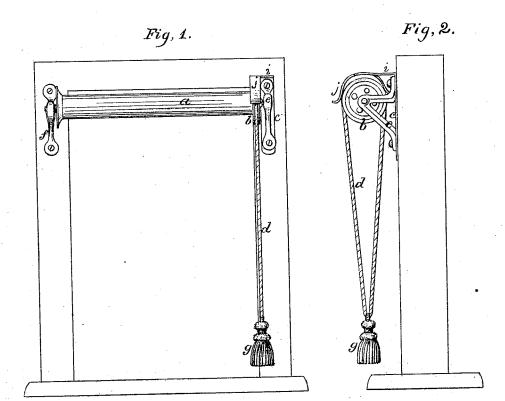
## T. Tose, Curtain Fixture.

No. 111,405.

Patented Jan. 31. 1871.



Witnesses,

H. a. Daniel, Sydney & Frield. Inventor, Richard Vose By his attorney J. C. Robbins

## United States Patent Office.

## RICHARD VOSE, OF NEW YORK, N. Y.

Letters Patent No. 111,405, dated January 31, 1871.

## IMPROVEMENT IN CURTAIN-FIXTURES.

The Schedule referred to in these Letters Fatent and making part of the same

To all whom it may concern:

Be it known that I, RICHARD VOSE, of No. 1 Barclay street, in the city, county, and State of New York, have invented a new and useful Improvement in the Operating-Attachments to the Rollers of Window-Shades; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing which forms a portion of this specification.

Figure 1 is a view of a mounted window-shade roller, a, and of the respective attachments thereto for

operating the same, and

Figure 2 is a view which more clearly and distinctly represents the combination of said operating-attachments with the right-hand end of said roller.

The cord by which the window-shade roller a is revolved is received into a deep groove in its metallic head b, and from which it swings freely in the form of a loop, and which is hereinafter designated as the operating cord-loop d.

The weighted tassel g, which is suspended to the cord-loop d, serves the purpose of preserving the perfect shape of said loop, and is also an ornamental ap-

pendage thereto.

The bracket e, which supports the end of the shaderoller that carries the grooved head b, is combined with a spring-plate, c i j, in the manner shown in the drawing.

The straight and flat portion c of the spring-plate c i j passes under the legs of the bracket e, and has such perforations formed therein as enable both the spring plate and the bracket to be combined with each other and secured to the window-casing by the same nails or screws.

The portion i of the spring plate c i j, which projects forward from the upper end of the portion c of said plate, has a lateral offset, j, therefrom, whose ends are curved downward to such an extent and of such a shape as to bear upon a portion of the periphery of the roller-head b, and with such a degree of force as will counteract the tendency of the weight of the shade appended to the roller to turn said roller,

and, consequently, a force which enables the frictional action of the curved portion j of said spring plate to retain the shade in any desired position.

The curved portion j of the spring plate c i j also serves the purpose of securely retaining the actuating cord-loop d within the groove of the roller-head b.

The weighted tassel g may be suspended to the operating-cord loop d by means of a short loop or by means of an attachment which is combined with a grooved anti-friction roller, or by any other means which will permit the cord-loop d to pass freely through the said attaching contrivance.

If the cord employed in said loop should be of such a size that the curved portion j of the spring plate ci j will bear upon it, the shade can be raised or lowered by drawing upon one or the other side of the cord-loop. But if the cord employed in said cord-loop d be of such a size as to rest entirely within the groove of the roller-head b, then, to turn the shade-roller, it will be necessary to simultaneously take hold of both sides of the  $\operatorname{cord-loop} d$  and to draw downward thereupon with such a degree of force as will enable the movement that may then be imparted to said cord-loop to impart the desired amount of movement to the roller a and to the shade that may be appended thereto.

Having thus fully described the construction and operation of my improvement in the operating-attach-

ments to window-shade rollers,

What I claim therein as my invention, and desire to

secure by Letters Patent, is-

The combination of the spring plate c i j with the supporting-bracket e, the grooved roller-head b, and the tassel-weighted cord-loop d, substantially as and for the purpose herein set forth.

This specification of my improvement in the metallic attachments of window-shade rollers signed and witnessed this 19th day of December, 1870.

RICHD. VOSE.

Witnesses:

B. J. Guibert, F. I. GUIBERT.