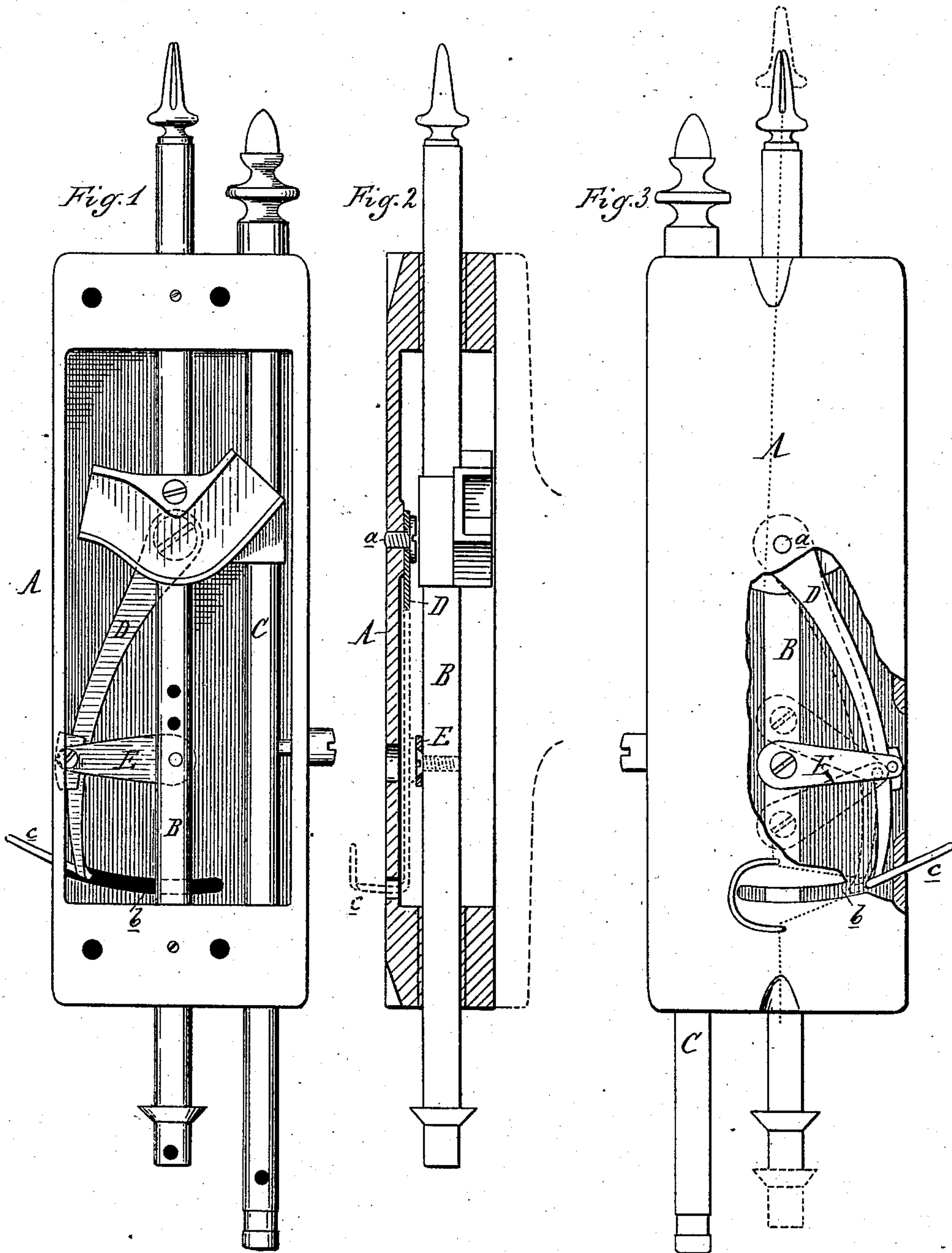


(No Model.)

J. V. D. ELDREDGE.
SEWING MACHINE TAKE-UP.

No. 255,425.

Patented Mar. 28, 1882.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN V. D. ELDREDGE, OF DETROIT, MICHIGAN.

SEWING-MACHINE TAKE-UP.

SPECIFICATION forming part of Letters Patent No. 255,425, dated March 28, 1882.

Application filed July 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN V. D. ELDREDGE, of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Sewing-Machine Take-Ups; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a rear view of the face-plate of the Eldredge sewing-machine with my attachment. Fig. 2 is a side view of the needle-bar, showing its connection with the take-up. Fig. 3 is a front view of said face-plate partially broken away to show the action of the take-up actuated by the needle-bar.

My invention relates to certain new and useful improvements in the take-up of sewing-machines, more especially in that class where the take-up is actuated by the reciprocation of the needle-bar in contradistinction to those machines wherein the thread is compelled to operate the take-up.

The invention consists in the peculiar details of construction, and in their combination and operation, as more fully hereinafter described.

In the drawings, A represents the face-plate of the machine, B the straight reciprocating needle-bar, and C the presser-bar, all of the usual construction, except as hereinafter specified.

D is the vibrating take-up, pivotally secured at *a* to the rear face of the face-plate, and in front of the needle-bar. The lower and free end of this take-up is bent at right angles, or nearly so, to its vertical part, and passes through the curved slot *b* in the face-plate, and then is bent nearly laterally to form the point-hook *c* of the device. A link, E, is pivotally secured to the front of the needle-bar, and the opposite end of said link or bar is pivotally secured to the take-up D in such a manner that when the bar in its reciprocation has completed half its downward or half its upward stroke the link or bar E will stand at right angles to said bar, and will project the hook *c* of the take-up, which will be retracted by the completion of the stroke of the needle-bar in either direction.

It will readily be seen that by my improvement the forward movement of the take-up is compelled at just the right time by the reciprocatory movement of the needle-bar communicating a vibrating movement to the take-up through the intervention of a stiff or rigid link or bar pivotally secured, one end to the bar and the other to the pendulum part of the take-up, thereby slackening the thread, so that all the shuttle is required to do in passing through the loop is to draw the thread through the material being operated upon, no matter how thick or thin the latter may be. It will also be seen that the stitch is drawn at the mid-stroke of the needle-bar, and that the thread is slack at the termination of the upper movement of the needle-bar, at which time the material being operated upon is fed forward for the next successive stitch, and all strain upon the thread and fabric is entirely obviated, rendering it almost impossible to "draw" the material.

The link E is adapted to be adjusted at its inner end by means of its fastening-screw and a series of holes in the needle-bar, into either of which the fastening-screw fits. By this adjustment the movement of the take-up can be changed at will, as when the pivotal point of the link E is raised to the upper hole in the needle-bar the movement of the needle-bar does not move the take-up out so far or so rapidly as when the pivotal point is at the lower hole in the needle-bar.

The entire take-up mechanism is, as will be seen from the drawings, entirely inclosed by the face-plate, with the exception of the hook *c*, which projects through the curved slot *b*.

What I claim as my invention is—

The take-up lever D, pivoted to the interior of the face-plate A, as described, in combination with the link E, pivoted to said lever, the needle-bar B, provided with holes for receiving the inner pivotal screw of the link E, and the face-plate A, having a slot, *b*, to allow the passage and movement of the lower end of the take-up lever, as and for the purpose specified.

JOHN V. D. ELDREDGE.

Witnesses:

H. S. SPRAGUE,
R. S. MALLORY.