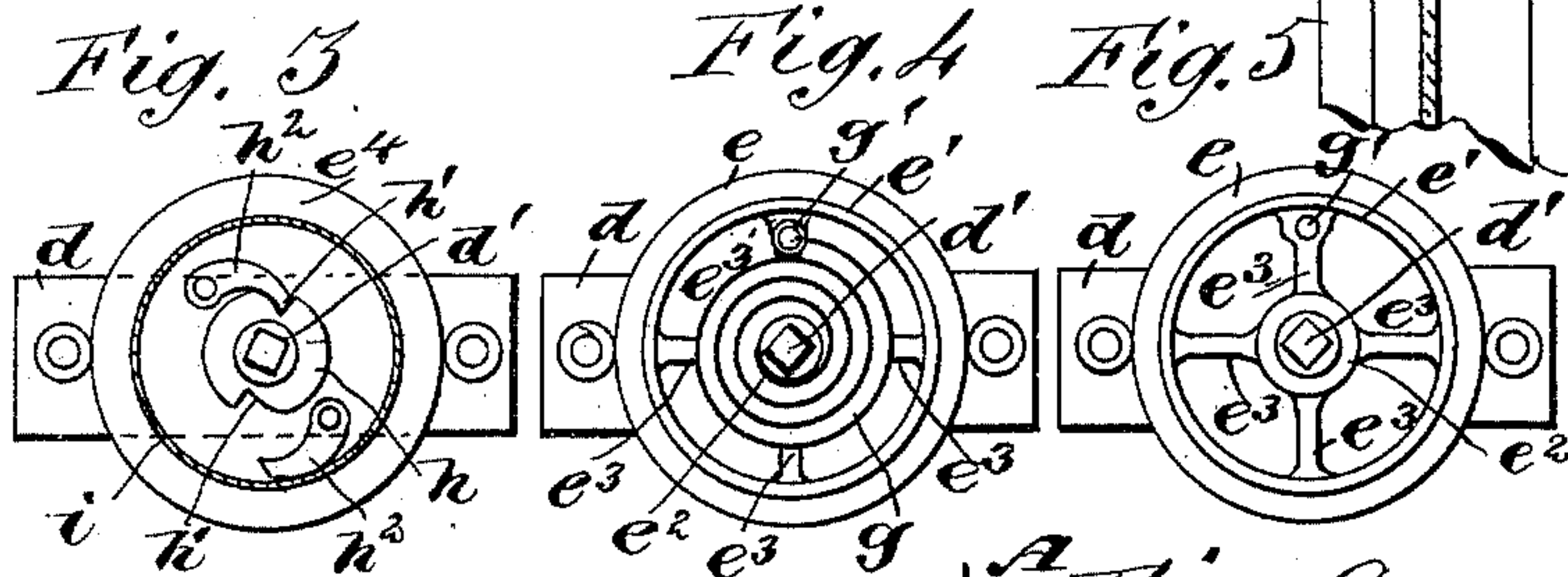
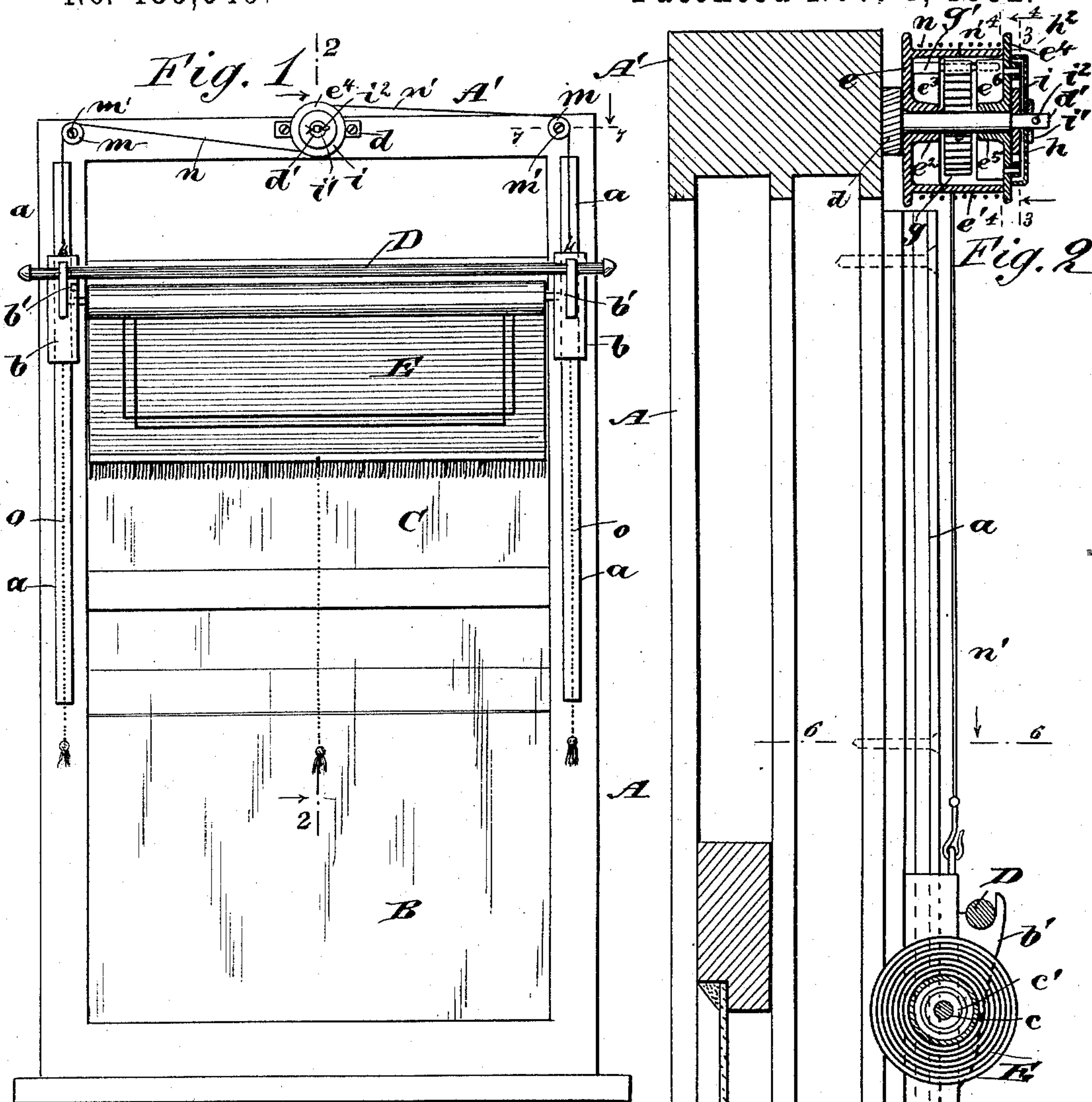


(No Model.)

J. H. HERRING.
SHADE AND CURTAIN FIXTURE.

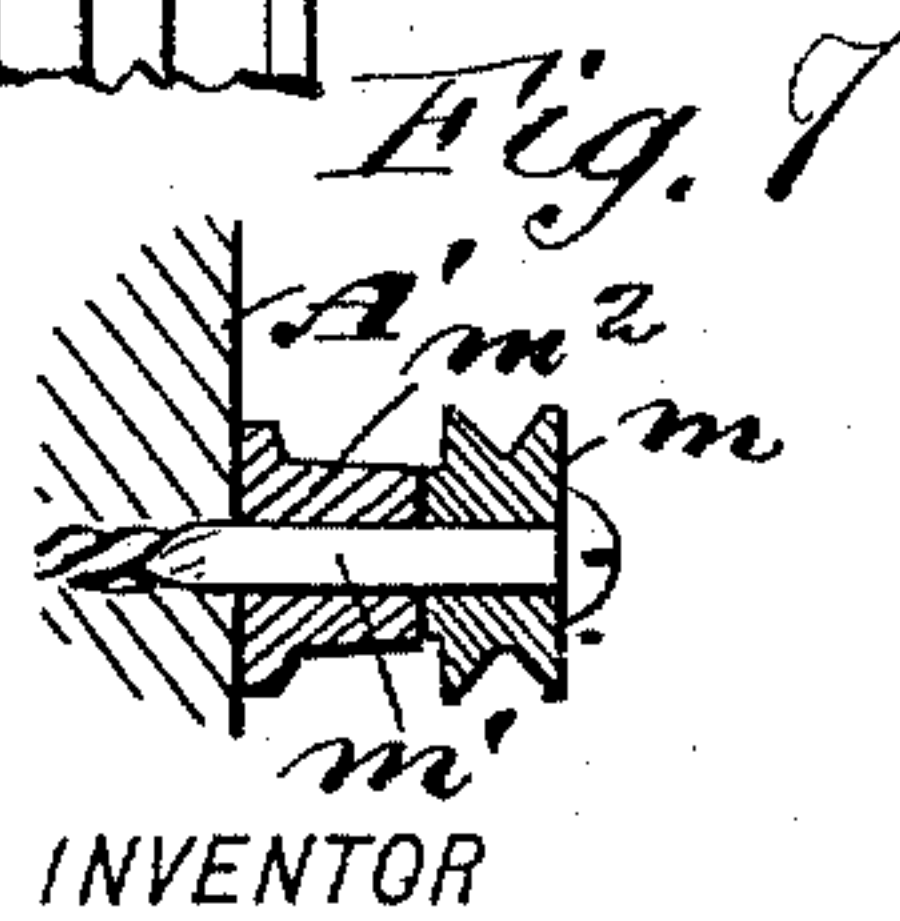
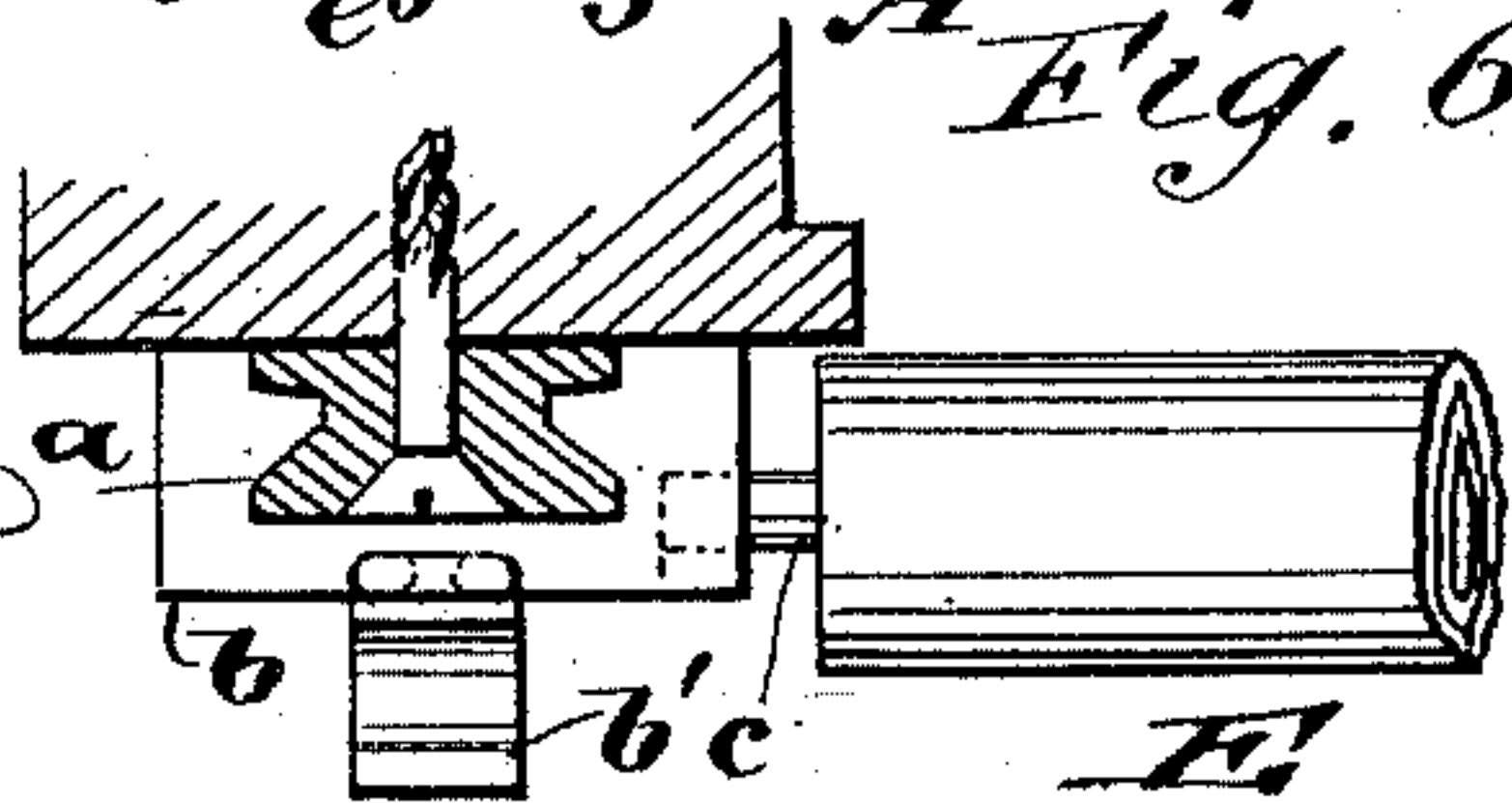
No. 486,040.

Patented Nov. 8, 1892.



WITNESSES:

C. Xevaux
C. Sedgwick



INVENTOR

J. H. Herring
BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES H. HERRING, OF MURPHY, TEXAS, ASSIGNOR OF ONE-HALF TO T. P. CHADDICK, OF SAME PLACE.

SHADE AND CURTAIN FIXTURE.

SPECIFICATION forming part of Letters Patent No. 486,040, dated November 8, 1892.

Application filed May 14, 1892. Serial No. 432,998. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. HERRING, of Murphy, in the county of Collin and State of Texas, have invented a new and useful Shade and Curtain Fixture, of which the following is a full, clear, and exact description.

The objects of this invention are to provide a simple, practical, and efficient device which will afford adjustable support for a window-shade and also for a curtain-pole, whereby the curtain and shade may be together lowered and permit the free entrance of light above these screens or the admission of air through a lowered upper sash.

To these ends my invention consists in the peculiar construction of parts and their combination, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an inside elevation of a window with the improvements in position thereon. Fig. 2 is an enlarged vertical section on the line 2 2 in Fig. 1, broken away below. Fig. 3 is an inner end view of a detail of construction, in section on the line 3 3 in Fig. 2. Fig. 4 is an end view of parts in the direction of the arrow 4 with other features removed, on the line 4 4 in Fig. 2. Fig. 5 is an end view of the bracketed casing for the features of construction shown in Figs. 3 and 4, with connected parts removed. Fig. 6 is an enlarged sectional and broken plan view of parts, on the line 6 6 in Fig. 2; and Fig. 7 is a plan view in section enlarged and broken, taken on the line 7 7 in Fig. 1.

The window-casement A may be of any preferred finish, containing sashes B and C, that are adapted for vertical sliding adjustment, the improved window curtain and shade support being an attachment thereon.

There are two similar guide-strips *a* provided, that are secured vertically upon the inner side of the stiles of the casement A, which strips are laterally grooved, as shown in Fig. 6, which adapts them to retain a bracket-box *b* on each strip, said boxes, that are of proper length for effective service, having each a longitudinal groove formed in one face of a suitable depth, and on opposite side

walls of said groove have tongues projected that are shaped to loosely fit within the grooves of the strips *a*.

Upon each bracket-box *b* there is an arm *b'* outwardly projected, which have rounded grooves formed in their upper ends for the reception and retention of a curtain-pole D, that may be of any preferred style, it being designed to sustain pendent curtains affixed thereto by usual means. (Not shown.)

At opposite points in the sides of the sliding bracket-boxes *b*, that are innermost when these are in position on the guide-strips *a*, the pintle ends of the spring shade-roller *c* are inserted, one pintle being adapted to interlock with the perforation of the box and the other cylindrical pintle loosely held in a mating hole in the bracket-box it engages, so that the spring *c'* of the shade-roller will rotate said roller and elevate the shade E, when the latter is properly manipulated to effect such a result, there being by preference a gravity-actuated-pawl mechanism, such as is indicated in Fig. 3, employed to restrain the rotation of the shade-roller at any desired point, or any other arresting-fixture of approved form may be used in connection with the shade-roller to effect its rotary adjustment, and thus sustain the shade E at any desired point of lowered adjustment on its own roller. A novel device is provided to sustain the boxes *b* and permit them, with the curtain and shade attachments, to be elevated and depressed at will, consisting, essentially, of parts that will now be described.

A bracket-plate *d* supports a journal-stud *d'*, which is projected from its center, said plate being in service secured near the center of the cap-piece A' on the casement A, as represented in Fig. 1. Upon the stud *d'* a spring-case is mounted to rotate, which case comprises a circular back plate *e*, from which concentrically projects a cylindrical shell *e'* of less diameter, allowing an edge portion of the plate to project as a radial flange from the shell at one end of the latter. From the center hub *e²* of the spring-case spaced ribs *e³* project, that are integral with the hub, plate *e* and shell *e'* serving to support the latter, and also to hold the volute spring *g* in proper relative position within the case.

As shown in Figs. 2 and 4, the spring g has one of its ends secured to a post g' , that projects from the back plate e or one of the ribs e^3 , as may be preferred, the other end being
 5 affixed upon the journal-stud d' . The projection of the cylindrical shell e' beyond the hub e^2 and the corresponding length of the journal-stud d' is so proportioned as to allow the cap-plate e^4 to be loosely located upon the
 10 stud, as shown in Fig. 2. The plate e^4 is circular, and its diameter is equal with that of the back plate e , a hub e^5 , projecting from its face that is nearest to the volute spring g , and ribs e^6 radiate therefrom, said ribs being
 15 formed integral with the cap-plate and its hub and of such a relative length as will adapt them to fit neatly within the outer portion of the shell e' , the width of said ribs permitting their inner edges to loosely engage
 20 the coiled spring g and prevent its lateral displacement when the projecting edge portion of the cap-plate e^4 is in contact with the edge of the cylindrical shell e' . If found desirable, the body of the shell e' may be formed
 25 integrally with the cap-plate e^4 and bear on the back plate e without impairing the efficiency of the shell.

Upon the projecting end portion of the stud d' , which is squared in the body exterior of
 30 the cap-plate e^4 , a locking-disk h is placed, which latter is apertured to fit the squared shank or stud, and has detent-notches h' cut in its circular edge, as represented in Fig. 3, which are adapted to receive the toes of the
 35 pawls h^2 , that are pivoted upon the outer face of the cap-plate e^4 . Preferably, there is a circular flanged lid i slid upon the outer squared end of the stud d' , it being perforated centrally to fit said stud, and outside of the lid a
 40 washer i' is placed on the stud end, a transverse key i^2 that passes through a hole in the stud-body serving to retain all parts in their relative position.

The loosely-mounted back plate e and cap-
 45 plate e^4 are held in locked engagement with each other, preferably by projecting the post g' into a perforation in a rib e^6 , as shown in Fig. 2 by dotted lines. On the upper part of the casement-stiles at proper points two
 50 similar small grooved pulleys m are sustained by a screw-bolt m' for each pulley, the latter being spaced from the casement-face by a sleeve-block m^2 , strung upon each screw-bolt and held by it between the pulley and
 55 casement, as indicated in Fig. 7.

Upon the cylindrical shell e' two flexible strands n n' are wrapped oppositely on the shell—that is, one end of each strand is attached to the shell, one at the top and the
 60 other at the bottom of the shell—and after a proper number of coils have been located on the shell the strands are extended in opposite directions toward the stiles of the window-casement, resting on the grooved pulleys m ,
 65 and thence depending sufficiently to have their remaining ends attached to the upper ends of the bracket-boxes b . The strands n

n' are by preference made of twisted wire formed into a cord, thereby insuring strength without objectionable thickness. 70

On the lower end of each of the bracket-boxes b an adjusting-cord o is attached by one end, so as to hang pendent, and of a length that will afford a convenient means to adjust the height of the curtain-roller and window-
 75 shade.

In use the volute spring g will be wrapped closer when the bracket-boxes b are drawn down and retained from uncoiling by a locking engagement of one of the pawls h^2 , with a
 80 detent-notch in the disk h , thus storing energy that will be sufficient to elevate the boxes b and their load if either of the cords o is suddenly jerked down and then released, which will dislodge the pawl from its locked
 85 contact with the notched disk and permit the spring to uncoil until its rotary motion is checked by a pull on one of the cords o , that will allow the pawl to again fall into a notch. 90

It will be seen that by the construction of parts hereinbefore described the sash of the window may be lowered from above, as indicated in Fig. 1, and both the window-shade
 95 E and curtains on the pole D similarly adjusted to depress them any desired distance from the top of the casement A, thus affording free access for light and air; or the shade and curtains may be lowered to admit light
 100 from above when the upper sash of the window is closed, the normal position of the screening devices being quickly resumed by a proper manipulation of the pendent cords o , as before explained. 105

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent— 105

A supporting and retracting device for window-shades and curtain-poles, comprising two vertically-sliding bracket-boxes on strips
 110 fixed to the stiles of the window-casement and a spring-actuated retracting device comprising a bracket-plate on the cap-piece of the casement, a stud projecting from the bracket-plate, a cylindrical shell rotatable on
 115 the stud, a rotatable cap-plate on the stud and connected to the shell, a volute spring on the stud between the cap-plate and a back plate of the shell, having one end fast to the shell and the other end secured to the stud, a
 120 locking-disk fast on the stud outside of the cap-plate, pawls on the cap-plate adapted to lock with the disk, two strands wrapped on the shell and secured by an end of each thereon and thence extended laterally in opposite
 125 directions over pulleys on the window-stiles and downwardly from the pulleys to a connection with the bracket-boxes, and pulleys that support the strands on the casement, substantially as described.

JAMES H. HERRING.

Witnesses:

ALFRED I. STOPPLE,
 THOMAS P. CHADDICK.