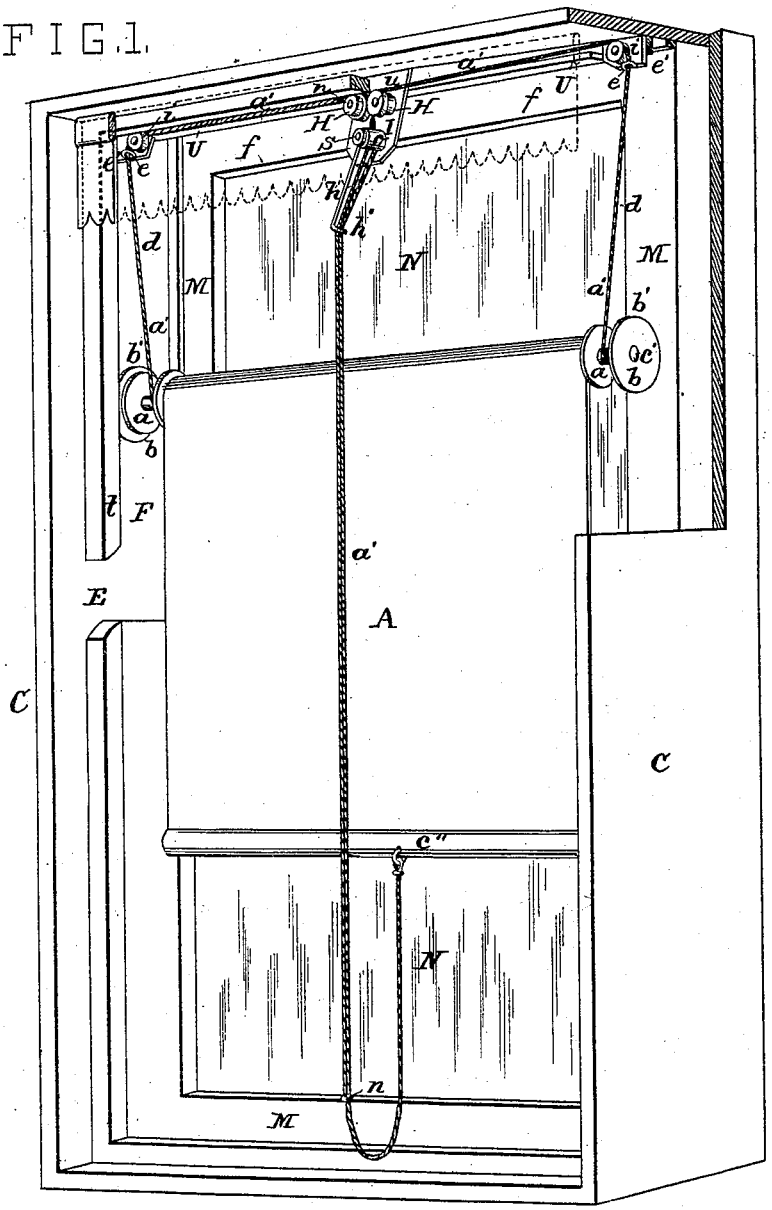
J. K. MACFARLANE.
Curtain-Fixture.

No. 205,493. Patented July 2, 1878.

FIG. 1.



ATTEST.

Alex J. Thomson

W. F. Daly

INVENTOR.

John Kenneth Macfarlane

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FIG. 2.

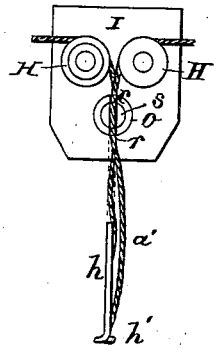


FIG. 3.

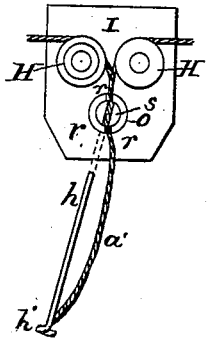


FIG. 4.

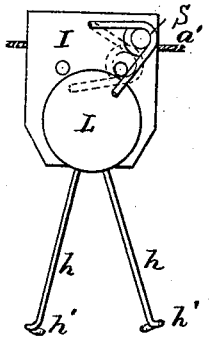


FIG. 5.

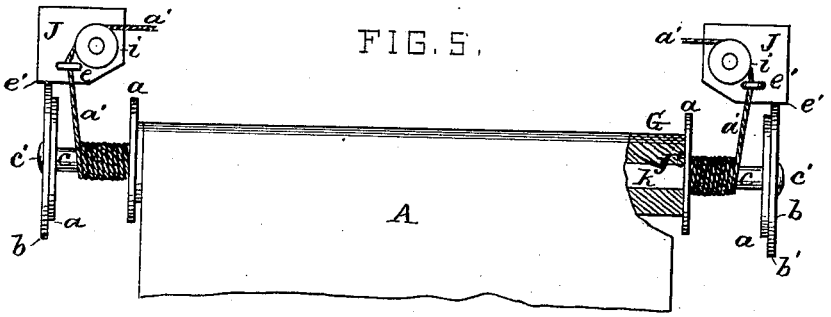


FIG. 8.

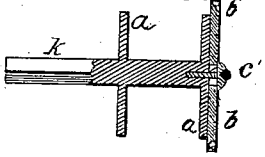


FIG. 6.

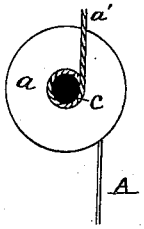
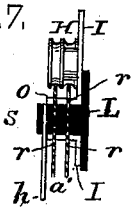


FIG. 7.



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By Jos E. Ware Attorney

UNITED STATES PATENT OFFICE.

JOHN K. MACFARLANE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **205,493**, dated July 2, 1878; application filed March 18, 1878.

To all whom it may concern:

Be it known that I, JOHN K. MACFARLANE, of the city of St. Louis, and State of Missouri, have invented certain new and useful Improvements in Window-Curtains; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of this invention relates to an improved method of operating window curtains and shades.

It consists in the application of friction-wheels to the ends of the ordinary curtain-roller, and in the manner of operating the suspension-cords thereof, to effect their perfect retention at any elevation of the curtain, and also enable a person in pulling down the curtain to cause the spools to unwind and ascend as well as to descend.

In the accompanying drawing, Figure 1 is a perspective view, having parts broken to more plainly show my improved window-curtain, and how it is practically operated. Fig. 2 is a sectional elevation of a stop lock and plate, which retains or liberates the raising-cords of the curtain. Fig. 3 is a similar view of the same part, which shows the position of a certain spindle device which forms a perfect detent for the curtain-cords. Fig. 4 is a reverse view of the same, showing the method by which a spring therein shown holds in the desired position the pendent rod *h*. Fig. 5 is an enlarged detached view of my curtain, showing the attachment of certain traverse disks to the ends of the curtain-rollers. Fig. 6 shows, in the cross-section of a spool, the axis upon which the cords wind and unwind. Fig. 7 shows a cross-section of the stop lock and plate.

The curtain A is to be fastened by tacks to the roller G. To said roller are attached the metallic spools *a*, as follows: A square cast extension of the axes of the said spools *a* is to be driven into the ends of the said roller G, to secure them thereto, while on the opposite ends of said spools are cast the short round extensions *c'*, which act as axles, on which are to be placed friction-disks *b*, and secured thereon by linchpins or otherwise, to prevent abrasion of the window-frame by the end of said axles. The spool-axis *c* has cast thereon the fixed disks *a*, having, external to one of said disks, the square spindle *k*, which is to be driven into the end of the said roller G, while on the other or outer end of said spool is also cast a short axle-shaped round extension, upon which the friction-disk *b* is fastened by a pin, or preferably by the elastic boss *c'*, as shown in Fig. 5. A small elastic buffer, *c'*, may be inserted in a hole in the axle end. In a proper channel on the periphery of the said disk *b* may be placed a small elastic band, as shown at *b'* in Fig. 8. The said curtain A is suspended within several folds of the cords *a'* on the axes of said spools *a*. The other ends of the cords are passed up through guide-eyes *e* of the check-plates J and over the pulleys *i* and center pulleys H on the plate I, secured in the upper center of the window. The cords from thence are turned downward and passed through the holes in the said stop-lock, marked *r s' r*, and out through the eye-loop *h'* in the pendent rod *h*. The ends are then to be fastened to the slat *c''*, and are afterward used to draw down the said curtain A, when it is desirable to shade the whole or a part of the window N. The said cord never should touch the floor. The plate L, as shown in Figs. 4 and 7, is operated upon by the spring S, and thereby retained in either of the positions shown in Figs. 3 and 4.

It will be seen that the rod *h* passes through and operates the spindle *s*, and when said rod hangs vertical the cords have free passage, and when the rod is inclined from the perpendicular the cords are held by compression.

On pins inserted in the plate I the center pulleys H are held, which serve to change the direction of the cords downward into the stop-lock.

A useful additional function of the plates J is to check, by their extended lower angles *e'*, the further ascension of the friction-disks *b*, by which the roller may not be allowed to rise, but can freely wind or unwind the curtain by holding the hoisting-cord and drawing the curtain down.

The said curtain A is suspended entirely

within the folds of the cords a', and the said roller G has its axis consequently within the fold of said cords a', and the resistance to unwinding is offered by the counter-weight of the curtain and slat c''. The roller G may be caused to run against the sash-frame M or against the sash-strip t, or against the sash in part and also against the sash-strip through the opening shown by E. The lambrequin ff is intended for ornament, and as well to conceal the upper portion of the window.

I am aware that curtains have been tacked at the top of the casing, the roller being tacked to the bottom of the curtain, and the curtain raised by cords passing upward through loops at the upper corners, and thence through loops at the center downward to a weight or tassel. This I do not claim.

Now, it can be seen that by slightly pulling the cords a' until the rod h hangs perpendicular the curtain can be freely raised or lowered to any desired point. It is only required, therefore, that the ends of the cords attached to the slat be drawn to cause the curtain to unwind either upward or downward, and that but a slight throw of the cords will close or unclose the stop-lock.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a window-curtain, the roller G, as provided with the spools a, having thereto attached the axle-extension c' and friction-disks b, as stated.

2. In combination with a curtain-roller, the friction-disks b and check-plate J, whereby, though the rise of the curtain is arrested, the curtain may still be rolled and unrolled, as specified.

3. The stop-lock arranged on plate I, consisting of the disk-plate L, having thereto attached socket o for the reception of spindle s, provided with holes $r\,s'\,r$, to engage, through the action of the rod h, to the retention or release of the cords a', as and for the purpose herein stated.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JOHN KENNETH MACFARLANE.

Witnesses:
JOSEPH E. WARE,
W. F. DALY.