No. 617,585. Patented Jan. 10, 1899.

J. W. LESLIE.

CURTAIN RING.

(Application filed Jan. 28, 1897.)

(No Model.)

Fig. 8.

Fig. 1.

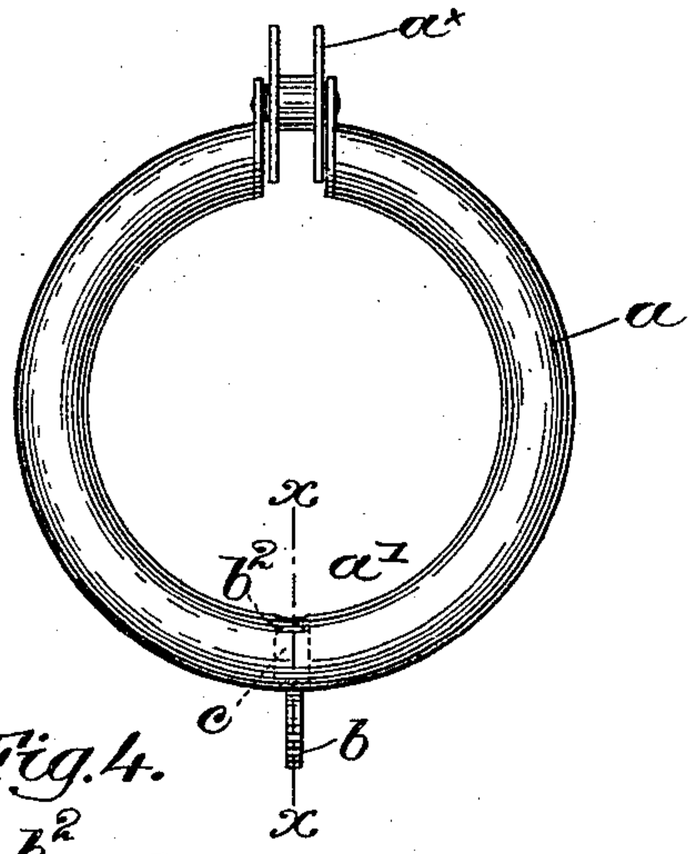


Fig. 2.

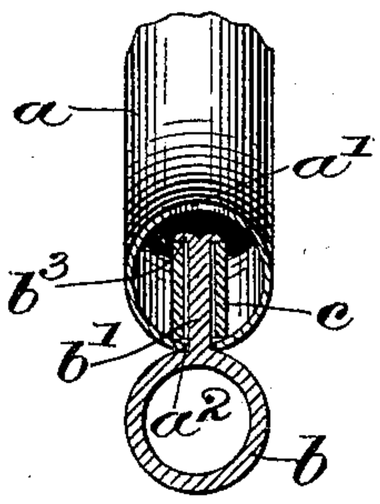


Fig. 4.

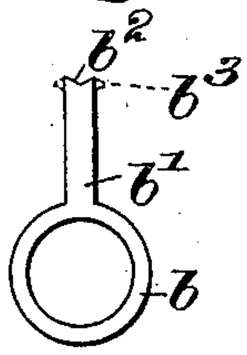


Fig. 5.

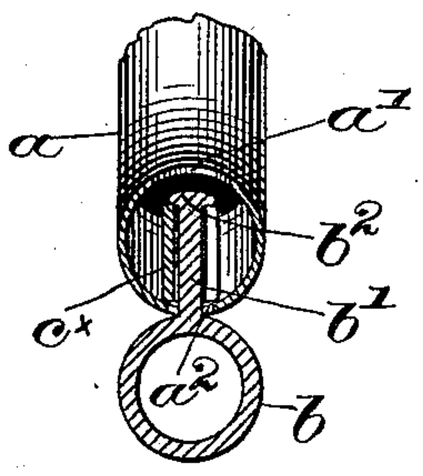


Fig. 7.

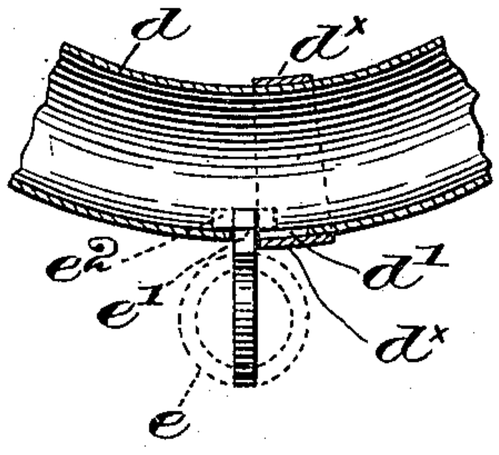


Fig. 3.

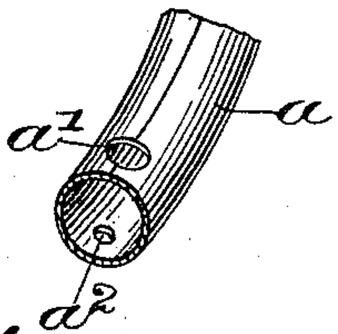
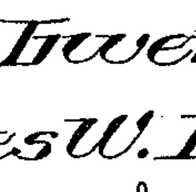


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES W. LESLIE, OF MELROSE, MASSACHUSETTS.

CURTAIN-RING.

SPECIFICATION forming part of Letters Patent No. 617,585, dated January 10, 1899.

Application filed January 28, 1897. Serial No. 621,030. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. LESLIE, of Melrose, county of Middlesex, State of Massachusetts, have invented an Improvement in Curtain-Rings, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates particularly to curtain-rings for use in connection with poles suitably suspended adjacent the tops of doors or windows, whereby the movement of the curtains or portières is made easy and convenient. Such rings are provided with some kind of device to which the curtain or portière is directly attached, such as a bail or eye, the latter being in most general use. The eye is attached to the ring at its under side when suspended on the pole, and there is more or less tendency of the rings to be slanted as they are moved along the pole by the folds of the curtain, especially in the case of heavy and stiff portières, such slanting of the rings on the pole increasing the friction and decreasing the easy operation.

In the course of my experiments to improve the construction and operation of curtain-rings I have devised a swiveled or rotatable eye mounted in or attached to the ring in a novel manner, so that twisting or folding of the curtain will not affect the position of the ring upon the pole, the eye being free to adapt itself to the folds of the attached material. When the eye is rigidly secured to the ring, the twisting tends to pull the eye out or to break it off, and this tendency is entirely overcome by my invention.

Figure 1 is a front elevation of a curtain-ring provided with a swivel-eye embodying my invention. Fig. 2 is a transverse sectional view thereof, enlarged, taken on the line $x\,x$, Fig. 1. Fig. 3 is a perspective detail of the part of the ring to which the eye is attached. Fig. 4 is a side elevation of the eye and shank shown in Fig. 2 as it is inserted in the ring. Figs. 5 and 6 are sectional and perspective detail views, respectively, of a modified form of retaining device for the swivel-eye. Fig. 7 is a longitudinal sectional view of a portion of a ring with yet another form of retaining device for the eye, and Fig. 8 is a perspective view of the retaining member detached.

Referring to Figs. 1 to 4, inclusive, the ring a, preferably made tubular in form, of brass or other suitable light and strong sheet metal, is provided with a roll $a^{\times}$ to travel upon the pole. (Not shown.) Opposite the roll the ring has two holes a' and a^2 made therein on its inner and outer circumference, respectively, the former being the larger. An eye b, having a straight shank b' and which can be readily punched from sheet metal, is shown separately in Fig. 4, the shank being of a size to readily enter the hole a^2 in the ring and preferably having a slight nick b^2 in its end.

When assembling the ring and eye, the shank b' of the latter is passed into the ring through hole a^2, and a sleeve c, of suitable material, is slipped in through the holes a' over the shank, the external diameter of the sleeve being greater than that of the hole a^2. Any suitable tool is then introduced in the hole a' and the end of the shank b' is upset, as at b^3, Fig. 2, above the upper end of the sleeve. The sleeve thus retains the eye in place, while permitting free rotation of the latter relatively to the ring, the shank of the eye being substantially radial to the center of the ring, and the construction is at once cheap, simple, and durable.

Various other devices may be employed for rotatably securing the eye in place in the ring—as, for instance, in Fig. 5 the shank b' of the eye is headed at its upper end at b^2, and a split sleeve $c^{\times}$ (see Fig. 6) is introduced within the ring through hole a' and around the shank. The sleeve is then compressed around the shank beneath its head b^3, as shown in Fig. 5.

Yet another construction is shown in Fig. 7, the ring d having an oblong slot d' made in its outer circumference to receive the T-head e^2 on the shank e' of the eye e, the width and length of the slot permitting easy insertion of the head. A retaining-ring $d^{\times}$ is then slipped about the curtain-ring d and up to the shank of the eye, closing the greater part of the slot d' and preventing withdrawal of the eye-shank without preventing its rotation. The ring $d^{\times}$ may be held in place by friction, or a drop of solder may be employed.

In the several constructions shown the eye is rotatably connected with the curtain-ring to have a swivel movement relative thereto.

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

1. As a new article of manufacture, a curtain-ring provided with a roll to travel longitudinally upon a pole and having holes in its inner and outer circumference opposite the roll, and a swivel-eye having a shank extended through the outer hole into the ring and rotatably held within it, the inner hole permitting access to said shank in assembling the ring and eye, substantially as described.

2. As a new article of manufacture, a curtain-ring, an eye having a straight, headed shank extended into the ring, and a retaining device to prevent withdrawal of the shank while permitting its rotation, substantially as described.

3. As a new article of manufacture, a hollow curtain-ring, an eye provided with a shank extended into the ring from its outer circumference and having an enlarged head, and a retaining-sleeve within the ring and surrounding the shank below its head, said eye-shank being rotatable in the sleeve, substantially as described.

4. As a new article of manufacture, a curtain-ring having oppositely-located holes in its inner and outer circumference, and a swivel-eye having a shank extended through the outer hole into the ring and rotatably held within it, the inner hole permitting access to said shank in assembling the ring and eye, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES W. LESLIE.

Witnesses:

JOHN C. EDWARDS,

AUGUSTA E. DEAN.