(No Model.)

J. M. OSGOOD.

SPRING SHADE ROLLER.

No. 280,229. Patented June 26, 1883.

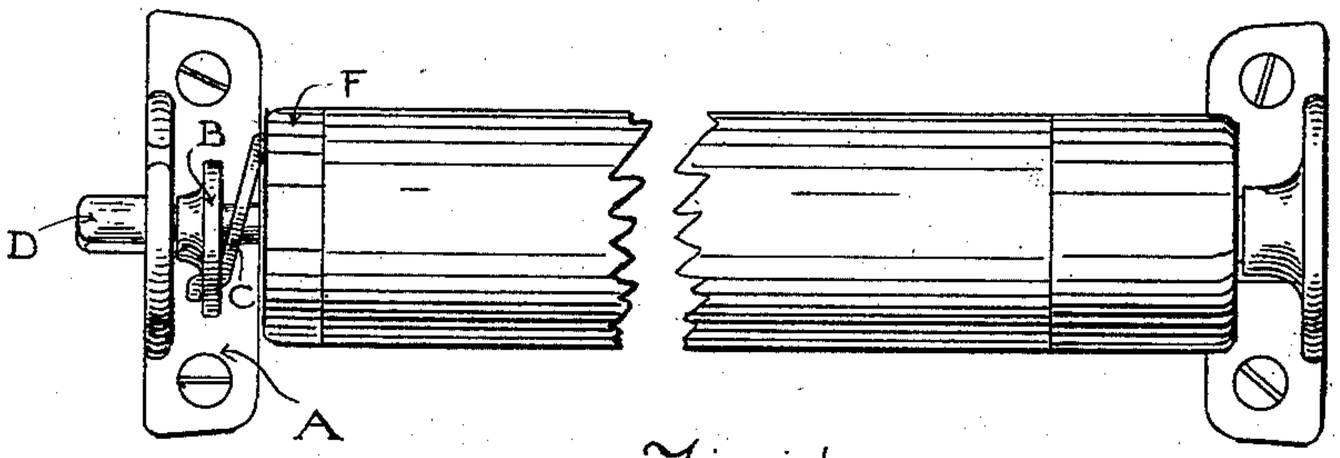


Fig. 1.

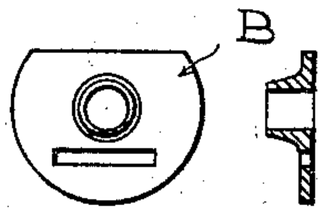


Fig. 3.

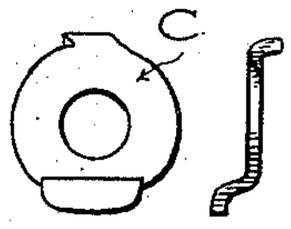


Fig. 4.

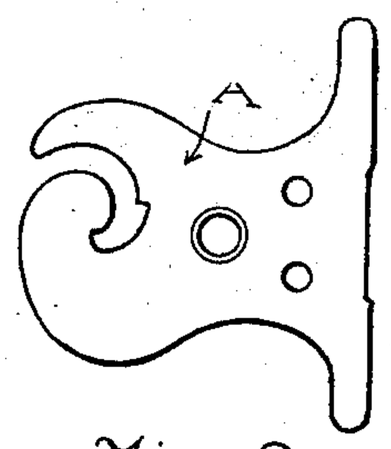


Fig. 2.

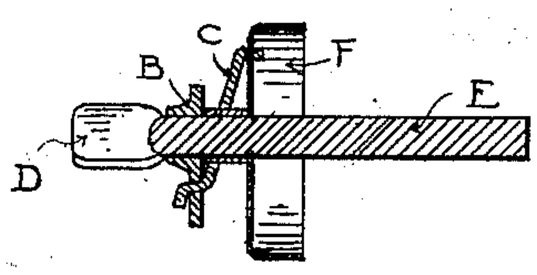


Fig. 5.

Fig. 6.

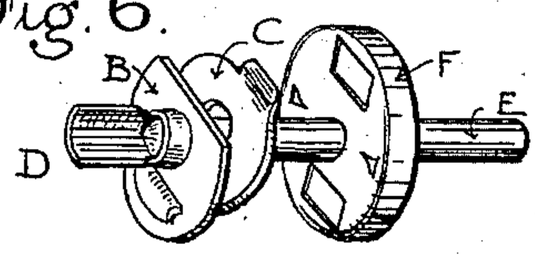
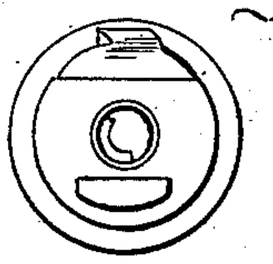


Fig. 8.



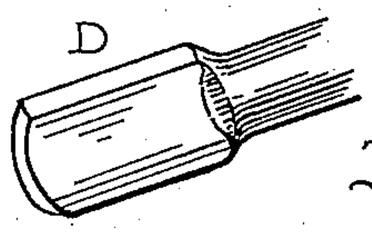


Fig. 7.

Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES M. OSGOOD, OF SOMERVILLE, MASSACHUSETTS.

SPRING SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 280,229, dated June 26, 1883.

Application filed December 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. OSGOOD, of Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Spring-Stop Curtain-Roller, Spindle-End, and Bracket, of which the following is a specification.

My invention relates to hinging or holding a pawl or catch to a face-plate attached to a spindle; also an improvement in a bracket and spindle-end of a spring curtain-roller. Heretofore such pawls or catches have been pivoted or pinned to the face-plate of the spindle, or else to a plate which is confined to and rotates with the roller, the pawl or catch operating upon the spindle or roller, as the case may be.

The object of my invention is to provide a pawl or catch without the use of pivots or pins; also a spindle-end and a bracket which will hold the roller when in position and prevent the spindle from being forced from the bracket by the rapid movement of the curtain when the full force of the spring is applied. I attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 is a perspective view of a curtain-roller, showing the roller in a completed state with the improvements attached. Fig. 2 is a side view of the bracket. Fig. 3 is a front view of the face-plate. Fig. 4 is a front and side view of the pawl or catch. Fig. 5 is a sectional view of the spindle with the pawl or catch attached to the face-plate, also a view of the cap which receives the tooth of the catch when it falls into engagement. Fig. 6 is a sketch view, showing the spindle, catch, face-plate, and cap when completed and ready for the roller. Fig. 7 is an enlarged view of the end of the spindle which holds the roller in the bracket. Fig. 8 is an end view of curtain-roller.

Similar letters refer to similar parts throughout the several views.

Fig. 1 shows the curtain-roller completed and placed in the brackets, ready for use. A is the bracket. B is the face-plate, attached to the spindle. C is the catch, one end of which passes through the slot in the face-plate B. The other end is made in the form of a tooth. When the catch falls forward, as is here shown, this tooth drops into the slot of cap F. D is the spindle-end, placed in the curved slot of the bracket A, (an enlarged view of which is shown in Fig. 7.) When the spindle-end enters the mouth of the curved slot, it must be convex or rounded side up. The roller then is slightly turned to carry the edge of the spindle to the bottom of the slot in the bracket. The upper edge of the spindle will then be received by the notch which is made in the curve for the purpose of holding the spindle firmly, so that the force of the spring cannot by a quick motion throw the roller from the bracket. E is that part of the spindle, as shown in Fig. 5, which enters the roller, and to which the spring is attached. F is the cap which is attached to the end of the roller, and through which the spindle passes. It has two holes, as shown in Fig. 6, to receive the tooth of catch C, and prevents the spring from unwinding when the curtain is drawn down to any desired position, or to hold the tension of the spring when the roller is out of the bracket. A quick movement of the roller, which is made by drawing down the curtain, relieves the tooth of catch C from the hole of cap F. This allows a free movement of the roller, catch C falling back and resting close to the face-plate B, or makes a tilting motion on the spindle until it again falls into engagement with cap F.

Fig. 2 shows a side view of the bracket A, with the curved slot and notch.

Fig. 3 shows the face-plate, side and edge view.

Fig. 4 shows the catch C, and also the projecting shoulder of the catch before it is placed in the slot of the face-plate B.

Fig. 5 is a sectional view of spindle E, showing the connection of catch C and face-plate B, as is also shown in Fig. 1.

Fig. 6 shows the spindle E and spindle-end D, face-plate B, catch C, and also shows a position of cap F on the spindle before it enters the roller.

Fig. 7 shows an enlarged view of the convexo-concave spindle-end D.

Fig. 8 shows the catch and cap, and is an end view of the curtain-fixture.

I do not confine myself wholly to the style of catch as is here shown in the drawings, which is made with a hole in the center for the purpose of receiving the spindle or the spindle

passing through it, as is shown in Fig. 6. A catch can be made and hinged to the face-plate in the same manner as this, and made to operate on either side of the spindle, the tooth of the catch dropping into the cap with the same freedom and ease, thereby obtaining the same results.

By this invention the roller can be placed on either end of the window. When at the top, the curtain is drawn down and held against the force of the spring by the catch, as above described. When placed at the bottom, the curtain is drawn up by means of a cord drawn over a pulley which is placed at the top of the window. The catch falls back and rests close to the face-plate on the spindle, while the roller revolves with perfect freedom. When the roller is taken from the bracket, the tooth of the catch falls into the cap, which prevents the spring from unwinding. Reference is made to my patent dated December 14, 1880, where I have a device for holding the catch, which is made with a tenon which passes through the lower edge of the circle of the ring face-plate, the spindle passing through the catch in the same manner as here described. My invention as here set forth differs from that, inasmuch as the catch is made with a shoulder which passes through a slot made in the face-plate, which acts as a hinge and holds the catch more firmly to the face-plate, allowing a more free and tilting motion.

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

1. In combination with a spring curtain-roller, a spindle-end made convexo-concave for the purpose of holding the roller and preventing the spindle from flying out of the bracket, substantially as described.

2. In combination with a convexo-concave spindle-end for a spring curtain-roller, a bracket or holder with a curved slot and notch for the purpose of holding the spindle-end, substantially as set forth.

3. In combination with a spindle for a spring curtain-roller, a pawl or catch with a projecting shoulder, and a face-plate with a slot, said pawl being connected or hinged to the face-plate by means of a shoulder and slot for the purpose of holding the force of the spring and securing a tilting motion to the catch while the roller is in motion, substantially as described.

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Witnesses:
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