No. 767,370. PATENTED AUG. 9, 1904.

F. J. LOWERY.

SASH LOCK.

APPLICATION FILED JULY 29, 1903.

NO MODEL.

Fig. 1.

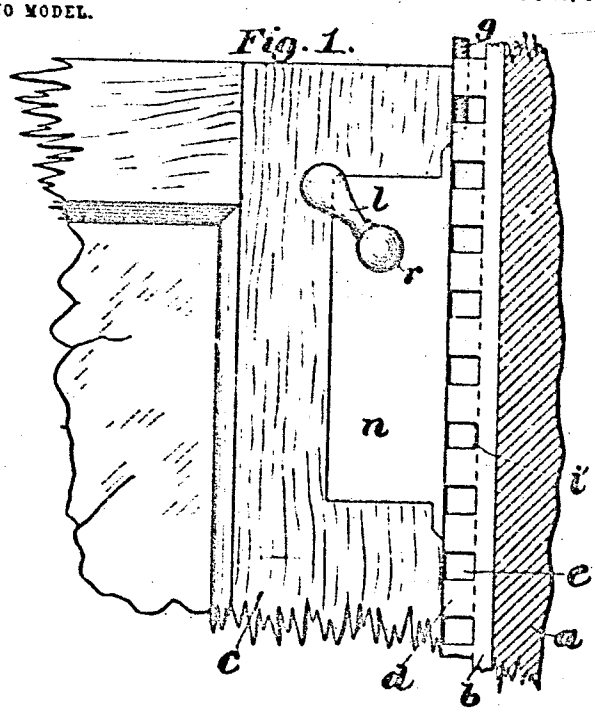


Fig. 2.

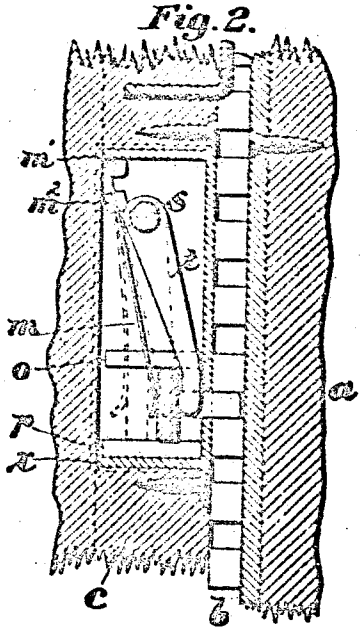


Fig. 3.

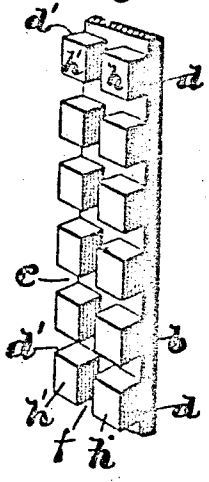


Fig. 4.

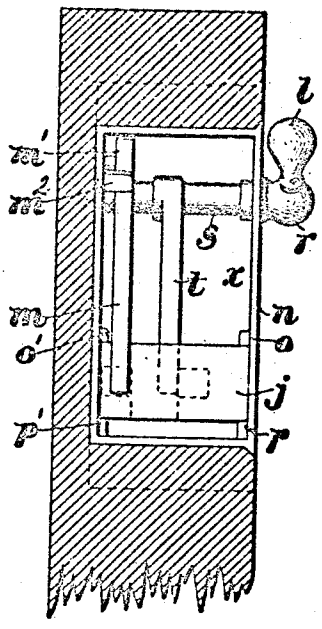
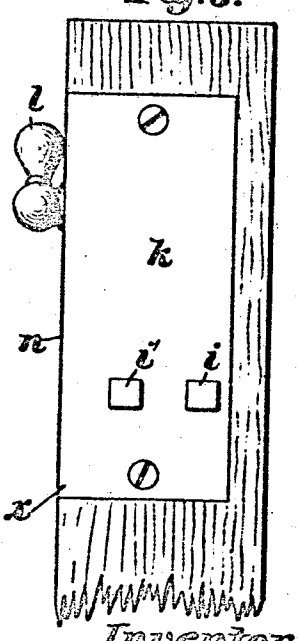


Fig. 5.



Witnesses:
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No. 767,370. Patented August 9, 1904.

UNITED STATES PATENT OFFICE.

FRANK J. LOWERY, OF FORT FAIRFIELD, MAINE.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 767,370, dated August 9, 1904.

Application filed July 29, 1903. Serial No. 167,467. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. LOWERY, a citizen of the United States, residing at Fort Fairfield, in the county of Aroostook and State of Maine, have invented certain new and useful Improvements in Sash-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in sash-locks especially adapted for use in railway-car windows; and the object of the invention is to provide a window-lock which will allow the lower window-sash to be effectively locked when opened at any height; and it consists of a locking mechanism contained within a case provided with normally projecting prongs and a rack-bar for the engagement of said prongs, the case containing the lock preferably being set in one upper side of the lower window-sash and the rack-bar set in the corresponding side of the window-frame, as shown in the figures of the drawings, and when so constructed is easily manipulated with one hand, and the person desiring to open or close the sash may release the supporting device with the same hand used in raising or lowering the sash by a pressure of the thumb directed against the handle or button *l*; but this order of inserting the lock and rack-bar may be reversed, the tooth rack-bar being set into a groove in the sash and the case containing the lock set in the window-frame at about the top of the window-sash on the same side as the rack-bar, as may be readily understood.

The invention consists in the combination of elements and in certain parts of construction entailed in the combination of said elements to obtain the desired result.

A full understanding of the invention can best be given by a detailed description of a preferred construction embodying the various features of the invention, and such a description will now be given in connection with the accompanying drawings, and I attain my object by the mechanism there illustrated, showing such preferred construction, and the features forming the invention will then be specifically pointed out in the claims.

In said drawings, Figure 1 is a side elevation, partly in section, showing the outside casing and rack-bar of my device as applied to part of the sash and frame of a window. Fig. 2 is a sectional elevation of the same. Fig. 3 is a perspective view of the rack-bar. Fig. 4 is a rear vertical cross-sectional view through a portion of the window-sash and the case containing the lock. Fig. 5 is a front elevation of the lock, showing the projecting prongs through the side of the case.

Similar letters refer to similar parts throughout the several views.

Reference now being had to the details of the drawings by letter, *a* designates the window-frame, on one side of which is inserted and attached a rack-bar *b*, having two rows of teeth *d d'*, vertically separated by a passage *f*, in which runs one of the window-cords *g*, attached to the window-sash *c*, which is inserted in the window-frame *a* and one side of which travels upon the front faces *h h'* of the teeth *d d'*, the teeth *d d* and the teeth *d' d'* having horizontal interdental spaces or notches *e* to allow of the inserting of the prongs *i i'* of the bolt *j*, traveling on the guide-bars *o o'* and *p p'*, which normally extend through the front face *k* of the casing *x*, which is countersunk in the frame of the window adjacent to said rack-bar, the prongs *i i'* locking within the notches *e* and normally kept in place by the spring *m* pressing against its rear side, the spring being fastened at one end, as at *m'*, to the inner upper side of the casing *x* and having the bearing-block m^2 for steadying it in place.

The button or handle *l*, attached to the shank *r*, is used to operate the spindle *s*, on which is rigidly attached an arm *t*, which when the handle *l* is turned to the right works against the front face of the bolt, pressing the bolt back and withdrawing the prongs *i i'* from contact with the teeth of the rack-bar, so that they will not strike against the teeth as the window is raised or lowered. The spring *m* immediately presses the prongs into place upon the releasing of the handle *l*, thus locking the window at any desired height.

As is readily seen, the order of inserting the casing and rack-bar can be changed, the rack-bar being countersunk, if desired, in the side of the window-sash and the casing *x* counter-

sunk in the window-frame *a*, when the same results would be obtained.

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

1. A sash-lock comprising a rack provided with two or more rows of parallel teeth and a locking member consisting of a spring-actuated bolt provided with two or more parallel prongs for engaging with the rack and an arm mounted in said casing and in contact with said bolt for disengaging said bolt.

2. A sash-lock comprising in combination with the frame of the window and the window-sash, a rack-bar having a double row of teeth in one end of the window-frame, a casing seated in the window-sash, a spring-actuated bolt traveling in said casing provided with prongs in mesh with said teeth, a spring pressing outwardly against the rear of the bolt and a key within the casing extending between the prongs against front of the bolt and having its handle without casing, substantially as shown.

3. In a sash-lock in combination with sash and frame members of a rack-bar inserted in one of the members having a double row of parallel teeth, horizontal interdental notches between the teeth, a casing in the other member, a bolt mounted within the casing having a pair of horizontal prongs extending without the casing and locking in the notches between the teeth and an operating-handle for withdrawing the prongs and moving them horizontally within the casing.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK J. LOWERY.

Witnesses.
WM. T. SPEAR,
J. R. CARY.