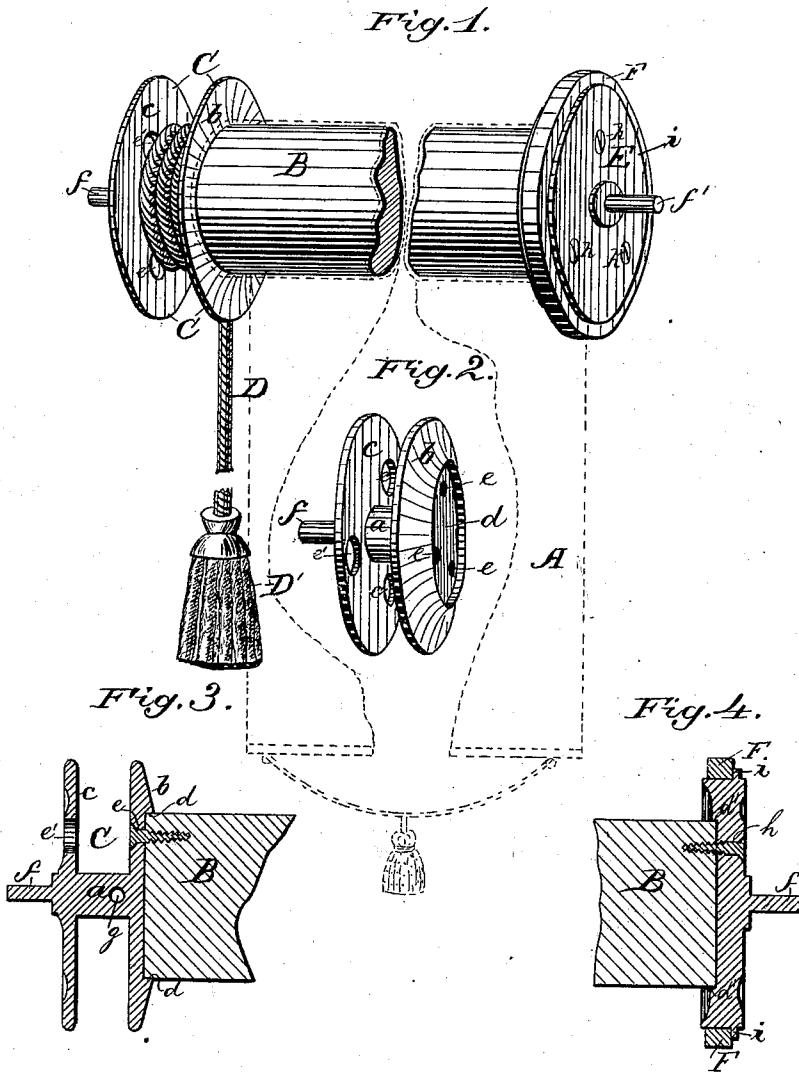


J. F. LASH.
Curtain Fixture.

No. 201,799.

Patented March 26, 1878.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN F. LASH, OF TORONTO, ONTARIO, CANADA.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 201,799, dated March 26, 1878; application filed November 20, 1877.

To all whom it may concern:

Be it known that I, JOHN F. LASH, of Toronto, Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Curtain-Fixtures; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to so-called "curtain or shade fixtures;" and it consists, first, in the construction of an improved reel-cap, to be secured upon one end of the roller; and, second, in the combination of this cap with the roller, reel-cord carrying a weighted tassel at the end, and a friction-wheel placed at the other end of the roller, substantially as hereinafter more fully described.

In the drawings, Figure 1 is a perspective view. Fig. 2 is a perspective view of the reel-cap detached from roller. Fig. 3 is a diametrical section of the reel-cap, and Fig. 4 is a similar section of the friction-wheel.

Similar letters of reference indicate corresponding parts in all the figures.

B represents the roller. C is the reel-cap, which consists of a cylindrical axle, *a*, and two disks, *b c*, the inner of which, *b*, has a circular recess, *d*, corresponding in diameter to the diameter of the roller B, so that the end of this may be fitted into the said recess. Disk *b* has three screw-holes, *e e e*, arranged immediately opposite to three larger perforations, denoted by *e' e' e'*, in the outer disk *c*. *f* is the spindle, and *g* is a perforation in the axle *a*, in which the end of the cord D is secured.

The friction-wheel E consists of a disk having a circular recess, *d'*, on its inner face, corresponding to recess *d* in cap C, which, in like manner, fits over the end of the roller, and has three screw-holes, *h h h*.

F is a rubber band, which is sprung upon the periphery of the wheel, and prevented from slipping off by an annular flange, *i*; and *f'* is the spindle.

The roller is operated by a cord, D, fastened in the axle *a* of the reel-cap, as already described, and coiled up upon itself between the disks *b* and *c*. To the end of cord D is secured a weighted tassel, D', the weight of which must balance the weight of the curtain as nearly as possible. As it would, however, be almost impossible to balance the weight of the tassel and that of the curtain exactly, the friction-wheel E is, in hanging the roller, so adjusted as to bear with its rubber band slightly against any fixed surface, which will counteract any inequality of weight between the curtain and tassel, yet not be sufficient to interfere with the free and easy working of the curtain.

By perforating the outer disk *c* of the reel-cap in places opposite to the screw-holes *e* in the inner disk, the screws may readily be inserted and screwed home in the end of the roller, the perforations *e'* being sufficiently large to admit of the insertion of the head of the screws, and also of a small screw-driver, by means of which they are screwed home.

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

1. The reel-cap C, consisting of the stem or axle *a*, inner disk *b*, recessed at *d* and having screw-holes *e e e*, and outer disk *c*, having corresponding but larger perforations *e' e' e'*, substantially as described, for the purpose herein shown and specified.

2. The combination of the improved reel-cap C, provided with operating-cord D and weight D', roller B, having curtain A, and wheel E, having friction-band F, all constructed and combined to operate substantially as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN FANNON LASH.

Witnesses:

E. COATSWORTH, Jr.,
JNO. EDWD. ROSE.