

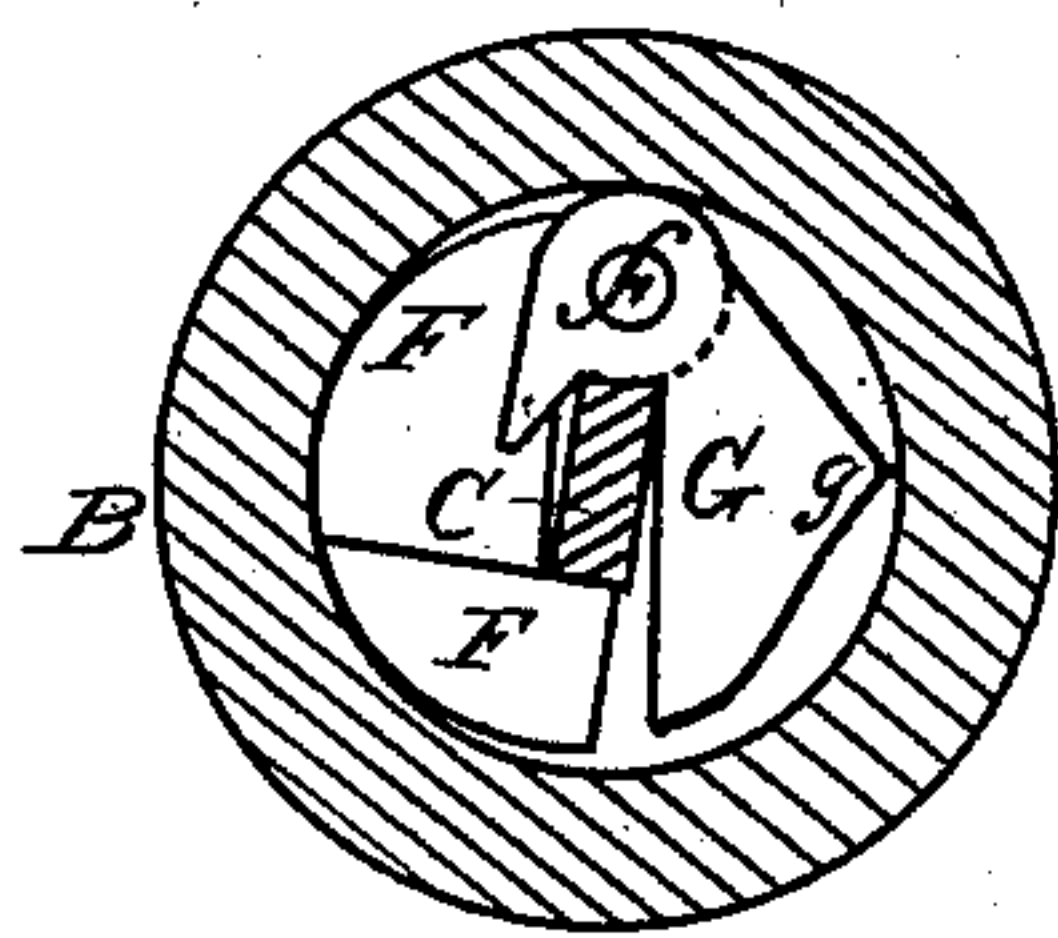
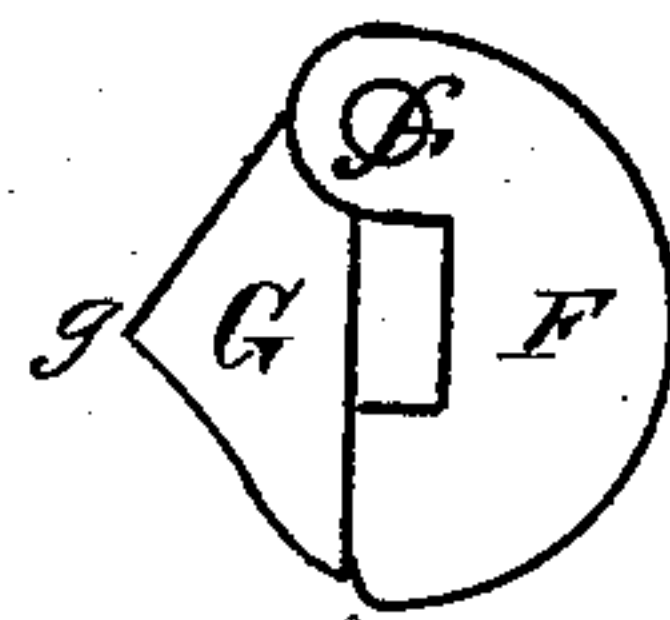
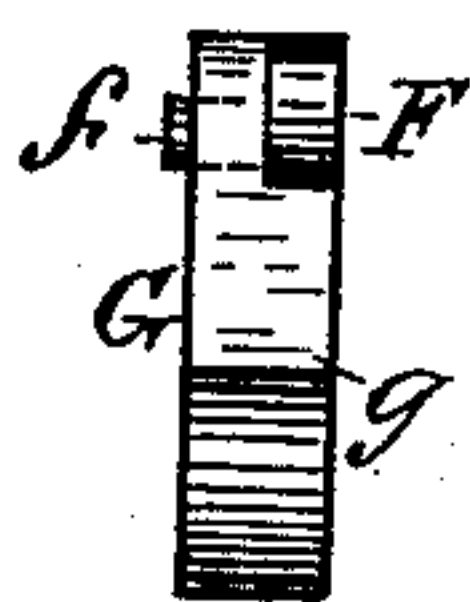
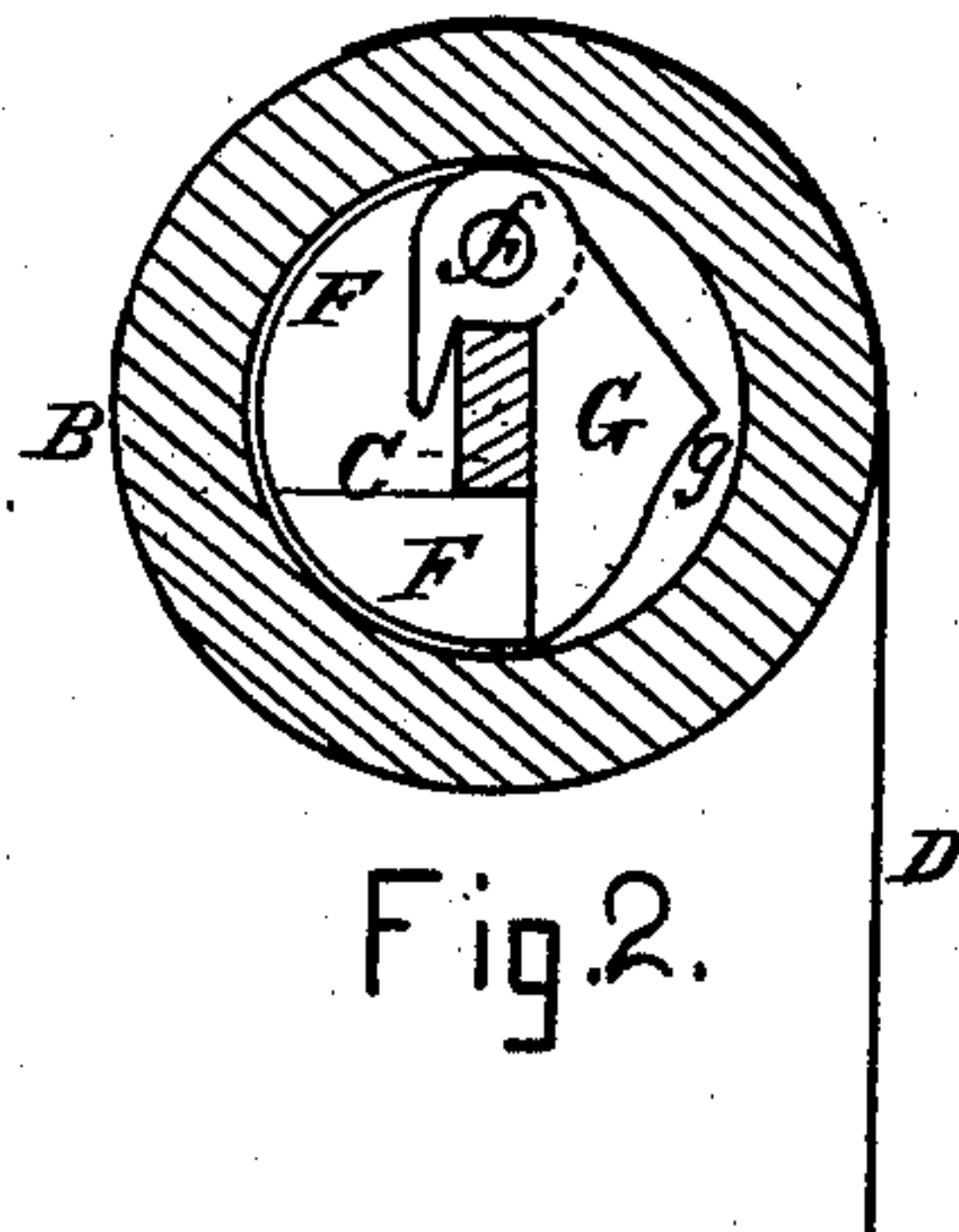
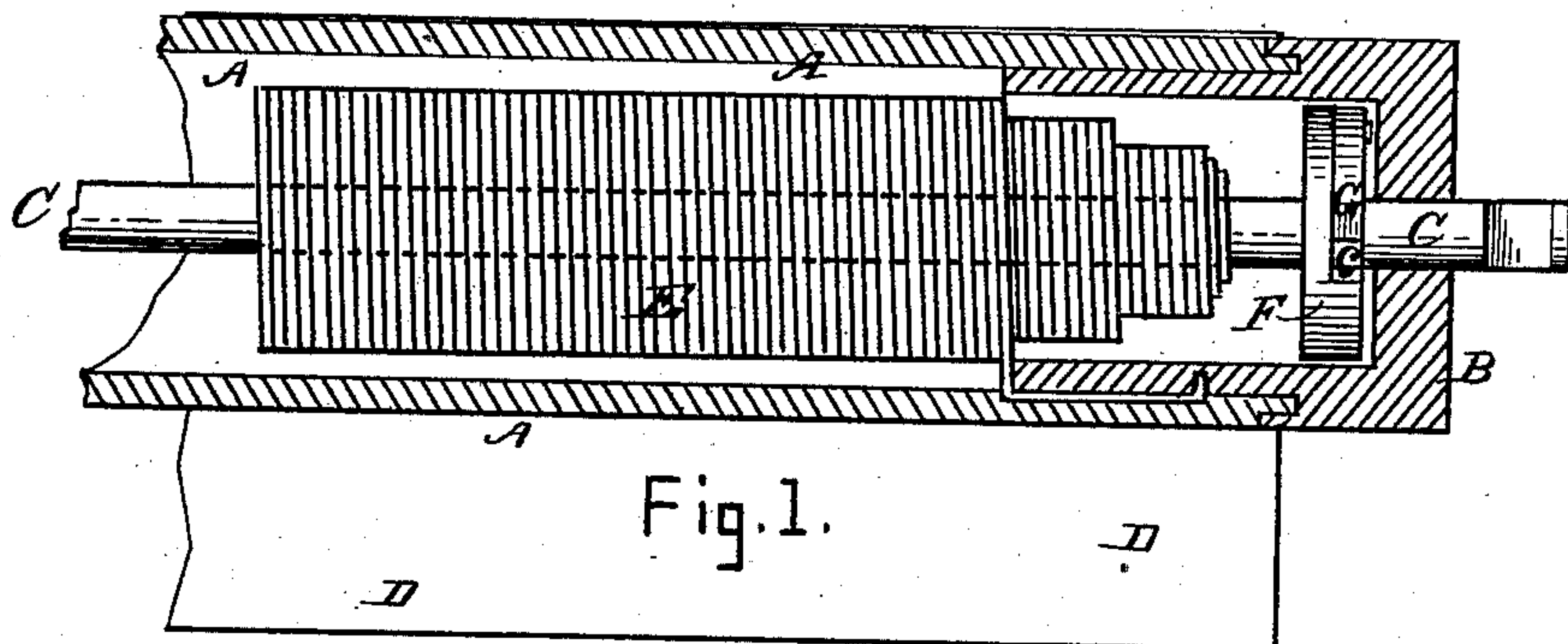
(No Model.)

W. P. & S. L. PUTNAM.

CURTAIN FIXTURE.

No. 279,803.

Patented June 19, 1883.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

WENDELL P. PUTNAM, OF WATERTOWN, AND SIMEON L. PUTNAM, OF  
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## CURTAIN-FIXTURE,

SPECIFICATION forming part of Letters Patent No. 279,803, dated June 19, 1883.

Application filed May 1, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, WENDELL P. PUTNAM and SIMEON L. PUTNAM, citizens of the United States, residing, respectively, in Watertown, Massachusetts, and Boston, Massachusetts, have jointly invented certain new and useful Improvements in Curtain-Fixtures; and we do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of this invention is to provide a simple and efficient locking device for balance curtain-fixtures by means of which the tension of the spring is retained when the spindle is removed from the bracket. Our improved device is positive in its action and absolutely prevents the spindle from making even as much as one-fourth of a single revolution within the roller when taken down from the brackets.

Our invention consists in a hollow roller and an angular, flattened, or recessed spindle adapted to be held by the brackets a given side up, in combination with two locking-pieces pivoted loosely at their ends and hung (within the roller) upon the angular or recessed part of the spindle, so that the quick rotation of the spindle when released from the bracket will spread the pivoted pieces and bring them both into contact with the inner wall of the roller or its cap.

The drawings will make plain the peculiarity of our invention, Figure 1 being a longitudinal section of the roller, and Fig. 2 a transverse section at the locking-point, showing the dormant position of the lock as it remains while the roller is mounted in position for use. Fig. 5 is a view at the same point, showing the roller and spindle locked together by a partial rotation of the latter. Fig. 3 is an edge view of the pivoted locking-pieces, and Fig. 4 a side view the reverse of the position shown in Fig. 2.

In the drawings the roller A has a cap, B, practically forming part of it, both revolving around the stationary spindle C, which is held in position for use by the brackets in which it is mounted. The downward movement of the shade D increases the tension of the spring E, and its upward movement decreases it, the re-

action of the spring serving to raise or coil up the shade when the weight at its bottom is lifted, as usual. Both these movements are freely and repeatedly executed without affecting the locking device so long as the roller is mounted for use. Within the cap B the spindle is recessed, to give a flattened or angular portion, *c*, to operate the locking-pieces F G, which are loosely pivoted at *f* and hung over the spindle at the part *c*. There is space enough between these pieces to receive the reduced part *c* of the spindle, and they lie snugly surrounding it during ordinary use of the roller. (See Fig. 2.) The piece F fits approximately the interior of the cap, or has a part of its periphery so fitting, and also extends beneath the part *c* of the spindle, while the piece G has a sharp angular part, *g*, which is forced into close contact with the inner wall of the cap B by a very slight rotary movement of the spindle, which causes the part *c* to instantly spread the extremities of the pivoted locking-pieces and lock the spindle and roller together when removed from the brackets. (See Fig. 5.)

The pieces F G may be permanently riveted together; but this is not essential, as a pin, *f*, projecting from one and entering a corresponding recess in the other forms a sufficient hinge, the recess in the spindle keeping them engaged.

When the cap B is omitted, a ferrule will cover the roller end, the locking will be against the bore of the roller A, and one end of the spring will be secured to the roller.

We claim as our invention—

1. In a spring-actuated curtain-roller, the pivoted locking-pieces F G, hung upon the flattened or angular spindle, substantially as and for the purpose set forth.

2. The roller A, cap B, spindle C *c*, and spring E, in combination with the pivoted locking-pieces F G, constructed and adapted to operate substantially as set forth.

In testimony whereof we hereto affix our signatures in presence of two witnesses.

WENDELL P. PUTNAM.

SIMEON L. PUTNAM.

Witnesses:

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