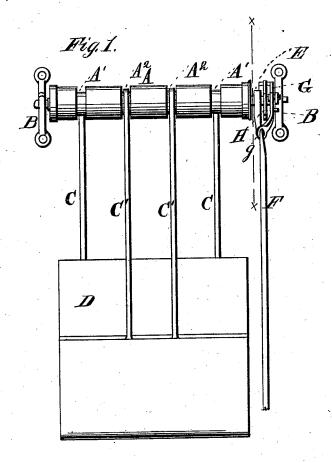
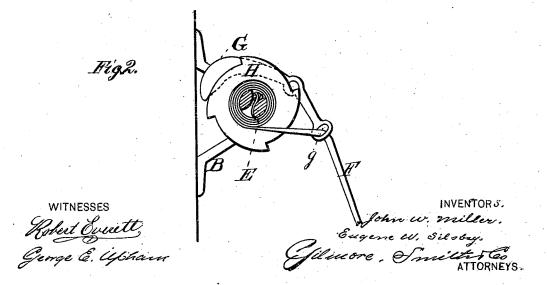
## J. W. MILLER & E. W. SILSBY. CURTAIN-FIXTURES.

No. 183,411.

Patented Oct. 17, 1876.





## UNITED STATES PATENT OFFICE.

JOHN W. MILLER AND EUGENE W. SILSBY, OF OTTUMWA, IOWA.

## IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 183,411, dated October 17, 1876; application filed July 22, 1876.

To all whom it may concern:

Be it known that we, John W. MILLER and EUGENE W. SILSBY, of Ottumwa, in the county of Wapello and State of Iowa, have invented a new and valuable Improvement in Curtain-Fixtures; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front elevation of our curtain-fixture, and Fig. 2 is a transverse vertical sectional

view through x x.

This invention relates to curtain-fixtures; and it consists in a roller provided with circumferential guide-grooves, in combination with ribbons working therein, and attached at their upper ends to opposite sides of said roller, and fastened at their lower ends to the upper and lower ends of a curtain, as will be

hereinafter more fully set forth.

In the annexed drawing, A designates a roller, secured to the window-frame by brackets BB, but detachable therefrom. Said roller is grooved circumferentially at A1 A1, for the attachment of cords or ribbons C C, from which the upper end of curtain D is suspended. Said roller is also grooved circumferentially at A2 A2, where ribbons C' C', running to the bottom of said curtain, are suspended. The points of attachment of said ribbons C and C' are on opposite sides of said roller, so that when said roller is turned the one ascends as the other descends—that is, ribbous C and the upper end of curtain D descend as the lower end of said curtain is drawn up by the ribbons C' attached thereto. In this way the curtain is removed from the upper and lower parts of the window, to admit light and air while shielding the middle portion. Grooves  $A^1$  and  $A^2$  guide the ribbons, so as to make them pull vertically upward.

At one end of roller A is a shaft or drum, E, to which is attached a cord, F. Said cord passes through the perforated end g of a pivoted weighted pawl, G, which engages with ratchet H, secured on and turning shaft E.

When cord F is pulled pawl G is lifted out of engagement with ratchet H, and shaft E and roller A are rotated. When cord F is released pawl G falls into engagement again, locking said roller and curtain, so as to pre-

vent displacement.

When cord F is pulled sufficiently to disengage said pawl, but not to operate said roller, the lower end of curtain D may be pulled down by hand, when the upper end of said curtain will automatically rise, and the window will be completely covered; or, by pulling sufficiently upon cord F, said cord having been wound a number of times about shaft E, said curtain may be drawn up, so as to cover only the upper part of said window, or even to leave the window entirely uncovered.

We are aware that a curtain attached to a roller by means of tapes or cords, whereby it may be doubled or folded upon itself, so as to cover a part of the window, or extended to cover the whole thereof, has heretofore been employed, and we therefore lay no claim to such invention, in which no circumferential grooves are used to guide the tapes or cords, which are liable to slip or slide along the roller, thus preventing the proper and even raising and lowering of the curtain, whereas in our invention the tapes or cords are positively guided in the circumferential grooves, thus preventing the sliding of the tapes along the roller.

What we claim as new, and desire to secure

by Letters Patent, is—

The roller A, provided with the circumferential guide-grooves A<sup>1</sup> A<sup>2</sup>, in combination with the ribbons C C C' C', operating therein, and attached to opposite parts of said grooves at their upper ends, and to the upper and lower ends of the curtain D at their lower ends, substantially as described, and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the

presence of two witnesses.

JOHN W. MILLER. EUGENE W. SILSBY.

Attest:

H. W. COCKERELL, H. C. CHAMBERS.