

G. C. MATHERS.
Curtain-Fixture.

No. 159,944.

Patented Feb. 16, 1875.

Fig. 1.

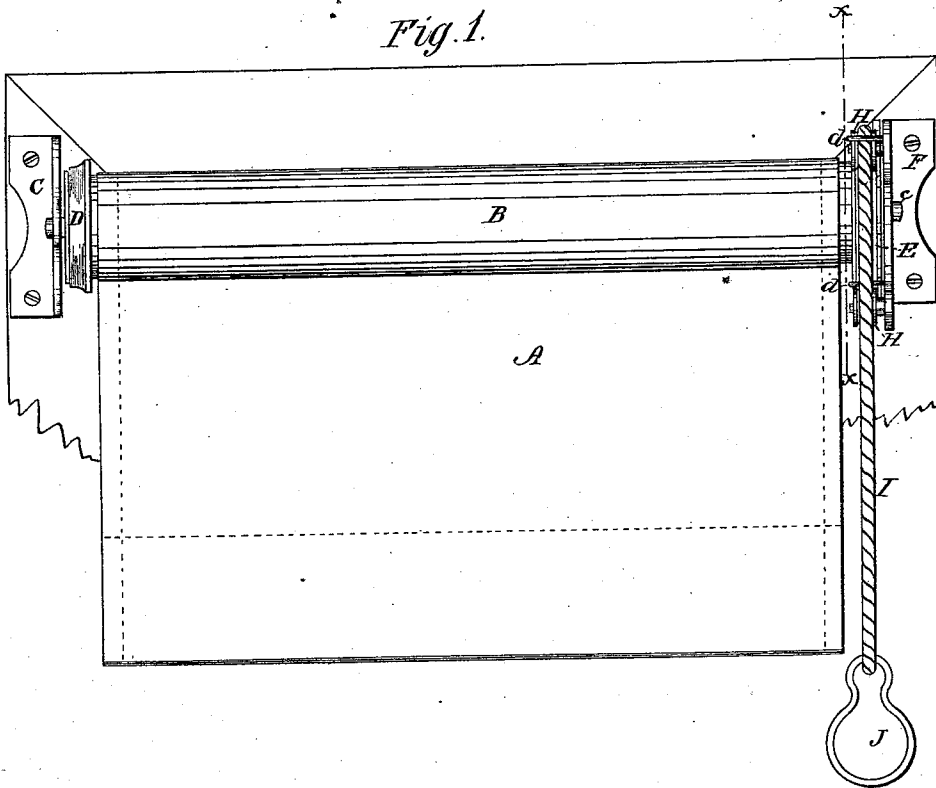


Fig. 2.

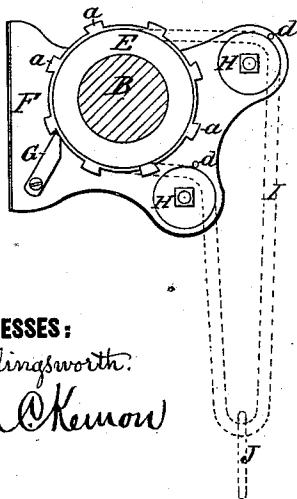
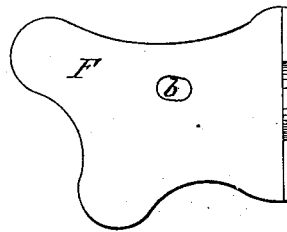


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE C. MATHERS, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **159,944**, dated February 16, 1875; application filed December 10, 1874.

To all whom it may concern:

Be it known that I, GEORGE C. MATHERS, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Curtain-Fixture; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a front elevation of the curtain-fixture as seen when attached to the window-frame; Fig. 2, a sectional detail view through line *xx*; Fig. 3, a detail view of the bracket, showing the slotted bearing.

This invention relates to certain improvements in curtain-fixtures; and it consists in the combination, with a grooved disk having upon its periphery notches that engage with a detent or pawl and a journal that moves in a slotted bearing, of an endless cord and two small wheels or pulleys, so located as that when a draft is exerted upon the cord they form a loop around the grooved disk, and move it laterally in the slotted bearing and away from the detent, so that the curtain may be free to move either up or down from the action of the said cord.

In the drawing, A represents a window curtain or shade adapted to be wound upon a rod, B, in the usual way. Said rod has at one end a cap, D, provided with a stud, which rests in the ordinary open bearing in the bracket C, attached to the window-frame. E is the grooved disk, which is attached to the other end of the rod. Said disk has upon its periphery the notches or projections *a*, and its groove is made serrated or roughened to secure a greater amount of friction with the cord. F is the bracket, which has a slotted bearing, *b*, which, in the direction of its longitudinal axis, is slightly inclined upward and away from the window-frame. In said bearing rests the stud *c*, which forms the journal of the disk. G is a detent or pawl, which is permanently attached to the inner side of the bracket, and engages, when the journal of the disk is in the lower portion of its bearing, with the notches upon the said disk, for the purpose of holding the rod rigid and the curtain in place. H H are small friction-wheels, which move upon studs attached to extensions of the

bracket, one above and the other below the bearing of the disk. Around those said wheels and the grooved disk E passes an endless cord, I, which, by reason of the relative position of the wheels H and the disk, forms around the said disk a laterally-drawing loop. This cord is maintained in its position upon the wheels H by means of the pins *d*, and is kept from slipping off the grooved disk by the adjacent position of the detent G. J is a ring suspended in the endless cord, by means of which the latter is tightened. In the place of said ring, however, I may use a tassel, with or without a friction-wheel, my object being simply to afford a means of tightening the cord and still allow its free passage around the disk.

The operation of the above devices is very simple. When the ring J is pulled the endless cord I is tightened, and the laterally-drawing loop which it forms brings the journal of the disk in the outer and upper portion of the slotted bearing, in which position the notches of the disk are out of the range of the detent, and the curtain may be either raised or lowered by pulling, respectively, either one side or the other of the endless cord. When the curtain is in the right position the ring is released and the journal of the disk recedes to its former position by reason of the inclination of the slot, and the notches engage the detent to hold it stationary.

I know that it is not new to employ a slotted bearing in connection with a notched disk and a detent for the same purpose as herein shown.

In the devices heretofore constructed, however, a single cord only is used, which gives positive motion only in one direction, the curtain being lowered by gravity while the cord is slowly released. This feature is objectionable, for the reason that the tendency of gravity to bring down the curtain is in a measure counteracted by the draft requisite upon the cord to hold the notches away from the detent.

I am aware of the fact, also, that an endless cord has been used with friction-rollers to withdraw, by a traction upon the said cord, a notched brake or detent from the notched disk. I therefore disclaim any broadness of invention, and confine myself to the devices in

which an endless cord forms around two friction-rollers a laterally-drawing loop, which brings the journal of the curtain-rod into a portion of a slotted bearing when it is out of engagement with the detent and free to revolve, whereby I secure a much more uniform and reliable adjustment, and am enabled to manipulate my curtain with a positive motion in either direction.

Having thus described my invention, what I claim as new is—

The combination, with a notched disk journaled in a slotted bearing, of a stationary de-

tent, an endless cord, I, and the friction-wheels H H, the said wheels being arranged to one side of the disk, and the said cord passing around the same in such a manner as to form a laterally-drawing loop, which, when a traction is exerted upon the cord, brings the disk away from the detent, and the journal of the disk in a portion of the slotted bearing when it is free to revolve, substantially as described.

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Witnesses:

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