No. 777,094. PATENTED DEC. 13, 1904.

E. F. HARTSHORN.

ATTACHMENT FOR SPRING SHADE ROLLERS.

APPLICATION FILED FEB. 16, 1904.

NO MODEL.

Fig. 1

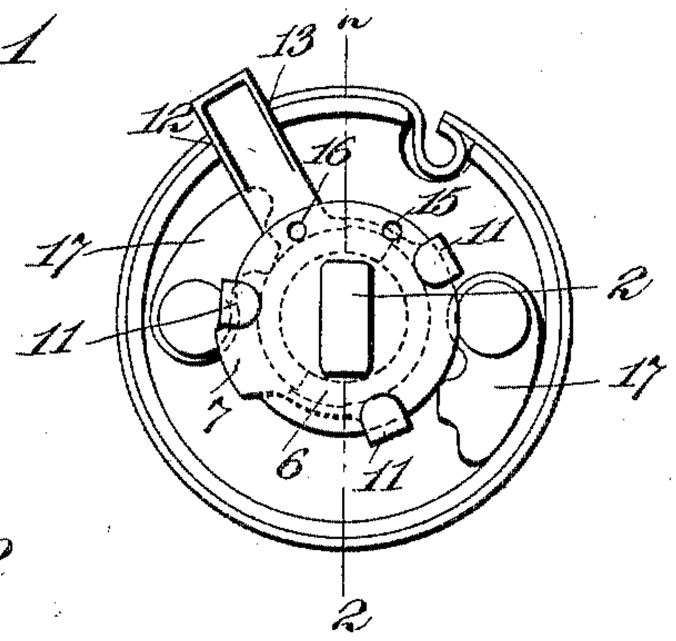


Fig. 2

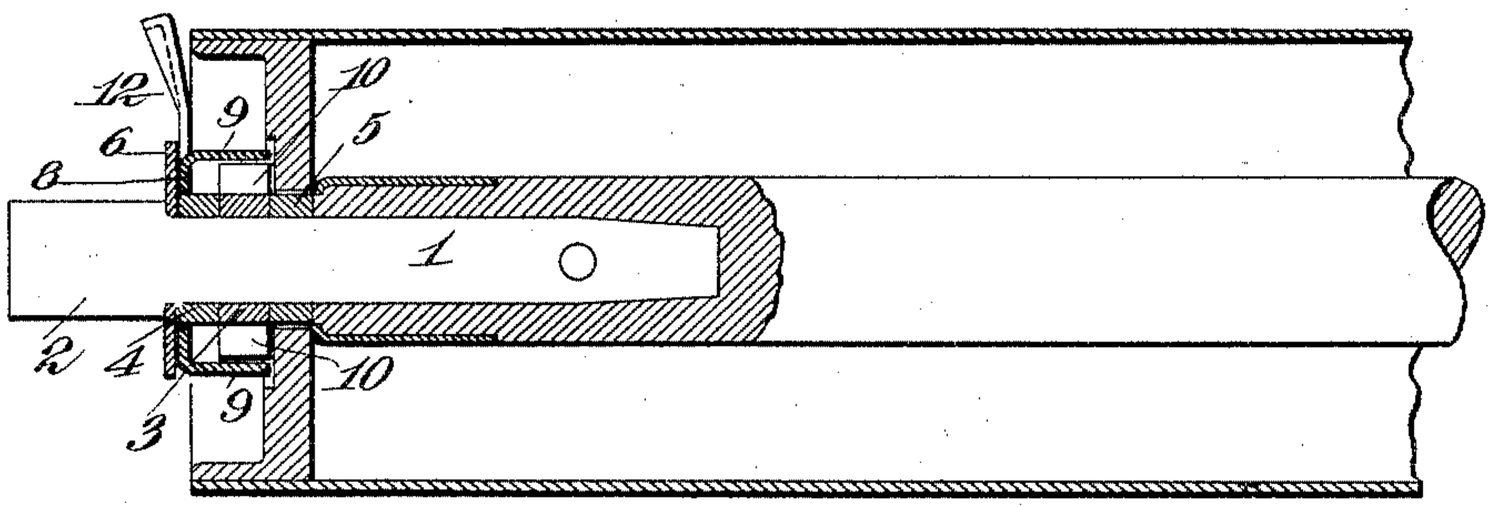


Fig. 3

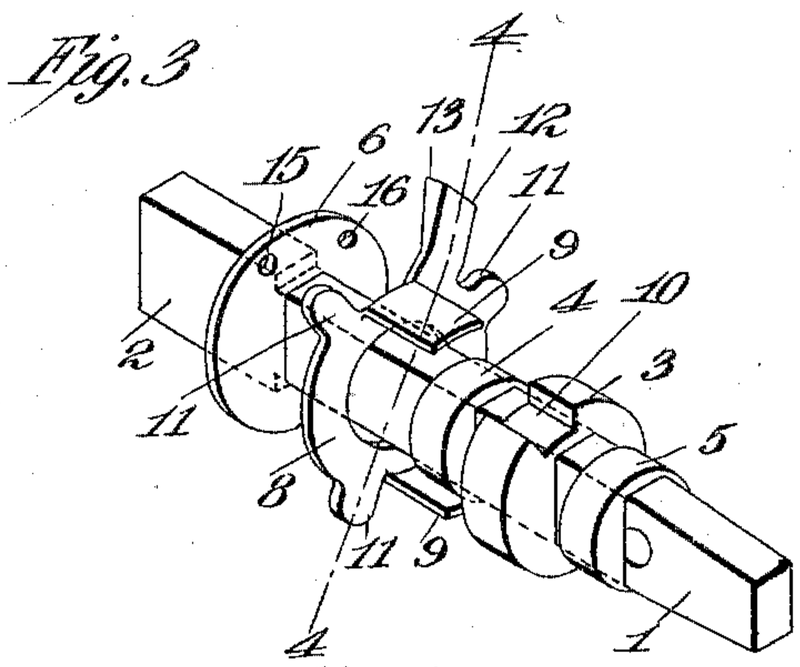
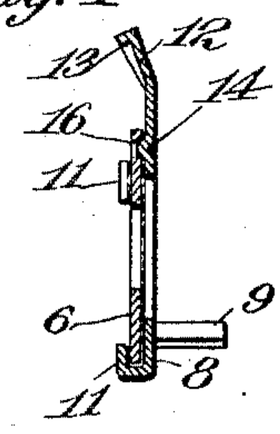


Fig. 4



Witnesses:

Jas. F. Coleman

Jno. Robt. Taylor

Inventor

Edmund F. Hartshorn

By Wyman & Co

Attorneys.

No. 777,094. Patented December 13, 1904.

UNITED STATES PATENT OFFICE.

EDMUND F. HARTSHORN, OF NEWARK, NEW JERSEY, ASSIGNOR TO STEWART HARTSHORN COMPANY, OF EAST NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

ATTACHMENT FOR SPRING SHADE-ROLLERS.

SPECIFICATION forming part of Letters Patent No. 777,094, dated December 13, 1904.

Application filed February 16, 1904. Serial No. 193,873. (No model.)

To all whom it may concern:

Be it known that I, EDMUND F. HARTSHORN, a citizen of the United States, residing in the city of Newark, county of Essex, and State of New Jersey, have invented a certain new and useful Improvement in Attachments for Spring Shade-Rollers, of which the following is a description.

The present invention relates to improvements in attachments for spring shade-rollers, and has for its object to provide a device by means of which the pawls may be allowed or prevented from engagement with the notch in the hub when the roller is in the bracket. The ordinary so-called "one-notch" roller is sometimes placed in the bracket with the notch side down before proper tension is placed upon the spring. To get the roller out of the bracket, it is necessary to lift the pawl up into engagement with the notch by the application of a wire on the side or through a hole in the roller provided for that purpose. In order to force the pawl into the notch, the roller must be slowly revolved, and it is more or less difficult to force the pawl into the lower notch.

One of the objects of the invention is to overcome this objection incident to the use of the ordinary form of one-notch roller.

A further object is to provide a device in which the notches may be covered or uncovered while the roller is in position in the bracket.

Another object is to produce an attachment whereby when the roller is so arranged that the pawls will not enter the notches it may be inserted in the bracket without danger of being wrong side up.

A still further object is to provide a device which has no loose parts and which can be manufactured and sold in complete form ready for use.

I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a spring shade-roller embodying my invention. Fig. 2 is a sectional view thereof taken on the lines 2 2 of Fig. 1. Fig. 3 is a perspective view of the spear, showing the parts separated; and Fig. 4 is a sectional view of a portion of the device, taken on the lines 4 4 of Fig. 3.

In all of the several views like parts are designated by the same reference-numerals.

In practicing my invention I employ a spear 1, having an enlarged rectangular portion 2 for engagement with the bracket. Upon the spear are threaded a ratchet-hub 3 and end washers 4 5, if such be necessary. This portion of the spear may be constructed as described in my Patent No. 656,288, of August 21, 1900. On the spear is placed a plate 6. The plate has a central opening which makes a close fit with the spear. The plate is generally circular in outline, but has a protuberance 7 on its periphery. (See Fig. 1.) This plate serves to support and guide a disk 8, which loosely surrounds the spear and rotates thereon. The disk 8 is provided with lips 9 9, which extend over and serve to cover both of the notches 10 in the ratchet-hub 3. The disk 8 is adapted to be rotated upon the hub 4, so that the notches may be covered or uncovered, as will be understood. The disk 8 is secured in position and in contact with the plate 6 by having ears 11 formed upon it, which ears are bent to surround and embrace the periphery of the plate 6, as shown in Figs. 1 and 4. The protuberance 7 is so proportioned and located in relation to two of the ears 11 that they will limit the amount of rotary movement of the disk 8, so that the lips 9 will either entirely cover or uncover the notches when the disk is at its extreme point of rotary movement. The disk 8 is rotated by means of a lever 12, which may be formed integral therewith and has dished sides and ends 13, as shown, so that an increased surface will be secured and the fingers of the operator will not be injured in rotating the disk. The lever 12 is preferably bent outward, as shown in Fig. 2, so that it will extend slightly beyond the outer edge of the roller, whereby its operation is facilitated.

To provide a lock to secure the disk 8 in either of its extreme positions, it may be provided with a small protuberance or projection

14, (see Fig. 4,) which will engage with either of the two holes 15 or 16 in the plate 6, the plate and disk being sufficiently elastic to allow the protuberance 14 to enter one or the other of the holes when brought adjacent thereto. This lock, however, is not essential, as the projections 11 may be made to grasp the periphery of the plate 6 with sufficient pressure to serve as a lock.

As shown in Fig. 1, the lever 12 is in such a position that the lips 9 close the notches 10 10 at both top and bottom of the ratchet-hub. The roller when so used may be a free running roller and the pawls 17 will not engage with the notches 10. By moving the lever 12 so that the protuberance 14 will be disengaged from the opening 16 and engaged with the opening 15 the disk 8 will be partly rotated and the lips 9 will no longer cover the notches 10. When so arranged, the pawls 17 will be free to engage with the notch which is upward. It will be seen that both notches of the ratchet-hub being capable of simultaneously being covered it is immaterial which way the squared portion 2 of the spear be inserted in the bracket. The tension of the spring may be adjusted in the well-known manner.

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

1. In a spring shade-roller, the combination with a roller and a spear having a ratchet-hub thereon and with a disk-carrying means for covering the notches in the ratchet-hub, the said disk being capable of rotating in relation to the roller to bring the covering means into operative position, substantially as described.

2. In a spring shade-roller, the combination with a spear, a ratchet-hub and pawl, of a disk surrounding the spear and capable of rotary movement thereon and having a lip adapted to cover a notch in the ratchet-hub to prevent engagement with the pawl, substantially as described.

3. In a spring shade-roller, the combination with a spear, a ratchet-hub and pawl, of a disk surrounding the spear and capable of rotary movement thereon and having a plurality of lips adapted to simultaneously cover the notches in the ratchet-hub to prevent engagement with the pawl, substantially as described.

4. In a spring shade-roller, the combination with a spear, a ratchet-hub and pawl, of a disk surrounding the spear and capable of rotary movement thereon and having a lip adapted to cover a notch in the ratchet-hub, and a lock for securing the disk in position, substantially as described.

5. In a spring shade-roller, the combination with a spear and ratchet-hub, the spear having a fixed plate thereon, of a disk rotatably mounted on the spear and having ears embracing the plate, the said disk having a lip adapted to cover a notch in the ratchet-hub, substantially as described.

6. In a spring shade-roller, the combination with a spear and ratchet-hub, the spear having a fixed plate thereon, the said plate having a protuberance upon its periphery, of a disk rotatably mounted on the spear and having ears embracing the plate, the said disk having a lip adapted to cover a notch in the ratchet-hub, the protuberance limiting the rotary movement of the disk, substantially as described.

7. In a spring shade-roller, the combination with a spear, a ratchet-hub and a pawl, of means for covering a notch in the ratchet-hub to prevent engagement with the pawl, such means being operated by a rotary movement, substantially as described.

8. In combination with a spear, having a ratchet-hub thereon, of means for covering the notch in the hub to prevent engagement with the pawl, such means being carried permanently by the spear and brought into action by a rotary movement.

9. In a spring shade-roller, a spear having a ratchet-hub thereon, and a disk-carrying means for covering the notches in the ratchet-hub to prevent engagement with the pawl, such means being brought into action by a rotary movement of the disk, substantially as described.

10. In a spring shade-roller, the combination with a spear, a ratchet-hub and pawl, of means for covering a notch in the ratchet-hub to prevent engagement with the pawl, such means being permanently attached to the spear, substantially as described.

This specification signed and witnessed this 10th day of February, 1904.

EDMUND F. HARTSHORN.

Witnesses:
LEONARD HEDGES,
JNO. ROBT. TAYLOR.