No. 769,925. PATENTED SEPT. 13, 1904.

R. E. WAGELEY.

CURTAIN STOP.

APPLICATION FILED OCT. 21, 1903.

NO MODEL.

Fig. 1.

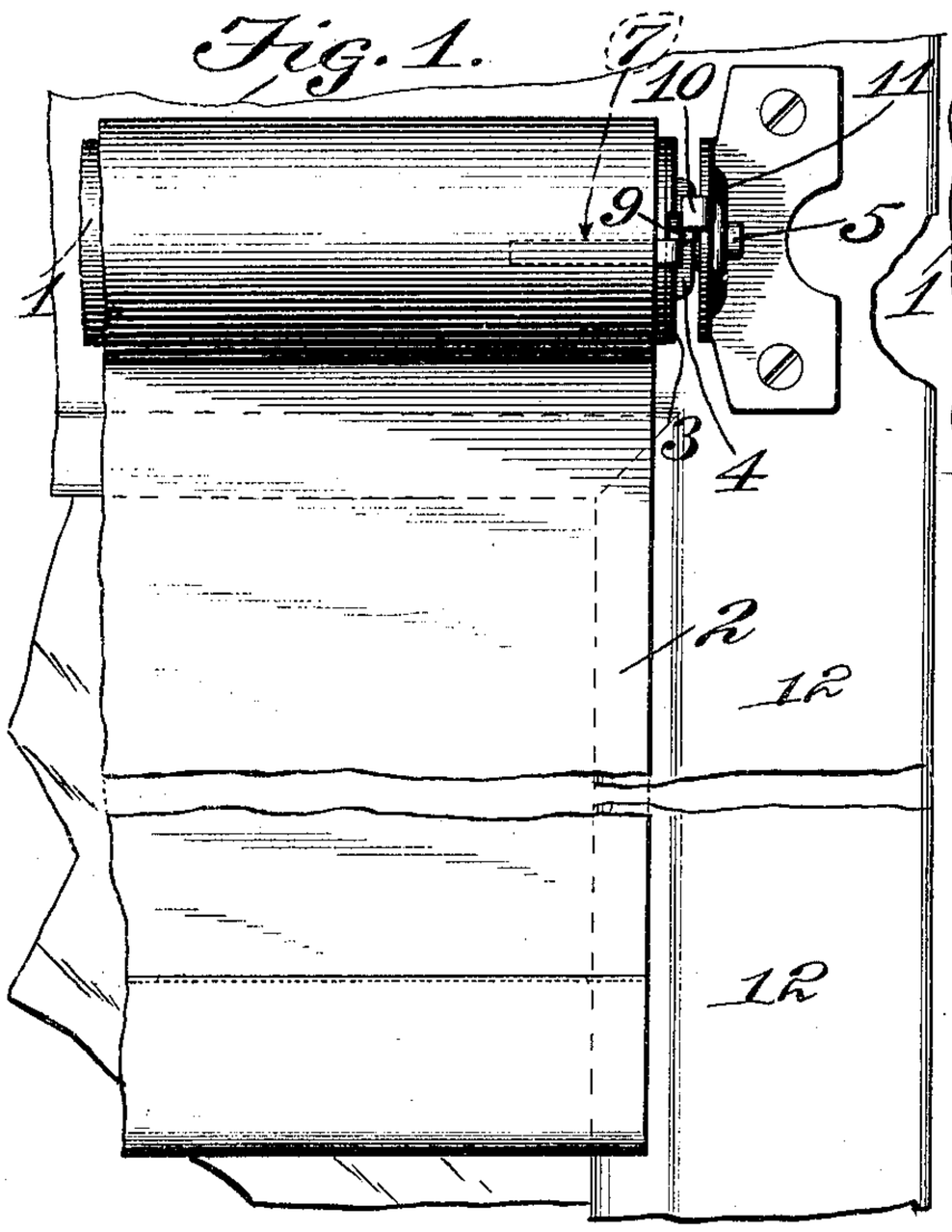


Fig. 2.

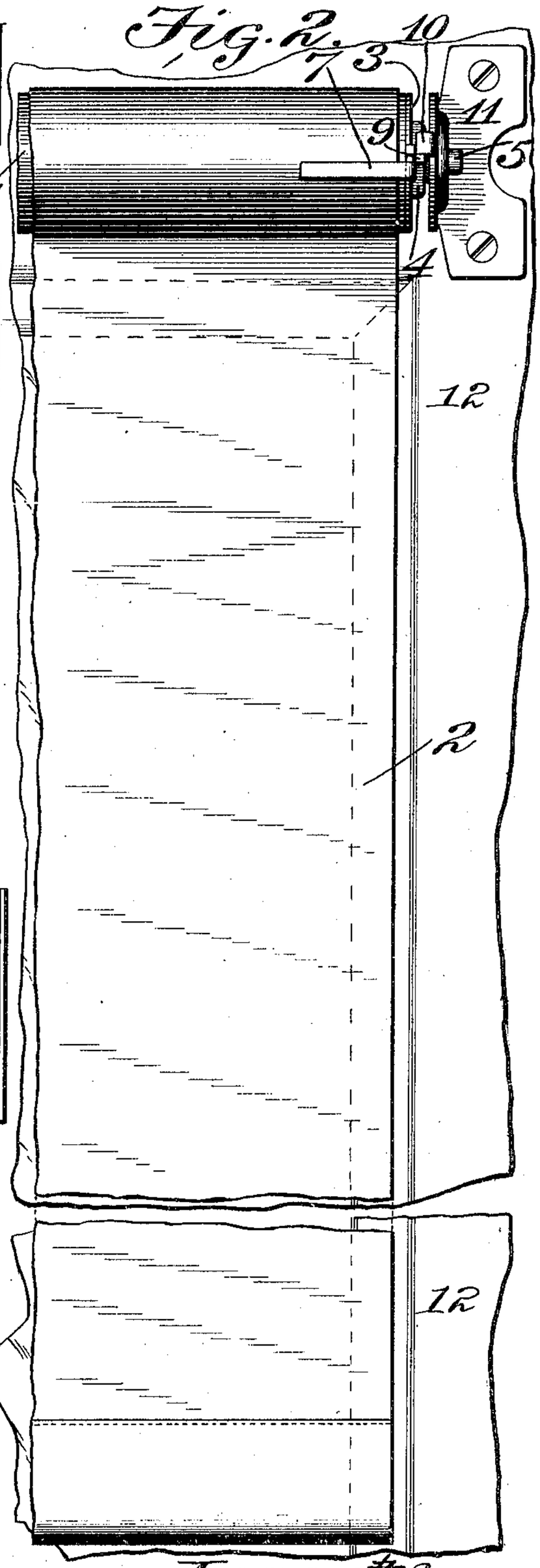


Fig. 4.

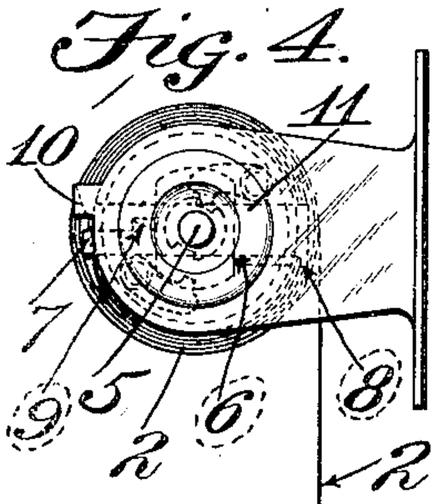


Fig. 3.

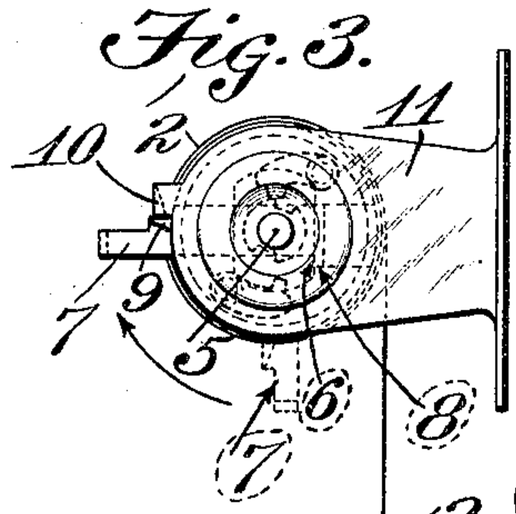


Fig. 5.

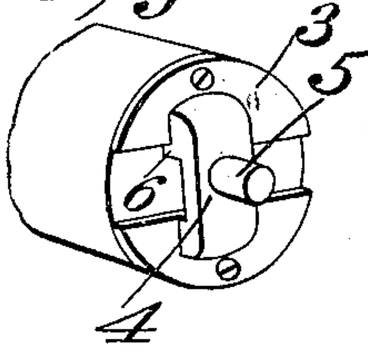


Fig. 6.

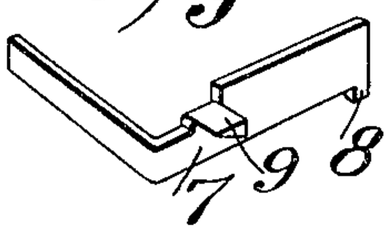
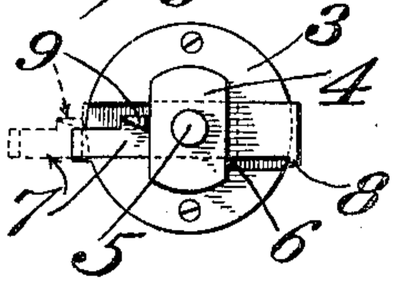


Fig. 7.



Witnesses:
G. A. Pennington
J. H. Weisbrod.

Inventor:
Robert E. Wageley,
by Bakewell & Cornwall
Attys.

No. 769,925. Patented September 13, 1904.

UNITED STATES PATENT OFFICE.

ROBERT E. WAGELEY, OF ST. LOUIS, MISSOURI.

CURTAIN-STOP.

SPECIFICATION forming part of Letters Patent No. 769,925, dated September 13, 1904.

Application filed October 21, 1903. Serial No. 177,901. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. WAGELEY, a citizen of the United States, residing at 10 Rugby Place, St. Louis, Missouri, have invented a certain new and useful Improvement in Curtain-Stops, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a fragmentary view, in front elevation, of the improved curtain-stop applied to the window-casement, and Fig. 2 is a similar view showing the stop in operative position. Fig. 3 is an end elevational view showing the stop in its outer position. Fig. 4 is a similar view showing the stop in its inner or folded position. Fig. 5 is a detail view of the head upon which the stop is mounted. Fig. 6 is a detail view of the stop, and Fig. 7 is a view showing the stop in position.

This invention relates to a new and useful improvement in curtain-stops designed particularly for use in connection with spring-actuated rollers of that type commonly known as "Hartshorn" rollers.

When window curtains or shades are pulled to their lowest position, they being secured to their rollers by a row of tacks or other securing means, they are liable to become torn or detached from the rollers, necessitating repair and sometimes a readjustment of the curtain on its rollers.

It is the object of my invention to provide means to prevent the curtain being torn or ripped from its roller, which means becomes effective when the curtain approaches its lowest position.

With these objects in view the invention consists in the construction, arrangement, and combination of the several parts of my device, all as hereinafter described, and pointed out in the claims.

In the drawings, 1 indicates the roller, which may be of any usual construction and which may contain the well-known rewinding-spring and gravitating dogs common to the type of Hartshorn rollers.

2 is a curtain mounted on the roller 1.

3 is the head mounted on the end of roller 1, which head is provided with a way to accommodate my improved stop, said way being bridged, as at 4, and provided with the trunnion or stud-shaft 5.

6 indicates a shoulder on one edge of the way, the purpose of which is to limit the outward movement of my improved stop.

7 indicates the folding stop, which is mounted to slide in the way in the head, one end of said stop being provided with a lateral projection 8 to coöperate with the shoulder 6, while the other end of said stop is bent substantially at right angles, so as to lie in the plane parallel to the axis of roller 1, said bent portion extending inwardly beyond the edge of the curtain 2.

9 indicates a projection on the stop 7, which coöperates with a projection 10 on a casement-fixture 11, carried by the casement 12.

In operation when the curtain approaches the lower extremity of its movement the stop being released by the unwinding curtain will fall in the position shown in Fig. 3, so that the projection 9 is in the path of the projection 10. Consequently when these two projections come in contact it is impossible to further unwind the curtain.

I prefer, in order to insure absolute safety to the curtain, to at least have one turn around the roller at the time when the safety-stop is released and, further, that when the curtain is arrested by the stop the dog which drops into the grooves in the spindle at the opposite end will not be in position to engage the groove, but will permit the spring to retract the curtain approximately one-half a revolution, so that no difficulty will be experienced when the operator desires to raise the curtain again by pulling it downward slightly to disengage the dogs. When the curtain starts upwardly and is wound on its roller, the edge of the curtain will engage the angled extension of the stop and fold the same inwardly close to the roller, so that the stop will not interfere with the smoothness of the layers of curtain on the roller.

In the event that the stop is not folded by the curtain, as just above described, and remains in its outer position, so that the stops

9 and 10 are in the paths of each other, in order to avoid the arrest of the curtain which might result from this engagement of the stops I bevel the upper face of stop 10 and the lower face of stop 9, the beveled faces of said stops being so disposed that should the projection on the folding stop come in contact with the fixed stop these beveled faces will tend to force the folding stop inwardly, and in this manner the raising of the curtain will not be interfered with.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. The combination with a roller, of a head on one end of the roller and having a way, a bridged portion on the head and arched over the way, a journal on the bridged portion, and a stop element in the way movable to arrest further movement of the roller.

2. The combination with a head having a guideway and a trunnion, a shoulder 6 in said guideway, a sliding stop 7 provided with a shoulder 8, and a bent extension, a projection 9 on said stop, and a casement-fixture having a projection designed to coöperate with the projection 9; substantially as described.

3. The combination with a curtain-roller and its curtain, of a bodily-movable stop terminally supported by said roller and normally held against movement by the curtain, and a roller-bracket having means for engagement with the stop when released by the curtain whereby the unwinding rotation of the roller will be retarded; substantially as described.

4. The combination with a curtain-roller and its curtain, and a bracket in which the roller is journaled, of a bodily-movable element mounted on the roller and normally held in an inoperative position by the curtain, said bodily-movable element being releasable by the curtain to contact with the bracket to retard further unwinding rotation of the roller; substantially as described.

5. The combination with a window-casement, a curtain-roller and its curtain, of a device for rigid attachment to the window-casement, and a bodily-movable device terminally supported by the roller but normally held out of engagement with the rigid device by the curtain, and when released by the unwinding of the curtain adapted to contact with the rigid device to arrest further unwinding rotation of the roller; substantially as described.

6. The combination with a roller, its curtain, and a casement-fixture provided with a stop, of a bodily-movable element mounted on the roller and having a portion thereof approximately parallel with the axis of the roller and temporarily held inoperative by the curtain but releasable by the unwinding of the curtain to permit a portion of the element to contact with the stop on the casement-fixture to arrest further unwinding movement of the roller; substantially as described.

7. The combination with a curtain-roller having a terminally-disposed guideway, of a bodily-movable stop in the guide on the roller and having one end bent at approximately right angles to the main portion of the stop, a curtain on the roller for engaging the right-angularly-bent portion so as to prevent movement of the stop when the curtain is wound, and to permit movement of the stop when the curtain is unwound, and a rigid part on the casement for engagement with the stop to arrest an unwinding movement of the roller; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 17th day of October, 1903.

ROBERT E. WAGELEY.

Witnesses:
FRANK PHILLIPS,
GEORGE BAKEWELL.