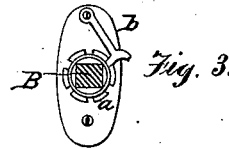
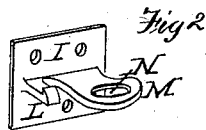
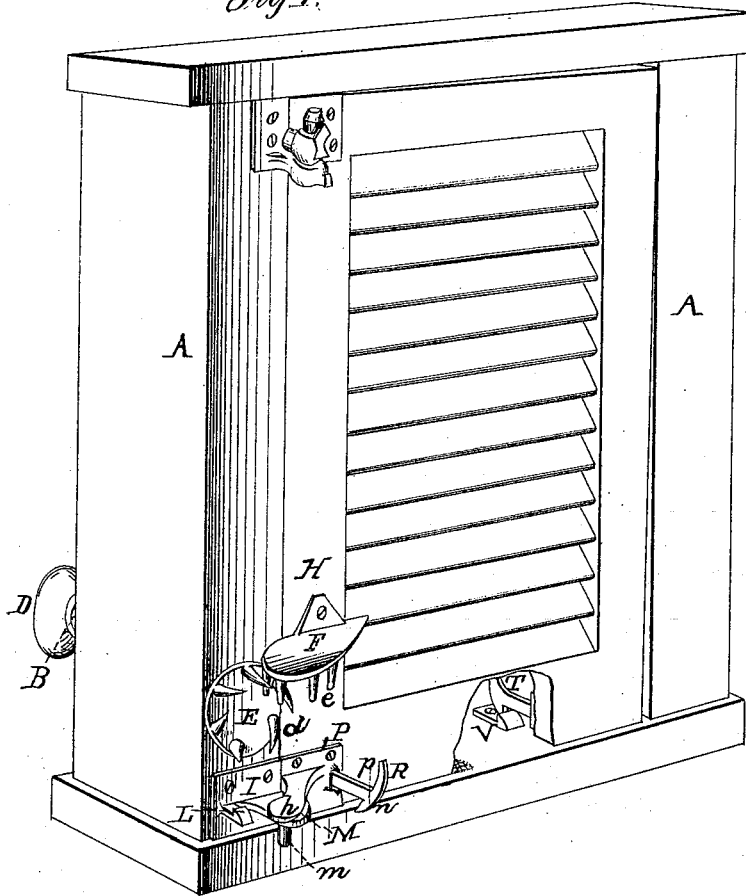


S. W. MERRY.
Shutter-Workers.

No. 196,470.

Patented Oct. 23, 1877.

Fig. 1.



Witnesses;
Chas. Hill
A. K. Cowl

Inventor
Samuel H. Merry
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Crosby & Co.

UNITED STATES PATENT OFFICE.

SAMUEL W. MERRY, OF QUINCY, ILLINOIS.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **196,470**, dated October 23, 1877; application filed April 5, 1877.

To all whom it may concern:

Be it known that I, SAMUEL W. MERRY, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Shutter-Workers, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improved shutter-worker, the object being to provide suitable means for both operating and fastening shutters; and consists in the novel combination and arrangement of devices hereinafter more fully described and specifically claimed.

Figure 1 is a perspective view of a device embodying the elements of the invention. Fig. 2 is a detached perspective view of the plate I. Fig. 3 is a plan view of the spindle-locking devices.

In the accompanying drawings, A represents the casing of the window, through which extends the spindle B, having on the inside the knob D. On the spindle, adjacent the place where it enters the casing, there is provided the ratchet *a*, which may be engaged by the pawl *b*, serving to lock the spindle and attachment, and thus prevent the opening of the shutter from without, as will be more particularly seen hereinafter.

Upon the outer end of the spindle B is secured the disk E, having upon its outer surface the curved tapered prongs *d*, which engage the tapered dependent teeth *e* on the lower surface of the plate F, secured to the shutter H, as more fully set forth in the Letters Patent heretofore granted me, No. 183,191, dated October 10, 1876. Now, it is obvious that the prongs *d*, operating upon the dependent teeth *e*, serve to rotate the shutter in either way, and, at the same time, to give it a lateral movement at the inception of the operation.

Immediately below the disk E is secured to the casing the plate I, on which is cast or suitably secured one end of the locking-catch L, the outer end of which is reduced to an edge, or beveled downward and outward, in order to permit the pivoted catch *n* to easily ride up thereon. Opposite the locking-catch there is cast with, or suitably secured to, the plate I one edge of the hinge-plate M, the upper surface of which is slightly beveled or inclined, this plate being furnished with the oval aperture N, so constructed to allow the shutter lateral movement when the dependent

teeth and prongs are in operation. The plate P is secured to the shutter and is furnished with the hinge-plate *h*, having the downwardly-projecting pintle *m*, which passes through the aperture N, and is of such length as to permit the shutter to be slightly elevated without becoming disengaged. On the other side of the plate P is provided the hook R, loosely pivoted at one end in the plate, and at the other end furnished with the catch *n* and thumb-latch *p*. Now, it is obvious that, the shutter being opened, the pivoted catch *n* will engage the locking-catch L, and the shutter be thus held open. To the inside of the shutter is secured the loose hook T, which engages the catch V when the shutter is closed.

Thus, the shutter being closed, it is likewise obvious that, if the knob be turned, a slight lateral movement will be given the shutter, causing the hook T to slide clear of the catch V, and, the rotation of the knob being continued, that the shutter will be opened, and, when opened, a contrary movement will cause the pivoted catch *n* so to slide clear of the locking-catch L, and, this movement being continued, the shutter will be closed. It is also plain that, if the pawl *b* be in contact with the ratchet *a*, the shutter cannot be opened without breaking the glass, as, if the spindle be locked in place, the shutter cannot be opened.

The above furnishes a shutter-worker by means of which the shutter can be opened or closed without raising the sash.

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

1. The locking-catch L, hinge-plate M, and aperture N, in combination with the loosely-depending hook R, hinge-plate *h*, and pintle *m*, substantially as shown and described.

2. The disk E, provided with the prongs *d*, and plate F, provided with the dependent teeth *e*, in combination with the hinge-plates M *h*, locking-catch L, loosely-depending hook R, aperture N, and pintle *m*, substantially as set forth.

In testimony that I claim the foregoing improvement in shutter-workers, as above described, I have hereunto set my hand this 27th day of March, 1877.

SAMUEL W. MERRY.

Witnesses:

I. PHIL. BEST,
WILLIAM E. AVISE.