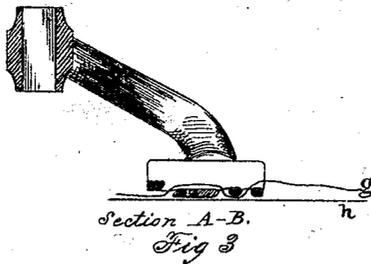
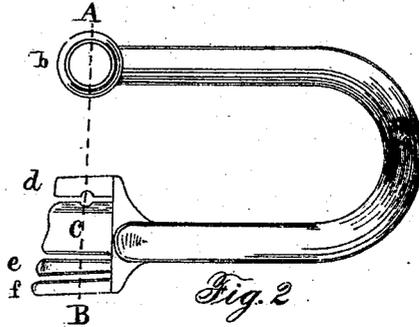
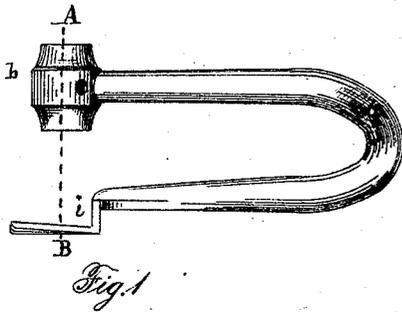


H. C. GOODRICH.

Improvement in Ruffling Attachment for Sewing Machines.

No. 123,168.

Patented Jan. 30, 1872.



Witnesses
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HARRY C. GOODRICH, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RUFFLING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 123,168, dated January 30, 1872.

I, HARRY C. GOODRICH, of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Ruffling Attachments for Sewing-Machines; and the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a front view; Fig. 2, a plan; Fig. 3, a section on line A B of Figs. 1 and 2.

The drawing is full size.

The object of my invention is to construct an attachment for sewing machines which can be used for ruffling, and also, at the same time, operate as a presser-foot. I have heretofore invented a presser-foot having a curved shank; and my present invention consists in so forming the foot proper of such curved-shank presser-foot that the device can be used as a ruffling attachment.

In the drawing, *a* represents a curved bar corresponding with the curved shank above mentioned. *b* is a collar, by means of which and a set-screw, the device is attached to the presser-foot bar of a sewing-machine. The other end of the bar *a* is formed as shown in the drawing, and consists of four parts, *c*, *d*, *e*, and *f*. The part *c* comes over the feed and takes the place of, and operates as, the foot of a presser-foot. *e* and *f* serve the purpose of retarding the cloth to be ruffled; and *d* holds the cloth in place after it has passed the needle, which passes down through the opening between *c* and *d*. The under surface of *d* does not rest on the bed of the machine, but is a little higher than the under surface of *c*, giving room for the ruffle. To facilitate the passage of the cloth the two edges of *c* and the inner edge of *d* are beveled, as represented. *g* represents a piece of cloth upon which the ruffle is to be sewed; and *h* is the piece which is

to be ruffled. *h* lies on the bed of the machine beneath the parts *c d e f*, and will be held down upon the feed by *c*, acting as the foot of a presser-foot. The cloth *g*, which is to be sewed upon the ruffled part *h*, passes over *f*, under *e*, over *c*, and under *d*; and after the first stitch has been taken both pieces will be carried forward by the feed, but the movement of *g* being somewhat retarded, *h* will be ruffled. Thus one piece of the cloth passes under *c* and the other over it; or, in other words, one piece passes over the foot of the presser-foot, and the other beneath it, which cannot be done when the foot is connected to a straight shank.

This device can be used as a presser-foot only, though not primarily designed for that purpose.

In addition to *c* and *f* other prongs may be used, if desired, to retard the cloth, or this can be done in some other suitable manner.

The prongs or fingers stand at an angle with the shoulder *i* greater than a right angle, and have a strong tendency to carry the work against the shoulder *i*, which serves as a guide.

The arm *a* need not be curved or bent as much as shown, nor in the form represented. My object can be accomplished by carrying the shank *a* away from the direct line of the presser-foot bar far enough to permit one part of the work to pass over the foot.

What I claim as new is as follows:

The attachment herein described, consisting of an arm, *a*, and foot *c*, provided with tongues, constructed substantially as described and adapted to operate as a presser-foot while being used as a ruffling attachment.

HARRY C. GOODRICH.

Witnesses:

E. A. WEST,
O. W. BOND.