(No Model.)

J. W. WEST.

TENSION DEVICE FOR SPOOLS.

No. 358,313. Patented Feb. 22, 1887.

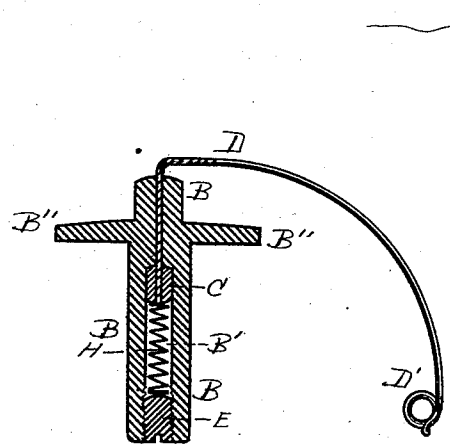


FIG. 3.

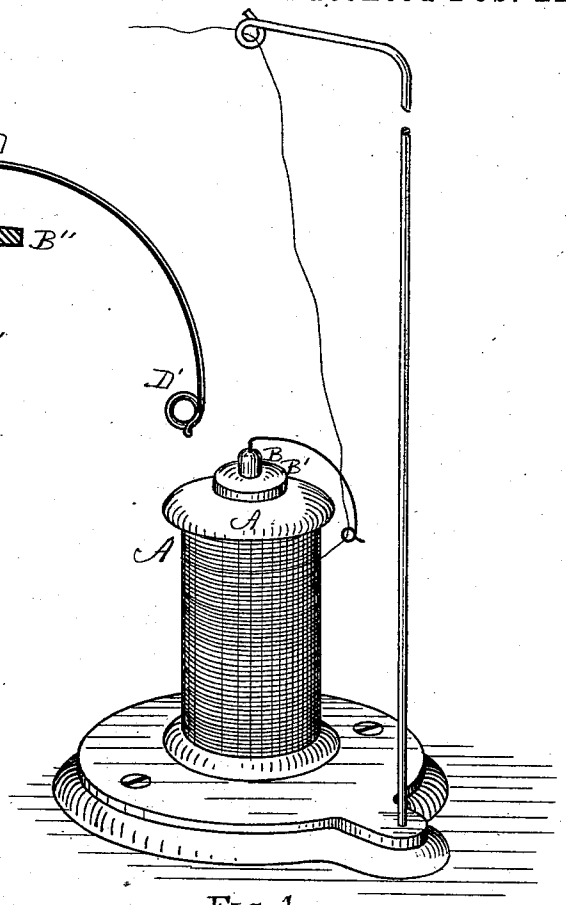


FIG. 1.

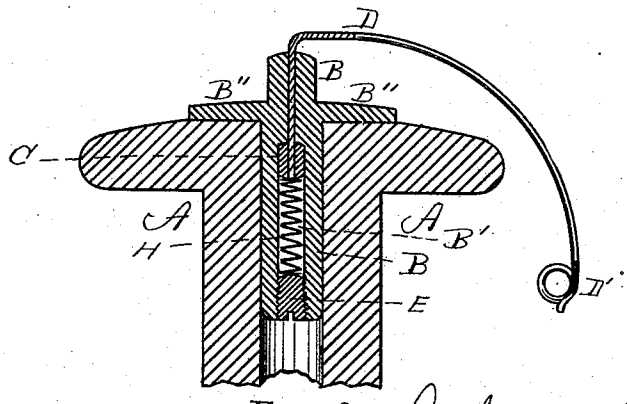


FIG. 2.

Witnesses
J. M. Hartnett.
J. M. Brown

Inventor
John W. West
By his atty
Henry W. Williams

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN W. WEST, OF BRAINTREE, MASSACHUSETTS.

TENSION DEVICE FOR SPOOLS.

SPECIFICATION forming part of Letters Patent No. 358,313, dated February 22, 1887.

Application filed May 10, 1886. Serial No. 201,773. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. WEST, of Braintree, in the county of Norfolk and State of Massachusetts, have invented a new and useful Attachment for Spools, of which the following is a specification.

This is a device adapted to be attached to spools of thread, especially when placed upon sewing-machines, the object of which is to regulate the tension of the unwinding thread.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view of a spool with my device applied thereto. Fig. 2 is an enlarged vertical section of part of a spool with my attachment in position thereon. Fig. 3 is a similar section of the device removed.

A is an ordinary spool, in Fig. 1 represented as placed on a stand for feeding a sewing-machine.

My device consists of a round metallic piece or plug, B, extending down into the hole in the spool, chambered at B′, and provided with an annular flange, B″, to prevent the device from dropping into the spool.

In the upper end of the chamber B′ is a block, C, from which the bent wire D extends, passing through the upper portion of the device, as shown. This wire is provided with the coil D′ for the thread to pass through, and as the thread unwinds the wire revolves around the spool with it. E is a screw, resting in the lower end of the chamber B′, which is threaded at that point for the purpose.

Between the screw E and the block C is a spiral spring, H.

It is evident that the pressure of the spring against the block C is greater or less as the screw E is higher or lower. Hence to increase the tension by causing the block C, which supports the wire, to turn harder, the screw E is raised, and vice versa.

Of course the block C and wire D are free to revolve, and the weight of the device, which is preferably of metal, is sufficient to keep it motionless in position.

Devices of different sizes are provided for different-sized spools.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The herein-described device for regulating the tension of thread as it unwinds from the spool, consisting, essentially, of the piece or plug B, provided with the chamber B′ and flange B″, the block C, free in the upper end of said chamber and provided with the wire D, which extends upward therefrom, the screw E, and spring H, between said screw and said block, substantially as and for the purpose set forth.

JOHN W. WEST.

Witnesses:
HENRY W. WILLIAMS,
J. M. HARTNETT.