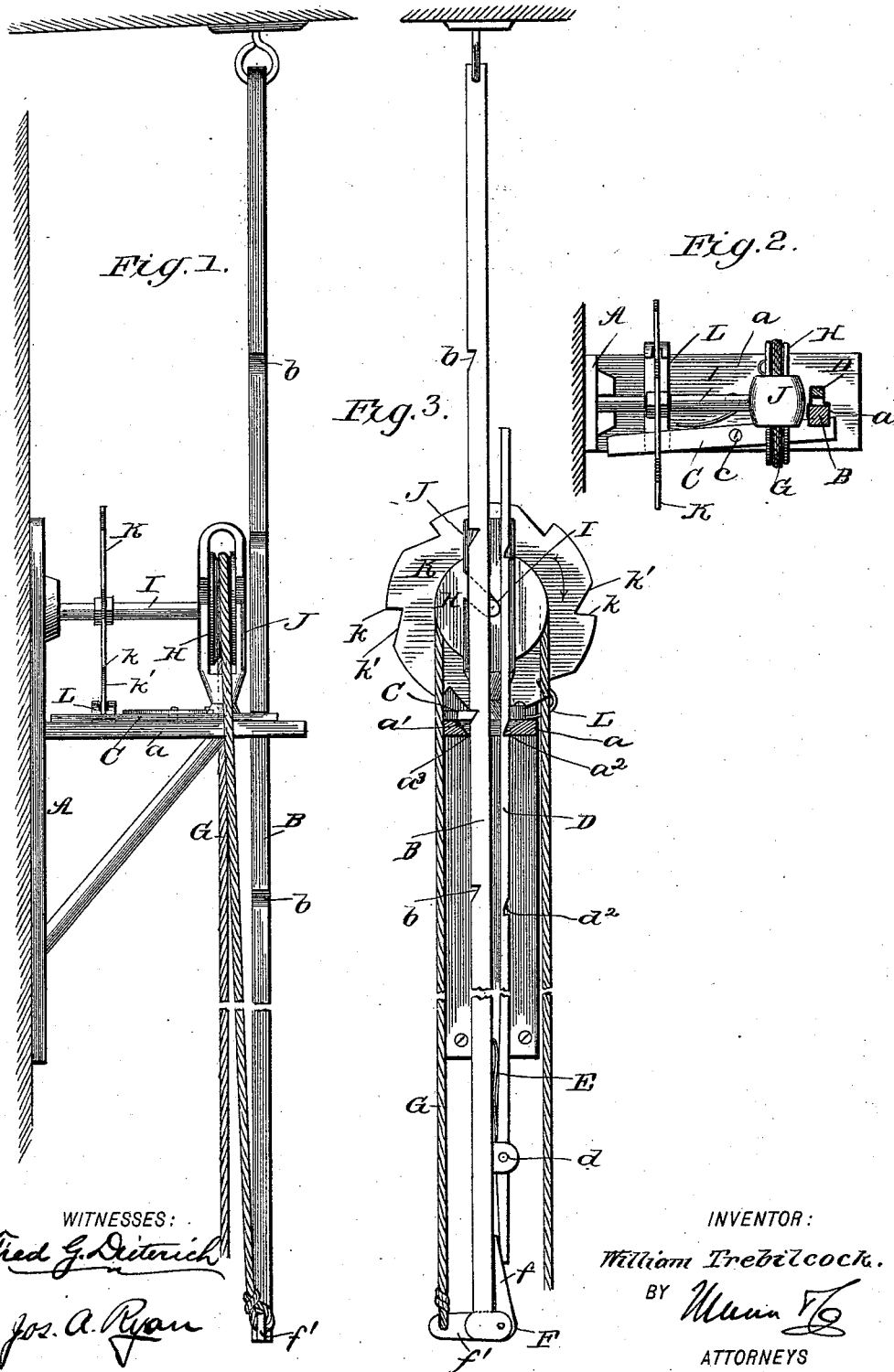


(No Model.)

W. TREBILCOCK.
SKYLIGHT LIFTER AND LOCK.

No. 455,134.

Patented June 30, 1891.



WITNESSES:

Fred G. Dietrich

Jos. A. Ryan

INVENTOR:

William Trebilcock.

BY

Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM TREBILCOCK, OF CENTRAL CITY, COLORADO.

SKYLIGHT LIFTER AND LOCK.

SPECIFICATION forming part of Letters Patent No. 455,134, dated June 30, 1891.

Application filed March 4, 1891. Serial No. 383,789. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TREBILCOCK, residing at Central City, in the county of Gilpin and State of Colorado, have invented certain new and useful Improvements in Skylight Lifters and Locks, of which the following is a specification.

My invention has for its object to provide a simple, cheap, easily-operated, and effective combined skylight lifter and lock, which will serve to raise or lower the skylight for ventilating purposes and hold it locked in any of its adjusted positions, so that it cannot be raised or lowered from the outside.

My invention consists in the peculiar combination and novel arrangement of the several parts hereinafter fully described in the annexed specification, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my improvement. Fig. 2 is a sectional plan view; and Fig. 3 is an end view, partly in section.

In the accompanying drawings, A indicates a bracket or support, which is secured to the inside framing of the skylight, as shown, the outer end of the horizontal member *a* thereof being apertured, as at *a'*, in which the lifting and locking rod B is adapted to be slid up or down.

By reference to Fig. 3 of the drawings it will be observed that the lifting and locking rod B is formed with a series of inclined notches *b*, which are arranged to automatically lock in engagement with a spring-actuated lock-bar C, pivoted at *c* on the member *a* of the bracket, such notches being inclined in the manner shown, so as to admit of the bar being pushed upward past the bar C, but to lock against same on its downward pressure. To hold said bar B in its locked positions, I provide a spring-bar D, pivoted near its lower end, as at *d*, to the bar B, its upper end being extended to the rear of and up through the aperture *a'*, the leaf-spring E serving to normally press said bar D against the wall *a²* of the aperture and the bar B against the wall *a³*, as shown, said bar D being formed with a series of notches *d²*, inclined in a direction opposite to the notches *b* in bar B and disposed about three-eighths of an inch below the horizontal plane of the same, where-

by said bar D will be locked from movement upward when adjusted in position, for a purpose presently described.

The lower end of the bar D is extended below the pivot *d* and rests against the long arm *f* of an angle-lever F, pivoted in the lower end of the bar B, its short arm *f'* being connected to the cord G, by means of which the device is operated, the free end of said cord extending up over a pulley H and down again to within easy reach for operation.

The pulley H is mounted upon a shaft I, journaled on the bracket A and disposed in a slotted standard J, through which the cord passes, and is held to the pulley, as shown. Upon the shaft I is mounted to revolve therewith a disk K, the peripheral edge of which is formed with a series of notches *k*, having inclined faces *k'*, which edge is adapted to engage and pass over a spring-arm L on the lock-bar C when the bar B is operated to raise the skylight; but to engage said arm L and pull it outward to release the bar C from the toothed bar B when it is operated to lower the skylight, the arrangement of the notches in the disk K and the arm L being such as to allow the disk to slip over such arm when the disk is turned in the direction indicated by the arrow and to engage said arm L, as stated, when turned in an opposite direction.

The manner in which my improved combined lifter and lock is operated is very simple. The operator, to raise the skylight, pulls upon the free end of the cord G, which causes the lever F to force the spring-bar D inward out of engagement with the edge *a²* of the aperture *a'* and allows it and the bar B to be pushed up one or more notches. Then by releasing the cord the bar B will seat itself into engagement with the locking-arm C and be prevented from falling down, and the bar D swinging outward will lock against the edge *a²*, as shown, thereby preventing any one from raising or lowering the skylight from the outside. When it is desired to lower the skylight, the operator takes hold of the free end of the cord, pulling slightly, which releases lock-bar D. Then continuing the pull, lifting the skylight until the disk K revolves enough for spring-arm L to catch in first notch of disk K, which by slight reverse movement causes the arm C to be pulled away and become dis-

engaged from the bar B. He then gradually allows the bars B and D to drop one or more notches, as he may desire, then by slight pull on the cord, which revolves disk K, thereby
 5 disconnecting the spring-arm L, when the bars B and D will automatically lock themselves in place.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. A lifter for skylights, transoms, &c., consisting of an apertured bracket, a notched lifting-bar connected to the skylight and arranged for lateral movement in the aperture
 15 in the bracket, a locking-lever for engaging said notched lifting-bar to hold it from downward movement, a spring-actuated locking-bar pivoted to the lower end of the lifting-bar and projected through the aperture in the
 20 bracket, said spring-bar formed with notches arranged to engage the bracket and hold the lifting-bar from upward movement, and means for raising the lifting-bar and unlocking the locking-lever from said lifting-bar, substan-
 25 tially as and for the purpose described.

2. The combination, with the bracket A, having an aperture a' , as shown, and the guide-pulley H, mounted thereon, of the

notched lifting-bar B, the spring-actuated locking-arm C, adapted to engage the notched
 30 bar B, the spring-bar D, arranged to operate in the aperture a' and hold the bar B in engagement with the arm C, and the lifting-cord G, secured to the lower end of the bar B,
 35 passed over the pulley H and down to within easy reach of an operator, substantially as and for the purpose described.

3. The combination, with the bracket A, formed with an aperture a , the shaft I, mounted thereon, provided with a pulley H and
 40 notched disk K, and the spring locking-arm C, having a spring member L, arranged for engagement with the notched disk, of the bars B and D, operating in the aperture a , and notched, as shown, the bar D, pivoted
 45 near its lower end to the bar B, the angle-lever pivoted in the bar B and arranged to engage the bar D, the operating-cord G, secured at one end to the lever F, its free end passed
 50 over the pulley H and extended down, as shown, all arranged substantially as and for the purpose described.

WILLIAM TREBILCOCK.

Witnesses:

WILLIAM WILLIAMS,
 NICHOLAS SPARGO.