

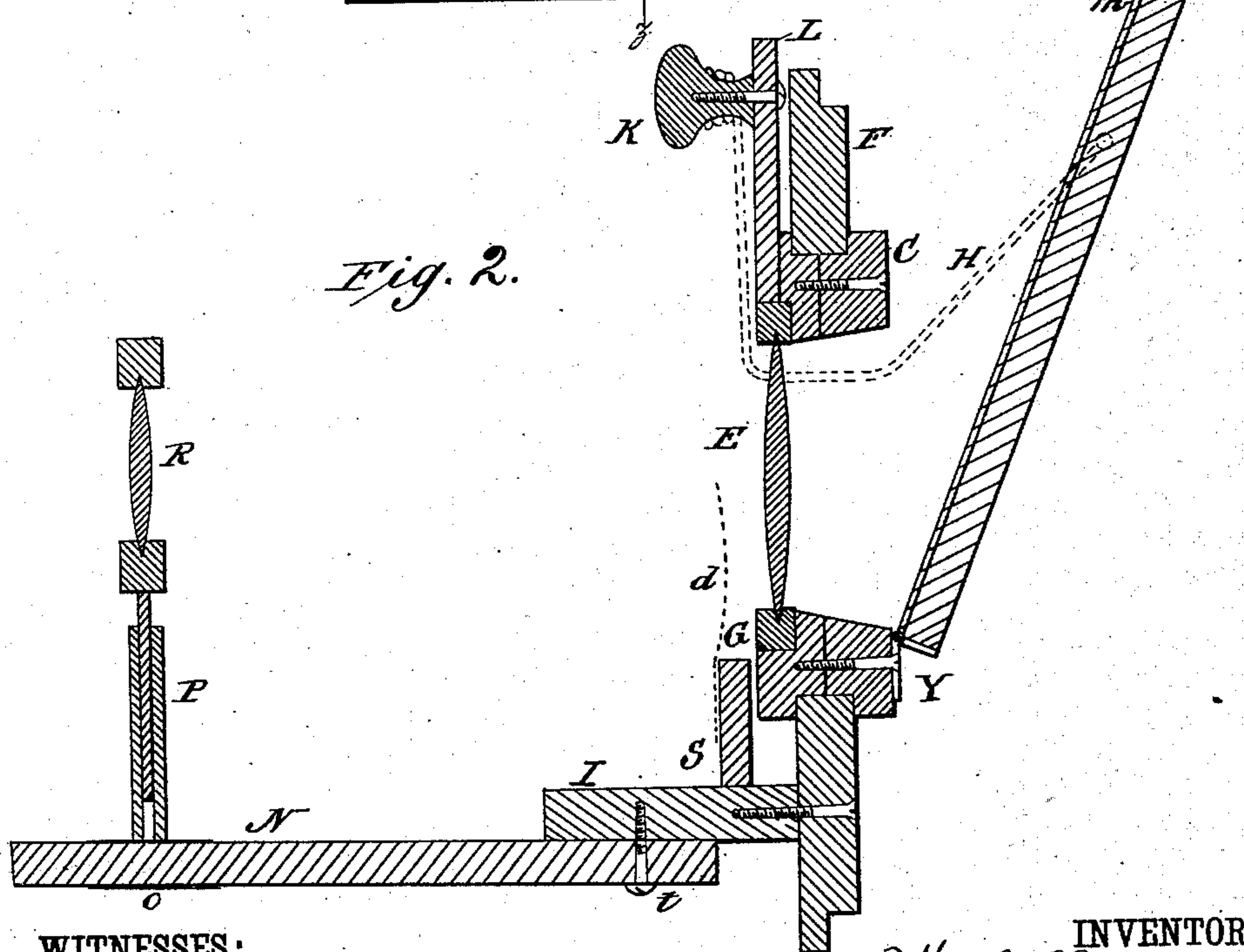
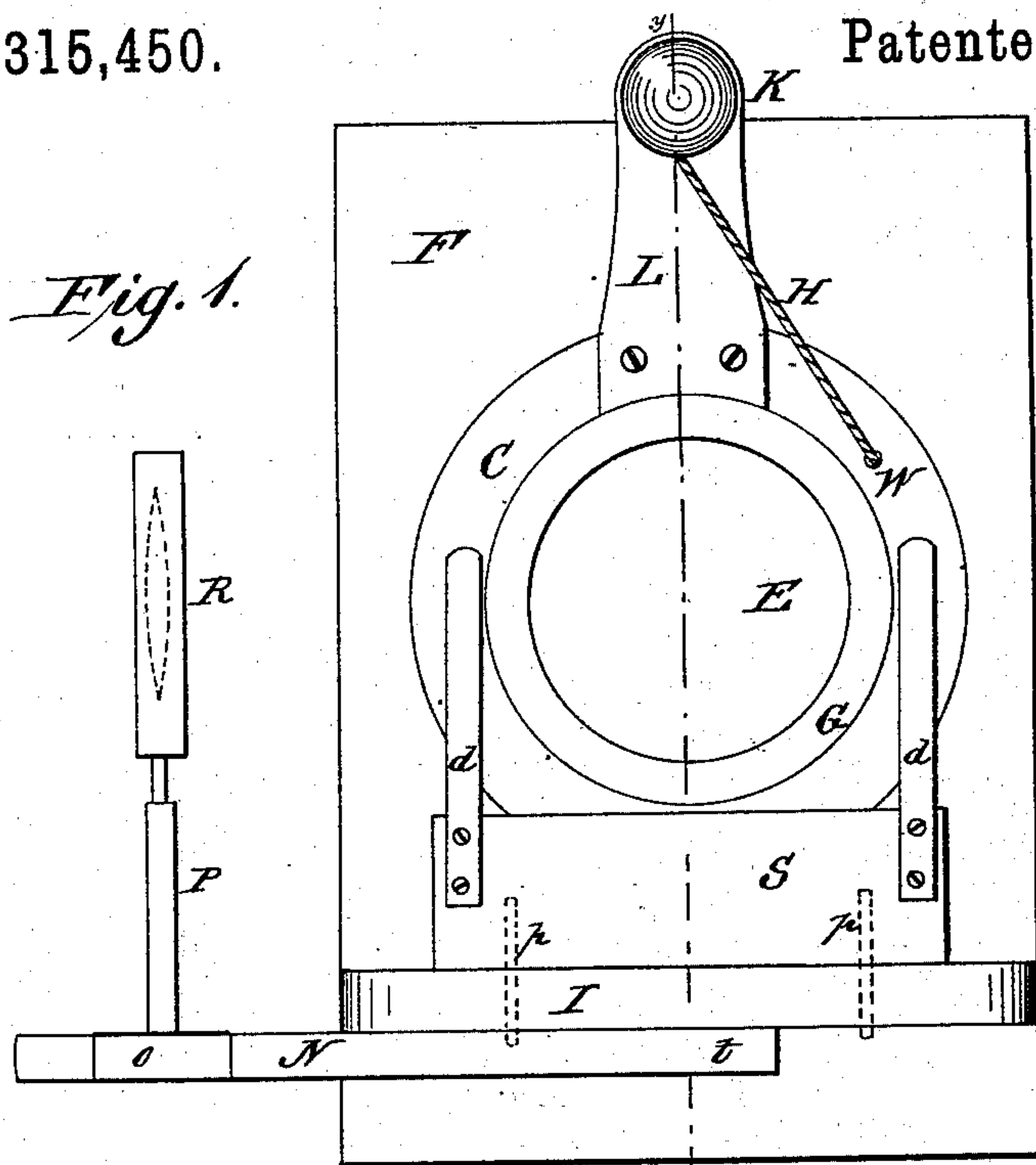
(No Model.)

W. C. STRONG.

ADJUSTMENT FOR SOLAR CAMERAS.

No. 315,450.

Patented Apr. 7, 1885.



WITNESSES:

W. W. Hollingsworth
W. H. Stevens

INVENTOR:

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UNITED STATES PATENT OFFICE.

WILLIAM CYRUS STRONG, OF KENT'S HILL, MAINE.

ADJUSTMENT FOR SOLAR CAMERAS.

SPECIFICATION forming part of Letters Patent No. 315,450, dated April 7, 1885.

Application filed March 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CYRUS STRONG, a citizen of the United States, residing at Kent's Hill, Readfield, in the county of Kennebec and State of Maine, have invented a new and useful Solar Camera, of which the following is a specification.

My invention relates to improvements in apparatus for luminous projection and other purposes in which a beam of sunlight is employed, said beam being directed by a solar camera having a mirror and two lenses; second, to afford facilities for the ready adjustment of the mirror; third, to cut off communication between the air in the room where the apparatus is used and the outside air; fourth, to arrange the cross-piece to which are attached the bar of the projecting lens and the slide-holder in such manner as to secure the several objects named in the following detailed description; fifth, to provide for a ready adjustment of the projecting lens by a lens-bar pivoted to swing to either side in a horizontal plane; sixth, to render the slide-holder readily removable. I attain these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a front elevation of my invention with the inner lens swung to one side; and Fig. 2 is a vertical section of the same on the line yz of Fig. 1, showing the inner lens parallel with the outer lens.

Similar letters refer to similar parts in the two figures.

The body of the apparatus consists of a foundation, F , designed to fit into a rectangular opening in a suitable window-shutter, and having a circular hole near its center, into which is fitted the movable collar C , made in two similar parts and screwed together, the collar being kept in position by flanges projecting from it on either side of the foundation. On the front or inner side this collar has a rabbet, into which is fitted the ring G , which serves as the mounting of the condensing-lens E . To the outer and lower side of the collar is hinged at V the mirror M . The adjustments of the mirror are secured, first, by the rotation of the collar C in the foundation F by the lever L , which serves as a kind of crank; and, second, upon the hinge V by the cord H , which is attached to the mirror, and which,

passing through the collar at W , is wound upon the knob K , fixed upon said lever L and serving as its handle.

To the lower part of the foundation F is fastened the cross-piece I , to which is attached, on the upper side, the slide-holder S . The slide-holder is secured in position by the pins p , projecting from it and passing down through the cross-piece I . To the lower side of said cross-piece is attached by the screw t the lens-bar N , which, turning upon the screw t , may swing to either side. Upon the lens-bar N slides at O the projecting lens R , which is adjustable vertically by means of the telescoping-joint P . The slide-holder S is removable by lifting the pins p , attached to it, out of their sockets in the cross-piece I . The cross-piece I might have various forms. I prefer to make it in the form of a shelf running across the whole width of the foundation F .

Many parts of the apparatus I do not claim to be new.

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the foundation F , having a circular hole near its center, of the two flanged collars C , fitted to the said hole, the lever L , secured to the inner collar and provided with the knob K , pivoted to it, the mirror m , hinged to the outer collar, and the cord H , secured at one end to the mirror and at the outer end to the knob K , to be wound thereon, substantially as described, whereby the mirror may be both rotated and elevated or depressed by means of the said knob.

2. The combination, with the foundation F , the mirror m , and lens E , secured thereto, as described, and the cross-piece I , also secured to the foundation F , of the lens-bar N , pivoted at t to the cross-piece I , the lens R , and the telescoping-joint P , supporting the lens and provided with the slide O , fitted to the bar N , as shown and described, whereby the lens R may be raised or lowered, may be caused to approach or recede from the lens E , and may be swung horizontally out of parallel therewith, as described.

WILLIAM CYRUS STRONG.

Witnesses:

EVERETT A. NASH,
LYMAN A. CALL.