

(No Model.)

C. CLEMENT.
Tension Device for Sewing Machines.

No. 236,213.

Patented Jan. 4, 1881.

Fig. 1.

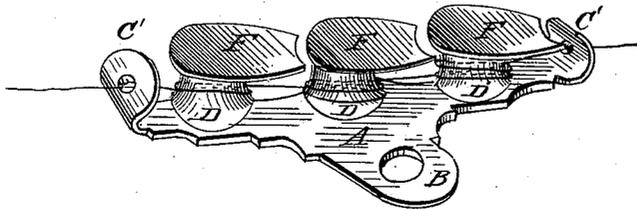


Fig. 2.

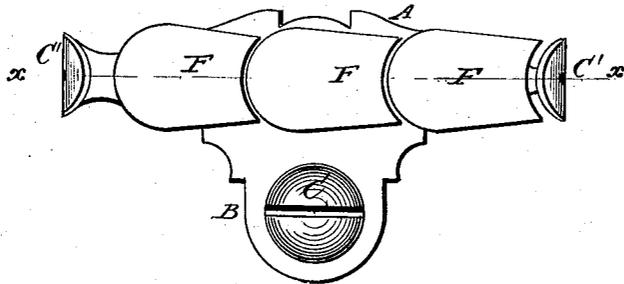
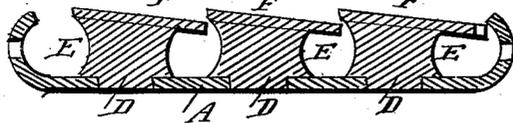


Fig. 3.



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UNITED STATES PATENT OFFICE.

CAROLINE CLEMENT, OF PENHOOK, VIRGINIA.

TENSION DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 236,213, dated January 4, 1881.

Application filed June 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, CAROLINE CLEMENT, of Penhook, in the county of Franklin and State of Virginia, have invented certain new and useful Improvements in Tension Devices for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my tension device for sewing-machines. Fig. 2 is a top view of the same, and Fig. 3 is a vertical sectional view on the line *xx* in Fig. 2.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to tension devices for sewing-machines; and it consists in certain improvements in the construction of the same, which will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents a plate having a perforated lug, B, through which a set-screw, C, may be passed to secure the device to a sewing-machine. The ends of plate A are turned up and perforated, as shown at C' C', for the passage of the thread. Upon plate A, between its upturned ends, is placed a series of three studs, D, (more or less,) provided with smooth annular grooves E. On top of the studs D, which are beveled down toward the right, are secured plates F, each extending nearly to the next adjoining stud, or to the upturned end of plate A, as the case may be.

In operation the thread is passed through the perforation at the right-hand end of plate A, and wound several times around each successive stud, before it is finally threaded through

the perforation C at the left-hand end of plate A, from whence it is carried on to the needle. The tension may be regulated by the number of times the thread is wound upon the studs, 45 coarse thread requiring fewer windings. The plates F prevent the thread from slipping off the tops of the studs D during operation of the machine.

This device is simple, durable, inexpensive, 50 and easily regulated.

I am aware that a comb or a row of pins has been employed, or described as having been employed, in the English provisional specification No. 3,364 of 1872, for the purpose of regulating 55 the top-thread tension of sewing-machines, the thread being led in and out of the teeth or pins, and the tension increased by leading the thread through an additional number of teeth or pins; and this device I do not claim herein. 60

I am further aware that a row of pins through which the thread has been interlaced is shown in Patent No. 16,321, of December 23, 1856, and I do not claim the same, but desire to limit myself to the improved construction herein 65 shown and described.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The sewing-machine tension device consisting of the plate A, having upturned perforated ends, and studs D, provided with annular grooves E, and having beveled tops capped by plates F, substantially as and for the purpose 70 set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses. 75

CAROLINE CLEMENT.

Witnesses:

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DAVID L. ODINEAL.