(No Model.)

L. B. HARKNESS.

CURTAIN SUPPORTER AND ADJUSTER.

No. 407,592. Patented July 23, 1889.

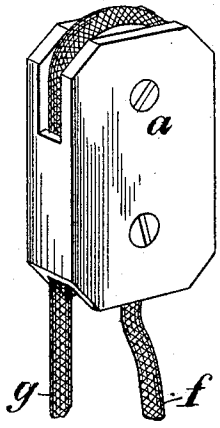


Fig. 1.

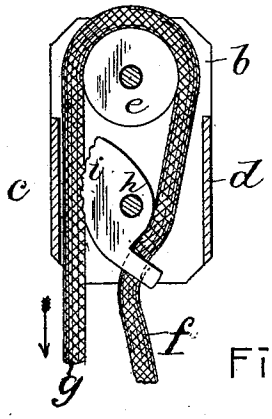


Fig. 2.

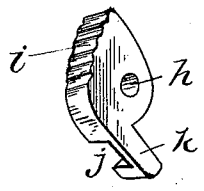


Fig. 4.

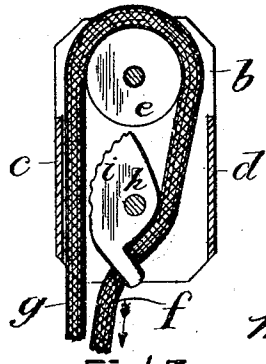


Fig. 3.

WITNESSES
W. C. Ramsay.
A. D. Harrison.

INVENTOR
L. B. Harkness.
By
Wright Brown & Quinby
Attys.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

LEVRET B. HARKNESS, OF BOSTON, MASSACHUSETTS.

CURTAIN SUPPORTER AND ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 407,592, dated July 23, 1889.

Application filed July 30, 1888. Serial No. 281,428. (No model.)

To all whom it may concern:

Be it known that I, LEVRET B. HARKNESS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Automatic Curtain Supporters and Adjusters, of which the following is a specification.

My invention relates to devices for supporting and adjusting curtains generally, and particularly to such curtains as are adapted to cover or shade the lower part of a window, and which it is desired to raise and lowerand support in position at different points, leaving the upper part of the window free, though the invention may be applied to the operation of curtains extending down from the top of the window.

It is the object of my invention to provide a compact curtain supporting and adjusting device which shall be exceedingly simple in construction and entirely efficient for the purposes for which it is intended.

To the foregoing ends my invention consists of a curtain supporting and adjusting device comprising a casing having front and back plates and connecting side pieces, a pulley journaled in the upper portion of the casing over or around which the curtain-supporting cord is adapted to pass, and a dog or lever pivoted or fulcrumed in said casing beneath said pulley and adapted at its free end to bear against the portion or end of the cord to which the curtain is attached and firmly clamp said portion of said cord between the free end of the dog and the casing, the opposite end of the lever being constructed to be acted upon by the free end of the cord to release the dog from said cord to permit the latter to run freely over the pulley, or to allow the dog to engage and clamp or hold the cord from moving over the pulley.

My invention will first be described in connection with the accompanying drawings, forming a part of this specification, and then pointed out in the claim.

Of the drawings, Figure 1 is a perspective view of my improved device, with a portion of a curtain-cord in position therein. Fig. 2 is a front view of the device shown in Fig. 1, the front plate of the casing being removed and the cord being shown as clamped between the dog and the casing. Fig. 3 is a view somewhat similar to Fig. 2, the dog being shown as having been moved to position to release the cord. Fig. 4 is a perspective view of the cord-clamping dog or lever.

The same letters of reference designate the same parts in all of the views.

As has already been said, my invention is particularly adapted to support and adjust a curtain arranged to cover or shade the lower part of a widow, the upper edge of the curtain in such case being adapted to be raised and lowered, while the lower edge may be left free or be wound on a spring-roller of common construction and function. While not confining my invention to use of curtains of this kind, the description hereinafter given will be so limited, a description of one use of the invention being sufficient to suggest others to which it is adapted.

In carrying out my invention I construct a casing of suitable form and size and of suitable material, preferably consisting of a front plate *a* and back plate *b*, with side pieces *c d*. These several parts or features may be formed separately and suitably secured together, or they may be integrally connected, as shown in the drawings. In the upper part of the casing is journaled a pulley *e*, over which the curtain-cord is adapted to pass, both the free end *f* and the end *g*, which may be supposed to be the end attached to and supporting the curtain, passing down through the casing between the sides *c d*, as shown. *h* is a lever fulcrumed in the casing below the pulley *e*, its upper or inner arm being constructed as a cam or dog *i*, and arranged to engage and firmly clamp the portion *g* of the cord passing between the side *c* of the casing and said dog against said side and hold it from running down therebetween. A notch *j* is formed in the free arm *k* of the lever, through which notch the portion *f* of the cord passes, as is clearly shown in Figs. 2 and 3, so that by drawing down on the end *f* of the cord the lever will be moved on its fulcrum or pivot, so as to draw dog *i* away from the portion *g* of the cord and allow the latter to run freely between it and the side *c*, as shown in Fig. 3. This is accomplished by pulling directly down on the cord, and without the necessity of

drawing the cord to one side, as is required in similar inventions now in use, to free the cord from its clamping device. By releasing the strain or tension on end *f* of the cord the dog *i* will fall forward against the end *g*, and immediately engage it and bind it between itself and the side *c*, as portrayed in Fig. 2.

In use the device will be secured to the upper portion of the window casing or frame, and the upper edge of the curtain will be attached to the end *g* of the cord, the end *f* being made to serve as the regulating or raising and lowering end. In this way an entirely efficient and at the same time a very simple and inexpensive curtain holder and adjuster is provided, all the parts being assembled or inclosed in the casing and entirely hidden from view, as well as protected from damage. The curtain-cord is guided in its movement over and around the pulley by the front and back plates and connecting side pieces of the inclosing-casing. The fulcrum-stud of lever *h* and journal-stud of pulley *e* may also be made to serve as the means for attaching the device to a window casing or frame.

By cutting away the sides *c d* of the casing opposite pulley *e*, as shown, cords of varying size can readily be used with the device.

Having thus described my invention, I would have it understood that what I claim is—

As an improved article of manufacture, the herein-described curtain-cord holder, comprising the casing having the front and back plates and connecting side pieces, the pulley located in the upper portion of said casing, the lever fulcrumed in said casing below said pulley and having a toothed or corrugated dog at one end for clamping the curtain-cord against one of said side pieces of the casing, and also having a free arm provided with a notch through which the free end of the curtain-cord is passed, substantially as set forth, said curtain-cord being guided by the front and back plates and side pieces of the casing, as stated.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 26th day of July, A. D. 1888.

LEVRET B. HARKNESS.

Witnesses:
ARTHUR W. CROSSLEY,
A. D. HARRISON.