

No. 832,437.

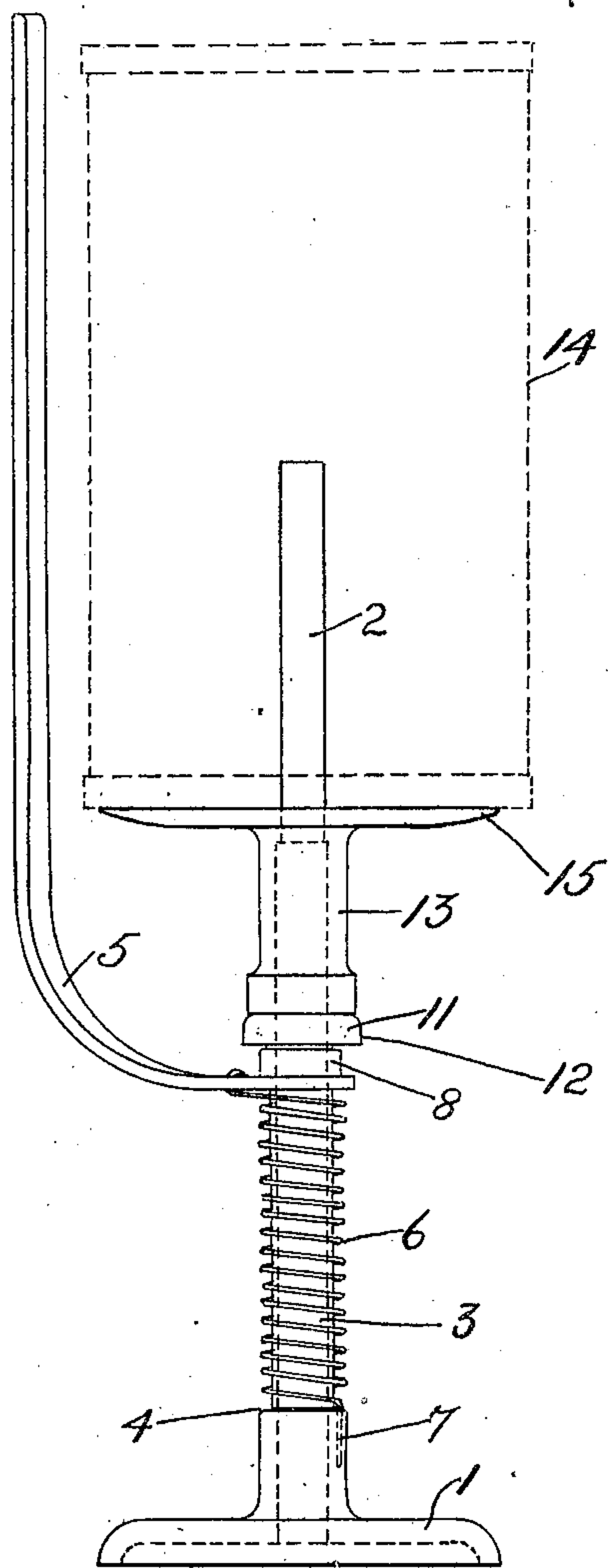
PATENTED OCT. 2, 1906.

J. P. WEIS & W. C. ROBBINS.

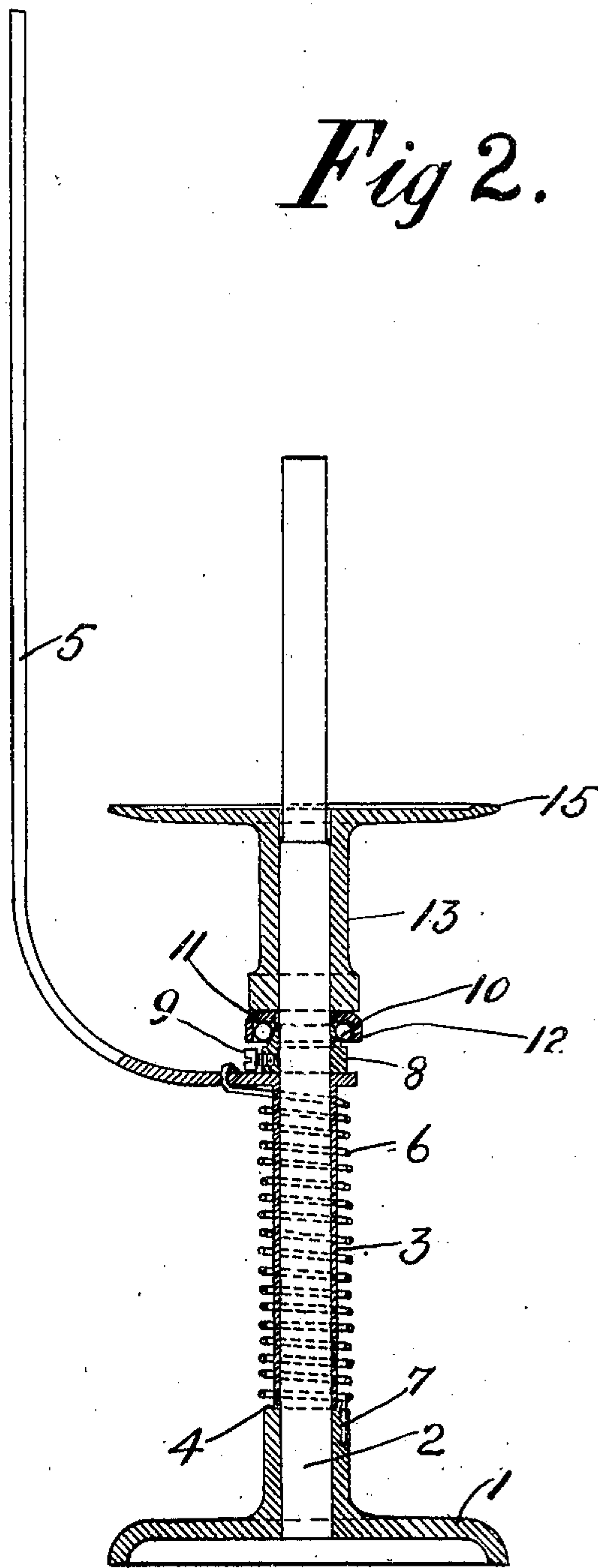
SPOOL HOLDER.

APPLICATION FILED APR. 23, 1903.

*Fig 1.*



*Fig 2.*



WITNESSES:

*M. B. Hoare.*

INVENTORS:

*John P. Weis and  
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# UNITED STATES PATENT OFFICE.

JOHN P. WEIS, OF BROOKLYN, AND WILLIS C. ROBBINS, OF MOUNT VERNON, NEW YORK, ASSIGNORS, BY MESNE ASSIGNMENTS, TO METROPOLITAN SEWING MACHINE COMPANY, A CORPORATION OF NEW YORK.

## SPOOL-HOLDER.

No. 832,437.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed April 23, 1903. Serial No. 153,915.

*To all whom it may concern:*

Be it known that we, JOHN P. WEIS, residing in Brooklyn, county of Kings, and WILLIS C. ROBBINS, residing in Mount Vernon, county of Westchester, State of New York, have invented a new and useful Improvement in Spool-Holders, of which the following is a description.

This invention relates to spool-holders or stands for supporting spools, tape, cord, &c., and particularly to means whereby the slack formed in unwinding or using the tape or cord is taken up and the cord or tape is prevented from falling in loose coils below the base of the spool.

An object of this invention is to provide means whereby the tape or cord may be controlled during the unwinding or use thereof, so as to prevent the coils overflowing the spool and becoming entangled.

With the above object in view and others which will be disclosed during the course of this description the invention consists in the parts, features, and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of the spool-holder, showing the spool in dotted lines in position; and Fig. 2 is a central vertical section of Fig. 1.

The stand or base of the holder is indicated by 1 and includes, suitably fixed thereto, a spindle 2, supporting a journal or sleeve 3 loosely thereon, said journal or sleeve finding its support at its lower end upon a shoulder 4 of the base. The journal or sleeve 3 is provided with an arm 5, extending laterally and then vertically therefrom and in substantial parallelism with the spindle 2 and also extending substantially to the full height of the combined holder and spindle supported thereby. A coiled spring surrounds the sleeve 3 and has one end suitably secured to the arm 5 and its other end extending into a vertical bore 7 in the base. Obviously the tension of the spring can be regulated by compressing the same and withdrawing its lower end from the bore 7 and then winding the spring sufficiently and reinserting the end in the bore 7. On the spindle 2, just above the arm 5, a collar 8 is secured by means of a screw 9, tapped therethrough and engaging the spindle 2. The upper end of the collar is made conical, affording a bearing for anti-

friction-balls 10, which are held against said conical portions by means of a cap or holder 11, formed with the depending and inclosing flange 12. This structure of the cap, together with the structure of the collar, affords a housing for the balls and provides a means by which the spool-support 13 may be freely rotated upon the spindle 2. Said support is independent of the ball-bearing, and its weight affords sufficient connection between it and said bearing for the purpose. As shown by the dotted lines 14, the spool is placed upon a flange 15 of the support; the upper end of the spindle 2 affording the means by which the spool is centrally held and the axis upon which the spool rotates.

The tape or cord from the spool is usually passed through suitable guides to the machine in which the same is being used, and in its passage the arm 5 is caused to contact therewith—that is to say, the arm under its spring tension is caused to engage the tape or cord and place stress thereon, thus preventing the same from falling down around the base of the spool or the body of the stand, the tendency of the arm being to rewind the tape or cord upon the spool, thus also taking up slack between the latter and the machine in which the tape or cord is being used. It will however, be obvious that irrespective of the position of the coils of the tape or cord on the spool between its upper and lower ends the tension on the tape or cord will be such as to prevent the coils thereof falling and becoming entangled and will also prevent objectionable slack forming between the spool and the machine. Moreover, during the operation of the machine in which the tape or cord is being used if the stress upon the same should decrease for any reason the arm would immediately take up the slack and prevent the same from interfering with the operation of the machine and avoid entanglement of the coils.

It will be seen from the above description that we have produced a spool-holder capable of use in many relations, among which may be mentioned sewing-machines, braiding and cording machines, spinning-machines, bobbin-winders, and in connection with any class of mechanism where it is necessary to lead tape, cord, or thread to the machine from a large mass or spool.



Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A spool-holder comprising a base having a vertical spindle fixed thereto, a sleeve resting upon and supported by the base and journaled upon the spindle, a spring-controlled arm carried by the sleeve, a ball-bearing fixed to the spindle above the sleeve, and a spool-support centered by the spindle and resting upon the bearing, and free to rotate upon said spindle.

2. A spool-holder comprising a base having a vertical spindle fixed thereto, a spring-controlled arm journaled upon and movable circularly relatively to the spindle, and a spool-support, journaled upon the spindle above the journal of said arm, through which support said spindle projects to aid in holding the spool.

3. In combination, a supporting-base having a fixed spindle, an arm journaled upon

the spindle and resting upon the base, a spring controlling the action of the arm, a spool-support journaled upon the spindle above the journal of said arm, and a ball-bearing fixed to the spindle above the journal of the arm, upon which the support rests.

4. In combination, a supporting-base including a fixed spindle, an arm journaled upon the spindle, a spring coiled about the journal of the arm and having one end attached to the arm and the other to the base, a ball-bearing fixed to the spindle above the arm, and a spool-support resting upon the bearing.

In testimony whereof we have hereunto signed our names in the presence of two subscribing witnesses.

JOHN P. WEIS.

WILLIS C. ROBBINS.

Witnesses:

CHAS. MCC. CHAPMAN,  
J. W. HARDING.