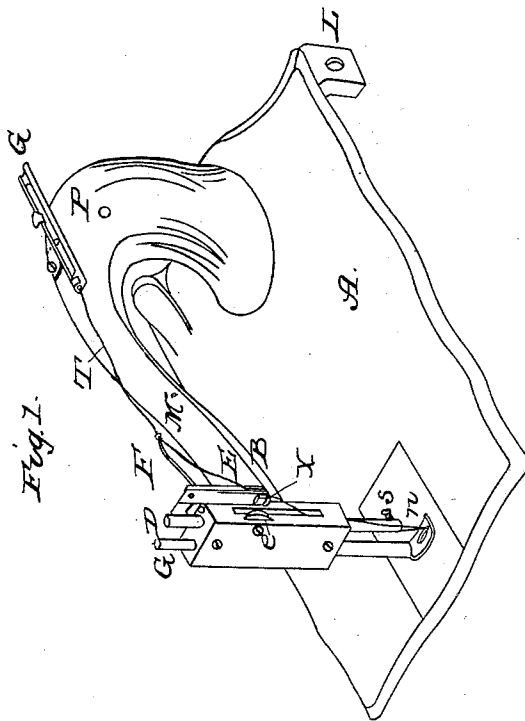
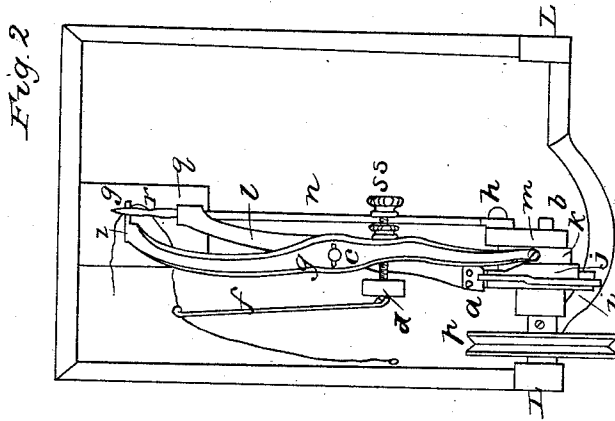


T. NEWLOVE.
Sewing Machine.

No. 27,761.

Patented April 3, 1860.



WITNESSES
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THOMAS NEWLOVE, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF, JAMES BOWLEY, AND T. LYNCH, JR., OF SAME PLACE.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 27,761, dated April 3, 1860.

To all whom it may concern:

Be it known that I, THOMAS NEWLOVE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Mode of Constructing Sewing-Machines; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view; Fig. 2, an under side view.

Referring to the several parts, letter A, Fig. 1, is body of machine; M, curved support and sheath for lever throwing needle-bar D; P, center or pivot upon which lever vibrates; C, foot resting on and securing article being sewed; L, attachment to table or lugs on which machine turns in being raised to a vertical position; G, tension device for thread T; F, spring to prevent twisting of thread; E, nipper holding the thread firmly at certain point by pressure on passing dog *e*; B, lever when at lowest place; *n*, needle; *s*, needle-set-screw. Fig. 2, letter *p* is pulley giving motion to machinery by band and treadle; *g*, feed receiving two motions upward and sidewise by two cams, *j* and *k*; *m*, tail of lever throwing needle-bar D in Fig. 1, vibrated by crank *b*, to which under looping-needle, *n'*, is attached, and receives the required motion at *h*, advancing and returning it in horizontal direction; *s s*, set-screw varying distance feed-bar moves; *f*, spring straightening under thread; *t*, thread passing through the two eyes *r* and *y* in looping-needle; *l*, guide moved in required manner by cam *i*, formed into sheath at one end, through which under looper-needle passes, and by which the looper or under needle is moved sidewise, leaving the loop formed by same for upright needle to pass through; letter *c*, common center pivot for levers *g* and *l* to turn upon.

The nature of my invention or improvement consists in moving the under looper-needle by positive motion communicated by the guide sheathed at end to contain needle, moved by cam, producing a combination of guide and straight needle, simple, durable, and reliable, and free from springs.

To enable others skilled in the art to make

and use my invention, I will proceed to describe its construction and operation.

I construct the body of the machine in any of the known forms of them, communicate the automatic motions by cams working on a common center, and levers of which the principal are needle-guide and feed levers. I use vertical needle and nipper to aid in forming loop, straight under needle or looper attached to the tail of needle-bar lever.

The several parts being connected, the needles threaded, the lower thread, *t*, passing through both eyes *r* and *y*, and the needle-bar lever B at its highest reach, power being applied by band at pulley *p*, the operation is as follows: The needle *n* passes to its entire extent through cloth, and the crank moving needle-bar lever having passed its farthest reach, begins to lift the needle out of the cloth, while cam *i* brings looper from the position at right of needle (if machine is inverted) by means of guide-lever *l* to the left of needle, and has withdrawn looper sufficient to admit its being entered the loop formed just as needle would leave the cloth by spring of the thread and action of nippers claspings thread while passing dog *e*. The looper being entered, the loop rests in notch near eye *r*, thus prevented from slipping off. The cam *i* now acts, carrying looper *n'* to the right, opening a space between thread *t* and end of looper to receive upright needle in its downward passage. At this point the feed-lever acts and moves the cloth distance for one stitch. The upright needle now passes through space still farther enlarged by feed, and the looper by its leftward motion throws off the double-loop stitch, and the operation is thus repeated indefinite length of time.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the sheathed guide-lever *l* with the straight looper *n'*, substantially in the manner described, and for the purpose of securing a positive forward and back as well as a positive lateral movement to the looper.

THOMAS NEWLOVE.

Witnesses:

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A. S. EVANS.