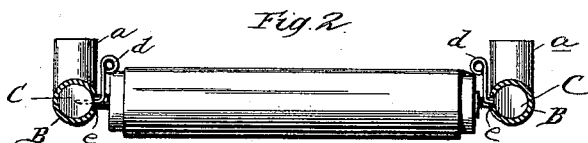
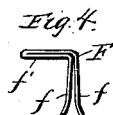
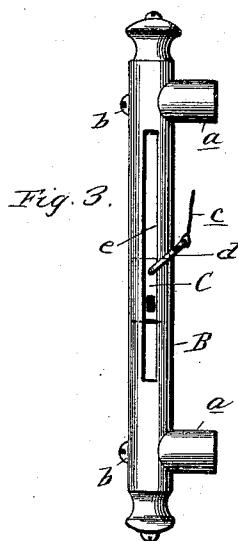
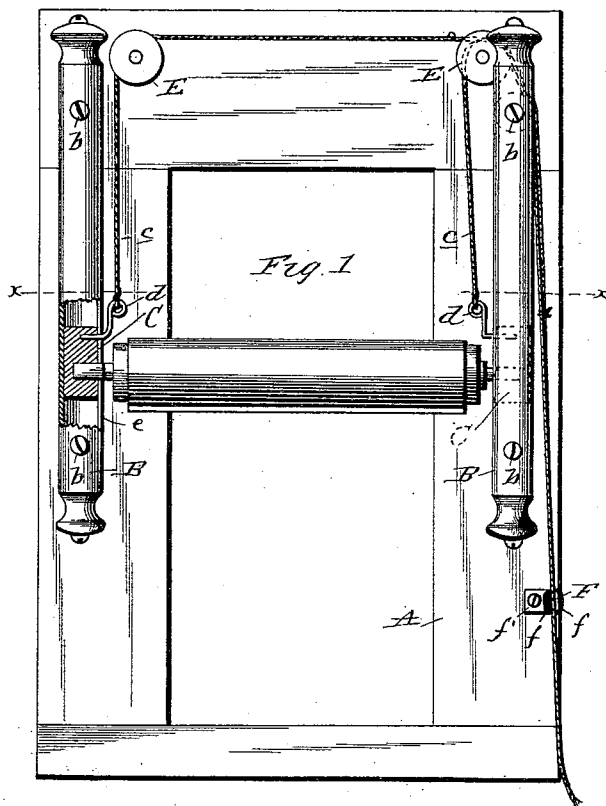


(No Model.)

J. C. MOORE & B. & C. L. WROUGHTON.
CURTAIN ATTACHMENT.

No. 469,164.

Patented Feb. 16, 1892.



Witnesses
[Signature]
Van Buren Hillyard.

Inventors
John C. Moore
Burton Wroughton
Cyrus L. Wroughton
By their Attorneys
[Signature] R. H. P. Lacey

UNITED STATES PATENT OFFICE.

JOHN C. MOORE, BURTON WROUGHTON, AND CYRUS L. WROUGHTON, OF
FAIRFIELD, NEBRASKA.

CURTAIN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 469,164, dated February 16, 1892.

Application filed July 23, 1889. Serial No. 318,387. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. MOORE, BURTON WROUGHTON, and CYRUS L. WROUGHTON, citizens of the United States, residing at Fairfield, in the county of Clay and State of Nebraska, have invented certain new and useful Improvements in Curtain Attachments; and we do declare the following to be a full, clear, and exact description of the invention, such as 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.

This invention relates to certain fixtures which admit of the raising and the lowering of the curtain-roller, as required, so that the upper part of the window may be opened to admit air and light and the lower part of the window darkened.

The improvement consists, essentially, of slotted guide-tubes and blocks placed in the tubes, the ends of the roller being supported in said blocks.

The improvement further consists in the novel features and the peculiar construction and the combination of parts which will be hereinafter more fully described and claimed, and which are shown in the drawings, in which—

Figure 1 is a front view, parts being broken away, of a window embodying our invention. Fig. 2 is a horizontal section on the line *x x* of Fig. 1. Fig. 3 is a view of the inner side of the guides, showing the roller-supporting block in position. Fig. 4 is a top plan view of the cord-holder.

The window frame or casing A is of ordinary construction.

The guides B, secured to the casing A, are tubular and are held from said casing a suitable distance by the spacing-blocks *a*, through which and the tubular guides B the screws *b* pass, which fasten the said guides B to the casing.

The roller-supporting blocks C are placed in the tubular guides B and have oblique spring-arms *d*, to which the operating-cords *e* are attached, said cords passing over the pulleys E and extending down on one side within convenient reach and adapted to be held by the spring holder F. The ends or journals of the roller pass through slots *e* in the sides of the guides and are inserted in suitable openings in the blocks C.

The cord-holder F comprises two spring-jaws *f* and a shank *f'*, at right angles to the jaws, the jaws and shank being formed by bending a single piece or strip of metal substantially in the form shown.

By reason of the spring-arms *d* extending in an oblique direction binding of the blocks C in the tubular guides B is prevented, as a strain on the operating-cords is taken up by the said arms and transmitted by them to the blocks in such a manner as to prevent their binding in the tubular guides. Again, a too rapid movement or quick jerk on the said operating-cords is counteracted by the yielding of arms *d d*, thereby preventing a jumping of the said curtain. If arms *d* were rigid, a slight obstruction in the guide-tubes would engage with and cause the blocks C to bind therein, because the lifting force exerted on the operating-cords is applied to the blocks to one side of a perpendicular line passing through the center thereof. The spring-arms yield and in practice would react sufficiently to prevent the binding or sticking of the said blocks C in the guide-tubes. Practical demonstration shows that the spring-arms give superior results to rigid arms, and hence are far preferable.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

The hereinbefore-specified curtain-fixture, composed of tubes B, having slots *e* in their opposing sides, blocks *a* between the tubes and the window-frame, fastenings *b*, passing through the tubes and the blocks, blocks C,

inserted in the tubes and having openings
to receive the journals of the curtain-roller,
spring-arms *d*, secured to the blocks C and
projected through the slots in the sides there-
of and extending in an oblique direction, the
5 cords *c*, attached to the arms *d*, guides E at
the top of the window-frame for the cords *c*
to pass over, and a cord-holder F, substan-
stantially as and for the purpose described.

In testimony whereof we affix our signatures
in presence of witnesses.

JOHN C. MOORE.
BURTON WROUGHTON.
CYRUS L. WROUGHTON.

Witnesses:

IRA TITUS,
F. B. SHIVELEY,
CHAS. H. EPPERSON.