

**Patented Sept. 2, 1879.**



# UNITED STATES PATENT OFFICE.

LESTER H. ALLEN, OF FARMINGTON, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF HIS RIGHT TO ALONZO NUTE, OF SAME PLACE.

## IMPROVEMENT IN TRIMMERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **219,058**, dated September 2, 1879; application filed February 28, 1879.

*To all whom it may concern:*

Be it known that I, LESTER H. ALLEN, of Farmington, county of Strafford, State of New Hampshire, have invented an Improvement in Trimmers for Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to an attachment for trimming the edges of material being stitched on a sewing-machine.

The invention is comprised in a lever having an adjustable end piece, adapted to be actuated by some moving part of the sewing-machine, and a beveled blade pivoted to said lever, and held down by a spring, combined with a grooved guiding and supporting surface for the cutting end of the blade, so that the latter is permitted to move backward and forward in the direction of movement of the feed, so as to trim the material parallel with the line of stitching.

Figure 1 of the drawings shows my trimming attachment applied to the well-known Weed sewing-machine, the face-plate of the head of the machine being removed to show the needle-actuating crank, and how it is made to operate the lever of the trimming attachment; and Fig. 2, a detail of the top of the lever.

In the drawings, *a* represents the head of the machine; *b*, the needle-bar; *c*, the rocker-shaft; *d*, the arm thereon, and *e* the link connecting it with the needle-bar.

The presser-foot lifter is shown at *f*. Upon an ear, *g*, attached to the head is pivoted the cutter-carrying lever *h*, an arm, 2, connected with which is acted upon by a spring, *i*, the stress of which spring tends to throw the arm 2 within the head to be moved in the opposite direction by the arm *d*, when, as the needle descends, the said arm strikes the arm 2, whereby the lever *h* is moved, as shown in dotted lines, such movement of the lever causing it to push forward the cutter or knife *k*, pivoted to the lever *h* at 4, and provided with a cutting-edge, 5, and a foot, 6, causing it to move in a straight line, and at the same time rock a little upon its foot, owing to the rise of

its pivot-pin and the action of the spring *l*, and cause the convexed cutting-edge to move and operate somewhat after the manner of shears, or with a sort of draw-cut.

The throat-plate *m* is of usual construction, except that it is provided at its upper surface with a shallow groove, 8, to receive and direct the end of the cutter and support the foot.

While the cutter operates to trim the leather or other material the presser-foot holds the work down upon the throat-plate.

By withdrawing the pin 10 the attachment may be readily removed.

To enable the trimmer to operate in the best manner, the cutting-edge of the knife or cutter should be kept abreast the needle. To do this the arm 2, attached or connected to the upper end of the lever *h*, is made adjustable by means of a screw, *r*, or its equivalent, and by adjustment of the arm 2 said arm is caused to project more or less into the head, and thus sooner or later come into contact with the arm *d*, to be operated by it. By the provision of this adjustability of the arm 2 with relation to the lever *h* and arm *d* the forward throw or motion of the knife or cutter can be changed to provide for wear, such as grinding, &c.

I claim—

1. In a trimming attachment, the pivoted lever *h*, in combination with a cutter composed of a single member, *k*, jointed to said lever, and provided with a foot, 6, substantially as and for the purpose described.

2. The grooved throat-plate, in combination with the pivoted cutter having a cutting-edge and a foot, and with the operating-lever, substantially as shown and described.

3. A vibrating cutter-carrying lever adapted to be struck at its upper end to vibrate the lever, combined with a cutter pivoted upon the lever below the pivot of the lever, and with a spring to retain the foot of the cutter pressed down against a support for it while the cutter is moved forward and tipped upon its foot, substantially as described.

4. In a trimming attachment, a pivoted horizontally-reciprocating cutter and its pivoted



carrying-lever, combined with an adjustable end piece to be struck when the cutter is operated, whereby the forward throw of the cutting-edge of the cutter with relation to the needle may be regulated, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

LESTER H. ALLEN. [L. S.]

Witnesses:

GEORGE E. COCHRANE,  
CHARLES S. McLANE.