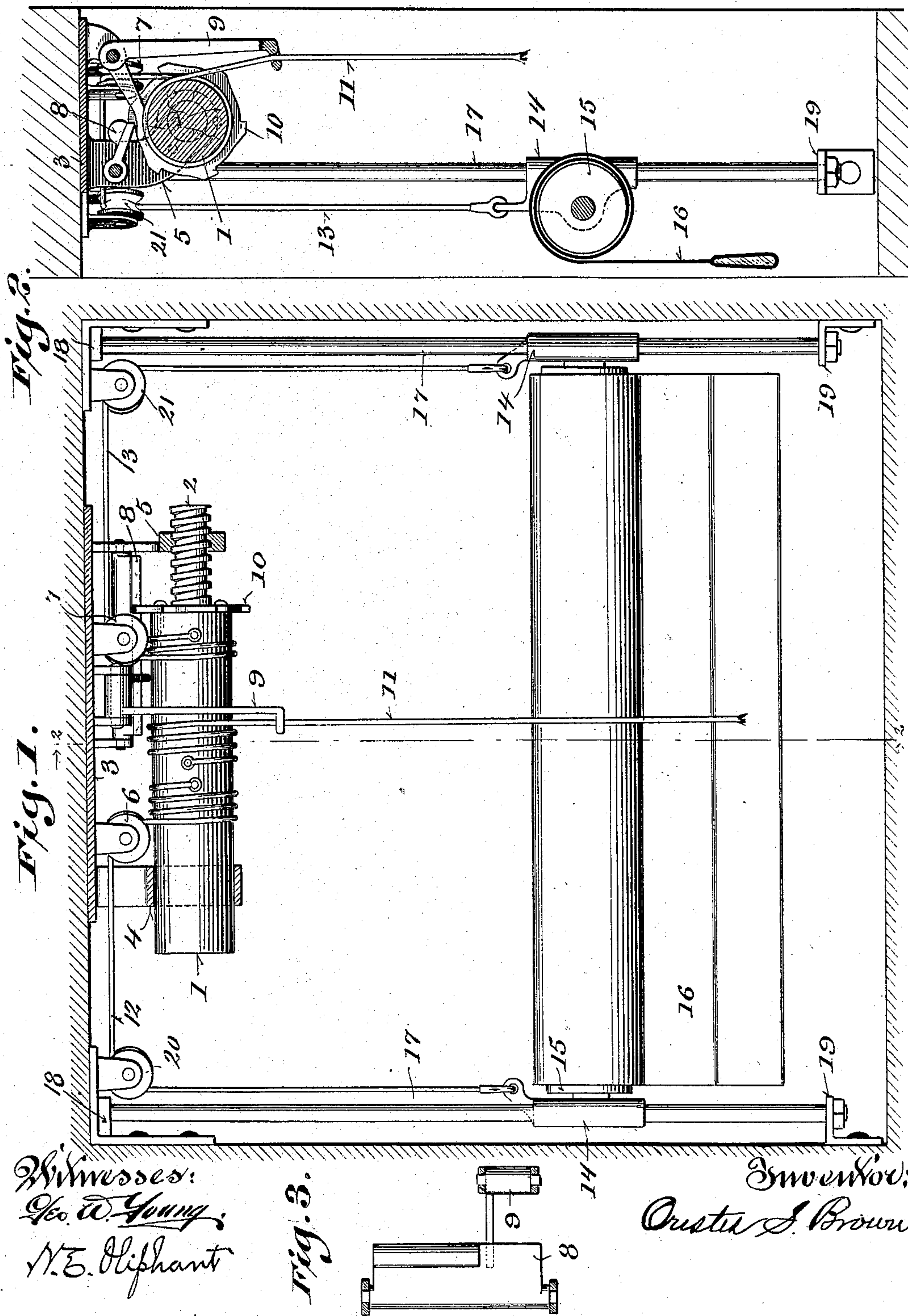


O. S. BROWN.
ADJUSTABLE WINDOW SHADE FIXTURE.
APPLICATION FILED OCT. 26, 1907.

900,477.

Patented Oct. 6, 1908.



Witnesses:
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UNITED STATES PATENT OFFICE.

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ADJUSTABLE WINDOW-SHADE FIXTURE.

No. 900,477.

Specification of Letters Patent.

Patented Oct. 6, 1908.

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To all whom it may concern:

Be it known that I, ORESTES S. BROWN, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Adjustable Window-Shade Fixtures, of which the following is a specification.

My invention relates to improvements in adjustable window shade fixtures, more particularly to that class of adjusters for window shades in which the device is fastened at the top part of the window casing, by means of which the shade roller may be raised or lowered along the window frame, the shade roller being suspended by means of cords passing over pulleys at the upper corners of the window casing and attached to hangers adapted to receive the respective ends of the shade roller.

Figure 1 represents a partly sectional front elevation of an adjustable fixture in accordance with my invention applied to a window casing and shade; Fig. 2, a sectional view of the casing, fixture and shade on the plane indicated by line 2—2 in Fig. 1, and Fig. 3, a plan view partly in horizontal section illustrating a detent and trip-lever for same in the fixture.

Referring by numeral to the drawings, 1 indicates a roller and 2 a screw-extension of same. This roller and its screw extension are hung in brackets 4 and 5 depending from a plate 3 attachable to the underside of the head-bar of a window-casing. Pulleys 6, 7, a detent 8 and a lever 9 are also suspended in connection with the aforesaid plate. The roller turns freely in the bracket 4 and the bracket 5 is in part a stationary nut for the screw-extension of said roller, the latter and said extension of same being preferably one piece of wood.

Fast to an end of roller 1, next the screw-extension thereof, is a circular ratchet-plate 10 for engagement with the detent 8, and the lever 9 of bell-crank type is suspended to have one arm thereof extend under said detent. The other arm of the lever depends in front of the roller 1 and is looped for the engagement of an operating-cord 11 attached to said roller. The loop-arm of said lever is normally at such an angle, that when the cord is pulled directly down, the detent will be disengaged from the ratchet 10 to release said roller. Other cords 12 and 13 are each con-

nected at their ends to the roller 1 and one of a pair of hangers 14 for the roller 15 of the window-shade 16, and these hangers are preferably sleeves guided on vertical rods 17 each supported in connection with brackets 18, 19, attached to stiles of the window-casing. The cord 12 is trained on the pulley 6 and another pulley 20 in connection with the window-frame, the cord 13 is trained on the pulley 7 and another pulley 21 in connection with said window-frame, and said cords wind and unwind simultaneously with relation to the roller to which they are attached. When the detent is lifted, the cords 12 and 13 will unwind from the roller 1 simultaneously, and this roller in its revolution will move endwise from right to left permitting gravity descent of the other roller 15 and shade therewith. The cord 11, if allowed to slide through the grasp of the operator, will be kept sufficiently taut to keep the detent 8 lifted out of engagement with the ratchet 10, and thus allow free revolution of the roller 1 in the direction to permit unwinding of the shade suspending cords, but the downward movement of the shade is readily arrested at any point by slackening or pulling out of the operating cord to permit a drop of said detent into reengagement with said ratchet.

When the shade-suspending cords unwind from the roller 1, the operating-cord winds on said roller, and when said operating cord is pulled down to unwind the same, the other cords are caused to wind and thus elevate the shade.

The pulleys 6 and 7 are placed in front above the plane of the cord-roller and the operating-cord passes down in front of said roller. The tendency of the cords 12 and 13 to lift the roller in the brackets 4 and 5 is met by the tendency of the operating cord to pull said roller down in said brackets, thus in a measure the pull in one direction is counteracted by pull in the opposite direction to obviate friction of said roller in the aforesaid brackets. It is also to be understood that the screw-extension 2 of the roller 1 working in a stationary nut, automatically regulates the winding and unwinding of the shade-suspending cords thereby preventing sticking or bunching of the same at any time, and that the detent 8 has length in proportion to that of the screw to be engageable with the ratchet 10 in any position of said roller in its endwise movement in either direction.

Having described my invention, what I claim as new, and desire to secure by Letters Patent is—

1. The combination of suspending brackets, a roller having a screw-extension and engaging the brackets one of which is a stationary nut for the screw, a pair of cords in connection with the roller, suitably arranged pulleys on which said cords are trained, a shade having the roller thereof suspended by said cords, an operating-cord in connection with the roller first aforesaid to wind and unwind opposite the other cords, a ratchet in connection with the cord-roller, a detent of a length sufficient to be engageable with the ratchet in any position of same, and a bell-crank lever having one arm thereof arranged under the detent, its other arm being provided with a loop engaged by the operating-cord and normally at such an angle that direct down-pull on said cord will actuate said lever to trip the detent from the ratchet.

2. The combination of suspending brackets one of which constitutes a stationary nut, a roller and screw-extension of the same engaging the brackets, a pair of cords in connection with the roller, suitably arranged pulleys on which the cords are trained, a shade having the roller thereof suspended by said cords, an operating-cord in connection with the

roller first aforesaid to wind and unwind opposite the other cords, a ratchet in connection with the cord-roller, a detent of suitable length engageable with the ratchet, and a trip-lever for the detent controlled by the operating-cord with which it is engaged at such an angle as to be actuated by direct down-pull of said operating cord to trip said detent, automatic reengagement of the detent with the ratchet being a result of slacking the aforesaid operating-cord or of an outward pull of same.

3. The combination of suspending brackets one of which constitutes a stationary nut, a roller and screw-extension of same engaging the brackets, a pair of cords in connection with the roller, suitably arranged pulleys on which the cords are trained, a shade having the roller thereof suspended by said cords, an operating-cord in connection with the roller first aforesaid to wind and unwind opposite the other cords, and means controlled by the operating-cord for stopping and releasing the cord-roller.

In testimony whereof I affix my signature in presence of two witnesses.

ORESTES S. BROWN.

Witnesses:

JOHN P. HARKINS,
JOHN ADOLPHUS EGGEN.