

N. CAMPBELL.

Improvement in Curtain-Fixtures.

No. 130,977.

Patented Sep. 3, 1872.

Fig 1.

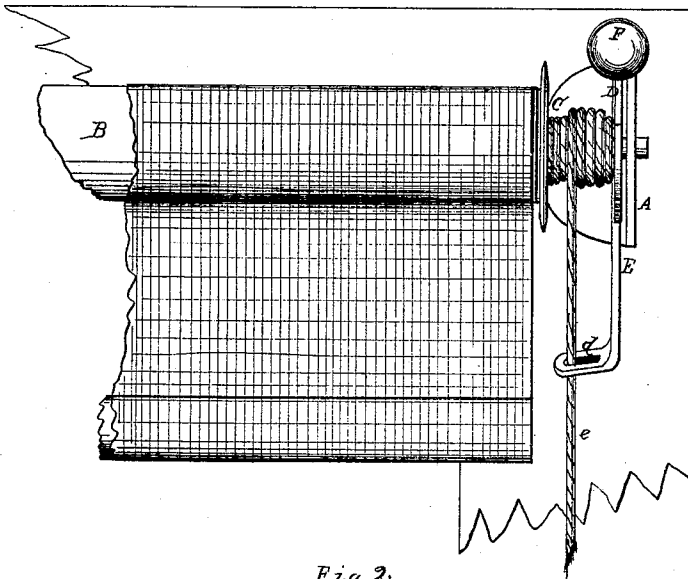
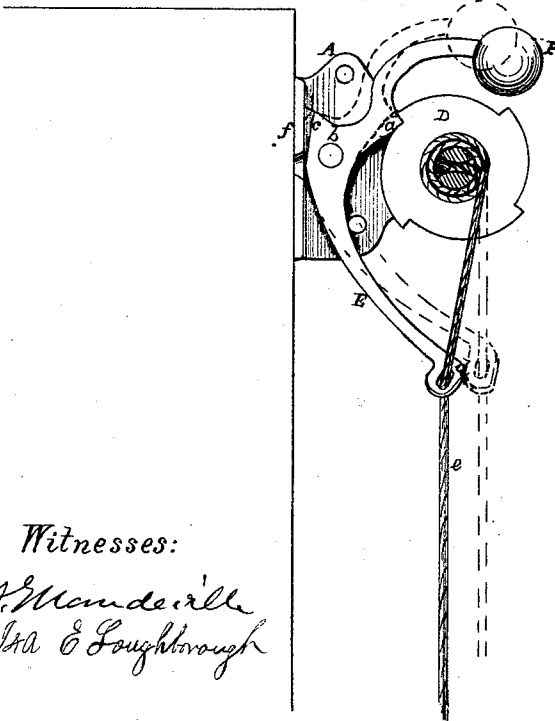


Fig 2.



Witnesses:

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NATHAN CAMPBELL, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **130,977**, dated September 3, 1872.

SPECIFICATION.

Be it known that I, NATHAN CAMPBELL, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in "Curtain-Fixtures," of which the following is a specification:

My invention relates to that class of curtain-fixtures in which the movements of the supporting-roller are controlled by a single elevating-cord at the side of the window; and it consists more especially in a peculiar method of locking and unlocking said roller by means of a ratchet or a friction-wheel, and a bent counterweighted lever acting thereon, which is in turn operated by the elevating-cord.

Figure 1 is a front elevation of my invention. Fig. 2 is a side view of the roller-bracket and connected parts.

A represents the roller-bracket arranged to be attached to the window-casing in the usual manner. B is the curtain-roller provided with the spool C, around which the elevating-cord *e* is wound, and the ratchet D. E is a bent pawl-lever extending over the ratchet, as indicated in Fig. 2, and is provided with a counter-weight, F, at its extremity. This lever is pivoted to the bracket at the point *b* so as to swing easily, and a lateral projection upon its lower end has a slot, *d*, in it, through which the cord *e* passes. A projecting toe, *a*, just above the pivot *b*, locks into the teeth of the ratchet, as indicated in Fig. 2; and when the parts are in such locked position the cord-slot *d* is somewhat within a vertical line dropped from the winding side of the spool C.

It will be observed that, by the peculiar shape of the lower end of the lever E and arrangement of the counter-weight, F, nearly all the effective weight of those parts are brought to bear upon the toe *a*, thus allowing them to be very light. The counter-weight, also, be-

ing further from the center *b* than the toe, the pressure upon the latter is thereby increased.

To raise the curtain, a pull is given upon the cord *e* in the usual manner. To lower it, the cord is pulled lightly, the lever E being drawn into the position indicated by dotted lines *e'* in Fig. 2, thereby lifted from the ratchet. If, now, the cord is allowed to run through the hand, a slight pressure only being exerted upon it, the curtain will descend by its own gravity, the cord winding upon the spool. Upon the entire release of the cord the counter-weight F causes the toe *a* to lock into the ratchet and retain the curtain. The rear edge of the lever E is provided with a fullness at *c*, seen in Fig. 2, which limits the throw of the lever in that direction by coming in contact with the flange *f* of the bracket. The movement of the lever is made just sufficient to allow the toe *a* to clear the ratchet, whereby the parts are in position to lock instantaneously when the cord is released. This construction obviates the necessity of a special stop upon the bracket.

A friction-wheel may be substituted for the ratchet, if desired.

It will be observed that my improved fixture is very simple in its construction and direct and positive in its action, is not liable to get out of order, and is easily operated.

What I claim as my invention, is—

The bent pawl-lever E, with or without the stop *c*, provided with the counter-weight F, toe *a*, and the cord-slot or loop *d*, in combination with the ratchet D and cord *e* acting conjointly, as and for the purposes shown and described.

N. CAMPBELL.

Witnesses:

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