around the said pivot is a spiral spring, *d*, which is so arranged as to bear against the inner sides of the frame, by which means the said pivot is secured in proper adjustment, the elasticity of the spring being such as to allow the frame to move downward upon the pivot when the lower extremity of the same is brought in contact with the fabric. Firmly secured to the lower side of the forward extremity of the frame is a spring, K, which is bent downward and backward in such a manner as to bring its lower end under the lower extremity of the pivot, and slightly below the same, as shown in Fig. 1. Secured within the lower portion of the said frame, at a point slightly back of its point of attachment with the spring, is a set-screw, L, which is so arranged as to bear upon the said spring, by which means the same is adjusted to thick or thin fabric. Firmly affixed to the base-plate, or made as a part of the same, are lips *n n*, which are bent upward and forward, as shown in Fig. 1. These lips are so arranged as to allow spring K of the frame to pass under the same as the said spring is

brought in contact with the fabric upon the base-plate by the downward movement of the arm; also to allow the lower extremity of the pivot to strike the fabric upon the spring between the said lips, as shown in Fig. 3, thereby impinging the fold upon the spring. Affixed to the rear extremity of the base-plate is a spring, M, which extends forward to a point near the forward end of the said plate. This spring is so arranged as to bear upon the fabric, and thereby hold the same in a smooth position during its movement under the needle.

In using my invention the base-plate is secured to the bed of the machine, as heretofore described, the gauge and base-plate being arranged with the needle relatively to the desired width of fold; the fabric is passed over the said plate and under the spring, and secured in position against the gauge by the presser-foot in the ordinary manner. Motion is then imparted to the machine, and as the needle-bar descends arm F is forced downward, bringing the lower end of spring K in contact with and upon the fabric in front of the lips *n n*, and by a continuous downward movement of the said arm the spring is curved backward, forcing a portion of the fabric under the said lips, thereby forming a fold in the same, which

fold is impinged between the lower end of the pivot and upper surface of the spring, forming a well-defined crease or mark.

It will be observed by reference to the drawing that the pivot comes in contact with the fabric between the lips, the object of which is to insure a positive action upon the fold, thereby overcoming the difficulty arising in markers of a similar character, in which the fabric is impinged against the bed of the machine at the side of the spring, for in such the fold is more or less liable to become displaced or imperfectly formed.

Having thus described my invention, I claim—

The combination of arm F, frame H, pivot J, springs *d* and K, and lips *n n*, the said spring K acting to fold the fabric over the end of the lips, and the pivot to impinge the fold against the spring between the said lips, substantially as and for the purpose described.

The above specification of my invention signed by me this 19th day of March, A. D. 1872.

NELSON BARNUM.

Witnesses:

H. D. PIERCE,
J. W. MERRIAM.