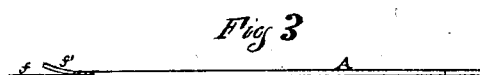
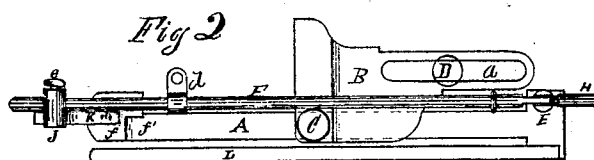
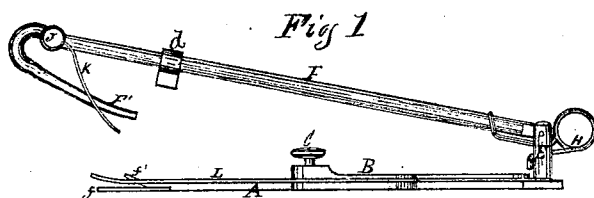


P. DORAN.

Tuck-Creaser for Sewing-Machines.

No. 132,148.

Patented Oct. 15, 1872.



Witnesses

A. E. Bostin
Henny Billie's

Inventor

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UNITED STATES PATENT OFFICE.

PETER DORAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO ADELBERT E. BOLSTER
AND KIRK D. PIERCE, OF SAME PLACE.

IMPROVEMENT IN TUCK-CREASERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **132,148**, dated October 15, 1872.

To all whom it may concern:

Be it known that I, PETER DORAN, 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 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 side elevation of the base-plate with pressure-spring removed, showing the form of said plate.

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 provide an improvement on the device secured to me by Letters Patent No. 126,684, dated May 14, 1872; and to that end it consists in forming the forward extremity of the base-plate in two parts, arranged one above the other, the upper part thereof being curved upward in such a manner as to allow the fabric to be folded over its end by the descending movement of the spring, which is adjustably secured to the arm, which is actuated by the needle-bar of the machine, and the lower portion of the said plate acting to prevent the fabric from coming in contact with and upon the cloth-plate of the machine when forced downward by the thrust of the said spring, thereby insuring the formation of the requisite mark and preventing the said cloth-plate from being worn by the continuous action of the spring.

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

with a longitudinal mortise, *a*, through which passes a set-screw, D, the said screw passing into the bed of the machine, by which means the gage and plate are firmly secured at the requisite point thereon. Firmly affixed to the rear end of the base-plate is a vertical post, 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 slightly forward of the forward extremity of the base-plate, and is there bent downward and backward in U-form, as shown in Fig. 1, forming a supplemental arm, F'. Loosely fitted upon the said arm is a clasp or eye, *d*, through which the needle passes in the usual manner, and by which a downward movement is imparted to the arm by the descending movement of the needle-bar. Firmly secured to the rear end of the base-plate is a spring, H, which extends backward through the slot formed in the upper end of post E, and is bent in an annular form at a point near the said post, the forward portion of the said spring extending forward through the said 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 at the time of the ascending movement of the needle-bar. Loosely fitted upon the said arm, slightly back of the arc or bend, is a sleeve, J, within which is firmly secured a spring, K. This spring extends downward and backward to a point slightly forward of and below the rear end of the supplemental arm F', as shown in Fig. 1. Within the end of this sleeve is secured a set-screw, *e*, which is so arranged as to engage the arm, by which means the said sleeve is secured at the requisite point thereon. The object of this sleeve and its manner of attachment with the arm is to allow the spring to be moved forward or backward to the proper position to seize the fabric when said spring is forced downward by the action of the needle-bar. The forward extremity of the base-plate is made in two parts, *f f'*. The part *f* is arranged below the part *f'* and extends slightly forward of the same, as shown in Fig. 3. The forward extremity of the

part f' is bent upward in such a manner as to allow the fabric to be folded over the same by the descending movement of the spring. Firmly secured to the rear end of the base-plate is a spring, L, which extends forward to a point near the forward extremity 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. The lower surface of the supplemental arm F' is slightly convexed, the object being to allow the same a slight movement in the direction of its length upon the fabric when brought in contact therewith. It will be observed, by reference to the drawing, that the part f of the base-plate is wider than the part f' , the object being to allow the supplemental arm to come in contact therewith when forced downward, thereby compressing the fabric between the lower surface of the supplemental arm and upper surface of the part f at the point where the fabric is folded over the end of the part f' .

In using my invention the base-plate is secured to the bed of the machine by means of the set-screw, as heretofore described, the gage and base-plate being arranged with the needle relative to the desired width or fold. The fabric is then passed over the said plate and under the spring L, and secured in position against the gage 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 slightly forward of the part f' of the base-plate, and by a continuous downward movement of the arm the spring is curved backward, forcing a portion of the fabric under the part f' , thereby folding the fabric over its end; and simultaneously with the backward movement of the spring the supplemental arm F' is brought in contact with the fabric in close proximity to the side of the spring and at the point where the fabric is folded over the end of the part f' , thereby compressing the fold between the lower surface of said supplemental arm and the upper surface of the part f of the base-plate, which forms the requisite crease or mark, the part f acting to prevent the fabric from coming in contact with the cloth-plate of the machine, and at all times insuring the supplemental arm in coming in contact with the fold at the same relative point with the part f' when used upon machines having a raised cloth-plate.

Having thus described my invention, I claim—

The combination, with the inclined projection rising from the base-plate and the supplemental arm F' , of the inclined spring K and its adjusting mechanism, substantially as described.

PETER DORAN.

Witnesses:

A. E. BOLSTER,
HENRY B. WILLIS.