

A. M. LESLIE.

Ruffing Attachment for Sewing Machines.

No. 100,161.

Patented Feb. 22, 1870.

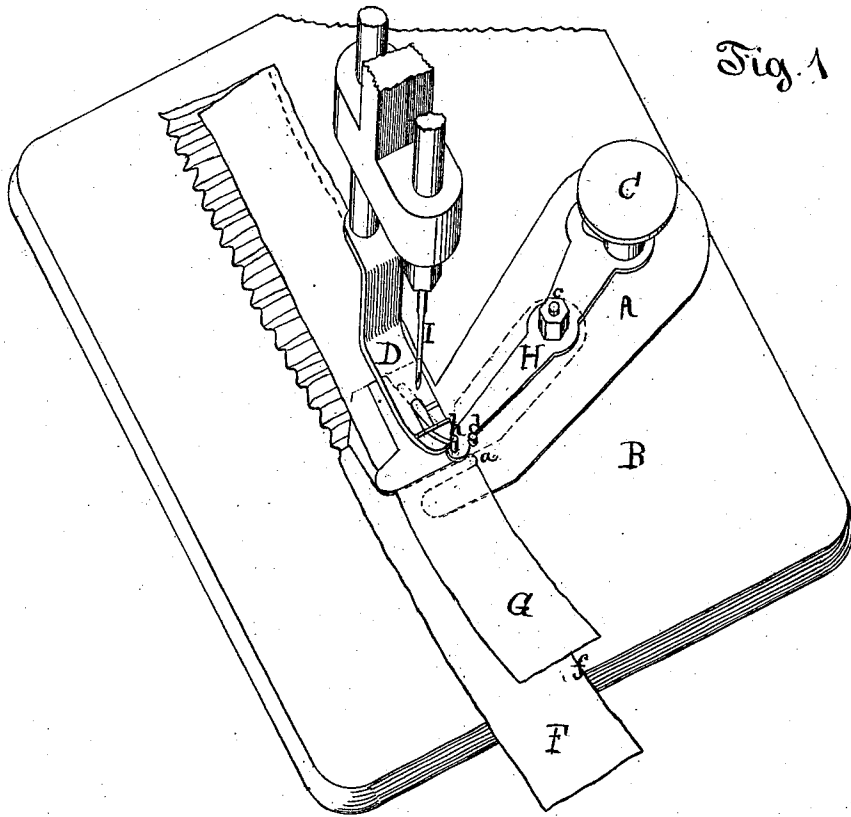
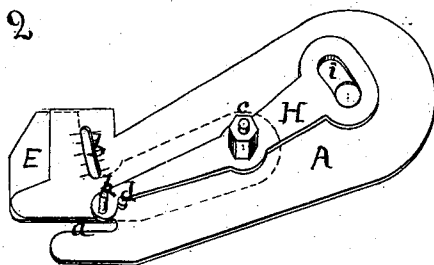


Fig. 1

Fig. 2



Witness:

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ARTHUR M. LESLIE, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND CORNELL, WARD, AND COMINGS.

Letters Patent No. 100,161, dated February 22, 1870.

IMPROVEMENT IN RUFFLING ATTACHMENT FOR SEWING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ARTHUR M. LESLIE, of Chicago, in the county of Cook, and State of Illinois, have invented a new and improved Ruffling-Attachment for Sewing-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view of my improved ruffler attached to the bed-plate of a sewing-machine; and

Figure 2, a perspective view of the same detached from the machine.

Similar letters of reference indicate corresponding parts in the several figures of the drawings.

My invention has for its object to improve the construction of rufflers for sewing-machines, whereby the same are rendered more efficient in their operation.

My invention consists in a ruffler composed of two elastic plates, made adjustable with relation to the presser-foot and feed-surface, and provided with a curved slot, so that, when adjusted about its confining screw for the purpose of regulating the fullness of the gathers or ruffles, the slot shall always be in range of the needle.

It consists further in an adjustable locking-device for securing the ruffler in position upon the machine with reference to the feed-surface.

In accompanying drawings—

A is the top or main portion of the ruffler, composed of a thin elastic metal plate, attached at one end to the bed-plate B of a sewing-machine by means of the gauge-screw C.

Its free end extends forward beneath the presser-foot D of the machine and over the feed surface of the latter.

This end of the main plate A is provided with two slots *a b*, the former serving to guide the cloth to be ruffled and its band, and the latter arranged at an angle to the former, permitting the passage of the needle.

To the under surface of this plate is attached by means of a rivet or the screw and nut *c*; one end of the second and smaller elastic plate E, shown in dotted lines, fig. 2, whose enlarged free end bears against the under surface of the plate A, between the slots *a b*. It is prevented from displacement by means of the stud *d* extending through the top plate, as shown.

The cloth F to be ruffled is placed under the plate E upon the feed-surface of the machine, with its edge *f* passing through the slot *a* above the plate A.

The band G, to which the cloth is sewed to form

the ruffle, also passes through the slot *a* above the plate A, and between such plate and the under plate E.

By this means the presser-foot, instead of bearing directly upon the band, rests upon the plate A, while the enlarged outer end of this plate and the plate E, distribute the pressure over a large surface of the band and cloth, and facilitate their easy passage through the machine.

The needle I passes through the slot *b* to unite the cloth to the band.

It is often necessary or desirable to change the ruffling to make the same more or less full. This is accomplished in the following manner:

When it is desired to gather the ruffle very full, the ruffler is moved in a direction opposite the feed of the machine, or toward the operator, so that but a small surface of the cloth beneath the bottom plate E, and in rear of the needle is exposed to the action of the feed-surface after the cloth has been stitched to the band.

This feeds the cloth and band slowly, and permits a larger accumulation of gathers in front of the needle before stitching.

When the ruffler is moved in the opposite direction, so that the feed shall act upon a larger surface of cloth in rear of the needle, and a smaller surface in front of the same, the cloth and band pass through the ruffler with greater speed after having been stitched together, and there is less accumulation of gathered cloth in front of the needle.

From this description it will be seen that the fullness of the ruffling depends upon the amount of cloth acted upon or gathered by the feed-surface in front of the needle.

The opening *b* in the plate A is curved and elongated to permit the passage of the needle when the ruffler is adjusted with relation to the feed-surface. Its edges are also graduated to indicate the degree of ruffling desired.

In order to prevent the displacement of the ruffler with reference to the feed-surface and presser-foot, and at the same time permit the adjustment of the ruffler, I have provided a lever, H, pivoted centrally to the bolt *e* or rivet which unites the plates A E, and extending at one end to the presser-foot, at which point it is provided with a pin or stud, *h*.

Its opposite end is formed with a slot, *i*, through which the adjusting screw C passes to clamp said lever in position.

When the ruffler is adjusted to form a ruffle of the desired fullness, the lever H is also adjusted so that the pin *h* shall bear against the side or end of the presser-foot, and thus hold the ruffler in position.

My improved ruffler is easily constructed, and per

forms its work in the most thorough and satisfactory manner.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The ruffler for sewing-machines, consisting of the two elastic plates A B, constructed as described, the former being provided with the curved slot to admit of the movement of the ruffler about its holding screw, in order to adjust the position of the plates,

with relation to the feed and foot, to regulate the fullness of the gathers or ruffles.

2. An adjustable locking-device, in combination with a ruffler for sewing-machines, which shall bear against the presser-foot and hold the ruffler in position with reference to the feed-surface, substantially as described.

Witnesses:

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