P. W. PHILLIPS.

SPRING SHADE FIXTURES.

No. 189,781. Patented April 17, 1877.

Fig. 1.

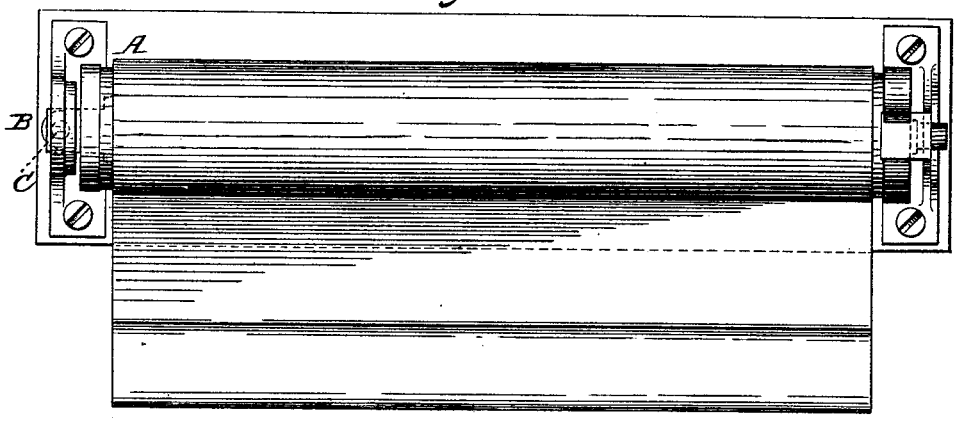


Fig. 2.

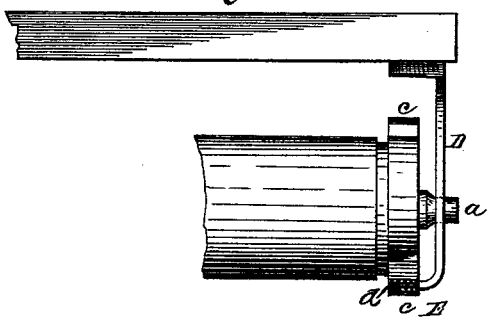


Fig. 3.

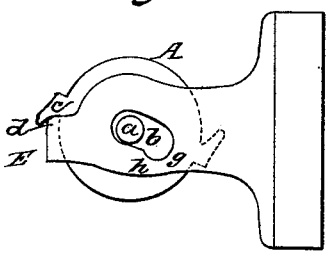


Fig. 4.

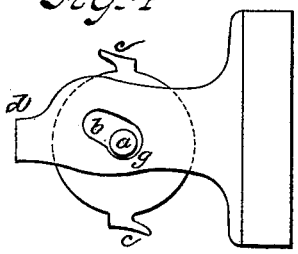
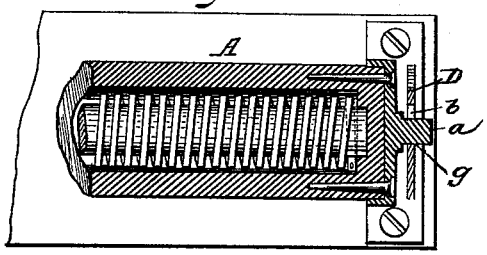


Fig. 5.



Witnesses:

J. Hurst Wagner.

Jobs Coombs

Inventor:

P. W. Phillips.

By James L. Norris.

Attorney.

UNITED STATES PATENT OFFICE.

PHINEAS W. PHILLIPS, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN SPRING SHADE-FIXTURES.

Specification forming part of Letters Patent No. **189,781**, dated April 17, 1877; application filed July 19, 1876.

To all whom it may concern:

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

This invention more particularly relates to holding the roller against, and releasing it to, the action of its coiled spring; and as to this consists in the combination, with a roller, of a clutch and of a support for the roller on its brackets, which are so constructed and arranged that the roller can be moved to and fro—as, for instance, in a vertical, or in a horizontal, or other direction—and so that one of its motions shall separate the parts composing the clutch, and the other bring them together, all substantially as hereinafter described.

In the accompanying drawing, Figure 1 represents a front elevation of a curtain-fixture, with my improvements applied thereto. Fig. 2 is a top view of one end of the roller; Figs. 3 and 4, end views, showing the journal of the roller in different positions, and Fig. 5 a sectional view of a part of the roller, showing the internal spring.

In the drawings, A represents a spring shade-roller.

This roller A is made of wood or of sheet metal. It has a spring coiled within it and attached to it and to a spindle, B, and, except as hereinafter described, it is suspended by its spindle B and its journal *a* in brackets C and D, all as with the well-known spring shade-rollers of this class, therefore needing no more particular description herein; *b*, the bearing in the bracket D for the roller-journal *a*.

This bearing *b* is a slot which extends in a horizontal and inclined direction in the bracket, and allows the roller to be moved bodily forward or backward on the bracket; E, the clutch or device for holding the roller against, and releasing it to, the action of its coiled spring.

This clutch is in two members—*c* and *d*. The one, *c*, is a projection, and is in duplicate on the end H of the roller, which is suspended in the slotted bearing *b* of the bracket D, and the other, *d*, is a stop on the front end of said bracket, which projects in front of the roller in position for either of the projections *c* of the roller to be engaged therewith when the journal *a* of the roller is at the outer or front end *f* of its slotted bearing *b*, and to be wholly disengaged therefrom when the roller-journal *a* is at the inner or rear end *g* of its slotted bearing, all as plainly shown in the drawings, more particularly in Figs. 3 and 4.

When the two parts *c* and *d* of the clutch E are together, as is shown in Fig. 3, the roller is held against the action of its coiled spring, and thus the shade is retained at any desired height; but when the two parts *c* and *d* of the clutch E are separated, as is shown in Fig. 4, the roller is free to be acted upon by its spring, and thus the shade raised or to be rotated against its spring, and thus the shade lowered.

To separate the two parts *c d* of the clutch E, pull downward on the shade. This downward pull on the shade first lifts the part *c* of the clutch from the part *d*, and then slides the roller bodily along the slotted bearing *b* toward and to the inner end *g* of said bearing, where the roller-journal *a* comes to a seat in a depression or notch, *h*, in the lower edge or side of the slot.

To bring the two parts *c d* of the clutch E together, pull forward on the shade. This forward pull on the shade draws the roller bodily toward and to the front or outer end of the bracket-slot, and thereby brings the part *c* of the clutch E into position to engage itself with the part *d* of the clutch, and this engagement will take place by the action of the coiled spring of the roller, revolving the roller, and thereby bringing the members of the clutch together.

The depression *h* in slotted bearing *b* secures a rest, as it were, for a roller-journal, when the roller is drawn back, and the better holds it against being pulled forward by the action of the coiled spring of the roller, which obviously at all times tends to throw the roller to the front or outer end of the bracket; but said depression is not necessary, although, for the reason above given, it is preferable to have it. As the spring of the roller tends, when the clutch is disengaged, to move the roller bodily on its supports, so as to bring

the parts of the clutch together, it would of itself be sufficient to engage the clutch; but it is preferable to assist it by pulling the shade forward, as has been described; for such assistance the better directs, controls, and steadies the roller in its said movement, especially when the depression *h* is used.

From the description of the clutch E and the support for the roller-journal *a* above given it is plain that, to separate or to bring together the two parts of the clutch, the roller is moved bodily on its support.

One part of the clutch obviously could be on any other part of the fixture which is stationary in relation to the rotation of the roller, instead of on the bracket, as described; and again the support of the roller for separating and bringing together the two parts of the clutch by a movement of the roller bodily obviously could be readily adapted for a movement of the roller bodily in a direction other than that particularly described, and in either or both cases with, of course, a proper relative arrangement and construction of the parts of the clutch and of the support for the roller, secure substantially the same operation of the fixture which has been described.

I am aware that shade-rollers operated by a pulley and cord have been mounted to be moved bodily to and fro on their supports to clutch and unclutch them, so that their shades can be raised and lowered, and then held at the height desired, and this I do not claim; but

What I do claim as my invention is—

In a curtain-fixture in which the roller is provided with an internal spring for automatically winding up the shade, the combination therewith of a support for the roller in its bracket, and a clutch constructed in parts, arranged in relation to the roller and its supports, the said roller being adapted to move to and fro on its supports, substantially as set forth, whereby the clutch is disengaged by a downward pull of the shade against the spring in the roller and engaged by the action of the said spring, as set forth.

PHINEAS W. PHILLIPS.

Witnesses:
EDWIN W. BROWN,
GEO. H. EARL.