

W. H. MAINE.
CURTAIN-FIXTURES.

No. 170,006.

Patented Nov. 16, 1875.

Fig: 1.

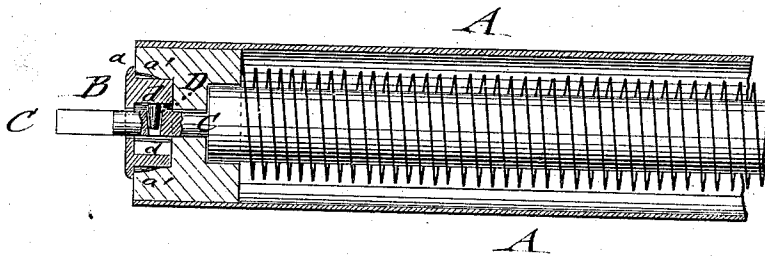
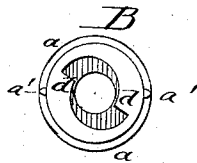


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. MAINE, OF ABINGTON, MASSACHUSETTS.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 170,006, dated November 16, 1875; application filed October 16, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. MAINE, of Abington, Plymouth county, Massachusetts, have invented a new and Improved Curtain-Roller, of which the following is a specification:

Figure 1 represents a vertical central section of my improved curtain roller, and Fig. 2 a detail end view of the locking-cam sleeve as detached from the roller.

Similar letters of reference indicate corresponding parts.

The present invention relates to that class of spring curtain-rollers which are provided with a device for preventing the unwinding of the spring when the roller is removed from the brackets.

The invention consists of a spring-roller with stationary cam-sleeve socketed to the end in connection with a loose pin sliding in a hole of the spindle or shaft, for engaging the cam-sleeve at the instant when the spindle is taken out of the bracket.

In the drawing, A represents a spring curtain-roller, of the usual construction, which is provided at the end with a metallic cam-sleeve, B, set securely by an outer collar or rim, and raised ribs *a'* into the cap or end piece of the roller. The cam-sleeve B fits loosely, by an interior collar, on the shaft or spindle C of the roller, the shaft being rigidly held in position in the customary manner, by its flattened end, when seated in the supporting-bracket. The cam-sleeve B is formed at the interior with one or more recesses and teeth, *d*, against which a conically-tapering pin, D, that slides in a corresponding hole of the spindle at a point within the cam-sleeve, is thrown by centrifugal force, imparted by the sudden rotation of the spindle when being

taken out of the bracket. The pin D is loosely fitted into the hole of the spindle, and retained therein when the roller is placed in position on the brackets, by being seated vertically in the hole, with the larger end at the top, so that the roller and cam-sleeve can clear the pin and revolve without obstruction. The pin is so arranged in the spindle that it assumes a vertical position when the roller is placed in the brackets.

As soon as the roller is taken out of the bracket, the spiral roller-spring acts on the spindle, revolves the same, and throws the pin instantly out of its seat against a cam of the sleeve, so as to retain the spindle and prevent the unwinding of the spring. The roller thus remains in locked position as long as it is out of the brackets, and is instantly available for use when replaced in the brackets.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improvement in spring curtain-rollers, the improved spindle-locking device, consisting of a curtain-roller with fixed cam-sleeve at the end, in combination with a sliding pin seated in a perforation of the spindle within the sleeve, to arrest the spindle when the roller is detached from the supporting-bracket, substantially as specified.

2. The spindle of a spring curtain-roller, provided with a guide-hole for the sliding locking-pin at a point within the cam-sleeve of the roller, the pin-hole being in vertical position when the spindle is seated in the brackets, substantially as specified.

WILLIAM H. MAINE.

Witnesses:

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