S. TAYLOR AND F. JARRY.

TENSION DEVICE FOR SPOOLING MACHINES.

APPLICATION FILED APR. 19, 1922.

1,422,240. Patented July 11, 1922.

FIG. 1

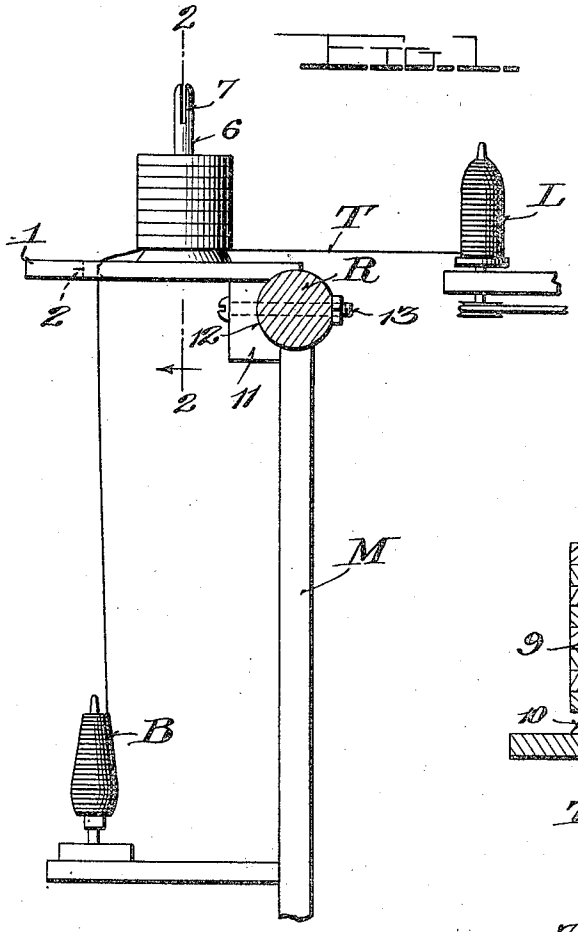


FIG. 2

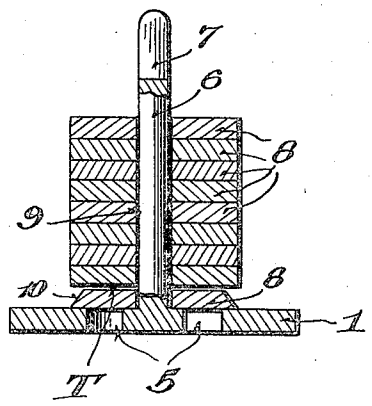
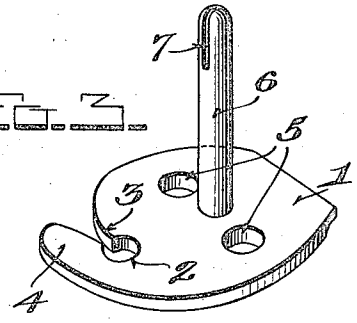


FIG. 3



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SAMUEL TAYLOR AND FREDERICK JARRY, OF NEW BEDFORD, MASSACHUSETTS.

TENSION DEVICE FOR SPOOLING MACHINES.

1,422,240. Specification of Letters Patent. Patented July 11, 1922.

Application filed April 19, 1922. Serial No. 555,567.

To all whom it may concern:

Be it known that we, SAMUEL TAYLOR and FREDERICK JARRY, citizens of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Tension Devices for Spooling Machines, of which the following is a specification.

This invention relates to certain new and useful improvements in tension device for spooling machines and the primary object thereof is to provide a device of this character in which weights are employed for exerting tension on the thread or yarn and are supported on a base member which latter is formed to guide the thread and to also catch and eliminate the fly or lint which may accumulate as the thread passes beneath the weights.

A further object of the invention is to provide novel means for allowing the weights to be easily and quickly applied or removed from the base member to thereby adjust the tension and for holding the weights against accidental separation from the base member.

A still further object of the invention is to provide a tension device which is of simple construction, capable of easy and economical production, and also one which can be easily and quickly applied to the spooling machine.

The invention also aims to provide a tension device which is devoid of parts subject to derangement and has other and further objects which will be later set forth and manifested in the course of the following description.

In the drawings:

Figure 1, is a side elevation of the invention;

Figure 2, is a section on line 2—2 of Figure 1, and

Figure 3, is a detail perspective view of the base member.

In proceeding in accordance with the present invention, a base member 1 is employed which may be of plate-like form as depicted in the drawings. The member 1 is formed with a thread-eye 2, the edge of the member on one side of the eye being curved as indicated at 3, while the opposite side of the eye is flanked by a guide arm 4, the edge 3 and arm 4 providing an approximately V-shaped entrance for the eye, so as to facilitate threading of the yarn into the eye. The member 1, is further formed with a pair of lint or fly receiving vents or openings 5 and with a stem 6 that projects vertically and upwardly therefrom. The stem 6 is formed of material possessing spring properties and is split as indicated at 7 so that the resultant furcations normally lie or project outwardly from the periphery of the lower or remaining part of the stem, the furcations being tapered or beveled at their free outer ends to more readily and easily permit the weights 8 to be positioned thereover. The weights are perforated at 9 to receive the stem 6, while the lowermost weight preferably has its peripheral edge downwardly beveled or tapered as indicated at 10 to prevent cutting or abrading action of the edge of the weight on the thread or yarn. However, all of the weights may be similarly shaped, if desired.

For the purpose of attaching the base member to the machine, a depending arm 11 is suitably carried by the base member and has a concaved face 12 to engage the rising and falling rod R of the spooling machine, a screw and nut 13 being projected through the arm and rod R to clamp the arm onto the rod.

In operation, the bobbin B secured to the frame member M, the latter also carrying the rod R, rises and falls, in the usual manner, the length of the traverse of the spool L so that the thread T is laid upon the spool L. The thread passes from bobbin B through eye 2, and thence over the lowermost weight and onto the spool L. The position of the tension device is so arranged with relation to the spool L that the thread in passing between the weights effects slow rotation of the same, thus causing uniform wear of the yarn on the weights and providing a more smooth acting tensioning means, less likely to break or fray the yarn. The openings 5 catch and permit any accumulations of lint or fly to gravitate therethrough. The parts resultant from the split 7 of the stem are compressed or relatively moved together, upon placing the weights over and upon the stem, following which the parts automatically expand or spring apart to thus latch the weights in position.

What is claimed is:—

1. In a tension device for spooling machines, in combination with the rising and falling rod thereof, a plate-like member having a thread eye flanked on one side by a curved edge and on the opposite side by a guide arm, the curved edge and arm forming

a V-entrance to the eye, said members having lint or fly receiving openings and having a vertical stem extending upwardly therefrom, the stem having a split spring upper end, means to attach the member to the said rod of the machine, and a series of rotatable weights having openings to receive the stem, the lowermost weight having a beveled periphery over which the yarn passes.

2. In a tension device for spooling machines, in combination with the rising and falling rod thereof, a plate-like member having a thread eye, a vertical stem extending upwardly from the member and having a split spring upper end, means to attach the member to the said rod of the machine, and a series of rotatable weights having openings to receive the stem, the lowermost weight having a beveled periphery over which the yarn passes.

3. In a tension device for spooling machines, in combination with the rising and falling rod thereof, a plate-like member having a thread eye, a vertical stem extending upwardly from the member and having a split spring upper end, means to attach the member to the said rod of the machine, and a series of rotatable weights having openings to receive the stem.

4. In a tension device for spooling machines, in combination with the rising and falling rod thereof, a plate-like member having a thread eye, said member having lint or fly receiving openings and having a vertical stem extending upwardly therefrom, means to attach the member to the said rod of the machine, and a series of rotatable weights having openings to receive the stem.

In testimony whereof we affix our signatures.

SAMUEL TAYLOR.
FREDERICK JARRY.