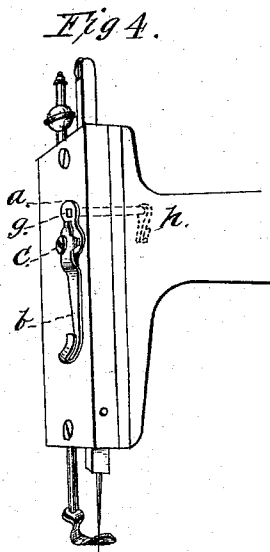
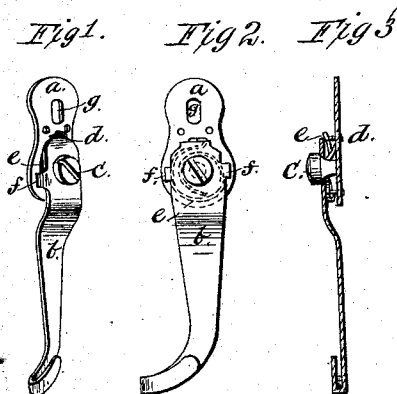


M. M. BARNES.

Take-up and Thread-Controller for Sewing-Machines.

No. 162,737.

Patented May 4, 1875.



Witnesses:

Charles H. Beall.
Seth G. Loring.

Inventor:

Charles H. Barnes
By George E. Piton
his attorney in law

UNITED STATES PATENT OFFICE.

MERRICK M. BARNES, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN TAKE-UPS AND THREAD-CONTROLLERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 162,737, dated May 4, 1875; application filed November 16, 1874.

To all whom it may concern:

Be it known that I, MERRICK M. BARNES, of Boston, Massachusetts, have invented an Improved Take-Up and Thread-Controller for Sewing-Machines, of which the following is a specification:

My invention is a thread-controller so constructed as to combine both a positive and a yielding motion. The object of this is, that the thread may be drawn during the tightening of the stitch by its positive motion, while by its positive yielding motion it prevents the formation of a loop around the point of the needle above the upper surface of the material being sewed, and also prevents the drawing of the thread so tight as to deflect the point of the needle from its perpendicular action, and it so takes up the slack thread as to prevent its being entangled with any part of the sewing mechanism below the material being sewed. It also prevents too much strain upon the thread, and the drawing-off of too much thread from the upper spool.

My device, instead of being made in one whole piece, and then without any spring, is made in two or more parts. The part attached to the head of the machine I make about one inch in length, the top and bottom being rounded, having a transverse slot in the bottom, in which a projection from the top of the lower part enters, and operates to allow a limited play of the lower part actuated by the spring. A headed screw passes through the top of the lower part and the bottom of the upper part, and serves to hold the parts together firmly, and at the same time allows taking apart. This screw also operates as a joint on which the parts turn, and around which a spring is coiled. One end of the spring enters a hole in the upper part, and the other

end is clamped onto the projection on the lower part, which works in the transverse slot. The projections on each side of the lower part, on either side of the headed screw, keep the parts firm, and prevent wobbling or shaking. This take-up is attached in the usual way to the head of the machine by a perpendicular slot in the top part of the take-up, fastening onto a rod with an arm, and is operated by a cam on the main shaft, or it may be attached in any suitable manner to the goose-neck of a machine, and operated by the needle-bar. I propose to use the same in combination with my take-up, as described.

Figure 1 is a perspective view of the thread-controller. Fig. 2 is a front view, showing the coiled spring in the dotted lines. Fig. 3 is a side view. Figs. 4, 5, and 6 are views of the controller with a twist. Fig. 7 is the take-up attached to the head of the machine.

a represents the upper part of the controller; *b*, the lower part; *c*, the headed screw. *d* is the transverse slot in the upper part, in which the projection on the top of the lower part enters and moves. *e* is the coiled spring. *f f* are projections on each side of the headed screw, that serve to keep the parts firm and prevent shaking. *g* is the perpendicular slot by which the take-up is attached to the main shaft by an arm.

I claim as my invention—

The take-up composed of the two parts *a* and *b*, joined by the screw *c*, in combination with the coiled spring *e* and the stops *d* and *f f*, substantially as described, and for the purpose set forth.

MERRICK M. BARNES.

Witnesses:

BERT STETSON,
M. J. McCAFFERTY.