J. L. WILLIAMS & A. KERR

CURTAIN-FIXTURES.

No. 190,656. Patented May 8, 1877.

Fig. 1.

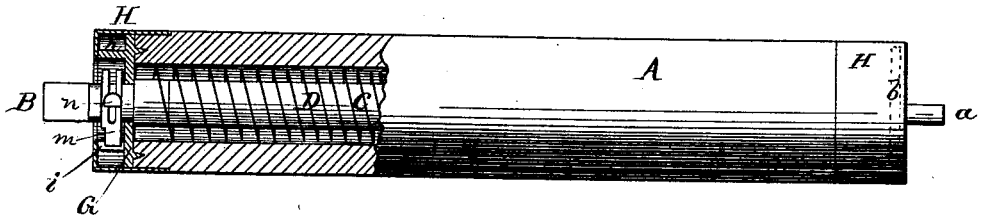
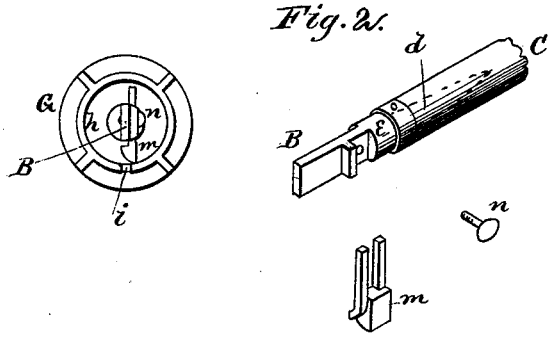


Fig. 2.



WITNESSES

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JOHN L. WILLIAMS AND ANDREW KERR, OF HARRISON, NEW JERSEY.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **190,656**, dated May 8, 1877; application filed April 3, 1877.

To all whom it may concern:

Be it known that we, JOHN L. WILLIAMS and ANDREW KERR, of Harrison, in the county of Hudson and in the State of New Jersey, have invented certain new and useful Improvements in Curtain-Fixtures; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Our invention relates to that class of curtain-rollers which are provided with interior springs, arranged in such manner that by pulling down the curtains the springs are wound up, and the reaction of the springs winds up the curtains; and the nature of our invention consists in the construction and combination of parts, as will be hereinafter more fully set forth, and pointed out in the claims.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view of a curtain-roller, partly in longitudinal section, embodying our invention. Fig. 2 is detailed view, showing the various parts thereof.

A represents a curtain-roller, of ordinary dimensions, made hollow and provided at one end with a plate, *b*, having a central projecting pin or pivot, *a*, which is to have its bearing and rotate in any ordinary fixture for that purpose.

At the other end of the roller A projects a flat bar, B, which is to be placed and held stationary in a suitable fixture fastened to the window-frame. The inner end of the flat bar B forms a longitudinally-corrugated stem, *d*, which is inserted and fastened in a rod, C, placed within the roller A. This rod C is surrounded by a spiral spring, D, one end of which is fastened to the rod, and the other end to the roller.

A portion of the bar B, at *e*, is made round, as shown, and this part passes through a plate or head-piece, G, fastened permanently on that end of the roller A. On the outer side of this plate or head-piece G is formed a circular projecting flange, *h*, concentric with the head-piece, and in this flange is made a slot, *i*, as shown.

On the side of the bar B, within the circular flange *h*, is, by means of a rivet or headed pin, *n*, held a slotted pawl or catch, *m*, which drops vertically of its own gravity, so that when the roller is turned around, to bring the slot *i* of the flange *h* at the bottom, said pawl will fall down into the slot and prevent the backward turning of the roller.

When the curtain is pulled down the spring D is thereby wound up, and the catch *m* slides over the slot *i*, one side of the catch being beveled for that purpose, and when the curtain is pulled down as far as desired the roller is allowed to turn back slowly, when the catch will drop into the slot as soon as the slot gets below the same, and the curtain will then be held at that height. When it is desired to raise the curtain, it must first be pulled down a little, or until the slot *i* has passed by the catch; then, by letting the curtain loose, the spring D will turn back the roller and wind up the curtain sufficiently fast to prevent the catch dropping into the slot; or, in other words, the slot passes by the catch so rapidly that the catch cannot enter the same.

Both ends of the roller A are covered by sheet-metal caps or ferrules H, which inclose, at one end, all the working parts, and at the other end the plate *b*.

We are fully aware that spring-fixtures for winding up curtains on rollers are not new, hence we do not claim such, broadly, as our invention.

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

1. In a spring-fixture for curtains, the vertically-sliding pawl or catch *m*, secured to the stationary center-bar B by the headed pin *n*, or its equivalent, in combination with the head-piece G, fastened on the end of the curtain-roller, and provided with the flange *h*, having slot *i*, substantially as and for the purposes herein set forth.

2. The combination, with the curtain-roller A, of the interior rod C, spring D, bar B, with sliding pawl or catch *m*, the headed pin or set-

screw *n*, and the head-piece G, with circular flange *h*, having slot *i*, substantially as and for the purposes herein set forth.

3. The sheet-metal caps or ferrules H, in combination with the curtain-roller A, and the fixtures in the ends thereof, substantially as herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 2d day of April, 1877.

JOHN L. WILLIAMS.
ANDREW KERR.

Witnesses:
FRANK GALT,
HENRY N. MILLER.