

R. V. HENRY.
CURTAIN ROLLER.
APPLICATION FILED APR. 27, 1912.

1,056,673.

Patented Mar. 18, 1913.

Fig. 1.

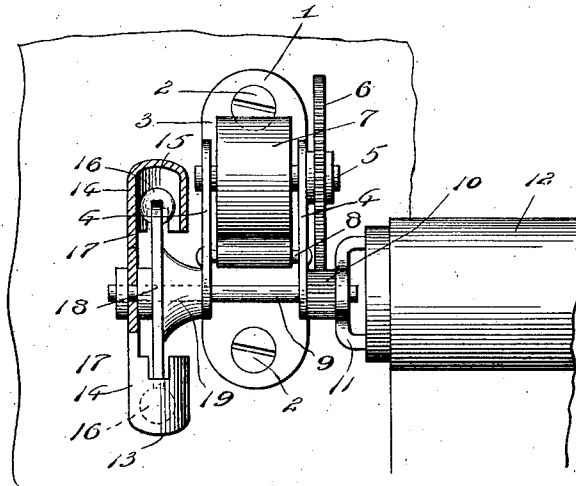


Fig. 3.

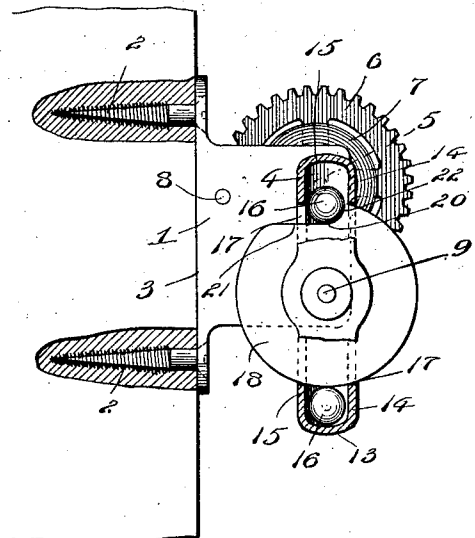
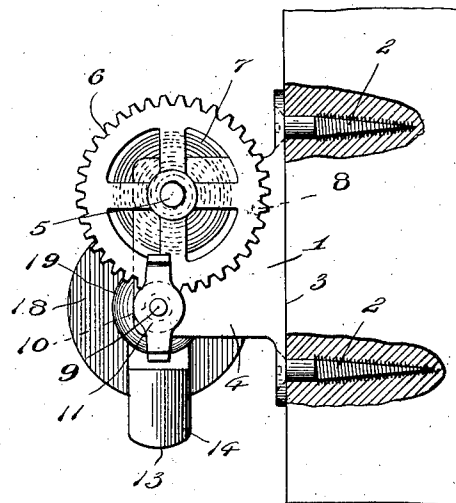


Fig. 2.



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UNITED STATES PATENT OFFICE.

RUFIES V. HENRY, OF BICKFORD, OKLAHOMA.

CURTAIN-ROLLER.

1,056,673.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUFIES V. HENRY, a citizen of the United States, residing at Bickford, in the county of Blaine and State of Oklahoma, have invented new and useful Improvements in Curtain-Rollers, of which the following is a specification.

This invention relates to improvements in curtain rollers and especially with reference to an improved fixture for mounting one end of a roller and to permit it to rotate in one direction to lower a shade or curtain and to automatically raise the curtain or shade when desired, my improved curtain roller fixture providing a spring for operating the curtain roller and means for controlling the action of the spring, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawing:—Figure 1 is a front elevation of a curtain roller fixture constructed in accordance with my invention, showing one end of a curtain roller connected thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a similar view, showing the opposite side of the fixture.

In accordance with my invention, I provide a bracket 1 which is adapted to be fitted against a window casing or the like and to be secured in place by means of screws or other suitable devices 2. This bracket comprises a base 3 and a pair of lugs or arms 4 which are arranged in spaced relation and project outwardly from the base. An arbor 5 has its bearings in the said arms and is provided at one end with a spur gear 6. A spring 7 of the usual form has one end connected to a pin 8 which passes through openings in and is secured by the arms 4, the other end of the spring being attached to the arbor so that the spring is adapted to be coiled on the arbor and to uncoil therefrom. An operating shaft 9 also has its bearings in the arms 4 and is provided at its inner end with a pinion 10 which engages the gear 6 and a substantially U-shaped yoke 11, the arms of which are adapted to be inserted in recesses in one end of a curtain or shade roller 12. On the other end of the operating shaft is secured a carrier arm 13 the extremities of said arm projecting in opposite directions from the said shaft and being provided with opposing shouldered guiding members 14 each of which has a radial guide recess 15

for the reception of a detent ball 16, alined notches 17 being at the inner ends of said shouldered guide members. A stop disk 18, which is fixed, has a hub member 19 on one side which secures it to one of the arms 4. The stop disk is concentric with the operating shaft 9, the latter passing through and being free to revolve in a central opening in the stop disk. Said stop disk is arranged at opposite sides in the notches 17 of the guide members 14 of the carrier arm and in the upper side of the stop disk is a recess 20. The bottom of the said recess is substantially horizontal and presents a rolling surface 21, one side of the said recess forming a stop shoulder 22. The detent balls move radially in the carrier arm and describe orbital movement around the stop disk when the device is in operation. When the curtain is lowered it revolves the roller and the operating shaft 9 with its carrier in one direction and, hence, the gears hereinbefore described cause the arbor 5 to revolve in the opposite direction and wind up the spring. When the roller is held for an instant against rotation, by a grasp on the curtain, one of the stop balls by engagement with the shoulder 22 formed by the recess 20 will, through the instrumentality of the carrier and the stop disk lock the operating shaft so as to hold the roller and shade or curtain stationary. When it is desired to raise the shade or curtain a slight pull is first made thereon and it is released and thereupon the spring by uncoiling will cause the operating shaft and, hence, also the roller to be revolved in the direction required to fly up and raise the chain, as will be understood.

While I have herein shown and described a preferred form of my invention, I would have it understood that changes may be made in the form, proportion and construction of the several parts without departing from the spirit of my invention and within the scope of the appended claims.

I claim:—

1. A fixture of the class described comprising a curtain roller journal mounted for rotation, a carrier element revoluble with the journal a fixed stop disk substantially concentric with the journal and having a recess in its upper side, a spring to revolve the journal in one direction, and wound when the journal is revolved in the reverse direction, and centrifugally movable detents

carried by the carrier to engage the recess of the stop disk.

2. A curtain roller fixture of the class described comprising a bracket, an operating shaft forming a roller journal and having its bearings on said bracket, said shaft having a pinion, a carrier element secured to and revoluble with the operating shaft and having guideways radial to said shaft, 5
10 detent balls movable radially or centrifugally in said guideways, a fixed stop disk having a recess on its upper side arranged

for engagement by the detent balls to prevent casual rotation of the operating shaft, an arbor having a gear engaging said pinion, and a driving spring connected to the said arbor. 15

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

RUFIES V. HENRY.

Witnesses:

CHARLES N. BANCROFT,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
