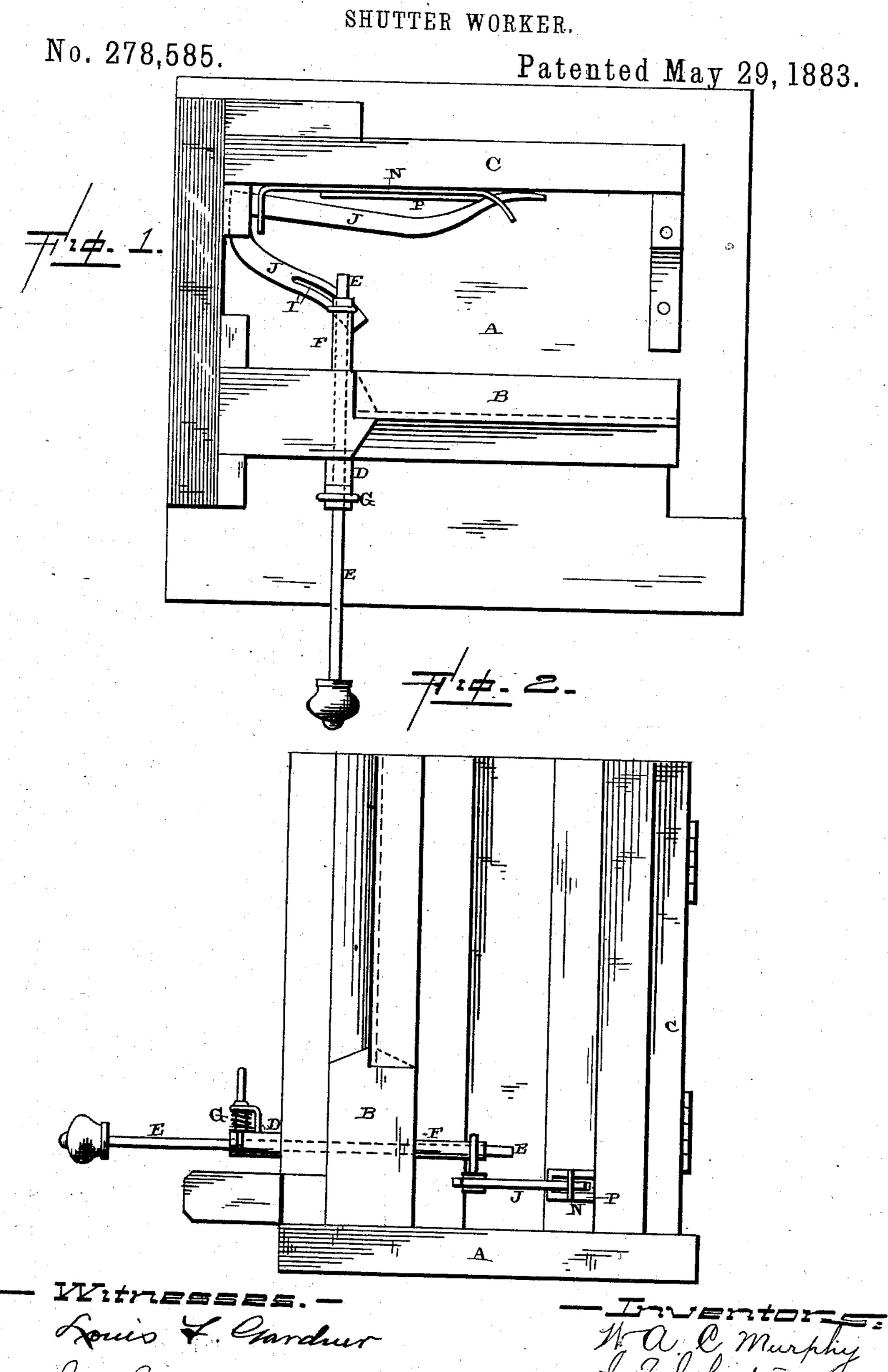
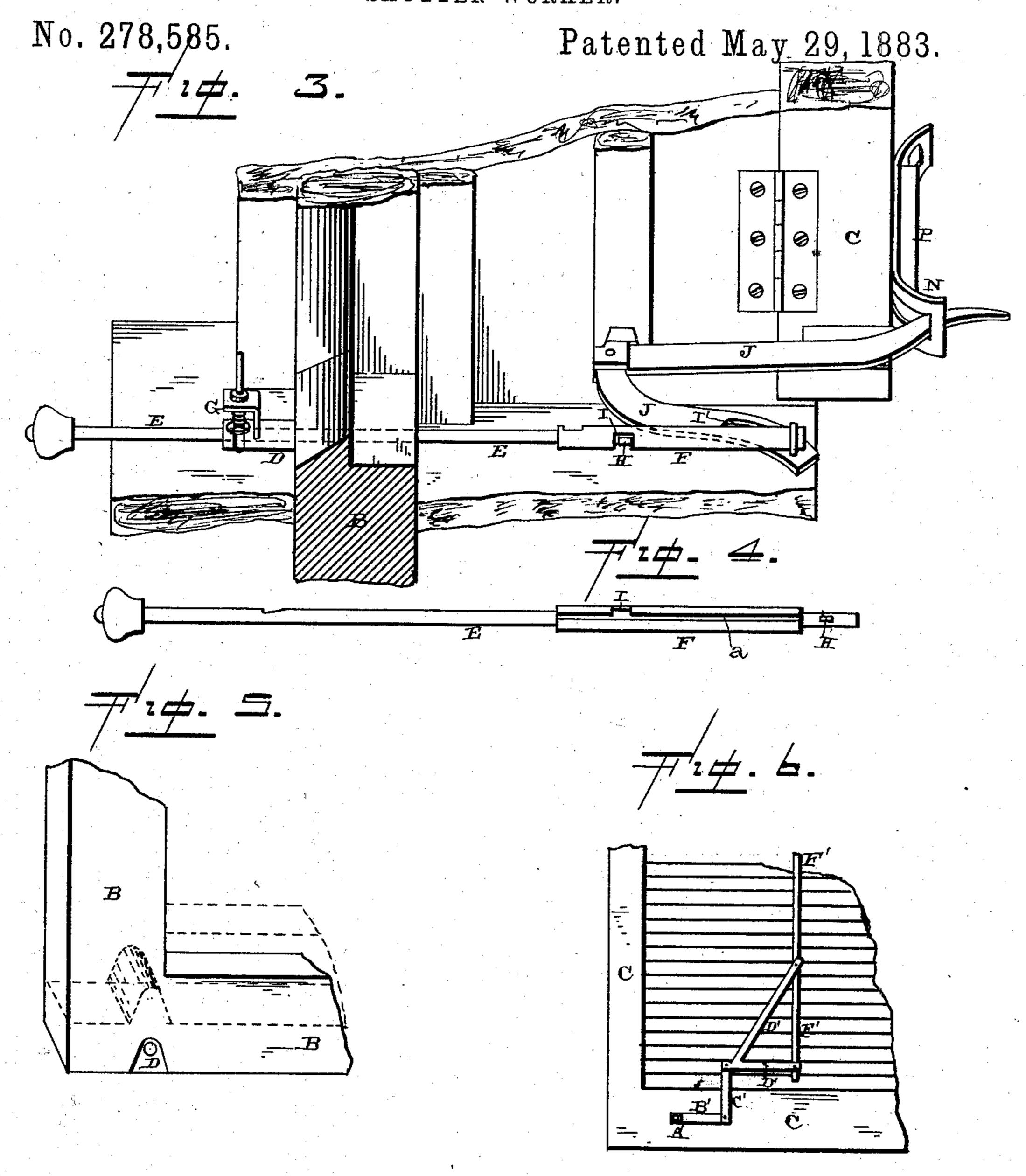
W. A. C. MURPHY & J. T. JOHNSTON.



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SHUTTER WORKER.



- Witnesses. Sours X. Gardiner
Julyanner

W. a. C. Murphy J. J. Johnston Faxfamann, atty.

United States Patent Office.

WILLIAM A. C. MURPHY AND JOHN T. JOHNSTON, OF SPRINGFIELD, MO.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 278,585, dated May 29, 1883.

Application filed February 26, 1883. (Model.)

To all whom it may concern:

Be it known that we, WILLIAM A. C. MUR-PHY and JOHN T. JOHNSTON, of Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Shutter-Openers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in combined shutter and blind or slat openers; 15 and it consists, first, in the combination of a flanged plate, having both of its ends turned outward and perforated, with a triangular or V-shaped lever and an operating mechanism, one of the ends of the lever being made to 20 pass through the holes in the ends of the flanged plate; second, in the combination of a suitable sleeve having a slot made through its lower side, and which is connected with the triangular or V-shaped lever at its outer end, with a 25 sliding rod provided with a suitable projection or catch, and which is made to slide back and forth through the slot in opening the shutter, as will be more fully described hereinafter.

The object of our invention is to provide a suitable means for opening and closing blinds or shutters without the necessity of having to open the window for that purpose, and which means are also made to lock the shutter after it has been closed, and fasten it back when open.

Figure 1 represents a plan view of our invention. Fig. 2 is a side elevation of the same. Figs. 3, 4, 5 are detail views. Fig. 6 is a view of the slat-opener.

A represents the window-frame; B, the sash, and C the shutter. This sash will have a suitable recess made through its bottom edge, so as to fit down over the frame or casting, which is secured to the window-frame. This frame 45 D will preferably be of triangular shape, and forms the bearing for the operating-rod E and the sleeve F. Secured upon the inner corner of this frame is a suitable catch, G, which will preferably be operated by being pushed down, and which will catch in a notch formed in the operating-rod for the purpose-of locking the

parts in position. Also formed in the inner end of the sleeve is a suitable slot, through which the catch passes for the purpose of engaging with the rod. This operating-rod is made con- 55 siderably longer than the sleeve, and both the rod and the sleeve have an endwise movement through the triangular frame. On the outer end of the rod is formed a suitable projection, H, which is made to engage with the notch I 60 in the inner end of the sleeve when it is desired to force the sleeve outward in opening the shutter. When this operating rod is not so turned as to engage with this notch or recess, the rod slides freely back and forth 65 through the sleeve without moving it. When, however, the rod is drawn inward to its full extent, and it is then turned so that the projection engages with the notch or recess in the sleeve, the two are locked together, and the 70 sleeve will be forced outward, so as to be entirely clear of the triangular frame D. For the purpose of allowing the rod carrying the projection near its outer end to play freely back and forth through the sleeve, the sleeve 75 has a slot, a, extending from its outer end into the recess or notch in which the rod is to catch. The outer end of this sleeve is fastened in a slot, I', which is formed in the shorter prong of the triangular or V-shaped lever J. 80 This lever J is pivoted to the side of the window-frame, and has its longer prong sharpened and bent, as shown. This sharpened prong passes through a perforation in the inner turned-out end of the flanged plate N. This 85 plate N is secured to the inner side of the shutter, and has its outer end also turned outward and provided with a suitable perforation, through which the end of the prong or lever passes. Formed upon this plate is a flange, 90 P, which serves as a guide for the longer prong of the lever, and serves to always guide this prong directly into the perforation in the outer turned-out end of the plate, so that the lever will act as a lock to hold the shutter closed. 95 As the sleeve is forced back and forth by means of the operating-rod the lever is made to open and close the shutter in the usual manner. After the shutter has been closed the sleeve is first drawn into position, so that the 100 spring snap will pass through the slot in its

after being turned slightly around, so that the spring-snap will catch in the notch in its side. In this position the entire device is locked in place, so that the shutter cannot be opened from the outside without breaking the parts.

Loosely fastened or pivoted to the inner side of the shutter is the socket A', which receives the outer end of the operating-rod when the shutter is closed. Extending outward from this shutter is the arm or lever B', which has pivoted to its outer end the connecting-rod C'. The upper end of this rod is pivoted to the one corner of the triangle D', which has its other two corners rigidly fastened to the vertical rod F', which operates the slats. When the operating-rod E is turned while its end is fitting in the socket, the arm or lever B' is made to raise or depress the triangle, and thus to open and close the slats.

20 Having thus described our invention, we claim—

1. The combination of a suitable frame, D, secured to the window-frame and provided with a suitable catch, with the operating-rod provided with a projection, and the sleeve through which the rod passes, provided with

a recess, and the slotted lever by which the shutter is opened and closed, substantially as shown.

2. The combination of the slotted V-shaped 30 lever and an operating mechanism with the perforated flanged plate, which is secured to the inner side of the shutter, substantially as described.

3. The combination of the flanged plate, having its ends turned outward and perforated, with the triangular slotted lever, the slotted sleeve provided with a recess at the inner end of the slot, and the operating-rod provided with a projection for engaging with the sleeve, 40 substantially as shown and described.

4. The combination of the operating-rod, the pivoted socket A', arm or lever B', connecting-rod, and triangular frame, which is secured to the slat-rod, substantially as specified. 45

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM ANDERSON CLYDE MURPHY.
JOHN THOMAS JOHNSTON:

Witnesses:

J. W. HATFIELD, Jr., A. F. INGRAM.