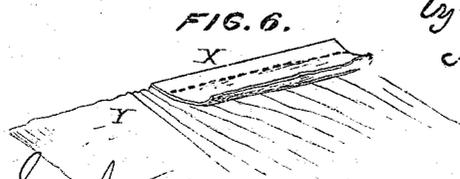
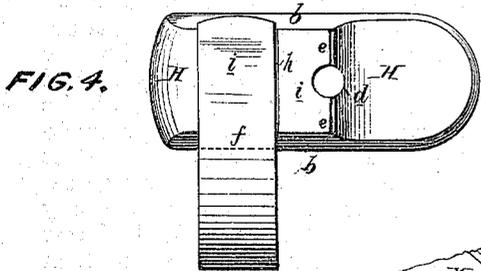
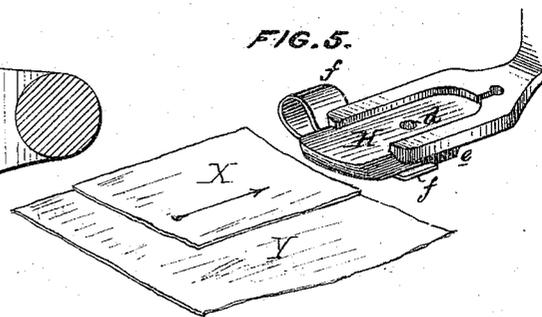
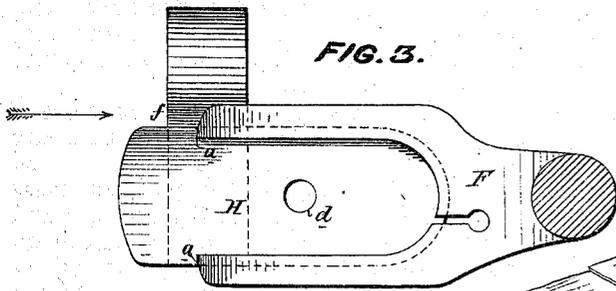
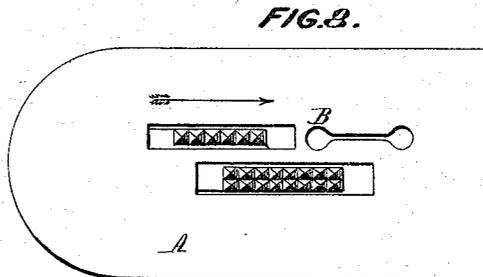
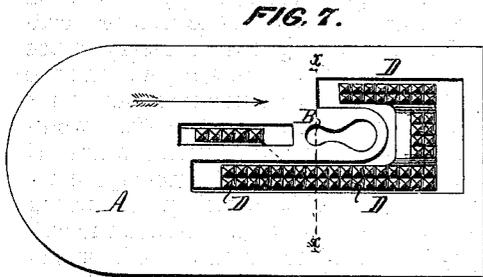
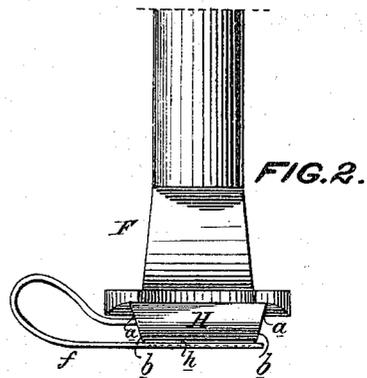
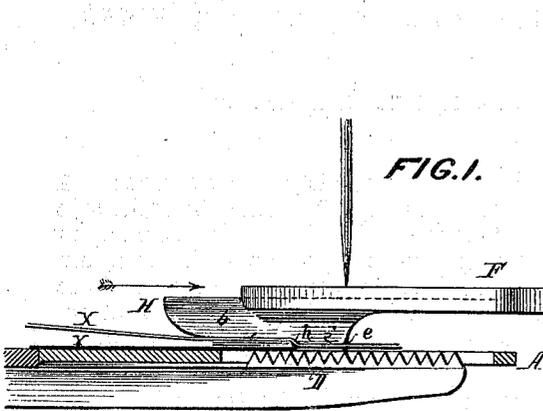


R. E. PETERSON, Jr.

Improvement in Ruffling Attachment for Sewing Machines.

No. 124,853.

Patented March 19, 1872.



Robert E. Peterson Jr.  
by his Atty.  
Howson and Son

WITNESSES { Harry Smith  
                  Thos. McLean

# UNITED STATES PATENT OFFICE.

ROBERT E. PETERSON, JR., OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN RUFFLING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 124,853, dated March 19, 1872.

Specification describing a Ruffling Attachment for Sewing-Machines, invented by ROBERT E. PETERSON, JR., of Philadelphia, Pennsylvania.

My invention relates to a ruffling attachment in which a thin blade extends below the block attached to the presser-bar, to separate the two strips of fabric, the lower of which is to be ruffled; and consists in so recessing the said block, as fully described hereafter, as to permit the lower edge of the block near the needle-hole to be flush, or nearly so, with the lower edge of the thin metal strip that extends into the recess.

In the accompanying drawing, Figure 1 is a side view of part of a Wheeler and Wilson sewing-machine with my improved ruffling attachment; Fig. 2, an end view of the presser-foot and attachment; Fig. 3, a plan view; Fig. 4, an inverted plan view of the attachment; Fig. 5, a perspective view illustrating the operation of the attachment; Fig. 6, also a perspective view, showing the character of the work to be produced; Fig. 7, a view of the Wheeler and Wilson "push-and-draw" feed; and Fig. 8, a view of the Wheeler and Wilson "push" feed. All of the above views, with the exception of Figs. 5 and 6, are drawn to an enlarged scale.

A represents the cloth-plate of a Wheeler and Wilson sewing-machine; B, the needle-hole; D, the "push-and-draw" feed, projecting upward through slots in the work-plate, and almost surrounding the needle-hole; and F is the forked foot, formed with V-shaped guides *a a* for the reception and retention of the detachable presser-plate, and of the various attachments used in connection with the machine. The ruffling attachment which forms the subject of my invention is adapted especially for this machine, and consists, as in others of the same class, of a plate, H, formed with beveled edges *b b*, which enable it to be readily attached to and detached from the guides of the forked presser-foot F. A hole, *d*, is formed in the plate for the passage of the needle, and the under side of the said plate is cut away from a point, *e*, (Fig. 1,) coinciding with the center of the needle-hole, so that that portion only of the plate which is situated at the left-hand side of the needle, or at the left of the line *x x* in Fig.

7, shall bear upon the fabric to be sewed. A transverse recess, *h*, is formed in the under side of that portion of the plate which bears upon the feeding surface for the reception of a thin flat spring, *f*, which extends to one side of the plate, as shown in Fig. 2, and is then bent upward and inward and secured to the said plate. The recess *h* is only of a depth sufficient to receive the spring *f*, and its object is to enable the portion *i* of the plate, between the needle-hole and the edge of the spring *f*, as well as the said spring, to bear upon the serrated feeding surface. In ruffling it is necessary to use a long feed, and to push the work up onto the needle, so that it may be puckered and thus sewed, but there must be no draw-feed whatever to pull the work away from the needle, for if such feed is employed the result is merely a series of long stitches, without puckering or gathering up of the work. Hence the cutting away of the plate on the line *e*, which causes the work to be pressed down onto the feed at the left-hand side of the needle only, and thus renders inoperative the draw-feed, and converts the combined push and draw feed, which is very useful for ordinary sewing, into the push-feed required in ruffling.

In using the device, the two thicknesses of material, X and Y, to be sewed together are placed one upon the other, as shown in Figs. 1 and 5, and the edge of the upper thickness or binding X is passed over the spring *h* and between the same and the plate, while the under thickness Y, which is to be puckered by the action of the feed, is passed beneath the spring *h* and portion *i* of the plate. The two thicknesses of material having been thus adjusted are sewed together, as usual, but the under thickness Y, being continually pushed toward the needle by the long feed, will be puckered or gathered up, while the upper thickness X, above the spring plate *f*, which is not acted on by the feed, but, on the contrary, held back by the pressure of the spring, will only be drawn forward with the work as the latter leaves the needle, the consequence of which will be the sewing together of the straight or extended upper thickness and the gathered-up lower thickness of material, as seen in Fig. 6, this being the ruffling product which it is desired to obtain.

The recessing of the under side of the ruffling plate for the reception of the spring *h* constitutes my improvement, and enables the work to be pressed down onto the feed by the portion *i* of the plate as well as by the spring, and thus renders the feed operative upon both thicknesses of fabric after they leave the plate *f*, and causes the gathering up or puckering operation to be accomplished more uniformly than if only that portion of the fabric below the plate *f* was acted on by the feed.

My invention, it will be evident, can be used with a feed of the character shown in Fig. 8, although it is adapted more especially for the push-and-draw feed shown in Fig. 7.

I claim as my invention—

The ruffling attachment for sewing machines, consisting of the block *B*, recessed to receive and combined with the spring plate *f*, the said plate being in front of the projection *i* and the needle-hole, and all constructed and arranged as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBT. E. PETERSON, JR.

Witnesses:

WM. A. STEEL,  
HARRY SMITH.