P. W. PHILLIPS.

Curtain-Roller.

No. 165,861. Patented July 20, 1875.

Fig. 1.

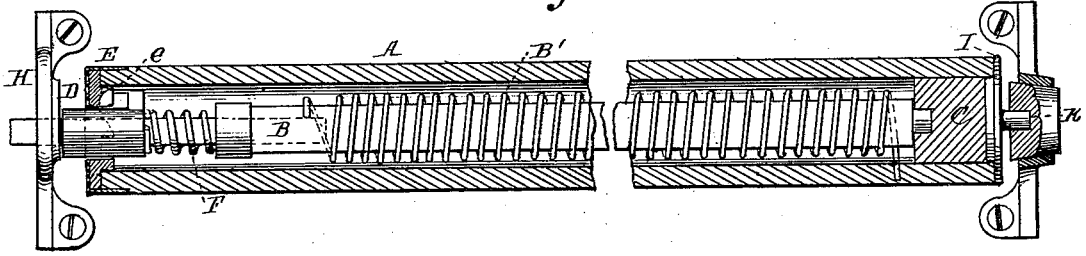


Fig. 2.

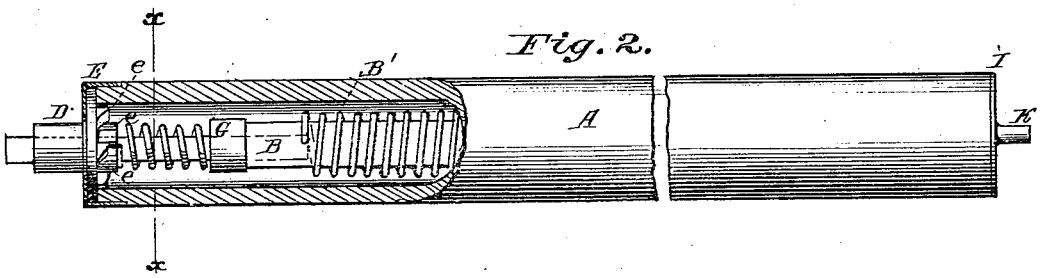


Fig. 3.

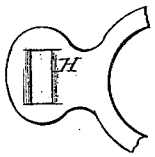


Fig. 4.

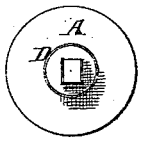


Fig. 5.

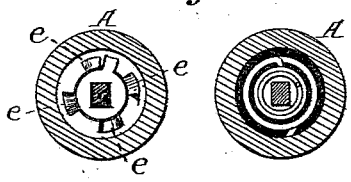


Fig. 6.

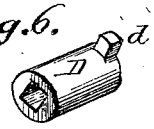
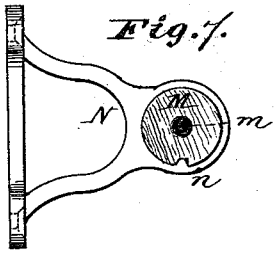


Fig. 7.



Attest:

W. L. Coombs.

A. H. Norris.

Inventor:

Phineas W. Phillips

By James L. Norris.

Atty

UNITED STATES PATENT OFFICE.

PHINEAS W. PHILLIPS, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN CURTAIN-ROLLERS.

Specification forming part of Letters Patent No. **165,861**, dated July 20, 1875; application filed June 11, 1875.

To all whom it may concern:

Be it known that I, PHINEAS W. PHILLIPS, of Salem, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Shade-Rollers, of which the following is a specification:

This invention relates to certain improvements in that class of curtain-fixtures in which the shade-roller is rotated by means of a spring inside, for the purpose of winding up the shade when unrolled; and it consists in the combination, with a shade-roller, of a sleeve, provided with a lug on its inner end, fitting over a stationary shaft, and having a slight longitudinal movement thereon, said sleeve extending through a cap on the end of the roller, which is adapted to revolve on the same, and which is provided with a ratchet or stops on its inner face, with which the lug on the sleeve may be made to automatically engage or disengage, in such manner as to prevent the rotation of the roller upon the shaft when removed, and allow the free movement of the same when secured between its brackets, as fully hereinafter set forth.

In the drawing, Figure 1 represents a longitudinal section through the shade-roller and shaft. Fig. 2 represents a view, partly in section and partly in elevation, of the same. Fig. 3 represents a detached view of one of the supporting-standards. Fig. 4 represents an end view of the roller. Fig. 5 represents detached transverse sections of the roller; Fig. 6, a detached perspective view of the sleeve; and Fig. 7, a detached view of the standard, with the anti-friction block.

The letter A represents the shade-roller, and B a longitudinal shaft, extending through one end of the same and journaled in the other, which is made solid, or provided with a suitable plug, C, for the purpose. To the shaft B is secured one end of a spiral spring, B′, which surrounds the same, the other end being secured to the inside of the shade-roller A. D represents a sleeve sitting over the outer end of the shaft B, and passing through the cap or head E, secured to the shade-roller, said cap being adapted to rotate on said sleeve. The sleeve is provided at its rear end with a lug, *d*, which automatically engages a ratchet, *e*, or suitable stops upon the inside of the cap or head E when the sleeve is pressed outward by the spring F, which is confined on the shaft B, between a shoulder, G, on the same and the sleeve D. The shaft B is rectangular in cross-section, and at its outer end is adapted to fit into a rectangular stop on the standard H, which supports one end of the shade-roller when in position. To the opposite end of the shade-roller is attached a head, I, which carries a journal, K, which has its bearing in the anti-friction block M, which is supported in the standard N. Said block is composed of a short cylindrical or other shaped piece of wood, saturated with oil or other fatty matter, and provided with a recess, *m*, for the end of the journal, and is confined in a cylindrical or suitably shaped socket, *n*, in the standard M for the purpose.

The standards are adapted to be attached to the window-frame in the ordinary manner, and when secured to the same are placed in such position that when the roller is placed between them the sleeve D will be forced inward by the standard or bracket H, throwing the lug or pin *d* out of or away from the ratchet or stops *e*, allowing the shade-roller to rotate freely upon the shaft B. When the roller is removed, it will be evident that the spring F will again force the pin *d* into the ratchet *e*, and thus lock the roller upon the shaft.

By this means provision is made for automatically locking and releasing the roller upon the shaft at proper times, so that when the roller is removed from the brackets or standards the shade-roller spring will be prevented from unwinding, and when in place will have full and perfect play.

I do not here claim the anti-friction bearing applied to the bracket of the fixture, as such may form the subject for a separate application for Letters Patent.

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

In combination with the shade-roller and shaft, the spring F and sleeve D, provided with a lug, *d*, said sleeve fitting over the end

of the shaft, and extending through the cap E, which is provided with a ratchet or stops, *e*, with which the lug or pin *d* is automatically engaged and disengaged, as described, for the purpose of locking or unlocking the shade-roller upon its shaft, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

PHINEAS W. PHILLIPS. [L. S.]

Witnesses:
JAS. F. ALMY,
S. H. ALMY.