

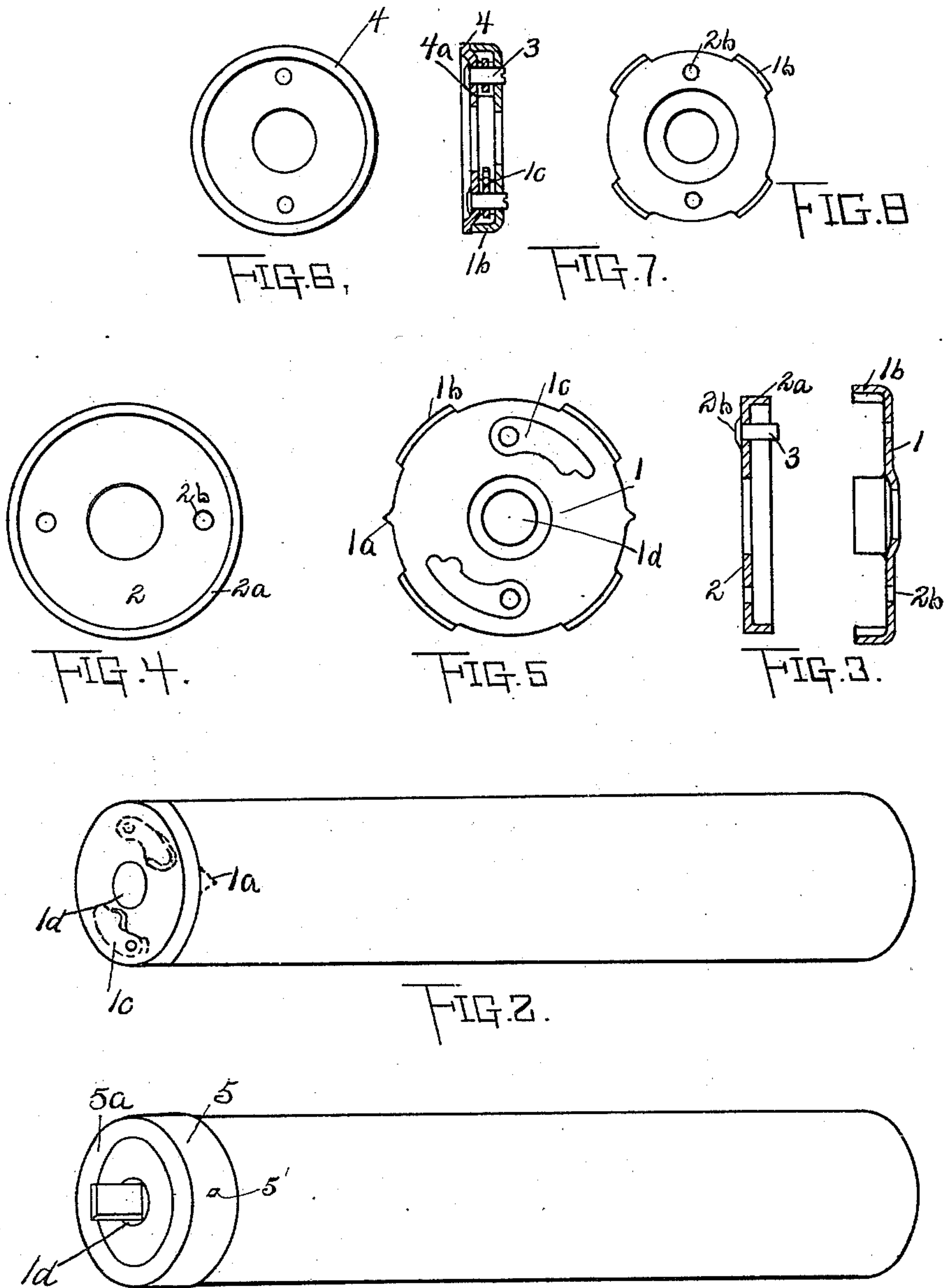
No. 713,644.

Patented Nov. 18, 1902.

W. D. JAMES.
CAP FOR SHADE ROLLERS.

(Application filed Oct. 10, 1901.)

(No Model.)



WITNESSES:
William Stephens.
J. Gould.

FIG. 1.
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BY
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UNITED STATES PATENT OFFICE.

WILLIAM D. JANES, OF SAGINAW, MICHIGAN.

CAP FOR SHADE-ROLLERS.

SPECIFICATION forming part of Letters Patent No. 713,644, dated November 18, 1902.

Application filed October 10, 1901. Serial No. 78,208. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. JANES, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Caps for Shade-Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to ratchet-and-pawl caps for the ends of spring shade-rollers, and pertains more particularly to the construction and arrangement of the parts of such caps whereby the objects of my invention are attained. These objects are to provide a cap attachment for the end of a shade-roller which will prevent slipping of the pawls over the ratchet or spear notches and to thereby insure even and uniform action of the shade-roller.

A further object is to provide a cap which shall be simple and strong in construction and operation, inexpensive to manufacture, and easily applied to shade-rollers of any usual construction.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the completed end of a shade-roller embodying my improvement. Fig. 2 is a similar view showing the ratchet-cap with the ferrule and spear removed. Fig. 3 is a diametral section through the cap, the base-plate and cover being separated. Fig. 4 is an interior view of the cover. Fig. 5 is a view of the outer face of the base-plate with the pawls in place. Fig. 6 is a plan view of a modified form of the cover. Fig. 7 shows this form of cover applied to the base-plate. Fig. 8 is a view of the base-plate detached.

As is clearly shown in the drawings, the device consists in a base-plate 1, similar to those in common use, having prongs 1^a to engage the end of the shade-roller and having outwardly-bent segmental flanges 1^b around its periphery. The pawls 1^c are pivotally mounted at opposite sides of the center to engage the ratchet pin or spear, which protrudes through the central opening 1^d. In combination with the base-plate just described I pro-

vide an outer cup or cover 2, having an inwardly-turned circumferential flange 2^a and having pivot-openings 2^b registering with the pivot-openings in the pawls 1^c and in the plate 1. The cover 2 is secured to the base-plate by rivets 3, which also form the pivots on which the pawls 1^c are loosely mounted.

The shape of the cover may be modified— as, for instance, after the manner shown in Figs. 6 and 7, in which the cover instead of being flanged inwardly has a flanged periphery 4, which rests upon the tops of the segmental flanges 1^b, the body 4^a of the cover being dish-shaped sufficiently to give the required amount of clearance for the pawl, while preventing its excessive lateral movement. The cover may be made of a flat plate supported around its outer edge by the segmental flanges 1^b, which in this case are shortened sufficiently to give the proper clearance for the pawls.

In ordinary pawl constructions it is found that the pawls must be riveted comparatively tightly to the plate in order to prevent lateral movement of the pawl to such an extent that it slips out of the slot in the spear or otherwise causes unsatisfactory action of the roller. If the pawl is riveted tighter, it binds on the pivot and becomes inoperative. Moreover, when riveted in this way rusting of the face of the plate is often sufficient to retard or stop the action of the pawl. It is also frequently the case that the rivet, having but a single bearing in the plate, is pulled out or twisted off.

In my improved construction the depth of the flange 2^a is sufficiently in excess of the thickness of the pawls to insure perfectly free radial movement, but the pivot may be as loose as desired, while it is at the same time prevented by the face of the cover from becoming displaced laterally to such an extent as to interfere with its proper and uniform action. Each pawl-pivot has, moreover, a double bearing and cannot be pulled out or broken off under the conditions of ordinary use. The end of the roller that carries the shade-operating mechanism is protected and greatly strengthened by the cap.

A shade is apt to ravel at the edges after continued use and the threads frequently become entangled with the pawls, preventing

their action. My improved cap protects the pawls and prevents threads or ravelings from becoming entangled in them.

To provide a neat finish for the end of the shade-roller and to hold the cap firmly in place, I slide a brass ferrule 5 over the cap and over the end of the roller, securing it to the roller by indenting the metal of the ferrule into the roller, as at 5', or by fastening it with brads or other suitable means. The outer end of the ferrule has a flange 5^a, which holds the cap in position. The outer cover having a smooth surface is capable of being finished by polishing or otherwise, thus greatly improving the appearance of the completed roller.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A cap for shade-rollers comprising a base-plate having outwardly-extending flanges; a cover-plate resting on the ends of said flanges; a pair of opposing pawls pivotally mounted between said base-plate and cover-plate; a pivot for each pawl passing through the cover-plate and base-plate, and having its ends riveted over to rigidly fasten the cover-plate to the base-plate; together with a ferrule adapted to fit over the cap, and over the end of the roller to hold the cap in place.

2. A cap for shade-rollers, comprising a base-

plate having outwardly-extending circumferential flanges; an inwardly-dished cover-plate resting on the ends of said flanges; a pair of opposing pawls pivotally mounted between said base-plate and cover-plate; together with a pivot for each pawl, passing through the cover-plate and base-plate, and having its ends riveted over to rigidly fasten the cover-plate to the base-plate, all arranged substantially as and for the purposes set forth.

3. In a cap for shade-rollers the combination with a base-plate having outwardly-extending flanges, a cover-plate resting on the edges of said flanges; oppositely-placed pawls, pivotally mounted between said base-plate and cover-plate; a pivot for each pawl passing through both the base-plate and the cover-plate and having its ends riveted over to rigidly fasten the cover-plate to the base-plate, said plates and pivots together forming means whereby the pawls have free radial movement, but are secured against displacement, for the purposes set forth.

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

WILLIAM D. JANES.

Witnesses:

ROY GUENTHER,
I. GOULD.