

A. JOHNSTON.

Gatherers and Rufflers for Sewing-Machines.

No. 148,959.

Patented March 24, 1874.

Fig. 1.

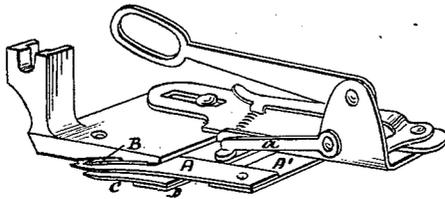
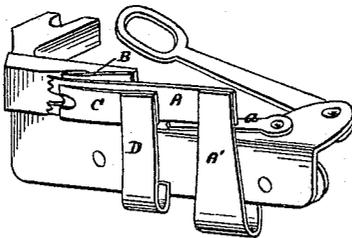


Fig. 2.



Witnesses.

D. P. Bowler

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# UNITED STATES PATENT OFFICE.

ALLEN JOHNSTON, OF OTTUMWA, IOWA.

## IMPROVEMENT IN GATHERERS AND RUFFLERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 148,959, dated March 24, 1874; application filed March 7, 1874.

*To all whom it may concern:*

Be it known that I, ALLEN JOHNSTON, of Ottumwa, Wapello county, Iowa, have invented certain new and useful Improvements in Gatherers and Rufflers for Sewing-Machines, of which the following is a specification:

This invention relates to that class of gathering and ruffling attachments in which the reciprocating gathering-blade works against or in connection with an upper stationary surface or holding blade to form the gathers. The object of my invention is to prevent this gathering-blade from interfering with or coming in contact with the sewing-machine feed, and also to provide means whereby the gather pushed forward by the gathering-blade may be more securely held and prevented from being drawn out by the receding gathering-blade. To this end I combine, with the upper stationary holding surface or blade and the under reciprocating blade, a guard plate or strip below the gathering-blade, intermediate between it and the cloth-plate of the machine, and extending forward about as far as the acting edge of the gathering-blade reaches in its forward movement—that is to say, so that its front end will be about even with the front end of the upper stationary holding-blade; and I prefer that the front ends of the said holding-blade and said guard-plate should converge so as to meet or nearly meet, thus, in effect, constituting a pair of yielding nippers or jaws, between which the gathering-blade plays, and which serve to hold securely the gather pushed forward beyond them by the gathering-blade.

In the accompanying drawing, Figure 1 is a perspective view of a ruffler or gatherer adapted to be attached to the presser-bar of a Singer sewing-machine. Fig. 2 is an under-side view of the same.

The ruffling attachment, in the main, is constructed substantially as described in my Letters Patent No. 135,123, dated January 21, 1873, and also embraces the features of re-issued Letters Patent Nos. 5,070, 5,071, and 5,072, of September 24, 1872, to which I refer for details that need not consequently be noted here.

Below the reciprocating gathering-blade A, which operates in conjunction with the upper stationary surface or holding blade B to gather the cloth passing between them, is the guard plate or strip C, between which and the upper blade B the gathering-blade plays. The guard-plate C keeps the gathering-blade from contact with the feed or the cloth-plate of the machine, and prevents all liability of the said blade and the feed interfering with one another—a feature of value, especially in the case of sewing-machines, like the Weed machine, having a sensitive and easily-moved feed. The front end of the plate C extends forward about as far as the corresponding end of the stationary blade B, and I prefer—although this is not absolutely essential—that the said front ends should converge so as to, in effect, form a pair of jaws or nippers, between and out beyond which the gathering-blade pushes the gather. When the gathering-blade recedes these jaws close on the cloth and effectually prevent the gather from being drawn out or back by the recession of the gathering-blade. The guard-plate C, for this purpose, is made of elastic or spring metal, or is mounted on an elastic or yielding arm, which will permit it to give when the gathering-blade moves forward and pushes along the cloth. In the present instance the guard-plate is carried by an elastic or spring arm, D, which is attached at its back or rear portion to the frame of the attachment, and is bowed or formed like the supporting-arm A' of the gathering-blade, so that there may be a space between it and the bed of the attachment above. The cloth to be gathered passes above these two arms and between the blades A B. In case there are two thicknesses of goods, the under one of which is to remain ungathered, the latter passes under the attachment and below the guard-plate C.

On the frame of the attachment is a gage, a, similar to the one described in my Letters Patent, No. 135,123, above referred to.

The guard-plate C may be otherwise secured to the frame, according to the style of the attachment and the sewing-machine for which it may be designed; and it is equally well adapted for attachments—like those used on

the Wheeler & Wilson and the Weed machines, for instance—designed to be secured to the cloth-plate of the machine.

Having described my invention, and the manner in which the same is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is—

In a ruffler or gatherer for sewing-machines, the combination, with an under reciprocating gathering-blade and an upper stationary surface or holding blade, against which the gath-

ering-blade works in forming the gathers, of a guard-plate below said gathering-blade, operating in connection with the same and the upper stationary surface or holding blade, substantially as shown and described.

Signed at Ottumwa, Iowa, this 28th day of February, 1874.

ALLEN JOHNSTON.

Witnesses:

J. T. HACKWORTH,  
A. G. HARROW.