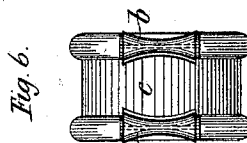
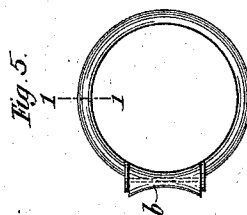
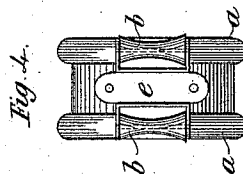
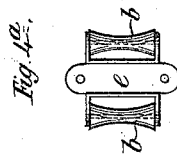
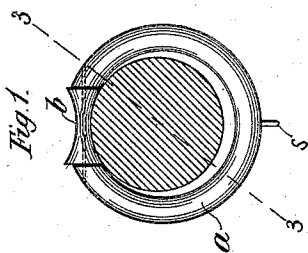
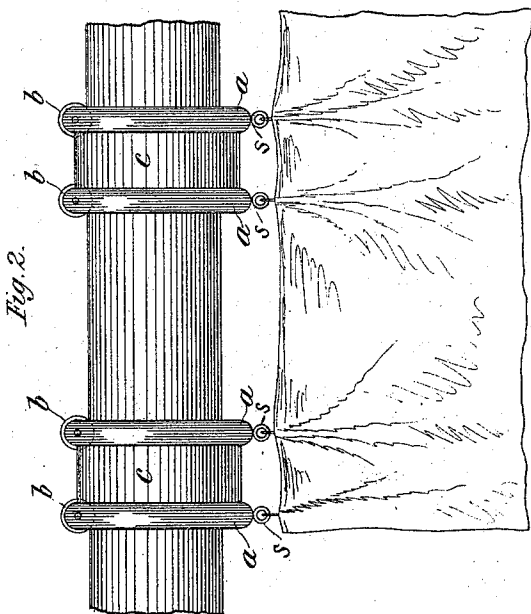
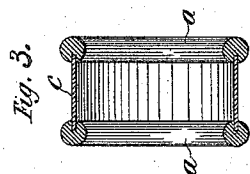


(No Model.)

R. H. BISHOP & W. DOWN.
RUNNER OR SUPPORT FOR CURTAINS.

No. 575,456.

Patented Jan. 19, 1897.



Witnesses:
M. E. Fletcher
George Barry

Inventors:
Robert Hordges Bishop
and William Down
by attorneys
Morton Howard

UNITED STATES PATENT OFFICE.

ROBERT HODGES BISHOP AND WILLIAM DOWN, OF LONDON, ENGLAND.

RUNNER OR SUPPORT FOR CURTAINS.

SPECIFICATION forming part of Letters Patent No. 575,456, dated January 19, 1897.

Application filed June 3, 1896. Serial No. 594,165. (No model.)

To all whom it may concern:

Be it known that we, ROBERT HODGES BISHOP and WILLIAM DOWN, of 257 High Holborn, London, England, have invented certain new and useful Improvements in Runners or Supports for Curtains, of which the following is a specification.

The great disadvantage in the use of the ordinary rings on metal or wooden curtain-poles is that when the curtains are being drawn the rings tilt at an angle and bind or grip on the pole both at top and underneath, so that a somewhat vigorous effort is required to move the rings along the pole with the almost certain risk (especially in the case of lace or other light curtains) of tearing the curtain.

Now the object of the present invention is to overcome this great disadvantage of the tilting ring and to provide for the curtain a support which will travel smoothly and with facility along the top of the pole upon receiving the slightest pull. This object we effect by giving to the runner or support the form of a tube, at the ends of which we provide antifriction-rollers, so that the support will under all circumstances maintain its normal or vertical position on the pole.

In the accompanying drawings we have shown various forms of runner embodying the principle of our invention.

Figure 1 shows in end elevation one example of our improved antifriction-runner, and Fig. 2 shows in front view two such runners mounted on a curtain-pole and carrying a curtain. Fig. 3 represents a transverse section in the line 3 of Fig. 1. Fig. 4 is a top view of a runner, illustrating a mode of attaching the antifriction-rollers differing from that shown in Figs. 1 and 2. Fig. 4^a is a top view of the same roller attachment as is shown in Fig. 4 separated from the tubular portion of the runner. Fig. 5 is a side view of another example of our runner. Fig. 6 is a top view corresponding with Fig. 5.

The runner shown in Figs. 1 and 2 consists of two short cylinders or ordinary wooden curtain-rings *a a*, the upper portions of which are cut away to provide a space for the insertion of a pair of supporting antifriction-rollers *b b*. These rollers are turned to such a contour or longitudinal profile as to conform

to the inner periphery of the rings, and they are fitted with fixed axles, which have their bearings in the severed ends of the rings. The two rings thus fitted with rollers and furnished with the usual eyes *s s* for receiving the curtain-hooks are coupled together by inserting between them a cylinder *c* of papier-mâché, or it may be metal, the ends of which are inserted in annular grooves turned in the adjacent sides of the two rings, as illustrated in the sectional diagram Fig. 3. The rings *a a* and the connecting-cylinder *c* thus form parts of a tube.

By this mode of constructing runners a broad antifriction-support is provided which will prevent the possibility of a sudden jerk from an attached cord tipping the runner and causing it to grip the pole, as is now the case with ordinary curtain-rings. Moreover, the diameter of these runners will more closely assimilate to that of the pole to which they are to be applied than has hitherto been possible with curtain-rings as ordinarily constructed.

An incidental advantage of forming the runners with a cylindrical coupling-piece is that they admit of decoration by covering their cylindrical portion with some ornamental fabric, as silk, velvet, &c.

It will be obvious that our improved runner, whether formed from wood, metal, or other suitable substance, may be made in one piece, if thought desirable. This mode of manufacture is illustrated at Fig. 4, where the runner in the form of a tube having the appearance of two joined-up rings is turned out of one piece of wood. This figure also illustrates a facile mode of mounting the antifriction-rollers *b* in a separate frame *e*, formed out of a piece of sheet metal, and which is secured at its extremities by screws or rivets to the runner. Fig. 4^a shows this support or frame for the rollers detached from the runner.

Figs. 5 and 6 show a runner formed from a single cylinder of thin sheet metal. The ends of the cylinder are molded into hollow beads to present the appearance of rings and give stiffness to the metal. A portion of these beads or rings is cut away to receive the antifriction-rollers, which are preferably made of wood or some other suitable non-metallic

substance to enable them to run noiselessly over the curtain-pole.

By constructing the runner of metal an incidental advantage is obtained which we propose in some cases to utilize—that is, the fitting of the runners onto the rod or pole and removing them therefrom while the rod or pole is in place. For this purpose, having constructed the runner as illustrated at Figs. 5 and 6, we cut it through, as indicated by the line 1 1 of Fig. 5, and open out the runner to an extent sufficient to allow it to be passed laterally over the curtain-pole.

What we claim is—

1. A runner or hanger for curtain-poles consisting of a tube having an eye at each end for the reception of a curtain-hook, and two antifriction-rollers having a contour conforming to the inner circumference of said tube

and arranged one at each end thereof directly over the said eyes, substantially as herein described.

2. The combination in a runner or hanger for curtain-poles of two rings *a a* having grooves in their opposite faces and each furnished with an eye *s*, a connecting-cylinder *c* placed between said rings with its ends in said grooves, and two antifriction-rollers *b* having a contour conforming to the inner circumference of said rings and arranged one within each of said rings, directly above its eyes, substantially as herein described.

ROBERT HODGES BISHOP.
WILLIAM DOWN.

Witnesses:

H. K. WHITE,
FRED C. HAINS.