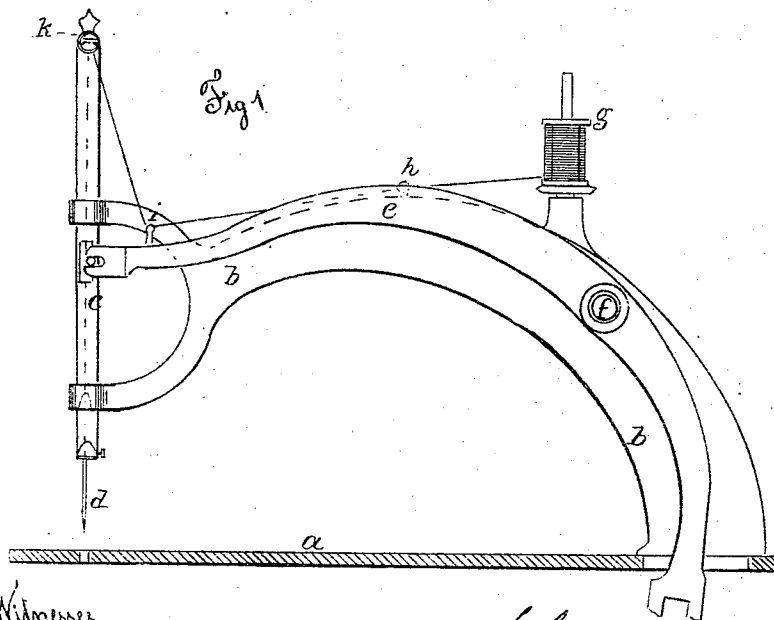
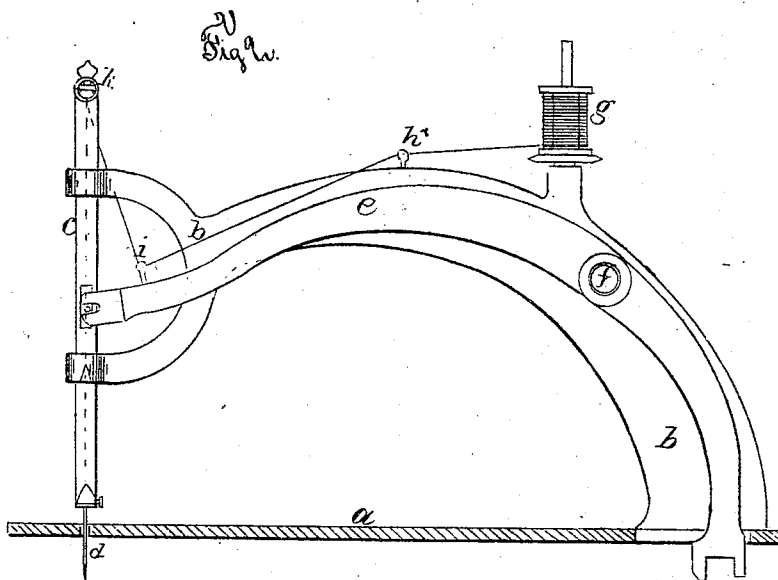


J. FANNING.
TAKE-UP FOR THREAD IN SEWING MACHINES.



Witnesses,

Geo. A. Walker
Chas. H. Smith

John Fanning

United States Patent Office.

JOHN FANNING, OF BROOKLYN, NEW YORK, ASSIGNOR TO JOHN S. ANDREWS, OF NEW YORK CITY.

Letters Patent No. 82,397, dated September 22, 1868.

IMPROVEMENT IN TAKE-UP FOR THREAD IN 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, JOHN FANNING, of Brooklyn, in the county of Kings, and State of New York, have invented, made, and applied to use, a certain new and useful Improvement in Thread-Take Up for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is an elevation of the needle-bar, and parts that carry and move the same, with my improved take-up, with the parts in the position they occupy when the needle is out of the cloth, and

Figure 2 is a similar view, with the needle at the extreme downward movement.

Similar marks of reference denote the same parts.

In sewing-machines that form either a single or a double-loop stitch, it is very important that the loop of needle or upper thread be drawn fully up when the upper or perforating-needle completes its downward movement at the next penetration thereof, in order that the first loop may be entirely out of the way of the lower needle or looper, so as to avoid the risk of the same taking two loops and breaking the thread.

Difficulties have heretofore been experienced in accomplishing this object, and, at the same time, allowing sufficient slack thread to form the loop as the needle rises.

The nature of my said invention consists in an eye near the end of the lever that moves the needle-bar, in combination with an eye upon the standing head or arm of the sewing-machine, and above the said lever, so that the eye on the said lever, in moving down with the needle-bar and needle, is at a greater distance from the stationary eye, and hence draws upon the thread as the needle descends, sufficiently to take up the loop of the needle-thread left from the previous stitch below the cloth.

In the drawing—

a is the bed of the sewing-machine.

b is the fixed arm, carrying at its end the needle-bar *c*, with the perforating eye-pointed needle *d*.

e is the lever to the needle-bar, on the fulcrum *f*, and actuated in any usual manner.

g is the spool of thread, and any desired tension-apparatus may be employed.

h is the eye on the arm *b*, which is a fixture, but may be adjusted, if desired, so as to be located at the proper point, to act in conjunction with the eye *i*, that is upon and moves with the lever *e*, to draw up the previous loop of needle-thread.

It will be evident that the thread, shown by red lines, will be slackened when in the position of fig. 1, but when the distance between *h* and *i* is increased by the descent of the needle-bar and lever *e*, the thread will be drawn upon in proportion to the position of the eye *h* on the arm *b*, and the consequent angle at which the thread stands to the eye *i*, when the needle has penetrated the cloth, as in fig. 2.

The thread passes through the eye *k*, at the upper end of the needle-bar, where there may be a spring to allow for inequalities, and thence said thread passes to the needle.

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

The eye *h* upon the arm *b*, in combination with the eye *i* near the end of the lever *e* that moves the needle-bar, so arranged as to draw upon and tighten the thread between the eye *h* and the guide *k* on the needle-bar, as the needle descends, for the purposes set forth.

Dated, December 18, 1867.

Witnesses:

CHAS. H. SMITH,
GEO. D. WALKER.

JOHN FANNING.