

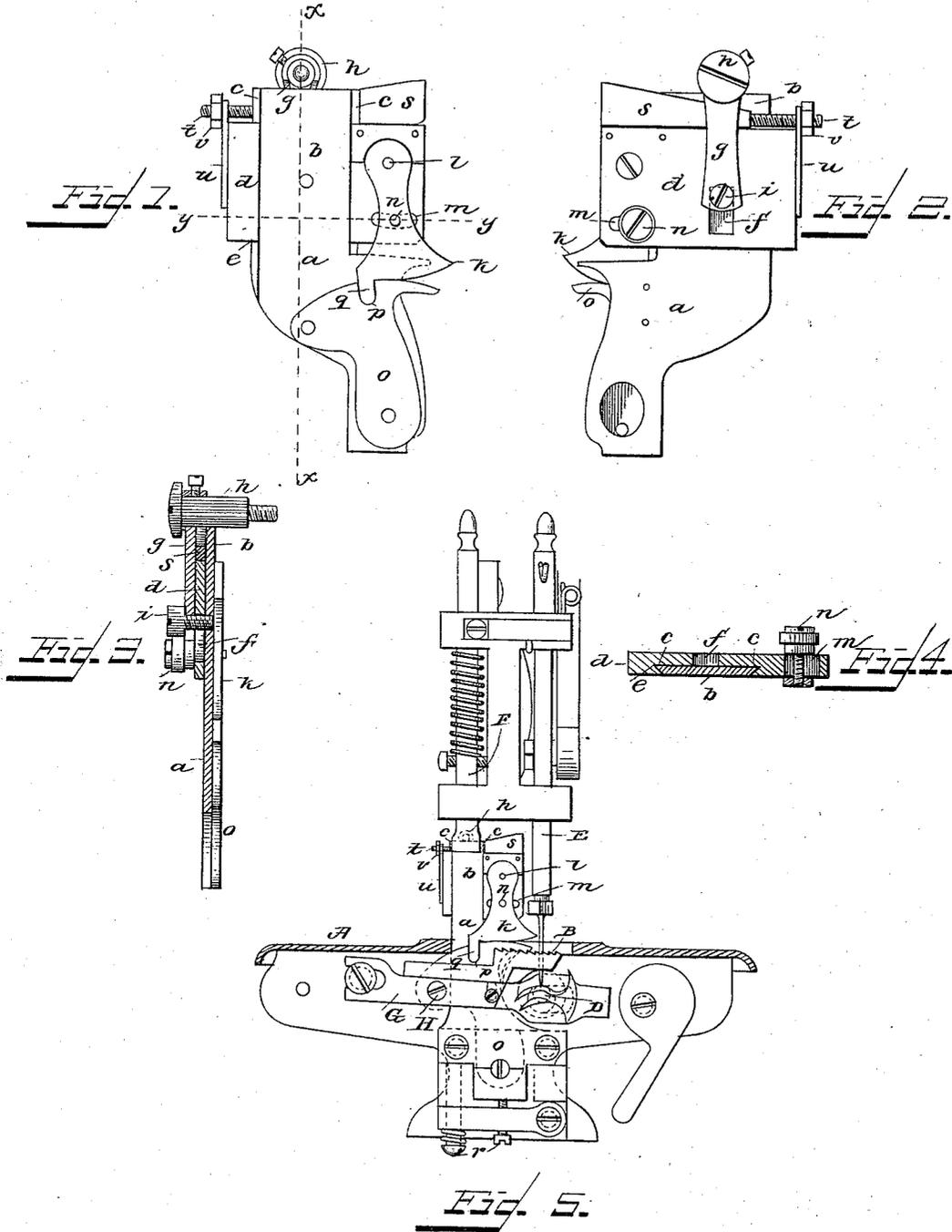
(No Model.)

W. S. CLARK & J. F. MURPHY.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

No. 324,813.

Patented Aug. 25, 1885.



WITNESSES
C. M. Dashiell.
E. J. Siggers.

INVENTORS
Wm S. Clark
John F. Murphy
By *C. A. Snow*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM S. CLARK AND JOHN F. MURPHY, OF LITTLE FALLS, NEW YORK.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 324,813, dated August 25, 1885.

Application filed April 10, 1885. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM S. CLARK and JOHN F. MURPHY, citizens of the United States, residing at Little Falls, in the county of Herkimer and State of New York, have invented new and useful Improvements in Trimming Attachments for Sewing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to an improvement in trimming attachments for sewing-machines, and is an improvement upon that for which Letters Patent of the United States were granted to J. W. Dewees, October 31, 1882, No. 266,783.

The nature of our improvement consists in the combination of the plate or bracket with a cross-plate that is dovetailed on the upper end of the bracket-plate, the upper jaw being attached to said cross-plate, whereby the upper jaw may be adjusted toward the lower jaw in order to take up the wear thereof, and means for clamping the cross-plate to the bracket-plate, as will be more fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of a trimming attachment embodying our improvements. Fig. 2 is a similar view of the same, showing the opposite side of the attachment. Fig. 3 is a vertical sectional view taken on the line *xx* of Fig. 1. Fig. 4 is a horizontal sectional view taken on the line *yy* of Fig. 1. Fig. 5 is a side elevation of our trimmer, showing its mode of attachment to a Willcox & Gibbs sewing-machine.

a represents the bracket-plate of a trimming attachment for sewing-machines. This plate has a vertical upper extension, *b*, which has its sides *c* beveled as shown. *d* represents a cross-plate, which has a dovetailed groove, *e*, that adapts the plate to slide vertically on the vertical extension of the bracket-plate. A vertical slot, *f*, is made in the cross-plate *d*.

g represents an arm, through the upper end of which passes a screw, *h*, that enters the lower rear side of the vertical arm of the sewing-machine that supports the needle-bar, so as to secure the attachment to the sewing-machine, and through the lower end of this arm

passes a set-screw, *i*, that extends through the slot *f* and enters the bracket-plate. By means of this set-screw it will be readily understood that the cross-plate can be clamped to the bracket-plate at any desired point of adjustment.

To the inner extended end of the cross-plate is fulcrumed the upper toggle-jaw, *k*, as at *l*, and at a suitable distance below the point *l* in the cross-plate is cut a curved slot, *m*. A screw, *n*, passes through this slot, and its point enters the jaw *k*. The function of this screw *n* is to prevent lateral movement of the jaw.

In the lower end of the bracket-plate is fulcrumed the lower toggle-jaw, *o*, that has a recess, *p*, in its upper edge, where it comes in contact with the lower edge of the upper jaw, in which recess engages a projecting tooth or spur, *q*, from the upper jaw. The opposing edges of the jaws each form segments of circles drawn from the pivotal points of the jaws. The edge of the lower jaw is flat, and the edge of the upper jaw is rounded, and these jaws when moved back and forth when the machine is operated remove the superfluous portion of the fabric that passes between their edges after leaving the needle of the machine.

In Fig. 5 we show the attachment as applied to a Willcox & Gibbs sewing machine, of which A represents the bed; B, the cloth-plate; D, the main shaft; E, the needle-bar; F, the vertical arm, and G the feed-bar, which derives its motion from the main shaft of the machine and is attached to the lower toggle-jaw by a screw, H. We have here shown the attachment in connection with a Willcox & Gibbs sewing-machine, but we wish to state that the attachment is adapted to be used in connection with other machines as well.

The lower toggle-jaw is provided with devices *r*, by means of which it may be moved up toward the upper jaw, in order to take up the wear, and, as formerly constructed, means for adjusting the lower jaw only have been employed. These means have only permitted the lower toggle-jaw to be adjusted vertically a slight distance, and when the jaws become worn it has been necessary to throw them away and to replace them with new ones.

The object of our invention is to make the jaws last much longer than they have heretofore, and this we accomplish by means of the

devices, whereby we are enabled to adjust the upper jaw also, as previously fully described, and herein shown. It will be seen that the cross-plate, to which the upper jaw is attached, can be adjusted on the bracket-plate for a considerable distance, (nearly half an inch,) and thereby the life of the jaws can be very considerably increased.

Another advantage gained by our improved devices is that we are enabled to keep the meeting edges of the jaws always in line with the upper side of the cloth-plate of the sewing-machine, which cannot be accomplished when only the lower jaw is adjustable.

In order to keep the upper jaw pressed down in contact with the lower jaw and prevent the possibility of its working upward by the vibration of the machine, we provide a wedge, *s*, that bears between the cross-plate and the screw *h*. This wedge has an extended arm, *t*, that is threaded, and passes through a lug, *u*, that projects from the upper side of the cross-plate. A nut, *v*, screws on the end of the arm *t* and controls the wedge.

Having thus described our invention, we claim—

1. In a trimming attachment for sewing-machines, the combination of the bracket-plate, the cross-plate adjustable vertically on the bracket-plate, the lower toggle-jaw fulcrumed to the bracket-plate and vertically adjustable, and the upper toggle-jaw fulcrumed to the cross-plate, whereby the meeting edges of the jaws may be maintained in line with the cloth-plate of the sewing-machine as the jaws wear away, substantially as described.

2. The combination of the bracket-plate, the cross-plate vertically adjustable thereon, the lower toggle-jaw fulcrumed to the bracket-

plate and vertically adjustable, the upper toggle-jaw fulcrumed to the cross-plate, and means for securing the bracket-plate to the vertical arm of a sewing-machine, substantially as described.

3. The combination of the bracket-plate having the vertical extension, the cross-plate dovetailed thereon, said cross-plate having a vertical slot, the arm *g*, having screw *h*, and the set-screw *i*, that passes through the lower end of the arm, through the slot in the cross-plate, and enters the bracket-plate, the lower toggle-jaw, and the upper toggle-jaw fulcrumed to the cross-plate, substantially as described.

4. The combination of the bracket-plate having the vertical extension, the cross-plate adjustable vertically thereon, the wedge bearing on the cross-plate, the lower toggle-jaw, and the upper toggle-jaw fulcrumed to the cross-plate, substantially as described.

5. The combination of the bracket-plate having the vertical extension, and the lug *u*, the cross-plate adjustable vertically on the bracket-plate, the wedge bearing on the cross-plate having the threaded arm that passes through the lug *u* and the nut on the end of the arm, the lower toggle-jaw, and the upper toggle-jaw fulcrumed to the adjustable cross-plate, substantially as described.

In testimony that we claim the foregoing our own we have hereto affixed our signatures in presence of two witnesses.

WILLIAM S. CLARK.
JOHN F. MURPHY.

Witnesses:

J. J. GILBERT,
E. J. COFFIN.