

J. M. GREIST.
SEWING MACHINE RUFFLER.
APPLICATION FILED JAN. 26, 1905.

Fig. 1.

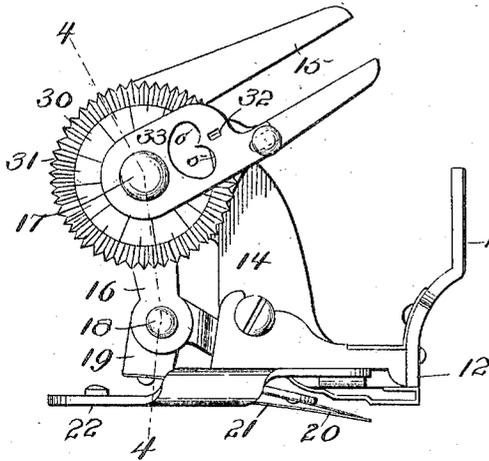


Fig. 3.

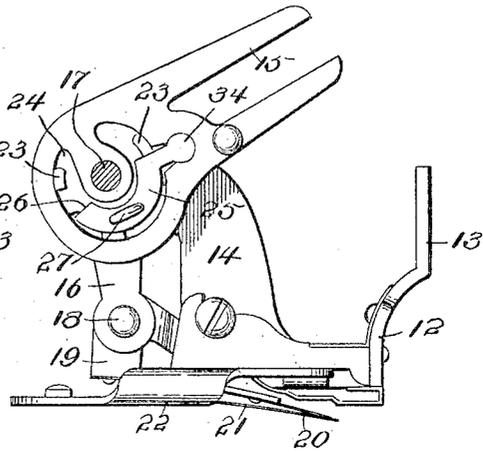


Fig. 2.

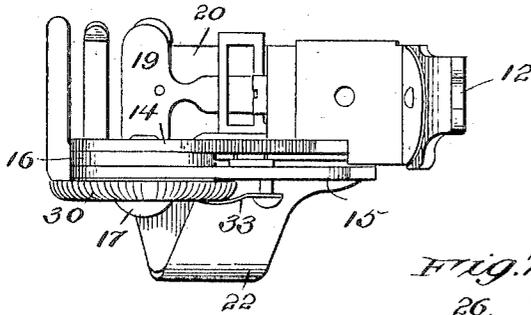


Fig. 4.

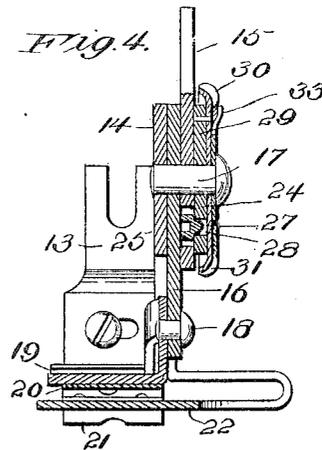


Fig. 7.

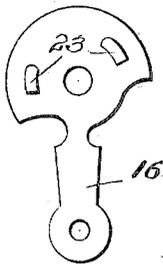


Fig. 5.

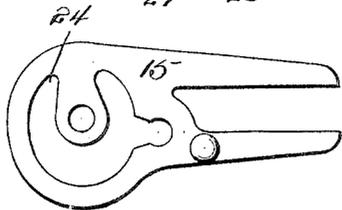
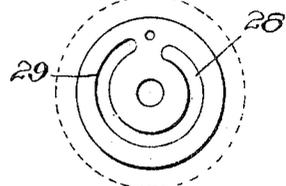


Fig. 6.

Fig. 8.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN M. GREIST, OF NEW HAVEN, CONNECTICUT.

SEWING-MACHINE RUFFLER.

No. 802,637.

Specification of Letters Patent.

Patented Oct. 24, 1905.

Application filed January 26, 1905. Serial No. 242,715.

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 or discovered certain new and useful Improvements in Sewing-Machine Rufflers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of sewing-machine rufflers which are operated from the needle-bars of the machines; and the invention has for its object to provide a ruffler of the class referred to in which the regulating mechanism, by which the throw of the ruffling-blade may be varied, will be simple in construction and efficient in operation. To this end the secondary lever, which operates the ruffling-blade and which is to be actuated from the main or needle-bar lever, is provided with suitable stops or projections to be engaged by stops on a regulating-dog moving with the needle-bar lever, but capable of adjustment to vary the amount of lost motion between said needle-bar lever and secondary lever through the medium of an eccentric device movable with the said needle-bar lever when the ruffler is in operation, but capable of being turned or adjusted independently of said lever.

In the accompanying drawings, Figures 1 and 2 are side and plan views, respectively, of the improved ruffler. Fig. 3 is a side view of the same with the adjusting-washer and its attached cap or disk removed. Fig. 4 is a section on line 4 4, Fig. 1. Figs. 5 and 6 are detail views of the secondary and main levers, respectively. Fig. 7 is a detail view of the regulating-dog, and Fig. 8 is a detail view of the adjusting-washer or disk to show its eccentric slot.

Referring to the drawings, the frame of the attachment comprises a presser-foot 12, its shank 13, and the standard 14, which parts are preferably integral; but they may be rigidly secured together. The main or needle-bar lever 15 and the secondary or ruffling-blade operating-lever 16 are pivoted on a stud 17, supported by the standard 14, said lever 16 being connected by a pivot 18 with the carrier 19, to which the ruffling-blade 20 is secured, and said ruffling-blade cooperating in the usual manner with a separator-plate 21, secured to a holder 22, detachably connected to the frame of the ruffler.

The hub portion of the secondary lever 16

is provided with stops or projections 23, and the hub portion of the main or needle-bar lever 15 is provided with a circular slot or recess 24, the upper part of which loosely receives the said stops or projections, and in the lower part of which is arranged a pivoted dog 25, having shoulders 26, which cooperate with the said stops or projections 23, and which dog is provided with a lug or projection 27, entering an eccentric recess 28 in a washer 29, attached to or integral with an adjustable disk 30, having a serrated peripheral portion 31 to be engaged by a small lug or projection 32 on a spring-plate 33, connected with the main or needle-bar lever 15 so as to move therewith, said lug or projection 32 serving to hold the washer 29 and disk 30 in any position relative to the said lever 15 to which they may be adjusted. The pivoted dog 25, arranged in the recess 24 of the lever 15, is entirely out of sight, being inclosed or housed in said recess between the lever 16 and the washer 29, the construction being simple and compact and contributing to a neat and attractive appearance of the ruffler.

The lost motion between the main or needle-bar lever 15 and the secondary lever 16 may be varied simply by turning the disk 30 and the washer connected therewith, so that the eccentric slot or recess of the said washer 29 will move the regulating-dog in or out, and thus vary its working position, as may be desired, to bring the shoulders or stop portions 26 thereof nearer to or farther from the stops or lugs 23 on the said secondary lever 16, and as the said regulating-dog swings from its pivotal portion 31 in being thus adjusted both of said stop portions or shoulders 26 will be simultaneously adjusted, although one will have a greater adjusting movement than the other, so that the throw of the ruffling-blade will be regulated at both ends of its stroke; but the adjustment for the forward throw will be less than the adjustment for the backward throw as measured from the central or middle part of the movement of said blade.

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

1. In a sewing-machine ruffler, the combination with a ruffling-blade and main and secondary levers by which said blade is operated, of fixed stops on one of said levers and an adjustable inclosed regulating-dog on the other of said levers affording stops cooperating with the first-named stops, and a rotatable device provided with an eccentric slot for

changing the working position of the said regulating-dog to vary the throw of the said ruffling-blade.

- 5 2. In a sewing-machine ruffler, the combination with the ruffling-blade and its carrier, of the main or needle-bar lever 15 having the circular recess 24, the pivoted dog 25 located in said recess and having a lug or projection 27, the secondary lever 16 having the
10 lugs or stops 23 projecting into said recess, the adjustable washer 29 having an eccentric recess into which said lug or projection extends, and means for holding said washer in any desired position of adjustment.
- 15 3. In a sewing-machine ruffler, the combination with the ruffling-blade and its carrier,

of the main or needle-bar lever 15 having the circular recess 24, the pivoted dog 25 located in said recess and having a lug or projection 27, the secondary lever 16 having the lugs or stops 23 projecting into said recess, the adjustable washer 29 having an eccentric recess into which said lug or projection 27 extends, the serrated disk 30 to which said washer is attached, and the spring-plate 33 having a
20 lug or projection 32 to engage said disk.

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

JOHN M. GREIST.

Witnesses:

HENRY CALVER,
GEO. W. REA.