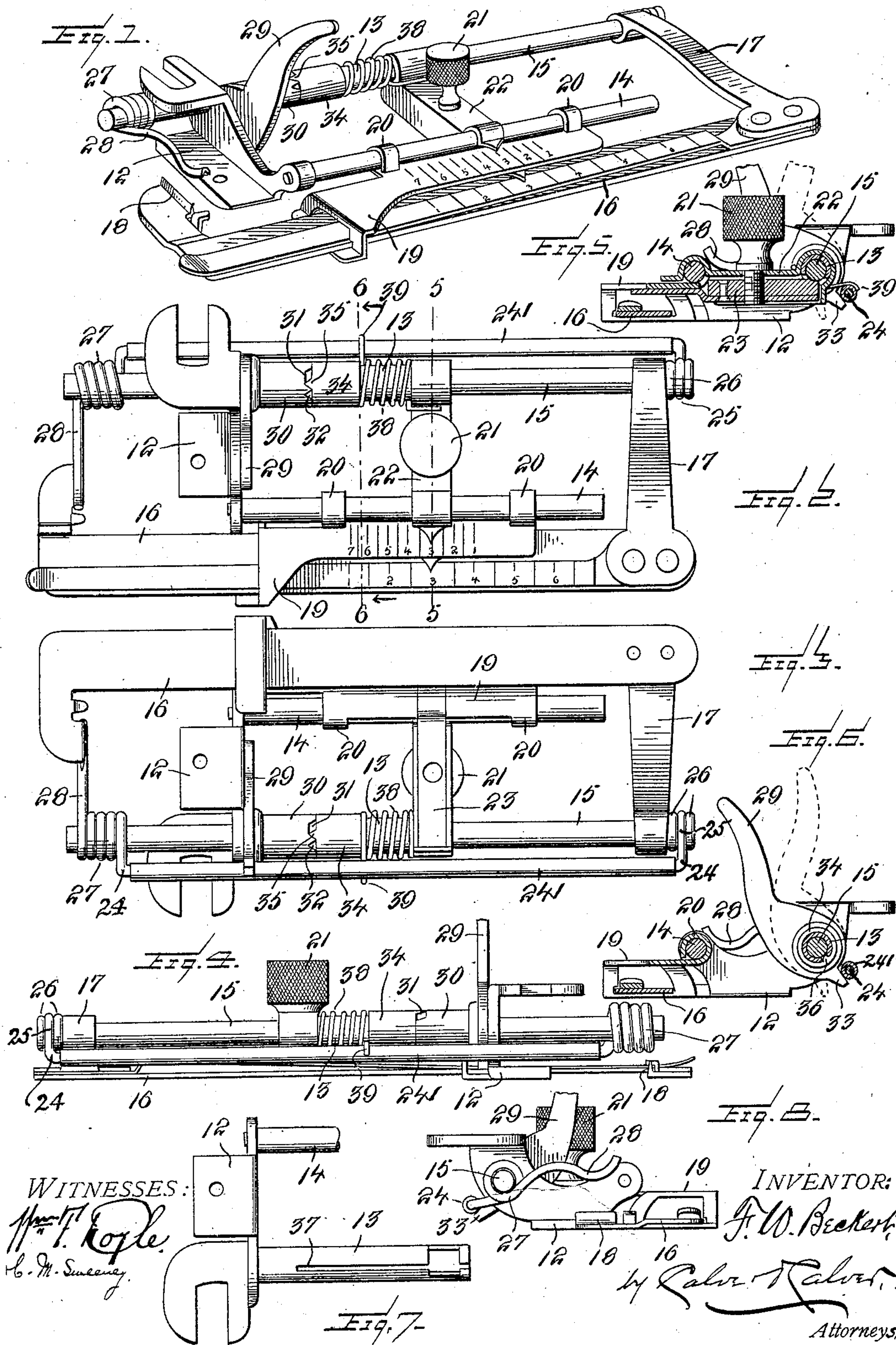


F. W. BECKERT.
TUCK CREASER FOR SEWING MACHINES.
APPLICATION FILED NOV. 18, 1908.

933,819.

Patented Sept. 14, 1909.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FREDERICK W. BECKERT, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE GREIST MANUFACTURING COMPANY, A CORPORATION OF CONNECTICUT.

TUCK-CREASER FOR SEWING-MACHINES.

933,819.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed November 18, 1908. Serial No. 463,218.

To all whom it may concern:

Be it known that I, FREDERICK W. BECKERT, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented or discovered 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 certain improvements in the tuck marking or tuck creasing attachment for sewing machines shown and described in the Johnston patent No. 665,441, granted January 8, 1901; and the invention has for its object to provide a construction which may be manufactured more cheaply than the construction shown and described in said patent, as also to provide convenient means whereby the creaser may be thrown out of operation without removing the same from the sewing machine.

In the accompanying drawings Figure 1 is a perspective view of the improved creasing attachment. Figs. 2 and 3 are top and bottom views, respectively, and Fig 4 a rear side view of the same. Fig. 5 is a cross section on line 5—5, Fig. 2, and Fig. 6 is a cross section on line 6—6, Fig. 2. Fig. 7 is a detail bottom view of the presser foot and parts attached thereto. Fig. 8 is an end view looking from the left, Figs. 1 and 2.

Referring to the drawings, 12 denotes the presser-foot portion of the attachment, and which is adapted to be secured to the presser-bar of a sewing machine in substitution of an ordinary presser-foot, said foot 12 having rigidly attached to its rear portion a laterally extending sleeve 13 and to its front portion a laterally extending rod 14.

The laterally adjustable creasing frame comprises a rod 15 fitted for sliding movement in the sleeve 13, a bar or plate 16 extending parallel to said rod and rigidly connected therewith by a transverse arm 17 fixed to said rod and to which said plate or bar 16 is rigidly attached; the said plate or bar carrying at its forward end the usual creasing lip 18 forming the lower creasing

element. The rod 14 supports the laterally adjustable guide 19 which is provided with ears or loops 20 encircling said rod, and the said creasing frame and guide are held in any desired position of adjustment by means of a set screw 21 passing through a transverse cap plate 22, and tapped in a cross bar 23 which, when tightened by said screw, clamps the said creasing frame and guide in any desired position of adjustment.

The construction of the parts thus far described are the same as corresponding parts of the creaser of the Johnston patent above referred to, and the adjustable parts are fixedly secured in place by the said set screw in the manner fully shown and described in said patent.

The present improved construction comprises a vibrating rod 24 provided at its rear end with an eye 25 encircling the rod 15 between two small collars 26 permanently attached to said rod 15, the said vibrating rod 24 consisting of a piece of wire which is formed into a coil 27 comprising a plurality of convolutions encircling the forward end of the rod 15, the wire forming the said coil being continued into the vibrating creasing arm or upper creasing element 28 extending over the creasing lip 18 and grooved on its under side near its end for coöperation with said lip 18 in the creasing operation. This construction provides a yielding or elastic creasing arm in that the rear portion thereof is a continuation of the spring coil 27, and the said coil serves as one of the pivotal mountings of the vibrating rod 24 on the rod 15; the eye 25 at the rear end of said vibrating rod serving as its other pivotal mounting on the said rod 15. The rod 24 is preferably provided with an encircling sleeve 241.

The operating lever 29 is provided with a laterally extending sleeve 30 rigidly attached to said lever and encircling the sleeve 13, the said sleeve 30 being provided at its end farthest from said lever with one or more wide notches 31 and one or more V-shaped notches 32. The said operating lever is also provided with a toe or projection 33 extend-

ing beneath the vibrating rod 24 so as to lift said rod when the operating lever is depressed by a projection on the needle-bar of the machine, and thereby force the creasing arm 28 yieldingly downward on the creasing lip 18. Also encircling the sleeve 13 is a sliding sleeve 34 provided with one or more pointed fingers or projections 35 adapted to fit tightly in the V-shaped notches 32 in the end of the sleeve 30 when said notch or notches are brought into register with the said pointed finger or fingers.

The sliding sleeve 34 is provided with a projection or spline 36 fitting in a longitudinal slot 37 in the sleeve 13, so that while the said sleeve 34 is adapted for sliding endwise movement on the sleeve 13 it is prevented from rocking or turning thereon by the engagement of said projection or spline with the said slot. The sleeve 34 is yieldingly forced toward the sleeve 30 by a coil spring 38 encircling the sleeve 13, one end of the said coil spring having an extension 39 engaging the sleeve 241 and acting on the vibrating rod 24, the said spring thus having a torsional action tending to force the said rod downward against the lifting action of the toe or projection 33 on the operating lever 29, the said spring, in its torsional action, thus serving to lift the creasing arm 28.

When the operating lever is in the operative position shown in Figs. 1 and 2, and in full lines in Figs. 5 and 6, the pointed finger or fingers 35 on the end of the sleeve 34 extend into the wide notches 31 in the end of the sleeve 30 on the operating lever, said wide notches thus permitting rocking or oscillating movements of said sleeve 30, with the operating lever, relative to the non-rocking or non-oscillating sleeve 34; but when it is desired to remove the said operating lever from the range of the operating screw or projection on the needle-bar of the sewing machine the said operating lever may be manually lifted or thrown up to the position indicated in dotted lines in Figs. 5 and 6, and when in such position the pointed finger or fingers 35 on the sliding sleeve 34 will be forced into the V-shaped notch or notches 32 in the end of the sleeve 30 by the stress of the coil spring 38, and in which V-shaped notch or notches said finger or fingers tightly fit, to hold the said operating lever in an inoperative position; and thus the creasing attachment may be conveniently thrown out of operation without removing it from the sewing machine.

Having thus described my invention I claim and desire to secure by Letters Patent:

1. In a sewing machine tuck-creaser, the combination with a supporting presser-foot part and a creasing frame comprising a

lower creasing element and a rod, as 15, 65 mounted on said presser-foot part, of a vibrating rod pivotally mounted on said first-named rod, one of said pivotal mountings consisting of a coil formed as a continuation of said vibrating rod and comprising 70 a plurality of convolutions, a yielding or elastic creasing arm formed as a continuation of said coil, an operating lever for lifting said vibrating rod to depress the said creasing arm, and a spring acting in opposition to said lever to lift the said creasing arm. 75

2. In a sewing machine tuck-creaser, the combination with a creasing frame comprising a lower creasing element, of a vibrating rod pivotally mounted on said frame, one of said pivotal mountings consisting of a coil formed as a continuation of said rod and comprising a plurality of convolutions, a yielding or elastic creasing arm formed as 85 a continuation of said coil, an operating lever for lifting said rod to depress the said creasing arm, a spring acting in opposition to said lever to lift the said creasing arm, said operating lever being provided with 90 a laterally extending sleeve rigid with said lever, and means, cooperating with said sleeve, for holding the said lever in an inoperative lifted position, when desired.

3. In a sewing machine tuck-creaser, the combination with a creasing frame comprising a lower creasing element, of a vibrating rod pivotally mounted on said frame, one of said pivotal mountings consisting of a coil formed as a continuation of said rod, a 100 yielding or elastic creasing arm formed as a continuation of said coil, an operating lever for lifting said rod to depress the said creasing arm, a spring acting in opposition to said lever to lift the said creasing arm, said 105 operating lever being provided with a laterally extending sleeve having one or more wide and one or more V-shaped notches at its end, a sliding sleeve having one or more pointed fingers or projections for engaging 110 said V-shaped notch or notches, a spring for yieldingly forcing said sliding sleeve toward the said first-named sleeve, and means for preventing axial or turning movement of the said sliding sleeve. 115

4. In a sewing machine tuck-creaser, the combination with upper and lower creasing elements one of which is mounted to vibrate, of an operating lever for said vibrating element and which lever is provided with a 120 laterally extending sleeve rigid with said lever, and means, cooperating with said sleeve, for holding the said lever in an inoperative lifted position, when desired.

5. In a sewing machine tuck-creaser, the combination with upper and lower creasing elements one of which is mounted to vibrate, of an operating lever for said vibrating ele- 125

ment and which lever is provided with a
laterally extending sleeve having one or
more wide and one or more V-shaped notches
at its end, a sliding sleeve having one or
5 more pointed fingers or projections for en-
gaging said V-shaped notch or notches, a
spring for yieldingly forcing said sliding
sleeve toward the said first-named sleeve,

and means for preventing axial or turning
movement of the said sliding sleeve. 10

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

FREDERICK W. BECKERT.

Witnesses:

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