

No. 698,011.

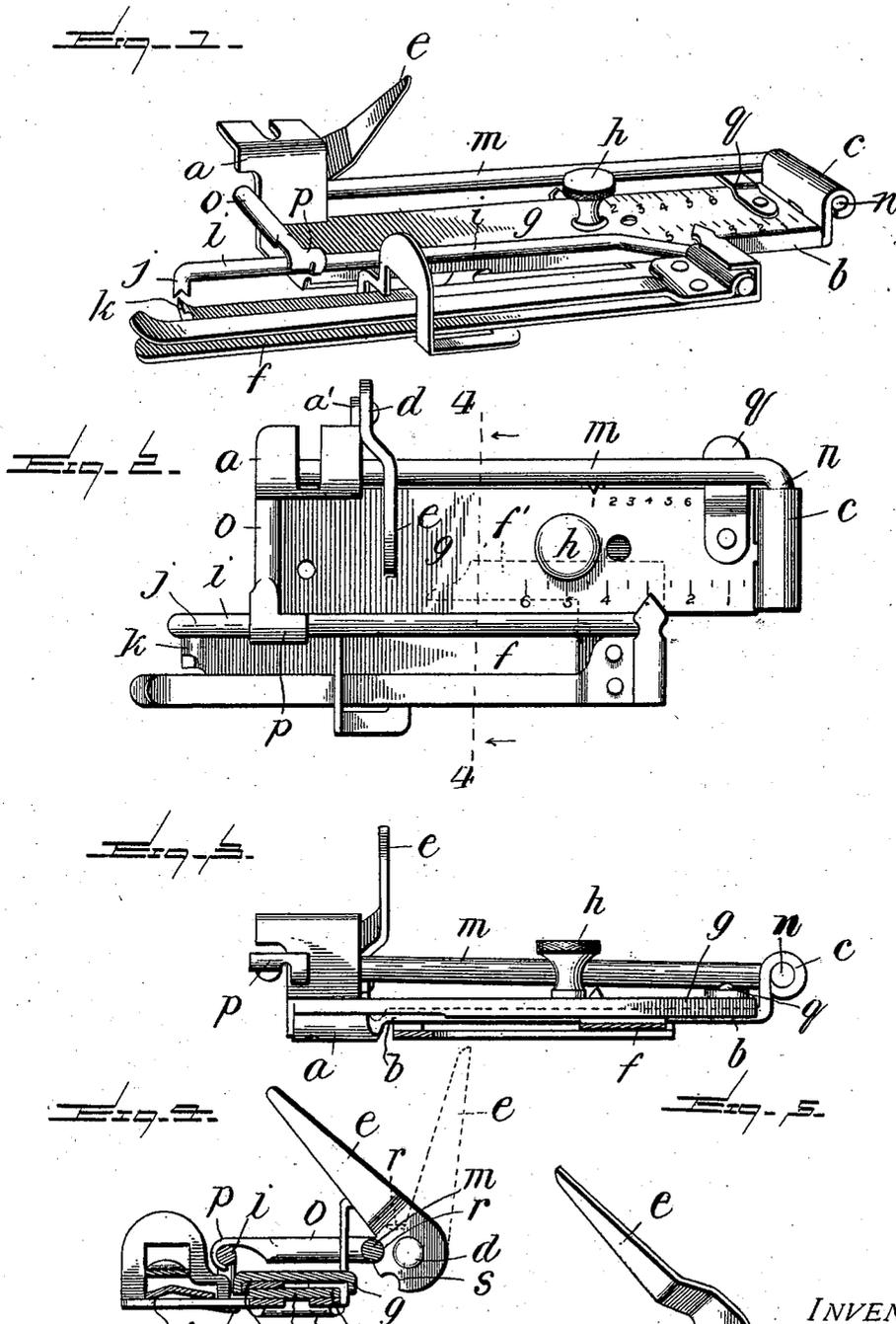
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J. M. GREIST.

TUCK CREASER FOR SEWING MACHINES.

(Application filed June 1, 1901.)

(No Model.)



WITNESSES: f k f' b a b
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UNITED STATES PATENT OFFICE.

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TUCK-CREASER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 698,011, dated April 22, 1902.

Application filed June 1, 1901. Serial No. 62,724. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. GREIST, 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-Creasers for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improved form of thesewing-machine tuck-creaser shown and described in my Patent No. 665,523, dated January 8, 1901, the present invention relating to an improved means whereby the movement of the operating-lever is transmitted to the vibrating creasing arm or lever by a simple construction which provides for a yielding connection between the said operating-lever and the said creasing arm or lever, so that the creasing portion of the latter is yieldingly pressed upon the goods in such a manner as to allow a continued downward movement of the operating-lever after the downward movement of the creasing arm or lever has been arrested by contact with the work. To this end the connecting or power-transmitting device between the operating-lever and the creasing arm or lever consists of a bent wire or bar forming a lever, which is pivoted at its rear end to the base plate or frame of the attachment and which is provided at its forward end with an arm bearing on the creasing arm or lever, said wire or bar being so arranged as to be engaged near its forward end by the operating-lever in such a manner that it will bend or yield torsionally between its pivotal point and its point of engagement with the creasing arm or lever when the downward movement of the said last-named lever is arrested.

In the accompanying drawings, Figure 1 is a perspective view of my improved tuck-creaser. Fig. 2 is a plan view of the same. Fig. 3 is a front edge view of the same with the creasing devices removed. Fig. 4 is a cross-section of the same on line 4 4 of Fig. 2 looking in the direction of the arrows adjacent to said line. Fig. 5 is a detail view of the operating-lever.

Referring to the drawings, *a* denotes a presser-foot adapted for attachment to the presser-bar of a sewing-machine in substi-

tution of an ordinary presser-foot, the said presser-foot *a* being provided with a lateral extension or plate *b*, having an upturned rear end portion which is bent over to form an ear or cylindrical part *c*. The said parts *a*, *b*, and *c* are preferably formed integral and constitute the frame of the attachment. Pivoted on a rivet *d*, attached to a depending lug *a'*, integral with the shank of the presser-foot, is the operating-lever *e*, arranged to be engaged in a well-known manner by a pin or screw on the needle-bar.

The creasing devices are or may be the same as those shown and described in my patent referred to, and, as herein shown, said creasing devices comprise a plate *f*, having a lateral arm or portion *f'* extending between the plate *b* of the frame of the attachment and a cover-plate *g* overlying the said plate *b*, the said cover-plate being held in place by a set-screw *h*, which can be tightened to secure the plate *f* and the creasing devices carried thereby in any desired position of adjustment relative to the frame of the attachment, as in the construction fully shown and described in my aforesaid patent.

Hinged at its rear end to the plate *f* is a creasing arm or lever *i*, having a downturned end *j*, which registers with an upturned creasing-lip *k* on the plate *f*. The creasing arm or lever *i* is connected with the operating-lever *e* through a transmitting-lever consisting of a bar or wire *m*, having right-angular bends *n* and *o* at its rear and front ends, respectively, the bend *n* being mounted in the ear or cylindrical portion *c* of the frame, so as to serve as a pivot for the said lever, and the bend *o* of the lever *m* being provided with a hooked portion *p*, engaging the creasing arm or lever *i*. The lever *m* is engaged near its forward end by the operating-lever *e*, so that as the latter is depressed the downturned end of the creasing arm or lever *i* will be pressed downward upon the work overlying the creasing-lip *k* by the arm *o* of the lever *m*. The transmitting-lever *m*, with its integral arms *n* and *o*, is preferably formed from a piece of steel wire, so that it has a certain amount of resilience and is therefore adapted to yield or spring after the downward movement of the creasing arm or lever has been arrested by contact with the goods, the said

transmitting-lever bending at such times between its pivotal point *n* and its bearing portion or hook *p*, resting in the creasing arm or lever. In other words, the said transmitting-lever is adapted to yield or bend torsionally after the downward movement of the creasing arm or lever has been arrested and while the operating-lever continues to move downward under the action of the pin or projection on the needle-bar of the sewing-machine.

Attached to the cover-plate *g* is a spring *q*, which bears against the lower surface of the transmitting-lever *m* near its pivotal point, and thus serves to move the said lever upward after it has been depressed and to normally maintain it in a raised position, the upward movement of said lever, due to the stress of said spring, being limited by a suitable lug or projection on the frame or presser-foot portion of the attachment.

The operating arm or lever *e* is provided with two notches *r* and *s*, either of which is adapted to be brought into engagement with the transmitting-lever *m*, the notch *r* engaging said lever *m* when the lever *e* is in normal operating position, as shown in full lines in Fig. 4; but when it is desired to throw the attachment out of action the said lever *e* will be moved upward to the position shown in dotted lines in Fig. 4, thus bringing the notch *s* into engagement with the lever *m*, which will then serve to hold the operating-lever *e* in the operative position indicated by the said dotted lines. In bringing either of the notches *r* *s* of the lever *e* into register or engagement with the lever *m* the resilience of said lever and its lifting-spring *q* will serve to hold said lever *e* in either the operative or inoperative position in which it may be placed.

Having thus described my invention, I

claim and desire to secure by Letters Patent—

1. In a sewing-machine tuck-creaser, the combination with means for attaching the tuck-creaser to a sewing-machine, of creasing devices comprising a vibrating creasing arm or lever, an operating-lever, a transmitting-lever consisting of a rod or wire arranged to be engaged by said operating-lever and having right-angular bends at its opposite ends one of which serves to pivot said lever and the other of which engages the said creasing arm or lever, and a spring, independent of said transmitting-lever, for lifting the latter after it has been depressed, said transmitting-lever being engaged between its ends by the said operating-lever.

2. In a sewing-machine tuck-creaser, the combination with the frame thereof comprising the presser-foot *a* having a laterally-extending arm or plate *b* provided at its end with an ear *c*, of an operating-lever *e* pivoted to a part of the shank of said presser-foot, creasing devices comprising a creasing arm or lever *i*, extending lengthwise the attachment, and a cooperating lip or part, a transmitting-lever *m* actuated by said lever *e* and having at its rear end a right-angular bend or arm *n* pivotally mounted in the said ear *c* and having at its forward end a right-angular bend or arm *o* overlying the said creasing arm or lever *i*, and a spring *q* for lifting the transmitting-lever after it has been depressed.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. GREIST.

Witnesses:

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