

H. BROOM.
CURTAIN-FIXTURES.

No. 190,544.

Patented May 8, 1877.

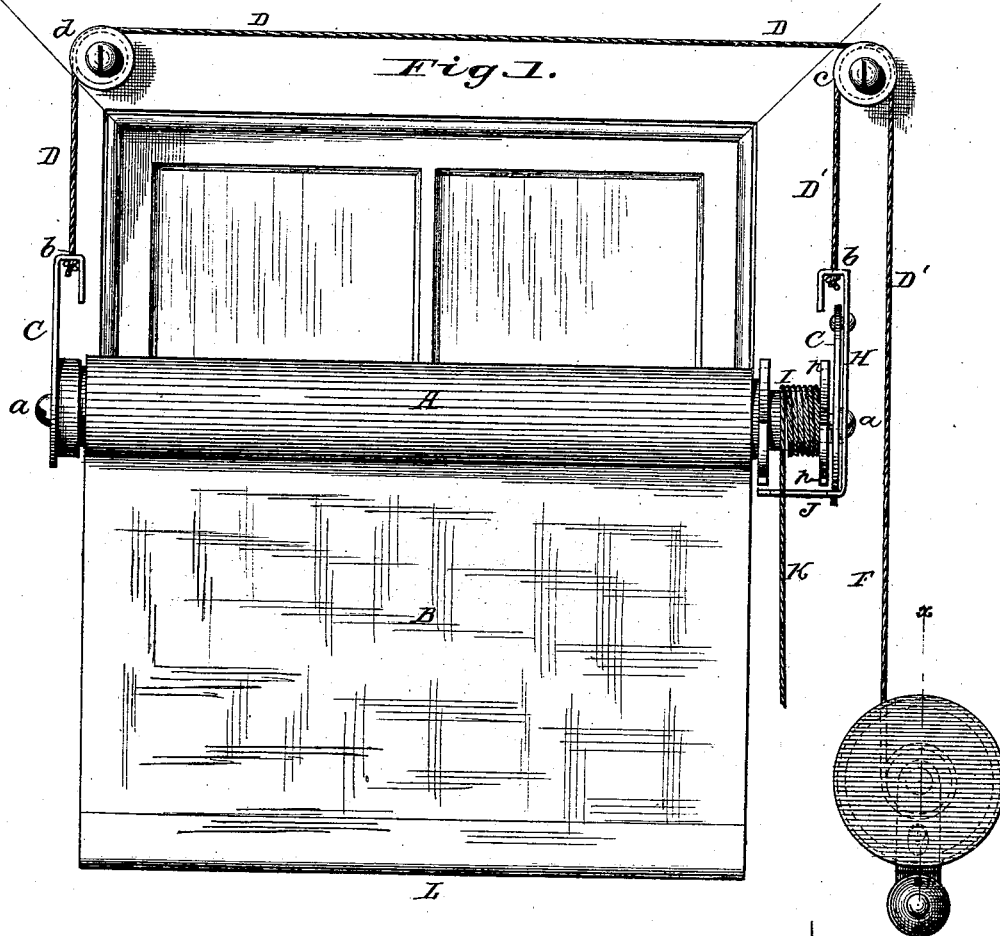
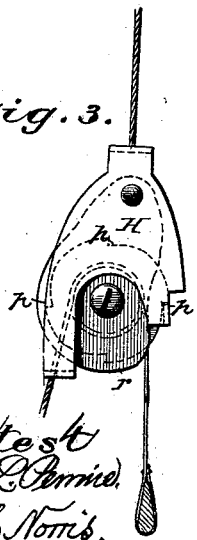
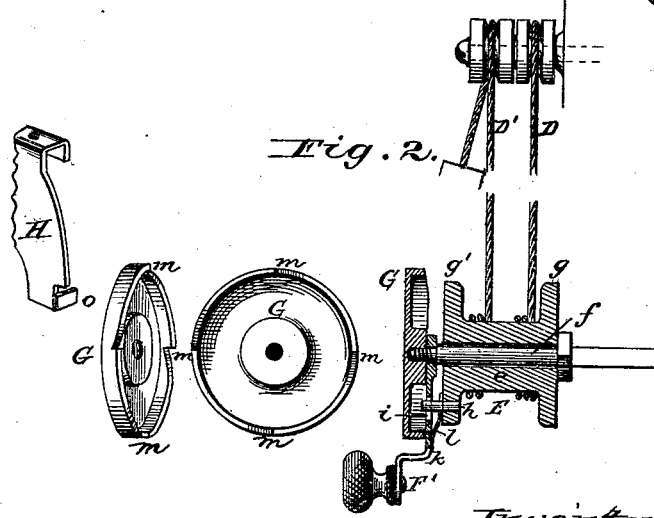


Fig. 3.



Attest
J. C. Smith
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Fig. 2.



Inventor.
Hugh Broom.
By James L. Norris
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UNITED STATES PATENT OFFICE.

HUGH BROOM, OF CAMBRIDGE, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT
TO HUGH B. HUFFMAN, OF SAME PLACE.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 190,544, dated May 8, 1877; application filed
March 3, 1877.

To all whom it may concern:

Be it known that I, HUGH BROOM, of Cambridge, in the county of Guernsey and State of Ohio, have invented certain new and useful Improvements in Curtain-Fixtures, of which the following is a specification:

This invention relates to certain improvements in that class of window-curtain fixtures in which the roller carrying the curtain or shade is suspended or hung upon the ends of cords, which pass over pulleys on the casing of the window-frame in such manner that by drawing or loosening such cords, the roller, with the shade, can be raised or lowered for shading or covering different parts of the window.

My invention consists in providing each end of the shade-roller with a bracket, to which the ends of two cords are attached, the cords passing upward and over pulleys connected with the window-casing at its top, and thence extending downward and around a barrel for winding or unwinding the cords, said barrel being mounted on an axis, and provided with two heads, one of which has a stud engaging with a slot in a crank-handle, which is pivoted on the axis of the barrel, and which handle operates in connection with a notched cap-plate secured to the end of the axis of the barrel, the crank being forced into engagement with any of the notches in the cap-plate by means of a suitable spring arranged between the crank-handle and the head of the barrel, as will be fully hereinafter described.

In the drawings, Figure 1 represents a front elevation of my invention; Fig. 2, a detached sectional view of the drum for raising or lowering the curtain-roller, and Fig. 3 a detached view of the pivoted arm for arresting and releasing the curtain-roller.

Referring to the drawings, A represents the roller, to which the shade or curtain B is attached in the usual manner. C C represent brackets attached to the ends of the roller by screws *a*, or otherwise, and to the upper end of said brackets are attached the ends *b* of two cords, D D', the cord D passing upward and over a pulley, *c*, and thence hori-

zontally over a pulley, *d*, and downwardly around the winding-drum, which latter will be hereinafter described. The cord D' simply passes upward over the pulley *c*, and downward and around the winding-drum.

The winding-drum E is composed of a tubular portion, *e*, mounted upon an axis or stud, *f*, attached to the window-casing F, and each end of the tubular portion *e* is provided with circular heads *g g'*, the latter or front head having on its face a stud or projection, *h*, which sets in a slot, *i*, formed in the arm *k* of the crank-handle F', the lower end of said handle being pivoted upon the end of the axis *f*, and between such arm *k* of the handle and the head *g'* of the barrel is arranged a flat spring, *l*, which forces the arm *k* outward into engagement with any of the series of notches *m* in a cap-plate, G. This cap-plate is screwed into the end of the axis *f*, and not only serves as a means of holding the crank-handle, but also serves to conceal and protect the crank-handle.

If it is necessary to raise or lower the curtain-roller for shading different portions of the window, or for ventilation, the crank-handle is released from engagement with the notched cap-plate, and turned in the proper direction, when the curtain-roller can be raised or lowered to any position desired.

Near the upper end of the bracket C is pivoted a plate, H, having near its lower rear edge a lip, *o*, which engages with any of the notches *p* in the head *r* of a barrel, I, attached to the end of the roller A.

The lower front edge of the plate H is provided with a lateral arm, J, against which the cord *k*, which winds up the curtain, is adapted to press for the purpose of releasing the lip *o* from engagement with the notched head of the barrel I, and thereby permitting the cord to be wound up or unwound from the curtain-roller.

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

In combination with the curtain-roller, the brackets at its ends, the cords attached to said brackets, and the pulleys over which the cords pass, the drum E, mounted on the stud

F, the crank-handle F', pivoted on the stud *f*, and connected with the drum by projection *h* and slot *i*, the flat spring *e* between the crank-handle and drum, and the cap-plate G, attached to the end of the stud, and having on its inner side the notches *m*, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand and seal in the presence of the subscribing witnesses.

HUGH BROOM. [L. S.]

Witnesses:

J. W. WHITE,

J. W. CAMPBELL.