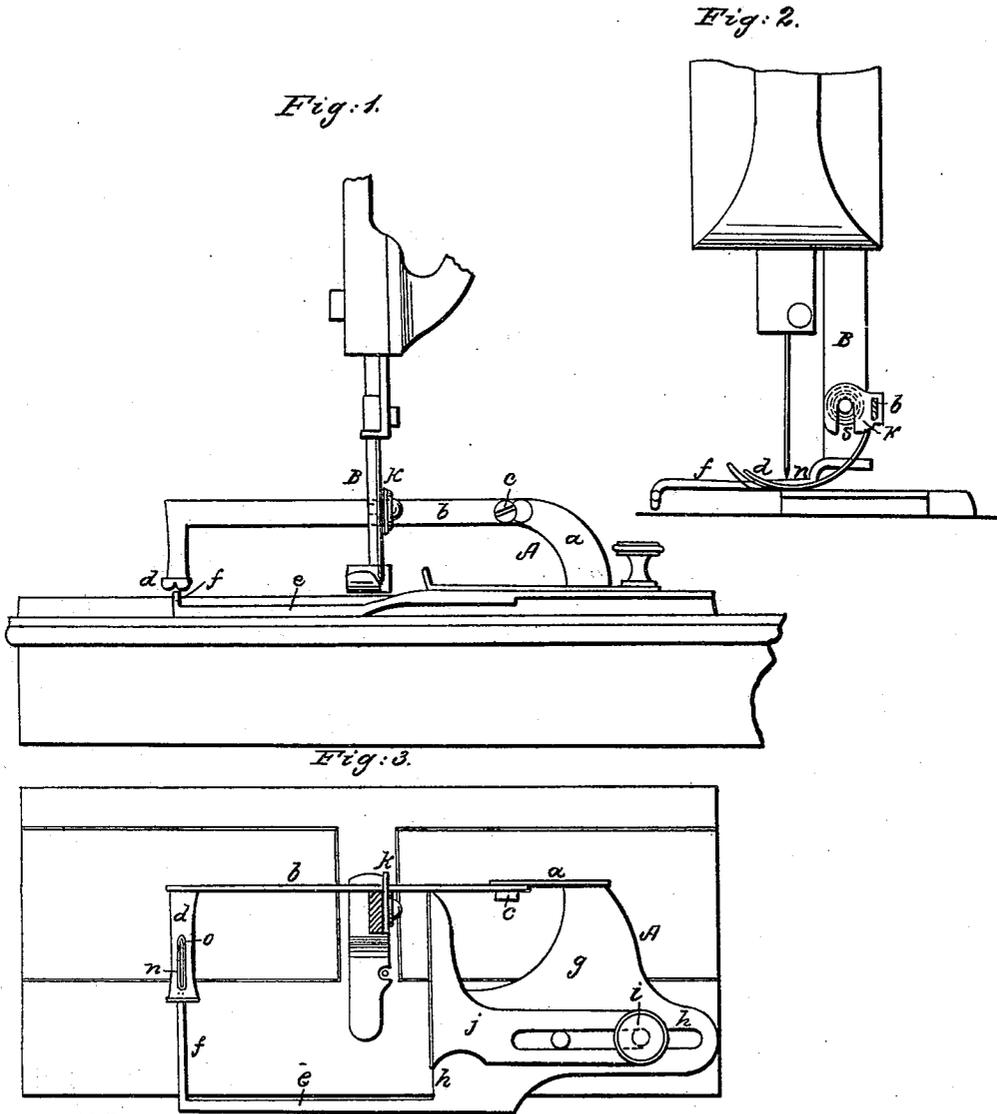


J. BOLTON.

Tuck Creasing Device for Sewing Machines.

No. 46,871.

Patented March 21, 1865.



Witnesses:

Gustave Dietrich
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UNITED STATES PATENT OFFICE

JAMES BOLTON, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TUCK-CREASING DEVICES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 46,871, dated March 21, 1865.

To all whom it may concern:

Be it known that I, JAMES BOLTON, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Marker or Creaser for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a marker constructed according to my invention. Fig. 2 is a transverse sectional view, taken behind or to the right of the presser-bar B, shown in red outline in Fig. 1. Fig. 3 is a plan of the marker.

Similar letters of reference indicate like parts.

This invention consists in a novel mode of constructing and operating markers or creasers to be used on sewing-machines, being composed of only two pieces, hinged together so as to make one instrument, and so attached to a presser-bar having a positive vertical motion as to be operated at every movement of the feeding devices.

The drawings represent the marker in position on the table and attached to the presser-bar of a sewing-machine, part of whose outlines are shown in red.

A is the marker, made up of two pieces, one of which is designated by the letters *b d* and the other by the letters *a, g, e, f,* and *n*. That portion marked *g* is flattened, so as to lie upon the table of the sewing-machine, to which it is secured adjustably by means of screw-threaded holes made in the table, and a slot, *h*, in the flat part *g* of the tucker to receive an adjusting-screw, *i*. The length of the part *g* is such that when the adjusting-screw *i* is fixed in the slot *h*, at the right-hand end thereof, the edge *p* of said flat part *g* will not reach to the needle-slot made in the table, so as to interfere with the operation of sewing. An arm, *e*, extends from the left-hand inner corner of the part *g*, in a direction parallel with the slot *h*, past the place of making the seam, the length of the arm *e* in this example of my invention being about equal to the length of the part *g*. At a point opposite the end of the shoe *d* it is joined to another arm, *f*, which extends at right angles therefrom inward to a point in

line with the place of making the seam, where it is raised to a dull knife-edge, *n*. The arm *f* is intended to lie upon the bed-plate of the sewing-machine, and both it and the arm *e* are of small diameter, so as not to offer any obstruction to the movement of the material to be sewed.

A vertical arm, *a*, rises from the right-hand outer corner of the part *g* and curves upward and forward toward the place where the seam is formed in a direction parallel with the slot *h*. The end of the vertical arm *a* is connected by a pivot with a straight arm, *b*, which extends past the place where the seam is formed to a point opposite to and in line with the arm *f*, where it is joined by a curved shoe, *d*, which extends therefrom at a right angle toward and above the arm *f*.

The shoe *d* is slotted at *o*, where it comes above the raised edge of the arm *f*, and its toe or outer end is turned upward, so that the material to be sewed may readily pass between it and the arm *f*.

The arm *b* carries an adjustable bracket, *K*, by passing through a vertical slot cut therein, as seen in Fig. 2, and in which it is free to slide. The bracket *K* extends at right angles from the arm *b* toward the place of the presser-bar of a sewing-machine, and it is to be adjustably attached to the inside of the presser-bar by means of an open slot, *s*, in said bracket, fitting over the shank of a screw, which takes into it a threaded hole made in said presser-bar.

The bracket *K* can be attached to the presser-bar in many cases by means of the same screw which secures the presser-foot to the bar.

The open slot *s* in the bracket *K* enables me to fix it at any desired height on the presser-bar, according to the lateral adjustment of the marker on the bed-plate for the width of tuck. When the bracket *K* is fixed to the presser-bar the arm *b* of the marker, being carried in said bracket, reciprocates with the presser-bar—that is, when the marker is used on a sewing-machine which has a “reciprocating feed,” so called—the said arm *b* moving freely upon its pivot *c*. The material being sewed lies upon and moves over the arm *f*, and at every advance of the feed the shoe *d* of the marker is raised off the material with the rising of the presser-bar, and afterward borne down by the said bar and pressed upon the material while

the needle is making another stitch, the material being crimped between the slot *o* in the shoe *d* and the raised edge *n* of the arm *f*, thus marking the place for the tuck step by step as the sewing or the perforation of the material proceeds on a line parallel with the seam or perforations by means of the rising and falling of the presser-bar.

The width of the tuck is determined by the adjustment of the slot *h* and set-screw *i*. A gage to guide the edge of the material may be made, if desired, along the edge *p* of the part *g* of the marker; but it will be found most convenient to use an independent gage, *j*, which may be adjusted to the sewing-machine above the part *g* of the marker by the same set-screw *i* which secures the marker to the table. When a narrow tuck is to be made the position of the joint *k* of the arm *b* is moved to the right a suitable distance, and the extent of the reciprocating movement of the shoe *d*—or, in other words, the extent of its vibration—is correspondingly lessened, according to the distance of the shoe from the presser-arm. The movement given to the shoe when it is near the presser-bar, as when it is marking for a narrow tuck, is sufficient for successful operation, because the material which is being sewed is held and advanced smoothly beneath the shoe for a considerable distance to one side of the line of sewing by the joint operation of the feeding devices and the needle; but when the tuck is to be wide the extent of the vibrating movement of the shoe needs to be greater,

because that portion of the material which lies at a considerable distance at one side of the seam has a tendency to drag or lag behind the advance of the seam, unless it is held extended and smooth by the hand of the operator or by some other means. It is therefore necessary that the shoe be raised sufficiently at each movement of the feed to clear the material. This, it will be seen, is effectually accomplished by my invention, the extent of vibration of the shoe being increased and diminished by the adjustment of the jointed arm and the consequent lengthening and shortening of the distance between the shoe and the presser-arm.

I disclaim marking a tuck or line on material being sewed on a sewing-machine by means of the needle-bar, as shown in the patent granted to H. W. Fuller on the 5th day of June, 1860; but,

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The tuck-marker A, for use with a sewing-machine, made and operated substantially as above described.

2. Marking parallel lines for tucks, or for the seaming or perforating of material on a sewing-machine, by means of a marker which is operated by a presser-bar having a positive vertical motion, substantially as above described.

JAMES BOLTON.

Witnesses:

WM. F. MCNAMARA,
M. M. LIVINGSTON.