A. B. SHAW.

CURTAIN-FIXTURES.

No. 189,798. Patented April 17, 1877.

Fig 1.

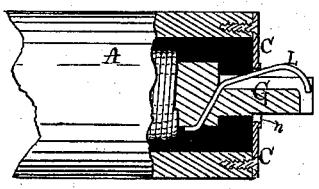


Fig. 2.

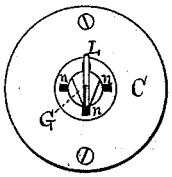
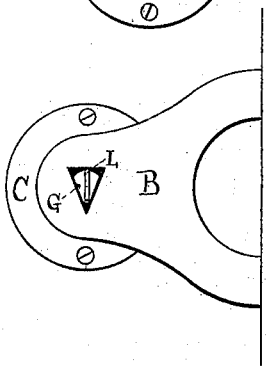


Fig. 3.



Witnesses.

C. G. Keyes.

Chas. J. Page

Inventor.

Ai. B. Shaw,

by his atty, A. N. Spencer.

UNITED STATES PATENT OFFICE.

AI B. SHAW, OF MEDFORD, ASSIGNOR TO ALBERT B. RUSSELL, DANIEL LOW, AND JAMES F. ALMY, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **189,798**, dated April 17, 1877; application filed December 9, 1876.

To all whom it may concern:

Be it known that I, AI B. SHAW, of Medford, Middlesex county, Massachusetts, have invented a new and useful Improvement in Curtain-Fixtures, which improvement is fully set forth in the following specification and accompanying drawing.

My improvement is applicable to that class of shade-rollers having a coiled spring within the roller, the recoil of which tends to roll up the unrolled portion of the curtain, or to counterbalance its weight.

To accomplish this perfectly, a proper tension should be imparted to the internal spring before the roller is placed in the brackets, and it is important to retain this degree of tension when the roller is removed from its position to be again replaced.

My invention relates to an automatic locking device, inoperative when the roller is in place in the brackets, but serving to retain the spring under tension when the roller is removed from them.

My invention consists in the combination of the roller and its internal spring with a grooved spindle, a notched cap, and a locking-spring connecting them; also, in such combination with a bracket, serving to release the locking-spring from its engagement with the cap, as described.

In the drawing, Figure 1 is a longitudinal section of the grooved spindle, notched cap, and roller, showing the position of the locking-spring when free from the bracket. Fig. 2 is an end view of the parts in the same position, and Fig. 3 is a view of the bracket, showing the locking-spring depressed by insertion therein.

A is the roller; B, the brackets; C, the cap, secured to or forming part of the roller; G, the grooved spindle, and L the locking-spring.

The coiled spring within the roller is secured at one end to the spindle, and at the other to the roller, in the usual manner. The outer end of the spindle is grooved, so as to constitute a recess, into which the locking-spring may enter when pressed by the bracket. This locking-spring L is formed, preferably, of bent wire passed through a hole in, and thus secured to, the spindle. Its shape and elasticity cause it to stand out from the spindle, as shown in Fig. 1, in which position it engages with one of the notches, *n*, formed in the cap C, and thus locks the roller and the spindle together, so that the tension of the coiled spring will not cause the one to turn upon the other; but when the end of the spindle is pressed into the aperture, of similar angular form in the bracket, the locking-spring is thereby depressed, and caused to enter the groove in the spindle. This movement releases the locking spring L from its engagement with the notch *n* in the cap, and permits the roller to revolve freely upon its fixed spindle under the influence of the coiled spring.

It will thus be seen that when the roller is in position for use the locking-spring lies dormant in the spindle-groove, but that it springs out and engages with the cap when the roller is removed from the bracket, thus preventing the spindle from revolving, and preserving the proper tension of the internal spring.

I claim as of my invention—

1. The combination of the roller, the coiled spring, the notched cap, the grooved spindle, and the spring-lock, substantially as specified.

2. The combination of the roller, the coiled spring, the notched cap, the grooved spindle, the spring-lock, and the bracket, substantially as specified.

AI B. SHAW.

Witnesses:

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