(No Model.)

A. W. JOHNSON.

TUCK MARKING ATTACHMENT FOR SEWING MACHINES.

No. 329,908. Patented Nov. 10, 1885.

Fig. 1.

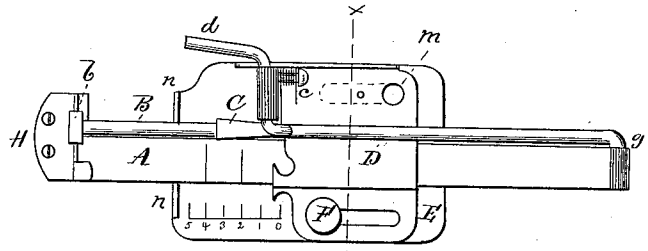


Fig. 2.

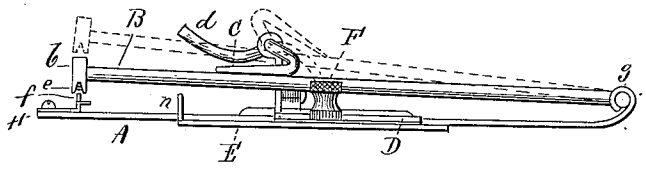


Fig. 3.

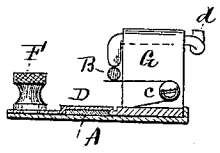


Fig. 4.

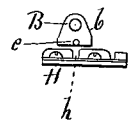
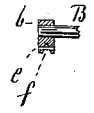


Fig. 5.

Fig. 6.



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TUCK-MARKING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 329,903, dated November 10, 1885.

Application filed November 28, 1884. Serial No. 148,984. (No model.)

To all whom it may concern:

Be it known that I, ALBERT W. JOHNSON, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Tuck-Marking Attachments for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in that class of tuck-markers that attach to the bed of a sewing-machine and mark cloth for a tuck-fold by creasing it by means of a creasing-blade in conjunction with a vertically-vibrating grooved creaser actuated by the needle-bar; and its objects are to furnish a tuck-marker with the creasing device arranged to depress the cloth below the edge of and across the line of the creasing-blade adjacent to a corner or corners of said blade, whereby the crease is made sharper and more clearly defined, and one in which the mechanism is readily disconnected from the needle-bar, and so arranged that when disconnected the creaser is automatically raised to considerable distance above the creasing-blade, whereby the operation of inserting or removing the work is greatly facilitated.

In the drawings, Figure 1 is a top view of my tuck-marker. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section on the broken line *x x*, Fig. 1. Fig. 4 is a detailed side view of the creasing-blade and creaser. Fig. 5 is a vertical longitudinal section of the creaser on a line through its center, and Fig. 6 is a vertical cross section of the same through its center.

Similar letters refer to similar parts throughout the several views.

The base D is held to the guide-plate E below it by a thumb-screw, F, passing through a slot in the base and into said guide-plate. The flat bar A, carrying a vertical creasing-blade, H, at its front end, and the creaser-bar B at its rear end, passes between the guide-plate E and base D, resting in a groove in the under side of said base. This groove, in conjunction with the lips *n n*, turned up from one end of the guide-plate E, which also operate as guides for gaging the width of tuck, serve to hold the bar A in position. The creaser-bar B is attached at one end to the rear end of the bar A by a hinge-joint, on which it vibrates in a vertical plane at right angles to the creasing-blade H and line of stitching of the machine, carries at its free end a creaser, *b*, and is arranged to be parallel with the bar A when the creaser rests upon the creasing-blade. The auxiliary lever C, pivoted to the fulcrum-arm G of the base D, rests upon and is adapted to vibrate in the same vertical plane with the creaser-bar B, and is provided with an arm, *d*, constructed to engage with the needle-bar of the machine when in use.

The auxiliary lever C is formed with a heel extending back past the center of its pivot, the object of which is to operate as a stop against the creaser-bar B to limit its upward movement, which is imparted to it by a spring, *c*, secured to the fulcrum-arm G, and pressing against the under side of the creaser-bar.

The creaser *b* is constructed with a groove, *f*, in its under side to receive and embrace both sides of the vertical creasing-blade H, and with a rib, *e*, extending across said groove *f* in such a position that when the creaser and creasing-blade come together said rib *e* enters and rests in a notch, *h*, in said creasing-blade below its creasing-edge, while the bottom of the groove *f* in the creaser bears upon the creasing-edge of the creasing-blade both in front and in the rear of said notch.

The attachment is secured to the bed of a sewing-machine by means of a screw made to pass through a hole, *m*, in the base D, and a slot in the guide-plate E under it, this slot allowing for the adjustment of said guide-plate with the tuck-guides *n n* thereon.

When the thumb-screw F is loosened, the bar A may be moved longitudinally in a direction at right angles to the line of stitching of the machine, for the purpose of adjusting the creasing mechanism to the required position; but when tightened the base D and guide-plate E are drawn together thereby, and the bar A is firmly clamped between them.

The auxiliary lever C may be turned on its pivotal bearing in the fulcrum-arm G over to the position shown by broken lines in Fig. 2, whereby the arm *d* is thrown out of connection with the needle-bar, and by which movement the heel of the auxiliary lever C is car-

ried forward of its pivot and off from the creaser-bar B, which is thereby released and allowed to rise by the action of the spring *c* to the position also indicated by broken lines in Fig. 2, leaving a wide space between the creaser and creasing-blade to facilitate the insertion or removal of work.

When the auxiliary lever C is turned back to its first position, it carries the creaser-bar downward until only a narrow space is left between the creaser and creasing-blade, in which position it is held against the pressure of the spring *c* by the heel of said lever, as above described.

As the needle-bar of the machine descends it comes in contact with and carries the free end of the arm *d* downward, causing the auxiliary lever C to turn on its pivot and its free end to press the creaser-bar down until the creaser *b* bears upon the creasing-blade H, which forces the cloth being operated upon into the groove *f* in the creaser, the rib *e* depressing the cloth into the notch *h* below the edge of the creasing-blade, so that while the cloth is folded over and pressed upon the edge of the creasing-blade, both in front and in the rear of the notch *h*, it is also drawn tightly down over its inner corners adjacent to said notch, thereby producing sharper indentations therein.

As the needle-bar ascends, the spring *c* causes the creaser-bar, and with it the auxiliary lever C, to rise to their first position, in which, the creaser being raised above it, the cloth is free to be carried forward by the feed mechanism of the machine.

At each descent and ascent of the needle-bar the above operation is repeated, and its continued repetition produces a continuous clearly-defined crease in the cloth.

The creaser-bar B is elastic, and the auxiliary lever C bears thereupon always at a point practically midway between its hinged end and the creaser, by which construction the elasticity of the creaser-bar is utilized in the adaptation of my device to fabrics of different thicknesses.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a tuck-marking attachment for sewing-machines, a vertical creasing-blade, H, with a notch, *h*, in its creasing-edge, combined with a creaser, *b*, arranged to be operated by connection with the needle-bar, having a groove, *f*, in its under side adapted to receive and embrace both sides of said creasing-blade and have a bearing upon its creasing-edge both in front and in the rear of said notch, provided with a rib, *e*, adapted to enter and rest in said notch when the creaser and creasing-blade come together, substantially as and for the purpose set forth.

2. The combination of the vertical creasing-blade H, with a notch, *h*, in its creasing-edge, the creaser *b*, grooved to receive and embrace both sides of said creasing-blade, the rib *e* of said creaser adapted to enter and rest in said notch *h* while the creaser bears upon the creasing-edge of said creasing-blade both in front and in the rear of said notch, the vertically-vibrating elastic creaser-bar B, carrying said creaser, the spring *c*, and the auxiliary lever C, pivoted to the fulcrum-arm G, with a heel extending back past the center of its pivot, provided with an arm, *d*, for engagement with the needle-bar of a sewing-machine, the whole constructed and arranged substantially as and for the purpose set forth.

3. In a tuck-marking attachment for sewing-machines, the combination, with the elastic creaser-bar B, hinged at one end to the rear end of the bar A, carrying a creaser, *b*, at its free end, arranged to vibrate in a vertical plane at right angles to the line of stitching, of an auxiliary lever, C, pivoted to an arm, G, of the base D, constructed with a heel extending back past the center of its pivot, arranged to vibrate in the same vertical plane with and above said creaser-bar B, its free end arranged to bear upon said creaser-bar at a point midway between its hinged end and said creaser, and provided with an arm, *d*, for engagement with the needle-bar, substantially as and for the purpose set forth.

4. The combination of the longitudinally-adjustable bar A, carrying at one end a vertical creasing-blade, H, provided with a notch, *h*, and at its other end an elastic creaser-bar, B, hinged thereto, said creaser-bar carrying at its free end a grooved creaser, *b*, provided with a rib, *e*, for engagement with said notch *h*, and the auxiliary lever C, pivoted to the base D, arranged to bear upon said creaser-bar at a point midway between its hinged end and said lever, provided with an arm, *d*, for engagement with the needle-bar, adapted to be thrown out of engagement with the needle-bar by being turned on its pivot, substantially as described.

5. The combination of the adjustable bar A, carrying a creasing-blade, H, provided with a notch, *h*, the vibrating bar B, carrying a creaser, *b*, provided with a groove, *f*, and bar *e*, extending across said groove, the vibrating lever C *d*, hung to the base D, spring *c*, guide-plate E, provided with tuck-guides *n n*, and thumb-screw F, when constructed and arranged substantially as described and for the purpose set forth.

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