

E. J. TOOF.

Ruffling Attachment for Sewing Machines.

No. 125,230.

Patented April 2, 1872.

Fig. 1.

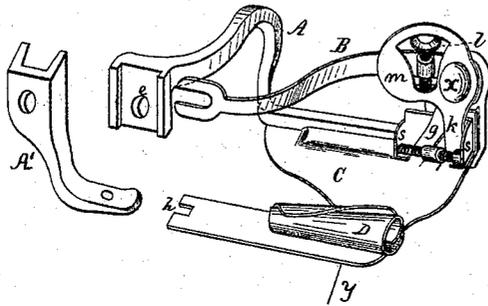
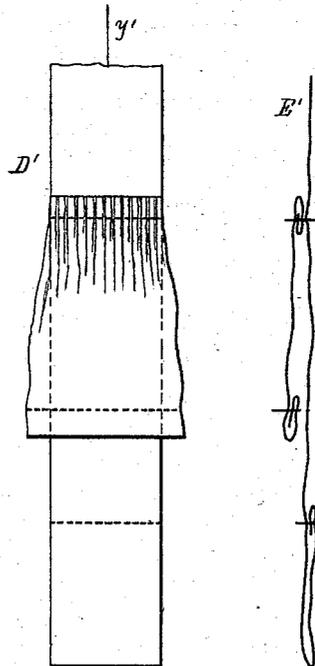
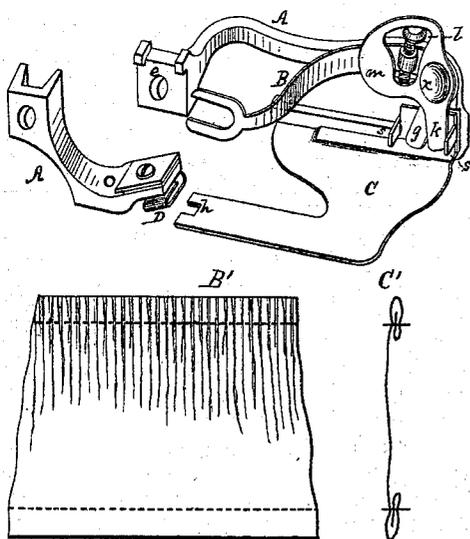


Fig. 2.



Fig. 3.



Witnesses.

Wm. W. L. Dyer.
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IMPROVEMENT IN RUFFLING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 125,230, dated April 2, 1872.

To all whom it may concern:

Be it known that I, EDWIN J. TOOF, of Fort Madison, in the county of Lee and State of Iowa, have invented certain new and useful Improvements in Ruffling Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in a ruffling attachment for a sewing-machine, the feed-plate of which is combined with a folding-in or hemming device, said devices so operating with relation to each other and the bed-plate of the machine that a piece of goods may be hemmed and ruffled at a single operation, and also a piece of goods hemmed, ruffled, and sewed to another piece of goods, distant from its edge.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, which forms part of my specification, Figure 1 is a perspective view of a ruffling attachment for sewing-machines, substantially the same as that described in the patent granted me October 24, 1871, No. 120,173, except that the feed-plate is provided with a folding-in or hemming device. Fig. 2 is a transverse section of the feed-plate and a folding-in device, when cut through at line *y* of Fig. 1. Fig. 3 is a perspective view of my improvement, representing the folding-in or hemming device placed upon the presser-foot, which arrangement will produce, in hemming and ruffling, the same results as the arrangement shown in Fig. 1.

In the drawing, A' represents a presser-foot for sewing-machines. B' represents a piece of goods hemmed and ruffled. C' is a transverse section of the same. D' represents a piece of goods ruffled, hemmed, and sewed to another piece of goods at a point distant from its edge. E' is a section cut through a line indicated at *y'*. In Fig. 1, A represents a bent arm provided with an opening, *e*, for the screw used for securing it to the presser-bar of the sewing-machine. B is a bent lever, pivoted to the arm A at *x*, the front end of which is

forked so as to straddle the screw which secures the needle in position. The lever B is provided with an adjusting-screw, *l*, for varying the position of the limb *k* of the piece *m* with relation to the downward-projecting limb *g* of the lever B. The piece *m* is pivoted with the lever B to the bent arm A, as indicated at *x*. On the arm A is placed a feed-plate, C, which is provided with lugs *s*, against which the limb *k* of the piece *m* and the limb *g* of the lever B alternately strike at each up-and-down movement of the lever B, thereby imparting to the feed-plate C a reciprocating motion. *h* is an orifice in the feed-plate C for the needle. On the upper side of the feed-plate is secured a folding-in or hemming device, D, in which the edge of the goods to be hemmed is placed, as indicated by the dotted line *n*.

When the ruffling attachment, constructed as hereinbefore described, is attached to the presser-bar of the sewing-machine, the bed-plate of the machine will be unincumbered, whereby the skirt of a lady's dress may be trimmed with a series of hemmed ruffles, and attached to it at different distances from its edge.

The operation of my improvement is as follows: The edge of the goods to be ruffled and hemmed is placed in the folding-in or hemming device, as indicated by the dotted line *n* in Fig. 2, and passed between the feed-plate C and the presser-foot of the machine; and as the needle passes down, carrying the lever B with it, the limb *k* of the piece *m* strikes against the back lug *s* of the feed-plate C, carrying it backward, leaving a space between the feed-plate and needle. Then, as the needle rises, the lever B is carried upward, and the limb *g* strikes against the forward lug *s*, moves the feed-plate C forward, and in doing so presses the cloth against the presser-foot, and carries the goods with it, folding it over, ready for the needle in its next downward motion to pass through the fold and hem and hold them in place, thereby ruffling and hemming the goods, which may, when desired, be sewed to another piece of goods placed under it, as indicated in the figures D' and E'.

From the foregoing description of this in-

vention, and by reference to the patent granted me October 24, 1871, No. 120,173, it will be observed that the main feature of my present invention consists in providing the feed-plate C with the folding-in or hemming device D, for the purposes herein set forth.

Having thus described my improvement in attachment for sewing-machines, what I claim as being of my invention is—

The feeding-plate, combined with the folding in or hemming device, and arranged to hem and ruffle a piece of cloth, as and for the purpose set forth.

EDWIN J. TOOF

Witnesses:

WM. W. L. DYRE,
EDM. F. BROWN.