(Model.)

E. BOSTOCK.

TUCK CREASER FOR SEWING MACHINES.

No. 295,975. Patented Apr. 1, 1884.

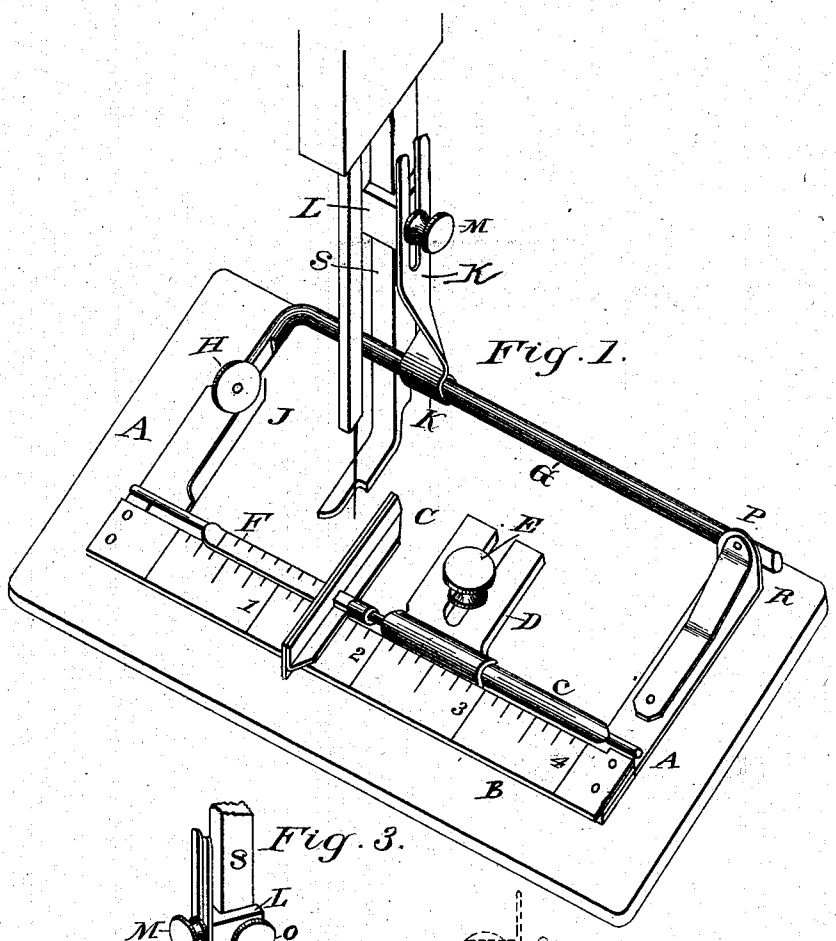

Fig. 1.

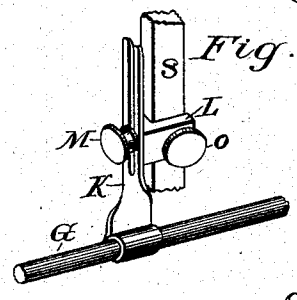

Fig. 3.

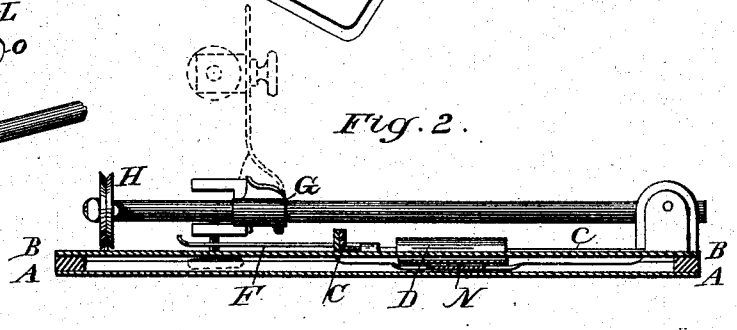

Fig. 2.

Witnesses:
Solomon Mogilewich
Charles Blondell

Inventor:
Edward Bostock

UNITED STATES PATENT OFFICE.

EDWARD BOSTOCK, OF NEW YORK, N. Y.

TUCK-CREASER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 295,975, dated April 1, 1884.

Application filed July 14, 1883. (Model.)

To all whom it may concern:

Be it known that I, EDWARD BOSTOCK, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Tuck-Creasers for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, sufficient to enable any person skilled in the art to use the same.

The object of my present invention is to construct a vibrating tuck-creaser which fits all sewing-machines equally well without change in its arrangement, is operated independently of the needle-bar, and by which the pressure of the upper creaser can be regulated on the work for light or heavy material.

The principal tuck-creasers in use at the present time are operated by a vibrating arm which is attached to the needle-bar of a sewing-machine, adding appreciably to the weight of running the same, having a tendency to cause "skip stitches" and break the thread, giving unnecessary pressure, (which cannot be regulated,) especially on light and delicate fabrics—such as organdie or nainsook muslins—and being noisy and liable to get out of order or break.

The drawings accompanying this specification and forming part thereof are described as follows:

Figure 1 represents my improved tuck-creaser in perspective as applied to a sewing-machine. Fig. 2 is a vertical longitudinal section of the same; and Fig. 3 is a detail view, showing the manner in which the upper marking-arm is attached to the presser-bar of the machine.

Similar letters denote similar parts in all of the figures.

In Fig. 1, A A is the main plate, shaped as shown, along the top of the inner edge of which is firmly attached a piece of wire its entire length, for the gage to slide upon. In place of a wire, the inner edge may be turned up or corrugated. The left-hand edge of this plate is turned up at J, to press the cloth into the groove of the upper creaser, and the right-hand end is turned up at R, to which the upper marking-arm is hinged at P.

B is a flat metal plate, secured to A A at each end in such manner as to admit of a space between it and the lower plate, along which the slotted clamp slides. On the upper surface of this plate is a graduated scale for adjusting width of space to the left of the needle.

C C is a T-shaped sliding gage, corrugated its entire length and resting on the raised edge of plate A A. At right angles thereto, and straddling plate B, it has a flat-faced straight-edge, against which the material is guided on the machine. Attached to this straight-edge parallel with the corrugation is a thin tongue, F, projecting over the inner edge of main plate. On the upper surface of this tongue is a graduated scale in parts of an inch, for gaging the width of tuck to the right of the needle.

D is a slotted clamp, which straddles plate A A, and has a downward projection, N, which slides along the front edge of plate A A. Near its center, at right angles from its slot, it is corrugated to slide along over the corrugation on C C. The set-screw E, belonging to the sewing-machine, passing through the slot of D, serves to clamp plate A A and gage C C securely to the bed-plate of any sewing-machine in proper position for use.

G is a metal arm, made preferably of steel, which is hinged to the right-hand end of A A at P. Its left-hand end is bent at right angles, to which is attached in proper position to center over the edge of the lower creaser a grooved wheel, H.

L is a metal clamp, which is screwed firmly to the presser-bar S.

K is a thin metal bar, shaped substantially as shown, the lower end of which is attached to and slides along the arm G. The upper part of K is slotted its entire length, and is secured firmly to the presser-bar by screw M and clamp L. This slot admits of adjustment in any position, besides regulating the degree of pressure of the upper creaser on the work, and, in connection with the slot in clamp D, admits of adjusting the entire apparatus backward or forward, as well as lengthwise of the machine. The importance of this arrangement is manifest, as by its means the same creaser can be made to fit any sewing-machine—a feature which it is believed has not been attained in any vibrating tuck-creaser hitherto made.

I do not confine myself to the use of a grooved wheel on the end of the upper marking-arm, as I might employ a stationary notch or any other equivalent device; but I have preferably chosen a grooved wheel for several reasons, the most important of which is that the lateral play from the axis to its periphery is more liable to center the groove over the edge of the lower creaser.

Instead of turning up the main plate at R, I may attach to said plate an upright metal post slotted at the upper end to receive the arm G.

The manner of attaching my improved tuck-creaser to the machine is as follows: Let the presser-bar down and raise the needle-bar to its highest point, pass the hinged arm under the needle, and screw the clamp to the presser-bar, with the wheel resting on the lower creaser, as when the feed takes place the presser-bar raises the upper creaser sufficiently to admit of the work passing freely along. The arm can be raised or lowered by the slot of K and screw M.

It is well known to all who are familiar with sewing machines of various kinds now in use that the screw-hole in the bed-plate of the machine is situated in different positions on different machines relative to the point where the stitching and feeding take place, and as almost all tuck-markers are held in position on the machine by means of a thumb-screw in such screw-hole, I will explain the advantages of my present invention with reference thereto. Also, as the presser-bar of some machines is located at a greater distance back of the needle and from the point of stitching and feeding than in others, and it being essential that the point of creasing be as near as possible opposite to the needle and feed, in order to adapt a vibrating tuck-marker for use on different machines, it is absolutely necessary to provide for adjusting the same backward or forward on the machine in such manner that whatever the position of the screw-hole in the bed of the machine, and whatever may be the position of the presser-bar relatively to the point of stitching and feeding, the tuck-marker may be so adjusted as to locate the creasing-points opposite to the needle, which can be done with the slotted bar K, (constructed substantially as herein shown and described,) connecting the upper creasing-arm, G, with the presser-bar S, and which, in conjunction with the slotted clamp D, enables the operator to move the tuck-marker and gage backward or forward as well as lengthwise of the machine. My present construction also admits of adjusting and regulating the pressure of the upper marker on the cloth (whatever may be the relative position of the presser-bar and the screw-hole in bed of machine toward the needle and feed) by means of the slotted bar K, which admits of adjusting the entire apparatus in any direction, so that the same tuck-marker will fit all machines.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. The main plate A, having two lateral arms, one of which bears the creasing-blade J, and the creasing-arm G, pivoted at its rear end to the other arm of plate A, and bearing at its front end the creasing-roller H, in combination with the clamp D, provided with the slot, as shown, adapted to clamp the plate A to the bed-plate of a sewing-machine in such a manner that the said plate can be adjusted longitudinally beneath the clamp, and means for connecting the creaser-arm to the presser-bar, substantially as shown and described.

2. The main plate A, having two lateral arms, one of which bears the creasing-blade J, and the creasing-arm G, pivoted at its rear end to the other arm of plate A, and bearing at its front end the creasing-roller H, in combination with the clamp D, slotted as shown, adapted to clamp the plate A to the bed-plate of a sewing-machine in such a manner that said plate can be longitudinally adjusted beneath the clamp, and the slotted bar K and set-screw M, substantially as set forth.

EDWARD BOSTOCK.

Witnesses:
CHARLES BLONDEL, Jr.,
HENRY G. GABAY.