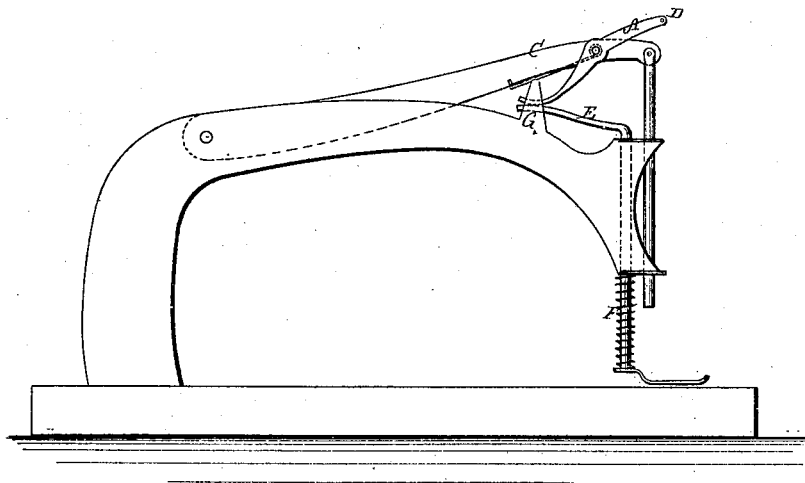


*W. Bennett,
Sewing Machine.*

No. 110,424.

Patented Dec 27, 1870



Witnesses:

*Chas. Nida.
L. S. Nabee*

Inventor:

W. Bennett
PER *Munn & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

WALTER BENNETT, OF SPRINGFIELD, ILLINOIS.

IMPROVEMENT IN TAKE-UP MECHANISMS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **110,424**, dated December 27, 1870.

To all whom it may concern:

Be it known that I, WALTER BENNETT, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and Improved Thread Take-Up; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to improvements in thread take-up apparatus for sewing-machines; and it consists in improvements in the arrangement of that class of such apparatus designed for varying the slack of the thread according to the thickness of the cloth.

The drawing represents a side elevation of a part of a sewing-machine having my improvements applied to it.

A is a short take-up lever, pivoted near the center to the vibrating arm C, which works the needle-bar; or, in case the machine is of that character in which a vibrating arm is not used, the said lever is to be pivoted in about the same position to an arm or other attachment to the needle-bar, projecting from it in a suitable way. The front end of the said lever, projecting slightly beyond the vertical line of the needle-bar, has an eye, D, for the thread. The other end, bending downward and curving upward slightly near the extremity, bears on the upper side of an arm, E, projecting rearward from the top of the presser-bar F, and both the lever A and the arm E work in a verti-

cally-slotted guide, G, the upper end or wall of which slot is intended to arrest the upward movement of the rear end of the said lever in the usual way for taking up the slack of the thread at the time of the upward movement of the needle-bar.

The essential feature of this improvement lies in the arrangement of the rear end of the lever A to come in direct contact with the arm E of the presser-bar for varying the slack of the thread, according to the variation of the thickness of the cloth, which is due to the variation of the height of the arm E by the thickness of the cloth. When the cloth is thick more thread is required to make the stitch, and it is obtained by the outer end of the lever A being forced farther down by the contact of the rear end with the arm E when raised by the thick cloth. On the other hand, if the cloth be thin the arm E will fall lower, and the slack will be taken up to a greater extent.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A thread take-up attached centrally to and moving with the vibrating arm of the sewing-machine, its back end being free to come in contact with a fixed stop on the upward movement and with a projection on the foot-bar on the downward movement, as and for the purpose described.

WALTER BENNETT.

Witnesses:

JAMES LEMEN,
JOSEPH MORRIS.