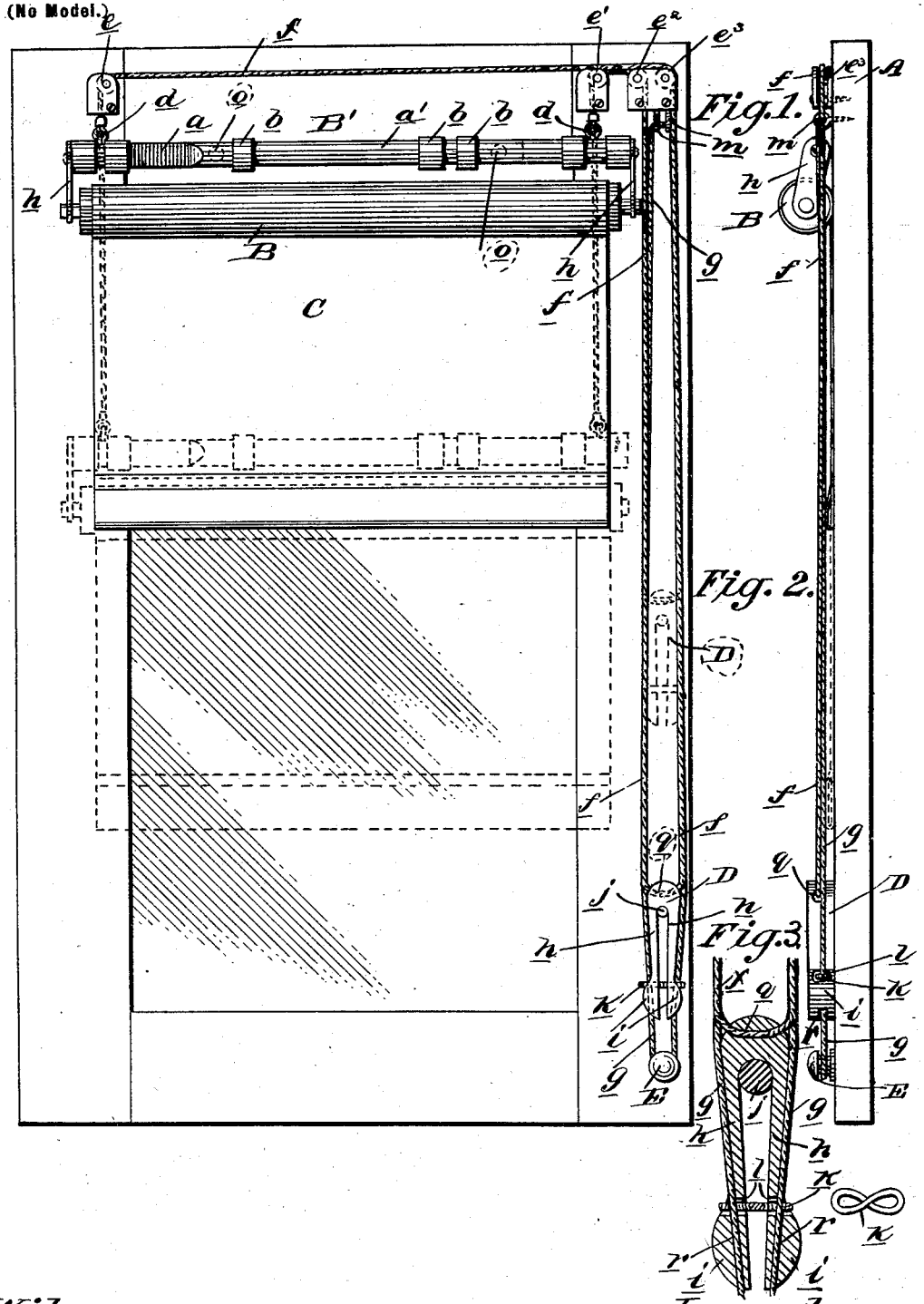
No. 650,027. Patented May 22, 1900.

C. P. THOMAS.

ADJUSTABLE WINDOW SHADE FIXTURE.

(Application filed July 3, 1899.)

(No Model.)



Witnesses:
Edward L. Mills.
Nella C. Dennison.

Inventor:
Calvin P. Thomas.
per R. S. Bacon
Attorney.

UNITED STATES PATENT OFFICE.

CALVIN P. THOMAS, OF GRAND RAPIDS, MICHIGAN.

ADJUSTABLE WINDOW-SHADE FIXTURE.

SPECIFICATION forming part of Letters Patent No. 650,027, dated May 22, 1900.

Application filed July 3, 1899. Serial No. 722,657. (No model.)

To all whom it may concern:

Be it known that I, CALVIN P. THOMAS, of the city of Grand Rapids, Kent county, and State of Michigan, have invented certain Improvements in Adjusting Window-Shades, of which the following is a specification.

My invention relates to improvements in shade-hangers of the class wherein mechanism is employed for adjusting the shade-roller vertically, so that the curtain may be employed to shut off the light from the lower portion of a window when desired, but which will at the same time offer no obstruction to the light at the upper portion of the window.

Another object of the invention is to provide new and improved clamping means for retaining the shade and roller at any adjusted position.

The invention further relates to the parts and combinations of parts to be more fully described, and definitely pointed out in the claims.

In the accompanying drawings, wherein an embodiment of the invention is delineated for the sake of illustration, like reference-letters refer to corresponding parts in the several views, and

Figure 1 is a front elevation of a window-frame with my improvement attached. Fig. 2 is a side elevation of the same, and Fig. 3 is a detail sectional view of the clamp employed for holding the shade-roller in its adjusted vertical position.

Referring more specifically to the drawings, A designates an ordinary rectangular window-frame. In alinement at the upper portion of this frame I mount the pulleys or rollers e, e', e^2, and e^3, over which the adjusting-rope is adapted to pass, as will be hereinafter explained.

B designates an ordinary shade-roller, and C the shade suspended therefrom, the roller being of the ordinary spring type.

B′ represents what I will term the "supporting-rod," which comprises the two sections a a', which sections are adapted to be adjusted inwardly and outwardly to accommodate rollers and frames of different lengths or widths. To prevent lateral or separating movement of these sections, I employ suitable bands or rings b, which encircle the same and bind them together. The shade-roller is supported from the ends of this rod B′ by the supporting-links n, attached in any desirable manner to permit ready removal of the roller therefrom. Secured at the respective outer ends of the sections a a' are the eyelets d, to which are attached the opposite ends of the operating-rope f. This rope extends from the eyelet on the section a upward over the pulley e, thence over the pulley e^3, downward through the clamping device, to be hereinafter described, and upward again over the pulleys e' e^2 to the eyelet at the end of the section a'. It will be observed that as the clamping device (indicated at D) is elevated or lowered the operating-rope f will be correspondingly operated and the shade-roller and shade thereby adjusted vertically relative to the window-frame. In full lines the roller is shown in its extreme elevated position and in dotted lines in an intermediate or adjusted position. The more important feature, however, of this invention is the clamping device, which will now be described. This device D is substantially **U**-shaped in cross-section, provided with the arms h, which have a normal tendency to spring outwardly, and the enlarged portions i at the ends of the arms. At the upper portion of the device is a curved slot q, occupying a position parallel with the window-frame and through which the return-bend of the operating-rope f is made, as best seen in Fig. 3. Extending from the extreme upper to the extreme lower portion of the frame, preferably at the right-hand side thereof, is a retaining-rope g, which is secured at its upper end by the screw-eyes m and at its lower end by the knob or projection E. This rope or cable is adapted to be held from turning in either direction and to be clamped by the device D in the following manner: Passing longitudinally through the enlarged portions i on the arms h in a plane with the outer faces of said arms h are slots r, through which the retaining-rope g passes and is adapted to freely engage to retain the device in place thereon. An **8**-shaped link k loosely fits in transversely-arranged slots l in the arms h immediately above the longitudinal slots r. The rope g also passes through the respective loops of this link.

The operation of the clamping device will be apparent. The spring tendency of the

arms *h* of the clamp in an outward direction will force the retaining-cable *g* outwardly, and thereby bind the said rope between the arms and the outer ends of the link *k*, whereby the clamp will be held from longitudinal movement upon the retaining-cable. To ward against any insufficiency of the spring in the arms *h*, I provide the cushion *j*, preferably rubber, in the slot intermediate the arms *h*, which will assist in giving the arms a sufficient binding upon the rope or cable *g*. To release the clamp, it is simply necessary to press the enlarged portions *i* of the arms inwardly to release the binding action thereof upon the ropes against the link, and it will be obvious that the device may be readily moved up and down to adjust the shade and that as soon as the arms are released the device will be again clamped in position.

It is to be understood that while I have described much in detail the several parts of the clamping means herein many changes may be made without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A clamping device adapted to engage a rope or cable having spring-pressed arms, and means intermediate the ends of the arms between which and said arms the rope or cable is adapted to be held, substantially as described.

2. In combination with a flexible member, a clamping device comprising resilient members, and means carried by and projecting beyond the plane of the sides of the resilient members between which and the sides of said members the flexible member is adapted to be held, substantially as described.

3. In combination with shade-adjusting mechanism, a retaining rope or cable, a clamping device engaging said rope or cable, having outwardly-pressed arms and means carried by said arms between which and the arms the retaining-rope is adapted to be clamped, substantially as described.

4. In combination with a rope or cable, a clamping device adapted to engage said cable comprising spring-pressed arms and a link projecting outwardly from said arms between which and the arms the rope is adapted to be clamped, substantially as described.

5. In combination with a rope or cable, a clamp adapted to engage the same, substantially U-shaped in cross-section, means for forcing the arms of the clamp outwardly and a link carried by the arms between which and the arms the rope or cable is adapted to be clamped, substantially as described.

6. In combination with a rope or cable, a clamp operating thereon, substantially U-shaped in cross-section, a link supported by the arms thereof through which the rope passes, enlargements at the ends of the arms provided with guide-apertures for the rope, and an elastic cushion between the arms, substantially as described.

Signed at Grand Rapids, Michigan, June 20, 1899.

CALVIN P. THOMAS.

In presence of—

MARY A. ANDERSON,

E. D. COMSTOCK.