

UNITED STATES PATENT OFFICE.

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RUFFLING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 665,520, 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.

This 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 lever pivoted to a standard of the ruffler; and the invention has for its object to provide an attachment of the class referred to which will be simple in construction as well as convenient and efficient in operation and in which simple and convenient means for adjusting and indicating the throw of the ruffler-blade are provided.

In the accompanying drawings, Figures 1 and 2 are opposite side views of my improved ruffler. Fig. 3 is a plan view thereof, and Fig. 4 a rear end view of the same. Figs. 5 and 6 are detail opposite side views of the operating-lever and of the adjusting devices carried thereby. Figs. 7 and 8 are respectively a detail under side view of the milled head of the adjusting-screw, to show the notched spring-washer carried thereby, and a side view of the screw and its head and washer. Figs. 9 and 10 illustrate in detail the laterally-adjustable strip-guide.

A denotes the foot portion of the attachment, adapted to be secured to the presser-bar of a sewing-machine, said foot portion 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, fulcrumed on the standard a' by means of the pivot-pin a^2 and forked for engagement with a screw or projection on the needle-bar of the machine. The lever B is provided with notches or open-ended slots b b' b^2 .

C is a vertically-movable slide mounted on the lever B and provided with an ear c , which enters the slot b , and with a pin or projection c' , which enters the slot b' . Tapped in the ear c is a screw c^3 , having a milled head or disk c^2 , by which it may be conveniently

turned, and which head or disk extends into the slot b^2 to prevent longitudinal movement of the said screw, so as to cause the slide C to be moved up or down by the said screw as the latter is turned in one direction or the other by means of its milled head c^2 .

The ruffling-blade d is attached to a slide or carrier d' , one portion of which is arranged to slide between the head of a rivet a^3 on the standard a' and the lateral extension a of the foot A, the said blade-carrier being pivotally attached at d^2 to a lever e , fulcrumed on the pivot-pin a^2 , said lever e having an opening e' , in which the vertically-adjustable pin c' loosely works and against the walls of which opening said pin abuts to move the lever e in one direction or the other when the lever B is in operation for the purpose of reciprocating the ruffling-blade carrier and blade.

Pivotally mounted on the pivot-pin a^2 is a pointer or index f' , slotted for the reception of a small stud c^4 on the slide C, and having on its end opposite said stud an indicating portion which moves adjacent to a graduated scale b^4 on the lever B. Thus when the slide C is raised or lowered by turning the milled head c^2 the position of the said index will be varied to indicate on the graduated scale b^4 the size of the ruffle to be made when the said slide is in a certain position of adjustment, the pointer of said index moving reversely to the said slide. The milled head c^2 is also provided with an index which operates in connection with that portion of the lever B lying above the said milled head and which serves as a pointer.

Mounted on the blade carrier or slide d' is a laterally-adjustable strip-guide f , consisting of a small piece of sheet metal folded upon itself and provided with a strip-guiding slot, the folded portion of said strip-guide forming a spring-clip which while serving to hold the said guide in position on the blade-carrier permits of its lateral adjustment, owing to the fact that said guide is indented into a slot or recess in said carrier and is merely held in place by the frictional hold of said spring-clip. A second strip-guide g of ordinary construction is attached to the top of the foot A.

The milled head c^2 is provided on its under side with an attached thin spring-washer c^5 ,

which is preferably provided with slight indentations or notches adapted to engage the lower wall of the slot b^2 in the lever B, and thus retain the said milled head and the screw c^3 in any desired position of adjustment. When it is desired to vary the throw of the ruffling-blade, the attendant merely turns the milled head in one direction or the other, thereby raising or lowering the pin c' on the slide C, and which pin forms an abutting connection between the lever B and the lever e . By raising or lowering the said pin c' its position relative to the fulcra of the levers B and e is varied so that greater or less movement is imparted to the lever e from the lever B, and the throw of the ruffling-blade connected with the said lever e is thereby varied, as will readily be understood.

The separator-plate h is removably attached to the holder H, which is removably secured to the standard or framework of the attachment by means of notches or slots, with which the said holder is provided and which engage a screw a^5 and a rivet a^6 on the said frame of the attachment. This feature is, however, not herein claimed.

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 graduated scale, of an operating-lever pivoted to said standard, an adjustable slide carried by said lever and provided with a pin or projection and with a stud, a second lever also pivoted to said standard and operated from the first-named lever through the medium of the said pin or projection, a sliding ruffling-blade carrier connected with said second lever, and a slotted index or pointer pivotally mounted at the center of movement of said lever and adjustable, to indicate the throw of the ruffling-blade, by means of the said stud on said slide.

2. In a sewing-machine ruffler, the combination with the frame thereof, of the operating-lever B pivoted to said frame and provided with the slots b, b', b^2 , of the slide C having the ear c and the pin or projection c' ,

the screw c^3 tapped in said ear c and provided with the disk or head c^2 entering the said slot b^2 in said lever, the lever e provided with an opening in which said pin or projection c' loosely works, and the sliding ruffling-blade carrier operated by said lever e .

3. In a sewing-machine ruffler, the combination with the frame thereof, of the operating-lever B pivoted to said frame and provided with the slots b, b', b^2 , of the slide C having the ear c and the pin or projection c' , the screw c^3 tapped in said ear c and provided with the disk or head c^2 entering the said slot b^2 in said lever, a spring-washer movable with said screw and serving in connection with a portion of said lever B to retain said screw in any desired position of adjustment, the lever e provided with an opening in which said pin or projection c' loosely works, and the sliding ruffling-blade carrier operated by said lever e .

4. In a sewing-machine ruffler, the combination with the frame thereof, of the operating-lever B pivoted to said frame and provided with the slots b, b', b^2 , of the slide C having the ear c and the pin or projection c' , the screw c^3 tapped in said ear c and provided with the disk or head c^2 entering the said slot b^2 in said lever, said disk or head having an indicating-scale on its upper surface, the lever e provided with an opening in which said pin or projection c' loosely works, and the sliding ruffling-blade carrier operated by said lever e .

5. In a sewing-machine ruffler, the combination with the ruffling-blade carrier and its operating mechanism, of a strip-guide attached to said carrier and consisting of a thin piece of sheet metal folded upon itself to form a spring-clip one portion of which is indented into a slot in said carrier so as to permit said strip-guide to be adjusted laterally on the carrier.

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

JOHN M. GREIST.

Witnesses:

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