No. 665,519. Patented Jan. 8, 1901.

J. M. GREIST.

RUFFLING ATTACHMENT FOR SEWING MACHINES.

(Application filed Apr. 26, 1900.)

(Model.)

Fig. 1.

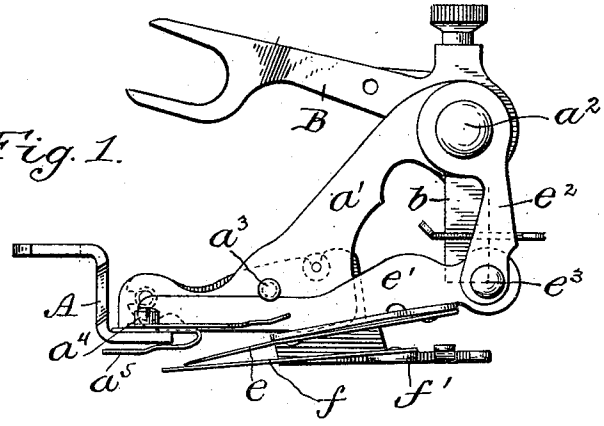


Fig. 2.

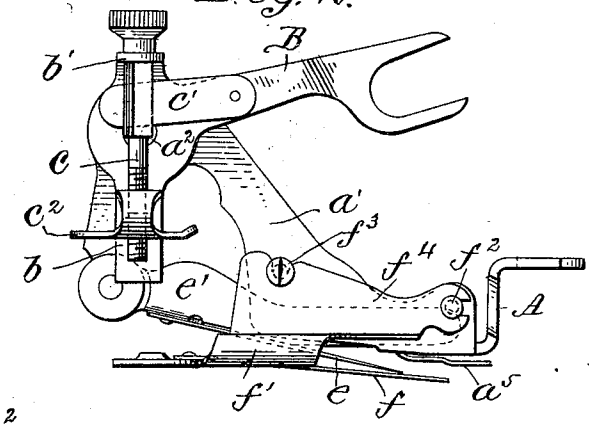


Fig. 4.

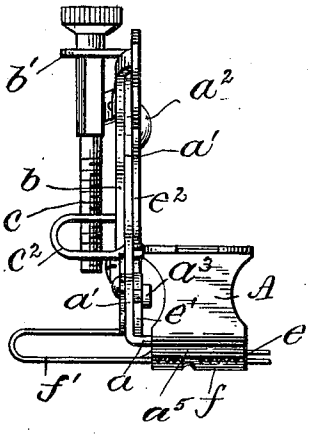


Fig. 3.

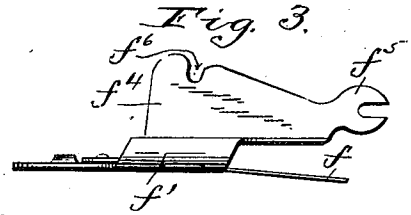
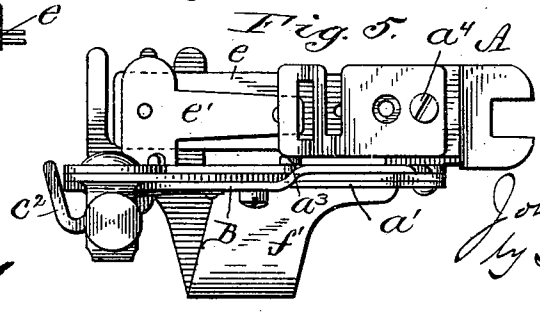


Fig. 6.

Fig. 5.



Witnesses:
C. M. Sweeney
H. C. Dickinson

Inventor:
John M. Greist,
by Henry Calvert,
Attorney.

UNITED STATES PATENT OFFICE.

JOHN M. GREIST, OF NEW HAVEN, CONNECTICUT.

RUFFLING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 665,519, dated January 8, 1901.

Application filed April 26, 1900. Serial No. 14,408. (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 Sewing-Machine Rufflers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of ruffling attachments for sewing-machines in which the ruffling-blade is operated from the needle-bar of the machine through the medium of a bell-crank operating-lever on the attachment; and the invention has for its object to provide an attachment of the class referred to which may be constructed at comparatively little cost, which may be readily adjusted to vary the stroke of the ruffling-blade, and which, while efficient in operation, will be durable, so as to withstand wear.

In the accompanying drawings, Figures 1 and 2 are opposite side views of my improved ruffler, and Fig. 3 is a view of the separator-plate and its holder detached. Fig. 4 is a rear end view of the attachment, and Fig. 5 is a plan view thereof. Fig. 6 is a detail view of the false foot.

A denotes the foot portion of the attachment, adapted to be secured to the presser-bar of a sewing-machine, said foot portion A having a lateral extension a, which is turned up to form a standard a', these parts constituting the frame of the attachment.

B is the operating-lever, pivotally mounted on the standard a' by means of the pivot-pin a^2, said lever B being forked for engagement with a screw or projection on the needle-bar of the machine and having a pendulous arm b. The lever B is provided with a small ear b', in which is fixed, so as to be held from longitudinal movement, a screw c, having a milled head by which it may be readily turned and having a polygonal shank portion which is pressed against by a light plate-spring c' to retain the said screw in any desired position of adjustment by frictional contact of said spring with the square or polygonal portion of the said screw. The threaded portion of the screw c is tapped in a fork c^2, which is steadied on the pendulous arm b of the lever B, so that by turning the said screw in one direction or the other the said fork may be raised or lowered to bring it nearer to or farther from the pivot-pin a^2 of the operating bell-crank lever.

The ruffling-blade e is attached to a carrier e', one portion of which is arranged to slide between a headed rivet a^3 on the standard a' and the lateral extension a of the foot A, the said blade-carrier being pivotally attached at e' to the lower ends of a link e^2, supported at its upper end on the pivot-pin a^2, the said link being embraced by the horizontally-extending arms of the vertically-adjustable fork c^2, so that as the lever B is operated the arms of the said fork will come in contact with the opposite sides of the said link to move the blade-carrier and ruffling-blade to and fro. The link e^2 is formed somewhat tapering, as shown in Fig. 1, being narrower toward the upper portion thereof, which is to be engaged by the said fork, so as to provide for variations in the throw of the ruffler-blade at both ends of the stroke.

The foot portion A of the attachment is provided with a sole or false foot formed of thin sheet metal, so that its portion bearing upon the work may be readily stamped into proper shape, the said false foot in the present instance consisting of a folded piece of thin sheet metal attached to the said foot A, as by the screw a^4, and overlapping both the upper and under sides or faces of the said foot A, said folded false foot being disposed with its fold or bend toward the ruffling-blade. This construction and arrangement of the false foot prevents any possible accidental contact between the ruffling-blade and the end portion of the foot in such a manner as to endanger breakage of the blade, as has sometimes occurred with previous constructions in which the false foot was secured to the heel of the presser-foot and projected forward therefrom, this difficulty being entirely avoided by the present construction of the folded false foot secured to the upper side of the rigid foot portion of the attachment and so disposed that it extends rearwardly from its folded portion, so as to present no obstruction to the free passage thereunder of the ruffling-blade.

The separator-plate f is attached to a holder f', which is secured to the frame or standard

a' of the attachment by means of a headed stud or rivet f^2 to be embraced by the notched or open-slotted end portion f^5 of the holder, and a screw f^3, engaged by a notch or open slot f^6 in the upwardly-projecting portion f^4 of the holder. To remove the separator-plate when shirring is to be done, it is only necessary to loosen the screw f^3, when the separator-holder can be turned down to disengage the notch f^6 from the said screw f^3, and said holder may then be withdrawn from engagement with the rivet f^2 in removing the separator-plate and its holder from the attachment.

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

1. In a sewing-machine ruffler, the combination with the frame thereof provided with a suitable standard, of an operating bell-crank lever pivoted to said standard and having a pendulous arm, a ruffling-blade, a carrier for said blade, a pivoted link the lower end of which is jointed to said carrier, and a vertically-adjustable fork carried by the pendulous arm of said lever and having horizontally-extending arms arranged to loosely embrace the said link.

2. In a sewing-machine ruffler, the combination with the frame thereof provided with a suitable standard, of an operating bell-crank lever pivoted to said standard, and having a pendulous arm, a ruffling-blade, a carrier for said blade, a pivoted link the lower end of which is jointed to said carrier, said link being somewhat tapering with its narrower part upward, and a vertically-adjustable fork carried by the pendulous arm of said lever and having horizontally-extending arms arranged to loosely embrace the said link.

3. The combination in a sewing-machine ruffling attachment provided with a foot portion adapted to be secured to the presser-bar of a sewing-machine, of a reciprocating ruffling-blade, means for operating said blade, and a false foot secured to the foot portion of said attachment and consisting of a folded piece of thin sheet metal overlapping both the upper and under sides of said foot portion and disposed so as to have its folded portion or bend toward the said ruffler-blade, whereby the latter can pass freely beneath the said false-foot portion of said attachment without danger of positive contact therewith.

4. In a sewing-machine ruffling attachment, the combination with the separator-plate f, of a holder to which said plate is attached and one portion of which is provided with two open slots or notches, an attachment-frame provided with a headed rivet or stud f^2, and a headed screw f^3 for detachably securing the said separator-carrier to the frame of the attachment.

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

JOHN M. GREIST.

Witnesses:
W. J. SMITH,
L. A. BEECHER.