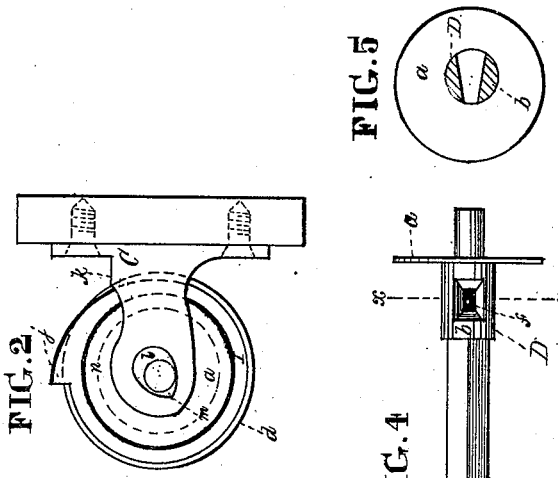
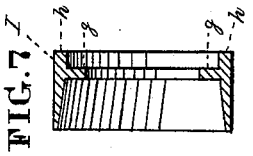
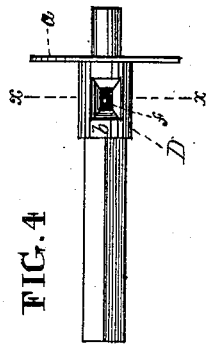
W. H. SPARKS.

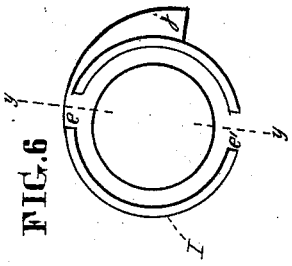
Curtain-Fixture.

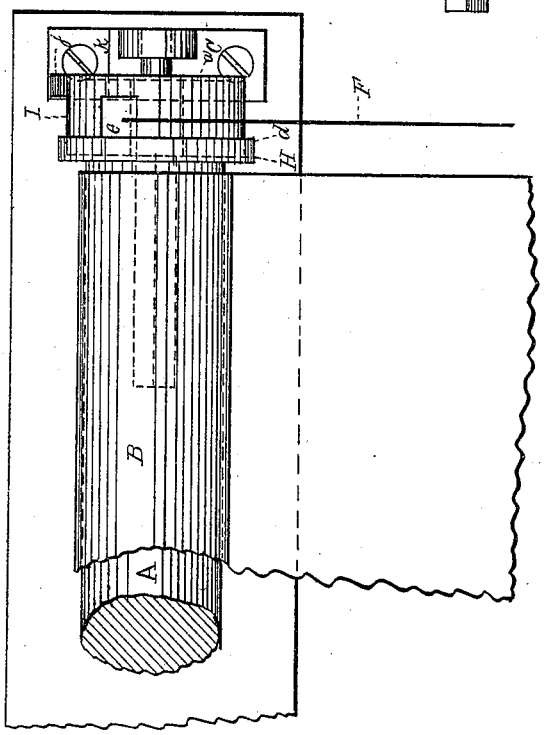
No. 169,309. Patented Oct. 26, 1875.

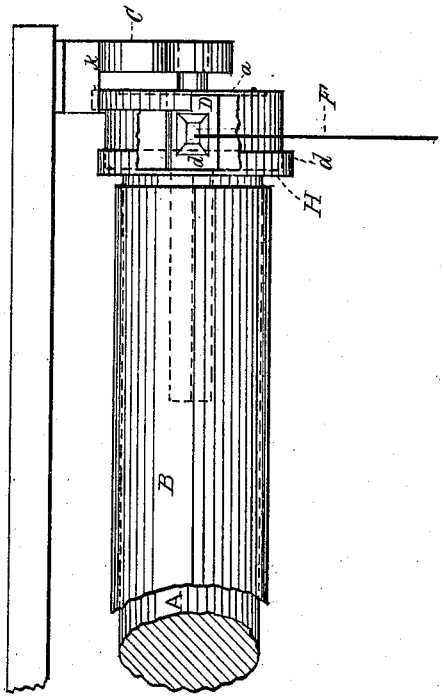












Witnesses:

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George C. Hetzel

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UNITED STATES PATENT OFFICE.

WILLIAM H. SPARKS, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF HIS RIGHT TO THOMAS D. COULSTON, OF PHILADELPHIA, PA.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **169,309**, dated October 26, 1875; application filed September 20, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. SPARKS, of the city and county of Camden, in the State of New Jersey, have invented an Improvement in Curtain-Fixtures, of which the following is a specification:

My invention is an improvement on my patent dated June 22, 1875, No. 164,882; and consists of the following particulars: The inside flange of the pivot, between which and the outer flange the cord was wound, is dispensed with, and an independent disk used in its place. Said disk has a central opening, through which the inner end of the pivot passes into the end of the roller, there being a shoulder on the pivot which bears against the outer side of the disk when driven to its proper depth. The outside flange of the pivot, which is eccentric, as in the patent above mentioned, is connected with a rabbet in the outer end of the case which surrounds the part of the pivot on which the cord is wound, whereby the case is held in its longitudinal position with the roller, and with its outer end within an annular flange or lip of the disk. The case has two holes through its periphery, one for the passage of one end of the cord through the pivot for its connection therewith, and the other, which is immediately opposite, to admit of the cord being passed clear through the case and knotted, and then drawn back until the knot is drawn into an enlargement in the cord-hole, whereby the cord is held securely in connection with the pivot.

Instead of making the locking-cam on the periphery of the case the whole length of the same, as in my patent referred to, I construct it only at the outer end of sufficient thickness to form a bearing to engage with a lug of the bracket.

In the accompanying drawings, Figure 1 is a front view of one end of a roller having my improvement and a portion of a curtain. Fig. 2 is an end view of the roller bracket and cap. Fig. 3 is a top view, a portion of the upper side of the cap being broken away to show the interior arrangement. Fig. 4 is a side view of the pivot D, having an eccentric flange, *a*. Fig. 5 is a cross-section at the line *x x* of Fig. 4. Fig. 6 is an end view of the case I. Fig. 7 is a cross-section at the line *y y* of Fig. 6.

Like letters of reference in all the figures indicate the same parts.

A represents the end of the curtain-roller with which my improvements are combined; B, the curtain, and C the bracket which supports the pivot D connected with that end of the roller. The bracket is confined to the window-casing by means of screws in the usual manner. The pivot, which is shown in detail in Figs. 4 and 5, has an eccentric flange, *a*, outside of the enlargement *b*, on which the cord F is wound. H is a disk on the end of the roller A, through a central opening of which the inner end of the pivot is passed as it is driven into the roller. The disk has an annular flange or lip, *d*, which serves to guide the cylindrical case I as it revolves, and also to keep the cord F in the slot *e*. The cord F, which is wound on the enlargement *b* of the pivot, is kept in place in the longitudinal direction of the pivot, between the permanent flange *a* and the disk H. The case I above mentioned surrounds the pivot D and the wound-up part of the cord F. The case has a slot, *e'*, at the opposite side to the slot *e*, which is used merely in the threading of the cord to the pivot in the following manner: One end of the cord is passed through the slot *e'* of the case and the hole *f* of the pivot, and also through the opposite hole *e* of the case, and a knot tied on it. The cord is then drawn forward until the knot is brought into the enlarged part of the hole *f* of the pivot, which is shown in detail in Figs. 4 and 5, to connect the cord securely therewith. The outer end of the case has an internal annular rabbet, *g*, with which the eccentric flange *a* of the pivot is connected. The case is thereby held in position in the longitudinal direction of the pivot, and the circumferential lip *h'* of the rabbet serves for an abutment for the support of the enlarged part of the flange *a* in the locking process. The case has a cam, *j*, at its outer end, which automatically engages with the stop K on the inner side of the bracket C in the locking process, as shown in my patent above mentioned. The only difference is that in the present case the cam does not extend

clear across the side of the case, it being only of requisite thickness to form a sufficient bearing against the stop K of the bracket. The bearing-opening *l* of the bracket C has a diminished part, *m*, into which the pivot is forced when the cord F is slackened and the cam automatically is brought against the stop K of the bracket, and the enlarged part at *n* of the flange *a* of the pivot is brought to bear hard against the shoulder *h* of the annular rabbet *g* of the case, whereby the roller is securely locked in position.

I claim as my invention—

1. The combination of the flange *a* of the pivot D with the rabbet *g* of the case I, whereby the case is held longitudinally in place, substantially as set forth.

2. The combination of the disk H with the case I, the disk having a flange or lip, *d*, for guiding the case laterally, substantially as set forth.

3. The case I, having an opening, *e'*, opposite to the cord-opening *e*, for the purpose of threading the pivot D with the cord F, substantially as set forth.

4. The bracket C, having its pivot-bearing contracted opposite to its stop K, to assist in locking the roller, substantially as set forth.

WILLIAM H. SPARKS.

Witnesses:
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