H. W. FULLER.

Tuck-Creaser.

No. 130,365. Patented Aug. 13, 1872.

Fig. 1.

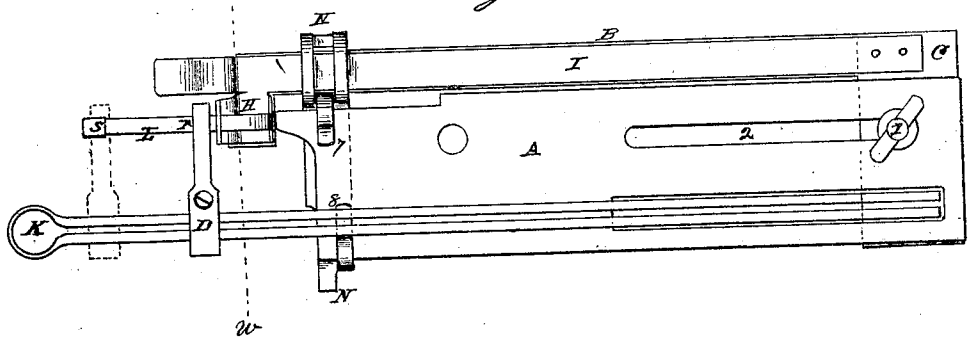


Fig. 2.

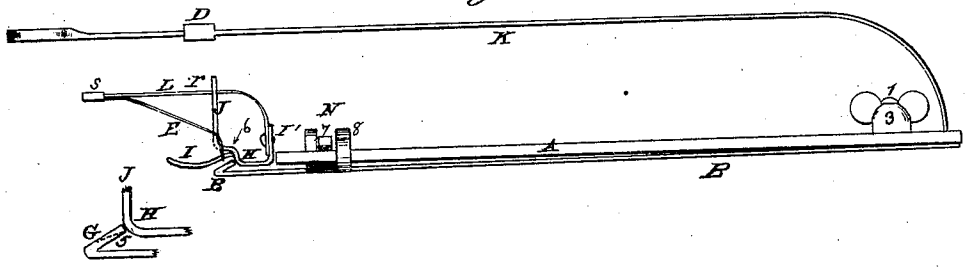


Fig. 3.



Fig. 4.

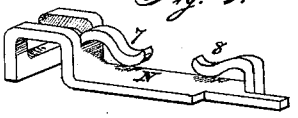
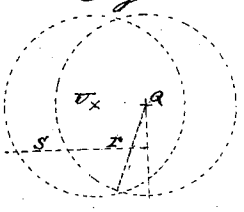


Fig. 5.



Inventor.

H. W. Fuller

Witnesses

Earle H. Smith

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

HENRY W. FULLER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN TUCK-CREASERS.

Specification forming part of Letters Patent No. **130,365**, dated August 13, 1872.

To all whom it may concern:

Be it known that I, HENRY W. FULLER, of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Tuck Creasers or Markers for Sewing-Machines, whereof the following is a specification:

The said improvements are chiefly applicable to that class of tuck-markers which mark or crease the cloth by the operation of nipping or pinching, but are not confined in their application thereto. They relate to a combination of the clamping "shoe," for holding the work steady, and the movable pinching-jaw, with and upon a "smoother" or spring-plate, resting at all times on the material outside the line of the seam, substantially as hereinafter described. Also, to a combination, with the foregoing, of a supporting-plate for sustaining the material, having a notch therein under the movable pinching-jaw, as herein specified. Also, to a gage or guide, held at the point required by friction, and made substantially as hereinafter set forth.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same, referring to the drawing hereto annexed, wherein—

Figure 1 is a top view of the instrument. Fig. 2 is a side elevation. Fig. 3 is a perspective view, enlarged, of the cloth-supporting or thrust plate. Fig. 4 is a perspective view of the gage. Fig. 5 is a diagram of movements.

A represents the base plate or stock to which all the parts of the instrument are attached. B is the bed-plate on which the cloth lies when being creased. I is a light elastic plate or bar, which rests lightly on the cloth. It has the front end turned up, as seen at I′ in Fig. 2, and has affixed thereto a short spring-arm, L, the office of which is to carry the working or marking jaw E. The other jaw is fixed, and is formed of a part (6) of the up-turned portion of the plate I, Fig. 2. Said up-turned portion also forms the upper one (H) of two clamping devices, (also called the shoe,) between which devices the cloth is momentarily clamped at the instant of being acted on by the jaw or jaws. The lower clamping device is formed from the front end of the bed-plate by bending over or upward a part thereof, presenting an edge, 5, as represented in Figs. 2 and 3, and the cloth is clamped, as aforesaid, between the edge 5 and the under side of the shoe H. The portion of the cloth to be acted on by the working-jaw lies on the inclined surface G of the bed-plate in front of the clamping-edge 5. To prevent the working-jaw from becoming inadvertently bent out of its proper shape and place, I provide a guard, J, which, for simplicity, is formed of an extension of the upturned portion 6 of the plate I or "shoe" H. When the shoe is not pressed hard against the edge 5 aforesaid, it rests lightly on the cloth and holds it down with a gentle pressure, thereby acting as a "smoother," causing the movement of the cloth to incline toward the guide or gage N. Such inclination is also promoted by arranging the under surfaces of H and edge 5 in a position slightly diagonal to the line of the feed, as indicated by a dotted line, *v w*. K represents the actuating or yielding spring-arm, through which motion is transmitted to the marker-arm from the sewing-machine. It is of peculiar construction, being formed of a double wire, or two wires, in such a manner as to leave a central space between them to admit the needle of the sewing-machine, whereby the vertical movement of the spring-arm is controlled, such arm being placed under the needle-bar of the machine. This arm is arranged to slide back and forth in a slot in the base-plate A for adjusting the instrument for wide or narrow tucks, and is permanently affixed to and combined with the bed-plate and upper clamping-plate by means of the connecting-plate C, which is one with the bed-plate. Attached to said arm K is a reach, D, arranged for adjustment on said arm by a screw. Through this adjustment power may be applied to the marker-arm at different points thereon, whereby the downward thrust of the point of the working-jaw may be reduced and converted into a lateral movement, and so caused to press more or less lightly on the supporting-plate, or not at all, (as may be required,) according to the position of the center of motion of the working-jaw—that is to say, if the power be applied at P (the point indicated by the full lines in Fig. 1) the point of the marker will describe an arc having the center of its radiuses at about the location represented at Q in the diagram, Fig. 5; but if applied at S (the point indicated in dotted lines in Fig. 1) the arc described will have

the center of its radiuses at about the point, relatively, indicated at U in said diagram. To facilitate the grasping action of the working-jaw upon the cloth preparatory to pinching it, the supporting-plate G is grooved transversely, as represented at 4 (enlarged) in Fig. 3, whereby the cloth is supported on each side of the point of action of the working-jaw. The preparatory action of the jaw upon the cloth is further enhanced by a part of the plate I, which reaches beyond the supporting-plate G, and is bent downward, partially, to assist in giving the cloth the proper shape as it approaches the jaw E to be seized thereby.

The gage N is of novel construction, being held in place at any point desired on the base-plate A, as required, by friction only. Such friction is produced by a pair of springs, 7 8, formed in this instance from portions cut out of the body of the gage, but may be otherwise formed, their purpose being simply to exert a spring pressure, and produce sufficient friction to maintain the gage at any point on the base-plate.

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

1. The spring clamping-plate, with its forward end resting at all times on the material outside the line of the seam, and provided with the shoe and movable pinching-jaw, substantially as described.

2. The combination with the foregoing of the notched supporting-plate, substantially as specified.

3. The friction-gage, when constructed substantially as set forth.

H. W. FULLER.

Witnesses:
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