C. H. MILLER.

Cloth Gathering Attachment for Sewing Machines.

No. 61,552. Patented Jan'y 29, 1867.

Fig. 1.

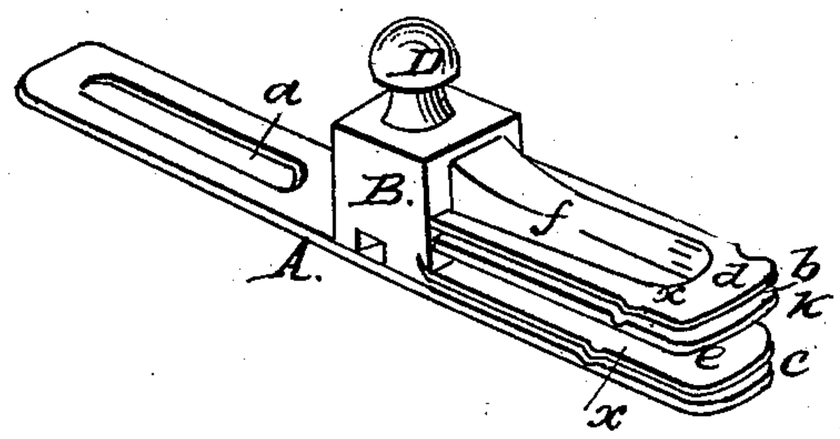
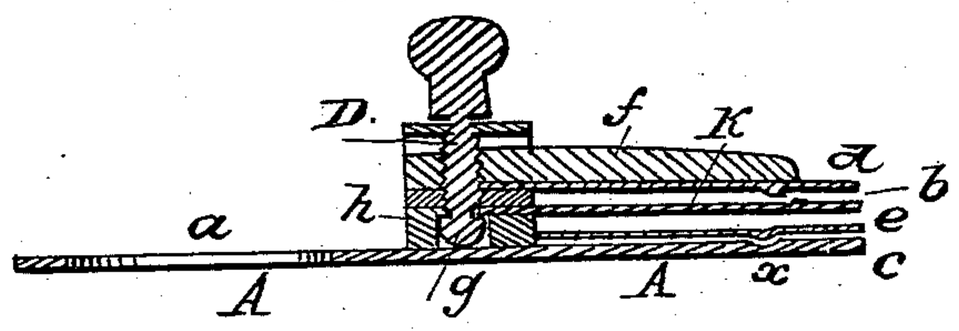


Fig. 2



Witnesses
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CHARLES H. MILLER, OF DAYTON, OHIO.

Letters Patent No. 61,552, *dated January* 29, 1867.

IMPROVEMENT IN CLOTH-GATHERING ATTACHMENT FOR SEWING MACHINES.

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, CHARLES H. MILLER, of Dayton, in Montgomery county, in the State of Ohio, have invented a new and useful Improvement in Gathering Attachments for Sewing Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of my invention.

Figure 2 is a vertical sectional view of the same.

The object of my invention is to furnish a device for gathering one piece of cloth while it is being sewed by the sewing machine upon another piece, so as to form a ruffle, such as is generally made by hand sewing.

In the accompanying drawings, A denotes a base-plate, which rests upon the table of a sewing machine; the slot *a*, being designed for a set-screw to secure the attachment upon the table in proper position for the accomplishment of its work. Upon the base-plate A the square box B is fastened, and extending therefrom above the base-plate there are tension guides *b c*, through which the two fabrics to be sewed together will be drawn by the feeding mechanism of a sewing machine. The upper plates *d e* of the tension guides are made of thin elastic metal, while the lower plates are thicker, and of a less yielding nature. The upper plate *d* is fastened rigidly to the under side of the bar *f*, which extends through the box B, fitting a square opening therein, as represented in the drawings. D is a set-screw working in a counter-screw in the bar *f*, within the box B. This screw, D, is retained in position while acting upon the bar *f* by the bulb *g*, beneath the diaphragm *h*, and by its neck surrounded by the top plate of the box B. In other words, the neck of the screw is retained in an orifice in the box top. The three plates A, *e*, and *k* are permanently fastened to the box B, while the plate *d*, which is secured to the under side of the bar *f*, is capable of being elevated or depressed by the action of screw D upon the bar *f*. This bar, at its rear end, within the box B, works in a square opening, which acts as a guide, causing the bar with its plate *d* to rise and descend uniformly throughout their entire length, by means of the screw D. In use, the piece of cloth to be gathered is placed between the base-plate A and the elastic plate *e*, and the piece to be sewed to the gathered or lower piece is placed between the plates *k* and *d*. The lower tension guide *c* gives but a gentle pressure to the cloth held by it, while the guide *b* is capable of adjustment by means of the set-screw D, which will raise or depress the upper plate *d*. My tension device or gatherer is placed in front of the feeding mechanism of a sewing machine, which will draw both pieces of cloth placed in the tension guides gradually through them to be sewed. The lower piece to form the ruffle is easily drawn through its guide, while the upper piece or band, for a ruffle, placed in the guide *b*, may be sufficiently compressed by means of screw D as to cause considerable tension thereon, thereby retarding its progress. But the lower piece of cloth, to form the ruffle, being freely fed to the needle, will move faster than the band. Thus the two pieces of cloth are sewed together as they pass through the sewing machine at different degrees of speed; and as the thread is drawn up after each stitch, it will necessarily cause the piece of cloth which is advanced through the machine with the fastest movement to be gathered upon the piece held back and retarded by means of the tension plates *k d*. The V-shaped depressions *x*, running diagonally across the guide plates, will cause the fabrics being sewed to be held constantly with their edges against the side of the box B, which will insure a straight seam.

Having fully described my invention, what I claim and desire to secure by Letters Patent, is—

1. The combination of the two tension guides *b c*, constructed, arranged, and operating conjointly as shown and set forth, for gathering one piece of cloth upon another as they are sewed by a sewing machine, substantially as described.

2. The combination of the two tension guides *b c*, with the slotted base-plate A, box B, and set screw D, the whole being constructed, arranged, and used in the manner and for the purpose specified.

In testimony whereof I have hereunto set my hand this 21st day of November, A. D. 1866.

CHARLES H. MILLER.

Witnesses:

H. P. K. PECK,

A. L. PECK.