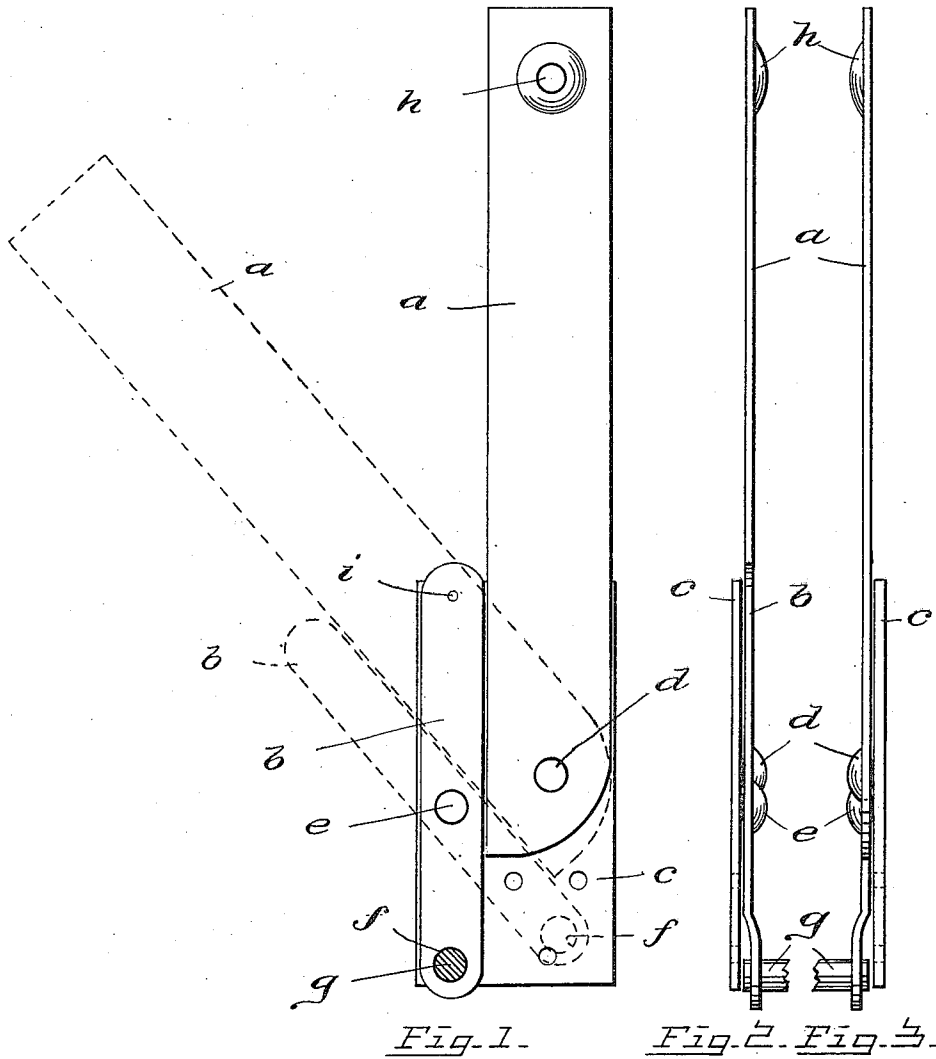


H. E. GIFFORD.
ADJUSTABLE WINDOW SHADE FIXTURE.
APPLICATION FILED DEC. 6, 1911.

1,042,213.

Patented Oct. 22, 1912.

3 SHEETS—SHEET 1.



WITNESSES:

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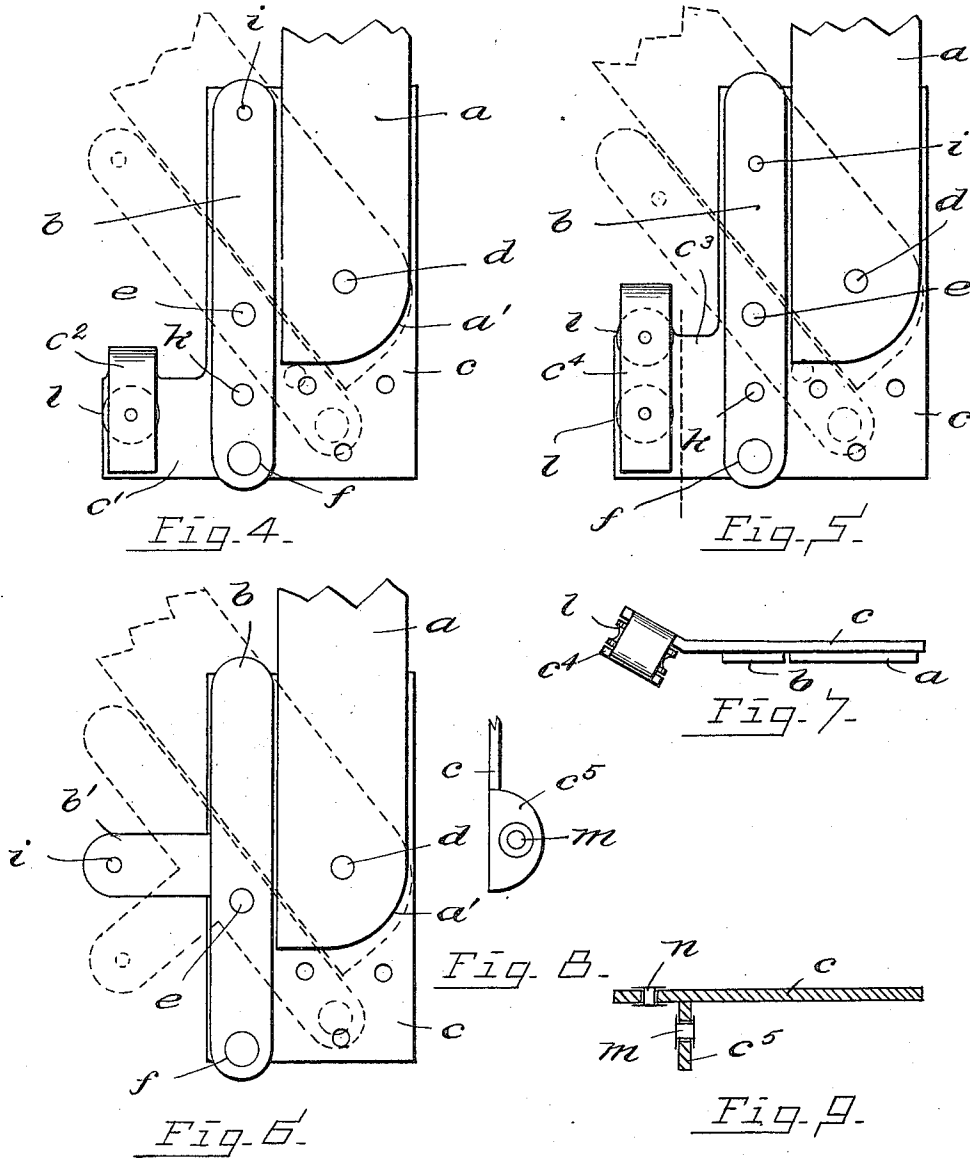
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WITNESSES:

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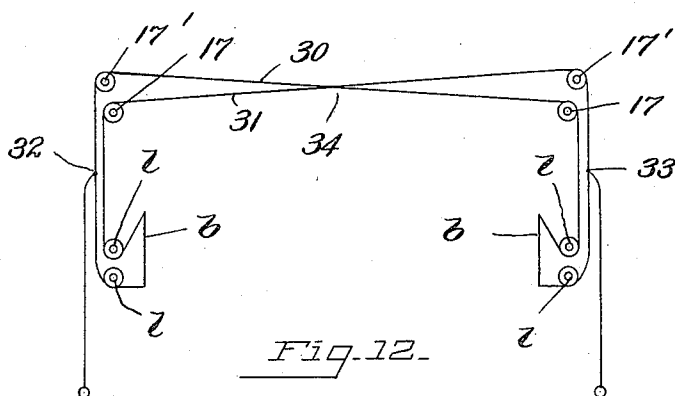
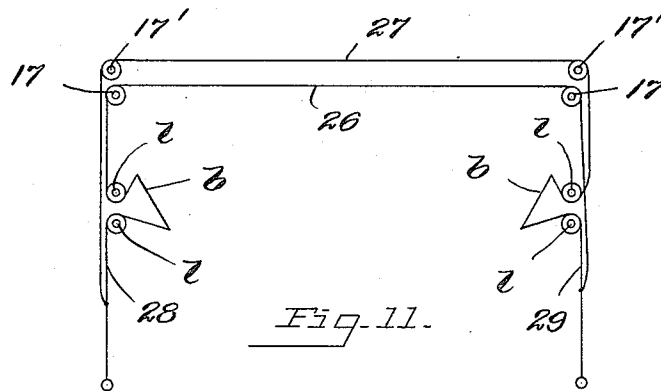
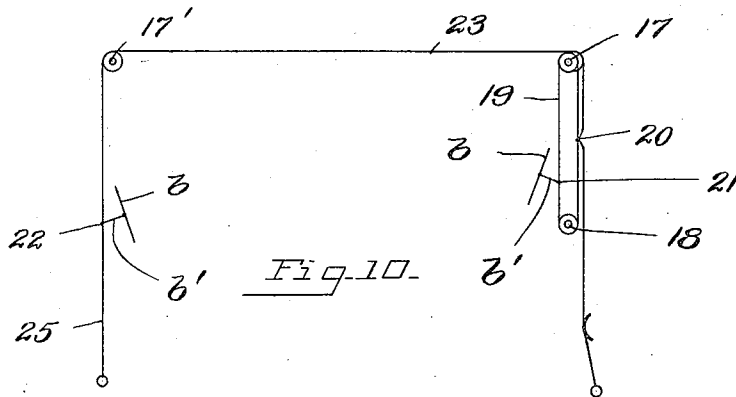
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WITNESSES

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ADJUSTABLE WINDOW-SHADE FIXTURE.

1,042,213.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed December 6, 1911. Serial No. 664,261.

To all whom it may concern:

Be it known that I, HARRY E. GIFFORD, a citizen of the United States, and a resident of Mattapan, Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Window-Shade Fixtures, of which the following is a specification.

This invention relates to fixtures for supporting window shades so that the upper portion can be adjusted away from the upper end of the window casing in order to facilitate ventilation.

Window shades ordinarily are hung upon fixtures that are permanently secured to the window frame, the result being that when the shade is lowered to shut out sunlight or to obstruct view from the outside, circulation of air through the window for ventilating purposes is practically shut off when the draft is outward and materially interfered with when the draft is inward, this being due to the fact that the shade itself hangs close to the window frame or sash.

By the term "window shade" is usually meant the kind of hanging which comprises suitable material mounted upon a spring roller. While I employ the term "shade" herein, I do not wish to be understood as limiting myself to any specific kind of window hanging.

One of the objects of the present invention is to provide an improved fixture of the character described in which the shade roller is mounted in bearings at the free ends of pivotally mounted arms, each of said arms being adjusted by means of a manipulator or actuator that is mounted on an independent pivot, but parallel with the arm so that the actuator will not only serve to shift the arm, but also constitute the stop which limits the extremes of movement of said arm whereby an improved fixture is provided that may be secured to the inner side of a window frame and occupy very little space.

My invention is embodied in an improved construction which includes few and simple parts that may be easily applied and operated.

The invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

Of the accompanying drawings,—Figure

1 is a side elevation of one embodiment of my invention, said figure illustrating the guide rod which connects two fixtures in section the upright position of the arm and actuator being indicated by full lines and the outwardly swung position being indicated by dotted lines. Figs. 2 and 3 are front or edge views of the left hand and right hand fixtures, the guide rod being broken away to reduce width of the figure. Figs. 4, 5, and 6 are views similar to the lower portion of Fig. 1, but illustrating modifications hereinafter described. Fig. 7 is a view looking from the top of Fig. 5. Fig. 8 is a detail side elevation of a modification hereinafter described. Fig. 9 is a sectional view of a modified form of base plate. Figs. 10, 11, and 12 are diagrams to illustrate how two members of the fixture may be simultaneously manipulated by cords and pulleys.

Similar reference characters indicate the same or similar parts in all of the views.

Referring first to Figs. 1, 2 and 3, the swinging arms which support the shade roller are indicated at *a*, and are adapted to be swung from the full line position of Fig. 1 to the dotted line position of that figure, and back again or to any intermediate point. Each arm is pivoted at *d* to a base plate or bracket *c* having suitable means for attaching it to a window casing as by means of screws. The actuator or manipulator *b* is pivoted at *e* to said base plate, the pivot *e* being in a slightly lower plane than the pivot *d*. The arm *a* and actuator *b* are in the same plane so that the edge of the actuator *b* engages the lower portion of the edge of arm *a* in such manner as to positively cause the arm *a* to follow all swinging movements imparted to the actuator *b*. This structure also causes the actuator *b* to serve as a stop for limiting the extremes of movement of the arm *a*, without other means for effecting such result. The amount of the swinging movement is of course determined by the manipulator and will depend upon the width of the space between the adjoining edges of the arm *a* and actuator *b* when said members are pivotally connected to the base plate. In Fig. 1 a slight space is shown between the edges in order to clearly illustrate that the two members are separated from each other but in practice

the structure will be such that when the members are in the position shown by full lines in Fig. 1, the lower corner of the member *a* will bear against the edge of actuator *b* while the upper end of actuator *b* is in contact with the edge of arm *a*. Owing to the fact that the actuator *b* is pivoted in a plane below the pivot of arm *a*, the edges are slightly separated as they swing toward the dotted line position and then again contact as they reach substantially the said dotted line position.

The lower end of each actuator *b* is formed with a hole *f* so that a rod *g* can be mounted in the holes of the two actuators of a pair of the attachments when they are connected to the opposite sides of a window casing. The upper end of each arm *a* has a bearing *h* for one end of a shade roller. As will be obvious from Fig. 1, when a shade roller is mounted in the bearings *h* and the arm and actuators are shifted to the dotted line position, the guide bar *g* will press the shade-roller farther in toward the window, it being understood that the shade material or apron is passed down to the right of the guide bar in Fig. 1, or in other words, behind said guide bar or between it and the window. Then, when the arms are swung upwardly to the full line position to carry the shade roller to the position which it will normally occupy when the shade is raised, the shade apron will hang free from the guide bar *g*, and can be run up and down without rubbing against said bar. Preferably the arm *a* has one corner rounded as at *a'* so as to present no angular corner that might be forced against the wood work of the window sash.

The hole *i* in the upper end of the actuator, Fig. 1, may be utilized to be engaged by a hook or wire or cord to enable said actuator to be operated from a point at some distance away from or below said actuator.

In Fig. 4, the structure is substantially the same as in Fig. 1, but the actuator *b* has another hole *k* so that separate cords leading from the holes *i* and *k* can be alternately pulled to swing the actuator. In said Fig. 4, the base plate *c* is provided with an arm or extension *c'*, a portion of which is doubled upon itself to form an ear *c''*, between which and said arm *c'* a pulley *l* is mounted in order that an operating cord leading from the hole *k* may be passed over said pulley *l*.

In Fig. 5, the base plate is shown as provided with an arm *c''* having a portion which is bent over upon itself to form an ear *c''* between which ear and the main portion of the arm *c''* are mounted two pulleys *l, l'*, for cords leading from the holes *i* and *k* of the actuator *b*. As shown in Fig. 7, the extended portion of the base plate which supports the rollers is preferably bent at an

angle in order that the operating cords hereinafter described may be led easily in the proper directions.

In Fig. 6, the actuator is shown as formed with a lateral extension *b'* having a hole *i'* for an operating cord.

As shown in Fig. 8, the base plate *c* may be formed with an outwardly turned flange *c''* having an eyeleted hole *m* through which the operating cord may pass.

Fig. 9 shows a similar eyeleted hole and also shows the base plate as having another eyeleted hole *n*. These eyeleted holes may be employed as guides for operating cords instead of the pulleys *l, l'*.

As shown in Figs. 2 and 3, the two arms *a* and their actuators are not connected by anything that would insure simultaneous swinging movements, excepting the shade roller when that is in place, and the guide bar *g* when such is used. It is, of course, desirable that the two arms *a* should swing in unison. To illustrate how the attachments may be put up and connected for simultaneous operation, reference may be had to the diagrammatic Figs. 10, 11 and 12.

In Fig. 10 the attachments are supposed to be of the type of Fig. 6. When the two attachments are secured by means of their base plates to the opposite sides of a window casing, a cord 19 having its ends connected to constitute an endless cord or belt is mounted on pulleys 17, 18, and to said endless cord is connected the arm *b'* of one of the attachments. Another cord 23 is connected at 20 to the endless cord 19, and has one end 24 extending downwardly to a suitable cleat. The other end of said cord 23 passes over pulley 17 and a pulley 17' secured to a window casing upon the other side of the window casing and is connected at 22 to the arm *b'* of said other attachment. The extreme end of the cord 23 may be left free as at 25, and have its end either provided with a weight or arranged to be connected to another cleat. As will be obvious, by pulling either portion 24 or 25 of the cord 23, both of the attachments will be swung in unison, to adjust the shade roller relatively to the top of the window casing.

In Fig. 11, which illustrates connections that may be employed with such a structure of attachments as shown in Fig. 5, there are two cords 26, 27, passing over pulleys 17, 17'. The cord 26 at one end passes under a pulley *l* and is connected to the upper end of an actuator *b*. The other end of the cord 26 is connected to a cord 29 which leads over a lower pulley *l* and is connected to the lower end of the other actuator *b*. The cord 27 is connected at one end to the upper end of the last-mentioned actuator *b*, and leads under a pulley *l* over the pulleys 17' and is connected to a cord 28 which passes over the lower pulley *l* at the left and is con-

nected to the lower end of actuator *b*. The depending portions of the cord 28, 29, may be arranged to be secured as cleats or otherwise. From said Fig. 11 it will be obvious that by pulling one or the other of the cords 28, 29, the two shade-supporting attachments will be swung in unison.

In Fig. 12, cords 30 and 31 are shown as crossing each other where they extend across the window casing, said cords passing over the pulleys 17, 17' and the pulleys *l*, *l*, and attached to the actuators *b*, *b*. Pull cords are attached at 32, 33, to the cords 30, 31, as shown in said Fig. 12, whereby the two attachments may be swung in unison. It will be understood of course that instead of the actuators being provided with holes for the attachment of the operating cords, suitable studs may be provided.

From the foregoing description, it will be understood that I have provided an exceedingly simple attachment for the purpose described, in which the principal parts are the arms *a* and their actuators *b*, which latter not only control the swinging movements of the arms, but also act as limiting stops to define the proper upright and outwardly swung positions, this being due to the relative positions of the pivots of the arms and actuators.

Owing to the engagement of the pivoted actuator with the arm in the manner described, bearing points between the two are provided on opposite sides of the pivot of the arm, which bearing points are of course brought into operation alternately. In other words, one bearing or engaging point is between the edge of the upper end of the actuator *b* and the adjacent portion of the edge of the arm *a* while the other bearing or engaging point is between the edge of the lower end of the arm *a* below its pivot, and the opposite portion of the edge of the actuator *b*.

I claim:—

1. A curtain shade fixture, comprising a pivoted arm having a bearing for a shade roller at its free end, and a pivoted actuator mounted in position to engage said arm on opposite sides of the pivot of the latter, the

arm and actuator being mounted in substantially the same plane.

2. A curtain shade fixture comprising a base plate, and an arm and an actuator independently pivotally connected in juxtaposition to each other upon said base plate and in substantially the same plane, the arm having a bearing for a shade roller at its free end.

3. A curtain shade fixture comprising a base plate, an arm pivotally connected thereto and having a shade roller bearing and an actuator also pivotally mounted to said base plate to swing in the same plane as the arm, the pivot of the actuator being in a lower plane than the pivot of the arm.

4. A curtain shade fixture comprising a base plate, and a shade roller supporting arm and an actuator pivotally connected edge to edge upon said base plate, the pivots of the arm and actuator being in different planes.

5. A curtain shade fixture comprising a pivoted arm having a bearing at its free end, and a pivoted actuator mounted in position to engage said arm on opposite sides of the pivot of the latter, said actuator having means for supporting a guide rod.

6. A curtain shade fixture comprising a base plate having means for guiding manipulating cords, an arm having a bearing at its free end and pivotally connected to said base plate, and an actuator pivotally mounted on the base plate in position to engage said arm on opposite sides of the pivot of the latter.

7. A curtain shade fixture comprising a base plate having pulleys for guiding manipulating cords, an arm having a bearing at its free end and pivotally connected to said base plate, and an actuator pivotally mounted on the base plate in position to engage said arm on opposite sides of the pivot of the latter.

In testimony whereof I have affixed my signature, in presence of two witnesses.

HARRY E. GIFFORD.

Witnesses:

A. W. HARRISON,
P. W. PEZZETTI.