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Patented July 8, 1902.

J. J. M. CHAUVET & J. W. COULTER.

SEWING MACHINE TAKE-UP.

(Application filed Aug. 1, 1900.)

(No Model.)

Fig. 1.

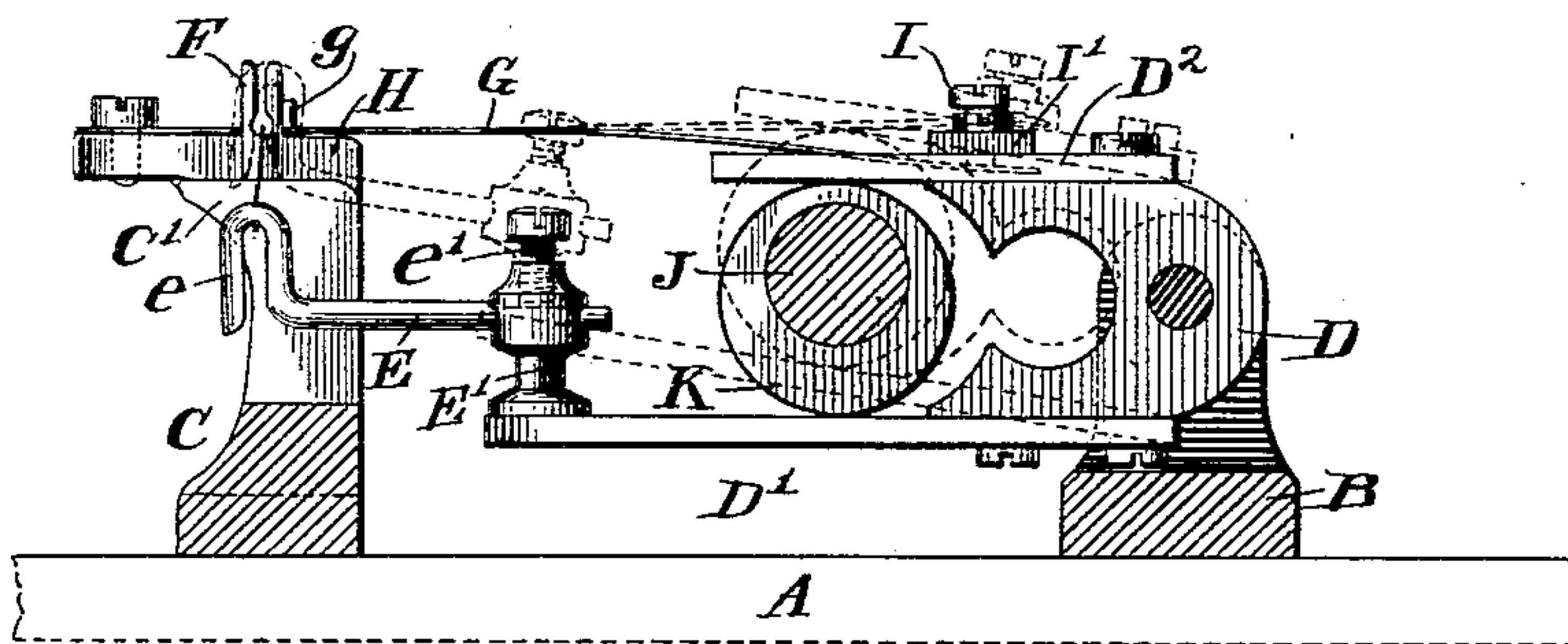
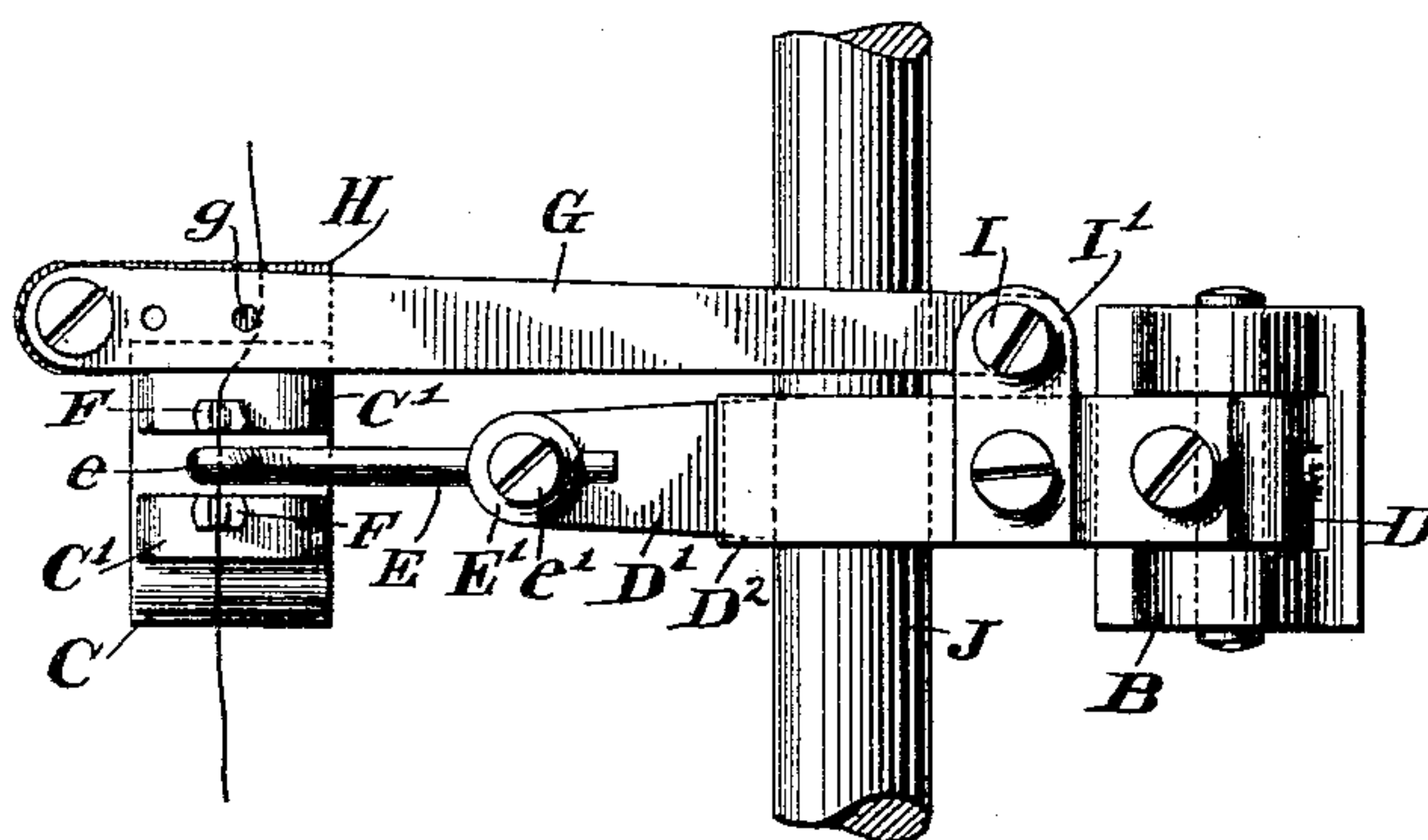


Fig. 2.



Witnesses
Edward C. Rowland.
H. L. Reynolds.

Inventors
Joseph L. M. Chauvet
John M. Coglier
By their Attorneys
Safford & Hall

UNITED STATES PATENT OFFICE.

JOSEPH J. M. CHAUVET AND JOHN W. COULTER, OF NEW YORK, N. Y.

SEWING-MACHINE TAKE-UP.

SPECIFICATION forming part of Letters Patent No. 704,297, dated July 8, 1902.

Application filed August 1, 1900. Serial No. 25,488. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH J. M. CHAUVET, of the city of New York, borough of the Bronx, county of New York, and JOHN W. COULTER, of the city of New York, borough of Brooklyn, in the county of Kings, State of New York, have invented a certain new and useful Improvement in Sewing-Machine Take-Ups, of which the following is a specification.

Our invention relates to an improvement in sewing-machine take-ups, and comprises certain novel features, which will hereinafter be described and particularly pointed out in the claims.

In the accompanying drawings similar letters of reference refer to similar parts in both figures.

Figure 1 is an elevation of our device with a portion of the framework in section. Fig. 2 is a top plan view of our device.

In the accompanying drawings we have shown only that portion of a sewing-machine which is directly connected with the take-up, as the construction of the other parts of the machine is immaterial to our present invention.

A shaft J is shown which corresponds with the shaft which extends beneath the work-table of sewing-machines of a certain class. This shaft has an eccentric K mounted thereon and by means of which the vibrating motion is communicated to the take-up arm. It is evident that any other form of mechanism which will produce a vibrating or reciprocating movement may be substituted for the eccentric and shaft as herein shown.

The take-up lever is pivoted upon a standard B, which is herein shown as secured to a base-plate A. This standard is shown as having two arms extending upward, between which the rear end or body-piece D of the take-up lever is pivoted. To this body-piece D are secured two plates D' and D², one to the lower and the other to the upper side thereof and at such a distance apart as to snugly embrace the eccentric K. To the outer or vibrating end of one of these plates, as the plate D', is secured an extension E, which at its outer end is provided with a hook e, adapted to engage the thread. This extension is herein shown as secured to the plate D'

by means of a post E' and a set-screw e', by which means the extension E may be adjusted in or out, so as to make the effective length of the take-up lever more or less, thus varying slightly the extent of action of the take-up upon the thread. A second standard C is provided, which is also divided into two upwardly-extending arms or ears C', upon the upper surface of each of which is placed a thread-guide. These thread-guides are herein shown as formed from pins F, which are inserted in the upper ends of the arms C' and have a slot extending downward from their upper ends and terminating in a slight enlargement, as clearly shown in Fig. 1. The thread is inserted in both of these guides and beneath the hook e, so that as the take-up lever vibrates it will pull the thread downward between the two guides, and thus take up the amount of thread which has been drawn out by the downward reciprocation of the looper, and thus tighten the stitch. On the side of the thread-guides F toward the spool or where it will engage the thread between the thread-guides and the spool is placed a tension device consisting of a spring bar or plate G, which is mounted upon an extension H of one of the arms C'. This bar is secured by a screw at one end thereof and is provided with a hole adapted to receive a pin g, which prevents the bar from turning upon the securing-screw as a pivot and also limits the position of the thread between said bar and its support H. The outer end of this spring-bar extends beneath an arm I', which projects from the take-up arm near its pivot. This arm is provided with a set-screw I, adapted to engage the upper end of the spring-bar G, so as to depress the same and cause the thread which lies between the bar and its support H to be gripped and held against the action of the take-up. This prevents the take-up from drawing the thread from the spool instead of from the looper. In use this tension device will be set so that the spring will rise sufficiently to disengage the thread except when it is depressed by the engagement of the set-screw I. This leaves the thread free to be drawn out by the looper, but grips it when the take-up is brought into action. The action of this device upon the thread is positive, and its construction is also such that it may

be very easily threaded. By adjusting the position of the rod E, which forms an extension of the take-up lever, the working length of the take-up lever may be changed and the amount of slack which is taken up thereby controlled.

We claim—

1. A sewing-machine take-up comprising two stationary and separated thread-guiding members, a pivoted lever, and means for vibrating the same, and a guide carried by said lever between the other guides and adjustable toward and from the lever-pivot whereby the amount of the take-up may be varied.
2. A sewing-machine take-up, comprising stationary thread-guides, a vibrating take-up lever cooperating therewith, a normally inoperative thread-nipping device between the take-up and thread-supply comprising a lever and its support secured together at one end and adapted to engage the thread in the angle between them, the take-up lever having an arm extending over the thread-nipping lever, and an adjustable member carried by said arm and adapted to engage the movable member of the thread-nipping device before the completion of the take-up stroke.

3. The combination with a take-up device, of a thread-nipping or tension device comprising a support and a spring-bar secured by one end to said support and adapted to receive the thread between them in its passage to the take-up, means for guiding the thread between said members and transversely of the spring-bar, a thread-stop extending across the space between spring-bar and support to limit the entrance of the thread between the two, said stop being located in the path of travel of the thread whereby the extent of the entrance of the thread within the angle between the parts of the nipping or tension device is determined, and means carried by the take-up for engaging said spring-bar to press it upon the thread before the completion of the take-up stroke.

In testimony whereof we have hereunto affixed our signatures in the presence of two subscribing witnesses.

JOSEPH J. M. CHAUVET.
JOHN W. COULTER.

Witnesses:

H. L. REYNOLDS,
CHAS. J. RATHJEN.